



## REGULAR WORK SESSION & MEETING OF THE CITY COUNCIL

December 13, 2016

ADDISON TOWN HALL

5300 BELT LINE RD., DALLAS, TX 75254

5:00 PM DINNER & EXECUTIVE SESSION

6:00 PM WORK SESSION

7:30 PM REGULAR MEETING

### Executive Session

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1. Closed (executive) session of the Addison City Council pursuant to:

Section 551.072, Tex. Gov. Code, to deliberate the purchase, exchange, lease, sale or value of real property

- **4460 Belt Line Road, Addison, TX 75001**
- **4500 Belt Line Road, Addison, TX 75001**

Section 551.074, Tex. Gov. Code, to deliberate the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of a public officer or employee, pertaining to:

- **City Manager Evaluation**

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### Reconvene from Executive Session

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2. **RECONVENE INTO REGULAR SESSION:** In accordance with Texas Government Code, Chapter 551, the City Council will reconvene into Regular Session to consider action, if any, on matters discussed in Executive Session.

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## WORK SESSION

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3. Present And Discuss **The Purpose And Proposed Process For An Asset Management Plan For The Town Of Addison.**
4. Present And Discuss **The Housing Policy For The Town of Addison.**

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## REGULAR MEETING

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### Pledge of Allegiance

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Announcements and Acknowledgements regarding Town and Council Events and Activities

Discussion of Events/Meetings

5. Present A **Proclamation Acknowledging The Service And Accomplishments Of Tom Lamberth.**
  6. Public Comment.  
The City Council invites citizens to address the City Council on any topic not on this agenda. Please fill out a **City Council Appearance Card** and submit it to a city staff member prior to Public Participation. Speakers are allowed **up to three (3) minutes per speaker** with **fifteen (15) total minutes** on items of interest or concern and not on items that are on the current agenda. In accordance with the Texas Open Meetings Act, the City Council cannot take action on items not listed on the agenda. The Council may choose to place the item on a future agenda.
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Consent Agenda:

*All items listed under the Consent Agenda are considered routine by the City Council and will be enacted by one motion with no individual consideration. If individual consideration of an item is requested, it will be pulled from the Consent Agenda and discussed separately.*

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7. Consider **Approval Of The November 8 And November 14, 2016 Regular Meeting Minutes.**

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  8. Consider Authorizing The City Manager To **Approve A Final Payment To Shirley and Sons Construction Co. Inc., For The Dredging Of The Winnwood Ponds** In The Amount Of \$58,833.47.

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  9. Consider Authorizing The City Manager To **Approve An Amendment To The Ground Lease At 4500 Westgrove Drive With Key Development, LLC.**

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  10. Consider Action On The **Final Payment To Groves Electric Company For The Completion Of The Beltway/Proton Pedestrian Connectivity Project** In An Amount Of \$101,392.02.

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  11. Consider Action On A **Resolution Adopting The 2017 Legislative Agenda For The Town Of Addison, Texas; Directing The City Manager Or His Designee To Act With Regard To The Town's 2017 Legislative Agenda.**

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  12. Consider Action On An **Ordinance Amending Section 62-138 Of The Code Of Ordinances Concerning Holiday Decorations By Extending The Display Period For Such Decorations And By Establishing Dates For The Installation And Removal Of Holiday Lights From Trees.**

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  13. Consider Action On A **Resolution Authorizing The City Manager To Approve the Assignment Of The Economic Development Program Grant Agreement For The Addison Grove Redevelopment From Beltline Beltway Investments, Ltd. and Urban InTownhomes, LLC to Texas Capital Bank.**
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14. Consider Action On **A Resolution For A Consulting Services Agreement With Solutions For Local Control, LLC,** In The Amount Of \$36,000.
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15. Consider Action On **A Resolution Authorizing The City Manager To Enter Into An Agreement With The Charter Communications For The Installation, Maintenance and Support Of A Network Of Hotspots At 13 Locations.**
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16. Consider Action On **A Resolution Approving Fee Increase For City Attorney Services.**
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Regular Items

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17. Hold A Public Hearing, Discuss, And Consider Action On A **Resolution Adopting A New Master Transportation Plan For The Town Of Addison.** Case 1750-Z/Town of Addison.
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18. Present, Discuss, And Consider Action On A **Resolution Approving A Contract With Flowline Construction, Inc., For The Construction of The Vitruvian Phase 5 Public Infrastructure** In The Amount Of \$3,823,868.
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19. Present, Discuss, And Consider Action On A **Resolution Authorizing The City Manager To Award A Professional Engineering Services Agreement to Kleinfelder, Inc., For Materials Testing Services Associated With The Construction Of The Vitruvian Phase 5** In The Amount Of \$58,100.
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20. Present, Discuss, And Consider Action On A **Resolution Authorizing The City Manager To Approve A Contract With UDR, Inc., For Construction Management Services In Connection With The Construction Of The Public Infrastructure Improvements For Phase 5 Of The Vitruvian Development Located At Marsh Lane And Vitruvian Way** In The Amount Of \$305,909.44.
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21. Present, Discuss, And Consider Action On A **Resolution Authorizing The City Manager To Award A Professional Engineering Services Contract To Icon Consulting Engineers, Inc., For Public Infrastructure Design Services Associated With The Vitruvian Phase 8 Development** In The Amount Of \$97,800.

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22. Hold A Public Hearing, Discuss, And Consider Action On An **Ordinance Rezoning The Property Located At 5280 Belt Line Road At The Southwest Corner of Belt Line Road and Montfort Drive, Which Is Currently Zoned LR, Local Retail, By Approving A New Special Use Permit For A Restaurant And A New Special Use Permit For The Sale Of Alcoholic Beverages For On-Premises Consumption Only.** Case 1747-SUP/Meso Maya.

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23. Present, Discuss, And Consider Action On An **Ordinance To Reappoint Larry Dwight As Presiding Municipal Judge To The Addison Municipal Court Of Record, And Of Agreement For Service Of The Said Judge.**

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24. Present And Discuss The **Finance Department Quarterly Financial Report Of The Town For The Quarter Ended September 30, 2016.**

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25. Present, Discuss, And Consider Action On An **Ordinance Providing For Increased Prior And Current Service Annuities Under The Act Governing The Texas Municipal Retirement System For Retiree And Beneficiaries Of Deceased Retirees Of The Town Of Addison (COLA).**

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26. Present, Discuss And Consider Action On A Resolution **Adopting A Revised Housing Policy For The Town of Addison.**

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27. Discussion And Possible Action Regarding The **Role Of The City Council In The Consideration And/Or Approval Of Severance Agreements Between The Town Of Addison And Town Employees.**

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Adjourn Meeting

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NOTE: The City Council reserves the right to meet in Executive Session closed to the public at any time in the course of this meeting to discuss matters listed on the agenda, as authorized by the Texas Open Meetings Act, Texas Government Code, Chapter 551, including §551.071 (private consultation with the attorney for the City); §551.072 (purchase, exchange, lease or value of real property); §551.074 (personnel or to hear complaints against personnel); §551.076 (deployment, or specific occasions for implementation of security personnel or devices); and §551.087 (economic development negotiations). Any decision held on such matters will be taken or conducted in Open Session following the conclusion of the Executive Session.

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Posted:

Laura Bell, 12/8/2016, 5:00 pm

**THE TOWN OF ADDISON IS ACCESSIBLE TO PERSONS WITH DISABILITIES.  
PLEASE CALL (972) 450-7017 AT LEAST  
48 HOURS IN ADVANCE IF YOU NEED ASSISTANCE.**

AI-2018

1.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** City Manager

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**AGENDA CAPTION:**

Closed (executive) session of the Addison City Council pursuant to:

Section 551.072, Tex. Gov. Code, to deliberate the purchase, exchange, lease, sale or value of real property

- **4460 Belt Line Road, Addison, TX 75001**
- **4500 Belt Line Road, Addison, TX 75001**

Section 551.074, Tex. Gov. Code, to deliberate the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of a public officer or employee, pertaining to:

- **City Manager Evaluation**

**BACKGROUND:**

N/A

**RECOMMENDATION:**

N/A

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AI-2019

2.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** City Manager

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**AGENDA CAPTION:**

**RECONVENE INTO REGULAR SESSION:** In accordance with Texas Government Code, Chapter 551, the City Council will reconvene into Regular Session to consider action, if any, on matters discussed in Executive Session.

**BACKGROUND:**

N/A

**RECOMMENDATION:**

N/A

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AI-1972

3.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** Infrastructure- Development Services

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**AGENDA CAPTION:**

Present And Discuss **The Purpose And Proposed Process For An Asset Management Plan For The Town Of Addison.**

**BACKGROUND:**

The Fiscal Year (FY) 2017 budget included a \$250,000 line item in the Self-Funded Special Projects Fund for the development of an Asset Management Plan (AMP) for the Town. The Self-Funded Special Project Fund was created by a transfer in FY2016 from General Fund savings.

The purpose of the AMP is to manage assets in such a way as to minimize the total cost of owning, operating, and maintaining those assets while delivering the desired service level at an acceptable level of risk. The plan will take into consideration the full life-cycle cost of an asset from installation or purchase, through maintenance and operation, to final disposal, and the long-range planning for the and financial planning for repair, refurbishment, and replacement. It will incorporate information from all department that are responsible for the Town's physical assets.

The \$250,000 is for the solicitation of a qualified firm to assist the Town in the formulation of the plan, the formulation of the capital improvement plan, and the long-range financial plan, and other associated tasks. Staff will provide a briefing for Council on the proposed development of the Asset Management Plan.

**RECOMMENDATION:**

Information only, no action required.

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**Work Session and Regular Meeting****Meeting Date:** 12/13/2016**Department:** City Manager

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**AGENDA CAPTION:**Present And Discuss **The Housing Policy For The Town of Addison.****BACKGROUND:**

Over the past number of months, the City Council has had several conversations, and held a public hearing, regarding the Town's current housing policy and possible amendments. There is a desire by some Council Members to allow additional flexibility for the Town to consider housing developments that do not comply with the current housing policy. At the September 29, 2016 Council Meeting, the Council unanimously directed staff to bring forward a resolution adopting two revisions to the policy.

First, Council requested that "Where feasible and appropriate" be added to the first section of the policy, so that it would read:

*Where feasible and appropriate, new housing should increase the proportion of fee-simple ownership in Addison's housing mix. Apartment-only rezoning is unlikely to be approved, as currently the ratio of rental to ownership properties is higher than desired.*

Second, Council requested that a fifth section be added that would allow for exceptions to the policy. This new section would read as follows:

*The City Council acknowledges that there may be exceptional projects that do not comply with elements of this policy. The Council encourages developers and staff to pursue projects that represent the highest and best use of each property and that advance portions of this policy or other Town goals.*

This language recognizes that there may be projects that warrant special consideration, defines staff's role in bringing such projects forward and broadly states the criteria for considering exceptions to the policy. The other components of the policy were left unchanged.

The resolution to formally adopt these revisions was placed on the October 11, 2016. At that meeting, the Council voted to delay making these changes until a Work Session could be held so that the Council could continue to discuss the issue. Accordingly, staff has placed this item on the agenda to provide Council the opportunity to hold further discussions.

**RECOMMENDATION:**

Information only, no action required.

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**Attachments**

Housing Policy Resolution Red Lined

Housing Policy Resolution

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**TOWN OF ADDISON, TEXAS**

**RESOLUTION NO. R016-\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TX APPROVING AND SUPPORTING A HOUSING POLICY WITHIN THE TOWN OF ADDISON PURSUANT TO THE LAWS OF THE STATE OF TEXAS AND THE ADDISON CODE OF ORDINANCES; PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, the City Council has researched the current housing stock and discussed and deliberated a wide range of housing alternatives for the Town of Addison, Texas; and

**WHEREAS**, the City Council desires to make a policy statement to guide City Staff and potential developers as new housing developments are proposed and brought forward for City Council consideration.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

Section 1. Addison Housing Policy. When new housing is proposed in Addison, the Addison City Council encourages it to be developed according to the following principles:

1. Where feasible and appropriate, nNew housing should increase the proportion of fee-simple ownership in Addison's housing mix. Apartment-only rezoning is unlikely to be approved, as currently the ratio of rental to ownership properties is higher than desired.
2. A proposal should offer a 'best fit' mix of uses and housing choices within the context of the surrounding Addison community. The Town may use a study area committee (with staff, elected, and appointed members such as area residents and business representatives) to evaluate a proposal's fit in Addison.
3. New housing should create or enhance neighborhoods of urban character rather than locate on a stand-alone, nonintegrated property and should continue the high quality design and walkability that make Addison's existing neighborhoods distinctive,
4. Proposals for independent and/or assisted living may be considered by the Town of Addison. Since there are no assisted living housing units in Addison today, the Town will conduct research to understand how this housing could or should be included in Addison's future.
5. The City Council acknowledges that there may be exceptional projects that do not comply with elements of this policy. The Council encourages developers and staff to pursue projects that represent the highest and best use of each property and that advance portions of this policy or other Town goals.

Section 2. Recitals. The above and forgoing recitals are true and correct and are incorporate herein and made part hereof for all purposes.

Section 3. Effective Date. This Resolution shall take effect upon its passage and approval.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 11<sup>th</sup> day of October, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

**TOWN OF ADDISON, TEXAS**

**RESOLUTION NO. R016-\_\_\_**

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**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 11<sup>th</sup> day of October, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

AI-2014

5.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** City Manager

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**AGENDA CAPTION:**

Present A **Proclamation Acknowledging The Service And Accomplishments Of Tom Lamberth.**

**BACKGROUND:**

The Town of Addison would like to acknowledge the contribution of Tom Lamberth to the Vitruvian area and to the Town also.

**RECOMMENDATION:**

Presentation will be done by Mayor Meier.

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AI-2012

7.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** City Secretary

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**AGENDA CAPTION:**

Consider **Approval Of The November 8 And November 14, 2016 Regular Meeting Minutes.**

**BACKGROUND:**

The City Secretary has prepared the minutes for Council approval.

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

November 8 2016 DRAFT Minutes

November 14 2016 DRAFT Minutes

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# DRAFT

## OFFICIAL ACTIONS OF THE ADDISON CITY COUNCIL

November 8, 2016

Addison Town Hall, 5300 Belt Line Rd., Dallas, TX 75254

5:30 PM Dinner & Executive Session

6:00 PM Work Session

7:30 PM Regular Meeting

Present: Mayor Meier; Mayor Pro Tempore Arfsten; Deputy Mayor Pro Tempore Hughes; Councilmember Angell; Councilmember Duffy; Councilmember Walden; Councilmember Wilcox

### Executive Session

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1. Closed (executive) session of the Addison City Council pursuant to:

Section 551.071, Tex. Gov. Code, to conduct a private consultation with its attorney on a matter in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with Chapter 551, Tex. Gov. Code, pertaining to:

- **Open Meetings Act**

Section 551.074, Tex. Gov. Code, to deliberate the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of a public officer or employee, pertaining to:

- **City Attorney Evaluation**
- **Associate Judge Selection**

Council convened into Executive Session at 5:32 pm.

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2. **RECONVENE INTO REGULAR SESSION:** In accordance with Texas Government Code, Chapter 551, the City Council will reconvene into Regular Session to consider action, if any, on matters discussed in Executive Session.

Council recessed out of Executive Session at 6:46 pm.

No action was taken.

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## WORK SESSION

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3. Present And Discuss **Oktoberfest 2016 Operations And Financial Reconciliation.**

Director of Special Events Mark Acevedo presented the item to Council. Mr. Acevedo introduced Senior Accountant Ashley Boatright who presented the financial portion of the update.

Ms. Boatwright provided the breakdown of ticket sales, food and beverage sales, Tasty Buck redemption and overall costs associated with the event. She also reviewed the reconciliation process and the internal controls in place.

Mr. Acevedo then presented the remainder of the information. He discussed the planning for Oktoberfest next year which will be the 30th anniversary that has already been started.

Mayor Meier stated the attendance number was a worry. He stated he hoped that the Town is doing the event for the right reason and that the hotels were being consulted and included in the planning in hopes to get the numbers back up to the 2014 attendance peak. He also stated he hoped staff could visit with the Intercontinental Hotel to see if they would be willing to participate again.

Mayor Pro Tempore Arfsten stated that he hoped that the 30th anniversary celebration would create a big splash. He hoped planning would be even better than the past.

Deputy Mayor Pro Tempore Hughes stated that he would like to see staff see if the World Affairs Council could help with the event.

Mayor Meier stated that he would like to see Economic Development and Tourism department use the events to collaborate with their contacts.

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4. Present An **Update From Fred Hill, Former State Representative, Concerning Legislative Issues.**

Former State Representative, Fred Hill, gave a preview of a number of issues relevant to local governments that will be hot button issues during the 85th Legislative Session.

Council also reviewed a staff prepared draft legislative agenda that focuses on protecting local control for cities. Council agreed the draft priority list is very concise and complete. An item concerning TMRS and the COLA participation will be added to the legislative agenda.

The proposed Legislative Agenda will come back to Council for approval at the December 13, 2016 meeting.

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## REGULAR MEETING

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### Pledge of Allegiance

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Announcements and Acknowledgements regarding Town and Council Events and Activities

Discussion of Events/Meetings

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Public Comment.

The City Council invites citizens to address the City Council on any topic not on this agenda. Please fill out a **City Council Appearance Card** and submit it to a city staff member prior to Public Participation. Speakers are allowed **up to three (3) minutes per speaker** with **fifteen (15) total minutes** on items of interest or concern and not on items that are on the current agenda. In accordance with the Texas Open Meetings Act, the City Council cannot take action on items not listed on the agenda. The Council may choose to place the item on a future agenda.

Sheila Barkofske, 4130 Proton Drive, spoke regarding the citizen involvement in the DART meetings.

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Consent Agenda:

*All items listed under the Consent Agenda are considered routine by the City Council and will be enacted by one motion with no individual consideration. If individual consideration of an item is requested, it will be pulled from the Consent Agenda and discussed separately.*

Mayor Meier requested to pull Item 8.

Mayor Pro Tempore Arfsten moved to approve Items 7,9,10 & 11 as submitted. Deputy Mayor Pro Tempore Hughes seconded the motion. The vote was cast 7-0 in favor of the motion.

Item 8 (Vehicle Purchase): Mayor Meier stated he would abstain from voting on this item. His law firm represents the Sam Pack dealership where some of the vehicles are being purchased. Mayor Meier stated that after the older vehicles are auctioned, he would like to see a breakdown of how much money they generated.

Councilmember Walden moved to approve Item 8 as submitted. Councilmember Wilcox seconded the motion. The vote was cast 6-0 in favor of the motion. Mayor Meier abstained.

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7. Consider Approval Of The **October 20, 2016 Regular Meeting Minutes.**

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8. Consider Approval Of The **Purchase Of (2) 2017 Sedans, (1) 2017 Hybrid Electric Vehicle, (3) 2017 Half-Ton Trucks, (2) 2017 Three-Quarter Ton Trucks, (3) One Ton Trucks, (1) Sport Utility Vehicle, (1) Sweeper Truck Under The Town's Inter-local Agreement With The Texas Local Government Purchasing Cooperatives Houston Galveston Area Council Of Government (HGAC) And Texas SmartBuy** In An Amount Not To Exceed \$504,897.42.

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9. Consider A **Resolution Authorizing The City Manager To Approve A Contract With Shiroma Southwest For Public Relations To Promote The Town Of Addison's Special Events.**

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10. Consider And Authorize **The City Manager To Approve A Final Payment To Canary Construction, Inc. For The Construction Of The Les Lacs Pond Water Well Transfer Piping System** In An Amount Not To Exceed \$12,032.50.

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11. Consider A **Resolution Allowing Addison To Participate In The Dallas County Emergency Management Plan.**

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Regular Items

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12. Discussion Of **Ron Whitehead's Appearance Before The Council And Matters Related To Town Operations During Mr. Whitehead's Tenure As City Manager.**

City Manager, Wes Pierson, stated that Mr. Whitehead notified him that he would not attend the meeting but submitted a statement to be read by Councilmember Duffy.

Councilmember Wilcox stated that he felt it was not appropriate for a statement to be read when the item was for Mr. Whitehead to come and have a conversation with the Council.

Councilmember Duffy stated that Mr. Whitehead changed his mind in coming after the Mayor asked for questions from citizens through his newsletter and the coffee. Mr. Whitehead felt is was in violation of the spirit of the conditions.

Councilmember Wilcox asked why Mr. Whitehead is able to dictate terms to the City Council.

Councilmember Duffy stated that the terms were laid out and Council voted to accept those terms.

Councilmember Wilcox stated that he voted to allow Mr. Whitehead to come and discuss other things and not limit the conversation to not just the safe deposit box.

Councilmember Duffy stated the Council voted to allow him to speak on multiple subjects, not just the safe deposit box, and Mr. Whitehead would take questions from the Council.

Councilmember Wilcox stated that was not what was happening.

Councilmember Duffy asked if Council would like to him to read the letter. He stated it was the decision of Council.

Mayor Meier asked if Councilmember Duffy would provide a copy of the statement to Council.

Councilmember Duffy stated he would.

Councilmember Wilcox stated when something is on the agenda, Council gets a packet of information that explained what will be discussed the Friday before the meeting. .

Mayor Meier stated that the memo referenced a statement and he thought the Council would have received a copy of the statement

before the meeting.

Councilmember Duffy stated the agenda item stated discussion.

Councilmember Wilcox stated that he felt that a third person was being entered into the conversation by Councilmember Duffy reading the statement. If discussing it, then Council needed to discuss it.

Mayor Meier stated that if the statement had been given out ahead of time, then Council could have fully discussed it.

Councilmember Duffy stated he hasn't held on to the statement. He just received the statement.

Councilmember Walden stated that when he asked for the presentation the Mayor was doing at the Fall Town Meeting, he was told that it was the Mayor's thing and he was not allowed to have it beforehand. Councilmember Walden stated that this situation was the same as this one.

Mayor Pro Tempore Arfsten stated if Council wasn't going to entertain reading the letter, then he would like to move on to the next item.

Mayor Meier stated the letter should be read and move on.

Deputy Mayor Pro Tempore Hughes stated that particularly since the item was in the packet and Council was told it was coming.

Mayor Meier stated he would like to hear the letter and move on.

Councilmember Duffy read the statement from Ron Whitehead. The statement read as follows: (the following text is the actual written statement as submitted by Mr. Ron Whitehead)

*November 8, 2016*

*The Honorable Addison City Council,*

*I appreciate the city council's offer to allow me to address some of the subjects that the Mayor continues to bring up in his newsletter and his other venues. I have been retired for over two and a half years and he continues to feel a need to question my actions over my 32 year career for his own political reasons. I am tired of it to be honest with you.*

*After reading last week's Mayor's Newsletter and other commentaries it is obvious that the mayor isn't interested in the truth. He just wants to create an adversarial atmosphere where he can continue his political grandstanding and try to cause me and others harm. For this reason I have decided to not participate in that arena in person. I ask that you read this response into the record at the City Council meeting and include it in the City Manager's weekly newsletter.*

*I am very proud of the almost 32 years I served the Town of Addison. I have great respect for the Council Manager form of government and believe it is the best form for a community when it is allowed to operate as designed.*

*We built a great city and an incredible municipal organization. Five other Mayors and countless City Council members selflessly served Addison over three decades to make it what it is today. We won awards annually for financial reporting. Our Annual Budgets and Comprehensive Financial Reports were the envy of most communities. We had clean audits from professional accounting firms. Our long time Finance Director Randy Moravec had a degree in Finance, a Master's in Public Administration, and a PHD in Urban Studies. Eric Cannon replaced him in the later years and he had a degree in Accounting and Finance and he was a CPA. They are two respected and highly competent professionals.*

*A couple of weeks before I retired the Mayor proposed that we find someone to do a transitional audit for the Town. We just had our annual audit completed in October. None of us had any idea what a transitional audit was supposed to be. The Mayor proposed that the audit cover the period of October through the end of February when I was leaving, so to give Lea Dunn the new City Manager a clean slate. Lea Dunn had been with the town for 17 years as the Deputy City Manager so it wasn't like she was walking in the door from somewhere else. Lea was not the Mayor's choice for City Manager. He found Larry Kanter and they started an almost two year process of trying to discredit me, Lea and the organization in general and spent over \$100,000. Mr. Kanter was always careful to say that he was not conducting a forensic audit, and his criticisms were mostly directed through his opinion of accounting practices and processes. By Mr. Kanter's own admission the process was very political, and frankly his findings were just his opinion and he has no significant municipal experience.*

*Not once during this two year period did the Mayor and Council ask*

*for my input or opinion of the Kanter report and public access was actively blocked to Lea Dunn's response to the report claiming it was privileged information. Lea's response and the comments of other senior staff members were critical of the report and the Mayor did not want that out in the public.*

*The Mayor was hoping to find information that would void Lea's severance agreement so when they forced her out they would not have to pay her \$200,000 in severance. That didn't happen, so they had to pay her as well as pay an interim replacement and headhunting firm to find her replacement. All of this was a total waste of our tax dollars and we lost an excellent employee. He was also trying to discredit me, because I often disagreed with him and he was always concerned that I would run for Council. I have never had any interest in running for public office and I still do not.*

*This is the first mayor that has criticized fellow council members in public that disagree with him. He has a death grip on the cities email list, because he has to control the message or his house of cards will fall. He has divided the community, which I didn't even think was possible, but it happened. His lack of care for the employees of the town caused the Police and Fire Associations to get involved in the last election for the first time in the history of the town. Lots of people have left the towns employment and others are looking.*

*I have provided an explanation of the safe deposit box situation and the Midway Road accusations for your benefit. Under the city manager form of government the process for obtaining information from former employees is to have the city manager's office contact them and then they present that information to the city council. That doesn't happen here because of the Mayor's involvement in the process. Our city functions best when the professional management team is permitted to do their job and is not distracted by a mayor with his own political agenda. Addison voters recently made it clear that they do not appreciate the mayor's political stunts that serve only to undermine confidence in the community.*

*Donna and I are living in the same house on Bobbin Lane that we have lived in for 30 years. We aren't going anywhere and we are here almost every day, so if anyone wants to know something about us or what I have done in the past just come on by. I will be happy to visit with individual council members or individual members of the public and tell you everything I know. It saddens me to see the community divided. That is the legacy of this mayor.*

*I have always wanted nothing but the best for Addison, so hopefully this schism can soon be repaired and we can get back to common decency in how people are treated in the town.*

*Thank you,  
Ron Whitehead  
3919 Bobbin Lane, Addison 972-490-8449*

*The Safe Deposit Box at Bank of America*

*Addison served as the treasurer for the MetroPlex Mayors Association which is a group of area mayors that meet once a month at the Marriott Quorum in Addison. Each city pays dues to cover their mayor's breakfast and name tags. That is pretty much the extent of the type of expenditures from this checking account. The two signatories on the checking account were me as the City Manager of Addison and Michele Covino, my Assistant. Michele retired and I was about to retire, so Charles Goff, Assistant to the City Manager and Lea Dunn, who was about to become the City Manager and I went to the Bank of America at Preston and Belt Line to change the signatories to Charles and Lea.*

*The banker at the Preston Branch said, "Do you know that you still have a safe deposit box at the Belt Line and the Tollway location of Bank of America?" They said it had not been opened since Randy Moravec opened it in 2004 and we had not been paying for it. The Town had changed banks to Frost Bank some years earlier, so there was no reason for us to know we still had this box at Bank of America.*

*There were three signatories on the original account. Randy Moravec the Director of Finance, Sandra Goforth the Chief Accountant and me as the City Manager. Randy and Sandra had retired by this time in 2014 and Sandra passed away shortly after retiring, so I would have to go to the bank since I was the only remaining signatory.*

*Randy Moravec has said thinking back he recalls that before we had a full time Information Technology Department we used to store the data backups for the town's financial system at the bank. That would explain why Sandra Goforth, the Chief Accountant was the person who accessed the safe deposit box most frequently and why I would have no reason to access it over all those years.*

*Charles and I went over the next day and met with a banker and he had me sign a card to get admittance to the safe deposit area. He*

*took us back and showed us where the box was and we tried a number of keys the Finance Department had provided, but none of them would open the box. Since we could not access the box he drew a line through my name where I had signed on the card.*

*I retired at the end of February 2014 and really had not thought about it until a couple of weeks ago when I heard that there was an item on the City Council agenda to discuss the safe deposit box and that the Finance Department thought they had found the key. The Mayor wanted the box opened and he wanted it videotaped. That was apparently done and there was nothing in the box.*

***The idea that finding an unused safe deposit box would be a mystery or agenda item is ludicrous. This was a housekeeping item that should have been addressed with a couple of phone calls by the city staff.***

Midway Road Construction Estimate in 2011

*The City Manager doesn't make engineering estimates on projects. The Town hires professional engineers to make those estimates and the engineers do their best to project into the future what unit cost might be for concrete and steel and other building materials and the cost of construction. The vast majority of the time they are pretty accurate, but sometimes the economy surges on them and causes the cost to be significantly higher. The engineer doesn't know at the time of estimate if the city will build the project in three years or in six to ten years. Often cities decide to wait to build projects until the economy cools off if construction prices are running higher than their estimate. Sometimes they will go back to the public and ask for additional funding or they will re-engineer the project to fit the available funding.*

*The Midway Road reconstruction is one such project. The estimate for construction came from Guymon Phillips a registered professional engineer in Texas. Guymon was working with the bond committee back in 2011 to try to develop the scope for a project on Midway Road and some estimated cost. There were a lot of unknown variables for the project at the time. Obviously the project had not been designed. Cities generally don't design projects before they get authorization to fund the project from the public. The vast majority of the time this works, but occasionally it doesn't because of the issues mentioned earlier.*

*Farmers Branch controls the west lane of Midway from Spring Valley all the way north to almost Beltway Drive. We did not know what*

*their financial participation would be in the construction process, but we felt they should participate if one lane was in their city. We did not have a final design and cost for landscaping and the bond committee didn't really talk about utility relocations at that time. Most of the focus was on the part that was north of Belt line, because the committee had been made aware that this was the section that had the most problems.*

*I haven't seen the new design for Midway, but I have heard that it has a substantial allocation for landscaping and for utility relocation that was not in the original plans. The Dallas area is booming with all of the major relocations coming to the area like Toyota, State Farm, and liberty Mutual Insurance.*

*Construction cost have escalated rapidly over the last five years.*

*Todd Meier was the mayor in 2012. He heard the same presentations from the bond committee we all did, so trying to place blame for the estimate being off seems a bit disingenuous at this point. The committee and the professionals did their best with the information they had when they were setting the scope and budget for the project in late 2011. I can't emphasize enough that the engineering estimates for projects over the years have been pretty accurate.*

*If you spent a million dollars designing the project before it was approved by the voters you still don't know when you are going to build it and what construction prices will be at the time. It could potentially keep you from changing the scope of the project as has apparently been done on Midway recently, but there are no guarantees. It is what it is and you are now probably looking at 2018 at the earliest before you do anything on Midway. The choices are the same. Don't do anything, re-engineer the project to fit the money or go back to the voters and ask them for additional authorization. Move forward!*

Councilmember Wilcox stated that he felt that there were still questions that hadn't been answered.

Councilmember Duffy stated that Mr. Whitehead offered to speak to anyone to discuss the issues further.

Councilmember Wilcox stated that he would have liked to have that conversation in public otherwise it may becomes a "he said/she said" arrangement.

Mayor Meier stated that he had a number of things to say. He stated he anticipated a number of things Mr. Whitehead may say. He stated he prepared a couple thoughts. The Mayor then read the following comments: (the following text is as written and read by Mayor Todd Meier)

***Ironically the very first question I planned on asking Mr. Whitehead this evening was: Do you agree with the council's policy on Transparency, "More is Better?" I guess we have our answer! Over the last several weeks neighbors have called, spoken to me in a variety of ways and places about suggested questions...lots of interest.***

***Obviously now, we will not be permitted to ask Mr. Whitehead those questions.***

***Really too bad, might have cleared up lots of issues, however now after his offer made thru Duffy to come after we arranged our schedule and agreed to all of his conditions he changes his mind?***

***Without the efforts our current City Manager, would Ron Whitehead have just not shown up tonight with no advance notice? How rude and disrespectful.***

***And of course it is all somehow the mayor's fault? Great technique to try to redirect the conversation...deflect and distract!***

***Remember it was Mr. Whitehead who wanted this, he was the one that wanted to come chat with council and the council agreed to all of his conditions. Mr. Whitehead's decision to not come tonight will certainly serve to confirm many folk's suspicions that **there are questions that he is simply unwilling to answer publicly.*****

***As several folks have remarked to me, "Why in the world would anyone refuse to come chat with the council about their work unless they have something to hide?"***

***Let's explore a few of those areas where they may have been some questions that would be very difficult to answer;***

***First; on the Undergrounding of utilities on Belt Line Road and Midway Road reconstruction projects we know;***

- The estimates for each of these projects were woefully short in each case well over 100% wrong leaving us \$22 million short on Midway Road and at least \$20 million short on the Belt Line Road project.***

- On the Midway Road project we know that the estimate Ron Whitehead provided to council and our community was for \$16 million for the **entire** project from Spring Valley to Keller Springs. We know the scope of work included; paving, drainage, lighting improvements, landscape improvements We know that because that is what Mr. Whitehead told us and because that is exactly what is reflected in the materials Mr. Whitehead and his staff at that time produced for us!

**Here it is...I'll just read it to you...** the question has been, "what process did he use developing those estimates?" We now know that what his neighbor Sabina Bradbury told the group of about 50 folks at Lion and Crown on August 18, 2016 was untrue. She told the group that Ron told her that Halff and Associates prepared the estimate. **Our current staff has determined that is simply not true,** Why Mr. Whitehead told Sabina that untruth, I suppose we will never know.

So what was the process Ron Whitehead used to develop those estimates? Here is what we do know: On February 27, 2012 at a council work session Mr. Whitehead got very upset with a couple of council members who were pressing him about his estimates for the bond work; Mr. Whitehead said he was not going to spend millions of dollars on estimates when road reconstruction was a core competency of government. He ended the conversation and debate with "Building a street is a core competency, you need to trust us, do you not trust us?"

**Since then he has refused every opportunity to come help our staff or come forward with his notes or in person explanation, including tonight.** Mr. Whitehead has been very critical of Larry Kanter and his work. Given what Mr. Kanter's work revealed it is understandable why Mr. Whitehead would be so defensive. It is the classic case of shooting the messenger! All Mr. Kanter did was shine a bright light on the shortcomings that existed when Mr. Whitehead was City Manager as to the very poor internal financial controls that existed during Mr. Whitehead's tenure.

It was Mr. Whitehead and his staff at the time that failed to address the lack of financial control issues first brought to light in the Jim Rolfe report delivered to council in the '80s entitled "Alleged misconduct by Addison City Officials" related to abuse of credit cards and poor internal controls, It was Mr. Whitehead and his staff who failed to address the

*items brought forward in the annual Weaver Audits concerning the poor internal financial controls and the improper use of P-Cards and purchase orders.*

*Then not too surprisingly the third independent source, Larry Kanter tells us in much more specifics that he too found a lack of internal financial controls. See the pattern? Lack of internal financial controls. Very specifically; Special Events, \$3 million in Oktoberfest dollars with no reconciliation with the bank deposits. We had a purchasing manual, however we did not use it! That produced all sorts of purchasing irregularities. Lack of a sufficient number or qualified staff, the fact that the City manager did not give the CFO oversight control or responsibility of all financial matters and transactions, among several issues with our banking relationships was the highlighted fact that several signature cards and authority were outdated containing names of people who no longer worked for Addison. In the payroll department there was a lack of proper separation of duties, For cash receipts there was not proper accounting or receipt process, In our municipal courts that handle millions of dollars of cash and credit cards each year, he process was very old and impossible to track the cash accounting including in the jail bond process, there was no fixed asset inventory or accounting including in our Police department. Most importantly since is departure 3 separate City Managers have acknowledged the deficiencies and lack of internal financial controls and pledged to correct them!*

*In fact in a January 4, 2015 email to council Ms. Dunn, City Manager at the time, stated, "The staff recognizes that coordination of the COSO initiatives with the various outside consultants is a high priority" and further she said, "the staff fully embraces the council's decision to implement the COSO initiatives."*

*And since Wes Pierson has been our City Manager he has led the process of ticking down the list and has implemented virtually every one of Mr. Kanter's recommendations.*

*You may not like Mr. Kanter's personality, however **there has never been any dispute about the failures he has sighted in our basic internal financial controls...no dispute whatsoever!!!!***

*More proof of our lack of internal financial controls? Our recent*

*discovery of the mysterious safe deposit box! No one knew about it except Ron Whitehead...remember the outdated signature card and access authority? Sound familiar? Totally consistent with the observations and concerns expressed by Mr. Kanter?*

*Sure there are lots of questions remaining;*

*Duffy's comment about a "bunch of keys"?*

*What did Ron Whitehead do with that "bunch of keys"?*

*Questions like*

*Why even have one when we have safes all over Town in secure locations in Town facilities?*

*Why did Mr. Whitehead not tell anyone about the safe deposit box that he tried to enter on February 25 three days before he retired?*

*Ron Whitehead had a safe deposit box key that he thought opened the safe deposit box at the Bank of America branch in Dallas, according to Mr. Whitehead, he was not able to open that safe deposit box with the safe deposit box key he had in his hand on February 25, 2014..so what safe deposit box did that key fit? What did he find in that other safe deposit box?*

*Thanks to the Freedom of Information Act and the tenacity of one of our long time Addison residents, the council received and has reviewed documents that reveal some very surprising information; Between May 2011 when I was elected to be mayor and his retirement in February of 2014, Ron Whitehead fired between 8 and 10 employees. Each one of those fired employees received significant cash settlements, the total payout for just that limited time period exceeded \$130,000 with a possible additional amount of \$94,000 for just one employee.*

*In exchange for the payment, each fired employee was required to sign a "no disparagement" agreement or as council member Walden might call it a "Hush money agreement". Until the council received copies of the documents given to the citizen as per the FOIA request, the council was totally unaware of this process or the expenditures of tax payer money. Why did he keep the payments of tax payer dollars secret and hidden from the council?*

*Finally, the wind turbine project that Ron Whitehead conceived, developed and completed as City Manager that began as a single bidder contract given to Landmark Construction for over*

*\$6 million including payment for the wind turbine portion of the project. During Mr. Whitehead's tenure between February 2012 when the wind turbine project was completed by Landmark and January 2014 on three separate occasions there were catastrophic failures of the wind turbines. **Blades coming off** on one occasion a blade penetrated the roof of a nearby business landing on a conference table. **The second and third failures occurring after repeated repair attempts by Landmark.***

*We also now know that Mr. Whitehead disagreed with City Manager Lea Dunn's recommendation to council to end the wind turbine project because as she said, "It just was not safe".*

*So why would Ron Whitehead disagree with City Manager Lea Dunn to end the wind turbine project after three near disasters?*

*We also now know that Mr. Whitehead disagreed with the council's decision to seek legal recourse by filing suit against Landmark to recover the \$1.1 million dollars allocated to the wind turbine portion of the \$6 million project.*

*What we don't know is...Why? Why would Ron Whitehead disagree with a council trying to recover tax payer dollars for a failed project?*

*That is of course the council's fiduciary duty! What was the council's alternative? Just forget about it? Maybe there is an answer to the Why, in what has to be one of the most stunning and extraordinary acts of "betrayal "as characterized by one of our staff members present or as later described by our then interim City Manager Charles Daniels as the most shocking lack of respect he had ever observed in his 40 years in municipal government When on October 27,2015 at required mediation in our lawsuit against Landmark, **Ron Whitehead spent 4 hours in the other teams' locker room.** At the beginning of the mediation that day Mr. Whitehead joined the president of Landmark and their lawyers in their private conference room, **unbeknownst to anyone in Addison,** to plot against Addison in our lawsuit to recover \$1.million taxpayer dollars.*

*As if that is not shocking enough?*

*Since that time **Mr. Whitehead has refused multiple attempts** of our attorneys to meet and to seek his cooperation and help.. He has been so unwilling to help that our attorneys have*

characterized Mr. Whitehead as a "uncooperative former employee" **He has continued with his refusal to meet with our attorneys to this day unless the lawyers from Landmark are present.**

Shocking? Of course, **revealing?** What conclusions would any reasonable person draw from those facts No wonder Mr. Whitehead changed his mind about coming to the council meeting this evening.

There are way too many questions that would be far too difficult to answer in public and now we know, **he is simply refusing to answer!**

**Refusing to answer questions** about the wind turbine project, **Refusing** to help his former employer and the taxpayers that funded his retirement, and **Refusing to answer** questions about his relationship with Landmark, **Refusing to answer** questions about his estimating process for the bond projects that would help our current staff? **Refusing to answer** questions about his secret arrangements with fired employees and spending tax payer dollars for their silence? **Refusing to answer** questions about that mysterious safe deposit box and the key? What safe deposit box did that key fit?

Maybe most importantly **refusing to come help us put an end to this divisiveness and put this all behind us.**

There are numerous other questions suggested to be asked that I have chosen not to ask. I believe the items above are revealing enough, many of the other questions mostly refer to times before I was Mayor. For now I believe maybe best left unasked.

**I believe the unanswered questions speak volumes....**  
Time to move on...

Mayor Pro Tempore Arfsten stated that he would hope that City Manager Pierson would feel comfortable to discuss any issues with Mr. Whitehead as he sees necessary to clear up any question staff may have.

Mayor Meier stated he is encouraged by the staff in place now and with the leadership of City Manager Wes Pierson.

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13. Present, Discuss And Consider Approval Of A **Resolution**  
**Appointing Members To The Planning & Zoning Commission.**

City Manager Wes Pierson stated this item was a follow up to the discussion at the last meeting. The Resolution had been provided with those names nominated at the last meeting.

Councilmember Paul Walden moved to approve the Resolution as stated with names and places for the appointees. Councilmember Duffy seconded the motion.

Mayor Meier stated he would like to discuss each appointee separately and vote accordingly for each.

City Manager Wes Pierson read the Resolution for clarification.

Council discussed the process the Councilmembers took to decide who to appoint to the positions.

Councilmembers Duffy & Walden stated they spoke some of the applicants.

Councilmember Angell asked if there was a protocol to follow.

Mayor Pro Tempore Arfsten stated there hadn't been a protocol.

Mayor Meier stated that with the new process in place he wanted to see what the vetting process had been. Mayor Meier stated he wanted to know how the candidate pool was handled, if interviews were done.

Mayor Pro Tempore Arfsten asked if this questioning was a necessary part of the process.

Mayor Meier stated he wanted to make an informed vote.

Deputy Mayor Pro Tempore Hughes stated he would be much more comfortable with this conversation in Executive Session. He stated that in the past the names were not disclosed before the discussion in Executive Session. Qualifications could be discussed without an intrusive discussion happening out in the public. He stated he saw these appointments as a personnel matter that would be discussed in Executive Session.

Mayor Meier stated that the Councilmembers with the appointments had asked to have the discussion in public at the last meeting and now the names have been disclosed. He stated he didn't see

anything wrong with sharing with the public the process that goes on with selecting members to the P&Z and BZA boards.

Mayor Pro Tempore Arfsten stated the last time the discussion was done in Executive Session he felt he was forced to appoint someone new instead of reappointing the member already on the board.

Councilmember Wilcox stated he was asking the question of how many applicants were spoken to because he had a hard time understanding why none of the three appointments included an applicant with professional real estate experience.

Mayor Meier stated he wanted to echo Councilmembers Wilcox's concerns. He stated that the three appointed members were getting fired from their jobs as volunteers and are all very qualified. He stated not one of the three outgoing members received a conversation from any one of the three Councilmembers who are appointing members at this time. He stated no one talked to them or told the current appointees that they weren't going to be reappointed or the reasoning behind those decisions.

Councilmember Walden stated one of the members up did not reapply.

Council discussed the qualifications of the applicants.

Mayor Meier discussed how he chose those he has appointed in the past.

Councilmember Wilcox stated he would like to amend the motion to include direction for conversations regarding the applicants for Planning & Zoning and Board of Zoning Adjustment be done in Executive Session.

Mayor Meier stated he would suggest that the Council bring that option up in a future Work Session to further explore the process. He stated he believed that there were issues with the appointment of commissioners and no one has expressed great pleasure with the process.

Councilmember Wilcox withdrew his amendment.

The motion as stated above was; Councilmember Paul Walden moved to approve the Resolution as stated with names and places for the appointees. Councilmember Duffy seconded the motion.

The vote was cast 5-2 in favor of the motion. Mayor Meier and Councilmember Wilcox voted against.

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14. Present, Discuss And Consider Approval Of A **Resolution Appointing Members To The Board Of Zoning Adjustment.**

Mayor Meier asked for a motion.

Councilmember Walden moved to approve Item #14 as submitted with the names and places stated respectively. Councilmember Duffy seconded the motion.

Mayor Meier stated that his discussion would be the same as the previous item. Mayor Meier stated he felt it was very disrespectful not to discuss appointments with the citizens currently appointed to the boards. He stated he was pleased to see one member of the Board of Zoning Adjustment was reappointed.

Mayor Pro Tempore Arfsten stated he felt the Mayor's comments lead the new appointees to believe they didn't have the Mayor's approval.

Mayor Meier stated he wasn't voting against the appointees but against the process.

Mayor Pro Tempore Arfsten stated that the appointees could perceive it differently.

Mayor Meier stated he meant no harm. He stated he was pleased to see the reappointment of one but he thought the process was disrespectful for those serving.

Councilmember Duffy asked the Mayor if he felt that if a citizen served for 6 years then they should be replaced?

Mayor Meier stated no.

Councilmember Duffy stated if someone is being replaced, there's no disrespect to them. He stated that others need to have the opportunity to serve also.

Mayor Meier stated he was displeased with the way the current appointees have been treated. Mayor Meier stated that he would have liked the Councilmembers making the appointments to sit down with the current members who weren't going to be reappointed and explain the change and why it was happening.

The vote was cast 5-2 in favor of the motion. Mayor Meier and Councilmember Wilcox voted against.

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15. Present, Discuss And Consider Approval Of A **Resolution Approving A First Amended And Restated Joint Fire Training Center Interlocal Cooperation Agreement Among The City Of Carrollton, Texas, The City Of Coppell, Texas, The City Of Farmers Branch, Texas And The Town of Addison.**

City Manager Wes Pierson presented the item to Council. The agreement would allow the Town to become an owner in the Fire Training Facility along with the Cities of Carrollton, Coppell and Farmers Branch. The Town's equity portion would be paid out over 3 years. This new facility would allow the Fire Department to participate in more frequent training, save time in travel to training, and eliminate the need for overtime to train. This facility would also allow the entities to coordinate training for mass emergencies and allow training to partner with the North Texas Emergency Communications Center (NTECC). This facility will also allow the Police Department and joint SWAT team to coordinate training.

Council discussed the funding of the facility and improvements that may be needed in the future.

Mr. Pierson stated that the initial shared capital costs are agreed and any additional costs would be taken to the governing board, which consists of Fire Chiefs from the 4 cities, and voted on with the board.

Mayor Meier moved to approve Item #15 with the version presented at the Dias. Mayor Pro Tempore seconded the motion. The vote was cast 7-0 in favor of the motion.

Mayor Meier commented he wanted to thank Mr. Pierson for working so hard to make the agreement work and allow Addison to take advantage of the shared service opportunity.

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Adjourn Meeting

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NOTE: The City Council reserves the right to meet in Executive Session closed to the public at any time in the course of this meeting to discuss matters listed on the agenda, as authorized by the Texas Open Meetings Act, Texas Government Code, Chapter 551, including §551.071 (private consultation with the attorney for the City); §551.072 (purchase, exchange, lease or value of real property); §551.074 (personnel or to hear complaints against personnel); §551.076 (deployment, or specific occasions for implementation of security personnel or devices); and §551.087 (economic development negotiations). Any decision held on such matters will be taken or conducted in Open Session following the conclusion of the Executive Session.

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Mayor-Todd Meier

Attest:

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City Secretary-Laura Bell

# DRAFT

## OFFICIAL ACTIONS OF THE ADDISON CITY COUNCIL

November 14, 2016

Addison Town Hall, 5300 Belt Line Rd., Dallas, TX 75254

5:00 PM Work Session

7:30 PM Regular Meeting

8:30 PM Executive Session

Present: Mayor Meier; Mayor Pro Tempore Arfsten; Deputy Mayor Pro Tempore Hughes; Councilmember Angell; Councilmember Duffy; Councilmember Walden; Councilmember Wilcox

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### WORK SESSION

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1. Present And Discuss **Changes To The Addison Police Departments' Racial Profiling Data Collection Process; Training Related To Public Safety Personnel Regarding Racial Profiling And Racial Sensitivity, Diffusing Critical Incidents, And Emotionally And Mentally Disturbed Persons.**

Police Chief Paul Spencer presented the item to Council. Chief Spencer introduced Dr. Alex del Carmen who presented the findings of his report to Council.

Council and Dr. del Carmen discussed the findings. A lengthy conversation focused on the issues with Texas Department of Public Safety information not correctly listing the race of a citizen. This information then is incorrectly entered on citations throughout the state.

Chief Spencer spoke regarding the past reports completed by the University of North Texas. He stated that the reports were not done wrong. The data provided to the University from the Police Department was flawed. The process now will fix that issue and the Chief is moving forward with the correct data to ensure the reports are correct from this point on. Chief Spencer spoke regarding the

proposed training program for both the Police Department and the Fire Department. This training will include racial sensitivity training and procedural justice as well as de-escalation or crisis intervention.

Mayor Meier stated he was pleased to see the information presented and the plan for action from the Chief. He also stated that both Chief Spencer and Chief Jones should bring any training needs to the City Manager and Council's attention as soon as possible so action can be taken to get the training in place.

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2. Present And Discuss **Information Related To The Town Of Addison's Participation In The Texas Municipal Retirement System (TMRS).**

Leslie Hardy and Eric Davis from Texas Municipal Retirement System (TMRS) presented the item to Council. An extensive power point presentation was given which included information on the history of funding in Addison, Actuarial Process, Investments, Effects of COLA Adoption, and the viability of the TMRS as a whole.

Council discussed the information with the TMRS representatives. Discussion included comparison to other cities, the effect of a recurring COLA on the budget and possible changes to the system at the State level.

An item regarding the COLA will be brought to Council at the December 13, 2016 meeting.

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3. Present And Discuss **The Housing Policy For The Town of Addison.**

Due to time constraints, Council moved this item to the next meeting on December 13, 2016.

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## REGULAR MEETING

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### Pledge of Allegiance

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## Announcements and Acknowledgements regarding Town and Council Events and Activities

### Discussion of Events/Meetings

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#### Public Comment.

The City Council invites citizens to address the City Council on any topic not on this agenda. Please fill out a **City Council Appearance Card** and submit it to a city staff member prior to Public Participation. Speakers are allowed **up to three (3) minutes per speaker** with **fifteen (15) total minutes** on items of interest or concern and not on items that are on the current agenda. In accordance with the Texas Open Meetings Act, the City Council cannot take action on items not listed on the agenda. The Council may choose to place the item on a future agenda.

Fran Powell, 14796 Lochinvar Court, spoke regarding the relationships between Councilmembers and the tension felt in the community.

Sheila Barkofske, 4130 Proton Drive, spoke regarding the statement from Ron Whitehead.

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#### Consent Agenda:

*All items listed under the Consent Agenda are considered routine by the City Council and will be enacted by one motion with no individual consideration. If individual consideration of an item is requested, it will be pulled from the Consent Agenda and discussed separately.*

Mayor Pro Tempore Arfsten moved to approve Items # 5-7. Deputy Mayor Pro Tempore Hughes seconded the motion. The vote was cast 7-0 in favor of the motion.

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5. Consider Authorizing The City Manager To **Approve A Final Payment To McMahon Contracting, LP., For The Construction Of The Northwest Drainage Channel Located On The Addison Airport** In The Amount Of \$120,320.67.
6. Consider A **Resolution Approving An Interlocal Agreement With The Trinity River Authority For The Monitoring Of Wastewater For Certain Industrial Uses.**
7. Consider A **Resolution Approving An Interlocal Agreement With Dallas County Health And Human Services For Coordinated Health Services.**

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## Regular Items

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8. **Hold A Public Hearing, Discuss, And Consider Approval Of An Ordinance Changing The Zoning On Property Located At The Southeast Corner of Westgrove Drive and Sojourn Drive, Which Property Is Currently Zoned PD, Planned Development, To Approve A New PD, Planned Development, Allowing An Office And Warehouse Building** Case 1742-Z/Knight Renovation.

Assistant Director of Development Services Charles Goff presented the item to Council. He stated the Planning & Zoning Commission recommended approval for this item with one stipulation that the warehouse and office be used by the same user.

Councilmember Wilcox stated he had a concern with the doors on the warehouse.

Mr. Goff stated that the doors lead into the warehouse. The vehicles will be going in and out of those doors to reload supplies. The plan calls for boosted landscape on the Westgrove Drive side to screen with dense bushes. This will help to enhance the landscape and minimize the noise.

Mayor Meier stated his concern would be with the noise. He understood the visual screening with the landscape. Mayor Meier stated he hoped the noise was limited to daytime, working hours.

Mr Goff stated the noise ordinance restricts the noise from 10pm-8am. These concerns would fall into that restriction.

Councilmember Duffy asked if a stipulation could be put in place that the loading has to be done within the warehouse to help with the noise control.

Mr. Goff stated that yes a stipulation could be added to the motion to impose that stipulation.

The applicants' attorney, Mr. Robert Reeves, spoke to Council regarding the project and the proposed stipulation. He stated the applicant would be fine to work within that stipulation.

Mayor Meier opened the Public Hearing. There were no speakers. Mayor Meier closed the Public Hearing.

Mayor Pro Tempore Arfsten moved to approve Item #8 with the

stipulation from Planning & Zoning and the addition of a stipulation that all loading of trucks be done within the interior of the building. Councilmember Angell seconded the motion. The vote was cast 7-0 in favor of the motion.

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9. **Hold A Public Hearing, Discuss, And Consider Approval Of A Resolution Adopting A New Master Transportation Plan For The Town Of Addison.** Case 1750-Z/Town of Addison.

Assistant Director of Development Services Charles Goff presented the item to Council. He stated the report was a compilation of many months of work with outside consultants, meetings with citizens, online surveys, meetings with Council and staff.

Deputy Mayor Pro Tempore Hughes stated he was surprised to see the information about the limited increase to traffic on Belt Line Road west of the Tollway. He stated he also had concerns about the information on parking at the Transit Center. Deputy Mayor Pro Tempore Hughes stated the conversation may be more of a land use one rather than the transportation conversation. He stated the intended purposes of the Transit Center with the input of DART will need to be addressed in light of the Cotton Belt project. Deputy Mayor Pro Tempore Hughes stated he would like to see land reserved ahead of time and a plan mapped out.

Mr. Goff stated that conversation would be part of a comprehensive land use discussion.

Deputy Mayor Pro Tempore Hughes asked if there was a standard for crosswalks or if there was a way to brand the look for them. He stated he had seen crosswalk branding with other cities.

Mr. Goff stated there about 5 standard choice that allow some flexibility. He stated under certain circumstances there may be some flexibility to allow Council to achieve certain looks or aesthetics at certain locations.

Discussion included the report information regarding bike lanes, bus shelter design, proposed street extensions and right-of-way acquisition.

Deputy Mayor Pro Tempore Hughes discussed how serious Council was about putting the suggestions from the report in action. He stated if Council or staff wanted this to go forward as is, the information may have to be changed on the Belt Line Road and

Midway Road sections where major changes are contemplated.

Mr. Goff stated that some of the standards will have to be tweaked to meet the needs of the Town.

Council agreed that certain parts of the report are needed more quickly than others. Once those areas are designated, funding for the projects and the exact standards and design elements will be considered. Some projects may need to wait for funding or the need for change to be greater.

Mayor Meier stated he would like to hear from the committee members and listen to their feedback on the report. Mayor Meier asked staff to invite the committee members to the next meeting to discuss. Mayor Meier suggested the item be tabled until the December 13 meeting for further discussion.

Mayor Pro Tempore Arfsten moved to table the item until December 13, 2016. Councilmember Duffy seconded the motion. The vote was cast 7-0 in favor of the motion.

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10. Present And Discuss **Matters Related To Procuring Entertainment For Addison Special Events.**

Mr. Acevedo and Shelbi Stofer, Senior Special Events Coordinator, presented the information to Council on how a genre of music is usually selected. City Manager Wes Pierson stated this was the time for Council to direct staff as to what genre of music they would like to see at the event.

Mayor Pro Tempore Arfsten stated he would like staff to look at the appropriate demographic for the restaurants at the event. He would like to see the restaurants brought into the process to make sure everyone is hitting the same target at the event to ensure the best outcomes.

Mr. Pierson stated this conversation helped staff move forward with the direction needed. Staff will talk to the restaurants involved in the event and align the demographics of those attending more tightly.

Mayor Meier stated he would hope that staff would feel comfortable to make a decision on entertainment without having to come back to Council for direction. Mr. Pierson stated he would like a motion to that affect for the record.

Mayor Pro Tempore Arfsten moved to approve the Mayor's

statement. Deputy Mayor Pro Tempore Hughes seconded. The vote was cast 7-0 in favor of the motion.

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## Executive Session

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11. Closed (executive) session of the Addison City Council pursuant to:

Section 551.074, Tex. Gov. Code, to deliberate the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of a public officer or employee, pertaining to:

- **City Secretary Evaluation**
- **Municipal Judge Evaluation**

Council convened into Executive Session at 9:16 pm.

- 
12. **RECONVENE INTO REGULAR SESSION:** In accordance with Texas Government Code, Chapter 551, the City Council will reconvene into Regular Session to consider action, if any, on matters discussed in Executive Session.

Council recessed from Executive Session at 10:24 pm.

No action was taken.

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## Adjourn Meeting

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NOTE: The City Council reserves the right to meet in Executive Session closed to the public at any time in the course of this meeting to discuss matters listed on the agenda, as authorized by the Texas Open Meetings Act, Texas Government Code, Chapter 551, including §551.071 (private consultation with the attorney for the City); §551.072 (purchase, exchange, lease or value of real property); §551.074 (personnel or to hear complaints against personnel); §551.076 (deployment, or specific occasions for implementation of security personnel or devices); and §551.087 (economic development negotiations). Any decision held on such matters will be taken or conducted in Open Session following the conclusion of the Executive Session.

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\_\_\_\_\_  
Mayor-Todd Meier

Attest:

---

City Secretary-Laura Bell

AI-1946

8.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** Infrastructure- Development Services

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**AGENDA CAPTION:**

Consider Authorizing The City Manager To **Approve A Final Payment To Shirley and Sons Construction Co. Inc., For The Dredging Of The Winnwood Ponds** In The Amount Of \$58,833.47.

**BACKGROUND:**

Shirley and Sons Construction Co. Inc., was awarded a contract to dredge the Winnwood Ponds in the amount of \$1,161,245 on June 28, 2016. The project was expected to take 8 months to complete and was budgeted in the Stormwater Capital Projects Fund. This is the final payment for the project that was completed in October this year. The project was completed ahead of the schedule and on budget.

The Winnwood Ponds are a series of on-stream waterways located in the eastern section of the Town of Addison (please see attached map). Over the years, a considerable amount of silt and sediment had built up in the ponds and needed to be removed to restore the storage capacity of the water body. This project will improve the overall health and ecosystem of the pond, and to enhance the aesthetics. These ponds were last dredged in 2000.

The scope of this project was to dredge and desilt the Winnwood Ponds. The project was one of the several capital improvement projects that were identified during the initial development of the storm water drainage utility fee.

Half Associates, Inc., completed the design for the project in late April 2016 and the project was posted to BidSync on May 3, 2016. Plans and specifications for the project can be found on the Town of Addison website under the Finance Department tab. The bids closed on May 26, 2016 and the Town received two bids.

Shirley & Sons Construction Co., Inc., was the lowest responsible bidder. The contract value for this project is \$1,161,245 and is budgeted in the Storm Water Capital Projects Fund. The budget for the project was \$1,500,000 and the total cost including design, construction, construction management, and wildlife relocation was \$1,411,669.46.

The project and punch-list are now complete and Shirley and Sons Construction Co. Inc., has submitted a final payment request. The project was complete in accordance with the construction plans and specifications, and staff recommends approval of the final pay application.

**RECOMMENDATION:**

Administration recommends approval.

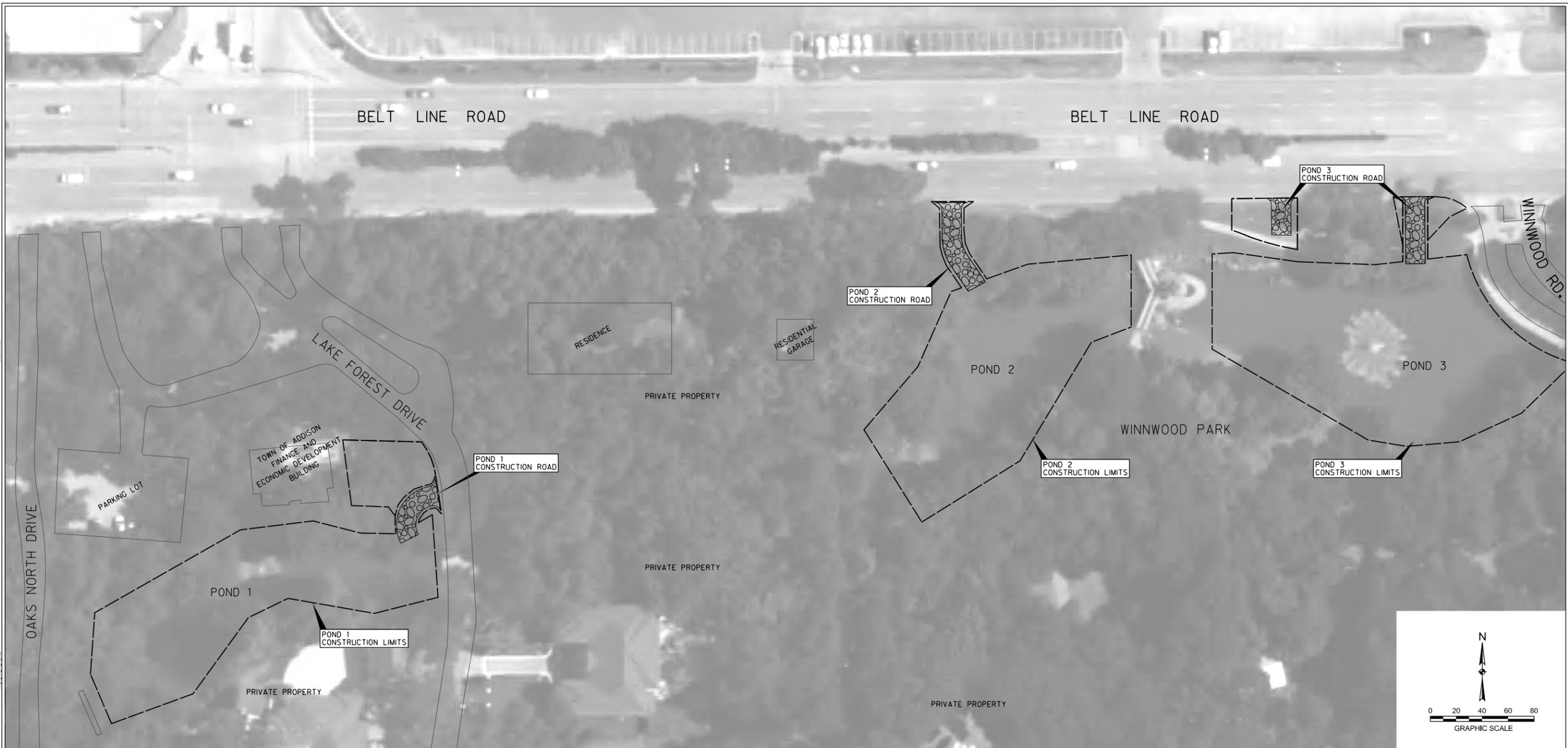
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**Attachments**

Map

Pay Application

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**WINWOOD POND  
DREDGING PROJECT**  
TOWN OF ADDISON  
DALLAS COUNTY, TEXAS



**HALFF**  
12225 GREENVILLE AVE., SUITE 200  
DALLAS, TEXAS 75243  
TEL: 972.987.9200  
FAX: 972.987.9202

Revision No.	Date	Description



The seal appearing on this document was authorized by Timothy E. Lackey, PE #61212 on 04-28-16. Absorption of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act. The record copy of this drawing is on file at the office of Halff Associates, Inc. 12225 Greenville Avenue, Suite 200, Dallas, Texas 75243. TBPE #PM #F-312.

Project No.: 29751-WA21  
Issued: 4/28/2016  
Drawn By: HC  
Checked By: TL  
Scale: AS NOTED

Sheet Title  
**PROJECT LAYOUT**  
**C1.01**  
Sheet Number

**LEGEND**  
--- LIMITS OF CONSTRUCTION  
[Hatched Box] CONSTRUCTION ROAD

- Notes:
- The Contractor shall contact the Town of Addison Infrastructure Operations and Services Department prior to any sign removal. Sign removal and reinstallation/relocation shall be in good condition equal to or better than existing condition, and as per the Engineers specifications with the cost incidental to the Project Bid Items.
  - All fences, signs, and property corner monuments removed for, or damaged during construction shall be replaced or repaired to as good a condition or with a better material than the existing as per the Engineer's specifications. Extra payment shall not be made for this work.
  - The Contractor shall be responsible for taking all precautions to protect existing trees except on specific authority of the Engineer.
  - The Contractor shall be responsible for taking all precautions to protect existing inlets and fountains.
  - The Contractor shall be responsible for repairing any damage caused by the Contractor outside of the designated work area with equal or better quality material at the Contractor's expense.
  - Refer to General Notes for sprinkler system.
  - Construction vehicles and material are not allowed in parking lots and streets outside the project limits or within private property.
  - The Contractor shall take reasonable measures to avoid unnecessary noise.

<b>Project Name:</b> Winn Wood Pond Dredging Project Bid Number 16-92	<b>Owner:</b> City of Addison 5350 Belt line Rd Addison Tx, 75001	<b>Contract Amount:</b> \$1,161,245.00
<b>Contractor:</b> Shirley & Sons Construction Co., Inc. P.O. Box 429 Cleveland, Texas 77328-0429	<b>Contract Change Orders:</b> \$0.00	<b>Total Contract Amount:</b> \$1,161,245.00
	<b>Covering Period:</b> 10/1/16-10/24/16	<b>Total Done To Date:</b> \$1,176,669.46
	<b>Amount Retained:</b> \$0.00	<b>Previous Payments:</b> \$1,117,835.99
	<b>Total Deductions:</b> Amount Due For Payment:	<b>Total Deductions:</b> \$1,117,835.99
		<b>Amount Due For Payment:</b> \$58,833.47

Certificate of the Contractor or His Duly Authorized Representative

To the best of my knowledge, I certify that all items, quantities and prices of work and materials shown on the face of this estimate are correct; that all work has been performed and materials supplied in full accordance with the terms and the conditions of the corresponding construction contractual documents between the Owner and the Contractor, all changes authorized thereto; that the foregoing is a true and correct statement and of the contract account up to and including the last day of the period covered by this estimate and that no part of the "AMOUNT DUE FOR PAYMENT" has been received. I further certify that all just and lawful bills against the below named Contractor for labor, material and expendable equipment employed in the performance of said contract have been paid in full accordance with the contract documents.

Date: 10/24/16  
Shirley & Sons Construction Co., Inc.  
By:  Ronald R. Shirley, President

Certificate of Owners Construction Supervisor or Engineer  
By:  David S. Keel 12/6/16

Owner: City of Addison

Contractor: Shirley & Sons  
Construction Co., Inc.

Date: 10/24/16  
Page: 2 of 2

Item	Description	Unit	Contract Quantity	Total Work Done This Estimate	Total Work Done Previous Estimate	Total Work To Date Quantity	Contract Unit Price	Amount
001	Mobilization	LS	1	0	0	1	\$50,000.00	\$50,000.00
002	Traffic Control	LS	1	0	1	1	\$7,750.00	\$7,750.00
003	SW3P Control	LS	1	0	0	1	\$26,300.00	\$26,300.00
004	Trench Safety System	LS	1	0	0	0	\$1,000.00	\$0.00
005	Project Signs	EA	3	0	3	3	\$850.00	\$2,550.00
006	Remove Existing Concrete Sidewalk	SY	60	0	47	47	\$5.00	\$235.00
007	Remove Existing Concrete Box	EA	2	0	0	0	\$1,250.00	\$0.00
008	Remove submersible Fountain	EA	2	0	2	2	\$1,250.00	\$2,500.00
009	Aquatic Species Relocation	LS	1	0	1	1	\$300.00	\$300.00
010	Bypass Pumping	MO	6	0	5	5	\$7,000.00	\$35,000.00
011	Unwatering of Ponds	LS	1	0	1	1	\$31,500.00	\$31,500.00

Owner: City of Addison

Date:

10/24/16

Contractor: Shirley & Sons  
Construction Co., Inc.

Page: 3 of 3

Item	Description	Unit	Contract Quantity	Total Work Done This Estimate	Total Work Done Previous Estimate	Total Work To Date Quantity	Contract Unit Price	Amount
012	Desilting including excavation	CY	5,000	0	5,257	5,257	\$120.00	\$630,840.00
013	Sediment Disposal	CY	5,000	0	5,257	5,257	\$70.00	\$367,990.00
101	Concrete sidewalk	SY	60	0	47	47	\$81.00	\$3,779.46
102	Temporary Asphalt Sidewalk	SY	245	0	0	0	\$50.00	\$0.00
103	Flowable Fill Concrete	CY	24	0	10	10	\$125.00	\$1,250.00
201	Soil Prep Material	SF	12,300	0	0	0	\$0.30	\$0.00
202	Turf Reinforcement Mat	SY	1,020	0	0	0	\$3.50	\$0.00
203	Common Bermuda Mid Iron Sod	SF	8,500	0	8500	8,500	\$0.55	\$4,675.00
204	Wood Chips	SF	5,000	0	5000	5,000	\$0.50	\$2,500.00
205	Tree Trimming	LS	1	0	1	1	\$1,000.00	\$1,000.00
206	Tree Removal	EA	1	0	1	1	\$1,500.00	\$1,500.00
207	Tree Protection	LS	1	0	0	0	\$500.00	\$0.00
208	90 Day Establishment Period	LS	1	0	1	1	\$4,000.00	\$4,000.00
209	1 Year Maintenance	LS	1	0	1	1	\$3,000.00	\$3,000.00
<b>210</b>	<b>Total Project</b>							<b>\$1,176,669.46</b>

**Work Session and Regular Meeting****Meeting Date:** 12/13/2016**Department:** Infrastructure- Development Services

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**AGENDA CAPTION:**

Consider Authorizing The City Manager To **Approve An Amendment To The Ground Lease At 4500 Westgrove Drive With Key Development, LLC.**

**BACKGROUND:**

Key Development, LLC, requests consideration of and consent to a third amendment to their airportground lease at 4500 Westgrove Drive. The proposed amendment would extend the Repair and Improvement Period that was established in the Second Amendment to the Ground Lease, dated December 3, 2015, by 18 months. No other terms of the ground lease are proposed to be modified by this action. Extending the Repair and Improvement Period will provide the Tenant the needed time to complete the remaining building improvements and thereby qualify for the eight year ground lease term extension as outlined in the Second Amendment.

Key Development, LLC (Key Development) has held the ground lease at 4500 Westgrove Drive at Addison Airport since 2006. The Second Amendment to that ground lease agreement, approved by Council in November 2015 and effective December 3, 2015, amended the lease term by adding 8 years (96 months) to the term of the lease, thereby extending it to March 31, 2047. In order to qualify for the 8-year extension, Key Development is required to complete certain building improvements within 12 months of the effective date of the Second Amendment, or December 3, 2016. The total value of the improvements to the building is \$378,000. The improvements are as described in Exhibit B of the Second Amendment, which is attached herein.

To date, Key Development has completed over \$264,000 (70%) of those improvements. According to Key Development, due to the unforeseen circumstances and unexpected delays, they have been unable to complete all of the improvements within the stipulated 12-month period, as originally committed. In an attempt to upgrade their elevator, they encountered a 6-month delay attributed to unforeseen code compliant fire and sprinkler system upgrades including heat and fire sensors at each floor level, air-duct sensors and a new alarm panel with wired pull stations. Once completed, each of the system upgrades required various city and state inspections before they could be made operational. Key Development also experienced a two-month delay while evaluating various proposals to upgrade their building atrium.

As a consequence of these unforeseen circumstances and unexpected delays, Key Development has been unable to complete the building improvements as required under the Second Amendments, therefore they are requesting an 18-month extension to the Repair and Improvement Period. This request is the subject of the proposed Third

Amendment to the Ground Lease. This extended period will allow sufficient time to develop the appropriate scope of work, solicit and evaluate the needed proposals and then schedule the work to be completed. Some work, such as the planned roof improvements, will need to be scheduled during the upcoming spring and summer months. Key Development is confident the requested extension should give them more than ample time to fulfill their obligations under the ground lease without having to come to the Town to request additional time again.

Key Development has been a tenant in good standing at Addison Airport since 2006, and they have successfully managed, operated and maintained the leased premises to a high standard since taking ownership of the building improvements. The proposed Third Amendment to the Ground Lease affords Key Development the needed time to fulfill their obligations with little or no adverse impact to the Town. The building improvements are consistent with the 2013 Addison Airport Strategic Plan by enhancing the overall value of the Airport and they represent upgrades and improvements to an existing Airport facility that will enhance the value of that particular facility. The Addison Airport Master Plan Update does not contemplate any significant land-use change for this portion of the Airport, so these improvements are consistent with that plan as well.

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

Resolution

2nd Amendment to Ground Lease (Key)

3rd Amendment Recommendation

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**TOWN OF ADDISON, TEXAS**

**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS APPROVING A THIRD AMENDMENT TO GROUND LEASE BETWEEN THE TOWN OF ADDISON AND KEY DEVELOPMENT, LLC FOR COMMERCIAL AVIATION USE ON PROPERTY LOCATED AT 4500 WESTGROVE DRIVE, AUTHORIZING THE CITY MANAGER TO EXECUTE THE AGREEMENT, AND PROVIDING AN EFFECTIVE DATE.**

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

**Section 1.** The Third Amendment to Ground Lease between the Town of Addison and Key Development, LLC for commercial aviation use on property located at 4500 Westgrove Drive, a copy of which is attached to this Resolution as **Exhibit A**, is hereby approved and the City Manager is authorized to execute the agreement.

**Section 2.** This Resolution shall take effect from and after its date of adoption.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13<sup>th</sup> day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

**EXHIBIT A**

**STATE OF TEXAS           §**  
**§**           **THIRD AMENDMENT TO GROUND LEASE**  
**COUNTY OF DALLAS       §**

This Third Amendment to Ground Lease (hereinafter referred to as the "Third Amendment") is entered into and made effective as of \_\_\_\_\_ 2016, (the "Effective Date") at Addison, Texas, by and between the Town of Addison, Texas, a home-rule municipality (hereinafter sometimes referred to as the "Landlord" or the "City"), and Key Development, LLC, a Texas limited liability company ("Tenant") (Landlord and Tenant are sometimes referred to as the "parties" or "party").

**WHEREAS**, a Ground Lease, together with the Addendum to Ground Lease, was executed on March 2, 1984 between the City of Addison, Texas (the same being the Town of Addison, Texas and sometimes referred to herein as the "City") and Addison Airport of Texas, Inc. ("AATI") as Landlord, and Lawson Ridgeway as Tenant, recorded in Volume 86022, Pages 0124-0133 of the Deed Records of Dallas County, Texas; and the Easement Agreement entered into on or about April 16, 1984 by and between Lawson Ridgeway as Granter and the City and AATI as Grantee, recorded as Instrument #198601697396 in Volume 861969, Pages 5742-5748 in the Deed Records of Dallas County, Texas, comprising the Ground Lease, as amended or modified, hereinafter referred to as the "Ground Lease" and described in that certain boundary survey dated June 6, 2006, by the terms the real property now commonly known as 4500 Westgrove Drive at Addison Airport within the Town of Addison, Texas and owned by the City; and

**WHEREAS**, the Lease provides that, upon the expiration or termination of that certain agreement referred to and defined in the Ground Lease as the "Base Lease" (and being an Agreement for Operation of the Addison Airport between the City and AATI), the City is entitled to all of the rights, benefits and remedies, and will perform the duties, covenants and obligations of the Landlord under the Lease; and

**WHEREAS**, the said Base Lease has expired and the City alone is the Landlord under the Ground Lease; and

**WHEREAS**, by that Assignment of Lease dated October 23, 1985, recorded in Volume 86169, Pages 5724-5748 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from LAWSON RIDGEWAY, as assignor, to GREAT SOUTHWEST HOMES, INC., as assignee; and

**WHEREAS**, by that Assignment of Lease dated May 31, 1988, recorded as Instrument #198801897613, in Volume 88189, Pages 1182-1201 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from GREAT SOUTHWEST HOMES, INC., as assignor, to TARFIVE, INC., as assignee; and

**WHEREAS**, by that Substitute Trustee's Deed, dated September 7, 1988, recorded as Instrument #198801897613 in Volume 88178, Pages 1420-1425 of the Deed Records of Dallas

County, Texas, the Ground Lease was assigned from TARFIVE, INC., as assignor to the beneficiary, MCORP MANAGEMENT SOLUTIONS, INC., as assignee; and

**WHEREAS**, by that Assignment of Lease dated September 8, 1988, recorded as Instrument #198900044704 in Volume 89004, Pages 577-580 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from MCORP MANAGEMENT SOLUTIONS, INC., a Texas corporation, as assignor, to REALTY ALLIANCE OF TEXAS, LTD., a Texas limited partnership, as assignee; and

**WHEREAS**, by that Assignment of Ground Lease dated March 15, 1990, recorded as Instrument #199000545456 in Volume 90054, Pages 1648-1687 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from REALTY ALLIANCE OF TEXAS, LTD., a Texas corporation, as assignor, to ITALIX ACQUISITION CORPORATION, a Texas corporation, as assignee; and

**WHEREAS**, by that Assignment of Ground Lease dated March 31, 1999, recorded as Instrument #199900523035 in Volume 99063, Pages 1763-1767 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from ITALIX ACQUISITION CORPORATION, a Texas corporation, as assignor, to AIR 276 I, L.P., a Texas limited partnership, as assignee; and

**WHEREAS**, by that Assignment of Ground Lease dated July 7, 2000, recorded as Instrument #200001054648 in Volume 2000132, Pages 07549-07556 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from AIR 276 I, L.P., a Texas limited partnership, as assignor, to ADS AIR 2000, L.P. a Texas limited partnership, as assignee; and

**WHEREAS**, by that Assignment of Ground Lease dated September 15, 2006, recorded as Instrument #200600346255 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from ADS AIR 2000, L.P., a Texas limited partnership, as assignor, to Key Development LLC., a Texas limited liability company, as assignee; and

**WHEREAS**, by virtue of such assignments, Key Development, LLC, a Texas limited liability company, is the Tenant under the Ground Lease, as amended or modified as of the effective date given above for this Third Amendment; and

**WHEREAS**, the Ground Lease was modified by that First Amendment to Ground Lease made and entered into September 15, 2006 (hereinafter referred to as the "First Amendment"), recorded as Instrument #200600346256 of the Deed Records of Dallas County, Texas, modifying, among other things, the term of the Ground Lease by adding two hundred forty (240) months, (ending 3/31/2044); provided within eighteen (18) months of the effective date of the First Amendment Tenant completes the remodeling and renovation of approximately 10,000 sf. of office space and the construction of at least 5,000 sf. of additional hangar space (conditions detailed in Section 2, Paragraph A of the First Amendment); and

**WHEREAS**, by that certified letter to Tenant dated September 17, 2008, Landlord confirmed (i) the Ground Lease extension in accordance with the First Amendment and (ii) Tenant elected not to complete the Improvements as defined in Section 2, Paragraph A of the

First Amendment and did not elect either of the alternate options as defined in Subparagraph (vii) of Section 2, Paragraph A of the First Amendment. Therefore, the Term of the Ground Lease was extended by one hundred eighty (180) months so that the Term of the Ground Lease shall end on March 31, 2039, still subject to the termination provisions of the Ground Lease as amended or modified; and

**WHEREAS**, the Ground Lease was modified by that Second Amendment to Ground Lease made effective December 3, 2015 (hereinafter referred to as the "Second Amendment"), extending the modified term of the Ground Lease by an additional ninety-six (96) months, (ending 3/31/2047), provided within twelve (12) months of the effective date of the Second Amendment Tenant completes Three Hundred Seventy-Eight Thousand and No/100 Dollars (\$378,000.00) of scheduled Building Improvements set forth in Exhibit "B" pursuant to Section 2, Paragraph A of the Second Amendment; and

**WHEREAS**, due to unforeseen circumstances, Tenant is unable to complete all of the Second Amendment Building Improvements (set forth in Exhibit "B") within the twelve (12)-month Repair and Improvement Period provided for in the Second Amendment and in connection therewith, and as consideration thereof, Landlord and Tenant desire to amend the Ground Lease in the manner set forth below, contingent upon the final completion of such Building Improvements and the approval thereof by Landlord; and

**WHEREAS**, a true and correct copy of the Ground Lease as amended or modified as set forth above is attached hereto and incorporated herein by reference as Exhibit "A".

**NOW, THEREFORE**, for and in consideration of the above and foregoing premises, the sum of Ten and No/100 Dollars (\$10.00), and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Town of Addison, Texas and Key Development, LLC, a Texas limited liability company, do hereby agree as follows:

**Section 1. Incorporation of Premises.** The above and foregoing recitals are true and correct and are incorporated herein and made a part hereof.

**Section 2. Amendments and Modifications to Ground Lease.** The Ground Lease, as described in the above and foregoing recitals, is hereby amended and modified as follows:

A. Amendment to the "Repair and Improvement Period" as defined by the Second Amendment Section A.1 (i) of the Ground Lease is amended to hereby extend an additional eighteen (18) months to now expire on June 3, 2018.

**Section 3. No Other Amendments.** Except to the extent modified or amended herein, all other terms and obligations of the Ground Lease shall remain unchanged and in full force and effect.

**Section 4. Applicable Law; Venue.** In the event of any action under this Third Amendment, exclusive venue for all causes of action shall be instituted and maintained in Dallas County, Texas. The parties agree that the laws of the state of Texas shall govern and apply to the interpretation, validity and enforcement of this Third Amendment; and, with respect to any

conflict of law provisions, the parties agree that such conflict of law provisions shall not affect the application of the law of Texas (without reference to its conflict of law provisions) to the governing, interpretation, validity and enforcement of this Third Amendment. All obligations of the parties created by this Third Amendment are performable in Dallas County, Texas.

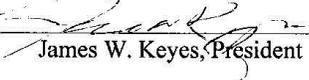
**Section 5. No Third Party Beneficiaries.** This Third Amendment and each of its provisions are solely for the benefit of the parties hereto and are not intended to and shall not create or grant any rights, contractual or otherwise, to any third person or entity.

**Section 6. Authority to Execute.** The undersigned officers and/or agents of the parties hereto are the properly authorized officials and have the necessary authority to execute this Third Amendment on behalf of the parties hereto, and each party hereby certifies to the other that any necessary resolutions or other act extending such authority have been duly passed and are now in full force and effect.

IN WITNESS WHEREOF, the undersigned parties execute this Third Amendment to Ground Lease this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

**TENANT:**

**KEY DEVELOPMENT, LLC**

By:   
James W. Keyes, President

**LANDLORD:**

**TOWN OF ADDISON, TEXAS**

By: \_\_\_\_\_  
Wesley S. Pierson, City Manager

**ACKNOWLEDGMENT**

**STATE OF TEXAS       §**  
**COUNTY OF DALLAS   §**

BEFORE ME, the undersigned authority, on this day personally appeared James W. Keyes, president of Key Development, LLC, a Texas limited liability company, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein stated.

GIVEN under my hand and seal of office this 16TH day of NOVEMBER, 2016.



Sharon E. Shobe  
Notary Public, State of Texas

**STATE OF TEXAS       §**  
**COUNTY OF DALLAS   §**

BEFORE ME, the undersigned authority, on this day personally appeared Wesley S. Pierson, city manager of the Town of Addison, a home-rule municipality, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein stated.

GIVEN under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

[SEAL]

\_\_\_\_\_  
Notary Public, State of Texas

**EXHIBIT A**

**COPY OF GROUND LEASE AS AMENDED AND MODIFIED**

Due to the voluminous size of the historical documents, they are not included herein.

However, they are available for review upon request in the archives of the Town of Addison,  
Dallas County, Texas.

STATE OF TEXAS           §  
  §           **SECOND AMENDMENT TO GROUND LEASE**  
COUNTY OF DALLAS       §

This Second Amendment to Ground Lease (hereinafter referred to as the "Second Amendment") is entered into and made effective as of December 3, 2015, (the "Effective Date") at Addison, Texas, by and between the Town of Addison, Texas, a home-rule municipality (hereinafter sometimes referred to as the "Landlord" or the "City"), and Key Development, LLC, a Texas limited liability company ("Tenant") (Landlord and Tenant are sometimes referred to as the "parties" or "party").

**WHEREAS**, a Ground Lease, together with the Addendum to Ground Lease, was executed on March 2, 1984 between the City of Addison, Texas (the same being the Town of Addison, Texas and sometimes referred to herein as the "City") and Addison Airport of Texas, Inc. ("AATI") as Landlord, and Lawson Ridgeway as Tenant ("Lawson Ridgeway"), recorded in Volume 86022, Pages 0124-0133 of the Deed Records of Dallas County, Texas, and the Easement Agreement entered into on or about April 16, 1984 by and between Lawson Ridgeway as Granter and the City and AATI as Grantee, recorded as Instrument #198601697396 in Volume 861969, Pages 5742-5748 in the Deed Records of Dallas County, Texas, collectively referred to herein as the Ground Lease, as amended or modified, hereinafter referred to as the "Ground Lease" and described in that certain boundary survey dated June 6, 2006 by the terms of which certain real property now commonly referred to as 4500 Westgrove Drive at Addison Airport within the Town of Addison, Texas and owned by the City; and

**WHEREAS**, the Lease provides that, upon the expiration or termination of that certain agreement referred to and defined in the Lease as the "Base Lease" (and being an Agreement for Operation of the Addison Airport between the City and AATI), the City is entitled to all of the rights, benefits and remedies, and will perform the duties, covenants and obligations, of the Landlord under the Lease; and

**WHEREAS**, the said Base Lease has expired and the City alone is the Landlord under the Lease; and

**WHEREAS**, by that Assignment of Lease dated October 23, 1985, recorded in Volume 86169, Pages 5724-5748 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from LAWSON RIDGEWAY, as assignor, to GREAT SOUTHWEST HOMES, INC., as assignee; and

**WHEREAS**, by that Assignment of Lease dated May 31, 1988, recorded as Instrument #198801897613, in Volume 88189, Pages 1182-1201 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from GREAT SOUTHWEST HOMES, INC., as assignor, to TARFIVE, Inc., as assignee; and

**WHEREAS**, by that Substitute Trustee's Deed, dated September 7, 1988 recorded as Instrument #198801897613 in Volume 88178, Pages 1420-1425 of the Deed Records of Dallas

County, Texas, the Ground Lease was assigned to the beneficiary, MCORP MANAGEMENT SOLUTIONS, INC.; and

**WHEREAS**, by that Assignment of Lease dated September 8, 1988, recorded as Instrument #198900044704 in Volume 89004, Pages 577-580 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from MCORP MANAGEMENT SOLUTIONS, INC., a Texas corporation, as assignor, to REALTY ALLIANCE OF TEXAS, LTD., a Texas limited partnership, as assignee; and

**WHEREAS**, by that Assignment of Ground Lease dated March 15, 1990, recorded as Instrument #199000545456 in Volume 90054, Pages 1648-1687 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from REALTY ALLIANCE OF TEXAS, LTD., a Texas corporation, as assignor, to ITALIX ACQUISITION CORPORATION, a Texas corporation, as assignee; and

**WHEREAS**, by that Assignment of Ground Lease dated March 31, 1999, recorded as Instrument #199900523035 in Volume 99063, Pages 1763-1767 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from ITALIX ACQUISITION CORPORATION, a Texas corporation, as assignor, to AIR 276 I, L.P., a Texas limited partnership, as assignee; and

**WHEREAS**, by that Assignment of Ground Lease dated July 7, 2000, recorded as Instrument #200001054648 in Volume 2000132, Pages 07549-07556 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from AIR 276 I, L.P., a Texas limited partnership, as assignor, to ADS AIR 2000, L.P. a Texas limited partnership, as assignee; and

**WHEREAS**, by that Assignment of Ground Lease dated September 15, 2006, recorded as Instrument #200600346255 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from ADS AIR 2000, L.P., a Texas limited partnership, as assignor, to Key Development LLC., a Texas limited liability company, as assignee; and

**WHEREAS**, by virtue of such assignments, Key Development, LLC, a Texas limited liability company, is the Tenant under the Ground Lease, as amended or modified as of the effective date given above for this Second Amendment; and

**WHEREAS**, the Lease was modified by that First Amendment to Ground Lease made and entered into September 15, 2006, recorded as Instrument #200600346256 of the Deed Records of Dallas County, Texas ("First Amendment"), modifying, among other things, the term of the agreement by adding 240 months, (ending 3/31/2044) provided within 18 months of the effective date of the First Amendment tenant completed the remodeling and renovation of approximately 10,000 sf. of office space and the construction of at least 5,000 sf of additional hangar space (conditions detailed in the Amendment Section 2, Paragraph A); and

**WHEREAS**, by that certified letter dated September 17, 2008 confirming the lease extension in accordance with the First Amendment, Tenant elected not to complete the Improvements as defined in Section 2, Paragraph A of the First Amendment and did not elect either of the alternate options as defined in Subparagraph (vii) of Section 2, Paragraph A of the

First Amendment, and as a result, the Term of the Ground Lease was extended by one hundred eighty (180) months so that the Term of the Ground Lease shall end on March 31, 2039, still subject to the termination provisions of the Ground Lease as amended or modified; and

**WHEREAS**, a true and correct copy of the Ground Lease as amended or modified as set forth above is attached hereto and incorporated herein by reference as **Exhibit "A"**; and

**WHEREAS**, Tenant has proposed to construct certain additional improvements on the Demised Premises, as described in **Exhibit "C"** attached hereto and incorporated herein for all purposes, and in connection therewith and as consideration therefore Landlord and Tenant desire to amend the Ground Lease in the manner set forth below, contingent upon the final completion of such additional improvements and the approval thereof by Landlord.

**NOW, THEREFORE**, for and in consideration of the above and foregoing premises, the sum of Ten and No/100 Dollars (\$10.00), and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Town of Addison, Texas and Key Development, LLC, a Texas limited liability company, do hereby agree as follows:

**Section 1. Incorporation of Premises.** The above and foregoing recitals are true and correct and are incorporated herein and made a part hereof.

**Section 2. Amendments and Modifications to Ground Lease.** The Ground Lease, as described in the above and foregoing recitals, is hereby amended and modified as follows:

A. **Amendment to Term.** The term of the Ground Lease may be modified in accordance with the following:

1. The Term of the Ground Lease, currently scheduled to end on March 31, 2039, shall be extended for an additional **96 months** so it shall end on March 31, 2047 (the "**Second Lease Extension Period**"), subject to the termination provisions of the Ground Lease. Provided, however, notwithstanding the foregoing, the Second Lease Extension Period shall not become effective unless and until Tenant has complied with and fully satisfied each of the following terms and conditions:

(i) Within one year immediately following the Effective Date of this Second Amendment (the "Repair and Improvement Period"), Tenant shall have completed upon the Demised Premises to Landlord's satisfaction the construction, remodeling and renovation of improvements to the existing building improvements as generally described in **Exhibit "B"** attached hereto and incorporated herein (the "**Building Improvements**");

(ii) Tenant agrees that it will contribute no less than Three Hundred Seventy-Eight Thousand and No/100 Dollars (\$378,000.00) to the cost of the construction of the Building Improvements. If Landlord requests, Tenant shall provide Landlord with reasonable evidence of the costs and expenses contributed by Tenant to the construction and completion of the Building Improvements;

- (iii) All construction of the Building Improvements and any other facilities or improvements shall be in a first-class, workmanlike manner and in accordance with and subject to the provisions of the Ground Lease. The design and construction of the Building Improvements shall be in accordance and comply with all applicable federal, state, and local laws, statutes, ordinances, codes, rules, regulations, orders, and standards. Tenant shall promptly pay and discharge all costs, expenses, claims for damages, liens and any and all other liabilities and obligations that arise in connection with any such construction; and
- (iv) At the time of the issuance of the written notice described in paragraph 2 below, Tenant shall not then be in default of any provision of the Ground Lease beyond any applicable cure period;

2. Upon Landlord's determination that Tenant has fully, finally and timely complied with, to Landlord's satisfaction, each of the terms and conditions set forth in Section 2.A.1, above, Landlord will notify Tenant of the same in writing and the Second Lease Extension Period shall thereafter be in effect.

3. If, however, Landlord determines that Tenant has failed to fully, finally and timely comply with, to Landlord's satisfaction, all of the conditions and provisions of Section 2.A.1., above, Landlord shall deliver to Tenant written notice of Tenant's failure to comply with and satisfy all the conditions and provisions of Section 2.A.1; and if said conditions and provisions remain unresolved and not so complied with or so satisfied, in the sole discretion of Landlord, for more than thirty (30) days after said notice, the Second Lease Extension Period shall not be granted and shall not take effect, and the Term of the Ground Lease shall end on March 31, 2039 (subject to the termination provisions of the Ground Lease).

4. Upon the eventual conclusion of either Subparagraph 2 or 3 above, Landlord and Tenant hereby agree to execute and cause to be recorded in the Official Public Records of Dallas County, Texas a Memorandum of the Second Amendment to the Ground Lease substantially in the form of Exhibit "C" which shall, among other things, affirm the true and correct expiration date of the Ground Lease resulting from this Second Amendment to Ground Lease.

**Section 3. No Other Amendments.** Except to the extent modified or amended herein, all other terms and obligations of the Ground Lease shall remain unchanged and in full force and effect.

**Section 4. Applicable Law; Venue.** In the event of any action under this Second Amendment, exclusive venue for all causes of action shall be instituted and maintained in Dallas County, Texas. The parties agree that the laws of the state of Texas shall govern and apply to the interpretation, validity and enforcement of this Second Amendment; and, with respect to any conflict of law provisions, the parties agree that such conflict of law provisions shall not affect the application of the law of Texas (without reference to its conflict of law provisions) to the governing, interpretation, validity and enforcement of this Second Amendment. All obligations of the parties created by this Second Amendment are performable in Dallas County, Texas.

**Section 5. No Third Party Beneficiaries.** This Second Amendment and each of its provisions are solely for the benefit of the parties hereto and are not intended to and shall not create or grant any rights, contractual or otherwise, to any third person or entity.

**Section 6. Authority to Execute.** The undersigned officers and/or agents of the parties hereto are the properly authorized officials and have the necessary authority to execute this Second Amendment on behalf of the parties hereto, and each party hereby certifies to the other that any necessary resolutions or other act extending such authority have been duly passed and are now in full force and effect.

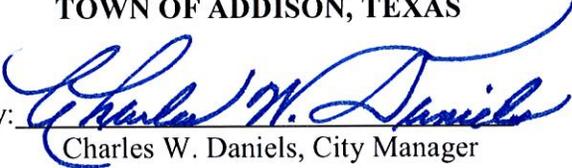
IN WITNESS WHEREOF, the undersigned parties execute this Agreement this 10 day of November, 2015.

**LANDLORD:**

**TENANT:**

**TOWN OF ADDISON, TEXAS**

**KEY DEVELOPMENT, LLC**

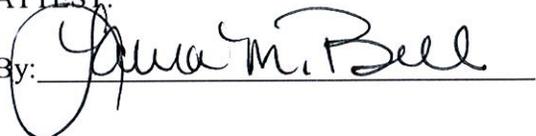
By: 

Charles W. Daniels, City Manager

By: 

James W. Keyes, President

ATTEST:

By: 

**ACKNOWLEDGMENT**

STATE OF TEXAS       §  
COUNTY OF DALLAS   §

BEFORE ME, the undersigned authority, on this day personally appeared James W. Keyes, president of Key Development, LLC, a Texas limited liability company, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein stated.

GIVEN under my hand and seal of office this 19<sup>th</sup> day of NOVEMBER, 2015.



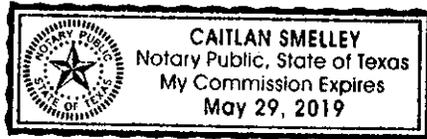
Sharon E. Shobe  
Notary Public, State of Texas

STATE OF TEXAS       §  
COUNTY OF DALLAS   §

BEFORE ME, the undersigned authority, on this day personally appeared Charles W. Daniels, City Manager of the Town of Addison, Texas, a home-rule municipality, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein stated.

GIVEN under my hand and seal of office this 3<sup>rd</sup> day of December, 2015.

[SEAL]



Caitlan Smelley  
Notary Public, State of Texas

**EXHIBIT "A"**

**COPY OF GROUND LEASE AS AMENDED AND MODIFIED**

Due to the voluminous size of the historical documents, they are not included herein.

However, they are available for review upon request in the archives of the Town of Addison,  
Dallas County, Texas.

**EXHIBIT "B"**

**BUILDING IMPROVEMENTS**

## Exhibit B - Building Improvements

	<b>Description of Building Improvement</b>	<b>Estimated Improvement Cost</b>
1	Replace 50 ton HVAC unit with 60 ton	\$96,889
2	Upgrade and improve elevator	
	a) Replace Motor and all electrical components	\$55,857
	b) Upgrade cab interior	\$25,777
3	Replace Roof	\$50,000
4	1st floor lobby atrium	
	a) Improve the 3 sets of lobby doors	\$27,670
	b) Polish granite floors, repair broken granite, repair cracks in glass block and seal exterior, improve and replace landscape	\$10,578
	c) Re-lamp with energy efficient light bulbs and paint atrium ceilings	\$3,089
5	Hangar lobby - update restrooms and renovate lobby	\$4,110
	Hangar - Repair drywall, install new base, repair	
6	damaged insulation, seal floor, paint gate and repair door tracks	\$8,955
7	Install new ceiling grid	
	a) New ceiling grid and tiles at 2nd and 3rd floor hallways	\$19,337
	b) New ceiling grid and modern tiles in all suites	\$60,000
8	New window treatments in all suites	\$33,000
	<b>Total Estimated Improvement Cost</b>	<b>\$395,262</b>

**EXHIBIT "C"**

**MEMORANDUM OF LEASE**

## EXHIBIT C

### MEMORANDUM OF LEASE

This Memorandum of Lease is dated as of \_\_\_\_\_, 2016, and executed by and between the Town of Addison, Texas ("Landlord" or "City") and Key Development, LLC, a Texas limited liability company ("Tenant").

**WHEREAS**, a Ground Lease, together with the Addendum to Ground Lease, was executed on March 2, 1984 between the City of Addison, Texas (the same being the Town of Addison, Texas and sometimes referred to herein as the "City") and Addison Airport of Texas, Inc. ("AATI") as Landlord, and Lawson Ridgeway as Tenant, recorded in Volume 86022, Pages 0124-0133 of the Deed Records of Dallas County, Texas; and the Easement Agreement entered into on or about April 16, 1984 by and between Lawson Ridgeway as Granter and the City and AATI as Grantee, recorded as Instrument #198601697396 in Volume 861969, Pages 5742-5748 in the Deed Records of Dallas County, Texas, comprising the Ground Lease, as amended or modified, hereinafter referred to as the "Ground Lease" and described in that certain boundary survey dated June 6, 2006 by the terms of which certain real property now commonly referred to as 4500 Westgrove Drive at Addison Airport within the Town of Addison, Texas and owned by the City; and thereafter the Ground Lease:

- the Ground Lease was assigned October 23, 1985, recorded in Volume 86169, Pages 5724-5748 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from LAWSON RIDGEWAY, as assignor, to GREAT SOUTHWEST HOMES, INC., as assignee; and thereafter
- the Ground Lease was assigned May 31, 1988, recorded as Instrument #198801897613, in Volume 88189, Pages 1182-1201 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from GREAT SOUTHWEST HOMES, INC., as assignor, to TARFIVE, Inc., as assignee; and thereafter
- by that Substitute Trustee's Deed, dated September 7, 1988 recorded as Instrument #198801897613 in Volume 88178, Pages 1420-1425 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned to the beneficiary, MCORP MANAGEMENT SOLUTIONS, INC.; and thereafter
- the Ground Lease was assigned September 8, 1988, recorded as Instrument #198900044704 in Volume 89004, Pages 577-580 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from MCORP MANAGEMENT SOLUTIONS, INC., a Texas corporation, as assignor, to REALTY ALLIANCE OF TEXAS, LTD., a Texas limited partnership, as assignee; and thereafter
- the Ground Lease was assigned March 15, 1990, recorded as Instrument #199000545456 in Volume 90054, Pages 1648-1687 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from REALTY ALLIANCE OF

TEXAS. LTD., a Texas corporation, as assignor, to ITALIX ACQUISITION CORPORATION, a Texas corporation, as assignee; and thereafter

- the Ground Lease was assigned March 31, 1999, recorded as Instrument #199900523035 in Volume 99063, Pages 1763-1767 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from ITALIX ACQUISITION CORPORATION, a Texas corporation, as assignor, to AIR 276 I, L.P., a Texas limited partnership, as assignee; and thereafter
- the Ground Lease was assigned July 7, 2000, recorded as Instrument #200001054648 in Volume 2000132, Pages 07549-07556 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from AIR 276 I, L.P., a Texas limited partnership, as assignor, to ADS AIR 2000, L.P. a Texas limited partnership, as assignee; and thereafter
- the Ground Lease was assigned September 15, 2006, recorded as Instrument #200600346255 of the Deed Records of Dallas County, Texas, the Ground Lease was assigned from ADS AIR 2000, L.P., a Texas limited partnership, as assignor, to Key Development LLC., a Texas limited liability company, as assignee; and thereafter
- the lease was modified by that “First Amendment” to Ground Lease made and entered into September 15, 2006, recorded as Instrument #200600346256 of the Deed Records of Dallas County, Texas; and thereafter
- by that certified letter dated September 17, 2008 confirming the lease extension in accordance with the First Amendment so that the Term of the Ground Lease shall end on March 31, 2039, still subject to the termination provisions of the Ground Lease as amended or modified; and

Now let it be known, the said Ground Lease is further amended by that Second Amendment to Ground Lease, entered into and made effective \_\_\_\_\_, 2015, which, among other things, extends the Term so the Ground Lease shall [Note: strike non-applicable of] a) continue to expire on March 31, 2039 OR b) now expire March 31, 2047 unless otherwise earlier terminated.

This Memorandum of Lease is solely for recording and notice purposes and shall not be construed to alter, modify, expand, diminish or supplement the provisions of the Ground Lease, as amended. In the event of any inconsistency between the provisions of this Memorandum of Lease and the provisions of the Ground Lease (as amended), the provisions of the Ground Lease, as amended, shall govern. Reference should be made to the Ground Lease (and all amendments thereto) for the full description of the rights and duties of Landlord and Tenant thereunder, and this Memorandum of Lease shall in no way affect the terms and conditions of the Ground Lease (including all amendments thereto) or the interpretation of the rights and duties of Landlord and Tenant thereunder.

Upon the expiration or earlier termination of the Ground Lease, Landlord and Tenant agree that they shall execute and record a termination of this Memorandum of Lease.

**IN WITNESS WHEREOF**, the undersigned parties execute this Memorandum of Lease  
this \_\_\_\_ day of \_\_\_\_\_, 2016.

**LANDLORD:**

**TOWN OF ADDISON, TEXAS**

By: \_\_\_\_\_

\_\_\_\_\_, City Manager

**ATTEST:**

By: \_\_\_\_\_

**TENANT:**

**KEY DEVELOPMENT, LLC**

By: \_\_\_\_\_

James W. Keyes, President

STATE OF TEXAS           §  
  §  
COUNTY OF DALLAS       §

BEFORE ME, the undersigned authority, on this day personally appeared James W. Keyes, president of Key Development, LLC, a Texas limited liability company, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein stated.

GIVEN under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

[SEAL]

By: \_\_\_\_\_  
Notary Public, State of Texas

My commission expires: \_\_\_\_\_

STATE OF TEXAS           §  
  §  
COUNTY OF DALLAS       §

BEFORE ME, the undersigned authority, on this day personally appeared \_\_\_\_\_, city manager of the Town of Addison, a home-rule municipality, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein stated

GIVEN under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

[SEAL]

By: \_\_\_\_\_  
Notary Public, State of Texas

My commission expires: \_\_\_\_\_

**EXHIBIT A**  
**to Memorandum of Lease**

**LEGAL DESCRIPTION OF DEMISED PREMISES**

BEING a 1.5538 acre tract of land in the Town of Addison, Texas, in the William Lomax Survey, Abstract No. 792, in Dallas County, Texas and being located on Addison Municipal Airport, Addison, Texas, same being part of Addison Airport, Town of Addison Addition, according to the plat thereof recorded in Volume 2005131, Page 0082, Deed Records, Dallas County, Texas, and being an Assignment of Lessee's Interest Under Ground Lease and Assumption Agreement to ADS Air 2000, L.P., a Texas limited partnership by deed recorded in Volume 2000132, Page 07557, Deed Records, Dallas County, Texas and being more particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch iron rod found with yellow plastic cap stamped "Powell & Powell" at the intersection of the South right-of-way line of Westgrove Road, (60 foot right-of-way) and the West right-of-way line of Claire Chennault, (a 60 foot ingress and egress easement recorded in said Volume 2005131, Page 0082, Deed Records, Dallas County, Texas;

THENCE South 00 degrees 41 minutes 28 seconds East, along said Claire Chennault West right-of-way line, a distance of 260.10 feet to a 1/2 inch iron rod found with yellow plastic cap stamped "Powell & Powell";

THENCE South 89 degrees 27 minutes 43 seconds West, a distance of 260.60 feet to an "X" found;

THENCE North 00 degrees 33 minutes 43 seconds West, a distance of 259.96 feet to a 1/2 inch iron rod found with yellow plastic cap stamped "Powell & Powell" on aforementioned Westgrove Road South right-of-way line;

THENCE North 89 degrees 25 minutes 55 seconds East, along said Westgrove Road South right-of-way line, a distance of 260.01 feet to the POINT OF BEGINNING and containing 67,685.79 square feet or 1.5538 acres of land.



William M. Dyer  
Real Estate Manager  
16051 Addison Road  
Suite #220  
Addison, Texas 75001

Main: 972-392-4850  
Direct: 972-392-4856  
Fax: 972-788-9334  
bill.dyer@addisonairport.net

## - MEMORANDUM -

To: Lisa Pyles, Director of Infrastructure & Development Services  
From: Bill Dyer, Airport Real Estate Manager  
CC: Joel Jenkinson, Airport Director  
Date: November 18, 2016  
Re: A Request for the City Council’s Consideration and Consent to Amend Ground Lease 0710-55 (commonly known as 4500 Westgrove Drive) at Addison Airport, Key Development, LLC as Tenant.

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### **Requested Action:**

Key Development, LLC is requesting the City Council’s consideration and consent for the Town to enter into and execute a third amendment to the above-referenced ground lease, thereby extending the “Repair and Improvement Period” established in the Second



Amendment to Ground Lease, which second amendment was approved by Council in November 2015. No other terms of the ground lease, as amended, are being modified. Extending the Repair and Improvement Period will provide the Tenant the needed time to complete the remaining building improvements and thereby qualify for the eight

(8) year term extension as outlined in the Second Amendment.

Airport Management is recommending the City Council give its consent for the City Manager, on behalf of the Town, to enter into and execute the proposed Third Amendment

to Ground Lease (the “Amendment”) attached hereto as Exhibit 1. The City Attorney has reviewed the agreement and finds it acceptable to form.

**Background Information:**

Key Development, LLC acquired and took assignment of the leasehold interest and building improvements located at 4500 Westgrove Drive at Addison Airport in 2006. The Second Amendment was made effective in December 2015 and amended the lease term by adding 96 months (to end 3/31/2047), provided within 12 months of the effective date of the Second Amendment the Tenant completes a total of \$378,000 of the Building Improvements as described in Exhibit B of that amendment (the “Repair and Improvement Period”). To date, the Tenant has completed over \$264,000 (70%) toward those Building Improvements. Due to circumstances outlined below, Key Development has been unable to complete all of the Building Improvements within the stipulated 12-month period, therefore they are requesting the Town to extend the “Repair and Improvement Period” an additional 18 months allowing for plenty of time for Key Development to complete the remaining \$113,800 in Building Improvements.

**Delays Experienced and Reason for Extension Request:**

Key Development experienced eight months of delays largely due to:

- A six-month delay due to unforeseen elevator motor and electrical upgrade requirements that included installing heat and fire sensors at each floor level,, an updated alarm panel, which required new duct detectors, pull stations and wiring and a new fire sprinkler system. After these upgrades were completed, the Tenant had to schedule and pass city and state inspections.
- A two-month delay due to delays in receiving atrium improvement scope, estimates and feasibility study, as well as requested revisions to the scope of work.

Over the next 18 months Key Development will obtain revised and updated scopes of work needed for improvements to the office roof and interior elevator cab that will complete the Building Improvements required in the Second Amendment:

- Additional time is needed for an updated roof improvement scope and estimates due to the time lapse from the initial scope and estimates obtained. Construction will need to take place during more favorable weather conditions in spring and summer. Consideration is also being made for unforeseen complications and additional items that may need to be included in this scope once work has begun.
- Elevator cab improvements may now commence as all upgrades to the elevators have been completed. Consideration is also being made for unforeseen complications and additional items that may need to be included in this scope once work has begun.

**Current Property Description and Lease Status:**

Property Description		Ground Lease Information	
Date of Report	11/15/2016	Lease #	0710-5502
Property Number	0710	Tenant Name	Key Development, LLC
Property Address	4500 Westgrove Drive	Doing Business As	Key Development, LLC
Ramp Address	V-16	Primary Contact:	James W. Keyes
Property Type	Ground Lease	Lease Commencement Date	3/2/1984
Land Area (SFL)	67,686	Lease Expiration Date	3/31/2039
Hangar Area (BSF)	10,000	Years Remaining in Term	22
Office/Shop Area (BSF)	29,626	Current Monthly Rent	\$4,810.81
Total Building Area (BAF)	39,626	Current Annual Rent	\$57,729.72
Year Built	1985	Annual Rent /SF Land	\$0.85
Est. Economic Life	60	Est. Remaining Contract Rent	\$1,554,722
End of Proj. Eco. Life	2045	Next Rent Adjustment Date	04/01/18 - CPI every 2 years
% Obsolescent	52%	Permitted Use:	Multi-tenant office w/ attached aircraft hangar; sale & storage of aircraft & aircraft parts; flight training, charter, repairs and rentals
Aircraft Apron Area (SFL)	15,215		

**Conclusion and Recommendation:**

Based upon the foregoing, Key Development, LLC has been a tenant in good standing at Addison Airport since 2006. They have successfully managed, operated and maintained the leased premises to a high standard ever since taking ownership of the building improvements.

Key Development’s proposal is consistent with the 2013 Addison Airport Strategic Plan by (i) enhancing the overall value of the Airport and surrounding community; and (ii) represents upgrades and improvements to an existing Airport facility. With respect to the FAA Addison Airport Master Plan Update, this plan does not contemplate any significant land-use change for this portion of the Airport.

Airport Management is recommending the Town give its consent for the City Manager to enter into and execute on behalf of the Town the proposed Third Amendment to Ground Lease. The City Attorney has reviewed and approves of the agreement to form.

**Work Session and Regular Meeting**

Meeting Date: 12/13/2016

Department: Parks & Recreation

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**AGENDA CAPTION:**

Consider Action On The **Final Payment To Groves Electric Company For The Completion Of The Beltway/Proton Pedestrian Connectivity Project** In An Amount Of \$101,392.02.

**BACKGROUND:**

This item is to approve the final payment for Groves Electric Service for the Beltway/Proton Pedestrian Connectivity project. The project budget approved by Council was \$2,018,182.26. There were 5 change orders which resulted in a project budget of \$2,027,840.30 which is an increase of 1% over the approved amount. The majority of this increase was due to unforeseen conditions related to the original construction of Beltway Road which resulted in a change order for \$51,982.04. Due to unforeseen weather and accessibility inspection delays, the project was completed after its original completion date. The timeline for completion Beltway Drive parkway improvements in March 2016. The project and punch-list are complete and Groves Electric Service has submitted a final retainage payment request.

The Beltway/Proton Pedestrian Connectivity began following the approval of the 2012 Bond Election. During that election, the residents of Addison voted to fund Proposition 6 (\$3.5 million) which was designated for Park and Pedestrian Trail Improvements. The Beltway/Proton Pedestrian Connectivity project was presented and approved by Council on multiple occasions (November 2013, January 2014, February 2014, August 2014, June 2015).

The goal of the Pedestrian Connectivity Project was to provide pedestrian opportunities for those that live, work, and play in Addison. Some of the improvements included in the Beltway/Proton Pedestrian Connectivity project are: pedestrian lighting along Beltway and Proton Drives; improved crosswalk markings at Les Lacs Avenue, Proton Drive and Surveyor Boulevard; a new accessible route to the Addison Athletic Club from the Beltway/Proton intersection; a mid-block crossing from the Addison Athletic Club to the Les Lacs Park pavilion and playground; and landscape enhancements.

**RECOMMENDATION:**Administration recommends approval.

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**Attachments**Pay Application

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# PAYMENT APPLICATION

<p>TO: Town of Addison 5350 Beltline Addison, Texas 75001 Attn: Michael Kashuba</p> <p>FROM: Groves Electrical Service, Inc. 2410 Squire Place Suite A Farmers Branch, TX 75234</p> <p>FOR: Street Lighting &amp; Electrical</p>	<p>PROJECT 1555 NAME AND LOCATION: Addison Beltway Expansion Ph 2&amp;3 Beltway Raod Addison, Texas 75001</p> <p>ARCHITECT:</p>	<p>APPLICATION # 12 Final PERIOD THRU: 10/31/2016 PROJECT #s: PO 27600776 DATE OF CONTRACT: 06/09/2015</p>	<p>Distribution to:</p> <p><input checked="" type="checkbox"/> OWNER <input type="checkbox"/> ARCHITECT <input type="checkbox"/> CONTRACTOR <input type="checkbox"/> <input type="checkbox"/></p>
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## CONTRACTOR'S SUMMARY OF WORK

Application is made for payment as shown below.  
Continuation Page is attached.

1. CONTRACT AMOUNT	\$1,953,182.26
2. SUM OF ALL CHANGE ORDERS	\$74,658.04
3. CURRENT CONTRACT AMOUNT (Line 1 +/- 2)	\$2,027,840.30
4. TOTAL COMPLETED AND STORED (Column G on Continuation Page)	\$2,027,840.30
5. RETAINAGE:	
a. 0.00% of Completed Work (Columns D + E on Continuation Page)	\$0.00
b. 0.00% of Material Stored (Column F on Continuation Page)	\$0.00
Total Retainage (Line 5a + 5b or Column I on Continuation Page)	\$0.00
6. TOTAL COMPLETED AND STORED LESS RETAINAGE (Line 4 minus Line 5 Total)	\$2,027,840.30
7. LESS PREVIOUS PAYMENT APPLICATIONS	\$1,926,448.28
8. PAYMENT DUE	\$101,392.02
9. BALANCE TO COMPLETION (Line 3 minus Line 6)	\$0.00

SUMMARY OF CHANGE ORDERS	ADDITIONS	DEDUCTIONS
Total changes approved in previous months	\$74,658.04	\$0.00
Total approved this month	\$0.00	\$0.00
<b>TOTALS</b>	<b>\$74,658.04</b>	<b>\$0.00</b>
<b>NET CHANGES</b>	<b>\$74,658.04</b>	

Contractor's signature below is his assurance to Owner, concerning the payment herein applied for, that: (1) the Work has been performed as required in the Contract Documents, (2) all sums previously paid to Contractor under the Contract have been used to pay Contractor's costs for labor, materials and other obligations under the Contract for Work previously paid for, and (3) Contractor is legally entitled to this payment.

CONTRACTOR: Groves Electrical Service, Inc.  
By: Maria Groves Date: 10/5/2016  
Maria Groves

State of: Texas  
County of: Dallas  
Subscribed and sworn to before me this 5<sup>th</sup> day of October, 2016  
Notary Public: Leeann May Hawkins  
My Commission Expires: 08-02-17



## ARCHITECT'S CERTIFICATION

Architect's signature below is his assurance to Owner, concerning the payment herein applied for, that: (1) Architect has inspected the Work represented by this Application, (2) such Work has been completed to the extent indicated in this Application, and the quality of workmanship and materials conforms with the Contract Documents, (3) this Application for Payment accurately states the amount of Work completed and payment due therefor, and (4) Architect knows of no reason why payment should not be made.

CERTIFIED AMOUNT.....  
(If the certified amount is different from the payment due, you should attach an explanation. Initial all the figures that are changed to match the certified amount.)

ARCHITECT:  
By: \_\_\_\_\_ Date: \_\_\_\_\_

Neither this Application nor payment applied for herein is assignable or negotiable. Payment shall be made only to Contractor, and is without prejudice to any rights of Owner or Contractor under the Contract Documents or otherwise.

CONTINUATION PAGE

PROJECT: 1555  
Addison Betway Expansion Ph 2&3

APPLICATION #: 12 Final  
DATE OF APPLICATION: 10/05/2016  
PERIOD THRU: 10/31/2016  
PROJECT #s: PO 27600776

Payment Application containing Contractor's signature is attached.

A ITEM #	B WORK DESCRIPTION	C SCHEDULED AMOUNT	D		E AMOUNT THIS PERIOD	F STORED MATERIALS (NOT IN D OR E)	G		H BALANCE TO COMPLETION (C-G)	I RETAINAGE (If Variable)
			COMPLETED WORK				TOTAL COMPLETED AND STORED (D + E + F)	% COMP. (G / C)		
			AMOUNT PREVIOUS PERIODS							
10	Part A - Street Lighting & Electrical									
11	G-1 Mobilization	\$5,000.00	\$5,000.00	\$0.00	\$0.00	\$5,000.00	100%	\$0.00		
12	G-2 Bonding	\$13,893.50	\$13,893.50	\$0.00	\$0.00	\$13,893.50	100%	\$0.00		
13	G-3 Barricading & Traffic Control	\$33,500.00	\$33,500.00	\$0.00	\$0.00	\$33,500.00	100%	\$0.00		
14	G-4 Furnish & Install Signs	\$1,910.00	\$1,910.00	\$0.00	\$0.00	\$1,910.00	100%	\$0.00		
14a	E-1 Electrical Conduit	\$280,166.00	\$280,166.00	\$0.00	\$0.00	\$280,166.00	100%	\$0.00		
15	E-2 Light Pole Bases	\$80,427.00	\$80,427.00	\$0.00	\$0.00	\$80,427.00	100%	\$0.00		
16	E-3 Remove Existing Pole Bases	\$21,420.00	\$21,420.00	\$0.00	\$0.00	\$21,420.00	100%	\$0.00		
17	E-6 Install Illuminated Bollards	\$111,606.00	\$111,606.00	\$0.00	\$0.00	\$111,606.00	100%	\$0.00		
18	E-7 Irrigation System	\$11,415.00	\$11,415.00	\$0.00	\$0.00	\$11,415.00	100%	\$0.00		
19	E-8 Landscape Repair	\$10,276.50	\$10,276.50	\$0.00	\$0.00	\$10,276.50	100%	\$0.00		
20	Part B - Trail, Sculp Area, Crosswalk									
21	G-1 Mobization	\$5,000.00	\$5,000.00	\$0.00	\$0.00	\$5,000.00	100%	\$0.00		
22	G-2 Bonding	\$21,500.00	\$21,500.00	\$0.00	\$0.00	\$21,500.00	100%	\$0.00		
23	G-3 Tree Protection	\$3,512.00	\$3,512.00	\$0.00	\$0.00	\$3,512.00	100%	\$0.00		
24	C-1 Barricading & Traffic Control	\$3,000.00	\$3,000.00	\$0.00	\$0.00	\$3,000.00	100%	\$0.00		
	SUB-TOTALS	\$602,626.00	\$602,626.00	\$0.00	\$0.00	\$602,626.00	100%	\$0.00		

**CONTINUATION PAGE**

PROJECT: 1555  
Addison Betlway Expansion Ph 2&3

APPLICATION #: 12 Final  
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PERIOD THRU: 10/31/2016  
PROJECT #s: PO 27600776

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			AMOUNT PREVIOUS PERIODS	AMOUNT THIS PERIOD		% COMP. (G / C)			
							25		
26	C-3 Project Signs	\$1,910.00	\$1,910.00	\$0.00	\$0.00	\$1,910.00	100%	\$0.00	
27	C-4 Street Pavement Repair Work	\$59,036.85	\$59,036.85	\$0.00	\$0.00	\$59,036.85	100%	\$0.00	
28	C-5 Concrete Sidewalk Repair Work	\$14,592.63	\$14,592.63	\$0.00	\$0.00	\$14,592.63	100%	\$0.00	
29	C-6 Driveway Pavement	\$25,926.64	\$25,926.64	\$0.00	\$0.00	\$25,926.64	100%	\$0.00	
30	C-7 Concrete Curb Repair	\$4,493.60	\$4,493.60	\$0.00	\$0.00	\$4,493.60	100%	\$0.00	
31	C-8 Traffice Sign & Foundation	\$1,304.00	\$1,304.00	\$0.00	\$0.00	\$1,304.00	100%	\$0.00	
32	C-9 Relocate Signs	\$838.00	\$838.00	\$0.00	\$0.00	\$838.00	100%	\$0.00	
33	C-10 Remove & Dispose of Trees	\$13,464.10	\$13,464.10	\$0.00	\$0.00	\$13,464.10	100%	\$0.00	
34	C-11 Remove Curb Inlet	\$9,184.83	\$9,184.83	\$0.00	\$0.00	\$9,184.83	100%	\$0.00	
35	C-12 Remove CPC	\$3,039.30	\$3,039.30	\$0.00	\$0.00	\$3,039.30	100%	\$0.00	
36	C-13 Remove Retainaing Wall	\$8,162.94	\$8,162.94	\$0.00	\$0.00	\$8,162.94	100%	\$0.00	
37	C-14 Trench Safety	\$3,331.00	\$3,331.00	\$0.00	\$0.00	\$3,331.00	100%	\$0.00	
38	C-15 10' Depth Curb Inlet	\$23,884.08	\$23,884.08	\$0.00	\$0.00	\$23,884.08	100%	\$0.00	
39	C-16 F&I 21" RCP - Class 111	\$1,217.60	\$1,217.60	\$0.00	\$0.00	\$1,217.60	100%	\$0.00	
40	C-17 Relocate Fire Hydrant	\$12,486.45	\$12,486.45	\$0.00	\$0.00	\$12,486.45	100%	\$0.00	
SUB-TOTALS		\$793,998.02	\$793,998.02	\$0.00	\$0.00	\$793,998.02	100%	\$0.00	

CONTINUATION PAGE

PROJECT: 1555  
Addison Betlway Expansion Ph 2&3

APPLICATION #: 12 Final  
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PROJECT #s: PO 27600776

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			AMOUNT PREVIOUS PERIODS	AMOUNT THIS PERIOD					
41	C-18 F&I 8" Water Lowering	\$9,232.00	\$9,232.00	\$0.00	\$0.00	\$9,232.00	100%	\$0.00	
42	C-19 Unclassified Excavation	\$28,339.00	\$28,339.00	\$0.00	\$0.00	\$28,339.00	100%	\$0.00	
43	C20 Class A Concrete Sidewalk	\$50,541.12	\$50,541.12	\$0.00	\$0.00	\$50,541.12	100%	\$0.00	
44	C-21 Class K Driveway with Monolithic	\$87,487.00	\$87,487.00	\$0.00	\$0.00	\$87,487.00	100%	\$0.00	
45	C-22 Class P2 Concrete Curb	\$58,947.06	\$58,947.06	\$0.00	\$0.00	\$58,947.06	100%	\$0.00	
46	C-23 Class P2 18" Curb and Gutter	\$890.00	\$890.00	\$0.00	\$0.00	\$890.00	100%	\$0.00	
47	C-24 Barrier Free Ramp	\$18,557.18	\$18,557.18	\$0.00	\$0.00	\$18,557.18	100%	\$0.00	
48	C-25 Class A Ramp with Integral SW	\$4,170.40	\$4,170.40	\$0.00	\$0.00	\$4,170.40	100%	\$0.00	
49	C-26 Class A Integral Sidewalk	\$14,248.00	\$14,248.00	\$0.00	\$0.00	\$14,248.00	100%	\$0.00	
50	C-27 Class A Concrete Sidealk	\$3,921.05	\$3,921.05	\$0.00	\$0.00	\$3,921.05	100%	\$0.00	
51	C-28 Integral Sidewalk	\$5,970.40	\$5,970.40	\$0.00	\$0.00	\$5,970.40	100%	\$0.00	
52	C-29 R&R Manhole Cone & Cover	\$4,566.00	\$4,566.00	\$0.00	\$0.00	\$4,566.00	100%	\$0.00	
53	C-30 Adj Existing Water Meter	\$31,905.00	\$31,905.00	\$0.00	\$0.00	\$31,905.00	100%	\$0.00	
54	C-31 Adj Existing Water Valve	\$12,714.00	\$12,714.00	\$0.00	\$0.00	\$12,714.00	100%	\$0.00	
55	C-32 R&D Skipped Lane, Line Button	\$1,056.00	\$1,056.00	\$0.00	\$0.00	\$1,056.00	100%	\$0.00	
56	C-33 R&D Solid Lane, Line Buttons	\$117.00	\$117.00	\$0.00	\$0.00	\$117.00	100%	\$0.00	
SUB-TOTALS		\$1,126,659.23	\$1,126,659.23	\$0.00	\$0.00	\$1,126,659.23	100%	\$0.00	

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PROJECT: 1555  
Addison Betlway Expansion Ph 2&3

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			COMPLETED WORK			TOTAL COMPLETED AND STORED (D + E + F)	% COMP. (G / C)		
			AMOUNT PREVIOUS PERIODS	AMOUNT THIS PERIOD					
57	C-34 R&D Solid Double Centerline	\$468.00	\$468.00	\$0.00	\$0.00	\$468.00	100%	\$0.00	
58	C-35 Remove Stop Bar	\$5,620.00	\$5,620.00	\$0.00	\$0.00	\$5,620.00	100%	\$0.00	
59	C-36 Remove Arrow Markings	\$94.00	\$94.00	\$0.00	\$0.00	\$94.00	100%	\$0.00	
60	C-37 F&I Skipped Yellow Lane	\$1,050.72	\$1,050.72	\$0.00	\$0.00	\$1,050.72	100%	\$0.00	
61	C-38 F&I 6" Solid White Thermo Lane	\$264.00	\$264.00	\$0.00	\$0.00	\$264.00	100%	\$0.00	
62	C-39 F&I Solid Double Yellow Centerline	\$936.00	\$936.00	\$0.00	\$0.00	\$936.00	100%	\$0.00	
63	C-40 F&I 24" Wide Thermoplastic	\$379.44	\$379.44	\$0.00	\$0.00	\$379.44	100%	\$0.00	
64	C-41 F&I Thermoplastic Turn Arrow	\$294.00	\$294.00	\$0.00	\$0.00	\$294.00	100%	\$0.00	
65	C-42 F&I Traffic Sign	\$7,200.00	\$7,200.00	\$0.00	\$0.00	\$7,200.00	100%	\$0.00	
66	C-43 F&I TXDOT Type C Pedestrian	\$12,353.92	\$12,353.92	\$0.00	\$0.00	\$12,353.92	100%	\$0.00	
67	C-44 F&I Thermoplastic Yield Lane	\$812.00	\$812.00	\$0.00	\$0.00	\$812.00	100%	\$0.00	
68	C-45 Relocate Irrigation Control Valve	\$878.00	\$878.00	\$0.00	\$0.00	\$878.00	100%	\$0.00	
69	C-46 Adjust Existing Vault Cover	\$3,747.00	\$3,747.00	\$0.00	\$0.00	\$3,747.00	100%	\$0.00	
70	C-47 Install 4" White Parking Signss	\$105.30	\$105.30	\$0.00	\$0.00	\$105.30	100%	\$0.00	
71	L-48 Install (1) Ped CW - Lee Lacs	\$107,198.00	\$107,198.00	\$0.00	\$0.00	\$107,198.00	100%	\$0.00	
72	L-49 Install (1) Ped CW - Proton	\$116,551.89	\$116,551.89	\$0.00	\$0.00	\$116,551.89	100%	\$0.00	
SUB-TOTALS		\$1,384,611.50	\$1,384,611.50	\$0.00	\$0.00	\$1,384,611.50	100%	\$0.00	

**CONTINUATION PAGE**

PROJECT: 1555  
Addison Betlway Expansion Ph 2&3

APPLICATION #: 12 Final  
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A ITEM #	B WORK DESCRIPTION	C SCHEDULED AMOUNT	D COMPLETED WORK		F STORED MATERIALS (NOT IN D OR E)	G		H BALANCE TO COMPLETION (C-G)	I RETAINAGE (If Variable)
			AMOUNT PREVIOUS PERIODS	AMOUNT THIS PERIOD		TOTAL COMPLETED AND STORED (D + E + F)	% COMP. (G / C)		
74	L-52 Install (1) Ped CW - AAC	\$13,313.30	\$13,313.30	\$0.00	\$0.00	\$13,313.30	100%	\$0.00	
75	L-53 Install (12) Ped CW - AAC	\$54,861.17	\$54,861.17	\$0.00	\$0.00	\$54,861.17	100%	\$0.00	
75a	Parking Lot								
76	L-54 Remove Hedgerow	\$9,782.00	\$9,782.00	\$0.00	\$0.00	\$9,782.00	100%	\$0.00	
77	L-55 Remove Ext Screening	\$5,514.75	\$5,514.75	\$0.00	\$0.00	\$5,514.75	100%	\$0.00	
78	L-56 Removal Concrete PL Areas	\$562.20	\$562.20	\$0.00	\$0.00	\$562.20	100%	\$0.00	
79	L-57 Removal of Trees at Sculpture	\$3,748.00	\$3,748.00	\$0.00	\$0.00	\$3,748.00	100%	\$0.00	
80	L-58 Construct Stone Feature	\$22,569.48	\$22,569.48	\$0.00	\$0.00	\$22,569.48	100%	\$0.00	
81	L-59 Construct Brick Screening	\$9,403.56	\$9,403.56	\$0.00	\$0.00	\$9,403.56	100%	\$0.00	
82	L-60 Tie-In Existing Screening Walls	\$2,532.00	\$2,532.00	\$0.00	\$0.00	\$2,532.00	100%	\$0.00	
83	L-61 Construct Brick Seat Wall	\$19,453.98	\$19,453.98	\$0.00	\$0.00	\$19,453.98	100%	\$0.00	
84	L-62 Construct Sculpture Base	\$13,775.23	\$13,775.23	\$0.00	\$0.00	\$13,775.23	100%	\$0.00	
85	L-63 Stone Steps to Comm Garden	\$45,453.15	\$45,453.15	\$0.00	\$0.00	\$45,453.15	100%	\$0.00	
86	L-64 Stone Retaining Wall	\$16,346.60	\$16,346.60	\$0.00	\$0.00	\$16,346.60	100%	\$0.00	
87	L-65 Low Brick Wing Wall W/Cap	\$1,230.42	\$1,230.42	\$0.00	\$0.00	\$1,230.42	100%	\$0.00	
SUB-TOTALS		\$1,660,663.88	\$1,660,663.88	\$0.00	\$0.00	\$1,660,663.88	100%	\$0.00	

CONTINUATION PAGE

PROJECT: 1555  
Addison Betway Expansion Ph 2&3

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A ITEM #	B WORK DESCRIPTION	C SCHEDULED AMOUNT	D COMPLETED WORK		F STORED MATERIALS (NOT IN D OR E)	G TOTAL COMPLETED AND STORED (D + E + F)	H % COMP. (G / C)	I BALANCE TO COMPLETION (C-G)	RETAINAGE (If Variable)
			AMOUNT PREVIOUS PERIODS	AMOUNT THIS PERIOD					
88	L-66 Install Brick Face & Cap on Existing	\$6,107.20	\$6,107.20	\$0.00	\$0.00	\$6,107.20	100%	\$0.00	
89	L-67 Concrete Paving at Sculpture	\$11,574.41	\$11,574.41	\$0.00	\$0.00	\$11,574.41	100%	\$0.00	
90	L-68 Composite Decking	\$47,871.70	\$47,871.70	\$0.00	\$0.00	\$47,871.70	100%	\$0.00	
91	L-69 Install Drain Lines	\$3,567.00	\$3,567.00	\$0.00	\$0.00	\$3,567.00	100%	\$0.00	
92	L-70 Electrical Service & Recept	\$4,798.00	\$4,798.00	\$0.00	\$0.00	\$4,798.00	100%	\$0.00	
93	L-71 Internal Lights for Stone	\$5,228.00	\$5,228.00	\$0.00	\$0.00	\$5,228.00	100%	\$0.00	
94	L-72 Illuminated Bollards	\$15,951.00	\$15,951.00	\$0.00	\$0.00	\$15,951.00	100%	\$0.00	
95	L-73 Sculpture Lighting	\$8,268.00	\$8,268.00	\$0.00	\$0.00	\$8,268.00	100%	\$0.00	
96	L-74 Landscape Lighting	\$4,612.00	\$4,612.00	\$0.00	\$0.00	\$4,612.00	100%	\$0.00	
97	L-75 Remove & Deliver to Town L.P.	\$955.00	\$955.00	\$0.00	\$0.00	\$955.00	100%	\$0.00	
98	L-76 Town;s Sculpture Monument	\$5,859.00	\$5,859.00	\$0.00	\$0.00	\$5,859.00	100%	\$0.00	
99	L-77 Lost In Wisconsin Sculpture	\$2,500.00	\$2,500.00	\$0.00	\$0.00	\$2,500.00	100%	\$0.00	
100	Part C - Landscape Planting & Irrigation								
101	LS-1 Install Purple Wintercreeper	\$26,325.00	\$26,325.00	\$0.00	\$0.00	\$26,325.00	100%	\$0.00	
102	LS-2 Install Hardwood Mulch	\$5,076.00	\$5,076.00	\$0.00	\$0.00	\$5,076.00	100%	\$0.00	
103	LS-3 Fine Grading Landscape Areas	\$375.00	\$375.00	\$0.00	\$0.00	\$375.00	100%	\$0.00	
SUB-TOTALS		\$1,809,731.19	\$1,809,731.19	\$0.00	\$0.00	\$1,809,731.19	100%	\$0.00	

**CONTINUATION PAGE**

PROJECT: 1555  
Addison Betway Expansion Ph 2&3

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			AMOUNT PREVIOUS PERIODS	AMOUNT THIS PERIOD		TOTAL COMPLETED AND STORED (D + E + F)	% COMP. (G / C)		
105	LS-5 Install Canopy Trees	\$3,980.00	\$3,980.00	\$0.00	\$0.00	\$3,980.00	100%	\$0.00	
106	LS-6 Install Ornamental Trees	\$1,760.00	\$1,760.00	\$0.00	\$0.00	\$1,760.00	100%	\$0.00	
107	LS-7 Install Specimen Savannah Holly	\$6,432.00	\$6,432.00	\$0.00	\$0.00	\$6,432.00	100%	\$0.00	
108	LS-8 Install Large Shrubs	\$19,694.00	\$19,694.00	\$0.00	\$0.00	\$19,694.00	100%	\$0.00	
109	LS-9 Install Shrubs/Groundcovers	\$27,000.00	\$27,000.00	\$0.00	\$0.00	\$27,000.00	100%	\$0.00	
110	LS-10 Install Bermuda	\$3,750.00	\$3,750.00	\$0.00	\$0.00	\$3,750.00	100%	\$0.00	
111	LS-11 Install Decomposed/Crushed	\$3,936.48	\$3,936.48	\$0.00	\$0.00	\$3,936.48	100%	\$0.00	
112	LS-12 Install Brazos Native River Rock	\$27,746.26	\$27,746.26	\$0.00	\$0.00	\$27,746.26	100%	\$0.00	
113	LS-13 Install Steel Edging Painted	\$4,368.83	\$4,368.83	\$0.00	\$0.00	\$4,368.83	100%	\$0.00	
114	LS-14 Install Purple Wintercreeper	\$10,858.50	\$10,858.50	\$0.00	\$0.00	\$10,858.50	100%	\$0.00	
115	LS-15 Provide Bed Preparation	\$7,600.00	\$7,600.00	\$0.00	\$0.00	\$7,600.00	100%	\$0.00	
116	LS-16 Install Hardwood Mulch	\$2,700.00	\$2,700.00	\$0.00	\$0.00	\$2,700.00	100%	\$0.00	
120	C-4 C/O #1 1555-01 Sawcut,	\$17,298.04	\$17,298.04	\$0.00	\$0.00	\$17,298.04	100%	\$0.00	
120a	Remove & Dispose of Street Pavement								
121	C-23 C/O #1 Construct 8" Class P2	\$31,684.00	\$31,684.00	\$0.00	\$0.00	\$31,684.00	100%	\$0.00	
SUB-TOTALS		\$2,002,164.30	\$2,002,164.30	\$0.00	\$0.00	\$2,002,164.30	100%	\$0.00	

CONTINUATION PAGE

PROJECT: 1555  
Addison Belway Expansion Ph 2&3

APPLICATION #: 12 Final  
DATE OF APPLICATION: 10/05/2016  
PERIOD THRU: 10/31/2016  
PROJECT #s: PO 27600776

Payment Application containing Contractor's signature is attached.

A ITEM #	B WORK DESCRIPTION	C SCHEDULED AMOUNT	D		E AMOUNT THIS PERIOD	F STORED MATERIALS (NOT IN D OR E)	G		H BALANCE TO COMPLETION (C-G)	I RETAINAGE (If Variable)
			COMPLETED WORK				TOTAL COMPLETED AND STORED (D + E + F)	% COMP. (G / C)		
			AMOUNT PREVIOUS PERIODS							
121a	Reinforced Concrete Pavement									
122	C-1 C/O #1 Traffic Control	\$3,000.00	\$3,000.00	\$0.00	\$0.00	\$3,000.00	100%	\$0.00		
123	C/O #2 1555-02 Beltway Enhancement	\$11,296.00	\$11,296.00	\$0.00	\$0.00	\$11,296.00	100%	\$0.00		
123a	Phase 2 & 3									
124	C/O #3 1555-03 Light Pole Relocation	\$9,980.00	\$9,980.00	\$0.00	\$0.00	\$9,980.00	100%	\$0.00		
124a	Manhole Lowering									
125	C/O #4 1555 30 Day Weather Time Extension	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		
126	C/O #5 1555-05 Add (3) Piers	\$1,400.00	\$1,400.00	\$0.00	\$0.00	\$1,400.00	100%	\$0.00		
126a	Weld Plates, Nailer, Sparer & Boards									
TOTALS		\$2,027,840.30	\$2,027,840.30	\$0.00	\$0.00	\$2,027,840.30	100%	\$0.00		

**Work Session and Regular Meeting****Meeting Date:** 12/13/2016**Department:** City Manager**AGENDA CAPTION:**

Consider Action On A **Resolution Adopting The 2017 Legislative Agenda For The Town Of Addison, Texas; Directing The City Manager Or His Designee To Act With Regard To The Town's 2017 Legislative Agenda**.

**BACKGROUND:**

With issues that impact the Town of Addison being actively debated across multiple levels of government, the Town's involvement in the legislative process has grown into a year round activity at the local, regional, state, and federal levels. The 2017 Legislative Agenda establishes policy direction for general topics that could affect the Town of Addison. The goal of the Town's legislative efforts is to use the Town's legislative priorities as a guide and to protect the Town's municipal interests. This approach allows the Council and staff to act on a broad array of bills that address topics of interest. The Town Council of the Town of Addison last adopted legislative priorities in 2014.

The 85th session of the Texas legislature will begin in early January 2017. Attached is the proposed 2017 Legislative Agenda which outlines the Town's positions and will allow Town representatives to actively advocate on the Town's behalf at all levels of government.

The Town's efforts will be coordinated by a Town Staff member selected by the City Manager. In addition, each Department Director will be assigned bills related to their Department. Research, comments, and requests for action on applicable bills will be made by Departments and action will be taken based upon the priority of the topic and impact to the Town.

Additionally, the Town will coordinate efforts when interests are aligned with partners including: Texas Municipal League, Texas Coalition of Cities for Utility Issues, North Central Texas Council Of Government - Air Transportation Advisory Committee, Dallas Area Rapid Transit, Texas Civil Service Cities Coalition, Texas Municipal Retirement System, Regional Transportation Commission, and the North Texas Municipal Water District. Most of the Town's efforts will be dedicated to defeating legislation that would negatively affect the Town.

Finally, we anticipate the 85th session to have several significant topics of concern to the Town including:

- Revenue, Tax, and Expenditure Caps
- Effective and Rollback Rate Reform

- Transportation Funding
- Education Funding

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

Resolution with Town of Addison 2017 Legislative Agenda

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**TOWN OF ADDISON**  
**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS ADOPTING THE TOWN'S 2017 LEGISLATIVE AGENDA; DIRECTING THE CITY MANAGER OR HIS DESIGNEE TO ACT WITH REGARD TO THE CITY'S LEGISLATIVE PRIORITIES; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, Legislative activities are ongoing in Congress and the State Legislature;  
and

**WHEREAS**, it is anticipated that many legislative issues affecting local government will be considered; and

**WHEREAS**, the City Council has reviewed the recommended 2017 Legislative Agenda and is of the opinion that such legislative priorities are in the best interest of the Town and its citizens, should be adopted, and should be forwarded for consideration by the Legislature; and

**WHEREAS**, the City Council is of the further opinion that the City Council, the Town's legislative consultant and the City Manager and his designees should be directed to take action with regard to the legislative priorities as outlined below.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS, THAT:**

**Section 1.** The Town of Addison 2017 Legislative Agenda, attached hereto as **Exhibit A** is hereby adopted and approved as the 2017 Legislative Agenda for the Town.

**Section 2.** The City Council and each of its members, the Town's legislative consultants and the City Manager or his designees are directed to communicate the items included in the Town's 2017 Legislative Agenda to members of Congress, the Texas Legislature, in general, and/or to the appropriate legislative committees, committee members and others as appropriate.

**Section 3.** For those items designated as "support," the City Manager or his designees are directed to actively pursue passage of the appropriate legislation if it is introduced by some other entity. The City Manager's efforts to obtain passage of the legislation may include drafting appropriate legislation, seeking a sponsor, and actively pursuing passage of such legislation by providing testimony and through other means.

**Section 4.** For those items designated as "oppose," the City Manager or his designees are directed to attempt to impede the passage of any such legislation.

**Section 5.** It is recognized Addison's legislative priorities will often be implemented in the context of great numbers of legislative proposals being considered within short time periods. City representatives, under the direction of the City Manager, shall be authorized to act on behalf of the City consistent with the necessary broad policy concerns set forth in this list of priorities.

**Section 6.** This Resolution shall become effective immediately upon its passage.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this 13th day of December, 2016.

---

Todd Meier, Mayor

ATTEST:

---

Laura Bell, City Secretary

APPROVED AS TO FORM:

---

Brenda N. McDonald, City Attorney

## Exhibit A



### **Town of Addison 2017 Legislative Agenda**

The Town of Addison, through its various governmental agencies and business community, promote the following legislative priorities in an effort to collaborate and maintain a good working relationship with our state legislators.

#### **LOCAL CONTROL**

- Oppose any measures that would limit, reduce, or remove the local control that municipalities have today regarding their respective abilities to govern, finance, or otherwise make decisions on behalf of the communities we serve
- Support legislation which promotes the authority of home rule cities to govern themselves as a sovereign entity.
- Support legislation which states appraisals should reflect the true market of the value of property
- Support legislation which assists the Town of Addison with exponential growth while giving due consideration to family and/or business budgets
- Encourage and support local participation in issues that directly impact local government operations
- Oppose unfunded state mandates that place a fiscal burden on municipalities
- Support a bill that provides Cost of Living Adjustment (COLA) relief options to the cities

#### **ECONOMIC DEVELOPMENT**

- Support tax abatements and other economic development incentives
  - Continue to support local control and flexibility in the use of tax abatements, tax increment financing, reinvestment zones, and other incentives to promote economic development and job creation
  - Continue to support the Texas Enterprise Fund
- Support including Fortune 500 Corporate Headquarters as an eligible project for Chapter 313 value limitation from the school district
- Support for streamlining the Texas process for economic development incentives
- Support incentives for high-tech, innovation-driven startup companies

## Exhibit A

### EDUCATION & WORKFORCE

- Support efforts that would more adequately fund education from state revenue funds that would also decrease the amount of recapture currently required of districts such as the Dallas Independent School District.
- Support local control of the education system
- Support the Skills Development Fund

### TRANSPORTATION

- Support further increase Texas Department of Transportation funding
- Support legislative plan to fund the state's transportation needs through the current motor vehicle sales tax and the associated transportation related debt.
- Support the Regional Transportation Council's legislative agenda. Making real, meaningful progress on DART initiatives is vital as north Texas continues to grow rapidly. More specifically, the DFW region continues to grow at a rate that is simply overwhelming the transportation system.
- Support opportunities to link transportation and land use surrounding public use and general aviation airports
- Support increased funding to foster airport development for public use and general aviation airports to meet future demands
- Support high-speed rail access between major metro areas
- Support TX-DOT aviation staffing
- Support TX-DOT aviation funding increase
- Support TX-DOT grant funding transparency

### TAXES & SPENDING

- Support amendments to the hotel occupancy tax statute that would rebate a portion of the state Hotel Occupancy Tax (HOT) revenues to Texas cities for use in the development, maintenance, and operations of convention centers and other meeting facilities
- Oppose any attempt to adopt the Streamlined Sales Tax (SST) measure as has been discussed in past sessions unless the State of Texas maintains origin sourcing.
- Oppose any further changes in the sourcing of sales tax remittance from the current origin of sale method to any method that would include destination as the manner in which sales tax remittance is calculated.
- Oppose any legislation that would limit the elected Mayors and City Councils of Texas municipalities from adopting budgets that they deem appropriate for their respective communities or that would require voter approval for increases in expenditures.
- Oppose any legislation or attempt to alter the manner in which municipalities in the State of Texas currently generate revenues or to require voter approval of revenue increases.
- Oppose any and all efforts to implement ad valorem property tax caps.

## Exhibit A

### WATER

- Support efforts and legislation that would allocate state funding to increase water supply within the state including, but not limited to:
  - the development of additional reservoirs
  - the extension of pipelines/pumping systems to transport available water from outside the region/state
  - the development of non-conventional water supply resources, such as desalination, water reuse, etc.
- Support legislation which promotes maintaining local control of water conservation efforts within individual districts and/or municipalities
- Support legislation to streamline water project permitting process at both the state and federal level

### ELECTIONS

- Support efforts and legislation to maintain the May and November Uniform Election dates

### OPEN GOVERNMENT

- Support efforts to allow for internet publication of legal notices rather than requiring publication in a paper of record.

### OIL AND GAS WELLS

- Support any efforts that would provide municipalities more ability to control the site of oil and gas wells as they relate to residential developments, any occupied buildings, and environmental sensitive areas such as creeks, rivers and drainage ways.

**Work Session and Regular Meeting**

Meeting Date: 12/13/2016

Department: Infrastructure- Development Services

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**AGENDA CAPTION:**

Consider Action On An **Ordinance Amending Section 62-138 Of The Code Of Ordinances Concerning Holiday Decorations By Extending The Display Period For Such Decorations And By Establishing Dates For The Installation And Removal Of Holiday Lights From Trees.**

**BACKGROUND:**

Section 62-138 of the Sign Code regulates the display of holiday lights and decorations on buildings and landscaping for all properties other than single-family homes. Currently, the Code allows for such displays between November 15<sup>th</sup> and January 15<sup>th</sup>.

Post Properties has requested the ability to display holiday lights in the trees in the public Right-of-Way along Quorum Drive to coincide with Daylight Savings Time, approximately November 1<sup>st</sup> to March 1<sup>st</sup>. Post Properties indicated that, in addition to being a holiday decoration, this is an attempt to address a perceived lack of lighting for pedestrians along the corridor.

To accommodate this request, staff is proposing to extend the time period for holiday light displays from November 1<sup>st</sup> through January 31<sup>st</sup>. Additionally, staff is proposing to add language to the ordinance specifying when the holiday lights on trees may be installed (September 15<sup>th</sup>) and by when they must be removed (February 15<sup>th</sup>). This reduces the potential for harming trees by having them wrapped only during their dormant period. Furthermore, the Parks Department typically conducts tree trimming for trees in the public Right-of-Way during the winter months. This requirement would provide a sufficient window of time for trimming the trees without being impeded by light strings.

Staff has discussed these changes with both Post Properties and UDR and they are amenable to the proposed time periods. These changes would also apply to all other non-single family properties in Addison.

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

Ordinance

---



**TOWN OF ADDISON, TEXAS**

**ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE OF THE TOWN OF ADDISON, TEXAS AMENDING SECTION 62-138 “HOLIDAY DECORATIONS,” OF THE CODE OF ORDINANCES, TOWN OF ADDISON, TEXAS, TO REGULATE THE INSTALLATION AND ILLUMINATION OF HOLIDAY LIGHTING; PROVIDING FOR A PENALTY OF A FINE NOT TO EXCEED THE SUM OF FIVE HUNDRED DOLLARS (\$500.00) FOR EACH OFFENSE; AND PROVIDING FOR SAVINGS, SEVERABILITY AND AN EFFECTIVE DATE.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS, THAT:**

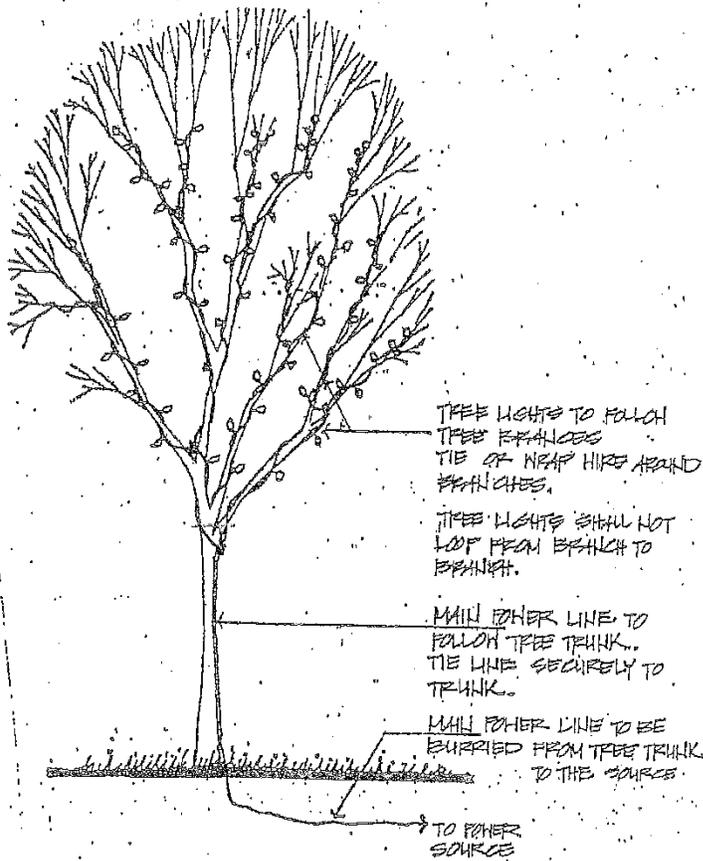
Section 1. Chapter 62 – Signs, Section 138 – Holiday decorations, of the Code of Ordinances, Town of Addison, Texas shall be amended to read in its entirety as follows:

Sec. 62-138. Holiday decorations.

All holiday decorations in districts zoned for single-family residential use are exempt from the following regulations. Nothing in this section shall be construed to prevent tree lights or attached building lights of a primarily decorative nature, clearly incidental and customary and commonly associated with any national, local, or religious holiday, provided such lights shall be displayed between November 1<sup>st</sup> and January 31<sup>st</sup> only. Additionally, the code enforcement officer may allow tree lights if such lights meet the following criteria:

- (1) Such lights may be installed on trees between September 15<sup>th</sup> and February 15<sup>th</sup> only;
- (2) Such lights may be illuminated between November 1<sup>st</sup> and January 31<sup>st</sup> only;
- (3) Such lights do not camouflage or divert attention from traffic signals or directional signals;
- (4) Such lights and wiring thereto is in conformity with the electrical code of the town;
- (5) Such lights shall not glare upon the street or adjacent property;
- (6) Such lights shall not blink, flash, or move by any means; and
- (7) Such lights shall be installed in accordance with figure 62-138.5, as approved by resolution of the city council.

FIGURE 62-138.5



(8) These provisions shall not apply to festoon lighting, which is permitted.

Section 2. Penalty Clause.

Any person, firm or corporation violating any of the provisions or terms of this Ordinance or the Code of Ordinances, Town of Addison, Texas as amended hereby, commits a Class C misdemeanor punishable by a fine as set forth in Section 1-7 of the Code of Ordinances, Addison, Texas for each offense, and each and every day such violation shall continue shall constitute a separate offense.

Section 3. Savings.

The Code of Ordinance, Addison, Texas, shall remain in full force and effect save and except as amended by this Ordinance.

Section 4. Cumulative Clause.

This Ordinance shall be cumulative of all provisions of state or federal law and other ordinances of the Town of Addison, Texas, except where the provisions of this Ordinance are in direct conflict with the provisions of such ordinances, in which event the conflicting provisions of such ordinances are hereby repealed.

Section 5. Severability Clause.

It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs and sections of this Ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this Ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this Ordinance, since the same would have been enacted by the City Council without the incorporation of this Ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

Section 6. Effective Date.

This Ordinance shall become effective immediately upon its passage and publication as required by law.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13<sup>th</sup> day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

**Work Session and Regular Meeting**

Meeting Date: 12/13/2016

Department: Infrastructure- Development Services

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**AGENDA CAPTION:**

Consider Action On A **Resolution Authorizing The City Manager To Approve the Assignment Of The Economic Development Program Grant Agreement For The Addison Grove Redevelopment From Beltline Beltway Investments, Ltd. and Urban InTownhomes, LLC to Texas Capital Bank.**

**BACKGROUND:**

On April 26, 2016, the City Council approved an incentive agreement with Beltline Beltway Investments, Ltd. and Urban InTownhomes, LLC (InTown Homes) for the provision of public infrastructure for the Addison Grove redevelopment of the former Sam's Club property. An amendment to this agreement was approved on September 13, 2016. This agreement specified the responsibilities of the developer and, in return, the Town agreed to reimburse up to \$6.25 million in infrastructure costs and waive up to \$250,000 in permit and other development fees.

Section 11 of the agreement requires that the Town must approve any assignment or conveyance by Beltline Beltway Investments, Ltd. and Urban InTownhomes, LLC. As a condition of their loan approval, Beltline Beltway Investments, Ltd. and Urban InTownhomes, LLC lender, Texas Capital Bank, has required that they be assigned the rights and obligations under the agreement. This will enable the Bank to receive the same reimbursements and waivers promised to Beltline Beltway Investments, Ltd. and Urban InTownhomes, LLC in the event that the Bank should need to step in and complete the project. The Bank would be bound by the same performance requirements specified in the agreement. Assignments are fairly common on projects with an economic development agreement of this nature.

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

**Resolution with Incentive Agreement Assignment**

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TOWN OF ADDISON, TEXAS

RESOLUTION NO. \_\_\_\_\_

A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS APPROVING AN ACKNOWLEDGMENT OF NOTICE AND INDEMNITY PERTAINING TO THE PLEDGE OF THE RIGHT TO RECEIVE PAYMENTS PURSUANT TO THE ECONOMIC DEVELOPMENT PROGRAM GRANT AGREEMENT BETWEEN THE TOWN OF ADDISON AND BELTLINE BELTWAY INVESTMENTS, LTD AND URBAN INTOWNHOMES, LLC, AUTHORIZING THE CITY MANAGER TO EXECUTE THE CONTRACT, AND PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:

**Section 1.** The Acknowledgement of Notice and Indemnity Pertaining to the pledge of the right to receive payments pursuant to the Economic Development Program Grant Agreement between the Town of Addison and Urban Intownhomes, LLC, a copy of which is attached to this Resolution as **Exhibit A**, is hereby approved. The City Manager is hereby authorized to execute the acknowledgment.

**Section 2.** This Resolution shall take effect from and after its date of adoption.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13<sup>th</sup> day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

# EXHIBIT A

## ACKNOWLEDGMENT OF NOTICE AND INDEMNITY

The undersigned, the Town of Addison, Texas, a Texas home rule municipality (the "City") does hereby acknowledge its receipt of notice of that certain Assignment dated the \_\_\_\_\_ day of \_\_\_\_\_, 2016, (the "Assignment") by and between URBAN INTOWNHOMES, LLC, a Texas limited liability company ("Assignor") and TEXAS CAPITAL BANK, NATIONAL ASSOCIATION, a national banking corporation ("Assignee") concerning that certain Economic Development Program Grant Agreement between the City and the Assignor regarding construction of certain improvements as specified therein (the "Agreement").

Pursuant to the terms of Section 11 of the Agreement, the City acknowledges receipt of the Assignment and approves said Assignment as specified therein. The City acknowledges that the Assignment is a pledge of the right to receive payments under the Agreement and does not constitute a delegation of any obligation of the Assignor to perform the covenants contained in the Agreement.

By its execution of this Acknowledgment, the City expressly disclaims any representations as to (i) the validity of the Assignment, and (ii) whether Assignor and/or Assignee have satisfied the terms and conditions set forth in the Agreement which must be satisfied prior to the accrual of the City's obligation to pay any sum or sums due, or to become due, under the Agreement.

Assignor hereby represents and warrants that it has not assigned or attempted to assign any of its right, title, interest, or benefit in and under the Agreement and which is assigned by the Assignment to any other person or entity, other than Assignee. **IN CONSIDERATION OF THE CITY'S EXECUTION OF THIS ACKNOWLEDGMENT, ASSIGNOR HEREBY AGREES TO INDEMNIFY, DEFEND AND HOLD THE CITY HARMLESS FROM AND AGAINST ANY AND ALL LOSS, COST, EXPENSE OR LIABILITY (INCLUDING REASONABLE ATTORNEYS' FEES), ARISING OUT OF OR IN ANY WAY RELATED TO (I) ASSIGNOR'S BREACH OF THE FOREGOING REPRESENTATION AND WARRANTY, AND (II) ANY CLAIMS, LAWSUITS, JUDGMENTS, DISPUTES, PROTESTS, CHALLENGES AND SIMILAR MATTERS ASSERTED BY ASSIGNOR AS TO ANY SUM OR SUMS DUE, OR TO BECOME DUE, UNDER THE AGREEMENT.**

**FURTHER, IN CONSIDERATION OF THE CITY'S EXECUTION OF THIS ACKNOWLEDGMENT AND BASED UPON ASSIGNOR'S REPRESENTATION AND WARRANTY SET FORTH ABOVE, ASSIGNEE HEREBY AGREES TO INDEMNIFY, DEFEND AND HOLD THE CITY HARMLESS FROM AND AGAINST ANY AND ALL LOSS, COST, EXPENSE OR LIABILITY (INCLUDING REASONABLE ATTORNEYS' FEES) ARISING OUT OF OR IN ANY WAY RELATED TO ANY CLAIMS, LAWSUITS, JUDGMENTS, DISPUTES, PROTESTS, CHALLENGES AND SILIMAR MATTERS ASSERTED**

# EXHIBIT A

**BY ANY PERSON OR ENTITY CONCERNING OR RELATING TO THE PAYMENT OF ANY SUM OR SUMS DUE, OR TO BECOME DUE, UNDER THE AGREEMENT.**

The foregoing indemnities and hold harmless agreements running in favor of the City are specifically intended to cover all costs of the City for any future litigation, including attorneys' fees and expenses, other defense costs, and the costs of enforcing the indemnities and hold harmless agreements.

The addresses for notice to the parties hereunder shall as follows:

City: Town of Addison  
5300 Belt Line Road  
Dallas, Texas 75254  
Attn: City Manager

Assignor: Urban Intownhomes, LLC  
1500 Oliver Street  
Houston, Texas 77007  
Attn: Frank Liu

Assignee: Texas Capital Bank, N.A.  
2930 West Sam Houston Parkway Note, Suite 300  
Houston, Texas 77043  
Attn: Melissa Abel

Prior to notice in writing sent to the City by certified U.S. Mail, return receipt requested, postage prepaid, the City shall make such payments to the Assignor at the address specified above as the City may determine pursuant to the Agreement. Following notice from the Assignee as specified herein, the City shall make such payments to the Assignee at the address specified above as the City may determine pursuant to the Agreement.

***[SIGNATURES APPEAR ON THE FOLLOWING PAGE]***

# EXHIBIT A

Executed this the \_\_\_\_ day of \_\_\_\_\_, 2016.

**CITY:** **TOWN OF ADDISON**

By: \_\_\_\_\_  
Name:  
Title:

**ASSIGNOR:** **URBAN INTOWNHOMES, LLC, a Texas limited liability company**

By: **INTOWNBUILDER GP, LLC, a Texas limited liability company (Its Manager)**

By: \_\_\_\_\_  
**FRANK M. K. LIU**  
Manager

**ASSIGNEE:** **TEXAS CAPITAL BANK, NATIONAL ASSOCIATION**

By: \_\_\_\_\_  
Name:  
Title:

AI-1990

14.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** City Manager

---

**AGENDA CAPTION:**

Consider Action On **A Resolution For A Consulting Services Agreement With Solutions For Local Control, LLC,** In The Amount Of \$36,000.

**BACKGROUND:**

The Town of Addison has contracted with Solutions for Local Control, LLC since 2009. Under this agreement, former State Representative Fred Hill will assist the Town in communicating the Town's legislative agenda and represent the Town during legislative sessions regarding issues of importance to the Town. This item will renew the agreement until September 30, 2018.

The service fee for this agreement is \$3,000 per month, or \$36,000 annually, and is budgeted for in the Fiscal Year 2017 budget.

**RECOMMENDATION:**

Administration recommends approval.

---

**Attachments**

Resolution with Solutions for Local Control Agreement

---

**TOWN OF ADDISON, TEXAS**

**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS APPROVING AN AGREEMENT BETWEEN THE TOWN OF ADDISON AND SOLUTIONS FOR LOCAL CONTROL, LLC FOR DEVELOPING POLITICAL AND LEGISLATIVE STRATEGIES IN AN AMOUNT OF \$3,000.00 PER MONTH FOR THE DURATION OF THE AGREEMENT, AUTHORIZING THE CITY MANAGER TO EXECUTE THE CONTRACT, AND PROVIDING AN EFFECTIVE DATE.**

**BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

**Section 1.** The Agreement between the Town of Addison and Solutions for Local Control, LLC for developing political and legislative strategies in an amount of \$3,000.00 per month for the duration of the agreement, a copy of which is attached to this Resolution as **Exhibit A**, is hereby approved. The City Manager is hereby authorized to execute the agreement.

**Section 2.** This Resolution shall take effect from and after its date of adoption.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13<sup>th</sup> day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

# EXHIBIT A

## AGREEMENT

This Agreement is made on this the 1<sup>st</sup> day of October, 2016, by and between Solutions for Local Control, LLC ("Consultant"), a TEXAS limited liability company, and the Town of Addison, Texas ("City"). The two parties agree as follows:

### TERMS

This Agreement is effective from October 1, 2016 through September 30, 2018.

### SERVICES

The parties agree that the Consultant shall perform the following services:

1. Assist the City in developing political and legislative strategies to achieve its goals;
2. Assist in communicating the position of the City to the legislative and executive branches of Texas government (and including agencies of the State), interested parties and the public;
3. Represent the City during meetings, hearings and negotiating sessions involving the executive or legislative branches of Texas government regarding issues of importance to the City, and advise the City about the need for and content of testimony before legislative committees;
4. Assist the City in working with elected officials and members and staff persons of the Texas House of Representatives and Texas Senate in passing or amending legislation favorable to the City or in defeating legislation deemed harmful to the goals of the City, and including assisting the City in drafting legislation;
5. Monitor and represent the City during interim legislative studies or interim committee meetings; and
6. Provide routine written status reports to the City regarding the items outlined above; such reports will be provided at least weekly during any Legislative session and bi-weekly at all other times.

### FEES

For services rendered under this Agreement, the City agrees to pay Consultant the sum of \$3,000 monthly for the duration of this agreement unless cancelled by either party and payable on the 1<sup>st</sup> day of each calendar month beginning October 1, 2016. The fee shall be made to Fred Hill, 909 N. Waterview Drive, Richardson, Texas, 75080, and deposited electronically to the account of the Consultant on or about the first of each month.

# EXHIBIT A

For purposes of reporting as defined by the rules of the Texas Ethics Commission the amount of the monthly retainer paid to Consultant that is being paid for *lobby activities*, the Consultant believes 35% (thirty-five) percent will be a reasonable estimate of the monthly retainer attributable to "*lobby activities*." Consultant is and shall be solely responsible and liable for such determination.

Payment of the fees and any expenses of Consultant as set forth in this Agreement is subject to the annual appropriation and budgeting of funds by the City, in the City's sole discretion, to make such payments. In the event funds are not appropriated and budgeted by the City to make such payments, this Agreement shall terminate at the end of the fiscal year for which funds to make the payments hereunder were budgeted and appropriated.

## EXPENSES

In addition to the professional fee, the City agrees to reimburse Consultant for necessary and reasonable, itemized out-of-pocket expenses requested by Consultant to the City in writing and approved in advance and in writing by City. Expenses may include travel, lodging and business meals *incurred on behalf of the City and at its request*. Such itemized expenses, with corresponding paid receipts, shall be paid separately and shall be reviewed and approved by the City, prior to payment. *Such expenses do not include the normal office functions or daily expenses of the Consultant in the course of his functions in Austin representing the interests of the City*. If any such expenses are incurred by Consultant jointly for, or for the combined interests of, the City and other clients of Consultant, Consultant shall bill and the City shall be responsible for paying only the pro rata share of any such expenses which are attributable to the City (such pro rata share to be determined according to a method mutually agreeable to Consultant and the City).

Consultant shall keep accurate records of all expenses incurred on behalf of the City and shall bill the City on a regular monthly basis for the same, and the City shall have the right to review, inspect, and make copies of the same upon the City's written request submitted to Consultant. Each invoice shall itemize the expenses and include true and correct copies of any and all receipts, invoices, and other documents and materials in support of the invoice, and any such additional documents or materials as the City may request in connection with the invoice and/or the compensation paid to Consultant. All invoices will be forwarded to City Manager, 3500 Belt Line Road, Dallas, Texas 75254, for review and processing unless otherwise directed.

# EXHIBIT A

## **CONFLICTS OF INTEREST**

Consultant will comply with all relevant State laws regarding ethics and lobbying, including immediately notifying the City in the event a conflict of interest arises and resolving any conflict.

## **REGISTRATION REQUIREMENTS**

Texas ethic laws require Consultant to disclose his representation of the City and to report certain moneys paid for some of the activities to be conducted under this Agreement.

Consultant will comply with all rules regarding such disclosure and shall communicate with the City prior to filing such disclosures. In addition, if the Consultant performs any lobbying for the City with any local jurisdiction, it is the responsibility of the Consultant to properly register and comply with all local lobbying ordinances.

Consultant agrees not to engage in any activity on behalf of the City, which is contrary to any Federal, State, or local law or regulation. Furthermore, Consultant agrees not to make or offer any gifts or gratuities to any public official on behalf of the City.

## **INDEPENDENT CONTRACTOR RELATIONSHIP**

It is understood by the parties that Consultant is an independent contractor for all purposes of this Agreement, including for the purposes of any federal and/or state laws including tax laws, and that Consultant is not in any way an employee, full or part time of the City.

## **TERMINATION**

It is agreed and fully understood that City may, at its option and without prejudice to any other remedy it may be entitled to at law or in equity or otherwise, cancel or terminate this Agreement upon at least thirty (30) days written notice to Consultant. Consultant shall be compensated in accordance with the terms of this Agreement for all services that City shall be obligated to pay for any work performed in accordance with this Agreement. City shall not be obligated to pay for any work which is not submitted in compliance with the terms of this Agreement. Consultant shall deliver all original source documents belonging to City immediately after notice of termination of this Agreement has been received by Consultant. The City may also terminate this contract with (30) days notice if termination is caused due to a conflict of interest that cannot be resolved to the City's satisfaction.

It is agreed and fully understood that the Consultant may, at its option and without prejudice to any other remedy it may be entitled to at law or in equity or otherwise, cancel or terminate this Agreement upon at least sixty (60) days written notice to City.

This Agreement shall be governed under and construed according to the laws of the State of Texas (without reference to its conflict of laws provisions), and exclusive venue for any action under this Agreement lies in Dallas County, Texas.

**EXHIBIT A**

**Town of Addison, Texas**

\_\_\_\_\_

**DATE**

\_\_\_\_\_

**Consultant**

  
\_\_\_\_\_  
**Fred Hill**  
**On behalf of Solutions for**  
**Local Control, LLC**

**30 SEPT 2016**

\_\_\_\_\_

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** City Manager

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**AGENDA CAPTION:**

Consider Action On **A Resolution Authorizing The City Manager To Enter Into An Agreement With The Charter Communications For The Installation, Maintenance and Support Of A Network Of Hotspots At 13 Locations.**

**BACKGROUND:**

Charter Communications, formally known as Time Warner Cable, has conducted a nation-wide search for cities that are progressive, innovative and vibrant to provide Wifi Hotspot services to the public. The Town of Addison is one of the few cities that has been selected to receive this service free of charge.

This item was brought to the Council on October 11, 2016 and the Council unanimously gave staff the permission to negotiate a contract with the Charter Communications. Under the proposed contract the Charter Communications will provide:

- WiFi coverage in public spaces – Exhibit A,
- Free WiFi up to 60 minutes per day,
- Hardware & software included – At no cost to Addison,
- Necessary cabling (Coax Ethernet) and power adapters,
- Construction, installation, managing, and supporting the network – At no cost to Addison,
- Marketing the service – At no cost to Addison,
- 25% revenue sharing generated in Addison,
- End user support through toll free number.

This contract will have no financial impact on the Town.

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

Resolution with Charter Communications Agreement

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TOWN OF ADDISON, TEXAS

RESOLUTION NO. \_\_\_\_\_

A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS APPROVING AN AGREEMENT BETWEEN THE TOWN OF ADDISON AND TIME WARNER CABLE ENTERPRISES, LLC AND AUTHORIZING THE INSTALLATION, MAINTENANCE, OPERATION, UPGRADING AND REMOVAL OF EQUIPMENT, CABLES AND DEVICES AT TOWN FACILITIES TO PROVIDE PUBLIC WI-FI ACCESS, AUTHORIZING THE CITY MANAGER TO EXECUTE THE CONTRACT, AND PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:

**Section 1.** The Agreement between the Town of Addison and Time Warner Cable Enterprises, LLC and authorizing the installation, maintenance, operation, upgrading and removal of equipment, cables and devices at Town facilities to provide public Wi-Fi access, a copy of which is attached to this Resolution as **Exhibit A**, is hereby approved. The City Manager is hereby authorized to execute the agreement.

**Section 2.** This Resolution shall take effect from and after its date of adoption.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13<sup>th</sup> day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

# EXHIBIT A

## Authorization to Install and Maintain Communications Equipment ("Agreement")

The Town of Addison, Texas, a Texas home-rule municipal corporation ("Town") hereby grants permission to Time Warner Cable Enterprises LLC ("TWC") to attach, install, maintain, operate, upgrade and remove the equipment, cables and devices depicted and described in Exhibit A (the "Equipment") to and at the property located at:

Address: [See Schedule 1 attached hereto] \_\_\_\_\_

City and State: \_\_\_\_\_ Zip Code \_\_\_\_\_ (the "Property").

Town represents, warrants and covenants to TWC that Town: (a) has the full power and authority to negotiate, execute, deliver and perform this Agreement; and (b) has obtained any and all requisite approvals from the owner of the Property (if the Property is not owned by Town) (the "Owner") to enter into this Agreement and to grant certain non-exclusive and non-vesting rights to TWC as more specifically set forth herein including, without limitation, the right to install and maintain the Equipment to and at the Property. In consideration for the grant provided herein, simultaneously with the execution of this Agreement, the Town and TWC shall execute the Addendum to Authorization to Install and Maintain Communications Equipment, attached hereto as Exhibit "B" and incorporated herein for all purposes, providing for a revenue share payment to alleviate the costs incurred by the Town under this Agreement.

The Equipment and WiFi Service will be operated by TWC, at no cost to Town or the Owner. The Equipment includes WiFi hardware that will allow TWC to provide wireless/WiFi service at the Property for the convenience of TWC's customers and for the benefit to Town and/or the Owner of attracting foot traffic commerce within the supported WiFi community in which the Property is located (the "Community"). Town hereby grants TWC, its successors and assigns, and its authorized agents and contractors access to the interior and exterior of the Property (including building rooftop(s)) for the purpose of installation, maintenance, repair, upgrade, disconnection, replacement and/or removal of the Equipment, and Town agrees to provide a standard power source for operation of the Equipment, with prior written notice to Town. At the time of this Agreement, the parties acknowledge that TWC can not identify with certainty the preliminary design, specifications and/or layout of the Equipment either on and/or under the ground. Therefore, the parties agree that TWC shall provide the preliminary design, specifications and/or layout of the Equipment to the Town prior to the issuance of any permit for the Town's review and approval. TWC agrees to proceed with diligence to complete the installation of the Equipment in a timely manner to avoid disruption to Town infrastructure.

Town grants TWC permission to advertise, market and otherwise promote the Property as being a TWC WiFi access point in any and all forms of media now known or hereafter developed, in TWC's sole discretion, and Town grants TWC permission to use the Town approved names, trademarks and logos of Town in connection with such advertising, marketing and promotion. However, the Town may revoke the permission to use the Town approved names, trademarks and logos of the Town at any time, for any reason, in writing.

All Equipment will remain the property of TWC, and TWC assumes the risk of loss, unless damage to or loss of the Equipment is due to the negligent or willful acts of the Town. The Equipment may not be relocated by the Town. However, in the event the Town determines that a public purpose would require the Town to remove the Equipment, then TWC agrees that it shall promptly remove and/or relocate, if relocation is possible in the sole determination of the Town, the Equipment at TWC's sole cost and expense. Such removal and/or relocation shall be in accordance with Town ordinances, as amended. TWC WILL BE RESPONSIBLE FOR ANY DAMAGES DIRECTLY CAUSED BY, AND WILL DEFEND, INDEMNIFY AND HOLD HARMLESS TOWN FROM ANY THIRD-PARTY CLAIM(S) BROUGHT AGAINST TOWN THAT ARISE FROM: (A) TWC'S INSTALLATION, OPERATION, MAINTENANCE, REPAIR OR REMOVAL OF THE EQUIPMENT (EXCEPT FOR CLAIMS CAUSED BY THE NEGLIGENCE OR INTENTIONAL MISCONDUCT OF TOWN OR THE OWNER, OR RESULTING FROM ANY PRE-EXISTING CONDITIONS AT THE PROPERTY); OR (B) BODILY INJURY OR DAMAGE TO TANGIBLE PROPERTY CAUSED BY TWC'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. TWC WILL NOT BE LIABLE UNDER THIS AGREEMENT FOR ANY CLAIMS OR DAMAGES OTHER THAN THOSE DESCRIBED IN THE IMMEDIATELY PRECEDING SENTENCE. NEITHER PARTY WILL BE LIABLE TO THE OTHER OR FOR ANY INDIRECT, EXEMPLARY, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING UNDER THIS AGREEMENT. TWC agrees to maintain the insurance coverages described on Exhibit C, attached hereto and incorporated herein for all purposes.

# EXHIBIT A

The term of this Agreement will commence as of the date of later signature below and remain in effect for a period of five (5) years. Thereafter, this Agreement will automatically renew for two (2) additional five (5) year terms. TWC may terminate this Agreement at any time upon ninety (90) days prior written notice, for any reason or no reason. The Town may terminate this Agreement at any time after thirty (30) days notice to TWC of a default or breach under this Agreement and TWC fails to cure. Upon notice by the Town of a matter of public safety, TWC shall correct the matter within five (5) days. After the initial five (5) year term, Town may terminate this Agreement at any time upon thirty (30) days, written notice, for any reason or no reason. Any notice provided in writing under the terms of this Agreement by either party to the other shall be in writing and may be effected by registered or certified mail, return receipt requested at the addresses provided herein. Upon the termination of this Agreement for any reason, TWC shall immediately remove all Equipment at their sole cost and expense.

All notices or communication required to be given in writing by one party or the other shall be considered as having been given to the addressee on the date such notice or communication is postmarked by the sending party. Each party may change the address to which notice may be sent to that party by giving notice of such change to the other party in accordance with the provisions of this Agreement. Notice shall be provided to the addresses provided below.

Assignment; Third Party Benefit. The TWC may not and shall have no authority to assign, transfer, or otherwise convey by any means whatsoever this Agreement or any of the rights, duties or responsibilities hereunder without obtaining the prior written approval of the Town, and any attempted assignment, transfer, or other conveyance of this Agreement without such approval shall be null and void and be cause for immediate termination of this Agreement by the Town ; provided, TWC may assign this Agreement to its affiliates or any party that acquires all or substantially all of its asset or equity. This Agreement is solely for the benefit of the parties hereto and is not intended to and shall not be deemed to create or grant any rights, contractual or otherwise, to any third person or entity.

No Partnership; Joint Venture; or Joint Enterprise. Nothing contained in this Agreement shall be deemed to constitute that the Town and the TWC are partners or joint venturers with each other, or shall be construed or be deemed to establish that their relationship constitutes, or that this Agreement creates, a joint enterprise.

Legal Compliance; Subject to Laws. The TWC shall observe and abide by, and this Agreement is subject to, all applicable federal, state, and local (including the Town) laws, rules, regulations, and policies (including, without limitation, the Charter and Ordinances of the Town), as the same currently exist or as they may be hereafter amended. The TWC agrees that any and all records of the TWC which, including but not limited to describe, relate to, convey and/or illustrate the obligations, terms and conditions set forth in this Agreement shall be subject to the Texas Public Information Act, Texas Government Code Chapter 552, as amended.

Venue; Governing Law. In the event of any action under this Agreement, exclusive venue for all causes of action shall be instituted and maintained in Dallas County, Texas. The parties agree that the laws of the State of Texas shall govern and apply to the interpretation, validity and enforcement of this Agreement; and, with respect to any conflict of law provisions, the parties agree that such conflict of law provisions shall not affect the application of the law of Texas (without reference to its conflict of law provisions) to the governing, interpretation, validity and enforcement of this Agreement.

Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and constitute one and the same instrument.

No Waiver; Rights Cumulative. The failure by either party to exercise any right or power, or option given to it by this Agreement, or to insist upon strict compliance with the terms of this Agreement, shall not constitute a waiver of the terms and conditions of this Agreement with respect to any other or subsequent breach thereof, nor a waiver by such party of its rights at any time thereafter to require exact and strict compliance with all the terms hereof. The rights or remedies under this Agreement are cumulative to any other rights or remedies, which may be granted by law.

Severability. The terms of this Agreement are severable, and if any section, paragraph, clause, or other portion of this Agreement shall be found to be illegal, unlawful, unconstitutional or void for any reason, the balance of the Agreement shall remain in full force and effect and the parties shall be deemed to have contracted as if said section, paragraph, clause or portion had not been in the Agreement initially.

# EXHIBIT A

Entire Agreement. This Agreement represents the entire and integrated Agreement and agreement between the Town and the TWC and supersedes all prior negotiations, representations and/or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both the Town and the TWC.

Sovereign Immunity. The parties agree that the Town has not waived its sovereign immunity by entering into and performing its obligations under this Agreement.

*Each person signing below represents that he/she is a duly authorized representative of the party for which he/she is signing and has the full power and authority to enter into this Agreement on behalf of such party.*

**Town of Addison, Texas:**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_

**Time Warner Cable Enterprises LLC:**

By Charter Communications, Inc., its Manager

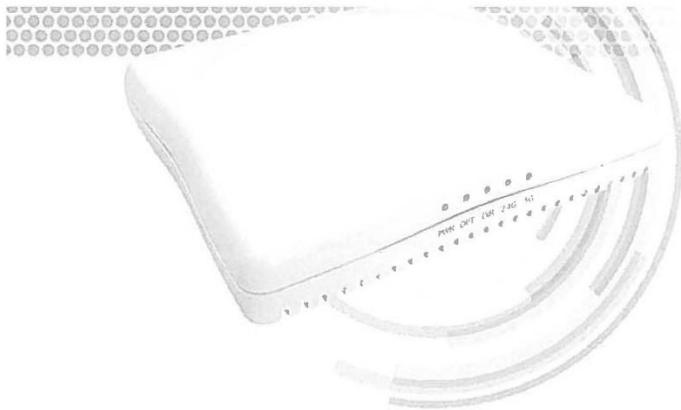
By: Justin Colwell  
Name: Justin Colwell  
Title: VP Wireless  
Date: 11/14/16  
Address: 6399 F. Daleo's Green  
Greenwood Village, CO  
Phone: 720-621-9046

# EXHIBIT A

Exhibit "A"

Equipment

# EXHIBIT A



data sheet

## BENEFITS

**Best-in-class mid-range performance at lowest cost**  
Unprecedented price/performance with extended range at the industry's most affordable price point for both single and dual-band

**Extended range requires fewer APs**  
Adaptive antenna technology delivers a 2x to 4x increase in Wi-Fi signal coverage minimizing the number of APs required to service any area

**Wire-like wireless reliability**  
Patented smart antenna array, adaptive antenna technology and Quality of Service technologies combine to mitigate interference and minimize packet loss

**Channel selection optimizes throughput**  
ChannelFly dynamic management, based on throughput measurements, not just interference, chooses the best channel to give users the highest throughput

**Super simple configuration and management**  
The industry's simplest configuration and management through a Web-based wizard and automated deployment capabilities

**Flexible deployment options**  
Standalone or controller-based deployment

**Smart wireless meshing**  
When used with a ZoneDirector Smart WLAN controller, the ZoneFlex 7300 easily extends Wi-Fi services to areas where Ethernet cabling isn't available, possible or cost effective

**Multiple Ethernet ports**  
Three Ethernet ports enable connectivity of wired devices such as printers, registers, VoIP phones, servers, etc.

## ZoneFlex™ 7300 Series

### SINGLE/DUAL-BAND 802.11N SMART WI-FI ACCESS POINTS

#### High Performance, 802.11n Mid-Range Smart Wi-Fi Access Points with Adaptive Antenna Technology

Unlike any other 802.11n wireless solution in its class, the ZoneFlex 7300 combines patented adaptive antenna technology and automatic interference mitigation to deliver consistent, predictable performance at extended ranges with up to an additional 4dB of BeamFlex gain on top of the 6 dBi physical antenna gain and 10dB of interference mitigation.

The ZoneFlex 7300 delivers a 2- to 4-fold increase in signal range with lower packet error rates while reducing the number of APs required to deliver dependable Wi-Fi service.

Each ZoneFlex 7300 integrates Ruckus-patented BeamFlex, a software-controlled, high gain antenna array that continually forms and directs each 802.11n packet over the best performing signal path. The ZoneFlex 7300 automatically selects channels for highest throughput potential using Ruckus ChannelFly dynamic channel management, adapting to environmental changes. Once deployed, enterprises never have to worry about constant site surveys as the environment changes.

A sleek and low-profile design, the ZoneFlex 7300 was purpose-built for cost-minded enterprises requiring reliable high speed client connectivity. It is ideal for a variety of enterprise and hotspot environments including hotels, schools, retail outlets, branch offices and public venues.

Offered in single and dual band models, the ZoneFlex 7300 series can be deployed as a standalone access point or as part of the centrally-controlled Smart Wireless LAN with the Ruckus ZoneDirector. The ZoneFlex 7300 can also be easily deployed using Smart Mesh Networking to extend Wi-Fi services in locations where Ethernet cabling is not available or cost prohibitive.

Standard 802.3af power over Ethernet (PoE) leverages existing PoE switches eliminating costly and cumbersome upgrades.

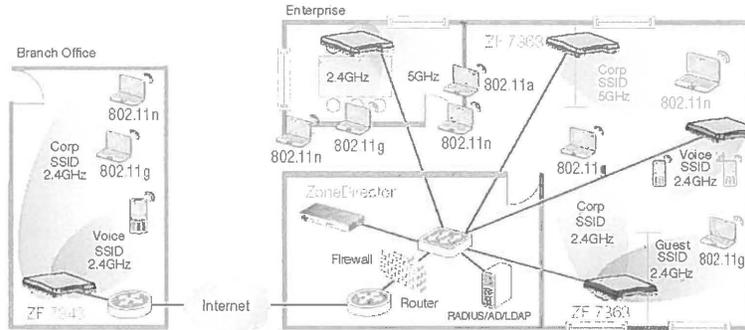


# EXHIBIT A

## ZoneFlex™ 7300 Series SINGLE/DUAL-BAND 802.11N SMART WI-FI ACCESS POINTS

### AFFORDABLE PERFORMANCE FOR ENTERPRISES

The ZoneFlex 7300 series integrates seamlessly with your existing network infrastructure, delivering best-in-class 802.11n performance and reliability at the industry's most affordable price - making it the ideal wireless solution for mid-range enterprise and branch office applications.



### Patented BeamFlex™ Technology Extends Signal Range, Improves Stability of Client Connections

All ZoneFlex 7300 Smart Wi-Fi access points integrate a software-controlled smart antenna array that delivers up to an additional 4dB of BeamFlex gain and 10dB of interference mitigation. This allows a 2 to 4x improvement in signal range and a reduction in packet loss from the ability to automatically mitigate interference and avoid obstacles.

### Advanced WLAN Applications with Smart/OS

When used with the Ruckus ZoneDirector Smart WLAN controller, each ZoneFlex 7300 supports a wide range of value-added applications such as guest networking, Smart Wireless Meshing, Dynamic PSK, hotspot authentication, wireless intrusion detection and many more. With Smart/OS, up to 2,048 discrete WLANs can be created and mapped to the same or different APs or VLANs. In a centrally managed configuration, the ZoneFlex 7300 works with a wide range of authentication servers including Microsoft's Active Directory, LDAP, and RADIUS.



### Flexible Deployment Options

ZoneFlex 7300 APs can be deployed as a standalone AP or as part of a centrally managed wireless LAN using ZoneDirector Smart WLAN controllers. ZoneFlex 7300's can be deployed across any L2/L3 network and can bridge traffic

onto the local network, tunnel to a central location using L2TP or PPPoE, or route between the WAN and NAT'ed private subnets. It can be wired to the network or connect wirelessly by meshing to another AP when Ethernet cabling is unavailable. When used with the ZoneDirector, each ZoneFlex 7300 is automatically configured through the network making deployment quick and easy.

### Complete Local and Remote Management

Each ZoneFlex 7300 can be managed as a standalone AP through a Web-based GUI, using SNMP or through the Ruckus FlexMaster Wi-Fi remote management system.

Local management can also be performed using the ZoneDirector Smart WLAN controller. FlexMaster is a LINUX-based software platform that uses industry-standard protocols to perform bulk configuration, fault detection, monitoring and a wide range of troubleshooting capabilities over a wire area connection. The ZoneDirector enables local management and control of APs, adding value-added services such as transmit power control, guest networking and meshing.



# EXHIBIT A



## ZoneFlex™ 7300 Series

SINGLE/DUAL-BAND 802.11N SMART  
WI-FI ACCESS POINTS

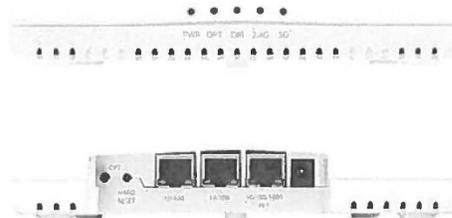
### FEATURES

- Single (2.4GHz) and dual-band (5GHz/2.4GHz) options\*
- Adaptive antenna technology and advanced RF management
- Up to an additional 4dB BeamFlex gain / 10dB interference mitigation / 6 dBi physical antenna gain
- Automatic interference mitigation, optimized for high-density environments
- Integrated smart antenna array with over 300 unique patterns for high reliability
- Standard 802.3af Power over Ethernet (PoE)
- Router mode with NAT and DHCP services
- 2 to 4 times extended range and coverage
- IP multicast video streaming support
- Up to 8 BSSIDs per radio with unique QoS and security policies
- Advanced QoS packet classification and automatic priority for latency-sensitive traffic
- Dynamic, pre-user rate-limiting for hotspot WLANs
- WEP, WPA-PSK (AES), 802.1X support for RADIUS and Active Directory\*\*
- Ethernet 802.1x port-based authentication (authenticator and supplicant)
- Smart Mesh Networking\*\*
- Zero-IT and Dynamic PSK\*\*
- Admission control/load balancing\*\*
- Bandsteering\* and airtime fairness
- Captive portal and guest accounts\*\*
- Wall, desktop or ceiling mountable
- USB 2.0 port hardware option (special orders only)\*\*\*
- Limited lifetime warranty

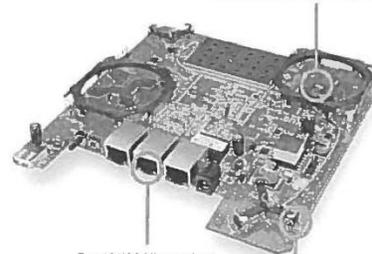
\* ZoneFlex 7303 only

\*\* when used with Ruckus ZoneDirector controller.

\*\*\* hardware build option with future software support



High-gain directional antenna elements not only delivers signal gain but also interference mitigation for range extension, reliability and high data rates



Two 10/100 Mbps and one 802.3af PoE 10/100/1000 Mbps Ethernet port support

More than 300 potential antenna combinations can be chosen for high availability of Wi-Fi

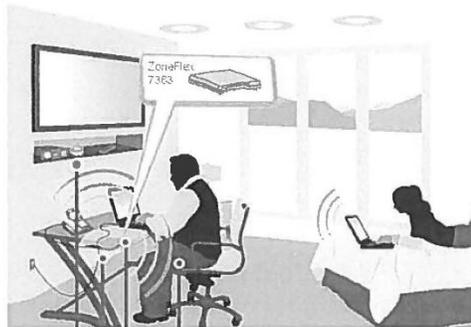
# EXHIBIT A

## ZoneFlex™ 7300 Series

SINGLE/DUAL-BAND 802.11N SMART  
WI-FI ACCESS POINTS

### IN ROOM DEPLOYMENT FOR HOTELS

The ZoneFlex 7300 series is ideal for deployment in hotel guest rooms to provide wireless connection to high quality video and data access, as well as wired connections to IP phone and guest devices.



Dual-band (2.4/5GHz) support allows for concurrent internet and IP-based video services

Sleek, elegant design easily concealed

Wired ports for connecting IP devices such as laptops and VoIP phones

Multiple SSIDs for high speed internet access and other services

### DEPLOYMENT FOR RETAIL / BRANCH OFFICES

The ZoneFlex 7300 series is ideal for deployment in retail stores to provide inconspicuous wireless connection to high quality video, wireless IP phones and data access for handheld PoS bar code scanners.



Wired ports to connect devices such as cash registers, printers, etc

Multiple SSIDs for differentiated user services (e.g., guest Wi-Fi, point of sale, voice)

Reliable Wi-Fi connectivity for point of sale devices

5GHz band and smart antenna system ideal for wireless roaming between APs

# EXHIBIT A

## Specifications

PHYSICAL CHARACTERISTICS	
<b>POWER</b>	<ul style="list-style-type: none"> <li>External power adapter</li> <li>Input: 110-240V AC</li> <li>Output: 12V DC, 1.0A</li> <li>Power over Ethernet Class 0</li> </ul>
<b>PHYSICAL SIZE</b>	17.8cm (L), 17.8cm (W), 3.6cm (H)
<b>WEIGHT</b>	397 grams (0.875 lbs.)
<b>ETHERNET PORTS</b>	<ul style="list-style-type: none"> <li>1 auto MDX, auto-sensing 10/100/1000 Mbps, RJ-45, PoE port</li> <li>2 auto MDX, auto-sensing 10/100 Mbps, RJ-45 ports (7343/7363 only)</li> </ul>
<b>LOCK OPTION</b>	Integrated Kensington lock
<b>ENVIRONMENTAL CONDITIONS</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 0°C - 40°C</li> <li>Operating Humidity: 15% - 95% non-condensing</li> </ul>
<b>POWER DRAW</b>	<ul style="list-style-type: none"> <li>ZF7363: 12.95W (PoE), 12W (12V DC)</li> <li>ZF7343: 9W (PoE), 9W (12V DC)</li> </ul>

RF	
<b>ANTENNA</b>	<ul style="list-style-type: none"> <li>ZF7363: Adaptive antenna array that provides up to 300+ unique antenna patterns</li> <li>ZF7341/7343: Adaptive antenna array that provides 256 unique antenna patterns</li> </ul>
<b>MAXIMUM EIRP</b>	<ul style="list-style-type: none"> <li>2.4 GHz: Up to 29 dBm</li> <li>ZF7363: 5 GHz: Up to 27 dBm</li> </ul>
<b>PHYSICAL ANTENNA GAIN</b>	<ul style="list-style-type: none"> <li>ZF7341/7343: Up to 6 dBi (2.4 GHz)</li> <li>ZF7363: Up to 6 dBi (2.4 and 5 GHz)</li> </ul>
<b>BEAMFLEX* SINR TX GAIN</b>	Up to 4 dB
<b>INTERFERENCE MITIGATION</b>	Up to 10 dB
<b>MINIMUM RX SENSITIVITY</b>	Up to -98 dBm

\*BeamFlex gains are statistical system level effects translated to enhanced SINR here, and based on observations over time in real-world conditions with multiple APs and many clients.

PERFORMANCE AND CAPACITY	
<b>TARGET UDP THROUGHPUT</b>	150-200 Mbps (300 Mbps bursts) sustainable throughput for a 5000 sq foot (460 sq meter) area for each radio for each band
<b>CONCURRENT STATIONS</b>	256
<b>SIMULTANEOUS VoIP CLIENTS</b>	Up to 20

MANAGEMENT	
<b>DEPLOYMENT OPTIONS</b>	<ul style="list-style-type: none"> <li>Standalone (individually managed)</li> <li>Managed by ZoneDirector</li> <li>Managed by FlexMaster</li> </ul>
<b>CONFIGURATION</b>	<ul style="list-style-type: none"> <li>Web User Interface (HTTP/S)</li> <li>CLI (Telnet/SSH), SNMP v1, 2, 3</li> <li>TR, OSS via FlexMaster</li> </ul>
<b>AUTO AP SOFTWARE UPDATES</b>	FTP or TFTP, remote auto available

WI-FI	
<b>STANDARDS</b>	<ul style="list-style-type: none"> <li>IEEE 802.11a/b/g/n*</li> <li>2.4GHz and 5GHz*</li> </ul>
<b>SUPPORTED DATA RATES</b>	<ul style="list-style-type: none"> <li>802.11n: 6.5Mbps - 130Mbps (20MHz) 6.5Mbps - 300Mbps (40MHz)</li> <li>802.11a: 54, 48, 36, 24, 18, 12, 9 and 6Mbps*</li> <li>802.11b: 11, 5.5, 2 and 1 Mbps</li> <li>802.11g: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps</li> </ul>
<b>RADIO CHAINS</b>	2 x 2
<b>SPATIAL STREAMS</b>	2
<b>RF POWER OUTPUT</b>	<ul style="list-style-type: none"> <li>26 dBm for 2.4GHz†</li> <li>24 dBm for 5GHz†</li> </ul>
<b>CHANNELIZATION</b>	20MHz and/or 40MHz
<b>FREQUENCY BAND</b>	<ul style="list-style-type: none"> <li>IEEE 802.11n: 2.4 - 2.484 GHz and 5.15 - 5.85 GHz*</li> <li>IEEE 802.11a: 5.15 - 5.85 GHz*</li> <li>IEEE 802.11b: 2.4 - 2.484 GHz</li> </ul>
<b>OPERATING CHANNELS</b>	<ul style="list-style-type: none"> <li>US/Canada: 1-11</li> <li>Europe (ETSI X30): 1-13</li> <li>Japan X41: 1-13</li> <li>5GHz channels: Country dependent for the following channel ranges: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165</li> </ul>
<b>BSSID</b>	Up to eight per radio
<b>POWER SAVE</b>	Supported
<b>WIRELESS SECURITY</b>	<ul style="list-style-type: none"> <li>WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i</li> <li>Authentication via 802.1X with the ZoneDirector, local authentication database, support for RADIUS, LDAP, and ActiveDirectory</li> </ul>
<b>CERTIFICATIONS</b>	<ul style="list-style-type: none"> <li>U.S., Europe, Australia, Brazil, Canada, Chile, Hong Kong, India, Israel, Japan, Korea, Mexico, New Zealand, Philippines, Saudi Arabia, Singapore, South Africa, Taiwan, Thailand, UAE, Vietnam</li> <li>WEEE/RoHS compliance</li> <li>EN-60950-1-2</li> <li>Wi-Fi Alliance</li> </ul>

\*5GHz functionality is only available with ZoneFlex 7363  
† Maximum power varies by country

## Product Ordering Information

MODEL	DESCRIPTION
<b>ZoneFlex 7300 Series Smart Wi-Fi 802.11n Access Points</b>	
901-7363-XX00	Concurrent dual band 802.11n AP (includes cable cover), no power adapter
901-7343-XX00	Single band 802.11n AP (includes cable cover), no power adapter
901-7341-XX00	Single band 802.11n 1-port AP, no power adapter
<b>Optional Accessories</b>	
902-0181-0001	Slim drop ceiling, ceiling, wall looking mount kit (1 unit, minimum order quantity of 5)
902-0166-0000	Metal drop ceiling, ceiling, wall looking mount kit
902-0162-XXYY	PoE injector (sold in quantities of 10 or 100)
902-0172-XX10	Power Supply (Qty: 10)
902-0152-XX01	Power Supply (Qty: 60)

PLEASE NOTE: When ordering ZoneFlex indoor APs, you must specify the destination region by indicating -US, -IL, or -WW instead of XX. When ordering PoE injectors or power supplies, you must specify the destination region by indicating -US, -EU, -AU, -ER, -CN, -IN, -JP, -KR, -SA, -UK, or -RU instead of XX.

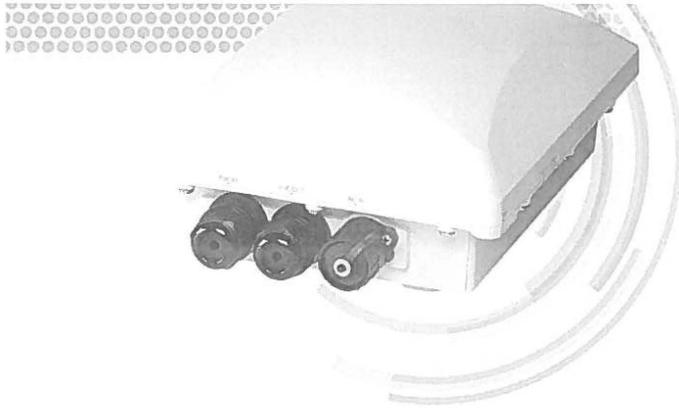
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Ruckus Wireless, Inc.  
350 West Java Drive  
Sunnyvale, CA 94089 USA  
(650) 295-4200 Ph | (408) 738-2055 Fx



www.ruckuswireless.com

# EXHIBIT A



data sheet

## BENEFITS

**Unprecedented outdoor Wi-Fi performance**  
Advanced Smart Wi-Fi design with concurrent dual-band 802.11n radios support 3x3:3 MIMO (2x2:2 for N model). Purpose built for 3G offload, Wi-Fi wholesaling or integrated small cell networking over shared wireless mesh backhaul services in dense urban environments or public venues

**Best in class channel selection technology**  
ChannelFly dynamic channel management is a novel capacity-driven channel selection technology that predicts and automatically selects the best performing channel based on statistical, real-time capacity analysis of all RF channels

**Environmentally hardened with AC power**  
Enables fast and easy mounting to street lights, traffic controls and other street furniture. Includes hardened enclosures for outdoor deployment with IP-67 rated enclosure

**Unified, centralized Wi-Fi management eases administration**  
ZoneDirector, SCG 200 and FlexMaster provide a detailed view into and control over both indoor and outdoor Smart Wi-Fi APs enabling seamless and system-wide administration of the entire wireless environment. ZoneFlex 7782 Series traffic can also backhaul into the mobile packet core using the SCG 200.

**Unmatched Wi-Fi capacity and reliability**  
BeamFlex+ adaptive antenna technology combined with interference mitigation technology delivers up to 6dB of added signal gain and up to 15dB of interference mitigation and support for up to 500 unencrypted clients per AP

**Polarization Diversity — Maximal Ratio Combining (PD-MRC)**  
The only outdoor AP which comes with PD-MRC, a polarization diversity capability that ensures reliable and consistent wireless connections to mobile devices such as smart phones and tablets

## ZoneFlex™ 7782 Series DUAL BAND SMART WI-FI OUTDOOR AP

### The Industry's Highest Capacity, Highest Performing Access Point with Adaptive Antenna Technology and Smart Wi-Fi Meshing

The ZoneFlex 7782 Series is the first dual-band 802.11n outdoor access point (AP) to integrate BeamFlex+ adaptive antenna technology coupled with transmit beamforming (TxBF) to enable much longer range signals, and more resilient mesh connections that automatically adapt to interference and changing environmental conditions.

The ZoneFlex 7782 Series implements Ruckus-patented BeamFlex+™ smart antenna technology that enables consistent, high-performance, extended coverage and multimedia support in the most challenging RF environments. BeamFlex+ combined with TxBF is capable of delivering up to 6 dB of signal-to-interference-plus-noise (SINR) improvement above the antenna gain and up to 15 dB of interference mitigation. Ruckus ChannelFly dynamic channel management optimizes client throughput up to 50 percent by selecting the best channel to operate on.

Supporting advanced Smart Mesh Networking, the Ruckus ZoneFlex 7782 Series is perfect for service providers looking to quickly and economically expand branded broadband services, offload data traffic from congested 3G networks, deploy multimedia hotspots or offer wireless broadband services where fixed line access is limited.

The ZoneFlex 7782 Series can be centrally managed by the ZoneDirector Smart WLAN controller or the Smart Cell Gateway (SCG) 200 as part of a unified indoor/outdoor wireless LAN, deployed as a standalone AP and managed individually, or through the FlexMaster remote Wi-Fi management system.

A Web-based wizard allows any computer user to configure ZoneFlex 7782 Series — creating a secure and sophisticated WLAN in a matter of minutes.

Ruckus ZoneFlex 7782 Series simply plugs into any Ethernet network and automatically discovers the ZoneDirector or SCG 200. No RF tuning, no client configuration needed. The small, lightweight hardware unit is designed for easy installation and to minimize the visual impact and public awareness challenges of introducing new infrastructure to a public venue.

# EXHIBIT A



- Concurrent dual-band (5GHz/2.4GHz) support
- Adaptive antenna technology and advanced RF management
- Up to 6dB signal gain / 15dB interference mitigation
- Chip based transmit beamforming increasing signal gain up to 4dB when used with supported clients
- Automatic interference avoidance, optimized for high-density environments
- Standard 802.3af/at Power over Ethernet (PoE)
- Polarization Diversity for optimal mobile device performance
- Standard 802.3af/at output for surveillance cameras or small cell backhaul
- Integrated VAC power
- Integrated GPS for location services and network timing
- Wall, pole or ceiling mountable
- Small, lightweight, and unassuming form factor
- 2 to 4 times extended range and coverage
- Multicast IP video streaming
- 900 Mbps of user throughput (450 Mbps/radio)
- 32 BSSIDs with unique QoS and security policies\*\*
- Advanced QoS packet classification and automatic priority for latency-sensitive traffic
- Continuous Spectrum Analysis
- Dynamic, per-user rate-limiting for hotspot WLANs
- WEP, WPA-PSK (AES), 802.1X support for RADIUS and Active Directory\*
- Smart Mesh Networking\*
- Zero-IT and Dynamic PSK\*
- Admission control/load balancing\*
- Band steering and airtime fairness support
- Captive portal and guest accounts \*

\*When used with Aruba ZoneDirector controller  
\*\*9.6 release

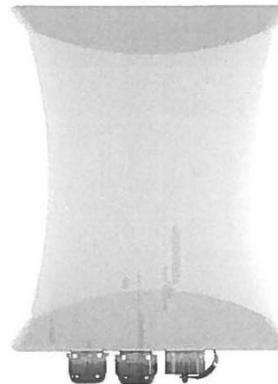
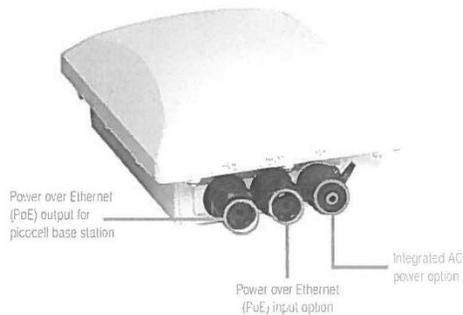


Fig. 2

9025872v2 07185.1445

# EXHIBIT A

## ZoneFlex™ 7782 Series DUAL BAND SMART WI-FI OUTDOOR AP

### ZoneFlex 7782



Dual-band 802.11n  
3:3x3, 900 Mbps  
Omni-Directional smart antenna for 2.4GHz/5GHz  
6 elements, +2000 patterns  
360° coverage

- Well suited to a wide variety of deployments including mesh
- Best coverage and capacity at 360°
- Ideal for poles, rooftops, or parapets

### ZoneFlex 7782-S



Dual-band 802.11n  
3:3x3, 900 Mbps  
Internal sectorized smart antenna for 2.4GHz/5GHz  
12 elements, +8 patterns  
120° coverage

- Well suited for high density deployments
- Best coverage and capacity at 120° sectors
- Ideal for poles and exterior walls

### ZoneFlex 7782-N



Dual-band 802.11n  
2:2x2, 600 Mbps  
Internal narrow sectorized smart antenna for 2.4GHz and 5GHz  
4 elements, 30° narrow sector coverage

- Well suited to extremely high-density deployments
- Can be used in mesh applications
- Best coverage and capacity at 30°

### ZoneFlex 7782-E



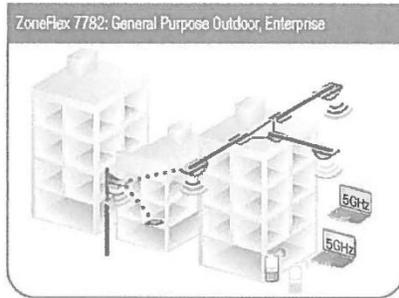
Dual-band 802.11n  
3:3x3, 900 Mbps  
External smart antenna support for both 2.4GHz and 5GHz

- Wide variety of external antennas can be attached giving great deployment flexibility
- Ideal for poles, street corners, roof tops
- Situations where AP is remote from antennas or where AP requires custom engineered RF coverage

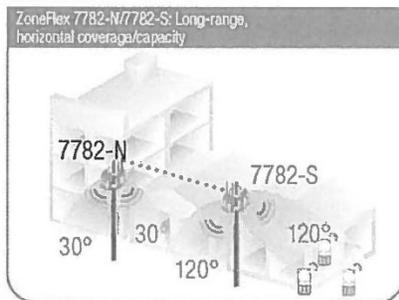
# EXHIBIT A

## ZoneFlex™ 7782 Series

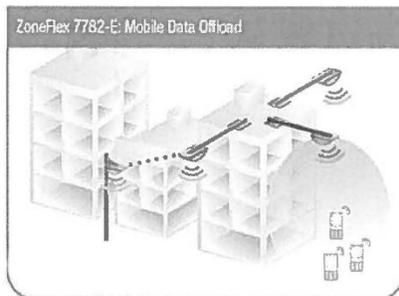
DUAL BAND SMART  
WI-FI OUTDOOR AP



- First 3x3 dual-band 802.11n smart outdoor AP with adaptive antenna array and TxBF
- Designed for extreme conditions
- Smart channel selection
- Concurrent dual band 802.11n
- 360° coverage
- 6 elements, +2000 patterns
- IP-67 rated, -40°C to +65°C
- Standalone or centrally managed by ZoneDirector, Smart Cell Gateway (SCG) 200, or FlexMaster



- Smart sectorized 3x3 802.11n AP (2x2:2 for N model)
- Optimized for horizontal, long-range coverage and high-density user environments
- Smart channel selection
- Concurrent dual band 802.11n
- 120° or 30° smart sector antennas for longer range or high-density deployments
- IP 67 rated, -40°C to +65°C
- Standalone or centrally managed by ZoneDirector, SCG 200, or FlexMaster



- Supports a wide variety of external antennas
- 360° 'beamforming' coverage
- Smart channel selection
- 2.4GHz and 5GHz external antennas
- Concurrent dual band 802.11n
- IP 67 rated, -40°C to +65°C
- Managed by ZoneDirector, SCG 200, and FlexMaster

# EXHIBIT A

## Specifications (7782, 7782-S, 7782-N, 7782-E)

PHYSICAL CHARACTERISTICS	
<b>POWER</b>	<b>AC Input (100-250 VAC 50/60 Hz)</b> <ul style="list-style-type: none"> <li>• Idle: 8W</li> <li>• Typical: 10W</li> <li>• Peak: 18W (PoE output off)</li> <li>• Peak: 50W (PoE output 25W)</li> </ul> <b>PoE Input</b> <ul style="list-style-type: none"> <li>• Idle: 0W</li> <li>• Typical: 8W</li> <li>• Peak: 802 3af (PoE output off)</li> <li>• Peak: 44W (PoE output 25W)</li> </ul>
<b>PHYSICAL SIZE</b>	<ul style="list-style-type: none"> <li>• 23.9 cm (L), 19.5 cm (W), 11.8 cm (H)</li> </ul>
<b>WEIGHT</b>	<ul style="list-style-type: none"> <li>• 2.4 kg</li> </ul>
<b>ETHERNET PORTS</b>	<b>PoE Input</b> <ul style="list-style-type: none"> <li>• 10/100/1000Base-T 802.3, 802.3u, 802.3ab, 802.3af/at PoE PD Input up to 40W with high power PoE Injector</li> <li>• Jumbo frame support (2000 byte MTU)</li> </ul> <b>PoE Output:</b> <ul style="list-style-type: none"> <li>• 10/100/1000Base-T 802.3, 802.3u, 802.3ab, 802.3af/at PoE PSE Output up to 25W</li> <li>• Jumbo frame support (2000 byte MTU)</li> </ul>
<b>GPS</b>	<ul style="list-style-type: none"> <li>• 1575.42 MHz GPS L1 radio band</li> </ul>
<b>ENVIRONMENTAL</b>	<ul style="list-style-type: none"> <li>• Operating temperature: -40 to +65C</li> <li>• Operating humidity: 5% to 100% condensing</li> <li>• IP 67</li> </ul>

RF (7782, 7782-S, 7782-N)	
<b>ANTENNA</b>	<ul style="list-style-type: none"> <li>• 7782: 2000+ patterns</li> <li>• 7782-S: 8+ patterns</li> <li>• 7782-N: 1 pattern</li> </ul>
<b>PHYSICAL ANTENNA GAIN</b>	<ul style="list-style-type: none"> <li>• 7782: 3 dBi (both bands)</li> <li>• 7782-S: 11 dBi (2.4GHz), 13 dBi (5GHz)</li> <li>• 7782-N: 12 dBi (2.4GHz), 4 dBi (5GHz)</li> </ul>
<b>BEAMFLEX* SINR TX GAIN</b>	<ul style="list-style-type: none"> <li>• Up to 6 dB</li> </ul>
<b>BEAMFLEX* SINR RX GAIN</b>	<ul style="list-style-type: none"> <li>• Up to 4 dB</li> </ul>
<b>INTERFERENCE MITIGATION</b>	<ul style="list-style-type: none"> <li>• Up to 15 dB</li> </ul>
<b>MINIMUM RX SENSITIVITY**</b>	<ul style="list-style-type: none"> <li>• -101 dBm (2.4GHz), -96 dBm (5GHz)</li> </ul>

\*BeamFlex gains are statistical system level effect translated to enhanced SINR based on observations over time in real-world conditions with multiple APs and many clients.  
 \*\*Rx Sensitivity varies by band, channel width, and MCS rate

PERFORMANCE AND CAPACITY	
<b>CONCURRENT STATIONS</b>	<ul style="list-style-type: none"> <li>• Up to 500</li> </ul>
<b>SIMULTANEOUS VoIP CLIENTS</b>	<ul style="list-style-type: none"> <li>• Up to 30</li> </ul>
<b>MANAGEMENT</b>	
<b>DEPLOYMENT OPTIONS</b>	<ul style="list-style-type: none"> <li>• Standalone (individually managed)</li> <li>• Managed by ZoneDirector</li> <li>• Managed by FlexMaster</li> <li>• Managed by SmartCell™ Gateway (SCG 200)</li> </ul>
<b>CONFIGURATION</b>	<ul style="list-style-type: none"> <li>• Web User Interface (HTTP/S)</li> <li>• CLI (Telnet/SSH), SNMP v1, 2, 3</li> <li>• TR-069 via FlexMaster</li> </ul>

WI-FI	
<b>STANDARDS</b>	<ul style="list-style-type: none"> <li>• IEEE 802.11a/b/g/n</li> <li>• 2.4GHz and 5GHz concurrent operation</li> </ul>
<b>RADIO CHAINS</b>	<ul style="list-style-type: none"> <li>• 3x3 3(2x2 2 for Narrow Beam)</li> </ul>
<b>RF POWER OUTPUT*</b>	<ul style="list-style-type: none"> <li>• 7782: 28 dBm (2.4GHz) / 26 dBm (5GHz)</li> <li>• 7782-S: 28 dBm (2.4GHz) / 26 dBm (5GHz)</li> <li>• 7782-N: 26 dBm (2.4GHz) / 24 dBm (5GHz)</li> </ul>
<b>FREQUENCY BAND</b>	<ul style="list-style-type: none"> <li>• IEEE 802.11n: 2.4 - 2.484 GHz and 5.15 - 5.85 GHz</li> <li>• IEEE 802.11a: 5.15 - 5.875 GHz</li> <li>• IEEE 802.11g: 2.4 - 2.484 GHz</li> </ul>
<b>BSSID</b>	<ul style="list-style-type: none"> <li>• 32 per radio (64 per AP)**</li> </ul>
<b>ADVANCED RADIO FEATURES</b>	<ul style="list-style-type: none"> <li>• BeamFlex: Adaptive Antenna Technology</li> <li>• TxBF, LDPC, and ML receiver</li> <li>• Spectrum Analysis</li> </ul>
<b>WIRELESS SECURITY</b>	<ul style="list-style-type: none"> <li>• WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i Authentication via 802.1X, local authentication database, support for RADIUS and ActiveDirectory</li> </ul>
<b>CERTIFICATIONS***</b>	<ul style="list-style-type: none"> <li>• U.S., Canada, Europe, Argentina, Australia, Brazil, Chile, China, Columbia, Costa Rica, Hong Kong, India, Indonesia, Israel, Japan, Korea, Malaysia, Mexico, New Zealand, Philippines, Peru, Russia, Saudi Arabia, Singapore, South Africa, Taiwan, Thailand, UAE, Vietnam</li> <li>• WEEE/ROHS compliance</li> <li>• Wi-Fi Alliance Certification (Wi-Fi Certified)</li> <li>• Railway: EN 61373 Shock and Vibration; EN 50121-1 EMC Railway Rolling Stock; EN 50121-4 Immunity Railway Rolling Stock</li> </ul>

\* Maximum power varies by country, setting, band, and MCS rate

\*\* Release 9.6

\*\*\* Refer to price list for latest country availability

## Product Ordering Information

MODEL	DESCRIPTION
<b>ZoneFlex 7782 Outdoor Access Points</b>	
901-7782-XX01	7782: ZoneFlex 7782 gray 802.11n 3x3:3 Outdoor Wireless Access Point, 360 degree BeamFlex 2.4GHz/5GHz antenna. Includes mounting kit, 1 year warranty. Does not include PoE Injector. Does not include AC Power Cord. Includes AC connector.
901-7782-XX51	7782-S: ZoneFlex 7782-S 802.11n Outdoor Wireless Access Point, 120 degree Sector 2.4GHz/5GHz antenna. Includes mounting kit, 1 year warranty. Does not include PoE Injector. Does not include AC Power Cord.
901-7782-XX61	7782-N: ZoneFlex 7782-N 802.11n Outdoor Wireless Access Point, 30 degree Narrow Sector 2.4GHz/5GHz antenna. Includes mounting kit, 1 year warranty. Does not include PoE Injector. Does not include AC Power Cord.
901-7782-XX81	7782-E: ZoneFlex 7782-E 802.11n Outdoor Wireless Access Point, N-male antenna connectors for 2.4GHz/5GHz operation. Includes mounting kit, GPS antenna, 1 year warranty. Does not include PoE Injector. Does not include AC Power Cord.
<b>Optional Accessories</b>	
902-0180-xx00	Spare of Power over Ethernet (PoE) Injector (10/100/1000 Mbps) quantity of 1 unit. US Plug
902-0182-0003	Spare, Outdoor Mounting Bracket, Bare Metal, Any-Angle, Qty 1
902-0183-0000	Spare Data Connector; contains 1 weatherizing data cable gland
902-0185-0000	Spare Weatherized AC Connector; contains 4-pin AC connector



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# EXHIBIT A

## Exhibit "B" Addendum to the Authorization to Install and Maintain Communications Equipment

### ADDENDUM TO AUTHORIZATION TO INSTALL AND MAINTAIN COMMUNICATIONS EQUIPMENT

This Addendum to Authorization to Install and Maintain Communications Equipment ("Addendum") is made by and between Time Warner Cable Enterprises LLC ("TWC") and the Town of Addison, Texas ("Town")Town.

A. TWC and Town are parties to an Authorization to Install and Maintain Communications Equipment Agreement dated \_\_\_\_\_, 2016 (the "Authorization to Install Agreement"), under which TWC may provide WiFi services at Town's Property (as defined in the Authorization to Install Agreement).

B. Pursuant to the terms and conditions of this Addendum, TWC will provide Town a revenue share payment with respect to net receipts from sales of WiFi access plans from access points at the Property to alleviate costs incurred by the Town related to the Authorization to Install Agreement.

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

#### Definitions

"Access Pass Plan" means a prepaid plan to provide limited duration access to connect to TWC WiFi access points.

"Net Receipts" means the total revenues collected by TWC each calendar quarter that are derived directly from sales by TWC of Access Pass Plans from TWC WiFi access points associated with Town's unique vendor identification number, less any (i) refunds paid by TWC on prior quarter Access Pass Plan sales from such access points, (ii) adjustments due to cancelled sales resulting from fraud or other factors, or (iii) third party transaction fees directly incurred by TWC in connection with the sales. Net Receipts do not include (i) revenues related to taxes, franchise fees, or similar fees imposed or authorized by governmental entities, or (ii) revenues derived from customers that subscribe to TWC's residential or business class services, and as part of their subscriptions, have access to TWC WiFi service.

"Revenue Share Percentage" means 25%.

#### Revenue Share Payment

During the term of the Authorization to Install, TWC will calculate and pay to Town a revenue share payment (the "Revenue Share Payment") within 60 days after the end of each calendar quarter for the preceding quarter. The Revenue Share Payment will be calculated by multiplying the Net Receipts by the Revenue Share Percentage. The Revenue Share Payment will be adjusted to reflect any overpayments for prior quarters.

The Net Receipts and Revenue Share Payment will be calculated by TWC according to generally accepted accounting principles. With each Revenue Share Payment, TWC will provide Town with a statement of Net Receipts that reasonably details the calculation of the payment.

No Revenue Share Payments to Town will accrue (i) until TWC has received from Town a fully completed W-9, or (ii) during any period that Town is in breach of its obligations under the Authorization of Install.

#### Additional Terms

All users of TWC WiFi will be required to agree to, and will be bound by, the TWC WiFi Terms of Service available at <https://www.twcwifi.com/terms>. From time to time, TWC may offer complimentary TWC WiFi as part of its marketing programs, and no Revenue Share Payments will accrue with respect to such programs.

# EXHIBIT A

Town will not (i) make any representations or warranties related to the TWC WiFi service, or (ii) develop or utilize marketing materials or programs related to the TWC WiFi service or utilizing TWC's brand or marks, other than those approved in writing by TWC. Town will not resell the TWC WiFi service.

*Each person signing below represents that he/she is a duly authorized representative of the party for which he/she is signing and has the full power and authority to enter into this Addendum on behalf of such party.*

**TOWN:**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

**TWC:**

By: Justin P. Colwell

Name: Justin P. Colwell

Title: VP, Wireless

Date: 11-14-2016

Address: 6399 S. Fiddler's Green Cir.  
16th FL, Greenwood Village, CO 80111

Phone: 720-621-9046

# EXHIBIT A

## Exhibit "C" Addison Contractor Insurance Requirements

### CITY OF ADDISON, TEXAS CONTRACTOR INSURANCE REQUIREMENTS & AGREEMENT (the use of "City of Addison" herein is synonymous with the use of "Town of Addison" elsewhere)

#### REQUIREMENTS

Contractors performing work on CITY OF ADDISON property or public right-of-way shall provide the CITY OF ADDISON a certificate of insurance including a copy of the endorsements necessary to meet the requirements and instructions contained herein evidencing the coverages and coverage provisions identified herein within ten (10) days of request from CITY OF ADDISON. Contractors shall provide CITY OF ADDISON evidence that all subcontractors performing work on the project have the same types and amounts of coverages as required herein or that the subcontractors are included under the contractor's policy. Work shall not commence until insurance has been approved by CITY OF ADDISON.

All insurance companies and coverages must be authorized by the Texas Department of Insurance to transact business in the State of Texas and must have a A.M. Best's rating A-:VII or greater.

Listed below are the types and minimum amounts of insurances required and which must be maintained during the term of the contract. CITY OF ADDISON reserves the right to amend or require additional types and amounts of coverages or provisions depending on the nature of the work.

<b>TYPE OF INSURANCE</b>	<b>AMOUNT OF INSURANCE</b>	<b>PROVISIONS</b>
1. <b>Workers' Compensation Employers' Liability</b> to include: a) each accident b) Disease Policy Limits c) Disease each employee	Statutory Limits per occurrence  Each accident \$1,000,000 Disease Policy Limits \$1,000,000 Disease each employee \$1,000,000	<b>CITY OF ADDISON to be provided a <u>WAIVER OF SUBROGATION AND 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. Insurance company must be A-:VII rated or above.</b>
2. <b>Commercial General (Public) Liability</b> to include coverage for: a) Bodily Injury b) Property damage c) Independent Contractors d) Personal Injury e) Contractual Liability	Bodily Injury/Property Damage per occurrence \$1,000,000, General Aggregate \$2,000,000 Products/Completed Aggregate \$2,000,000, Personal Advertising Injury per occurrence \$1,000,000, Medical Expense 5,000	<b>CITY OF ADDISON to be listed as <u>ADDITIONAL INSURED</u> and provided <u>30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. Insurance company must be A-:VII rated or above.</b>
3. <b>Business Auto Liability</b> to include coverage for: a) Owned/Leased vehicles b) Non-owned vehicles c) Hired vehicles	Combined Single Limit \$1,000,000	<b>CITY OF ADDISON to be listed as <u>ADDITIONAL INSURED</u> and provided <u>30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. Insurance company must be A:VII-rated or above.</b>

Certificate of Liability Insurance forms (together with the endorsements necessary to meet the requirements and instructions contained herein) may be **faxed** to the Purchasing Department: **972-450-7074** or **emailed to: [purchasing@addisontx.gov](mailto:purchasing@addisontx.gov)**. Questions regarding required insurance should be directed to the Purchasing Manager.

With respect to the foregoing insurance,

1. All liability policies shall contain no cross liability exclusions or insured versus insured restrictions applicable to the claims of the City of Addison.

## EXHIBIT A

2. TWC shall immediately notify the City of Addison, Texas of any material change in the insurance coverage.
3. The City of Addison, Texas will receive at least thirty (30) days' notice prior to cancellation or non-renewal of the insurance.
4. All insurance policies, which name the City of Addison, Texas as an additional insured, must be endorsed to read as primary coverage regardless of the application of other insurance.
5. Insurance must be purchased from insurers that are financially acceptable to the City of Addison and licensed to do business in the State of Texas.

All insurance must be written on forms filed with and approved by the Texas Department of Insurance.

This form must be signed and returned with your quotation. You are stating that you do have the required insurance and if selected to perform work for CITY OF ADDISON, will provide the certificates of insurance (and endorsements) with the above requirements to CITY OF ADDISON within 10 working days.

**A CONTRACT/PURCHASE ORDER WILL NOT BE ISSUED WITHOUT EVIDENCE AND APPROVAL OF INSURANCE.**

# EXHIBIT A

## Schedule 1

### Addresses

- 1) North Addison Park – 17001 Addison Rd., Addison, TX
- 2) Addison Athletic Club – 3900 Beltway Dr, Addison, TX
- 3) The Tree House
- 4) Addison Circle Park – 4950 Addison Circle Dr., Addison, TX
- 5) Addison Town Park – 3799 Sidney Dr., Addison, TX
- 6) Beckert Park – 5044 Addison Circle Dr., Addison, TX
- 7) Bosque Park – 15675 Quorum Dr., Addison, TX
- 8) Celestial Park – 5501 Celestial Rd., Addison, TX
- 9) Les Lacs Park – 3901 Beltway Dr., Addison, TX
- 10) Parkview Park – 5032 Parkview, Addison, TX
- 11) Redding Trail Dog Park – 14677 Midway Rd., Addison, TX
- 12) Spruill Park – 4936 Marcus Ave., Addison TX
- 13) Vitruvian Park – 3966 Vitruvian Way, Addison, TX

AI-2020

16.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** City Manager

---

**AGENDA CAPTION:**

Consider Action On **A Resolution Approving Fee Increase For City Attorney Services.**

**BACKGROUND:**

The Town of Addison has contracted with Messer, Rockefeller, and Fort for City Attorney Services since 2015. During the annual evaluation in Executive Session on November 8, 2016, the City Attorney requested a fee increase from \$135 per hour to \$165 per hour. This resolution approves the fee increase.

**RECOMMENDATION:**

Administration recommends approval.

---

**Attachments**

Resolution

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**TOWN OF ADDISON, TEXAS**

**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS APPROVING AN INCREASE IN THE HOURLY BILLING RATE OF MESSER, ROCKEFELLER & FORT, PLLC, THE CITY ATTORNEY, TO \$165.00 PER HOUR AND PROVIDING AN EFFECTIVE DATE.**

**BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

**Section 1.** An increase in the hourly billing rate, to \$165.00 per hour, for the City Attorney, Messer, Rockefeller & Fort, PLLC, with an effective date of October 1, 2016 is hereby approved.

**Section 2.** This Resolution shall take effect from and after its date of adoption.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13th day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

AI-2017

17.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** City Manager

---

**AGENDA CAPTION:**

Hold A Public Hearing, Discuss, And Consider Action On A **Resolution Adopting A New Master Transportation Plan For The Town Of Addison.** Case 1750-Z/Town of Addison.

**BACKGROUND:**

The Addison Planning and Zoning Commission, meeting in regular session on October 18, 2016, voted to recommend approval of a resolution adopting the proposed Master Transportation Plan.

Voting Aye: Ennis, Griggs, Morgan, Robbins, Robinson, Schaeffer, Smith

Voting Nay: none

Absent: none

SPEAKERS AT THE PUBLIC HEARING: none

Town staff, along with a consultant team including Kimley-Horn and Associates and Prologue Planning, have been working for a year to develop a new Master Transportation Plan for the Town of Addison. A Master Transportation plan provides a long term vision for the transportation network of a city or town and establishes a community's transportation policy direction. Following an extensive public input process, a draft plan has been developed for review by the Planning and Zoning Commission and City Council. The draft plan, as well as a staff report with additional information on the plan and the update process, are attached. Since the Town's vehicular transportation is built out, the plan does not include major new roadways or expansions. Instead, it focuses on strategic connections and roadway improvements to enhance route choice, safety, and efficiency within the system.

**RECOMMENDATION:**

Administration recommends approval.

---

**Attachments**

1750-Z Staff Report

Draft Master Transportation Plan

Resolution

---



October 14, 2016

## STAFF REPORT

RE: Case 1750-Z/Town of Addison

REQUEST: Approval of an ordinance adopting a new Master Transportation Plan for the Town of Addison

### DISCUSSION:

Background: A Master Transportation Plan (MTP) establishes a community's transportation policy direction and provides a long term vision for the transportation network of a city or town. Such plans coordinate separate and incremental decisions by municipalities and private developers that occur over many years so that the community's vision is ultimately achieved. These actions are intended to address system capacity issues as well as other local priorities that may vary from city to city.

Traditionally, such plans have focused primarily on vehicular movement by locating and classifying major streets based on their needed capacity and desired access to adjacent land uses. More recently, Master Transportation Plans have been broadened to include alternative modes of transportation such as active transportation (walking and biking) and public transit.

Addison's current plan was adopted in June of 1998 and was an update to a plan first adopted in 1992. The plan established goals and objectives and proposed a number of projects that were intended to address the Town's transportation system through 2010. Several notable projects came out of the previous plans including the Arapaho Road extension to Marsh Lane and the Keller Springs Toll Tunnel.

In November 2015, the City Council approved a contract with Kimley-Horn and Associates and Prologue Planning for the development of a new Master Transportation Plan. Over the past year, staff from the City Manager's Office, Infrastructure and Development Services Department and the Parks Department have been working with the consultant team to draft a new plan.

Public Input Process: Public involvement was important from the outset of this process and serves as the foundation of the new plan. In March, the Town hosted two community meetings which were attended by approximately 70 residents and business representatives. Additionally, the Town produced an online survey which received 160 responses. The purpose of the early community meetings and the online survey was to receive direction on transportation priorities as well as any issues or concerns with existing conditions that should be addressed through this plan.

Furthermore, the City Council appointed an advisory committee of residents and business representatives. This group met with staff and the consultant team on two occasions to hold additional discussions on priorities, give feedback on design and connectivity features of certain roadway types and to review the draft concepts that were being developed.

In July and August, three additional community meetings were held to present the various components of the draft Master Transportation Plan to the public. Approximately 67 stakeholders attended these meetings.

A summary of the public input process can be found on pages 10-14 of the Master Transportation Plan document. A more detailed report on the community's input can be found in the Appendix of the Plan beginning on page 79.

Transportation Priorities: Based on the community's input, the following priorities are being proposed in the new MTP:

- Provide more and better options and features for active transportation, such as walking and biking
- Develop a safer and more efficient transportation network
- Create memorable places in Addison
- Develop better east/west connectivity, particularly across the Dallas North Tollway
- Increase route choice with new connections
- Support Addison's economic development goals
- Secure a firm commitment for rail in the Cotton Belt corridor

These priorities are presented in no particular order, but will serve to guide future transportation related decision making over time.

Transportation Concepts: In addition to the priorities mentioned above, the plan discusses several transportation concepts that represent best practices that should also be incorporated into the transportation system over time. These are:

- **Connectivity** – a term used to describe a transportation system composed of a network of streets, sidewalks, and trails that facilitates direct routes for multiple modes of travel with numerous intersections and few dead-end streets or other physical barriers to route choice
- **Multi-Modal Transportation** – travel by passenger car as well as walking, biking, carpooling or public transit
- **Context-Sensitive Design** – an approach to roadway planning that meets transportation goals while considering adjacent land use, safety, efficiency, capacity, aesthetics and other community objectives and values
- **Traffic Calming** –physical design infrastructure that encourages slower speeds, reduce cut-through traffic, create safe and attractive streets and improve conditions for non-motorized street users

A more in-depth overview of these concepts can be found on pages 26-38 of the plan.

Master Transportation Plan Map: Based on the priorities and concepts included in the plan, staff and the consultant team reviewed the current thoroughfare map and existing street classifications to determine if adjustments were necessary. It was found that the existing functional classifications were still appropriate, so no changes are being proposed. There are, however, a few new roadway connections being proposed in the plan. These are discussed on page 40-41 of the plan and again in the recommendations section on page 67.

Street Cross Sections: Once a street’s functional classification is determined, the Master Transportation Plan establishes a set of design standards for each street type. In previous plans, there was only one standard which called for sidewalks immediately back of curb. In order to allow for context-sensitive solutions, the new plan presents a number of alternatives for each classification based on the character of the street. The Town and property owners can determine which alternative should be applied in certain areas.

Another notable difference between these alternatives and the previous plan is the emphasis on the pedestrian realm adjacent to the street edge. The new plan calls for wider sidewalks pulled back from the curb. This will create a more desirable environment for pedestrians and promote walking along streets.

The proposed street cross sections are shown on pages 42-47 of the plan.

Multi-Modal Connectivity: The proposed Master Transportation Plan incorporates several other planning efforts with regards to walking and biking including the 2012 Trails Master Plan and the Quorum Drive pedestrian connectivity plan. The new plan proposes a

network of off-street trails and enhanced pedestrian paths along streets. Additionally, while acknowledging that all roads are not suitable for on-street bicycling, streets that are either residential in nature or that have lower traffic volumes have been designated as active transportation corridors where on-street bicycling may be encouraged. These designations can be seen on the Active Transportation Connectivity Map on page 49.

Public transit is also discussed in the new plan and focuses on achieving rail service along the Cotton Belt corridor, bus service to the Vitruvian Park neighborhood, and service enhancements that will make public transit a more viable and attractive alternative.

Corridor Case Studies: Through the update process, staff and the consultant team wanted to show how the priorities, concepts and design standards presented in the plan could be applied in certain corridors. To do so, staff selected a sampling of streets and street types for closer study. These corridors were discussed with the advisory committee which prioritized different goals and design elements for each corridor. The results of these studies are presented on pages 52-62. While these represent potentially viable corridor improvements, these are intended to be conceptual and illustrative in nature – not necessarily the final design solution. Should the Town move forward with improvements to these streets, additional study and discussion will be necessary.

Recommendations: The Master Transportation Plan includes a number of recommended projects that staff and the consultant team believe will address the priorities and concepts presented in the plan. Some of these projects are carried forward from the 1998 plan and many are new projects. These projects are organized into six categories:

- **Street Modifications** – changes to existing streets
- **New Street Segments** – new roadway connections
- **Transit Projects** – DART rail service and service improvements
- **Pedestrian and Cycling Enhancements** – features to encourage walking and biking
- **Major Connectivity Project** – a new pedestrian/bike connection across Dallas North Tollway
- **Other** – minor maintenance and repair projects

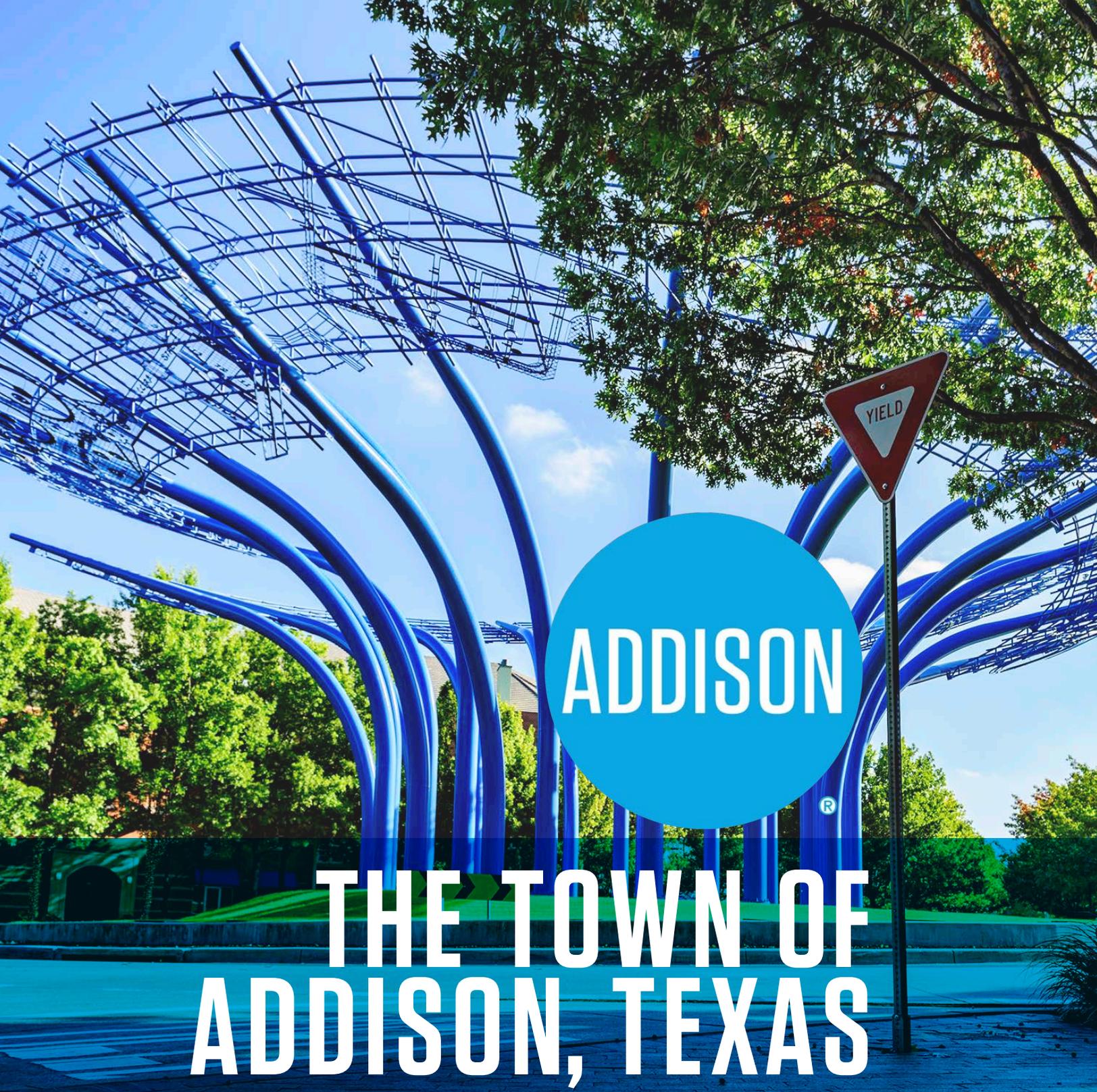
Discussion on the specific projects can be found on pages 65-73 of the plan.

Implementation and Funding: The plan itself does not discuss a specific implementation strategy. This will need to be determined once the plan is adopted and will be dependent on a variety of factors. Additionally, the plan does not provide any specific funding source for the recommended projects. There are a number of potential funding mechanisms which are presented on page 74-76 for future consideration.

**RECOMMENDATION: APPROVAL**

Much like the Town itself, the Town's vehicular transportation system is built out. For this reason, the plan does not include major new roadways or expansions. Instead, this plan focuses on strategic connections and roadway improvements to enhance route choice, safety, and efficiency within the system. Throughout the public input process, there was a strong desire for additional transportation options, both in the choice of route and mode. The plan addresses improvements that will encourage alternative modes of transportation by increasing connections and through other improvements that will make them more desirable.

The proposed 2016 Master Transportation Plan is submitted for review and consideration by the Planning and Zoning Commission and City Council. Staff recommends approval.



**ADDISON**

**THE TOWN OF  
ADDISON, TEXAS**

**DRAFT 2016 MASTER TRANSPORTATION PLAN**

**Kimley»Horn**



**PROLOGUE  
PLANNING  
SERVICES**

# ACKNOWLEDGEMENTS

---

## Addison City Council

Todd Meier, *Mayor*  
Bruce Arfsten, *Mayor Pro Tempore*  
Ivan Hughes, *Deputy Mayor Pro Tempore*  
Al Angell, *Council Member*  
Jim Duffy, *Council Member*  
Paul Walden, *Council Member*  
Dale Wilcox, *Council Member*

## Addison Planning & Zoning Commission

Marshal (Skip) Robbins, *Chairman*  
Debra Morgan, *Vice Chair*  
Jason Ennis  
Stacey Griggs  
Jim Robinson  
Tom Schaeffer  
Randy Smith

## Advisory Group

Gail Cook, *Resident*  
Michael Delima, *Resident*  
Richard Teza, *Resident*  
Tom Souers, *Resident*  
Elliot Moore, *Resident*  
Gary McIntyre, *Resident*  
Ilene Cohen, *Resident*  
Jay Ihrig, *Resident*  
John Morgan, *Resident*  
Heather Ferry, *Methodist Hospital*  
Denise Witry, *Village on the Parkway*  
Josh Yahoudy, *Atlantic Aviation*  
Mark Ford, *Partnership with Native Americans*

## Key City Staff

Wesley Pierson  
*City Manager*  
Cheryl Delaney  
*Deputy City Manager*  
Lisa Pyles  
*Director of Infrastructure and Development Services*  
Michael Kashuba  
*Director of Parks and Landscape Development*  
Jason Shroyer, P.E.  
*Assistant Director of Infrastructure Services*  
Charles Goff  
*Assistant Director of Development Services and Planning*

## Consultant Team

### Kimley-Horn

Drew Brawner, AICP  
David Halloin, P.E., PTOE  
Chelsey Cooper  
Farzine Hakimi  
Ignacio Mejia

### Prologue Planning Services

Monica Heid, AICP

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# EXECUTIVE SUMMARY

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Addison's 2016 Master Transportation Plan is a long-range planning tool that provides the Town with guidance for making smart, strategic mobility investments that address the priorities of the community. The Dallas-Fort Worth region, including the Addison area, continues to experience growth in population, housing, and employment. This, in turn, increases demand for transportation options and quality infrastructure.

Addison's streets provide a structural network that is essential to the community's daily life and commerce. While good mobility and connectivity are central objectives of a transportation plan, the Town should also strive for a multi-modal network – including pedestrian and bicycle facilities, as well as transit routes and services – that satisfies its goals for health, safety, quality of life, economic vitality, and community character when making future transportation decisions. Given that the Town's thoroughfare network is close to built out, these decisions should take a balanced approach that anticipates growth, considers all modes, provides choices, addresses the relationship between transportation and land use, incorporates changing transportation trends, and meets the desires of the community.

The Town should look for strategic opportunities to advance the goals established by this plan, which are:

- Provide more and better options and features for active transportation, such as walking and biking
- Develop a safer and more efficient transportation network
- Create memorable places in Addison
- Develop better east/west connectivity, particularly across the Dallas North Tollway
- Increase route choices with new connections
- Support Addison's economic development goals
- Secure a firm commitment for rail in the Cotton Belt corridor

The 2016 Master Transportation Plan retains, but updates, some of the general technical components of the previous 1998 plan:

- A functional street classification system
- A set of design standards and street cross-sections
- A list of recommended improvements

New to the 2016 plan are:

- An even greater emphasis on multi-modal/active transportation options and more specific design features
- Transportation planning techniques that have evolved since the last plan (including an educational section on planning for active transportation accommodations and a traffic calming toolbox)

This plan looks ahead to the year 2040, but the document should be reviewed on a periodic basis to ensure that the goals, policies, and recommendations contained herein remain consistent with the community's priorities.



*Addison Road*

# OVERVIEW

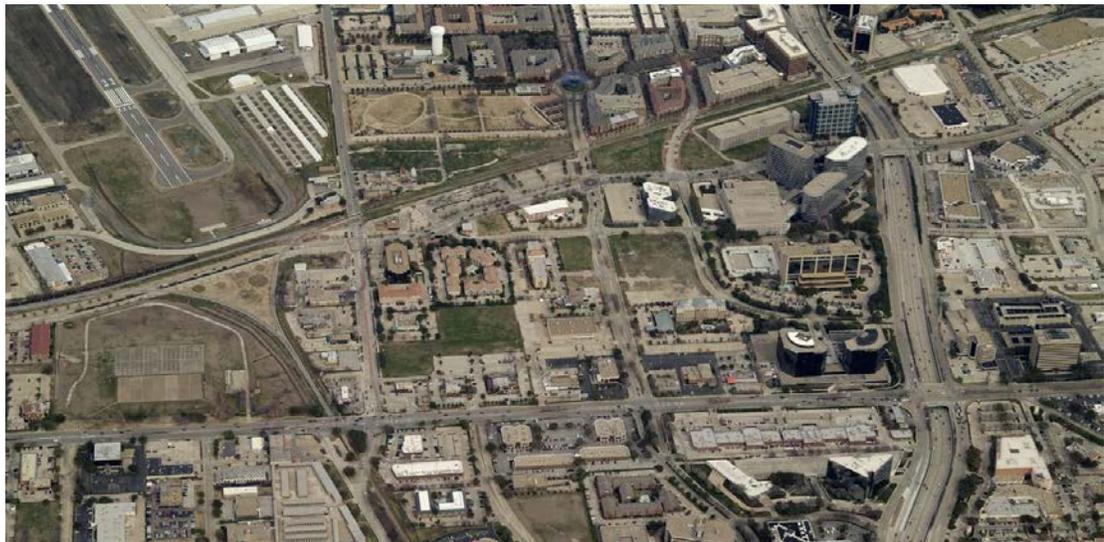
## COMMUNITY CONTEXT

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The Town of Addison is located northwest of the city of Dallas along the Dallas North Tollway (DNT). It has a residential population of over 15,000 and a daytime population that exceeds 100,000. The day-time population brings with it both opportunities and challenges for transportation planners, as does the attractiveness of Addison as a destination for dining and entertainment.

The community is fortunate to be well-served by roadways. Besides the segment of the DNT that splits a small portion of Addison on the east from the remainder to the west, other significant north/south roadways in the Town include Marsh Lane, Midway Road, Inwood/Addison Road, and Montfort Drive. East/West thoroughfares include Spring Valley Road, Belt Line Road, Arapaho Road, and Keller Springs Road. The Town is also home to Addison Airport and the Addison Transit Center, a Dallas Area Rapid Transit (DART) station that currently serves bus patrons, but is planned as the community's light rail station in the future.

The previous plan, designed to accommodate travel demands to the year 2010, was adopted in 1998. Nearly 20 years has passed since then, and the area has changed significantly. Town officials realize that an up-to-date plan is important, not only to address changing traffic volumes and travel patterns, but also to incorporate design standards and techniques that have been developed since the last plan and to respond to changing community priorities and new land uses.



# WHAT IS A MASTER TRANSPORTATION PLAN?

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## Purpose of the Master Transportation Plan

A Master Transportation Plan (MTP) establishes a community's transportation policy direction and provides a long term vision of the major street network necessary to meet future travel needs. Much as the Town's Comprehensive Plan guides decisions related to growth and development of both public and privately-owned property over many years, the Master Transportation Plan is intended to complement the Comprehensive Plan and guide the coordination of many separate incremental decisions that impact the transportation network.

The MTP locates and classifies major streets by needed capacity for through traffic, access to adjacent land uses, and compatibility with each street's development character. Street design guidance provides the ability to better integrate networks of other mode choices, including transit, walking, and bicycling. The plan guides future investments and provides the public and the development community with information about the long term plan for the road network. Simply put, a Master Transportation Plan is a community's blueprint for a safe, efficient, and sustainable transportation system. It seeks to create and sustain a system that balances local and regional priorities and existing and future conditions, to steer the community toward its vision for the future.

The Addison Master Transportation Plan consists of:

- A thoroughfare plan map that shows the location, general alignment, and type of thoroughfare
- A classification system that categorizes thoroughfares based on the amount and type of traffic being carried, the adjacent land use, and the features and accommodations required for the many and varied users of the network
- Guidance on the location of desired pedestrian, bicycle, and transit facilities that make up the Town's transportation network
- A set of basic street design standards that are based on the appropriate street design elements compatible with surrounding land use contexts, including standard right-of-way widths, number of lanes, medians, and pedestrian and bicycle facilities for each thoroughfare type

- Typical and alternative street cross sections that provide design guidance for each thoroughfare type
- Maps that show the location of existing and preferred pedestrian, bicycle, and transit facilities
- Recommendations for future network connectivity improvements

## How is the Plan Utilized?

The residents and businesses of Addison rely on a transportation system that provides mobility in the face of ever-increasing regional population and changing transportation needs. Transportation facilities need to accommodate automobiles, transit, bicycles, and pedestrians in order to further the Town's efforts to promote positive community character and identity. With this in mind, the Town must plan ahead and make deliberate decisions to maintain or enhance the Town's transportation infrastructure.

A transportation plan provides decision-making guidance for:

- Planning and funding the construction of new streets, sidewalks, trails, and transit improvements
- Budgeting for the maintenance and repair of the existing transportation infrastructure in the context of the Town's comprehensive asset management strategy
- Reviewing land use proposals to be in alignment with the Town's planned street network
- Providing additional opportunities for people who want to walk or bike as a means of transportation or for recreational purposes
- Connecting people in the community with their desired destinations

## How is the Plan Implemented?

In a community like Addison, which is largely built out, the focus of the transportation plan will be on making strategic investments to strengthen connectivity, boost network efficiency, and increase opportunities for alternative modes of transportation. Implementing elements of the plan can be achieved not just through major street reconstruction, but also during utility-related construction, minor maintenance projects, private development projects, and other capital projects to retrofit existing facilities.

The Town, as well as private developers, land owners, and residents, can utilize the Master Transportation Plan in making decisions related to planning, coordination, and programming of future land development and transportation improvements.

In addition to being one of the fundamental elements of a city's long-range planning, an MTP is also a tool for more immediate decision-making, such as:

- Reviewing zoning applications by the Planning and Zoning Commission and City Council for compliance with the Town's subdivision regulations and the Master Transportation Plan
- Budgeting for maintenance of the existing infrastructure
- Planning and funding major capital improvements, such as streets, trails, and sidewalks
- Acquiring right-of-way for transportation improvements as development or redevelopment occurs
- Supporting the Town's economic development goals

## Roles in Implementation

### *Role of Community:*

- Give guidance on transportation related goals
- Provide accountability

### *Role of City Council:*

- Approve a plan
- Support reasonable policies, projects and expenditures necessary to implement the plan
- Consider future development requests in the context of the plan

### *Role of Planning and Zoning Commission:*

- Provide City Council with recommendation(s) regarding a plan
- Make recommendations in future development requests in the context of the plan

### *Role of Staff:*

- Facilitate an inclusive process to establish a plan
- Incorporate Master Transportation Plan goals/recommendations in decision making process
- Bring forward policy changes necessary to achieve the plan for consideration by the City Council
- Work with developers to implement the plan through the development review process
- Track and report progress
- Bring forward updates and amendments to the plan for consideration, as necessary

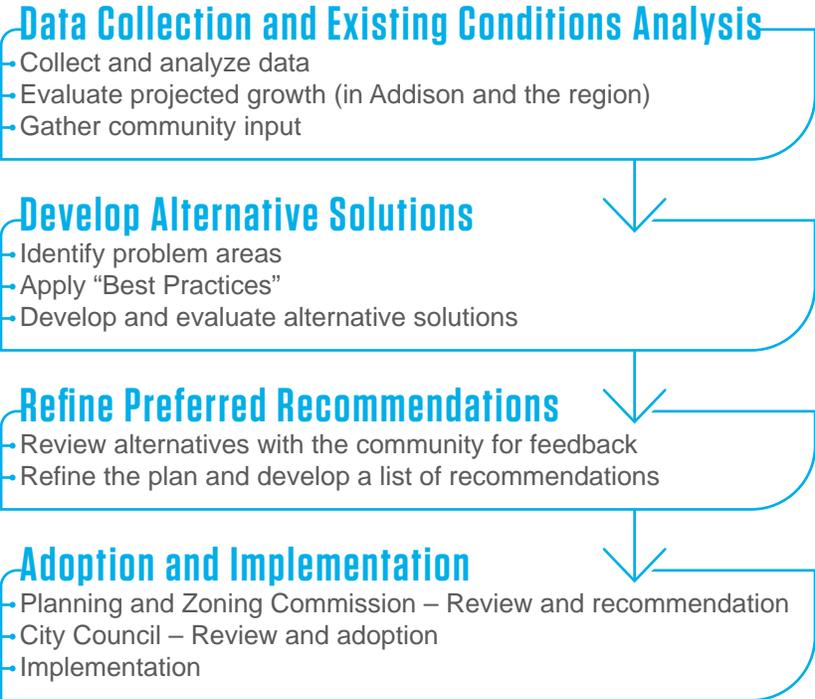
# UPDATING THE PLAN

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The Town of Addison has been a leader in responding to changes and trends in the development industry, including those related to transportation. It was among the first communities in the metroplex to implement the context sensitive land use and transportation framework in Addison Circle, with its small blocks, pedestrian-oriented amenities, and on-street parking. An updated set of standards will allow Town officials, developers and citizens to plan for, fund and construct the improvements necessary to accommodate Addison’s future transportation challenges as well.

One of the most notable trends in Addison since the adoption of the last plan has been a growing interest in accommodating multiple modes of transportation. The updated plan heightens the level of attention paid to alternative modes, including walking, biking, and using transit. Since the update is designed to address all of these options, not just thoroughfares, the new document will be called the Master Transportation Plan, unlike the previous plan which was called the Master Thoroughfare Plan.

The update process has been undertaken using a fairly standard series of steps for a planning effort, including a robust community input component:



## PUBLIC INPUT

---

Across the country, communities are rethinking their transportation systems. Instead of addressing limited, individual components of the network, cities are improving the efficiency of the system in ways that promote the community's values. Communities are implementing complete streets and context sensitive solutions to create safer, more livable and visually appealing places that are consistent with their social, environmental, and economic values. For this update, the priorities of Addison residents, and businesses were evaluated to reflect the desires of the community.

The Addison community revealed a variety of priorities in the ways people would like to get around and enjoy their streets. Planning an effective transportation system with multiple priorities in mind is a balancing act. When streets are designed to properly serve surrounding land uses and allow multiple modes of travel, automobile travel is still accommodated but not to the exclusion of other travel options. A network of "complete streets," built to allow automobiles, pedestrians, bicycles and transit service to work together, can provide an alternative to endless cycles of traffic congestion. The overall capacity of the network can be improved by reducing the demand for vehicular trips, especially when integrated with an effective rail and bus network.



## Public Input Process

The process of updating the Master Transportation Plan has given the community an opportunity to look at changes in traffic-related conditions and to think about priorities for the future. The community input phase was designed to encourage involvement from a broad spectrum of stakeholders in a variety of formats.

- **Community meetings** were held for those interested in taking part in the process in person. These meetings included topical stations aimed at gathering specific types of input and an informational briefing.
- An **online survey** was conducted to solicit input from people who were unable to attend the public meetings or who preferred to participate using this method.
- An **Advisory Group** provided direction and served as a sounding board throughout the process.
- **Public hearings** held with the Planning and Zoning Commission and the City Council provided the community an opportunity to provide input during the plan adoption process.

The City Council instructed staff to take extra measures to inform the community of this opportunity to provide input in order to encourage a high level of participation. To make it clear that any interested person was welcome to be a part of the process, a multi-faceted notification process including post cards, emails, and social media posts invited both residents and businesses to the five community meetings.

The feedback gathered in the public involvement phase revealed some important shifts in priorities since the adoption of the last plan, and these shifts provided direction for the remainder of the process.

### Community Meetings

Two kick-off meetings were held on March 14 and 16, 2016, which included approximately 70 participants. The project was introduced and participants were asked to identify transportation priorities as well as issues or concerns with existing conditions that should be investigated or addressed in the new plan.

Three follow-up meetings were conducted on July 28, August 2, and August 29, 2016 with approximately 67 participants. People attending were asked to comment on the direction of the draft plan and several

detailed concepts. Feedback from these meetings was used to develop the final draft plan for presentation to the Planning and Zoning Commission and City Council.



## Online Survey

Between March 21 and April 8, 2016, 160 Addison stakeholders provided their input on priorities and specific multi-modal transportation issues – walking, biking, using transit. This feedback was also instrumental in establishing direction for the plan.

## Advisory Group Meetings

Advisory Group meetings were held in May and July 2016. At the first meeting, members of the group, a panel of residents and business representatives appointed by the City Council, provided important feedback on the design and connectivity features of certain roadway types and reviewed several important draft plans and concepts prior to the second community meeting. The group was also given an opportunity to review and comment on the final draft plan and report before the P&Z public hearing.



## Public Hearings

The Planning and Zoning Commission and City Council each conducted a public hearing on the recommended plan. These hearings took place in October 2016. At these hearings, an important part of the process for a major update, the recommended Master Transportation Plan was presented for review, discussion, recommendation, and adoption.

## Establishing Transportation Priorities

An important component of the Kick-off Meetings and Online Survey was the need to identify the community's top transportation priorities. This was necessary early in the process so that these priorities could guide the development of the new plan.

### Kick-Off Community Meetings

To start the conversation at the Kick-off Meetings, a list of pre-prepared choices was presented and the top five, as ranked by the participants were:

- 1 Encourage an active, healthy lifestyle
- 2 Develop more efficient traffic circulation
- 3 Support Addison's economic development goals
- 4 Maintain the existing transportation infrastructure properly
- 5 Improve transportation safety

Participants at the Kick-off Meetings were also given an opportunity to write in and rank priorities of their own. The top write-in priorities were (six are listed; 3 and 4 below received the same number of votes; 5 and 6 also ranked equally):

- 1 Get the Cotton Belt by 2019 (interpreted to mean getting a firm commitment from DART for the Cotton Belt rail line by 2019)
- 2 Transform Addison into an eco-friendly, walkable, connected via pedestrian and bicycle pathways, beautiful environment that is the gold standard for urban planning
- 3 More sidewalks

- 4 Bicycling
- 5 Walkable neighborhoods
- 6 Context sensitive street design

## Online Survey

For the Online Survey, the list of priorities was modified based on the discussion from the Kick-off Meetings and to incorporate the new write-in issues as options as well. The survey participants ranked the issues as follows:

- 1 Traffic congestion (high traffic volumes, crowded intersections)
- 2 Lack of features and accommodations for pedestrians and bicycles (sidewalks, trails, handicap ramps, safe street crossings, trees/shade, lights in pedestrian areas, etc.)
- 3 Commitment to the Cotton Belt DART rail line in the near future
- 4 Lack of east-west connectivity in Addison (vehicular, pedestrian, bicycle connections)
- 5 Pass-through traffic (vehicle trips that pass through Addison, but neither start nor end here)

The Appendix section of this document includes more detailed information from the Kick-off Meetings and the Community Meetings. A summary of the Online Survey results is included in a presentation to the City Council on April 12, 2016. A final summary of plan priorities and goals is provided on page 64.

# OPPORTUNITIES AND CONSTRAINTS

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Perhaps the most challenging aspect of implementing this transportation plan will be the ability of the Town to make the desired mobility and aesthetic improvements within the limited right-of-way available and its capacity to secure the necessary funding. Many maturing first-ring suburbs around the region are facing this same challenge. The opportunities are likely to come with the reconstruction of aging infrastructure and the redevelopment of older properties in Addison.

Balancing multiple priorities in different parts of the community and funding the projects required to address those priorities will be a challenge. It is important to remember that Addison is one city in a large region, and much of the traffic on local streets is passing through from outside the community. Participants in the community meetings understood this. Because of its central location, the employment base, and all of the activities that make Addison a destination, there will always be outside traffic. The impacts of these traffic concerns can be minimized through efficiency improvements, aesthetic enhancements, and connectivity upgrades.

All of these conditions are likely to make the process of achieving the plan recommendations lengthier and more complicated, but neither the Town nor the community should be discouraged. In order to improve traffic conditions in the Town, accomplish aesthetic objectives, and maintain a competitive position in the marketplace, all parties must be willing to persevere and be prepared to watch for opportunities. Partnerships should be established during street construction, reconstruction, or rehabilitation and when new development or redevelopment occurs. In the design of projects such as these, steps can be taken to address the goals and priorities expressed by the community throughout this update process.



*Quorum Drive*





*Addison Circle Pedestrian Realm*

# TRANSPORTATION SYSTEM EVALUATION

## EXISTING TRANSPORTATION SYSTEM

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As the population and the economy of the greater Dallas-Fort Worth region continue to grow, Addison remains strategically located in a central, well-connected position that is easily linked to numerous major activity areas. The Town is primarily served by the Dallas North Tollway, nearby Interstate 635 and Bush Turnpike, and a set of major streets (Belt Line, Marsh, Midway, and Spring Valley) that provide connections to surrounding communities, major economic centers, and other regional destinations. DART bus service, pedestrian connections, and a growing trail network provide multi-modal options for residents who prefer an alternative to automobile travel or desire local routes for recreational activity.

### Roadway and Highway System

#### Functional Classification System

Addison's roadway system is comprised of a variety of standard street types, with the overall system designed to maintain a balance between mobility (the through movement of trips) and access to destinations. Addison's functional classification system is structured in a hierarchical manner, with the goal of providing a balanced network with appropriate roadway capacity, access, and efficiency. The network is made up of four classifications of streets: Principal Arterial, Minor Arterial, Collector Street, and Local Street. Collector streets are broken down further based on their land use context to distinguish between roadways in Commercial and Residential areas. A summary of the functional class characteristics is shown in Figure 1, and this functional classification system is identified on the Master Thoroughfare Plan Map on page 41.

#### Existing Conditions

Since the adoption of the 1998 Plan, much of Addison's roadway network has been built to its intended capacity, and numerous improvements have been made to the regional highway network serving the Addison area. The opening and expansion of the President George Bush Turnpike (PGBT), improvements to the main lanes and interchanges along Interstate 635, and the addition of tolled express lanes on I-635 have significantly increased east/west capacity through the greater Addison area and had a positive impact on Addison streets. The Dallas North Tollway continues to experience increased demand for north/south regional trips, and the North Texas Tollway Authority (NTTA) is expanding lanes and making ramp improvements from

### Principal Arterial

Examples: Belt Line Road, Midway Road

- Typically the highest traffic volume corridors with longer trip demands
- Provides connectivity between surrounding cities and major activity centers

### Minor Arterial

Examples: Quorum Drive, Montfort Drive

- Provides service for trips of moderate length (typically trips within Addison)
- Enhances connectivity to the Principal Arterials

### Collector (Commercial/Residential)

Examples: Beltway Drive, Spectrum Drive

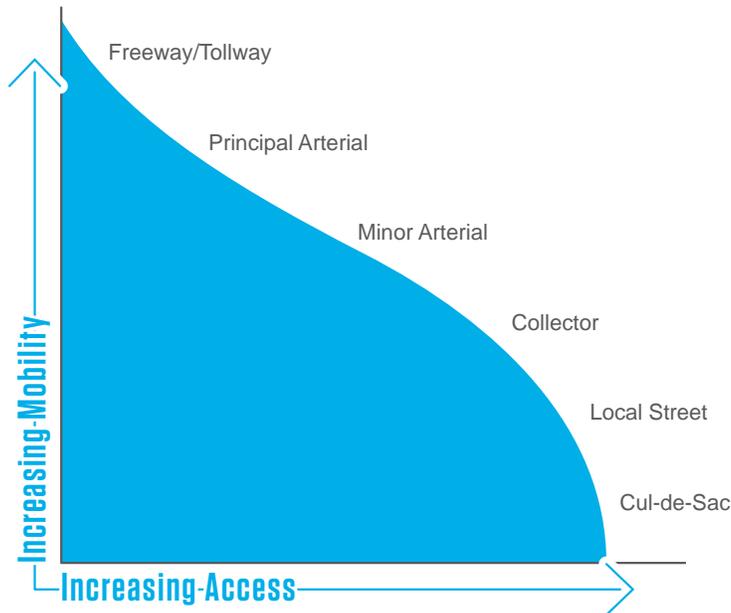
- Distributes traffic from the local streets to the arterials
- Balances providing access to destinations with traffic circulation

### Residential Local

Examples: Paladium Drive, Winter Park Lane

- Provides direct access to adjacent destinations
- Not intended for through traffic

Figure 1: Functional Class Characteristics



Mobility/Access Relationship

Addison north to the PGBT and beyond. All of these roadways function as regional travel corridors, connecting major activity areas within the Town and throughout the DFW Metroplex.

Cross-town mobility also relies heavily on a number of principal and minor arterials. Within Addison, the completion of the Arapaho Road extension and the Keller Road Toll Tunnel have increased the east/west capacity and provided much needed relief to Belt Line Road. That being said, Belt Line Road, Midway Road, and Marsh Lane carry some of the highest traffic volumes in town, distributing trips to local businesses, residential neighborhoods, and into surrounding cities. While many of the arterials continue to see high demand, historical traffic count data has shown that volumes across the network have either remained stable or decreased along most thoroughfares. For example, Addison Road, Midway Road south of Spring Valley, and Belt Line Road west of the Dallas North Tollway have seen significant reductions in traffic volumes since a peak in the late 1990s (see Figure 2), most likely due to the completion of other roadway connections and capacity improvements to the surrounding highway system. Current 2016 traffic counts are shown in the following map.

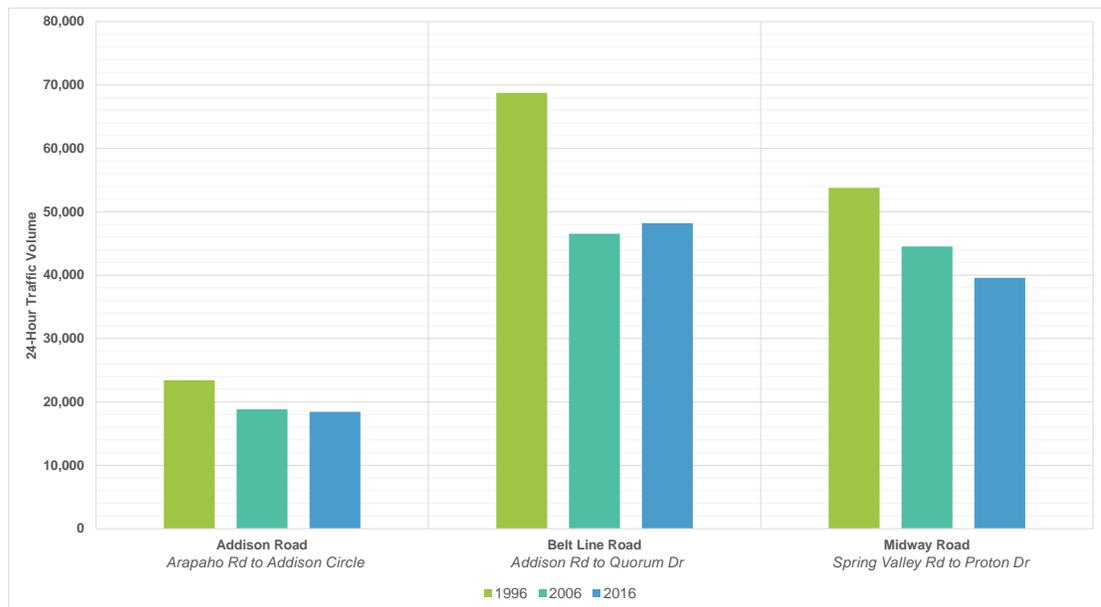
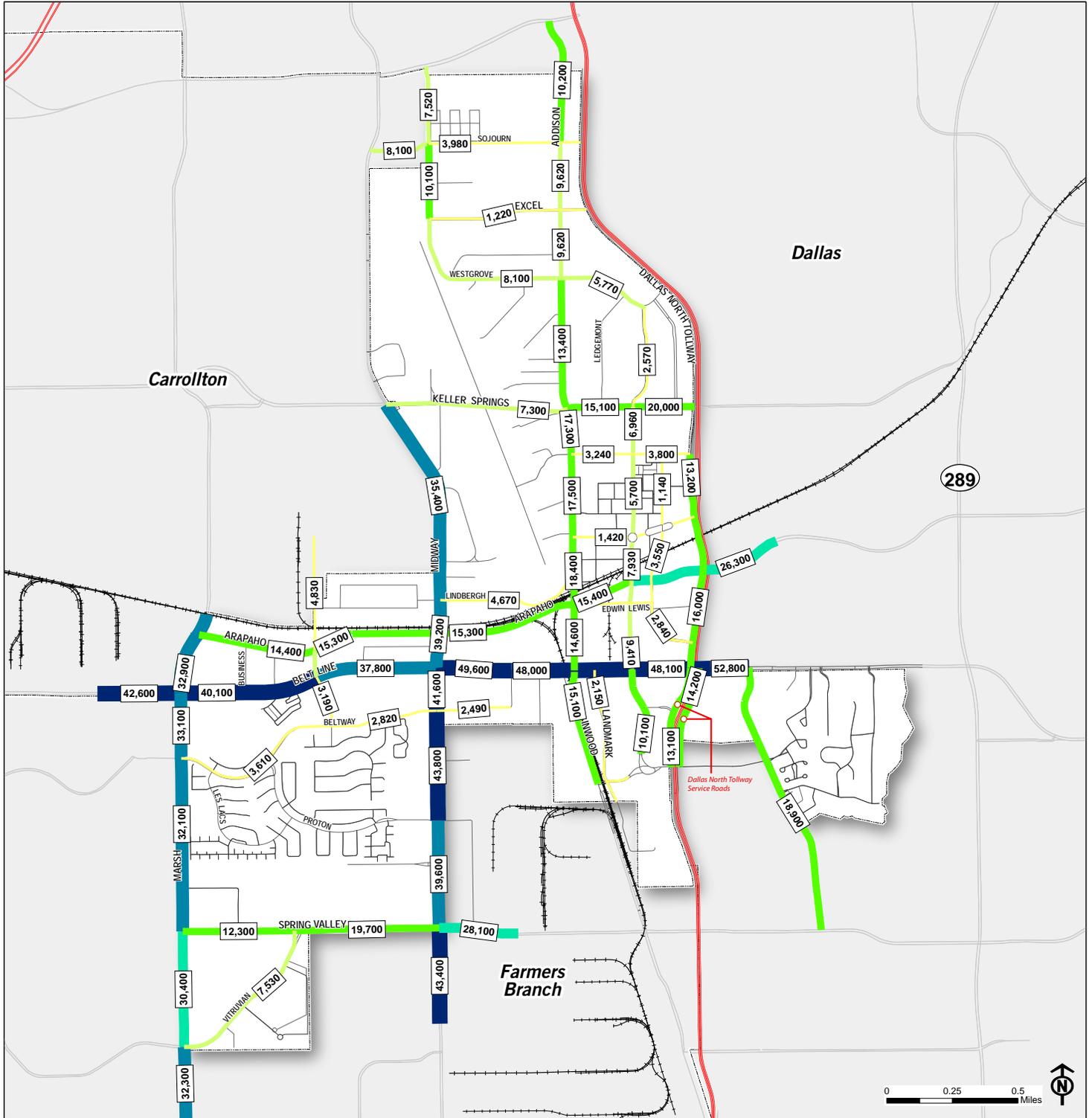


Figure 2: Traffic Count Trends (1996-2016)  
Source: Town of Addison Traffic Counts

# 2016 Traffic Counts

ADDISON

## Addison Master Transportation Plan



### LEGEND

#### 2016 Traffic Counts

- < 5,000
- 5,001 - 10,000
- 10,001 - 24,000
- 24,001 - 32,000
- 32,001 - 40,000
- > 40,000
- Addison Roads
- Tollway
- Rail Lines

Source: Town of Addison Traffic Counts

### Thoroughfare Level of Service

Forecasting future traffic demand is an essential element in mobility planning, and a useful tool in determining what roadways may have critical capacity issues in the future. This tool, known as travel demand modeling, is the prediction of traffic volumes on a transportation network based on land use, population, and network characteristics. One of the primary outputs of a travel demand model is a level of service (LOS) assessment, used to quantify traffic congestion along specific thoroughfares and assigning a level of service score of A through F to city streets to reflect how well they operate. LOS A represents a roadway where traffic is free flowing and volumes are much lower than the roadway capacity, while LOS F represents a roadway where volumes are greater than the capacity of the roadway and traffic flow often exhibits excessive delay. In the DFW region, most cities target C or D as an acceptable level of service.

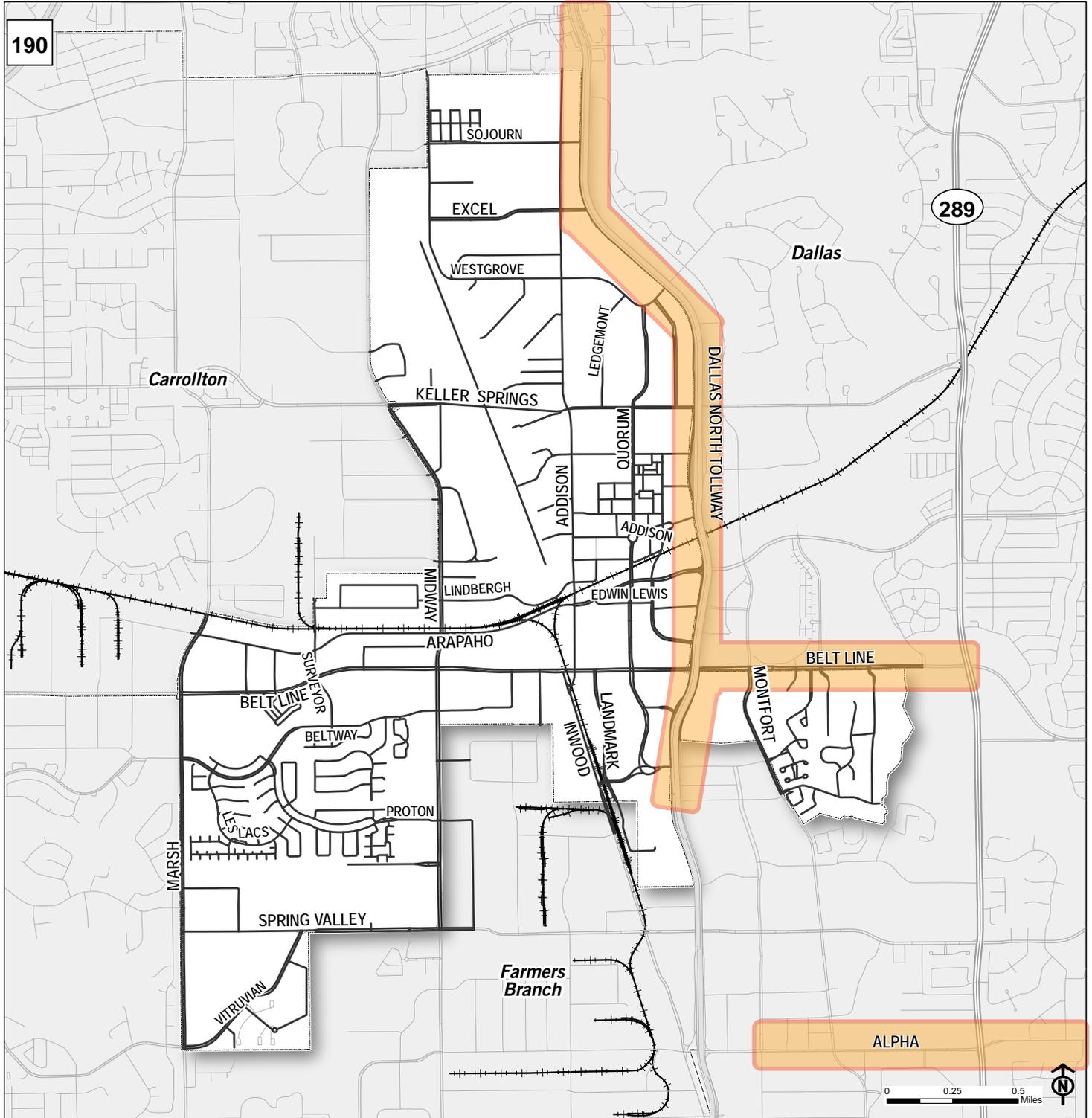
Based on regional travel demand modeling data from the North Central Texas Council of Governments (NCTCOG), the current conditions base year model shows most of the thoroughfares throughout the Town are operating at acceptable or tolerable levels, with traffic volumes below the roadway capacity; however, some sections of Addison's principal arterials, such as Belt Line Road and Midway Road, as well as the Dallas North Tollway, which is actually outside the Town limits, exhibit a level of service that is at or near capacity. The 2040 model projects volumes based on anticipated population and employment growth within the Town and across the region and assumes a continued reliance on personal vehicles for most trips.

Over the next 25 years, volumes are expected to increase significantly on the Dallas North Tollway and some arterials within the surrounding area, but level of service along thoroughfares within the Town will remain generally stable. The following map identifies major projected increases in congestion on area roadways. Since all of the principal arterials in Addison are currently built to their intended capacities, adding travel lanes on these roadways is not a recommended approach to improving the level of service since this can often induce additional traffic demand. Improvements are better focused on maintaining intersection performance, improving access management (ensuring that major arterials, intersections, and freeways not only operate with safety and efficiency, but also provide adequate access to the adjacent property), making strategic connections to increase route choices, and increasing multi-modal connectivity for transit, pedestrian, and bicycling trip alternatives.

# 2040 Congested Corridors



## Addison Master Transportation Plan



### LEGEND

- Projected Congested Corridors**  
20%+ Projected Traffic Volume Increase from Current Year Volumes with Significant/Excessive Delay Expected (Level of Service E/F)

Source: NCTCOG 2040 Travel Demand Model

### Existing Multi-Modal Network

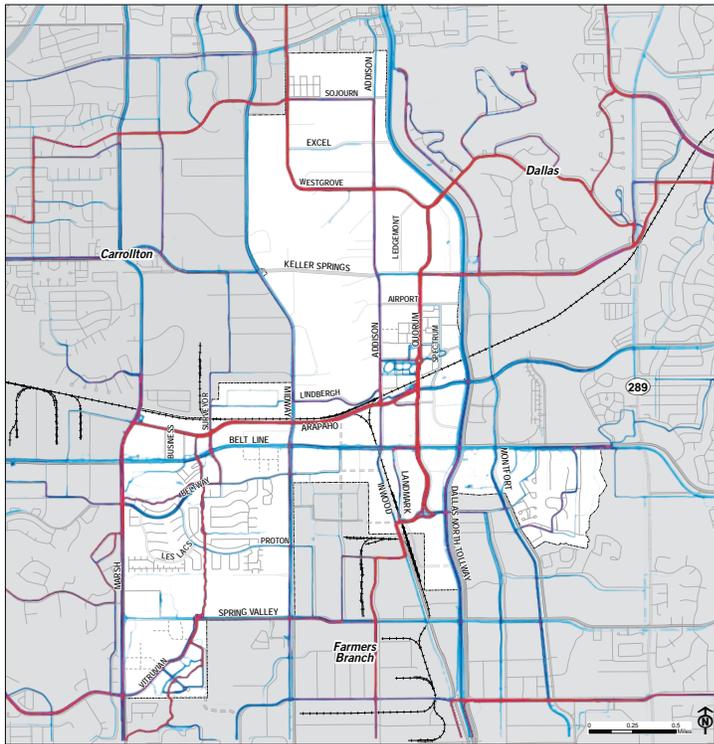
#### Active Transportation

Throughout much of the Town, the primary facilities for pedestrians are sidewalks and off-street trails. The current trail system is connected with many of the Town's parks and neighborhoods, but there are still many connectivity opportunities to expand this trail network and fill in sidewalk gaps to provide greater connectivity between neighborhoods and major activity centers. While bicyclists are able to utilize the existing trails and ride on-street in mixed traffic, there are currently no marked on-street bicycle facilities or designated routes. Providing an interconnected system of separated and protected bike facilities can appeal to a broader range of people and can contribute to increases in bicycling volumes.

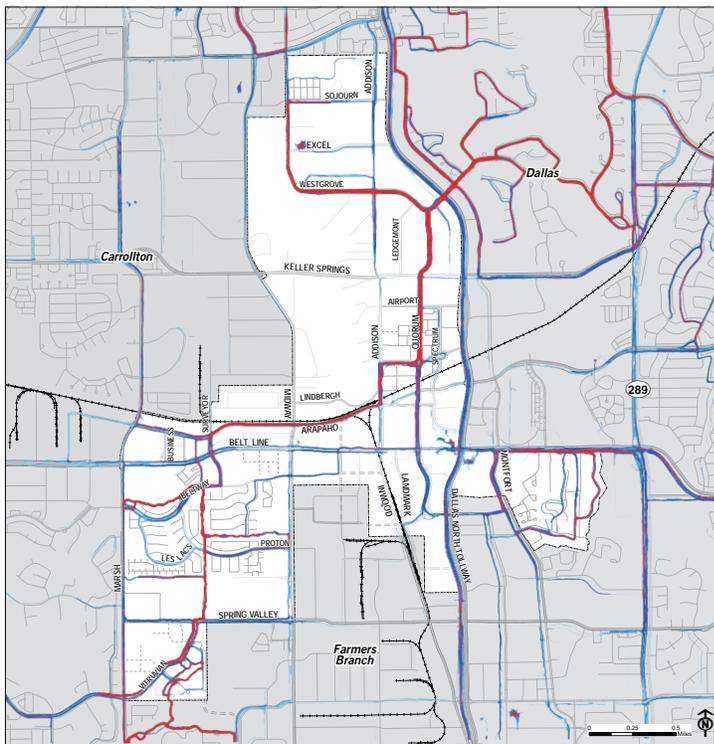
The maps on the following page provide some insight into how the streets and trails in the Addison area are currently used for active transportation based on data from Strava. Strava is an online application which allows people to track their bicycle rides, runs, and walks via their smartphone or GPS device. Routes that are used more often are identified in red.

#### Transit Service

Addison is a founding member of Dallas Area Rapid Transit (DART), and is currently served by a number of bus routes providing local and regional service. The bus routes follow many of the arterials in Addison and there are a variety of service types, including local, rail feeder, and express routes. The Addison Transit Center located near Addison Circle acts as a central hub for bus connections. Currently no rail service is provided in Addison, but potential commuter rail service has been planned for the Cotton Belt rail corridor, which would provide a regional east-west connection between DFW Airport and Plano, with a stop at the Addison Transit Center.



Current Bicycle Activity



Current Pedestrian Activity



Source: Strava, 2015 Data

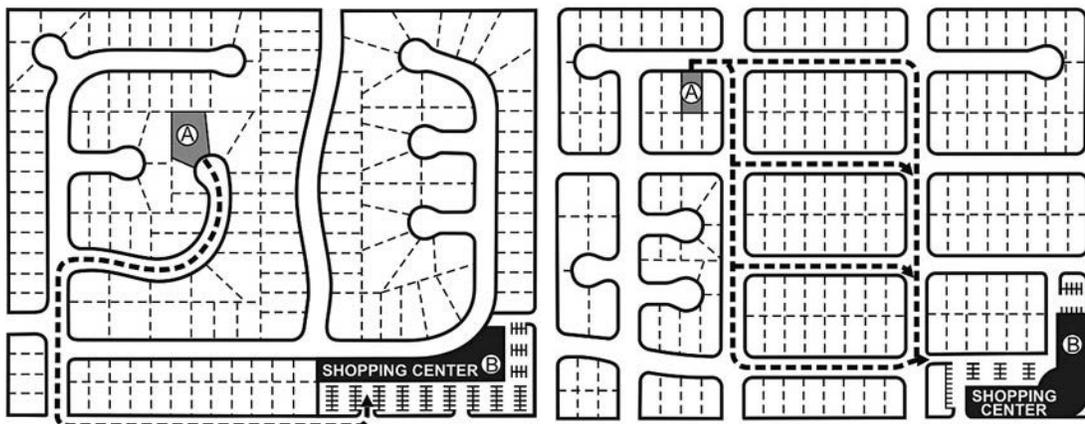
# TRANSPORTATION CONCEPTS

In addition to the assessment of thoroughfare traffic volume trends and capacity needs, other major transportation concepts have been evaluated for potential improvements and integration with future thoroughfare design. These concepts include **connectivity**, **multi-modal transportation best practices**, **context-sensitive design**, and **traffic calming**. This section provides an overview of these concepts.

## Connectivity

Appropriate network connectivity is essential to maximizing accessibility and increasing the number of route options. Streets that are networked well provide shorter, more direct routes between destinations, which in turn increases the efficiency and reliability of the road network. A classic example of a well-connected street system is found in the traditional grid street pattern. These grid street patterns disperse traffic throughout the system. There are major arterials within the grid pattern, but local travelers are able to use interconnected local streets, freeing up the arterials for the movement of longer trips.

The Addison Circle area is a prime example of a development pattern built around a grid-like network with shorter blocks and increased route choices. Most other neighborhoods in Addison were developed using the conventional suburban pattern prevalent at the time the Town was developing, with cul-de-sacs and fewer access points. The street framework was designed to collect traffic from residential areas and channel most of the trips onto major thoroughfares. This pattern tends to create greater congestion on arterial streets, and with fewer route choices, often discourages pedestrian and bicycle travel.



*Conventional vs. Traditional Street Networks*

*Conventional street networks (left) create longer trips and offer fewer route choices. A network of connected and multi-modal streets (right) offer greater trip choice and flexibility.*

Addison has, however, made strategic connections with its off-street trail network to improve pedestrian connectivity between neighborhoods and surrounding activity centers. With the roadway network in Addison almost completely built out, it will be essential that the connectivity between different transportation modes is improved to increase route options and accessibility.

## Multi-Modal Transportation Best Practices

For many people, the automobile will remain the most viable form of transportation, but resources should also be allocated for multi-modal connectivity to serve the current transportation needs of the region's diverse population and to respond to shifting demographics and generational priorities. There are many people who cannot drive each day or who prefer not to. The younger segment of the population is increasingly seeking safe and efficient alternatives to driving, and the growing retired and elderly population may also need other options.

### Active Transportation

A city's active transportation network—the portion of the system that is human-powered—is intended to provide transportation alternatives and recreational opportunities for people of all ages and abilities. The installation of pedestrian and bicycle facilities can be the most visible element of a city's multi-modal transportation network. It shows that the community is a welcoming place for non-motorized trip choices and supports the safe use of streets by all road users.

The use of sidewalks, trails, and bicycles is a transportation choice that benefits personal health, reduces traffic congestion, and air pollution, and enhances quality of life by creating opportunities for cost savings and social interaction. Interest in bicycling for commuting or recreation is increasing, but many novice riders do not feel comfortable riding on-street with traffic. Concerns about safety, barriers, and lack of infrastructure often lead people to continue using cars for many typical short trips. Increased bicycle and pedestrian facility choices not only address safety, but enhance long-term community livability, create welcoming streets and neighborhoods, and strengthen local economic competitiveness.

Addison has made considerable progress in improving the Town's sidewalk and trail connectivity in certain locations, but additional consideration should be given to designing streets to accommodate higher levels of pedestrian activity, particularly in mixed-use, commercial, and residential contexts. Streets should be attractive and comfortable for pedestrians. There are a variety of tools available to help make areas more walkable, such as appropriate sidewalk or trail width, high visibility crosswalks, mid-block crossings, increased pedestrian lighting, and shade elements.



*Les Lacs Linear Park Trail*

While significant improvements have been made for supporting pedestrian activity, few steps have yet been taken to develop an on-street bikeway system. Bicycling can improve quality of life by increasing opportunities for social connection between riders, and an active bicycling population is often considered a measure of livability for a city. Bicycle riders come with many different skill levels, and more people will be encouraged to ride if streets are designed to protect riders and make cycling enjoyable. As community preferences for bicycle connections increase, there are a variety of innovative facilities that can be considered, but the most appropriate facility should be selected based on the unique qualities of each location, the adjacent land use context, roadway characteristics, the existing or expected types of bicycle use, and the ability to connect to other trails and points of interest (not just dead-end).

## Pedestrian and Bicycle Facility Types

### Sidewalks

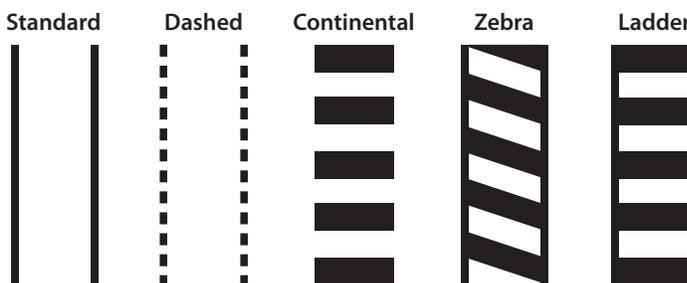
Sidewalks should provide pedestrians with space to travel and separation from the motor vehicle travel lanes. Wider sidewalks are appropriate in areas of higher pedestrian activity or to accommodate other uses on active commercial and mixed-use streets.



*Addison Circle Pedestrian Realm*

### Enhanced Pedestrian Crossings

Safe and frequent crosswalks are important in a walkable environment. Crosswalks at intersections should be designed to offer as much comfort and protection to pedestrians as possible. Considering that the majority of vehicle/pedestrian incidents involve a turning vehicle, all signalized crossings should be well marked to reinforce the requirement of turning vehicles to yield for pedestrians.



*Crosswalk Treatment Options*

Ladder, zebra, and continental crosswalk markings are preferable to standard parallel or dashed pavement markings due to their high visibility.

Midblock crossings provide pedestrians a safe and convenient way to cross the street in areas where intersections are far apart or where major pedestrian destinations are located directly across the street from each other. In these circumstances, pedestrians tend to take the most direct route when crossing the street instead of going out of the way to the nearest intersection; as such, midblock crossings are responsive to significant pedestrian desire lines. Medians or safety islands make crossings easier and safer by creating a two-stage crossing.



*Midblock Crossing*

## *Shared-Use Paths*

Shared-use paths are designed for two-way travel by both pedestrians and bicyclists. They are typically located adjacent to streets, and are useful for completing connections in an off-street trail network. These paths should be physically separated from the roadway with a landscape buffer or some type of barrier. Paths should be designed to a minimum width of 10 feet; however, in areas where bicycle traffic is low and pedestrian use of the facility is not more than occasional, an 8 foot sidepath may be used.



*Shared-Use Path*

## *Traditional Bike Lanes*

Bike lanes are dedicated travel lanes that carry bicycle traffic on the street in the same direction as adjacent motor vehicle traffic. Bike lanes are provided for the exclusive or preferential use of cyclists and are identified with signage, striping, or other pavement markings. These lanes allow bicyclists to ride at comfortable speeds and encourage a position within the roadway where they are more likely to be seen by motorists. The minimum width for bike lanes is 5 feet.



*Traditional Bike Lane*

## *Buffered and Protected Bike Lanes*

Bicycle facilities can be physically separated from adjacent motor vehicle travel with striped buffers or physical separation to create protected facilities. The addition of a buffer area provides even greater comfort to the rider than traditional bike lanes. Buffered and protected bike lanes are recommended on streets with high travel speeds, high traffic volumes, and multiple lanes. The preferred width of a buffered or protected bike lane is 5 feet with a minimum 2 foot buffer.



*Buffered Bike Lane*

## Shared Lanes

Certain roads may work well for cyclists due to low traffic speeds (preferably less than 30 miles per hour) and low volumes (generally fewer than 3,000 trips per day) and do not require a separated bike facility. These roadways can be identified as shared lane bike routes with route signage and “sharrow” pavement markings to designate shared use of the travel lanes.



Shared Lane

## Transit

Access to good transit service can have a significant financial impact on an individual. Compared to owning a vehicle, transit provides an affordable option and is particularly important for people who cannot drive due to age, income, or disability. Generational preferences have also influenced ridership. Trends have shown that younger people are less likely to get driver's licenses, tend to take shorter and fewer trips by vehicle, and are less likely to purchase a car at all. Efficiently run transit has the potential to move many more people in a much smaller amount of space than a fleet of personal automobiles, but in order for transit to be a viable alternative and to attract new riders, the service must also be reliable, convenient, and safe.

Addison's current transit service coverage is made up primarily of local and express bus routes. Local bus service, with its many stops, provides the greatest amount of flexibility for passengers, but tends not to attract the ridership or stimulate changes in land use patterns the way other transit modes can. Focusing on improving service in the corridors that are already carrying a high proportion of transit riders can go a long way towards increasing the share of traffic that buses serve on primary corridors in the city.



Improvements such as reduced headways (the time between consecutive transit service stops at a given location), higher quality passenger facilities, and improved connectivity between bus stops and destinations will help connect people to home, work, and shopping. The availability of other transit modes such as circulator buses can help accommodate new growth and influence the transition of trips onto alternative travel modes.

Higher capacity transit can shift commuting patterns and significantly affect travel choices on major transportation corridors. DART is currently updating its 2040 Transit System Plan, and numerous corridors have been identified for more frequent bus service. DART is also exploring options for expediting rail service along the Cotton Belt Corridor that would include service to Addison. The potential success of transit investments is largely dependent on the relationship of the service to the surrounding land use. Higher capacity transit investments should be considered in areas with high levels of employment, denser residential development, diverse uses, and pedestrian-oriented design.

### *Enhanced Bus Service*

Most of Addison's current bus service is provided by local bus routes, which must balance stop frequency with speed. While rail service provides greater passenger capacity and potential economic return on investment than bus, enhanced bus service can make the overall transit network more reliable, convenient, and comfortable. Priority corridors may benefit from rapid and express routes, and service can be made more efficient and attractive with improvements such as:

- Less frequent stops
- Higher capacity vehicles
- Transit signal priority
- Dedicated transit lanes
- High-amenity stops
- All-door boarding



*Rapid Bus Vehicle (Austin, TX)*

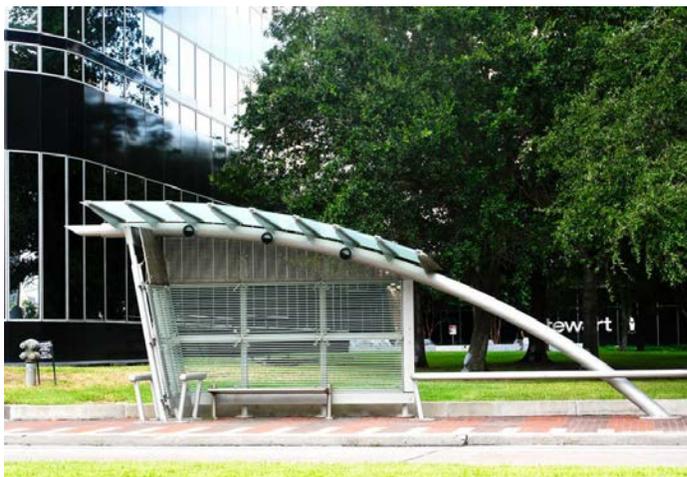
### *Circulator Bus*

Circulator buses, or shuttles, are similar to local bus service but tend to operate within small areas, and can provide strategic connections between employment centers, dining spots, and other major destinations. These routes are often funded in partnerships between transit service providers, cities, and/or business organizations.



### *Transit Stops*

The quality of the structures and amenities at transit stops matter to riders, but it is usually not possible, nor is it necessary, to provide all amenities at every stop system-wide due to costs and site constraints. At a minimum, all stops should be well maintained, appropriately lit, and provide a safe waiting area for riders. Basic transit stop design should be highly visible and should usually include a paved waiting pad, lighting, and a trash can; however, at major stops or along key corridors, additional amenities such as uniquely designed shelters, public art, real-time schedule information, wayfinding signage, or bike racks/lockers may be desirable.



*Custom Bus Shelter Design*

### Context-Sensitive Design

Complete Streets is a concept that supports the idea that streets should be designed for everyone, with safe access for pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. There is no single design for a Complete Street. Each one is unique and should relate to the surrounding community context. In the past, streets were designed mostly with cars in mind, which has made alternative transportation choices difficult, inconvenient, and often dangerous. Context Sensitive Design is taking the goal of Complete Streets and applying it to the process of determining the most appropriate cross sections for street construction, reconstruction, or rehabilitation projects. This process takes into account not only the functional class of the road, but also the character of the surrounding development, future goals for each corridor, and the existing or future need for different modes of transportation.

The development of thoroughfares in Addison has been guided largely by a single set of typical roadway cross sections designated by functional classification. The streets in the Addison Circle area, however, were designed using the context-sensitive approach, where they were laid out with the unique needs of both pedestrians and vehicles in mind. By integrating land use and modal priorities with the Master Transportation Plan, the context-sensitive design process can be applied to determine whether and to what degree the typical street design may need to be modified to better serve the variety of community priorities, land use contexts, and activity centers within a specific corridor.

## Traffic Calming

Traffic calming is a system of design strategies that aims to balance vehicular traffic with other uses on the street. These techniques seek to address concerns about safety, noise, and quality of life by reducing the impact of motor vehicles and slowing down or “calming” traffic. This approach is used primarily in residential areas, but many of these techniques have been used to regulate traffic speeds on other types of streets, such as urban mixed-use and main streets, especially where pedestrian activity is present.

Traffic calming is intended to mitigate cut-through traffic and speeding, with the added benefits of increasing pedestrian and bicycle safety and providing opportunities for aesthetic enhancements and neighborhood identity. Traffic conditions are different for each location, and different tools should be selected based upon the unique characteristics of each environment.



*Potential traffic issues mitigated with traffic calming: speeding and cut-through traffic*

Traffic calming measures typically fall into three categories:

### Education

Neighborhood traffic management studies have shown that often the perceived traffic problems within a neighborhood can be attributed to local traffic and the residents themselves. Many traffic calming strategies begin with educating the neighborhood about the need to obey speed limits or yield to pedestrians. Educational approaches may include neighborhood watch programs and traffic safety newsletters.

## Enforcement

Speeds can be monitored and displayed with portable or permanent radar detection speed feedback signs. Communities and neighborhoods may also work closely with local police to provide increased enforcement in areas where speeding occurs most often.

## Engineering

Physically changing how the road looks, whether with signage, curbing, or other traffic calming measures, works to alter the behavior of motorists, pedestrians, and bicyclists. These types of engineering solutions are often intended to be “self-enforcing” and should be implemented after the education and enforcement approaches have been used. Physical design techniques can have varying levels of impact on travel speeds and traffic volumes. Engineering measures typically fall into the following categories:

### *Vertical deflection*

Vertical speed control elements such as raised speed humps or speed tables help manage traffic speeds and reinforce pedestrian safety. These devices may be appropriate on a range of street types, but are most widely applied along low-speed neighborhood or residential streets. They are particularly effective in reducing speeds, but may also increase driver discomfort, noise, and emergency vehicle response time.



*Speed Hump*



*Speed Table*

### *Horizontal deflection*

Horizontal street design elements decrease the overall width of the roadway and can serve as both a visual and physical cue to drivers that they are entering a neighborhood street. Potential benefits include slower traffic speeds, safer and shorter crossings for pedestrians, and increased space for street furniture, plantings, and street trees. Horizontal treatments include:

- Lane Striping
- Curb Extensions
- Chicane
- Center Islands
- Pinchpoint/Choker
- Mini Traffic Circle



*Lane Striping to Narrow Travel Lanes*



*Curb Extensions*

### *Volume management*

Volume management measures reduce or discourage through traffic on specific corridors by reconfiguring select street segments and intersections along the route. Treatments should be implemented with consideration for emergency vehicles and neighborhood access.



*Diagonal Traffic Diverter*



*Half or Full Street Closure*

## Additional Considerations

When implementing traffic calming solutions, additional factors should be considered when determining the feasibility of certain techniques, including:

- Access for emergency vehicles, school buses, and transit routes
- Driveways and intersection locations
- Large vehicle access and turning movements
- Availability of adjacent arterials to accommodate diverted traffic
- Implementation and maintenance cost

Techniques that are not recommended for traffic calming include:

### *Reducing posted speed limits*

Speed limits are determined after a detailed traffic or engineering study. A speed limit that is unrealistic can invite drivers to disregard posted speeds. Traffic calming measures that reduce design speed can be a more effective way to encourage appropriate travel speeds.

### *Stop signs*

The Texas Manual on Uniform Traffic Control Devices (MUTCD) states that “Stop signs should not be used for speed control.” Studies have shown that some drivers will make up the time lost at an unwarranted stop sign by speeding up between signs, or will run an unwarranted stop sign if there is no opposing traffic present. To determine if an intersection meets the necessary criteria for stop sign traffic control, an analysis which considers traffic counts, pedestrian volume, accident history, sight distance, and on-site observations should be conducted, but ultimately, engineering judgement must be applied.



*Belt Line Road*

# MASTER TRANSPORTATION PLAN UPDATE

# MASTER TRANSPORTATION PLAN

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The Master Transportation Plan is the tool that enables the Town to preserve future roadway corridors and to protect or acquire the necessary right-of-way to improve the local transportation system. The MTP includes information related to roadway classification, right-of-way requirements, basic design criteria (including lane and median widths), and the number of through travel lanes for each thoroughfare in the Town. This plan identifies a number of future thoroughfare connections and introduces alternative solutions for thoroughfare design, but it does not propose any changes to existing functional classifications.

## Future Connections

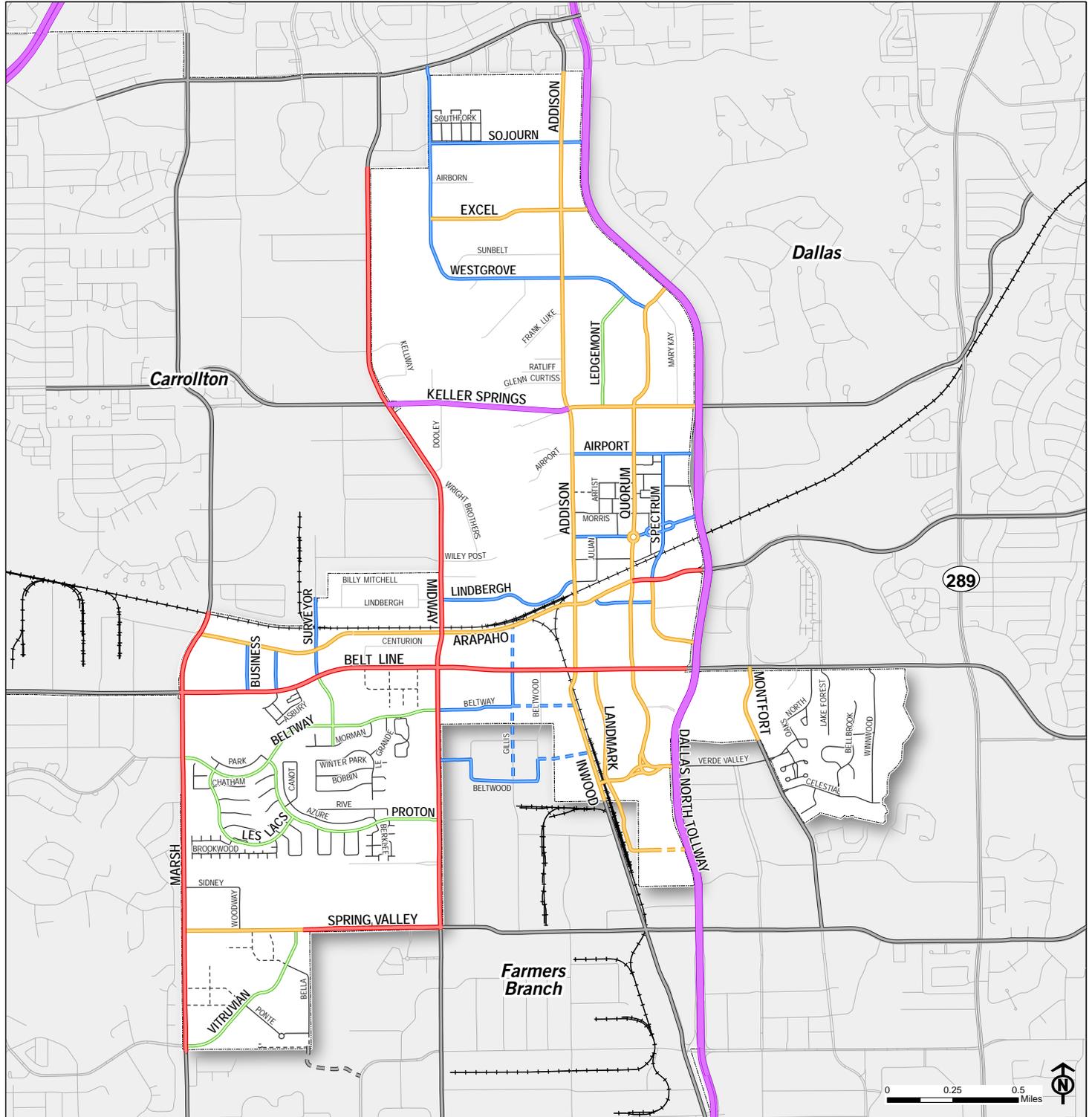
While much of the Town's thoroughfare capacity and network connectivity has been built out, there are still additional connections that can be made to support local trip circulation, multi-modal alternatives, and future property redevelopment. In particular, areas south of Belt Line Road have limited east/west route options due to a variety of barriers. A number of factors—the mix of often conflicting and incompatible development patterns between Addison and adjacent cities, the presence of existing rail lines, the manner in which the Dallas North Tollway creates a physical barrier between east and west Addison—all combine to reduce route choices and increase the reliance on the arterials for the distribution of local trips.

New minor arterial and collector connections that could improve local circulation include extensions of Landmark Boulevard, Beltwood Parkway, and Beltway Drive. Access to the Vitruvian development could also be improved with an additional entry point between Bella Lane and Alpha Road. This connection has been studied and design started. The decision to move forward rests with the City of Farmers Branch. The updated plan also documents other future connections in the Vitruvian Park and Addison Grove areas in the southwest corner of the Town and a future connection between Addison Road and Artist Way, in the Addison Circle area. All of these connections are expected to be constructed with future development projects.

# Master Thoroughfare Plan Map



## Addison Master Transportation Plan



### LEGEND

#### Functional Classification

- Toll Road
- Principal Arterial

- Minor Arterial
- - - Future Minor Arterial
- Commercial Collector

- - - Future Commercial Collector
- Residential Collector

- Residential Local
- - - Future Residential Local
- Local

- Major Roadway Outside Addison
- - - Future Connection Outside Addison
- + + + Rail Lines

# STREET CROSS SECTIONS

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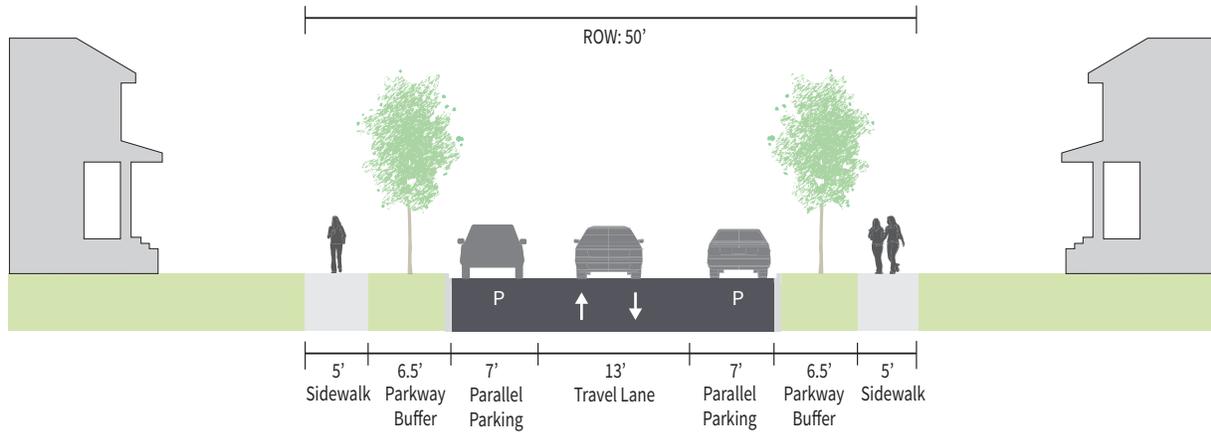
Most Addison streets have been planned and constructed based on one preferred design for each functional classification. While a standard street design, known as a typical cross section, may be appropriate in many cases, and no changes in classification are being recommended for any existing Addison streets, in some areas, an alternative design may be more appropriate. There is not a single solution for improving all streets and enhancing mobility throughout the Town. Street design that is context-sensitive, by definition, will vary in its cross section based on the existing physical constraints, the character of the land use in the surrounding area, and the preferences of the community.

## Context Sensitive Solutions (Cross Section Alternatives)

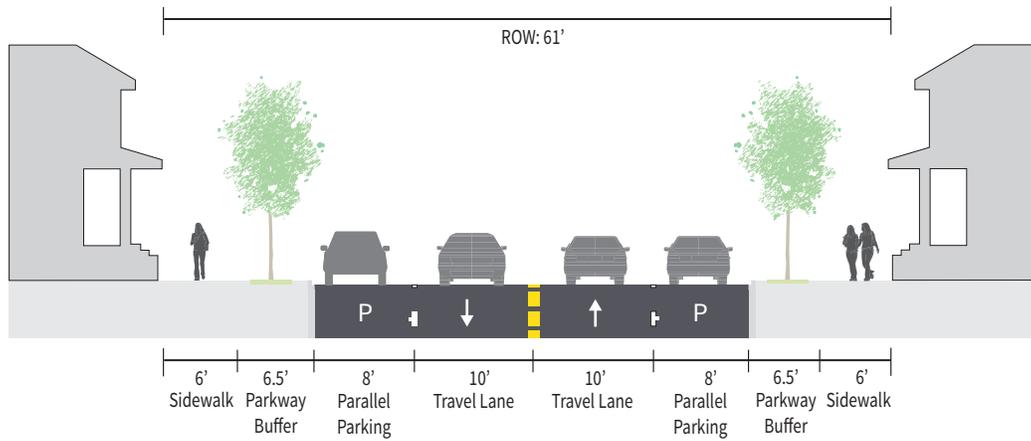
For each of the functional class categories, a set of Typical Cross Sections and Alternative Cross Sections has been developed to allow Town staff some flexibility as opportunities for mobility improvements arise. This flexibility must be based on an evaluation of the development context throughout the Town and the priorities expressed by the community. These cross sections are not intended to be rigid, but rather to act as templates that can be adapted to fit the local context, the adjacent land use and development type, and the physical and economic constraints of each future roadway project.

For example, on the Minor Arterial Cross Section, the preferred median width is 16 feet to accommodate median-protected turn lanes and to allow area for enhanced landscaping; however, in constrained areas, where adequate right-of-way is not available or can only be secured through purchase, a median or center turn lane design that is between 10 feet and 16 feet in width can be implemented. The objective of providing the median is still met, but a narrower design is applied because of the limited space available. This same flexibility can be applied to roadway lane widths, sidewalks, and other features within the overall street realm so long as the minimum requirements are met and the corridor goals are satisfied.

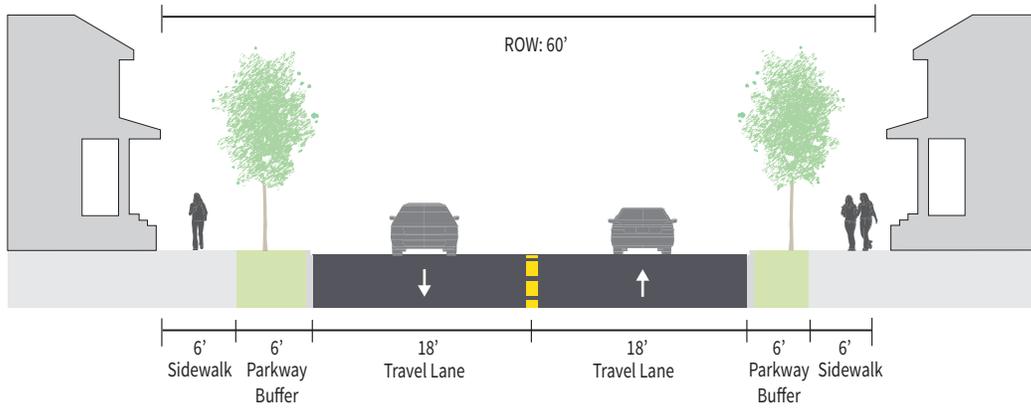
TYPICAL



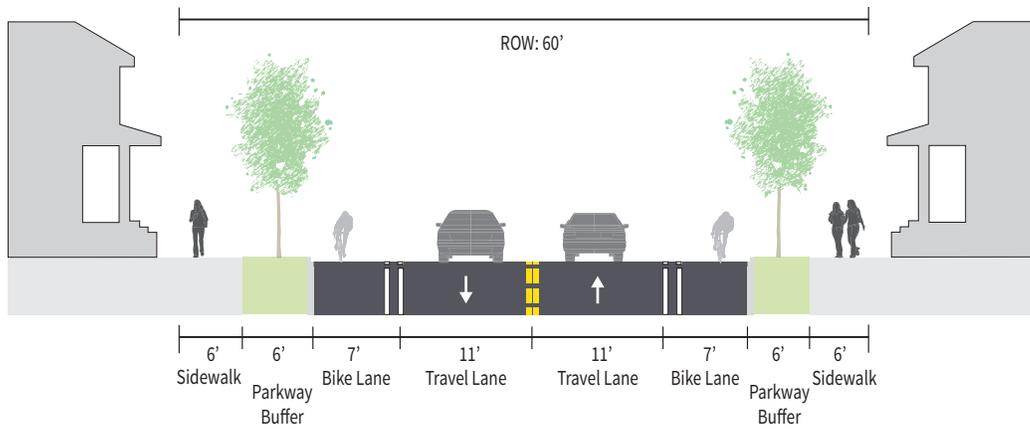
URBAN/MIXED-USE



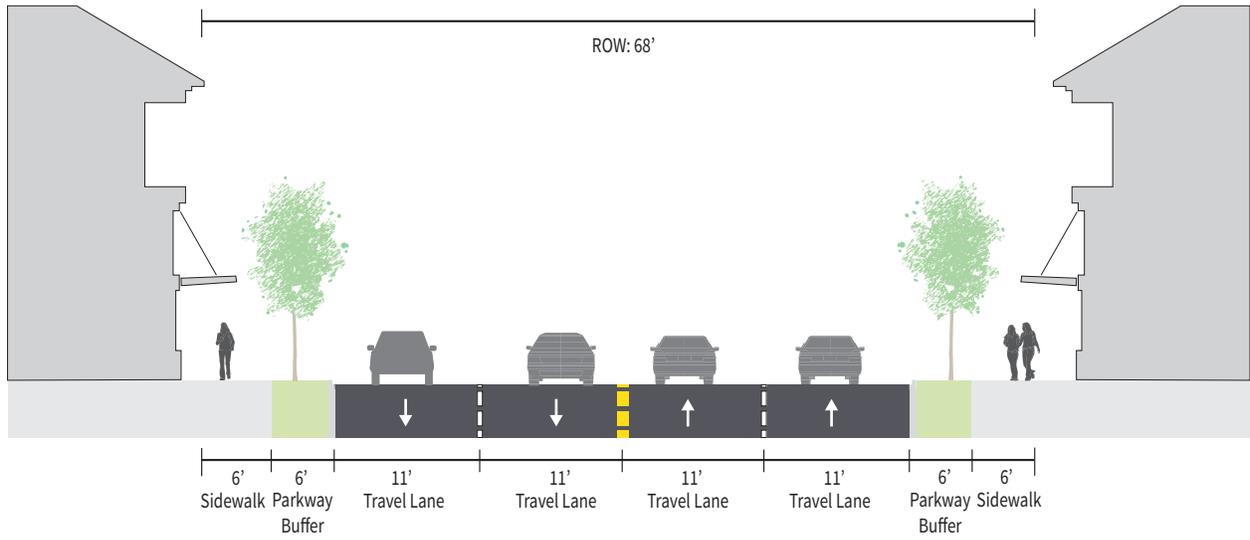
TYPICAL



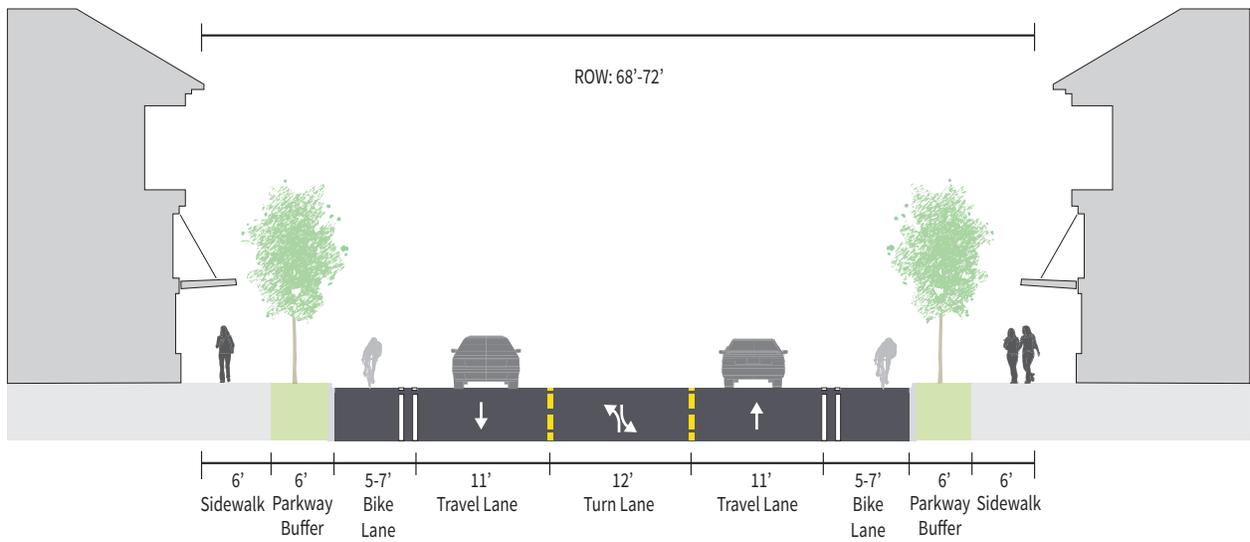
BIKE LANE



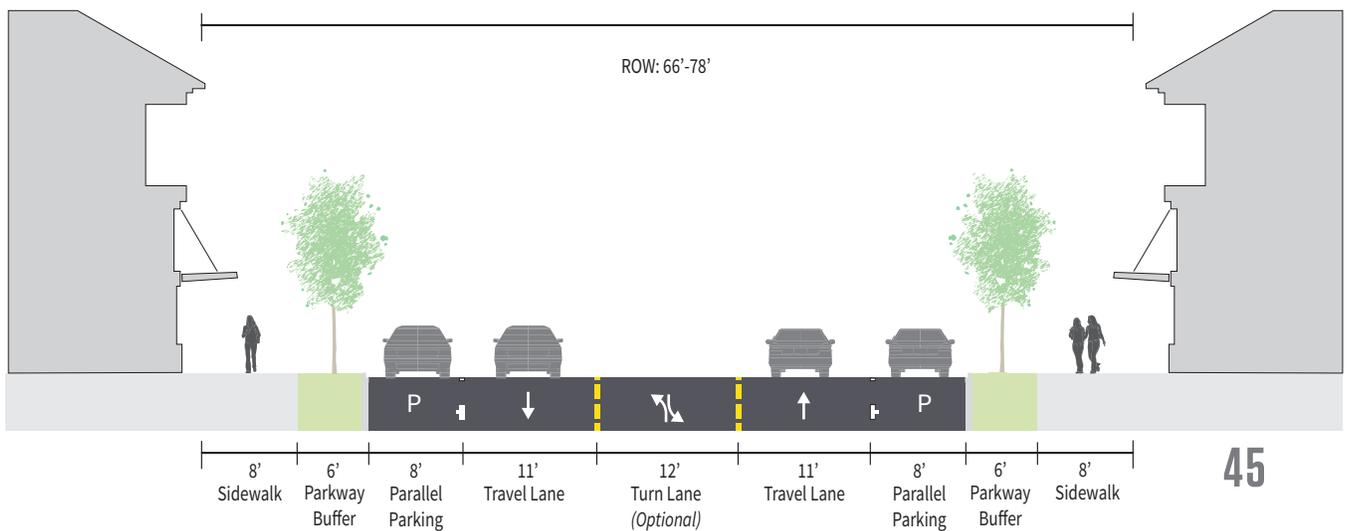
TYPICAL



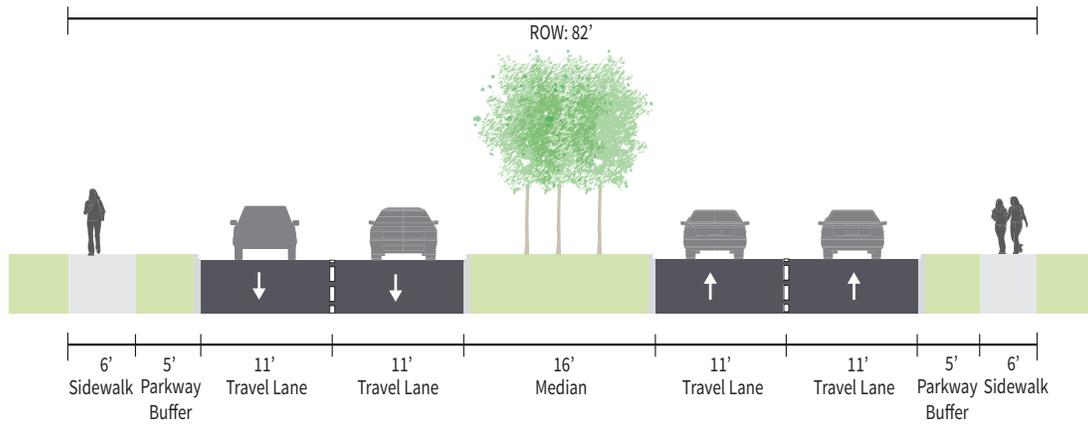
BIKE LANE



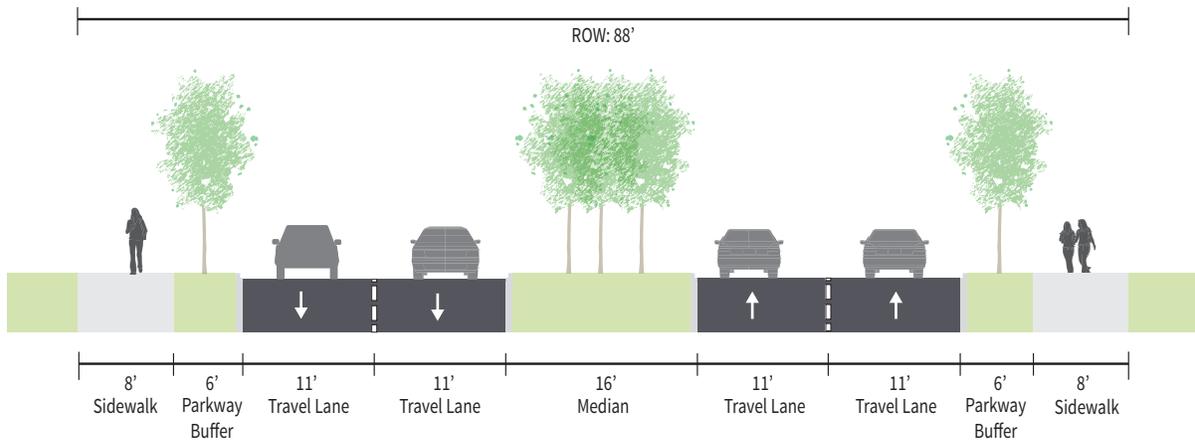
URBAN PEDESTRIAN



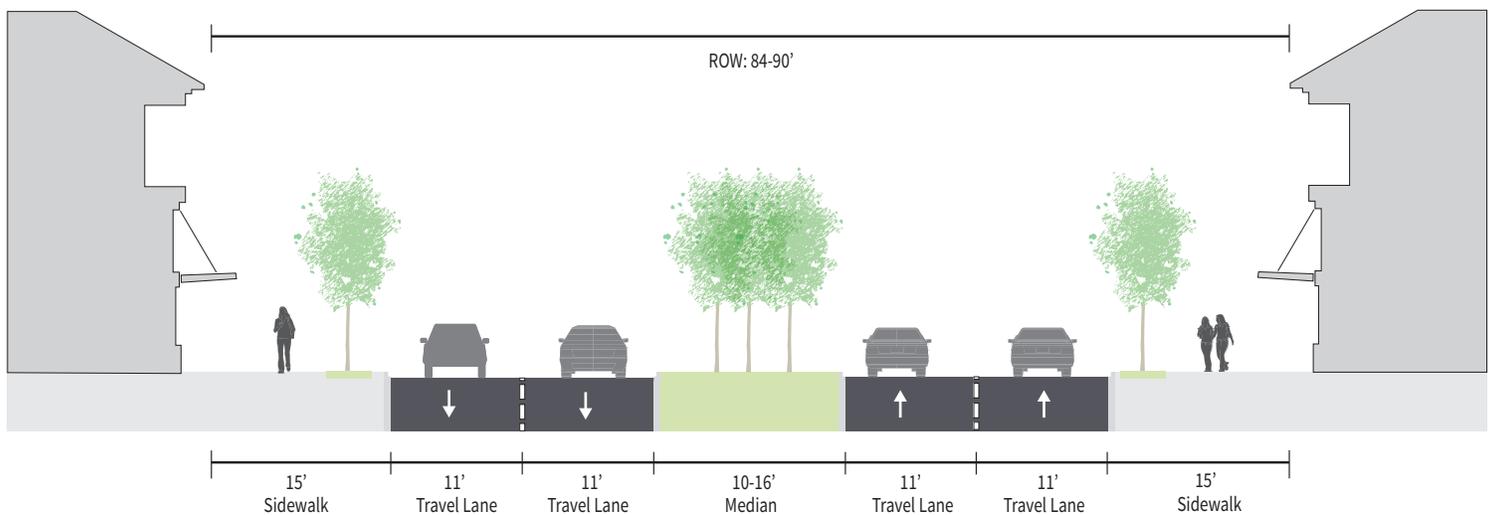
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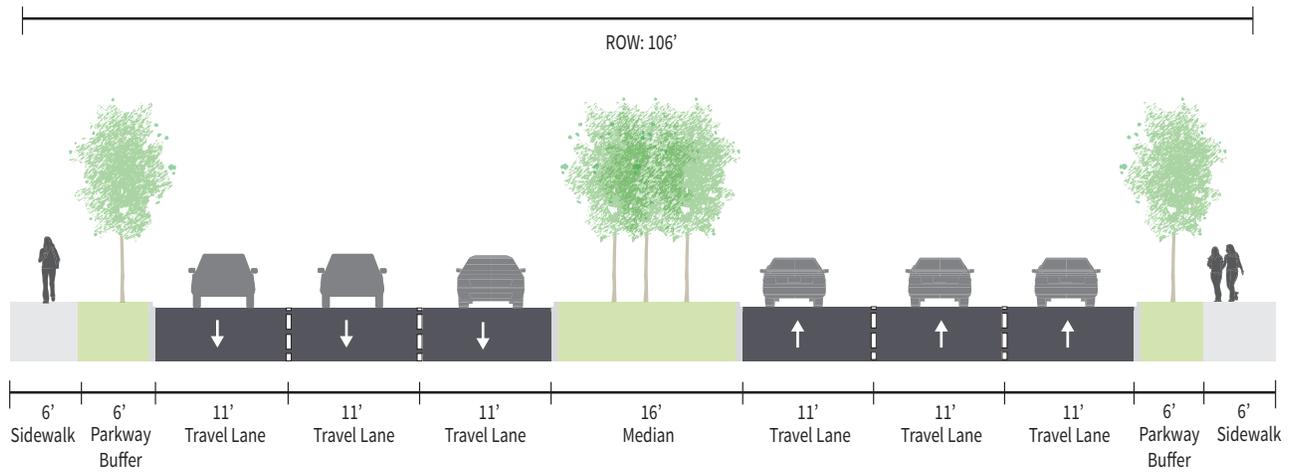
ENHANCED PEDESTRIAN



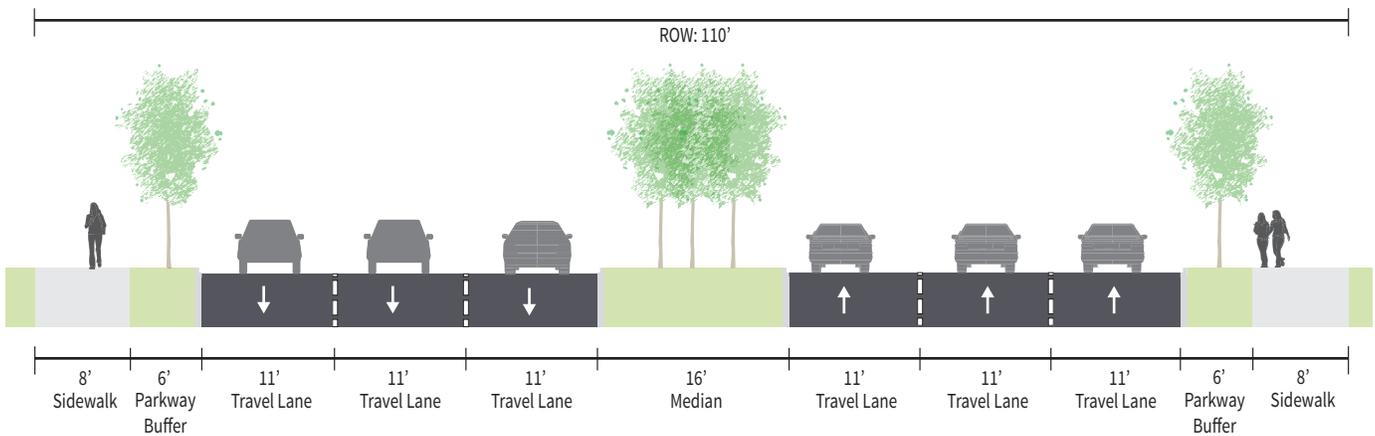
URBAN PEDESTRIAN



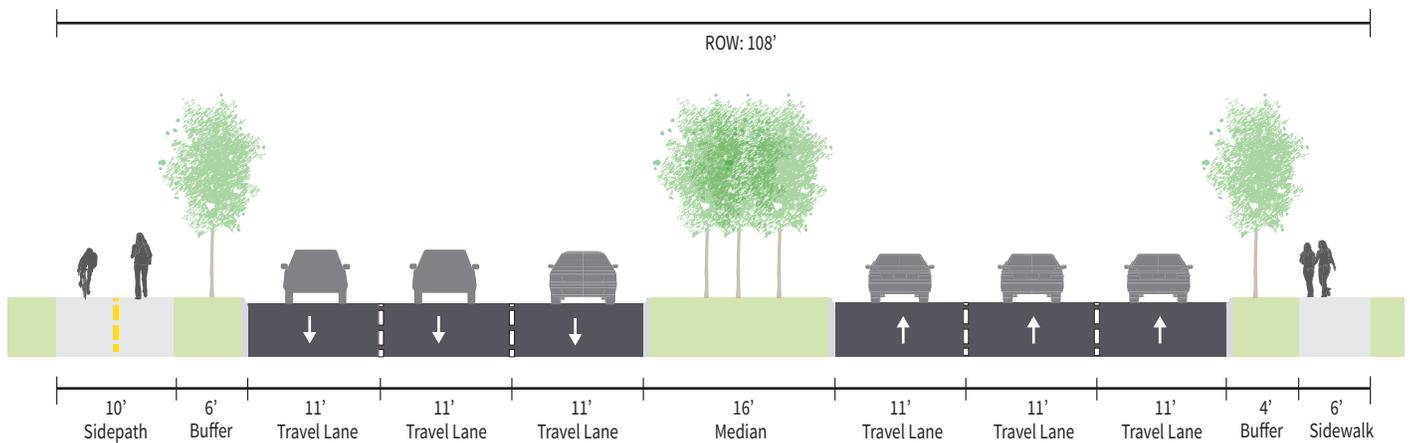
TYPICAL



ENHANCED PEDESTRIAN



SIDEPATH TRAIL



## MULTI-MODAL CONNECTIVITY

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Planning for a street involves a balance between modal priorities for the particular roadway and the desired street design elements. The connectivity plans provide guidance for situations where additional travel modes and design elements may need to be prioritized so that the appropriate alternative cross section and right-of-way width can be determined for a street reconstruction project. The connectivity maps in this plan indicate how and where pedestrian, bicycle, and transit can be better integrated with the roadway network to create more trip choices.

### Active Transportation

Addison's most recent 2012 Conceptual Trails Master Plan, which identifies possible trails, pedestrian corridors, and bikeways, was reviewed as part of this Master Transportation Plan update. Using input from community members on their transportation priorities, an Active Transportation Connectivity plan was developed to reflect the desire for safe, comfortable, and well-connected pedestrian pathways and potential locations for future on-street and off-street bikeways.

Three facility types have been identified on this plan:

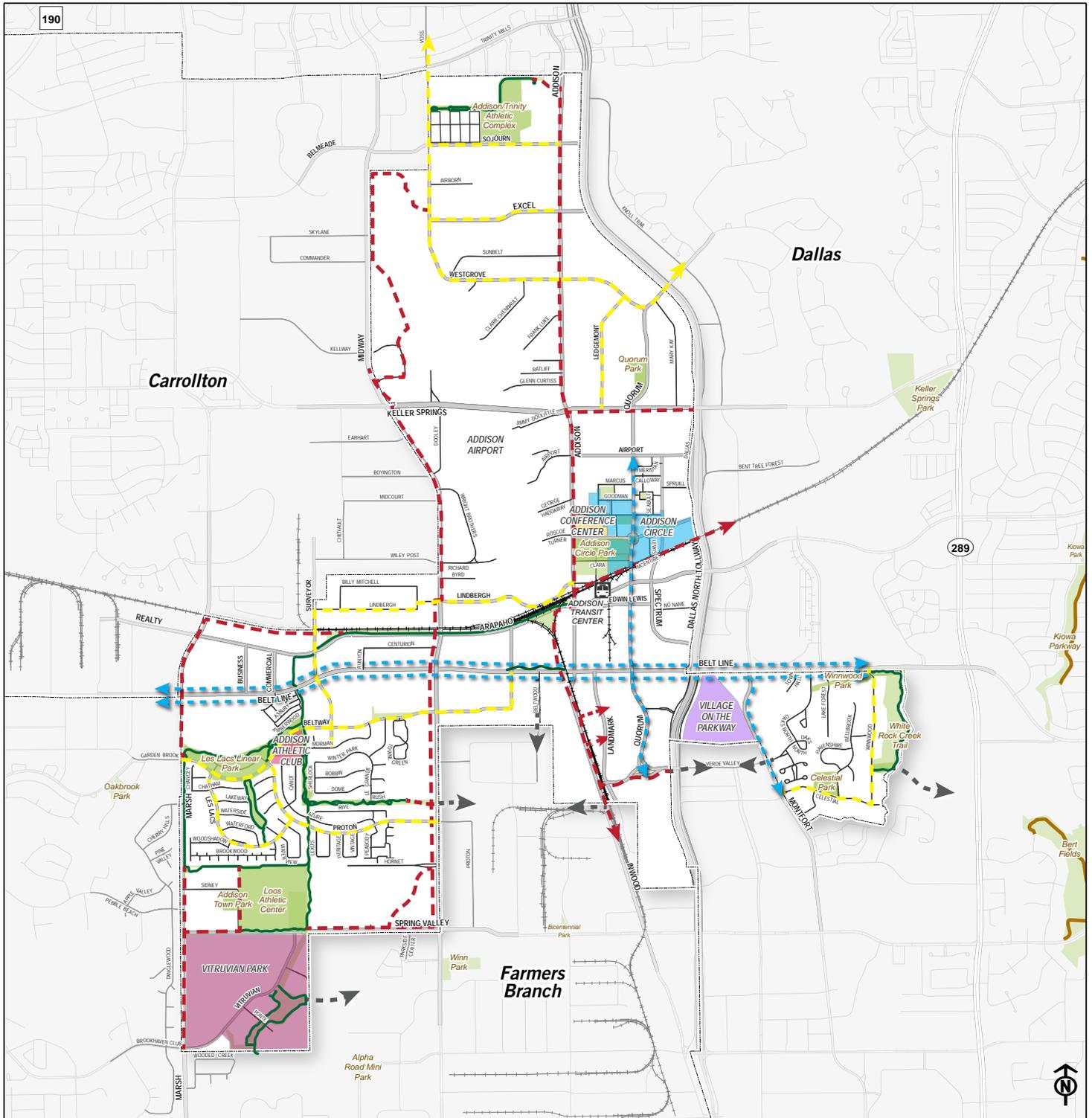
- **Off-Street Trail** - Shared-use paths separated from the roadway, where possible, that provide recreation and transportation opportunities for a variety of user groups, including pedestrians and bicyclists.
- **Enhanced Pedestrian Path** - Corridors designed to encourage pedestrian use with wider sidewalks, enhanced streetscaping, parkway buffers from moving traffic, and improved access to adjacent businesses.
- **Active Transportation Corridor** - Streets, suited to pedestrian and on-street bicycling activity due to their lower traffic volumes and speeds, that can be enhanced with a variety of design treatments to create a comfortable active transportation environment.

Potential off-street trail or active transportation corridor connections with neighboring cities have also been identified on the plan map as "**Preferred Future Connectivity**". The Town of Addison should work with adjacent communities, especially Farmers Branch and Dallas, to create a continuous and interconnected active transportation network.

# Active Transportation Connectivity

ADDISON

## Addison Master Transportation Plan



### LEGEND

**Existing Connections**  
— Off-Street Trail

**Potential New Connections**  
- - - Off-Street Trail  
- - - Enhanced Pedestrian Path  
- - - Active Transportation Corridor  
- - - Preferred Future Connectivity

Parks  
B Transit Center  
— Existing Dallas Trails

## Transit

DART's most recent plan for frequent and express bus service in the Addison area was used to identify the priority routes on the Transit Connectivity map. These routes are intended to provide bus service with weekday peak wait times (headways) of 15 minutes or less, and may be appropriate locations for enhanced shelters, seating, improved pedestrian connections, or other design features that support transit use.

Future transit service enhancements are also identified on the map. These enhancements reflect potential transit connectivity improvements between Addison and the surrounding region, including better bus connectivity to Vitruvian and rail service along the Cotton Belt corridor.

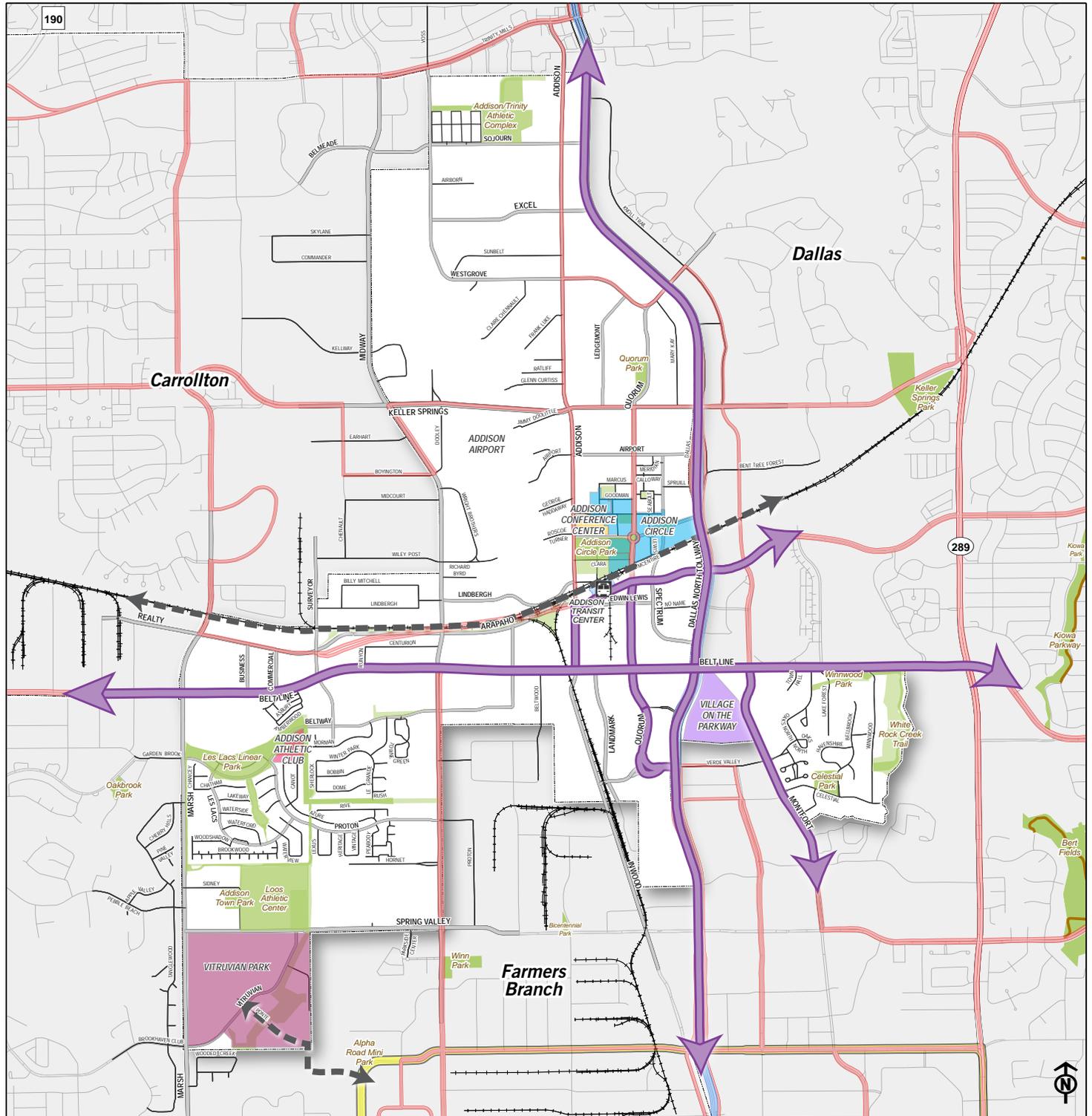


*Addison Transit Center*

# Transit Connectivity

ADDISON

## Addison Master Transportation Plan



### LEGEND

- |   |                                 |                |
|---|---------------------------------|----------------|
| <b>Priority Addison Transit Corridors</b> | <b>Existing DART Bus Routes</b> | <b>Parks</b>   |
| Frequent/Express Service                  | Local & Feeder Routes           | Parks          |
| Preferred Future Service Improvements     | Express Routes                  | Transit Center |
|   | Rapid Ride Shuttle              |                |

# CORRIDOR CASE STUDIES

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In order to demonstrate the process and potential for creating unique, flexible street designs, five different corridors were selected to represent a variety of transportation issues, street design challenges, and development contexts throughout Addison. The corridor concepts offer examples of how the various transportation themes and goals discussed in the MTP could be implemented on specific streets. While these corridor concepts can be seen as recommendations for mobility improvements along these specific thoroughfare segments, they are also intended to provide guidance for developing design solutions for street projects in other locations.

A summary of the Corridor Case Study locations and primary challenges are provided below:

<b>Addison Road</b> <ul style="list-style-type: none"><li>• Street Type: Commercial/Commuter Minor Arterial</li><li>• Primary Challenge: Determining reconstruction options within limited right-of-way</li></ul>
<b>Quorum Drive</b> <ul style="list-style-type: none"><li>• Street Type: Commercial/Mixed-Use Minor Arterial</li><li>• Primary Challenge: Improving walkability and creating a design transition between Addison Circle and Belt Line Road</li></ul>
<b>Montfort Road</b> <ul style="list-style-type: none"><li>• Street Type: Commercial/Commuter Minor Arterial</li><li>• Primary Challenge: Improving sidewalk connectivity and addressing access issues along a primary retail activity center</li></ul>
<b>Le Grande Drive</b> <ul style="list-style-type: none"><li>• Street Type: Residential Collector</li><li>• Primary Challenge: Constructing sidewalks in a developed residential neighborhood</li></ul>
<b>Belt Line Road</b> <ul style="list-style-type: none"><li>• Street Type: Commercial/Commuter Principal Arterial</li><li>• Primary Challenge: Providing connectivity improvements along one of the Town's most highly-traveled and economically active corridors</li></ul>

The process for developing these design alternatives included reviewing existing street conditions and major challenges, prioritizing mobility and design goals, and developing a preferred corridor cross section that accomplishes as many of the goals as possible. Goals for each corridor were determined through an exercise with the Advisory Committee where they were asked to select and rank their top six priorities for future transportation improvements out of a set of nine possible priorities: **vehicles, transit, pedestrians, bicycles, parking, economic vitality, aesthetics/sense of place, environment, and safety.**

Detailed Corridor Case Study exhibits and recommendations are provided on the following pages.

# Addison Road Corridor Concept

Concept Limits: Addison Circle to Arapaho Road



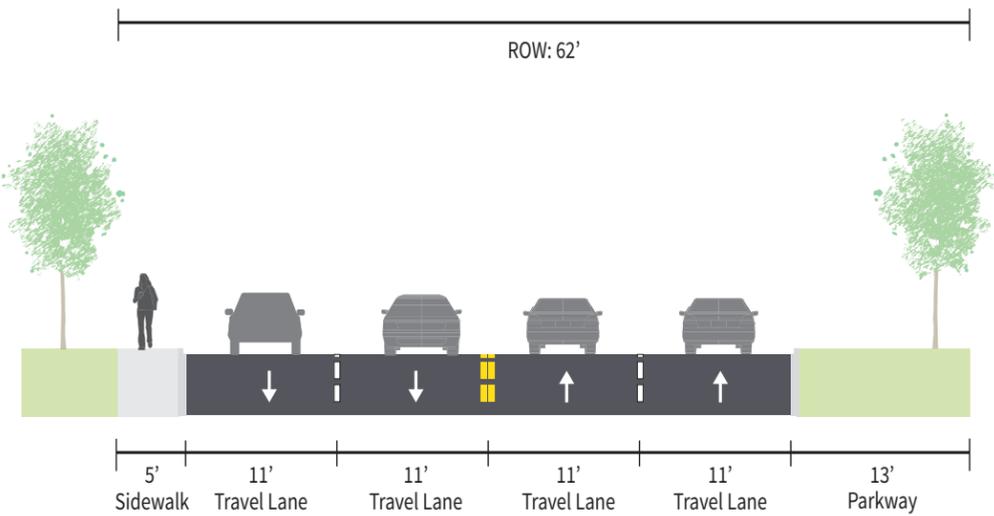
- Corridor Improvement Priorities (from Advisory Committee)**
- |               |                      |
|---------------|----------------------|
| 1. Aesthetics | 3. Economic Vitality |
| 2. Vehicles   | Transit              |
| Pedestrians   | Bicycles             |

- Small areas of enhanced streetscaping and seating to add visual interest along the corridor for pedestrians and provide additional comfort from moving traffic and the elements
- Connect sidewalk improvements to existing Addison Circle Park pathways
- Enhance landscaping adjacent to the Addison Airport where possible
- Widen the roadway from a 4-lane undivided to a 4-lane divided roadway with a raised median to separate opposing directions of travel and provide designated locations for turning movements\*  
\*The median width may vary from 10-16 feet depending on available right-of-way
- Eliminate gaps in sidewalk connectivity by providing continuous pathways along both sides of Addison Road
- In constrained areas, a narrow raised median or painted hatched median may be used
- Provide enhanced landscaping and street trees along existing parking areas
- Potential regional bicycle/pedestrian trail connection along the Cotton Belt rail corridor
- Planned Cotton Belt DART commuter rail service

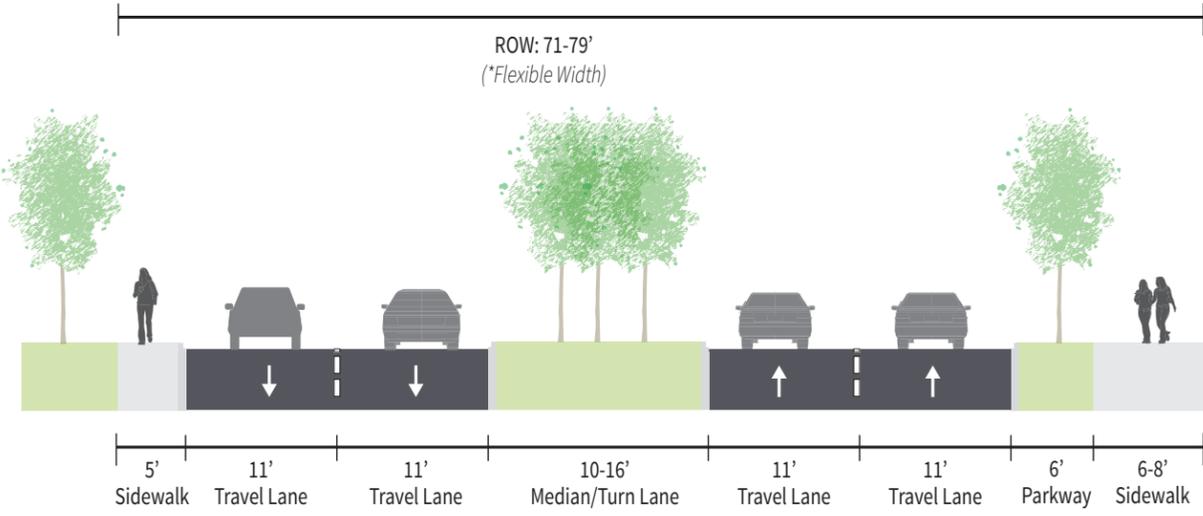
- LEGEND**
- Existing Tree
  - Proposed Street Tree
  - Proposed Ornamental Tree

## Cross Section Summary

### EXISTING



### ALTERNATIVE



\*Flexible width right-of-way and median width to accommodate potential ROW constraints.

# Quorum Drive Corridor Concept

Concept Limits: Arapaho Road to Belt Line Road



### Corridor Improvement Priorities (from Advisory Committee)

- |                                  |                    |
|----------------------------------|--------------------|
| 1. Aesthetics                    | 3. Vehicles Safety |
| 2. Pedestrians Economic Vitality | Environment        |

Add enhanced landscaping or street trees where possible to screen existing parking structure

Small areas of enhanced streetscaping and seating to add visual interest along the corridor for pedestrians

Provide a continuous wide pedestrian pathway with a tree-lined buffer from moving traffic

Maintain existing travelway and median width

Potential future pedestrian pathway connecting Quorum Drive and Spectrum Drive

Utilize median to create a high visibility midblock pedestrian crossing across Quorum

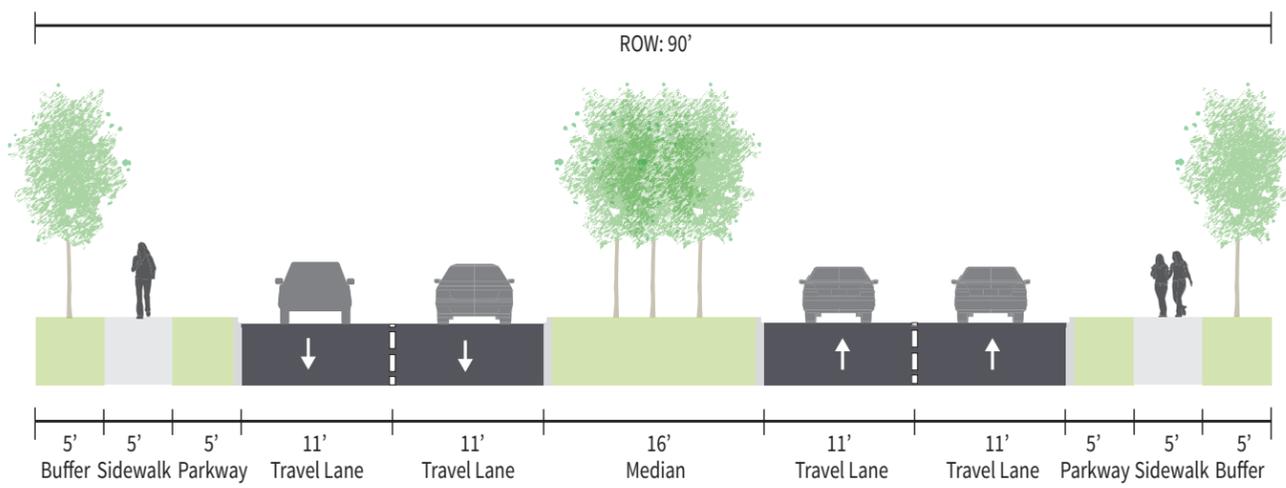
Streetscaping concept proposed as a blend of plantings, trees, and hardscape elements to create a visual transition between the urban development of Addison Circle and the tree-lined section of Quorum south of Belt Line

#### LEGEND

-  Existing Tree
-  Proposed Street Tree
-  Proposed Ornamental Tree

## Cross Section Summary

### EXISTING

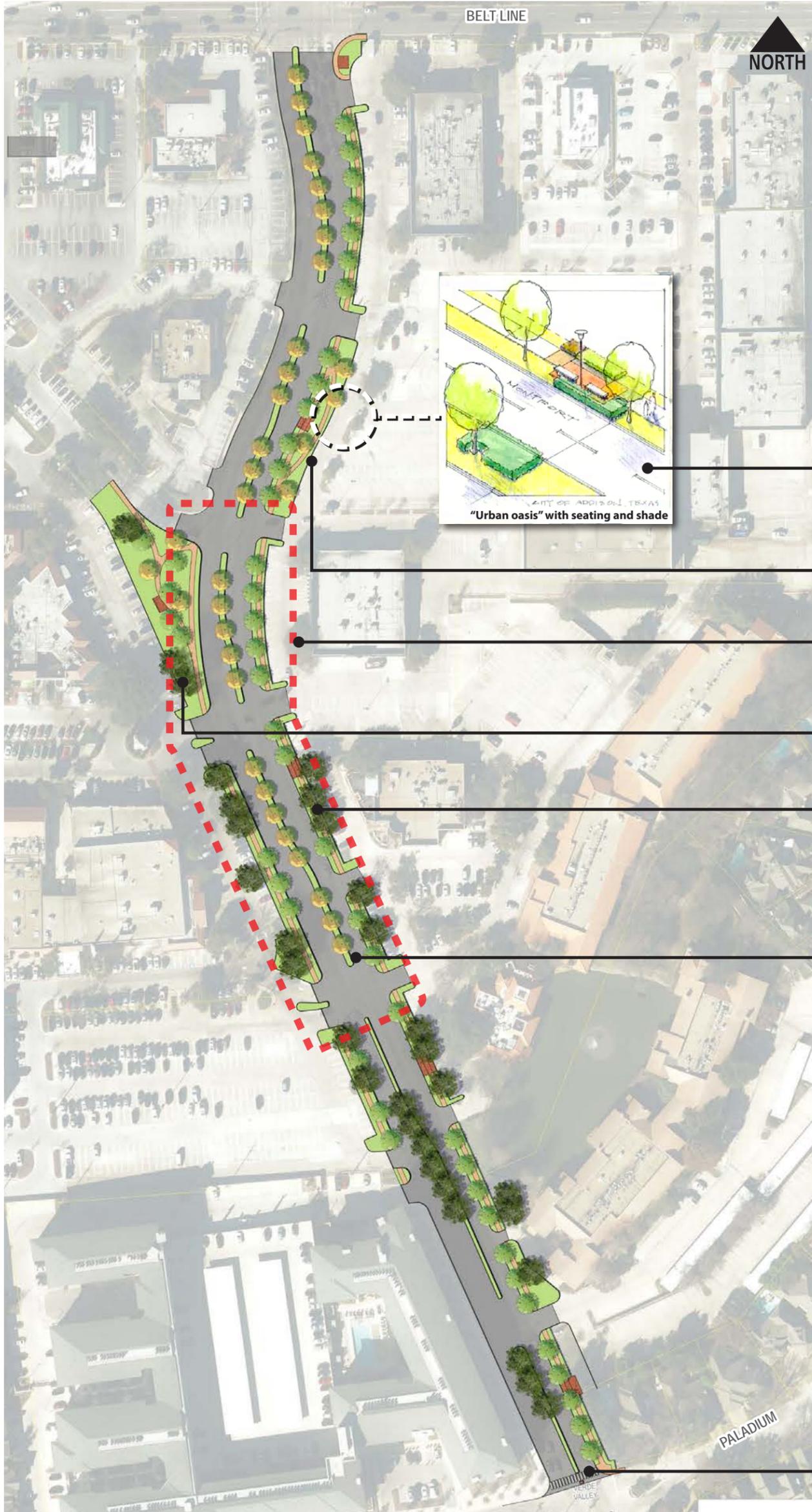


### ALTERNATIVE



# Montfort Drive Corridor Concept

Concept Limits: Belt Line Road to Verde Valley Lane



### Corridor Improvement Priorities (from Advisory Committee)

- |                   |               |
|-------------------|---------------|
| 1. Vehicles       | 3. Aesthetics |
| 2. Pedestrians    | Bicycles      |
| Economic Vitality | Transit       |

Small areas of enhanced streetscaping and seating to add visual interest along the corridor for pedestrians

Repurpose underutilized parking areas for small linear parks, increased landscaping, or additional sidewalk pathway improvements

Additional traffic signal and pedestrian crossings, if warranted and feasible (location likely within outlined area)

Pedestrian access into the retail areas can be improved with sidewalk connections through the existing landscape island

Create a continuous sidewalk pathway along the east side of Montfort. Additional ROW may be needed for landscape and sidewalk improvements.

Narrowing the travel lanes can allow for a wider median with areas for street trees

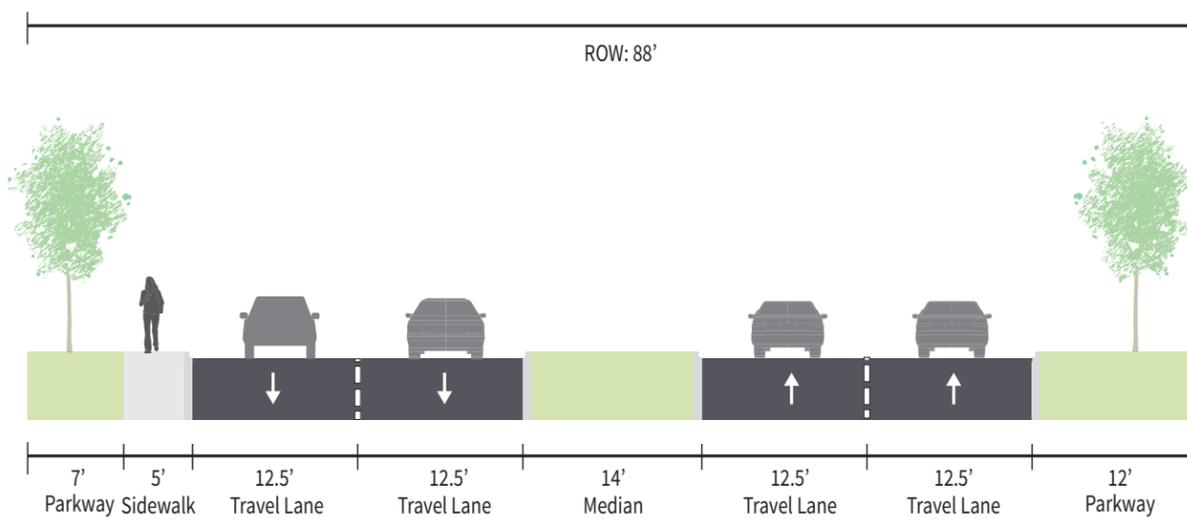
Increase pedestrian crossing visibility at the Montfort/Paladium intersection

#### LEGEND

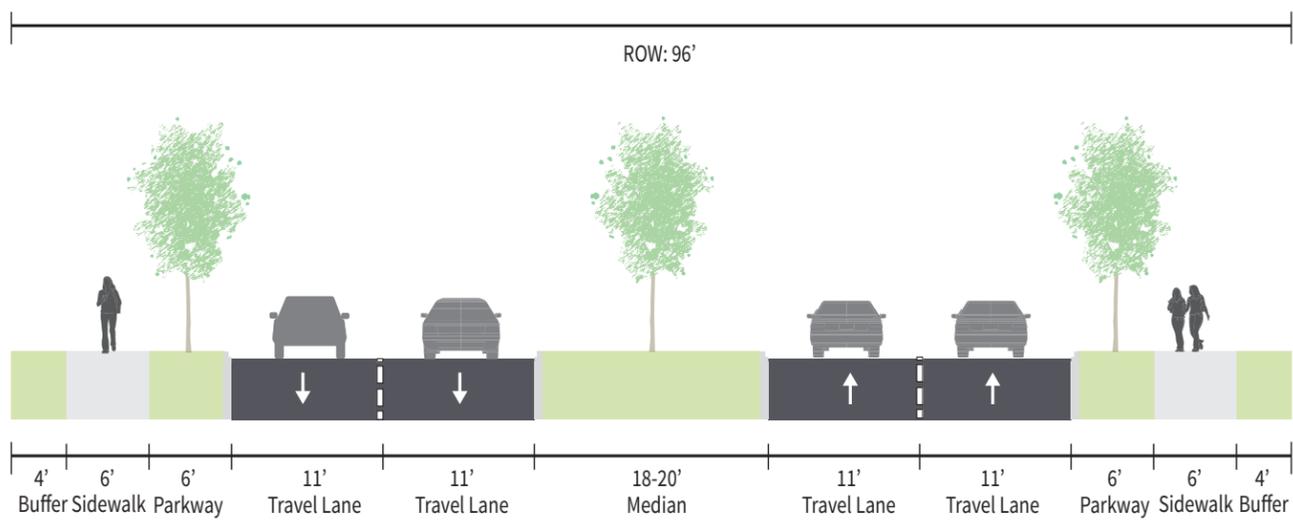
-  Existing Tree
-  Proposed Street Tree
-  Proposed Ornamental Tree

## Cross Section Summary

### EXISTING



### ALTERNATIVE



# Le Grande Drive Corridor Concept

Concept Limits: Beltway Drive to Winter Park Lane



### Corridor Improvement Priorities (from Advisory Committee)

- |                |             |
|----------------|-------------|
| 1. Pedestrians | 3. Bicycles |
| 2. Safety      | Environment |
| Aesthetics     | Parking     |

Connect new sidewalk to the existing sidewalks along Beltway and create a high visibility pedestrian crossing across Beltway. Curb extensions may be used to reduce the crossing distance across Beltway.

Reduced travelway from 36' to 26' allows for the addition of sidewalks to both sides of Le Grande within the existing right-of-way

Reduced travelway width accommodates on-street parking and may encourage slower travel speeds

Potential opportunities for some areas of new landscaping

Sidewalk placement outside the existing curb line reduces the impact to existing neighborhood landscaping

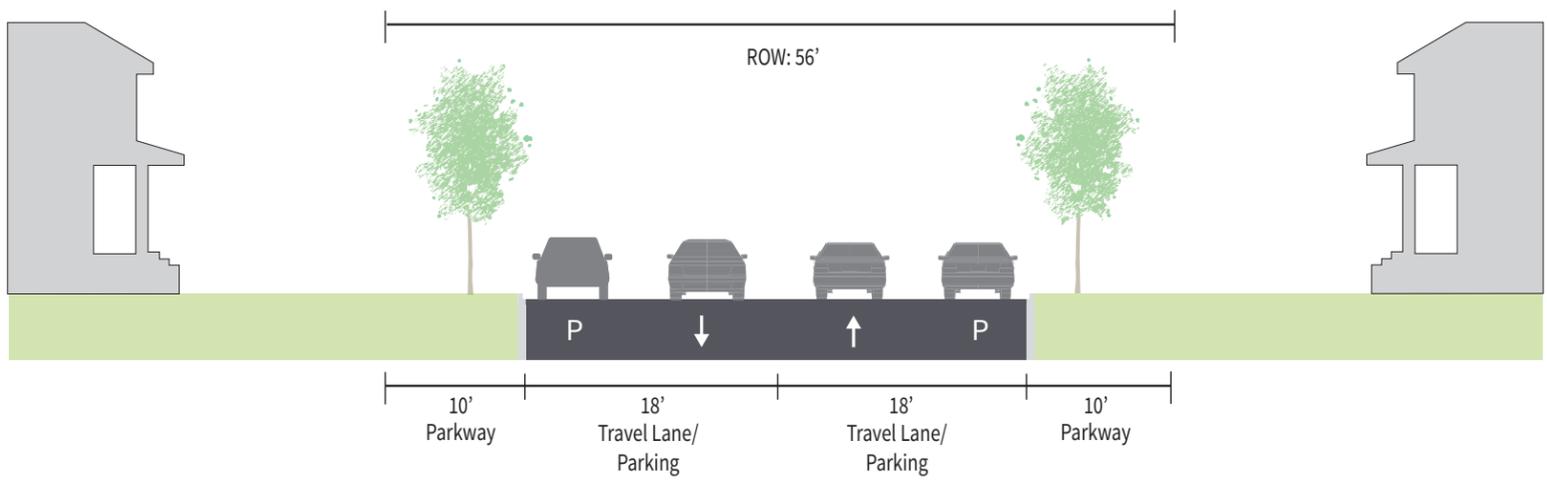
Note: The impact on mailboxes and ADA accessibility will need to be studied should the project be investigated further

#### LEGEND

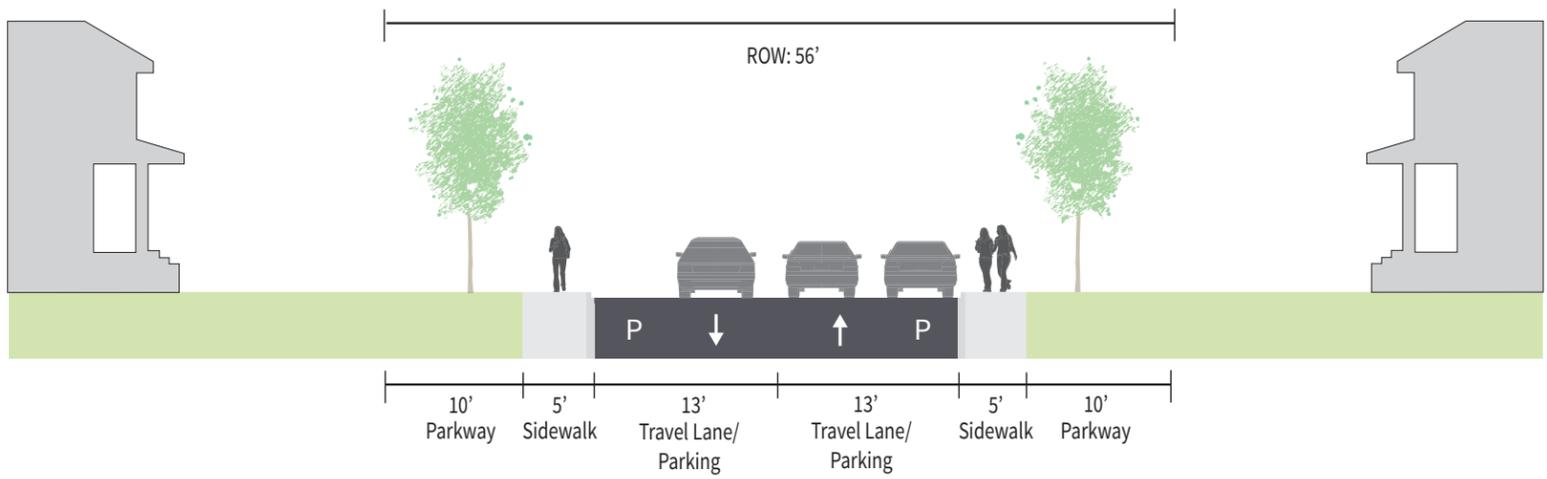
-  Existing Tree
-  Proposed Street Tree
-  Proposed Ornamental Tree

## Cross Section Summary

### EXISTING



### ALTERNATIVE



# Belt Line Road Corridor Concept

Concept Limits: Midway Road to Beltway Drive

### Corridor Improvement Priorities (from Advisory Committee)

- |               |                   |
|---------------|-------------------|
| 1. Vehicles   | 3. Pedestrians    |
| 2. Aesthetics | Economic Vitality |
|               | Safety            |



Dedicated right-turn lane to increase intersection capacity at the Belt Line/Midway intersection

Enhanced 20-foot parkway with a continuous 8-foot sidewalk on both sides of Belt Line

Double row of trees may be possible in some wider parkway sections

Cross access drive between adjacent developments allows vehicles to easily circulate between businesses without re-entering Belt Line

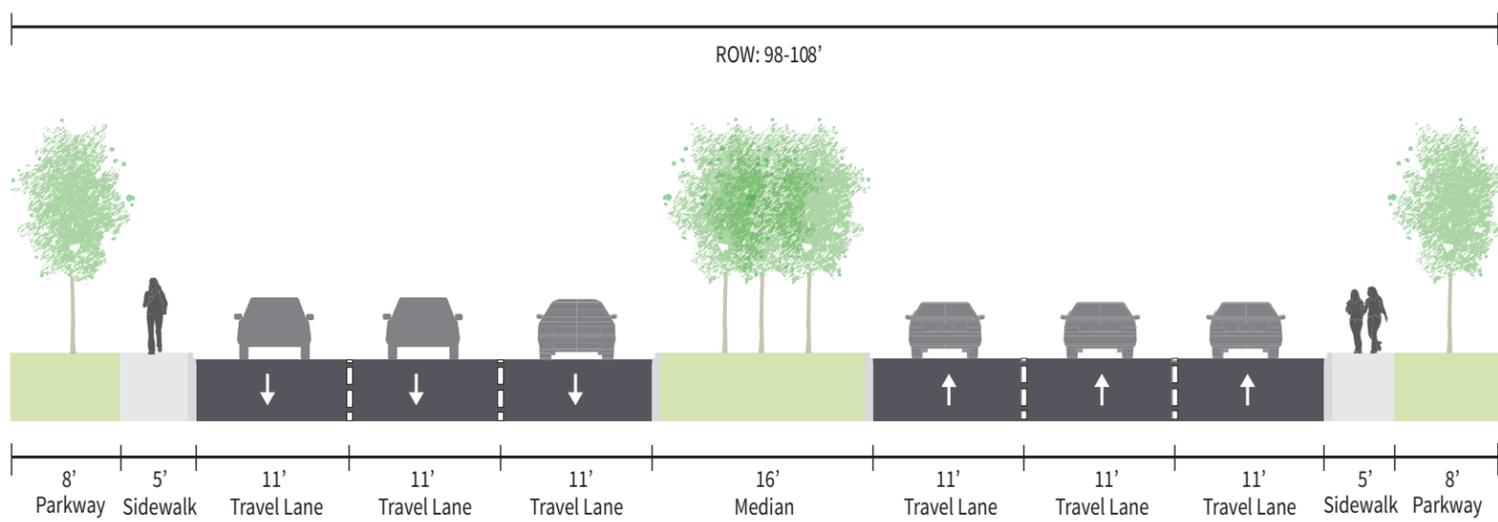
Potential enhanced pedestrian crossing to improve connectivity between the north and south sides of Belt Line

#### LEGEND

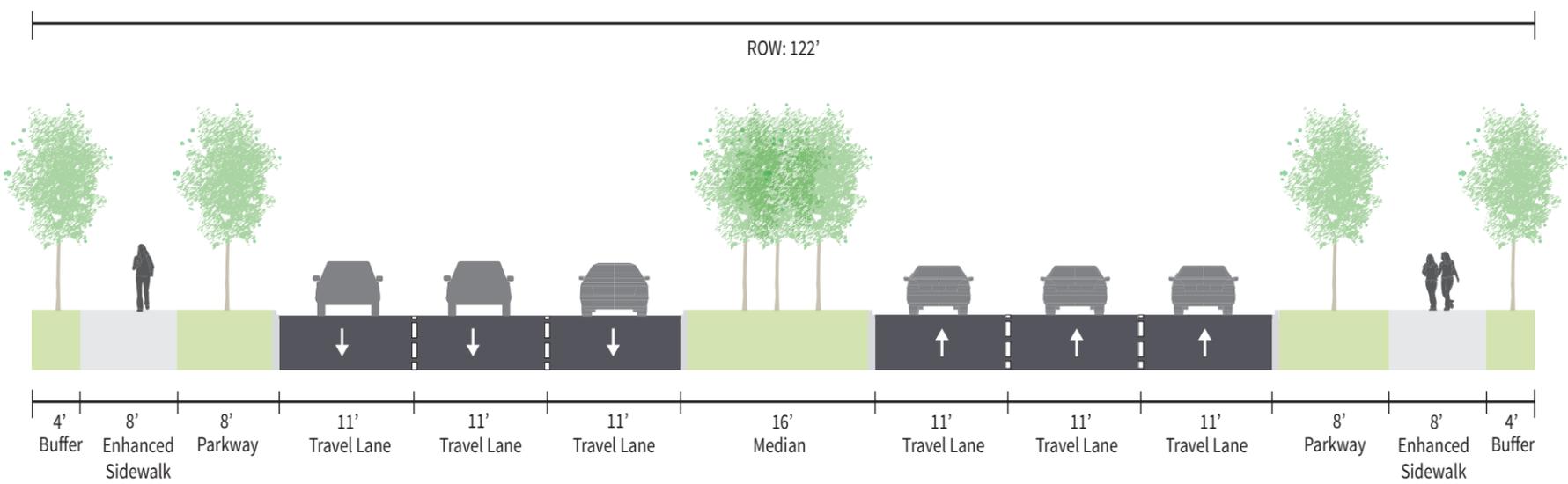
-  Existing Tree
-  Proposed Street Tree
-  Proposed Ornamental Tree

## Cross Section Summary

### EXISTING



### ALTERNATIVE



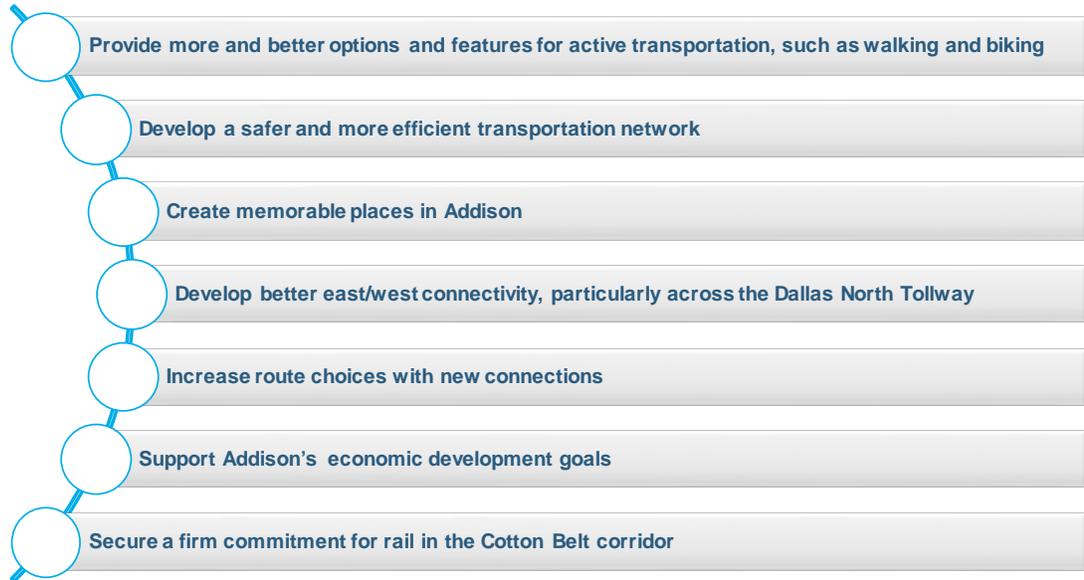


*Quorum Drive*

# RECOMMENDATIONS

# OVERALL TRANSPORTATION PRIORITIES

The new plan is structured around the transportation priorities identified by the community during the planning process. In summary, those were to:



Alternative modes of transportation are means of commuting or traveling other than driving alone in a car. Options include walking, biking, and taking transit. While passenger cars and trucks will continue to be an important part of the transportation system in the future, nearly any trip that is shifted to a different mode has the potential to lower congestion, reduce air pollution, make the street safer, preserve open space, reduce noise, and even promote better health if the person traveling chooses to walk or bike.



Particularly noteworthy in this process has been the emergence of a strong desire for better pedestrian and cycling improvements and better transit service, especially rail. By addressing these goals and the community's wishes for quality aesthetics, better connectivity, and more route choices, Addison will continue to attract the residents, businesses, workers, and visitors that will help keep the Town economically viable in the years to come.

# RECOMMENDATIONS

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## The 1998 Thoroughfare Plan

As part of this update, the actions recommended in the 1998 plan were reviewed. Changes in traffic conditions since that time, and changes projected through the year 2040, were also studied. Several of the most important recommendations from the earlier plan have been completed, in whole or in part—Arapaho Road has been extended, the Keller Springs Toll Tunnel is in place, the Landmark Place connection to Inwood Road has been constructed, and Spectrum Drive has been improved north of Arapaho Road. Other improvements recommended in the 1998 plan are being carried forward because they have not been completed and are still important to the overall system.

In many cases, where the improvements have not been fully implemented, progress has been made, but the lack of the necessary right-of-way has proven to be an obstacle. In other situations, traffic conditions have stabilized or changed over the years, and concern over future roadway capacity is not as intense as it once was. The opening of the President George Bush Turnpike and the recent improvements to LBJ Freeway have taken some of the pressure off of local east/west arterials, for example.

## 2016 Master Transportation Plan Recommendations

The recommendations below address these new community priorities as well as improvements that will respond to the needs of drivers. These recommendations are divided into six categories:

**Street Modifications**

Changes to existing streets

**Pedestrian and Cycling Enhancements**

Features to encourage walking and biking

**New Street Segments**

New roadway connections

**Major Connectivity Project**

A new pedestrian/bike connection across Dallas North Tollway

**Transit Projects**

DART rail service and a possible shuttle/circulator system

**Other**

Minor maintenance and repair projects

The tables on the following pages includes a list of improvements, their general location, a brief description of current conditions, and the recommended action items.

Street Modifications			
Improvement	Project Limits	Existing Condition	Recommended Action
Addison/Inwood Road*	North Town Limit to South Town Limit	4U and 4D	Widen to 4D in the remaining locations as right-of-way becomes available
Arapaho Road*	Quorum to Dallas North Tollway	Mostly 6D	Widen to 6D in the remaining locations as right-of-way becomes available
Quorum Drive*	Westgrove to Dallas North Tollway	Quorum 4D Westgrove 2U	Reconfigure the intersection when the adjacent property develops so that Quorum is the through movement at Westgrove

**D = Divided** **U= Undivided**

\*Carried forward from the 1998 Transportation Plan

**Addison/Inwood Road:** Addison/Inwood Road stretches from the north to the south town limits. North of Belt Line, the street is called Addison Road; south of Belt Line, it becomes Inwood. In almost all areas, the roadway is a 4-lane undivided street. Because Addison Road improvements may be included in a future bond program, the consultant team was asked to develop a new street section for community comment (the Addison Road Corridor Case Study). The section that was developed for a portion of the road north of Arapaho Road included a new 10-16 foot median (width could vary based on surrounding conditions) and an enhanced streetscape. A roadway of this type would address the highest priorities for Addison Road based on the Advisory Group's input (aesthetics/sense of place with consideration for vehicles and pedestrians).

**Arapaho Road:** Arapaho Road within Addison is a 4-lane divided street except in the Midway/Marsh vicinity. In the few areas where the street is not divided, if right-of-way becomes available, a median could be constructed where one does not currently exist.

**Quorum Drive:** A reconfiguration of the Quorum/Westgrove intersection is planned when the adjacent property develops. The new design would create a T-intersection giving Quorum, a four-lane divided street, the predominant through movement.

## New Street Segments

Improvement	Project Limits	Existing Condition	Recommended Action
Gillis Road/Beltway Drive*	Arapaho Road to South Town Limit	2U where in place as Beltway; no road to the north and south	Extend Gillis as a 3U or 4U Collector to connect to Gillis Road/Maxim Drive if extended in Farmers Branch; Extend Beltway as a 3U or 4U between Belt Line and Arapaho
Landmark Boulevard*	Current terminus east of Inwood Drive to Dallas North Tollway	No road	Extend to Dallas North Tollway as a 4D
Beltwood Parkway	Current terminus of North Beltwood Parkway to Inwood Road	No road	Extend North Beltwood Parkway from East Beltwood Parkway to Inwood Road as a 4U street
Beltway Drive	Current terminus to Inwood Road	No road	Extend Beltway east to Inwood Road as a Commercial Collector
Artist Way Connection	Addison Road to Artist Way	No road	Develop a new connection between Addison Road and Artist Way with the development of the adjacent property
Alpha Road/Bella Lane	Near Vitruvian and Brookhaven College	No road	Develop a new street segment to connect Alpha Road with Bella Lane in the Vitruvian area

**D = Divided**

**U = Undivided**

\*Carried forward from the 1998 Transportation Plan

**Gillis Road/Beltway Drive:** There is a desire on the Town's part to extend the north/south segment of Beltway south to connect to Gillis Road/Maxim Drive in Farmers Branch and to extend Beltway from Belt Line north to Arapaho. The Gillis Road construction would most likely require the demolition of all or portions of several buildings and parking lots, but it would open up a new north/south connection from Beltway to Spring Valley Road. This street also has the potential to provide more active transportation opportunities between the two cities.

The extension of Beltway to the north would most likely occur along with development of the property at the northeast corner of the intersection and would provide a new connection to Arapaho Road between Addison Road and Midway.

**Landmark Boulevard:** Landmark Boulevard currently terminates east of Inwood Road, where it takes a 90 degree turn to the north and transitions into a private driveway. Extending Landmark Boulevard to the east would provide an additional connection to Dallas North Tollway between Landmark Place/Quorum Drive and Spring Valley Road.

**Beltwood Parkway:** North Beltwood Parkway currently terminates at East Beltwood Parkway. Extending North Beltwood to Inwood Road would provide a new east/west connection between Midway and Inwood Road south of Beltway, and if the Gillis Road/Maxim Drive connection is made, would create an internal grid system to help distribute traffic in the surrounding area.

**Beltway Drive:** Extending Beltway Drive eastward to Inwood Road would provide another east/west reliever to help disperse traffic in the area south of Belt Line Road and further reinforce the internal grid system described above under the Beltwood Parkway recommendation.

**Artist Way Connection:** There is a desire for a new street between Addison Road and Artist Way to provide another connection to the Addison Circle area from the west. This street would likely be constructed as part of the redevelopment of some of the property on Addison Road.

## Transit Projects

Improvement	Project Limits	Existing Condition	Recommended Action
DART Cotton Belt Rail	Extends east to west through Addison along the Cotton Belt rail right-of-way	Right-of-way and Transit Center in place	Continue to advocate for the timely construction of rail to connect Addison with points east and west
Addison Shuttle/ Circulator System	In the area(s) generating the most demand (along Belt Line Road, in Addison Circle, and near major employers)	No system	Explore the possibility of a partnership between DART, the Town, area hotels and restaurants, and major employers to develop a local shuttle/circulator system
DART Service to Vitruvian	See New Street Segments, Alpha Road/ Bella Lane above	No service	Explore the possibility of a pilot project to provide DART bus service to the Vitruvian area via the proposed Alpha Road/ Bella Lane connection
Bus Stop Improvements	Various locations	Some shelters and improvements in place	Upgrades to shelters and other pedestrian amenities

**Cotton Belt Rail Service:** The Town of Addison continues to be a staunch supporter of DART rail in the Cotton Belt corridor. The proposed alignment would connect Addison to Downtown Plano, Richardson, North Dallas, and DFW Airport. Town officials should continue to advocate for the construction of rail in the shortest time frame possible to address the community's desire for connections to DFW Airport and entertainment and recreation destinations served by the DART line.

**Addison Shuttle/Circulator System:** During the community meetings, some of those attending suggested that the Town look into establishing a local shuttle or circulator system to provide frequent service with extended hours (for restaurant and bar patrons) to some of the more popular destinations in Addison. Systems such as these often require the participation of multiple parties and may still be financially infeasible; however, contacts could be made with DART and some of the potential users to discuss the possibility of a pilot project.

**DART Service to Vitruvian:** The Vitruvian area in Addison is currently not well-served by transit. The growing number of residents and plans for more development in the area will increase the pool of potential bus riders. A test of the demand for bus service to this area should be pursued through a pilot program utilizing a proposed new street that would connect Alpha Road at the Addison/Farmers Branch border near Brookhaven College to Bella Lane, Ponte Avenue and Vitruvian Way.

**Bus Stop Improvements:** Better accommodations for transit users can help attract new riders and retain existing ones, improving DART's performance measures and decreasing congestion on city streets. A partnership between the Town of Addison and DART could focus on the creation of safe, attractive, and comfortable bus shelters and pedestrian amenities. Modern shelters that better reflect the Addison "brand" could be installed with better lighting, upgraded benches, trash receptacles, and possibly public art installations at key locations.

## Pedestrian and Cycling Enhancements

Improvement	Project Limits	Existing Condition	Recommended Action
Pedestrian Enhancements Along Belt Line Road	All sections	Inconsistent pedestrian infrastructure; no mid-block crossings	Rebuild the parkway to include wide sidewalks, street trees, and other pedestrian-friendly amenities
Walkability Improvements on Quorum Drive	Arapaho Road to the southern end of Quorum Drive	Narrow sidewalks; limited lighting	Add pedestrian and landscape enhancements to transition from the Addison Circle environment to the southern end of Quorum Drive
Pedestrian Enhancements on Montfort Road	Belt Line Road to South Town Limit	Inconsistent pedestrian infrastructure; narrow sidewalks located back of curb; no mid-block crossings	Add pedestrian enhancements along the street; potential installation of a new traffic signal with pedestrian crossing at one of the drives at Village on the Parkway
On-street Bicycling Pilot Project	One or more of the Active Transportation Corridors	No marked on-street bike lanes	Develop a concept and implement a pilot program of cycling oriented improvements in one or more of the Active Transportation corridors
Trail Markers and Wayfinding Improvements	Various locations throughout the Town	No markers or wayfinding signs	Install markers/signs to direct walkers and cyclists to active transportation corridors and other trails
Le Grande Drive Sidewalks (optional)	Beltway to Winter Park	No sidewalks	Explore the possibility of adding sidewalks and street trees within the existing right-of-way if supported by the residents

**Belt Line Road:** Belt Line Road improvements compatible with existing plans for this corridor could include parkways of up to 20 feet along both sides of the street, with 8 foot sidewalks and street trees contained therein, creating a pedestrian-friendly walking environment. One or more enhanced pedestrian crossings could be developed to allow safe north/south crossing.

One other concept worth investigating is the development of a system of cross access between the commercial properties on the north side of Belt Line. This system, essentially a major driveway, could be located in front of the buildings or behind them. The goal would be to eliminate the need for drivers to enter onto the public roadway in order to circulate between properties. (See Corridor Case Study)

**Quorum Drive:** To provide a pleasing transition from Addison Circle to the southern end of the corridor, Quorum Drive could be improved with street trees and other plantings, wide sidewalks, appropriate hardscape elements, and pedestrian plazas, perhaps including public art, at key locations. (See Corridor Case Study)

**Montfort Road:** To respond to the community's desire for better, safer pedestrian access from neighborhoods east of Montfort Road to the Village on the Parkway, the travel lanes in the roadway could be narrowed slightly to increase the width of the median for landscaping, and pedestrian enhancements such as street trees, continuous sidewalks, a safe crossing haven, and small pedestrian plazas at key locations could be added adjacent to the roadway. The possibility of a new traffic signal at one of the Village driveways should also be studied. A project such as this should include a pedestrian crossing with enhanced paving or markings, and perhaps pedestrian actuation of the signal. (See Corridor Case Study)

**On-street Bicycling Pilot Project:** Although the desire for bicycling accommodations was not as strong as the desire for pedestrian improvements, about half of the people that took part in the Online Survey indicated they would ride a bicycle often or occasionally if cycling features were in place. To respond to this input, the Town could select one of the Active Transportation Corridors, tailor the cycling improvements to the surrounding land use context, and develop a pilot project. This project would be relatively easy and inexpensive to implement, and if monitored properly, would allow the Town to determine whether there is enough demand in the community for more improvements of this type.

**Trail Markers and Wayfinding:** At the community meetings, the suggestion was made that the Town install markers along the active transportation corridors to identify the preferred on-street trails, including distances to other trails, parks, and popular destinations. Additional steps could include adding other wayfinding information and even developing a bicycling app. Improvements of this type could be a relatively low-cost first step; however, even for projects of this type, ongoing maintenance costs will be incurred.

**Le Grande Drive (optional):** There are neighborhoods or portions of neighborhoods in Addison that were constructed without sidewalks. Where these neighborhoods front on a collector roadway, there may be enough room to construct sidewalks within the existing right-of-way. This would require a slight narrowing of the travel lanes and placement of the sidewalks adjacent to the roadway, and the impact of the reconstruction on existing mailboxes and Americans with Disabilities Act (ADA) requirements for accessibility will need to be studied if the projects moves forward. A project of this type should only be considered, however, if there is sufficient support from the affected neighborhood. (See Corridor Case Study)

## Major Connectivity Project

Improvement	Project Limits	Existing Condition	Recommended Action
Connection over/under the Dallas North Tollway	Belt Line Road at Dallas North Tollway and/or Quorum/Verde Valley at Dallas North Tollway	Belt Line - 6D Quorum/Valley Verde - 4D	Begin discussions with NTTA and the City of Dallas about a crossing of the Tollway to allow safe walking and biking between east and west Addison

**Connectivity at Dallas North Tollway:** Throughout the update process and in the feedback opportunities, the community expressed a strong interest in a safe east/west connection across the Tollway for pedestrians and bicyclists. Potential locations are at Belt Line and at Quorum/Verde Valley. One of the difficulties with this concept is that Addison controls very little of the right-of-way that would be required for such a project. The North Texas Tollway Authority and the City of Dallas would need to participate in a project like this; nonetheless, discussions with the other entities should be initiated so that the possibilities, potential design challenges, and preliminary cost estimates can be considered.

## Other Improvements

Improvement	Project Limits	Existing Condition	Recommended Action
Intersection Modifications	Various	Varies	Install ADA improvements, right-turn turn lanes, dual left-turn lanes, etc. where missing
Sidewalk Gap/Sidewalk Repair Program	Various	Varies	Develop a program to address missing sidewalk links and repair needs

**Intersection Improvements:** The need for minor modifications to roadway intersections should be monitored on an ongoing basis. The addition of right-turn lanes and dual left-turn lanes can add significant capacity to an intersection, reducing congestion, delay, and air pollution. These types of projects also provide an opportunity to make ADA improvements where they are needed.

**Sidewalk Gap/Repair Program:** Participants at the community meetings and in the Advisory Group noted locations along important roadways where sidewalks are missing or in disrepair. Existing conditions should be inventoried so that a program can be developed to address these deficiencies. This is likely to be a multi-year project funded through the sale of bonds. Locations and specific needs should be prioritized and coordinated so that contractor mobilization costs can be minimized.

## IMPLEMENTATION

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The most challenging aspect of this plan will be the implementation. The community's street network is essentially in place. Few new connections are recommended. The plan focuses largely on enhancements and expansions to existing roadways. These enhancements involve better accommodations for alternative transportation, including aesthetic improvements. These issues are among the highest priorities expressed by Addison residents and businesses during the community engagement phase of the study. In many cases, the enhancements and street expansions that the plan anticipates will require right-of-way or easements from developed properties.

Going forward, opportunities to address transportation needs may arise from projects other than development, including:

- Capital improvements
- Utility-related construction
- Minor maintenance projects

## FUNDING

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Nearly all of the recommended improvements will be costly, and securing the funds for project design, right-of-way acquisition, and construction will be a challenge. Combining funds from multiple sources can help ease the burden on taxpayers, but the City will undoubtedly still provide a significant share of the costs. Some of the potential funding sources for the recommended action items include:

### Bonds

A municipality has the authority to issue bonds to finance the construction of public improvements. Bonds can be an efficient and effective means of financing large public projects such as many of the ones recommended here. If the issuance of the bonds is subject to voter approval, advance planning will be required.

## County or Regional Transportation Funds

Though more limited than in the past, funding administered at the county or regional level can be used for transportation projects aimed at improving mobility and air quality, particularly if the projects connect to a larger regional system or satisfy a regional need. Funding is made available for transportation projects through county bond programs; the federal government funds the regional programs from gasoline tax revenues and other sources. Regardless of the source, projects almost always compete with proposals from other cities for approval. Applications are accepted on a periodic basis, and funding may be distributed over a multi-year time period. Cities are usually responsible for a portion of the cost of each project (referred to as the “local match”) as a condition of receiving the remainder.

The good news is that the definition of “transportation” is broad enough to cover not only applications for street projects, but also features for alternative modes of transportation (sidewalks and trails for walking and biking) and for intersection improvements, which can reduce vehicle delay and improve air quality.

## Grants from Outside Agencies

Periodically, outside agencies and organizations provide opportunities for grants and other funding to help promote projects consistent with their goals. Transportation and sustainability have been the subjects of a number of grant programs in the past, but there are other objectives as well.

The National Endowment for the Arts (NEA), for example, has an Our Town grant program that focuses on incorporating art into community placemaking. If the Town is interested in public art as part of a street or pedestrian enhancement project, this could be an opportunity.

As with other types of outside funding, the city or organization seeking a grant is often required to provide in-kind services or some percentage of the total funding for a project that is approved. The important thing is to be creative, proactive and persistent when looking for grant funds.

## Development Projects

When development or redevelopment occurs on private property, there is a requirement to dedicate right-of-way, if required by the Master Transportation Plan, as part of the approval process. The responsibility for construction of the improvements may lie with the developer, the city, or it may be shared between the two. The 2016 plan acknowledges the state of development in Addison by building in a degree of flexibility as to the right-of-way requirement to address existing conditions. The goal is to continue to encourage new development and to achieve the intent of the cross section as much as possible, even where conditions are not ideal.

## Private Funds or In-Kind Donations of Land

In special cases, property owners, business entities or even private citizens may decide to make donations towards significant public improvements, particularly landmark or iconic projects. In other instances, a property owner may choose to dedicate right-of-way, easements and/or make improvements to existing facilities whether or not there is a development or redevelopment project, particularly if the Town is planning a construction project adjacent to the property in question.

## AMENDMENTS AND UPDATES TO THE PLAN

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The Master Transportation Plan delineates thoroughfare alignments, sets the minimum standards for roadway design, and provides guidance for design flexibility to accommodate multi-modal connections and respond to varying land use contexts and physical constraints. Future transportation improvements completed during capital projects, utility-related construction, minor maintenance projects, and private development projects will not require an amendment to the MTP as long as the roadway alignment and design is in basic accordance with the plan.

The implementation of future thoroughfare alignments may vary somewhat from this plan and will be determined through the subdivision development process and the preliminary engineering phase of construction. Slight modifications to thoroughfare locations, such as minor deviations of an alignment several hundred feet one way or another or changes in roadway curvature, may be approved by city staff as long as the intent of the Master Transportation Plan to provide system connectivity and appropriate types of facilities is not compromised. Any proposed development determined to be inconsistent with the MTP in terms of classification and/or location will require an amendment of the MTP before it can be approved. Property owners, land developers, and city staff may propose changes to the Master Transportation Plan. Any MTP amendment must be presented to the Addison Planning & Zoning Commission and City Council for public hearings and approval.

This plan looks ahead to approximately 2040 in terms of its horizon; however, periodic review of the document (approximately every five years) is recommended so that the Town and the community have an opportunity to:

- Assess changes to existing and future transportation-related conditions
- Explore evolving community attitudes and desires
- Incorporate emerging transportation concepts, techniques, and technologies
- Revisit the list of recommended actions and improvements and revise as necessary

The needs and desires of the public are important considerations in Addison's decision-making process. Major transportation projects and studies may warrant additional community input opportunities similar to the process utilized during the development of this plan. These projects may include corridor studies, bicycle and pedestrian facility implementation, and future updates to the MTP. A major review of the plan should be undertaken approximately every five years to evaluate traffic and growth trends and to assess the goals, policies, and recommendations in the plan. Minor amendments can be made prior to a major update to incorporate the results of other specialized transportation studies or to reflect interim changes to the Thoroughfare Plan Map.



# APPENDIX



# PUBLIC INPUT SUMMARY

## Kick-Off Meeting - March 14 & 16, 2016

### Participant Demographics

<b>Number of Participants</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Number of Addison resident participants	37	21
Number of Addison-area worker participants	3	1
<b>Gender</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Male participants	13	14
Female participants	20	12
<b>Involvement in Addison</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Owner/Representative of owner of commercial property (not business owner)	0	0
Owner/Representative/Employee of a business (not owner of the property)	1	0
Owner of a business and commercial property	1	0
Resident, but not a homeowner	4	3
Owner and resident of a home	28	23
None of the above	0	0
<b>Length of Residency</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Less than one year	1	2
One to five years	9	5
Six to 10 years	5	8
More than 10 years but less than 20 years	14	5
20 years or more	4	6
Don't live in Addison	1	0

## Transportation Priorities

<b>What are Addison's transportation priorities for the future?</b>		
<b>Prepared list of priorities</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Develop more efficient traffic circulation	10	8
Improve transportation safety	7	4
Provide more transportation choices/alternatives	2	4
Support Addison's economic development goals	12	3
Encourage an active, healthy lifestyle	10	9
Minimize the impact of transportation on the environment	6	3
Accommodate physically challenged individuals (accessibility)	1	2
Maximize the opportunities available within the existing transportation infrastructure	6	2
Plan, design, and fund new transportation infrastructure needs	3	3
Maintain the existing transportation infrastructure properly	9	4
<b>Additional write-in priorities and comments</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Get the Cotton Belt by 2019	9	5
East-West Beltway Trails (from Cantina Laredo to Tollway)	2	2
Better Marketing to create awareness of other Belt Line routes (e.g. Arapaho Rd.)	2	2
Improve pedestrian safety in and around Addison Circle	4	3
Educate use of traffic circles	2	1
More sidewalks	4	7
Traffic Calming on Beltway	4	3
Consider use of more roundabouts to facilitate traffic flows in high density areas. More RA's could become a distinctive Addison branding feature. To facilitate traffic flow and display art sculpture at the center.	1	

## What are Addison's transportation priorities for the future?

<b>Additional write-in priorities and comments</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Wider sidewalks – need room for bikes.	1	2
Transform Addison into an eco-friendly, walkable, connected-via-pedestrian and bicycle pathways, beautiful urban environment that is the gold standard for urban planning.	4	8
Improve traffic safety at Montfort/Valley Verde/ Palladium		5
Improve walkability on Eastside of Tollway		3

## Visual Preference Priority Boards

<b>Health and Safety</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Active Transportation	4	3
Walkable Neighborhoods	3	7
Traffic Calming	3	2
Accessibility	0	2
<b>Public Investment and Economic Development</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Roadway Improvements	1	1
Context Sensitive Street Design	9	1
Transportation to Support Economic Development	2	3
Streetscape Improvements	2	0
<b>Transportation Efficiency</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Traffic Circulation	0	1
Intersection Improvements	3	5
Improved Transit Service	0	1
Connectivity	3	2
<b>Transportation Choices</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Bicycling	5	6
Local/Circulator Transit	2	4
Walking	3	6
Express/Regional Transit	0	0

## Additional Priorities (Flip Chart Comments)

	03/14/2016	03/16/2016
Sidewalks	2	1
Crosswalks	3	1
Ability to walk down Addison Road from the circle at least to Keller Springs - Town-owned land is a mess to walk by	1	
Across Belt Line in all intersections pedestrian markings		4
2019 or later on Cotton Belt		1

## Desired Connections (Flip Chart Comments)

- Jump on/off bus/trolley Friday/Saturday PM up and down Belt Line to get rid of traffic and reduce drunk driving
  - Events, especially Kaboom Town, have later run of busses to follow event and 1-2 hours
  - DART connections to Airport (DFW and Love)
  - Sidewalk gaps – Airport post office and Mary Kay
  - Improve bus shelters/stops
  - Improve Kaboom Town traffic routing
  - Pedestrian crossing over the Tollway to connect East and West Addison
  - Left-hand turn onto Belt Line from Southbound Dallas Parkway
  - Next bus and routing technology at bus stops
  - Rationalize parking
  - In the Belt Line/Midway area near the new
- development – more internal transit circulation or else it will seem isolated
  - Awareness of the bus/transit center and connections
  - Improve bus shelters – seats, coverings
  - Constant buses every half hour
  - Beltway and firehouse crossing – confusing signage for motorists has made intersection very dangerous
  - Park with trail across Tollway to Village on the Parkway
  - Possible East/West DART train line
  - DART bus traffic signal priority
  - East West connectivity to Village on the Parkway
  - Eastside Addison (East of Tollway) needs to be top of mind
  - Walkability from Finance building to Winn Park

## Desired Connections (Flip Chart Comments)

- East/West Transit Connectivity
- Arapaho and DNT pedestrian crossing not safe
- Signal timing coordination (like Belt Line)
- Cotton Belt Line
- Tollway-Frontage Road back up traffic
- Educate bikes on prepping pedestrians for them coming up behind them
- Bring “bike-share” to Addison
- Zip Cars – maybe test out with a local company
- Connections from Airport to hotels/ conference centers
- Need pedestrian crossing on Montfort at Village on the Parkway Desperately
- Light at Montfort and Verde Valley into Oaks North – that intersection is Dangerous. Something creates a scenario where cars run that light regularly. I was almost killed multiple times and I know to approach with caution. Please! Thank you.
- Improve pedestrian access from Finance Building to Winn Park
- Beacons for trail crossings

## Existing Transportation Concerns (Flip Chart Comments)

- Volumes on Beltway (and speeds)
- Pedestrians crossing Montfort near Village
- Proton and Ridge Lake sight issues
- More marked pedestrian crossings – Zebra markings
- Controlled trail crossing Beltway and fire station
- Pedestrian controls/safety
- No stop signs for speed and control – noise
- Minimize construction impact on Midway traffic
- More consistency and visibility for pedestrians (no pavers)
- Traffic calming in high pedestrian areas – public information
- Increased wayfinding and more visible (signing)
- Trail connectivity to neighboring communities
- Pedestrian cross markings on/across major roadways (Addison, Midway, Belt Line, etc.)
- Near Town Hall
- Connection from SF Residential area to all surrounding areas. Trails go no where
- No steps on Proton or Azure at or near Sherlock on bike trail
- Encourage bicycle parking at businesses

## Existing Transportation Concerns (Flip Chart Comments)

- Better detection for cyclists
- More East-West connectivity (Beltway?) or Valle Verde to the west
- Way for residents to get around town without going on principal arterials
- Early morning flashing lights instead of timed red/yellow
- Long light at Beltway/Midway already. What is impact of new residents where Sam's is now? How many times will it take to get through light?
- Left turn signal at Belt Line and Surveyor. Lots of times the arrow doesn't turn and it goes to regular green light
- Seriously fix Montfort Crossing (Dallas)
- Widen Valley Verde (Dallas)
- Signal change time – Valley Verde/ Montfort
- Should not night flash

## Kick-Off Meeting Comment Cards - March 14 & 16, 2016

	03/14/2016	03/16/2016
Number of persons signed-in	44	31
Number of comment cards returned	34	26
<b>Gender</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Male	39%	54%
Female	61%	46%
<b>Age group</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
0-17	-	-
18-30	6%	4%
31-50	9%	23%
51-64	38%	31%
65-79	44%	35%
80+	3%	8%
<b>I am most involved in Addison as:</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Owner/representative of an owner of commercial property (but not a business owner)	-	-
Owner/representative/employee of a business in Addison (but not owner of the property)	3%	-
Owner of a business and commercial property in Addison	3%	-
Resident, but not a homeowner	12%	12%
Owner and resident of a home in Addison	82%	88%
None of the above describes my involvement in Addison	-	-
<b>I have lived in Addison for:</b>	<b>03/14/2016</b>	<b>03/16/2016</b>
Less than one year	3%	8%
One to five years	26%	19%
Six to 10 years	15%	31%
More than 10 years but less than 20 years	41%	19%
20 years or more	12%	23%
I don't live in Addison	3%	-

## Comment Card General Comments - March 14, 2016

- Aesthetics on new construction.
- Remember to consider the additional traffic volume that may result from the development planned at Preston/Alpha/Valley View mall area.
- Sidewalks too narrow for bicycles. As a runner, I have been nearly run over several times & bike riders seem to think I am the problem!
- Crosswalks!
- Need better traffic flow at major intersections.
- Promote DART buses for residents.
- Keep fighting to bring DART rail to Addison.
- Speed bumps vs. stop sign at Beltway & Les Lacs.
- Yes for stop sign @ Le Lacs.
- As I am a walker, I am in favor of stop sign at Les Lacs & Beltway
- Want the stop sign at Beltway & Les Lacs.
- I want the stop sign at Les Lacs & Beltway - Be a lot safer.
- Thanks for the presentation and open communication.
- Just keep us informed of plans.
- Make use of existing infrastructure: Better maintain existing streets and sidewalks. Fill gap in sidewalk system near post office and DART bus stops.
- Provide more hike and bike connections: Wrapping around the perimeter of 15777 Quorum Drive Apartments there is a public easement that is designated as a fire lane where automobiles are prohibited. It is an underutilized section of expensive concrete. It should be recognized for its auxiliary purposes that the public is using it for including pedestrian walkway, dog path, and bike traffic.

## Comment Card General Comments - March 16, 2016

- Very skeptical of most “traffic calming” measures. Most that I have seen (as in Farmers Branch, etc.) are more aggravating than calming!
- We need to tie our pedestrian friendly areas together in a pedestrian friendly way. Belt Line is a horrible connection.
- More pedestrian friendly sidewalks.
- Add way to access east and west Addison south of Beltline; somehow get to Beltway Dr.
- Live off Montfort - very hard to cross Montfort to get to Village
- More parking for visitors to Village on the Parkway
- I am not at this time prepared to offer improvement suggestions, other than to say I am chagrined that Council members let vociferous citizens bully them for fear of not getting re-elected. As an engineer and past developer, I can say that your only primary east-west thoroughfare will continue to become more and more congested unless you can find a few small ways to help relieve the local traffic on B.L. “Calming” simply adds to congestion.
- Some kind of public transit.
- Create “people mover” carts by drivers.
- Zip cars & bicycle rental.

# Master Transportation Plan 2016 Update

Addison Town Council Briefing

April 12, 2016



Kimley»Horn



## Community Input and Findings

- Community meetings
  - Kick-off to provide information and gather input about issues and priorities
  - Follow-up to get feedback on alternatives
- Web-based information and engagement
  - Project website
  - Online surveys (1 or 2 surveys; Survey 1 complete)
- Advisory Group meetings
  - 2 or 3 meetings
- Council briefings
- Public hearings
  - P&Z
  - City Council

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## Community input process

- Two Community Meetings
  - March 14
  - March 16
- Online Survey
  - March 21 – April 8



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# Kick-off Meetings and Online Survey

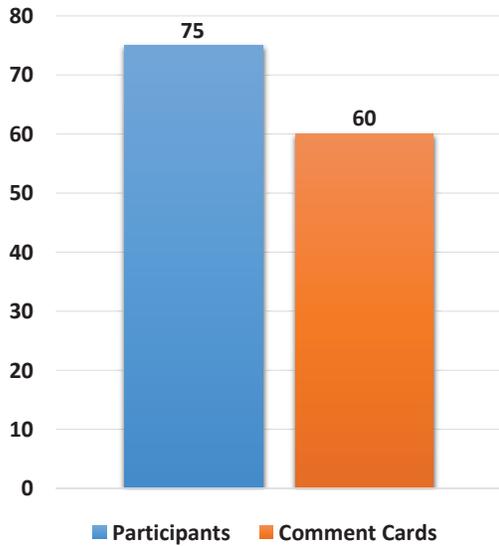
# Demographics

# Participation and Gender

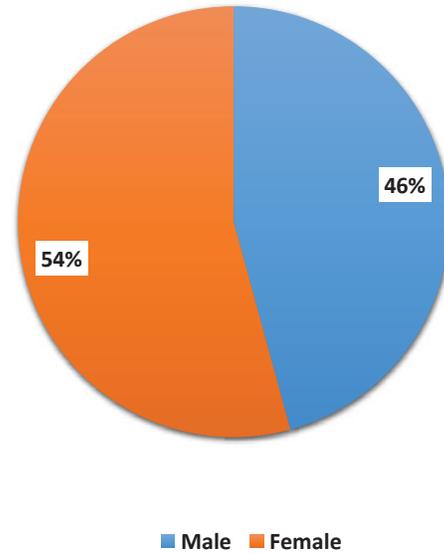


## Kick-off Meetings

### Participation and Comments



### Gender



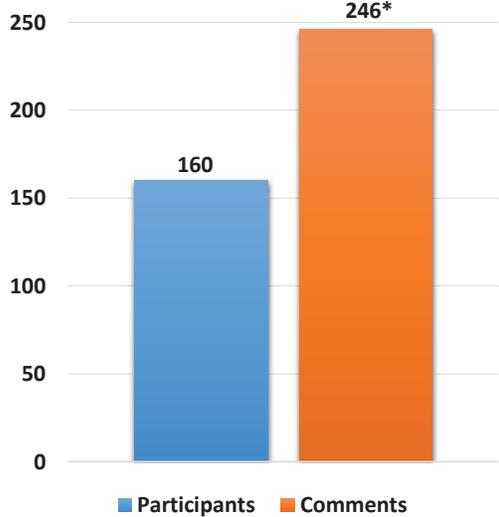
11

# Participation and Gender

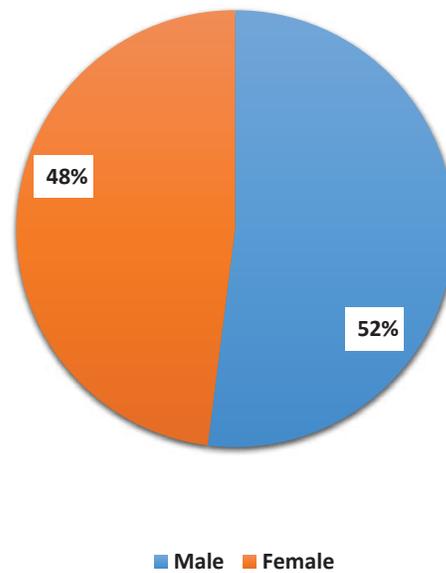


## Online Survey

### Participation and Comments



### Gender

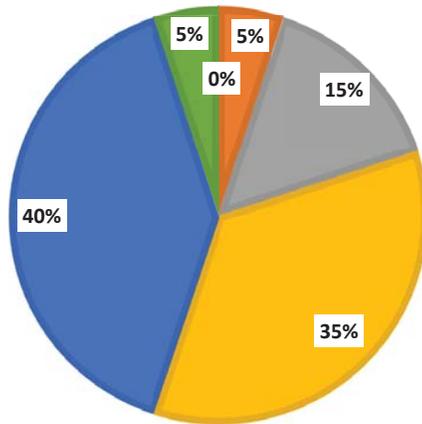


\* There were 5 questions with opportunities to comment; the number of comments for each of these question ranged from approximately 30 to 60

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## Kick-off Meetings

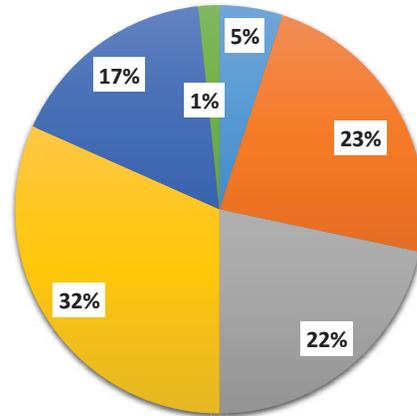
### Age of Participants



■ 0-17    ■ 18-30    ■ 31-50  
■ 51-64    ■ 65-79    ■ 80+

0% - 0-17 years

### Length of Residency

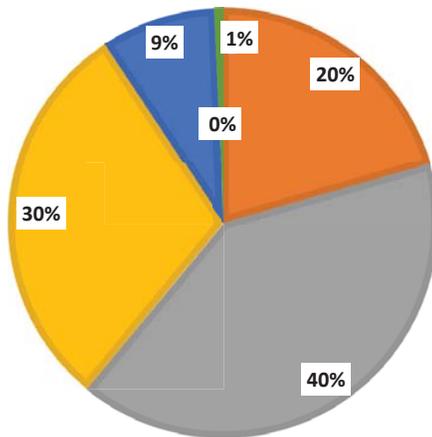


■ < 1 year    ■ 1 - 5 years  
■ 6 to 10 years    ■ >10 but < 20 years  
■ 20+ years    ■ Not a resident

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## Online Survey

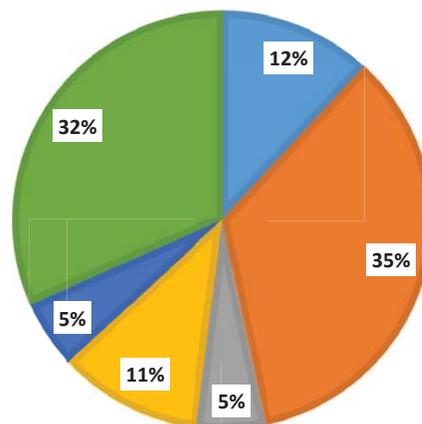
### Age of Participants



■ 0-17    ■ 18-30    ■ 31-50  
■ 51-64    ■ 65-79    ■ 80+

0% - 0-17 years

### Length of Residency



■ < 1 year    ■ 1 - 5 years  
■ 6 - 10 years    ■ >10 but < 20 years  
■ 20 years or more    ■ Not a resident

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## Most involved in Addison as...



### Kick-off Meetings

Rank	Description	Number (60)	%
1	Owner and resident of a home in Addison	51	85%
2	Resident, but not a homeowner	7	12%
3	Owner/representative/employee of a business in Addison (but not owner of the property)	1	1.5%
4	Owner of a business and commercial property in Addison	1	1.5%
	Owner/representative of an owner of commercial property (but not a business owner)	0	0%
	None of the above describes my involvement in Addison	0	0%
<i>Note: Two homeowners indicated that they also work in Addison</i>			

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## Most involved in Addison as...



### Online Survey

Rank	Description	Number (152 total)	%
1	Resident, but not a homeowner	50	33%
2	Owner and resident of a home in Addison	43	28%
3	Owner/representative/employee of a business in Addison (but not owner of the property)	39	26%
4	None of the above describes my involvement in Addison	15	10%
5	Owner of both a business and commercial property in Addison	3	2%
6	Owner/representative of an owner of commercial property (but not a business owner)	2	1%

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# Transportation Priorities

## Transportation Priorities

### Kick-off Meetings

Transportation Priorities for Addison's Future		
Rank		Total
<b>Prepared</b> list of priorities		
1	Encourage an active, healthy lifestyle	19
2	Develop more efficient traffic circulation	18
3	Support Addison's economic development goals	15
4	Maintain the existing transportation infrastructure properly	13
5	Improve transportation safety	11

## Kick-off Meetings

Transportation Priorities for Addison's Future		
Rank		Total
<b>Prepared</b> list of priorities		
6	Minimize the impact of transportation on the environment	9
7	Maximize the opportunities available within existing transportation infrastructure	8
8/9	Provide more transportation choices/alternatives	6
8/9	Plan, design, and fund new transportation infrastructure needs	6
10	Accommodate physically challenged individuals (accessibility)	3

19

## Kick-off Meetings

Transportation Priorities for Addison's Future		
Rank		Total
<b>Top write-in</b> priorities at station		
1	Get the Cotton Belt by 2019	14
2	Transform Addison into an eco-friendly, walkable, connected via pedestrian and bicycle pathways, beautiful environment that is the gold standard for urban planning	12
3/4	More sidewalks	11
3/4	Bicycling	11
5/6	Walkable neighborhoods	10
5/6	Context sensitive street design	10

20



Rank	Issue	Score
1	Traffic congestion (high traffic volumes, crowded intersections)	5.58
2	Lack of features and accommodations for pedestrians and bicycles (sidewalks, trails, handicap ramps, safe street crossings, trees/shade, lights in pedestrian areas, etc.)	4.65
3	Commitment to Cotton Belt DART rail line in the near future	4.46
4	Lack of east-west connectivity in Addison (vehicular, pedestrian, bicycle connections)	4.30
5	Pass-through traffic (a vehicle trip that passes through Addison, but neither starts nor ends here)	3.43
6	Cut-through traffic in residential neighborhoods (a vehicle trip that passes through a neighborhood, but neither starts in that neighborhood nor ends there)	3.18
7	Traffic speeds (vehicles traveling faster than the posted speed)	2.99

Online  
Survey

21



## Alternative Modes of Transportation: DART Walking Biking (Online Survey)

22

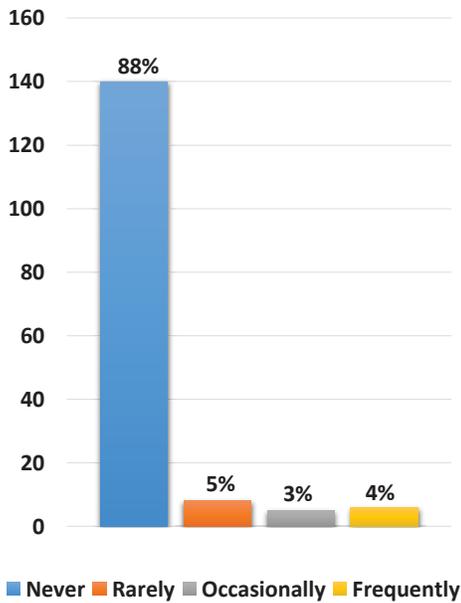
# DART

## Have you ridden a DART bus to/from Addison...

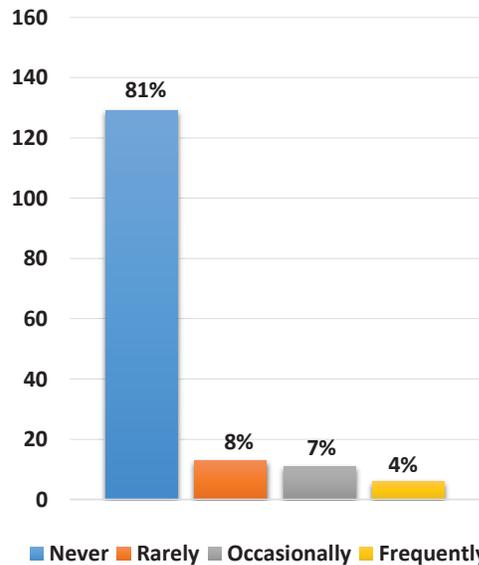


...in the past 12 months?

To work



For entertainment, recreation

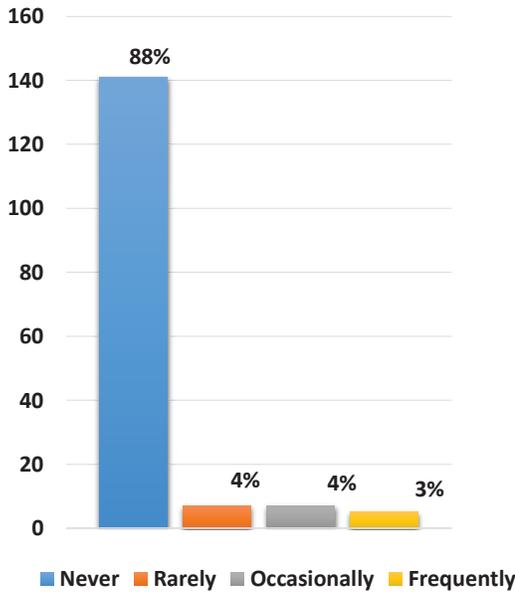


# Have you ridden a DART bus to/from Addison...



...in the past 12 months?

For shopping, dining

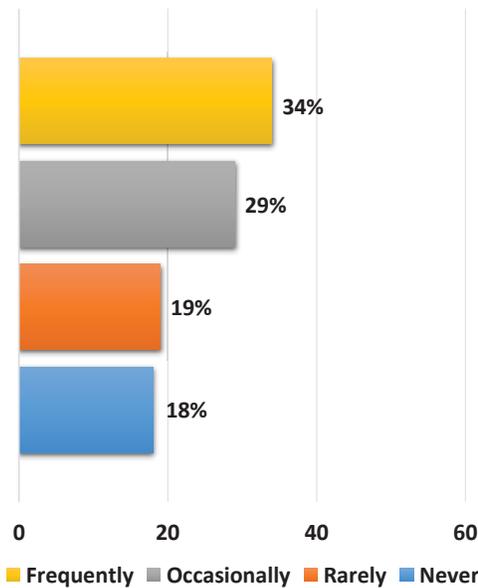


25

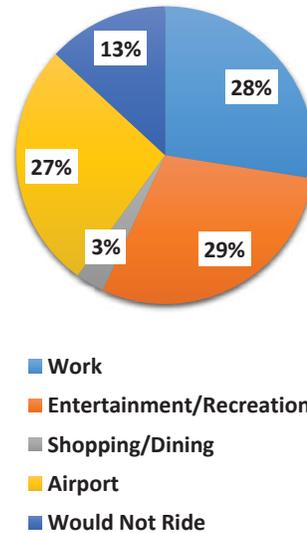
# If DART rail were available in Addison...



...how often do you think you would ride?



...for what purpose would you ride the most?



26

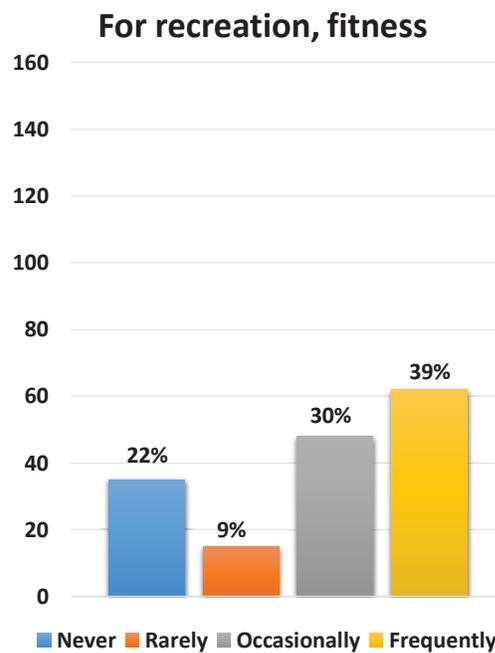
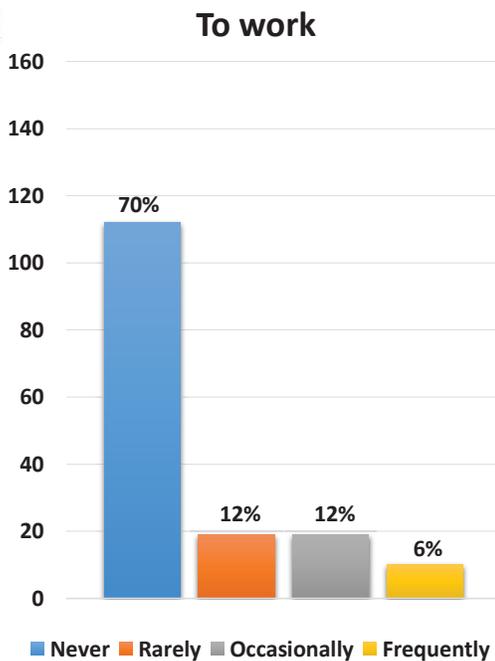
# Walking

27

## Have you walked in Addison...



...in the past 12 months?



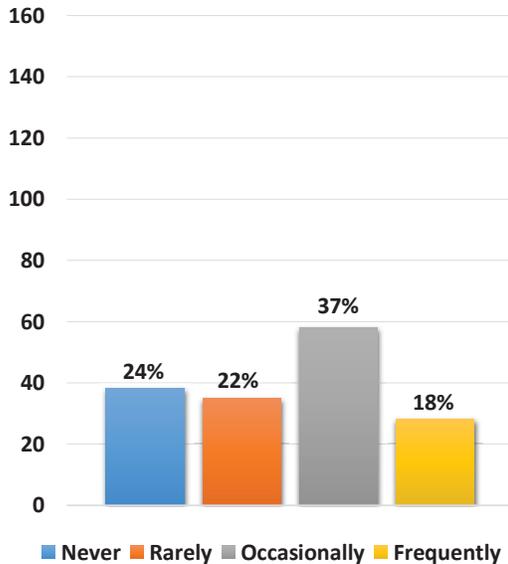
28

# Have you walked in Addison...



...in the past 12 months?

For shopping, dining, entertainment

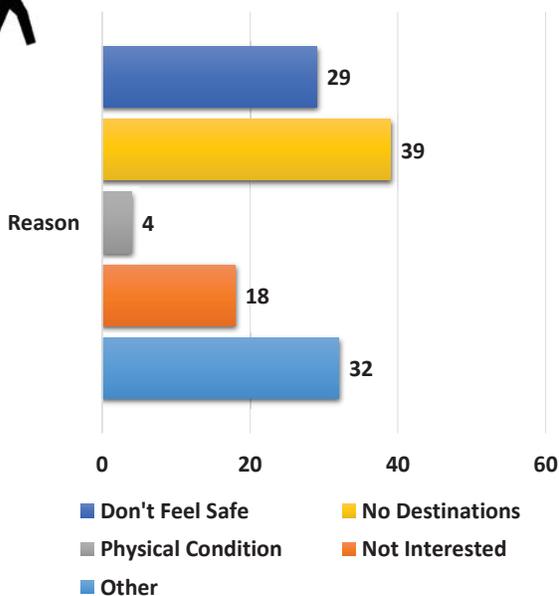


29

# If you don't walk...



...what is the reason? \*



## Other reasons (write-in)

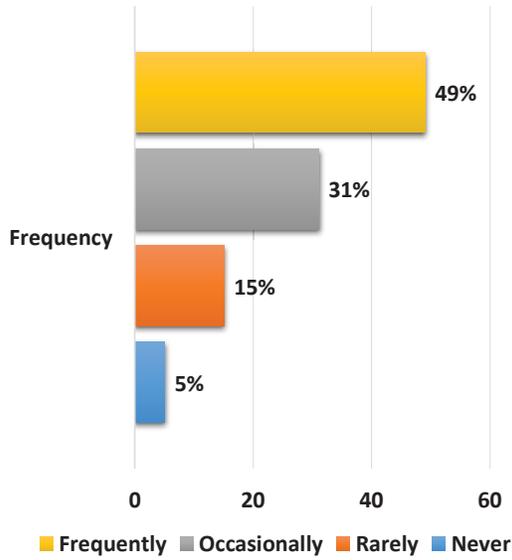
- Too far between origin and destination
- Few destinations within walking distance
- Problems with sidewalks (missing sections)
- Difficult to cross Belt Line; difficult to cross the Tollway
- Don't have time
- Have other transportation
- Poor connectivity to destinations
- Lack of amenities
- Dogs not on a leash
- If going somewhere with other people, they may not want to walk

\* Respondents were able to select more than one answer; numerical value above does not reflect a percentage

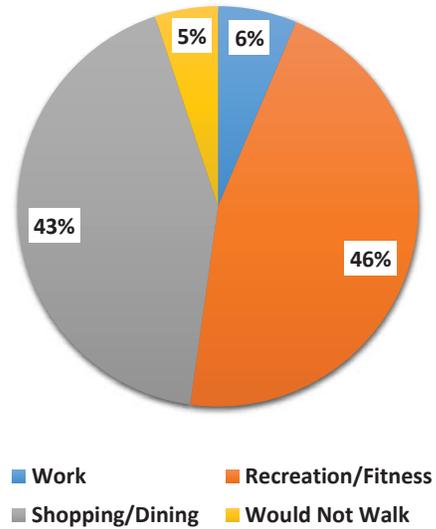
30



...how often do you think you would walk?



...for what purpose would you walk the most?

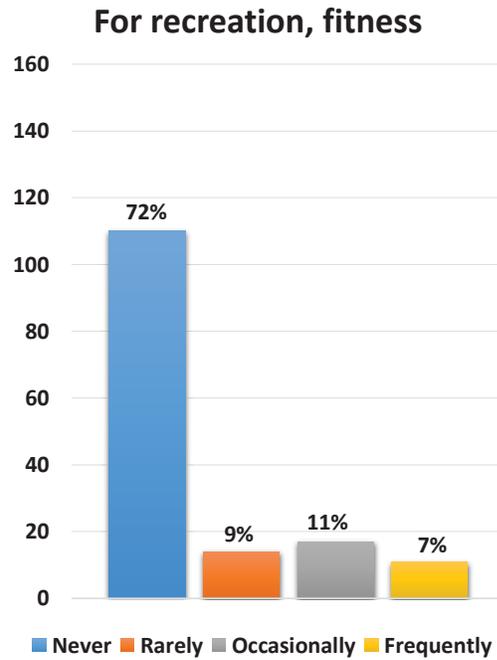
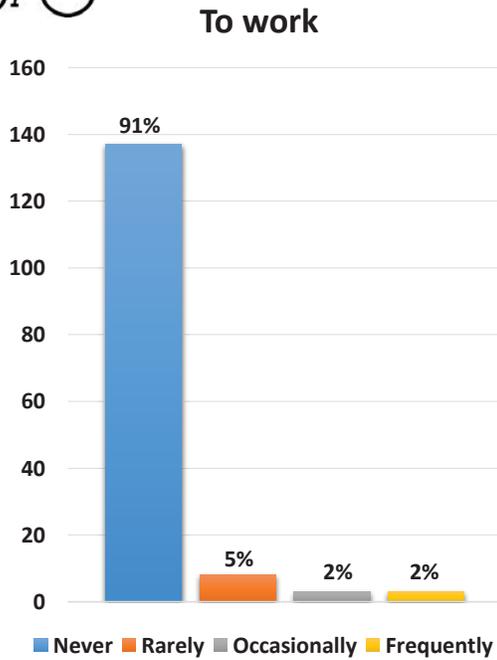


## Biking

# Have you ridden a bike in Addison...



...in the past 12 months?

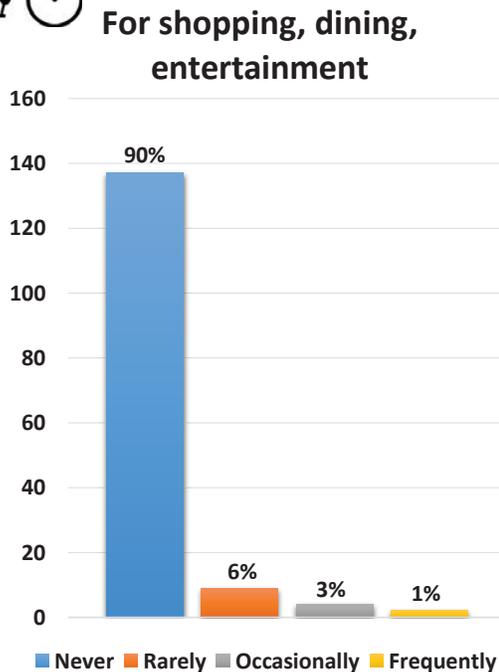


33

# Have you ridden a bike in Addison...



...in the past 12 months?

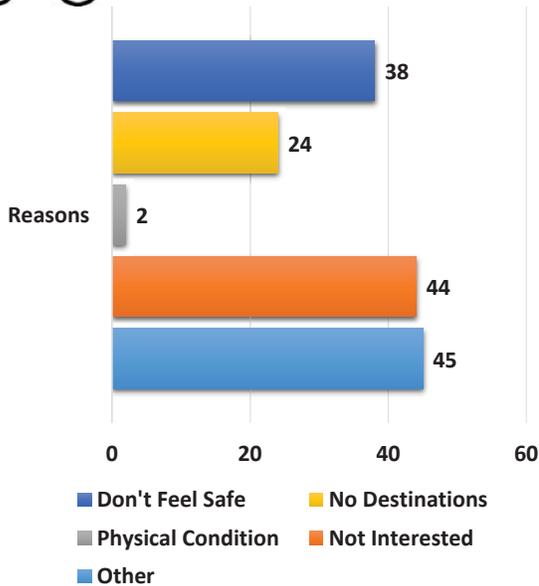


34

# If you don't ride a bike...



...what is the reason? \*



Other reasons (write-in)

- Don't own a bike
- Too far between origin and destination
- Prefer to walk
- Don't have time
- Have a car
- Poor connectivity to destinations
- Lack of cycling amenities
- Texas heat
- If going somewhere with other people, they may not want to ride a bike

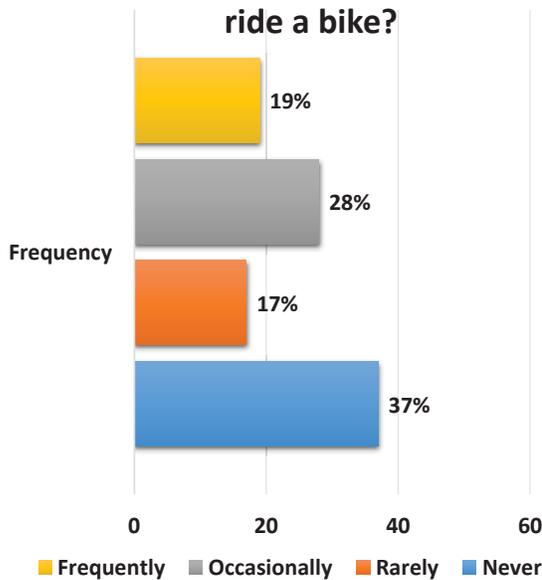
\* Respondents were able to select more than one answer; numerical value above does not reflect a percentage

35

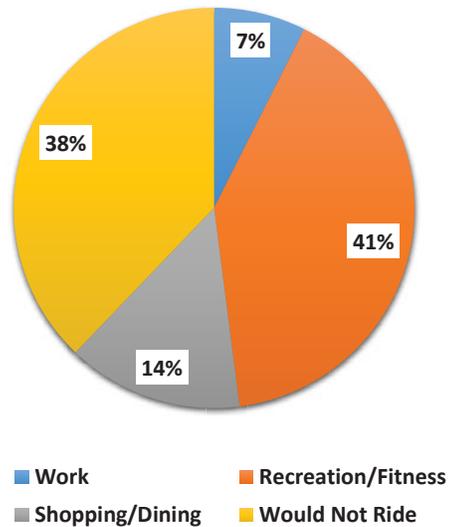
# With better bicycle accommodations...



...how often do you think you would you ride a bike?



...for what purpose would you ride the most?



36



**Destinations to walk to:**

- Village on the Parkway
- Addison Circle
- Restaurants, shopping on Belt Line, Midway, Marsh
- Work
- Parks, trails, Athletic Club
- Events in Addison
- DART transit center

**Destinations to bike to:**

- Village on the Parkway
- Addison Circle
- Restaurants, shopping on Belt Line, Midway, Marsh
- Work
- Parks, trails, Athletic Club
- Events in Addison



37



## Overall Observations

38

- Strong desire for east/west connectivity
- Support for a more efficient transportation system (less congestion, better traffic flow)
- Safety concerns with crossings of the Tollway and Belt Line Road and issues in the Montfort Road area
- Support for DART rail to:
  - Work
  - Entertainment/Recreation
  - Airport

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- High level of interest in a healthy lifestyle with strong demand for better pedestrian accommodations and some (but less) demand for better bicycle accommodations
- Destinations of most interest include:
  - Village on the Parkway
  - Addison Circle
  - Parks and recreation amenities
  - Restaurants, shopping on Belt Line, Midway, Marsh
- Support for aesthetics and an appealing public realm

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# Community Meeting #2 - July 28, August 2, & August 29, 2016

## Participant Summary

- 54 Residents
- 5 Employees (1 from outside Addison)

## Master Transportation Plan and Cross Sections

### Flip Chart Comments

- Pedestrian crossing over Tollway ✓
- Do we need stop signs on Beltway?
- No stop signs on Beltway.
- Implement res. collector on Beltway.
- Reevaluate the traffic signs on Les Lacs and Proton.
- Connection for east-west Addison - Park/ pedestrian bridge on Tollway is big idea.
- Add lighting/illumination on cross sections.
- Future analysis should include real estate value analysis.
- One output should be a master trails plan (with gaps identified).
- Plan should include recommendations on Tollway crossing and Beltway to Inwood extension.

## Connectivity Plans and Multi-Modal Street Design Elements

### Are the proposed connectivity plans consistent with your priorities for mobility in Addison? (dot votes)

	Yes	Neutral	No
Active Transportation	17	3	1
Transit	13	5	1

### Flip Chart Comments

- Addison/Trinity Athletic Complex – Athletic Complex no longer exists. Park is still there behind the school
- Mark Sojourn yellow (Active Transportation Corridor)
- Belt Line crossing for sidewalk or back to Surveyor
- Look at Vitruvian connection

## Corridor Case Studies

### Are the proposed corridor case study concepts consistent with your priorities for mobility in Addison? (dot votes)

	Yes	Neutral	No
Addison Road	14	6	2
Belt Line Road	17	5	0
Montfort Road	12	6	4
Quorum Drive	14	6	0
Le Grande Drive	7	9	5

#### Additional Comments on Boards

##### Montfort Drive

- what about cross traffic for pedestrians?
- A concern for Montfort losing any drive space due to high traffic on this street

##### Addison Road

- priority should be economic not aesthetic

##### Quorum Drive

- proposed pedestrian crossing would have adverse effect on future development

##### Le Grande Drive

- An island at Beltway will prevent left and right turns at the same time and limit mobility
- Le Grande is only accessible into and out of this neighborhood
- Some concern here for plan for sidewalk on both sides versus a sidewalk on just one side that is consistent with the rest of the entire Midway Meadow area

#### Flip Chart Comments

- Going south on Quorum to Verde Valley – traffic is backed up around 5pm traffic – huge bottleneck.
- No bikes on Montfort going toward Verde Valley – lots of drunk drivers Thursday-Sunday.
- No bikes on all roads, as is the law. Sharrows, perhaps.
- Look at traffic tie-ups, especially at major intersections, such as Beltline and Midway, Arapaho and Addison Road, etc. – experiment with changing traffic light patterns to improve the traffic flow.
- Bikers learn etiquette when on walking paths.
- Quorum between Belt Line and Dallas Parkway (where office buildings and shops are) – have sidewalks the entire way.

*Flip Chart Comments (continued)*

- Montfort near Belt Line – some of it is higher and lower grade – keep foliage in medians low (short) so that you can see traffic and turn in traffic – high foliage blocks the view and makes it dangerous to drive in that area.
- Belt Line Rd. #1 priority.
- In order for walkway to be more “pedestrian friendly”, cover them with a shade structure.

## Community Meeting #2 Comment Cards

	Total
Number of persons signed-in	67
Number of comment cards returned	50
<b>Gender</b>	
Male	56%
Female	44%
<b>Age group</b>	
0-17	0%
18-30	8%
31-50	16%
51-64	34%
65-79	38%
80+	4%
<b>I am most involved in Addison as:</b>	
Owner/representative of an owner of commercial property (but not a business owner)	0%
Owner/representative/employee of a business in Addison (but not owner of the property)	7%
Owner of a business and commercial property in Addison	0%
Resident, but not a homeowner	10%
Owner and resident of a home in Addison	83%
None of the above describes my involvement in Addison	0%
<b>I have lived in Addison for:</b>	
Less than one year	6%
One to five years	25%
Six to 10 years	21%
More than 10 years but less than 20 years	31%
20 years or more	18%
I don't live in Addison	0%

### *Comment Card General Comments*

- I am in favor of bike lanes on busy street that would include Montfort, Belt Line, Midway, Verde Valley, Marsh, etc.
- Belt Line between Marsh and Midway is #1 importance.
- Beautify Belt Line Rd; Find ways to improve traffic flow on Belt Line - service road to connect the restaurants; Cotton Belt line
- No stop sign on Beltway at Park Place.
- Good ideas.
- I will always vote in favor of improved aesthetics (sidewalks, trees, etc.) first
- Absolutely love the Le Grande concept.
- The many trees in the plan will require lots of water - a rare commodity.
- My objective in participating is to convey my opinion for the future: enhance walkability with new development and enhance/add bike lanes
- Pedestrian crossing over tollway
- Connectivity ideas that pull folks out of their cars: bicycle sharing, car sharing
- I love the residential collector plan (specially Beltway)
- Hard to see narrowing the streets so you can add trees and bushes. Wide roads are good and faster for traffic, especially on Montfort.
- Are we just looking for ways to spend money in order to make Addison something special? Will the cost of all these plans bring people to Town who will spend money we don't already have? Will we actually be increasing the economic viability and tax income of the Town?
- Appreciate the effort.
- I know it's expensive but I would like for under-grounding of utilities always be considered with future road projects.
- Consider trail maps at various major intersections on trails. Perhaps include mile distances and marker on trails. Would also be nice to have a web link or QR code to download a map or interactive app to navigate trails. Consider using existing sidewalks and streets rather than new trails where possible. Example: Surveyor is a much nicer walk on the sidewalk on the street vs. the trail from Beltway to Belt Line.
- It would be more professional if presenters were introduced or self-identified with first and last names and their roles in the study.
- Need to look at connectivity of trails north to south as not totally available yet from Brookhaven to far North Addison—example—crosswalks for Belt Line thru to Arapaho.
- Really appreciate the work done on this project! I agree with the directions of the plans presented. Let's hope the ideas are implemented sooner rather than later—and with much community conversation and cohesiveness.

- A. The only reason people “walk” is (1) so that the dog craps somewhere else (2) to get to retail/restaurants close by, or (3) one cannot afford a car. It is okay to accommodate pedestrians, but many times money can be better spent elsewhere.
- B. Addison needs more residents to use all these grand designs. Consider rezoning some vacant commercial to PD/multi-family.
- C. I think the Town is MUCH TOO interested in spending other people’s money than in being frugal and living with/being satisfied with what we have. That is if there is currently a real need, then redevelop to the need. Otherwise, leave it alone.
- D. “Sense of Place” is an architect’s/planner’s term that means NOTHING.
- Maybe there’s no real reason to not narrow Le Grande, but is there a pressing need to do so? On street parking changes would not help or enhance the street. Just be certain to leave 2 lanes for left & right turns at Beltway. Redeveloping this street might be a waste of money.
- The primary goal for all of this should be simply to encourage more new development of vacant land, lease vacant commercial space, and redevelop under-used real estate. Only. Any other use of public money should go for solving real problems/issues, not just for spending money that cannot improve economic vitality. Economics should not be outside the considerations.
- Transit connectivity is really important. I live in Post Addison Circle and work on the Tollway & Quorum and the sidewalk does not go all the way down to Quorum. I would love to walk or bike to work but I currently can’t. The proposed transit connectivity plan would be really good and would influence me to buy a home in Addison as I will be buying in the next 2 years. I found out about the meeting through a postcard in the mail.
- Please also prioritize purpose into the master plans for transportation for our area. We want to avoid the lack of planning that we see in the current I 635 westbound to I 35 southbound that is creating such a bottle neck in traffic every day at that intersection.
- I really don’t have much of an opinion. Just here to learn what’s going on
- Good work and thought processes. I agree with the owner on Le Grande that nothing needs doing.



**TOWN OF ADDISON, TEXAS**

**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS APPROVING THE 2016 ADDISON MASTER TRANSPORTATION PLAN AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, in November of 2015, the City began the process of updating the City's Master Transportation Plan; and

**WHEREAS**, the process to update the Master Transportation Plan included multiple community meetings, the appointment and involvement of an advisory committee that included residents and business representatives, and public hearings before the Planning & Zoning Commission and the City Council; and

**WHEREAS**, the Planning & Zoning Commission unanimously recommended approval of the 2016 Master Transportation Plan.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

**Section 1.** The 2016 Addison Master Transportation Plan, a copy of which is to be maintained in the office of the City Secretary is hereby approved.

**Section 2.** This Resolution shall take effect from and after its date of adoption.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 14<sup>th</sup> day of November, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

**Work Session and Regular Meeting****Meeting Date:** 12/13/2016**Department:** Infrastructure- Development Services

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**AGENDA CAPTION:**

Present, Discuss, And Consider Action On A **Resolution Approving A Contract With Flowline Construction, Inc., For The Construction of The Vitruvian Phase 5 Public Infrastructure** In The Amount Of \$3,823,868.

**BACKGROUND:**

Vitruvian Park, located at the corner of Marsh Lane and Vitruvian Way is a development that is funded by both private and public investment. The Master Facilities Agreement between the Town and UDR that was entered into on June 26, 2013, provides for, among other things, the allocation and expenditure of the authorized funds that are or may be available to design and construct the public infrastructure improvements necessary to support the development. In that agreement, the Town agreed to pay for the public infrastructure improvements in the development from proceeds from bond programs.

The scope of work for the construction of the public infrastructure improvements includes, a new public roadway and associated streetscape and utility improvements along the east right-of-way line of Marsh Lane and the north right-of-way line of Vitruvian Way. Construction services specifically for the new public roadway will include water, wastewater, storm drainage, paving, electric duct bank, telecommunications duct bank, miscellaneous conduits, landscaping, irrigation, and streetscape improvements. Improvements along Marsh Lane will include the extension of water, wastewater, storm drainage, and gas main improvements along with streetscape, landscaping and irrigation modifications. Improvements along Vitruvian Way will include the addition of parallel parking spaces to the existing street section along with streetscape, landscape, irrigation and miscellaneous utility improvements from the Marsh Lane intersection to the existing Ponte Avenue intersection. In order to prevent damage to the newly established streetscape, it will be installed in phases as the buildings are constructed.

The Town engaged Icon Consulting Engineers, Inc., in early January 2016 to prepare plans and specifications for the project. Their design contract was awarded on February 9, 2016.

Icon Consulting Engineers, Inc., completed the design in September 2016 and the project was posted to BidSync on September 29, 2016. The plan development incorporated a base bid which included the majority of the public infrastructure improvements and an additive alternate which included the streetscape elements. Plans and specifications for the project can be found on the Town of Addison website under the Finance Department tab. The bids closed on October 25, 2016 and the Town

received two bids. The bid comparison can be found in the attached bid tabulation document.

<b>Description</b>	<b>Flow-Line Construction, Inc.</b>	<b>John Burns Construction Co.</b>
<b>Bid</b>	\$3,197,299	\$3,657,448
<b>Add Alt 1</b>	\$626,569	\$942,417
<b>Total</b>	\$3,823,868	\$4,599,865

Flowline Construction, Inc., has been determined to be the lowest responsible bidder. Staff has reviewed their references and found them to be capable of performing this work. We are recommending award of the base bid along with the additive alternate. The contract value for this project is \$3,823,868 and is budgeted in the Vitruvian Bond Funds. The budget for Vitruvian Phase 5 based on the Master Facilities Agreement is \$4,780,852. The project is expected to take approximately 12 months to complete, weather permitting.

**RECOMMENDATION:**

Administration recommends approval.

---

**Attachments**

Resolution with Flowline Contract

Site Plan Exhibit

Project Specifications

Funding Disbursement

Form 1295

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**TOWN OF ADDISON, TEXAS**

**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS APPROVING A CONSTRUCTION CONTRACT BETWEEN THE TOWN OF ADDISON AND FLOWLINE CONSTRUCTION, INC., FOR SERVICES RELATED TO THE VITRUVIAN PHASE 5 PUBLIC INFRASTRUCTURE IN AN AMOUNT NOT TO EXCEED \$3,823,868 AUTHORIZING THE CITY MANAGER TO EXECUTE THE AGREEMENT, AND PROVIDING AN EFFECTIVE DATE.**

**BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

**Section 1.** The Contract Agreement between the Town of Addison and Flowline Construction, Inc., for services related to the Vitruvian Phase V Public Infrastructure in an amount not to exceed \$3,823,868, a copy of which is attached to this Resolution as **Exhibit A** and which incorporates the Town of Addison's General and Specific Conditions for construction contracts, and the Advertisement for Bids, Instruction to Bidders, General Provisions, Special Provisions, Plans and other bid documents, is hereby approved. The City Manager is hereby authorized to execute the agreement.

**Section 2.** This Resolution shall take effect from and after its date of adoption.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13<sup>th</sup> day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

# EXHIBIT A

## CONTRACT AGREEMENT

STATE OF TEXAS

COUNTY OF DALLAS

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2016, by and between the Town of Addison, of the County of Dallas and State of Texas, acting through its City Manager, thereunto duly authorized so to do, Party of the First Part, hereinafter termed the OWNER, and Flow-Line Construction, Inc., of the City of **Dallas**, County of **Dallas**, State of Texas, Party of the Second Part, hereinafter termed CONTRACTOR.

WITNESSETH: That for and in consideration of the payment and agreement hereinafter mentioned, to be made and performed by the OWNER, the said CONTRACTOR hereby agrees with the said OWNER to commence and complete construction of certain improvements as follows:

Town of Addison Public Improvements  
to be known as

### **VITRUVIAN PARK PUBLIC INFRASTRUCTURE – BLOCK 200**

and all extra work in connection therewith, under the terms as stated in the General and Specific Conditions of the AGREEMENT; and at his own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance and other accessories and services necessary to complete the said construction, in accordance with the conditions and prices stated in the Proposal attached hereto and in accordance with the Advertisement for Bids, Instructions to Bidders, General Provisions, Special Provisions, Plans, and other drawings and printed or written explanatory matter thereof, and the Technical Specifications and Addenda thereto, as prepared by the OWNER, each of which has been identified by the endorsement of the CONTRACTOR and the OWNER thereon, together with the CONTRACTOR's written Proposal and the General Provisions, all of which are made a part hereof and collectively evidence and constitute the entire AGREEMENT.

The CONTRACTOR hereby agrees to commence work within ten (10) calendar days after the date of written notice to do so shall have been given to him, to complete the work within Three Hundred Sixty Five (365) calendar days, after he commences work, subject to such extensions of time as are provided by the General Provisions.

The OWNER agrees to pay the CONTRACTOR **\$ 3,823,868.00** \_\_\_\_\_ in current funds for the performance of the Contract in accordance with the Proposal submitted thereof, subject to additions and deductions, as provided in the General Provisions, and to make payments of account thereof as provided therein.

IN WITNESS WHEREOF, the parties of these presents have executed this AGREEMENT in the year and day first above written.

**TOWN OF ADDISON, TEXAS (OWNER)**

**ATTEST:**

By: \_\_\_\_\_  
Wes Pierson, City Manager

By: \_\_\_\_\_  
Laura Bell, City Secretary

**(CONTRACTOR)**

**ATTEST:**

By: \_\_\_\_\_  

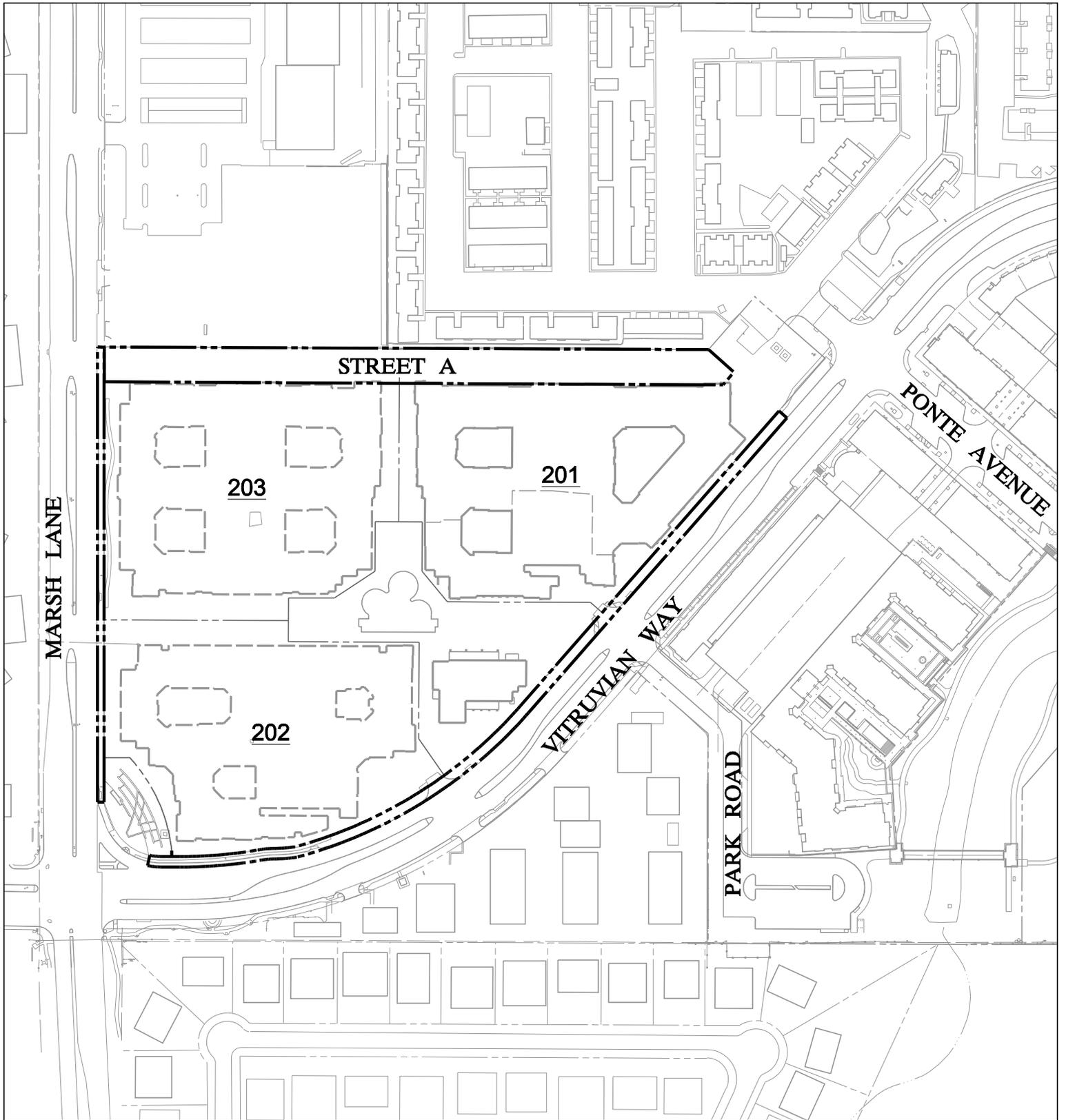

By: \_\_\_\_\_  


The following to be executed if the CONTRACTOR is a corporation:

I, **Eduardo M. Hernandez** certify that I am the secretary of the corporation named as CONTRACTOR herein; that **Eduardo M. Hernandez**, who signed this Contract on behalf of the CONTRACTOR is the **President** (official title) of said corporation; that said Contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Signed: \_\_\_\_\_  


Corporate Seal



# EXHIBIT A

## Vitruvian Park - BLOCK 2

### INFRASTRUCTURE

**icon** Consulting Engineers, Inc.  
Civil Engineers - Designers - Planners

Vermilion Office Park  
2840 W. Southlake Blvd., Suite 110  
Southlake, Tx 76092  
Phone: (817) 552-6210  
Fax: (817) 778-4845



SCALE: 1" = 200'

01/18/16



**SPECIFICATIONS AND CONTRACT DOCUMENTS**

**FOR THE CONSTRUCTION OF**

**VITRUVIAN PARK  
PUBLIC INFRASTRUCTURE – BLOCK 200  
TOWN OF ADDISON, TEXAS**

**Infrastructure & Development Services # 2016-09  
Bid Number 16-184**

**August, 2016**

**PREPARED BY:**

**icon** Consulting Engineers, Inc.  
Civil Engineers - Designers - Planners  
Engineering Firm Registration Number F-9007

**2840 W. Southlake Blvd., Suite 110  
Southlake, Texas 76092  
(817) 552-6210**



**TOWN OF ADDISON, TEXAS**

**MAYOR**

**Todd Meier**

**COUNCIL MEMBERS**

**Bruce Arfsten**

**Ivan Hughes**

**Al Angell**

**Jim Duffy**

**Paul Walden**

**Dale Wilcox**

**CITY MANAGER**

**Wes Pierson**

**DIRECTOR OF INFRASTRUCTURE & DEVELOPMENT SERVICES**

**Lisa Pyles**

**ASSISTANT DIRECTOR OF INFRASTRUCTURE & DEVELOPMENT SERVICES**

**Jason Shroyer, P.E.**

**CITY SECRETARY**

**Laura Bell**

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<b>Section IA</b>	<b>Indemnification Agreement</b>
<b>Section CA</b>	<b>Contract Agreement</b>
<b>Section BB</b>	<b>Bid Bond</b>
<b>Section PrB</b>	<b>Performance Bond</b>
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<b>Section MB</b>	<b>Maintenance Bond</b>
<b>Section BP</b>	<b>Contractor's Affidavit of Bills Paid</b>
<b>Section GP</b>	<b>General Provisions</b> <b>Standard Specifications for Public Works Construction,</b> <b>North Central Texas (separate document not furnished)</b>
<b>Section SP</b>	<b>Special Provisions</b>
<b>Section PS</b>	<b>Project Sign</b>
<b>Section TS</b>	<b>Technical Specifications</b> <b>General Requirements for Water Service</b> <b>Water Services</b> <b>Interlocking Concrete Pavers</b> <b>Electrical</b> <b>Detectable Warning Panels</b>
<b>Section GR</b>	<b>Geotechnical Report</b>

**SECTION AB**

**ADVERTISEMENT FOR BIDS**

## **ADVERTISEMENT FOR BIDS**

1. Sealed bids addressed to the Town of Addison, Texas, for **Paving, Drainage and Utility Improvements for Vitruvian Park Public Infrastructure – Block 200** in the Town of Addison, Texas, hereinafter called “City” or “Owner” in accordance with specifications and contract documents prepared by **Icon Consulting Engineers, Inc.** will be received at the office of the Purchasing Department, 5350 Belt Line Road, Addison, Texas until **2:00 p.m. on Thursday, October 20, 2016**. Bids received by the appointed time will be opened and read aloud. Any bids received after closing time will be returned unopened.
2. The Contractor shall identify his bid on the outside of the envelope by writing the words **INFRASTRUCTURE & DEVELOPMENT SERVICES #2016-09, VITRUVIAN PARK PUBLIC INFRASTRUCTURE – BLOCK 200**.
3. Paper bids shall be required and accompanied by a cashier’s check or certified check upon a national or state bank in an amount not less than five percent (5%) of the total maximum bid price payable without recourse to the Town of Addison, or a bid bond in the same amount from a reliable surety company licensed by the State of Texas to act as a Surety and be listed on the current U.S. Treasury Listing of Approved Sureties, or a Binder of Insurance executed by a surety company licensed by the State of Texas to act as a surety or its authorized agent as a guarantee that the bidder will enter into a contract and execute a Performance Bond within ten (10) days after notice of award of contract to him.
4. Plans, specifications and bidding documents may be downloaded from [www.bidsync.com](http://www.bidsync.com). The Town of Addison is a “free buyer”, meaning that prospective bidders need only a free registration to sign up for plan updates. Bidders assume all risk for acquiring plans and/or specs from third party sites and plan rooms, as only Bidsync.com will be directly updated by Addison.
5. The right is reserved by the Mayor and the City Council as the interests of the City may require to reject any or all bids and to waive any informality in bids received and to select the proposal deemed most advantageous to the Town.
6. The Bidder (Proposer) must supply all the information required by the Proposal Form.
7. A Performance Bond, Labor and Material Payment Bond, and Maintenance Bond will be required by the Owner; each Bond shall be in the amount of 100% of the total contract amount. Bonds shall be issued by a surety company licensed by the State of Texas to act as a Surety and be listed on the current U.S. Treasury Listing of Approved Sureties.
8. For information, call Will Newcomer, Purchasing Manager, Town of Addison (972) 450-7091. For information on the work to be performed, call Jason Shroyer, P.E., Town of Addison, (972) 450-2849 or Bruce F. Dunne, P.E., Icon Consulting Engineers, Inc., (817) 552-6210.
9. The project consists of installing proposed public water, wastewater, storm drain, electrical, telecommunications and other related improvements in accordance with the plans and specifications.
11. Pre-Bid Conference will be held at 2:30 p.m., on Wednesday, October 12, 2016 in the Conference Room of the Town of Addison’s Service Center, 16801 Westgrove Dr., Addison, Texas 75001.

**TOWN OF ADDISON, TEXAS**

**SECTION IB**

**INSTRUCTIONS TO BIDDERS**

## **INSTRUCTIONS TO BIDDERS**

- A. PROJECT: VITRUVIAN PARK PUBLIC INFRASTRUCTURE – PHASE V**, in the Town of Addison.

The bids will be evaluated as stated in Section "P" of the instructions to Bidders.

- B. PROJECT DESCRIPTION:** This project consists of furnishing and installing paving, drainage and utility improvements in accordance with the plans and specifications.

- C. PROPOSALS:** Proposals must be in accordance with these instructions in order to receive consideration.

- D. DOCUMENTS:** Documents include the Bidding Requirements, including the Advertisement for Bids, these Instructions to Bidders, Proposal Forms, Contract Agreement, Bid Bond, Performance Bond, Payment Bond, Maintenance Bond, Contractor's Affidavit of Bills Paid, General Provisions, Special Provisions, Technical Specifications, Waiver of Lien, Drawings, and Addenda which may be issued by the Town of Addison during the bidding period. Bidding Documents may be viewed and/or obtained under the terms and conditions set forth in the Advertisement for Bids, Section AB of this Project Manual.

- E. EXAMINATION OF DOCUMENTS AND SITE:** Bidders shall carefully examine the Bidding Documents and the construction site to obtain first-hand knowledge of the scope and the conditions of the Work. Each Contractor, Subcontractor and Sub-subcontractor, by submitting a proposal to perform any portion of the Work, represents and warrants that he has examined the Drawings, Specifications (Project Manual) and the site of the Work, and from his own investigation has satisfied himself as to the scope, accessibility, nature and location of the Work; the character of the equipment and other facilities needed for the performance of the Work; the character and extent of other work to be performed; the local conditions; labor availability, practices and jurisdictions and other circumstances that may affect the performance of the Work. No additional compensation will be allowed by the Owner for the failure of such Contractor, Subcontractor or Sub-subcontractor to inform himself as to conditions affecting the Work. **A Pre-Bid Meeting will be held at 2:30 P.M. on Wednesday, the 12<sup>th</sup> day of October, 2016** at the Addison Service Center, 16801 Westgrove Drive, Addison, Texas 75001.

- F. INTERPRETATION OF DOCUMENTS:** If any person contemplating submitting a bid for the proposed Contract is in doubt as to the meaning of any part of the Drawings, Specifications (Project Manual) or other proposed Contract Documents, he may submit to the Town of Addison, not later than seven (7) calendar days prior to the date set for opening bids, a written request for an interpretation or clarification. Bidders should act promptly and allow sufficient time for a reply to reach them before preparing their bids. Any interpretation or clarification will be in the form of an Addendum duly issued. No alleged verbal interpretation or ruling will be held binding upon the Owner.

- G. SUBSTITUTIONS:** Conditions governing the submission of substitutions for specific materials, products, equipment and processes are in the Special Provisions. Requests for substitutions must be received by the Town of Addison seven (7) calendar days prior to the established bid date.

- H. ADDENDA:** Interpretations, clarifications, additions, deletions and modifications to the Documents during the bidding period will be issued in the form of Addenda and a copy of such Addenda will be released through [www.bidsync.com](http://www.bidsync.com). It is the responsibility of each person who has been issued a set of bid documents to obtain addenda through [www.bidsync.com](http://www.bidsync.com). Addenda will be a part of the Bidding Documents and the Contract Documents, and receipt of them shall be acknowledged in the Bid Form. All such interpretations and supplemental instructions will be in the form of written addenda to the contract documents which, if issued, will be sent by telegram, certified or registered mail, facsimile, email or hand delivered to all prospective bidders (at the respective addresses furnished for such purposes) not later than three (3) calendar days prior to the date fixed for the opening of bids. If any bidder fails to acknowledge the receipt of such addenda in the space provided in the bid form, his bid will nevertheless be construed as though the receipt of such addenda had been acknowledged.
- I. COMPLETION TIME:** It is understood and agreed to between the Town of Addison and the Contractor that time is of the essence of this contract and that the time allocated for completion of this project will be **180 calendar days**. The time period shall commence ten (10) calendar days following written notification from the Town of Addison that the Contractor may begin work. Reference Special Provision 22 for Explanation of Contract Time. The completion date of the contract will be same date of the Town's final acceptance of the improvements.
- J. FAILURE TO COMPLETE ON TIME:** The time of completion is an essential element of this contract. For each day that any work shall remain uncompleted after the time specified in the proposal and the Contract, or the increased time granted by the Town of Addison, or as equitably increased by additional work or materials ordered after the Contract is signed, the sum of **\$500 per day** shall be deducted from the monies due the Contractor. The sum of money thus deducted for such delay, failure or noncompletion is not to be considered as a penalty, but shall be deemed, taken and treated as reasonable liquidated damages, per day that the Contractor shall be in default after the time stipulated in the Contract for completing the work. The said amounts are fixed and agreed upon by and between the Town of Addison and Contractor because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Town of Addison would sustain and which shall be retained from the monies due, or that may become due, the Contractor under this Contract: and if said monies be insufficient to cover the amount owing, then the Contractor or its surety shall pay any additional amounts due. In the event that the actual damages incurred by the Town of Addison exceed the amount of liquidated damages, the Town of Addison shall be entitled to recover its actual damages.
- K. PREPARATION OF BIDS:** Prices quoted shall include all items of cost, expense, taxes, fees and charges incurred by, or arising out of, the performance of the work to be performed under the Contract. Bids shall be submitted in duplicate and shall be signed in ink. Any bid on other than the required form will be considered informal and may be rejected. Erasures or other changes in a bid must be explained or noted over the initials of the bidder. Bids containing any conditions, omissions, unexplained erasures and alterations, or irregularities of any kind may be rejected as informal. The prices should be expressed in words and figures or they may be deemed informal and may be rejected. In case of discrepancy between the prices written in the bid and those given in the figures, the price in writing will be considered as the bid. In the case of a discrepancy between a unit price and its extension, the unit price will govern. Failure to submit all requested information will make a bid irregular and subject to rejection. Bids shall be signed with name typed or printed below signature, and, if a partnership, give full name of all partners. Where bidder is a corporation, bids must be signed with the legal name of the corporation followed by the name of the state

of incorporation and the legal signature of an officer authorized to bind the corporation to a contract.

NOTE: AN ELECTRONIC SPREADSHEET IS POSTED ON BIDSYNCR FOR THE CONTRACTORS CONVENIENCE. THIS SPREADSHEET MAY BE USED IN LIEU OF THE MANUAL HANDWRITTEN PROPOSAL FORM IN THE SPECIFICATIONS AND SHALL BE ATTACHED TO THE PROPOSAL AND MADE PART OF THE CONTRACT DOCUMENTS. USING THE SPREADSHEET OPTION SHALL NOT AMEND NOR MODIFY ANY WORDING IN THE PROPOSAL FORM OR THE PLANS AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THAT THE SPREADSHEET ADEQUATELY CONVEYS THEIR BID.

- L. SUBMITTAL OF BIDS:** Sealed proposals will be received at the time, date and place stated in the Advertisement for Bids. Proposals shall be made on unaltered Proposal Forms furnished by the Town of Addison. Submit proposal in an opaque, sealed envelope addressed to the Owner and plainly mark on the outside of the envelope the project name, and the name and address of the bidder. The envelopes shall be marked with the following project names:

**INFRASTRUCTURE & DEVELOPMENT SERVICES # 2016-09**  
**VITRUVIAN PARK PUBLIC INFRASTRUCTURE – BLOCK 200**

The Bid Bond must be completed and signed by each bidder and submitted with the bid. Submit Bids by mail or in person prior to the time for receiving bids set forth in the Advertisement for Bids issued by the Town.

Electronic bidding on bidsync.com will not be considered for this project. The Town of Addison uses bidsync to distribute bids and proposals. There will be NO COST to the contractor for standard bids or proposals. The project is considered a standard bid. For cooperative Bids and Reverse Auctions ONLY, the successful contractor/supplier agrees to pay bidsync a transaction fee of one percent (1%) of the total amount of all contracts for goods and/or services. Cooperative Bids and Reverse Auctions will be clearly marked on the bid documents. To assure that all contractors/suppliers are treated fairly, the fee will be payable whether the bid/proposal is submitted electronically, or by paper means. Refer to [www.bidsync.com](http://www.bidsync.com) for further information.

- M. MODIFICATION AND WITHDRAWAL OF BIDS:** Prior to the time set for bid opening, bids may be withdrawn or modified. Bids may be modified only on the official bid form and must be signed by a person legally empowered to bind the bidder. No bidder shall modify, withdraw or cancel his bid or any part thereof for sixty (60) calendar days after the time agreed upon for the receipt of bids.
- N. DISQUALIFICATION:** The Owner reserves the right to disqualify proposals, before or after the opening, upon evidence of collusion with intent to defraud or other illegal practices relating to this proposal upon the part of the bidder.
- O. SUBMISSION OF POST-BID INFORMATION:** Upon notification of acceptance, the selected bidder shall, within five (5) calendar days, submit the following:
1. A designation of the portions of the Work proposed to be performed by the bidder with his own force.

2. A list of names of the subcontractors or other persons or organizations, including those who are to furnish materials and equipment fabricated to a special design proposed for such portions of the Work as may be designated in the Bidding Documents or as may be requested by the Town of Addison. The bidder will be required to establish to the satisfaction of the Owner the reliability and responsibility of the proposed Subcontractors and suppliers to furnish and perform the Work.
3. Other information as required.

**P. AWARD:** The Owner reserves the right to accept any or to reject any bids without compensation to bidders and to waive irregularities and informalities. The Town of Addison Infrastructure & Development Services Department, in making its recommendation, will consider the following elements:

1. Whether the bidder is a contractor with experience in the type of work involved.
2. Whether the bidder has adequate plant, equipment and personnel to perform the work properly and expeditiously.
3. Whether the bidder has a suitable financial status and reputation for meeting obligations incident to work of the kind specified.
4. Whether the bidder has complied with the terms and conditions of the A+B bidding.

Alternate items may or may not be awarded. Addition or deletion of other items or schedules will be governed by the *Standard Specifications for Public Works Construction – North Central Texas, 4<sup>th</sup> Edition*, (hereinafter called SSPWC) Item 104.2 "Change or Modification of Contract".

**Q. EXECUTION OF THE CONTRACT:** The successful bidder will be required to enter into a contract with the Owner within ten (10) days of notice by the Owner that his bid has been accepted. Failure to enter into a contract within the established time limit shall be considered grounds for forfeiture of the bid bond.

**R. CONSTRUCTION SCHEDULE:** It is the Owner's desire to have the project completed and operational in as short a time as possible. The number of calendar days for completion of the project will begin with the date specified in the Notice to Proceed. The Notice to Proceed will be issued in a manner to facilitate a smooth construction of the project. The Contractor shall begin construction within ten (10) calendar days of the issuance of the Notice to Proceed.

**S. FORM OF CONTRACT:** The contract for the construction of the project will be drawn up by the Owner. A sample form of agreement is included in the Contract Agreement Section.

**T. BONDS:** A Performance Bond, a Labor and Material Payment Bond and a Maintenance Bond will be required by the Owner. The performance and payment bonds shall name the Town of Addison, and others as directed by the Town, as joint obligees. Sample forms have been included in the Performance Bond, Payment Bond and Maintenance Bond sections.

**U. BID SECURITY:** Bids shall be accompanied by a cashier's check or certified check upon a national or state bank in an amount not less than five percent (5%) of the total maximum bid price payable without recourse to the Town of Addison, or a bid bond in the same amount from a surety company licensed to do business in the State of Texas as a guarantee that the

bidder will enter into a contract and execute a Performance Bond and Payment Bond within ten (10) calendar days after notice of award of contract to him. Such checks or bid bonds will be returned to all except the three lowest bidders within three (3) days after the opening of bids, and the remaining checks or bid bonds will be returned promptly after the Owner has made an award of contract, or, if no award has been made within thirty (30) calendar days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

**V. RESOLUTIONS:** If the bidder is a corporation, a copy of the resolution empowering the person submitting the bid to bind the bidder must be included with the bid.

**W. CONSTRUCTION STAKING:** Construction staking and re-staking will not be provided by the Owner. Benchmarks and Horizontal Control are shown on the plans. There is no separate bid item for staking, therefore, the contractor must include value for staking in the various bid items as subsidiary to the contract. Any staking or re-staking that is required shall be the responsibility of the Contractor and shall be at no cost to the Owner.

**X. FINAL PAYMENT:** The general provisions for Final Payment shall be as stated in Item 1.09.5.4 of the North Central Texas Standard Specifications for Public Works Construction (4<sup>th</sup> Edition) including all Amendments and Additions. Prior to final payment the Contractor shall provide the Owner with the following items:

1. A Contractor's Affidavit of Bills Paid in accordance with Section BP.
2. A Consent of Surety Company to Final Payment.
3. A complete set of record plans which indicate all construction variations from the original construction documents in accordance with Item 5 of the Special Provisions.
4. A two (2) year Maintenance Bond in accordance with Section MB.
5. Acknowledgement that the project has been reviewed and accepted by TDLR.

**Y. PREVAILING WAGE RATES:** Wage rates paid on this project shall not be less than specified in the schedule of general prevailing rates of per diem wages as attached in the Special Provisions.

**Z. PRIORITY OF CONTRACT DOCUMENTS:** In case of conflict between contract documents, priority of interpretation shall be in the following order: signed agreement, performance and payment bonds, proposal, special provisions (or conditions), technical specifications, general provisions, advertisement for bids, project drawings, *Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges* adopted by the Texas Department of Transportation June 1, 2004; Standard Specifications for Public Works Construction – North Central Texas (NCTCOG, October 2004); Town of Addison Standard Drawings. This priority list shall take precedence over item 1.05.1 of the SSPWC.

SECTION PF

**PROPOSAL FORM**

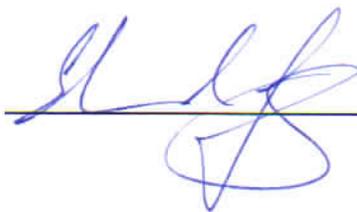
**PROPOSAL FORM**

10/25/ \_\_\_\_\_, 2016

TO: The Honorable Mayor and Town Council  
Town of Addison, Texas

Gentlemen:

The undersigned bidder, having examined the plans, specifications and contract documents, and the location of the proposed work, and being fully advised as to the extent and character of the work, proposes to furnish all equipment and to perform labor and work necessary for completion of the work described by and in accordance with the Plans, Specifications and Contract for the following prices, to wit:

Signed by:  \_\_\_\_\_

ACKNOWLEDGMENT OF ADDENDA:

The Bidder acknowledges receipt of the following addenda:

Addendum No. 1 EAH \_\_\_\_\_

Addendum No. 2 \_\_\_\_\_

Addendum No. 3 \_\_\_\_\_

**VITRUVIAN PARK PUBLIC INFRASTRUCTURE - BLOCK 200**  
**PAVING, DRAINAGE AND UTILITY IMPROVEMENTS**  
**TOWN OF ADDISON PROJECT #2016-09**

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
1	1	L.S.	<p>For Mobilization (not to exceed 5% of total bid amount)</p> <p>complete in place, the sum of <u>one hundred fifty thousand</u></p> <p style="text-align: right;">Dollars</p> <p>and <u>zero</u></p> <p>Cents per Lump Sum</p>	150,000.00	150,000.00
2	1	L.S.	<p>For Installation and Maintenance of Barricades, Signage, Pav't Markings and Traffic Control Measures for Marsh Lane Water Improvements</p> <p>complete in place, the sum of <u>10</u></p> <p><u>Ten thousand</u></p> <p style="text-align: right;">Dollars</p> <p>and <u>zero</u></p> <p>Cents per Lump Sum</p>	10,000.00	10,000.00
3	1	L.S.	<p>For Installation and Maintenance of Barricades, Signage, Pav't Markings and Traffic Control Measures for Marsh Lane Sanitary Sewer Improvements</p> <p>complete in place, the sum of _____</p> <p><u>Nine thousand</u></p> <p style="text-align: right;">Dollars</p> <p>and <u>zero</u></p> <p>Cents per Lump Sum</p>	9,000.00	9,000.00
4	1	L.S.	<p>For Installation and Maintenance of Barricades, Signage, Pav't Markings and Traffic Control Measures for Marsh Lane and Vitruvian Way Paving Improvements</p> <p>complete in place, the sum of _____</p> <p><u>Fifteen thousand</u></p> <p style="text-align: right;">Dollars</p> <p>and <u>zero</u></p> <p>Cents per Lump Sum</p>	15,000.00	15,000.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
5	2	EA.	<p>For Furnishing and Installing Project Signs in Accordance with Sign Plan</p> <p>complete in place, the sum of _____</p> <p><u>One thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	1,000.00	2,000.00
6	1	L.S.	<p>For Compliance with Storm Water Pollution Prevention Plan Including Maintenance of Erosion Control Devices</p> <p>complete in place, the sum of _____</p> <p><u>Four thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Lump Sum</p>	4,000.00	4,000.00
7	3	EA.	<p>For Furnishing, Installation and Maintenance of Construction Entrance</p> <p>complete in place, the sum of _____</p> <p><u>Four thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	4,000.00	12,000.00
8	1,335	L.F.	<p>For Furnishing, Installation and Maintenance of Silt Fence Sediment Barrier</p> <p>complete in place, the sum of _____</p> <p><u>Four</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	4.00	5,340.00
9	18	EA.	<p>For Furnishing, Installation and Maintenance of Inlet Protection Devices</p> <p>complete in place, the sum of _____</p> <p><u>Two Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	200.00	3,600.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
10	110	L.F.	<p>For Furnishing, Installation and Maintenance of Tree Protection Fencing</p> <p>complete in place, the sum of _____</p> <p><u>Two</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	2.00	220.00
11	2,715	S.Y.	<p>For Sawcutting, Removal &amp; Recycling of Existing Asphalt Street Pavement (Reference Special Provision 85)</p> <p>complete in place, the sum of _____</p> <p><u>Ten</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Yard</p>	10.00	27,150.00
12	1,025	S.Y.	<p>For Sawcutting, Removal &amp; Recycling of Existing Concrete Street Pavement (Reference Special Provision 85)</p> <p>complete in place, the sum of _____</p> <p><u>Fifteen</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Yard</p>	15.00	15,375.00
13	2,441	S.F.	<p>For Sawcutting, Removal &amp; Recycling of Existing Concrete Sidewalk Pavement (Reference Special Provision 85)</p> <p>complete in place, the sum of _____</p> <p><u>Two</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Foot</p>	2.00	4,882.00
14	746	L.F.	<p>For Sawcutting, Removal and Recycling of Existing Concrete Curb and Gutter</p> <p>complete in place, the sum of _____</p> <p><u>Ten</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	10.00	7,460.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
15	1	EA.	<p>For Removal and Disposal of Existing Drop Inlet and Concrete Apron</p> <p>complete in place, the sum of _____</p> <p><u>Two thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	2,000.00	2,000.00
16	1	EA.	<p>For Removal and Disposal of Existing 10' Curb Inlet</p> <p>complete in place, the sum of _____</p> <p><u>Two thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	2,000.00	2,000.00
17	45	EA.	<p>For Removal and Disposal of Existing Trees</p> <p>complete in place, the sum of _____</p> <p><u>Three Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	300.00	13,500.00
18	850	L.F.	<p>For Removal and Disposal of Existing Cable Barrier Fence</p> <p>complete in place, the sum of _____</p> <p><u>Four</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	4.00	3,400.00
19	1	L.S.	<p>For Removal and Disposal of Existing Overhead Secondary (450 LF) and 3 Poles with Lights</p> <p>complete in place, the sum of _____</p> <p><u>Five thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Lump Sum</p>	5,000.00	5,000.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
20	420	L.F.	<p>For Removal and Disposal of Existing Concrete Block Wall and Footing</p> <p>complete in place, the sum of _____</p> <p><u>Forty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	40.00	16,800.00
21	32	L.F.	<p>For Removal and Disposal of Existing 6' High Chain Link Fencing</p> <p>complete in place, the sum of _____</p> <p><u>Fourteen</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	14.00	448.00
22	3	E.A.	<p>For Removal, Storage and Re-installation of Existing Street Signage</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Twenty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	120.00	360.00
23	1	L.S.	<p>For Removal and Disposal of Existing Tree Planters and Bollards along Marsh Lane</p> <p>complete in place, the sum of _____</p> <p><u>Four thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Lump Sum</p>	4,000.00	4,000.00
24	2,465	C.Y.	<p>For Unclassified Street Excavation and Controlled Density Placement of Embankment Materials for Westgate Lane, Drive Approach on Marsh Lane and Parallel Parking along Vitruvian Way</p> <p>complete in place, the sum of _____</p> <p><u>Twenty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Cubic Yard</p>	20.00	49,300.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
25	4,595	S.Y.	For Fine Grading and Subgrade Preparation complete in place, the sum of _____ <u>Four</u> Dollars and <u>Zero</u> Cents per Square Yard	4.00	18,380.00
26	4,595	S.Y.	For 6" Lime Stabilized Subgrade complete in place, the sum of _____ <u>Seven</u> Dollars and <u>Zero</u> Cents per Square Yard	7.00	32,165.00
27	83	TONS	For Furnishing and Placing Hydrated Lime (8% by Weight) complete in place, the sum of _____ <u>Two Hundred Ten</u> Dollars and <u>Zero</u> Cents per Ton	210.00	17,430.00
28	3,861	S.Y.	For Furnishing and Placing 10" Reinforced Concrete Street Pavement (4200 PSI) complete in place, the sum of _____ <u>Niney Five</u> Dollars and <u>Zero</u> Cents per Square Yard	95.00	366,795.00
29	103	S.Y.	For Furnishing and Placing 8" Reinforced Concrete Street Pavement (4200 PSI) complete in place, the sum of _____ <u>One Hundred Fifteen</u> Dollars and <u>Zero</u> Cents per Square Yard	115.00	11,845.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
30	2,586	L.F.	For Constructing 6" Reinforced Monolithic Concrete Curb  complete in place, the sum of _____ _____ Dollars and <u>Thick</u> <u>zero</u> Cents per Linear Foot	30.00	77,580.00
31	75	L.F.	For Constructing 6" Reinforced Monolithic Concrete Rollover Curb  complete in place, the sum of _____ _____ Dollars and <u>Fourty Five</u> <u>zero</u> Cents per Linear Foot	45.00	3,375.00
32	158	L.F.	For Constructing 6" Reinforced Concrete Curb & Gutter  complete in place, the sum of _____ _____ Dollars and <u>Fifty</u> <u>zero</u> Cents per Linear Foot	50.00	7,900.00
33	48	L.F.	For Constructing Concrete Street Header  complete in place, the sum of _____ _____ Dollars and <u>Fourty</u> <u>zero</u> Cents per Linear Foot	40.00	1,920.00
34	2,819	S.F.	For Furnishing and Placing 4-inch thick Reinforced Concrete Sidewalk Pavement  complete in place, the sum of _____ _____ Dollars and <u>Eight</u> <u>210</u> Cents per Square Foot	8.00	22,552.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
35	353	S.Y.	<p>For Furnishing and Placing 4" Crushed Limestone Flex Base</p> <p>complete in place, the sum of _____</p> <p><u>Twenty Five</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Yard</p>	25.00	8,825.00
36	311	S.Y.	<p>For Furnishing and Placing 4" HMAC Type "B" Base Course</p> <p>complete in place, the sum of _____</p> <p><u>Forty Two</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Yard</p>	42.00	13,062.00
37	311	S.Y.	<p>For Furnishing and Placing 2" HMAC Type "D" Surface Course</p> <p>complete in place, the sum of _____</p> <p><u>Twenty Three</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Yard</p>	23.00	7,153.00
38	62	GAL	<p>For Furnishing and Placing Emulsion Asphalt Membrane (MS-2) (0.2 Gal/SY)</p> <p>complete in place, the sum of _____</p> <p><u>Fifty Two</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Gallon</p>	52.00	3,224.00
39	315	S.F.	<p>For Furnishing, Laying and Compacting Short Term Asphalt Pavement Repair</p> <p>complete in place, the sum of _____</p> <p><u>Eleven</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Foot</p>	11.00	3,465.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
40	1,530	C.Y.	<p>For Furnishing and Placement of Topsoil Placement to a Depth of 6"</p> <p>complete in place, the sum of _____</p> <p><u>Forty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Cubic Yard</p>	40.00	61,200.00
41	83	S.F.	<p>For Furnishing and Installing Pavestone ADA Truncated Dome Concrete Paver, Running Bond Pattern, 2-3/8" Thickness, Bellows Brown Color</p> <p>complete in place, the sum of _____</p> <p><u>Eleven</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Foot</p>	11.00	913.00
42	345	S.F.	<p>For Furnishing and Installing Pavestone Concrete Street Paver, Running Bond Pattern, 3-1/8" Thickness, Bellows Brown Color</p> <p>complete in place, the sum of _____</p> <p><u>Twelve</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Foot</p>	12.00	4,140.00
43	4	EA.	<p>For Furnishing and Installing White Thermoplastic "ARROW" Pavement Marking</p> <p>complete in place, the sum of _____</p> <p><u>Six Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	600.00	2,400.00
44	2	EA.	<p>For Furnishing and Installing White Thermoplastic "ONLY" Pavement Marking</p> <p>complete in place, the sum of _____</p> <p><u>Seven Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	700.00	1,400.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
45	320	L.F.	<p>For Furnishing and Installing 4-Inch Wide White Solid Thermoplastic Pavement Marking</p> <p>complete in place, the sum of _____</p> <p>_____ Dollars</p> <p>and _____</p> <p>Cents per Linear Foot</p>	4.00	1,280.00
46	305	L.F.	<p>For Furnishing and Installing 8-Inch Wide Yellow Solid Thermoplastic Pavement Marking</p> <p>complete in place, the sum of _____</p> <p>_____ Dollars</p> <p>and _____</p> <p>Cents per Linear Foot</p>	8.00	2,440.00
47	86	L.F.	<p>For Furnishing and Installing 8-Inch Wide White Solid Thermoplastic Pavement Marking</p> <p>complete in place, the sum of _____</p> <p>_____ Dollars</p> <p>and _____</p> <p>Cents per Linear Foot</p>	8.00	688.00
48	48	L.F.	<p>For Furnishing and Installing 24-Inch Wide White Solid Thermoplastic Pavement Marking (Stop Bar)</p> <p>complete in place, the sum of _____</p> <p>_____ Dollars</p> <p>and _____</p> <p>Cents per Linear Foot</p>	24.00	1,152.00
49	91	L.F.	<p>For Furnishing and Installing 12-Inch Wide White Solid Thermoplastic Pavement Marking (Crosswalk)</p> <p>complete in place, the sum of _____</p> <p>_____ Dollars</p> <p>and _____</p> <p>Cents per Linear Foot</p>	12.00	1,092.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
50	16	EA.	<p>For Furnishing and Installing Type 11-AA-4 ReflectORIZED Pavement Marker</p> <p>complete in place, the sum of _____</p> <p>_____ Dollars</p> <p>and _____</p> <p>Cents per Each</p>	6.00	96.00
51	5	EA.	<p>For Furnishing and Installing Type 1-C-4 ReflectORIZED Pavement Marker</p> <p>complete in place, the sum of _____</p> <p>_____ Dollars</p> <p>and _____</p> <p>Cents per Each</p>	6.00	<del>76</del> 30.00
52	7	EA.	<p>For Furnishing and Installing Type 11 ReflectORIZED Blue Pav't Markers for Hydrants</p> <p>complete in place, the sum of _____</p> <p>_____ Dollars</p> <p>and _____</p> <p>Cents per Each</p>	6.00	42.00
53	2	EA.	<p>For Furnishing and Installing Stop Sign (R1-1)</p> <p>complete in place, the sum of _____</p> <p>_____ Dollars</p> <p>and _____</p> <p>Cents per Each</p>	400.00	800.00
54	1	EA.	<p>For Furnishing and Installing Stop Sign (R1-1) Complete with Two Street Name Signs and Mount per Vitruvian Park Standards</p> <p>complete in place, the sum of _____</p> <p>_____ Dollars</p> <p>and _____</p> <p>Cents per Each</p>	500.00	500.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
55	2	EA.	<p>For Furnishing and Installing Speed Limit Sign (R2-1)</p> <p>complete in place, the sum of _____</p> <p><u>Three Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	300.00	600.00
56	285	L.F.	<p>For Excavation of Earthen Drainage Swale</p> <p>complete in place, the sum of _____</p> <p><u>Fifteen</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	15.00	4,275.00
57	1	EA.	<p>For Removal of Plug and Connecting Proposed Pipe to Existing 24-Inch Storm Sewer Pipe</p> <p>complete in place, the sum of _____</p> <p><u>Two Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	2,000.00	2,000.00
58	1	EA.	<p>For Constructing Standard 5' Type "B" Square Storm Drain Manhole over Existing 39" RCP</p> <p>complete in place, the sum of _____</p> <p><u>Seven Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	7,000.00	7,000.00
59	7	EA.	<p>For Constructing Standard 4' Type "A" Square Storm Drain Manhole</p> <p>complete in place, the sum of _____</p> <p><u>Six Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	6,000.00	42,000.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
60	1	EA.	<p>For Constructing Standard 3' Square Drop Inlet with 2' Concrete Apron</p> <p>complete in place, the sum of _____</p> <p><u>Seven thousand</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Each</p>	7,000.00	7,000.00
61	2	EA.	<p>For Constructing 10' Standard Curb Inlet</p> <p>complete in place, the sum of _____</p> <p><u>Ten thousand</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Each</p>	10,000.00	20,000.00
62	6	EA.	<p>For Constructing 6' Standard Curb Inlet</p> <p>complete in place, the sum of _____</p> <p><u>Nine thousand</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Each</p>	9,000.00	54,000.00
63	475	L.F.	<p>For Furnishing and Installing 30-Inch Reinforced Concrete Pipe (Class III)</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Twenty</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Linear Foot</p>	120.00	57,000.00
64	309	L.F.	<p>For Furnishing and Installing 27-Inch Reinforced Concrete Pipe (Class III)</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Ten</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Linear Foot</p>	110.00	33,990.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
65	513	L.F.	<p>For Furnishing and Installing 24-Inch Reinforced Concrete Pipe (Class III)</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Six</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	106.00	54,378.00
66	692	L.F.	<p>For Furnishing and Installing 18-Inch Reinforced Concrete Pipe (Class III)</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	100.00	69,200.00
67	1	EA.	<p>For Furnishing and Installing Concrete Plug for 24-Inch Reinforced Concrete Pipe (Class III)</p> <p>complete in place, the sum of _____</p> <p><u>Eighty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	80.00	80.00
68	16	EA.	<p>For Furnishing and Installing Concrete Plug for 18-Inch Reinforced Concrete Pipe (Class III)</p> <p>complete in place, the sum of _____</p> <p><u>Sixty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	60.00	960.00
69	1,989	L.F.	<p>For TV Inspection of Storm Drain System</p> <p>complete in place, the sum of _____</p> <p><u>Five</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	5.00	9,945.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
70	1	L.S.	<p>For Preparing, Furnishing, Installing and Maintaining Trench Safety System for Storm Drain Improvements</p> <p>complete in place, the sum of _____</p> <p><u>Ten Thousand</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Lump Sum</p>	10,000.00	10,000.00
71	837	L.F.	<p>For Removal and Disposal of Existing 8" Water Line</p> <p>complete in place, the sum of _____</p> <p><u>Eighteen</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Linear Foot</p>	18.00	15,066.00
72	5	L.F.	<p>For Removal and Disposal of Existing 6" Water Line</p> <p>complete in place, the sum of _____</p> <p><u>Seventeen</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Linear Foot</p>	17.00	85.00
73	1	EA.	<p>For Removal of Plug &amp; Blocking and Connection to Existing 12-inch Water Pipe</p> <p>complete in place, the sum of _____</p> <p><u>Two Thousand</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Each</p>	2,000.00	2,000.00
74	7	EA.	<p>For Removal and Disposal of Existing Meter Boxes and Service Lines</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Each</p>	100.00	700.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
75	2	EA.	<p>For Removal of 45 Degree Bend &amp; Blocking and Connection to Existing 8-inch Water Pipe</p> <p>complete in place, the sum of _____</p> <p><u>Two Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	2,000.00	4,000.00
76	3	EA.	<p>For Connection to Existing 8" Water Pipe</p> <p>complete in place, the sum of _____</p> <p><u>Two Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	2,000.00	6,000.00
77	1	EA.	<p>For Removal and Salvaging of Existing Fire Hydrant Assembly</p> <p>complete in place, the sum of _____</p> <p><u>Five Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	500.00	500.00
78	687	L.F.	<p>For Furnishing and Installing 12-Inch PVC Water Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Eighty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	80.00	54,960.00
79	20	L.F.	<p>For Furnishing and Installing 12-Inch Ductile Iron Water Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Eighty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	180.00	3,600.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
80	1,510	L.F.	<p>For Furnishing and Installing 8-Inch PVC Water Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Seventy</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	70.00	105,700.00
81	102	L.F.	<p>For Furnishing and Installing 8-Inch Ductile Iron Water Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Thirty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	130.00	13,260.00
82	46	L.F.	<p>For Furnishing and Installing 6-Inch PVC Water Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Seventy</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	70.00	3,220.00
83	33	L.F.	<p>For Furnishing and Installing 4" PVC Water Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Sixty Five</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	65.00	2,145.00
84	106	L.F.	<p>For Furnishing and Installing 2" CU Water Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Forty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	40.00	4,240.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
85	51	L.F.	<p>For Furnishing and Installing 1 1/2" CU Water Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Forty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	40.00	2,040.00
86	8	EA.	<p>For Furnishing and Installing 12-Inch Gate Valve Complete w/ Valve Box, Extention, Collar, Debris Cap and Cover</p> <p>complete in place, the sum of _____</p> <p><u>Two Thousand Four Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	2,400.00	19,200.00
87	21	EA.	<p>For Furnishing and Installing 8-Inch Gate Valve Complete w/ Valve Box, Extention, Collar, Debris Cap and Cover</p> <p>complete in place, the sum of _____</p> <p><u>Sixteen Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	1,600.00	33,600.00
88	7	EA.	<p>For Furnishing and Installing 6-Inch Gate Valve Complete w/ Valve Box, Extention, Collar, Debris Cap and Cover</p> <p>complete in place, the sum of _____</p> <p><u>Eleven Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	1,100.00	7,700.00
89	1	EA.	<p>For Furnishing and Installing 4-Inch Gate Valve Complete w/ Valve Box, Extention, Collar, Debris Cap and Cover</p> <p>complete in place, the sum of _____</p> <p><u>Nine Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	900.00	900.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
90	7	EA.	<p>For Furnishing and Installing Fire Hydrant Assembly, Complete in Place</p> <p>complete in place, the sum of _____</p> <p><u>Thirty Five Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	3,500.00	24,500.00
91	6.80	TONS	<p>For Furnishing and Installing Ductile Iron Full Bodied Mechanical Joint Type Fittings w/ Restraining Glands for Water Pipe</p> <p>complete in place, the sum of _____</p> <p><u>Eight Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Ton</p>	8,000.00	54,400.00
92	5	EA.	<p>For Furnishing and Installing 2" Water Service Tap</p> <p>complete in place, the sum of _____</p> <p><u>Five Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	500.00	2,500.00
93	2	EA.	<p>For Furnishing and Installing 1 1/2" Water Service Tap</p> <p>complete in place, the sum of _____</p> <p><u>Four Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	400.00	800.00
94	1	EA.	<p>For Furnishing and Installing 2" Meter and Meter Box</p> <p>complete in place, the sum of _____</p> <p><u>Two Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	2,000.00	2,000.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
95	3	EA.	For Furnishing and Installing 2" Meter Box complete in place, the sum of _____ <u>Seven Hundred</u> Dollars and <u>Zero</u> Cents per Each	700.00	2,100.00
96	2	EA.	For Furnishing and Installing 1 1/2" Meter Box complete in place, the sum of _____ <u>Six Hundred</u> Dollars and <u>Zero</u> Cents per Each	600.00	1,200.00
97	2	EA.	For Reconnection of Exist Domestic/Irrigation Water Services to New 12" Water Pipe complete in place, the sum of _____ <u>One Thousand Three Hundred</u> Dollars and <u>Zero</u> Cents per Each	1,300.00	2,600.00
98	37	EA.	For Final Adjustment of Existing Water Valves to Finish Grade complete in place, the sum of _____ <u>One Hundred</u> Dollars and <u>Zero</u> Cents per Each	100.00	3,700.00
99	1	EA.	For Furnishing and Installing Automatic Flushing Device, Kupferle 9800i - Genesis or Approved Equal complete in place, the sum of _____ <u>Twenty Four Thousand</u> Dollars and <u>Zero</u> Cents per Each	24,000.00	24,000.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
100	1	L.S.	<p>For Preparing, Furnishing, Installing and Maintaining Trench Safety System for Water Line Improvements</p> <p>complete in place, the sum of _____</p> <p><u>Three Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Lump Sum</p>	3,000.00	3,000.00
101	3	EA.	<p>For Connection to Existing Sanitary Sewer Manhole</p> <p>complete in place, the sum of _____</p> <p><u>Two Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	2,000.00	6,000.00
102	1	EA.	<p>For Abandonment of Existing Sanitary Sewer Manhole per Town of Addison Requirements</p> <p>complete in place, the sum of _____</p> <p><u>Two Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	2,000.00	2,000.00
103	898	L.F.	<p>For Cutting and Filling of Existing 8" Sewer Pipe with Flowable Fill (NTCOG 504.2.3.4)</p> <p>complete in place, the sum of _____</p> <p><u>Seven</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	7.00	6,286.00
104	1,334	L.F.	<p>For Furnishing and Installing 10-Inch PVC Sanitary Sewer Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Eighty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	80.00	106,720.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
105	25	L.F.	<p>For Furnishing and Installing 10-Inch PVC Sanitary Sewer Pipe by Open Cut with Cement Stabilized Sand Embedment</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Twenty</u> Dollars and <u>Zero</u> Cents per Linear Foot</p>	120.00	3,000.00
106	18	L.F.	<p>For Furnishing and Installing 10-Inch PVC Sanitary Sewer Pipe with 18" Steel Encasement Pipe (0.375" thickness) by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Two Hundred Thirty</u> Dollars and <u>Zero</u> Cents per Linear Foot</p>	230.00 4,140.00	4,140.00
107	40	L.F.	<p>For Furnishing and Installing 10-Inch PVC Sanitary Sewer Pipe with 18" Steel Encasement Pipe (0.375" thickness) by Other Than Open Cut</p> <p>complete in place, the sum of _____</p> <p><u>Three Hundred Ninety</u> Dollars and <u>Zero</u> Cents per Linear Foot</p>	390.00	15,600.00
108	523	L.F.	<p>For Furnishing and Installing 8-Inch PVC Sanitary Sewer Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Eighty</u> Dollars and <u>Zero</u> Cents per Linear Foot</p>	80.00	41,840.00
109	41	L.F.	<p>For Furnishing and Installing 8-Inch PVC Sanitary Sewer Pipe by Open Cut with Cement Stabilized Sand Embedment</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Thirty</u> Dollars and <u>Zero</u> Cents per Linear Foot</p>	130.00	5,330.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
110	54	L.F.	<p>For Furnishing and Installing 8-Inch PVC Sanitary Sewer Pipe with 18" Steel Encasement Pipe (0.375" thickness) by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Two Hundred Ninety</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	290.00	15,660.00
111	95	L.F.	<p>For Furnishing and Installing 8-Inch PVC Sanitary Sewer Pipe with 18" Steel Encasement Pipe (0.375" thickness) by Other Than Open Cut</p> <p>complete in place, the sum of _____</p> <p><u>Three Hundred Eighty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	380.00	36,100.00
112	46	L.F.	<p>For Furnishing and Installing 6-Inch PVC Sanitary Sewer Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Seventy Five</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	75.00	3,450.00
113	9	L.F.	<p>For Furnishing and Installing 4-Inch PVC Sanitary Sewer Pipe by Open Cut with Std. Embedment</p> <p>complete in place, the sum of _____</p> <p><u>Seventy</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	70.00	630.00
114	14	EA.	<p>For Furnishing and Installing Sanitary Sewer Lateral Cleanouts</p> <p>complete in place, the sum of _____</p> <p><u>One Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	1,000.00	14,000.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
115	1	EA.	<p>For Installing 4" Service Taps</p> <p>complete in place, the sum of _____</p> <p><u>Three Hundred</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Each</p>	300.00	300.00
116	1	EA.	<p>For Constructing Standard 4' Diameter Sanitary Sewer Manhole to 6' Depth with Standard Frame and Cover, over Existing Sewer Lines</p> <p>complete in place, the sum of _____</p> <p><u>Six thousand</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Each</p>	6,000.00	6,000.00
117	10	EA.	<p>For Constructing Standard 4' Diameter Sanitary Sewer Manhole to 6' Depth with Standard Frame and Cover</p> <p>complete in place, the sum of _____</p> <p><u>Four thousand</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Each</p>	4,000.00	40,000.00
118	24	V.F.	<p>For Extra Depth for Standard 4' Diameter Manhole in Excess of 6' Depth</p> <p>complete in place, the sum of _____</p> <p><u>Two hundred</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Vertical Feet</p>	200.00	4,800.00
119	1	EA.	<p>For Constructing Standard 5' Diameter Internal Drop Sanitary Sewer Manhole to 6' Depth with Standard Frame and Cover</p> <p>complete in place, the sum of _____</p> <p><u>Six thousand</u> Dollars</p> <p>and <u>zero</u></p> <p>Cents per Each</p>	6,000.00	6,000.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
120	4	V.F.	<p>For Extra Depth for Standard 5' Diameter Internal Drop Manhole in Excess of 6' Depth</p> <p>complete in place, the sum of _____</p> <p><u>Two Hundred Fifty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Vertical Feet</p>	250.00	1,000.00
121	12	EA.	<p>For Final Adjustment of Sanitary Sewer Manholes to Finish Grade</p> <p>complete in place, the sum of _____</p> <p><u>Three Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	300.00	3,600.00
122	631	S.Y.	<p>For Sawcutting, Removal and Replacement of Concrete Street Pavement</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Fifty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Yard</p>	150.00	94,650.00
123	2,185	L.F.	<p>For TV Inspection of Sanitary Sewer System</p> <p>complete in place, the sum of _____</p> <p><u>3 Three</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	3.00	6,555.00
124	1	L.S.	<p>For Preparing, Furnishing, Installing and Maintaining Trench Safety System for Sewer Line Improvements</p> <p>complete in place, the sum of _____</p> <p><u>Ten Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Lump Sum</p>	10,000.00	10,000.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
125	31	EA.	<p>For Furnishing and Installation of Street Light Pole, Type 1, Single 100W 240V MH Luminare on 11'-8" Pole, Color Silver, Complete in Place (Reference Special Provision 84)</p> <p>complete in place, the sum of _____</p> <p><u>Thirty Five Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	3,500.00	108,500.00
126	31	EA.	<p>For Concrete Drilled Shaft Foundation, Type 1, Complete in Place</p> <p>complete in place, the sum of _____</p> <p><u>Six Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	600.00	18,600.00
127	8	L.F.	<p>For Furnishing and Installation of 2" Schedule 40 PVC Conduit</p> <p>complete in place, the sum of _____</p> <p><u>Thirty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	30.00	240.00
128	2,137	L.F.	<p>For Furnishing and Installation of 1 1/4" Schedule 40 PVC Conduit</p> <p>complete in place, the sum of _____</p> <p><u>Twenty Five</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	25.00	53,245.00
129	4,870	L.F.	<p>For Furnishing and Installation of Electric Conductor (No. 6 CU) XHHW-2 Insulated</p> <p>complete in place, the sum of _____</p> <p><u>One</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	1.00	4,870.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
130	2,435	L.F.	<p>For Furnishing and Installation of Electric Conductor (No. 10 CU) XHHW-2 Insulated</p> <p>complete in place, the sum of _____</p> <p><u>Two</u> _____ Dollars</p> <p>and <u>zero</u> _____</p> <p>Cents per Linear Foot</p>	2.00	4,870.00
131	1	EA.	<p>For Connection to Existing Street Light Circuit</p> <p>complete in place, the sum of _____</p> <p><u>Two Thousand</u> _____ Dollars</p> <p>and <u>zero</u> _____</p> <p>Cents per Each</p>	2,000.00	2,000.00
132	3	EA.	<p>For Connection to Existing Street Light Conduits</p> <p>complete in place, the sum of _____</p> <p><u>Five Hundred</u> _____ Dollars</p> <p>and <u>zero</u> _____</p> <p>Cents per Each</p>	500.00	1,500.00
133	2	EA.	<p>For Furnishing and Installation of Ground Box, Type A</p> <p>complete in place, the sum of _____</p> <p><u>One thousand</u> _____ Dollars</p> <p>and <u>zero</u> _____</p> <p>Cents per Each</p>	1,000.00	2,000.00
134	229	L.F.	<p>For Furnishing and Installation of 1-6" and 1-2" Schedule 40 PVC Irrigation Conduits</p> <p>complete in place, the sum of _____</p> <p><u>Thirty</u> _____ Dollars</p> <p>and <u>zero</u> _____</p> <p>Cents per Linear Foot</p>	30.00	6,870.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
135	1	EA.	<p>For Furnishing and Installation of Electric Service Pedestal, Type PS, 120/240 V, Single Phase Electric Service, Milbank CP3B A-Size or Approved Equal, with 200 Amp Panel and Main Breaker, Lighting Control with HOA Switch, Photo Electric Controlled with Distribution Blocks, Complete in Place</p> <p>complete in place, the sum of _____</p> <p><u>Five Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	5,000.00	5,000.00
136	8	L.F.	<p>For Furnishing and Constructing 8E6 Duct Bank Structure per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>Four Hundred Ten</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	410.00	3,280.00
137	1,596	L.F.	<p>For Furnishing and Constructing 6E6 Duct Bank Structure per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Eighty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	180.00	287,280.00
138	839	L.F.	<p>For Furnishing and Constructing 4E6 Duct Bank Structure with (2) -3" conduits above per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Seventy</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	170.00	142,630.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
139	209	L.F.	<p>For Furnishing and Constructing 2E6 Duct Bank Structure per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Fifty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	150.00	31,350.00
140	1	EA.	<p>For Furnishing and Constructing 4 Way Electrical Manhole per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>Twenty Three Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	23,000.00	23,000.00
141	5	EA.	<p>For Furnishing and Constructing 3 Way Electrical Manhole per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>Twenty Two Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	22,000.00	110,000.00
142	1	EA.	<p>For Furnishing and Constructing 2 Way Electrical Manhole per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>Twenty One Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	21,000.00	21,000.00
143	3	EA.	<p>For Constructing Manhole Entrance Pad per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>Five Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	500.00	1,500.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
144	7	EA.	<p>For Final Adjustment of Electrical Manhole to Finish Grade</p> <p>complete in place, the sum of _____</p> <p><u>Two Hundred</u> _____ Dollars</p> <p>and <u>Zero</u> _____</p> <p>Cents per Each</p>	200.00	1,400
145	2	EA.	<p>For End and Plugging of Electrical Duct Bank Structure per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>Two Hundred</u> _____ Dollars</p> <p>and <u>Zero</u> _____</p> <p>Cents per Each</p>	200.00	400.00
146	1	EA.	<p>For Concrete Transformer Pad (Type 2) for Single Phase Transformer per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>Three Thousand</u> _____ Dollars</p> <p>and <u>Zero</u> _____</p> <p>Cents per Each</p>	3,000.00	3,000.00
147	7	EA.	<p>For Concrete Deepwell Pad for 4 Way 25KV Deadfront Switchgear per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>Four Thousand</u> _____ Dollars</p> <p>and <u>Zero</u> _____</p> <p>Cents per Each</p>	4,000.00	28,000.00
148	81	L.F.	<p>For Furnishing and Installation of (2) - 4" Electrical Duct by Open Cut</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred</u> _____ Dollars</p> <p>and <u>Zero</u> _____</p> <p>Cents per Linear Foot</p>	100.00	8,100.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
149	140	L.F.	<p>For Furnishing and Installation of (2) - 3" Electrical Duct by Open Cut</p> <p>complete in place, the sum of _____</p> <p><u>Sixty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	60.00	8,400.00
150	100	L.F.	<p>For Furnishing and Installation of (2) - 3" Electrical Duct by Other Than Open Cut</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	100.00	10,000.00
151	630	S.F.	<p>For Sawcutting, Removal &amp; Replacement of Asphalt Street Pavement Repair</p> <p>complete in place, the sum of _____</p> <p><u>Twenty</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Foot</p>	20.00	12,600.00
152	1	L.S.	<p>For Preparing, Furnishing, Installing and Maintaining Trench Safety System for Duct Bank Improvements</p> <p>complete in place, the sum of _____</p> <p><u>Six thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Lump Sum</p>	6,000.00	6,000.00
153	1	L.S.	<p>For Furnishing all Labor and Materials necessary to Repair the Existing Irrigation System along Westgate Lane (Ref. Note 29 - Sheet 90)</p> <p>complete in place, the sum of _____</p> <p><u>Nineteen thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Lump Sum</p>	19,000.00	19,000.00

## BASE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
154	1	L.S.	For Furnishing all Labor and Materials necessary to Repair the Existing Irrigation System along Vitruvian Way (Ref. Note 29 - Sheet 90)  complete in place, the sum of _____ <u>Ten thousand</u> Dollars and <u>zero</u> Cents per Lump Sum	<i>10,000.00</i>	<i>10,000.00</i>
155	1	L.S.	For Furnishing all Labor and Materials necessary to Repair the Existing Irrigation System along Marsh Lane (Ref. Note 29 - Sheet 90)  complete in place, the sum of _____ <u>Twenty thousand</u> Dollars and <u>zero</u> Cents per Lump Sum	<i>20,000.00</i>	<i>20,000.00</i>
<b>TOTAL AMOUNT OF BASE BID (Items 1 Through 155)</b>					<i>3,197,299.00</i>

## ADDITIVE ALTERNATE

The following Additive Alternate will be added to the bid at the option of the Town of Addison

### ADDITIVE ALTERNATE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
156	1	L.S.	For Mobilization (not to exceed 5% of total bid amount)  complete in place, the sum of _____ <u>Twenty Eight Thousand</u> Dollars and <u>300</u> Cents per Lump Sum	28,000.00	28,000.00
157	10,092	S.F.	Furnishing & Placing 4-inch thick Reinforced Concrete Sidewalk Enhanced Pvmnt  complete in place, the sum of _____ <u>Thirteen</u> Dollars and <u>300</u> Cents per Square Foot	13.00	131,196.00
158	47	S.F.	For Furnishing & Installing Pavestone ADA Truncated Dome Concrete Paver, Running Bond Pattern, 2-3/8" Thickness, Bellow Brown Color  complete in place, the sum of _____ <u>Eleven</u> Dollars and <u>200</u> Cents per Square Foot	11.00	517.00
159	103	S.F.	For Furnishing & Installing Pavestone Concrete Street Paver, City Stone 1, 3-1/8" Thickness, Bellows Brown Color  complete in place, the sum of _____ <u>Twelve</u> Dollars and <u>200</u> Cents per Square Foot	12.00	1,236.00

## ADDITIVE ALTERNATE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
160	1,894	S.F.	<p>For Furnishing &amp; Installing Pavestone Concrete Paver - Holland Stone, 2-3/8" Thickness, Bellows Brown Color</p> <p>complete in place, the sum of _____</p> <p><u>Four</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Square Foot</p>	4.00	7,576.00
161	14	EA.	<p>For Furnishing and Installing PEDOC, 30" Height, Single Gang, Hinged Top Pedestal with Integral Base, Color Green, Complete in Place</p> <p>complete in place, the sum of _____</p> <p><u>Six Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	600.00	8,400.00
162	1,528	L.F.	<p>For Furnishing and Installing 3/4" Schedule 40 PVC Conduit</p> <p>complete in place, the sum of _____</p> <p><u>Twenty Three</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Linear Foot</p>	23.00	35,144.00
163	6	EA.	<p>For Furnishing and Installing Ground Box Type "A"</p> <p>complete in place, the sum of _____</p> <p><u>One Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	1,000.00	6,000.00
164	4	EA.	<p>For Connecting Proposed Tree Drain Line to Storm Drain Curb Inlet</p> <p>complete in place, the sum of _____</p> <p><u>Fifteen Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	1,500.00	6,000.00

## ADDITIVE ALTERNATE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
165	959	L.F.	For Furnishing and Installing 4" PVC (SDR-35) Tree Drain Piping complete in place, the sum of _____ _____ Dollars and <u>Twenty Five</u> <u>Zero</u> Cents per Linear Foot	25.00	23,975.00
166	1.25	Acres	For Furnishing and Installing Hydromulch Seeding (NCTCOG Item 3.10. "Seeding") of Disturbed Areas as shown on Sheets 83-85, and including all other Disturbed Areas of the Site (Ref. Special Provision 74) complete in place, the sum of _____ _____ Dollars and <u>Thirty Two Hundred</u> <u>Zero</u> Cents per Acre	3,200.00	4,000.00
167	4,650	S.F.	For Furnishing and Installing Midiron Bermuda Sod (Pinned on Slopes Greater than 6:1) complete in place, the sum of _____ _____ Dollars and <u>Zero</u> <u>Fifty</u> Cents per Square Foot	0.50	2,325.00
168	3,530	EA.	For Furnishing & Installing Liriope, 1 gallon, Planted 12" O.C. complete in place, the sum of _____ _____ Dollars and <u>Thirteen</u> <u>Zero</u> Cents per Each	13.00	45,890.00
169	3,655	S.F.	For Preparation of Planting Bed Areas including Topsoil, Soil Amendment Materials and Mulch complete in place, the sum of _____ _____ Dollars and <u>Two Dollars</u> <u>Zero</u> Cents per Square Foot	2.00	7,310.00

## ADDITIVE ALTERNATE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
170	43	EA.	<p>For Furnishing and Installing "High Rise" Live Oak, 6" Caliper, Single Trunk, (See SP-85)</p> <p>complete in place, the sum of _____</p> <p><u>Forty five Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	4,500.00	193,500.00
171	1	L.S.	<p>For Implementation of Landscape Maintenance Program for a Period of One (1) Year From Date of Final Acceptance (Ref. Special Provision 118)</p> <p>complete in place, the sum of _____</p> <p><u>Fifty Five Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Lump Sum</p>	55,000.00	55,000.00
172	1	EA.	<p>For Furnishing and Installing 2" Irrigation Service Connection including Isolation Valve, Wye Strainer, Double Check Assembly, Master Valve and Flow Meter</p> <p>complete in place, the sum of _____</p> <p><u>Twenty Five Hundred</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Each</p>	2,500.00	2,500.00
173	1	L.S.	<p>For Furnishing and Installing Streetscape Irrigation System along Westgate Lane</p> <p>complete in place, the sum of _____</p> <p><u>Twenty Six Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Lump Sum</p>	26,000.00	26,000.00
174	1	L.S.	<p>For Furnishing and Installing Streetscape Irrigation System along Vitruvian Way</p> <p>complete in place, the sum of _____</p> <p><u>Five Thousand</u> Dollars</p> <p>and <u>Zero</u></p> <p>Cents per Lump Sum</p>	5,000.00	5,000.00

## ADDITIVE ALTERNATE BID

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
175	1	L.S.	For Furnishing and Installing Irrigation System for Hydromulch and Sod areas along Westgate Lane		
			complete in place, the sum of _____		
			<u>Twelve Thousand</u> Dollars	12,000.00	12,000.00
			and <u>Zero</u> Cents per Lump Sum		
176	1	L.S.	For Furnishing and Installing Irrigation System for Hydromulch and Sod areas along Vitruvian Way		
			complete in place, the sum of _____		
			<u>Twelve Thousand</u> Dollars	12,000.00	12,000.00
			and <u>Zero</u> Cents per Lump Sum		
177	3	E.A.	For Connection to Existing Irrigation System Mainline along Vitruvian Way		
			complete in place, the sum of _____		
			<u>Two Thousand</u> Dollars	2,000.00	6,000.00
			and <u>Zero</u> Cents per Each		
178	1	L.S.	For Furnishing all Labor and Materials necessary to Connect Proposed Irrigation System Wiring to the Existing Irrigation System Wiring and Controller along Vitruvian Way (Ref. Note 31 - Sheet 90)		
			complete in place, the sum of _____		
			<u>Seven Thousand</u> Dollars	7,000.00	7,000.00
			and <u>Zero</u> Cents per Lump Sum		
<b>AMOUNT OF ADDITIVE ALTERNATE 1</b>					<b>626,569.00</b>

**VITRUVIAN PARK**  
**PUBLIC INFRASTRUCTURE – BLOCK 200**

**BID SCHEDULE SUMMARY**

<u>Bid Schedule &amp; Description</u>	<u>Total Amount Materials &amp; Services</u>
TOTAL AMOUNT OF BASE BID (Items 1 through 155)	<u>3,197,299.00</u>
WRITTEN IN WORDS:	<u>Three Million One Hundred Ninety Seven Two Hundred Ninety Nine</u>
TOTAL AMOUNT OF ADDITIVE ALTERNATE BID (Items 153 through 178)	<u>626,569.00</u>
WRITTEN IN WORDS:	<u>Six Hundred Twenty Six Thousand Five Hundred Sixty Nine</u>

**NOTES:**

1. All items, labor, materials, equipment, facilities, incidentals, and work required for construction of the project are to be provided and installed by the Contractor as part of the project and payment for the cost of such shall be included in the price bid.
2. Prices must be shown in words and figures for each item listed in this proposal. In the event of discrepancy, the words shall control.
3. It is understood that the Bid Security shall be collected and retained by the Owner as liquidated damages in the event a contract is made by the Owner based on this proposal within ninety (90) calendar days after receiving bids and the undersigned fails to execute the contract.
4. Materials, which are "tax exempt", are those items which are physically incorporated into the facilities constructed for the Town of Addison, as set forth in the Special Provisions. Materials include, but are not limited to purchased items such as water pipe, sanitary sewer pipe, storm drain pipe, etc. Services, which are "not tax exempt", are those items which are used by the Contractor but are not physically incorporated into the Town of Addison's facility and/or items which are consumed by construction, as set forth in the Special Provisions. Services include, but are not limited to, items such as supplies, tools, skill and labor, the purchase, rental or lease of equipment, etc.

EdUARdo M. Hernandez  
Name of Person Signing Bid

[Signature]  
Signature of Person Signing Bid

P.O. Box 600851 Dallas, TX  
Address

214 390-2848  
Telephone No. Fax No.

46-0730116  
Bidder's Tax I.D. No. or Employer No.

If BIDDER is:

**AN INDIVIDUAL**

By \_\_\_\_\_ (Seal)  
(Individual's Name)

doing business as \_\_\_\_\_

Business address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone No. \_\_\_\_\_

---

**A PARTNERSHIP**

By \_\_\_\_\_ (Seal)  
(Firm Name)

\_\_\_\_\_ (General Partner)

doing business as \_\_\_\_\_

Business address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone No. \_\_\_\_\_

**A CORPORATION**

By Flow-Line Construction, Inc.  
(Corporation Name)

Ohio  
(State of Incorporation)

By Edwards de Hernandez  
(Name of Person Authorized to Sign)

President  
(Title)

(Corporate Seal)

Attest [Signature]  
(Secretary)



Business address: P.O. Box 600881  
Dallas TX 75360  
75

Phone No. 214-390-2848

---

**A JOINT VENTURE**

By \_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Address)

By \_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Address)

(Each joint venture must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

**SECTION IA**

**INDEMNIFICATION AGREEMENT**

**TOWN OF ADDISON**  
**INDEMNIFICATION AGREEMENT**

**Contractor's Indemnity Obligation.** Contractor covenants, agrees to, and shall DEFEND (with counsel reasonably acceptable to Owner), INDEMNIFY, AND HOLD HARMLESS Owner, its past, present and future elected and appointed officials, and its past, present and future officers, employees, representatives, and volunteers, individually or collectively, in both their official and private capacities (collectively, the "Owner Persons" and each being an "Owner Person"), from and against any and all claims, liabilities, judgments, lawsuits, demands, harm, losses, damages, proceedings, suits, actions, causes of action, liens, fees (including attorney's fees), fines, penalties, expenses, or costs, of any kind and nature whatsoever, made upon or incurred by Owner and/or Owner Person, whether directly or indirectly, (the "Claims"), that arise out of, result from, or relate to: (i) the services to be provided by Contractor pursuant to this Agreement, (ii) any representations and/or warranties by Contractor under this Agreement, (iii) any personal injuries (including but not limited to death) to any Contractor Persons (as hereinafter defined) and any third persons or parties, and/or (iv) any act or omission under, in performance of, or in connection with this Agreement by Contractor or by any of its owners, directors, officers, managers, partners, employees, agents, contractors, subcontractors, invitees, patrons, quests, customers, licensees, sub licensees, or any other person or entity for whom Contractor is legally responsible, and their respective owners, directors, officers, managers, partners, employees, agents, contractors, subcontractors, invitees, patrons, quests, customers, licensees, sub licensees (collectively, "Contractor Persons"). **SUCH DEFENSE, INDEMNITY AND HOLD HARMLESS SHALL AND DOES INCLUDE CLAIMS ALLEGED OR FOUND TO HAVE BEEN CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE OR GROSS NEGLIGENCE OF OWNER OR ANY OTHER OWNER PERSON, OR CONDUCT BY OWNER OR ANY OTHER OWNER PERSON THAT WOULD GIVE RISE TO STRICT LIABILITY OF ANY KIND.**

Contractor shall promptly advise Owner in writing of any claim or demand against any Owner Person related to or arising out of Contractor's activities under this Agreement and shall see to the investigation and defense without relieving Contractor of any of its obligations hereunder. This defense, indemnity, and hold harmless provision shall survive the termination or expiration of this Agreement.

The provisions in the foregoing defense, indemnity and hold harmless are severable, and if any portion, sentence, phrase, clause or word included therein shall for any reason be held by a court of competent jurisdiction to be invalid, illegal, void, or unenforceable in any respect, such invalidity, illegality, voidness, or unenforceability shall not affect any other provision hereof, and this defense, indemnity and hold harmless provision shall be considered as if such invalid, illegal, void, or unenforceable provision had never been contained in this Agreement. **In that regard, if the capitalized language included in the foregoing indemnity is so determined to be void or unenforceable, the parties agree that:**

- (i) the foregoing defense, indemnity, and hold harmless obligation of Contractor shall be to the extent Claims are caused by, arise out of, or result from, in whole or in part, any act or omission of Contractor or any Contractor Persons; and**

(ii) notwithstanding the provisions of the foregoing subparagraph (i), to the fullest extent permitted by law, Contractor shall INDEMNIFY, HOLD HARMLESS, and DEFEND Owner and Owner Persons from and against all Claims arising out of or resulting from bodily injury to, or sickness, disease or death of, any employee, agent or representative of Contractor or any of its subcontractors, regardless of whether such Claims are caused, or are alleged to be caused, in whole or in part, by the negligence, or any act or omission, of Owner or any Owner Persons, it being the expressed intent of Owner and Contractor that IN SUCH EVENT THE CONTRACTOR'S INDEMNITY, HOLD HARMLESS, AND DEFENSE OBLIGATION SHALL AND DOES INCLUDE CLAIMS ALLEGED OR FOUND TO HAVE BEEN CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE OR GROSS NEGLIGENCE OF OWNER OR ANY OTHER OWNER PERSON, OR CONDUCT BY OWNER OR ANY OTHER OWNER PERSON THAT WOULD GIVE RISE TO STRICT LIABILITY OF ANY KIND. The indemnity obligation under this subparagraph (ii) shall not be limited by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor under workers compensation acts, disability benefit acts, or other employee benefit acts.

I understand that the indemnification provisions are required of all Town of Addison Contracts. I have read the provisions and agree to the terms of these provisions.

Project/Bid #: Vitruvius Park Public Infrastructure 2016-09

Company Name: Flourfire Construction, Inc

Signature:  Date: 10/25/16

SECTION CA

**CONTRACT AGREEMENT**

## CONTRACT AGREEMENT

STATE OF TEXAS

COUNTY OF DALLAS

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2016, by and between the Town of Addison, of the County of Dallas and State of Texas, acting through its City Manager, thereunto duly authorized so to do, Party of the First Part, hereinafter termed the OWNER, and Flow-Line Construction, Inc., of the City of Dallas, County of Dallas, State of Texas, Party of the Second Part, hereinafter termed CONTRACTOR.

WITNESSETH: That for and in consideration of the payment and agreement hereinafter mentioned, to be made and performed by the OWNER, the said CONTRACTOR hereby agrees with the said OWNER to commence and complete construction of certain improvements as follows:

Town of Addison Public Improvements  
to be known as

### VITRUVIAN PARK PUBLIC INFRASTRUCTURE – BLOCK 200

and all extra work in connection therewith, under the terms as stated in the General and Specific Conditions of the AGREEMENT; and at his own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance and other accessories and services necessary to complete the said construction, in accordance with the conditions and prices stated in the Proposal attached hereto and in accordance with the Advertisement for Bids, Instructions to Bidders, General Provisions, Special Provisions, Plans, and other drawings and printed or written explanatory matter thereof, and the Technical Specifications and Addenda thereto, as prepared by the OWNER, each of which has been identified by the endorsement of the CONTRACTOR and the OWNER thereon, together with the CONTRACTOR's written Proposal and the General Provisions, all of which are made a part hereof and collectively evidence and constitute the entire AGREEMENT.

The CONTRACTOR hereby agrees to commence work within ten (10) calendar days after the date of written notice to do so shall have been given to him, to complete the work within Three Hundred Sixty Five (365) calendar days, after he commences work, subject to such extensions of time as are provided by the General Provisions.

The OWNER agrees to pay the CONTRACTOR \$ 3,823,868.00 in current funds for the performance of the Contract in accordance with the Proposal submitted thereof, subject to additions and deductions, as provided in the General Provisions, and to make payments of account thereof as provided therein.

IN WITNESS WHEREOF, the parties of these presents have executed this AGREEMENT in the year and day first above written.

**TOWN OF ADDISON, TEXAS (OWNER)**

**ATTEST:**

By: \_\_\_\_\_  
Wes Pierson, City Manager

By: \_\_\_\_\_  
Laura Bell, City Secretary

(CONTRACTOR)

ATTEST:

By: \_\_\_\_\_  


By: \_\_\_\_\_  


The following to be executed if the CONTRACTOR is a corporation:

I, **Eduardo M. Hernandez** \_\_\_\_\_ certify that I am the secretary of the corporation named as CONTRACTOR herein; that **Eduardo M. Hernandez** \_\_\_\_\_, who signed this Contract on behalf of the CONTRACTOR is the **President** \_\_\_\_\_ (official title) of said corporation; that said Contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Signed: \_\_\_\_\_  


Corporate Seal

# CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.  
 Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

## OFFICE USE ONLY CERTIFICATION OF FILING

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Flow-Line Construction, Inc.  
 Dallas, TX United States

Certificate Number:  
 2016-140029

Date Filed:  
 11/28/2016

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Town of Addison

Date Acknowledged:

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

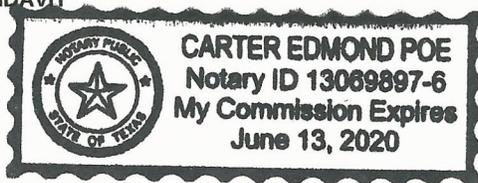
2016-09  
 Vitruvian Park Public Infrastructure - Block 200

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	Hernandez, Eduardo	Dallas, TX United States	X	

5 Check only if there is NO Interested Party.

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.



*[Handwritten Signature]*  
 \_\_\_\_\_  
 Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Eduardo Hernandez, this the 28 day of November 2016, to certify which, witness my hand and seal of office.

*Carter Edmond Poe*      Carter Edmond Poe      Notary Public  
 Signature of officer administering oath      Printed name of officer administering oath      Title of officer administering oath

**SECTION BB**

**BID BOND**

## **BID BOND**

Bidder shall submit a bid bond equal to five percent (5%) of the bid price. Failure to submit a bid bond when required may deem the bid non-responsive. Bid Bonds may be submitted electronically with the executed original provided immediately upon request.



**BID BOND**

**KNOW ALL MEN BY THESE PRESENTS**, that we Flow-Line Construction, Inc.  
as principal, hereinafter called the "Principal," and **SURETEC INSURANCE COMPANY**, as surety, hereinafter called the  
"Surety," are held and firmly bound unto Town of Addison  
as obligee, hereinafter called the Obligee, in the sum of 5 % of the greatest amount bid by Principal for the  
payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs,  
executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the principal has submitted a bid for Bid Number 16-184, Infrastructure & Development Services #2016-09  
Vitruvian Park Public Infrastructure - Block 200 Proj. No. Bid Number 16-184

**NOW, THEREFORE**, if the contract be timely awarded to the Principal and the Principal shall within such time as  
specified in the bid, enter into a contract in writing or, in the event of the failure of the Principal to enter into such Contract,  
if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in  
said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the work  
covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

**PROVIDED, HOWEVER**, neither Principal nor Surety shall be bound hereunder unless Obligee prior to execution of the  
final contract shall furnish evidence of financing in a manner and form acceptable to Principal and Surety that financing  
has been firmly committed to cover the entire cost of the project.

SIGNED, sealed and dated this 20th day of October, 2016.

Flow-Line Construction, Inc.  
(Principal)

BY: [Signature]

TITLE: President

**SURETEC INSURANCE COMPANY**

BY: [Signature]

Kirk Dreyer , Attorney-in-Fact



# SureTec Insurance Company

## LIMITED POWER OF ATTORNEY

**Know All Men by These Presents,** That SURETEC INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Texas, and having its principal office in Houston, Harris County, Texas, does by these presents make, constitute and appoint

Kirk Dreyer

its true and lawful Attorney-in-fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include waivers to the conditions of contracts and consents of surety for:

- Principal:** Flow-Line Construction, Inc.
- Obligee:** Town of Addison
- Amount:** \$Five Percent (5%) of the Greatest Amount Bid

and to bind the Company thereby as fully and to the same extent as if such bond were signed by the President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney-in-Fact may do in the premises. Said appointment is made under and by authority of the following resolutions of the Board of Directors of the SureTec Insurance Company:

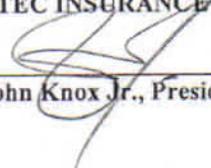
*Be it Resolved,* that the President, any Vice-President, any Assistant Vice-President, any Secretary or any Assistant Secretary shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

*Attorney-in-Fact* may be given full power and authority for and in the name of and of behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements or indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be binding upon the Company as if signed by the President and sealed and effected by the Corporate Secretary.

*Be it Resolved,* that the signature of any authorized officer and seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached. (Adopted at a meeting held on 20<sup>th</sup> of April, 1999.)

**In Witness Whereof,** SURETEC INSURANCE COMPANY has caused these presents to be signed by its President, and its corporate seal to be hereto affixed this 21st day of March, A.D. 2013.

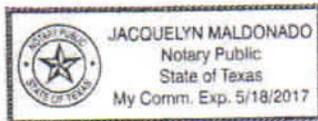
SURETEC INSURANCE COMPANY

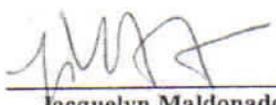
By:   
John Knox Jr., President

State of Texas                    ss:  
County of Harris



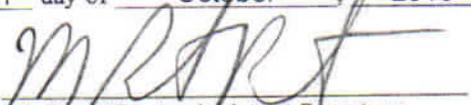
On this 21st day of March, A.D. 2013 before me personally came John Knox Jr., to me known, who, being by me duly sworn, did depose and say, that he resides in Houston, Texas, that he is President of SURETEC INSURANCE COMPANY, the company described in and which executed the above instrument; that he knows the seal of said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto by like order.



  
Jacquelyn Maldonado, Notary Public  
My commission expires May 18, 2017

I, M. Brent Beaty, Assistant Secretary of SURETEC INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Company, which is still in full force and effect; and furthermore, the resolutions of the Board of Directors, set out in the Power of Attorney are in full force and effect.

Given under my hand and the seal of said Company at Houston, Texas this 20th day of October, 2016, A.D.

  
M. Brent Beaty, Assistant Secretary

**SureTec Insurance Company**  
**THIS BOND RIDER CONTAINS IMPORTANT COVERAGE INFORMATION**  
**Statutory Complaint Notice/Filing of Claims**

To obtain information or make a complaint: You may call the Surety's toll free telephone number for information or to make a complaint or file a claim at: 1-866-732-0099. You may also write to the Surety at:

SureTec Insurance Company  
9737 Great Hills Trail, Suite 320  
Austin, Tx 78759

You may contact the Texas Department of Insurance to obtain information on companies, coverage, rights or complaints at 1-800-252-3439. You may write the Texas Department of Insurance at

PO Box 149104  
Austin, TX 78714-9104  
Fax#: 512-490-1007  
Web: <http://www.tdi.state.tx.us>  
Email: [ConsumerProtection@tdi.texas.gov](mailto:ConsumerProtection@tdi.texas.gov)

**PREMIUM OR CLAIM DISPUTES:** Should you have a dispute concerning your premium or about a claim, you should contact the Surety first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

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**SECTION PrB**

**PERFORMANCE BOND**

**STATUTORY PERFORMANCE BOND PURSUANT TO CHAPTER 2253  
OF THE TEXAS GOVERNMENT CODE  
(PUBLIC WORKS)**

**(Penalty of this Bond must be 100% of Contract Amount)**

KNOW ALL MEN BY THESE PRESENTS, That \_\_\_\_\_  
(hereinafter called the Principal), as Principal, and \_\_\_\_\_  
(hereinafter called the Surety), as Surety are held and firmly bound unto the **Town of Addison** (hereinafter called the Obligee), in the amount of \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_ ) for the  
payment whereof the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the \_\_\_\_\_ day of \_\_\_\_\_, 2016 to

**Town of Addison Public Improvements  
to be known as  
VITRUVIAN PARK  
PUBLIC INFRASTRUCTURE – BLOCK 200**

which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform the work in accordance with the plans, specifications and contract documents, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitations of said Chapter to the same extent as if it were copied at length herein.

IN WITNESS WHEREOF, the said Principal and Surety have signed this instrument this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
(Principal)  
By: \_\_\_\_\_

\_\_\_\_\_  
(Surety)  
By: \_\_\_\_\_  
(Attorney-in-Fact)

**SECTION PyB**

**PAYMENT BOND**

**STATUTORY PAYMENT BOND PURSUANT TO CHAPTER 2253  
OF THE TEXAS GOVERNMENT CODE  
(PUBLIC WORKS)**

**(Penalty of this Bond must be 100% of Contract Amount)**

KNOW ALL MEN BY THESE PRESENTS, That \_\_\_\_\_  
(hereinafter called the Principal), as Principal, and \_\_\_\_\_  
(hereinafter called the Surety), as Surety are held and firmly bound unto the **Town of Addison** (hereinafter  
called the Oblige), in the amount of \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_ ) for the  
payment whereof the said Principal and Surety bind themselves and their heirs, administrators, executors,  
successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Oblige, dated the  
\_\_\_\_\_ day of \_\_\_\_\_, 2016 to

**Town of Addison Public Improvements  
to be known as  
VITRUVIAN PARK  
PUBLIC INFRASTRUCTURE – BLOCK 200**

which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at  
length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said  
Principal shall pay all claimants supplying labor and material to him or a subcontractor in the prosecution  
of the work provided for in said contract, then this obligation shall be void; otherwise to remain in full  
force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of  
the Texas Government Code and all liabilities on this bond shall be determined in accordance with the  
provisions, conditions and limitations of said Chapter to the same extent as if it were copied at length  
herein.

IN WITNESS WHEREOF, the said Principal and Surety have signed this instrument this \_\_\_\_\_  
day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
(Principal)  
By: \_\_\_\_\_

\_\_\_\_\_  
(Surety)  
By: \_\_\_\_\_  
(Attorney-in-Fact)

**SECTION MB**

**MAINTENANCE BOND**

**MAINTENANCE BOND**

STATE OF TEXAS

COUNTY OF DALLAS

That \_\_\_\_\_ as principal and \_\_\_\_\_  
\_\_\_\_\_, a corporation organized under the laws of \_\_\_\_\_  
and \_\_\_\_\_ as sureties, said sureties being authorized to do business in the  
State of Texas, do hereby expressly acknowledge themselves to be held and bound to pay unto the Town of  
Addison, a municipal corporation, chartered by virtue of a Special Act of Legislature of the State of Texas, as  
Addison, Dallas County, Texas, the sum of

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(\$ \_\_\_\_\_) for the payment of which sum will and truly to be made unto said Town of Addison and its  
successors, said principal and sureties do hereby bind themselves, their assigns and successors, jointly and severally.

This obligation is conditioned, however, that whereas said

\_\_\_\_\_

has this day entered into a written contract with the said Town of Addison to build and construct the

**Town of Addison Public Improvements**

**to be known as**

**VITRUVIAN PARK**

**PUBLIC INFRASTRUCTURE – BLOCK 200**

which contract and the Plans and Specifications therein mentioned adopted by the Town of Addison, are hereby  
expressly made a part hereof as though the same were written and embodied herein.

WHEREAS, under the Plans, Specifications and Contract it is provided that the Contractor will maintain and keep in good repair the work herein contracted to be done and performed for a period of two (2) years from the date of startup, and to do all necessary backfilling that may arise on account of sunken conditions in ditches, or otherwise, and to do and perform all necessary work and repair any defective condition growing out of or arising from the improper joining of the same, or on account of any breaking of the same caused by the said Contractor in laying or building the same, or on account of any defect arising in any of said part of said work laid or constructed by the said Contractor, or on account of improper excavation or backfilling; it being understood that the purpose of this section is to cover all defective conditions arising by reason of defective materials, work or labor performed by the said Contractor; and in case the said Contractor shall fail to do, it is agreed that the City may do said work and supply such materials, and charge the same against the said Contractor and sureties on this obligation, and the said Contractor and sureties hereon shall be subject to the liquidated damages mentioned in said contract for each day's failure on its part to comply with the terms of the said provisions of said contract;

NOW THEREFORE, if the said Contractor shall keep and perform its said agreement to maintain said work and keep the same in repair for the said maintenance period of two (2) years, as provided, then these presents shall be null and void and have no further effect; but if default shall be made by the said Contractor in the performance of its contract to so maintain and repair said work, then these presents shall have full force and effect, and said Town of Addison shall have and recover from the Contractor and its sureties damages in the premises, as provided, and it is further understood and agreed that this obligation shall be a continuing one against the principal and sureties hereon and that successive recoveries may be had hereon for successive branches until the full amount shall have been exhausted; and it is further understood that the obligation herein to maintain said work shall continue throughout said maintenance period, and the same shall not be changed, diminished, or in any manner affected from any cause during said time.

IN WITNESS WHEREOF, the said \_\_\_\_\_ has caused these presents to be executed by \_\_\_\_\_ and the said \_\_\_\_\_ has hereunto set his hand this the \_\_\_\_\_ day of \_\_\_\_\_, 2016 \_\_\_\_

SURETY

PRINCIPAL

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
By: \_\_\_\_\_

By: \_\_\_\_\_  
Attorney in Fact

ATTEST

By: \_\_\_\_\_  
Surety

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
\_\_\_\_\_  
Agency and Address

NOTE: Date of Maintenance Bond must be same as date of City acceptance.

**SECTION BP**

**CONTRACTOR'S AFFIDAVIT OF BILLS PAID**

**CONTRACTOR'S AFFIDAVIT OF BILLS PAID**

STATE OF TEXAS

COUNTY OF DALLAS

Personally, before me the undersigned authority, on this day appeared \_\_\_\_\_ who, being  
duly sworn, on oath, says that he is a legal representative of \_\_\_\_\_  
(full name of Contractor as in contract)

and that the contract for the construction of the project, designated as

**Town of Addison Public Improvements  
to be known as**

**VITRUVIAN PARK**

**PUBLIC INFRASTRUCTURE – BLOCK 200**

**Infrastructure & Development Services #2016-09**

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has been satisfactorily completed and that all bills for materials, apparatus, fixtures, machinery and labor used in connection with the construction of this project have, to the best of my knowledge and belief, been fully paid.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
Notary Public in and for

\_\_\_\_\_  
County, Texas

**Instructions:**

If the contractor is an individual, he shall sign the affidavit. If the contractor is a partnership, any partner may sign the affidavit. If the contractor is a corporation, a person authorized by the by-laws or by the Board of Directors shall sign the affidavit. If the Contractor is a joint-venture of individuals, any of the individuals may sign the affidavit. If the Contractor is a joint-venture of partnerships, or of individuals and partnerships, the affidavit may be signed by the individual or any partner of any partnership. If the contractor is a joint-venture in which a corporation is a party, separate affidavits must be executed in the name of the joint-venture: one by each corporation and one by each individual or partnership. Signatures for corporations should be by a duly authorized officer. If signature is by another, a showing of authority to sign must accompany the affidavit.

**SECTION GP**

**GENERAL PROVISIONS**

## **GENERAL PROVISIONS**

The General Provisions of the Contract shall be as stated in the Standard Specifications for Public Works Construction, North Central Texas Council of Governments 2004 Version, under Division 100, "General Provisions," as amended or supplemented and except as modified by the Special Provisions.

**SECTION SP**  
**SPECIAL PROVISIONS**

**SPECIAL PROVISIONS**  
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## **SPECIAL PROVISIONS**

1. **SCOPE OF WORK:** The work to be performed under the provisions of these Contract Documents shall consist of furnishing all materials, labor, equipment, supplies and appurtenances; providing all construction, plant, equipment and tools; performing all necessary labor and supervision; and the construction complete, including all work appurtenant thereto, the proposed improvements for **Vitruvian Park Public Infrastructure – Block 200.**
  
2. **GENERAL:** This work shall conform to the requirements of the specifications and the details as shown on the Drawings. These Contract Documents are intended to be complementary. Requirements of any of the Contract Documents are as binding as if called for by all. In the event of conflict between the Drawings and the Specifications, the Contractor will be deemed to have assumed the more expensive way of doing the work unless, before submitting a bid, the Contractor shall have asked for and obtained (by addendum) a written decision as to which method or material is intended.

In cases of discrepancies, calculated dimensions shall govern over scaled dimensions; special provisions and special specifications shall govern over both general and standard specifications; and quantities shown on the plans shall govern over those shown in the proposal.

3. **EXAMINATION OF SITE:** The Contractor acknowledges that he has investigated and satisfied himself as to the conditions affecting the work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, or similar physical conditions at the site, conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the work. The Contractor acknowledges that he has inspected the site of the work and is familiar with the soil conditions to be encountered. Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the work. The Town of Addison assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the Town and the Engineer.
  
4. **SPECIFICATIONS:** Construction improvements shall be governed by the following published specifications and details (except as modified by these Special Provisions):

Standard Specifications for Public Works Construction, North Central Texas - North Central Texas Council of Governments (latest edition);

Town of Addison Standard Specifications and Construction Details;

Standard Specifications and Details for Manhole and Duct Structure Facilities as established by Oncor Electric Delivery and AT&T.

The Contractor shall keep copies of applicable specifications on the project site at all times. Where reference is made to specifications compiled by other agencies, organizations or departments, such specifications referred to are hereby made a part of the project specifications.

5. **SUBSURFACE INVESTIGATION:** Subsurface exploration to ascertain the nature of soils, including the amount of rock, if any, is the responsibility of any and all prospective bidders. It shall be the responsibility of the bidders to make such subsurface investigations as he deems necessary to determine the nature of the material to be encountered. Some preliminary subsurface exploration has been performed by the Town of Addison and the Engineer, and is provided to the contractor in these documents. This information is provided only as preliminary and all bids shall be based on information obtained by the Contractor. The Town of Addison and the Engineer disclaim any responsibility for the accuracy, true location and extent of the soils information that has been prepared by others. They further disclaim responsibility for interpretation of that data by bidders, as in projecting soil bearing values, rock profiles, soils stability and the presence, level and extent of underground water.
  
6. **COMPLIANCE WITH LAWS:** The Contractor shall familiarize himself with the nature and extent of the specifications, site conditions, traffic and safety requirements, and shall fully comply with all local, state and federal laws, including all codes, ordinances, rules and regulations applicable to this contract and the work to be done hereunder, which exist or which may be enacted later by governmental bodies having jurisdiction or authority for such enactment. The Contractor shall comply with all federal, state and local laws, rules and regulations of every kind and nature applicable to the performance of its Work hereunder, and shall hold the Town of Addison and the Engineer harmless therefrom.
  
7. **PERMITS, LICENSES AND REGULATIONS:** Permits and licenses for the prosecution of the Work shall be secured and paid for by the Contractor. Wherever the work under this contract requires the obtaining of permits from the Town of Addison or other public authorities, duplicate copies of such permits shall be furnished to the Engineer by the Contractor hereunder before the work covered thereby is started. **NO WORK WILL BE ALLOWED TO PROCEED BEFORE SUCH PERMITS ARE OBTAINED.**
  
8. **RIGHTS-OF-WAY AND EASEMENTS:** Rights-of-way and permanent easements, dedicated to the Town of Addison, have been secured for this project and made a part of thereto. The Contractor shall obtain a right-of-way permit from the Town of Addison prior to beginning work. When working within the public rights-of-way and easements, the Contractor shall at all times observe and comply with all Federal and State Laws, and Town of Addison ordinances and regulations which in any way affect the conduct of the work or his operations, and shall observe and comply with all orders, laws, ordinances and regulations which exist or which may be enacted later by bodies having jurisdiction or authority for such enactment. No plea of misunderstanding or ignorance thereof will be considered. The Contractor and his Sureties shall indemnify and save harmless the Town of Addison, the Engineer and all of their officers, agents, and employees against any and all claims or liability arising from or based on the violation of any such law, ordinance, regulation, or order, whether it be by himself or his employees.

It shall be the responsibility of the Contractor, prior to the initiation of construction on easements through private property, to inform the property Town of his intent to begin construction. Before beginning construction in areas of public dedication, the Contractor shall inform the agency having jurisdiction in the area forty-eight (48) hours prior to initiation of the Work. All easements shall be cleaned up after use and restored to their original conditions or better.

9. **RESTRICTED WORK HOURS:** Per the Town of Addison Building Regulations, "It shall be unlawful for a person, firm or corporation to excavate, erect, build, construct, alter, repair or demolish any building or structure which has been issued or which is required to be issued a building permit by the Town of Addison between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday, and between the hours of 7:00 p.m. and 8:00 a.m. on Saturday and Sunday, if such activity is performed within a residential, apartment, or townhouse zoned area, or within three hundred (300) feet of an occupied residence, except in cases of urgent necessity or in the interest of public safety and convenience, and then only by permit of the City Manager."
10. **COMPLIANCE WITH IMMIGRATION LAWS:** Contractor shall take all steps necessary to ensure that all of the Contractor's employees are authorized to work in the United States as required by the Immigration Reform and Control Act of 1986.
11. **NON-DISCRIMINATION POLICY:** It is the policy of the Town of Addison to afford all people an equal opportunity to bid on any contract being let by the Town. The Town of Addison has a policy that prohibits discrimination against any person because of race, color, sex, or national origin, in the award or performance of any contract. The Town of Addison will require its employees, agents, and contractors to adhere to this policy.
12. **ANTITRUST LAWS:** The Contractor hereby assigns to the Town of Addison any all claims for overcharges associated with this contract which arise under the antitrust laws of the United States 15 U.S.C.A. Sec. 1, et seq. (1973).
13. **ABANDONMENT:** The Town of Addison reserves the right to abandon, without obligation to the Contractor, any part of the project, or the entire project, at any time before the Contractor begins any construction work authorized by the Town of Addison. In case of total abandonment of the project, the contract becomes void. The Town of Addison may abandon portions of the project at any time during the project duration. In case of such partial abandonment, the Contractor shall not be due any payment for lost or unrealized profits on the abandoned portions of the project.
14. **DISCREPANCIES:** If the Contractor, in the course of the Work, finds any discrepancy between the Contract Documents and the physical conditions of the locality, or any errors or omissions in drawings or in the layout as given by survey points and instructions, or if it appears that any Plan, Specification or other Contract Document is or may not be in compliance with any building code or other requirement of any governmental body, he shall immediately inform the Town of Addison and the Engineer in writing, and the Town of Addison and the Engineer shall promptly verify the same. Any Work done after such discovery, until authorized, will be done at the Contractor's risk.

15. **PREVAILING WAGE RATES:** Wage rates paid on this project shall not be less than specified in the schedule of general prevailing rates of per diem wages as attached hereto.
16. **ADDENDA:** Bidders desiring further information, or interpretation of the Plans and Specifications, must make written request for such information to the Engineer (not later than three (3) working days prior to the date set for the Bid opening). Answers to all such requests will be released on [www.bidsync.com](http://www.bidsync.com) in addendum form and all addenda will be bound with and made a part of the Contract Documents. No other explanation or interpretation will be considered official or binding. Should a Bidder find discrepancies in, or omissions from, the Plans, Specifications or Contract Documents, or should he be in doubt as to their meaning, he shall at once notify the Engineer in writing in order that a written addendum may be sent to all Bidders.
17. **PAY ITEMS:** Pay items provided are intended to be all-inclusive of the work required on this project. Work required by the plans or specifications but not provided with a specific pay item shall be considered incidental to other items of work. Final payment to the construction contractor shall not be made until all Work has been finally completed and verified in accordance with the construction contract, plans and specifications and have been finally accepted by the Town of Addison.
18. **INCREASE OR DECREASE IN QUANTITIES:** The quantities shown in the proposal are approximate. Final payment will be based on quantities determined by measurement methods described for each work item.

When the quantity of work to be done or materials to be furnished under any major pay item or contract is more than 125% of the quantity stated in the contract, whether stated by Town of Addison or by Contractor, then either party to the contract, upon demand, shall be entitled to negotiate for revised consideration on the portion of work above 125% of the quantity stated in the contract.

When the quantity of the work to be done or materials to be furnished under any major pay item of the contract is less than 75% of the quantity stated in the contract, whether stated by Town of Addison or by Contractor, then either party to the contract, upon demand, shall be entitled to negotiate for revised consideration on the portion of work below 75% of the quantity stated in the contract. This paragraph shall not apply in the event Town of Addison deletes a pay item in its entirety from this contract.

19. **SUBSIDIARY WORK:** Any and all work specifically governed by documentary requirements for the project, such as conditions imposed by the Plans or these Special Provisions, in which no specific item for bid has been provided for in the Proposal, shall be considered as a subsidiary item of work, the cost of which shall be included in the various bid items in the Proposal. Costs of permits, inspection fees, traffic control, construction staking, surface restoration and cleanup are general items of work which fall in the category of subsidiary work.

20. **QUALIFICATION OF BIDS:** The Town of Addison reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the Work, and the right to disregard all nonconforming, non-responsive, unbalanced, or conditional Bids. The Town reserves the right to reject the Bid of any Bidder if the Town believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by the Town. Discrepancies in the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

21. **AWARD AND EXECUTION OF CONTRACT:** The Town of Addison reserves the right to withhold final action on the Proposal for a reasonable time, not to exceed forty-five (45) days after the date of opening Proposals, and in no event will an award be made until after investigations have been made as to the responsibility of the proposed awardee. The award of the contract, if an award is made, will be to the lowest and best responsible bidder. The award of the contract shall not become effective until the Town of Addison has notified the Contractor in writing of such award.

Within ten (10) days after the Town of Addison has by appropriate resolution, or otherwise, awarded the contract, the Contractor shall execute and file with the Town of Addison the Contract and such bonds as may be required in the Contract Documents.

22. **EXPLANATION OF CONTRACT TIME:** The term "Original Contract Time" as used in this Provision will mean the number of calendar days established in this Contract (**180 calendar days**) for completion of the work of the Contract from the date the Contract was executed. The term "calendar day" as used in this Article will mean every day shown on the calendar. Calendar days will be consecutively counted from commencement of Contract Time regardless of weather, weekends, holidays, suspensions of Contractor's operations, delays or other events as described herein. The Original Contract Time will not be adjusted for any reason, cause or circumstance whatsoever, regardless of fault, save and except in the instance of a catastrophic event (i.e., war, invasion, riot, declared state of emergency, national strike, or other situations as declared by the Town of Addison). The parties anticipate that delays may be caused by or arise from any number of events during the course of the Contract, including, but not limited to, work performed, disruptions, permitting issues, actions of suppliers, subcontractors or other contractors, actions by third parties, weather, weekends, holidays, or other such events, forces or factors sometimes experienced in roadway construction work. Such delays or events and their potential impacts on performance by the Contractor are specifically contemplated and acknowledged by the parties in entering into this Contract, and shall not extend the Original Contract Time. Further, any and all costs or impacts whatsoever incurred by the Contractor in accelerating the Contractor's work to overcome or absorb such delays or events in an effort to complete the Contract prior to expiration of the Original Contract Time, regardless of whether the Contractor successfully does so or not, shall be the sole responsibility of the Contractor in every instance. In the event the project is altered by work deleted, change orders, supplemental agreements, utility conflicts, design changes or defects, extra work, right of

way issues, or other situations which are not the fault of or a direct result of contractor negligence which may impact the critical path of the project construction schedule, the Town may choose to negotiate the extension or reduction of the Original Contract Time with the Contractor.

In the event of a catastrophic event (i.e., war, invasion, riot, declared state of emergency, national strike, or other situations as declared by the Town of Addison) directly and substantially affecting the Contractor's operations on the Contract, the Contractor and the Town shall agree as to the number of calendar days to extend the Original Contract Time. In the event the Contractor and Town are unable to agree to the number of calendar days to extend the Original Contract Time, the Town shall unilaterally determine the number of calendar days to extend the Original Contract Time reasonably necessary and due solely to such catastrophic event and the Contractor shall have no right whatsoever to contest such determination, save and except that the Contractor establishes that the number of calendar days determined by the Town were arbitrary or without any reasonable basis. The Contractor shall have no rights under the Contract to make any claim arising out of this incentive payment provision except as is expressly set forth in this Provision.

Should the Contractor fail to complete the Contract on or before expiration of the Allowable Contract Time, as adjusted in accordance with the provisions above, the Town shall deduct from the moneys due the Contractor the sum of **\$500 per day** for each calendar day completion exceeds the Allowable Contract Time. The term "Allowable Contract Time" as used in this Article shall mean the Original Contract Time plus adjustments pursuant to the statements above. This deduction shall be the disincentive for the Contractor's failing to timely complete the Contract. **This shall be strictly enforced.**

23. **COPIES OF PLANS FURNISHED:** One (1) set of 11" x 17" plans and one (1) electronic version of the plans shall be furnished to the Contractor, at no charge, for construction purposes. Additional copies may be obtained at cost of \$150 per set upon request.
24. **PRE-CONSTRUCTION CONFERENCE:** The successful Contractor, Engineer, and Town of Addison shall meet for a preconstruction conference before any of the work begins on this project. At this time, details of sequencing of the work, contact individuals for each party, testing requirements, submittals, and pay requests will be covered. Prior to the meeting, the Contractor shall prepare schedules showing the sequencing and progress of their work and its effect on others. A final composite schedule will be prepared during this conference to allow an orderly sequence of project construction.
25. **MOBILIZATION:** The work specified in this item consists of the preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for the establishment of temporary offices, utilities, and other facilities, if necessary, for the construction of proposed improvements. Maximum allowed will be 5% of the total bid.

26. **GENERAL SEQUENCE OF CONSTRUCTION:** Prior to the start of work, the contractor shall develop a detailed construction and sequence of construction schedule using the critical path method, to be submitted to the Town of Addison for approval, that shall cause minimum interference with traffic along, across and adjacent to the project during construction. If the schedule or sequence becomes unworkable or unsatisfactory as work proceeds, adjustments shall be made. During all phases of construction access to all existing residences and businesses must be maintained at all times unless otherwise authorized in writing by the Town of Addison. Erosion control devices must be properly installed and maintained during all stages of construction.
27. **PROJECT REPRESENTATIVE:** The Town of Addison, the Engineer, the Contractor(s), and any applicable public utilities shall designate a single individual within their organization to act as liaison for the project. This individual shall be aware of the day to day activities on the project, have authority to make decisions binding on the party, and serve as single point for coordination of activities with the other team members.
28. **COORDINATION WITH OTHERS:** In the event that other Contractors are doing work in the same area simultaneously with this project, the Contractor shall coordinate his proposed construction with that of the other Contractors. The Town of Addison and/or the Engineer shall mediate any disputes, and the Contractors shall comply with their decisions.
29. **INSURANCE:** Each insurance policy that the Contractor must furnish in accordance with these contract documents shall name the Town of Addison and the Engineer as additional insured. Contractor shall include in their bid package, a copy of their certificate of insurance showing compliance to the limits established by the Town of Addison.

1.0 The Contractor shall agree to furnish and maintain continuously during the period of this agreement, any renewals or extension, insurance coverage meeting all of the following requirements:

1.1 Commercial General Liability Insurance at minimum combined single limits of \$1,000,000 per occurrence and \$2,000,000 general aggregate for Bodily Injury and Property Damage, which coverage shall include Products/Completed Operations, and XCU Hazards. Coverage for product/completed operations must be maintained for at least two (2) years after the construction work has been completed. Coverage must be amended to provide for an each-project aggregate limit of insurance. Contractual Liability must be included.

1.2 Workers Compensation Insurance at statutory limits, including employer's liability coverage at minimum limits of \$1,000,000 each occurrence-each accident, \$1,000,000 by disease-each occurrence and \$1,000,000 by disease aggregate (see attachment on Workers Compensation Commission rules).

1.3 Commercial Automobile Liability Insurance at minimum combined single limits of \$1,000,000 per occurrence for bodily injury and property damage, including owned, non-owned, and hired car coverage.

1.4 Umbrella Liability at minimum limits of \$1,000,000 each-occurrence \$4,000,000 aggregate with respect to primary commercial general liability, automobile liability and employer's liability policies.

1.5 Any Subcontractor(s) hired by the Contractor shall maintain insurance coverage equal to that required by the Contractor. It is the responsibility of the Contractor to assure compliance with this provision. The Town accepts no responsibility arising from the conduct, or lack of conduct, of the Subcontractor.

1.6 A comprehensive general liability insurance form may be used in lieu of a commercial general liability form. In this event, coverage must be written on an occurrence basis, at limits of \$1,000,000 each-occurrence, combined single limit and coverage must include a broad form comprehensive general liability endorsement, products/completed operations, XCU hazards and contractual liability.

2.0 With reference to the foregoing insurance requirements, Contractor shall specifically endorse applicable insurance policies as follows:

2.1 The Town shall be named as an additional insured with respect to general liability and automobile liability.

2.2 All liability policies shall contain no cross liability exclusions or insured versus insured restrictions.

2.3 A waiver of subrogation in favor of the Town of Addison shall be contained in the workers compensation and all liability policies.

2.4 All insurance policies shall be endorsed to require the insured to immediately notify the Town of Addison of any material changes in the insurance coverage.

2.5 All insurance policies shall be endorsed to the effect that the Town will receive at least thirty (30) days notice prior to cancellation or non-renewal of the insurance.

2.6 All certificates shall be mailed to Town of Addison, Purchasing Dept., P.O. Box 9010, Addison, Texas 75001.

2.7 All insurance policies, which name the Town as an additional insured, must be endorsed to read as primary coverage regardless of the application of other insurance.

2.8 Required limits may be satisfied by any combination of primary and umbrella liability insurances.

2.9 Contractor may maintain reasonable and customary deductibles, subject to approval by the Town.

3.0 All insurance shall be purchased from an insurance company who meets the following requirements:

3.1 Must be issued by a carrier, which is rated "A-" or better by A.M. Best's Key Rating Guide.

3.2 Licensed and admitted to do business in the State of Texas and is a subscriber to the Texas Guaranty Fund.

4.0 All insurance must be written on forms filed with and approved by the Texas State Board of Insurance. Certificates of insurance shall be prepared and executed by the insurance company or its authorized agent and shall contain provisions representing and warranting the following:

4.1 Set forth all endorsements and insurance coverages according to requirements and instruction contained herein.

4.2 Shall specifically set forth the notice-of-cancellation or termination provisions to the Town.

5.0 Upon request, Contractor shall furnish the Town of Addison with certified copies of all insurance policies.

**30. WORKERS' COMPENSATION INSURANCE COVERAGE:**

A. Definitions.

**Certificate of Coverage** ("certificate") - A copy of a certificate of insurance, a certificate of authority to self insure issued by the Texas Workers' Compensation Commission (the "TWCC"), or a coverage agreement (TWCC-81, TWCC-82, TWCC-83 or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

**Duration of the Project** - includes the time from the beginning of the work on the project until the Contractor's/person's work on the project has been completed and accepted by the governmental entity.

**Persons Providing Services on the Project** ("subcontractor" in Section 406.096 of the Texas Labor Code) - includes all persons or entities performing all or part of the services the Contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the Contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, Town-operators, employees of any such entity or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

B. The Contractor shall provide coverage, based on property reporting of classification codes and payroll amounts and filing of any coverage agreement, which meets the statutory requirements of Texas Labor Code, 401.011(44) for all employees of the Contractor providing services on the project, for the duration of the project.

C. The Contractor must provide a certificate of coverage to the Town of Addison prior to being awarded the contract.

D. If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the Town of Addison, showing that the coverage has been extended.

E. The Contractor shall obtain from each person providing services on the project, and provide to the Town of Addison:

(1) a certificate of coverage, prior to that person beginning work on the project, so that the Town of Addison will have on file certificates of coverage showing coverage for all persons providing services on the project; and,

(2) no later than seven days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

F. The Contractor shall retain all required certificates of coverage on file for the duration of the project and for one year thereafter.

G. The Contractor shall notify the Town of Addison in writing by certified mail or personal delivery, within 10 days after the Contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

H. The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the TWCC, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify current coverage and report failure to provide coverage.

I. The Contractor shall contractually require each person with whom it contracts to provide Services on a project to:

(1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Codes 401.011 (44) for all its employees providing services on the project, for the duration of the project;

(2) provide to the Contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;

(3) provide the Contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

(4) obtain from each person with whom it contracts, and provide to the Contractor;

a. a certificate of coverage, prior to the other person beginning work on the project; and,

b. a new certificate of coverage showing extension of the coverage period, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

(5) retain all required certificates of coverage on file for the duration of the project and for one year thereafter;

(6) notify the Town of Addison in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

(7) contractually require each other person with whom it contracts to perform as required by paragraphs (1) - (7) with the certificate of coverage to be provided to the person for whom they are providing services.

J. By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the Town of Addison that all employees of the Contractor who will provide services on the project will be covered by worker's compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the TWCC's Division of Self-Insurance Regulation. Providing false or misleading information may subject the Contractor to administrative penalties, criminal penalties, civil penalties or other civil actions.

K. The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the Town of Addison to declare the contract void if the Contractor does not remedy the breach within ten days after receipt of notice of breach from the Town.

The following is the form of notice of workers' compensation coverage prescribed by the TWCC. Pursuant to Section 110.110 (d) (7), this notice must be printed with a title in at least 30-point bold type, and text in at least 19-point nominal type, and shall be in both English and Spanish and any other language common to the worker population.

## **REQUIRED WORKERS' COMPENSATION COVERAGE**

"The law requires that each person working on this site or providing services related to this construction project must be covered by workers' compensation insurance. This includes persons providing, hauling or delivering equipment or materials, or providing labor or transportation or other service related to the project, regardless of the identity of their employer or status as an employee.

"Call the Texas Workers' Compensation Commission (TWCC) at (512) 440-3789 to receive further information on the legal requirements for coverage, to verify whether your employer has provided the required coverage, or to report an employer's failure to provide coverage."

31. **CLEAN AIR ACT AND CLEAN WATER ACT:** Include in all construction contracts exceeding \$100,000, the following requirement: "Contractor is responsible for compliance with all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act, Section 505 of the Clean Water Act, Executive Order 11738, and Environmental Protection Agency regulations."
  
32. **RESOLUTION OF DISPUTES:** The parties hereby covenant and agree that in the event of any controversy, dispute, or claim, of whatever nature arising out of, in connection with or in relation to the interpretation, performance or breach of this agreement, including but not limited to any claims based on contract, tort or statute, before filing a lawsuit, the parties agree to submit the matter to Alternative Dispute Resolution pursuant to the laws of the State of Texas. The parties shall select a third party arbitrator or mediator from the current list of neutrals on file with the Alternative Dispute Resolution Administrator of the Dallas County District Courts. All forms of Alternative Dispute Resolution may be used except binding arbitration. The proceedings shall be conducted in accordance with the laws of the State of Texas.
  
33. **SHOP DRAWINGS:** The Contractor shall provide, review, approve and submit all shop drawings, product data and samples required by the Town of Addison, the Engineer and the Contract Documents in accordance with Item 1.28 of the Standard Specifications for Public Works Construction, North Central Texas Council of Governments. The Contractor shall furnish a minimum of four and a maximum of six copies of shop drawings for review by the Engineer, who will review, approve and forward to the Town of Addison for acceptance. Approved submittals will be returned as follows:
  - Two (2) – Town of Addison
  - One (1) – Contractor
  - One (1) – Icon Consulting Engineers, Inc.

Maximum size of submittals shall be 11 x 17 inch. No fax copies are acceptable. Shop drawings shall include all items to be installed in the project, including:

- Concrete Mix Designs
- Storm Sewer Pipe
- Fire Hydrants
- Trench Safety Plan
- Steel Casing Pipe
- Conduit
- Traffic Control Plan
- Sanitary Sewer Pipe
- Sanitary Sewer Manholes
- Fittings
- Flex Base
- Embedment Materials
- Water Main Pipe
- Valves & Boxes
- Water Vaults
- Gradation
- Asphalt
- Backfill Materials

34. **PROJECT VIDEO:** Prior to the start of construction, Contractor shall video the construction area and property adjacent to construction in the presence of the City Inspector. The format shall be DVD. The video shall be narrated. The Contractor shall furnish the Town of Addison a copy of the video in DVD format prior to commencement of project. This shall be subsidiary to project.

35. **TESTING REQUIREMENTS:** The Town of Addison shall designate and pay an independent testing laboratory to furnish testing for this project. Random testing will be provided by the independent lab as necessary for compliance with the specifications. The Contractor shall coordinate construction with the testing lab and the Town of Addison, and shall provide assistance to the testing labs by providing excavation, access, trench safety, materials for testing and any other work required to insure all testing requirements are met. Work performed to accommodate testing will be a subsidiary item and no extra payment will be authorized. All costs for the field quality control testing shall be paid for by the Town of Addison, except for any and all re-testing, which shall be paid by the Contractor and such cost shall be deducted from monthly pay requests. The Contractor shall be responsible for providing any test required by the specifications. All samples and tests shall be performed in accordance with the Standard Specifications for Public Works Construction, North Central Texas Council of Governments (Latest Edition) as amended or supplemented.

36. **INSPECTION:** The Town of Addison and the Engineer reserve the right to inspect, test, measure or verify the construction work for this project as they deem necessary to ascertain that the Work is being accomplished in accordance with the standards and requirements set forth in the Contract Documents. Notwithstanding such reviews, the Contractor will be held responsible for the finished Work, and any acceptance of the Work by the Town or governmental agencies will not relieve the Contractor from responsibility for the Work. The Town reserves the right to place full-time construction inspectors at the site of the Work. Costs for inspection services will be paid by the Town of Addison. The Contractor shall provide assistance to the Town of Addison and the Engineer by providing excavation, trench safety, or other work necessary to facilitate inspection activities, and shall give sufficient notice well in advance of pending construction activities for scheduling of inspection services.

If the Specifications, the Town's instructions, laws, ordinances, or any public authority require any Work to be specially tested, the Contractor shall give the Town timely notice of its readiness for testing, and if the testing is by an authority other than the Town, of the date fixed for such testing. Tests by the Town shall be made promptly, and where practicable at the source of supply.

37. **ACCESS ROUTES, STAGING AREAS AND STORAGE AREAS:** All haul roads and access routes and the location of job site trailers, staging areas, and storage areas shall be subject to the approval of the Town and the Engineer. The Contractor shall be responsible for maintaining and repairing all roads and other facilities used during construction. Upon completion of the project all existing roads and other disturbed areas shall be left in a condition equal to that at the time the Contractor commences work on this project.
38. **PROPERTY ACCESS:** Access to adjacent properties shall be maintained at all times unless otherwise directed by the Engineer and/or Town of Addison. Contractor shall block no more than one half of a driveway at any time. Contractor shall also maintain sufficient sidewalk access throughout the project limits to the existing apartment buildings during construction operations.
39. **PLANT, PROCEDURE, METHODS AND EQUIPMENT:** The Contractor shall determine the methods to be employed, the procedures to be followed, and equipment to be used on the work under this contract, subject to the requirements of these specifications and approval of the Engineer and Town of Addison. Only adequate and safe procedures, methods and equipment shall be used. The Contractor shall so arrange his work and provide such plant and equipment as is necessary in order to meet the progress requirements of the approved time schedule and to complete the work within the period of time as specified in the Construction Agreement. Only such materials and equipment as are necessary for the construction of the work under this contract shall be placed, stored or allowed to occupy any space at the site of the work.

It is expressly agreed that the acceptance or approval of any order of procedure, methods or equipment submitted or employed by the Contractor shall not in any manner relieve the Contractor of responsibility for the safety, maintenance and repairs of any work, or for the construction maintenance and safety of the work hereunder, or from any liability whatsoever on account of any procedure or method employed by the Contractor. Where the work under this contract requires permits from the Town of Addison, the State of Texas, or other public authorities, duplicate copies of such permits shall be furnished to the Engineer by the Contractor before the work covered thereby is started. **NO WORK WILL BE ALLOWED TO PROCEED BEFORE REQUIRED PERMITS ARE OBTAINED AND DISTRIBUTED**

40. **PARKING OF CONSTRUCTION EQUIPMENT:** At night and during all other periods of time when equipment is not being actively used on the construction work, the Contractor shall park the equipment at locations which are approved by the Town of Addison or the Engineer. The Contractor shall provide adequate barricades, markers and lights to protect the Town of Addison, the Engineer, the public and other work. All barricades, lights, and markers must meet the requirements of the Town of Addison, State and Federal regulations.
41. **ZONING REQUIREMENTS:** During the construction of this project, the Contractor shall comply with the present zoning requirements of the Town of Addison in the use of vacant property for storage purposes.

42. **CONSTRUCTION IN PUBLIC ROADS AND PRIVATE DRIVES:** No public road shall be entirely closed overnight. It shall be the responsibility of the Contractor to build and maintain all weather bypasses and detours, if necessary, and to properly light, barricade and mark all bypasses and detours that might be required on and across the roads involved in the work included in this contract. No interference with traffic flow on city streets shall be permitted during the hours of 6:30 a.m. to 9:30 a.m. and 3:30 p.m. to 7:30 p.m., Mondays through Fridays.

The Contractor shall make every effort to complete construction and allow immediate access to adjacent property at driveway entrances located along the roadways. Towns or tenants of improvements where access and/or entrance drives are located shall be notified at least twenty-four (24) hours prior to the time the construction will be started at their driveways or entrances and informed as to the length of time driveways will be closed. Contractor shall at all times maintain at least one point of access into all properties, unless obtaining written permission from property Town to do otherwise with such written permission being provided to the Town's inspector.

The Contractor shall be responsible for all road and entrance reconstruction and repairs and maintenance of same for a period of two years from the date of such reconstruction. In the event the repairs and maintenance are not made immediately to the satisfaction of the Town, and it becomes necessary for the Town to make such repairs, the Contractor shall reimburse the Town for the cost of such repairs.

The Contractor shall, at all times, keep a sufficient width of the roadway clear of dirt and other material to allow the free flow of traffic. The Contractor shall assume any and all responsibility for damage, personal or otherwise, that may be caused by the construction along roads and private drives.

43. **HAULING ON TOWN OF ADDISON STREETS:** The Contractor shall receive approval of his haul routes and type of equipment to be used prior to beginning construction. The Contractor shall be responsible for maintaining the cleanliness of existing paved roadways and shall provide equipment and manpower for that purpose.

44. **EXISTING POWER POLES & GUY WIRES:** The Contractor shall have the responsibility of coordinating with the proper authorities for the bracing, replacing or relocating of all utility poles and guy wires which interfere with the construction of this project prior to beginning his construction operations. The Contractor will also be responsible for all damage to poles, guy wires, etc. that are damaged or destroyed by Contractor's operations.

45. **SAFETY RESTRICTIONS - WORK NEAR HIGH VOLTAGE LINES:** The following procedures shall be followed for work near high voltage lines on this contract:

- a. A warning sign not less than five (5) inches by seven (7) inches, painted yellow with black letters that are legible at twelve (12) feet shall be placed inside and outside vehicles such as cranes, derricks, power shovels, drilling rigs, pile driver, hoisting

equipment or similar apparatus. The warning sign shall read as follows: "Warning - Unlawful to Operate This Equipment Within Six Feet of High Voltage Lines."

- b. Equipment that may be operated within ten (10) feet of high voltage lines shall have an insulating cage guard protecting the boom or arm, except backhoes or dippers, and insulator links on lift hook connections.
- c. When necessary to work within six (6) feet of high voltage electric lines, notify the power company who will erect temporary mechanical barriers, de-energize the line, or raise or lower the line. All such work done by the power company shall be at the expense of the Contractor. The Contractor shall maintain an accurate log of all such calls to the power company.
- d. The Contractor is required to make arrangements with the power company for the temporary relocation or raising of high voltage lines at the Contractor's sole expense.
- e. No person shall work within six (6) feet of high voltage lines without protection measures having been taken as outlined in Paragraph c.

**46. PROTECTION OF EXISTING UTILITIES AND STRUCTURES:** The location and dimensions shown on the plans relative to existing utilities and subsurface structures are based on the best records and/or field information available and are not guaranteed by the Town of Addison or the Engineer to be accurate as to location and depth. It shall be the Contractor's responsibility to verify locations of adjacent and conflicting utilities sufficiently in advance of his activities in order that he may negotiate such restrictive locations with the Town of Addison of the conflicting utility and/or make local adjustments to provide adequate clearances. The Contractor shall take all necessary precautions in order to protect all utilities and services encountered, whether or not they are indicated on the plans. All damage to utilities resulting from Contractor's operations shall be restored at his expense. The Town of Addison and the Engineer assume no responsibility for failure to show any or all of these utilities or structures on the plans, or to show them in their exact locations. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for extra work or for increasing the pay quantities in any manner whatsoever, unless the obstruction encountered is such as to necessitate changes in the lines or grades, or requires the building of special work, provisions for which are not made in the plans, in which case, provisions in these specifications for extra work shall apply.

**47. PUBLIC UTILITIES AND OTHER PROPERTY TO BE CHANGED:** In case it is necessary to change or move the property of a public utility, such property shall not be moved or interfered with until authorized by the Town of Addison or the Engineer. The right is reserved for the Owner of public utilities to enter upon the limits of the project for the purpose of making such changes or repairs of their property that may be made necessary by performance of the Contract. The Contractor shall be responsible for coordination with the Town of Addison and the Engineer, and all utility companies whose utility lines or streets may be affected by the proposed improvements. The Contractor shall observe the following:

- a. Prior to any excavation, the Contractor shall determine the locations of all existing water, gas, sewer, electric, telephone, telegraph, television, pipelines and other underground utilities and structures.
- b. After commencing work, the Contractor shall use every precaution to avoid interference with existing underground and surface utilities and structures, and protect them from damage.
- c. Where the locations of existing underground and surface utilities and structures are indicated, these locations are generally approximate, and all items which may be encountered during the work are not necessarily indicated. The Contractor shall determine the exact locations of all items indicated, and the existence and locations of all items not indicated.
- d. The Contractor shall repair or pay for all damage caused by his operations to all existing utility lines, public property, and private property, whether it is below ground or above ground, and he shall settle in total the cost of all damage suites which may arise as a result of his operations.
- e. To avoid unnecessary interferences or delays, the Contractor shall coordinate all utility removals, replacements and construction with the appropriate utility company, and then request written authorization from the Town of Addison or the Engineer. The Town of Addison and the Engineer will not be liable for damages due to delay as a result of the above.

**48. MAINTENANCE AND REPAIRS:** The Contractor shall maintain and keep in good repair all work contemplated under these plans, specifications, and drawings which shall include the maintenance and repair of all existing streets, storm sewer crossings, utility crossings, temporary crossings for access to adjacent property, barricades, lights, and danger signals, and all work which is necessary for the well being of the general public. In the event the Contractor fails in his obligations to properly maintain the work, the Town of Addison shall make such repairs as are necessary and the cost of such repairs shall be deducted from payment due the Contractor.

**49. PROTECTION OF WORK:** During performance and up to date of final acceptance, the Contractor shall be under the absolute obligation to protect the finished work against damage, loss or injury. In the event of damage, loss or injury, the Contractor shall promptly replace or repair such work, whichever the Town of Addison shall determine to be preferable. The obligation to deliver finished work in strict accordance with the contract prior to final acceptance shall be absolute and shall not be affected by the Town of Addison's approval of or failure to prohibit means and methods of construction used by the Contractor. All risk of loss or damage to the work shall be borne solely by the Contractor until final acceptance of all work by the Town of Addison, as evidenced by the Town of Addison's issuance of a certificate of acceptance.

50. **PUBLIC CONVENIENCE AND SAFETY:** In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours.

Materials stored about the work site shall be so placed, and the work shall at all times be so conducted, as to cause no greater obstruction to the traveling public than is considered necessary by the Town of Addison. The materials excavated shall be placed so as not to endanger the work or prevent free access to all fire hydrants, water valves, gas valves, manholes (telephone, telegraph or electrical conduits, and sanitary sewers) and fire alarm or police call boxes in the vicinity.

The Town of Addison reserves the right to remedy any neglect on the part of the Contractor as regards to the public convenience and safety which may come to the Town of Addison's attention, after 24 hours notice in writing to the Contractor, save in cases of emergency, when the Town of Addison shall have the right to remedy any neglect without notice; and, in either case, the cost of such work done by the Town of Addison shall be deducted from the monies due or to become due the Contractor. The Contractor shall notify the Town of Addison and the Engineer when any street is to be closed or obstructed. The Contractor shall provide for emergency vehicle access at all times.

Where the work passes over or through private property, the Town of Addison shall provide such right-of-way. The Contractor shall notify the proper representatives of any public utility, corporation, company or individual, not less than 48 hours in advance of work which might damage or interfere with the operation of their property along or adjacent to the work. The Contractor shall be responsible for all damage or injury to property of any character (except such as may be required by the provisions of the Contract Documents, or caused by agents or employees or the Town of Addison) by reason of any negligent act or omission on the part of the Contractor, his employees, agents or subcontractors, or at any time due to defective work or materials, or due to his failure to reasonably or properly prosecute the work, and said responsibility shall not be released by the fact that the work shall have been completed and accepted.

When and where any such damage or injury is done to public or private property on the part of the Contractor, he shall restore or have restored at his own cost and expense such property to a condition similar or equal to that existing before such damage was done, by repairing, rebuilding or otherwise restoring as he may be directed, or he shall make good such damage or injury in a manner acceptable to the property Town of Addison and the Engineer. In case of failure on the part of the Contractor to restore such property or make good such damage or injury, the Town of Addison may, upon 48 hour written notice under ordinary circumstances, and without notice when a nuisance or hazardous condition results, proceed to repair, rebuild or otherwise restore such property as may be determined necessary, and the cost thereof shall be deducted from any monies due or to become due to the Contractor under this contract; or where sufficient contract funds are unavailable for this purpose, the Contractor or his surety shall reimburse the Town of Addison for all such costs.

51. **PROTECTION OF PERSONS AND PROPERTY:** The Contractor shall have the responsibility to provide and maintain all warning devices and take all precautionary measures required by law or otherwise necessary to protect persons and property while said persons or property are approaching, leaving or within the work site or any area adjacent to said work site. No separate compensation shall be paid to the Contractor for the installation or maintenance of any warning devices, barricades, lights, signs, or any other precautionary measures required by law or otherwise necessary for the protection of persons or property.

The Contractor shall assume all responsibilities to the general public in connection with the general public's immediate approach to and travel through the work site and the area adjacent to said work site.

Where the work is in or adjacent to any street, alley, sidewalk, public right-of-way or public place, the Contractor shall at his own cost and expense provide such flagmen and watchmen and furnish, erect and maintain such warning devices, barricades, lights, signs, and other precautionary measures for the protection of persons or property as may be prudent or necessary, or as required by law. The Contractor's responsibility for providing and maintaining flagmen, watchmen, warning devices, barricades, signs and lights and other precautionary measures shall not cease until the project shall have been completed and accepted by the Town of Addison, and shall cease when the Town of Addison notifies the Contractor in writing of final project acceptance.

If the Town of Addison discovers that the Contractor has failed to comply with applicable federal or state laws (by failing to furnish the necessary flagmen, warning devices, barricades, lights, signs or other precautionary measures for the protection of persons or property), the Town of Addison may order the Contractor to take such additional precautionary measures as required by law to protect persons and property.

In addition, the Contractor shall be held responsible for all damages to the work and other public or private property due to the failure of warning devices, barricades, signs, lights or other precautionary measures in protecting said property; and whenever evidence is found of such damage, the Town of Addison may order the damaged portion immediately removed and replaced by and at the cost and expense of the Contractor.

52. **TRAFFIC CONTROL:** It shall be the responsibility of the Contractor to provide traffic control during the construction as required by the State of Texas, the Town of Addison, and in accordance with the following additional requirements:

1. The Contractor shall be required to furnish barricades, flares, flagmen, etc., for the protection of the public, employees and the work.
2. The Contractor shall prosecute his work in such a manner as to create a minimum of interruption to traffic along adjacent roadways.
3. The unit price bid under the appropriate bid item of the proposal shall cover all cost for providing signage, markings, lighting, barricades, flagmen and other devices and personnel required for traffic control during construction of the project.

4. The Contractor shall not remove any regulatory sign, instructional sign, warning sign, street name sign or any other sign or signal which currently exists.

**53. BARRICADES, WARNING SIGNS, DETOURS AND SEQUENCE OF WORK:**

Throughout the construction operations, streets and intersections will remain open to traffic by constructing the work in stages. All streets, driveways, adjacent business and alleys shall remain open to traffic as far as is practicable.

A. General Construction: The Contractor shall plan his work sequence in a manner that will cause minimum interference with traffic during construction operations. Before beginning work on this project, the Contractor shall submit, for approval by the Town of Addison, a plan of construction operations outlining in detail a sequence of work to be followed; setting out the method of handling traffic on streets, roads and driveways along, across and adjacent to the work. If at any time during the construction, the Contractor's proposed plan of operation for handling traffic does not provide for safe comfortable movement, the Contractor shall immediately change his operations to correct the unsatisfactory conditions.

Ditches across the traffic lanes will be kept covered with a portable traffic-bearing surface at all times unless work in the ditch is in progress. Only one lane of traffic may be closed at a time when work is in progress in a ditch.

B. Safety: The Contractor shall provide, construct and maintain barricades and signs at locations set out in the plans and in the Special Provisions in accordance with the Texas Manual on "Uniform Traffic Control Devices for Streets and Highways". In addition, he shall provide and maintain such other barricades and signs as deemed necessary by the Town or the Engineer, and provide and maintain, between sunset and sunrise, a sufficient number of lights at barricades and points of danger for the protection of vehicular and pedestrian traffic.

Barricades shall be placed in such a manner as not to interfere with the sight distance of drivers entering the street from side streets.

The Contractor shall keep traveled surfaces used in his hauling operation clear and free of dirt or other material.

The Contractor shall provide and maintain qualified flagmen at such points and for such periods of time as may be required to provide for the safety and convenience of public travel and Contractor's personnel.

**54. EXCAVATION SAFETY SYSTEMS**

The work performed under this section of the specifications consists of providing trench safety systems consisting of shoring, sheeting, trench shield, and/or laid back slopes to meet the trench safety requirements of the Occupational Safety and Health Administration (O.S.H.A.), as required for this project and specified herein.

A. General: Trench safety systems shall be provided by the Contractor as provided in Subpart P - Excavation, Trenching and Shoring, Part 1926 of the Code of Federal

Regulations which describes safety and health regulations as administered by the U.S. Department of Labor Occupational Safety and Health Administration (O.S.H.A.). The standards specified by the O.S.H.A. Regulations shall be the minimum allowed on this project. It shall be the responsibility of the Contractor to design and install adequate trench safety systems for all trenches excavated on this project.

The Contractor shall furnish to the Town for review, prior to beginning construction activity, a Trench Safety Plan for the entire project. The trench safety plan must be prepared and sealed by a Professional Engineer registered in the State of Texas. In addition, all trench safety systems utilized in this project must be designed by a Professional Engineer registered in the State of Texas. The Contractor shall be totally responsible for the safety of all persons involved in the construction of this project.

B. Core Borings: Any core borings and soil data furnished by the Town are for the convenience of the Contractor. The Contractor shall be responsible for any additional soil or geotechnical information required. The Contractor shall be responsible for properly designed trench safety systems to be utilized for any type of subsurface condition found on this project. The furnishing of soil information by the Town of Addison in no way relieves the Contractor of this obligation. If no core borings or soil data are furnished by the Town, it shall be the Contractor's responsibility to obtain whatever geotechnical information required for preparation of trench safety systems.

C. Inspections: In addition to the inspections of the trench and trench safety systems required of the Contractor by the O.S.H.A. Regulations, the Town may further inspect the work. The Town shall have the right to reject any trench safety systems which he finds to be inadequate, and the Contractor shall immediately improve the system to comply with this specification.

D. Measurement and Payment: Measurement and payment of Trench Safety Systems shall be based on the actual linear footage of the pipe installed on the project. The payment shall be full compensation for all planning, engineering, materials, equipment, fabrications, installation, recovery and all incidental work required. All excavation and backfill in addition to that specified elsewhere in these specifications shall be considered subsidiary to this bid item.

**55. TRENCH EXCAVATION, BACKFILL AND COMPACTION**: Trench excavation, backfill and compaction of storm drain and utility trenches shall be in accordance with Town of Addison Standards and with details shown on the Construction Drawings.

a. Trench Excavation: If the stated maximum trench widths are exceeded, either through accident or otherwise, and if the Engineer determines that the design loadings of the pipe will be exceeded, the Contractor will be required to support the pipe with an improved trench bottom. The expense of such remedial measures shall be entirely the Contractor's own. All trenching operations shall be confined to the width of permanent rights-of-way, permanent easements and any temporary construction easements. All excavation shall be in strict compliance with the Trench Safety Systems Special Condition of this document.

- b. Trench Backfill: Trenches shall be backfilled above the top of the embedment material with approved backfill material per Town of Addison Standards for the appropriate pipe size, pipe material, depth and soil condition.
  - c. Compaction: All trenches under proposed or existing pavement shall be compacted to within a range of 95% to 100% Standard Proctor Density. Trenches which lie outside limits of pavement shall be compacted to a minimum of 90% Standard Proctor Density (ASTM D-698).
56. **TRENCH WALLS:** The Contractor shall use shoring or a drag box in those areas where it is required to protect existing improvements. This shall be subsidiary to the linear foot cost of the pipe and not a separate pay item.
57. **PROPERTY LINES AND MONUMENTS:** The Contractor shall protect all property corner markers, and when any such markers or monuments are in danger of being disturbed, they shall be properly referenced and if disturbed shall be reset at expense of the Contractor.
58. **CONSTRUCTION STAKING:** Construction staking will not be provided by the Town of Addison or Engineer. This item will be performed by the Contractor and shall be subsidiary to other bid items. The Contractor will also be responsible for maintaining stakes. If re-staking is required for any reason, it will be the Contractor's responsibility, including associated costs.

All construction staking shall be done under the supervision of a Registered Professional Land Surveyor registered in the State of Texas. The Contractor shall submit copies of cut sheets and field books for the construction of all paving, water, wastewater, and stormwater improvements to the Town of Addison for review prior to construction of the improvements. The information on the cut sheets and field books shall include but not be limited to the following:

- a. Heading to include date, contract number, project name, surveying firm, contractor, and construction plan sheet number.
- b. Location, description of street/line and street/line name, number, letter, etc. designation.
- c. Benchmark Data: Location, description, and elevation.
- d. Slope or percent of grade of each curb line or utility line.
- e. Stations at 50 foot intervals and including all PC, PT, PI, PVC, PVI, PVT, PRC, grade changes, etc.
- f. Offset description including distance to center line or back of curb and direction of offset; left, right, east, west, etc,

- g. Cut to subgrade, pavement, top of curb, or flowline of the street or utility being staked.
  - h. Clarifying remarks such as top of curb, gutter, pavement, subgrade, manhole, cleanout, valve, tee, cross, fire hydrant, wastewater lateral, water service, etc.
  - i. Cut sheets shall be signed by a Texas Registered Professional Land Surveyor.
59. **VENDOR'S CERTIFICATION:** All materials used in construction shall have a vendor's certified test report. Test reports shall be delivered to the Engineer before permission will be granted for use of the material. All vendors' test reports shall be subject to review by the Engineer, and shall be subject to verification by testing of samples of materials as received for use on the project. In the event additional tests are required, they shall be performed by an approved independent testing laboratory and shall be paid for by the Contractor.
60. **WATER PIPE:** All water mains twelve-inch (12") diameter and smaller shall be ANSI / AWWA C-900 PVC pressure pipe with cast iron o.d. except when a) water pipe penetrates meter vault walls and b) specific water pipe crossings as referenced on water profile sheets, in which cases the water pipe shall be Class 51 Ductile Iron, polyethylene wrapped. Pipe joints shall be rubber ring and integral thickened bell, assembled with a factory supplied lubricant. Water mains shall have a minimum class rating of 150-psi for domestic use and a minimum class rating of 200-psi for fire line applications. Joint material for PVC shall conform to ASTM F471.
61. **WASTEWATER PIPE:** All wastewater main piping shall meet the extra strength requirements of ASTM specification D3034 (SDR-35). Pipe shall have the bell and spigot type joints, consisting of integral wall section with factory installed compression rubber ring gasket, securely locked in bell groove to provide positive seal under all installation conditions. Pipe shall be laid with the bell end on the upstream side.
62. **STORM DRAINAGE PIPE:** All pipe for storm drainage improvements shall be reinforced concrete pipe (RCP), Class III, unless otherwise noted on the plans.
63. **POLYETHYLENE WRAPPING:** All valves, ductile iron pipe, cast iron fittings, and specials, shall be polyethylene wrapped. Payment for the polyethylene wrapping for these components shall be subsidiary to the various items bid for the furnishing and installing pipe complete in place. Polyethylene wrap shall precede blocking.
64. **PIPE CLEANING:** Joints shall be wiped and then inspected for proper installation by the inspectors. Each joint shall be swept daily and kept clean during installation. A temporary night plug shall be installed on all exposed pipe ends during any period of work stoppage.
65. **PLUGS:** Pipe plugs for water lines are included in the Bid Item for Water Fittings. Wastewater line plugs shall be considered incidental and shall not be a separate pay item. Plugs for storm drain lines do have separate pay items established for each size provided and shall be paid for accordingly.

66. **CEMENT STABILIZED BACKFILL:** Two (2) sack cement stabilized backfill shall be provided in wastewater pipe trenches at locations of crossings with water lines where shown on the plans and in conformance with Texas Dept. of Health Rules & Regulations for Public Water Systems. Payment for such work including all labor, tools, equipment and material necessary to complete the work shall be included in the linear foot price bid for Cement Stabilized Backfill.
67. **NON-METALLIC WATER PIPE DETECTION:** Detectable underground utility warning tapes, which can be located from the surface by a pipe detector, shall be installed directly above non-metallic pipe. The detectable tape shall be “Detect Tape” as manufactured by Allen Systems, Inc. or an approved equal, and shall consist of a minimum thickness of 0.35-mil. solid aluminum foil encased in a protective inert plastic jacket that is impervious to all known alkalis, acids, chemical reagents and solvents found in the soil. The minimum overall thickness of the tape shall be 5.5-mils. And the width shall not be less than two-inch with a medium unit weight of 2 ½ pounds per inch x 1,000 feet. The tape shall be color coded and imprinted with the messages as follow:

<u>Type of Utility</u>	<u>Color Coded</u>	<u>Legend</u>
Water	Safety Precaution Blue	CAUTION BURIED WATER LINE BELOW
Sanitary	Safety Green	CAUTION BURIED SEWER LINE BELOW

Installation of detectable tapes shall be per manufacturer’s recommendations, and shall be as close to the grade as is practical for optimum protection and detectability. Allow a minimum of 18 inches between the tape and the water line.

Payment for detectable tapes shall be included in the linear foot price bid for applicable pipe(s).

68. **PIPE EMBEDMENT:** All storm drain and utility construction shall be installed with embedment per the details shown on the plans for the appropriate pipe size, pipe material, depth and soil condition unless otherwise directed by the Town of Addison or the Engineer.
69. **REMOVALS, ADJUSTMENTS AND REPLACEMENTS:** Existing pavements, driveways, curbs, gutters, sidewalks, etc., to be removed to facilitate the construction of the improvements shall be broken up and disposed of. Care shall be exercised to leave a neat, uniform edge or joint at the excavation limits or sections removed where only portions are to be removed. The Engineer will designate the limits to be removed. Where pavements, driveways, curbs, gutters, sidewalks, etc., shall be replaced, then said replacements shall be to the standard of the previously removed portion or better. Re-sawing of damaged edges will be at the Contractor’s expense.

Existing structures such as manholes, inlets, cleanouts, valve boxes, etc. which are not the property of a private firm or company, or an individual required to move their own property,

shall be adjusted, altered or reset to the required elevation and alignment. New materials and workmanship necessary shall conform to the requirements of these Specifications covering the particular Work. Salvaged materials in good condition may be used in rebuilding such structures, provided the materials are thoroughly cleaned before their use. These items shall be subsidiary to other bid items unless quantified in the proposal as a separate bid item.

All private obstructions which are indicated on the Plans to be moved, will be removed and replaced, or moved to new permanent locations by the Contractor, without additional payment to the Contractor. Any such additional item which the Contractor moves or causes to be moved for his own convenience shall be at his own expense.

70. **SHORT TERM ASPHALTIC PAVEMENT REPAIR:** The unit price bid under the appropriate bid item of the proposal shall cover all cost for providing pavement repair per the short term pavement repair detail provided in the plans.
71. **WATER FOR CONSTRUCTION:** The Contractor shall acquire a meter and make the necessary arrangements with the Town of Addison for securing and transporting all water required for construction, including water required for mixing of concrete, sprinkling, testing or flushing. There will be no separate pay item for connection into the existing water system and quantity of water required for construction purposes. The Town of Addison will furnish water for initial cleaning and sterilization of water lines. All additional water used by the Contractor for compaction or any other purpose incidental to this project may be obtained from existing hydrants along adjacent roadways. Note that the Contractor will be responsible for supplying chlorine gas or chlorinated lime (HTH) for water line sterilization.
72. **EXISTING STOCKPILES OF MATERIAL ON SITE:** An existing stockpile of material has been placed on the adjacent property and is available for use on this project if necessary to complete the project to the alignment, grades and cross sections indicated on the plans. This area of stockpiled material is not reflected in the topographic contours shown. The content and quality of this material within this stockpile is also unknown at this time. While the dirt in this stockpile should be good for fill material, the pile may contain large rock and other construction debris or trash that is unsuitable for fill material. This Contractor shall separate and stockpile the unsuitable material at locations on-site as directed by the Engineer. If directed by the Town of Addison and/or the Engineer to remove and dispose of these materials at an authorized disposal site, the Contractor will be reimbursed as an extra to his contract based on actual invoiced costs.
73. **BORROW SOURCE:** If additional sources of earthen material are required for construction of embankment areas to complete the project to the alignment, grades and cross sections indicated on the plans, Contractor will be required to locate, obtain, excavate, deliver and place suitable fill material from an off-site source. Borrow materials should be compatible with existing on-site materials and shall be tested by the Geotechnical Engineer (employed and paid for by the Town of Addison) for acceptance as an approved source of borrow prior to borrow operations. Item 3.6 - Borrow of the Standard Specifications for Public Works Construction, North Central Texas Council of Governments shall apply for all work performed. If borrow material is required, Contractor will be reimbursed by the Town

for the work performed and the material furnished at a negotiated price between the Town and Contractor prior to commencing this work, and included as a change order to the contract.

74. **EXCESS MATERIAL:** Suitable excess material (if any) may be disposed of on this site at locations directed by the Engineer. Topsoil shall be stripped and stockpiled from locations where excess material is to be placed. The Contractor shall scarify the spoil area to a depth of 6 inches and shall place the spoil material in 6-inch lifts, compacted to ninety-five percent (95%) of the maximum density as determined by ASTM D-698 Standard Proctor Test Method at or slightly above optimum moisture content. Rock shall be broken or crushed so that the maximum dimension is 12". No rock larger than 4" will be allowed in the upper 12" of fill. After completion of filling, replace topsoil and smooth grade. Tree stumps and limbs, concrete debris, discarded materials and all unsuitable excess spoil material, including rock measuring larger than 12" in the largest dimension, shall become the property of the contractor and shall be removed from the site and disposed of by the Contractor at his expense. The Contractor shall also comply with all applicable laws governing spillage of debris while transporting to a disposal site, and shall indemnify and save harmless the Town of Addison and the Engineer from all suits, actions, or claims of any character resulting from his arrangements for the disposal of spoil.
75. **DURING CONSTRUCTION:** During construction of the work, the Contractor shall, at all times, keep the site of the work and adjacent premises as free from material, debris and rubbish as is practicable and shall remove same from any portion of the site if, in the opinion of the Town of Addison or the Engineer, such material, debris or rubbish constitutes a nuisance or is objectionable. In case of failure on the part of the Contractor to maintain a clean site, the Town of Addison may, upon 24 hour written notice, clean the site, and the cost thereof shall be deducted from any monies due or to become due to the Contractor under his contract; or where sufficient contract funds are unavailable for this purpose, the Contractor or his surety shall reimburse the Town of Addison for all such costs.
76. **CONSTRUCTION TRAFFIC OVER PIPE LINES:** The design of the new pipes and the design of the existing pipe have been taken into account and provided for highway live loads. It is apparent, however, that certain construction vehicles could exceed this highway load condition under shallow bury conditions. It will be the responsibility of the Contractor to protect both the new line and the existing lines from these possibly excessive loads. The Contractor shall not at any time cross the existing or new pipe with a truck delivering new pipe to the site. Any damage to the existing or new pipe will be repaired or replaced by the Contractor to the satisfaction of the Town of Addison.

In locations where it is not permissible to cross the existing or proposed pipes without additional protection, the Contractor may elect to provide additional protection of the pipes so that more frequent crossings of the pipes are allowed. It still is, however, the responsibility of the Contractor to repair any damage to the existing or proposed lines if the damage results from any phase of his construction operation.

77. **CONTRACTOR'S CONTINUING OBLIGATION:** Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by the Town of Addison, nor the issuance of a certificate of Substantial Completion, nor any payment by Town of Addison to Contractor under the Contract Documents, nor any use or occupancy of the Work or any part thereof by Town of Addison, nor any act of acceptance by Town of Addison nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by the Town of Addison pursuant to final payment nor any correction of defective Work by Town of Addison will constitute an acceptance of Work not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents.
78. **WAIVER OF CLAIMS:** The making and acceptance of final payment will constitute:
- a. A waiver of all claims by Town of Addison against Contractor, except claims arising from unsettled Liens, from defective Work appearing after final inspection or failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by Town of Addison of any rights in respect of Contractor's continuing obligations under the Contract Documents.
  - b. A waiver of all claims by Contractor against Town of Addison other than those previously made in writing and still unsettled.
79. **IRRIGATION AND SPRINKLER REPAIR:** The contractor shall maintain all existing irrigation systems within the limits of the project during the duration of the contract. The contractor shall employ a licensed irrigator who is responsible for the repair or replacement of any damage to irrigation lines, valves, controllers, sprinklers, wiring and appurtenances which are damaged during construction. This repair is subsidiary to the various other items bid. The contractor will be responsible for any vegetation that dies as a result of damage to the irrigation system and replace it with equal vegetation at his own cost.
80. **REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK:** All work which has been rejected or condemned shall be repaired; or if it cannot be repaired satisfactorily, it shall be removed and replaced at the Contractor's expense. Defective materials shall be immediately removed from the work site. Work done without line and grade having been provided; work done beyond the line or not in conformity with the grades shown on the Drawings or as provided, work done without proper inspection; or any extra or unclassified work done without written authority and prior agreement in writing as to prices, shall be at the Contractor's risk and will be considered unauthorized, and at the option of the Town of Addison may not be measured and paid for and may be ordered removed at the Contractor's expense. Upon failure of the Contractor to repair satisfactorily or to remove and replace, if so directed, rejected, unauthorized or condemned work or materials immediately after receiving notice from the Town of Addison, the Town will, after giving written notice to the Contractor, have the authority to cause defective work to be remedied or removed and replaced, or to cause unauthorized work to be removed and to deduct the cost thereof from any monies due or to become due the Contractor.

81. **DISPOSITION AND DISPOSAL OF MATERIALS:** All materials to be removed from the site including refuse and other debris shall become the property of the Contractor and shall be disposed of outside the limits of the project. Contractor shall also comply with all applicable laws governing the spillage of debris while transporting to a disposal site.
82. **CLEAN-UP FOR FINAL ACCEPTANCE:** The Contractor shall make a final cleanup of all parts of the work before acceptance by the Town of Addison. This cleanup shall include removal of all objectionable rock and other construction materials, and in general preparing the site of the work in an orderly manner and appearance.
83. **TV INSPECTION OF WASTEWATER AND STORM DRAIN SYSTEMS:** Part of the final inspection of the wastewater and storm drain systems on this project shall include a closed circuit TV survey of the completed pipe installation, exclusive of services, and all imperfections in the installed facility revealed by the TV survey of the imperfections in the installed facilities revealed by the TV survey shall be remedied by the Contractor prior to acceptance of the project as complete. All TV survey work, including furnishing of necessary personnel, equipment and material shall be performed by the Contractor.
84. **STREET LIGHTS:** The following, or approved equal, are to be used on this project:
- Street Light Type 1:  
                   Bega      Fixture 9701 MH – V240 – BEGA OLD SILVER  
                                   Pole 1108HR – BEGA OLD SILVER  
                                   Lamp MP 100/U/MED
85. **RECYCLING OF ASPHALT AND CONCRETE:** The existing asphalt pavement on Westgate Lane shall be recycled and reinstalled as base material beneath the new concrete road section. The existing pavement can be removed by cold planning where the material is pulverized, sized and mixed with an additive (asphalt emulsion or a recycling agent) to rejuvenate the existing asphalt. Ripping and crushing the asphalt, then combining the recycled asphalt with hot new aggregate and asphalt or a recycling agent at a central plant is also acceptable. If the amount of recycled asphalt material is insufficient to complete the required base course material required on this project, the Contractor shall provide new hot mix asphaltic concrete material to complete the project. Recycling of the existing Marsh Lane concrete street pavement, curb and gutter, and sidewalks is also required. The crushed concrete shall be processed to meet TxDOT Item 247 Type A Grade 2. The recycled concrete meeting this requirement will be allowed in lieu of the crushed limestone flex base. If the amount of recycled concrete material is insufficient to complete the required flex base material required on this project, the Contractor shall provide new crushed limestone flex base material to complete the project. Proof of recycling of all asphalt and concrete from this project will be required from the Contractor.
86. **PHASING OF CONSTRUCTION:** Construction of Vitruvian Park Building 201 will be on-going by others and in conjunction with this Block 200 Public Infrastructure phase of construction. The construction requirements of these projects will entail coordination and

proper staging in order to complete both phases of work. It is of the utmost importance that the contractors for each of these projects work together to that end. Public Infrastructure improvements shall be constructed in the following sequence with the intention of keeping Westgate Lane open for construction operations related to Building 201.

Phase 1: Construction of Electric Duct Bank System

Phase 2: Construction of utility work along Vitruvian Way including Sanitary Sewer, Storm Drain and Electric improvements.

Phase 3: Construction of improvements along Marsh Lane and the West Private Drive including Sanitary Sewer, Storm Drain and Electric improvements.

Phase 4: Construction of utility improvements along proposed Westgate Lane.

Phase 5: Paving improvements for Vitruvian Way, West Private Drive and Westgate Lane.

87. **TOPSOIL SPREADING:** Upon completion of street paving and backfilling of curbs, the Contractor shall provide and spread a 6” layer of topsoil on all unpaved areas of the street right-of-way including medians and parkway areas. Topsoiled areas shall be fine graded to provide a smooth surface, free from lumps and clods, and graded to provide proper drainage.
88. **GRASSING:** Grassing within street rights-of-way and easements will be provided under separate contract by others. This Contractor will be responsible for grassing of all other areas disturbed by this Contractors’ operations including job staging area, batch plant site, haul roads, etc. Cost of grassing for these areas shall be considered subsidiary to the cost of the project.
89. **SILICONE JOINT SEALANT:** Silicone joint sealant must be used in all instances where joint sealing applies to Portland cement concrete pavement and curbs. Payment for the use of silicone joint sealant throughout this project will in all cases be subsidiary to this contract at no extra payment.
90. **CLAIMS FOR DAMAGES OR INJURY:** Item 1.24.3 - SMALL CLAIMS FOR DAMAGE OR INJURY is amended to read as follows:

If any person files a claim against the Town of Addison or Contractor for personal injury or property damage resulting from, arising out of, or caused by, the operations of the Contractor, or any work within the limits of the project, the Contractor must either submit to the Town of Addison, a duly executed full release within thirty (30) days from the date of written claim, or immediately report the claim to his liability insurance carrier for their action in adjusting the claim. If the Contractor fails to comply with this provision within the stipulated time limit, it will be automatically deemed that the Contractor has appointed the Town as it’s irrevocably Attorney-In-Fact authorizing the Town to report the claim directly with the liability insurance carrier. This provision is in and of itself a Power-of-Attorney from the Contractor to the Town which authorizes the Town to take said action on behalf of the Contractor without the necessity of the execution of any other document. If the Contractor fails to comply with the provisions of this item the Town, at its own discretion, may terminate this contract or take any other actions it deems appropriate. Any payment or portion thereof due the Contractor, whether it is a final payment, progress payment, payment out of retainage or refund payment may be withheld by the Town as is authorized by Item

1.52. Bankruptcy, insolvency or denial of liability by the insurance carrier shall not exonerate the Contractor from liability.

As a result of the additional work created to Town of Addison due to un-responded claims for damages by Contractor to third parties, Contractor shall incur penalties for failure to abide by this Special Provision.

In accordance with the obligations set forth in Special Provision Item 1.24.3, Contractor shall respond to the claimant in writing regarding the status of the claim, including whether Contractor disputes the claim, wishes to settle, or will notify its liability insurance carrier regarding the claim. Contractor will be assessed a penalty by the Town of \$75.00 per claim, for its failure to respond to the claimant as described above within thirty days of its written notice of claim by the Town.

To ensure Contractor compliance, the Town of Addison shall be notified, by copied correspondence of responses or settlement by Contractor.

91. **MECHANICS AND MATERIALMEN'S LIEN:** The Contractor shall be required to execute a release of mechanics and materialmen's liens upon receipt of payment.
92. **CONTRACTOR'S AFFIDAVIT OF BILLS PAID:** The Contractor shall be required to execute the form provided in Section BP prior to the acceptance of the project.
93. **PROJECT RECORD DOCUMENTS:** The Contractor shall maintain record drawings and legibly annotate shop drawings to record changes made after review. A red felt-tip marking pen shall be used for all recording.

Maintenance of Documents. The Contractor shall maintain at the job site one record copy of the Contract Drawings, Specifications, Shop Drawings, Change Orders, other modification to the Contract, field test records and other documents submitted by Contractor in compliance with specification requirements. These documents shall be maintained at the job site apart from documents used for construction. These documents are not to be used for construction purposes. The documents shall be maintained in clean, legible condition. The documents shall be made available at all times for inspection by the Town.

Recording. Each document shall be labeled Project Record Copy in 2-inch high printed letters. The record documents shall be kept current. No work shall be covered until required information has been recorded.

Contract Drawings. The appropriate drawing shall be legibly marked to record, where applicable:

- a. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
- b. Field changes of dimension and detail made during construction process.

- c. Changes made by Change Order or Supplemental Agreement.
- d. Details not on original Contract Drawings.
- e. Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.
- f. Changes made by Change Order or Supplemental Agreement.
- g. Other matters not originally specified.

Shop Drawing. The Contractor shall maintain the Shop Drawings as record drawings and legibly annotate shop drawings to record changes made after review.

Submittal. At the completion of the project, the Contractor shall deliver record drawings to the Town. The transmittal letter shall be accompanied, in duplicate, with:

- a. Date, project title and number.
- b. Contractor's name and address.
- c. Title and number of each record document.
- d. Certification that each document as submitted is complete and accurate.
- e. Signature of Contractor or his authorized representative.

- 94. TOWN OF ADDISON APPROVAL:** This project is subject to final approval and acceptance by the Town of Addison. Final approval acceptance will not be given until the punch list items are completed to the Town's satisfaction and as-built drawings are given to the Town of Addison.

**SECTION PS**

**PROJECT SIGN**

## **PROJECT SIGN**

### **1. Quantity**

Two (2) Project Designation signs will be constructed and installed on the project site as directed by the Owner. It will be the responsibility of the Contractor to maintain the sign in a presentable condition at all times during construction. Maintenance will include painting and repairs as directed by the City Engineer or his appointee. The locations of the signs will be given to the Contractor by the Town of Addison at the Pre-Construction Meeting.

### **2. Material**

Sign shall be constructed of 3/4-inch thick smooth finish fir plywood (Grade A-C, exterior or better).

Sign will be securely mounted to 6" x 6" square posts. Nuts and bolts will not protrude from face of sign. Posts will be mounted to a support system that will provide adequate stabilization to ensure the sign will not fall over in heavy winds. Sand bags or other techniques may be necessary to protect sign.

### **3. Dimensions**

Size of sign will be four feet tall and six feet wide. The height and arrangement of the lettering shall be in accordance with the attached detail.

### **4. Paint**

Sign will be one-sided and will have a white background. Text will be black, except for the word "ADDISON!" which will be a blue color approved by the City Engineer. The paint will be an outdoor paint and will be maintained throughout the project in proper order. The quality of the paint, painting, and lettering on the signs shall be approved by the City Engineer or his appointee.

### **5. Payment**

Project Signs will be a separate pay item. This will include all labor, equipment, tools, and incidentals necessary to complete and install the work.

# The Town of



**PLEASE PARDON THE TEMPORARY  
INCONVENIENCE DURING THIS PROJECT**

**WATER, WASTEWATER AND STORM DRAIN IMPROVEMENTS**

## **VITRUVIAN PARK PUBLIC INFRASTRUCTURE – BLOCK 200**

CONTRACTOR: \_\_\_\_\_

ESTIMATED COMPLETION DATE: May 2017

**AN ADDISON PROJECT  
FOR MORE INFORMATION, PLEASE CALL 972-450-2871**

## SECTION TS

### **TECHNICAL SPECIFICATIONS**

TS-1	General Requirements for Water Service
TS-2	Water Services
TS-3	Interlocking Concrete Pavers
TS-4	Electrical
TS-5	Detectable Warning Panels

# TECHNICAL SPECIFICATIONS

## TS -1 - GENERAL REQUIREMENTS FOR WATER SERVICE

All new meters installed in the Town of Addison shall be equipped with electronic encoder registers, programmed to read in thousand gallon increments, and equipped with touch-pad readers.

<b>Connection Fees</b>		
.75" = \$50.00	2" = \$400.00	6" = \$800.00
1" = \$100.00	3" = \$500.00	8" = \$1,000.00
1.5" = \$150.00	4" = \$600.00	10" = \$1,200.00

### **A. Domestic (potable) Use:**

1. AU commercial unit applications for domestic use having flow demand's greater than 160 g.p.m. shall employ either a compound type meter, or a single-jet meter, 2", and conforming to Town of Addison Specifications. Hersey MCTW, Neptune Tru/floTM, or Badger Recordall—Compound Series are the accepted compound models at this time. Single-jet meters shall be Metron-Farnier Spectrum".
2. All services with flow capabilities 160 g.p.m. shall employ either a nutaling disc, single-\$, or turbine meter, sized (2", conforming to Town of Addison Specifications. Disc meters shall be Hersey400 Series IIS- or 500 Series IISTM, Neptune T-10-~, or Badger Recordall—Disc Series. Single-jet shall be Metron-Farmer Spectrum~, and turbine meters shall be Hersey MVRTh, Neptune HP", or Badger Recordall" Turbo Series meters.

### **B. Lawn Irrigation:**

1. All irrigation services to 1.5" shall employ a turbine, or single-jet type meter conforming to the above guidelines.
2. Less than 1.5" irrigation meter may be disc meters, but turbine meters are preferred.
3. Connection fees are waived for Irrigation services. Fire Service:
4. Less than or equal to 2" meters shall be a turbine, or single-jet meter as described above.
5. Greater than 2" shall be either a Double Check Detector Assembly, or a Reduced Pressure Zone Detector Assembly. These assemblies shall be approved by the University of Southern California Foundation for Cross Connection Control and Hydraulic Research (USC-FCCCHR), and installed in USC approved orientations and clearances.
6. Connection fees apply; see above.

### **C. Backflow Prevention Assemblies:**

1. All water services (except fire services > 2", see page one) shall have the appropriate BPA installed immediately after the meter. If there are space limitations or other considerations that would preclude installation in that location, the BPA may be installed inside a building or other location. There may be no unprotected taps or tees into the service between the meter and the BPA. The Town of Addison Public Works Department must approve proposed installations prior to actual

installation. All installations shall comply with USC-FCCCHR approved orientations and clearances as found in the most recent edition of the Manual of Cross-Connection Control.

2. All BPA's must be on the most current List of Approved Backflow Prevention Assemblies as published by the USC-FCCCHR.
3. The appropriate BPA will be determined by the Town of Addison Utility Division, using the most current edition of the Manual of Cross-Connection Control as published by USC-FCCCHR as a guideline. Final determination rests with the Town of Addison.
4. The plumber, contractor, and/or owner is responsible for having the BPA tested upon installation and initiation of service by a Tester certified according to TCEQ Rules for the specific type of installation (i.e. Fireline, General) and registered with the Town of Addison Utility Division. Thereafter, it will be the responsibility of the party paying the water bill, to have the BPA tested as determined by the Town of Addison Utility Division based on type of device and Degree of Hazard. Reduced Pressure Zone Assemblies shall be tested at least annually.
5. Stainless steel, brass, or nylon/plastic plugs shall be placed in all test cocks after testing. The use of Teflon tape is required to facilitate removal of plugs for future testing of the device. Plumber's putty or pipe dope is unacceptable for this installation.
6. Double Check Valve Assemblies may be placed in a meter box, but the box must be of sufficient size to provide the proper clearances for accessing, testing, and repair of the device. All above ground device installations shall be protected from freezing with apparatus designed for such use. In no case shall Reduced Pressure Zone Assemblies be permitted in a meter box or vault, or any other below grade installation.

# **TECHNICAL SPECIFICATIONS**

## **TS-2 - WATER SERVICES**

### **WATER SERVICE (Sizes 3/4" through 2")**

Contractors and/or plumbers are responsible for compliance with the following specifications:

- A. The Owner/Developer, or their contractor, shall supply water meters that conform to Town specifications as to make and type (See General Requirements for Water Service). All meters shall be equipped with electronic encoder registers for connection to touch-pad readers. Touch-pads shall be mounted at the direction of the Utilities Superintendent.
- B. Meters shall be set within the Utility easement and out of vehicular traffic flow and/or parking spaces. Curb stops are to be set 6" to 12" below finished grade.
- C. To prevent the inflow of mud or silt into the box, 4" to 6" of washed pea gravel shall be placed under the meter inside the box, allowing for 2" to 6" of open space below the meter. Meter box shall be minimum 18" deep. (See Figure SM-I)
- D. Meter boxes and openings shall be large enough to allow access to, and operation of, all meter nuts' flanges/bolts, and the curb stop without obstruction.
- E. Boxes unavoidably vulnerable to vehicular traffic shall have load-bearing frames and lids designed to withstand the anticipated load. Submittal and City engineer approval is required.
- F. An approved Backflow Prevention Assembly shall be installed on all water services after the meter, with a brass or copper nipple between the meter and the Assembly of sufficient length to allow placement in separate boxes. Both meter and assembly shall be accessible for testing and repairs. It shall be the responsibility of the contractor to have the Assembly tested upon installation by a TCEQ certified tester, registered with the Town of Addison Utilities Division, who shall provide the original of the test report to the Town of Addison Utility Division prior to final, continuous connection to the City's water supply.

All companion flanges shall be elliptical brass, and all bolts & nuts shall be grade 316 stainless steel, 5/8-11 x 2 1/2" hex head.

- H. Meters shall be set level in all directions.
- I. 2" meters shall have a laying length of 17"; 1.5" meters shall have a laying length of 13". Meters may be *'compact'*, but the difference shall be made up with a strainer upstream or a spool with test port downstream from the meter. 5/8" x 3/4" meters shall have 7" laying length, 3/4" meters shall have 9" laying length, and 1" meters shall have 10 3/4" laying length. (Approval of Utility Inspector)
- J. A meter deposit is required for all meters before initiation of service. The party responsible for the water bill will make application and deposit for service to the Town of Addison Utility Billing Department. (Call 450-7081)

### **3/4" through 2" WATER SERVICE APPROVED MATERIALS and PROCEDURES**

1. Double-strap bronze tapping saddle with CC. (AWWA taper) threads: Mueller #BR2B, Ford #202B, or McDonald #3 825. Tap shall be set at 45° of vertical on the mainline. Alternate tapping saddle #2 following.
2. Mueller Servi—Sea1™ style 502,504,506,508; 7" mm. length; Ford Style FS303-CC, or equal (Submittal to Public Works Dept. for approval).
3. Corporation stop with AWWA taper thread (CC) by conductive compression connection: Mueller H-ISO 13 or B25008 (1.5", 2"), Mueller H-15008 or H-25008 (3/4", 1"), Ford FBI000 or FI000 (1.5", 2", -6-0, -7-6, respectively), (3/4", 1", -3-0, -4-6, respectively), McDonald 4701T or 470 1BT
4. Pipe and meter size shall be determined by owner with approval of Building Inspection or Public Works/Engineering Departments: Piping shall be continuous type "K" copper from corporation to curb stop and completely embedded in sand 6" around the pipe.
5. 90 degree angle curb stop with lock-wing: Mueller H-14277 or B24276 (1.5 -2"), Ford KV43-666W-G or Fy43-777W-G (1.5'~ 2"), Mueller H-14277 or B24258 (3/4", 1"), Ford KV43-332W-G or KV43-444W-G (3/4", 1"), McDonald 4646BT or 4606BT. All companion flanges (1.5 -2") shall be brass.
6. Meter boxes shall be of sufficient size to accommodate the curb stop, meter, and all connections. They shall have a cover with reader lid. Concrete boxes shall be stacked to achieve sufficient depth (see "138cC" page one).
7. In-line curb-stops, meter yokes/setters, and/or meter risers may be considered on a case-by-case basis dependent on situation and subject to approval of Utility Inspector and/or Utility Superintendent. NQ gate valves will be allowed on the inlet side of the meter.
8. The type of Backflow Prevention Assembly required will depend upon the degree of hazard or potential hazard which exists. Contact the Utility Superintendent for further information at 972-661-1693.
9. The tapping saddle and corporation stop must be poly-wrapped (8 mil) and hand backfilled with sand to a depth of 12". Additional backfill may be done by machine, with material free of rocks and clods exceeding three (3) inches in diameter. **CAUTION!!** Inspection must be called for and completed ~fi~ to backfill, or tap must be re-exposed by the contractor so that the Town's representative may complete the inspection.

Lawn irrigation sprinklers are exempt from connection fees. Connection to an existing service will require a \$35.00 connection fee. See Figure SM-i for detail.

## **WATER SERVICE (Sizes greater than 2")**

Contractors, plumbers, and/or developers are responsible for compliance with the following specifications:

- A. Provide and install mechanical joint tapping sleeve or Stainless Steel tapping sleeve (such as Mueller H-6 15 or Mueller H-304 respectively). Submittal and approval required if other.
- B. Provide and install tapping valve to meet Addison specification GV-95. 1, for resilient wedge gate valve.
- C. Provide and install piping. Piping shall conform to ANSI/AWWA C-909-98 for Molecularly Oriented PVC Pressure pipe for water distribution. Pipe shall be 150-psi minimum class rating for domestic use, and 200-psi minimum class rating for fire line applications. Submittal and approval required, if other.
- D. Fittings shall be ductile iron mechanical joint style, with restraining glands (such as MegaLug). Fittings shall be wrapped with 8-mu poly prior to backfill.
- E. Pipe embedment shall conform to NCTCOG Class "B-2", or "B+" (from Standard Specifications for Public Works Construction, Third Edition, Drawing 3020, 3030). Crushed stone shall be separated from the granular material by a layer of geotextile fabric. Variations allowed with engineer's seal and approval of City Engineer.
- F. Service meter or Fire Line DCDA shall be placed in a pre-cast concrete vault with floor and access hatch. Hatch shall be "Bilco"-type, aluminum, spring-assisted, lockable, and sufficiently sized to allow for removal of complete meter or assembly. Vault shall be placed within the public ROW, wherever possible, clear of vehicular traffic flow and/or parking areas.
- G. All meters shall be equipped with electronic encoder registers calibrated to read in 1000 U.S. gallon increments, and remote touch-pad reading devices. (See General Requirements J-Q! Water Service)
- H. The meter and/or backflow assembly and piping shall be supported with manufactured supports designed for such application. (For clarification, reference Specification for *Stanton Pipe Supports* as manufactured by Material Resources Co., Hillsboro, Oregon; 503-693-0727 –Models S89 or S92).
- I. There shall be an MJ by flange coupling adapter in-line on the inlet side of the meter or device.

# TECHNICAL SPECIFICATIONS

## TS – 3 - INTERLOCKING CONCRETE PAVERS

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Concrete paver units. [Concrete paver edge units.]
- B. Bedding and joint sand.

#### **1.02 RELATED SECTIONS**

- A. Curbs and Drains.
- B. Aggregate Base.
- C. Cement Treated Base.
- D. Asphalt Treated Base.
- E. Pavements, Asphalt and Concrete.
- F. Bitumen and Neoprene Setting Bed, Acrylic Fortified Mortar Setting Bed.
- G. Geotextiles.

#### **1.03 REFERENCES**

- A. American Society of Testing and Materials (ASTM):
  - 1. C 33, Specification for Concrete Aggregates.
  - 2. C 136, Method for Sieve Analysis for Fine and Coarse Aggregate.
  - 3. C 140, Sampling and Testing Concrete Masonry Units.
  - 4. C 144, Standard Specification for Aggregate for Masonry Mortar.
  - 5. C 936, Specification for Solid Interlocking Concrete Paving Units.
  - 6. C 979, Specification for Pigments for Integrally Colored Concrete.
  - 7. D 698, Test Methods for Moisture Density Relations of Soil and Soil Aggregate Mixtures Using a 5.5-lb (2.49 kg) Rammer and 12 in. (305 mm) drop.
  - 8. D 1557, Test Methods for Moisture Density Relations of Soil and Soil Aggregate Mixtures Using a 10-lb (4.54 kg) Rammer and 18 in. (457 mm) drop.
  - 9. D 2940, Graded Aggregate Material for Bases or Subbases for Highways or Airports.

#### **1.04 QUALITY ASSURANCE**

- A. Manufacturer: Company specializing in the manufacture of concrete interlocking pavers for a minimum of three (3) years.  
Preapproved Manufacturers meeting submittal requirements:  
Pavestone Company, L. P. Plaza-Stone I & II San Marcos, TX (512)558-7283
- B. Installation shall be by a contractor and crew with at least one (1) year of experience in placing interlocking concrete pavers on projects of similar nature or dollar cost.
- C. Installation Contractor shall conform to all local, state/provincial licensing and bonding requirements.

## 1.05 SUBMITTALS

Since it is important to the specifier that all materials being proposed for this job are truly "equal" please submit the following for approval a minimum of 14 days prior to the bid opening:

- A. Submit product drawings and data sheets.
- B. Submit concrete paving units to indicate color, shape and surface texture. Reference drawings for color and shapes (4 pc system) shall be Large Rectangle (140 mm x 210 mm), Square (140 mm x 140 mm), Medium Rectangle (140 mm x 105 mm), and Small Rectangle (140 mm x 70 mm).
- C. Submit sieve analysis for grading of bedding and joint sand (upon award of contract).
- D. Submit test results for paver batch design from an independent testing laboratory to assure compliance of paving unit requirements to ASTM C 936.
- E. Indicate layout, pattern, and relationship of paving joints to fixtures and project formed details.
- F. Substitutions: Substitutions shall not be considered 14 days prior to bid opening for acceptance.

## 1.06 MOCK-UPS

- A. Install a 7 ft. x 7 ft. (2 m x 2 m) paver area as described in Article 3.02. This area will be used to determine surcharge of the bedding sand layer, joint sizes, lines, laying pattern(s), color(s), and texture of the job. This area shall be the standard from which the work will be judged. Consideration shall be given with regard to differences in age of materials from time of mock-up erection to time of actual product delivery.

## 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver concrete pavers to the site in steel banded, plastic banded, or plastic wrapped cubes capable of transfer by fork lift or clamp lift. Unload pavers at job site in such a manner that no damage occurs to the product.
- B. Sand shall be covered with waterproof covering to prevent exposure to rainfall or removal by wind. The covering shall be secured in place.
- C. Coordinate delivery and paving schedule to minimize interference with normal use of buildings adjacent to paving.

## 1.08 ENVIRONMENTAL CONDITIONS

- A. Do not install sand or pavers during heavy rain or snowfall.
- B. Do not install sand and pavers over frozen base materials.
- C. Do not install frozen sand.

## PART 2 PRODUCTS

### 2.01 CONCRETE PAVERS

Concrete pavers must have spacer bars on each unit. These insure a minimum joint width between each unit into which sand is placed. Spacer bars help prevent contact of the edges with adjacent pavers and subsequent spalling.
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- A. Product shape(s), overall dimensions, color(s), and thickness of the paver(s) shall be:
- | Shape | Dimensions | Color | Thickness |
|-------|------------|-------|-----------|
|-------|------------|-------|-----------|

Reference drawings for style and color of pavers.

All shapes shall have a dappled top with a cobbled surface texture and rounded corners.

- B. Pavers shall meet the following requirements set forth in ASTM C 936, Standard Specification for Interlocking Concrete Paving Units:
1. Average compressive strength of 8,000 psi (55 MPa) with no individual unit under 7,200 psi (50 MPa).
  2. Average absorption of 5% with no unit greater than 7% when tested in accordance with ASTM C 140.
  3. Resistance to 50 freeze-thaw cycles when tested in accordance with ASTM C 67.
- C. Pigment in concrete pavers shall conform to ASTM C 979.
- D. Material shall be manufactured in individual layers on production pallets.
- E. Materials shall be manufactured to produce a solid homogeneous matrix in the produced unit.

## **2.02 VISUAL INSPECTION**

- A. All units shall be sound and free of defects that would interfere with the proper placing of unit or impair the strength or permanence of the construction.
- B. Minor cracks incidental to the usual methods of manufacture, or chipping resulting from customary methods of handling in shipment and delivery, shall not be deemed grounds for rejection.

## **2.03 SAMPLING AND TESTING**

- A. Manufacturer shall provide access to lots ready for delivery to the Owner or his authorized representative for testing in accordance with ASTM 936-82 for sampling of material prior to commencement of paver placement.
- B. Manufacturer shall provide a minimum of three (3) years testing backup data showing manufactured products that meet and exceed ASTM 936-82 when tested in compliance with ASTM C-140.
- C. Sampling shall be random with a minimum of nine (9) specimens per 20,000 sq. ft. per product shape and size with repeated samples taken every additional 20,000 sq. ft. or a fraction thereof.
- D. Test units in accordance with ASTM for compressive strength, absorption and dimensional tolerance. A minimum of three (3) specimens per test required for an average value. Testing of full units is preferred.

## **2.04 REJECTION**

- A. In the event the shipment fails to conform to the specified requirements, the manufacturer may sort it, and new test units shall be selected at random by the Owner from the retained lot and tested at the expense of the manufacturer. If the second set of test units fails to conform to the specified requirements, the entire lot shall be rejected.

## **2.05 EXPENSE OF TESTS**

- A. The expense of inspection and testing shall be borne by the Owner.

The type of sand used for bedding is often called sand that is suitable for the manufacturing of concrete. Sands vary regionally. Screenings and stone dust can be unevenly graded and have an excess amount of material passing the No. 200 (75 Hm) sieve. Bedding sands with these characteristics should not be used. Contact paver contractors local to the project and confirm sand(s) successfully used in previous similar applications. Limestone sand should not be used for bedding sand. Mason sands are typically acceptable only for joint sand, provided they meet grading requirements as shown in Table 2 of this section.

- A. Bedding and joint sand shall be clean, non-plastic, free from deleterious or foreign matter. The sand shall be natural or manufactured from crushed rock. Limestone screenings or stone dust shall not be used. When concrete pavers are subject to vehicular traffic, the sands shall be as hard as practically available.
- B. Grading of sand samples for the bedding course and joints shall be done according to ASTM C 136. The bedding sand shall conform to the grading requirements of ASTM C 33 as shown in Table 1.

Table 1  
Grading Requirements for Bedding Sand

ASTM C 33	
Sieve Size	Percent Passing
3/8 in. (9.5 mm)	100
No. 4 (4.75 mm)	95 to 100
No. 8 (2.36 mm)	85 to 100
No. 16 (1.18 mm)	50 to 85
No. 30 (600 µm)	25 to 60
No. 50 (300 µm)	10 to 30
No. 100 (150 µm)	2 to 10

Bedding sand may be used for joint sand. However, extra effort in sweeping and compacting the pavers may be required in order to completely fill the joints. If joint sand other than bedding sand is used, the gradations shown in Table 2 are recommended. Joint sand should never be used for bedding sand.

- C. The joint sand shall conform to the grading requirements of ASTM C 144 as shown in Table 2 below:

Table 2  
Grading for Joint Sand

ASTM C 144	
Sieve Size	Natural Sand Percent Passing
No. 4 (4.75 mm)	100
No. 8 (2.36 mm)	95 to 100
No. 16 (1.18 mm)	70 to 100
No. 30 (600 µm)	40 to 75
No. 50 (300 µm)	10 to 35
No. 100 (150 µm)	2 to 15
No. 200 (75 µm)	0

## PART 3 EXECUTION

### 3.01 EXAMINATION

For installations on a compacted aggregate base and soil subgrade, the specifier should be aware that the top surface of the pavers may be 1/8 to 1/4 in. (3 to 6 mm) above the final elevations after compaction. This difference in initial and final elevations is to compensate for possible minor settling.

- A. Verify that subgrade preparation, compacted density and elevations conform to the specifications. Compaction of the soil subgrade to at least 95% Standard Proctor Density per ASTM D 698 is recommended. Higher density, or compaction to ASTM D 1557 may be necessary for areas subject to continual vehicular traffic. Stabilization of the subgrade and/or base material may be necessary with weak or saturated subgrade soils. The Architect/Engineer should inspect subgrade preparation, elevations, and conduct density tests for conformance to specifications.
- B. Verify that geotextiles, if applicable, have been placed according to specifications.
- C. Verify that aggregate base materials, thickness, compaction, surface tolerances, and elevations conform to the specifications.

Local aggregate base materials typical to those used for flexible pavements or those conforming to ASTM D 2940 are recommended. Compaction to not less than 95% Proctor Density in accordance with ASTM D 698 is recommended for pedestrian areas. Compaction to not less than 98% Modified Proctor Density according to ASTM D 1557 is recommended for vehicular areas. The aggregate base should be spread and compacted in uniform layers not exceeding 6 in. (150 mm) thickness. Recommended base surface tolerance should be plus or minus 3/8 in. (10 mm) over a 10 ft. (3 m) straight edge. The Architect/Engineer should inspect geotextile materials and placement (if applicable), base preparation, surface tolerances, elevations, and conduct density tests for conformance to specifications.

Mechanical tampers are recommended for compaction of soil subgrade and aggregate base around lamp standards, utility structures, building edges, curbs, tree wells and other protrusions. In areas not accessible to roller compaction equipment, compact to specified density with mechanical tampers.

- D. Verify location, type, installation and elevations of edge restraints around the perimeter area to be paved.
- E. Verify that base is dry, uniform, even, and ready to support sand, pavers, and imposed loads.
- F. Beginning of bedding sand and paver installation means acceptance of base and edge restraints.

### 3.02 INSTALLATION

- A. Spread the sand evenly over the base course and screed to a nominal 1 in. (25 mm) thickness, not exceeding 1 1/2 in. (40 mm) thickness. The screeded sand should not be disturbed. Place sufficient sand to stay ahead of the laid pavers. Do not use the bedding sand to fill depressions in the base surface.
- B. Ensure that pavers are free of foreign materials before installation.
- C. Lay the pavers in the pattern(s) as shown on the drawings. Maintain straight pattern lines.
- D. Joints between the pavers on average shall be between 1/16 in. and 3/16 in. (2 mm to 5 mm) wide.

Some paver shapes require a larger joint. Consult manufacturer for recommended joint widths.

- E. Fill gaps at the edges of the paved area with cut pavers or edge units.

Units cut no smaller than one-third of a whole paver are recommended along edges subject to vehicular traffic.

- F. Cut pavers to be placed along the edge with a double blade paver splitter or masonry saw.
- G. Use a low amplitude, high frequency plate vibrator to vibrate the pavers into the sand. Use Table 3 below to select size of compaction equipment:

Table 3

Paver Thickness	Minimum Centrifugal Compaction Force
60 mm	3000 lbs. (13 kN)
80 mm	5000 lbs. (22 kN)

- H. Vibrate the pavers, sweeping dry joint sand into the joints and vibrating until they are full. This will require at least two or three passes with the vibrator. Do not vibrate within 3 ft. (1 m) of the unrestrained edges of the paving units.
- I. All work to within 3 ft. (1 m) of the laying face must be left fully compacted with sand-filled joints at the completion of each day.
- J. Sweep off excess sand when the job is complete.
- K. The final surface elevations shall not deviate more than 3/8 in. (10 mm) under a 10 ft. (3 m) long straightedge.
- L. The surface elevation of pavers shall be 1/8 in. to 1/4 in. (3 to 6 mm) above adjacent drainage inlets, concrete collars or channels.
- M. The resanding as necessary of paver joints shall be accomplished by contractor for a period of 90 days after completion of work.

**3.03 FIELD QUALITY CONTROL**

- A. After removal of excess sand, check final elevations for conformance to the drawings.

**END OF SECTION**

# **TECHNICAL SPECIFICATIONS**

## **TS-4 - ELECTRICAL**

### **Table of Contents**

16010	General Requirements for Electrical Work
16111	Raceways and Fittings
16120	Wire and Cable
16135	Precast Electrical Manholes and Pullboxes
16410	Underground Electrical Distribution
16450	Grounding
16503	Poles and Standards
16530	Street Lighting

## SECTION 16010

### GENERAL REQUIREMENTS FOR ELECTRICAL WORK

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. General Requirements for Electrical Work are intended to be complementary to General Requirements of Construction Contract.
- B. Work Included: Provide complete electrical items where shown on Drawings, as specified herein, and as needed for complete and proper installation including, but not necessarily limited to following summary of Work.
  - 1. Electrical work will consist of the installation of pedestrian, roadway/pedestrian and parking lot fixtures and poles. Power for pedestrian and roadway fixtures will be provided by (2) new utility services. Parking lot fixtures will be served from existing Minol parking lot circuits.

##### 1.2 QUALITY ASSURANCE AND APPLICABLE STANDARDS

- A. Use adequate numbers of skilled workers thoroughly trained and experienced in necessary crafts and completely familiar with specified requirements and methods needed for proper performance of Work of this Division. Ensure that there is minimum of one licensed journeyman electrician, on job site whenever Division 16 Work is being performed.
- B. Without additional cost, provide labor and materials as required to complete Work of this Division in accordance with requirements of Governmental Agencies having jurisdiction, regardless of whether materials and associated labor are called for elsewhere in these Contract Documents.
- C. Codes: Electrical work shall conform to requirements and recommendations of latest edition of National Electrical Code and local codes and ordinances. When codes conflict, more stringent requirements shall govern.
- D. Materials incorporated into or used in conjunction with Work provided in this Division shall be change-of-century compliant. Century 1900 and 2000 values shall be processed correctly without abnormally ending and date values processed by applicable software shall contain correct century and include at minimum: date data century recognition, calculations that accommodate same century and multiple century formulas and date values, and date interface values that reflect century. Materials and equipment shall not contain timers, clocks, counters, or other limiting designs or routines that cause items to be erased, inoperable, or otherwise incapable of being used in full manner for which designed after occurrence or lapse of triggering event. Materials and equipment shall be warranted to not cause other materials, equipment, or systems to become erased, contaminated, inoperable, or otherwise incapable of being used in intended manner.
- E. Standards: Specifications and Standards of following organizations are by reference made part of these Specifications. Electrical Work, unless otherwise indicated, shall comply with requirements and recommendations wherever applicable:
  - 1. Association of Edison Illuminating Companies (AEIC)
  - 2. American National Standards Institute (ANSI)

3. American Society for Testing and Materials (ASTM)
4. Certified Ballast Manufacturers (CBM)
5. Electrical Testing Laboratories (ETL)
6. Institute of Electrical and Electronic Engineers (IEEE)
7. Insulated Power Cable Engineers Association (IPCEA)
8. National Bureau of Standards (NBS)
9. National Electrical Contractors Association (NECA)
10. National Electrical Manufacturer's Association (NEMA)
11. National Fire Protection Association (NFPA)
12. Radio-Television Manufacturer's Association (RTMA)
13. Reflector Luminaire Manufacturers (RLM)
14. Underwriters' Laboratories, Inc. (UL)

### 1.3 REQUIREMENTS OF REGULATORY AGENCIES

- A. Requirements and recommendations of latest editions of Occupational Safety and Health Act (OSHA), Americans with Disabilities Act (ADA), and Texas Accessibility Standards (TAS) are by reference made part of these Specifications. Work shall comply with requirements and recommendations wherever applicable.

### 1.4 RELATED WORK SPECIFIED ELSEWHERE

- A. Other Divisions of Contract Documents. Refer to each Division's Specifications and Drawings for requirements.

### 1.5 DEFINITIONS

- A. Terms *furnish*, *install*, and *provide* are used interchangeably and shall mean to furnish and install, complete and ready for intended use.

### 1.6 SUBMITTALS

- A. Comply with pertinent provisions of Division 1.
- B. Submittals required of materials and equipment include following:
  1. Materials list of items proposed to be provided under Division 16.
  2. Manufacturer's specifications and other data needed to prove compliance with specified requirements. Term "Compliance" is understood to mean that Contractor certifies that submitted equipment meets or exceeds Contract Document requirements. Items that do not clearly meet this definition should be identified and explained as required in following paragraph.
  3. Explain with enough detail so that it can easily be determined that item complies with functional intent. List disadvantages or advantages of proposed item versus specified item. Submit technical data sheets and/or pictures and diagrams to support and clarify. Organize in clear and concise format. Substitutions must be approved in writing by Engineer. Engineer's decision shall be final.
  4. Allow minimum of 10 working days for review of each submittal and re-submittal.
  5. Items of equipment that are not accepted in writing as approved equal shall be replaced or revised to comply with Contract Documents at Contractor's expense.

6. The manufacturer's recommended installation procedures shall become basis for accepting or rejecting actual installation procedures used on Work.
  7. Shop drawings shall consist of detailed drawings with dimensions, schedules, weights, capacities, installation details and pertinent information needed to describe the material or equipment.
- C. Submittals required of materials and equipment under this Division include following listed items not supplied by Owner. These submittal requirements are intended to be complimentary to requirements that may be listed in individual sections. In event of conflict, more stringent requirement shall apply.
1. Conductors and Cables
    - a. Submit product data for each specified product.
    - b. Submit tabular list of wire and wiring systems that will be increased in capacity or size to comply with Section 16120 and/or similar requirements shown on Drawings. List shall include size shown on Drawings, proposed increase to comply with Section 16120, and proposed installed length.
  2. Raceways and Boxes
    - a. Submit product data for surface raceways, wireways and fittings, floor boxes, hinged-cover enclosures, and cabinets.
    - b. Submit Shop Drawings including layout drawings showing components and wiring for nonstandard boxes, enclosures, and cabinets.
  3. Grounding
    - a. Submit product data for grounding rods, connectors and connection materials, and grounding fittings.
  4. Exterior Lighting
    - a. Submit product data describing fixtures, lamps, ballasts, poles, and accessories. Arrange product data for fixtures in order of fixture designation. Include data on features, poles, accessories, and finishes.
    - b. Submit outline drawings indicating dimensions and principal features of fixtures and poles.
    - c. Submit electrical ratings and photometric data including certified results of laboratory tests for fixtures and lamps.
    - d. Submit wind resistance calculations, certified by registered professional engineer.
    - e. Submit Shop Drawings detailing nonstandard fixtures and poles and indicating dimensions, weights, and methods of field assembly, components, and accessories.
    - f. Submit wiring diagrams detailing wiring for control system showing both factory-installed and field-installed wiring for each specific system, which differentiates between factory-installed and field-installed wiring.

- g. Submit anchor-bolt templates, keyed to specific poles and certified by manufacturer.
  - h. Submit maintenance data for products to include in operation and maintenance manual specified in this Section.
  - i. Submit lamp data for each lamp type.
  - j. Submit ballast data.
- 5. Record Documents. Refer to "Project Record Documents" Paragraph of this Section.
  - 6. Operation and Maintenance Data. Refer to "Operation and Maintenance Data" paragraph of this Section.
- D. Resubmittals of rejected submittals shall be limited to one (1) in number. Costs for processing subsequent resubmittals in excess of the first resubmittal, resulting from the Contractor's disregard of Engineer's primary submittal rejection comments, shall be borne by the Contractor. Costs shall be based on Engineer's hourly rates as published in their current professional fee schedules and shall also include reimbursable costs for delivery, mailing, and photocopies at direct cost fifteen percent (15%).

#### 1.7 SUBSTITUTIONS

- A. The Contract Documents list manufacturers' names and catalog numbers followed by phrase "or equivalent" are to establish a standard of quality and utility for the specified items and to provide a dimensional reference to the scaled drawings.
- B. Submittals for "equivalent" items shall include the following data, which is not necessarily required for specified items which list the manufacturer and catalog number:
  - 1. Performance characteristics.
  - 2. Materials.
  - 3. Finish.
  - 4. Certification of conformance with specified codes and standards.
  - 5. Manufacturer's specifications and other data needed to prove compliance with specified requirements. Term "compliance" is understood to mean that the submitted equipment will meet or exceed the Contract Document requirements. Items that do not clearly meet this definition shall be identified and explained as required in following Paragraph.
  - 6. Identify difference between specified equipment and proposed substituted equipment. Explain with enough detail so that /Owner can easily determine that item complies with functional intent. List disadvantages or advantages of proposed item versus specified item. Submit technical data sheets and/or pictures and diagrams to support and clarify. Organize in clear and concise format. Engineer shall approve substitutions in writing. Engineer's decision shall be final.
- C. Submittals of "equivalent" components or systems may be rejected if:

1. Material or equipment would necessitate alteration of mechanical, electrical, architectural, or structural design.
  2. Dimensions vary from specified material or equipment so that accessibility or clearances are impaired or Work of other trades is adversely affected.
- D. Proposed substitutions for materials or equipment must be submitted 10 days prior to final bid date for consideration as approved equals. Otherwise, substitutions will not be permitted. Only prime bidders shall make proposals for substitutions.
- E. No substitution shall be made unless authorized in writing by Architect/Engineer. Should substitution be accepted, and should substitute material prove defective or otherwise unsatisfactory for service intended, and within guarantee period, replace this material or equipment with material or equipment specified, to satisfaction of Engineer and at no cost to Owner.

#### 1.8 ORDINANCES, PERMITS, METERS, UTILITIES AND ROYALTIES

- A. Purchase all necessary permits and licenses necessary for completion of the Work. Pay all lawful fees required and necessary pursuant in obtaining said permits and licenses. Required certificates of approvals and inspections by local governing and regulating authorities.
- B. Pay all fees required for connection of utility power and telephone services required for the Work.
- C. Pay royalty payments or fees required for use of patented equipment or systems. Defend lawsuits or claims for infringement of patent rights and hold Owner and/or Engineer harmless from loss as result of said suits or claims.

#### 1.9 COMPATIBILITY OF EQUIPMENT

- A. Assume full responsibility for satisfactory operation of component parts of electrical systems. Assure compatibility of equipment and performance of integrated systems in accordance with requirements of the Construction Documents. Notify the Engineer before submitting a bid should Specifications or Drawings make acceptance of responsibility impossible, prohibitive, or restrictive. The bid shall be accompanied by a written statement listing any objections or exceptions to the applicable specification section and/or drawing.

#### 1.10 UTILITIES AND TEMPORARY POWER

- A. Verify location and capacity of all existing utility services before starting Work. The locations and sizes of electrical lines are shown in accordance with data secured from Owner's survey. The data shown is offered as estimating guide without guarantee of accuracy.

#### 1.11 EXCAVATION AND BACKFILLING

- A. Perform excavation and backfilling in strict accordance with Section 02161, including trench safety requirements.
- B. Perform excavation and backfilling associated with Work in strict accordance with provisions of these Specifications, including trench safety requirements.

- C. Perform excavation and backfilling necessary for installation of Work. This shall include shoring and pumping in ditches to keep them in dry condition until Work has been installed. Shoring required to protect excavation and safeguard employees shall be properly performed.
- D. Excavations shall be made to proper depth, with allowances made for floor slabs, forms, beams, etc. Ground under conduits shall be well compacted before conduits are installed.
- E. Exterior conduits shall be installed with minimum of 36 inches of cover below finished grade, unless otherwise indicated or required by local ordinances. Exterior conduit shall be installed with minimum of 12 inches of cover below finished paving grade, unless otherwise indicated or required by local ordinances.
- F. Backfilling shall be made with selected soil, free from rocks and debris and shall be pneumatically tamped with 6-inch layers to secure field density ratio of 90 percent as defined by ASTM Designation D698-57T (Proctor Soil Compaction Test).
- G. Excavated materials not suitable and not used in backfill shall be removed from site.
- H. Field verify locations of underground utilities. If existing utilities are damaged, they shall be repaired at no cost to Owner.
- I. Restore all lime stabilization and replace concrete, curbs, paving and other surface improvements cut during excavation to original condition.

#### 1.12 FLASHINGS, SLEEVES, AND INSERTS

- A. Furnish and install flashings where conduits pass through outside walls. Flashings shall be properly formed to fit around conduit and shall be caulked, with 790 Silicone Building Sealant by Dow Corning Corporation, so as to make watertight seal between conduit and building.
- B. Unless otherwise specified, install sleeves for each conduit where it may pass through interior walls or floors. Galvanized 22 gage sheet iron sleeves shall be used. Finish flush with each finished wall surface. In pipe chases, the sleeve shall extend 1-1/2 inches above floor slab and shall be watertight.
- C. Raceways that pass through concrete beams or walls and masonry exterior walls shall be provided with galvanized wrought iron pipe sleeves, unless shown otherwise on drawings. Inside diameter of these sleeves shall be at least 1/2 inch greater than outside diameters of service pipes. After pipes are installed in these sleeves, fill annular space between pipes and sleeves with 790 Silicone Building Sealant by Dow Corning Corporation. Completed installation shall be watertight.
- D. Penetrations through walls, floors and ceilings shall be done in manner to maintain integrity of fire rating of respective wall, floor, or ceiling.
- E. Reference Section 07902 for additional sealant requirements. Where conflicts occur with the specified requirements, the more stringent shall apply.

#### 1.13 CUTTING AND PATCHING

- A. Perform cutting and patching in strict accordance with provisions of these Specifications and following:

1. Coordinate Work to minimize cutting and patching.
  2. Use adequate number of skilled workers who are thoroughly trained and experienced in necessary crafts and who are completely familiar with specified requirements and methods needed for proper performance of Work.
- B. Request for Engineer's consent:
1. Prior to cutting which affects structural safety, submit a written request to Engineer for permission to proceed with cutting.
  2. When conditions of Work or schedule require a change of materials or methods for cutting and patching, notify Engineer and secure written permission to proceed with the work.
- C. Perform cutting and demolition using methods that will prevent damage to other portions of Work.
- D. Perform fitting and adjusting to provide a finished installation complying with specified tolerances and finishes.

#### 1.14 SURFACE CONDITIONS

- A. Examine areas and conditions under which Work of this Division will be performed. Work required to correct conditions detrimental to timely and proper completion of Work shall be included as part of Work of this Division. Do not proceed until unsatisfactory conditions are corrected.

#### 1.15 CONSTRUCTION REQUIREMENTS

- A. Drawings show arrangements of Work. Rearrangement of spaces and equipment will be considered when Project conditions make this necessary and/or materials or equipment can be installed to better advantage. Prior to proceeding with Work, coordinate with various trades to prepare and submit five (5) copies of Drawings of proposed arrangement for Engineer's review. Allow minimum of 10 working days for review.
- B. Installation or rearrangement of equipment and space for Contractor's convenience or to accommodate material or equipment substitutions will be considered. Assume responsibility for rearrangement of equipment and space and have Engineer review change before proceeding with Work. Request for changes shall be accompanied by Shop Drawings of affected equipment and space. Identify proposed monetary credits or other benefits. Allow minimum of 10 working days for review.
- C. Properly locate and size all required pipe sleeves and slots, holes, or openings in structure.

#### 1.16 PREPARATION AND COORDINATION

- A. Coordinate the work in strict accordance with the Contract Documents as follows:
- B. Information on the Drawings and in these Specifications is as accurate as could be secured, but absolute accuracy is not guaranteed. The drawings are diagrammatic, and the exact locations, distances, levels, and other conditions shall be governed by actual construction. The drawings and specifications shall be for guidance.

- C. Field verify measurements. No extra compensation will be allowed because of differences between Work shown on Drawings and actual site measurements.

#### 1.17 PROJECT RECORD DOCUMENTS

- A. Provide Project record documents associated with Work in accordance with provisions of these Specifications. Refer to Sections 01700 and 01730 for additional requirements.
- B. Throughout progress of the Work, maintain accurate record of all changes in Contract Documents (Drawings and Specifications). Changes shall include Addendums issued during bidding and location of electrical service lines, receptacles, and outside utilities.
- C. Delegate responsibility for maintenance of record documents to one person on Contractor's staff.
- D. Accuracy of Records
  - 1. Thoroughly coordinate changes within record documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other documents where required to show change properly. Match symbology and format of base documents.
  - 2. Accuracy of records shall be such that future search for items shown in Contract Documents may rely reasonably on information obtained from approved Project record documents.
- E. Maintain a job set of record documents protected from deterioration and from loss and damage until completion of Work. Transfer all recorded data to final Project record documents.
- F. Making Entries on Drawings
  - 1. Using erasable colored pencil (not ink or indelible pencil), clearly describe change by graphic line and note as required.
  - 2. Date entries.
  - 3. Call attention to entry by "cloud" drawn around area or areas affected.
  - 4. In event of overlapping changes, use different colors for overlapping changes.
  - 5. Make entries within 24 hours after receipt of information that changes have occurred.
  - 6. Maintain base drawing format and use same symbology.
  - 7. Convert field mark-ups to finished CADD record drawings when required in this Section.
- G. Conversion of Schematic Layouts
  - a. The purpose of the final Project Record Documents is to provide factual information regarding all aspects of the Work, both concealed and visible, to enable future modification of the Work to proceed without lengthy and expensive site measurement, investigation, and examination.

2. Provide CADD electronic files in dwg Format using AutoCAD Release 2000 software. Upon written request, completion of a release form, and payment of the Engineer's standard fee of \$200 plus applicable sales tax for a set-up charge and \$25 per drawing plus applicable sales tax for copies of such files, Engineer will provide AutoCAD Release 2000 electronic files of base Contract Drawings in dwg format on 3-1/2 inch electronic or on compact disc. Engineer will also provide a list of drawing layers and names that shall be maintained.
3. Provide completed record drawings on electronic 3-1/2" disks or CD and one mylar film reproducible of each drawing.
4. Refer to Section 01770 for additional requirements.

H. Final Project Record Documents

1. Provide CADD Electronic files in .dwg format using AutoCAD Release 14 software. Upon written request, Engineer will provide AutoCAD Release 14 electronic files of base Contract Drawings in .dwg format on 3-1/2-inch electronic disks at no cost. Engineer will also provide a list of drawing layers and names that shall be maintained in record set.
2. Provide completed record drawings on electronic 3-1/2-inch disks and one reproducible Mylar film of each drawing.
3. Refer to Section 01720 for additional requirements.

1.18 OPERATION AND MAINTENANCE DATA

- A. Submit two copies of preliminary draft of proposed manual or manuals to Engineer for review and comments. Allow minimum of 10 working days for review. Refer to Sections 0130, 01700 and 01730 for additional requirements.
- B. Submit approved manual to Engineer prior to indoctrination of operation and maintenance personnel.
- C. Where instruction manuals are required for submittal, they shall be prepared in accordance with the following:

**Format:**

Size:

8-1/2-inch by 11-inch

Paper:

White bond, at least 20 pound weight

Text:

Neatly written or printed

Drawings:

11 inches in height preferable; bind in with text; foldout acceptable; larger drawings acceptable but fold to fit within Manual and provide drawing pocket inside rear cover or bind in with text.

**Flysheets:**

Separate each section of Manual with neatly prepared flysheets briefly describing contents of ensuing section; flysheets may be

in color.

**Binding:** Use heavy-duty plastic or fiberboard covers with binding mechanism concealed inside manual; 3-ring binders will be acceptable; binding is subject to **Engineer's** approval.

**Measurements:** Provide measurements in U.S. standard units (e.g., feet, inches, and pounds). Where items may be expected to be measured within 10 years in accordance with metric formulae, provide additional measurements in "International System of Units" (SI).

Provide front and back covers for each manual, using durable material approved by Engineer, and clearly identified on or through cover with at least following information:

#### OPERATING AND MAINTENANCE INSTRUCTIONS

Name and Address of Work

Name of Contractor

General subject of this manual

Space for approval signature of Engineer and approval date[s]

E. Contents: Include at least following:

1. Neatly typewritten index near front of Manual, giving immediate information as to location within manual of emergency information regarding installation.
2. Complete instructions regarding operation and maintenance of equipment involved including lubrication, disassembly, and reassembly.
3. Complete nomenclature of parts of equipment.
4. Complete nomenclature and part number of replaceable parts, name and address of nearest vendor and other data pertinent to procurement procedures.
5. Copy of guarantees and warranties issued.
6. Manufacturer's bulletins, cuts, and descriptive data, where pertinent, clearly indicating precise items included in this installation and deleting, or otherwise clearly indicating, manufacturers' data with which this installation is not concerned.
7. Other data as required in pertinent Sections of these Specifications.

#### 1.19 TESTING AND INSPECTION

- A. Provide personnel and equipment, make required tests, and secure required approvals from Engineer and Governmental Agencies having jurisdiction.
- B. Make written notice to Engineer adequately in advance of each of following stages of construction:
  1. When rough-in is complete, but not covered.

2. At completion of Work of this Division.
  3. In underground condition prior to placing backfill, concrete floor slab, and when associated electrical Work is in place.
- C. When material or workmanship is found to not comply with specified requirements, remove items from job site and replace them with items complying with specified requirements at no additional cost to Owner. This shall be performed within 3 days after receipt of written notice of noncompliance.
  - D. In Engineer's presence, test parts of electrical system and prove that items provided under this Division function electrically in required manner.

#### 1.20 WARRANTY

- A. Warrant equipment and workmanship for period of one year after date of substantial completion and replace or repair faulty equipment or installation at no cost to Owner for service during this period, in accordance with requirements of Division 1.
- B. Warranty shall not void specific warranties issued by manufacturers for greater periods of time or void rights guaranteed to Owner by law.
- C. Warranties shall be in writing in form satisfactory to Owner, and shall be delivered to Owner before final payment is made.

#### 1.21 PROJECT COMPLETION

- A. Upon completion of Work of this Division, thoroughly clean exposed portions of electrical installation, removing traces of soil, labels, grease, oil, and other foreign material, and using only type cleaner recommended by manufacturer of item being cleaned.
- B. Thoroughly indoctrinate Owner's operation and maintenance personnel in contents of operations and maintenance manual required to be submitted as part of this Division of these Specifications.

**END OF SECTION 16010**

**SECTION 16111**  
**RACEWAYS AND FITTINGS**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. The General Provisions of the contract, including General and Supplementary Conditions, apply to the Work specified in this Section.

**1.2 RELATED WORK SPECIFIED ELSEWHERE**

- A. All other Sections of Division 16.
- B. All other Divisions of the Contract Documents. Refer to each Division's Specifications and Drawings for requirements.

**1.3 SCOPE**

- A. Provide all equipment, materials, labor, supervision, and services necessary for or incidental to the installation of a complete and operating electrical raceway system, as indicated on the Drawings and as specified.
- B. Work included:
  - 1. Rigid metal conduit and fittings
  - 2. Rigid metal and fittings with PVC coated jacket
  - 3. Non-metallic conduit and fittings

**1.4 QUALITY ASSURANCE**

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Without additional cost to the Owner, provide such other labor and materials as are required to complete the work of this Section in accordance to the requirements of governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in these Contract Documents.
- C. When requested, provide the Architect with manufacturer's certificates that confirm that materials meet or exceed minimum requirements as specified.

## **PART 2 - PRODUCTS**

### **2.1 CONDUITS AND FITTINGS**

- A. Provide metal conduits, tubing, fittings, and couplings of types, grades, sizes, and weights (wall thicknesses) for each service indicated. Where types and grades are not indicated, provide proper selection determined by installer to fulfill wiring requirements and comply with applicable portions of NEC for raceways.
- B. Rigid Metal Conduit and Fittings
  - 1. Rigid steel conduit: ANSI C80.1
  - 2. Fittings and conduit bodies: ANSI/NEMA FB 1; threaded type, material to match conduit.
- C. Plastic Conduit and Fittings
  - 1. Conduit: NEMA TC 2; Schedule 40 PVC
  - 2. Fittings and Conduit Bodies: NEMA TC 3

### **2.2 CONDUIT SUPPORTS**

- A. Conduit Clamps, Straps, and Supports: Steel or malleable iron

## **PART 3 - EXECUTION**

### **3.1 CONDUIT SIZING, ARRANGEMENT, AND SUPPORT**

- A. Size of conduit shall be as indicated on the drawings or sized for conductor type installed, whichever is larger. Size all conduits in accordance with the NEC. Minimum conduit size shall be  $\frac{3}{4}$  inch.
- B. Arrange conduit to maintain maximum headroom and present a neat appearance.
- C. Route exposed conduit and conduit above accessible ceilings parallel and perpendicular to walls and adjacent piping.
- D. Maintain minimum 6-inch clearance between conduit and piping. Maintain 12-inch clearance between conduit and heat sources such as flues, steam pipes, and heating appliances.
- E. Arrange conduit supports to prevent distortion of alignment by wire pulling operations. Fasten conduit using galvanized straps, lay-in adjustable hangers, clevis hangers, or bolted split stamped galvanized hangers.
- F. Group conduit in parallel runs where practical and use conduit rack constructed of steel channel with conduit straps or clamps.
- G. Do not fasten conduit with wire or perforated pipe straps. Remove all wire used for temporary conduit support during construction, before conductors are pulled.

### 3.2 CONDUIT INSTALLATION

- A. Cut conduit square using a saw or pipe cutter; de-burr cut ends.
- B. Bring conduit to the shoulder of fittings and couplings and fasten securely.
- C. Use conduit hubs for fastening conduit to cast boxes and for fastening conduit to sheet metal boxes in damp or wet locations.
- D. Install no more than the equivalent of three 90-degree bends between boxes.
- E. Use conduit bodies to make sharp changes in direction, as around beams.
- F. Use hydraulic one-shot conduit bender or factory elbows for bends in conduit larger than 2-inches in size.
- G. Avoid moisture traps where possible; where unavoidable, provide junction box with drain fitting at conduit low point.
- H. Use suitable conduit caps to protect installed conduit against entrance of dirt and moisture.
- I. Provide a pull tape for spare empty conduits. The tape shall be fiberglass reinforced polyester tape with distance marking in feet continuous along its length. Furnish T&B or Greenlee products.
- J. Install expansion joints where conduit crosses building expansion joints.
- K. Where conduit penetrates fire-rated walls and floors, provide mechanical firestop fittings with UL listed fire rating equal to wall or floor rating. Seal opening around conduit with UL listed foamed silicone elastomer compound.
- L. Route conduit through roof openings for piping and ductwork where possible; otherwise route through roof jack with pitch pocket.
- M. Maximum size conduit in slabs above grade: 3/4 inch.
- N. Make joints in accordance with manufacturers' written instructions.
- O. Provide plastic warning tape for underground conduit or duct bank installations. Install warning tape directly above conduit one foot below finished grade or as shown on drawings.
- P. Sand for intermediate fill around underground conduits shall be washed sand, suitable for concrete or masonry. Reference Section 16010 for additional backfill and excavation requirements.

### 3.3 CONDUIT INSTALLATION SCHEDULE

- A. Underground installations more than two feet from foundation wall: Schedule 40 plastic conduit.
- B. Installations underground within 2 feet of foundation wall: Rigid steel conduit with PVC jacket.

- C. In slab or concrete above grade: Rigid steel conduit.
- D. Exposed outdoor locations: Rigid steel conduit.
- E. Installations below concrete slab: Schedule 40 PVC conduit.

**END OF SECTION 16111**

## SECTION 16120

### WIRE AND CABLE (600 VOLTS)

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. The General Provisions of the Contract, including General and Supplementary Conditions, apply to the Work specified in this Section.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. All other Sections of Division 16.
- B. All other Divisions of the Contract Documents. Refer to each Division's Specifications and Drawings for requirements, including but not limited to the following:
  - 1. Section 16111 - Raceways and Fittings

##### 1.3 SCOPE

- A. Provide all equipment, materials, labor, supervision, and services necessary for or incidental to the installation of conductors as indicated on the Drawings and as specified.
- B. Work included:
  - 1. Wiring connections and terminations, 600 Volt rating and below.

##### 1.4 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Without additional cost to the Owner, provide such other labor and materials as are required to complete the work of this Section in accordance to the requirements of governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in these Contract Documents.
- C. When requested, provide the manufacturer's certifications that confirm that materials meet or exceed minimum requirements as specified.

#### PART 2 - PRODUCTS

##### 2.1 CONDUCTORS

- A. Provide conductors made of soft-drawn annealed copper with a conductivity not less than that of 98% pure copper.
- B. Building Wire:
  - 1. Thermoplastic-insulated building wire: NEMA WC 5.

2. Feeders and branch circuits: Copper, stranded conductor, 600-volt insulation, THHN/THWN-2.
3. Control circuits: Copper, stranded conductor 600-volt insulation, THHN/THWN-2.
4. Use the following color code system:

	208Y/120 Volt Systems (NA)	480/240 Volt Systems
Phase A	Black	Brown
Phase B	Red	Orange
Phase C (NA)	Blue	Yellow
Neutral	White	Gray
Ground	Green	Green

C. Remote Control and Signal Cable:

1. Control cable for Class 2 or Class 3 remote control and signal circuits: Copper conductor, 300-volt insulation, rated 60-degree C, individual conductors twisted together, shielded, and covered with a PVC jacket; UL listed.
2. Plenum cable for Class 2 or Class 3 remote control and signal circuits: Copper conductor, 300-volt insulation, rated 60-degree C, individual conductors twisted together, shielded, and covered with a nonmetallic jacket; UL listed for use in air handling ducts, hollow spaces used as ducts, and plenums.

2.2 ACCEPTABLE MANUFACTURERS

A. Provide products by the following manufacturers:

1. Rome
2. Cablec
3. Pirelli
4. Belden
5. Or approved equal

**PART 3 - EXECUTION**

3.1 GENERAL WIRING METHODS (LESS THAN 600 VOLTS)

- A. The minimum wire size shall be 12 AWG for power and lighting circuits, and no smaller than 18 AWG for control wiring. Remote control wiring shall not be less than 14 AWG for installed lengths of 50 feet or less. Remote control conductors shall be increased one size (per NEC Table 310) for each additional 50 feet of length. Increase the raceway system to accommodate the increased wire size.
- B. Provide an equal number of conductors of equal size for each phase of a circuit in same raceway or cable.
- C. Splice only in junction boxes, outlet boxes, pullboxes, or manholes.

- D. Neatly train and lace wiring inside boxes, equipment, and panelboards.
- E. Make conductor lengths for parallel circuits equal.

### 3.2 WIRING INSTALLATION IN RACEWAYS

- A. Pull all conductors into a raceway at the same time. Use UL listed wire-pulling lubricant for pulling 4 AWG and larger wires.
- B. Install wire in raceway after interior of building has been physically protected from the weather and all mechanical work likely to injure conductors has been completed.
- C. Completely and thoroughly swab raceway system before installing conductors.

### 3.3 WIRING CONNECTIONS AND TERMINATIONS

- A. Splice only in accessible boxes or manholes.
- B. Use solderless pressure connectors with insulating covers for copper wire splices and taps 8 AWG and smaller.
- C. Use split bolt connectors for copper wire splices and taps 6 AWG and larger. Tape uninsulated conductors and connectors with electrical tape to 150 percent of the insulation value of conductor.
- D. Thoroughly clean wires before installing lugs and connectors.
- E. Make splices, taps and terminations to carry full capacity of conductors without perceptible temperature rise.
- F. Terminate spare conductors with electrical tape.

### 3.4 FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed under applicable provisions of Division 16.
- B. Inspect wire and cable for physical damage and proper connection.
- C. Torque test conductor connections and terminations to manufacturer's recommended values.
- D. Perform continuity tests on all power and equipment branch circuit conductors. Verify proper phasing of all connections.

### 3.5 WIRE AND CABLE INSTALLATION SCHEDULE

- A. All locations: Building wire in raceways.

**END OF SECTION 16120**

## SECTION 16135

### PRECAST ELECTRICAL MANHOLES AND PULLBOXES

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. The General Provisions of the Contract, including General and Supplementary Conditions, apply to the Work specified in this Section.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. All other Sections of Division 16.
- B. All other Divisions of the Contract Documents. Refer to each Division's Specifications and Drawings for requirements including the following:
  - 1. Section 16111 – Raceways and Fittings
  - 2. Section 16450 - Grounding

##### 1.3 SCOPE

- A. Provide all equipment, materials, labor, supervision, and services necessary for or incidental to the installation of precast concrete electrical manholes and pullboxes, as indicated on the Drawings and specified.
- B. Work included:
  - 1. Prefabricated Manholes
  - 2. Manhole Accessories
  - 3. Excavation and Backfill as Required

##### 1.4 REFERENCES

- A. AASHO H-20 *Standard Specification for Highway Bridges*
- B. ANSI/ASTM A153 – *Zinc Coating (Hot-Dip) on Iron and Steel Hardware*
- C. ANSI/ASTM A569 – *Steel, Sheet and Strip, Carbon (0.15 Maximum Percent), Hot-Rolled, Commercial Quality*
- D. ASTM A48 – *Gray Iron Castings*
- E. ASTM A124 – *Zinc (Hot-Galvanized) Coatings and Products Fabricated from Rolled, Pressed, And Forged Steel Shapes, Plates, Bars and Strips*

##### 1.5 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

- B. Without additional cost, provide such other labor and materials as are required to complete the work of this Section in accordance with the requirements of governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in the Contract Documents.
- C. Manufacturer: Manufacturer shall be company specializing in structures with three (3) years' documented experience.

## 1.6 SUBMITTALS

- A. Product Data: Submit the following:
  - 1. Materials list of items proposed to be provided as part of the Work of this section.
  - 2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements. Submit shop drawings and product data as follows:
    - a. Materials specifications, dimensions, capacities, sizes and locations of openings, reinforcing details, and accessory locations.
    - b. Product data for manhole accessories.
  - 3. Manufacturer's recommended installation procedures which, when approved, will become the basis for accepting or rejecting actual installation procedures used on the Work. Documentation from the manufacturer, sealed by a professional structural engineer, stating that each manhole or pullbox is properly designed and constructed to meet all requirements of the intended location shall be required.

## PART 2 - PRODUCTS

### 2.1 ACCEPTABLE MANUFACTURERS

- A. Strongwell/Quazite
- B. Approved equal

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Excavate, install base material, and compact base material in accordance with manufacturer's instructions.

### 3.2 INSTALLATION – PRECAST MANHOLES

- A. Install and seal precast sections in accordance with manufacturer's instructions.
- B. Install plumb.
- C. Set the top of each pullbox to finished elevation.

### 3.3 INSTALLATION – ACCESSORIES

- A. Install ground rod with top protruding 4 inches (100 mm) above manhole floor.

**3.4 COORDINATION OF BOX LOCATIONS**

- A. Provide pullboxes as shown on Drawings and as required for splices, taps, wire pulling, equipment connections and code compliance.
- B. Locations shown on Drawings are approximate unless dimensioned.

**END OF SECTION 16135**

## SECTION 16410

### UNDERGROUND ELECTRIC DISTRIBUTION

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. The General Provisions of the Contract, including General and Supplementary Conditions, apply to the Work specified in this section.
- B. Refer to Section 16402 for work relating to utility electric service.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. All other Sections of Division 16.
- B. All other Divisions of the Contract Documents. Refer to each Division's Specifications and Drawings for requirements, including but not limited to the following:
  - 1. Section 16010 - General Requirements for Electrical Work
  - 2. Section 16111 - Raceways and Fittings
  - 3. Section 16120 - Wire and Cable (600Volts)

##### 1.3 SCOPE

- A. Provide and install materials, labor, supervision and services necessary for or incidental to the installation of a complete underground electric service as shown or indicated on the drawings and/or as specified.
- B. Work Included:
  - 1. Conduit
  - 2. Conductors
  - 3. Excavation
  - 4. Pull Boxes

##### 1.4 QUALITY ASSURANCE

- A. When requested, provide the manufacturer's certificates that confirm that materials meet or exceed minimum requirements as specified.
- B. Perform cable pulling calculations for the electrical power and communications systems based on the actual field routing of underground conduit or duct prior to duct or conduit installation. Calculations shall demonstrate that cable pulling tensions and sidewall pressures do not exceed manufacturer's requirements.
- C. Submit calculations to the Engineer for approval. Provide pullboxes as required at no additional cost and where required in locations dictated by the calculations.

#### PART 2 - PRODUCTS

##### 2.1 EQUIPMENT

- A. Conduit: See Section 16111.
- B. Markers: Continuous-printed plastic tape: Reference Section 16195.
- C. Conductors: See Section 16120.
- D. Duct Spacers: Fabricated plastic, UL approved.

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION**

- A. Slope service to drainage point.
- B. Terminate conduit in panel with grounding bushing. Make ground connection from bushing to ground bus with ground conductor sized as per drawings.

#### **3.2 CONDUIT**

- A. Adjust final slopes on site to coordinate with existing utilities.
- B. Install on undisturbed soil where possible. Use gravel and sand, placed in 8-inch lifts and compacted for backfill.
- C. Clean and swab ducts/conduits.

**END OF SECTION 16410**

## **SECTION 16450**

### **GROUNDING**

#### **PART 1 - GENERAL**

##### **1.1 RELATED DOCUMENTS**

- A. The general provisions of the Contract, including General and Supplementary Conditions, apply to the work specified in this Section.

##### **1.2 RELATED WORK SPECIFIED ELSEWHERE**

- A. All other Sections of Division 16.
- B. All other Divisions of the Contract Documents. Refer to each Division's specifications and drawings for all requirements, including but not limited to the following:
  - 1. Section 16111 - Raceways and Fittings.
  - 2. Section 16120 - Wire and Cable.

##### **1.3 SCOPE**

- A. Provide all equipment, materials, labor, supervision, and services necessary for or incidental to the installation of electrical systems grounding as shown or indicated on the Drawings and/or as specified.
- B. Work Included:
  - 1. Electrical equipment and raceway grounding and bonding.

##### **1.4 QUALITY ASSURANCE**

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Without additional cost to the Owner, provide such other labor and materials as are required to complete the work of this Section in accordance with the requirements of governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in these Contract Documents.
- C. When requested, provide the Engineer with the manufacturer's certificate that materials meet or exceed minimum requirements as specified.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. Provide electrical grounding system indicated with assembly of materials, including but not limited to:
  - 1. Wires and cables.
  - 2. Connectors.
  - 3. Terminals.
  - 4. Ground rods.
  - 5. Bonding jumper braid.
- B. Where materials or components are not indicated, provide products complying with NEC, UL, IEEE, and established industry standards for applications indicated.

### **2.2 GROUND ROD**

- A. Ground Wire Termination: Exothermic connection to 4/0 conductor. U-bolt with pressure plate provided as test point.
- B. Ground Rods: Copper-clad steel, 3/4" diameter, minimum length 8 feet.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION**

- A. Install electrical grounding systems in accordance with applicable portions of NEC, with NECA's "Standard of Installation," and in accordance with recognized industry practices to ensure that products comply with requirements and serve intended functions.
- B. Provide a separate, insulated equipment grounding conductor in feeder circuits. Terminate each end on a grounding lug, bus, or bushing.

### **3.2 FIELD QUALITY CONTROL**

- A. Inspect grounding and bonding system conductors and connections for tightness and proper installation.
- B. Electrical Tests:
  - 1. Perform fall-of-potential test or alternative in accordance with IEEE Standard 81-1991 on the main grounding electrode or systems.
  - 2. Perform point-to-point tests to determine the resistance between the main grounding system and all major electrical equipment frames, system neutral, and/or derived neutral points.
- C. Test Values:

1. The resistance between the main grounding electrode and ground should be no greater than five ohms. Install additional grounding electrodes, as required, to achieve the specified resistance value.
  2. Investigate point-to-point resistance values which exceed 0.5 ohm. Correct deficiencies at no additional cost. Retest to prove compliance
- D. Provide written certification to the Engineer that the grounding system has been tested and complies with the specified requirements.
- E. Provide test report.

**END OF SECTION 16450**

## SECTION 16503

### POLES AND STANDARDS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. The General Provisions of the Contract, including General and Supplementary Conditions, apply to the Work specified in this Section.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. All other Sections of Division 16.
- B. All other Divisions of the Contract Documents. Refer to each Division's Specifications and Drawings for requirements, including but not limited to the following:
  - 1. Section 16120 - Wires and Cables
  - 2. Section 16450 - Grounding
  - 3. Section 16530 - Site Lighting

##### 1.3 SCOPE

- A. Provide all equipment, materials, labor, supervision, and services necessary for or incidental to the installation of poles and standards as shown or indicated on the Drawings and/or as specified.
- B. Work Included:
  - 1. Concrete bases and base reinforcement.
  - 2. Anchor bolts.

##### 1.4 SUBMITTALS

- A. Reference Section 16010 for detailed requirements.

##### 1.5 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Without additional cost to the Owner, provide such other labor and materials as are required to complete the work of this Section in accordance to the requirements of governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in these Contract Documents.
- C. When requested, provide the Architect with manufacturer's certificate that materials meet or exceed minimum requirements as specified.

## **PART 2 - PRODUCTS**

### **2.1 ACCEPTABLE MANUFACTURERS**

- A. Provide poles and standards as specified on the lighting fixture schedule or an approved equal.

### **2.2 POLES**

- A. Provide poles as specified on the lighting fixture schedule or an approved equal.
- B. Handhole: Complete with removable weatherproof cover installed 18 inches above bottom of pole.
- C. Finish: Factory painted, color selection by architect.

### **2.3 ANCHOR BOLTS**

- A. Provide anchor bolts as recommended by manufacturer. All items to be hot-dipped galvanized.
- B. Provide template for positioning of anchor bolts.
- C. Provide anchor bolt covers painted to match pole.

## **PART 3 - EXECUTION**

### **3.1 BASES**

- A. Construct as indicated on the civil drawings.
- B. Install anchor bolts with 2 inch projection above top of bases unless indicated otherwise on the contract drawings.

### **3.2 INSTALLATION**

- A. Mount standards on bases plumb and true, utilizing shims as necessary.
- B. Touch-up chips and scratches on poles upon completion.

**END OF SECTION 16503**

## **SECTION 16530**

### **SITE LIGHTING**

#### **PART 1 - GENERAL**

##### **1.1 RELATED DOCUMENTS**

- A. The General Provisions of the Contract, including General and Supplementary Conditions, apply to the Work specified in this Section.

##### **1.2 RELATED WORK SPECIFIED ELSEWHERE**

- A. All other Sections of Division 16.
- B. All other Divisions of the Contract Documents. Refer to each Division's Specifications and Drawings for requirements, including but not limited to the following:
  - 1. Section 16111 - Conduit.
  - 2. Section 16503 - Poles and Standards.

##### **1.3 SCOPE**

- A. Provide all equipment, materials, labor, supervision, and services necessary for or incidental to the installation of site lighting as shown or indicated on the Drawings and/or as specified.
- B. Work Included:
  - 1. Exterior lighting fixtures.

##### **1.4 QUALITY ASSURANCE**

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Without additional cost to the Owner, provide such other labor and materials as are required to complete the work of this Section in accordance to the requirements of governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in these Contract Documents.
- C. When requested, provide the Architect with manufacturer's certificate that materials meet or exceed minimum requirements as specified.

#### **PART 2 - PRODUCTS**

##### **2.1 ACCEPTABLE MANUFACTURERS**

- A. Provide exterior lighting fixtures of the types specified on the Drawings.

## **2.2 EXTERIOR LUMINAIRES AND ACCESSORIES**

- A. Enclosures: Complete with gaskets, stops, and barriers to form weatherproof assembly and prevent light leaks.
- B. Provide low temperature ballasts, with reliable starting to -20 degrees F.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION**

- A. Install underground wiring in conduit with watertight connections. Refer to Section 16111.

**END OF SECTION 16530**



U.S. Department  
of Transportation

Federal Aviation  
Administration

# Advisory Circular

**Subject:** SPECIFICATION FOR  
OBSTRUCTION LIGHTING EQUIPMENT

**Date:** 09/12/06  
**Initiated by:** AAS-100

**AC No.:** 150/5345-43F  
**Change:**

1. **PURPOSE.** This advisory circular (AC) contains the Federal Aviation Administration (FAA) specification for obstruction lighting equipment.
2. **EFFECTIVE DATE.** Effective 6 months after the date of this circular, only that equipment qualified per this specification will be listed in AC 150/5345-53, Airport Lighting Equipment Certification Program.
3. **CANCELLATION.** AC 150/5345-43E, *Specification for Obstruction Lighting Equipment*, dated October 19, 1995, is canceled.
4. **APPLICATION.** The specifications contained in this AC are recommended by the FAA in all applications involving development of this nature. For airport projects receiving Federal funds under the airport grant assistance program, the use of these standards is mandatory.
5. **DEFINITIONS.**
  - a. **Beam Spread.** The angle between the two directions in a plane for which the intensity is equal to 50 percent of the minimum specified peak beam effective intensity.
  - b. **Vertical Aiming Angle.** The angle between the horizontal and a straight line intersecting the beam at its maximum intensity.
  - c. **Steady-Burning (fixed) Light.** A light having constant luminous intensity when observed from a fixed point.
  - d. **Effective Intensity.** The effective intensity of a flashing light is equal to the intensity of a steady-burning (fixed) light of the same color that produces the same visual range under identical conditions of observation.
6. **PRINCIPAL CHANGES.**
  - a. Added a requirement for the use of ultraviolet and ozone resistant materials with xenon flashtubes.
  - b. Added a requirement for solar radiation resistant plastic parts and applicable testing.
  - c. Added a requirement for surge protection and testing for equipment with solid-state devices.

d. Added requirements from FAA Engineering Brief #67 as necessary to provide requirements for obstruction lighting using alternative light sources (ALDs).

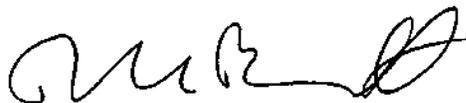
e. Added optional radiated emissions requirements with no testing required.

7. **METRIC UNITS.** To promote an orderly transition to metric units, this AC includes both English and metric dimensions. The metric conversions may not be exact equivalents, and until there is an official changeover to the metric system, the English dimensions will govern.

8. **COMMENTS OR SUGGESTIONS** for improvements to this AC should be sent to:

Manager, Airport Engineering Division  
Federal Aviation Administration  
ATTN: AAS-100  
800 Independence Avenue, S.W.  
Washington, DC 20591

9. **COPIES OF THIS AC.** The Office of Airport Safety and Standards makes this AC available online at [www.faa.gov](http://www.faa.gov).



DAVID L. BENNETT  
Director of Airport Safety and Standards

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**CHAPTER 1. SCOPE AND CLASSIFICATION.****1.1 Scope.**

This specification sets forth the Federal Aviation Administration (FAA) requirements for obstruction lighting equipment used to increase conspicuity of structures to permit early obstruction recognition by pilots.

**1.2 Equipment Classification.**

<b>Type</b>	<b>Description</b>
L-810	Steady-burning red obstruction light
L-856	High intensity flashing white obstruction light, 40 Flashes Per Minute (FPM)
L-857	High intensity flashing white obstruction light, 60 FPM
L-864	Flashing red obstruction light, 20-40 FPM
L-865	Medium intensity flashing white obstruction light, 40 FPM
L-866	Medium intensity flashing white obstruction light, 60 FPM
L-885	Flashing red obstruction light, 60 FPM

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## CHAPTER 2. REFERENCED DOCUMENTS.

### 2.1 General.

The following is a listing of documents referenced in this AC.

### 2.2 FAA Advisory Circulars (ACs).

AC 70/7460-1	<i>Obstruction Marking and Lighting</i>
AC 150/5345-53	<i>Airport Lighting Equipment Certification Program</i>

### 2.3 FAA Engineering Briefs.

Engineering Brief #67	<i>Light Sources Other Than Incandescent and Xenon for Airport and Obstruction Lighting Fixtures</i>
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### 2.4 Military Standards and Specifications.

MIL-STD-810F	<i>Environmental Engineering Considerations and Laboratory Tests</i>
MIL-C-7989	<i>Cover, Light-Transmitting, for Aeronautical Lights, General Specification for</i>

### 2.5 Code of Federal Regulations (CFR).

Title 47	<i>Telecommunications</i>
Part 15	<i>Radio Frequency Devices</i>

### 2.6 Institute of Electrical and Electronics Engineers (IEEE) Publications.

IEEE C62.41-1991	<i>IEEE Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits</i>
IEEE C62.45	<i>IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000 V and Less) AC Power Circuits</i>

### 2.7 International Standardization Organization (ISO) Publications.

ISO-10012	<i>Measurement Management Systems – Requirements for Measurement Processes and Measuring Equipment</i>
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### 2.8 International Civil Aviation Organization (ICAO).

Annex 14	<i>Volume 1, Aerodrome Design and Operations</i>
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### 2.9 Illuminating Engineering Society (IES).

IES Handbook	<i>Reference and Application Volume, 8th Edition, 1993, Flashing Light Signals, pp. 96-97</i>
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Copies of FAA ACs may be obtained from:

U.S. Department of Transportation  
Subsequent Distribution  
Office Ardmore East Business Center  
3341 Q 75<sup>th</sup> Ave.  
Landover, MD 20785

Tel: (301) 322-4961  
FAX: (301) 386-5394  
Website: [www.faa.gov](http://www.faa.gov)

Copies of military standards and specifications may be obtained from:

DAPS/DODSSP  
Building 4, Section D  
700 Robbins Avenue  
Philadelphia, PA 19111-5094

Tel: (215) 697-2179  
FAX: (215) 697-1460  
Website: [dodssp.daps.dla.mil](http://dodssp.daps.dla.mil)

Copies of IEEE standards may be obtained from:

IEEE Customer Service Center  
445 Hoes Lane  
P.O. Box 1331  
Piscataway, NJ 08855-1331

Tel: (800) 678-4333  
FAX: (732) 981-0060 (*Worldwide*)  
FAX: (732) 981-9667  
E-mail: [storehelp@ieee.org](mailto:storehelp@ieee.org)  
Website: [shop.ieee.org/ieeestore](http://shop.ieee.org/ieeestore)

Copies of the ISO document are available online from:

Website: [www.iso.ch](http://www.iso.ch)

Copies of ICAO documents may be obtained from:

ICAO, Document Sales Unit  
999 University Street  
Montreal, Quebec, Canada H3C 5H7

Telephone: +1 (514) 954-8022  
FAX: +1(514) 954-6769

E-mail: [sales@icao.int](mailto:sales@icao.int)  
Website: [www.icao.int](http://www.icao.int)

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Copies of IES of North America (IESNA) documents may be obtained from:

Website: [www.techstreet.com](http://www.techstreet.com)

or

Website: [www.iesna.org/shop/](http://www.iesna.org/shop/)

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## CHAPTER 3. EQUIPMENT REQUIREMENTS.

### 3.1 General.

This section addresses environmental, design, and photometric requirements for obstruction light equipment. Criteria for selecting the proper obstruction lighting equipment, installation tolerances, and administrative information are in AC 70/7460-1, *Obstruction Marking and Lighting*.

### 3.2 Environmental Requirements.

Obstruction lighting equipment must be designed for continuous operation under the following conditions:

- a. Temperature. Storage/shipping: -67 degrees Fahrenheit (F) (-55 degrees Celsius (C)) to 130 degrees F (55 degrees C). Operating: -40 degrees F (-40 degrees C) to 130 degrees F (55 degrees C).
- b. Humidity. 95 percent relative humidity.
- c. Wind. Wind speeds up to 150 miles per hour (mph) (240 kilometers per hour (kmph)).
- d. Wind-blown Rain. Exposure to wind-blown rain from any direction.
- e. Salt Fog. Exposure to salt-laden atmosphere.
- f. Sunshine. Exposure to solar radiation.

### 3.3 Design Requirements.

#### 3.3.1 Light Unit.

The light unit must be lightweight and designed for easy servicing and lamp (or flashtube) replacement. Materials used within the light unit must be selected for compatibility with their environment. All plastic lens parts (including gaskets), that are exposed to ultraviolet radiation or ozone gas must not change color, crack, check, disintegrate, or be otherwise degraded (photometry must remain compliant) and meet the equipment warranty requirements of AC 150/5345-53, Appendix 2. Each light unit must be an independent unit and must flash at the specified intensity or at its highest intensity when control signals are absent.

#### 3.3.2 Light Covers.

Light-transmitting covers for light units must be per the requirements in MIL-C-7989. In addition, if plastic covers are used, they must be resistant to checking, crazing, or color changes caused by ultraviolet radiation or ozone gas exposure.

#### 3.3.3 Light Colors.

The aviation red must be per ICAO Annex 14, Volume 1, Appendix 1, *Colours for Aeronautical Ground Lights*, at operating temperature within the following chromaticity boundaries:

$$\text{purple boundary} \quad y = 0,980 - x$$

yellow boundary       $y = 0.335$   
                                  $x + y + z = 1$

Xenon flashtube emission or a color temperature range from 4,000 to 8,000 degrees Kelvin is acceptable for white obstruction lights. See Engineering Brief #67 for additional information about lamp chromaticity requirements.

### **3.3.3.1 Light Color During Daytime.**

Means must be provided on all L-810 obstruction lights to indicate the specified non-powered color during daytime viewing. See Engineering Brief #67 for additional information.

### **3.3.4 Aiming (for L-856 and L-857).**

Light units must have a method for adjustment of the vertical aiming angle between 0 and +8 degrees. A spirit level or other device must be provided as part of each light unit for setting the vertical aiming angle of the light beam with an accuracy of one degree.

### **3.3.5 Control Unit.**

#### **3.3.5.1 Flashing White Obstruction Lighting Systems.**

The control unit must set the system's flash rate, intensity and sequence and must be capable of controlling light units up to a distance of 2,500 feet (ft) (762 meters (m)). If the control unit or control wiring fails, the light units must continue to flash per Table 4 flash rate. Failure of an intensity step change circuit must cause all light units to remain operating at their proper intensity or alternatively to operate at the high intensity step.

##### **3.3.5.1.1 Monitoring.**

Each light unit must be monitored for FLASH/FAIL status. FAIL status is defined as either of the following conditions: unit misses four or more consecutive flashes; unit flashes at wrong intensity step during day operation. Monitoring must be fail safe (i.e., active signals for FLASH and absence of signals for FAIL). There must be a provision to permit connection to a remote alarm device, (supplied by others or as an option), to indicate the system and individual light unit FLASH/FAIL status.

*NOTE: See Engineering Brief #67 for additional information regarding the failure requirements for multiple alternative lighting devices (ALDs).*

##### **3.3.5.1.2 Placement.**

The control and monitor functions may be consolidated in a light unit or in a single enclosure for remote mounting or they may be distributed into several light units.

###### **3.3.5.1.2.1 Remote Mounting.**

In addition to the above, if placed in a remote mounted enclosure, the control unit must display the status of each light unit. An intensity control override switch must also be mounted in the enclosure to manually control light intensity during maintenance or in the event of a photoelectric control malfunction.

### **3.3.5.2 Flashing Red Obstruction Lights.**

The control unit must set the system flash rate and flash sequence. Failure of the flashing circuit must cause the light units to energize and operate as steady burning lights. An override switch must be mounted on the control unit to manually control the lights during maintenance or in the event of a lack of a photoelectric control signal. To insure proper operation, all flashing red obstruction lights, inclusive of any associated system steady burning red lights, must be certified with a control unit whether internal or external to the lighting unit.

#### **3.3.5.2.1 Dual Lighting Systems.**

The control unit may be a separate unit or incorporated as part of either the white or red obstruction light control unit. The control unit must set the operating mode for each light unit in the system. Outage of one of two lamps, or any failure in the device that causes a reduction in intensity of the horizontal beam or results in an outage in the uppermost red beacon (L-864 unit) or outage of any uppermost red strobe, must cause the white obstruction light system to operate in its specified "night" step intensity. At no time should both red and white systems be on simultaneously. An override switch must be mounted on the control unit to manually control the operating mode of the system during maintenance or in the event of a lack of a photoelectric control signal.

#### **3.3.5.2.2 Monitoring.**

Each separate L-864 light unit and each tier of L-810 light units must be monitored for FLASH/FAIL status. FAIL is defined as outage of any lamp in an L-864 light unit, outage of any one lamp in a tier of L-810 light units, or failure of a flasher (steady on and/or total) for an L-864 light unit. Monitor signals must be fail safe (i.e., active signals for FLASH and absence of signals for FAIL). There must be a provision to permit connection to a remote alarm device, (supplied by others or as an option) to indicate FLASH/FAIL status.

*NOTE: See Engineering Brief #67 for additional information regarding the failure requirements for multiple alternative lighting devices (ALDs).*

### **3.3.6 Input Voltage.**

The obstruction lighting equipment must be designed to operate from the specified input voltage  $\pm 10$  percent. Incandescent lamps must be operated to within  $\pm 3$  percent of the rated lamp voltage to provide proper light output.

### **3.3.7 Performance Criteria.**

Manufacturers are required to publish performance criteria for all light generating devices (see Engineering Brief #67).

### **3.3.8 Transient Protection.**

Equipment with solid state devices must be designed to withstand and/or include separate surge protection devices that are tested against defined waveforms per IEEE C62.41-1991, Table 4, Location Category C1, for single phase modes (line to ground, line to neutral, line and neutral to ground).

### 3.3.9 Radiated Emissions.

**NOTE:** *Optional only. No equipment qualification is required.*

a. Obstruction lighting that uses electronic circuitry to power the light source must be classified as an incidental radiator (47 CFR §15.13). This applies to equipment that does not intentionally generate any radio frequency energy, but may create such energy as an incidental part of its intended operations.

b. Obstruction light systems must employ sound engineering practices to minimize the risk of harmful interference.

### 3.3.10 Warning Labels.

All enclosures that contain voltages exceeding 150 volts direct current (VDC) or alternating current (AC) root mean square (rms) must have high voltage warning label(s) placed at a conspicuous location(s). Also, a visual indicator must be included within the enclosure to indicate that greater than 150 VDC is present on the high voltage capacitors.

### 3.3.11 Interlock Switches.

Interlock switches must be incorporated in each power supply and optionally in each flashhead so that opening either unit must (1) interrupt incoming power and (2) discharge all high voltage capacitors within the enclosure to 50 volts or less within 30 seconds.

### 3.3.12 Nameplate.

A nameplate, with the following information, must be permanently attached to each unit:

- a. Name of unit (light unit, control unit, etc.).
- b. FAA type (e.g., L-856, L-864, etc.).
- c. Manufacturer's catalog number.
- d. Manufacturer's name and address.
- e. Rated separation distance in feet is \_\_\_\_ to \_\_\_\_ between power supply and optical head using American Wire Gage (AWG) \_\_\_\_ conductors. (Item e is required if a unique power supply and its associated optical head are separate components of the lighting system as in the case of some discharge lights.)

In addition to the above, the power supply must include nominal input voltage, number of phases, frequency, and peak VA rating.

### 3.3.13 Optional Arctic Kit

Light systems may be offered with an optional arctic kit to enable operation in temperatures below -40 degrees F (-40 degrees C).

### **3.3.14 Component Ratings.**

#### **3.3.14.1 Discharge Type Lighting Equipment.**

The flashtube or flashtubes must have a minimum rated life of two years without maintenance or loss of light output below the minimum specified candela.

#### **3.3.14.2 Component Separation Rating.**

If the light unit's power supply and optical head are separate components, the manufacturer must rate each light unit for maximum and minimum separation at a given AWG wire size. The manufacturer must include this rating on the nameplate per section 3.3.12. The rating certifies that the unit meets all requirements within the rated distances. The manufacturer must maintain records of test results which support the stated separation rating until the next system re-qualification.

#### **3.3.14.3 Incandescent Light Equipment.**

Lamps must have a minimum rated life of 2,000 hours at rated voltage.

#### **3.3.14.4 Alternative Light Source Equipment.**

Light sources other than incandescent or xenon (light emitting diodes, cold cathode) must have a minimum rated life of two years without maintenance or loss of light output below the minimum specified intensity (see Engineering Brief #67).

#### **3.3.14.5 Light Equipment Components.**

All components used in obstruction lighting equipment, except lamps, must be designed to meet performance requirements for a minimum of one year without maintenance.

### **3.3.15 Leakage Current.**

All obstruction lighting equipment classified in paragraph 1.2 must be designed to withstand application of 1,000 volts AC or 1,414 volts DC between the input power leads and equipment chassis for 10 seconds during which the leakage current must not exceed 10 microamperes at ambient room temperature and humidity.

## **3.4 Performance Requirements.**

### **3.4.1 Photometric.**

#### **3.4.1.1 General.**

The effective intensity for flashing lights must be calculated per the following formula by the method described for *Flashing Light Signals* in the IES Handbook, 1993 Reference and Application Volume 8th Edition, Pages 96 and 97:

$$I_e = \left( \int_{t_1}^{t_2} I dt \right) / (0.2 + (t_2 - t_1))$$

Where:

- $I_e$  = Effective intensity (Candela)  
 $I$  = Instantaneous intensity (Candela)  
 $t_1, t_2$  = Times in seconds of the beginning and end of that part of the flash when the value of  $I$  exceeds  $I_e$ . This choice of the times maximizes the value of  $I_e$ .

For discharge type flashing lights, the equipment must provide the specified light output at the specified temperature extremes as the input voltage simultaneously varies by  $\pm 10$  percent from nominal. The light intensity and beam distribution requirements for obstruction lighting equipment are specified below. All intensities listed are effective intensities (except steady-burning red obstruction lights) measured at the flash rate specified in Table 4. All incandescent lights will be tested as steady burning lights. Additional requirements for ALDs are in Engineering Brief #67.

The effective intensity for multiple pulse flashes as used in strobe lights during nighttime operation must be calculated by:

$$I_e = \left( \frac{\int_{t_1}^{t_A} I dt}{0.2 + t_A - t_1} \right) + \left( \frac{\int_{t_B}^{t_C} I dt}{0.2 + t_C - t_B} \right) + \left( \frac{\int_{t_D}^{t_E} I dt}{0.2 + t_E - t_D} \right) + \dots + \left( \frac{\int_{t_X}^{t_Z} I dt}{0.2 + t_Z - t_X} \right)$$

The frequency of the pulses must not be less than 50 Hz and the interval  $t_A - t_1$  must not vary by more than  $\pm 5\%$  from the nominal value from pulse to pulse over the simultaneous extremes of temperature and input voltage.

#### 3.4.1.2 L-810 Light Unit.

The center of the vertical beam spread must be between +4 and +20 degrees. With a minimum vertical beam spread of 10 degrees and at all radials throughout 360 degrees, there must be a minimum intensity of 32.5 candela. Mechanical interface for installation must be 3/4 or 1 inch National Pipe Thread (NPT) side and/or bottom.

#### 3.4.1.3 L-856 Light Unit.

The beam spread and effective intensity must be per Table 1.

**Table 1. L-856 Intensity Requirements.**

Step	Beam Spread		Peak Intensity (candela) <sup>(2)</sup>
	Horizontal <sup>(1)</sup> (degrees)	Vertical (degrees)	
Day	90 or 120	3 - 7	270,000 ±25%
Twilight	90 or 120	3 - 7	20,000 ±25%
Night	90 or 120	3 - 7	2,000 ±25%

**NOTES:**

- (1) Multiple light units may be used to achieve a horizontal coverage of 360 degrees.  
 (2) When the light unit is installed per the manufacturer's instructions, the intensity at zero degrees elevation angle (horizontal) must be at least as great as the minimum specified beam peak intensity. For stray light, the intensity at 10 degrees below horizontal, at any radial, must not be greater than 3% of the peak intensity at the same radial.

**3.4.1.4 L-857 Light Unit.**

Photometric requirements are defined in Table 2.

**Table 2. L-857 Intensity Requirements.**

Step	Beam Spread		Peak Intensity (candela) <sup>(2)</sup>
	Horizontal <sup>(1)</sup> (degrees)	Vertical (degrees)	
Day	90 or 120	3 - 7	140,000 ±25%
Twilight	90 or 120	3 - 7	20,000 ±25%
Night	90 or 120	3 - 7	2,000 ±25%

**NOTES:**

- (1) Multiple light units may be used to achieve a horizontal coverage of 360 degrees.  
 (2) When the light unit is installed per the manufacturer's instructions, the intensity at zero degrees elevation angle (horizontal) must be at least as great as the minimum specified beam peak intensity. For stray light, the intensity at 10 degrees below horizontal, at any radial, must not be greater than 3% of the peak intensity at the same radial.

**3.4.1.5 L-864 Light Unit.**

At all radials throughout the omnidirectional 360 degrees, there must be a peak effective intensity of 2,000 ±25 percent candela. There must also be a minimum effective intensity of 750 candela throughout a minimum vertical beam spread of 3 degrees.

**3.4.1.5.1 Beam Adjustment.**

When the light unit is installed per the manufacturer's instructions, the intensity at zero degrees elevation angle (horizontal) must be at least as great as the minimum specified beam peak intensity.

**3.4.1.6 L-865 Light Unit.**

Photometric requirements are defined in Table 3.

**Table 3. L-865 Intensity Requirements.**

Step	Beam Spread		Peak Intensity (candela) <sup>(2)</sup>
	Horizontal (degrees) <sup>(1)</sup>	Vertical (degrees)	
Day/Twilight	360	3 minimum	20,000 ±25%
Night	360	3 minimum	2,000 ±25%

**NOTES:**

- (1) Multiple light units may be used to achieve a horizontal coverage of 360 degrees.
- (2) When the light unit is installed per the manufacturer's instructions, the intensity at zero degrees elevation angle (horizontal) must be at least as great as the minimum specified beam peak intensity. For stray light, the intensity at 10 degrees below horizontal, at any radial, must not be greater than 3% of the peak intensity at the same radial.

**3.4.1.7 L-866 Light Unit.**

The requirements are the same as the L-865 light unit, except the flash rate must be 60 flashes per minute (FPM).

**3.4.1.8 L-885 Light Unit.**

The requirements are the same as the L-864 light unit, except the flash rate must be 60 FPM.

**3.4.2 Flash Rate and Duration.**

Flash characteristics are defined in Table 4.

**Table 4. Flash Characteristics for Obstruction Lights**

Type	Intensity Step	Flash Rate <sup>(1)</sup>	Flash Duration <sup>(2)</sup>
L-856	Day & Twilight	40 FPM	Less than 100 milliseconds (ms)
L-856	Night	40 FPM	Between 100 and 250 ms inclusive
L-857	Day & Twilight	60 FPM	Less than 100 ms
L-857	Night	60 FPM	Between 100 and 250 ms inclusive
L-864	Single	20-40 FPM	1/2 to 2/3 of flash period if incandescent lighting <sup>(3)</sup> , and between 100 and 2000 ms inclusive if other lighting sources.
L-865	Day & Twilight	40 FPM	Less than 100 ms
L-865	Night	40 FPM	Between 100 and 1000 ms inclusive
L-866	Day & Twilight	60 FPM	Less than 100 ms
L-866	Night	60-FPM	Between 100 and 250 ms inclusive
L-885	Single	60 FPM	1/2 to 2/3 of flash period if incandescent lighting <sup>(3)</sup> , and between 100 and 670 ms inclusive if other lighting sources.

**NOTES:**

- (1) Flash rates have a tolerance of  $\pm 5$  percent.
- (2) When the effective flash duration is achieved by a group of short flashes, the short flashes must be emitted at a rate of not less than 50 Hz.
- (3) The light intensity during the "off" period must be less than 10 percent of the peak effective intensity. The "off" period must be at least 1/3 of the flash period.

**3.4.3 System Flashing Requirements.****3.4.3.1 Simultaneous Flashing Systems.**

All obstruction lights in systems composed of either L-864 light units or L-856 and/or L-865 light units must flash within 1/60 of a second of each other.

**3.4.3.2 Sequenced Flashing Systems.**

a. Catenary support structure systems composed of L-857, L-866, or L-885 light units must have a sequenced flashing characteristic.

b. This system consists of three lighting levels on or near each supporting structure. One light level is near the top, one at the bottom or lowest point of the catenary, and one midway between the top and bottom.

- c. The flash sequence must be middle, top, and bottom.
- d. The interval between top and bottom flashes must be about twice the interval between middle and top flashes.
- e. The interval between the end of one sequence and the beginning of the next must be about 10 times the interval between middle and top flashes.
- f. The time for the completion of one cycle must be one second ( $\pm 5$  percent).

### **3.4.4 Intensity Step Changing.**

#### **3.4.4.1 White Obstruction Lights.**

The light unit intensity must be controlled by a photocell facing the northern (polar) sky. White obstruction lights must automatically change intensity steps when the ambient light changes as follows:

- a. From day intensity to twilight intensity when the illumination decreases below 60 foot-candles (645.8 lux) but before it reaches 35 foot-candles (376.7 lux).
- b. From twilight intensity to night intensity when the illumination decreases below 5 foot-candles (53.8 lux) but before it reaches 2 foot-candles (21.5 lux).
- c. From night intensity to twilight intensity when the illumination increases above 2 foot-candles (21.5 lux) but before it reaches 5 foot-candles (53.8 lux).
- d. From twilight intensity to day intensity when the illumination increases above 35 foot-candles (376.7 lux) but before it reaches 60 foot-candles (645.8 lux).

#### **3.4.4.2 Red Obstruction Lights.**

If automatic control is utilized, the light unit must turn on when the ambient light decreases to not less than 35 foot-candles (376.7 lux) and turn off when the ambient light increases to not more than 60 foot-candles (645.8 lux). Single L-810 light units are controlled in a manner compatible with the particular installation.

#### **3.4.4.3 Dual Obstruction Lighting System.**

White obstruction lights must turn off and red obstruction lights must turn on when the ambient light changes from twilight to night per paragraph 3.4.4.1b. Red obstruction lights must turn off and white obstruction lights must turn on when the ambient light changes from night to twilight per paragraph 3.4.4.1c.

### **3.5 Instruction Manual.**

An instruction manual containing the following information must be furnished with all obstruction lighting equipment:

- a. Complete system schematic and wiring diagrams showing all components cross-indexed to the parts list.

- b. Complete parts list of field replaceable parts with applicable rating and characteristics of each part, and with the component manufacturer's part number as appropriate.
- c. Installation instructions, including leveling and aiming of light units.
- d. Maintenance instructions, including lamp or flashtube replacement, theory of operation, troubleshooting charts and, as appropriate, conspicuous warnings about alignment and replacement of lamps and light units with other than manufacturer recommended items. Explanation of testing requirements regarding light units with specific lamps must be provided in the text. A discussion must be included about mixing light units as replacements with other manufacturers' units with emphasis on assuring that system design of obstruction lighting is not degraded.
- e. Operating instructions.

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## CHAPTER 4. EQUIPMENT QUALIFICATION REQUIREMENTS.

### 4.1 Qualification Procedures.

Procedures for qualifying equipment to be furnished under the Federal grant assistance program for airports are contained in AC 150/5345-53, *Airport Lighting Equipment Certification Program*.

### 4.2 Qualification Tests.

Qualification tests must be conducted on the light unit in the following order:

- a. Initial photometric test, per paragraph 4.2.1
- b. Environmental tests, per paragraphs 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7, and 4.2.8 (in any order)
- c. 1000 hours of continuous operation, per paragraph 4.2.10
- d. System Operational Test, per paragraph 4.2.10
- e. Leakage Current Test, per paragraph 4.2.11
- f. Sampling Photometric Test, per paragraph 4.2.1
- g. Visual examination, per paragraph 4.2.12
- h. Transient Protection Test, per paragraph 4.2.9. The equipment may be damaged by this test. It should only be performed when testing per paragraphs a through c above is complete.

Sample photometric and system operational tests must be conducted after completion of all environmental tests. The same unit(s) must be used throughout the tests. The following tests are required to demonstrate compliance with this specification. The tests may be run on the control unit, power supply, and a single light unit, with a simulated load replacing the other light units. Equipment tested must be as a complete system.

#### 4.2.1 Photometric Test.

- a. A full photometric test as described in this section must be performed before all environmental tests.

**NOTE:** *To verify proper color correction, photometric testing conducted on alternative light source fixtures must be done with a detector having an up to date calibration including spectral response data (see Engineering Brief #67).*

- b. A sampling photometric retest must be conducted after the unit has been operated continuously for 1000 hours with normal (12 hour) day/night cycling. This sampling must consist of measuring the vertical beam pattern for compliance with photometric requirements at a minimum of two of the previously tested horizontal radials.
- c. Light units must be energized by the system power supply and control unit, and must be tested for compliance with photometric requirements.

- d. For alternative light source equipment high temperature testing, see Engineering Brief #67.
- e. Incandescent lamps must be tested at  $\pm 3$  percent of their nominal voltage.
- f. Red light intensity may be measured in white light and then calculated if the glassware manufacturer certifies the chromaticity and transmissivity values of the red filter material for the particular source.
- g. If more than one lamp type is to be used, the qualification testing must be completed for each lamp type.
- h. For a discharge type flashing system, if the power supply and optical head are separate components, the manufacturer must demonstrate that the required photometrics are produced with the units separated by maximum and minimum recommended distances and connected by cable recommended by the manufacturer.
- i. Photometric test results must be in the forms of:
  - (1) Vertical beam pattern: Distribution curve (vertical angle versus candela) with minimum one degree spacing of test points over range of specified angles.
  - (2) Horizontal beam pattern: Polar plot (horizontal angle versus candela) with minimum 30 degree spacing of test points.

#### 4.2.2 High Temperature Test.

- a. The high temperature test must be conducted per MIL-STD-810F, Method 501.4, Procedure II. The equipment must be subjected to a constant temperature of +130 degrees F (+55 degrees C) for 4 hours after equipment temperature stabilization and be operated throughout the test.

*NOTE: For steady state temperature testing, consider thermal stabilization to be achieved when the temperatures of critical internal operating components are relatively constant. (Because of test item duty cycling or the operating characteristics, a constant temperature may never be achieved.)*

- b. During the test, the manufacturer must demonstrate that the equipment maintains the specified flash rate and (for discharge type flashing light) the proper amount of energy is being delivered to the flashtube as the input voltage is varied by  $\pm 10$  percent from nominal.
- c. A visual examination must be conducted after the equipment is removed from the chamber. Failure of the equipment to operate as specified is cause for rejection.

#### 4.2.3 Low Temperature Test.

- a. The low temperature test must be conducted per MIL-STD-810F, Method 502.4, Procedure II. The equipment must be placed in a chamber that maintains a temperature of -67 degrees F (-55 degrees C) for shipping/storage requirements and -40 degrees F (-40 degrees C) for equipment operational requirements.
- b. Equipment operation must be demonstrated at the beginning of the test.

c. The equipment storage and shipping low temperature requirement is -67 degrees F (-55 degrees C). The equipment must be stabilized and cold soaked at the storage/shipping temperature for one hour. The test chamber must then be ramped to the -40 degree F (-4 degrees C) equipment operating temperature at no more than 6 degrees F (3 degrees C) per minute to prevent thermal shock to the equipment.

d. The equipment, with input power off, must then be exposed to a 24-hour soaking period at -40 degrees F (-40 degrees C) after which the equipment must be turned on for one hour, and must operate normally. For discharge type flashing lights, the unit must achieve specified flash rate and intensity within 1 minute after being energized. During the one hour of operation, the manufacturer must demonstrate that the equipment maintains the specified flash rate and, for discharge type flashing lights, the proper amount of energy is being delivered to the flashtube as the input voltage is varied by  $\pm 10$  percent from nominal.

e. At the conclusion of the test, a visual inspection must be conducted. Failure of the equipment to operate as specified is cause for rejection.

#### **4.2.4 Rain Test.**

The wind-blown rain test must be conducted per MIL-STD-810F, Method 506.4, Procedure I, paragraph 4.4.2. The rain must be at a rate of 5.2 inches per hour (132 mm/hour) with an exposure time of 30 minutes per side. The equipment must be operated throughout the test. Failure of the equipment to operate as specified is cause for rejection.

#### **4.2.5 Wind Test.**

Evidence must be provided, either by testing or by calculation of mechanical force, to demonstrate that installed light units meet the wind requirement in paragraph 3.2c.

#### **4.2.6 Humidity Test.**

The test must be per MIL-STD-810F, Method 507.4, Procedure, paragraph 4.5.2. The equipment must be subjected to two complete cycles per Table 507.4-1, except the maximum chamber temperature must be +130 degrees F (+55 degrees C). Failure of the equipment to operate as specified is cause for rejection.

#### **4.2.7 Salt Fog Test.**

The salt fog test must be conducted per MIL-STD-810F, Method 509.4, Procedure, paragraph 4.5.2. Failure of the equipment to operate as specified is cause for rejection. If corrosion is present, the third party certification body must determine if it has impacted equipment structural integrity or functionality.

#### **4.2.8 Sunshine Test.**

**NOTE:** *The manufacturer may submit a certificate of compliance (for consideration by the third party certification body) from the material(s) manufacturer attesting to UV resistance (per MIL-STD-810F) in lieu of the testing requirements below.*

The equipment must be in its normal operational configuration for this test.

- a. A sunshine test must be conducted per MIL-STD-810, Method 505.4, paragraph 4.4.3, Procedure II for all obstruction lighting equipment with nonmetallic exterior parts or plastic/thermoplastic light covers.
- b. The equipment must be subjected to a minimum of 56 cycles.
- c. Perform an operational test of the equipment after 56 cycles.
- d. Any evidence of deterioration of plastic parts: chalking, bleaching, cracking, hazing, or color changes (yellowing) to the thermoplastic lenses of the test unit must be causes for rejection.
- e. For plastic/thermoplastic optical lenses or covers, the photometric performance must be measured after this test.

#### 4.2.9 Transient Protection Test.

**NOTE:** *The equipment may be damaged by this test. Perform this test only when tests in paragraphs 4.2.1 through 4.2.8 are completed.*

- a. Subject the obstruction lighting equipment to 2 pulses at 15 second intervals to a combination wave 1.2 microseconds ( $\mu\text{s}$ )/50 $\mu\text{s}$  and 8 $\mu\text{s}$ /20 $\mu\text{s}$  (6,000 volts, 3,000 amps) test pulse per the descriptions in IEEE C62.41, Table 4, Location Category C1.
- b. See IEEE C62.41-1991 Section 9.3 for test condition and test generator information.
- c. See IEEE C62.41-1991 Section 9.4 for a detailed combination pulse generation and parameters discussion.
- d. See also IEEE C62.45, *IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1,000 volts (V) and Less) AC Power Circuits* for guidance about equipment test methods.
- e. The equipment under test must operate normally at the conclusion of the test.

#### 4.2.10 System Operational Test.

- a. A system operational test must be performed after the unit has been operated continuously without failure for 1000 hours with normal (12 hour) day/night cycling.
- b. System components must be connected with the necessary wiring to electrically simulate an actual installation in which the top and bottom light units on a structure are separated by 2,000 feet (609.6 m) for a system composed of L-856 and/or L-865 and 500 feet (152.4 m) for system composed of L-857 or L-866, and the controller separated an additional 2,500 feet (762.0 m). Simulated interconnecting cables with equivalent impedance may be used in lieu of full cable lengths.
- c. The system must be energized and operated to demonstrate compliance with all specification operating requirements such as flash rate, flash sequence, photoelectric switching of intensity steps, operation of interlocked devices, and satisfactory operation under input voltage variations.

d. If the power supply and optical head are separate components, it must be demonstrated that with the maximum and minimum nameplate rated separation between components, proper energy is delivered to the light unit to produce the specified photometrics.

e. It must be demonstrated that L-810 and L-864 lights produce the specified photometric requirement when energized over conductors (actual or simulated) representing the maximum and minimum nameplate rated cable length at the minimum input voltage.

#### **4.2.11 Leakage Current Test.**

Light units must be tested for compliance to the leakage current requirement in paragraph 3.3.15. Leakage current must be measured between the primary power connection points to the equipment chassis. The primary power connection points may be connected together during this test, but all other internal wiring must be connected as in normal operation. Devices for surge and lightning protection connected directly to input power wiring may be disconnected during this test.

#### **4.2.12 Visual Examination.**

The obstruction lighting equipment must be examined for compliance with the requirements on materials, finish, and quality of workmanship.

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## **CHAPTER 5. PRODUCTION TEST REQUIREMENTS.**

### **5.1 System Production Tests.**

A visual examination must be performed for all components in a system to verify proper materials and assembly. Each component of the system must be energized and tested to verify specified operation and conformance to photometric requirements.

### **5.2 Incandescent Light Unit Production Tests.**

All light units must be visually examined for proper materials and assembly. The manufacturer must demonstrate that the on-going production photometric test results show the manufacturing process meets the photometric requirements per paragraphs 3.4.1.2, 3.4.1.5, or 3.4.1.8 and per section 5.6.

### **5.3 Alternative Lighting Devices (ALD).**

All light units must be visually examined for proper materials and assembly. The manufacturer must demonstrate that the ongoing production photometric test results show the manufacturing process meets the photometric requirements per paragraphs 3.4.1.2 through 3.4.1.8 and per section 5.6.

### **5.4 Discharge Light Unit Production Test.**

All light units must be visually examined for proper materials and assembly. The units must be energized and tested to verify proper operation and conformance to photometric requirements as specified in Tables 5 and 6.

### **5.5 Production Operational Test.**

All light units must be tested to verify specified operation per the following minimum standards.

a. Each unit must be operated a minimum of 24 hours at highest intensity and a minimum of 12 hours at lowest intensity.

b. During highest intensity operation, each unit must be monitored for FLASH/FAIL as defined in 3.3.5.1.1. Minimum acceptable quality is zero FAILs in 24 hours of high intensity operation.

c. After a minimum 36 hours elapsed time of operation each light unit must be tested to verify proper operation of the following:

- (1) All intensity step changes per paragraph 3.4.4.1
- (2) Proper operation of monitoring per paragraph 3.3.5.1.1
- (3) Proper interlock switch operation and discharge time to 50 volts (bank potential) per paragraph 3.3.11.
- (4) Simultaneous flashing and intensity changing for multi-light systems per paragraphs 3.4.3.1 and 3.3.5.1, respectively
- (5) Leakage current test per paragraph 3.3.15.

### 5.6 Production Photometric Test.

Photometric testing must be performed per Table 5 or Table 6 using either conventional sampling per column 2 or statistical process control (SPC) per column 3. If SPC is used for a characteristic, it must show statistical capability with  $C_{pk} \geq 1.0$  and  $\sigma \geq 3.0$ .

**Table 5. L-856/L-857 Production Photometric Requirements.**

CHARACTERISTIC TESTED <sup>(1)</sup>	TEST POINTS	
	CONVENTIONAL	SPC
a) Beam peak (Day Intensity)	3 radials each unit: 1 at center of Horizontal beam +2 radials $\pm 45$ degrees or $\pm 60$ degrees from center	1 radial each unit, random orientation
b) Beam peak (Twilight Intensity)	Same radials as (a)	Same radials as (a)
c) Beam peak (Night Intensity)	Same radials as (a)	Same radials as (a)
d) Intensity at -10 degrees (Night)	Same radials as (a)	Same radials as (a)

**NOTES:**

(1) Characteristic must meet all specifications per paragraph 3.4.1.3 or 3.4.1.4.

**Table 6. L-865/866/864<sup>(1)</sup> /885<sup>(1)</sup> Production Photometric Requirements.**

CHARACTERISTIC TESTED <sup>(2,3)</sup>	TEST POINTS	
	CONVENTIONAL	SPC
a) Beam peak (Day Intensity)	4 radials each unit: equally spaced, random orientation	1 radial each unit, random orientation
b) Beam peak (Night Intensity)	Same radials as (a)	Same radials as (a)
c) Intensity at -10 degrees	Same radials as (a)	Same radials as (a)

**NOTES:**

(1) Discharge type and alternative light source light only.

(2) Characteristic must meet all specifications per paragraph 3.4.1.5 or 3.4.1.6.

(3) Day, night, and -10 degrees where applicable.

**5.7 Production Test Records.**

Records showing actual test results of all tests required by paragraph 5.5 must be maintained for a period of three years by the manufacturer. These records must be traceable to the units tested and in the case of discharge light units traceable by serial number.

**5.8 Production Test Equipment.**

All measuring and test equipment used in the production of obstruction lighting equipment classified under paragraph 1.2 must have its accuracy and precision maintained by a calibration program with traceability to ISO-10012 *Measurement Management Systems – Requirements for Measurement Processes and Measuring Equipment* or current industry accreditation criteria. The manufacturer must show that all production photometric testing equipment correlates to the certifying laboratory's equipment to within  $\pm 5$  percent. Photometric testing must be performed in a properly designed photometric range using a calibrated photometer. For discharge type flashing lights, all photometric measurements must be based on a minimum five flash average.

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***SUGGESTED SPECIFICATIONS  
FOR  
DETECTABLE WARNING PANELS***

**1.0 General Requirements**

1.1 This specification states the requirements for wet cast detectable warning panels for installation in curb ramps and hazardous areas.

**1.2 Sample and Certified Test Reports**

A representative sample of the proposed panel to be furnished must be submitted along with the required certified test reports for approval.

**1.3 Standards**

1.3.1 Detectable warning surface panels must comply with detectable warnings on walking surfaces section of the American with Disabilities Act ( Title 49 CFR TRANSPORTATION, part 37.9 STANDARDS FOR ACCESSIBLE TRANSPORTATION FACILITIES, Appendix A, Section 4.29.2 DETECTABLE WARNINGS ON WALKING SURFACES.

**2.0 Materials Requirements**

Polymer concrete cast-in-place Detectable Warning Panels shall be manufactured using polymer concrete material. Polymer concrete material shall consist of calcareous and siliceous stone, glass fibers and thermo set polyester resin. The polymer concrete material shall be tested by an independent testing laboratory for chemical resistance and mechanical properties.

**2.1 Chemical Resistance**

Chemical Resistance	ASTM D-543
Simulated Sunlight	ASTM D-1501
Accelerated Service Test	ASTM D-756 Procedure "E"
Water Absorption	ASTM D-570

Material shall be determined to be acceptable if the following criteria are met. For chemical resistance, simulated sunlight, accelerated service test, and water absorption: retention of 75 percent of the control specimen values for load and deflection and no more than 2 percent change in weight. For flammability test, specimen should be self-extinguishing. For fungus resistance test the material should not allow any fungus growth. Smoke density shall be less than 0.5 at 1.5 minutes and less than 15 at 4 minutes. Surface flammability shall be less than 25.

## 2.2 Mechanical Properties

The mechanical properties of polymer concrete material shall be tested by an independent testing laboratory. Polymer concrete material shall have the following mechanical properties:

<u>Mechanical Properties</u>	<u>Average Value</u>	<u>Test Method</u>
Compressive Strength	11,430 PSI	ASTM C-170-99
Flexural Strength	3,330 PSI	ASTM C-580-02
Tensile Strength	1,710 PSI	ASTM C307-99
Shear Strength	11,670 PSI	ASTM D-372-02
Modulus of Elasticity	1,776,400 PSI	ASTM C-580

## 2.3 Construction

1. For consistency, detectable warning panels shall be manufactured using matched die molds under heat and pressure for superior material compaction, controlled chemical curing and uniform dimensions.
2. Polymer concrete detectable warning panels shall be reinforced with fiberglass mats for superior strength.
3. Polymer concrete detectable warning panels shall have ½” thick material sectional thickness excluding truncated domes height or reinforcement ribs.
4. Polymer concrete detectable warning panels shall be fitted with Zinc alloy concrete anchors and stainless steel bolts.
5. Polymer concrete panel surface shall be coated to keep the panel surface clean during installation. The coating shall be easily removable immediately after installation.
6. Polymer concrete detectable warning panels shall be fitted with hot dipped galvanized angles to facilitate installation in wet concrete.
7. Polymer concrete detectable warning panels shall be field replaceable without the need of cutting the existing concrete or pouring new concrete.
8. Slip Resistance of Polymer concrete detectable warning panel when tested by ASTM-C 1028 shall not to be less than 0.80.
9. Chemical Resistance of Tile when tested by ASTM-D 543 to withstand without any degradation or discoloration-1% hydrochloric acid, Acetic Acid, Sulfuric Acid, Sodium Chloride Sodium Hydroxide, Sodium Sulfate, Sodium Carbonate, Kerosene and Oil.
10. The material shall be abrasive resistant and shall be warranted for 5 years against excessive wear.
11. The polymer concrete material shall not sustain burning and be self extinguishing when tested in accordance with ASTM D 635.
12. The polymer concrete material shall not promote fungus growth when tested in accordance with ASTM G21.

13. The polymer concrete material surface flammability shall be tested in accordance with ASTM E-162 and shall be less than 25.
14. Smoke density shall be tested in accordance with ASTM E-662-03 and shall be less than 0.5 at 1.5 minutes and less than 15 at 4 minutes.

3.0 **Testing and Documentation Requirements**

- 3.1 The Polymer concrete Cast-In-Place Detectable Warning Panels specified is based on Armorcast Products Company (818-982-3600) or approved equal.
- 3.2 Certified test report must be submitted to demonstrate conformance to this specifications. Testing must be conducted by an independent testing laboratory.
- 3.3 Installation procedures must be submitted along with product drawings.



**SECTION GEO**

**GEOTECHNICAL REPORT**



**GEOTECHNICAL EXPLORATION**

**on**

**VITRUVIAN PARK**  
**BUILDINGS 201, 202, AND 203**  
Off Vitruvian Way  
Addison, Texas  
ALPHA Report No. G152235

Prepared for:

**UNITED DOMINION REALTY TRUST**  
3875 Ponte Avenue, Suite 400  
Addison, Texas 75001  
Attention: Ms. Deiadra Burns  
October 21, 2015

Prepared By:

ALPHA TESTING, INC.  
2209 Wisconsin Street, Suite 100  
Dallas, Texas 75229

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October 21, 2015

**United Dominion Realty Trust**  
3875 Ponte Avenue, Suite 400  
Addison, Texas 75001  
Attention: Ms. Deiadra Burns

Re: Geotechnical Exploration  
**Vitruvian Way**  
**Buildings 201, 202, and 203**  
Addison, Texas  
ALPHA Report No. G152235

Attached is the report of the geotechnical exploration performed for the project referenced above. This study was authorized by Mr. Harry G. Alcock and performed in accordance with the Abbreviated Agreement for Professional Services dated October 2, 2015 and ALPHA Proposal No. 48845 dated August 27, 2015.

This report contains results of field explorations and laboratory testing and an engineering interpretation of these with respect to available project characteristics. The results and analyses were used to develop recommendations to aid design and construction of foundations and pavement.

ALPHA TESTING, INC. appreciates the opportunity to be of service on this project. If we can be of further assistance, such as providing materials testing services during construction, please contact our office.

Sincerely,

**ALPHA TESTING, INC.**

Andrew M. Adams, E.I.T.  
Project Manager



Mark L. McKay, P.E.  
Senior Geotechnical Engineer  
Geotechnical Department Manager

AMA/MLM  
Copy: (1) Client



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On

### ALPHA REPORT NO. G152235

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#### APPENDIX

#### SOIL MODIFICATION WATER PRESSURE INJECTION (WPI) GUIDELINE SPECIFICATIONS

A-1	Methods of Field Exploration Boring Location Plan – Figure 1
B-1	Methods of Laboratory Testing Swell Test Results – Figure 2 Logs of Borings Key to Soil Symbols and Classifications

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## **1.0 PURPOSE AND SCOPE**

The purpose of this geotechnical exploration is for ALPHA TESTING, INC. (“ALPHA”) to evaluate for the “Client” some of the physical and engineering properties of subsurface materials at selected locations on the subject site with respect to formulation of appropriate geotechnical design parameters for the proposed construction. The field exploration was accomplished by securing subsurface samples from widely spaced test borings performed across the expanse of the site. Engineering analyses were performed from results of the field exploration and results of laboratory tests performed on representative samples.

Also included are general comments pertaining to reasonably anticipated construction problems and recommendations concerning earthwork and quality control testing during construction. This information can be used to evaluate subsurface conditions and to aid in ascertaining construction meets project specifications.

Recommendations provided in this report were developed from information obtained in test borings depicting subsurface conditions only at the specific boring locations and at the particular time designated on the logs. Subsurface conditions at other locations may differ from those observed at the boring locations, and subsurface conditions at boring locations may vary at different times of the year. The scope of work may not fully define the variability of subsurface materials and conditions that are present on the site.

The nature and extent of variations between borings may not become evident until construction. If significant variations then appear evident, our office should be contacted to re-evaluate our recommendations after performing on-site observations and possibly other tests.

## **2.0 PROJECT CHARACTERISTICS**

It is proposed to construct a new apartment complex and parking garage structures (Vitruvian Park) on a site located generally north off Vitruvian Way east of Marsh Lane in Addison, Texas.

A site plan illustrating the general outline of the property provided by the Client, with ALPHA’s boring locations noted on it, is provided as Figure 1, titled “Boring Location Plan,” in the Appendix of this report. At the time the field exploration was performed, the site was relatively open and vegetated with grass and scattered trees with a maintenance yard located in the north central portion of the site. According to online maps available from the North Central Texas Council of Governments (found at [www.dfwmaps.com](http://www.dfwmaps.com)), the topography of the site generally slopes downward from the northeast towards the southwest with a maximum change in surface elevation of about 18 ft (about Elev. 568 to 550).

Present plans provide for the construction of new 5-story wood-framed apartment buildings and 5-story concrete parking garage structures. At least one level of the parking garage structures is planned partially below-grade. Based on the current available information, foundation loads for the parking garage structures could be on the order of 1,000 kips or less and it is anticipated these loads will be supported using a drilled pier foundation system. The apartment buildings are anticipated to create relatively light loads to be carried by the foundations. Pavement design recommendations for Portland cement concrete (PCC) are also provided in this report.



The finished floor elevations for the partial below-grade levels are assumed to be about 6 ft below existing grade and slab-on-grade foundations for the apartment buildings are assumed to be within about 2 ft of existing grade.

### **3.0 FIELD EXPLORATION**

Subsurface conditions on the site were explored by drilling a total of twenty-three (23) test borings in general accordance with ASTM D 420 using standard rotary drilling equipment. Borings 1 through 6 were drilled in the parking garage areas to depths of about 70 ft each. Borings 7 through 23 were drilled in the proposed apartment building areas to a depth of 20 ft each. The approximate location of each test boring is shown on the Boring Location Plan, Figure 1, enclosed in the Appendix of this report. Details of drilling and sampling operations are briefly summarized in Methods of Field Exploration, Section A-1 of the Appendix.

Subsurface types encountered during the field exploration are presented on Log of Boring sheets included in the Appendix of this report. The boring logs contain our Field Technician's and Engineer's interpretation of conditions believed to exist between actual samples retrieved. Therefore, these boring logs contain both factual and interpretive information. Lines delineating subsurface strata on the boring logs are approximate and the actual transition between strata may be gradual.

### **4.0 LABORATORY TESTS**

Selected samples of the subsurface materials were tested in the laboratory to evaluate their engineering properties as a basis in providing recommendations for foundation design and earthwork construction. A brief description of testing procedures used in the laboratory can be found in Methods of Laboratory Testing, Section B-1 of the Appendix. Individual test results are presented on Log of Boring sheets or on summary data sheets also enclosed in the Appendix.

### **5.0 GENERAL SUBSURFACE CONDITIONS**

Based on the Geological Atlas of Texas, Dallas Sheet, available from the Texas Bureau of Economic Geology, published by the University of Texas at Austin, as well as the boring results and our experience at the Vitruvian site, the project site is generally located on the contact between the Austin Chalk Formation and the underlying Eagle Ford Formation. The Austin Chalk consists of massive gray unweathered limestone, overlain by tan weathered limestone. Near-surface residual soils associated with the Austin Chalk generally consist of high plasticity clays and/or low to moderate plasticity calcareous clays. The Eagle Ford Formation is composed predominantly of shale with occasional platy beds of sandstone and limestone. Residual overburden soils associated with the Eagle Ford Formation generally consist of clay and shaly clay with very high shrink/swell potential. In full section the Eagle Ford Formation should be over 200 ft thick at this site.

Subsurface materials consist generally of clay (CH), calcareous clay (CL), and/or shaly clay (CH) extending to depths of about 11 to 26 ft in Borings 1 through 6, 8, 12, 13, 14, 15, and 16, underlain by clay shale and deeper gray shale. The clay shale extended to depths of about 29 to 34 ft underlain by gray shale extending to the boring termination depths (70 ft). Shaly limestone



was encountered in Boring 14 at a depth of about 2 ft below existing grade and extended to a depth of about 11 ft underlain by clay shale. The upper 2 to 4 ft of material encountered in Borings 2, 4, 6, 11, 12, 13, 15, 16, 17, and 20 was visually classified as fill material. The letters in parenthesis represent the soils' classification according to the Unified Soil Classification System (ASTM D 2488). More detailed stratigraphic information is presented on the Log of Boring Sheets attached to this report.

Most of the subsurface materials are relatively impermeable and are anticipated to have a relatively slow response to water movement. Therefore, several days of observation will be required to evaluate actual groundwater levels within the depths explored. Also, the groundwater level at the site is anticipated to fluctuate seasonally depending on the amount of rainfall, prevailing weather conditions and subsurface drainage characteristics.

During the field explorations, free groundwater was encountered in the open boreholes upon completion of Borings 1 through 6 and 22 at depths of about 13 to 68 ft below the existing ground surface. No free groundwater was encountered in the other borings. It is common to detect seasonal groundwater from fill materials, from natural fractures within the clayey matrix, near the soil/rock (shale) interface or from fractures in the rock, particularly during or after periods of precipitation. If more detailed groundwater information is required, monitoring wells or piezometers can be installed.

Further details concerning subsurface materials and conditions encountered can be obtained from the Log of Boring sheets provided in the Appendix of this report.

## **6.0 DESIGN RECOMMENDATIONS**

The following design recommendations were developed on the basis of the previously described Project Characteristics (Section 2.0) and General Subsurface Conditions (Section 5.0). If project criteria should change, including structure locations on the site, our office should conduct a review to determine if modifications to the recommendations are required. Further, it is recommended our office be provided with a copy of the final plans and specifications for review prior to construction.

Review of historical aerial photographs indicates the site was previously covered with apartment buildings which have since been removed. Any soil disturbed due to removal of the structures, foundations or pavements should be re-compacted in accordance with recommendations provided in Section 6.3 where moisture conditioned soil is required or Section 7.3 where general fill is required. All elements of the removed structures and pavement should be removed or cut off at least 1 ft below finished grade or 1 ft below the new structural elements, whichever is deeper. All abandoned utility lines should be either removed or positively sealed to prevent possible water seepage into subgrade soils.

The following design criteria given in this report were developed assuming the parking garage levels are about 6 ft below existing grade and slab-on-grade foundations for the apartment buildings are within 2 ft of existing grade. Cutting and filling on the site more than described



above can alter the recommended foundation design parameters. Therefore, it is recommended our office be contacted once detailed site grading plans are available to verify appropriate design parameters are utilized for final foundation design.

### **6.1 Existing Fill**

As discussed in Section 5.0 of this report, existing fill was encountered to depths of about 2 to 4 ft below the existing ground surface in Borings 2, 4, 6, 11, 12, 13, 15, 16, 17, and 20. If compaction records for this fill cannot be obtained, the existing fill should be considered as uncontrolled fill. Uncontrolled fill is not suitable for direct support of slab foundations. Considering the soil improvements required to reduce potential seasonal movements of floor slabs (as discussed below in Section 6.3), it is expected most of the existing fill soil would be over-excavated and replaced in the building pad areas. Any existing fill encountered below the depth of moisture conditioning in the building pad areas should be removed to expose suitable firm native soils, and the resulting excavation filled to the building pad grade with controlled, engineered fill as described in Section 7.3 below. Pavement areas should be properly prepared and tested as discussed in Section 7.1 of this report.

Excavated materials can be utilized as engineered fill provided they are free of boulders, concrete, organics, debris, or other unsuitable materials. ALPHA TESTING should observe undercut excavations and monitor and test fill placement to verify conditions are as anticipated and that new fill is placed per the recommendations in this report.

### **6.2 Drilled Pier Foundation System**

The structural frame and walls for the planned parking garages could be supported using a system of drilled, straight-shaft piers bearing in the gray shale. These piers should bear at least 3 ft into the underlying gray shale. Gray shale was encountered at depths of about 20 to 34 ft below existing grade in Borings 1 through 6. Based on the conditions encountered in the borings, laboratory testing and our area experience, the following allowable design values in Table A are recommended for the proposed structure. Deeper penetrations will be necessary to develop skin friction and/or uplift resistance.

<b>TABLE A</b>		
<b>ALLOWABLE END BEARING AND SKIN FRICTION VALUES</b>		
<b>Material</b>	<b>End Bearing (ksf)</b>	<b>Skin Friction [Gravity Loads] (ksf)</b>
All Existing Fill Material and Native Clay Soils to a Depth of 15 ft Below Final Grade	NA	Neglect
Native Clay Soils below a Depth of 15 ft from Final Grade	NA	0.5
Clay Shale and Upper 3 ft of Shale	NA	1.5
Shale Below a Minimum 3 ft of Penetration	18	2.5



**Please note**, the following special conditions apply to drilled pier foundations bearing in the gray shale at this site:

- 1. Gray clay shale was encountered overlying the gray shale bearing stratum in Borings 1, 2, 3, and 6 at depths of about 21 to 26 ft and is estimated to be about 7 to 13 ft thick. The clay shale has relatively softer strength characteristics compared to the deeper gray shale. The clay shale is visually similar to the shale, and care should be taken to verify the pier shafts extend through the relatively softer clay shale to bear in the competent gray shale. Pier shaft excavations should be monitored by ALPHA geotechnical personnel to verify penetration into the shale stratum.*
- 2. Varying amounts of hard limestone and/or sandstone seams and layers were encountered within the shale stratum at some of the borings. In addition, hard limestone layers were encountered at varying depths in test borings drilled for previous phases and during pier installation for previous structures. These layers are generally hard and could cause obstruction to pier installation. Rock excavation equipment (rock teeth and/or core barrels) may be required during pier installation. The contractor selected should have experience drilling piers in shale containing limestone seams and layers. The pier installation contract should contain provisions for penetrating these hard materials and other obstructions. Additionally, ALPHA Testing, Inc. should verify piers penetrate any clay layers and seams and bear in competent gray shale during installation.*

The minimum clear spacing between adjacent piers should be at least two (2) shaft diameters (based on the largest pier diameter) to develop the full skin friction resistance to gravity loads and uplift loads. Closer spacing will result in reduced skin friction resistance. We should be contacted to review closer pier spacing on a case-by-case basis.

The above bearing capacity contains a factor of safety of at least three (3) considering a general bearing capacity failure and the skin friction values have a factor of safety of at least two (2). Skin friction values in the gray shale are applicable only for the portion of the shaft in gray shale below the bottom of any temporary casing used. Normal elastic settlement of piers under loading is estimated at less than about 1 inch.

Each pier should contain sufficient full length reinforcing steel and should be embedded a sufficient distance into the gray shale to resist the uplift pressure (soil-to-pier adhesion) due to potential soil swell along the shaft from post-construction heave and other uplift forces applied by structural loadings. The magnitude of uplift adhesion due to soil swell along the pier shaft cannot be defined accurately and can vary according to the actual in-place moisture content of the soils during construction. It is estimated this uplift adhesion will not exceed about 2.2 kips per sq ft. This soil adhesion is approximated to act uniformly over the upper 12 ft of the pier shaft in contact with clayey soils. The uplift adhesion due to soil swell can be neglected over the portion of the shaft in contact with non-expansive material used to grade the building pads.



The uplift resistance of each pier can be computed using an allowable uplift skin friction values in Table B below. These uplift skin friction values can be assumed to act uniformly over the respective portions of the shaft in the clayey soils, clay shale, and shale. Skin friction values are applicable only for the portion of the shaft below the bottom of any temporary casing used. These uplift resistance values have a factor of safety of at least two (2).

<b>TABLE B</b>	
<b>ALLOWABLE UPLIFT SKIN FRICTION VALUES</b>	
<b>MATERIAL</b>	<b>ALLOWABLE UPLIFT SKIN FRICTION (ksf)</b>
All Existing Fill Material and Native Clay Soils to a Depth of 15 ft Below from Final Grade	Neglect
Native Clay Soils below a Depth of 15 ft from Final Grade	0.3
Clay Shale and Upper 3 ft of Shale	1.0
Shale Below a Minimum 3 ft of Penetration	1.8

All grade beams connecting piers should be formed and not cast in earthen trenches. Grade beams should be formed with a nominal 12-inch void at the bottom if constructed within about 2 ft of existing grade. Alternatively, a nominal 6-inch void should be provided below the bottom of grade beams in below-grade areas (assumed to be about 6 ft below final grade). Commercially available cardboard box forms (cartons) are made for the purpose of forming the void. The cardboard cartons should extend the full length and width of the grade beams. Prior to concrete placement, cartons should be inspected to verify they are firm, properly placed, and capable of supporting wet concrete. Some type of permanent soil retainer, such as pre-cast concrete panels, must be provided to prevent soils adjacent to grade beams from sloughing into the void space at the bottom of the grade beams. Additionally, backfill soils placed adjacent to grade beams must be compacted as outlined in Section 7.3 of this report.

Lateral analysis for drilled piers constructed at the site can be performed using the following design parameters (L-Pile) provided for the site soils in Tables C-1 and C-2. The lateral resistance of the top portion of the pier shafts (the portion within 12 ft of final grade) should be neglected due to disturbance and potential soil shrinkage.



Material	Unit Weight, pci	Soil Modulus Parameter, pci	Shear Strength, psi	Strain at 50% Max Stress	Angle of Internal Friction, deg.
Native Clay/Shaly Clay Deeper than 12 ft Below Existing Grade at Piers	0.069	500	7	0.007	0
Clay Shale and Upper 3 ft of Shale	0.075	6,000	20	0.005	0

Material	Unit Weight, pci	Young's Modulus (Rock Condition), psi	Shear Strength, psi	$K_{rm}$
Shale Below 3 ft Penetration	0.075	25,000	60	0.0005

**Note:** Rock Quality Designation (RQD) for shale is generally in the range of 40 to 80 percent. *Please Note:* Rock coring was not performed for this project. RQD values provided above are typical for the material encountered based on our area experience and from information obtained from field Texas Cone Penetration tests.

### **6.3 Potential Seasonal Movements and Subgrade Improvement**

It is planned to construct the parking garage levels about 6 ft below existing grade and floor slabs for the apartment buildings within 2 ft of existing grade. Based on the subsurface stratigraphy encountered in the test borings performed at this site, the parking garage and apartment floor slabs will be supported on clayey soils. Our findings indicate the floor slab for the parking garage level could experience soil-related potential seasonal movements of about 4 inches if constructed at about 6 ft below existing and adjacent final grade. Alternatively, the slab-on-grade foundations for the apartment buildings could experience soil-related potential seasonal movements in excess of 5 ½ to 6 inches if constructed within 2 ft of existing grade. Once final grades are established and the locations of any ramps to below grade areas are located, ALPHA should be contacted to verify the subsequent PVR values and recommendations provided below.

These potential seasonal movements were estimated using results of absorption swell tests, in general accordance with methods outlined by Texas Department of Transportation (TxDOT) Test Method Tex-124-E and engineering judgment and experience. Estimated movements were calculated assuming the moisture content of the in-situ soil within the normal zone of seasonal moisture content change varies between a "dry" condition and a "wet" condition as defined by Tex-124-E. Also, it was assumed a 1 psi surcharge load from the slab acts on the subgrade soils. Movements exceeding those predicted above could occur if positive drainage of surface water is not maintained



or if soils are subject to an outside water source, such as leakage from a utility line or subsurface moisture migration from off-site locations.

In view of these potential seasonal movements, the most positive floor system for the buildings supported by drilled piers is a slab suspended completely above the existing highly expansive soils. A 12-inch or 6-inch void space should be provided between the bottom of the slab (or lowest suspended fixture) and top surface of the underlying expansive clays if the floor slab is constructed within about 2 ft of existing grade or about 6 ft below existing/adjacent final grade, respectively. Cardboard carton forms or a deeper crawl space can be used to create the minimum void space. A ventilated crawl space is preferred. Provisions should be made for (a) adequate drainage of the under-floor space and (b) differential movement of utility lines, including areas where the utility penetrates through the grade beam and/or where the utility penetrates below grade areas. If a crawl space is utilized, periodic inspections for plumbing line leaks, ponding water etc. should be performed with necessary repairs made.

If some floor slab movement is tolerable (about 2 inches or 1 inch), the concrete slab can be designed to bear uniformly on improved soils. The extent and depth of these subgrade improvement methods for the planned structures are summarized below in Tables D and E. These subgrade improvement procedures are discussed in Sections 6.3.1 and 6.3.2 below. Non-expansive material could consist of select fill, flexible base, or lime-treated on-site clayey soils as described in Section 7.3. The thickness of any gravel drainage layer below the slab (see Section 6.5 below) can also be counted as part of the thickness of non-expansive material. In choosing these methods of floor slab movement reduction, the Owner is accepting some post construction seasonal movement of the floor slab (2 inches or 1 inch).

<b>TABLE D</b> <b>SUBGRADE IMPROVEMENT RECOMMENDATIONS</b> <b>FOR PARKING GARAGE FLOOR SLAB CONSTRUCTED</b> <b>ABOUT 6 FT BELOW EXISTING/ADJACENT FINAL GRADE</b>	
<b>Potential Seasonal Movement, inches</b>	<b>Subgrade Improvement Method</b>
3	2 ft of Moisture Conditioned Soil
2	4 ft of Moisture Conditioned Soil
1	6 ft of Moisture Conditioned Soil



**TABLE E**  
**SUBGRADE IMPROVEMENT RECOMMENDATIONS**  
**FOR APARTMENT SLAB-ON-GRADE FOUNDATIONS CONSTRUCTED**  
**WITHIN ABOUT 2 FT OF EXISTING GRADE**

Potential Seasonal Movement, inches	Subgrade Improvement Method
2	1 ft of Non-Expansive Fill Material, in Conjunction with either 9 ft of Moisture-Conditioned Soil or 10 ft of Water Pressure Injection below Slab
1	2 ft of Non-Expansive Fill Material, in Conjunction with either 10 ft of Moisture-Conditioned Soil or 10 ft of Water Pressure Injection below Slab

If a soil-supported floor slab is utilized for the planned building, a "floating" (fully ground supported, and not structurally connected to walls or foundations) floor slab is preferred. This reduces the risk of cracking and displacement of the floor slab due to differential movements between the slab and foundations. A floor slab doweled into perimeter grade beams can develop a plastic hinge (crack) parallel to and approximately 5 to 10 ft inside the building perimeter. The structural engineer should determine the need for connections between the slab and structural elements and determine if control joints to limit cracking are needed. A properly designed and constructed moisture barrier should be placed between the slab and subgrade soils to retard moisture migration through the slab.

### 6.3.1 Subgrade Improvement Utilizing Moisture-Conditioned Soil

Movements of the floor slabs for parking garage below-grade levels constructed about 6 ft below existing/adjacent final grade can be reduced to about 3 inches, 2 inches, or 1 inch by over excavating the existing clay soils and placing 2 ft, 4 ft, or 6 ft of moisture conditioned soils below the bottom of the floor slabs (See Table D).

Movements of apartment and amenity center building foundations constructed within about 2 ft of existing grade can be reduced to about 2 inches or 1 inch by placing at least 1 ft or 2 ft of non-expansive fill material, respectively, (See Table E) between the bottom of the slab and the top surface of 8 ft and 10 of moisture-conditioned soil, respectively. Non-expansive fill material could consist of select fill, flexible base, or lime-treated on-site clayey soils as described in Section 7.3.

*Note: Limestone was encountered about 2 ft below existing grade in Boring 14. It is not necessary to excavate shallow limestone to install moisture conditioned soils. ALPHA should be present to observe any areas where the full subgrade treatment depth is not achieved.*

Moisture conditioning consists of processing and compacting the specified minimum thickness of on-site soil at a "target" moisture content approximated to be at least 5 percentage points (with an upper limit of 7 percentage points) above the material's optimum moisture content as determined by the standard Proctor method (ASTM D



698). Relatively lower plasticity soils may need to be placed at a moisture content closer to optimum moisture to allow for compaction of these materials. The moisture-conditioned soil should be placed in 8-in thick loose lifts and compacted to a dry density of 93 to 97 percent of standard Proctor maximum dry density. Moisture conditioning of the on-site soil should extend throughout the entire building pad area and at least 5 ft beyond the perimeter of the building. In entrance areas and adjoining flatwork, the moisture conditioning process should extend at least 10 ft beyond the perimeter of the building. However, non-expansive fill material should not extend beyond the building limits. Moisture-conditioned soils should be maintained in a moist condition prior to placement of the required thickness of non-expansive material. *Non-expansive fill material should not be placed above the plastic sheeting.*

The resulting estimated potential seasonal movements (3 inches, 2 inches or 1 inch, depending on the level of subgrade improvement implemented) were calculated assuming the moisture content of the moisture-conditioned soil varies between the “target” moisture content and the “wet” condition while the deeper undisturbed in-situ soil within the normal zone of seasonal moisture content change varies between the "dry" condition and the "wet" condition as defined by methods outlined in TxDOT Test Method Tex-124-E.

Please note, it is the intent of the moisture-conditioning process described above to reduce the free swell potential of the moisture-conditioned soil to 1 percent or less. Additional laboratory tests (i.e., standard Proctors, absorption swell tests, etc.) should be conducted during construction to verify the “target” moisture content for moisture-conditioning (estimated at 5 percentage points above the material’s optimum moisture content as defined by ASTM D 698) is sufficient to reduce the free swell potential of the processed soil to 1 percent or less. In addition, it is recommended samples of the moisture-conditioned material be routinely obtained during construction to verify the free swell of the improved material is 1 percent or less.

Installation of moisture-conditioned soils should be monitored and tested on a full-time basis by a representative of ALPHA TESTING, INC., to verify the soils tested were placed with the proper lift thickness, moisture content, and degree of compaction.

### **6.3.2 Subgrade Improvement Utilizing Water Pressure Injection (WPI)**

An alternate subgrade improvement method to reduce movement utilizes the procedures of Water Pressure Injection (WPI) in conjunction with placement of non-expansive fill material. Prior to water pressure injection, all remaining existing fill material should be removed and replaced as recommended in Section 7.3. The improvement procedures outlined below will not eliminate future movement of the slabs. Recommended specifications for WPI are attached to this report in the appendix.



*Note: Limestone was encountered about 2 ft below existing grade in Boring 14. It is not practical nor necessary to inject beyond the limestone to perform the required injection depths. ALPHA should be present to verify the limestone in areas where injection refusal terminates above the full subgrade treatment depth.*

**For 2-inch Slab Foundation Movement:** Following removal of the necessary thickness of on-site expansive soils to allow for placement of at least 1 ft of non-expansive material, the exposed subgrade of the building pad should be water pressure injected (WPI) to a depth of 10 ft below the bottom of the non-expansive material.

**For 1 inch Slab Foundation Movement:** Following removal of the necessary thickness of on-site expansive soils to allow for placement of at least 2 ft of non-expansive fill material, the exposed subgrade of the building pad should be water pressure injected (WPI) to a depth of 10 ft below the bottom of the non-expansive material.

The water pressure injection should extend throughout the entire building pad area and at least 5 ft beyond the perimeter of each building. In entrance areas and adjoining flatwork, WPI should extend at least 10 ft beyond the perimeter of the building. The non-expansive fill material should preferably not extend beyond the building limits. Where exterior flatwork does not adjoin the building pad, (i.e. above the water injected soils), a moisture barrier consisting of a minimum of 10 mil plastic sheeting with 8 to 12 inches of soil cover should be provided above the water injected soils. Injected soils should be maintained in a moist condition prior to placement of the required thickness of non-expansive fill material, plastic sheeting or flatwork.

Performance of post-injection swell testing and moisture content determinations should be employed as final acceptance criteria in engineering analysis to examine accomplishment of intended objectives of the injection treatment. Maximum benefit of these movement reduction procedures can be achieved by employing ALPHA TESTING, INC. to observe, monitor and test the entire process. Construction specifications for the water pressure injection process are provided in the Appendix of this report.

The purpose of the above procedure is to pre-swell the existing soils. Satisfactory completion of the injection process is achieved when the desired moisture content and abatement of swell in the injected subgrade clay soils are reached. Acceptance criteria for water pressure injection should be based upon obtaining an average free swell of 1 percent or less in the injected zone. Performance of post-injection swell testing and moisture content determinations should be employed as final acceptance criteria in engineering analysis to examine accomplishment of intended objectives of the injection treatment.



The resulting estimated potential seasonal movements were calculated assuming the average free swell of the injected soils does not exceed 1 percent. Further, it is assumed the moisture content of the soil below the injected zone and within the normal zone of seasonal moisture content change varies between a "dry" condition and a "wet" condition as defined by Tex-124-E.

#### **6.4 Slab-on-Grade Foundations for Apartment and Amenity Center Buildings**

We understand it is presently planned to support the apartment and amenity center buildings using a slab-on-grade foundation system designed for potential seasonal movements of either 2 inches or 1 inch. As discussed in Section 6.3 above, slab foundations on existing clays under current conditions will be subject to potential soil-related movements up to about 6 inches. Subgrade improvements (non-expansive fill material and moisture conditioning or water pressure injection) as described in Section 6.3 can be used to reduce slab foundation movements to 2 inches or 1 inch.

A slab-on-grade foundation should be designed with exterior and interior grade beams adequate to provide sufficient rigidity to the foundation system. A net allowable bearing pressure of 1.5 kips per sq ft may be used for design of all grade beams bearing subgrade improved soils placed as outlined in Section 6.3. Grade beams should bear a minimum depth of 18 inches below final grade and should have a minimum width of 10 inches.

It is common to experience some minor cosmetic distress to structures with slab-on-grade foundation systems due to normal ground movements. To reduce cracking as normal movements occur in subgrade soils, all grade beams and the floor slab should be adequately reinforced with steel (conventional reinforcing steel and/or post-tensioned reinforcement). A properly designed and constructed moisture barrier should be placed between the slab and subgrade soils to retard moisture migration through the slabs.

#### **6.5 Post-Tensioning Institute, Design of Post-Tensioned Slabs-on-Ground**

Provided below is information for the design of post-tensioned, slab-on-grade foundations. Design parameters provided below were evaluated based on the conditions encountered in the borings and using information and correlations published by PTI Third Edition and VOLFLO 1.5 computer program provided by Geostructural Tool Kit, Inc. (GTI).

**TABLE F**  
**Potential Seasonal Movement of 2 inches**  
**Following Subgrade Improvement as Outlined in Section 6.3**

	<b>EDGE LIFT</b>	<b>CENTER LIFT</b>
Edge Moisture Distance, ft ( $e_m$ )	4.3	7.0
Differential Soil Movement, inches ( $y_m$ )	1.6	1.2



**TABLE G**  
**Potential Seasonal Movement of 1 inch**  
**Following Subgrade Improvement as Outlined in Section 6.3**

	<b>EDGE LIFT</b>	<b>CENTER LIFT</b>
Edge Moisture Distance, ft ( $e_m$ )	4.3	7.5
Differential Soil Movement, inches ( $y_m$ )	1.4	1.1

### **6.6 Subgrade Improvement for Swimming Pool and Pool Decks**

Potential movements for the swimming pool deck slabs could be reduced to about 1 inch by improving the subgrade soils beneath these structures as generally recommended in Section 6.3.1 and 6.3.2 of this report (placing 10 ft of moisture conditioned soil or 10 ft of water injected soils in conjunction with 2 ft of non-expansive material beneath the pool deck slab). However, the soil improvements for the pool should extend to a depth that matches the elevation of the adjoining deck slab subgrade treatment. Therefore, for a 5-ft deep pool, moisture conditioning should extend to a depth of at least 7 ft beneath the bottom of the pool. Select fill is not required beneath the pool where the pool is at least 2 ft deep. Subgrade improvement referenced above should extend at least 5 ft beyond the pool deck slab area. Following subgrade improvement as recommended above, the pool and pool deck slabs constructed on-grade could experience potential movements of about 1 inch.

### **6.7 Lateral Earth Pressures for Below-Grade Levels**

Below grade walls of up to about 6 ft below grade are planned for the parking garage structures. The magnitude of lateral earth pressure against below-grade walls is dependent on the method of backfill placement, type of backfill soil, drainage provisions, and type of wall (rigid or yielding) after placement of the backfill. Experience demonstrates when a wall is held rigidly against horizontal movement (restrained at the top), the lateral pressure (at-rest lateral earth pressure) against the wall is greater than the normally assumed active pressure. Yielding walls (rotation at the top of the wall on the order of 0.1 to 0.4 percent of the wall height) can be designed for active earth pressures ( $k_a$ ) but rigid walls associated with the apartment building structure should be designed for higher at-rest lateral earth pressures ( $k_o$ ). Walls should be designed using the equivalent fluid pressures provided in Table H below, considering a triangular stress distribution and assuming a horizontal ground surface extending back from the top of the wall. The equivalent fluid pressures provided do not include a factor of safety.



<b>TABLE H LATERAL EARTH PRESSURES</b>			
<b>Material</b>	<b>Condition</b>	<b>Equivalent Fluid Pressure, pcf</b>	
		<b>Drained</b>	<b>Undrained including Hydrostatic Pressure</b>
Free Draining Granular Soil $\Phi=35^\circ$ , $\gamma_T = 125$ pcf	At-Rest, $k_o=0.42$	53	89
	Active, $k_a=0.27$	34	79
Site Clay Soil $\Phi=15^\circ$ , $\gamma_T = 120$ pcf	At-Rest, $k_o=0.74$	---	105
	Active, $k_a=0.59$	---	96

$\Phi$  – Internal friction and  $\gamma_T$  – Effective Total Unit Weight

Free draining granular material should be a clean, non-plastic, relatively well-graded granular soil consisting of sand, gravel, or a sand and gravel mixture with less than 5 percent finer than the No. 200 sieve size. To reduce surface water seepage into the free draining backfill, the top 2-ft of the backfill should consist of on-site clay soil with a plasticity index of at least 25. To utilize the lateral earth pressures associated with free draining granular material, the free draining granular backfill should extend outward at least 2 ft from the base of the wall and then extend upward on a 1 (horizontal) to 2 (vertical) slope. The free draining granular backfill should be separated from the adjacent native soils using a filter fabric (Mirafi 140N, or equivalent) to prevent intrusion of native soils into the free draining granular.

Complete drainage of the free draining material should be provided to prevent the development of hydrostatic pressures behind the wall. A typical drainage system could consist of perforated plastic PVC pipes placed in filter trenches excavated parallel to the base of the walls for their entire length. Septic field drain pipe is **not** acceptable for this purpose. The drain pipes should be positioned at a depth lower than the bottom elevation of the wall and should also be wrapped with filter fabric (Mirafi 140N, or equivalent). A drainage system is beneficial regardless of the type of backfill used. As a minimum, weep-holes should be provided for free-standing exterior walls. Subsurface drains are recommended behind below-grade areas such as walls associated with the structure. Such drains should drain by gravity or be connected to suitable sump pits and pumps.

The effects of surcharge loading must also be considered. Surcharge loads should be multiplied by the applicable coefficient of earth pressure from Table H above, and the resulting pressure should be applied as a uniform lateral pressure over the full height of the wall. The lateral earth pressure recommendations in Table H above assume a horizontal ground surface extending backward from the top of the wall. If sloping backfill is used, the lateral earth pressure on the below-grade wall will be higher. We should be contacted for additional lateral earth pressure recommendations if sloping backfill is used behind a wall.



Lightweight, hand-controlled vibrating plate compactors are recommended for compaction of backfill adjacent to walls to reduce the possibility of increases in lateral pressures due to over-compaction. Heavy compaction equipment should not be operated near the walls. Also, compaction of backfill soils behind walls should not exceed 100 percent standard Proctor maximum dry density (ASTM D 698) to further limit lateral earth pressures against walls.

Below-grade walls associated with the structure should be waterproofed, and keyed joints and waterstops should be provided at all construction joints.

Settlement of backfill behind the walls should be anticipated. Even though backfill is properly compacted as recommended in Section 7.3 of this report, the wall backfill is still subject to settlements over time of up to about 1 to 2 percent of the total fill thickness.

### **6.8 Below-Grade Drainage for Parking Garage Slab**

Consideration should be given to utilizing a sub-floor drainage system for below-grade areas that are susceptible to potential groundwater infiltration. The sub-floor drainage system should be sloped to drain to suitable sump pits. Consideration should also be given to providing multiple sump pits with an emergency power source. Depending on the tolerance for occasional wet spots, consideration can be given to deleting the sub-floor drainage, especially in parking areas, and rely on the perimeter wall drainage systems for collection of seepage. The need for a sub-floor drainage system should be reviewed during construction.

If a sub-floor drainage system is utilized it should be situated a minimum of 12 inches below the bottom of the slab. The drain system could consist of collector pipes (minimum 6 inches in diameter, perforated and wrapped with filter fabric - Mirafi 140N, or equivalent) in shallow trenches or bearing on top of rock connected to a uniform drainage layer at least 12 inches thick. Spacing of the drain pipes should not exceed 25 ft.

The drainage layer should consist of free-draining gravel material with a maximum nominal particle size of 2 inches and not more than 5 percent passing the No. 200 sieve. Gravel meeting the gradation requirements of ASTM C-33 Size No. 57 is an example of a commercially available material suitable for this purpose. The sub-floor drainage system should be sloped to drain to suitable sump pits. Consideration should also be given to providing multiple sump pits with an emergency power source.

### **6.9 Site Retaining Walls**

Low-level (maximum 4 ft in height) site retaining walls should be designed to resist the expected lateral earth pressures as recommended above in Section 6.7. These walls can be supported using drilled straight shaft piers as recommended in Section 6.2. As an alternate to drilled piers, site retaining walls (those not structurally associated with the building) could be supported by shallow spread footing foundations bearing in clayey soils if some level of foundation movement is tolerable (up to about 6 inches).



The proposed retaining walls supported using shallow footings bearing in native undisturbed soils can be designed using a net allowable bearing pressure of 2 ksf. Foundations should bear at a depth of at least 2 ft below the final ground surface as measured at the toe of the wall. The recommended footing depth is required for bearing capacity purposes only. The structural engineer should review the recommended bearing depth to verify the walls are sufficiently designed for global stability and to resist sliding, overturning, etc. Wall footings should have a least dimension of 18 inches for bearing capacity considerations.

Careful monitoring during construction is necessary to locate any pockets or seams of unsuitable material, which might be encountered in excavations for footings. Unsuitable materials encountered at the foundation bearing level should be removed and replaced with lean concrete (about 2,000 psi strength at 28 days).

Resistance to sliding will be developed by friction along the base of the footing and passive earth pressure acting on the vertical face of a key installed in the base of the footing, if required. We recommend an allowable coefficient of friction of 0.3 along the bottom of the footings bearing in clayey soils. The available passive earth resistance on the vertical face of a key installed in the base of the footing may be calculated using an allowable passive earth pressure of 500 psf for a key bearing against undisturbed native clay soils or cohesive fill soils placed as recommended in Section 7.3. Passive resistance on the vertical face of the footing within 2 ft of the final site grade should be neglected.

#### **6.10 Flatwork**

Flatwork, pavement and any other soil-supported building elements will be subjected to the same level of movement as discussed in Section 6.3 above. In any areas where post-construction movements of flatwork would be critical, flatwork should be structurally supported, or subgrade improvements as discussed in Section 6.3 should be considered.

#### **6.11 Seismic Considerations**

The Site Class for seismic design is based on several factors that include soil profile (soil or rock), shear wave velocity, and strength, averaged over a depth of 100 ft. Since our borings did not extend to 100-foot depths, we based our determinations on the assumption that the subsurface materials below the bottom of the borings were similar to those encountered at the termination depth. Based on Section 1613.3.2 of the 2012 International Building Code and Table 20.3-1 in the 2010 ASCE-7, we recommend using Site Class C (very dense soils and soft rock) for seismic design at this site.

#### **6.12 New Area Pavement**

Clay fill soils encountered at the borings, or similar materials used as engineered fill for grading the site could be encountered as subgrade material for the parking and drive areas. These materials should be improved and prepared prior to construction of pavements as recommended below in Section 7.1. To permit correlation between



information from test borings and actual subgrade conditions exposed during construction, a qualified Geotechnical Engineer should be retained to provide subgrade monitoring and testing during construction. If there is any change in project criteria, the recommendations contained in this report should be reviewed by our office.

Calculations used to determine the required pavement thickness are based only on the physical and engineering properties of the materials and conventional thickness determination procedures. Pavement joining the buildings should be constructed with a curb and the joint between the building and curb should be sealed. Related civil design factors such as subgrade drainage, shoulder support, cross-sectional configurations, surface elevations, reinforcing steel, joint design and environmental factors will significantly affect the service life and must be included in preparation of the construction drawings and specifications, but were not included in the scope of this study. Normal periodic maintenance will be required for all pavement to achieve the design life of the pavement system.

The recommended pavement sections provided below are considered the minimum necessary to provide satisfactory performance based on the expected traffic loading. In some cases, City minimum standards for pavement section construction may exceed those provided below.

#### **6.12.1 Pavement Subgrade Preparation**

In areas where clayey soils are exposed after final subgrade elevation is achieved, the exposed surface of the pavement subgrade soil should be scarified to a depth of 6 inches and mixed with a minimum 8 percent hydrated lime (by dry soil weight) in conformance with TxDOT Item 260. Assuming an in-place unit weight of 100 pcf for the pavement subgrade soils, this percentage of lime equates to about 36 lbs of lime per sq yard of treated subgrade. The actual amount of lime required should be confirmed by additional laboratory tests (ASTM C 977 Appendix XI) prior to construction. The soil-lime mixture should be compacted to at least 95 percent of standard Proctor maximum dry density (ASTM D 698) and at least 3 percentage points above the mixture's optimum moisture content. In all areas where hydrated lime is used to stabilize subgrade soil, routine Atterberg-limit tests should be performed to verify the resulting plasticity index of the soil-lime mixture is at/or below 15.

*Please note, the on-site soils can contain a sufficient quantity of soluble sulfates that can adversely react with hydrated lime added during the mechanical lime stabilization process. Therefore, before committing to mechanical lime stabilization, samples of the pavement subgrade soil should be tested for the quantity of soluble sulfates. Our office should be contacted regarding evaluation of the quantity of soluble sulfates detected and any special processing/design features that may be applicable due to the soluble sulfate concentrations measured.*



It is recommended that pavement subgrade stabilization procedures extend at least 1 ft beyond the edge of the pavement to reduce effects of seasonal shrinking and swelling upon the extreme edges of pavement.

Lime stabilization of the pavement subgrade soil will not prevent normal seasonal movement of the underlying untreated materials. Pavement and other flatwork will have the same potential for movement as slabs constructed directly on the existing undisturbed soils. Therefore, good perimeter surface drainage with a minimum slope of 2 percent away from the pavement is recommended. The use of sand as a leveling course below pavement supported on expansive clays should be avoided. Normal maintenance of pavement should be expected over the life of the structures.

### 6.12.2 Portland Cement Concrete (PCC) Pavement

Following subgrade improvement as recommended in Section 6.12.1 above, the following PCC (reinforced) pavement sections are recommended.

<b>Paving Areas and/or Type</b>	<b>PCC Thickness, Inches</b>
**Parking Areas Subjected Exclusively to Passenger Vehicle Traffic	5
Drive Lanes, Fire Lanes, Areas Subject to Light Volume Truck Traffic	6
Dumpster Traffic Areas	7

**\*\*Note:** Lime treatment of the pavement subgrade is not necessary for pavements subjected *exclusively* to passenger vehicle traffic, although lime treatment in these areas would be generally beneficial to the long-term performance of the pavement and improve constructability. Prior to construction of pavement on untreated clay subgrade soil, the exposed subgrade should be scarified to a depth of at least 6 inches and compacted to at least 95 percent of standard Proctor maximum dry density (ASTM D 698) and within the range of 1 percentage point below to 3 percentage points above the material's optimum moisture content.

Portland-cement concrete should have a minimum compressive strength of 3,000 lbs per sq inch (psi) at 28 days in parking areas subjected exclusively to passenger vehicle traffic. We recommend a minimum compressive strength of 3,500 per sq inch (psi) at 28 days for the street, drive lanes, fire lanes, and truck areas. Concrete should be designed with  $5 \pm 1$  percent entrained air. Joints in concrete paving should not exceed 15 ft. Reinforcing steel should consist of No. 3 bars placed at 18 inches on-center in two directions.



Alternately, mechanical lime stabilization of the pavement subgrade could be eliminated by increasing the PCC thickness in the pavement sections presented above by 1 inch. Prior to construction of pavement on untreated clay subgrade soil, the exposed subgrade should be scarified to a depth of at least 6 inches and compacted to at least 95 percent of standard Proctor maximum dry density (ASTM D 698) and within the range of 1 percentage point below to 3 percentage points above the material's optimum moisture content.

### **6.13 Drainage and Other Considerations**

Adequate drainage should be provided to reduce seasonal variations in the moisture content of foundation soils. All pavement and sidewalks within 5 ft of the structures should be sloped away from the buildings to prevent ponding of water around the foundations. Final grades within 5 ft of the structures should be adjusted to slope away from the structures at a minimum slope of 2 percent. **Maintaining positive surface drainage throughout the life of the structures is essential.**

In areas with pavement or sidewalks adjacent to the new structures, a positive seal must be maintained between the structure and the pavement or sidewalk to minimize seepage of water into the underlying supporting soils. Post-construction movement of pavement and flat-work is common. Normal maintenance should include examination of all joints in paving and sidewalks, etc. as well as re-sealing where necessary.

Several factors relate to civil and architectural design and/or maintenance, which can significantly affect future movements of the foundation and floor slab system:

1. Preferably, a complete system of gutters and downspouts should carry runoff water a minimum of 5 ft from the completed structures.
2. Large trees and shrubs should not be allowed closer to the foundations than a horizontal distance equal to roughly one-half of their mature height due to their significant moisture demand upon maturing.
3. Moisture conditions should be maintained “constant” around the edge of the slabs. Ponding of water in planters, in unpaved areas, and around joints in paving and sidewalks can cause slab movements beyond those predicted in this report.
4. Planter box structures placed adjacent to buildings should be provided with a means to assure concentrations of water are not available to the subsoil stratigraphy.
5. Architectural design of the floor slabs should avoid additional features such as wing walls as extensions of the slabs.



6. The root systems from existing or recently removed trees at this site will have dried and desiccated the surrounding clay soils, resulting in soil with near-maximum swell potential. Clay soils surrounding tree root mats in building pad and flatwork areas (including but not limited to sidewalks, driveways and patios) should be removed to a minimum depth of 3 ft and compacted in-place with moisture and density control as described in Section 7.3 of this report, below.

Trench backfill for utilities should be properly placed and compacted as outlined in Section 7.3 of this report and in accordance with requirements of local City standards. Since granular bedding backfill is used for most utility lines, the backfilled trench should not become a conduit and allow access for surface or subsurface water to travel toward the new structures. Concrete cut-off collars or clay plugs should be provided where utility lines cross building lines to prevent water from traveling in the trench backfill and entering beneath the structures.



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## **7.0 GENERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS**

Variations in subsurface conditions could be encountered during construction. To permit correlation between test boring data and actual subsurface conditions encountered during construction, it is recommended a registered Professional Engineering firm be retained to observe construction procedures and materials.

Some construction problems, particularly degree or magnitude, cannot be anticipated until the course of construction. The recommendations offered in the following paragraphs are intended not to limit or preclude other conceivable solutions, but rather to provide our observations based on our experience and understanding of the project characteristics and subsurface conditions encountered in the borings.

### **7.1 Site Preparation and Grading**

All areas supporting floor slabs, slab foundations, pavement, flatwork, or areas to receive new fill should be properly prepared.

After completion of the necessary stripping, clearing, and excavating and prior to placing any required fill, the exposed soil subgrade should be carefully evaluated by probing and testing. Any undesirable material (organic material, wet, soft, or loose soil) still in place should be removed.

The exposed soil subgrade should be further evaluated by proof-rolling with a heavy pneumatic tired roller, loaded dump truck or similar equipment weighing approximately 20 tons to check for pockets of soft or loose material hidden beneath a thin crust of possibly better soil.

Proof-rolling procedures should be observed routinely by a Professional Engineer, or his designated representative. Any undesirable material (organic material, wet, soft, or loose soil) exposed during the proofroll should be removed and replaced with well-compacted material as outlined in Section 7.3.

Prior to placement of any fill, the exposed soil subgrade should then be scarified to a minimum depth of 6 inches and recompacted as outlined in Section 7.3.

If fill is to be placed on existing slopes (natural or constructed) steeper than six horizontal to one vertical (6:1), the fill materials should be benched into the existing slopes in such a manner as to provide a minimum bench-key width of five (5) ft. This should provide a good contact between the existing soils and new fill materials, reduce potential sliding planes, and allow relatively horizontal lift placements.

Slope stability analysis of embankments (natural or constructed) was not within the scope of this study.

The contractor is responsible for designing any excavation slopes, temporary sheeting or shoring. Design of these structures should include any imposed surface surcharges.



Construction site safety is the sole responsibility of the contractor, who shall also be solely responsible for the means, methods and sequencing of construction operations. The contractor should also be aware that slope height, slope inclination or excavation depths (including utility trench excavations) should in no case exceed those specified in local, state and/or federal safety regulations, such as OSHA Health and Safety Standard for Excavations, 29 CFR Part 1926, or successor regulations. Stockpiles should be placed well away from the edge of the excavation and their heights should be controlled so they do not surcharge the sides of the excavation. Surface drainage should be carefully controlled to prevent flow of water over the slopes and/or into the excavations. Construction slopes should be closely observed for signs of mass movement, including tension cracks near the crest or bulging at the toe. If potential stability problems are observed, a geotechnical engineer should be contacted immediately. Shoring, bracing or underpinning required for the project (if any) should be designed by a professional engineer registered in the State of Texas.

Due to the nature of the clayey soils found near the surface at the borings, traffic of heavy equipment (including heavy compaction equipment) may create pumping and general deterioration of shallow soils. Therefore, some construction difficulties should be anticipated during periods when these soils are saturated.

## **7.2 Foundation Excavations**

All foundation excavations should be monitored to verify foundations bear on suitable material. The bearing stratum exposed in the base of all foundation excavations should be protected against any detrimental change in conditions. Surface runoff water should be drained away from excavations and not allowed to collect. All concrete for foundations should be placed as soon as practical after the excavation is made. Drilled piers should be excavated and concrete placed the same day.

Prolonged exposure of the bearing surface to air or water will result in changes in strength and compressibility of the bearing stratum. Therefore, if delays occur, straight shaft drilled piers should be slightly widened and deepened to provide a fresh penetration surface, or a new (deeper) full penetration should be provided. Grade beam excavations for slab foundations should be slightly deepened and cleaned, in order to provide a fresh bearing surface.

All pier shafts should have a diameter of at least  $1/30^{\text{th}}$  of the shaft length or 1.5 ft, whichever is greater, to facilitate clean-out of the base and proper monitoring. Concrete placed in pier holes should be directed through a tremie, hopper, or equivalent. Placement of concrete should be vertical through the center of the shaft without hitting the sides of the pier or reinforcement to reduce the possibility of segregation of aggregates. Concrete placed in piers should have a minimum slump of 5 inches (but not greater than 7 inches) to avoid potential honey-combing.

Observations during pier drilling should include, but not necessarily be limited to, the following items:



Verification of proper bearing strata and consistency of subsurface stratification with regard to boring logs,

Confirmation the minimum required penetration into the bearing strata is achieved,

Complete removal of cuttings from bottom of pier holes,

Proper handling of any observed water seepage and sloughing of subsurface materials,

No more than 2 inches of standing water should be permitted in the bottom of pier holes prior to placing concrete, and

Verification of pier diameter, and steel reinforcement.

Groundwater was noted at depths of about 13 to 68 ft in Borings 1 through 6 and 22 immediately upon completion of drilling. From our experience, groundwater seepage could also be encountered at shallow depths at the site during pier installation, and the risk of encountering seepage is increased during or after periods of precipitation. Submersible pumps, bailing tools, and/or temporary casing may be required to control groundwater seepage encountered during the pier drilling. The casing should be properly seated into clay or shale below the depth of seepage and groundwater should be removed prior to beginning the design penetration. As casing is extracted, care should be taken to maintain a positive head of plastic concrete and minimize the potential for intrusion of sloughing of fill soils. It is recommended a separate bid item be provided for casing on the contractor's bid schedule. Pier drilling contractors experienced in similar soil and groundwater conditions should be utilized for this project.

Groundwater can also occur within fractures in the bearing stratum and this may require extending the casing and deepening the piers. From our experience with similar soil and rock conditions, sometimes groundwater cannot be controlled by the use of casing, and underwater placement of pier concrete may be required. Special mix designs are usually required for tremied or pumped concrete. Proper concreting procedures should include placement of concrete from the bottom to the top of the pier using a sealed tremie or pumped concrete. The tremie should be maintained at least 5 ft into the wet concrete during placement. It is recommended a separate bid item be provided for casing and underwater concrete placement on the contractor's bid schedule. Pier drilling contractors experienced in similar soil and groundwater conditions should be utilized for this project.

Although not encountered at the borings, fill materials can contain debris which can cause obstruction to pier installation. The pier installation contract should contain provisions for penetration or removal of obstructions.

Hard limestone seams and layers were encountered at various depths within the gray shale bearing stratum for drilled piers. *Further, hard limestone layers were encountered at varying depths during pier installation for structures in other phases of development.*



These limestone layers within the shale are often discontinuous and can occur randomly with depth. Some of these materials are very hard and could cause obstruction to pier installation. Rock teeth and/or core barrels may be required during excavation for drilled pier foundations. The drilled pier contract should contain provision for the penetration or removal of obstructions.

### **7.3 Fill Compaction**

**Select, Non-Expansive Fill:** Materials used as select, non-expansive fill should have a liquid limit less than 35, a plasticity index (PI) not less than 5 nor greater than 15. All select, non-expansive fill should contain no deleterious material and should be compacted to a dry density of at least 98 percent standard Proctor maximum dry density (ASTM D 698) and within the range of 1 percentage point below to 3 percentage points above the material's optimum moisture content. (Note: The plasticity index and liquid limit of material used as select, non-expansive fill should be verified during fill placement using laboratory tests. Visual observation and classification should not be relied upon to confirm the material to be used as select, non-expansive fill satisfies the above Atterberg-limit criteria.)

**Flexible Base Material:** Flexible Base material used as non-expansive fill for the building pad area should meet the requirements of TxDOT Item 247, Type A, Grade 1 or 2. Processed concrete meeting TxDOT Item 247, Grade 1 or 2, Type D is also acceptable for as non-expansive material. The material should be compacted to a minimum 95 percent of standard Proctor maximum dry density (ASTM D 698) and within 3 percentage points of the material's optimum moisture content.

The following recommendations pertain to fill soils placed for general site grading as follows:

- *Outside* the designated building pad areas *if* moisture conditioning will be used as the method for subgrade improvement. Where moisture conditioning is utilized for subgrade improvement, all fill within the designated building pad areas, plus at least 5 ft outside the limits of the building pad areas, should meet the requirements of Section 6.3 discussed earlier.
- For general grading *including* building areas *if* water pressure injection will be used as the method for subgrade improvement.

Clay and shaly clay soils with a plasticity index equal to or greater than 25 should be compacted to a dry density between 93 and 98 percent of standard Proctor maximum dry density (ASTM D 698). The compacted moisture content of the clays during placement should be within the range of 2 to 6 percentage points above optimum.

Clay fill should be processed and the largest particle or clod should be less than 6 inches prior to compaction.

Compaction should be accomplished by placing fill in about 8-inch thick loose lifts and compacting each lift to at least the specified minimum dry density. Field density and moisture content tests should be performed on each lift.



In cases where either mass fills or utility lines are more than 10 ft deep, the fill/backfill below 10 ft should be compacted to at least 98 percent of standard Proctor maximum dry density (ASTM D-698) and within 2 percentage points of the material's optimum moisture content. The portion of the fill/backfill shallower than 10 ft should be compacted as outlined above.

Even if fill is properly compacted, fills in excess of about 10 ft are still subject to settlements over time of up to about 1 to 2 percent of the total fill thickness. This should be considered when designing utility lines under pavements and/or wall backfill.

#### **7.4 Groundwater**

Groundwater was encountered in Borings 1 through 6 and 22 at depths of about 13 to 68 ft below the existing ground surface immediately following completion of drilling. From our experience with similar soils, groundwater seepage could be encountered in excavations for grade beams, foundations, utility conduits and other general excavations.

The risk of encountering seepage increases with depth of excavation and during or after periods of precipitation. Standard sump pits and pumping may be adequate to control minor seepage on a local basis.

In any areas where cuts made to establish final grades, attention should be given to possible seasonal water seepage that could occur through natural cracks and fissures in the newly exposed stratigraphy. In these areas subsurface drains may be required to intercept seasonal groundwater seepage. The need for these or other dewatering devices should be carefully addressed during construction. Our office could be contacted to visually observe final grades to evaluate the need for such drains.



## **8.0 LIMITATIONS**

Professional services provided in this geotechnical exploration were performed, findings obtained, and recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. The scope of services provided herein does not include an environmental assessment of the site or investigation for the presence or absence of hazardous materials in the soil, surface water or groundwater. ALPHA, upon written request, can be retained to provide these services.

ALPHA TESTING, INC. is not responsible for conclusions, opinions or recommendations made by others based on this data. Information contained in this report is intended for the exclusive use of the Client (and their designated design representatives), and is related solely to design of the specific structures outlined in Section 2.0. No party other than the Client (and their designated design representatives) shall use or rely upon this report in any manner whatsoever unless such party shall have obtained ALPHA's written acceptance of such intended use. Any such third party using this report after obtaining ALPHA's written acceptance shall be bound by the limitations and limitations of liability contained herein, including ALPHA's liability being limited to the fee paid to it for this report. Recommendations presented in this report should not be used for design of any other structures except those specifically described in this report. In all areas of this report in which ALPHA may provide additional services if requested to do so in writing, it is presumed that such requests have not been made if not evidenced by a written document accepted by ALPHA. Further, subsurface conditions can change with passage of time. Recommendations contained herein are not considered applicable for an extended period of time after the completion date of this report. It is recommended our office be contacted for a review of the contents of this report for construction commencing more than one (1) year after completion of this report. Non-compliance with any of these requirements by the Client or anyone else shall release ALPHA from any liability resulting from the use of, or reliance upon, this report.

Recommendations provided in this report are based on our understanding of information provided by the Client about characteristics of the project. If the Client notes any deviation from the facts about project characteristics, our office should be contacted immediately since this may materially alter the recommendations. Further, ALPHA TESTING, INC. is not responsible for damages resulting from workmanship of designers or contractors. It is recommended the Owner retain qualified personnel, such as a Geotechnical Engineering firm, to verify construction is performed in accordance with plans and specifications.



# APPENDIX





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## **SOIL MODIFICATION WATER PRESSURE INJECTION (WPI) GUIDELINE SPECIFICATIONS**

### **Purpose**

The purpose of this specification is to provide a procedural basis for using water pressure injection as a method to obtain a relatively uniform, moist, pre-swelled zone of soil beneath the floor slab. Specifically, the intent of this procedure is to reduce the average free swell potential of soils within the injected zone to 1 percent or less.

### **Material**

1. Only potable water shall be used during the entire injection process.
2. A non-ionic surfactant (wetting agent) will be added to the water according to manufacturer's recommendations, but, in no case will proportions be less than one part (undiluted) per 3,500 gallons of water.

### **Application**

1. The water pressure injection work shall be accomplished after the site has been brought to near final subgrade elevation and prior to installation of any plumbing, trenches and utilities.
2. The injection vehicle will have a minimum gross weight of 5 tons and shall be capable of making straight vertical penetrations to minimize pressure loss around the injector rods to at least 10 ft.
3. Injections will be continued to "REFUSAL" (until the maximum reasonable quantity of water has been injected into the soil and water is flowing freely at the surface, either out of previous injection holes or from areas where the surface soils have fractured. The amount of water flowing from the areas described above will be approximately equivalent to the volume of water being pumped into the soil. As a minimum, injections should be at least 30 seconds at each injection interval unless altered by the Geotechnical Engineer).

Note: Loss of water or blow-back around injector pipes does not constitute refusal. Continued loss of water in this manner may indicate inadequate injection equipment or techniques, or in some instances, surficial soils that will not form an adequate seal to contain the water. In either instance, the owner's representative should be contacted and an on-site observation made to determine appropriate steps to achieve adequate injection.

After completion of water injection, the injection contractor will submit records which reflect the total quantity of water used. The injection contractor will be totally responsible for determining the means and methods of injecting the on-site soils such that the average free swell of soils within the injected zone does not exceed 1 percent.

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4. Injection pipe(s) will penetrate the soil in approximately 12 to 18-inch intervals, injecting to refusal at each interval for a total depth of 10 ft or impenetrable material, whichever occurs first. If a seemingly impenetrable layer is encountered, ALPHA TESTING, INC. must be contacted to evaluate the significance of the lack of penetration with the injector tubes or provide alternate recommendations. A minimum of seven (7) injection intervals will be provided for the 10-ft injection depth. The lower portion of the injection pipe will consist of a hole pattern that will uniformly disperse water throughout the entire depth.
  5. Spacing for the injections will not exceed 5 feet on-center each way. Subsequent injections will be offset laterally at one-half the distance in both directions between the original injection centers.
  6. Injection pressures should be adjusted to inject the greatest quantity of water possible within a pressure range of 50 - 200 psi pump pressure.
  7. After a minimum curing time of 48 hours, the water injected pad shall be tested for moisture content and swell abatement to determine if additional injections with water are necessary. Subsequent water injections will be 5 feet on-center each way and spaced 2½ feet offset in two orthogonal directions from the initial injection.
  8. Upon completion of the final water pressure injection, the top surface of the injected pad should be scarified to a depth of at least 6 inches and re-compacted to between 93 and 98 percent of the optimum density, at a moisture content between 2 and 4 percentage points above the optimum values, as defined by ASTM D-698. Compaction tests should be performed at a frequency of 1 test per 5,000 sq ft with a minimum of three (3) tests per pad.
  9. The moisture content of the injected soils will be maintained until the floor slab is placed. Loss of moisture from the surface or sides of the building pad must be prevented by watering or use of a membrane. Any open trenches should be sealed or kept wet to prevent loss of moisture. All trenches should be backfilled with the excavated material. The moisture content of the backfill should be maintained in the range of 2 to 4 percentage points above optimum.
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### **Special Considerations**

Several water injections may be required to achieve the desired final moisture content and corresponding soil swell abatement. Due to variations in the subsurface soils, the number of injection passes required to reduce the swell potential of the injected soils to 1 percent or less is unknown. Hence, the Client should allow for extra construction time on the site considering the time frame required to achieve the desired reduction in swell potential is unknown. Further, the contract with the Injection Contractor should address the situation where more injection passes than predicted are required to achieve the desired result.

Between the time the subgrade is water pressure injected and either the select fill material or plastic sheeting is placed, the upper surface of the injected soil should not be allowed to dry. To allow for adequate pre-swelling of the soils from the injection procedure, concrete for slabs should not be placed above injected areas until at least two (2) weeks following the final water injection. During this two-week period, the surface of the injected soil must be kept moist or covered with plastic sheeting to prevent moisture loss. About 3 to 4 inches or more of heave can be expected in building pad during and shortly after completion of the injection process.

Additionally, experience indicates injection adjacent to existing structures supported at or near the existing ground surface (such as, but not limited to, buildings, roads, and utility conduits) can result in swelling of soil in the injected zone as well as those beneath existing nearby structures. Swelling of soil supporting existing floor slabs can result in distress (movement) to existing buildings. Therefore, if an existing building or other structure is located within 30 ft of the proposed water injection area, it is recommended a temporary vertical moisture barrier be installed longitudinally between the existing structure and the injected pad to prevent injected water from entering the subgrade of the existing structure. The moisture barrier could consist of a 12 ft deep trench, about 1 ft wide, backfilled with lean concrete or other suitable relatively impermeable material.

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## **Monitoring**

A full-time ALPHA TESTING, INC. technician should be retained and present throughout the injection operations. Moisture content and free swell samples should be taken at 1-foot intervals to the total depth injected from a minimum of one test boring per each 4,000 sq feet of injected area (minimum two borings per pad). The moisture content and shear strength (using a pocket-penetrometer) will be determined for each sample. One-dimension free swell tests (ASTM D 4546-85 Method B) will be performed on selected samples at a frequency of at least two three (3) free swell tests per test boring for the 10 ft injection depth. The free swell tests will be performed with a surcharge equal to the overburden pressure anticipated upon completion of the new structure. Based upon the test results, the current swell potential of the injected soils should be determined by the project Geotechnical Engineer. Acceptance criteria for water pressure injection will be based upon achieving the potential movements indicated in the Geotechnical Exploration. As a guide, an average free swell of 1 percent or less in the injected zone could be used for planning. However, due to variations in the soils across the site, an average free swell of more than 1 percent may be allowable in some areas. Acceptance of soils with average free swells of more than 1 percent should be evaluated by ALPHA TESTING, INC. Depending upon the moisture content and the potential swell remaining in the existing injected soils, additional injections with water containing surfactant may be required until these requirements are met.

Wet and soft surface conditions resulting from the water injection procedures will require the contractor to provide access to drilling equipment used to obtain the soil samples which verify the injection process. Special track equipment may be required to provide the required access. The contractor will be responsible for providing and operating suitable equipment to permit sampling of the injected soils (test borings) with a standard truck-mounted drilling rig.

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## **A-1 METHODS OF FIELD EXPLORATION**

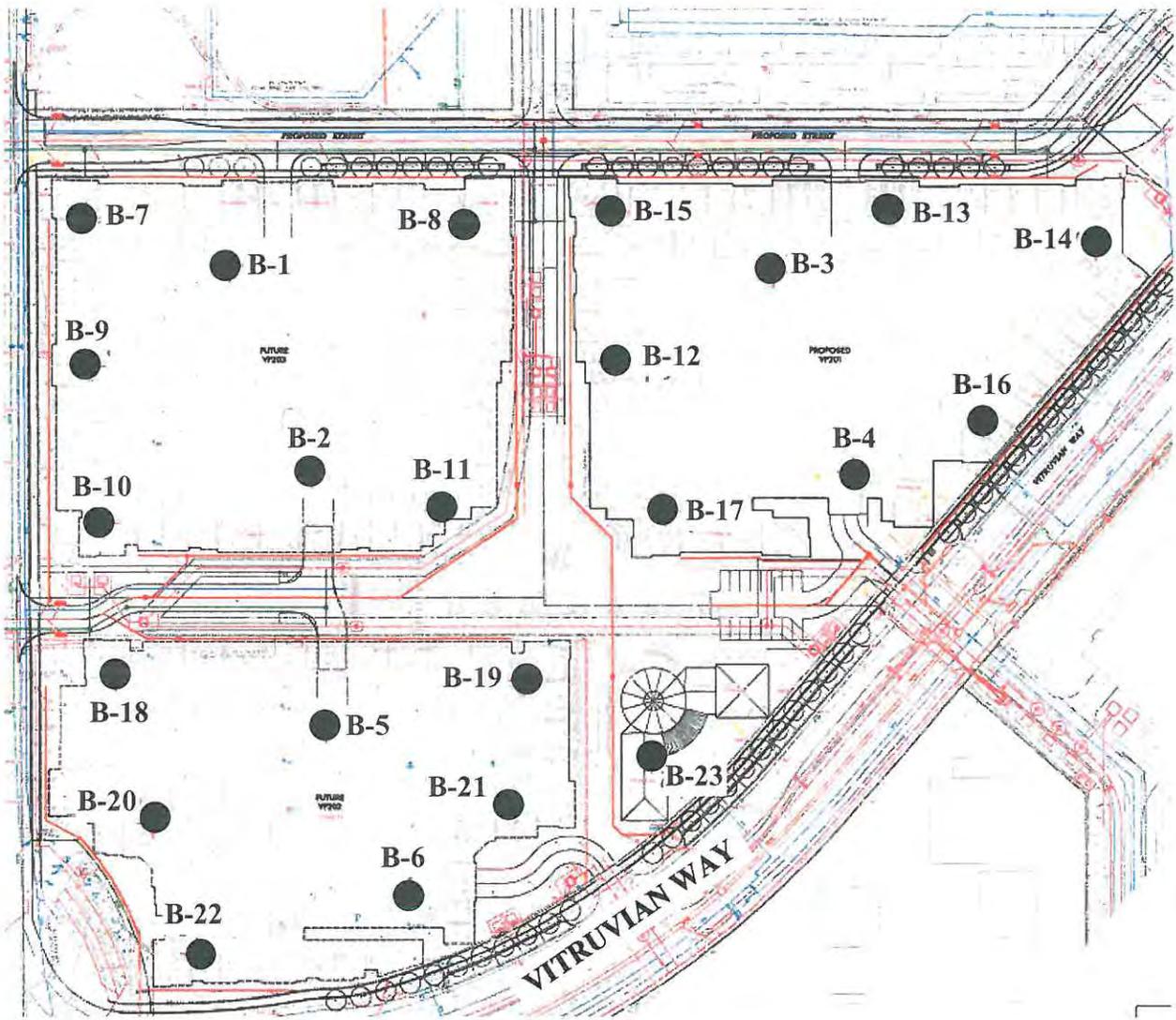
Using standard rotary drilling equipment, a total of twenty-three (23) test borings were performed for this geotechnical exploration at the approximate locations shown on the Boring Location Plan, Figure 1. The test boring locations were located by using a handheld GPS device or by pacing or taping and estimating right angles from landmarks which could be identified in the field and as shown on the site plan provided during this study. The locations of the test borings shown on the Boring Location Plan are considered accurate only to the degree implied by the method used to locate the borings.

Relatively undisturbed samples of the cohesive subsurface materials were obtained by hydraulically pressing 3-inch O.D. thin-wall sampling tubes into the underlying soils at selected depths (ASTM D 1587). These samples were removed from the sampling tubes in the field and examined visually. One representative portion of each sample was sealed in a plastic bag for use in future visual examinations and possible testing in the laboratory.

Texas Cone Penetration (TCP) tests were used to assess the apparent in-place strength characteristics of the materials encountered at the borings. The tests were conducted in accordance with TxDOT Test Method TEX 132-E. A 3-inch diameter steel cone driven by a 170-pound hammer dropped 24 inches is the basis for Texas Department of Transportation (TxDOT) strength correlations. Depending on the resistance (strength) of the materials, either the number of blows of the hammer required to provide 12 inches of penetration, or the inches of penetration of the cone due to 100 blows of the hammer are recorded on the field logs and are shown on the Drilling Logs.

Logs of all borings are included in the Appendix of this report. The logs show visual descriptions of subsurface strata encountered using the Unified Soil Classification System. Sampling information, pertinent field data, and field observations are also included. Samples not consumed by testing will be retained in our laboratory for at least 14 days and then discarded unless the Client requests otherwise.

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● Approximate Boring Locations

Geotechnical Exploration  
 Vitruvian Park - Buildings 201, 202 and 203  
 Off Vitruvian Way  
 Addison, Texas  
 Alpha Project No. G152235



Boring Location Plan  
 Figure 1



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## **B-1 METHODS OF LABORATORY TESTING**

Representative samples were examined and classified by a qualified member of the Geotechnical Division and the boring logs were edited as necessary. To aid in classifying the subsurface materials and to determine the general engineering characteristics, natural moisture content tests (ASTM D 2216), Atterberg-limit tests (ASTM D 4318), and dry unit weight determinations were performed on selected samples. In addition, unconfined compression tests (ASTM D 2166) and pocket-penetrometer tests were conducted on selected soil samples to evaluate soil shear strength. Results of all laboratory tests described above are provided on the accompanying Log of Boring sheets.

In addition to the Atterberg-limit tests, the expansive properties of the clay soils were further analyzed by absorption swell tests. The swell test is performed by placing a selected sample in a consolidation machine and applying either the approximate current or expected overburden pressure and then allowing the sample to absorb water. When the sample exhibits very little tendency for further expansion, the height increase is recorded and the percent free swell and total moisture gain calculated. Results of the absorption swell test are provided on the Swell Test Data sheet, Figure 2 included in this appendix.

---

# SWELL TEST DATA

Boring No.	1	2	3	4	5
Average Depth, ft	14	14	9	14	14
Dry Unit Weight, pcf	106	105	98	89	102
Liquid Limit	66	69	71	79	67
Plastic Limit	22	23	24	30	23
Plasticity Index	44	46	47	49	44
Initial Moisture Content	18%	23%	26%	34%	25%
Final Moisture Content	24%	26%	29%	37%	27%
Free Swell	0.8%	1.5%	0.0%	0.0%	0.3%

Boring No.	6	7	8	10	12
Average Depth, ft	9	9	3	5	7
Dry Unit Weight, pcf	107	103	110	97	103
Liquid Limit	41	76	72	70	76
Plastic Limit	17	26	24	24	25
Plasticity Index	24	50	48	46	51
Initial Moisture Content	20%	21%	20%	26%	25%
Final Moisture Content	23%	24%	25%	30%	28%
Free Swell	0.0%	0%	4.4%	0%	1.5%

Boring No.	13	15	16	17	18
Average Depth, ft	5	9	5	14	3
Dry Unit Weight, pcf	92	100	110	86	103
Liquid Limit	62	66	73	89	70
Plastic Limit	21	22	26	28	24
Plasticity Index	41	44	47	61	46
Initial Moisture Content	26%	26%	19%	39%	23%
Final Moisture Content	29%	29%	23%	39%	29%
Free Swell	0%	1.5%	2.8%	0%	4.7%

Boring No.	19	20	21	22	23
Average Depth, ft	7	3	5	9	3
Dry Unit Weight, pcf	102	98	95	108	99
Liquid Limit	35	70	79	56	71
Plastic Limit	18	24	24	21	25
Plasticity Index	17	46	55	35	46
Initial Moisture Content	19%	27%	25%	21%	24%
Final Moisture Content	24%	30%	32%	24%	32%
Free Swell	0%	0.8%	1.6%	0.7%	3.7%

Geotechnical Exploration  
 Vitruvian Park - Buildings 201, 202 and 203  
 Off Vitruvian Way  
 Addison, Texas  
 Alpha Project No. G152235



Swell Test Data  
 Figure 2







**Client:** DCO Realty, Inc. **Location:** Addison, Texas  
**Project:** Vitruvian Park - Buildings 201, 202 and 203 **Surface Elevation:** \_\_\_\_\_  
**Start Date:** 10/2/2015 **End Date:** 10/2/2015 **West:** \_\_\_\_\_  
**Drilling Method:** CONTINUOUS FLIGHT AUGER **North:** \_\_\_\_\_  
**Hammer Drop (lbs / in):** 170 / 24

Depth, feet	Graphic Log	GROUND WATER OBSERVATIONS		Sample Type	Recovery % RQD	TX Cone or Std. Pen. (blows/ft.in)	Pocket Penetrometer (tsf)	Unconfined Comp. Strength (tsf)	% Passing No. 200 Sieve	Unit Dry Weight (pcf)	Water Content, %	Liquid Limit	Plastic Limit	Plasticity Index
		▽ On Rods (ft): <u>21</u>	▼ After Drilling (ft): <u>Dry</u>											
MATERIAL DESCRIPTION														
0 - 2.0		Brown CLAY with sand and gravel-FILL	2.0				4.5+							
2.0 - 5.0		Dark Brown CLAY					4.5+				21			
5.0 - 6.0		Tan and Gray CLAY	6.0				4.5+				25			
6.0 - 10.0		Tan and Gray CLAY					3.5				21			
10.0 - 13.0		Tan and Gray SHALY CLAY	13.0				4.0				31			
13.0 - 15.0		Tan and Gray SHALY CLAY					4.5+				32	79	30	49
15.0 - 20.0		-gray below 18'	20.0				4.5+				15			
20.0 - 25.0		▽ Gray SHALE												
25.0 - 30.0							100/ 5.75"							
30.0 - 35.0							100/ 5							
35.0 - 40.0							100/ 5							
40.0 - 45.0							100/ 6"							
45.0 - 50.0							100/ 4.75"							
50.0 - 55.0							100/ 5.25"							
55.0 - 60.0							100/ 3.5"							
60.0 - 65.0		-3" thick layer limestone seam					100/ 3.5"							
65.0 - 70.0							100/ 4.25"							
70.0 - 75.0		TEST BORING TERMINATED AT 70 FT	70.0				100/ 4.5"							





Client: DCO Realty, Inc.  
Project: Vitruvian Park - Buildings 201, 202 and 203  
Start Date: 10/7/2015 End Date: 10/7/2015  
Drilling Method: CONTINUOUS FLIGHT AUGER

Location: Addison, Texas  
Surface Elevation: \_\_\_\_\_  
West: \_\_\_\_\_  
North: \_\_\_\_\_  
Hammer Drop (lbs / in): 170 / 24

Depth, feet	Graphic Log	GROUND WATER OBSERVATIONS		Sample Type	Recovery % RQD	TX Cone or Std. Pen. (blows/ft.in)	Pocket Penetrometer (tsf)	Unconfined Comp. Strength (tsf)	% Passing No. 200 Sieve	Unit Dry Weight (pcf)	Water Content, %	Liquid Limit	Plastic Limit	Plasticity Index
		▽ On Rods (ft):	None											
MATERIAL DESCRIPTION														
0 - 4.0		Dark Brown CLAY					3.5							
4.0 - 13.0		Tan and Gray CLAY					2.5	1.1		91	31			
13.0 - 15.0		Tan and Gray SHALY CLAY					2.0				31			
15.0 - 20.0		Tan and Gray SHALY CLAY					3.25				33			
20.0 - 20.0		TEST BORING TERMINATED AT 20 FT					4.5+				33	76	26	50
20.0 - 75.0							4.5+				25			







Client: DCO Realty, Inc.  
Project: Vitruvian Park - Buildings 201, 202 and 203  
Start Date: 10/8/2015 End Date: 10/8/2015  
Drilling Method: CONTINUOUS FLIGHT AUGER

Location: Addison, Texas  
Surface Elevation: \_\_\_\_\_  
West: \_\_\_\_\_  
North: \_\_\_\_\_  
Hammer Drop (lbs / in): 170 / 24

Depth, feet	Graphic Log	GROUND WATER OBSERVATIONS		Sample Type	Recovery % RQD	TX Cone or Std. Pen. (blows/ft.in)	Pocket Penetrometer (tsf)	Unconfined Comp. Strength (tsf)	% Passing No. 200 Sieve	Unit Dry Weight (pcf)	Water Content, %	Liquid Limit	Plastic Limit	Plasticity Index
		▽ On Rods (ft):	None											
MATERIAL DESCRIPTION														
0-2		Tan CLAY with rock fragments-FILL	2.0				4.5+							
2-5		Dark Brown CLAY					4.5+				23	69	23	46
5-6			6.0				4.5+				25			
6-8		Tan and Gray CLAY					3.0				23			
8-10		Tan and Gray SHALY CLAY					2.75				30			
10-15							4.5+				29			
15-20							4.5+							
20-75		TEST BORING TERMINATED AT 20 FT	20.0				4.5+							





**Client:** DCO Realty, Inc.  
**Project:** Vitruvian Park - Buildings 201, 202 and 203  
**Start Date:** 10/8/2015 **End Date:** 10/8/2015  
**Drilling Method:** CONTINUOUS FLIGHT AUGER

**Location:** Addison, Texas  
**Surface Elevation:** \_\_\_\_\_  
**West:** \_\_\_\_\_  
**North:** \_\_\_\_\_  
**Hammer Drop (lbs / in):** 170 / 24

Depth, feet	Graphic Log	GROUND WATER OBSERVATIONS		Sample Type	Recovery % RQD	TX Cone or Std. Pen. (blows/ft.in)	Pocket Penetrometer (tsf)	Unconfined Comp. Strength (tsf)	% Passing No. 200 Sieve	Unit Dry Weight (pcf)	Water Content, %	Liquid Limit	Plastic Limit	Plasticity Index
		▽ On Rods (ft):	None											
MATERIAL DESCRIPTION														
0 - 2.0		2.0					4.5+							
2.0 - 5.0		5.0				100/ 3"								
5.0 - 8.0		8.0				100/ 2"								
8.0 - 11.0		11.0				100/ 3.5"								
11.0 - 15.0		15.0				100/ 1.5"								
15.0 - 20.0		20.0				91/ 10.75"								
20.0 - 75.0	TEST BORING TERMINATED AT 20 FT													







Client: DCO Realty, Inc.

Location: Addison, Texas

Project: Vitruvian Park - Buildings 201, 202 and 203

Surface Elevation: \_\_\_\_\_

Start Date: 10/7/2015 End Date: 10/7/2015

West: \_\_\_\_\_

Drilling Method: CONTINUOUS FLIGHT AUGER

North: \_\_\_\_\_

Hammer Drop (lbs / in): 170 / 24

Depth, feet	Graphic Log	GROUND WATER OBSERVATIONS		Sample Type	Recovery % RQD	TX Cone or Std. Pen. (blows/ft.in)	Pocket Penetrometer (tsf)	Unconfined Comp. Strength (tsf)	% Passing No. 200 Sieve	Unit Dry Weight (pcf)	Water Content, %	Liquid Limit	Plastic Limit	Plasticity Index
		▽ On Rods (ft):	None											
MATERIAL DESCRIPTION														
5		Dark Brown CLAY					4.25				25	70	24	46
		-brown below 6'	8.0				4.5+				25			
10		Tan and Gray CLAY					2.5				28			
				13.0			2.5				31			
15		Tan and Gray SHALY CLAY					3.5							
20							4.25				29			
							4.5+							
20		TEST BORING TERMINATED AT 20 FT												
25														
30														
35														
40														
45														
50														
55														
60														
65														
70														
75														











**KEY TO SOIL SYMBOLS  
AND CLASSIFICATIONS**

SOIL & ROCK SYMBOLS

	(CH), High Plasticity CLAY
	(CL), Low Plasticity CLAY
	(SC), CLAYEY SAND
	(SP), Poorly Graded SAND
	(SW), Well Graded SAND
	(SM), SILTY SAND
	(ML), SILT
	(MH), Elastic SILT
	LIMESTONE
	SHALE / MARL
	SANDSTONE
	(GP), Poorly Graded GRAVEL
	(GW), Well Graded GRAVEL
	(GC), CLAYEY GRAVEL
	(GM), SILTY GRAVEL
	(OL), ORGANIC SILT
	(OH), ORGANIC CLAY
	FILL

SAMPLING SYMBOLS

	SHELBY TUBE (3" OD except where noted otherwise)
	SPLIT SPOON (2" OD except where noted otherwise)
	AUGER SAMPLE
	TEXAS CONE PENETRATION
	ROCK CORE (2" ID except where noted otherwise)

RELATIVE DENSITY OF COHESIONLESS SOILS (blows/ft)

VERY LOOSE	0 TO 4
LOOSE	5 TO 10
MEDIUM	11 TO 30
DENSE	31 TO 50
VERY DENSE	OVER 50

SHEAR STRENGTH OF COHESIVE SOILS (tsf)

VERY SOFT	LESS THAN 0.25
SOFT	0.25 TO 0.50
FIRM	0.50 TO 1.00
STIFF	1.00 TO 2.00
VERY STIFF	2.00 TO 4.00
HARD	OVER 4.00

RELATIVE DEGREE OF PLASTICITY (PI)

LOW	4 TO 15
MEDIUM	16 TO 25
HIGH	26 TO 35
VERY HIGH	OVER 35

RELATIVE PROPORTIONS (%)

TRACE	1 TO 10
LITTLE	11 TO 20
SOME	21 TO 35
AND	36 TO 50

PARTICLE SIZE IDENTIFICATION (DIAMETER)

BOULDERS	8.0" OR LARGER
COBBLES	3.0" TO 8.0"
COARSE GRAVEL	0.75" TO 3.0"
FINE GRAVEL	5.0 mm TO 3.0"
COURSE SAND	2.0 mm TO 5.0 mm
MEDIUM SAND	0.4 mm TO 5.0 mm
FINE SAND	0.07 mm TO 0.4 mm
SILT	0.002 mm TO 0.07 mm
CLAY	LESS THAN 0.002 mm

## TRANSMITTAL OF ADDENDUM

\*\*\*\*\*

### INSTRUCTIONS:

Acknowledge receipt of Addenda with the form below. Inclusion of this completed acknowledgement in final bid package is mandatory for bid acceptance.

\*\*\*\*\*

### Addendum Acknowledgment

I acknowledge the receipt of Addendum No.: 1 Total # of Pages: 9

Town of: Addison, Texas

Project Name: Vitruvian Park Public Infrastructure - Phase V

The undersigned bidder hereby certifies that Addendum No. 1 has been incorporated into the proposal and if accepted becomes part of the contract.

Company Name:

Flow-Line Construction, Inc.

Signed By (Print Name):

[Signature]

Signature:

Eduardo M. Hernandez

Date:

10/25/2016

Phone No:

214-390-2848

**PLEASE SIGN & INCLUDE THIS PAGE IN FINAL  
BID PACKAGE**



16-184 VITRUVIAN PARK PUBLIC INFRASTRUCTURE – PHASE V  
PRE-BID CONFERENCE 10/13/2016

Question 1. Who will be building temporary access crossings?

Answer: Building Contractor

Question 2. Will building contractor be responsible for paving after phase 1 has completed?

Answer: All paving is to occur in phase III. Acceptance of final paving inspection will be required upon completion of phase 3. Owner will be responsible for providing release to infrastructure contractor upon receipt of acceptance. UDR will be responsible for any paving repairs after acceptance by owner until completion of the corresponding building project.

Question 3. Is 180-day schedule flexible?

Answer: Yes – during pre-bid conference it was determined a new schedule of 270 calendar days would be acceptable, with an anticipated weekly schedule of Monday through Saturday in accordance with all town ordinances.

Question 4. Will there be an extra cost for required town inspections on Saturday?

Answer: No.

Question 5. Is there a requirement for construction forces?

Answer. No

Question 6. Will the Town provide water meters?

Answer: No. The Town has a list of acceptable suppliers.

Question 7. Where there is a requirement of Repair of Existing Irrigation System, is there an owner allowance for contingency of repairs, and/or a way to locate current irrigation systems (as-builts) and working conditions?

Answer. Irrigation systems are in good working order. There are no available as-builts for the irrigation system.

Question 8. Are duct bank plans approved by Oncor?

Answer: Yes.

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CORPUS CHRISTI, TX 78411  
361.400.2929

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SAN ANTONIO, TX 78216  
210.525.0647

DALLAS/FORT WORTH

16051 ADDISON ROAD, SUITE 211  
ADDISON, TX 75001  
210.468.4211



Question 9. Will there be any remedy if the building contractor causes delays to the infrastructure contractor?

Answer: Infrastructure contractor should coordinate with building contractor to ensure mitigation of delays.

Question 10. Will there be scheduling meetings with building contractor and owner?

Answer: Yes. It is anticipated that there will be weekly meetings held on site with all relevant parties.

Question 11. What material is footing of retaining wall exposed on the west side?

Answer: Not known.

Question 12. In areas not accessible to large paving equipment will slip form be allowed?

Answer: Yes.

Question 13. Does the parks department have a requirement to retain removed trees?

Answer: No.

Question 14. How many duplicates of bid are required?

Answer: 1 original, 2 copies and electronic copy (thumbdrive) are required. Electronic bidding on bidsyn.com will not be considered for this project.

Question 15. Duct bank questions including transformer size and package questions, Oncor acceptance of smaller bends.

Answer: There is only 1 transformer pad in this design and it is detailed in the design. Bid per design.

Question 16. Will the pre-bid conference sign-in sheet be available on bidsyn.com?

Answer: Yes.

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CURRENTLY UNANSWERED ON BIDSYN  
As of 10/18/2016

Question 3. Who will be the Building Contractor on this project?

Answer: Clark Building Co. is anticipated to be the building contractor.

Question 4. What "control" of this site will the Utility Contractor have over the Building Contractor on this project? What remedies will be available if Building Contractor for example has the area we are working in obstructed or causes the Utility Contractor a delay? I understand we will need to coordinate with the Building Contractor but that doesn't always go smoothly.

Answer: The project construction manager will be over both projects and will resolve any and all conflicts.

Question 5. Note 21D on Plan Sheet 60 states flowable material may be used as select material around manholes when requested. Is this just at the discretion of the Town? Will flowable material be required around manholes? If so how will this be paid?

Answer: Compaction around manholes must be achieved. The use of flowable material is at the discretion of and for the benefit of the selected contractor. No additional funds will be provided for the use of flowable material.

Question 6. What is the anticipated date of mobilization on this project?

Answer: Mobilization will be required within 10 days of the issuance of the notice to proceed (NTP). NTP will be issued within 2 working days of Addison Town Council award of construction contract anticipated on November 14<sup>th</sup> 2016.

Question 7. Is there any flexibility on the 180 day schedule? This seems like a really tight schedule to complete this amount of work.

Answer: Yes – during pre-bid conference it was determined a new schedule of 270 calendar days would be acceptable, with an anticipated weekly schedule of Monday through Saturday in accordance with all town ordinances.

Question 8. Concerning bid item #24. Is this item meant to pay for all the excavation/grading and fill for all areas associated with paving from ROW to ROW?

Answer: Yes.

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Question 9. Concerning Sheet 8 note #17. Will there be a pay item for proof rolling?

Answer: No, this item is subsidiary.

Question 10. Concerning note #23 on sheet 8. This note states all earthwork will be considered unclassified excavation and bid on a lump sum basis. Bid item #24 looks to be for earthwork associated with paved areas. Where is the earthwork associated with unpaved/landscaped areas paid for and what is the anticipated quantity? There is no pay item for unclassified excavation outside of paved areas.

Answer: Bid item #24 is for all earthwork on this project. Note #23 is to notify the contractor that there will be no adjustment in quantity shown unless change in scope of work is approved.

Question 11. Per note #21 on sheet 8. This note says to strip 6" below grade for landscaped areas. Is there a bid item or estimated quantity for this work? Is this to be paid under bid item #176 (Prep of planting beds)?

Answer: No. Note #21 is a reference to mass grading and is included in bid item #24, unclassified excavation.

Question 12. Concerning bid item #24 quantities; Can you breakout how much is embankment or fill and how much is cut?

Answer: No, that is the responsibility of the contractor to verify.

Question 13. Can you provide cut plans for this project for the grading?

Answer: No, cut plans are unnecessary.

Question 14. Concerning bid item #33, constructing concrete street header. What is the depth of the header? Is stabilization required under street header?

Answer: Please reference detail provided on sheet #15. Stabilization will be required under the street header.

Question 15. Where will the dig out under the proposed sidewalks be paid for? What pay item will be used for base under the sidewalks?

Answer: Earthwork for sidewalks is subsidiary to sidewalk construction.

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Question 16. In the additive alternate section what pay items will cover the removal and subgrade for pay item #154 (concrete sidewalks)?

Answer: Earthwork for sidewalks is subsidiary to sidewalk construction.

Question 17. For bid item #147. Please confirm that this is for the Concrete Deepwell Pad only (Detail 205-345) and not to include the 4-Way 25kv Deadfront Switchgear Vista Vault (Detail 205-346) on plan sheet 70.

Answer: Detail 205-346 is not a vault detail. It is a detail for conduit locations for deep well pads only.

Question 18. For bid item 147. How many piers are required for the Concrete Deepwell Pad?

Answer: Four (4)

Question 19. Please confirm that it is not mandatory to bid the additive alternate bid portion of this package.

Answer: It is mandatory to bid the additive alternate bid portion but the Town of Addison reserves the right to not include this in the Award of Bid.

Question 20. Should the irrigation repair items be included in the base bid instead of the additive alternate bid? If the contractor decides not to be the additive alternate package how will the irrigation repair items be paid for?

Answer: Bid items 176, 177, and 178 should be moved to Base Bid as bid items 153, 154, and 155. Delete Additive Alternate Bid Items 174 (Connection to existing irrigation system mainline along Westgate Lane), and Bid Items 176, 177, and 178 (Repair of existing irrigation systems) in their entirety.

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16-184 VITRUVIAN PARK PUBLIC INFRASTRUCTURE – PHASE V  
Miscellaneous Questions & Notifications

Question 1. Can the bid closing date be extended to allow additional time to incorporate RFI responses?

Answer: Yes, the bid closing date has been extended from Thursday, 10/20 to Tuesday 10/25 at 2:00pm CDT

Question 2. Do you have a detail for the asphalt pavement patch associated with the duct bank installation that runs through the parking lot on the NE corner of the project?

Answer: It is not a pavement patch. It is the Town of Addison's standard detail SD-U02 "Utility Asphalt Pavement Repair".

Notification 1: Irrigation Plan Sheets 86 and 87 have been revised.

CORPUS CHRISTI

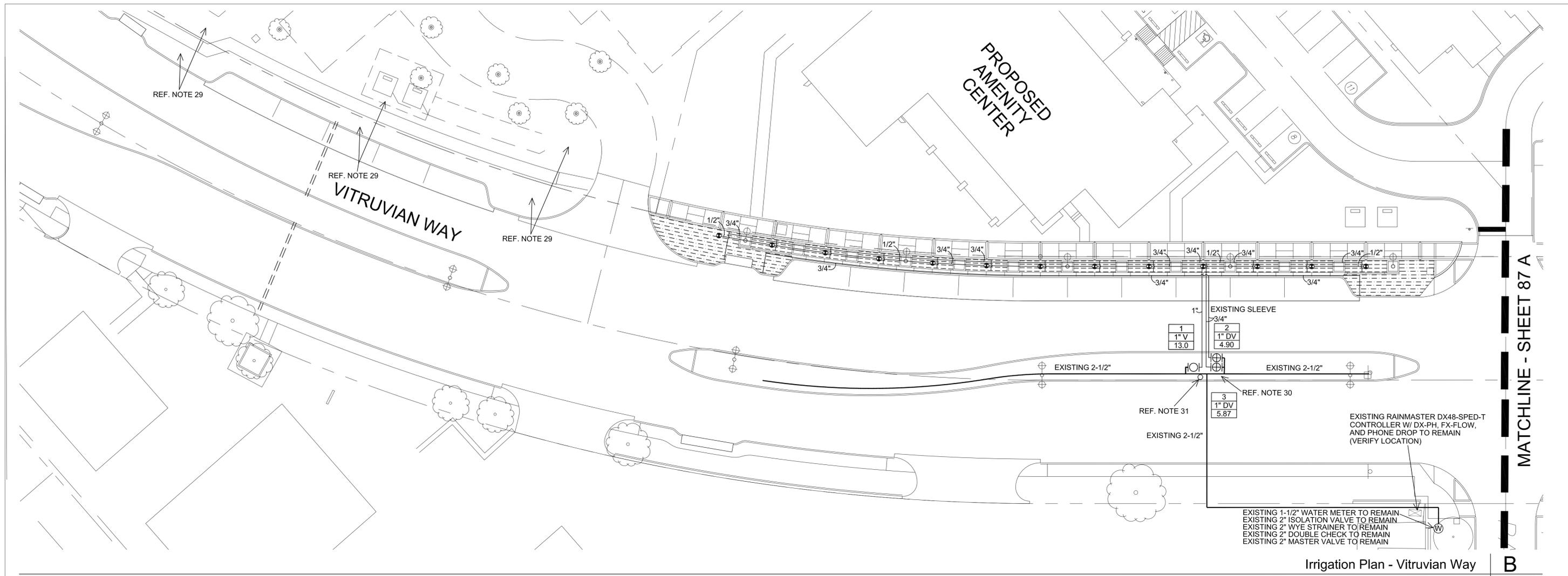
5151 FLYNN PARKWAY, SUITE 500  
CORPUS CHRISTI, TX 78411  
361.400.2929

SAN ANTONIO

401 ISOM ROAD, SUITE 101  
SAN ANTONIO, TX 78216  
210.525.0647

DALLAS/FORT WORTH

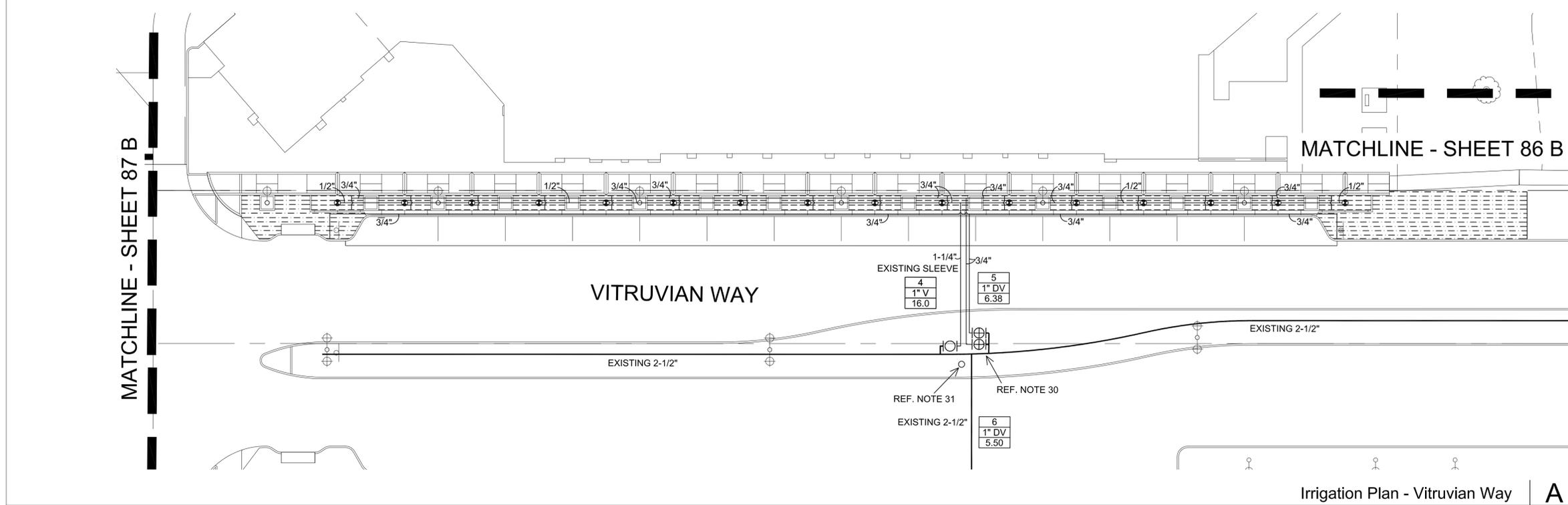
16051 ADDISON ROAD, SUITE 211  
ADDISON, TX 75001  
210.468.4211



Irrigation Plan - Vitruvian Way

B

Scale: 1"=20'



Irrigation Plan - Vitruvian Way

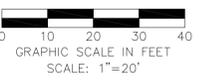
A

Scale: 1"=20'

Irrigation in Texas is regulated by the Texas Commission of Environmental Quality (TCEQ), MC-178, P.O. Box 13887, Austin, Texas, 78711-3887. TCEQ website is: www.tceq.texas.gov



**SETH HEIDMAN**  
IRRIGATION DESIGN & CONSULTING, LLC  
10700 W. Parker Rd., #100, Denver, Colorado, 80231



NO.	REVISION	BY	DATE

**studioOutside**

824 Exposition Avenue, Ste. 5  
Dallas, Texas 75226  
o214.954.7160  
f214.954.7162

PAVING, DRAINAGE & UTILITY IMPROVEMENTS  
VITRUVIAN PARK PUBLIC INFRASTRUCTURE BLOCK 200

TOWN OF ADDISON, TEXAS

IRRIGATION PLAN  
VITRUVIAN WAY

DESIGN	DRAWN	DATE	SCALE	NOTES	Sheet No.
SAH	SAH	OCT 13, 2016	AS NOTED		87

VITRUVIAN PARK BLOCK 200 PUBLIC INFRASTRUCTURE - PROJECT NO. 16071





## Projected Infrastructure Expenditures of Allocated Funding #2 by Project Phase

Improvements	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	Phase 9	Total
Water	0	0	174,990	140,795	166,810	281,375	98,230	\$862,200
Wastewater	0	0	122,495	98,555	116,765	196,962	68,760	\$603,537
Drainage	0	0	560,000	450,550	533,785	900,395	314,346	\$2,759,076
Misc. Utilities	0	0	402,497	323,830	383,660	647,160	225,937	\$1,983,084
Street Paving	0	0	1,312,500	1,055,970	1,251,063	2,110,302	736,740	\$6,466,575
Streetscape	442,530	0	927,495	746,220	884,085	1,491,280	520,630	\$5,012,240
Vitruvian Way Imp.	0	0	250,000	0	0	187,500	187,500	\$625,000
Marsh Imp.	0	0	168,750	0	151,875	168,750	0	\$489,375
Screening Wall	241,230	0	0	828,750	0	0	0	\$1,069,980
Restroom	326,466	0	0	0	0	0	0	\$326,466
Alpha Road Connect	0	1,775,577	0	0	0	0	0	\$1,775,577
FB Creek Improve.	90,000	0	0	0	0	0	0	\$90,000
Future Park Area	0	0	0	0	0	250,000	0	\$250,000
10% Design/Survey	0	0	391,875	364,466	348,805	623,375	215,220	\$1,943,741
4% Inspection	0	0	156,750	145,785	139,520	249,350	86,085	\$777,490
8% Constr. Mgmt.	0	0	313,500	291,575	279,043	498,700	172,170	\$1,554,988
<b>Totals</b>	<b>\$1,100,226</b>	<b>\$1,775,577</b>	<b>\$4,780,852</b>	<b>\$4,446,496</b>	<b>\$4,255,411</b>	<b>\$7,605,149</b>	<b>\$2,625,618</b>	<b>\$26,589,329</b>

# CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.  
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

## OFFICE USE ONLY CERTIFICATION OF FILING

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Flow-Line Construction, Inc.  
Dallas, TX United States

Certificate Number:  
2016-140029

Date Filed:  
11/28/2016

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Town of Addison

Date Acknowledged:

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

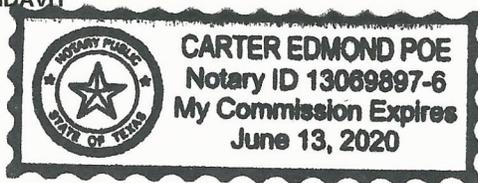
2016-09  
Vitruvian Park Public Infrastructure - Block 200

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	Hernandez, Eduardo	Dallas, TX United States	X	

5 Check only if there is NO Interested Party.

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.



*[Handwritten Signature]*  
\_\_\_\_\_  
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Eduardo Hernandez, this the 28 day of November 2016, to certify which, witness my hand and seal of office.

*Carter Edmond Poe*  
\_\_\_\_\_  
Signature of officer administering oath

Carter Edmond Poe  
\_\_\_\_\_  
Printed name of officer administering oath

Notary Public  
\_\_\_\_\_  
Title of officer administering oath

**Work Session and Regular Meeting**

Meeting Date: 12/13/2016

Department: Infrastructure- Development Services

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**AGENDA CAPTION:**

Present, Discuss, And Consider Action On A **Resolution Authorizing The City Manager To Award A Professional Engineering Services Agreement to Kleinfelder, Inc., For Materials Testing Services Associated With The Construction Of The Vitruvian Phase 5** In The Amount Of \$58,100.

**BACKGROUND:**

In 2012, the Town issued a Request for Qualifications to qualify a pool of professional engineers that could be utilized for various Town projects. Kleinfelder Inc., was selected as one of those firms. Staff recommends that they provide geotechnical services for the Vitruvian Phase 5 Public Infrastructure project. Kleinfelder has performed these services on several of the previous Vitruvian projects and they have performed well and they an outstanding reputation throughout the North Texas area.

Services provided for this project include but are not limited to, materials testing of concrete, asphalt, and steel, as well as soil testing for backfilling trenches and any related geotechnical services that are determined necessary to the project.

Construction materials testing and geotechnical services are an important part of the quality control and quality assurance of any construction project. They help ensure that the project is being installed according to the engineered specifications. It also allows the owner a glimpse into the integrity of the materials being used for the project, such as concrete, asphalt, or fill material. the construction of the Vitruvian Phase 5 Public Infrastructure will include many of these elements.

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

Resolution with Kleinfelder Agreement

Certificate of Interested Parties Form

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TOWN OF ADDISON, TEXAS

RESOLUTION NO. \_\_\_\_\_

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS APPROVING THE AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES BETWEEN THE TOWN OF ADDISON AND KLEINFELDER INC., IN AN AMOUNT NOT TO EXCEED \$58,100.00, FOR MATERIALS TESTING SERVICES ASSOCIATED WITH THE VITRUVIAN PHASE V DEVELOPMENT, AUTHORIZING THE CITY MANAGER TO EXECUTE THE AGREEMENT, AND PROVIDING AN EFFECTIVE DATE.**

**BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

**Section 1.** The Agreement for Professional Engineering Services between the Town of Addison and Kleinfelder, Inc., for materials testing services associated with the Vitruvian Phase V development, a copy of which is attached to this Resolution as **Exhibit A**, is hereby approved. The City Manager is hereby authorized to execute the agreement.

**Section 2.** This Resolution shall take effect from and after its date of adoption.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13<sup>th</sup> day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

# EXHIBIT A

**AGREEMENT  
BETWEEN  
THE TOWN OF ADDISON, TEXAS (TOWN)  
AND  
KLEINFELDER, INC. (CONSULTANT)  
FOR  
PROFESSIONAL ENGINEERING SERVICES**

Made as of the \_\_\_\_ day of \_\_\_\_\_ in the year 2016,

BETWEEN the Town:     The Town of Addison, Texas  
                                  16801 Westgrove Drive  
                                  Addison, Texas 75001  
                                  Telephone: (972) 450-7001

and the Consultant:     Kleinfelder, Inc.  
                                  7805 Mesquite Bend Drive  
                                  Suite 100  
                                  Irving, TX 75063

for the following Project:   Vitruvian Park Public Infrastructure-Block 200

The Town and the Consultant agree as set forth below.

**THIS AGREEMENT** is made and entered by and between the **Town of Addison, Texas**, a Home-Rule Municipal Corporation, hereinafter referred to as "Town," and **Kleinfelder, Inc.**, hereinafter referred to as "Consultant," to be effective from and after the date as provided herein, hereinafter referred to as "Agreement."

**WHEREAS**, the Town desires to engage the services of the Consultant to provide professional services which shall include, but not be limited to, construction materials testing services for public infrastructure improvements to Vitruvian Park Phase V, within the Town of Addison, Texas; hereinafter referred to as "Project"; and

**WHEREAS**, the Consultant desires to render such professional engineering services for the Town upon the terms and conditions provided herein.

**NOW, THEREFORE, KNOW ALL PERSONS BY THESE PRESENTS:**

That for and in consideration of the covenants contained herein, and for the mutual benefits to be obtained hereby, the parties agree as follows:

**ARTICLE 1  
CONSULTANT'S SERVICES**

- 1.1 **Employment of the Consultant** – The Town hereby agrees to retain the Consultant to perform professional engineering services in connection with the Project. Consultant agrees to perform such services in accordance with the terms and conditions of this Agreement.
- 1.2 **Scope of Services** – The parties agree that Consultant shall perform such services as are set forth and described in Exhibit “A,” which is attached hereto and incorporated herein by reference for all purposes, including all assumptions and limitations stated therein. The parties understand and agree that deviations or modifications to the scope of services described in Exhibit “A,” in the form of written change orders, may be authorized from time to time by the Town, upon Consultant’s written approval.
- 1.2.1 **Requirement of Written Change Order** – “Extra” work, or “claims” invoiced as “extra” work, or “claims” which have not been issued as a duly executed, written change order by the Addison Town Manager and Consultant, will not be authorized for payment and/or shall not become part of the subcontracts. A duly executed written change order shall be preceded by the Addison Town Council’s authorization for the Addison Town Manager to execute said change order.
- 1.2.2 **DO NOT PERFORM ANY EXTRA WORK AND/OR ADDITIONAL SERVICES WITHOUT A DULY EXECUTED WRITTEN CHANGE ORDER ISSUED BY THE ADDISON TOWN MANAGER.** Project Managers, Superintendents, and/or Inspectors of the Town are not authorized to issue verbal or written change orders.
- 1.2.3 Consultant will perform its services in a manner consistent with the professional skill and care ordinarily provided by competent engineers or architects practicing in the same or similar locality and under the same or similar circumstances and professional license as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect (“Standard of Care”). Consultant makes no representation, guarantee or warranty, express or implied, regarding the services, or any communication (oral or written), certification, report, opinion, or instrument of service provided pursuant to this Agreement.

- 1.3 **Schedule of Work** – The Consultant agrees to commence work immediately upon the execution of this Agreement and receipt of written Notice to Proceed, and to proceed diligently with said work to completion as described in the Compensation Schedule / Project Billing / Project Budget attached hereto as **Exhibit “B”** and incorporated herein by reference for all purposes, but in no event shall the Project be completed any later than **270 calendar days**.
- 1.4 **Failure to Meet Established Deadlines** – Consultant acknowledges that time is of the essence in the performance of services, in accordance with sound professional practices, under this Agreement as set forth in the Compensation Schedule / Project Billing / Project Budget attached hereto as Exhibit “B.”

## **ARTICLE 2 THE TOWN’S RESPONSIBILITIES**

Town shall do the following in a timely manner so as not to delay the services of Consultant:

- 2.1 **Project Data** – The Town shall furnish required information that is currently has in its possession, as expeditiously as necessary for the orderly progress of the work, and the Consultant shall be entitled to rely upon the accuracy and completeness thereof.
- 2.2 **Town Project Manager** – The Town shall designate, when necessary, a representative authorized to act on the Town’s behalf with respect to the Project (the “Project Manager”). The Town or such authorized representative shall examine the documents submitted by the Consultant and shall render any required decisions pertaining thereto as soon as practicable so as to avoid unreasonable delay in the progress of the Consultant’s services. The Project Manager is not authorized to issue verbal or written change orders for “extra” work or “claims” invoiced as “extra” work.

## **ARTICLE 3 CONSULTANT’S COMPENSATION**

- 3.1 **Compensation for Consultant’s Services** – As described in “Article 1, Consultant’s Services,” compensation for this Project shall be on a Type of Payment Basis not to exceed Fifty-Eight Thousand One Hundred **and 00/100 Dollars (\$58,100.00)**, (“Consultant’s Fee”) and shall be paid in accordance with Article 3 and the Compensation Schedule / Project Billing / Project Budget as set forth in Exhibit “B.”

- 3.1.1 **Completion of Record Documents** – Town and Consultant agree that the completion of the Record Documents and/or “As-Built” Documents, including hard copy formatting and electronic formatting, shall be completed, submitted to, and accepted by the Town. The electronic formatting shall be consistent with the standards established in Town of Addison Guidelines for Computer Aided Design and Drafting (“CADD”). Completion of the Record Documents and/or “As-Built” documents shall be included in the Consultant’s Fee and considered to be within the Scope of Services defined under this Agreement.
- 3.1.2 **Disputes between Town and Construction Contractor** – If the Project involves the Consultant performing Construction Administration Services relating to an agreement between a Construction Contractor (the “Contractor”) and the Town, and upon receipt of a written request by Town, Consultant shall research previous and existing conditions of the Project, and make a determination whether or not to certify that sufficient cause exists for the Town to declare the Contractor in default of the terms and conditions of the agreement. Consultant shall submit his findings in writing to the Town, or submit a written request for a specific extension of time (including the basis for such extension), within fifteen (15) calendar days of receipt of the written request from the Town. Town and Consultant agree that if requested by the Town, completion of this task shall be included in the Consultant’s Fee and considered to be within the Scope of Services as defined under this Agreement.
- 3.1.3 **Consultation and Approval by Governmental Authorities and Franchised Utilities** – Consultant shall be responsible for identifying and analyzing the requirements of governmental agencies and all franchise utilities involved with the Project, and to participate in consultation with said agencies in order to obtain all necessary approvals and/or permissions. The Consultant shall be responsible for preparation and timely submittal of documents required for review, approval, and/or recording by such agencies. The Consultant shall be responsible for making such changes in the Construction Documents as may be required by existing written standards promulgated by such agencies at no additional charge to Town.
- 3.2 **Direct Expenses** – Direct Expenses are included in the Consultant’s Fee as described in Article 3.1 and include actual reasonable and necessary expenditures made by the Consultant and the Consultant’s employees and subcontractors in the interest of the Project. All submitted Direct Expenses are to be within the amounts as stated in the Compensation

Schedule / Project Billing / Project Budget set forth in Exhibit "B," and consistent with Exhibit "C," Town of Addison Guidelines for Direct Expenses, General and Administrative Markup, and Travel and Subsistence Expenses. The Consultant shall be solely responsible for the auditing of all Direct Expenses, including the subcontractors, prior to submitting to the Town for reimbursement, and shall be responsible for the accuracy thereof. Any over-payment by the Town for errors in submittals for reimbursement may be deducted from the Consultant's subsequent payment for services; provided, however this shall not be the Town's sole and exclusive remedy for said overpayment.

- 3.3 **Additional Services** – The Consultant shall provide the services as described in the Scope of Services as set forth in Exhibit "A" of this Agreement. If authorized in writing by the Town, the Consultant shall provide additional services, to be compensated on an hourly basis in accordance with this paragraph ("Additional Services"). These services may include, but are not limited to:
- 3.3.1 Additional meetings, hearings, work-sessions, or other similar presentations which are not provided for or contemplated in the Scope of Services described in Exhibit "A."
  - 3.3.2 Additional drafts and revisions to the Project which are not provided for or contemplated in the Scope of Services as described in Exhibit "A." Drafts or revisions required as the result of errors or omissions by the Consultant shall not be considered Additional Services, but shall fall within the Scope of Services.
  - 3.3.3 Additional copies of final reports and construction plans which are not provided for or contemplated in the Scope of Services as described in Exhibit "A."
  - 3.3.4 Photography, professional massing models which are not provided for or contemplated in the Scope of Services as described in Exhibit "A."
  - 3.3.5 Compensation for Additional Services authorized by the Town shall be in addition to the Consultant's Fee and shall be based on direct billable labor rates and expenses.
  - 3.3.6 Compensation for Additional Services authorized by the Town shall be in addition to the Consultant's Fee and shall be based on an hourly basis according to the following personnel rates. The rates set forth in this chart are subject to reasonable change provided prior written notice of said change is given to Town.

**Hourly Billable Rates by Position**

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<i>Position</i>	<i>Rate</i>
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**\*SEE ATTACHED EXHIBIT B**

- 3.4 **Invoices** – No payment to Consultant shall be made until Consultant tenders an invoice to the Town. Invoices are to be mailed to Town immediately upon completion of each individual task listed in Exhibit “B.” On all submitted invoices, Consultant shall include appropriate background materials to support the submitted charges on said invoice. Such background material shall include, but is not limited to, employee timesheets, invoices for work obtained from other parties, and receipts and/or log information relating to Direct Expenses. All invoices for payment shall provide a summary methodology for administrative markup and/or overhead charges.
- 3.5 **Timing of Payment** – Town shall make payment to Consultant for said invoices within thirty (30) days following receipt and acceptance thereof. The parties agree that payment by Town to Consultant is considered to be complete upon mailing of payment by Town. Furthermore, the parties agree that the payment is considered to be mailed on the date that the payment is postmarked.
- 3.6 **Disputed Payment Procedures** – In the event of a disputed or contested billing by Town, only that portion so contested may be withheld from payment, and the undisputed portion will be paid. Town shall notify Consultant of a disputed invoice, or portion of an invoice, in writing by the twenty-first (21<sup>st</sup>) calendar day after the date the Town receives the invoice. Town shall provide Consultant an opportunity to cure the basis of the dispute. If a dispute is resolved in favor of the Consultant, Town shall proceed to process said invoice, or the disputed portion of the invoice, within the provisions of Article 3.5. If a dispute is resolved in favor of the Town, Consultant shall submit to Town a corrected invoice, reflecting any and all payment(s) of the undisputed amounts, documenting the credited amounts, and identifying outstanding amounts on said invoice to aid Town in processing payment for the remaining balance. Such revised invoice shall have a new invoice number, clearly referencing the previous submitted invoice. Town agrees to exercise reasonableness in contesting any billing or portion thereof that has background materials supporting the submitted charges.
- 3.7 **Failure to Pay** – Failure of the Town to pay an invoice, for a reason other than upon written notification as stated in the provisions of Article 3.6 to the Consultant within sixty (60) days from the date of the invoice shall

grant the Consultant the right, in addition to any and all other rights provided, to, upon written notice to the Town, suspend performance under this Agreement, and such act or acts shall not be deemed a breach of this Agreement. However, Consultant shall not suspend performance under this Agreement prior to the tenth (10<sup>th</sup>) calendar day after written notice of suspension was provided to Town, in accordance with Chapter 2251, Subchapter "D" ("Remedy for Nonpayment") of the *Texas Government Code*. The Town shall not be required to pay any invoice submitted by the Consultant if the Consultant breached any provision(s) herein.

- 3.8 **Adjusted Compensation** – If the Scope of the Project or if the Consultant's services are materially changed due to no error on behalf of Consultant in the performance of services under this Agreement, the amounts of the Consultant's compensation shall be equitably adjusted as approved by Town. Any additional amounts paid to the Consultant as a result of any material change to the Scope of the Project shall be authorized by written change order duly executed by both parties before the services are performed.
- 3.9 **Project Suspension** – If the Project is suspended or abandoned in whole or in part for more than three (3) months, Consultant shall be entitled to compensation for any and all work completed to the satisfaction of Town in accordance with the provisions of this Agreement prior to suspension or abandonment. In the event of such suspension or abandonment, Consultant shall deliver to Town all finished or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs, and/or any other items prepared by Consultant in connection with this Agreement prior to Consultant receiving final payment. If the Project is resumed after being suspended for more than three (3) months, the Consultant's compensation shall be equitably adjusted as approved by the Town. Any additional amounts paid to the Consultant after the Project is resumed shall be agreed upon in writing by both parties before the services are performed.

#### **ARTICLE 4 OWNERSHIP OF DOCUMENTS**

- 4.1 **Documents Property of the Town** – The Project is the property of the Town, and Consultant may not use the documents, plans, data, studies, surveys, drawings, maps, models, reports, photographs, and/or any materials for any other purpose not relating to the Project without Town's prior written consent. Town shall be furnished with such reproductions of the Project, plans, data, documents, maps, and any other information as defined in Exhibit "A." Upon completion of the work, or any earlier termination of this Agreement under Article 3 and/or Article 7, Consultant

will revise plans, data, documents, maps, and any other information as defined in Exhibit "A" to reflect changes while working on the Project and promptly furnish the same to the Town in an acceptable electronic format. All such reproductions shall be the property of the Town who may use them without the Consultant's permission for any purpose relating to the Project, including, but not limited to, completion of the Project, and/or additions, alterations, modifications, and/or revisions to the Project. All re-use of, or reliance on, Consultant's documents outside the intended scope or project shall be at the user's sole risk and without liability to Consultant.

- 4.2 **Documents Subject to Laws Regarding Public Disclosure** – Consultant acknowledges that Town is a governmental entity and that all documents, plans, data, studies, surveys, drawings, maps, models, reports, photographs, and/or any items prepared or furnished by Consultant (and Consultant's professional associates and/or Sub-consultants) under this Agreement are instruments of service in respect of the Project and property of the Town and upon completion of the Project shall thereafter be subject to the Texas Public Information Act (*Texas Government Code*, Chapter 552) and any other applicable laws requiring public disclosure of the information contained in said documents.

## **ARTICLE 5 CONSULTANT'S INSURANCE REQUIREMENTS**

- 5.1 **Required Professional Liability Insurance** – Consistent with the terms and provisions of Exhibit "D," Town of Addison Contractor Insurance Requirements, Consultant shall maintain, at no expense to Town, a professional liability (errors and omissions) insurance policy with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s), authorized to transact business in the State of Texas, in an amount not less than One Million and 00/100 Dollars (\$1,000,000.00) for each claim, and Two Million and 00/100 Dollars (\$2,000,000.00) in the aggregate. Such policy shall name the Town, its officers, representatives, and employees as additional insured as to all applicable coverage. Such policy shall require the provision of written notice to Town at least thirty (30) days prior to cancellation, non-renewal, or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish Town with certificates evidencing such coverage prior to commencing work on the Project.
- 5.2 **Required General Liability Insurance** - Consistent with the terms and provisions of Exhibit "D," Town of Addison Contractor Insurance Requirements, Consultant shall maintain, at no expense to Town, a

professional liability (errors and omissions) insurance policy with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s), authorized to transact business in the State of Texas, in an amount not less than One Million and 00/100 Dollars (\$1,000,000.00) for each occurrence, and Two Million and 00/100 Dollars (\$2,000,000.00) in the aggregate. Such policy shall name the Town, its officers, agents, representatives, and employees as additional insured as to all applicable coverage. Such policy shall provide for a waiver of subrogation against the Town for injuries, including death, property damage, or any other loss to the extent that same is covered by the proceeds of the insurance. Such policy shall require the provision of written notice to Town at least thirty (30) days prior to cancellation, non-renewal, or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish Town with certificates evidencing such coverage prior to commencing work on the Project.

5.3 **Required Workers Compensation Insurance** – Consistent with the terms and provisions of Exhibit "D," Town of Addison Contractor Insurance Requirements, Consultant shall maintain, at no expense to Town, all Statutory Workers Compensation Insurance as required by the laws of the State of Texas. Such insurance policy shall be with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent service(s), and authorized to transact business in the State of Texas. Such policy shall provide for a waiver of subrogation against the Town for injuries, including death, property damage, or any other loss to the extent that same is covered by the proceeds of the insurance. Such policy shall require the provision of written notice to Town at least thirty (30) days prior to cancellation, non-renewal, or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish Town with certificates evidencing such coverage prior to commencing work on the Project.

5.4 **Circumstances Requiring Umbrella Coverage or Excess Liability Coverage** – If Project size and scope warrant, and if identified on the checklist located in Exhibit "D," Town of Addison Contractor Insurance Requirements, Consultant shall maintain, at no expense to the Town, an umbrella coverage or excess liability coverage insurance policy with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s), authorized to transact business in the State of Texas, in an amount of Two Million and 00/100 Dollars (\$2,000,000.00). Consistent with the terms and provisions of Exhibit "F," such policy shall name the Town, its officers, agents over which the Consultant exercises control, representatives, and employees as additional insured as to all applicable coverage. Such policy shall

provide for a waiver of subrogation against the Town for injuries, including death, property damage, or any other loss to the extent that the same is covered by the proceeds of the insurance. Such policy shall require the provision of written notice to the Town at least thirty (30) days prior to cancellation, non-renewal, or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish Town with certificates evidencing such coverage prior to commencing work on the Project.

**ARTICLE 6  
CONSULTANT'S ACCOUNTING RECORDS**

Records of Direct Expenses and expenses pertaining to services performed in conjunction with the Project shall be kept on the basis of generally accepted accounting principles. Invoices will be sent to the Town as indicated in Article 3.4. Copies of employee time sheets, receipts for direct expense items and other records of Project expenses will be included in the monthly invoices.

**ARTICLE 7  
AUDITS AND RECORDS / PROHIBITED INTEREST / VENDOR DISCLOSURE**

The Consultant agrees that at any time during normal business hours and as often as the Town may deem necessary, Consultant shall make available to representatives of the Town for examination all of its records with respect to all matters covered by this Agreement, and will permit such representatives of the Town to audit, examine, copy and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement, and for a period of four (4) years from the date of final settlement of this Agreement or for such other or longer period, if any, as may be required by applicable statute or other lawful requirement.

The Consultant agrees that it is aware of the prohibited interest requirement of the Town Charter, which is repeated on the Affidavit, attached hereto as Exhibit "E" and incorporated herein for all purposes, and will abide by the same. Further, a lawful representative of Consultant shall execute the Affidavit attached hereto as Exhibit "E". Consultant understands and agrees that the existence of a prohibited interest during the term of this Agreement will render the Agreement voidable.

Consultant agrees that it is further aware of the vendor disclosure requirements set forth in Chapter 176, Local Government Code, as amended, and will abide by the same. In this connection, a lawful representative of Consultant shall execute the Conflict of Interest Questionnaire, Form CIQ, attached hereto as Exhibit "F" and incorporated herein for all purposes.

If the Agreement is required to go to the City Council for approval, then the Consultant shall execute and deliver to the Town the Form 1295 Certificate of Interested Parties, as required by section 2252.908, Texas Government Code, as amended, prior to the City's execution of this Agreement.

#### **ARTICLE 8 TERMINATION OF AGREEMENT / REMEDIES**

Town may, upon thirty (30) days written notice to Consultant, terminate this Agreement, for any reason or no reason at all, before the termination date hereof, and without prejudice to any other remedy it may have. If Town terminates this Agreement due to a default of and/or breach by Consultant and the expense of finishing the Project exceeds the Consultant's Fee at the time of termination, Consultant waives its right to any portion of Consultant's Fee that is equal to the amount expended by the Town to complete the Project as set forth in Article 3 herein and agrees to pay any costs over and above the fee which the Town is required to pay in order to finish the Project. On any default and/or breach by Consultant, Town may elect not to terminate the Agreement, and in such event it may make good the deficiency in which the default consists, and charge the costs due to Consultant as set forth in Article 3 herein. If Town terminates this Agreement and Consultant is not in default of the Agreement, Consultant shall be entitled to compensation for any and all work completed to the satisfaction of the Town in accordance with the provisions of this Agreement prior to termination.

In the event of any termination, Consultant shall deliver to Town all finished and/or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs and/or any items prepared by Consultant in connection with this Agreement prior to Consultant receiving final payment.

The rights and remedies provided by this Agreement are cumulative, and the use of any one right or remedy by either party shall not preclude or waive its rights to use any or all other remedies. These rights and remedies are given in addition to any other rights the parties may have by law, statute, ordinance, or otherwise.

#### **ARTICLE 9 DISPUTE RESOLUTION / MEDIATION**

In addition to all remedies at law, the parties may resolve/mediate any controversy, claim or dispute arising out of or relating to the interpretation or performance of this Agreement, or breach thereof, by voluntary mediation to be conducted by a mutually acceptable mediator.

## ARTICLE 10 INDEMNITY

CONSULTANT SHALL HEREBY COVENANT AND CONTRACT TO WAIVE ANY AND ALL CLAIMS, RELEASE, INDEMNIFY AND HOLD HARMLESS TOWN AND ITS TOWN COUNCIL MEMBERS, OFFICERS, AGENTS, REPRESENTATIVES AND EMPLOYEES FROM AND AGAINST ALL DAMAGES, INJURIES (INCLUDING DEATH), INTELLECTUAL PROPERTY INFRINGEMENT CLAIMS (INCLUDING PATENT, COPYRIGHT AND TRADEMARK INFRINGEMENTS), CLAIMS, PROPERTY DAMAGES (INCLUDING LOSS OF USE), LOSSES, DEMANDS, SUITS, JUDGMENTS AND COSTS, INCLUDING REASONABLE ATTORNEY'S FEES AND EXPENSES (INCLUDING ATTORNEYS' FEES AND EXPENSES INCURRED IN ENFORCING THIS INDEMNITY), CAUSED OR RESULTING FROM THE NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY CONSULTANT, ITS OFFICERS, AGENTS, REPRESENTATIVES, EMPLOYEES, SUBCONTRACTORS, LICENSEES, INVITEES, OR ANY OTHER ENTITY OVER WHICH THE CONSULTANT EXERCISES CONTROL, IN ITS/THEIR PERFORMANCE OF THIS AGREEMENT AND/OR ARISING OUT OF PROFESSIONAL SERVICES PROVIDED BY CONSULTANT PURSUANT TO THIS AGREEMENT, REGARDLESS OF THE JOINT OR CONCURRENT NEGLIGENCE OR STRICT LIABILITY OF THE TOWN (HEREINAFTER "CLAIMS"). THIS INDEMNIFICATION PROVISION AND THE USE OF THE TERM "CLAIMS" IS ALSO SPECIFICALLY INTENDED TO APPLY TO, BUT NOT LIMITED TO, ANY AND ALL CLAIMS, WHETHER CIVIL OR CRIMINAL, BROUGHT AGAINST TOWN BY ANY GOVERNMENT AUTHORITY OR AGENCY RELATED TO ANY PERSON PROVIDING SERVICES UNDER THIS AGREEMENT THAT ARE BASED ON ANY FEDERAL IMMIGRATION LAW AND ANY AND ALL CLAIMS, DEMANDS, DAMAGES, ACTIONS AND CAUSES OF ACTION OF EVERY KIND AND NATURE, KNOWN AND UNKNOWN, EXISTING OR CLAIMED TO EXIST, RELATING TO OR ARISING OUT OF ANY EMPLOYMENT RELATIONSHIP BETWEEN CONSULTANT AND ITS EMPLOYEES OR SUBCONTRACTORS AS A RESULT OF THAT SUBCONTRACTOR'S OR EMPLOYEE'S EMPLOYMENT AND/OR SEPARATION FROM EMPLOYMENT WITH THE CONSULTANT, INCLUDING BUT NOT LIMITED TO ANY DISCRIMINATION CLAIM BASED ON SEX, SEXUAL ORIENTATION OR PREFERENCE, RACE, RELIGION, COLOR, NATIONAL ORIGIN, AGE OR DISABILITY UNDER FEDERAL, STATE OR LOCAL LAW, RULE OR REGULATION, AND/OR ANY CLAIM FOR WRONGFUL TERMINATION, BACK PAY, FUTURE WAGE LOSS, OVERTIME PAY, EMPLOYEE BENEFITS, INJURY SUBJECT TO RELIEF UNDER THE WORKERS' COMPENSATION ACT OR WOULD BE SUBJECT TO RELIEF UNDER ANY POLICY FOR WORKERS COMPENSATION INSURANCE, AND ANY OTHER CLAIM, WHETHER IN TORT, CONTRACT OR OTHERWISE. THIS INDEMNIFICATION SHALL EXTEND TO THE PAYMENT OR REIMBURSEMENT OF THE TOWN'S REASONABLE ATTORNEYS FEES AND ASSOCIATED COSTS, COURT COSTS, AND SETTLEMENT COSTS IN PROPORTION TO THE CONSULTANT'S LIABILITY.

CONSULTANT SHALL PROMPTLY NOTIFY TOWN OF THE DEFENSE COUNSEL RETAINED BY CONSULTANT IN FULFILLING ITS OBLIGATION HEREUNDER, AND TIMELY NOTIFY TOWN OF ANY AND ALL LEGAL ACTIONS TAKEN BY THE DEFENSE COUNSEL REGARDING ANY AND ALL CLAIMS.

THIS ARTICLE SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

## ARTICLE 11 NOTICES

Consultant agrees that all notices or communications to Town permitted or required under this Agreement shall be delivered to Town at the following addresses:

**City Manager**  
Town of Addison  
5300 Belt Line Road  
Dallas, Texas 75254

Town agrees that all notices or communication to Consultant permitted or required under this Agreement shall be delivered to Consultant at the following addresses:

**Kleinfelder**  
**Lewis A. Reagan, Regional Manager**  
**7805 Mesquite Bend Drive**  
**Irving, Texas 75063**

Any notice provided in writing under the terms of this Agreement by either party to the other shall be in writing and may be effected by registered or certified mail, return receipt requested.

All notices or communication required to be given in writing by one party or the other shall be considered as having been given to the addressee on the date such notice or communication is postmarked by the sending party. Each party may change the address to which notice may be sent to that party by giving notice of such change to the other party in accordance with the provisions of this Agreement.

## ARTICLE 12 MISCELLANEOUS

- 12.1 **Complete Agreement** – This Agreement, including the exhibits hereto labeled “A” through “F,” all of which are incorporated herein for all purposes, constitute the entire Agreement by and between the parties regarding the subject matter hereof and supersedes all prior and/or contemporaneous written and/or oral understandings. This Agreement may not be amended, supplemented, and/or modified except by written

agreement duly executed by both parties. The following exhibits are attached below and made a part of this Agreement:

- 12.1.1 Exhibit "A," Scope of Services.
  - 12.1.2 Exhibit "B," Compensation Schedule / Project Billing / Project Budget.
  - 12.1.3 Exhibit "C," Town of Addison Guidelines for Direct Expenses; General and Administrative Markup; Travel and Subsistence Expenses.
  - 12.1.6 Exhibit "D," Town of Addison Contractor Insurance Requirements.
  - 12.1.7 Exhibit "E," Affidavit.
  - 12.1.8 Exhibit "F", Conflict of Interest Questionnaire, Form CIQ.
- 12.2 **Assignment and Subletting** – The Consultant agrees that neither this Agreement nor the work to be performed hereunder will be assigned or sublet without the prior written consent of the Town. The Consultant further agrees that the assignment or subletting or any portion or feature of the work or materials required in the performance of this Agreement shall not relieve the Consultant of its full obligations to the Town as provided by this Agreement. All such approved work performed by assignment or subletting shall be billed through Consultant, and there shall be no third party billing.
- 12.3 **Successors and Assigns** – Town and Consultant, and their partners, assigns, successors, subcontractors, executors, officers, agents, employees, representatives, and administrators are hereby bound to the terms and conditions of this Agreement.
- 12.4 **Severability** – In the event of a term, condition, or provision of this Agreement is determined to be invalid, illegal, void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision, shall be deleted and the remainder of the Agreement shall remain in full force and effect as if such invalid, illegal, void, unenforceable or unlawful provision had never been contained herein.
- 12.5 **Venue** – This entire Agreement is performable in Dallas County, Texas and the venue for any action related directly or indirectly, to this Agreement or in any manner connected therewith shall be in Dallas County, Texas, and this Agreement shall be construed under the laws of the State of Texas.

- 12.6 **Execution / Consideration** – This Agreement is executed by the parties hereto without coercion or duress for any substantial consideration, the sufficiency of which is forever confessed.
- 12.7 **Authority** – The individuals executing this Agreement on behalf of the respective parties below represent to each other that all appropriate and necessary action has been taken to authorize the individual who is executing this Agreement to do so for an on behalf of the party for which his or her signature appears, that there are no other parties or entities required to execute this Agreement in order for the same to be an authorized and binding agreement on the other party for whom the individual is signing this Agreement and that each individual affixing his or her signature hereto is authorized to do so, and such authorization is valid and effective on the date hereof.
- 12.8 **Waiver** – Waiver by either party of any breach of this Agreement, or the failure of either party to enforce any of the provisions of this Agreement, at any time, shall not in any way affect, limit, or waive such party's right thereafter to enforce and compel strict compliance.
- 12.9 **Headings** – The headings of the various sections of this Agreement are included solely for convenience of reference and are not to be full or accurate descriptions of the content thereof.
- 12.10 **Multiple Counterparts** – This Agreement may be executed in a number of identical counterparts, each of which shall be deemed an original for all purposes.
- 12.11 **Sovereign Immunity** – The parties agree that the Town has not waived its sovereign immunity by entering into and performing its obligations under this Agreement.
- 12.12 **Additional Representations** – Each signatory represents this Agreement has been read by the party for which this Agreement is executed and that such party has had the opportunity to confer with its counsel.
- 12.13 **Miscellaneous Drafting Provisions** – This Agreement shall be deemed drafted equally by all parties hereto. The language of all parts of this Agreement shall be construed as a whole according to its fair meaning, and any presumption or principle that the language herein is to be construed against any party shall not apply.
- 12.14 **No Third Party Beneficiaries** -- Nothing in this Agreement shall be construed to create any right in any third party not a signatory to this

Agreement, and the parties do not intend to create any third party beneficiaries by entering into this Agreement.

12.15 **Site Access** -- CLIENT shall, as may be required by KLEINFELDER for the successful and timely completion of Services: (i) provide unimpeded and timely access to the site, including third party sites, if required.

12.16 **Warranty of Title, Waste Ownership** -- KLEINFELDER will not take title to any hazardous materials found at the project site. Any risk of loss with respect to all materials shall remain with the project site owner, who shall be considered the generator of such materials, execute all manifests as the generator of such materials, and be liable for the arrangement, transportation, treatment, and/or disposal of all material. All samples shall remain the property of the CLIENT. CLIENT shall promptly, at its cost, remove and lawfully dispose of samples, cuttings, and hazardous materials.

**IN WITNESS WHEREOF**, the parties have executed this Agreement and caused this Agreement to be effective on the latest day as reflected by the signatures below.

**Effective Date:** \_\_\_\_\_

**TOWN:**  
Town of Addison, Texas

By: \_\_\_\_\_  
Wesley S. Pierson, City Manager

Date: \_\_\_\_\_

**CONSULTANT:**  
Kleinfelder, Inc.

By:   
Name, Title

Date: 10/27/16

STATE OF TEXAS §  
COUNTY OF DALLAS §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared **Wesley S. Pierson**, Town of Addison, Texas City Manager, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and consideration expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this \_\_\_ day of \_\_\_\_\_, 2016.

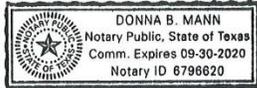
Notary Public In and For the State of Texas  
My commission expires: \_\_\_\_\_

STATE OF Texas §  
COUNTY OF Dallas §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Lewis Reagan, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 27<sup>th</sup> day of October, 2016.

Donna B. Mann  
Notary Public In and For the State of Texas  
My commission expires: 9-30-2020



**Exhibit "A"**  
**Scope of Services**  
**Agreement by and between the Town of Addison, Texas (Town)**  
**and Kleinfelder, Inc. (Consultant)**  
**to perform Professional Engineering Services for**  
**Vitruvian Park Infrastructure Improvements – Block 200**

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**I. PROJECT DESCRIPTION**

**Overview of the project/description**

The Consultant shall perform the necessary construction materials observation, sampling and testing services related to the infrastructure improvements to Vitruvian Park Phase V, including necessary Additional Services for development of this project according to the following sections of this Agreement.

**II. TASK SUMMARY, BASIC SERVICES.**

The following scope of services is based, in part, on project plan and specification requirements and prior conversations with the Town of Addison. At this time, a construction schedule was not available for review or consideration in the preparation of this proposal; however, we understand that the project is anticipated to have a construction contract of 270 days. We anticipate that, our services will be provided on a call-out basis, as scheduled by your designated representative. We agree to provide a representative from our office to provide the construction materials field testing and observation services as follows. *To most effectively serve the client and facilitate the construction process, our services should be scheduled 24-hours in advance. We understand that the construction process incorporates a large degree of variability and as such, we will do our best to accommodate scheduling calls made on the same day as our services are needed but we cannot guarantee that we can satisfy service requests made after-hours or on the same day as the services are needed to be performed.*

### Task 1 – Earthwork

- Obtain and perform laboratory moisture/density relations (standard proctor- ASTM D698) and soil classification tests (liquid limit, plastic limit and percent finer than no. 200 sieve analysis) for each soil type;
- Percent lime determination, pH series (5 point, ASTM C-977)
- Perform in-place sieve analysis (field gradations) at the anticipated rate of  
1/300 linear feet for lime treated materials, or as directed by the Town
- Perform in-place thickness testing (depth checks) at the anticipated rate of  
1/300 linear feet for lime-treated materials, or as directed by the Town
- Perform in-place moisture/density tests at frequencies specified for fill of onsite soils (anticipate 1 test per 300 LF per lift), or as requested by client.
- Perform in-place moisture/density tests at frequencies specified for backfill of storm drainage, water or wastewater utilities (anticipate 1 test per 50 LF per 1 foot of fill), or as requested by client.

### Task 2 – Cast-In-Place Concrete

Perform testing during concrete placements, which will include:

- Ambient and concrete temperature determinations;
- Entrained air content determination;
- Slump determination;
- Cast four inch by eight inch concrete test cylinders at the rate of 1 set of 5 cylinders per delivery truck of concrete, up to 150 cubic yards of concrete or fraction thereof placed per day, or as directed by client;
- Compressive strength determination of concrete test cylinders with one tested at 7 days and three tested at 28 days. Additional cylinders may be cast, as requested by the client for early age strength testing or for "hold" cylinders.
- Cut concrete core samples to verify thickness of concrete pavement; anticipate 2 cores per 300 linear feet, or as directed by client.

### Hot Mix Asphalt

Observation of Hot Mix Asphalt operations, which will include:

- Verify asphalt mix provided is in accordance with approved mix design
- Document asphalt placement procedures and verify established rolling pattern
- Perform field density testing to verify compaction of placed asphalt at the proposed rate of 1/5,000 square feet

- Sample asphalt on first day of placement and conduct laboratory testing to determine maximum theoretical specific gravity (rice gravity), asphalt oil content and gradation of asphalt aggregates.

### **III. TASK SUMMARY, SPECIAL SERVICES.**

#### **IV. ITEMS NOT INCLUDED IN THE EXISTING SCOPE OF SERVICES.**

##### **A. Additional Services not included in the existing Scope of Services**

– Town and Consultant agree that the following services are beyond the Scope of Services described in the tasks above. However, Consultant can provide these services, if needed, upon the Town's written request. Any additional amounts paid to the Consultant as a result of any material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed. These Additional Services include the following:

- List of excluded items

#### **V. DELIVERABLES.**

**A. Required Deliverables** – At the completion of Tasks 1 through 5, Consultant shall ensure the delivery of the following products to the Town:

1. Materials testing and observation reports, laboratory test data reports and field test data reports periodically during construction

**EXHIBIT "B"**  
**COMPENSATION SCHEDULE / PROJECT BILLING / PROJECT BUDGET**

**Agreement by and between the Town of Addison (Town)  
and Kleinfelder, Inc. (Consultant)  
to perform Professional Engineering Services for  
Vitruvian Park Phase V**

**I. COMPENSATION SCHEDULE / PROJECT BILLING SUMMARY.**

SERVICES	QTY.	RATE	TOTAL
<b>A. Soils Testing</b>			
Field Technician (hourly)	200.00	\$59.00	\$11,800.00
Field Technician, OT (hourly)		\$88.50	\$0.00
Standard Proctor, 4" (each)	4.00	\$240.00	\$960.00
Atterberg Limits (each)	4.00	\$80.00	\$320.00
Sieve Analysis, -#200 (each)	4.00	\$80.00	\$320.00
Lime Series (each)	2.00	\$175.00	\$350.00
Vehicle Charge/Trip, within 50 miles of local Kleinfelder office	85.00	\$50.00	\$4,250.00
		<b>Subtotal:</b>	<b>\$18,000.00</b>
<b>B. Concrete Testing &amp; Inspection</b>			
Field Technician (hourly)	150.00	\$59.00	\$8,850.00
Field Technician, OT (hourly)		\$88.50	\$0.00
Concrete Cylinders (each)	700.00	\$26.00	\$18,200.00
Concrete Cores (each)	10.00	\$20.00	\$200.00
Vehicle Charge/Trip, within 50 miles of local Kleinfelder office	80.00	\$50.00	\$4,000.00
		<b>Subtotal:</b>	<b>\$31,250.00</b>
<b>B. Asphalt</b>			
Field Technician (hourly)	20.00	\$59.00	\$1,180.00
Field Technician, OT (hourly)		\$88.50	\$0.00
Asphalt Content by Ignition Oven (each)	1.00	\$150.00	\$150.00
Asphalt Gradation of Extracted Aggregate (each)	1.00	\$120.00	\$120.00
Asphalt Content Maximum Theoretical Specific Gravity (each)	1.00	\$150.00	\$150.00
Asphalt Content by Unit Weight, Gyrotory Method (each)	1.00	\$150.00	\$150.00
Vehicle Charge/Trip, within 50 miles of local Kleinfelder office	3.00	\$50.00	\$150.00
		<b>Subtotal:</b>	<b>\$1,900.00</b>
<b>C. Project Management, Administration and Final Reporting</b>			
Project Manager (hourly)	20.00	\$145.00	\$2,900.00
Dispatch/Field Coordination (hourly)	30.00	\$75.00	\$2,250.00
Clerical (hourly)	30.00	\$60.00	\$1,800.00
		<b>Subtotal:</b>	<b>\$6,950.00</b>
		<b>Budget Total:</b>	<b>\$58,100.00</b>

-\*Overtime rates will be charged at 1.5 times standard hourly rate, and apply to hours worked before 7 AM and after 5 PM and Weekends.

-All field tests for soils are included in the hourly rate of the technician

**EXHIBIT "C"**  
**TOWN OF ADDISON GUIDELINES FOR DIRECT EXPENSES; GENERAL AND  
ADMINISTRATIVE MARKUP; TRAVEL AND SUBSISTENCE EXPENSES**

- I. **CONSULTANT'S RESPONSIBILITY**. The Consultant shall be solely responsible for the auditing of all direct expense, approved markup (general and/or administrative), and approved travel and/or subsistence charges, including those to be included under a sub-contract, prior to the Town for reimbursement, and Consultant shall be responsible for the accuracy thereof. Any overpayment by the Town for errors in submittals for reimbursement may be charged to the Consultant; however, this shall not be the Town's sole and exclusive remedy for said overpayment.

II. **GUIDELINES FOR DIRECT EXPENSES**.

- A. **Local Transportation** – Transportation in connection with the Project, when such transportation is not a function of routine performance of the duties of the Consultant in connection with the Project, and when such transportation exceeds beyond fifty (50) miles from the Project site, shall be reimbursed at a standard mileage rate consistent with that as issued, and periodically revised, by the United States Internal Revenue Service (IRS). Under no circumstances shall Town reimburse Consultant at a higher standard mileage rate or pay additional markup on charges for local transportation. Completion of Town's Standard Mileage Log is required for submittal of these charges for reimbursement, including justification for each submitted expense.

Under no circumstances are charges associated with rental cars for local transportation eligible for reimbursement by Town. Toll road subscriptions or toll plaza receipts are not reimbursable. Consultant agrees to place these standards in all subcontracts for work on the Project.

- B. **Supplies, Material, Equipment** – Town shall reimburse the actual cost of other similar direct Project-related expenses, which are duly presented in advance and approved by Town's Project Manager in writing.
- C. **Commercial Reproduction** – Town shall reimburse the actual cost of reproductions, specifically limited to progress prints prepared for presentation to Town at each phase of progress, and final Construction Documents prepared for distribution at bidding phase, provided that the Consultant has duly obtained at least three (3) quotations from commercial firms and has chosen the best value for the Town. Consultant shall provide such documentation to Town for review prior to submitting these expenses for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.
- D. **In-House Reproduction** - Consultant shall make arrangements with the Town for prior approval of in-house reproduction rates prior to submitting these expenses for reimbursement. Town shall provide Consultant with a standard format for documenting these charges. Completion of the Town's reproduction log is required as a prerequisite for payment, including the number or reproductions, the date, time, description, the approved standard rate, and a justification for each

submitted expense for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.

- E. **Commercial Plotting** – Town shall reimburse the actual cost of plots, specifically limited to final documents, provided the Consultant has duly obtained at least three (3) quotations from commercial firms and has chosen the best value for the Town. Consultant shall provide such documentation to Town for review prior to submitting these expenses for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.
- F. **In-House Plotting** – Consultant shall make arrangements with Town for prior written approval of in-house plotting rates prior to submitting these charges for reimbursement. Town shall provide Consultant with a standard format for documenting these charges. Completion of the Town's reproduction log is required as a prerequisite for payment, including the number of plots, the date, time, description, the approved standard rate, and a justification for each submitted charge for reimbursement.
- G. **Communications** – Reimbursement for expenses relating to electronic communications shall be limited to long-distance telephone or fax toll charges specifically required in the discharge of professional responsibilities related to the Project. Telephone service charges including office or cellular phones, WATTS, or Metro line services or similar charges are not reimbursable.
- H. **Postage, Mail, and Delivery Service** – Town shall reimburse the actual cost of postage and delivery of Instruments of Service, provided the Consultant duly considers all circumstances (including available time for assured delivery) of the required delivery and selects the best value for the Town, which may require comparison of delivery costs offered by three (3) or more sources or methods of delivery, which at a minimum shall include U.S. Mail. Courier service is acceptable only in circumstances requiring deadline-sensitive deliveries and not for the convenience of the Consultant and/or the Consultant's employees. Consultant agrees to place these standards in all subcontracts for work on the Project.
- I. **Meals and Other Related Charges** – Meals or any other related expenses are not reimbursable unless incurred outside a fifty (50) mile radius of the Project, and then only reimbursable for the actual cost subject to compliance with the Town's currently adopted policy. Non-allowable costs include, but are not limited to, charges for entertainment, alcoholic beverages, and gratuities.

### **III. GUIDELINES FOR GENERAL AND ADMINISTRATIVE MARKUP.**

1. **Requirement of Prior Approval** – Consultant may be allowed to charge a General and/or Administrative Markup on work completed if Consultant can clearly define to Town specifically what costs are included in the markup calculation. To apply General and/or Administrative Markup, Consultant must also document to Town what costs would be considered direct costs. Town shall issue approval in writing to allow Consultant to charge General and/or Administrative Markup. Town reserves the right to reject any and all requests for General and/or Administrative Markup.

### **IV. GUIDELINES FOR TRAVEL AND SUBSISTENCE EXPENSES.**

1. **Adherence to Currently Adopted Town Travel Policy** – Unless otherwise stated within this Agreement, reimbursements shall be governed by the same travel policies provided for Town employees according to current adopted policy. All lodging and meals are reimbursed in accordance with IRS rules and rates as shown on the U.S. General Services Administration website for the Town: <http://www.gsa.gov/portal/category/21287>.
2. Prior to the event, Consultant shall request, and the Town shall provide the provisions and the restrictions that apply to out-of-town reimbursements.

**EXHIBIT "D"**  
**TOWN OF ADDISON PROFESSIONAL SERVICES/CONSULTANT**  
**INSURANCE GUIDELINES**

**REQUIREMENTS**

Contractors performing work on CITY OF ADDISON property or public right-of-way shall provide the CITY OF ADDISON a certificate of insurance or a copy of their insurance policy(s) (and including a copy of the endorsements necessary to meet the requirements and instructions contained herein) evidencing the coverages and coverage provisions identified herein within ten (10) days of request from CITY OF ADDISON. Contractors shall provide CITY OF ADDISON evidence that all subcontractors performing work on the project have the same types and amounts of coverages as required herein or that the subcontractors are included under the contractor's policy. Work shall not commence until insurance has been approved by CITY OF ADDISON.

All insurance companies and coverages must be authorized by the Texas Department of Insurance to transact business in the State of Texas and must have a A.M. Best's rating A-:VII or greater.

Listed below are the types and minimum amounts of insurances required and which must be maintained during the term of the contract. CITY OF ADDISON reserves the right to amend or require additional types and amounts of coverages or provisions depending on the nature of the work.

	<b>TYPE OF INSURANCE</b>	<b>AMOUNT OF INSURANCE</b>	<b>PROVISIONS</b>
1.	<b>Workers' Compensation Employers' Liability</b> to include: (a) each accident (b) Disease Policy Limits (c) Disease each employee	Statutory Limits per occurrence  Each accident \$1,000,000 Disease Policy Limits \$1,000,000 Disease each employee \$1,000,000	<b>CITY OF ADDISON to be provided a <u>WAIVER OF SUBROGATION AND 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. <b>Insurance company must be A-:VII rated or above.</b></b>
2.	<b>Commercial General (Public) Liability</b> to include coverage for: a) Bodily Injury b) Property damage c) Independent Contractors d) Personal Injury e) Contractual Liability	Bodily Injury/Property Damage per occurrence \$1,000,000, General Aggregate \$2,000,000 Products/Completed Aggregate \$2,000,000, Personal Advertising Injury per occurrence \$1,000,000, Medical Expense 5,000	<b>CITY OF ADDISON to be listed as <u>ADDITIONAL INSURED</u> and provided <u>30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. <b>Insurance company must be A-:VII rated or above.</b></b>
3.	<b>Business Auto Liability</b> to include coverage for: a) Owned/Leased vehicles b) Non-owned vehicles c) Hired vehicles	Combined Single Limit \$1,000,000	<b>CITY OF ADDISON to be listed as <u>ADDITIONAL INSURED</u> and provided <u>30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. <b>Insurance company must be A:VII-rated or above.</b></b>

Certificate of Liability Insurance forms (together with the endorsements necessary to meet the requirements and instructions contained herein) may be **faxed** to the Purchasing Department:

972-450-7074 or emailed to: [purchasing@addisontx.gov](mailto:purchasing@addisontx.gov). Questions regarding required insurance should be directed to the Purchasing Manager.

With respect to the foregoing insurance,

1. All liability policies shall contain no cross liability exclusions or insured versus insured restrictions applicable to the claims of the City of Addison.
2. All insurance policies shall be endorsed to require the insurer to immediately notify the City of Addison, Texas of any material change in the insurance coverage.
3. All insurance policies shall be endorsed to the effect that the City of Addison, Texas will receive at least thirty (30) days' notice prior to cancellation or non-renewal of the insurance.
4. All insurance policies, which name the City of Addison, Texas as an additional insured, must be endorsed to read as primary coverage regardless of the application of other insurance.
5. Insurance must be purchased from insurers that are financially acceptable to the City of Addison and licensed to do business in the State of Texas.

All insurance must be written on forms filed with and approved by the Texas Department of Insurance. Upon request, Contractor shall furnish the City of Addison with complete copies of all insurance policies certified to be true and correct by the insurance carrier.

This form must be signed and returned with your quotation. You are stating that you do have the required insurance and if selected to perform work for CITY OF ADDISON, will provide the certificates of insurance (and endorsements) with the above requirements to CITY OF ADDISON within 10 working days.

**A CONTRACT/PURCHASE ORDER WILL NOT BE ISSUED WITHOUT EVIDENCE AND APPROVAL OF INSURANCE.**

**AGREEMENT**

I agree to provide the above described insurance coverages within 10 working days if selected to perform work for CITY OF ADDISON. I also agree to require any subcontractor(s) to maintain insurance coverage equal to that required by the Contractor. It is the responsibility of the Contractor to assure compliance with this provision. The City accepts no responsibility arising from the conduct, or lack of conduct, of the Subcontractor.

Project/Bid# Vitruvian Park Public Infrastructure Improvements - Block 200

Company: Kleinfelder, Inc.

Printed Name: Lewis Reagan

Signature  Date: 10/27/16

EXHIBIT "E"  
AFFIDAVIT

THE STATE OF TEXAS           §  
  §  
THE COUNTY OF DALLAS       §

I, Consultant Name, a member of the Consultant team, make this affidavit and hereby on oath state the following:

I, and/or a person or persons related to me, have the following interest in a business entity that would be affected by the work or decision on the Project (Check all that apply):

- \_\_\_\_\_ Ownership of 10% or more of the voting shares of the business entity.
- \_\_\_\_\_ Ownership of Twenty Five Thousand and 00/100 Dollars (\$25,000.00) or more of the fair market value of the business entity.
- \_\_\_\_\_ Funds received from the business entity exceed ten percent (10%) of my income for the previous year.
- \_\_\_\_\_ Real property is involved, and I have an equitable or legal ownership with a fair market value of at least Twenty Five Thousand and 00/100 Dollars (\$25,000.00).
- \_\_\_\_\_ A relative of mine has substantial interest in the business entity or property that would be affected by my business decision of the public body of which I am a member.
- \_\_\_\_\_ Other: \_\_\_\_\_
- None of the Above.

Upon filing this affidavit with the Town of Addison, Texas, I further affirm that no relative of mine, in the first degree by consanguinity or affinity, as defined in Chapter 573 of the Texas Government Code, is a member of a public body which took action on the agreement.

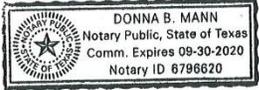
Signed this 27<sup>th</sup> day of October, 2016.

*Lewis Reagan*  
Signature of Official / Title

BEFORE ME, the undersigned authority, this day personally appeared Lewis Reagan and on oath stated that the facts hereinabove stated are true to the best of his / her knowledge or belief.

Sworn to and subscribed before me on this 27<sup>th</sup> day of October, 2016.

*Donna B. Mann*  
Notary Public in and for the State of Texas  
My commission expires: 9-30-2020



**EXHIBIT "F"**  
**CONFLICT OF INTEREST QUESTIONNAIRE, FORM CIQ**

<b>FORM CIQ CONFLICT OF INTEREST QUESTIONNAIRE</b> For vendor or other person doing business with local governmental entity	
This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session. This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a). By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code. A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.	<b>OFFICE USE ONLY</b> Date Received
1. Name of person who has a business relationship with local governmental entity.  <p align="center">N/A</p>	
2. Check this box if you are filing an update to a previously filed question <input type="checkbox"/> (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)	
3. Name of local government officer with whom filer has employment or business relationship.  <p align="center">N/A                  _____                  Name of Local Government Officer</p> This section (item 3 including subparts A, B, C & D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.	
A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?      Yes <input type="checkbox"/> No <input type="checkbox"/>	
B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?      Yes <input type="checkbox"/> No <input type="checkbox"/>	
C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?      Yes <input type="checkbox"/> No <input type="checkbox"/>	
D. Describe each employment or business relationship with the local government officer named in this section.  _____ _____	
4. Signature of person doing business with the governmental entity Date: <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">                       _____                      Signature                 </div> <div style="text-align: center;">                     10/27/16                      _____                      Date                 </div> </div>	

**EXHIBIT "F"**  
**CONFLICT OF INTEREST QUESTIONNAIRE, FORM CIQ**

**Local Government Officers Town of Addison, Texas**

For purposes of completion of the required Conflict of Interest Questionnaire for the Town of Addison Texas (required by all Vendors who submit bids/proposals), Local Government Officers are:

Mayor:	Todd Meier
Council Members:	Al Angel, Council Member Jim Duffy, Council Member Bruce Arfsten, Council Member Paul Walden, Council Member Ivan Hughes, Council Member Dale Wilcox, Council Member
City Manager:	Wesley S. Pierson

# CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.  
 Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

## OFFICE USE ONLY CERTIFICATION OF FILING

**1 Name of business entity filing form, and the city, state and country of the business entity's place of business.**  
 Kleinfelder, Inc.  
 Irving, TX United States

Certificate Number:  
 2016-129704

Date Filed:  
 10/27/2016

**2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.**  
 The Town of Addison, Texas

Date Acknowledged:

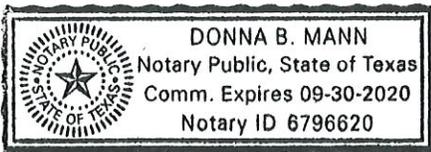
**3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.**  
 Vitruvian Park Public Infrastr  
 Construction Materials Observation and Testing

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary

**5 Check only if there is NO Interested Party.**

**6 AFFIDAVIT**

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.



AFFIX NOTARY STAMP / SEAL ABOVE

*Luis A. Reagan*

Signature of authorized agent of contracting business entity

Sworn to and subscribed before me, by the said Luis Reagan, this the 27<sup>th</sup> day of October, 2016, to certify which, witness my hand and seal of office.

*Donna B. Mann*  
 Signature of officer administering oath

Donna B. Mann  
 Printed name of officer administering oath

Notary  
 Title of officer administering oath

**Work Session and Regular Meeting****Meeting Date:** 12/13/2016**Department:** Infrastructure- Development Services

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**AGENDA CAPTION:**

Present, Discuss, And Consider Action On A **Resolution Authorizing The City Manager To Approve A Contract With UDR, Inc., For Construction Management Services In Connection With The Construction Of The Public Infrastructure Improvements For Phase 5 Of The Vitruvian Development Located At Marsh Lane And Vitruvian Way** In The Amount Of \$305,909.44.

**BACKGROUND:**

On June 26, 2013, the Town and UDR and various named partners executed an Amended and Restated Master Facilities Agreement (MFA) that covers the development known as Vitruvian Park in the area of Addison that is bounded by Vitruvian Way, Spring Valley Road, and Marsh Lane. Section 6.B.2, of the MFA states that the Town will retain UDR as the construction manager for the construction of the public infrastructure improvements under a separate agreement. Under this agreement, UDR will ensure that the improvements are completed in a timely manner and in accordance with the construction contract documents, plans, and specifications.

Under the Master Facilities Agreement, public infrastructure improvements are defined as the public streets, easements, and other public rights-of-way, water, sewer, and drainage facilities, park facilities, and all other proposed public facilities and improvements as depicted on the construction plan and specifications. Once a contractor is selected for the construction of the public improvements, the Town and UDR will enter into a Construction Management Agreement (CMA) for these services.

Section 2.(c) of the MFA stipulates that UDR is entitled to be paid an amount equivalent to 8% of the total construction costs for the public infrastructure improvements as determined by the regular construction bidding process. The request for bids for the Phase 5 public improvements project was posted on September 29, 2016 and the bid phase closed on October 25, 2016. Two bids were received and Council will consider the award to the low bidder at the December 13, 2016 Council meeting. The low bid is \$3,823,868.00 Therefore, UDR's fee for construction management services will be \$305,909.44.

Under the terms of the CMA, UDR will designate a construction manager who will communicate to the Town any issues related to the construction of the public improvements and will act as the Town's representative on site. The Construction Manager will provide construction observation, supervision, and coordination of all construction work related to the public improvements for Phase 5. UDR will schedule regular meetings with Town staff regarding the planning and construction of the

improvements and will also ensure that the work of the contractor has been inspected so as to guard against any defects and deficiencies in the improvements. UDR will not, however, assume any responsibility for the means and methods used by the contractor. UDR will review all invoices or pay requests from the selected contractor and will forward those to the Town for payment along with any supporting documentation the Town requires.

Funds are available for this expenditure in the Vitruvian Bonds for Phase 5 public improvements.

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

Resolution with Agreement

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TOWN OF ADDISON, TEXAS

RESOLUTION NO. \_\_\_\_\_

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS APPROVING THE ASSIGNMENT AND CONSTRUCTION SERVICES AGREEMENT BETWEEN THE TOWN OF ADDISON AND UDR, INC., VPDEV 1 LLC AND VP WEST 1, LLC, IN THE AMOUNT OF \$305,909.44, FOR WORK AND SERVICES AS CONSTRUCTION MANAGER AND SUPERVISOR AND COORDINATOR ASSOCIATED WITH THE VITRUVIAN PHASE V DEVELOPMENT, AUTHORIZING THE CITY MANAGER TO EXECUTE THE AGREEMENT, AND PROVIDING AN EFFECTIVE DATE.**

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

**Section 1.** The Assignment and Construction Services Agreement between the Town of Addison and UDR, Inc., VPDEV 1 LLC and VP West 1, LLC, in the amount of \$305,909.44, for work and services as construction manager and supervisor and coordinator associated with the Vitruvian Phase V development, a copy of which is attached to this Resolution as **Exhibit A**, is hereby approved. The City Manager is hereby authorized to execute the agreement.

**Section 2.** This Resolution shall take effect from and after its date of adoption.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13<sup>th</sup> day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney



Infrastructure Improvements are separated by City funding (identified in the Facilities Agreement as Funding No. 2 (and so called herein)) and by phases (e.g., Phase I Infrastructure, Phase II Infrastructure) as reflected in Exhibit C-2 thereof, and further separated by type of improvement as reflected in Exhibit D to the Facilities Agreement.

4. The Facilities Agreement recognizes the construction by UDR and the other Property Owners (including the Phase Five Owners) of certain private facilities and improvements within the Property and the need to coordinate the construction of private facilities and improvements with the construction of public facilities and improvements. In order to accommodate such coordination, the Facilities Agreement provides that, following the award and execution by the City of a contract to construct Public Infrastructure Improvements, the City will assign its rights, powers, duties, and obligations under the applicable construction contract to UDR, and UDR will then act and serve as the owner and construction manager under the applicable construction contract for all purposes.

5. The Public Infrastructure Improvements identified in the Facilities Agreement include those facilities and improvements described in Exhibit B attached hereto and incorporated herein (for purposes of this Agreement, the "Current Public Improvements"). The Current Public Improvements are part of the Phase V Infrastructure as shown on Exhibit C-2 to the Facilities Agreement and are included within that area identified as Phase V in Exhibit E to the Facilities Agreement. Further, the Current Public Improvements constitute Water, Sanitary Sewer, Storm Drain Improvement associated with Brookhaven Club Drive, Ponte Avenue and Vitruvian Park to be known as the Vitruvian Park Public Infrastructure – Phase V as described in Exhibit D to the Facilities Agreement. The Current Public Improvements are to be constructed on or immediately adjacent to the Phase One Property.

6. In accordance with applicable law, the City has selected Flowline Construction, Inc. (the "Contractor") to construct the Current Public Improvements and intends to enter into a contract with the Contractor to perform such construction (the "Current Public Improvements Construction Contract" or "Construction Contract") for Three Million One Hundred Ninety-Seven Thousand Two-Hundred Ninety-Nine Dollars (\$3,197,299.00) (a true and correct copy of the Construction Contract will be kept on file in the office of the City Secretary of the City). Prior to execution of the Construction Contract, UDR shall have a reasonable opportunity to review the Construction Contract and recommend modifications as UDR deems appropriate regarding the Construction Contract to the City. Engineering services to design the Current Public Improvements and to prepare plans and specifications for the construction of the Current Public Improvements have been provided by Icon Consulting Engineers, Inc. ("Engineer"). In accordance with the Facilities Agreement, the City by this Agreement desires to assign to UDR the City's rights, powers, duties and obligations under the Construction Contract, and UDR desires to accept such rights, powers, duties and obligations and to serve as the owner and construction manager for all purposes under and with respect to the Construction Contract.

**NOW, THEREFORE**, for and in consideration of the above and foregoing premises, and other good and valuable consideration, the Town of Addison, Texas and UDR, Inc., and Phase Five Owners do hereby contract and agree as follows:

**Section 1. Incorporation of Recitals.** The above and foregoing Recitals are true and correct and are incorporated herein for all purposes.

**Section 2. Funding.** The Current Public Improvements described in Exhibit B attached hereto are a part of the Phase V Infrastructure as generally described on Exhibit C-2 to the Facilities Agreement and as provided on the concept plan, plans, and specifications for Phase V as reviewed and approved by the City on May 24, 2016 incorporated herein for all purposes, constitute Water, Wastewater, Drainage and Streetscape Infrastructure (within the Phase V Infrastructure) as shown on the said Exhibit C-2, and further constitute Water Improvements, Wastewater Improvements, and Drainage Improvements as shown on Exhibit D to the Facilities Agreement. The Facilities Agreement provides that the City's funding for the design and construction of the Public Infrastructure Improvements will be allocated as described in Exhibit D to the Facilities Agreement and will not exceed the amounts set forth in Exhibit C-2 to the Facilities Agreement. The Facilities Agreement further provides that, with one exception not applicable to this Agreement, if the design and construction costs for any Public Infrastructure Improvements exceeds the projected total costs for the relevant Public Infrastructure Improvements set forth in Exhibit C-2 to the Facilities Agreement, UDR and the Property Owners (including the Phase Five Owners) will pay the City the difference between contracted costs and projected total costs prior to the execution of a construction contract by the City related to such Public Infrastructure Improvements. With respect to the Current Public Improvements, it is anticipated that the design and construction costs for the Current Public Improvements (exclusive of any change orders) will not exceed the projected total costs for the relevant Public Infrastructure Improvements set forth in Exhibit C-2 to the Facilities Agreement.

A description of the anticipated total costs to design and construct the Current Public Improvements, as of the date of this Agreement, is set forth in Exhibit C attached to and incorporated into this Agreement. Upon final completion of the construction of the Current Public Improvements, the City shall prepare revisions to Exhibit C which reflects the actual costs incurred and paid by the City to design and construct the Current Public Improvements (the "True-Up Exhibit C"). The City shall, upon finalizing the True-Up Exhibit C, provide a copy of the same to UDR, and the True-Up Exhibit C shall serve as the final determination of the actual costs incurred by the City to design and construct the Current Public Improvements. For purposes of subsequent design and construction of other Public Infrastructure Improvements, the costs set forth in the True-Up Exhibit C shall be used, in connection with the design and construction of other and additional Public Infrastructure Improvements, in determining whether the maximum amounts set forth in Exhibit C-2 and in Exhibit D of the Facilities Agreement have been met.

With respect to any change order in connection with the Construction Contract, to the extent a change order is necessary for the successful completion of the Work and construction as identified and described in the Construction Contract, the cost for such change order will be paid from funds applicable thereto (as set forth in and in accordance with the Facilities Agreement) which may then be available, if any; if such funds are not available, UDR shall pay the change order.

**Section 3. Assignment.** Except as otherwise provided in Section 4.C, the City does hereby assign and transfer all of its rights, powers, duties and obligations under the Current Public Improvements Construction Contract to UDR. Except as otherwise provided in Section 4.C, UDR

shall act and serve as the owner and construction manager under the Construction Contract for all purposes, including, observation, supervision and coordination of all construction work.

#### **Section 4. Construction Management.**

##### **A. Construction Manager; Inspection of Work.**

1. In connection with the performance of the Work and the construction of the Current Public Improvements, UDR shall perform construction management services and shall coordinate the construction of the Current Public Improvements. In connection with such services, UDR shall comply with and abide by the terms, conditions, and provisions set forth in Exhibit D attached hereto and incorporated herein (and references in the said Exhibit D shall mean and refer to UDR and the Construction Manager designated by UDR as described below).

UDR shall consult with and obtain approval from the City regarding the designation of an individual to serve as the construction manager (the "Construction Manager") for the Current Public Improvements. UDR and the Phase Five Owners shall be fully responsible for the work and services of the Construction Manager under this Agreement, and for the Construction Manager and all of the Construction Manager's work and activities. Following such designation UDR shall promptly provide to the City the name of the person so designated and the person's contact information, and shall promptly update such contact information in the event of any change.

The City's representative for purposes of this Agreement shall be the City's Director of Infrastructure and Development Services (the "Director") or the Director's designee. All communication from UDR (and including the Construction Manager) to the City shall be directed to the Director or the Director's designee (if any).

The person designated by UDR as the Construction Manager shall have significant experience in managing construction projects of the type that is the subject of the Current Public Improvements Construction Contract. The Construction Manager shall, and UDR shall cause the Construction Manager to, meet and communicate with the City, including the Director, on a regular basis. Among other things, the Construction Manager shall inform the City Manager of all emergencies and the occurrence of any unforeseen circumstances relating to the Construction Contract.

In the event the performance of the Construction Manager is reasonably determined by the City Manager to be unsatisfactory to the City Manager as evidenced by written notice to UDR from the City Manager, UDR shall, if the Construction Manager has not cured the unsatisfactory performance as set forth in the notice within a reasonable period of time following written receipt of such request (but in any event not to exceed 30 days, but such time period may be extended if necessary in order to comply with any applicable federal, state, or local law or regulation), remove the current Construction Manager and appoint a replacement in accordance with the provisions of this subsection within a reasonable time period thereafter (but not to exceed 15 days).

2. UDR shall use its best efforts to ensure that the work as described and set forth in the Current Public Improvements Construction Contract to be performed under the Construction Contract (and including the construction of the Current Public Improvements) (the "Work") is

completed in a timely manner and in accordance with the Construction Contract documents, plans, standards, specifications, and other materials and information related thereto. UDR shall coordinate the construction as a construction manager, including confirming that the Engineer has inspected the Work of the Contractor, to guard the City against defects and deficiencies in the Work without assuming responsibility for the means and methods used by the Contractor, and in accordance therewith UDR shall promptly notify the City of any defects or deficiencies in the Work if the same are observed or detected by UDR or otherwise brought to UDR's attention.

3. In connection with its construction management services, UDR will facilitate weekly meetings with designated City staff members regarding the planning and construction of the Current Public Improvements, which meetings shall occur more often as may be requested by the City. In connection with or related to the Work, UDR shall coordinate testing by any geotechnical engineering firm which has been selected by the City in accordance with the Facilities Agreement upon written notice thereof to UDR from the City.

B. Contractor Claims. Except as provided in paragraph C of this Section 4, UDR and the Phase Five Owners shall fully resolve and completely pay or settle, by litigation or otherwise, any claims of the Contractor or any subcontractor arising out of the Construction Contract, without involving the City.

C. Payment to Contractor; City's Wrongful Failure to Make Payments.

1. UDR shall review all invoices or pay or draw requests received from the Contractor and forward the same to the City for payment with such supporting documentation as the City may require. Except as provided in this Agreement or in the Facilities Agreement, all payments for Work performed under the Construction Contract shall be paid by the City and made payable to the Contractor and shall be delivered to UDR for forwarding to the Contractor; provided, however, that the City shall not be obligated to make a payment under any such invoice or pay estimate unless UDR has provided to the City a certification regarding the invoice or pay estimate and UDR has reviewed and approved the same.

UDR's certification shall be by affidavit sworn to by the appropriate official of UDR authorized to submit the same, and shall certify that the estimate of Work completed for the relevant period is true and correct to the best of UDR's information and belief, has been measured and verified in accordance with the Construction Contract documents, and that all Construction Contract preconditions to payment have been met. If not previously provided to the City, copies of all material testing results (if applicable and available) shall be furnished with the certification.

With respect to each invoice or pay or draw request from the Contractor or any other contractor or material supplier, the City may withhold from the payment thereof the amount of retainage which is to be withheld from each payment to the Contractor under the Construction Contract and any other amounts in accordance with or as set forth in the Construction Contract.

Subject to the terms of the Construction Contract, retainage under the Construction Contract (together with any change orders thereto) will be made by the City to UDR for forwarding to the Contractor upon the final acceptance by the City of the Work performed by the Contractor.

2. All change orders with respect to the Construction Contract and the construction of the Current Public Improvements shall be processed and approved by the City in accordance with the City's procedure for the review and approval thereof. In the event of a change order which increases the cost of construction work for the construction of the Current Public Improvements, there shall be withheld from each payment of an invoice, pay request or draw in connection with that change order the retainage required to be withheld under the Construction Contract, and if such payment is made by UDR, UDR shall promptly transfer such retainage to the City.

3. In order to secure the obligations of UDR to make payments under the Construction Contract (if any such payment is or may be required), UDR shall provide to the City, prior to the issuance of a notice to commence construction under the Construction Contract, UDR's guarantee of UDR's payment obligations in a form acceptable to the City.

4. In the event that claims from the Contractor under the Construction Contract result from the wrongful failure by the City to make construction payments in accordance with the terms of this Agreement, UDR may seek reimbursement in accordance with this paragraph C.4. of this Section. In the event UDR intends to seek reimbursement from the City for the expense incurred by UDR in resolving any claim caused directly by the City's wrongful failure to make such construction payments, UDR shall notify the City in writing of the claim and any proposed settlement or resolution. The City reserves the right upon such notice, and at the City's sole election, to make an audit of those portions of the books, records, accounts and other data of UDR and of the Contractor relating to the claim and overall performance of the Current Public Improvements Construction Contract before approving payment of such claim.

D. Construction Management Fee. In connection with and for UDR's work and services as construction manager and supervisor and coordinator of the construction of the Current Public Improvements, the City shall pay to UDR an amount equivalent to eight percent (8%) of the total construction costs for the Current Public Improvements as set forth in the Construction Contract (e.g. based upon the Construction Contract amount of \$3,197,299.00, such amount would be Two-Hundred Fifty-Five Thousand, Seven-Hundred Eighty-Three Dollars and Ninety-Two Cents (\$255,783.92)). Such amount is to be paid in monthly installments as the Work under the Current Public Improvements Construction Contract progresses and in accordance with this subsection D. Each installment payment shall be paid within thirty (30) days following the City's receipt of an invoice from UDR requesting such amount. Each such invoice from UDR shall not exceed an amount determined by multiplying (i) the amount of any unpaid invoice or pay or draw request properly submitted by the Contractor pursuant to the Construction Contract (less the amount of any retainage under the Construction Contract) for payment for the then current month and due and owing by the City, times (ii) eight percent (8%) (the intent being that the payment to UDR for UDR's construction management services shall parallel payment to the Contractor for the Contractor's Work and services under the Construction Contract). In accordance with the Facilities Agreement, the amounts paid to UDR pursuant to this paragraph shall be paid solely from Funding No. 2; and provided, however, that in accordance with the Facilities Agreement, UDR shall be entitled to such payment if and only if the costs to design and construct the Current Public Improvements (including the costs of any change orders) do not exceed the amount to be paid for the same as allocated and set forth in Exhibits C-2, and D of the Facilities Agreement.

If following the completion of construction of the Current Public Improvements for which UDR received a management fee, it is determined that UDR was not entitled to the management fee, UDR shall reimburse to the City the management fee to the extent funding was not available to pay the same as described herein.

**Section 5. Insurance.**

A. At all times in connection with this Agreement, UDR and the Phase Five Owners shall purchase and maintain in a company or companies lawfully authorized to do business in Texas such insurance coverages as set forth below:

1. Commercial General Liability insurance at minimum combined single limits of \$2,000,000 per-occurrence and \$5,000,000 general aggregate for bodily injury and property damage, which coverage shall include products/completed operations (\$2,000,000 products/completed operations aggregate), and XCU (Explosion, Collapse, Underground) hazards. Coverage for products/completed operations must be maintained for at least two (2) years after the construction work has been completed. Coverage must be amended to provide for an each-project aggregate limit of insurance. An alternative would be to have separate limits for all lines of General Liability coverage for each project.

2. Employers Liability coverage at minimum limits of \$1,000,000 each occurrence each accident / \$1,000,000 by disease each occurrence / \$1,000,000 by disease aggregate.

3. Builders Risk coverage as follows:

- (a) "All Risk" Builders Risk insurance, including collapse coverage, is required on a completed value form if the contract is for the construction of a structure or building.
- (b) The Builders Risk policy must provide transit and off-premises coverage if the contract with the builder makes the Town of Addison responsible for materials. The deductible shall not exceed \$5,000.

B. UDR and the Phase Five Owners are nonsubscribers under the Texas Workers Compensation Act. Therefore UDR and Phase Five Owners will maintain coverage and/or adequate collateral to fund payment of claims arising out of workplace injuries of UDR and Phase Five Owners employees. UDR and the Phase Five Owners shall provide proof of same in form and content acceptable to the City.

C. With reference to the foregoing insurance requirement, UDR and the Phase Five Owners shall specifically endorse applicable insurance policies as follows:

- 1. The Town of Addison, Texas shall be named as an additional insured with respect to General Liability.

2. All liability policies shall contain no cross liability exclusions or insured versus insured restrictions applicable to the claims of the Town of Addison.
3. A waiver of subrogation in favor of the Town of Addison, Texas, its officers, employees, and agents shall be contained in each policy required herein.
4. All insurance policies shall be endorsed to require the insurer to immediately notify the Town of Addison, Texas of any material change in the insurance coverage.
5. All insurance policies shall be endorsed to the effect that the Town of Addison, Texas will receive at least sixty (60) days' notice prior to cancellation or non-renewal of the insurance.
6. All insurance policies, which name the Town of Addison, Texas as an additional insured, must be endorsed to read as primary coverage regardless of the application of other insurance.
7. Required limits may be satisfied by any combination of primary and umbrella liability insurances.
8. UDR and Phase Five Owners may maintain reasonable and customary deductibles. UDR and Phase Five Owners shall give notice of any deductible or retention obligations in excess of \$25,000.00.
9. Insurance must be purchased from insurers that are financially acceptable to the City and licensed to do business in the State of Texas.

All insurance must be written on forms filed with and approved by the Texas Department of Insurance. Certificates of Insurance shall be prepared and executed by the insurance company or its authorized agent, delivered to UDR and the Phase Five Owners and the City prior to the commencement of any Work under the Construction Contract, and shall:

1. List each insurance coverage described and required herein. Such certificates will also include a copy of the endorsements necessary to meet the requirements and instructions contained herein.
2. Specifically set forth the notice-of-cancellation or termination provisions to the Town of Addison.

Upon request, UDR and the Phase Five Owners shall furnish the Town of Addison with complete copies of all insurance policies certified to be true and correct by the insurance carrier.

**SECTION 6. UDR'S AND PHASE FIVE OWNERS INDEMNITY OBLIGATION. UDR AND THE PHASE FIVE OWNERS (UDR AND THE PHASE FIVE OWNERS BEING REFERRED TO TOGETHER IN THIS SECTION 6 AS THE "DEVELOPER") COVENANT AND AGREE TO FULLY DEFEND, INDEMNIFY AND HOLD HARMLESS THE TOWN OF ADDISON, TEXAS AND THE ELECTED**

OFFICIALS, THE OFFICERS, EMPLOYEES, REPRESENTATIVES, AND VOLUNTEERS OF THE TOWN OF ADDISON, TEXAS, INDIVIDUALLY OR COLLECTIVELY, IN BOTH THEIR OFFICIAL AND PRIVATE CAPACITIES (THE ELECTED OFFICIALS, THE OFFICERS, EMPLOYEES, REPRESENTATIVES, AND VOLUNTEERS OF THE TOWN OF ADDISON, TEXAS EACH BEING AN "ADDISON PERSON" AND COLLECTIVELY THE "ADDISON PERSONS"), FROM AND AGAINST ANY AND ALL COSTS, CLAIMS, LIENS, HARM, DAMAGES, LOSSES, JUDGMENTS, EXPENSES, FEES, FINES, PENALTIES, PROCEEDINGS, ACTIONS, DEMANDS, CAUSES OF ACTION, LIABILITY, AND SUITS, OF ANY KIND AND NATURE WHATSOEVER MADE UPON ANY ADDISON PERSON, WHETHER DIRECTLY OR INDIRECTLY, (THE "CLAIMS"), THAT ARISE OUT OF, RESULT FROM, OR RELATE TO: (1) ANY ACT OR OMISSION, WORK OR SERVICES OF DEVELOPER OR ANY OWNER, OFFICER, DIRECTOR, MANAGER, EMPLOYEE, AGENT, REPRESENTATIVE, CONSULTANT, CONTRACTOR, SUBCONTRACTOR, LICENSEE, OR CONCESSIONAIRE OF DEVELOPER, OR ANY OTHER PERSON OR ENTITY FOR WHOM DEVELOPER IS LEGALLY RESPONSIBLE, AND THEIR RESPECTIVE OWNERS, OFFICERS, DIRECTORS, MANAGERS, EMPLOYEES, AGENTS, REPRESENTATIVES, CONSULTANTS, CONTRACTORS, SUBCONTRACTORS, LICENSEES, AND CONCESSIONAIRE (COLLECTIVELY, THE "DEVELOPER PERSONS") AS THE OWNER AND CONSTRUCTION MANAGER UNDER THE CONSTRUCTION CONTRACT, (2) REPRESENTATIONS OR WARRANTIES BY DEVELOPER UNDER THIS AGREEMENT, AND/OR (3) ANY OTHER ACT OR OMISSION UNDER, IN CONNECTION WITH, OR IN PERFORMANCE OF THIS AGREEMENT OR OF THE CONSTRUCTION CONTRACT BY DEVELOPER OR BY ANY OF THE OTHER DEVELOPER PERSONS. SUCH DEFENSE, INDEMNITY AND HOLD HARMLESS SHALL AND DOES INCLUDE CLAIMS ALLEGED OR FOUND TO HAVE BEEN CAUSED, IN WHOLE OR IN PART, BY THE NEGLIGENCE OF ANY ADDISON PERSON OR BY CONDUCT OF AN ADDISON PERSON THAT GIVES RISE TO STRICT LIABILITY, BUT DOES NOT INCLUDE CLAIMS FOUND TO BE CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF AN ADDISON PERSON.

DEVELOPER SHALL PROMPTLY ADVISE THE CITY IN WRITING OF ANY CLAIM OR DEMAND AGAINST ANY ADDISON PERSON OR DEVELOPER RELATED TO OR ARISING OUT OF DEVELOPER'S ACTIVITIES UNDER THIS AGREEMENT OR THE CONSTRUCTION CONTRACT AND SHALL SEE TO THE INVESTIGATION AND DEFENSE OF SUCH CLAIM OR DEMAND AT DEVELOPER'S SOLE COST AND EXPENSE. THE ADDISON PERSONS SHALL HAVE THE RIGHT, AT THE ADDISON PERSONS' OPTION AND AT OWN EXPENSE, TO PARTICIPATE IN SUCH DEFENSE WITHOUT RELIEVING DEVELOPER OF ANY OF ITS OBLIGATIONS HEREUNDER.

#### **Section 7. Default.**

A. In the event of a default by UDR and/or the Phase Five Owners, the City shall have the right to terminate this Agreement by giving at least thirty (30) days written notice of such termination to UDR. A default of this Agreement shall constitute a default under the Facilities Agreement. For purposes hereof, a default means and includes any violation of or breach of any provision of this Agreement.

UDR and the Phase Five Owners shall have a period of not more than thirty (30) days from the time of UDR's receipt of notice of default and termination is delivered by the City within which to cure any default of this Agreement. If any such default remains uncured to the satisfaction of

the City at the end of such thirty (30) day period, the City may immediately terminate this Agreement by giving written notice thereof to UDR. Notwithstanding the proceeding to the contrary, the City Manager may approve reasonable extensions to cure periods or deadlines for performance of any work by UDR and the Phase Five Owners.

In the event of termination, all finished or unfinished data, studies, reports and other items related to this Agreement and prepared by or in the possession of UDR or the Construction Manager shall be promptly delivered to the City, such items being the property of the City.

B. **Insolvency.** If at any time after the execution of this Agreement (i) any insolvency proceedings shall be instituted against UDR or the Phase Five Owners pursuant to any Federal or State law now or hereafter enacted, or any receiver or trustee shall be appointed for all or any portion of UDR's or any of the Phase Five Owners' business or property for which this Agreement is a material part, or any execution or attachment shall issue against UDR or the Phase Five Owners or any of UDR's or the Phase Five Owners' business or property for which this Agreement is a material part, and any of such proceedings, process or appointment be not discharged, dismissed or otherwise adjudicated within sixty (60) days from the date of such filing, appointment or issuance or within such other time as provided by applicable law or as may be ordered by a court of competent jurisdiction; or (ii) UDR or the Phase Five Owners shall be adjudged insolvent, or UDR or the Phase Five Owners shall make an assignment for the benefit of creditors, or UDR or the Phase Five Owners shall file a petition or petitions for (or enters into) an arrangement for reorganization, composition or any other arrangement with UDR's or the Phase Five Owners creditors under any Federal or State law now or hereafter enacted, or this Agreement shall pass to or devolve upon, by operation of law or otherwise, anyone other than UDR or the Phase Five Owners, and unless this Agreement is otherwise assumed and the obligations thereunder cured, the occurrence of any one of such contingencies shall be deemed to constitute and shall be construed as a repudiation by UDR or the Phase Five Owners of UDR's or the Phase Five Owners' rights and obligations hereunder and shall cause this Agreement *ipso facto* to be cancelled and terminated effective as soon as permitted by then applicable law without thereby releasing UDR or the Phase Five Owners; and upon such termination this Agreement shall not be treated as an asset of UDR's or Phase Five Owners' estate.

**Section 8. Texas Law to Apply; Venue.** The validity of this Agreement and of any of its terms or provisions, as well as the rights and duties of the parties hereto, shall be governed by the laws of the State of Texas, without reference to its conflict of law provisions. Venue for any action or matter under this Agreement lies exclusively in Dallas County, Texas. This Agreement and all of its terms and conditions are subject to applicable federal, state, and local laws, ordinances, rules, regulations, and codes, including, without limitation, the Zoning Ordinance and the City Charter of the Town of Addison, Texas.

**Section 9. Independent Contractor.** Each of UDR and the Phase Five Owners is and shall at all times operate as an independent contractor and not as an agent of the City in connection with or during any performance of this Agreement, and nothing herein shall be construed to create a partnership, joint venture, joint enterprise, or agency relationship between the parties hereto, or to allow the City to exercise discretion or control over the manner in which UDR and the Phase Five Owners perform the work and services which are the subject matter of this Agreement; provided always however that the work and services to be provided by UDR and the Phase Five Owners

shall be provided in a manner consistent with all applicable laws, standards and regulations governing the same. No personnel of UDR or the Phase Five Owners or of any contractor or UDR or the Phase Five Owners shall be deemed under any circumstances to be an agent or employee of the City, nor do such personnel have authority to bind the City by any representation, promise, contract or agreement. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purpose whatsoever. Each party hereto represents that it is acting on its own behalf and is not acting as an agent for or on behalf of any third party.

**Section 10. Entire Agreement.** This Agreement represents the entire and integrated agreement between the City, UDR and Phase Five Owners relative to the matters contained herein and supersedes all prior negotiations, representations and/or agreements, either written or oral. This Agreement may be amended only by written instrument signed by the City, UDR and Phase Five Owners.

**Section 11. Severability.** If any clause, paragraph, section, term, provision or portion of this Agreement shall be found to be illegal, unlawful, unenforceable, unconstitutional or void for any reason by a court of competent jurisdiction, the same shall be fully severable and this Agreement shall be construed as if such said clause, paragraph, section, term, provision or portion had not been in the Agreement initially. In lieu of any such illegal, unlawful, unenforceable, unconstitutional or void provision, the parties agree to seek to reasonably negotiate to add to this Agreement a provision as similar in its terms to such illegal, unlawful, unenforceable, unconstitutional or void provision as may be possible and be legal, valid and enforceable.

**Section 12. Miscellaneous.**

A. In connection with this Agreement and the matter set forth herein, all of UDR's, Phase Five Owners', and the Construction Manager's books and other records related to the Construction Contract and the construction of the Current Public Improvements shall be available for inspection by the City at UDR's office in Addison, Texas (located at 3875 Ponte Avenue, Suite 400, Addison, Texas 75001). The City further has the right to conduct inspections of all places where Work is undertaken pursuant to the Construction Contract or otherwise in connection with this Agreement.

B. Neither UDR nor Phase Five Owners shall have the authority to or shall assign, convey, subcontract, pledge, or otherwise transfer in any manner this Agreement, or any of the privileges, rights, or duties set forth herein, to any other person or entity, without the express prior written approval and consent of the City. Any assignment, conveyance, pledge, subcontract, or other transfer in violation of this provision shall be null and void *ab initio* and cause for immediate termination (no period of cure) by the City.

C. This Agreement and each of its provisions are solely for the benefit of the parties hereto and are not intended to create or grant any rights, contractual or otherwise, to any third person or entity.

D. Except as otherwise provided for in this Agreement, all obligations and responsibilities arising prior to the expiration or termination of this Agreement allocating

responsibility or liability of or between the parties shall survive the completion or termination of this Agreement, and any rights and remedies either party may have with respect to the other arising out of the performance during the term of this Agreement shall survive the cancellation, expiration, or termination of this Agreement.

E. The rights and remedies provided by this Agreement are cumulative and the use of any one right or remedy by either party shall not preclude or waive its right to use any or all other remedies. Said rights and remedies are given in addition to any other rights the parties may have by law statute, ordinance, or otherwise. The failure by either party to exercise any right, power, or option given to it by this Agreement, or to insist upon strict compliance with the terms of this Agreement, shall not constitute a waiver of the terms and conditions of this Agreement with respect to any other or subsequent breach thereof, nor a waiver by such party of its rights at any time thereafter to require exact and strict compliance with all the terms hereof.

F. Where the terms of this Agreement require that notice in writing be provided or given, such notice shall be in writing, addressed as provided hereinafter to the party to whom the notice or request is given, and shall be either (i) delivered personally, (ii) sent by United States certified mail, postage prepaid, return receipt requested, or (iii) placed in the custody of Federal Express Corporation or other nationally recognized carrier to be delivered overnight. Notice shall be deemed delivered and given (x) when received if delivered personally (y) three (3) days following the deposit of the notice in the United States mail, postage prepaid, and sent by certified mail, return receipt requester and properly addressed as set forth below, and (z) twenty-four (24) hours after deposit if sent by Federal Express or other nationally recognized carrier. Address for purpose of this Section are as follows:

To the City:

Town of Addison, Texas  
5300 Belt Line Road  
Dallas, Texas 75254-7606  
Attn: City Manager

To UDR and/or the Phase Five Owners:

c/o UDR, Inc.  
1745 Shea Center Drive, Suite 200  
Highlands Ranch, CO 80129  
Attn: Andrew Cantor

With a copy to:

c/o UDR, Inc.  
1745 Shea Center Drive, Suite 200  
Highlands Ranch, CO 80129  
Attn: Legal

The addresses and addressees for the purpose of this Section may be changed by giving notice of such change in the manner herein provided for giving notice. Unless and until such written notice is received the last addresses and addressee stated by written notice, or provided herein if no written notice of change has been sent or received, shall be deemed to continue in effect for all purposes hereunder.

G. This Agreement and all of its terms and conditions are subject to applicable laws, ordinances, rules, regulations, and codes, including, without limitation, the City Charter of the Town of Addison, Texas.

H. The undersigned officers and/or agents of the parties hereto are the properly authorized officials and have the necessary authority to execute this Agreement on behalf of the parties hereto, and each party hereby certifies to the other that any necessary resolutions or other act extending such authority have been duly passed and are now in full force and effect. UDR and Phase Five Owners warrant and represent to the City that there are no other parties, persons, or entities (including any other parties, persons, or entities who may have a lien against or interest in the Phase Five Property) whose consent to or approval of this Agreement is or may be necessary in order to effectuate this Agreement and to allow UDR and/or Phase Five Owners to carry out their duties, responsibilities, and obligations under this Agreement.

I. Notwithstanding any other provision of this Agreement nothing in this Agreement shall or may be deemed to be, or shall or may be construed to be, a waiver or relinquishment of any immunity, defense, or tort limitation to which the City, its officials, officers, employees, representatives, and agents is or may be entitled.

J. This Agreement shall be deemed drafted equally by all parties hereto. The language of all parts of this Agreement shall be construed as a whole according to its fair meaning, and any presumption or principle that the language herein is to be construed against any party shall not apply. Headings in this Agreement are for the convenience of the parties and are not intended to be used in construing this document. All exhibits, schedules and addenda attached to this Agreement are incorporated herein by reference and for all purposes. For purposes of this Agreement, "includes" and "including" are terms of enlargement and not of limitation or exclusive enumeration, and use of the terms does not create a presumption that components not expressed are excluded.

K. This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the parties hereto.

EXECUTED at Dallas County, Texas on the day and year first written above.

**TOWN OF ADDISON, TEXAS**

**UDR, INC.**  
**a Maryland corporation**

By: \_\_\_\_\_  
Wesley S. Pierson, City Manager

By:  \_\_\_\_\_  
Harry G. Alcock  
Senior Vice President  
Asset Management

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

Phase Five Owners:

VPDEV 1 LLC,  
a Delaware limited liability company

By: DCO Realty, Inc.,  
a Delaware corporation,  
its Managing Member

  
\_\_\_\_\_  
Harry G. Alcock  
Authorized Agent

VP WEST 1 LLC,  
a Delaware limited liability company

By: DCO Realty, Inc.,  
a Delaware corporation,  
its Managing Member

  
\_\_\_\_\_  
Harry G. Alcock  
Authorized Agent

**EXHIBIT A**  
**TO ASSIGNMENT AND CONSTRUCTION SERVICES AGREEMENT**

LEGAL DESCRIPTION

BEING a 576,951 square feet or 13.245 acres of land situated in the Noah Good Survey, Abstract No. 520, Town of Addison, Dallas County, Texas, said tract being part of a called 3.3611 acre tract of land conveyed to DCO Brooks Apartments LP by deed recorded in County Clerk Instrument Number 20070086354, Official Public Records of Dallas County, Texas, all of a called 9.4274 acre tract of land conveyed to DCO Greenbrook Apartments LP by deed recorded in County Clerk Instrument Number 20070159785, Official Public Records of Dallas County, Texas and part of a called 9.314 acre tract of land conveyed to DCO Talisker LP by deed recorded in County Clerk Instrument Number 20070159777, Official Public Records of Dallas County, Texas, and being more particularly described as follows:

BEGINNING at a found ½ inch iron rod for a corner in the east line of Marsh Lane (a 100 foot right of way), said point being the southwest corner of Brookhaven Shopping Center addition as recorded in Volume 86225, Page 4769, Deed Records of Dallas County, Texas and being the northwest corner of the said 9.4274 acre tract;

THENCE, S 89°43'05" E, departing the east line of Marsh Lane and with the south line of the said Brookhaven Shopping Center addition, a distance of 431.02 feet to a set 5/8 inch iron rod with a plastic cap stamped "Kadleck NO. 2952" for a corner, said point being the southeast corner of the said Brookhaven Shopping Center addition and the southwest corner of a called 9.314 acre tract of land conveyed to DCO Talisker, LP by deed recorded in County Clerk Instrument Number 20070159777, Official Public Records of Dallas County, Texas;

THENCE, S 89°47'34" E, with the south line of the said 9.314 acre tract, a distance of 486.78 feet to a set 5/8 inch iron rod with a plastic cap stamped "Kadleck No. 3952" for a corner;

THENCE, N 41°12'11" E, departing the said common line, a distance of 106.55 feet to a set PK nail for a corner;

THENCE, S 48°47'49" E, a distance of 142.01 feet to a set 5/8 inch iron rod with a plastic cap stamped "Kadleck No. 3952" for a corner in the northwest line of Vitruvian Way (a 100 foot right of way);

THENCE, the following courses and distances with the northwest and north line of Vitruvian Way:

- S 41°12'11" W, passing at a distance of 106.55 feet the common east corner of the said 9.314 acre tract and the said 9.4274 acre tract, continuing in all a distance of 596.12 feet to a set "x" cut on concrete pavement at the beginning of a tangent curve to the right with

a central angle of  $33^{\circ}33'27''$ , a radius of 700.00 feet, a chord bearing of  $S 57^{\circ}58'54'' W$  and a chord distance of 404.15 feet;

- Southwesterly, along said curve, an arc distance of 409.98 feet to a set 5/8 inch iron rod with a plastic cap stamped "Kadleck No. 3952" at the beginning of a compound curve to the right with a central angle of  $06^{\circ}19'56''$ , a radius of 290.00 feet, a chord bearing of  $S 85^{\circ}42'52'' W$  and a chord distance of 32.03 feet;
- Southwesterly, along said curve, an arc distance of 32.05 feet to a set 5/8 inch iron rod with a plastic cap stamped "Kadleck No. 3952" at the beginning of a reverse curve to the left with a central angle of  $08^{\circ}41'54''$ , a radius of 160.00 feet, a chord bearing of  $S 84^{\circ}31'53'' W$  and a chord distance of 24.27 feet;
- Southwesterly, along said curve, arc distance of 24.29 feet to a set 5/8 inch iron rod with a plastic cap stamped "Kadleck No. 3952" at the beginning of a reverse curve to the right with a central angle of  $10^{\circ}01'16''$ , a radius of 679.51 feet, a chord bearing of  $S 85^{\circ}11'34'' W$  and a chord distance of 118.70 feet;
- Southwesterly, along said curve, an arc distance of 118.85 feet to a set 5/8 inch iron rod with a plastic cap stamped "Kadleck No. 3952" at the point of tangency;
- $N 89^{\circ}47'48'' W$ , a distance of 12.68 feet to a set 5/8 inch iron rod with a plastic cap stamped "Kadleck No. 3952" for a corner;

THENCE,  $N 00^{\circ}12'12'' E$ , departing the north line of Vitruvian Way, a distance of 9.00 feet to the beginning of a tangent curve to the left with a central angle of  $36^{\circ}39'54''$ , a radius of 246.30 feet, a chord bearing of  $N 24^{\circ}14'37'' W$  and a chord distance of 154.94 feet;

THENCE, Northwesterly, along said curve, an arc distance of 157.61 feet to a set 5/8 inch iron rod with a plastic cap stamped "Kadleck No. 3952" for a corner;

THENCE,  $N 89^{\circ}58'39'' W$ , a distance of 38.88 feet to a set 5/8 inch iron rod with a plastic cap stamped "Kadleck No. 3952" for a corner in the east line of Marsh Lane;

THENCE,  $N 00^{\circ}01'21'' E$ , with the east line of Marsh Lane, a distance of 624.53 feet to the Point of Beginning.

**EXHIBIT B**  
**TO ASSIGNMENT AND CONSTRUCTION SERVICES AGREEMENT**

Water including pipes, valves, hydrants, and all associated appurtenances; Sanitary Sewer including pipes, manholes, access chambers, and all associated appurtenances; Drainage including pipes, junction boxes, inlets, manholes, and all associated appurtenances; Electrical/Telecommunications including duct bank, hand-holes, and all associated appurtenances; Streetscape including street pavement, sidewalks, lighting, street furnishings, and all associated appurtenances; and Landscape including trees, shrubs, grass, irrigation, and all associated appurtenances associated with, but not limited to, to be known as **Vitruvian Park Public Infrastructure – Phase 5** in the Town of Addison, Texas, in accordance with specifications and contract documents prepared by Icon Consulting Engineers, Inc. and approved by the Town of Addison.

**EXHIBIT C**  
**TO ASSIGNMENT AND CONSTRUCTION SERVICES AGREEMENT**

**Anticipated Total Cost to Design and Construct the Current Public Improvements**

**VITRUVIAN PARK PUBLIC INFRASTRUCTURE - BLOCK 200**  
**PAVING, DRAINAGE AND UTILITY IMPROVEMENTS**  
**TOWN OF ADDISON PROJECT #2016-09**

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
1	1	L.S.	For Mobilization (not to exceed 5% of total bid amount) complete in place, the sum of _____ _____ Dollars and _____ Cents per Lump Sum		
2	1	L.S.	For Installation and Maintenance of Barricades, Signage, Pav't Markings and Traffic Control Measures for Marsh Lane Water Improvements complete in place, the sum of <u>Ten thousand</u> <u>00</u> _____ Dollars and <u>zero</u> Cents per Lump Sum	<u>10,000.00</u>	<u>10,000.00</u>
3	1	L.S.	For Installation and Maintenance of Barricades, Signage, Pav't Markings and Traffic Control Measures for Marsh Lane Sanitary Sewer Improvements complete in place, the sum of _____ <u>Nine thousand</u> _____ Dollars and <u>zero</u> Cents per Lump Sum	<u>9,000.00</u>	<u>9,000.00</u>
4	1	L.S.	For Installation and Maintenance of Barricades, Signage, Pav't Markings and Traffic Control Measures for Marsh Lane and Vitruvian Way Paving Improvements complete in place, the sum of _____ <u>Fifteen thousand</u> _____ Dollars and <u>zero</u> Cents per Lump Sum	<u>15,000.00</u>	<u>15,000.00</u>

PF-3

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
5	2	EA.	For Furnishing and Installing Project Signs in Accordance with Sign Plan complete in place, the sum of _____ <u>One thousand</u> Dollars and <u>zero</u> Cents per Each	1,000.00	2,000.00
6	1	L.S.	For Compliance with Storm Water Pollution Prevention Plan Including Maintenance of Erosion Control Devices complete in place, the sum of _____ <u>Four thousand</u> Dollars and <u>zero</u> Cents per Lump Sum	4,000.00	4,000.00
7	3	EA.	For Furnishing, Installation and Maintenance of Construction Entrance complete in place, the sum of _____ <u>Four thousand</u> Dollars and <u>zero</u> Cents per Each	4,000.00	12,000.00
8	1,335	L.F.	For Furnishing, Installation and Maintenance of Silt Fence Sediment Barrier complete in place, the sum of _____ <u>Four</u> Dollars and <u>zero</u> Cents per Linear Foot	4.00	5,340.00
9	18	EA.	For Furnishing, Installation and Maintenance of Inlet Protection Devices complete in place, the sum of _____ <u>Two Hundred</u> Dollars and <u>zero</u> Cents per Each	200.00	3,600.00

PF-4

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
10	110	L.F.	For Furnishing, Installation and Maintenance of Tree Protection Fencing complete in place, the sum of _____ _____ Dollars and <u>Zero</u> Cents per Linear Foot	2.00	220.00
11	2,715	S.Y.	For Sawcutting, Removal & Recycling of Existing Asphalt Street Pavement (Reference Special Provision 85) complete in place, the sum of _____ _____ Dollars and <u>Zero</u> Cents per Square Yard	10.00	27,150.00
12	1,025	S.Y.	For Sawcutting, Removal & Recycling of Existing Concrete Street Pavement (Reference Special Provision 85) complete in place, the sum of _____ _____ Dollars and <u>Zero</u> Cents per Square Yard	15.00	15,375.00
13	2,441	S.F.	For Sawcutting, Removal & Recycling of Existing Concrete Sidewalk Pavement (Reference Special Provision 85) complete in place, the sum of _____ _____ Dollars and <u>Zero</u> Cents per Square Foot	2.00	4,882.00
14	746	L.F.	For Sawcutting, Removal and Recycling of Existing Concrete Curb and Gutter complete in place, the sum of _____ _____ Dollars and <u>Zero</u> Cents per Linear Foot	10.00	7,460.00

PF-5

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
15	1	EA.	For Removal and Disposal of Existing Drop Inlet and Concrete Apron complete in place, the sum of _____ <u>Two thousand</u> Dollars and <u>zero</u> Cents per Each	2,000.00	2,000.00
16	1	EA.	For Removal and Disposal of Existing 10' Curb Inlet complete in place, the sum of _____ <u>Two thousand</u> Dollars and <u>zero</u> Cents per Each	2,000.00	2,000.00
17	45	EA.	For Removal and Disposal of Existing Trees complete in place, the sum of _____ <u>Three hundred</u> Dollars and <u>zero</u> Cents per Each	300.00	13,500.00
18	850	L.F.	For Removal and Disposal of Existing Cable Barrier Fence complete in place, the sum of _____ <u>Four</u> Dollars and <u>zero</u> Cents per Linear Foot	4.00	3,400.00
19	1	L.S.	For Removal and Disposal of Existing Overhead Secondary (450 LF) and 3 Poles with Lights complete in place, the sum of _____ <u>Five thousand</u> Dollars and <u>zero</u> Cents per Lump Sum	5,000.00	5,000.00

PF-6

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
20	420	L.F.	For Removal and Disposal of Existing Concrete Block Wall and Footing complete in place, the sum of _____ <u>Forty</u> Dollars and <u>Zero</u> Cents per Linear Foot	40.00	16,800.00
21	32	L.F.	For Removal and Disposal of Existing 6' High Chain Link Fencing complete in place, the sum of _____ <u>Fourteen</u> Dollars and <u>Zero</u> Cents per Linear Foot	14.00	448.00
22	3	E.A.	For Removal, Storage and Re-installation of Existing Street Signage complete in place, the sum of _____ <u>One Hundred Twenty</u> Dollars and <u>Zero</u> Cents per Each	120.00	360.00
23	1	L.S.	For Removal and Disposal of Existing Tree Planters and Bollards along Marsh Lane complete in place, the sum of _____ <u>Four Thousand</u> Dollars and <u>Zero</u> Cents per Lump Sum	4,000.00	4,000.00
24	2,465	C.Y.	For Unclassified Street Excavation and Controlled Density Placement of Embankment Materials for Westgate Lane, Drive Approach on Marsh Lane and Parallel Parking along Vitruvian Way complete in place, the sum of _____ <u>Twenty</u> Dollars and <u>Zero</u> Cents per Cubic Yard	20.00	49,300.00

PF-7

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
25	4,595	S.Y.	For Fine Grading and Subgrade Preparation complete in place, the sum of _____ <u>Four</u> Dollars and <u>Zero</u> Cents per Square Yard	4.00	18,380.00
26	4,595	S.Y.	For 6" Lime Stabilized Subgrade complete in place, the sum of _____ <u>Seven</u> Dollars and <u>Zero</u> Cents per Square Yard	7.00	32,165.00
27	83	TONS	For Furnishing and Placing Hydrated Lime (8% by Weight) complete in place, the sum of _____ <u>Two Hundred Ten</u> Dollars and <u>Zero</u> Cents per Ton	210.00	17,430.00
28	3,861	S.Y.	For Furnishing and Placing 10" Reinforced Concrete Street Pavement (4200 PSI) complete in place, the sum of _____ <u>Ninety Five</u> Dollars and <u>Zero</u> Cents per Square Yard	95.00	366,795.00
29	103	S.Y.	For Furnishing and Placing 8" Reinforced Concrete Street Pavement (4200 PSI) complete in place, the sum of _____ <u>One Hundred Fifteen</u> Dollars and <u>Zero</u> Cents per Square Yard	115.00	11,845.00

PF-8

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
30	2,586	L.F.	For Constructing 6" Reinforced Monolithic Concrete Curb complete in place, the sum of _____ <u>Thirty</u> Dollars and <u>Zero</u> Cents per Linear Foot	30.00	77,580.00
31	75	L.F.	For Constructing 6" Reinforced Monolithic Concrete Rollover Curb complete in place, the sum of _____ <u>Forty Five</u> Dollars and <u>Zero</u> Cents per Linear Foot	45.00	3,375.00
32	158	L.F.	For Constructing 6" Reinforced Concrete Curb & Gutter complete in place, the sum of _____ <u>Fifty</u> Dollars and <u>Zero</u> Cents per Linear Foot	50.00	7,900.00
33	48	L.F.	For Constructing Concrete Street Header complete in place, the sum of _____ <u>Forty</u> Dollars and <u>Zero</u> Cents per Linear Foot	40.00	1,920.00
34	2,819	S.F.	For Furnishing and Placing 4-inch thick Reinforced Concrete Sidewalk Pavement complete in place, the sum of _____ <u>Eight</u> Dollars and <u>Zero</u> Cents per Square Foot	8.00	22,552.00

PF-9

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
35	353	S.Y.	For Furnishing and Placing 4" Crushed Limestone Flex Base complete in place, the sum of _____ <u>Twenty Five</u> Dollars and <u>Zero</u> Cents per Square Yard	25.00	8,825.00
36	311	S.Y.	For Furnishing and Placing 4" HMAC Type "B" Base Course complete in place, the sum of _____ <u>Forty Two</u> Dollars and <u>Zero</u> Cents per Square Yard	42.00	13,062.00
37	311	S.Y.	For Furnishing and Placing 2" HMAC Type "D" Surface Course complete in place, the sum of _____ <u>Twenty Three</u> Dollars and <u>Zero</u> Cents per Square Yard	23.00	7,153.00
38	62	GAL	For Furnishing and Placing Emulsion Asphalt Membrane (MS-2) (0.2 Gal/SY) complete in place, the sum of _____ <u>Fifty Two</u> Dollars and <u>Zero</u> Cents per Gallon	52.00	3,224.00
39	315	S.F.	For Furnishing, Laying and Compacting Short Term Asphalt Pavement Repair complete in place, the sum of _____ <u>Eleven</u> Dollars and <u>Zero</u> Cents per Square Foot	11.00	3,465.00

PF-10

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
40	1,530	C.Y.	For Furnishing and Placement of Topsoil Placement to a Depth of 6" complete in place, the sum of _____ <u>Forty</u> Dollars and <u>Zero</u> Cents per Cubic Yard	40.00	61,200.00
41	83	S.F.	For Furnishing and Installing Pavestone ADA Truncated Dome Concrete Paver, Running Bond Pattern, 2-3/8" Thickness, Bellows Brown Color complete in place, the sum of _____ <u>Eleven</u> Dollars and <u>Zero</u> Cents per Square Foot	11.00	913.00
42	345	S.F.	For Furnishing and Installing Pavestone Concrete Street Paver, Running Bond Pattern, 3-1/8" Thickness, Bellows Brown Color complete in place, the sum of _____ <u>Twelve</u> Dollars and <u>Zero</u> Cents per Square Foot	12.00	4,140.00
43	4	EA.	For Furnishing and Installing White Thermoplastic "ARROW" Pavement Marking complete in place, the sum of _____ <u>Six Hundred</u> Dollars and <u>Zero</u> Cents per Each	600.00	2,400.00
44	2	EA.	For Furnishing and Installing White Thermoplastic "ONLY" Pavement Marking complete in place, the sum of _____ <u>Seven Hundred</u> Dollars and <u>Zero</u> Cents per Each	700.00	1,400.00

PF-11

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
45	320	L.F.	For Furnishing and Installing 4-Inch Wide White Solid Thermoplastic Pavement Marking complete in place, the sum of _____ _____ Dollars and <u>Four</u> <u>Zero</u> Cents per Linear Foot	4.00	1,280.00
46	305	L.F.	For Furnishing and Installing 8-Inch Wide Yellow Solid Thermoplastic Pavement Marking complete in place, the sum of _____ _____ Dollars and <u>Eight</u> <u>Zero</u> Cents per Linear Foot	8.00	2,440.00
47	86	L.F.	For Furnishing and Installing 8-Inch Wide White Solid Thermoplastic Pavement Marking complete in place, the sum of _____ _____ Dollars and <u>Eight</u> <u>Zero</u> Cents per Linear Foot	8.00	688.00
48	48	L.F.	For Furnishing and Installing 24-Inch Wide White Solid Thermoplastic Pavement Marking (Stop Bar) complete in place, the sum of _____ _____ Dollars and <u>Twenty Four</u> <u>Zero</u> Cents per Linear Foot	24.00	1,152.00
49	91	L.F.	For Furnishing and Installing 12-Inch Wide White Solid Thermoplastic Pavement Marking (Crosswalk) complete in place, the sum of _____ _____ Dollars and <u>Twelve</u> <u>Zero</u> Cents per Linear Foot	12.00	1,092.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
50	16	EA.	For Furnishing and Installing Type 11-AA-4 ReflectORIZED Pavement Marker complete in place, the sum of _____ _____ Dollars and <u>SIX</u> <u>Zero</u> Cents per Each	6.00	96.00
51	5	EA.	For Furnishing and Installing Type 1-C-4 ReflectORIZED Pavement Marker complete in place, the sum of _____ _____ Dollars and <u>SIX</u> <u>Zero</u> Cents per Each	6.00	<del>76</del> 30.00
52	7	EA.	For Furnishing and Installing Type 11 ReflectORIZED Blue Pav't Markers for Hydrants complete in place, the sum of _____ _____ Dollars and <u>SIX</u> <u>Zero</u> Cents per Each	6.00	42.00
53	2	EA.	For Furnishing and Installing Stop Sign (R1-1) complete in place, the sum of _____ _____ Dollars and <u>Four Hundred</u> <u>Zero</u> Cents per Each	400.00	800.00
54	1	EA.	For Furnishing and Installing Stop Sign (R1-1) Complete with Two Street Name Signs and Mount per Vitruvian Park Standards complete in place, the sum of _____ _____ Dollars and <u>Five Hundred</u> <u>Zero</u> Cents per Each	500.00	500.00

PF-13

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
55	2	EA.	For Furnishing and Installing Speed Limit Sign (R2-1) complete in place, the sum of _____ <u>Three Hundred</u> Dollars and <u>Zero</u> Cents per Each	300.00	600.00
56	285	L.F.	For Excavation of Earthen Drainage Swale complete in place, the sum of _____ <u>Fifteen</u> Dollars and <u>Zero</u> Cents per Linear Foot	15.00	4,275.00
57	1	EA.	For Removal of Plug and Connecting Proposed Pipe to Existing 24-Inch Storm Sewer Pipe complete in place, the sum of _____ <u>Two Thousand</u> Dollars and <u>Zero</u> Cents per Each	2,000.00	2,000.00
58	1	EA.	For Constructing Standard 5' Type "B" Square Storm Drain Manhole over Existing 39" RCP complete in place, the sum of _____ <u>Seven Thousand</u> Dollars and <u>Zero</u> Cents per Each	7,000.00	7,000.00
59	7	EA.	For Constructing Standard 4' Type "A" Square Storm Drain Manhole complete in place, the sum of _____ <u>Six Thousand</u> Dollars and <u>Zero</u> Cents per Each	6,000.00	42,000.00

PF-14

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
60	1	EA.	For Constructing Standard 3' Square Drop Inlet with 2' Concrete Apron complete in place, the sum of _____ <u>Seven thousand</u> Dollars and <u>Zero</u> Cents per Each	7,000.00	7,000.00
61	2	EA.	For Constructing 10' Standard Curb Inlet complete in place, the sum of _____ <u>Ten thousand</u> Dollars and <u>Zero</u> Cents per Each	10,000.00	20,000.00
62	6	EA.	For Constructing 6' Standard Curb Inlet complete in place, the sum of _____ <u>Nine thousand</u> Dollars and <u>Zero</u> Cents per Each	9,000.00	54,000.00
63	475	L.F.	For Furnishing and Installing 30-Inch Reinforced Concrete Pipe (Class III) complete in place, the sum of _____ <u>One Hundred Twenty</u> Dollars and <u>Zero</u> Cents per Linear Foot	120.00	57,000.00
64	309	L.F.	For Furnishing and Installing 27-Inch Reinforced Concrete Pipe (Class III) complete in place, the sum of _____ <u>One Hundred Ten</u> Dollars and <u>Zero</u> Cents per Linear Foot	110.00	33,990.00

PF-15

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
65	513	L.F.	For Furnishing and Installing 24-Inch Reinforced Concrete Pipe (Class III) complete in place, the sum of _____ <u>One Hundred Six</u> Dollars and <u>Zero</u> Cents per Linear Foot	106.00	54,378.00
66	692	L.F.	For Furnishing and Installing 18-Inch Reinforced Concrete Pipe (Class III) complete in place, the sum of _____ <u>One Hundred</u> Dollars and <u>Zero</u> Cents per Linear Foot	100.00	69,200.00
67	1	EA.	For Furnishing and Installing Concrete Plug for 24-Inch Reinforced Concrete Pipe (Class III) complete in place, the sum of _____ <u>Eighty</u> Dollars and <u>Zero</u> Cents per Each	80.00	80.00
68	16	EA.	For Furnishing and Installing Concrete Plug for 18-Inch Reinforced Concrete Pipe (Class III) complete in place, the sum of _____ <u>Sixty</u> Dollars and <u>Zero</u> Cents per Each	60.00	960.00
69	1,989	L.F.	For TV Inspection of Storm Drain System complete in place, the sum of _____ <u>Five</u> Dollars and <u>Zero</u> Cents per Linear Foot	5.00	9,945.00

PF-16

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
70	1	L.S.	For Preparing, Furnishing, Installing and Maintaining Trench Safety System for Storm Drain Improvements complete in place, the sum of _____ _____ Dollars and <u>Zero</u> Cents per Lump Sum	10,000.00	10,000.00
71	837	L.F.	For Removal and Disposal of Existing 8" Water Line complete in place, the sum of _____ _____ Dollars and <u>Zero</u> Cents per Linear Foot	18.00	15,066.00
72	5	L.F.	For Removal and Disposal of Existing 6" Water Line complete in place, the sum of _____ _____ Dollars and <u>Zero</u> Cents per Linear Foot	17.00	85.00
73	1	EA.	For Removal of Plug & Blocking and Connection to Existing 12-inch Water Pipe complete in place, the sum of _____ _____ Dollars and <u>Zero</u> Cents per Each	2,000.00	2,000.00
74	7	EA.	For Removal and Disposal of Existing Meter Boxes and Service Lines complete in place, the sum of _____ _____ Dollars and <u>Zero</u> Cents per Each	100.00	700.00

PF-17

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
75	2	EA.	For Removal of 45 Degree Bend & Blocking and Connection to Existing 8-inch Water Pipe complete in place, the sum of _____ <u>Two Thousand</u> Dollars and <u>Zero</u> Cents per Each	2,000.00	4,000.00
76	3	EA.	For Connection to Existing 8" Water Pipe complete in place, the sum of _____ <u>Two Thousand</u> Dollars and <u>Zero</u> Cents per Each	2,000.00	6,000.00
77	1	EA.	For Removal and Salvaging of Existing Fire Hydrant Assembly complete in place, the sum of _____ <u>Five Hundred</u> Dollars and <u>Zero</u> Cents per Each	500.00	500.00
78	687	L.F.	For Furnishing and Installing 12-Inch PVC Water Pipe by Open Cut with Std. Embedment complete in place, the sum of _____ <u>Eighty</u> Dollars and <u>Zero</u> Cents per Linear Foot	80.00	54,960.00
79	20	L.F.	For Furnishing and Installing 12-Inch Ductile Iron Water Pipe by Open Cut with Std. Embedment complete in place, the sum of _____ <u>One Hundred Eighty</u> Dollars and <u>Zero</u> Cents per Linear Foot	180.00	3,600.00

PF-18

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
80	1,510	L.F.	For Furnishing and Installing 8-Inch PVC Water Pipe by Open Cut with Std. Embedment complete in place, the sum of _____ _____ Dollars and <u>Seventy</u> <u>Zero</u> Cents per Linear Foot	70.00	105,700.00
81	102	L.F.	For Furnishing and Installing 8-Inch Ductile Iron Water Pipe by Open Cut with Std. Embedment complete in place, the sum of _____ _____ Dollars and <u>One Hundred Thirty</u> <u>Zero</u> Cents per Linear Foot	130.00	13,260.00
82	46	L.F.	For Furnishing and Installing 6-Inch PVC Water Pipe by Open Cut with Std. Embedment complete in place, the sum of _____ _____ Dollars and <u>Seventy</u> <u>Zero</u> Cents per Linear Foot	70.00	3,220.00
83	33	L.F.	For Furnishing and Installing 4" PVC Water Pipe by Open Cut with Std. Embedment complete in place, the sum of _____ _____ Dollars and <u>Sixty Five</u> <u>Zero</u> Cents per Linear Foot	65.00	2,145.00
84	106	L.F.	For Furnishing and Installing 2" CU Water Pipe by Open Cut with Std. Embedment complete in place, the sum of _____ _____ Dollars and <u>Forty</u> <u>Zero</u> Cents per Linear Foot	40.00	4,240.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
85	51	L.F.	For Furnishing and Installing 1 1/2" CU Water Pipe by Open Cut with Std. Embedment complete in place, the sum of _____ _____ Dollars and <u>Forty</u> <u>Zero</u> Cents per Linear Foot	40.00	2,040.00
86	8	EA.	For Furnishing and Installing 12-Inch Gate Valve Complete w/ Valve Box, Extension, Collar, Debris Cap and Cover complete in place, the sum of _____ _____ Dollars and <u>Two Thousand Four Hundred</u> Cents per Each	2,400.00	19,200.00
87	21	EA.	For Furnishing and Installing 8-Inch Gate Valve Complete w/ Valve Box, Extension, Collar, Debris Cap and Cover complete in place, the sum of _____ _____ Dollars and <u>Sixty Hundred</u> Cents per Each	1,600.00	33,600.00
88	7	EA.	For Furnishing and Installing 6-Inch Gate Valve Complete w/ Valve Box, Extension, Collar, Debris Cap and Cover complete in place, the sum of _____ _____ Dollars and <u>Seven Hundred</u> Cents per Each	1,100.00	7,700.00
89	1	EA.	For Furnishing and Installing 4-Inch Gate Valve Complete w/ Valve Box, Extension, Collar, Debris Cap and Cover complete in place, the sum of _____ _____ Dollars and <u>Nine Hundred</u> Cents per Each	900.00	900.00

PF-20

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
90	7	EA.	For Furnishing and Installing Fire Hydrant Assembly, Complete in Place complete in place, the sum of _____ <u>Thirty Five Hundred</u> Dollars and <u>Zero</u> Cents per Each	3,500.00	24,500.00
91	6.80	TONS	For Furnishing and Installing Ductile Iron Full Bodied Mechanical Joint Type Fittings w/ Restraining Glands for Water Pipe complete in place, the sum of _____ <u>Eight Thousand</u> Dollars and <u>Zero</u> Cents per Ton	8,000.00	54,400.00
92	5	EA.	For Furnishing and Installing 2" Water Service Tap complete in place, the sum of _____ <u>Five Hundred</u> Dollars and <u>Zero</u> Cents per Each	500.00	2,500.00
93	2	EA.	For Furnishing and Installing 1 1/2" Water Service Tap complete in place, the sum of _____ <u>Four Hundred</u> Dollars and <u>Zero</u> Cents per Each	400.00	800.00
94	1	EA.	For Furnishing and Installing 2" Meter and Meter Box complete in place, the sum of _____ <u>Two Thousand</u> Dollars and <u>Zero</u> Cents per Each	2,000.00	2,000.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
95	3	EA.	For Furnishing and Installing 2" Meter Box complete in place, the sum of _____ <u>Seven Hundred</u> Dollars and <u>Zero</u> Cents per Each	700.00	2,100.00
96	2	EA.	For Furnishing and Installing 1 1/2" Meter Box complete in place, the sum of _____ <u>Six Hundred</u> Dollars and <u>Zero</u> Cents per Each	600.00	1,200.00
97	2	EA.	For Reconnection of Exist Domestic/Irrigation Water Services to New 12" Water Pipe complete in place, the sum of _____ <u>One Thousand Three Hundred</u> Dollars and <u>Zero</u> Cents per Each	1,300.00	2,600.00
98	37	EA.	For Final Adjustment of Existing Water Valves to Finish Grade complete in place, the sum of _____ <u>One Hundred</u> Dollars and <u>Zero</u> Cents per Each	100.00	3,700.00
99	1	EA.	For Furnishing and Installing Automatic Flushing Device, Kupferle 98001 - Genesis or Approved Equal complete in place, the sum of _____ <u>Twenty Four Thousand</u> Dollars and <u>Zero</u> Cents per Each	24,000.00	24,000.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
100	1	L.S.	For Preparing, Furnishing, Installing and Maintaining Trench Safety System for Water Line Improvements complete in place, the sum of _____ <u>Three Thousand</u> Dollars and <u>Zero</u> Cents per Lump Sum	3,000.00	3,000.00
101	3	EA.	For Connection to Existing Sanitary Sewer Manhole complete in place, the sum of _____ <u>Two Thousand</u> Dollars and <u>Zero</u> Cents per Each	2,000.00	6,000.00
102	1	EA.	For Abandonment of Existing Sanitary Sewer Manhole per Town of Addison Requirements complete in place, the sum of _____ <u>Two Thousand</u> Dollars and <u>Zero</u> Cents per Each	2,000.00	2,000.00
103	898	L.F.	For Cutting and Filling of Existing 8" Sewer Pipe with Flowable Fill (NTCOG 504.2.3.4) complete in place, the sum of _____ <u>Seven</u> Dollars and <u>Zero</u> Cents per Linear Foot	7.00	6,286.00
104	1,334	L.F.	For Furnishing and Installing 10-Inch PVC Sanitary Sewer Pipe by Open Cut with Std. Embedment complete in place, the sum of _____ <u>Eighty</u> Dollars and <u>Zero</u> Cents per Linear Foot	80.00	106,720.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
105	25	L.F.	For Furnishing and Installing 10-Inch PVC Sanitary Sewer Pipe by Open Cut with Cement Stabilized Sand Embedment  complete in place, the sum of _____ <u>One Hundred Twenty</u> Dollars and <u>Zero</u> Cents per Linear Foot	120.00	3,000.00
106	18	L.F.	For Furnishing and Installing 10-Inch PVC Sanitary Sewer Pipe with 18" Steel Encasement Pipe (0.375" thickness) by Open Cut with Std. Embedment  complete in place, the sum of _____ <u>Two Hundred Thirty</u> Dollars and <u>Zero</u> Cents per Linear Foot	230.00 <del>4,140.00</del>	4,140.00
107	40	L.F.	For Furnishing and Installing 10-Inch PVC Sanitary Sewer Pipe with 18" Steel Encasement Pipe (0.375" thickness) by Other Than Open Cut  complete in place, the sum of _____ <u>Three Hundred Ninety</u> Dollars and <u>Zero</u> Cents per Linear Foot	390.00	15,600.00
108	523	L.F.	For Furnishing and Installing 8-Inch PVC Sanitary Sewer Pipe by Open Cut with Std. Embedment  complete in place, the sum of _____ <u>Eighty</u> Dollars and <u>Zero</u> Cents per Linear Foot	80.00	41,840.00
109	41	L.F.	For Furnishing and Installing 8-Inch PVC Sanitary Sewer Pipe by Open Cut with Cement Stabilized Sand Embedment  complete in place, the sum of _____ <u>One Hundred Thirty</u> Dollars and <u>Zero</u> Cents per Linear Foot	130.00	5,330.00

PF-24

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
110	54	L.F.	For Furnishing and Installing 8-Inch PVC Sanitary Sewer Pipe with 18" Steel Encasement Pipe (0.375" thickness) by Open Cut with Std. Embedment  complete in place, the sum of _____ <u>Two Hundred Ninety</u> Dollars and <u>Zero</u> Cents per Linear Foot	290.00	15,660.00
111	95	L.F.	For Furnishing and Installing 8-Inch PVC Sanitary Sewer Pipe with 18" Steel Encasement Pipe (0.375" thickness) by Other Than Open Cut  complete in place, the sum of _____ <u>Three Hundred Eighty</u> Dollars and <u>Zero</u> Cents per Linear Foot	380.00	36,100.00
112	46	L.F.	For Furnishing and Installing 6-Inch PVC Sanitary Sewer Pipe by Open Cut with Std. Embedment  complete in place, the sum of _____ <u>Seventy Five</u> Dollars and <u>Zero</u> Cents per Linear Foot	75.00	3,450.00
113	9	L.F.	For Furnishing and Installing 4-Inch PVC Sanitary Sewer Pipe by Open Cut with Std. Embedment  complete in place, the sum of _____ <u>Seventy</u> Dollars and <u>Zero</u> Cents per Linear Foot	70.00	630.00
114	14	EA.	For Furnishing and Installing Sanitary Sewer Lateral Cleanouts  complete in place, the sum of _____ <u>One Thousand</u> Dollars and <u>Zero</u> Cents per Each	1,000.00	14,000.00

PF-25

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
115	1	EA.	For Installing 4" Service Taps complete in place, the sum of _____ <u>Three Hundred</u> Dollars and <u>Zero</u> Cents per Each	300.00	300.00
116	1	EA.	For Constructing Standard 4' Diameter Sanitary Sewer Manhole to 6' Depth with Standard Frame and Cover, over Existing Sewer Lines complete in place, the sum of _____ <u>Six Thousand</u> Dollars and <u>Zero</u> Cents per Each	6,000.00	6,000.00
117	10	EA.	For Constructing Standard 4' Diameter Sanitary Sewer Manhole to 6' Depth with Standard Frame and Cover complete in place, the sum of _____ <u>Four Thousand</u> Dollars and <u>Zero</u> Cents per Each	4,000.00	40,000.00
118	24	V.F.	For Extra Depth for Standard 4' Diameter Manhole in Excess of 6' Depth complete in place, the sum of _____ <u>Two Hundred</u> Dollars and <u>Zero</u> Cents per Vertical Feet	200.00	4,800.00
119	1	EA.	For Constructing Standard 5' Diameter Internal Drop Sanitary Sewer Manhole to 6' Depth with Standard Frame and Cover complete in place, the sum of _____ <u>Six Thousand</u> Dollars and <u>Zero</u> Cents per Each	6,000.00	6,000.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
120	4	V.F.	For Extra Depth for Standard 5' Diameter Internal Drop Manhole in Excess of 6' Depth complete in place, the sum of _____ <u>Two Hundred Fifty</u> Dollars and <u>Zero</u> Cents per Vertical Feet	250.00	1,000.00
121	12	EA.	For Final Adjustment of Sanitary Sewer Manholes to Finish Grade complete in place, the sum of _____ <u>Three Hundred</u> Dollars and <u>Zero</u> Cents per Each	300.00	3,600.00
122	631	S.Y.	For Sawcutting, Removal and Replacement of Concrete Street Pavement complete in place, the sum of _____ <u>One Hundred Fifty</u> Dollars and <u>Zero</u> Cents per Square Yard	150.00	14,650.00
123	2,185	L.F.	For TV Inspection of Sanitary Sewer System complete in place, the sum of _____ <u>Three</u> Dollars and <u>Zero</u> Cents per Linear Foot	3.00	6,550.00
124	1	L.S.	For Preparing, Furnishing, Installing and Maintaining Trench Safety System for Sewer Line Improvements complete in place, the sum of _____ <u>Ten Thousand</u> Dollars and <u>Zero</u> Cents per Lump Sum	10,000.00	10,000.00

PF-27

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
125	31	EA.	For Furnishing and Installation of Street Light Pole, Type 1, Single 100W 240V MH Luminaire on 11'-8" Pole, Color Silver, Complete in Place (Reference Special Provision 84)  complete in place, the sum of _____ Thirty Five Hundred Dollars and Zero Cents per Each	3,500.00	108,500.00
126	31	EA.	For Concrete Drilled Shaft Foundation, Type 1, Complete in Place  complete in place, the sum of _____ Six Hundred Dollars and Zero Cents per Each	600.00	18,600.00
127	8	L.F.	For Furnishing and Installation of 2" Schedule 40 PVC Conduit  complete in place, the sum of _____ Thirty Zero Dollars and Zero Cents per Linear Foot	30.00	240.00
128	2,137	L.F.	For Furnishing and Installation of 1 1/4" Schedule 40 PVC Conduit  complete in place, the sum of _____ Twenty Five Dollars and Zero Cents per Linear Foot	25.00	53,425.00
129	4,870	L.F.	For Furnishing and Installation of Electric Conductor (No. 6 CU) XHHW-2 Insulated  complete in place, the sum of _____ One Dollar and Zero Cents per Linear Foot	1.00	4,870.00

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**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
130	2,435	L.F.	For Furnishing and Installation of Electric Conductor (No. 10 CU) XHHW-2 Insulated complete in place, the sum of _____ _____ Dollars and _____ Cents per Linear Foot	2.00	4,870.00
131	1	EA.	For Connection to Existing Street Light Circuit complete in place, the sum of _____ _____ Dollars and _____ Cents per Each	2,000.00	2,000.00
132	3	EA.	For Connection to Existing Street Light Conduits complete in place, the sum of _____ _____ Dollars and _____ Cents per Each	500.00	1,500.00
133	2	EA.	For Furnishing and Installation of Ground Box, Type A complete in place, the sum of _____ _____ Dollars and _____ Cents per Each	1,000.00	2,000.00
134	229	L.F.	For Furnishing and Installation of 1-6" and 1-2" Schedule 40 PVC Irrigation Conduits complete in place, the sum of _____ _____ Dollars and _____ Cents per Linear Foot	30.00	6,870.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
135	1	E.A.	<p>For Furnishing and Installation of Electric Service Pedestal, Type PS, 120/240 V, Single Phase Electric Service, Milbank CP3B A-Size or Approved Equal, with 200 Amp Panel and Main Breaker, Lighting Control with HOA Switch, Photo Electric Controlled with Distribution Blocks, Complete in Place</p> <p>complete in place, the sum of _____</p> <p><u>Five Thousand</u> Dollars</p> <p>and <u>Zero</u> Cents per Each</p>	5,000.00	5,000.00
136	8	L.F.	<p>For Furnishing and Constructing 8E6 Duct Bank Structure per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>Four Hundred Ten</u> Dollars</p> <p>and <u>Zero</u> Cents per Linear Foot</p>	410.00	3,280.00
137	1,596	L.F.	<p>For Furnishing and Constructing 6E6 Duct Bank Structure per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Eighty</u> Dollars</p> <p>and <u>Zero</u> Cents per Linear Foot</p>	180.00	287,280.00
138	839	L.F.	<p>For Furnishing and Constructing 4E6 Duct Bank Structure with (2) -3" conduits above per Oncor Electric Delivery</p> <p>complete in place, the sum of _____</p> <p><u>One Hundred Seventy</u> Dollars</p> <p>and <u>Zero</u> Cents per Linear Foot</p>	170.00	142,630.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
139	209	L.F.	For Furnishing and Constructing 2E6 Duct Bank Structure per Oncor Electric Delivery complete in place, the sum of _____ <u>One Hundred Fifty</u> Dollars and <u>200</u> Cents per Linear Foot	150.00	31,350.00
140	1	EA.	For Furnishing and Constructing 4 Way Electrical Manhole per Oncor Electric Delivery complete in place, the sum of _____ <u>Twenty Three Thousand</u> Dollars and <u>200</u> Cents per Each	23,000.00	23,000.00
141	5	EA.	For Furnishing and Constructing 3 Way Electrical Manhole per Oncor Electric Delivery complete in place, the sum of _____ <u>Twenty Two Thousand</u> Dollars and <u>200</u> Cents per Each	22,000.00	110,000.00
142	1	EA.	For Furnishing and Constructing 2 Way Electrical Manhole per Oncor Electric Delivery complete in place, the sum of _____ <u>Twenty One Thousand</u> Dollars and <u>200</u> Cents per Each	21,000.00	21,000.00
143	3	EA.	For Constructing Manhole Entrance Pad per Oncor Electric Delivery complete in place, the sum of _____ <u>Five Hundred</u> Dollars and <u>200</u> Cents per Each	500.00	1,500.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
144	7	EA.	For Final Adjustment of Electrical Manhole to Finish Grade complete in place, the sum of _____ <u>Two Hundred</u> Dollars and <u>Zero</u> Cents per Each	200.00	1,400
145	2	EA.	For End and Plugging of Electrical Duct Bank Structure per Oncor Electric Delivery complete in place, the sum of _____ <u>Two Hundred</u> Dollars and <u>Zero</u> Cents per Each	200.00	400.00
146	1	EA.	For Concrete Transformer Pad (Type 2) for Single Phase Transformer per Oncor Electric Delivery complete in place, the sum of _____ <u>Three Thousand</u> Dollars and <u>Zero</u> Cents per Each	3,000.00	3,000.00
147	7	EA.	For Concrete Deepwell Pad for 4 Way 25KV Deadfront Switchgear per Oncor Electric Delivery complete in place, the sum of _____ <u>Four Thousand</u> Dollars and <u>Zero</u> Cents per Each	4,000.00	28,000.00
148	81	L.F.	For Furnishing and Installation of (2) - 4" Electrical Duct by Open Cut complete in place, the sum of _____ <u>One Hundred</u> Dollars and <u>Zero</u> Cents per Linear Foot	100.00	8,100.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
149	140	L.F.	For Furnishing and Installation of (2) - 3" Electrical Duct by Open Cut complete in place, the sum of _____ _____ Dollars and <u>Sixty</u> <u>Zero</u> Cents per Linear Foot	60.00	8,400.00
150	100	L.F.	For Furnishing and Installation of (2) - 3" Electrical Duct by Other Than Open Cut complete in place, the sum of _____ _____ Dollars and <u>One Hundred</u> <u>Zero</u> Cents per Linear Foot	100.00	10,000.00
151	630	S.F.	For Sawcutting, Removal & Replacement of Asphalt Street Pavement Repair complete in place, the sum of _____ _____ Dollars and <u>Twenty</u> <u>Zero</u> Cents per Square Foot	20.00	12,600.00
152	1	L.S.	For Preparing, Furnishing, Installing and Maintaining Trench Safety System for Duct Bank Improvements complete in place, the sum of _____ _____ Dollars and <u>Six thousand</u> <u>Zero</u> Cents per Lump Sum	6,000.00	6,000.00
153	1	L.S.	For Furnishing all Labor and Materials necessary to Repair the Existing Irrigation System along Westgate Lane (Ref. Note 29 - Sheet 90) complete in place, the sum of _____ _____ Dollars and <u>Nineteen thousand</u> <u>Zero</u> Cents per Lump Sum	19,000.00	19,000.00

**BASE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
154	1	L.S.	For Furnishing all Labor and Materials necessary to Repair the Existing Irrigation System along Vitruvian Way (Ref. Note 29 - Sheet 90) complete in place, the sum of _____ <u>Ten thousand</u> Dollars and <u>zero</u> Cents per Lump Sum	10,000.00	10,000.00
155	1	L.S.	For Furnishing all Labor and Materials necessary to Repair the Existing Irrigation System along Marsh Lane (Ref. Note 29 - Sheet 90) complete in place, the sum of _____ <u>Twenty thousand</u> Dollars and <u>zero</u> Cents per Lump Sum	20,000.00	20,000.00
<b>TOTAL AMOUNT OF BASE BID (Items 1 Through 155)</b>					<b>3,177,297.00</b>

**ADDITIVE ALTERNATE**

The following Additive Alternate will be added to the bid at the option of the Town of Addison

**ADDITIVE ALTERNATE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
156	1	L.S.	For Mobilization (not to exceed 5% of total bid amount) complete in place, the sum of _____ <u>Twenty Eight Thousand</u> Dollars and <u>00</u> Cents per Lump Sum	<u>28,000.00</u>	<u>28,000.00</u>
157	10,092	S.F.	Furnishing & Placing 4-inch thick Reinforced Concrete Sidewalk Enhanced Pgmt complete in place, the sum of _____ <u>thirteen</u> Dollars and <u>00</u> Cents per Square Foot	<u>13.00</u>	<u>131,196.00</u>
158	47	S.F.	For Furnishing & Installing Pavestone ADA Truncated Dome Concrete Paver, Running Bond Pattern, 2-3/8" Thickness, Bellow Brown Color complete in place, the sum of _____ <u>Eleven</u> Dollars and <u>00</u> Cents per Square Foot	<u>11.00</u>	<u>517.00</u>
159	103	S.F.	For Furnishing & Installing Pavestone Concrete Street Paver, City Stone 1, 3-1/8" Thickness, Bellows Brown Color complete in place, the sum of _____ <u>Twelve</u> Dollars and <u>00</u> Cents per Square Foot	<u>12.00</u>	<u>1,236.00</u>

**ADDITIVE ALTERNATE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
160	1,894	S.F.	For Furnishing & Installing Pavestone Concrete Paver - Holland Stone, 2-3/8" Thickness, Bellows Brown Color  complete in place, the sum of _____ _____ Dollars and <u>Four</u> _____ _____ Cents per Square Foot	4.00	7,576.00
161	14	EA.	For Furnishing and Installing PEDOC, 30" Height, Single Gang, Hinged Top Pedestal with Integral Base, Color Green, Complete in Place  complete in place, the sum of _____ _____ Dollars and <u>Six Hundred</u> _____ _____ Cents per Each	400.00	5,400.00
162	1,528	L.F.	For Furnishing and Installing 3/4" Schedule 40 PVC Conduit  complete in place, the sum of _____ _____ Dollars and <u>Twenty Three</u> _____ _____ Cents per Linear Foot	23.00	35,144.00
163	6	EA.	For Furnishing and Installing Ground Box Type "A"  complete in place, the sum of _____ _____ Dollars and <u>One Thousand</u> _____ _____ Cents per Each	1,000.00	6,000.00
164	4	EA.	For Connecting Proposed Tree Drain Line to Storm Drain Curb Inlet  complete in place, the sum of _____ _____ Dollars and <u>Fifteen Hundred</u> _____ _____ Cents per Each	1,500.00	6,000.00

**ADDITIVE ALTERNATE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
165	959	L.F.	For Furnishing and Installing 4" PVC (SDR-35) Tree Drain Piping complete in place, the sum of _____ <u>Twenty Five</u> Dollars and <u>Zero</u> Cents per Linear Foot	25.00	23,975.00
166	1.25	Acres	For Furnishing and Installing Hydromulch Seeding (NCTCOG Item 3.10. "Seeding") of Disturbed Areas as shown on Sheets 83-85, and including all other Disturbed Areas of the Site (Ref. Special Provision 74) complete in place, the sum of _____ <u>Three Thousand</u> Dollars and <u>Zero</u> Cents per Acre	3,200.00	4,000.00
167	4,650	S.F.	For Furnishing and Installing Midiron Bermuda Sod (Pinned on Slopes Greater than 6:1) complete in place, the sum of _____ <u>Zero</u> Dollars and <u>fifty</u> Cents per Square Foot	0.50	2,325.00
168	3,530	EA.	For Furnishing & Installing Liriope, 1 gallon, Planted 12" O.C. complete in place, the sum of _____ <u>Thirteen</u> Dollars and <u>Zero</u> Cents per Each	13.00	45,890.00
169	3,655	S.F.	For Preparation of Planting Bed Areas including Topsoil, Soil Amendment Materials and Mulch complete in place, the sum of _____ <u>Two dollars</u> Dollars and <u>Zero</u> Cents per Square Foot	2.00	7,310.00

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**ADDITIVE ALTERNATE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
170	43	EA.	For Furnishing and Installing "High Rise" Live Oak, 6" Caliper, Single Trunk, (See SP-85) complete in place, the sum of _____ <u>Forty Five Hundred</u> Dollars and <u>000</u> Cents per Each	4,500.00	193,500.00
171	1	L.S.	For Implementation of Landscape Maintenance Program for a Period of One (1) Year From Date of Final Acceptance (Ref. Special Provision 118) complete in place, the sum of _____ <u>Fifty Five Thousand</u> Dollars and <u>000</u> Cents per Lump Sum	55,000.00	55,000.00
172	1	EA.	For Furnishing and Installing 2" Irrigation Service Connection including Isolation Valve, Wye Strainer, Double Check Assembly, Master Valve and Flow Meter complete in place, the sum of _____ <u>Twenty Five Hundred</u> Dollars and <u>000</u> Cents per Each	2,500.00	2,500.00
173	1	L.S.	For Furnishing and Installing Streetscape Irrigation System along Westgate Lane complete in place, the sum of _____ <u>Twenty Six Thousand</u> Dollars and <u>000</u> Cents per Lump Sum	26,000.00	26,000.00
174	1	L.S.	For Furnishing and Installing Streetscape Irrigation System along Vitruvian Way complete in place, the sum of _____ <u>Five Thousand</u> Dollars and <u>000</u> Cents per Lump Sum	5,000.00	5,000.00

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**ADDITIVE ALTERNATE BID**

ITEM NO.	APPROX QUANT.	UNIT	DESCRIPTION OF ITEMS BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
175	1	L.S.	For Furnishing and Installing Irrigation System for Hydromulch and Sod areas along Westgate Lane complete in place, the sum of _____ <u>Twelve Thousand</u> Dollars and <u>Zero</u> Cents per Lump Sum	12,000.00	12,000.00
176	1	L.S.	For Furnishing and Installing Irrigation System for Hydromulch and Sod areas along Vitruvian Way complete in place, the sum of _____ <u>Twelve Thousand</u> Dollars and <u>Zero</u> Cents per Lump Sum	12,000.00	12,000.00
177	3	E.A.	For Connection to Existing Irrigation System Mainline along Vitruvian Way complete in place, the sum of _____ <u>Two Thousand</u> Dollars and <u>Zero</u> Cents per Each	2,000.00	6,000.00
178	1	L.S.	For Furnishing all Labor and Materials necessary to Connect Proposed Irrigation System Wiring to the Existing Irrigation System Wiring and Controller along Vitruvian Way (Ref. Note 31 - Sheet 90) complete in place, the sum of _____ <u>Seven Thousand</u> Dollars and <u>Zero</u> Cents per Lump Sum	7,000.00	7,000.00
<b>AMOUNT OF ADDITIVE ALTERNATE 1</b>					<b>626,569.00</b>

**VITRUVIAN PARK**  
**PUBLIC INFRASTRUCTURE – BLOCK 200**

**BID SCHEDULE SUMMARY**

<u>Bid Schedule &amp; Description</u>	<u>Total Amount Materials &amp; Services</u>
TOTAL AMOUNT OF BASE BID (Items 1 through 155)	<u>3,197,299.00</u>
WRITTEN IN WORDS:	<u>Three Million One Hundred Ninety Seven Two Hundred Ninety Nine</u>
TOTAL AMOUNT OF ADDITIVE ALTERNATE BID (Items 153 through 178)	<u>626,569.00</u>
WRITTEN IN WORDS:	<u>Six Hundred Twenty Six Thousand Five Hundred Sixty Nine</u>

**NOTES:**

1. All items, labor, materials, equipment, facilities, incidentals, and work required for construction of the project are to be provided and installed by the Contractor as part of the project and payment for the cost of such shall be included in the price bid.
2. Prices must be shown in words and figures for each item listed in this proposal. In the event of discrepancy, the words shall control.
3. It is understood that the Bid Security shall be collected and retained by the Owner as liquidated damages in the event a contract is made by the Owner based on this proposal within ninety (90) calendar days after receiving bids and the undersigned fails to execute the contract.
4. Materials, which are "tax exempt", are those items which are physically incorporated into the facilities constructed for the Town of Addison, as set forth in the Special Provisions. Materials include, but are not limited to purchased items such as water pipe, sanitary sewer pipe, storm drain pipe, etc. Services, which are "not tax exempt", are those items which are used by the Contractor but are not physically incorporated into the Town of Addison's facility and/or items which are consumed by construction, as set forth in the Special Provisions. Services include, but are not limited to, items such as supplies, tools, skill and labor, the purchase, rental or lease of equipment, etc.

Edwards M. Hernandez  
Name of Person Signing Bid

[Signature]  
Signature of Person Signing Bid

P.O. Box 620651 Dallas, TX  
Address

214 390-2848  
Telephone No. Fax No.

46-0730116  
Bidder's Tax I.D. No. or Employer No.

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**EXHIBIT D**  
**TO ASSIGNMENT AND CONSTRUCTION SERVICES AGREEMENT**

**ARTICLE 1**  
**CONSTRUCTION MANAGER'S**  
**RESPONSIBILITIES**

**1.1 CONSTRUCTION MANAGER'S SERVICES**

1.1.1 The Construction Manager's services consist of those services performed by the Construction Manager, Construction Manager's employees and Construction Manager's consultants pursuant to this Agreement.

1.1.2 The Construction Manager's services shall be provided in conjunction with the services of an Engineer (as defined in the Agreement).

1.1.3 The Construction Manager shall provide sufficient organization, personnel and management to carry out the requirements of this Agreement in an expeditious and economical manner consistent with the interests of the City and shall remain in regular communication with the City to ensure the Work is completed in a manner satisfactory to the City.

**ARTICLE 2**  
**SCOPE OF CONSTRUCTION MANAGER'S BASIC SERVICES**

**2.1 PRE-CONSTRUCTION PHASE**

2.1.1 The Construction Manager shall obtain insurance certificates, bonds and any other relevant documents from the Contractor, in forms acceptable to the City, and in obtaining building permits and special permits for permanent improvements, except for permits required to be obtained directly by the Contractor. The Construction Manager shall verify that the City has paid applicable fees and assessments. The Construction Manager shall assist the City in connection with the City's responsibility for filing documents required for the approvals of governmental authorities having jurisdiction over the construction of the Current Public Improvements (sometimes referred to herein as the "Project").

**2.2 CONSTRUCTION PHASE - ADMINISTRATION OF THE CONSTRUCTION CONTRACT**

2.2.1 The Construction Phase will commence with the award of the Construction Contract and will end 30 days after final payment to the Contractor is due.

2.2.2 The Construction Manager shall provide administration of the Construction Contract in cooperation with the Engineer.

2.2.3 The Construction Manager shall provide administrative, management and related services to coordinate scheduled activities and responsibilities of the Contractor and with those of the Construction Manager, the City and the Engineer, to endeavor to manage the Project in accordance with the latest approved estimate of construction costs, any Project schedule (approved by the City), and the Construction Contract and related documents.

2.2.4 The Construction Manager shall schedule and conduct meetings to discuss such matters as procedures, progress and scheduling. The Construction Manager shall prepare and promptly distribute minutes to the City, Engineer and Contractor. The Construction Manager shall conduct a pre-construction conference for the entire construction team to establish job site practices and guidelines, including, but not limited to, establishing job site work rules; safety and security procedures; developing a detailed phasing and relocation strategy; establishing traffic flow patterns, including planning the means of egress, traffic control and work hours; planning storage and staging areas, including equipment placement, job office location, and utility availability.

2.2.5 Utilizing the construction schedule(s) provided by the Contractor, the Construction Manager shall update the Project construction schedule incorporating the activities of the Contractor on the Project, including activity sequences and durations, allocation of labor and materials, processing of shop drawings, product data and samples, and delivery of products requiring long lead time and procurement. The Project construction schedule shall include the City's occupancy requirements showing portions of the Project having occupancy priority. The Construction Manager shall update and reissue the Project construction schedule as required to show current conditions. If an update indicates that the previously approved Project construction schedule may not be met, the Construction Manager shall recommend corrective action to the City and Engineer.

2.2.6 Consistent with the various bidding documents, and utilizing information from the Contractor, the Construction Manager shall coordinate the sequence of construction and assignment of space in areas where the Contractor is performing Work. The Construction Manager shall ensure proper provisions for safety, temporary protection, pedestrian flow and ongoing building use. The Construction Manager shall oversee scheduling and expediting, quality assurance, daily work schedule management, communications among trade contractors and consultants, document control and contract compliance, and shall perform at least twice-weekly job observation (and more often as the City may request).

2.2.7 The Construction Manager shall use its best efforts to obtain prompt performance of the terms, conditions, and provisions of the Construction Contract by and from the Contractor.

2.2.8 The Construction Manager shall monitor the approved estimate of the cost of construction. The Construction Manager shall show actual costs for activities in progress and estimates for uncompleted tasks by way of comparison with such approved estimate.

2.2.9 The Construction Manager shall manage the overall Project budget, control changes, develop cash flow reports and forecasts for the Project and advise the City and Engineer as to variances between actual and budgeted or estimated costs.

2.2.10 The Construction Manager shall maintain accounting records on authorized Work performed under unit costs, additional Work performed on the basis of actual costs of labor and materials, and other Work requiring accounting records.

2.2.11 The Construction Manager shall develop and implement procedures for the review and processing of applications by Contractor for progress and final payments.

2.2.11.1 Based on the Construction Manager's observations and evaluations of each Contractor's application for payment, the Construction Manager shall review and approve each such application.

2.2.11.2 The Construction Manager shall prepare a project application for payment based on the Contractor' certificates for payment.

2.2.11.3 The Construction Manager's approval of payment shall constitute a representation to the City, based on the Construction Manager's determinations and observations at the Project site and on the data comprising the Contractor' applications for payment, that, to the best of the Construction Manager's knowledge, information and belief, the Work has progressed to the point indicated and the quality of the Work has been completed in accordance with the Construction Contract and related documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Construction Contract upon Substantial Completion, to results of subsequent tests and inspections, to minor deviations from the Construction Contract and related documents correctable prior to completion and to specific qualifications expressed by the Construction Manager. The issuance of a certificate for payment shall further constitute a representation that the Contractor is entitled to payment in the amount certified.

2.2.11.4 The issuance of a Certificate for Payment shall not be a representation that the Construction Manager has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences for the Contractor's own Work, or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the City to substantiate the Contractor's right to payment or (4) ascertained how or for what purpose the Contractor has used money previously paid.

2.2.12 The Construction Manager shall review the safety programs developed by the Contractor for purposes of coordinating the safety programs with those of any other contractors. The Construction Manager's responsibilities for coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractor, subcontractors, agents or employees of the Contractor or subcontractors, or any other persons performing portions of the Work and not directly employed by or on behalf of the Construction Manager.

2.2.13 The Construction Manager shall determine in general that the Work of the Contractor is being performed in accordance with the requirements of the Construction Contract, including confirming that the Engineer has inspected the work of the Contractor to guard the City against, and shall notify the City of, any defects or deficiencies in the Work. The Construction Manager shall also endeavor to guard the City against defects and deficiencies in the Work. As appropriate, the Construction Manager shall have authority, upon written authorization from the City, to require

additional inspection or testing of the Work in accordance with the provisions of the Construction Contract, whether or not such Work is fabricated, installed or completed. The Construction Manager, in consultation with the Engineer, may reject Work which does not conform to the requirements of the Construction Contract.

2.2.14 The Construction Manager shall schedule and coordinate the sequence of construction in accordance with the Construction Contract and the latest approved Project construction schedule.

2.2.15 With respect to each Contractor's own Work, the Construction Manager shall not have control over or charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work of each of the Contractor, since these are solely the Contractor's responsibility under the Contract for Construction. The Construction Manager shall not be responsible for a Contractor's failure to carry out the Work in accordance with the respective Construction Contract. The Construction Manager shall not have control over or charge of acts or omissions of the Contractor, subcontractors, or their agents or employees, or any other persons performing portions of the Work not directly employed by the Construction Manager.

2.2.16 The Construction Manager shall transmit to the Engineer requests for interpretations of the meaning and intent of the Drawings and Specifications, and assist in the resolution of questions that may arise.

2.2.17 The Construction Manager shall review requests for changes, assist in negotiating Contractor's proposals, submit recommendations to the Engineer and City, and, if they are accepted, prepare Change Orders and Construction Change Directives which incorporate the Engineer's modifications to the Construction Contract and related documents.

2.2.18 The Construction Manager shall assist the Engineer in the review, evaluation and documentation of any claims.

2.2.19 The Construction Manager shall receive certificates of insurance from the Contractor and forward them to the City with a copy to the Engineer.

2.2.20 In collaboration with the Engineer, the Construction Manager shall establish and implement procedures for expediting the processing and approval of shop drawings, product data, samples, proposed substitutions, design modification, and other submittals. The Construction Manager shall review all shop drawings, product data, samples, proposed substitutions, design modifications, and other submittals from the Contractor. The Construction Manager shall coordinate submittals with information contained in related documents and transmit to the Engineer those which have been approved by the Construction Manager. The Construction Manager's actions shall be taken with such reasonable promptness as to cause no delay in the Work or in the activities of the City or Contractor.

2.2.21 The Construction Manager shall record the progress of the Project. The Construction Manager shall submit written progress reports to the City and Engineer including information on each Contractor and each Contractor's Work, as well as the entire Project, showing percentages of completion. For each visit by the Construction Manager to the Project site, the Construction

Manager shall keep a log containing a record of weather, each Contractor's Work on the site, number of workers, identification of equipment, Work accomplished, problems encountered, and other similar relevant information pertaining to the construction of the Current Public Improvements.

2.2.22 The Construction Manager shall maintain at the Project site one record copy of all contracts, drawings, specifications, addenda, change orders and other modifications, in good order and marked currently to record changes and selections made during construction, and in addition, approved shop drawings, product data, samples and similar required submittals. The Construction Manager shall maintain records, in duplicate, of principal building layout lines, elevations of the bottom of footings, floor levels and key site elevations certified by a qualified surveyor or professional engineer. The Construction Manager shall make all such records available to the Engineer and upon completion of the Project shall deliver them to the City.

2.2.23 The Construction Manager shall arrange for the delivery, storage, protection and security of City-purchased materials, systems and equipment that are a part of the Project until such items are incorporated into the Project.

2.2.24 With the Engineer and the City's personnel, the Construction Manager shall observe the Contractor's final testing and start-up of utilities, operational systems and equipment.

2.2.25 When the Construction Manager considers the Contractor's Work and services or a designated portion thereof substantially complete, the Construction Manager shall, jointly with the Contractor, prepare for the Engineer a list of incomplete or unsatisfactory items and a schedule for their completion. The Construction Manager shall assist the Engineer in conducting inspections to determine whether the Work or designated portion thereof is substantially complete.

2.2.26 The Construction Manager shall coordinate and monitor the correction and completion of the Work by the Contractor. Following issuance of a certificate of substantial completion of the Work or a designated portion thereof, the Construction Manager shall evaluate the completion of the Work of the Contractor and make recommendations to the Engineer when Work is ready for final inspection. The Construction Manager shall assist the Engineer in conducting final inspections.

2.2.27 The Construction Manager shall secure and transmit to the Engineer, or to such other appropriate person as City may direct, all required lien waivers, releases, bonds, affidavits, warranties and similar submittals required by the Construction Contract for delivery to the City and deliver all keys, manuals, record drawings and maintenance stocks to the City. The Construction Manager shall forward to the Engineer a final Project application for payment upon compliance with the requirements of the Construction Contract and related documents.

### **ARTICLE 3 DISPUTE RESOLUTION**

3.1 Claims, disputes or other matters in question between the parties to this Agreement arising out of or relating to this Agreement or breach thereof may, by agreement of the parties, be submitted to nonbinding mediation, as a first step in seeking a resolution of the same. If the parties agree to

submit to nonbinding mediation, the dispute shall be mediated by a mutually acceptable third-party to be chosen by the disputing parties within thirty (30) days after written notice by one of them requesting mediation. The disputing parties shall share the costs of the mediation equally. By mutual agreement the parties may postpone mediation until each has completed some specified but limited discovery about the dispute. By mutual agreement, the parties may use a nonbinding form of dispute resolution other than mediation. Any nonbinding dispute resolution process conducted under this Article shall be confidential within the meaning of Sections 154.053 and 154.073 of the Texas Civil Practice and Remedies Code and any successor statute thereto. If neither a negotiated settlement nor mediated resolution is obtained within the time periods provided by this Article, the parties may pursue any available legal or equitable remedy.

3.2 Any request for mediation or another form of nonbinding dispute resolution shall be filed in writing with the other party within a reasonable time after the claim, dispute or other matter in question has arisen. In no event shall the demand for mediation or other form of nonbinding dispute resolution be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statutes of limitations.

3.3 No mediation or other form of nonbinding dispute resolution process arising out of or relating to this Agreement shall include, by consolidation, joinder or in any other manner, an additional person or entity not a party to this Agreement, except by written consent containing a specific reference to this Agreement signed by the City, Construction Manager, and any other person or entity sought to be joined. Consent to mediation or other form of nonbinding dispute resolution involving an additional person or entity shall not constitute consent to mediation or other form of nonbinding dispute resolution of any claim dispute or other matter in question not described in the written consent or with a person or entity not named or described therein.

3.4 Notwithstanding the foregoing provisions of this Article 3, either party may at any time pursue any available legal, equitable, or other remedy or right and file a lawsuit or other action or proceeding regarding or in connection with the same.

#### **ARTICLE 4 MISCELLANEOUS PROVISIONS**

4.1 As a condition of this Agreement, Construction Manager covenants that Construction Manager will take all necessary actions to insure that, in connection with any work under this contract, Construction Manager, its employees, consultants and agents will not discriminate in the treatment or employment of any person or group of persons on the ground of race, color, religion, national origin, sex or disability in any manner prohibited by applicable law.

4.2 All reports, documents and materials prepared by Construction Manager under this Agreement shall be the sole property of the City. Construction Manager may retain a copy of such reports, documents, and materials.

**Work Session and Regular Meeting****Meeting Date:** 12/13/2016**Department:** Infrastructure- Development Services**AGENDA CAPTION:**

Present, Discuss, And Consider Action On A **Resolution Authorizing The City Manager To Award A Professional Engineering Services Contract To Icon Consulting Engineers, Inc., For Public Infrastructure Design Services Associated With The Vitruvian Phase 8 Development** In The Amount Of \$97,800.

**BACKGROUND:**

Vitruvian Park, located at the corner of Marsh Lane and Vitruvian Way is a development that is funded by both private and public investment. The Master Facilities Agreement between the Town and UDR that was entered into on June 26, 2013, provides for, among other things, the allocation and expenditure of the authorized funds that are or may be available to design and construct the public infrastructure improvements necessary to support the development. In that agreement, the Town agreed to pay for the public infrastructure improvements in the development from proceeds from bond programs.

The commercial area located at the corner of Spring Valley Road and Marsh Lane is referred to as Phase 8 in the Vitruvian development. The scope of work for the design of the public infrastructure includes streetscape and utility improvements, both exterior and interior to the property. Design services associated with the utility improvements include upsizing an existing 8 inch waterline that runs parallel to Marsh Lane to a 12 inch line. Several other water and sewer lines in the site will be replaced as well. Streetscape improvements will include areas along the east right-of-way line of Marsh Lane and the south right-of-way line of Spring Valley Road. Streetscape improvements include lighting, landscaping, sidewalks, ramps, and other ADA improvements.

Icon Consulting Engineers, Inc., designed the first three phases of the Vitruvian Park development and the phase 5 public infrastructure, and they have satisfactorily provided these services. Icon is also designing the private infrastructure portion of the development and therefore they are uniquely qualified to provide these services to the Town due to their extensive knowledge of the entire development.

Staff has reviewed Icon's scope and fee (\$97,800) and find it to be both fair and reasonable based on similar recent design fees. The total budget for the Phase 8 public infrastructure is \$7,605,149. This budget includes design, project management, construction, materials testing, and construction administration for the improvements.

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

Resolution with Agreement

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TOWN OF ADDISON, TEXAS

RESOLUTION NO. \_\_\_\_\_

A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS APPROVING THE AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES BETWEEN THE TOWN OF ADDISON AND ICON CONSULTING ENGINEERS, INC., IN AN AMOUNT NOT TO EXCEED \$97,800.00, FOR THE DESIGN OF THE PUBLIC INFRASTRUCTURE ASSOCIATED WITH THE VITRUVIAN PHASE 8 DEVELOPMENT, AUTHORIZING THE CITY MANAGER TO EXECUTE THE AGREEMENT, AND PROVIDING AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:

**Section 1.** The Agreement for Professional Engineering Services between the Town of Addison and Icon Consulting Engineers, Inc., for the design of the public infrastructure associated with the Vitruvian Phase VIII development, a copy of which is attached to this Resolution as **Exhibit A**, is hereby approved. The City Manager is hereby authorized to execute the agreement.

**Section 2.** This Resolution shall take effect from and after its date of adoption.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13<sup>th</sup> day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

# EXHIBIT A

**AGREEMENT  
BETWEEN  
THE TOWN OF ADDISON, TEXAS (TOWN)  
AND  
Icon Consulting Engineers, Inc. (CONSULTANT)  
FOR  
PROFESSIONAL ENGINEERING SERVICES**

Made as of the \_\_\_\_ day of \_\_\_\_\_ in the year 2016,

BETWEEN the Town:     The Town of Addison, Texas  
                                  16801 Westgrove Drive  
                                  Addison, Texas 75001  
                                  Telephone: (972) 450-7001

and the Consultant:     Icon Consulting Engineers, Inc.  
                                  2840 W. Southlake Blvd., Ste. 110  
                                  Southlake, TX 76092  
                                  Telephone: 817-552-6210

for the following Project:   Vitruvian Park Phase VIIIa Public Infrastructure  
  Improvements to Serve Block 500 Development

The Town and the Consultant agree as set forth below.

**THIS AGREEMENT** is made and entered by and between the **Town of Addison, Texas**, a Home-Rule Municipal Corporation, hereinafter referred to as "Town," and **Icon Consulting Engineers, Inc.**, hereinafter referred to as "Consultant," to be effective from and after the date as provided herein, hereinafter referred to as "Agreement."

**WHEREAS**, the Town desires to engage the services of the Consultant to provide professional services which shall include, but not be limited to, professional engineering services for the design of public infrastructure serving Vitruvian Park Block 500 development (Vitruvian Park Phase VIIIa) within the Town of Addison, Texas; hereinafter referred to as "Project"; and

**WHEREAS**, the Consultant desires to render such professional engineering services for the Town upon the terms and conditions provided herein.

# EXHIBIT A

## NOW, THEREFORE, KNOW ALL PERSONS BY THESE PRESENTS:

That for and in consideration of the covenants contained herein, and for the mutual benefits to be obtained hereby, the parties agree as follows:

### ARTICLE 1 CONSULTANT'S SERVICES

- 1.1 **Employment of the Consultant** – The Town hereby agrees to retain the Consultant to perform professional engineering services in connection with the Project. Consultant agrees to perform such services in accordance with the terms and conditions of this Agreement.
- 1.2 **Scope of Services** – The parties agree that Consultant shall perform such services as are set forth and described in Exhibit "A," which is attached hereto and incorporated herein by reference for all purposes. The parties understand and agree that deviations or modifications to the scope of services described in Exhibit "A," in the form of written change orders, may be authorized from time to time by the Town.
  - 1.2.1 **Requirement of Written Change Order** – "Extra" work, or "claims" invoiced as "extra" work, or "claims" which have not been issued as a duly executed, written change order by the Addison Town Manager, will not be authorized for payment and/or shall not become part of the subcontracts. A duly executed written change order shall be preceded by the Addison Town Council's authorization for the Addison Town Manager to execute said change order.
  - 1.2.2 **DO NOT PERFORM ANY EXTRA WORK AND/OR ADDITIONAL SERVICES WITHOUT A DULY EXECUTED WRITTEN CHANGE ORDER ISSUED BY THE ADDISON TOWN MANAGER.** Project Managers, Superintendents, and/or Inspectors of the Town are not authorized to issue verbal or written change orders.
- 1.3 **Schedule of Work** – The Consultant agrees to commence work immediately upon the execution of this Agreement and receipt of written Notice to Proceed, and to proceed diligently with said work to completion as described in the Compensation Schedule / Project Billing / Project Budget attached hereto as **Exhibit "B"** and incorporated herein by reference for all purposes, but in no event shall the Project be completed any later than as identified in **Exhibit "A"**.
- 1.4 **Failure to Meet Established Deadlines** – Consultant acknowledges that time is of the essence in the performance of services under this Agreement as set forth in the Compensation Schedule / Project Billing / Project Budget attached hereto as Exhibit "B."

# EXHIBIT A

## ARTICLE 2 THE TOWN'S RESPONSIBILITIES

Town shall do the following in a timely manner so as not to delay the services of Consultant:

- 2.1 **Project Data** – The Town shall furnish required information that is currently has in its possession, as expeditiously as necessary for the orderly progress of the work, and the Consultant shall be entitled to rely upon the accuracy and completeness thereof.
- 2.2 **Town Project Manager** – The Town shall designate, when necessary, a representative authorized to act on the Town's behalf with respect to the Project (the "Project Manager"). The Town or such authorized representative shall examine the documents submitted by the Consultant and shall render any required decisions pertaining thereto as soon as practicable so as to avoid unreasonable delay in the progress of the Consultant's services. The Project Manager is not authorized to issue verbal or written change orders for "extra" work or "claims" invoiced as "extra" work.

## ARTICLE 3 CONSULTANT'S COMPENSATION

- 3.1 **Compensation for Consultant's Services** – As described in "Article 1, Consultant's Services," compensation for this Project shall be on a Type of Payment Basis not to exceed **Ninety-Seven Thousand Eight Hundred and 00/100 Dollars (\$97,800.00)**, ("Consultant's Fee") and shall be paid in accordance with Article 3 and the Compensation Schedule / Project Billing / Project Budget as set forth in Exhibit "B."
  - 3.1.1 **Completion of Final Design** – Town and Consultant agree that the Final Design shall be completed, submitted to, and accepted by the Town prior to payment of the **final five percent (5%) of the Consultant's Fee, or Four Thousand Eight Hundred Ninety and 00/100 Dollars (\$4,890.00)**. The electronic formatting shall be consistent with the standards established in Town of Addison Guidelines for Computer Aided Design and Drafting ("CADD"). Completion of the Record Documents and/or "As-Built" documents, if any, shall be included in the Consultant's Fee and considered to be within the Scope of Services defined under this Agreement.
  - 3.1.2 **Disputes between Town and Construction Contractor** – intentionally omitted.
  - 3.1.3 **Consultation and Approval by Governmental Authorities and Franchised Utilities** – intentionally omitted.
- 3.2 **Direct Expenses** – Direct Expenses are included in the Consultant's Fee as described in Article 3.1 and include actual reasonable and necessary expenditures

# EXHIBIT A

made by the Consultant and the Consultant's employees and subcontractors in the interest of the Project. All submitted Direct Expenses are to be within the amounts as stated in the Compensation Schedule / Project Billing / Project Budget set forth in Exhibit "B," and consistent with Exhibit "C," Town of Addison Guidelines for Direct Expenses, General and Administrative Markup, and Travel and Subsistence Expenses. The Consultant shall be solely responsible for the auditing of all Direct Expenses, including the subcontractors, prior to submitting to the Town for reimbursement, and shall be responsible for the accuracy thereof. Any overpayment by the Town for errors in submittals for reimbursement may be deducted from the Consultant's subsequent payment for services; provided, however this shall not be the Town's sole and exclusive remedy for said overpayment.

- 3.3 **Additional Services** – The Consultant shall provide the services as described in the Scope of Services as set forth in Exhibit "A" of this Agreement. If authorized in writing by the Town, the Consultant shall provide additional services, to be compensated on an hourly basis in accordance with this paragraph ("Additional Services"). These services may include, but are not limited to:
- 3.3.1 Additional meetings, hearings, work-sessions, or other similar presentations which are not provided for or contemplated in the Scope of Services described in Exhibit "A."
  - 3.3.2 Additional drafts and revisions to the Project which are not provided for or contemplated in the Scope of Services as described in Exhibit "A." Drafts or revisions required as the result of errors or omissions by the Consultant shall not be considered Additional Services, but shall fall within the Scope of Services.
  - 3.3.3 Additional copies of final reports and construction plans which are not provided for or contemplated in the Scope of Services as described in Exhibit "A."
  - 3.3.4 Photography, professional massing models which are not provided for or contemplated in the Scope of Services as described in Exhibit "A."
  - 3.3.5 Compensation for Additional Services authorized by the Town shall be in addition to the Consultant's Fee and shall be based on direct billable labor rates and expenses.
  - 3.3.6 Compensation for Additional Services authorized by the Town shall be in addition to the Consultant's Fee and shall be based on an hourly basis according to the following personnel rates. The rates set forth in this chart are subject to reasonable change provided prior written notice of said change is given to Town.
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# EXHIBIT A

## Hourly Billable Rates by Position

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Reference attached **Exhibit "G"** Task Manpower and Hourly Rates.

- 3.4 **Invoices** – No payment to Consultant shall be made until Consultant tenders an invoice to the Town. Invoices are to be mailed to Town immediately upon completion of each individual task listed in Exhibit "B." On all submitted invoices, Consultant shall include appropriate background materials to support the submitted charges on said invoice. Such background material shall include, but is not limited to, employee timesheets, invoices for work obtained from other parties, and receipts and/or log information relating to Direct Expenses. All invoices for payment shall provide a summary methodology for administrative markup and/or overhead charges.
- 3.5 **Timing of Payment** – Town shall make payment to Consultant for said invoices within thirty (30) days following receipt and acceptance thereof. The parties agree that payment by Town to Consultant is considered to be complete upon mailing of payment by Town. Furthermore, the parties agree that the payment is considered to be mailed on the date that the payment is postmarked.
- 3.6 **Disputed Payment Procedures** – In the event of a disputed or contested billing by Town, only that portion so contested may be withheld from payment, and the undisputed portion will be paid. Town shall notify Consultant of a disputed invoice, or portion of an invoice, in writing by the twenty-first (21<sup>st</sup>) calendar day after the date the Town receives the invoice. Town shall provide Consultant an opportunity to cure the basis of the dispute. If a dispute is resolved in favor of the Consultant, Town shall proceed to process said invoice, or the disputed portion of the invoice, within the provisions of Article 3.5. If a dispute is resolved in favor of the Town, Consultant shall submit to Town a corrected invoice, reflecting any and all payment(s) of the undisputed amounts, documenting the credited amounts, and identifying outstanding amounts on said invoice to aid Town in processing payment for the remaining balance. Such revised invoice shall have a new invoice number, clearly referencing the previous submitted invoice. Town agrees to exercise reasonableness in contesting any billing or portion thereof that has background materials supporting the submitted charges.
- 3.7 **Failure to Pay** – Failure of the Town to pay an invoice, for a reason other than upon written notification as stated in the provisions of Article 3.6 to the Consultant within sixty (60) days from the date of the invoice shall grant the Consultant the right, in addition to any and all other rights provided, to, upon written notice to the Town, suspend performance under this Agreement, and such act or acts shall not be deemed a breach of this Agreement. However, Consultant shall not suspend performance under this Agreement prior to the tenth (10<sup>th</sup>) calendar day after written notice of suspension was provided to Town, in accordance with Chapter 2251, Subchapter "D" ("Remedy for Nonpayment") of the *Texas Government*

# EXHIBIT A

*Code.* The Town shall not be required to pay any invoice submitted by the Consultant if the Consultant breached any provision(s) herein.

- 3.8 **Adjusted Compensation** – If the Scope of the Project or if the Consultant's services are materially changed due to no error on behalf of Consultant in the performance of services under this Agreement, the amounts of the Consultant's compensation shall be equitably adjusted as approved by Town. Any additional amounts paid to the Consultant as a result of any material change to the Scope of the Project shall be authorized by written change order duly executed by both parties before the services are performed.
- 3.9 **Project Suspension** – If the Project is suspended or abandoned in whole or in part for more than three (3) months, Consultant shall be entitled to compensation for any and all work completed to the satisfaction of Town in accordance with the provisions of this Agreement prior to suspension or abandonment. In the event of such suspension or abandonment, Consultant shall deliver to Town all finished or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs, and/or any other items prepared by Consultant in connection with this Agreement prior to Consultant receiving final payment. If the Project is resumed after being suspended for more than three (3) months, the Consultant's compensation shall be equitably adjusted as approved by the Town. Any additional amounts paid to the Consultant after the Project is resumed shall be agreed upon in writing by both parties before the services are performed.

## ARTICLE 4 OWNERSHIP OF DOCUMENTS

- 4.1 **Documents Property of the Town** – The Project is the property of the Town, and Consultant may not use the documents, plans, data, studies, surveys, drawings, maps, models, reports, photographs, and/or any materials for any other purpose not relating to the Project without Town's prior written consent. Town shall be furnished with such reproductions of the Project, plans, data, documents, maps, and any other information as defined in Exhibit "A." Upon completion of the work, or any earlier termination of this Agreement under Article 3 and/or Article 7, Consultant will revise plans, data, documents, maps, and any other information as defined in Exhibit "A" to reflect changes while working on the Project and promptly furnish the same to the Town in an acceptable electronic format. All such reproductions shall be the property of the Town who may use them without the Consultant's permission for any purpose relating to the Project, including, but not limited to, completion of the Project, and/or additions, alterations, modifications, and/or revisions to the Project.
- 4.2 **Documents Subject to Laws Regarding Public Disclosure** – Consultant acknowledges that Town is a governmental entity and that all documents, plans, data, studies, surveys, drawings, maps, models, reports, photographs, and/or any items prepared or furnished by Consultant (and Consultant's professional

# EXHIBIT A

associates and/or Sub-consultants) under this Agreement are instruments of service in respect of the Project and property of the Town and upon completion of the Project shall thereafter be subject to the Texas Public Information Act (*Texas Government Code*, Chapter 552) and any other applicable laws requiring public disclosure of the information contained in said documents.

## ARTICLE 5 CONSULTANT'S INSURANCE REQUIREMENTS

- 5.1 **Required Professional Liability Insurance** – Consultant shall maintain, at no expense to Town, a professional liability (errors and omissions) insurance policy with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s), authorized to transact business in the State of Texas, in an amount not less than One Million and 00/100 Dollars (\$1,000,000.00) for each occurrence, and Two Million and 00/100 Dollars (\$2,000,000.00) in the aggregate. Such policy shall require the provision of written notice to Town at least thirty (30) days prior to cancellation, non-renewal, or material modification of any policies, or ten (10) days for non-payment of premium, evidenced by return receipt or United States Certified Mail. Consultant shall furnish Town with certificates evidencing such coverage prior to commencing work on the Project.
- 5.2 **Required General Liability Insurance** - Consistent with the terms and provisions of Exhibit "D," Town of Addison Contractor Insurance Requirements, Consultant shall maintain, at no expense to Town, a general liability insurance policy with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s), authorized to transact business in the State of Texas, in an amount not less than One Million and 00/100 Dollars (\$1,000,000.00) for each occurrence, and Two Million and 00/100 Dollars (\$2,000,000.00) in the aggregate. Such policy shall name the Town, its officers, agents, representatives, and employees as additional insured as to all applicable coverage. Such policy shall provide for a waiver of subrogation against the Town for injuries, including death, property damage, or any other loss to the extent that same is covered by the proceeds of the insurance. Such policy shall require the provision of written notice to Town at least thirty (30) days prior to cancellation, non-renewal, or material modification of any policies, or ten (10) days for non-payment of premium, evidenced by return receipt or United States Certified Mail. Consultant shall furnish Town with certificates evidencing such coverage prior to commencing work on the Project.
- 5.3 **Required Workers Compensation Insurance** – Consistent with the terms and provisions of Exhibit "D," Town of Addison Contractor Insurance Requirements, Consultant shall maintain, at no expense to Town, all Statutory Workers Compensation Insurance as required by the laws of the State of Texas. Such insurance policy shall be with a company that maintains a minimum rating of "A"

# EXHIBIT A

by A.M. Best's Key Rating Guide, or other equivalent service(s), and authorized to transact business in the State of Texas. Such policy shall provide for a waiver of subrogation against the Town for injuries, including death, property damage, or any other loss to the extent that same is covered by the proceeds of the insurance. Such policy shall require the provision of written notice to Town at least thirty (30) days prior to cancellation, non-renewal, or material modification of any policies, or ten (10) days for non-payment of premium, evidenced by return receipt or United States Certified Mail. Consultant shall furnish Town with certificates evidencing such coverage prior to commencing work on the Project.

- 5.4 **Circumstances Requiring Umbrella Coverage or Excess Liability Coverage** – If Project size and scope warrant, Town of Addison Contractor Insurance Requirements, Consultant shall maintain, at no expense to the Town, an umbrella coverage or excess liability coverage insurance policy with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s), authorized to transact business in the State of Texas, in an amount of Two Million and 00/100 Dollars (\$2,000,000.00). Consistent with the terms and provisions of Exhibit "F," such policy shall name the Town, its officers, agents, representatives, and employees as additional insured as to all applicable coverage. Such policy shall provide for a waiver of subrogation against the Town for injuries, including death, property damage, or any other loss to the extent that the same is covered by the proceeds of the insurance. Such policy shall require the provision of written notice to the Town at least thirty (30) days prior to cancellation, non-renewal, or material modification of any policies, or ten (10) days for non-payment of premium, evidenced by return receipt or United States Certified Mail. Consultant shall furnish Town with certificates evidencing such coverage prior to commencing work on the Project.

## ARTICLE 6 CONSULTANT'S ACCOUNTING RECORDS

Records of Direct Expenses and expenses pertaining to services performed in conjunction with the Project shall be kept on the basis of generally accepted accounting principles. Invoices will be sent to the Town as indicated in Article 3.4. Copies of employee time sheets, receipts for direct expense items and other records of Project expenses will be included in the monthly invoices.

## ARTICLE 7 AUDITS AND RECORDS / PROHIBITED INTEREST / VENDOR DISCLOSURE

The Consultant agrees that at any time during normal business hours and as often as the Town may deem necessary, Consultant shall make available to representatives of the Town for examination all of its records with respect to all matters covered by this Agreement, and will permit such representatives of the Town to audit, examine, copy and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered

# EXHIBIT A

by this Agreement, and for a period of four (4) years from the date of final settlement of this Agreement or for such other or longer period, if any, as may be required by applicable statute or other lawful requirement.

The Consultant agrees that it is aware of the prohibited interest requirement of the Town Charter, which is repeated on the Affidavit, attached hereto as Exhibit "E" and incorporated herein for all purposes, and will abide by the same. Further, a lawful representative of Consultant shall execute the Affidavit attached hereto as Exhibit "E". Consultant understands and agrees that the existence of a prohibited interest during the term of this Agreement will render the Agreement voidable.

Consultant agrees that it is further aware of the vendor disclosure requirements set forth in Chapter 176, Local Government Code, as amended, and will abide by the same. In this connection, a lawful representative of Consultant shall execute the Conflict of Interest Questionnaire, Form CIQ, attached hereto as Exhibit "F" and incorporated herein for all purposes.

If the Agreement is required to go to the City Council for approval, then the Consultant shall execute and deliver to the Town the Form 1295 Certificate of Interested Parties, as required by section 2252.908, Texas Government Code, as amended, prior to the City's execution of this Agreement.

## ARTICLE 8 TERMINATION OF AGREEMENT / REMEDIES

Town may, upon thirty (30) days written notice to Consultant, terminate this Agreement, for any reason or no reason at all, before the termination date hereof, and without prejudice to any other remedy it may have. If Town terminates this Agreement due to a default of and/or breach by Consultant and the expense of finishing the Project exceeds the Consultant's Fee at the time of termination, Consultant waives its right to any portion of Consultant's Fee as set forth in Article 3 herein and agrees to pay any costs over and above the fee which the Town is required to pay in order to finish the Project. On any default and/or breach by Consultant, Town may elect not to terminate the Agreement, and in such event it may make good the deficiency in which the default consists, and deduct the costs from the Consultant's Fee due Consultant as set forth in Article 3 herein. If Town terminates this Agreement and Consultant is not in default of the Agreement, Consultant shall be entitled to compensation for any and all work completed to the satisfaction of the Town in accordance with the provisions of this Agreement prior to termination.

In the event of any termination, Consultant shall deliver to Town all finished and/or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs and/or any items prepared by Consultant in connection with this Agreement prior to Consultant receiving final payment.

The rights and remedies provided by this Agreement are cumulative, and the use of any one right or remedy by either party shall not preclude or waive its rights to use any or all other

# EXHIBIT A

remedies. These rights and remedies are given in addition to any other rights the parties may have by law, statute, ordinance, or otherwise.

## ARTICLE 9 DISPUTE RESOLUTION / MEDIATION

In addition to all remedies at law, the parties may resolve/mediate any controversy, claim or dispute arising out of or relating to the interpretation or performance of this Agreement, or breach thereof, by voluntary mediation to be conducted by a mutually acceptable mediator.

## ARTICLE 10

### INDEMNITY

CONSULTANT SHALL HEREBY COVENANT AND CONTRACT TO WAIVE ANY AND ALL CLAIMS, RELEASE, INDEMNIFY AND HOLD HARMLESS TOWN AND ITS TOWN COUNCIL MEMBERS, OFFICERS, AGENTS, REPRESENTATIVES AND EMPLOYEES FROM AND AGAINST ALL DAMAGES, INJURIES (INCLUDING DEATH), INTELLECTUAL PROPERTY INFRINGEMENT CLAIMS (INCLUDING PATENT, COPYRIGHT AND TRADEMARK INFRINGEMENTS), CLAIMS, PROPERTY DAMAGES (INCLUDING LOSS OF USE), LOSSES, DEMANDS, SUITS, JUDGMENTS AND COSTS, INCLUDING REASONABLE ATTORNEY'S FEES AND EXPENSES (INCLUDING ATTORNEYS' FEES AND EXPENSES INCURRED IN ENFORCING THIS INDEMNITY), CAUSED OR RESULTING FROM THE NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY CONSULTANT, ITS OFFICERS, AGENTS, REPRESENTATIVES, EMPLOYEES, SUBCONTRACTORS, LICENSEES, INVITEES, OR ANY OTHER ENTITY OVER WHICH THE CONSULTANT EXERCISES CONTROL, IN ITS/THEIR PERFORMANCE OF THIS AGREEMENT AND/OR ARISING OUT OF PROFESSIONAL SERVICES PROVIDED BY CONSULTANT PURSUANT TO THIS AGREEMENT, REGARDLESS OF THE JOINT OR CONCURRENT NEGLIGENCE OR STRICT LIABILITY OF THE TOWN (HEREINAFTER "CLAIMS"). THIS INDEMNIFICATION PROVISION AND THE USE OF THE TERM "CLAIMS" IS ALSO SPECIFICALLY INTENDED TO APPLY TO, BUT NOT LIMITED TO, ANY AND ALL CLAIMS, WHETHER CIVIL OR CRIMINAL, BROUGHT AGAINST TOWN BY ANY GOVERNMENT AUTHORITY OR AGENCY RELATED TO ANY PERSON PROVIDING SERVICES UNDER THIS AGREEMENT THAT ARE BASED ON ANY FEDERAL IMMIGRATION LAW AND ANY AND ALL CLAIMS, DEMANDS, DAMAGES, ACTIONS AND CAUSES OF ACTION OF EVERY KIND AND NATURE, KNOWN AND UNKNOWN, EXISTING OR CLAIMED TO EXIST, RELATING TO OR ARISING OUT OF ANY EMPLOYMENT RELATIONSHIP BETWEEN CONSULTANT AND ITS EMPLOYEES OR SUBCONTRACTORS AS A RESULT OF THAT SUBCONTRACTOR'S OR EMPLOYEE'S EMPLOYMENT AND/OR SEPARATION FROM EMPLOYMENT WITH THE CONSULTANT, INCLUDING BUT NOT LIMITED TO ANY DISCRIMINATION CLAIM BASED ON SEX, SEXUAL ORIENTATION OR PREFERENCE, RACE, RELIGION, COLOR, NATIONAL ORIGIN, AGE OR DISABILITY UNDER FEDERAL, STATE OR LOCAL LAW, RULE OR REGULATION, AND/OR ANY CLAIM FOR WRONGFUL TERMINATION, BACK PAY, FUTURE WAGE LOSS, OVERTIME PAY, EMPLOYEE BENEFITS, INJURY SUBJECT TO RELIEF UNDER THE WORKERS' COMPENSATION ACT OR

# EXHIBIT A

WOULD BE SUBJECT TO RELIEF UNDER ANY POLICY FOR WORKERS COMPENSATION INSURANCE, AND ANY OTHER CLAIM, WHETHER IN TORT, CONTRACT OR OTHERWISE. THIS INDEMNIFICATION SHALL EXTEND TO THE PAYMENT OR REIMBURSEMENT OF THE TOWN'S REASONABLE ATTORNEYS FEES AND ASSOCIATED COSTS, COURT COSTS, AND SETTLEMENT COSTS IN PROPORTION TO THE CONSULTANT'S LIABILITY.

CONSULTANT SHALL PROMPTLY NOTIFY TOWN OF THE DEFENSE COUNSEL RETAINED BY CONSULTANT IN FULFILLING ITS OBLIGATION HEREUNDER, AND TIMELY NOTIFY TOWN OF ANY AND ALL LEGAL ACTIONS TAKEN BY THE DEFENSE COUNSEL REGARDING ANY AND ALL CLAIMS.

THIS ARTICLE SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

## ARTICLE 11 NOTICES

Consultant agrees that all notices or communications to Town permitted or required under this Agreement shall be delivered to Town at the following addresses:

**Director of Infrastructure and Development Services**  
Town of Addison  
16801 Westgrove Drive  
Addison, Texas 75001

Town agrees that all notices or communication to Consultant permitted or required under this Agreement shall be delivered to Consultant at the following addresses:

**Icon Consulting Engineers, Inc.**  
**Bruce Dunne, P.E.**  
**2840 W. Southlake Blvd., Ste. 110**  
**Southlake, TX 76092**

Any notice provided in writing under the terms of this Agreement by either party to the other shall be in writing and may be effected by registered or certified mail, return receipt requested.

All notices or communication required to be given in writing by one party or the other shall be considered as having been given to the addressee on the date such notice or communication is postmarked by the sending party. Each party may change the address to which notice may be sent to that party by giving notice of such change to the other party in accordance with the provisions of this Agreement.

# EXHIBIT A

## ARTICLE 12 MISCELLANEOUS

- 12.1 **Complete Agreement** – This Agreement, including the exhibits hereto labeled “A” through “G,” all of which are incorporated herein for all purposes, constitute the entire Agreement by and between the parties regarding the subject matter hereof and supersedes all prior and/or contemporaneous written and/or oral understandings. This Agreement may not be amended, supplemented, and/or modifies except by written agreement duly executed by both parties. The following exhibits are attached below and made a part of this Agreement:
- 12.1.1 Exhibit “A,” Scope of Services.
  - 12.1.2 Exhibit “B,” Compensation Schedule / Project Billing / Project Budget.
  - 12.1.3 Exhibit “C,” Town of Addison Guidelines for Direct Expenses; General and Administrative Markup; Travel and Subsistence Expenses.
  - 12.1.6 Exhibit “D,” Town of Addison Contractor Insurance Requirements.
  - 12.1.7 Exhibit “E,” Affidavit.
  - 12.1.8 Exhibit “F”, Conflict of Interest Questionnaire, Form CIQ.
  - 12.1.9 Exhibit “G”, Task Manpower and Hourly Rates
- 12.2 **Assignment and Subletting** – The Consultant agrees that neither this Agreement nor the work to be performed hereunder will be assigned or sublet without the prior written consent of the Town. The Consultant further agrees that the assignment or subletting or any portion or feature of the work or materials required in the performance of this Agreement shall not relieve the Consultant of its full obligations to the Town as provided by this Agreement. All such approved work performed by assignment or subletting shall be billed through Consultant, and there shall be no third party billing.
- 12.3 **Successors and Assigns** – Town and Consultant, and their partners, assigns, successors, subcontractors, executors, officers, agents, employees, representatives, and administrators are hereby bound to the terms and conditions of this Agreement.
- 12.4 **Severability** – In the event of a term, condition, or provision of this Agreement is determined to be invalid, illegal, void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision, shall be deleted and the remainder of the Agreement shall remain in full force and effect as if such invalid, illegal, void, unenforceable or unlawful provision had never been contained herein.

## EXHIBIT A

- 12.5 **Venue** – This entire Agreement is performable in Dallas County, Texas and the venue for any action related directly or indirectly, to this Agreement or in any manner connected therewith shall be in Dallas County, Texas, and this Agreement shall be construed under the laws of the State of Texas.
- 12.6 **Execution / Consideration** – This Agreement is executed by the parties hereto without coercion or duress for any substantial consideration, the sufficiency of which is forever confessed.
- 12.7 **Authority** – The individuals executing this Agreement on behalf of the respective parties below represent to each other that all appropriate and necessary action has been taken to authorize the individual who is executing this Agreement to do so for an on behalf of the party for which his or her signature appears, that there are no other parties or entities required to execute this Agreement in order for the same to be an authorized and binding agreement on the other party for whom the individual is signing this Agreement and that each individual affixing his or her signature hereto is authorized to do so, and such authorization is valid and effective on the date hereof.
- 12.8 **Waiver** – Waiver by either party of any breach of this Agreement, or the failure of either party to enforce any of the provisions of this Agreement, at any time, shall not in any way affect, limit, or waive such party's right thereafter to enforce and compel strict compliance.
- 12.9 **Headings** – The headings of the various sections of this Agreement are included solely for convenience of reference and are not to be full or accurate descriptions of the content thereof.
- 12.10 **Multiple Counterparts** – This Agreement may be executed in a number of identical counterparts, each of which shall be deemed an original for all purposes.
- 12.11 **Sovereign Immunity** – The parties agree that the Town has not waived its sovereign immunity by entering into and performing its obligations under this Agreement.
- 12.12 **Additional Representations** – Each signatory represents this Agreement has been read by the party for which this Agreement is executed and that such party has had the opportunity to confer with its counsel.
- 12.13 **Miscellaneous Drafting Provisions** – This Agreement shall be deemed drafted equally by all parties hereto. The language of all parts of this Agreement shall be construed as a whole according to its fair meaning, and any presumption or principle that the language herein is to be construed against any party shall not apply.

# EXHIBIT A

12.14 **No Third Party Beneficiaries** -- Nothing in this Agreement shall be construed to create any right in any third party not a signatory to this Agreement, and the parties do not intend to create any third party beneficiaries by entering into this Agreement.

**IN WITNESS WHEREOF**, the parties have executed this Agreement and caused this Agreement to be effective on the latest day as reflected by the signatures below.

**Effective Date:** \_\_\_\_\_

**TOWN:**

Town of Addison, Texas

By: \_\_\_\_\_  
Wesley S. Pierson, City Manager

Date: \_\_\_\_\_

**CONSULTANT:**

Icon Consulting Engineers, Inc.

By: *Gene Dean, P.E., President*  
Name, Title

Date: 10-26-16

**EXHIBIT A**

STATE OF TEXAS

§  
§  
§

COUNTY OF DALLAS

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared **Wesley S. Pierson**, Town of Addison, Texas City Manager, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and consideration expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this \_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
Notary Public In and For the State of Texas  
My commission expires: \_\_\_\_\_

STATE OF Texas

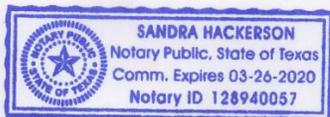
§  
§  
§

COUNTY OF Tarrant

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared **Bruce F. Dunne**, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 26 day of October, 2016.

Sandra Hackerson  
\_\_\_\_\_  
Notary Public In and For the State of Texas  
My commission expires: 3-26-20



# EXHIBIT A

## Exhibit "A" Scope of Services

### Agreement by and between the Town of Addison, Texas (Town) and Icon Consulting Engineers, Inc. (Consultant) to perform Professional Engineering services for the design of public infrastructure serving Vitruvian Park Block 500 development (Vitruvian Park Phase VIIIa)

#### 1) Route Design Surveys

Icon will perform route design surveys for the planning and design of public infrastructure improvements. Surveys along Marsh Lane will be limited to the east half of the existing right-of-way while the surveys along Spring Valley Road will be confined to the southern half of the existing right-of-way. The route surveys for proposed internal water and sanitary sewer improvements will be approximately 25' on either side of the proposed centerline of the improvements. Survey information provided will include all visible features and 1' contour elevations. A map of the results of the route design surveys will not be prepared. The results of the surveys will be incorporated into the plan design drawings.

#### 2) Existing Underground Utilities Location

Icon will contact Texas One Call, or the appropriate utility locator companies, to field locate the existing underground utility lines along Spring Valley Road, Marsh Lane and within the property limits of the proposed Shopping Center area. The location of the lines as marked will then be surveyed for design purposes.

#### 3) Water Plans

Icon will prepare Water Plans, including detailed design, drafting and specifications, for each of the following improvements in accordance with Town of Addison requirements. Icon will then provide all technical support necessary to facilitate acceptance of these plans by the Town of Addison. The plans will include the following:

- A. Water Plans: Plans will be prepared for a new 12" water line to replace the existing 8" water line that is currently in place along Marsh Lane. The new 12" line will extend along Marsh Lane from proposed Westgate Lane to the intersection of Sidney Street for approximately 2,400 feet. Included will be water line facilities and crossings (within the existing right-of-way for Marsh Lane) for future development phase connections. Also included will be re-connections of existing hydrant leads, services and other water appurtenances that are currently in service from the existing 8" water line. Plans will also be prepared for a new public water line to replace the existing loop system running along the back side of the existing Tom Thumb shopping center and along the south side of the existing Bank site. New internal looped water lines will also be designed as shown on the attached Exhibit "1".

# EXHIBIT A

- B. Water Profiles: Water line profiles will be provided for each of the proposed water line extensions.
- C. Traffic Control and Phasing Plans: Traffic control and phasing plans along with necessary details will be prepared for the construction of the proposed water line along Marsh Lane.
- D. Erosion & Sediment Control Plan: The plan will be prepared in compliance with the Texas Pollutant Discharge Elimination System (TPDES) program administered by the Texas Commission on Environmental Quality (TCEQ). The plan will include erosion and sediment control measures for use during construction of the project.
- E. Construction details.

After reviewing the plans with Town staff, Icon will prepare the necessary applications and submit the Water Plans to the Town of Addison. We have included attending all required design coordination meetings with Town of Addison staff for the purpose of obtaining plan approval.

#### 4) Sanitary Sewer Plans

Icon will prepare Sanitary Sewer Plans, including detailed design, drafting and specifications, for each of the following improvements in accordance with Town of Addison requirements. Icon will then provide all technical support necessary to facilitate acceptance of these plans by the Town of Addison. The plans will include the following:

- A. Sanitary Sewer Plan: Plans will be prepared for all proposed public sanitary sewer system improvements located within Vitruvian Park Block 500 as shown on attached Exhibit "2". These plans will include design for a new 8" sanitary sewer line to replace the existing 8" sanitary sewer line currently in place behind the existing Tom Thumb Shopping Center as well as a new 8" sewer line to serve future pad sites along Marsh Lane. Included will be re-connection of existing sanitary sewer mains, services and other sanitary sewer appurtenances that are currently in service, as well as design of temporary improvements necessary to keep existing facilities in place during construction.
- B. Sanitary Sewer Profiles: Profiles for all public sanitary sewer lines will be prepared.
- C. Traffic Control and Phasing Plans: Traffic control and phasing plans along with necessary details will be prepared for the construction of the public sanitary sewer improvements in Vitruvian Park Block 2.
- D. Erosion & Sediment Control Plan: The plan will be prepared in compliance with the Texas Pollutant Discharge Elimination System (TPDES) program administered by the

# EXHIBIT A

Texas Commission on Environmental Quality (TCEQ). The plan will include erosion and sediment control measures for use during construction of the project.

## E. Construction details.

After reviewing the plans with Town staff, Icon will prepare the necessary applications and submit the sanitary sewer plans to the Town of Addison. We have included attending all required design coordination meetings with Town of Addison staff for the purpose of obtaining plan approval.

## 5) Paving and Drainage Plans

Icon will prepare Paving and Drainage Plans, including detailed design, drafting and specifications, for each of the following improvements in accordance with Town of Addison requirements. Icon will then provide all technical support necessary to facilitate acceptance of these plans by the Town of Addison. The plans will include the following:

- A. Paving Plans: Plans will be prepared for the construction of new driveway approaches to serve Vitruvian Block 500 as depicted on attached Exhibit "3". Two new drive approaches are proposed along both Marsh Lane and Spring Valley Road, and four existing driveway openings will be closed off. It is our understanding that the existing median opening within Marsh Lane will stay in its current location with no proposed modifications planned.
- B. Drainage Plans: Construction of the new driveway approaches will necessitate the reconstruction of existing drainage inlets. Drainage Plans will be prepared to modify the existing inlets to accommodate existing and proposed runoff.
- C. Traffic Control and Phasing Plans: Traffic control and phasing plans along with necessary details will be prepared for the construction of the public paving improvements included in this proposal.
- D. Erosion & Sediment Control Plan: The plan will be prepared in compliance with the Texas Pollutant Discharge Elimination System (TPDES) program administered by the Texas Commission on Environmental Quality (TCEQ). The plan will include erosion and sediment control measures for use during construction of the project.

## E. Construction details.

After reviewing the plans with Town of Addison staff, Icon will prepare the necessary applications and submit the Paving and Drainage Plans to the Town. We have included attending all required design coordination meetings with Town of Addison staff for the purpose of obtaining plan approval.

## 6) Streetscape, Landscape and Irrigation Plans

# EXHIBIT A

Icon will prepare Streetscape, Landscape and Irrigation Plans, including detailed design, drafting and specifications for the proposed right-of-ways along Marsh Lane and Spring Valley Road adjacent to the proposed Block 500 development. (Note that Streetscape, Landscape and Irrigation Plans for the street right-of-way along Marsh Lane to Sidney Street is not included in this proposal.) Design shall be in general compliance with the Planned Development agreement for various street right-of-way sections. Icon will then provide all technical support necessary to facilitate acceptance of these plans by the Town of Addison. Drawings will be prepared to provide layout and construction details required to properly bid and install the following:

- A. Landscape Planting Plan: The plan will be prepared to include material locations, genus/species, quantity spacing, size and varieties to be utilized on site. Details and enlargements will be prepared as necessary in order to clarify intent of layout.
- B. Irrigation Plan: The plan will be prepared to include location and model of all heads, valves, meters, controller electrical service, wiring, etc. as well as size of all piping and sleeving. Details and enlargements will be prepared as necessary in order to clarify intent of layout.
- C. Drainage Plan: The plan will be prepared to include drainage facilities pertaining to any planting beds or tree wells.
- D. Streetscape Plans: The plan will be prepared to include selection and locations of Street Furniture.
- E. Special Pavement Treatment Plan: The plan will be prepared to include specifying locations and providing details for brick paver areas, concrete stamping, coloring, etc. for streets and street intersections, sidewalks, cross walks, etc.
- F. Street Lighting Plan: The plan will be prepared to include full lighting design services consisting of photo metrics, fixtures, electrical service, wiring, etc. for a complete functional street lighting system along Marsh Lane and Spring Valley Road adjacent to the Block 500 development.

After reviewing the plans with Town of Addison staff, Icon will prepare the necessary applications and submit the plans to the Town of Addison. Icon will meet with Town of Addison staff and provide coordination and technical support necessary to facilitate acceptance of plans by the Town of Addison.

## 7) **Texas Architectural Barriers Project Registration (TABPR)**

The project will require plans to be reviewed in accordance with TABPR guidelines. Icon will submit drawings for public infrastructure improvements within Vitruvian Park Block

# EXHIBIT A

500 directly to a state licensed TABPR reviewer for review. The following will be performed:

- A. Prepare the TABPR application and obtain Town of Addison signatures for submittal.
- B. Submit the completed application, review fee, and construction drawings to the reviewer for review and approval.
- C. Coordinate with the reviewer to address comments. Once comments have been cleared, the project will be registered with the Texas Department of Licensing and Regulations.
- D. Upon completion of construction, coordinate with the reviewer to have post construction audit performed.

## 8) Storm Water Pollution Prevention Plan

The Storm Water Pollution Prevention Plan (SWPPP) manual will be prepared in accordance with the Texas Pollutant Discharge Elimination System (TPDES) General Permit for Storm Water Discharges from Construction Activities. This program is administered by the Texas Commission on Environmental Quality (TCEQ).

The SWPPP manual will be prepared to cover the entire approximate 10.4 acre project. It is assumed that there will be a single General Contractor with overall responsibility for the day-to-day operations. That General Contractor will be responsible for implementing the SWPPP and for conducting the periodic inspections as required by the regulations.

## 9) Project Meetings

During the surveying, planning, and design phases, Icon will attend project meetings with the Town of Addison, RH Shackelford, Inc. and/or other project design team members.

We have budgeted 20 man-hours for meetings.

## 10) Construction Phase Services

Construction administration services will be performed for the following:

- A. Prepare bid proposal forms for Infrastructure Improvements relating to public improvements within the Vitruvian Park Block 500 tract. Included will be sanitary sewer, water, paving, storm drainage, miscellaneous conduits, grading, landscaping,

# EXHIBIT A

irrigation and streetscape improvements. It is anticipated that all improvements will be bid as one bid package.

- B. Prepare bid proposal documents and submit to Town of Addison for distribution to contractors for bidding purposes.
- C. Prepare and issue addenda as appropriate to clarify, correct or change the bidding documents.
- D. Attend the pre-bid meeting for public infrastructure improvements.
- E. Respond to contractor questions during the bidding process.
- F. Once the construction bids have been submitted, assist the Town of Addison in preparing a bid tabulation and in contractor selection.
- G. Provide assistance to the Town of Addison in the preparation of construction contracts for execution by the Town of Addison and the successful contractor.
- H. Attend the pre-construction conference.
- I. Review request for information (RFI), shop drawings, material submittals, test reports, and change orders related to the work.
- J. Attend a once-a-month construction progress meeting.
- K. When the construction has been completed, perform a final review (in conjunction with Town of Addison staff) of the public infrastructure improvements and related work, and provide the contractors with a punch list for each phase.
- L. Once the punch list is completed, perform a final review of completed improvements in union with Town of Addison staff to verify all punch list items have been completed.

## ***11) Record Drawings***

Upon completion of construction, Icon will prepare one (1) set of mylar record drawings, three (3) full size bond drawing sets, and electronic files in CAD and PDF formats for the Town of Addison based on marked-up plans to be provided by each of the contractors.



# EXHIBIT A

## EXHIBIT 1a-North Vitruvian Park Block 500 A Infrastructure - WATER

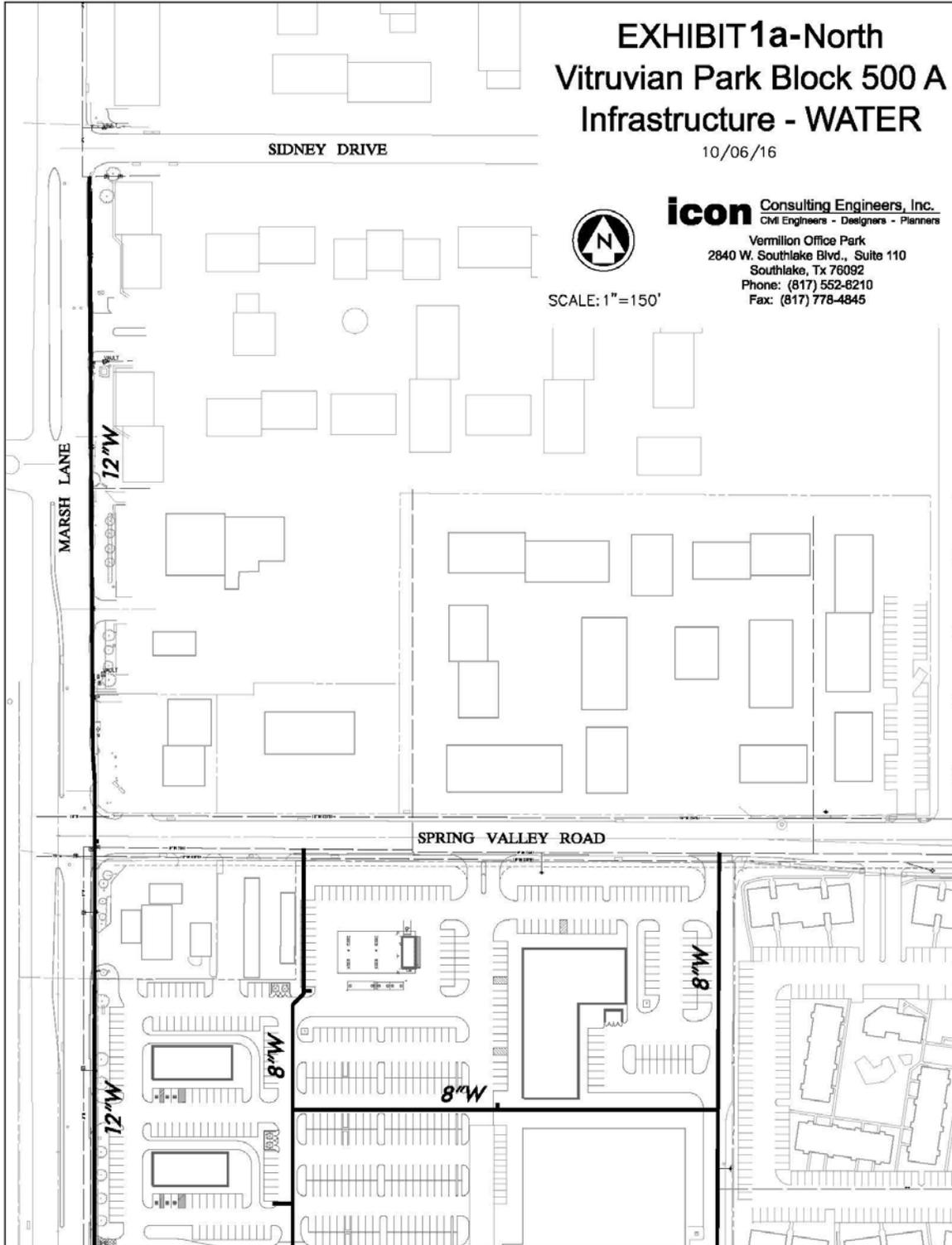
10/06/16



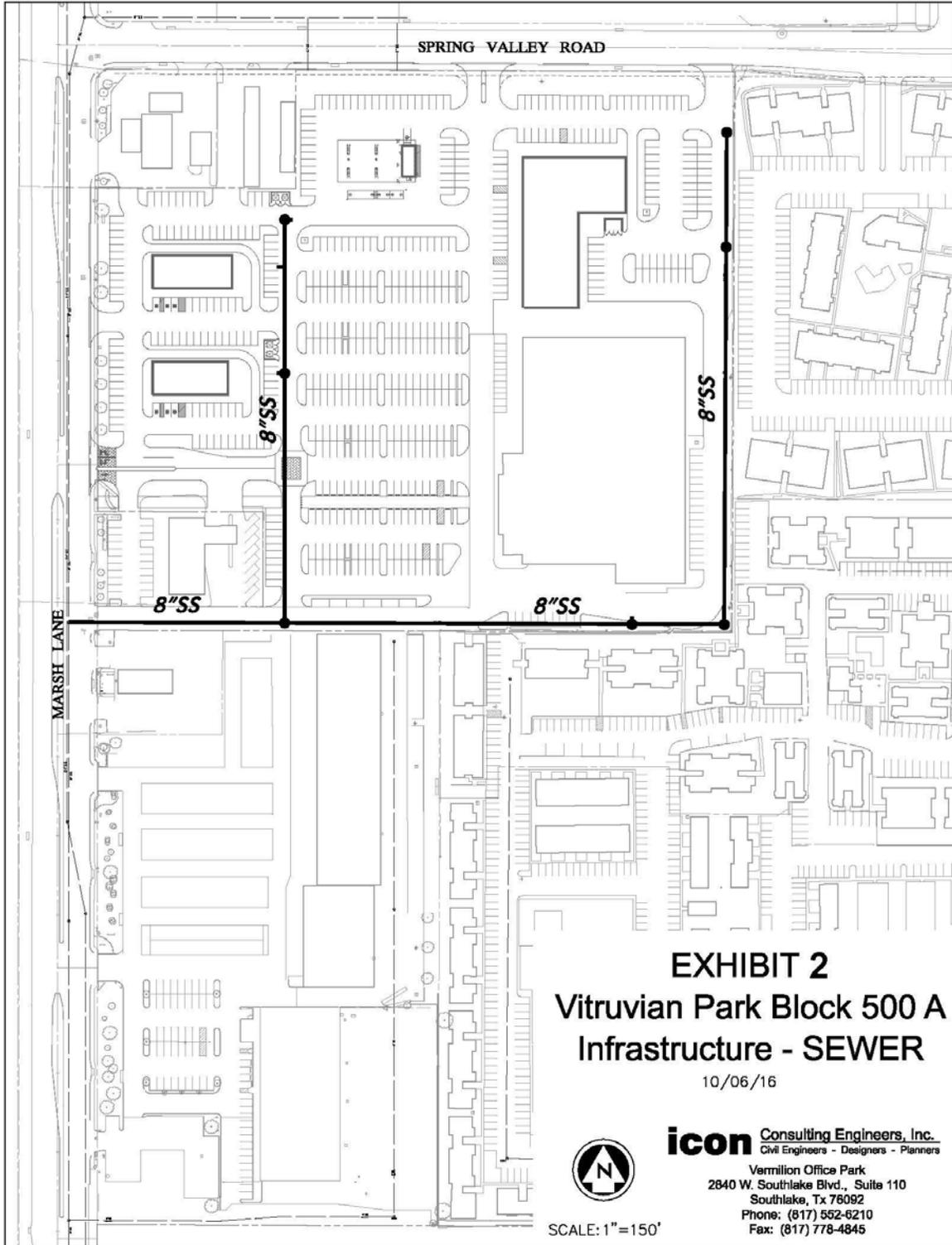
SCALE: 1" = 150'

**icon** Consulting Engineers, Inc.  
CIVI Engineers - Designers - Planners

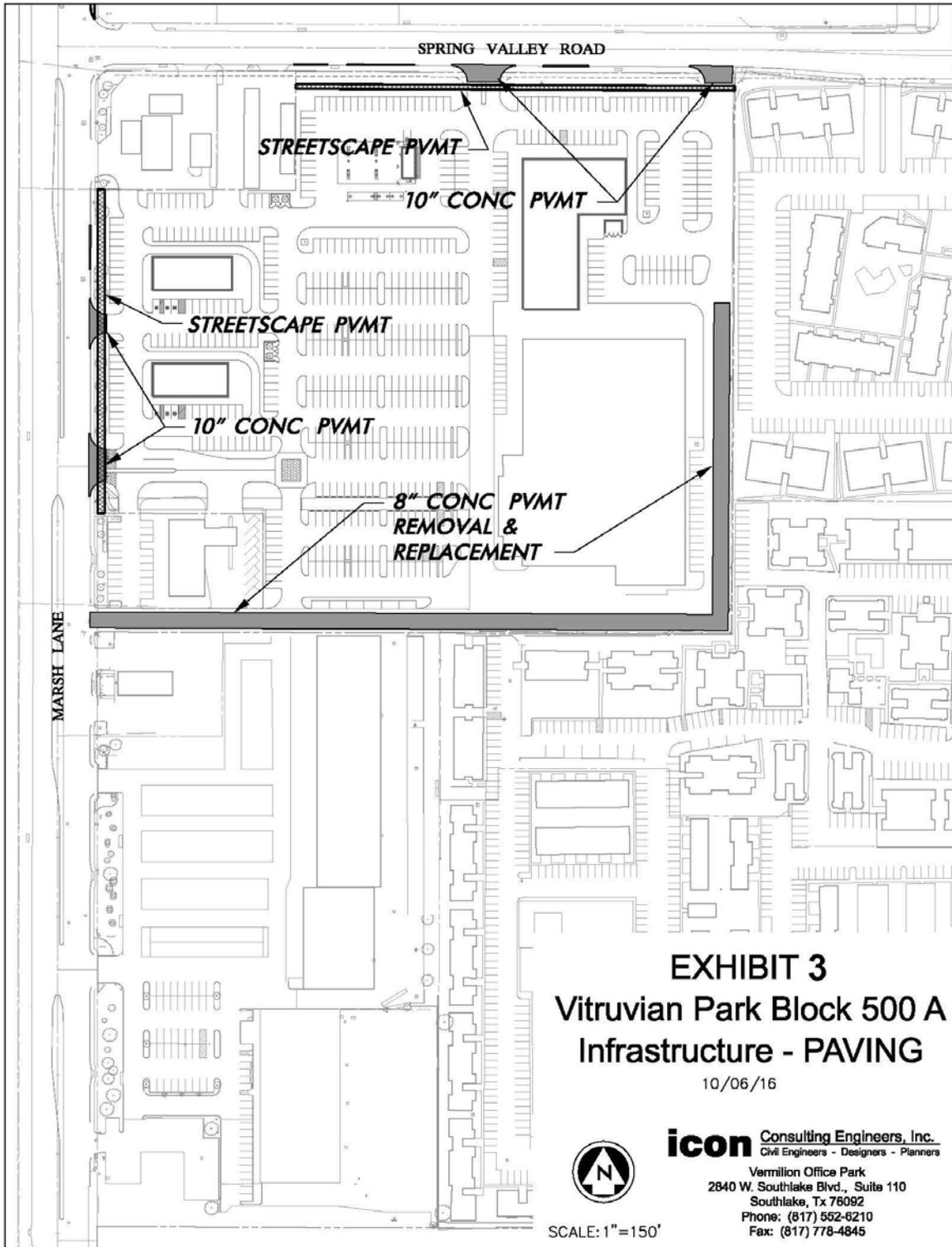
Vermillion Office Park  
2840 W. Southlake Blvd., Suite 110  
Southlake, Tx 76092  
Phone: (817) 552-8210  
Fax: (817) 778-4845



# EXHIBIT A



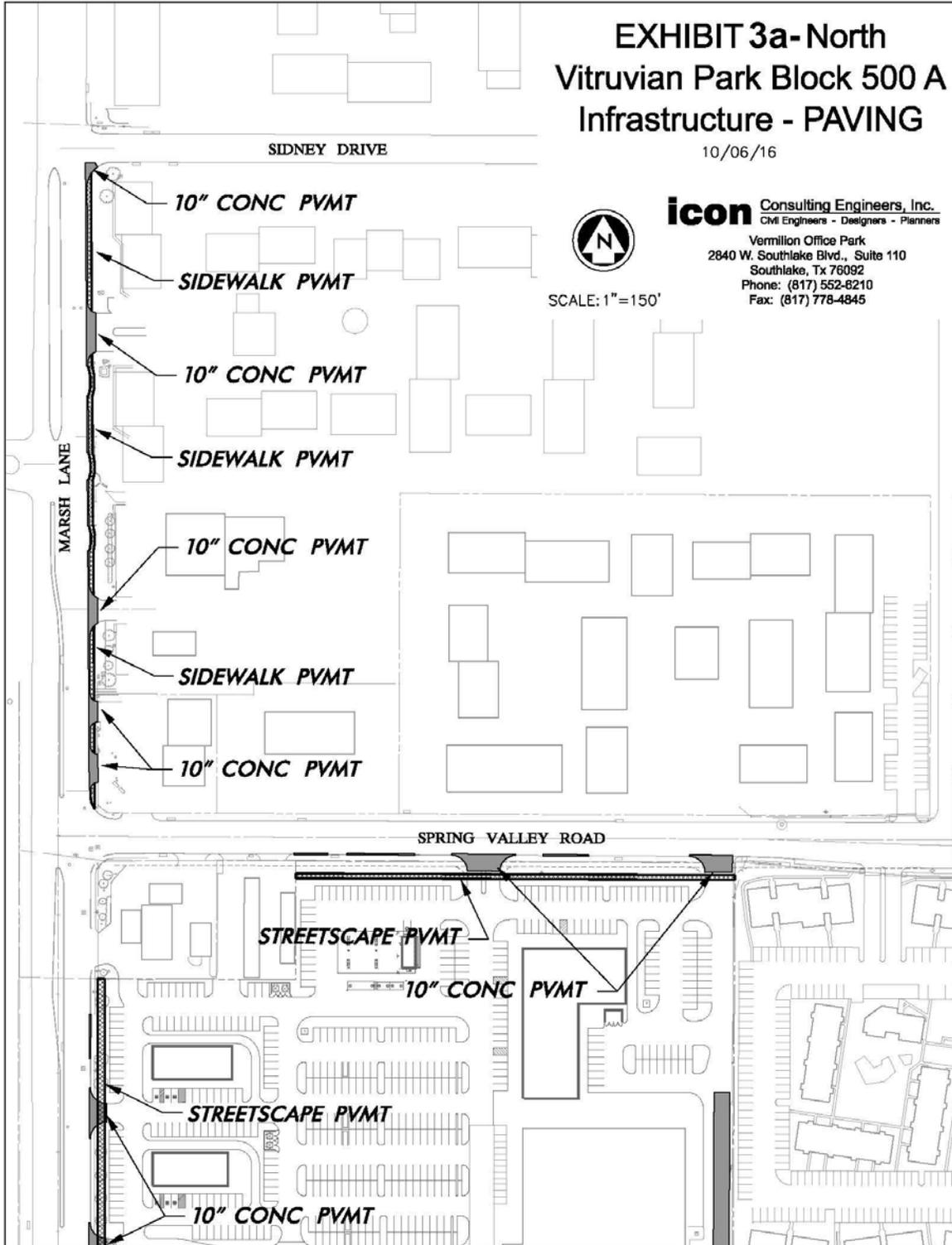
# EXHIBIT A



# EXHIBIT A

## EXHIBIT 3a-North Vitruvian Park Block 500 A Infrastructure - PAVING

10/06/16



**icon** Consulting Engineers, Inc.  
CIVIL Engineers - Designers - Planners  
Vermilion Office Park  
2840 W. Southlake Blvd., Suite 110  
Southlake, Tx 76092  
Phone: (817) 552-8210  
Fax: (817) 778-4845



SCALE: 1" = 150'

# EXHIBIT A

EXHIBIT "B"

COMPENSATION SCHEDULE / PROJECT BILLING / PROJECT BUDGET

<b>Icon Consulting Engineers, Inc.</b>				
Vermillion Office Park 2840 W. Southlake Boulevard, Suite 110 Southlake, Texas 76092 (817) 552-6210				
Project: Vitruvian Park Block 500			5029-05	
Design Fee Distribution			10/5/2016	
Public Infrastructure			Bruce F. Dunne	
Task	Civil	Survey	L. Arch.	Totals
1. Route Design Surveys	\$0	\$6,670	\$0	\$6,670
2. Existing Utility Locations	\$0	\$1,155	\$0	\$1,155
3. Water Plans	\$26,680	\$0	\$0	\$26,680
4. Wastewater Plans	\$11,640	\$0	\$0	\$11,640
5. Paving & Drainage Plans	\$4,310	\$0	\$0	\$4,310
6. Streetscape & Landscape Plans	\$3,760	\$0	\$9,160	\$12,920
7. TABLR	\$1,855	\$0	\$0	\$1,855
8. SWPPP	\$2,235	\$0	\$0	\$2,235
9. Project Meetings	\$5,600	\$0	\$0	\$5,600
10. Construction Phase Services	\$16,170	\$0	\$1,760	\$17,930
11. Record Drawings	\$2,040	\$0	\$265	\$2,305
12. Reimbursables	\$3,650	\$250	\$600	\$4,500
<b>Totals</b>	<b>\$77,940</b>	<b>\$8,075</b>	<b>\$11,785</b>	<b>\$97,800</b>
Summary Tabulation of Cost				
Infrastructure	\$58,120	\$7,825	\$9,425	\$75,370
Construction Phase Services	\$16,170	\$0	\$1,760	\$17,930
Reimbursables	\$3,650	\$250	\$600	\$4,500
Summary Tabulation by Percent of Cost				
Infrastructure	2.87%	0.39%	0.47%	3.73%
Construction Phase	0.80%	0.00%	0.09%	0.89%
Reimbursables	0.18%	0.01%	0.03%	0.20%
Based on estimated cost of Infrastructure at \$2,024,472.50				

# EXHIBIT A

## EXHIBIT "C"

### TOWN OF ADDISON GUIDELINES FOR DIRECT EXPENSES; GENERAL AND ADMINISTRATIVE MARKUP; TRAVEL AND SUBSISTENCE EXPENSES

I. **CONSULTANT'S RESPONSIBILITY**. The Consultant shall be solely responsible for the auditing of all direct expense, approved markup (general and/or administrative), and approved travel and/or subsistence charges, including those to be included under a sub-contract, prior to the Town for reimbursement, and Consultant shall be responsible for the accuracy thereof. Any overpayment by the Town for errors in submittals for reimbursement may be deducted from the Consultant's subsequent payment(s) for services; however, this shall not be the Town's sole and exclusive remedy for said overpayment.

#### II. **GUIDELINES FOR DIRECT EXPENSES**

A. **Local Transportation** – Transportation in connection with the Project, when such transportation is not a function of routine performance of the duties of the Consultant in connection with the Project, and when such transportation exceeds beyond fifty (50) miles from the Project site, shall be reimbursed at a standard mileage rate consistent with that as issued, and periodically revised, by the United States Internal Revenue Service (IRS). Under no circumstances shall Town reimburse Consultant at a higher standard mileage rate or pay additional markup on charges for local transportation. Completion of Town's Standard Mileage Log is required for submittal of these charges for reimbursement, including justification for each submitted expense.

Under no circumstances are charges associated with rental cars for local transportation eligible for reimbursement by Town. Toll road subscriptions or toll plaza receipts are not reimbursable. Consultant agrees to place these standards in all subcontracts for work on the Project.

B. **Supplies, Material, Equipment** – Town shall reimburse the actual cost of other similar direct Project-related expenses, which are duly presented in advance and approved by Town's Project Manager in writing.

C. **Commercial Reproduction** – Town shall reimburse the actual cost of reproductions, specifically limited to progress prints prepared for presentation to Town at each phase of progress, and final Construction Documents prepared for distribution at bidding phase, provided that the Consultant has duly obtained at least three (3) quotations from commercial firms and has chosen the best value for the Town. Consultant shall provide such documentation to Town for review prior to submitting these expenses for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.

D. **In-House Reproduction** - Consultant shall make arrangements with the Town for prior approval of in-house reproduction rates prior to submitting these expenses for reimbursement. Town shall provide Consultant with a standard format for documenting these charges. Completion of the Town's reproduction log is required as a prerequisite for payment, including the number or reproductions, the

# EXHIBIT A

date, time, description, the approved standard rate, and a justification for each submitted expense for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.

- E. **Commercial Plotting** – Town shall reimburse the actual cost of plots, specifically limited to final documents, provided the Consultant has duly obtained at least three (3) quotations from commercial firms and has chosen the best value for the Town. Consultant shall provide such documentation to Town for review prior to submitting these expenses for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.
- F. **In-House Plotting** – Consultant shall make arrangements with Town for prior written approval of in-house plotting rates prior to submitting these charges for reimbursement. Town shall provide Consultant with a standard format for documenting these charges. Completion of the Town's reproduction log is required as a prerequisite for payment, including the number of plots, the date, time, description, the approved standard rate, and a justification for each submitted charge for reimbursement.
- G. **Communications** – Reimbursement for expenses relating to electronic communications shall be limited to long-distance telephone or fax toll charges specifically required in the discharge of professional responsibilities related to the Project. Telephone service charges including office or cellular phones, WATTS, or Metro line services or similar charges are not reimbursable.
- H. **Postage, Mail, and Delivery Service** – Town shall reimburse the actual cost of postage and delivery of Instruments of Service, provided the Consultant duly considers all circumstances (including available time for assured delivery) of the required delivery and selects the best value for the Town, which may require comparison of delivery costs offered by three (3) or more sources or methods of delivery, which at a minimum shall include U.S. Mail. Courier service is acceptable only in circumstances requiring deadline-sensitive deliveries and not for the convenience of the Consultant and/or the Consultant's employees. Consultant agrees to place these standards in all subcontracts for work on the Project.
- I. **Meals and Other Related Charges** – Meals or any other related expenses are not reimbursable unless incurred outside a fifty (50) mile radius of the Project, and then only reimbursable for the actual cost subject to compliance with the Town's currently adopted policy. Non-allowable costs include, but are not limited to, charges for entertainment, alcoholic beverages, and gratuities.

# EXHIBIT A

### III. GUIDELINES FOR GENERAL AND ADMINISTRATIVE MARKUP.

1. **Requirement of Prior Approval** – Consultant may be allowed to charge a General and/or Administrative Markup on work completed if Consultant can clearly define to Town specifically what costs are included in the markup calculation. To apply General and/or Administrative Markup, Consultant must also document to Town what costs would be considered direct costs. Town shall issue approval in writing to allow Consultant to charge General and/or Administrative Markup. Town reserves the right to reject any and all requests for General and/or Administrative Markup.

### IV. GUIDELINES FOR TRAVEL AND SUBSISTENCE EXPENSES.

1. **Adherence to Currently Adopted Town Travel Policy** – Unless otherwise stated within this Agreement, reimbursements shall be governed by the same travel policies provided for Town employees according to current adopted policy. All lodging and meals are reimbursed in accordance with IRS rules and rates as shown on the U.S. General Services Administration website for the Town: <http://www.gsa.gov/portal/category/21287>.
2. Prior to the event, Consultant shall request, and the Town shall provide the provisions and the restrictions that apply to out-of-town reimbursements.

# EXHIBIT A

## EXHIBIT "D" TOWN OF ADDISON PROFESSIONAL SERVICES/CONSULTANT INSURANCE GUIDELINES

### REQUIREMENTS

Contractors performing work on CITY OF ADDISON property or public right-of-way shall provide the CITY OF ADDISON a certificate of insurance or a copy of their insurance policy(s) (and including a copy of the endorsements necessary to meet the requirements and instructions contained herein) evidencing the coverages and coverage provisions identified herein within ten (10) days of request from CITY OF ADDISON. Contractors shall provide CITY OF ADDISON evidence that all subcontractors performing work on the project have the same types and amounts of coverages as required herein or that the subcontractors are included under the contractor's policy. Work shall not commence until insurance has been approved by CITY OF ADDISON.

All insurance companies and coverages must be authorized by the Texas Department of Insurance to transact business in the State of Texas and must have a A.M. Best's rating A-:VII or greater.

Listed below are the types and minimum amounts of insurances required and which must be maintained during the term of the contract. CITY OF ADDISON reserves the right to amend or require additional types and amounts of coverages or provisions depending on the nature of the work.

TYPE OF INSURANCE	AMOUNT OF INSURANCE	PROVISIONS
1. <b>Workers' Compensation Employers' Liability</b> to include: (a) each accident (b) Disease Policy Limits (c) Disease each employee	Statutory Limits per occurrence  Each accident \$1,000,000 Disease Policy Limits \$1,000,000 Disease each employee \$1,000,000	<b>CITY OF ADDISON to be provided a <u>WAIVER OF SUBROGATION AND 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage.                      Insurance company must be A-:VII rated or above.</b>
2. <b>Commercial General (Public) Liability</b> to include coverage for: a) Bodily Injury b) Property damage c) Independent Contractors d) Personal Injury e) Contractual Liability	Bodily Injury/Property Damage per occurrence \$1,000,000, General Aggregate \$2,000,000 Products/Completed Aggregate \$2,000,000, Personal Advertising Injury per occurrence \$1,000,000, Medical Expense 5,000	<b><u>CITY OF ADDISON to be listed as ADDITIONAL INSURED and provided 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage.                      Insurance company must be A-:VII rated or above.</b>
3. <b>Business Auto Liability</b> to include coverage for: a) Owned/Leased vehicles b) Non-owned vehicles c) Hired vehicles	Combined Single Limit \$1,000,000	<b><u>CITY OF ADDISON to be listed as ADDITIONAL INSURED and provided 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage.                      Insurance company must be A-:VII-rated or above.</b>

Certificate of Liability Insurance forms (together with the endorsements necessary to meet the requirements and instructions contained herein) may be **faxed** to the Purchasing Department:

# EXHIBIT A

Certificate of Liability Insurance forms (together with the endorsements necessary to meet the requirements and instructions contained herein) may be **faxed** to the Purchasing Department: **972-450-7074** or **emailed to: [purchasing@addisontx.gov](mailto:purchasing@addisontx.gov)**. Questions regarding required insurance should be directed to the Purchasing Manager.

With respect to the foregoing insurance,

1. All liability policies shall contain no cross liability exclusions or insured versus insured restrictions applicable to the claims of the City of Addison.
2. All insurance policies shall be endorsed to require the insurer to immediately, or no later than thirty (30) days, notify the City of Addison, Texas of any material change in the insurance coverage.
3. All insurance policies shall be endorsed to the effect that the City of Addison, Texas will receive at least thirty (30) days' notice prior to cancellation or non-renewal of the insurance.
4. All insurance policies, which name the City of Addison, Texas as an additional insured, must be endorsed to read as primary coverage regardless of the application of other insurance.
5. Insurance must be purchased from insurers that are financially acceptable to the City of Addison and licensed to do business in the State of Texas.

All insurance must be written on forms filed with and approved by the Texas Department of Insurance. Upon request, Contractor shall furnish the City of Addison with complete copies of all insurance policies certified to be true and correct by the insurance carrier.

This form must be signed and returned with your quotation. You are stating that you do have the required insurance and if selected to perform work for CITY OF ADDISON, will provide the certificates of insurance (and endorsements) with the above requirements to CITY OF ADDISON within 10 working days.

**A CONTRACT/PURCHASE ORDER WILL NOT BE ISSUED WITHOUT EVIDENCE AND APPROVAL OF INSURANCE.**

**AGREEMENT**

I agree to provide the above described insurance coverages within 10 working days if selected to perform work for CITY OF ADDISON. I also agree to require any subcontractor(s) to maintain insurance coverage equal to that required by the Contractor. It is the responsibility of the Contractor to assure compliance with this provision. The City accepts no responsibility arising from the conduct, or lack of conduct, of the Subcontractor.

Project/Bid# Viridian Park Phase VIIIa Public Infrastructure For Block 500

Company: Icon Consulting ENG'S

Printed Name: BRUCE F. DUNNE, P.E.

Signature:  Date: 10-26-16

**EXHIBIT A**

**EXHIBIT "E"  
AFFIDAVIT**

THE STATE OF TEXAS

§  
§  
§

THE COUNTY OF DALLAS

I, Bruce F Dunne, a member of Icon Consulting Engineers, Inc., make this affidavit and hereby on oath state the following:

I, and/or a person or persons related to me, have the following interest in a business entity that would be affected by the work or decision on the Project (Check all that apply):

- Ownership of 10% or more of the voting shares of the business entity.
- Ownership of Twenty Five Thousand and 00/100 Dollars (\$25,000.00) or more of the fair market value of the business entity.
- Funds received from the business entity exceed ten percent (10%) of my income for the previous year.
- Real property is involved, and I have an equitable or legal ownership with a fair market value of at least Twenty Five Thousand and 00/100 Dollars (\$25,000.00).
- A relative of mine has substantial interest in the business entity or property that would be affected by my business decision of the public body of which I am a member.
- Other: \_\_\_\_\_
- None of the Above.

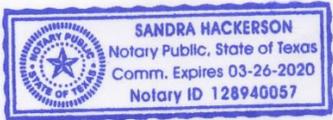
Upon filing this affidavit with the Town of Addison, Texas, I further affirm that no relative of mine, in the first degree by consanguinity or affinity, as defined in Chapter 573 of the Texas Government Code, is a member of a public body which took action on the agreement.

Signed this 26<sup>th</sup> day of October, 2016.

[Signature]  
Signature of Official / Title

BEFORE ME, the undersigned authority, this day personally appeared Bruce Dunne and on oath stated that the facts hereinabove stated are true to the best of his / her knowledge or belief.

Sworn to and subscribed before me on this 26 day of October 2016, 2016.



Sandra Hackerson  
Notary Public in and for the State of Texas  
My commission expires: 3-26-20

# EXHIBIT A

## EXHIBIT "F" CONFLICT OF INTEREST QUESTIONNAIRE, FORM CIQ

### FORM CIQ CONFLICT OF INTEREST QUESTIONNAIRE For vendor or other person doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session. This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a). By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code. A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

#### OFFICE USE ONLY

Date Received

1. Name of person who has a business relationship with local governmental entity.

*BRUCE F. DOWNE*

2. Check this box if you are filing an update to a previously filed question

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

3. Name of local government officer with whom filer has employment or business relationship.

*Town of Addison*

\_\_\_\_\_  
Name of Local Government Officer

This section (item 3 including subparts A, B, C & D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire? Yes  No

B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity? Yes  No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more? Yes  No

D. Describe each employment or business relationship with the local government officer named in this section.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# EXHIBIT A

## EXHIBIT "F" CONFLICT OF INTEREST QUESTIONNAIRE, FORM CIQ

4. Signature of person doing business with the governmental entity Date:

  
Signature

10-26-16  
Date

### Local Government Officers Town of Addison, Texas

For purposes of completion of the required Conflict of Interest Questionnaire for the Town of Addison Texas (required by all Vendors who submit bids/proposals), Local Government Officers are:

Mayor: Todd Meier

Council  
Members:

Al Angel, Council Member  
Jim Duffy, Council Member  
Bruce Arfsten, Council Member  
Paul Walden, Council Member  
Ivan Hughes, Council Member  
Dale Wilcox, Council Member

City Manager: Wesley S. Pierson

# EXHIBIT A

## EXHIBIT "G"

### Task Manpower and Hourly Rates

<u>Task</u>	<u>Manpower</u>	<u>Hours</u>	<u>Rate</u>	<u>Fee</u>
1. Route Design Surveys	Registered Surveyor	8	\$170	\$1,360
	Survey Crew	24	\$150	\$3,600.
	Survey Tech	8	\$105	\$840.
	Cad Drafter	8	\$90	\$720.
	Clerical	2	\$75	<u>\$150.</u>
				\$6,670.
2. Ex. Utility Locates	Survey Crew	2	\$150	\$300.
	Survey Tech	4	\$105	\$420.
	Cad Drafter	4	\$90	\$360.
	Clerical	1	\$75	<u>\$75.</u>
				\$1,155.
3. Water Design	Professional Engineer	12	\$190	\$2,280.
	Project Manager	56	\$160	\$8,960.
	Sr. CAD Tech	56	\$140	\$7,840.
	Cad Production Mgr.	56	\$125	\$7,000.
	Clerical	8	\$75	<u>\$600.</u>
				\$26,680.
4. Sewer Design	Professional Engineer	6	\$190	\$1,140.
	Project Manager	24	\$160	\$3,840.
	Sr. CAD Tech	24	\$140	\$3,360.
	Cad Production Mgr.	24	\$125	\$3,000.
	Clerical	4	\$75	<u>\$300.</u>
				\$11,640.
5. Paving/Drainage Design	Professional Engineer	4	\$190	\$760.
	Project Manager	8	\$160	\$1,280.
	Sr. CAD Tech	8	\$140	\$1,120.
	Cad Production Mgr.	8	\$125	\$1,000.
	Clerical	2	\$75	<u>\$150.</u>
				\$4,310.
6. Streetscape Design	Professional Engineer	4	\$190	\$760.
	Licensed Architect/Irrig.	40	\$140	\$5,600.
	Project Manager	10	\$160	\$1,600.
	Sr. CAD Tech	10	\$140	\$1,400.
	Cad Production Mgr.	10	\$125	\$1,250.
	Cad Drafter	24	\$90	\$2,160.
	Clerical	2	\$75	<u>\$150.</u>
				\$12,920.

## EXHIBIT A

7. TABLR	Professional Engineer	6	\$190	\$1,140.
	Project Manager	4	\$160	\$640.
	Clerical	1	\$75	<u>\$75.</u>
				\$1,855.
8. SWPPP	Professional Engineer	2	\$190	\$380.
	Project Manager	8	\$160	\$1,280.
	Cad Production Mgr.	4	\$125	\$500.
	Clerical	1	\$75	<u>\$75.</u>
				\$2,235.
9. Project Meetings	Professional Engineer	16	\$190	\$3,040
	Project Manager	16	\$160	<u>\$2,560.</u>
				\$5,600.
10. Construction Adm.	Professional Engineer	24	\$190	\$4,560.
	Project Manager	60	\$160	\$9,600.
	Licensed Architect/Irrig.	10	\$140	\$1,400.
	Sr. CAD Tech.	12	\$140	\$1,680.
	Cad Drafter	6	\$90	\$540.
	Clerical	2	\$75	<u>\$150.</u>
				\$17,930.
11. Record Drawings	Professional Engineer	2	\$190	\$380.
	Licensed Architect/Irrig.	1	\$140	\$140.
	Project Manager	6	\$160	\$960.
	Cad Production Mgr.	6	\$125	\$750.
	Clerical	1	\$75	<u>\$75.</u>
				\$2,305.
<u>Totals</u>	Professional Engineer	76	\$190	\$14,440.
	Registered Surveyor	8	\$170	\$1,360.
	Project Manager	192	\$160	\$30,720.
	Survey Crew	26	\$150	\$3,900.
	Licensed Architect/Irrig.	51	\$140	\$7,140.
	Sr. Cad Technician	110	\$140	\$15,400.
	Cad Production Mgr.	108	\$125	\$13,500.
	Survey Tech	12	\$105	\$1,260.
	Cad Drafter	42	\$90	\$3,780.
	Clerical	24	\$75	<u>\$1,800.</u>
				\$93,300.

AI-1910

22.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** Infrastructure- Development Services

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**AGENDA CAPTION:**

Hold A Public Hearing, Discuss, And Consider Action On An Ordinance Rezoning The Property Located At 5280 Belt Line Road At The Southwest Corner of Belt Line Road and Montfort Drive, Which Is Currently Zoned LR, Local Retail, By Approving A New Special Use Permit For A Restaurant And A New Special Use Permit For The Sale Of Alcoholic Beverages For On-Premises Consumption Only. Case 1747-SUP/Meso Maya.

**BACKGROUND:**

The Addison Planning and Zoning Commission, meeting in regular session on November 15, 2016, voted to recommend approval of an ordinance changing the zoning on property located at 5280 Belt Line Road by approving a Special Use Permit for a restaurant and a Special Use Permit for the sale of alcoholic beverages for on-premises consumption, subject to the following conditions:

- The applicant shall not use any terms or graphic depictions relating to alcoholic beverages in exterior signage.

Voting Aye: Ennis, Griggs, Morgan, Robbins, Robinson, Schaeffer, Smith  
Voting Nay: none

SPEAKERS AT THE PUBLIC HEARING: none

Please refer to the attached staff report for additional information on this case.

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

1747-SUP Staff Report

1747-SUP Plans

Ordinance

---

# 1747-SUP

**PUBLIC HEARING** Case 1747-SUP/Meso Maya. Public hearing, discussion, and take action on a recommendation regarding an ordinance changing the zoning on property located at 5280 Belt Line Road, which property is currently zoned LR, Local Retail, by approving a new Special Use Permit for a restaurant and a new Special Use Permit for the sale of alcoholic beverages for on-premises consumption only.

## LOCATION MAP





November 11, 2016

## STAFF REPORT

RE: Case 1747-SUP/Meso Maya

LOCATION: 5280 Belt Line Road

REQUEST: Approval of a new Special Use Permit for a restaurant and a new Special Use Permit for the sale of alcoholic beverages for on-premises consumption only

APPLICANT: Mr. Robert Kirk

DISCUSSION:

Background: This is a 1.104 acre tract located at the southwest corner of Belt Line Road and Montfort Drive. The site is zoned Local Retail and was originally developed in 1979 as Don Miguel's Restaurant, but soon converted to El Fenix.

El Fenix is owned by the Firebird Restaurant Group. That group also owns Snuffer's, Taqueria La Ventana and an upscale Mexican food concept called Meso Maya. Meso Maya currently has three locations in the Dallas area. The owner is requesting the ability to convert the building from the El Fenix concept to the Meso Maya concept. Because of the changes to the floor plan and building elevations, this necessitates a new Special Use Permit for a restaurant and the sale of alcoholic beverages for on-premises consumption.

Proposed Plan: The plans call for the building footprint to stay the same. The building currently has two dining areas - one central area and another wrapping three sides of the main space. The proposed plan moves the restaurant's entrance to the northeast corner of the building and relocates the bar within the central dining room. Most of the peripheral dining area would be converted into a covered patio with glass roll-up doors. A small portion of the new patio would be used for a lounge area. The total proposing seating is 359.

Facades: The applicant is proposing changes to the exterior of the building. By relocating the entrance to the northeast corner, a new focal point is being created. The façade in this area will be new red brick. As mentioned above, the current glass windows along the north and west façades will be replaced with glass roll-up doors to allow for the new patio. The existing brick will be painted a taupe color and the wood trim will be painted gray. The Spanish tile roof would remain.

All façades exceed the 80% masonry requirement for the Local Retail district.

Parking: When a restaurant use was first approved for this site, it was granted a parking ratio of 1 space per 100 square feet. This is atypical of free standing restaurants, which generally require 1 space per 70 square feet. The reasoning behind this is unclear, but perhaps it was considered an extension of the Village on the Parkway retail center and granted the mixed-use ratio of 1 per 100. That being said, it would be impossible for the property to comply with 1 per 70 requirement today without a significant reduction in the size of the building. The square footage of the building is 8,746. By continuing with the 1 per 100 parking requirement, 88 parking spaces are required. This site plan shows that this is the number being provided.

Landscaping: Since this property was developed in the late 1970s, it is far below the current landscaping requirements. Additionally, the site only provides a three-foot sidewalk located immediately back of curb. Unfortunately, absent a complete redevelopment of this site it, would be impossible to comply with the current standards. Staff has worked with the applicant to maximize the amount of landscaping provided within the site without impacting other requirements such as parking.

The site is currently just under 8% landscape coverage. The proposed plan increases that slightly to just above 8% by adding two tree islands and increasing the amount of landscaping adjacent to the building. This is still below the 20% required. The plan also does not meet the twenty-foot street frontage standard or the requirement to provide five-foot sidewalks. These cannot be addressed without losing the row of parking along Belt Line and Montfort Drive. Instead, applicant has agreed to increase the plant material around the building in order to maximize the use of the space available. Staff believes that the proposed landscaping gets the property as close as possible to current requirements under the existing site configuration.

#### RECOMMENDATION: **APPROVAL WITH A CONDITION**

Meso Maya is a quality, growing restaurant concept and will be a good addition for the Town. The proposed plan will give the interior and exterior of the building an improved look. While the landscaping is well below requirements, the applicant is proposing to make minor improvements, where possible. Staff recommends approval subject to the following condition:

- The applicant shall not use any terms or graphic depictions that relate to alcoholic beverages in any exterior signage.

## Land Use Analysis

### Attributes of Success Matrix

Meso Maya, 5280 Belt Line Road

1747-SUP

Attribute	Comment	Score
Competitive	This is a busy corner for Addison. The improvements and the concept being proposed should keep this property competitive.	
Safe	The project will be safe.	
Functional	The site is functional.	
Visually Appealing	The building facades will be updated to create a more modern look. However, due to its age, the landscaping does not comply with current standards and the property can only provide minimal improvements.	
Supported with Amenities	The restaurant is clustered with other restaurant, retail and entertainment options.	
Environmentally Responsible	This use is a good re-use of an existing space.	
Walkable	The site provides sidewalks, however they are narrow and immediately back of curb.	
<b>Overall Assessment</b>	<b>Meso Maya is a quality new concept that should do well in this location. As part of this transition, the building will receive much needed upgrades.</b>	



Case 1747-SUP/Meso Maya  
November 15, 2016

**COMMISSION FINDINGS:**

The Addison Planning and Zoning Commission, meeting in regular session on November 15, 2016, voted to recommend approval of an ordinance changing the zoning on property located at 5280 Belt Line Road by approving a Special Use Permit for a restaurant and a Special Use Permit for the sale of alcoholic beverages for on-premises consumption, subject to the following conditions:

- The applicant shall not use any terms or graphic depictions relating to alcoholic beverages in exterior signage.

Voting Aye: Ennis, Griggs, Morgan, Robbins, Robinson, Schaeffer, Smith  
Voting Nay: none

**SPEAKERS AT THE PUBLIC HEARING:**

For: none  
On: none  
Against: none

# MESO MAYA

JONESBAKER

1922 S AKARD ST  
DALLAS, TX 75215  
(214) 426-5600  
www.jonesbaker.com



PROJECT NO. : 1609B  
DATE : 10/27/16  
DRAWN BY : MQ  
SCALE : AS NOTED  
SQFT : 8,746

REVISIONS :

GENERAL INFORMATION

## GENERAL INFORMATION

PROJECT : MESO MAYA  
5280 BELT LINE ROAD  
ADDISON, TEXAS 75254

OWNER : MESO MAYA II, LLC  
2414 N AKARD ST., SUITE 500  
DALLAS, TEXAS 75201  
972-388-5421  
CONTACT : TOM MOORES / JILL BOYD

PROJECT DESIGNER :  
JONES BAKER  
1922 S AKARD ST, SUITE A  
DALLAS, TEXAS 75215  
214-426-5600  
CONTACT : WILLIAM BAKER

## SHEET INDEX

SH. 1	COVER SHEET
SH. 2	NOT USED
SH. 3	SITE PLAN
SH. 4	LANDSCAPE PLANS REFER TO SHEETS L1.01 & L1.02
SH. 5	FLOOR PLAN
SH. 6	EXTERIOR N & W ELEVATIONS & MATERIALS CALCULATIONS
SH. 7	EXTERIOR S & E ELEVATIONS & MATERIALS CALCULATIONS

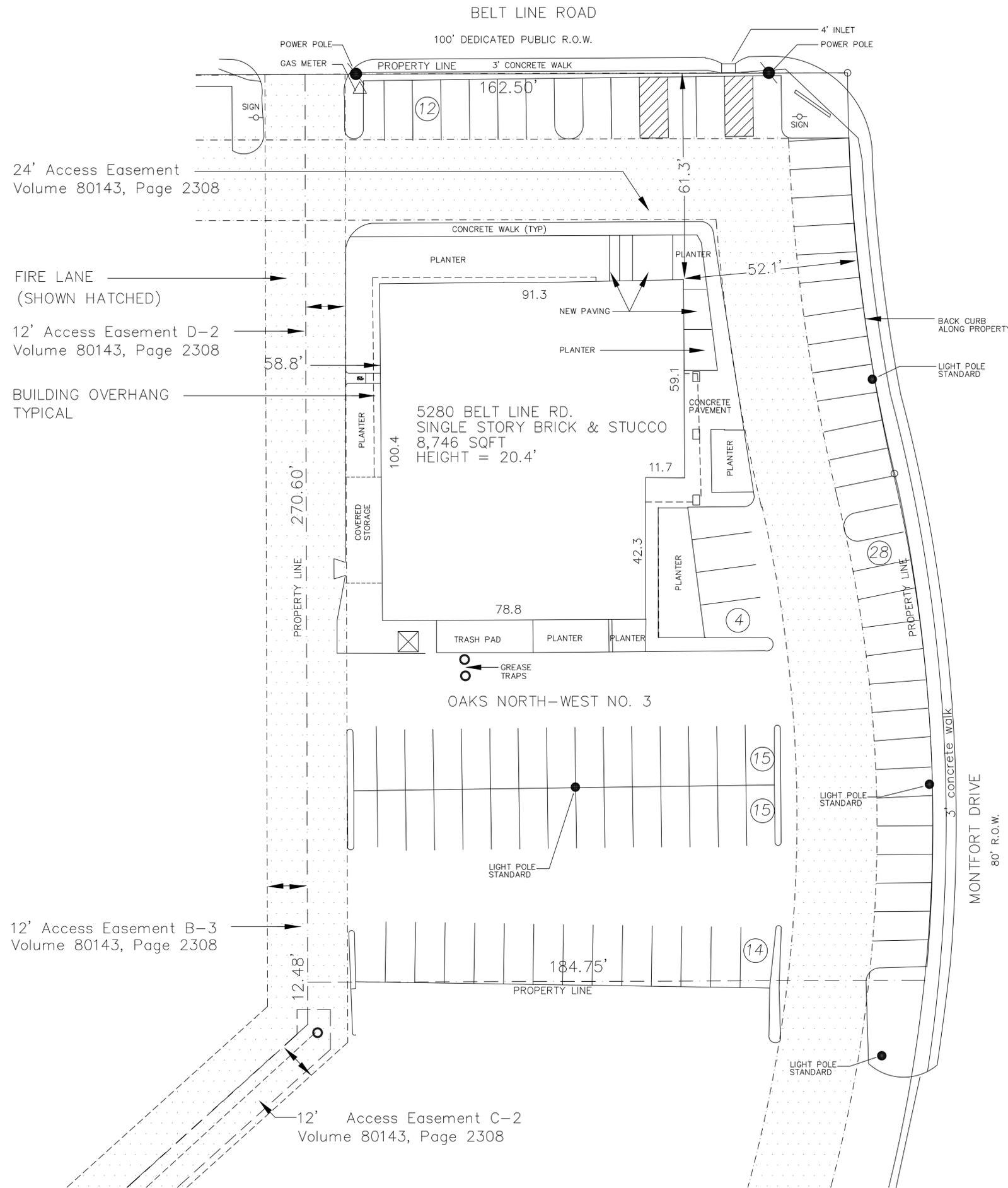
MESO MAYA  
TRACT II - PRESTON WOOD PLACE /  
OAK NORTH-WEST NO. 3  
5280 BELT LINE ROAD  
ADDISON / DALLAS COUNTY, TEXAS 75254  
PROJECT #

SH. 1



PROXIMITY MAP

N.T.S.



PARKING ANALYSIS

8,746 SQ.FT.

1 SPACE / 100 SQ. FT.

88 SPACES REQUIRED

88 SPACES PROVIDED

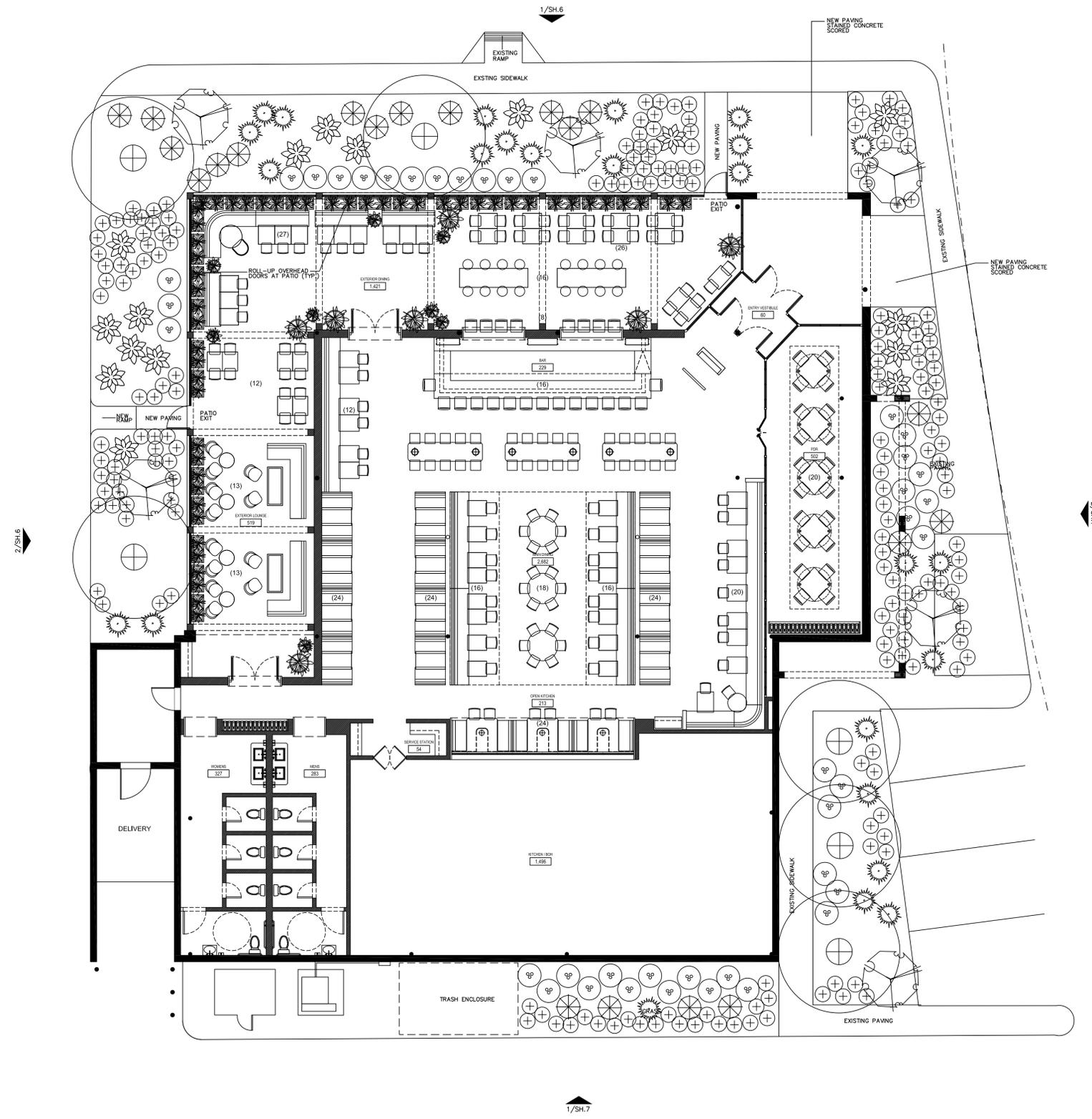
PROJECT NO.:	1609B
DATE:	10/27/16
DRAWN BY:	MQ
SCALE:	AS NOTED
SQFT:	8,746

REVISIONS:

SITE PLAN

MESO MAYA  
TRACT II - PRESTON WOOD PLACE /  
OAK NORTH-WEST NO. 3  
5280 BELT LINE ROAD  
ADDISON / DALLAS COUNTY, TEXAS 75254  
PROJECT #





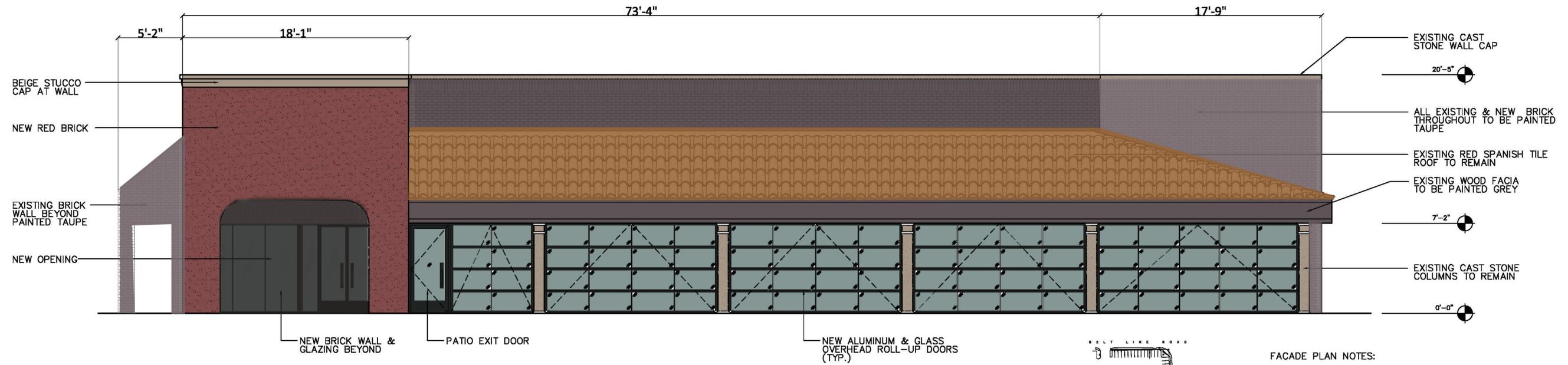
PROJECT NO. : 1609B  
DATE : 10/27/16  
DRAWN BY : MQ  
SCALE : AS NOTED  
SOFT : 8,746

REVISIONS :

FLOOR PLAN  
PLAN

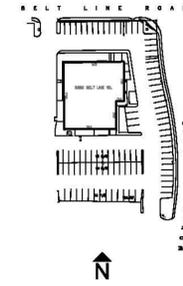
MESO MAYA  
TRACT II - PRESTON WOOD PLACE /  
OAK NORTH-WEST NO. 3  
5280 BELT LINE ROAD  
ADDISON / DALLAS COUNTY, TEXAS 75254  
PROJECT #





BUILDING MATERIALS - NORTH ELEVATION		
	MATERIAL SQ. FT.	MATERIAL PERCENTAGE
MASONRY	398 SQ. FT.	23 %
RED BRICK	238 SQ. FT.	13 %
PRE-CAST STONE	54 SQ. FT.	3 %
WOOD	123 SQ. FT.	7 %
GLAZING	633 SQ. FT.	35 %
SPANISH TILE	346 SQ. FT.	19 %
TOTAL NORTH ELEVATION AREA SQ. FT.	1,792 SQ. FT.	
TOTAL NORTH ELEVATION GLAZING AREA	633 SQ. FT.	
TOTAL BUILDING FACADE	1,159 SQ. FT.	
MASONRY / PRECAST STONE / SPANISH TILE / RED BRICK	94% OF FACADE	
STUCCO CAP / WOOD	6% OF FACADE	
	103 SQ. FT.	

MASONRY REQUIREMENT CALCULATION	
	TOTAL SQ. FT.
TOTAL BUILDING FACADE	7,473 SQ. FT.
TOTAL BUILDING GLAZING	1,111 SQ. FT.
TOTAL BUILDING FACADE SUBJECT TO MASONRY REQUIREMENT	6,362 SQ. FT.
100% OF FACADE SUBJECT TO MASONRY REQUIREMENT	
MASONRY / PRECAST STONE / EXISTING SPANISH TILE / RED BRICK	6,088 SQ. FT.
95% OF FACADE SUBJECT TO MASONRY REQUIREMENT	
STUCCO CAP / WOOD	274 SQ. FT.
5% OF FACADE SUBJECT TO MASONRY REQUIREMENT	



FACADE PLAN NOTES:

THIS FACADE PLAN IS FOR CONCEPTUAL PURPOSES ONLY. ALL BUILDING PLANS REQUIRE REVIEW AND APPROVAL BY DEVELOPMENT SERVICES

ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE

WHEN PERMITTED, EXPOSED UTILITY BOXES AND CONDUITS SHALL BE PAINTED TO MATCH THE BUILDING

ALL SIGNAGE AREAS AND LOCATIONS ARE SUBJECT TO APPROVAL BY DEVELOPMENT SERVICES

ROAD ACCESS SHALL BE PROVIDED INTERNALLY, UNLESS OTHERWISE PERMITTED BY THE CHIEF BUILDING OFFICIAL

NORTH ELEVATION

SCALE : 1/4" = 1'-0"

PROJECT NO. : 1609B

DATE : 10/27/16

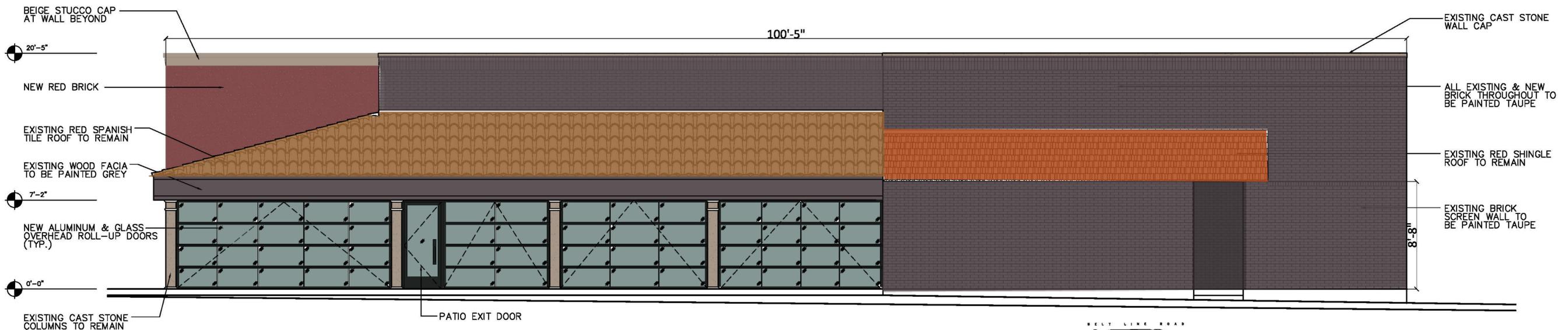
DRAWN BY : MQ

SCALE : AS NOTED

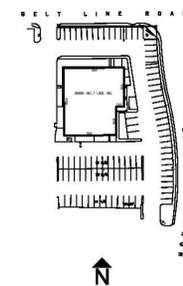
SQFT : 8,746

REVISIONS :

EXTERIOR ELEVATIONS



BUILDING MATERIALS - WEST ELEVATION		
	MATERIAL SQ. FT.	MATERIAL PERCENTAGE
MASONRY	862 SQ. FT.	45 %
RED BRICK	122 SQ. FT.	6 %
PRE-CAST STONE	52 SQ. FT.	3 %
WOOD	98 SQ. FT.	5 %
GLAZING	393 SQ. FT.	21 %
SPANISH TILE	266 SQ. FT.	14 %
RED SHINGLES	115 SQ. FT.	6 %
TOTAL WEST ELEVATION AREA SQ. FT.	1,908 SQ. FT.	
TOTAL WEST ELEVATION GLAZING AREA	393 SQ. FT.	
TOTAL BUILDING FACADE	1,515 SQ. FT.	
MASONRY / PRECAST STONE / SPANISH TILE / RED BRICK	94% OF FACADE	
STUCCO CAP / WOOD	6% OF FACADE	
	98 SQ. FT.	



FACADE PLAN NOTES:

THIS FACADE PLAN IS FOR CONCEPTUAL PURPOSES ONLY. ALL BUILDING PLANS REQUIRE REVIEW AND APPROVAL BY DEVELOPMENT SERVICES

ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE

WHEN PERMITTED, EXPOSED UTILITY BOXES AND CONDUITS SHALL BE PAINTED TO MATCH THE BUILDING

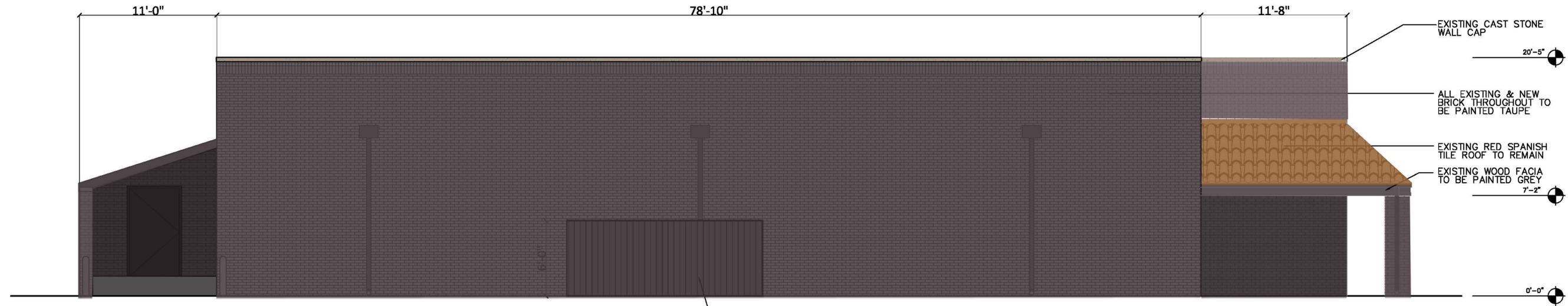
ALL SIGNAGE AREAS AND LOCATIONS ARE SUBJECT TO APPROVAL BY DEVELOPMENT SERVICES

ROAD ACCESS SHALL BE PROVIDED INTERNALLY, UNLESS OTHERWISE PERMITTED BY THE CHIEF BUILDING OFFICIAL

WEST ELEVATION

SCALE : 1/4" = 1'-0"

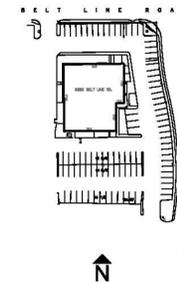
MESO MAYA  
TRACT II - PRESTON WOOD PLACE /  
OAK NORTH-WEST NO. 3  
5280 BELT LINE ROAD  
ADDISON / DALLAS COUNTY, TEXAS 75254  
PROJECT #



BUILDING MATERIALS - SOUTH ELEVATION		
	MATERIAL SQ. FT.	MATERIAL PERCENTAGE
MASONRY	1,699 SQ. FT.	92 %
RED BRICK	-	-
PRE CAST STONE	30 SQ. FT.	2 %
WOOD	17 SQ. FT.	1 %
GLAZING	-	-
SPANISH TILE	72 SQ. FT.	4 %
TOTAL SOUTH ELEVATION AREA SQ. FT.	1,846 SQ. FT.	
TOTAL SOUTH ELEVATION GLAZING AREA	0 SQ. FT.	
TOTAL BUILDING FACADE	1,846 SQ. FT.	
MASONRY / PRECAST STONE / SPANISH TILE / RED BRICK 99% OF FACADE	1,829 SQ. FT.	
WOOD 1% OF FACADE	17 SQ. FT.	

MASONRY REQUIREMENT CALCULATION	
	TOTAL SQ. FT.
TOTAL BUILDING FACADE	7,473 SQ. FT.
TOTAL BUILDING GLAZING	1,111 SQ. FT.
TOTAL BUILDING FACADE SUBJECT TO MASONRY REQUIREMENT	6,362 SQ. FT.
100% OF FACADE SUBJECT TO MASONRY REQUIREMENT	
MASONRY / PRECAST STONE / EXISTING SPANISH TILE / RED BRICK	6,088 SQ. FT.
95% OF FACADE SUBJECT TO MASONRY REQUIREMENT	
STUCCO CAP / WOOD	274 SQ. FT.
5% OF FACADE SUBJECT TO MASONRY REQUIREMENT	

EXISTING WOOD FENCE AT DUMSPETER ENCLOSURE TO REMAIN / TO BE PAINTED GREY



FACADE PLAN NOTES:

THIS FACADE PLAN IS FOR CONCEPTUAL PURPOSES ONLY. ALL BUILDING PLANS REQUIRE REVIEW AND APPROVAL BY DEVELOPMENT SERVICES

ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE

WHEN PERMITTED, EXPOSED UTILITY BOXES AND CONDUITS SHALL BE PAINTED TO MATCH THE BUILDING

ALL SIGNAGE AREAS AND LOCATIONS ARE SUBJECT TO APPROVAL BY DEVELOPMENT SERVICES

ROAD ACCESS SHALL BE PROVIDED INTERNALLY, UNLESS OTHERWISE PERMITTED BY THE CHIEF BUILDING OFFICIAL

**SOUTH ELEVATION**

SCALE : 1/4" = 1'-0"

PROJECT NO. : 1609B

DATE : 10/27/16

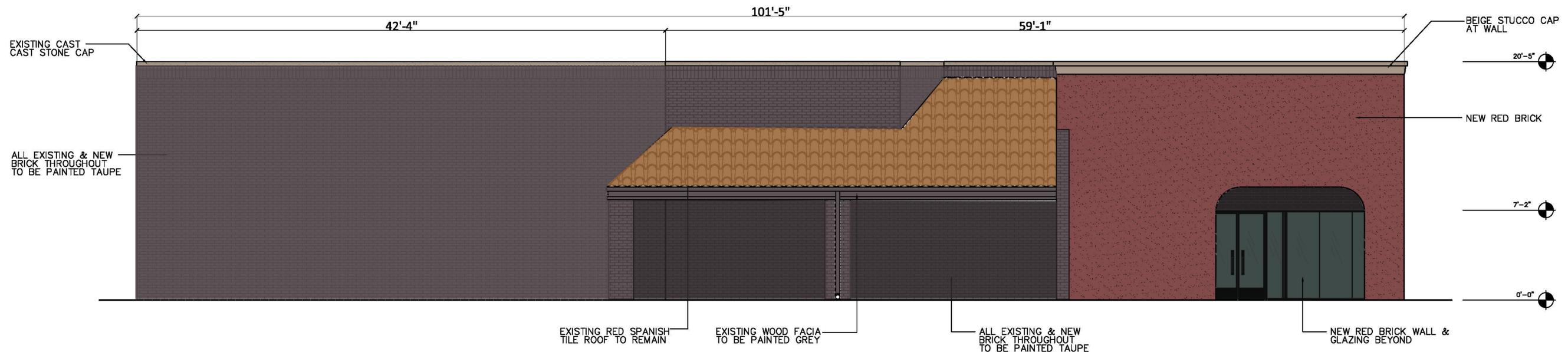
DRAWN BY : MQ

SCALE : AS NOTED

SQFT : 8,746

REVISIONS :

**EXTERIOR ELEVATIONS**



BUILDING MATERIALS - EAST ELEVATION		
	MATERIAL SQ. FT.	MATERIAL PERCENTAGE
MASONRY	1,174 SQ. FT.	62 %
RED BRICK	410 SQ. FT.	21 %
PRE CAST STONE	25 SQ. FT.	1 %
WOOD	36 SQ. FT.	2 %
GLAZING	85 SQ. FT.	4 %
SPANISH TILE	197 SQ. FT.	10 %
TOTAL EAST ELEVATION AREA SQ. FT.	1,927 SQ. FT.	
TOTAL EAST ELEVATION GLAZING AREA	85 SQ. FT.	
TOTAL BUILDING FACADE	1,842 SQ. FT.	
MASONRY / PRECAST STONE / SPANISH TILE / RED BRICK 98% OF FACADE	1,806 SQ. FT.	
STUCCO CAP / WOOD 2% OF FACADE	36 SQ. FT.	

FACADE PLAN NOTES:

THIS FACADE PLAN IS FOR CONCEPTUAL PURPOSES ONLY. ALL BUILDING PLANS REQUIRE REVIEW AND APPROVAL BY DEVELOPMENT SERVICES

ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE

WHEN PERMITTED, EXPOSED UTILITY BOXES AND CONDUITS SHALL BE PAINTED TO MATCH THE BUILDING

ALL SIGNAGE AREAS AND LOCATIONS ARE SUBJECT TO APPROVAL BY DEVELOPMENT SERVICES

ROAD ACCESS SHALL BE PROVIDED INTERNALLY, UNLESS OTHERWISE PERMITTED BY THE CHIEF BUILDING OFFICIAL

**EAST ELEVATION**

SCALE : 1/4" = 1'-0"

MESO MAYA  
TRACT II - PRESTON WOOD PLACE /  
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ADDISON / DALLAS COUNTY, TEXAS 75254  
PROJECT #





SECTION 32 9300 - LANDSCAPE

PART 1 - GENERAL

1.1 QUALIFICATIONS OF THE LANDSCAPE CONTRACTOR.

- A. ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING
- 1.2 REFERENCE DOCUMENTS
- A. REFER TO LANDSCAPE PLANS, NOTES, AND DETAILS FOR ADDITIONAL REQUIREMENTS

1.3 SCOPE OF WORK / DESCRIPTION OF WORK

- A. WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS, LABOR, SERVICES, EQUIPMENT, LICENSES, TAXES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK SPECIFIED HEREIN AND / OR SHOWN ON THE LANDSCAPE PLANS, NOTES, AND DETAILS.
- B. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS.
- C. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK
- D. FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY TO PROVIDE ALL WORK COMPLETE IN PLACE AS SHOWN AND SPECIFIED. WORK SHOULD INCLUDE:
  - E. PLANTING OF TREES, SHRUBS AND GRASSES
  - A. SEEDING
  - B. BED PREPARATION AND FERTILIZATION
  - C. WATER AND MAINTENANCE UNTIL FINAL ACCEPTANCE
  - D. WORK GUARANTEE

1.4 REFERENCES

- A. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) Z90.1 - NURSERY STOCK
- B. TEXAS STATE DEPARTMENT OF AGRICULTURE
- C. TEXAS ASSOCIATION OF NURSERYMEN, GRADES AND STANDARDS

1.5 SUBMITTALS

- A. PROVIDE REPRESENTATIVE QUANTITIES OF EACH SOIL, MULCH, BED MIX, GRAVEL AND STONE BEFORE INSTALLATION. SAMPLES TO BE APPROVED BY OWNER'S REPRESENTATIVE BEFORE USE.
- B. SOIL AMENDMENTS AND FERTILIZERS SHOULD BE RESEARCHED AND BASED ON THE SOILS IN THE AREA.
- C. BEFORE INSTALLATION, SUBMIT DOCUMENTATION THAT PLANT MATERIALS ARE AVAILABLE AND HAVE BEEN RESERVED FOR ANY PLANT MATERIAL NOT AVAILABLE. SUBMIT REQUEST FOR SUBSTITUTION.

1.6 JOB CONDITIONS, DELIVERY, STORAGE AND HANDLING

- A. GENERAL CONTRACTOR TO COMPLETE WORK BEFORE LANDSCAPE CONTRACTOR TO COMMENCE. ALL PLANTING BED AREAS SHALL BE LEFT THREE INCHES BELOW FINAL GRADE OF SIDEWALKS, DRIVES AND CURBS. ALL AREAS TO RECEIVE SOD SHOULD BE LEFT ONE INCH BELOW THE FINAL GRADE OF WALKS, DRIVES AND CURBS. CONSTRUCTION DEBRIS SHALL BE REMOVED PRIOR TO LANDSCAPE CONTRACTOR BEGINNING WORK.
- B. ALL PACKAGED MATERIALS SHALL BE SEALED IN CONTAINERS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. ALL MATERIALS SHALL BE PROTECTED FROM DETERIORATION IN TRANSIT AND WHILE STORED ON SITE.
- C. DELIVER PLANT MATERIALS IMMEDIATELY PRIOR TO INSTALLATION. PLANT MATERIALS SHOULD BE INSTALLED ON THE SAME DAY AS DELIVERED. IF PLANTING CANNOT BE INSTALLED ON THE SAME DAY, PROVIDE ADDITIONAL PROTECTION TO MAINTAIN PLANTS IN A

HEALTHY, VIGOROUS CONDITION.

- D. STORE PLANT MATERIALS IN SHADE, PROTECT FROM FREEZING AND DRYING.
- E. KEEP PLANT MATERIALS MOIST AND PROTECT FROM DAMAGE TO ROOT BALLS, TRUNKS AND BRANCHES.
- F. PROTECT ROOT BALLS BY HEELING WITH SAWDUST OR OTHER MOISTURE RETAINING MATERIAL IF NOT PLANTED WITHIN 24 HOURS OF DELIVERY.
- G. NOTIFY OWNERS REPRESENTATIVE OF DELIVERY SCHEDULE 72 HOURS IN ADVANCE.
- H. FOR BALLED AND BURLAPPED PLANTS - DIG AND PREPARE SHIPMENT IN A MANNER THAT WILL NOT DAMAGE ROOTS, BRANCHES, SHAPE, AND FUTURE DEVELOPMENT.
- I. CONTAINER GROWN PLANTS - DELIVER PLANTS IN CONTAINER TO HOLD BALL SHAPE AND PROTECT ROOT MASS.
- J. STORAGE OF ALL MATERIALS AND EQUIPMENT WILL BE AT THE RISK OF THE LANDSCAPE CONTRACTOR. OWNER WILL NOT BE HELD RESPONSIBLE FOR THEFT OR DAMAGE.

1.7 SEQUENCING

- A. INSTALL TREES, SHRUBS, AND LINER STOCK PLANT MATERIALS PRIOR TO INSTALLATION OF LAWN/SOLID SOD.
- B. WHERE EXISTING TURF AREAS ARE BEING CONVERTED TO PLANTING BEDS, THE TURF SHALL BE CHEMICALLY ERADICATED TO MINIMIZE RE-GROWTH IN THE FUTURE. AREAS SHALL BE PROPERLY PREPARED WITH AMENDED ORGANIC MATTER.

1.8 WARRANTIES PERIOD, PLANT GUARANTEE, REPLACEMENTS

- A. PROVIDE A MINIMUM OF (2) COPIES OF RECORD DRAWINGS TO THE OWNER UPON COMPLETION OF WORK. A RECORD DRAWING IS A RECORD OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.
- B. FURNISH WRITTEN WARRANTY THAT PLANT MATERIALS WILL BE IN A HEALTHY, VIGOROUS GROWING CONDITION FOR ONE YEAR (TWELVE MONTHS) AFTER FINAL ACCEPTANCE. DAMAGE DUE TO ACTS OF GOD, VANDALISM OR NEGLIGENCE BY OWNER IS EXCLUDED.
- C. REPLACE DEAD, UNHEALTHY, AND UNSIGHTLY PLANT MATERIAL WITHIN WARRANTY PERIOD UPON NOTIFICATION BY OWNER OR OWNERS REPRESENTATIVE. PLANTS USED FOR REPLACEMENT SHALL BE OF THE SAME SIZE AND KIND AS THOSE ORIGINALLY PLANTED OR SPECIFIED.
- D. THE OWNER AGREES THAT FOR THE ONE YEAR WARRANTY PERIOD TO BE EFFECTIVE, HE WILL WATER PLANTS AT LEAST TWICE A WEEK DURING DRY PERIODS.
- E. NOTIFY OWNER OR OWNERS REPRESENTATIVE SEVEN DAYS PRIOR TO THE EXPIRATION OF THE WARRANTY PERIOD.

1.9 MAINTENANCE

- A. MAINTAIN PLANT LIFE AND PLANTING BEDS IMMEDIATELY AFTER PLACEMENT AND FOR MINIMUM 30 DAYS AFTER FINAL ACCEPTANCE.
- B. ALL LANDSCAPE MUST BE MAINTAINED AND GRASS MOWED/EDGED ON A WEEKLY SCHEDULE UNTIL ACCEPTANCE BY OWNER.
- C. REPLACE DEAD OR DYING PLANTS WITH PLANTS OF SAME SIZE AND SPECIES AS SPECIFIED.
- D. REMOVE TRASH, DEBRIS, AND LITTER. WATER, PRUNE, RESTAKE TREES, FERTILIZE, WEED AND APPLY HERBICIDES AND FUNGICIDES AS REQUIRED.
- E. REMOVE CLIPPINGS AND DEBRIS FROM SITE PROMPTLY.
- F. COORDINATE WITH OPERATION OF IRRIGATION SYSTEM TO ENSURE THAT PLANTS ARE ADEQUATELY WATERED. HAND WATER AREAS NOT RECEIVING ADEQUATE WATER FROM AN IRRIGATION SYSTEM.
- G. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN ACCORDANCE TO THE MAINTENANCE SERVICE TO ENSURE THE SYSTEM IS IN PROPER WORKING ORDER WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.
- H. RESET SETTLED PLANTS

I. REAPPLY MULCH TO BARE AND THIN AREAS.

- J. SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF GRASS AT NO ADDITIONAL COST TO THE OWNER.
- K. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:
  - a. THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY. ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.
  - b. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE.
  - c. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1-1/2 INCHES BEFORE FIRST MOWING. HYDROMULCHED AREAS SHALL SHOW ACTIVE, HEALTHY GROWTH. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESEEDDED OR RESEDED (AS APPROPRIATE) PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE NEATLY MOWED.

1.10 QUALITY ASSURANCE

- A. COMPLY WITH ALL FEDERAL, STATE, COUNTY AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK.
- B. EMPLOY PERSONNEL EXPERIENCED AND FAMILIAR WITH THE REQUIRED WORK AND SUPERVISION BY A FOREMAN.
- C. DO NOT MAKE PLANT MATERIAL SUBSTITUTIONS. IF THE LANDSCAPE MATERIAL SPECIFIED IS NOT READILY AVAILABLE, SUBMIT PROOF TO LANDSCAPE ARCHITECT ALONG WITH THE PROPOSED MATERIAL TO BE USED IN LIEU OF THE SPECIFIED PLANT.
- D. OWNERS REPRESENTATIVE SHALL INSPECT ALL PLANT MATERIAL AND RETAINS THE RIGHT TO INSPECT MATERIALS UPON ARRIVAL TO THE SITE AND DURING INSTALLATION. THE OWNERS REPRESENTATIVE MAY ALSO REJECT ANY MATERIALS WHOSE FEELS TO BE UNSATISFACTORY OR DEFECTIVE DURING THE WORK PROCESS. ALL PLANTS DAMAGED IN TRANSIT OR AT THE JOB SITE SHALL BE REJECTED.

PART 2 - PRODUCTS

2.1 PLANT MATERIALS

- A. ALL PLANTS SHALL BE CERTIFIED IN ACCORDANCE TO THE AMERICAN STANDARD FOR NURSERY STOCK.
- B. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE, AND WITH SIMILAR CLIMATIC CONDITIONS.
- C. PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED, EXCEPT THE PLANTS LARGER THAN THOSE SPECIFIED MAY BE USED. USE OF LARGER PLANTS SHALL NOT INCREASE THE CONTRACT PRICE.
- D. WHERE MATERIALS ARE PLANTED IN MASSES, PROVIDE PLANTS OF UNIFORM SIZE.
- E. PLANT SCHEDULE ON DRAWING IS FOR CONTRACTORS INFORMATION ONLY AND NO GUARANTEE IS EXPRESSED OR IMPLIED THAT QUANTITIES THEREIN ARE CORRECT. THE CONTRACTOR SHALL ENSURE THAT ALL PLANT MATERIALS SHOWN ON THE DRAWINGS ARE INCLUDED IN HIS OR HER BID.
- F. SHALL BE FREE OF DISEASE, INSECT INFESTATION, DEFECTS INCLUDING WEAK OR BROKEN LIMBS, CROTCHES, AND DAMAGED TRUNKS, ROOTS OR LEAVES, SUN SCALD, FRESH BARK ABRASIONS, EXCESSIVE ABRASIONS, OBJECTIONABLE DISFIGUREMENT, INSECT EGGS AND LARVAE.
- G. ALL PLANTS SHALL EXHIBIT NORMAL GROWTH HABITS, VIGOROUS, HEALTHY, FULL, WELL BRANCHED, WELL ROOTED, PROPORTIONATE AND SYMMETRICAL.
- H. ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED, FIBROUS ROOT SYSTEMS, NON-POT-BOUND, FREE FROM ENCIRCLING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS S-SHAPED ROOTS).
- I. ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE SHALL BE IMMEDIATELY REMOVED

FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTABLE PLANT OF LIKE TYPE AND SIZE AT THE CONTRACTORS OWN EXPENSE ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT AND OWNERS REPRESENTATIVE SHALL BE THE SOLE JUDGES AS TO THE ACCEPTABILITY OF PLANT MATERIAL.

- J. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING
- K. TREE TRUNKS TO BE STURDY, EXHIBIT HARDENED SYSTEMS AND VIGOROUS AND FIBROUS ROOT SYSTEMS, NOT ROOT OR POT BOUND
- L. TREES WITH DAMAGED OR CROOKED LEADERS, BARK ABRASIONS, SUNSCALD, DISFIGURING KNOTS, OR INSECT DAMAGE WILL BE REJECTED.
- M. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER, AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER
- N. MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL
- O. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.
- P. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS OF 3/4" TO 1". EACH PALLET OF SOD SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.

2.2 ACCESSORIES/MISCELLANEOUS MATERIALS

- A. MULCH - DOUBLE SHREDDED HARDWOOD MULCH, PARTIALLY DECOMPOSED BY LIVING EARTH TECHNOLOGIES OR APPROVED SUBSTITUTE. MULCH SHOULD BE FREE OF STICKS, STONES, CLAY, GROWTH AND GERMINATION INHIBITING INGREDIENTS.
- B. FERTILIZER - COMMERCIAL FERTILIZER CONTAINING 10-20-10 OR SIMILAR ANALYSIS.
- C. SOIL PREPARATION - SHALL BE FERTILE, LOAMY SOIL. ORGANIC MATTER SHALL ENCOMPASS BETWEEN 3% AND 10% OF THE TOTAL DRY WEIGHT. SOIL SHALL BE FREE FROM SUBSOIL, REFUSE, ROOTS, HEAVY OR STIFF CLAY, STONES LARGER THAN 1", NOXIOUS WEEDS, STICKS, BRUSH, LITTER AND OTHER SUBSTANCES. IT SHOULD BE SUITABLE FOR THE GERMINATION OF SEEDS AND THE SUPPORT OF VEGETATIVE GROWTH. THE PH VALUE SHOULD BE BETWEEN 4 AND 7.

APPROXIMATE PARTICLE DISTRIBUTION FOR TOPSOIL

CLAY	BETWEEN 15% AND 25%
SILT	BETWEEN 15% AND 25%
SAND	LESS THAN 50%
GRAVEL	LESS THAN 10%

- D. EXISTING TOPSOIL - MAY BE USED IF IT MEETS THE REQUIREMENTS FOR THE IMPORTED TOPSOIL OR IF APPROVED BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. TOPSOIL SHALL NOT BE STRIPPED, TRANSPORTED OR GRADED IF MOISTURE CONTENT EXCEEDS FIELD CAPACITY. TOPSOIL STOCKPILES SHALL BE PROTECTED FROM EROSION OR CONTAMINATION.
- E. ALL NEW TURF AREAS LOCATED ON THE FRONT, SIDES, REAR, AND INSIDE THE FIRE LANE SHALL BE SODDED AND SHALL BE AMENDED WITH QUALITY TOPSOIL AT A MINIMUM DEPTH OF FOUR INCHES.
- F. STEEL EDGING - SHALL BE 3/16" X 4" X 16" DARK GREEN LANDSCAPE EDGING.
- G. TREE STAKING - TREE STAKING SOLUTIONS OR APPROVED SUBSTITUTE. REFER TO DETAILS.
- H. FILTER FABRIC - MIRAFI 1405 BY MIRAFI INC. OR APPROVED SUBSTITUTE.
- I. SAND - UNIFORMLY GRADED, WASHED, CLEAN, BANK RUN SAND.
- J. DECOMPOSED GRANITE - BASE MATERIAL OF NATURAL MATERIAL MIX

- K. RIVER ROCK - LOCALLY AVAILABLE RIVER ROCK BETWEEN 2'-4" IN DIAMETER.
- L. PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PRE-EMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURER'S LABELED RATES.

PART 3 - EXECUTION

3.1 PREPARATION

- A. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE GRADE OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1 OF FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES EXIST.
- B. SOIL TESTING: AFTER FINISH GRADES HAVE BEEN ESTABLISHED, CONTRACTOR SHALL HAVE SOIL SAMPLES TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY FOR THE FOLLOWING: SOIL TEXTURAL CLASS, GENERAL SOIL FERTILITY, PH, ORGANIC MATTER CONTENT, SALT (CEC), LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT. EACH SAMPLE SUBMITTED SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL.
- B. CONTRACTOR SHALL ALSO SUBMIT THE PROJECTS PLANT LIST TO THE LABORATORY ALONG WITH THE SOIL SAMPLES.
- C. THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE): GENERAL SOIL FERTILITY, PH, PRE-PLANT MIXES, PRE-PLANT FERTILIZER APPLICATIONS, AND ANY OTHER SOIL RELATED ISSUES. THE REPORT SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR THE ESTABLISHMENT PERIOD AND FOR LONG-TERM MAINTENANCE.
- C. THE CONTRACTOR SHALL INSTALL SOIL AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT RECOMMENDATIONS. ANY CHANGE IN COST DUE TO THE SOIL REPORT RECOMMENDATIONS, EITHER INCREASE OR DECREASE, SHALL BE SUBMITTED TO THE OWNER WITH THE REPORT
- D. IF WEEDS ARE GROWING IN PLANTING AREAS, APPLY HERBICIDE RECOMMENDED BY MANUFACTURER AND APPLIED BY AN APPROVED LICENSED APPLICATOR. UNWANTED WEEDS TO DIE, AND THEN GRUB OUT ROOTS TO A MINIMUM OF 1/2 INCH DEPTH.
- E. PREPARE NEW PLANTING BEDS BY TILLING EXISTING SOIL TO A DEPTH OF SIX INCHES PRIOR TO PLACING COMPOST AND FERTILIZER. ADD SIX INCHES OF COMPOST AND TILL INTO A DEPTH OF SIX INCHES OF THE TOPSOIL.
- F. POSITION TREES AND SHRUBS AS DESIGNED ON PLAN. OBTAIN OWNERS REPRESENTATIVE'S APPROVAL PRIOR TO PROCEEDING.
- G. ALL PLANTING AREAS SHALL RECEIVE A MINIMUM OF 2 INCH LAYER OF MULCH (SETTLED THICKNESS).

3.2 EXCAVATING

- A. EXCAVATE PITS FOR PLANTING. TREE PITS SHALL BE LARGE ENOUGH TO PERMIT THE HANDLING OF THE ROOT BALL WITHOUT DAMAGE TO THE ROOTS. TREES SHALL BE PLANTED AT A DEPTH THAT WHEN SETTLED, THE CROWN OF THE PLANT SHALL BEAR THE SAME RELATIONSHIP TO THE FINISH GRADE AS IT DID TO THE SOIL SURFACE AT ORIGINAL PLACE OF GROWTH.
- B. TREE PITS PERCOLATION TEST: FILL PIT WITH WATER AND ALLOW TO STAND FOR 24 HOURS. IF PIT DOES NOT DRAIN, THE TREE NEEDS TO BE MOVED TO ANOTHER LOCATION OR HAVE DRAINAGE ADDED.
- C. SHRUB AND TREE PITS SHALL BE NO LESS THAN 24" WIDER THAN THE ROOT BALL AND 4" DEEPER THAN ITS VERTICAL DIMENSION. HOLES SHOULD BE ROUGH, NOT SMOOTH OR GLAZED.

3.3 PLANTING

- A. REMOVE NURSERY TAGS AND STAKES FROM ALL PLANTS
- B. REMOVE CONTAINERS WITHOUT DAMAGE TO ROOTS.
- C. REMOVE BOTTOM OF PLANT BOXES PRIOR TO PLACING PLANTS. REMOVE SIDES AFTER PLACEMENT AND PARTIAL BACKFILLING.
- D. REMOVE UPPER THIRD OF BURLAP FROM BALLED AND BURLAPPED TREES AFTER PLACEMENT.
- E. PLACE PLANT UPRIGHT AND PLUMB IN CENTER OF HOLE. ORIENT

- PLANTS FOR BEST APPEARANCE.
- F. SET PLANTS WITH TOP OF ROOT BALLS FLUSH WITH ADJACENT GRADE AFTER COMPACTION. ADJUST PLANT HEIGHT IF SETTLEMENT OCCURS AFTER BACKFILLING.
- G. BACKFILL HOLES IMMEDIATELY AFTER PLANT IS PLACED USING BACKFILL MIX. BACKFILL TO ONE HALF DEPTH, FILL HOLE WITH WATER AND LIGHTLY TAMP SOIL TO REMOVE VOIDS AND AIR POCKETS.
- H. TRIM PLANTS TO REMOVE DEAD AND INJURED BRANCHES ONLY. BRACE PLANTS OVER 65 GALLONS IN SIZE.
- I. MULCH TO THE TOP OF THE ROOT BALL. DO NOT PLANT GRASS ALONG THE WAY TO TRUNK OF THE TREE. MULCH WITH AT LEAST 2" OF SPECIFIED MULCH.
- J. DO NOT WRAP TREES.
- K. DO NOT OVER PRUNE.
- L. BLOCKS OF SOD SHOULD BE LAID JOINT TO JOINT AFTER FERTILIZING THE GROUND FIRST. ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE. THE JOINTS BETWEEN BLOCKS SHOULD BE FILLED WITH TOPSOIL AND THEN WATERED THOROUGHLY.

3.4 STEEL EDGING

- A. STEEL EDGING SHALL BE INSTALLED AND ALIGNED AS INDICATED ON PLANS. OWNERS REPRESENTATIVE TO APPROVE THE STAKED OR PAINTED LOCATION OF STEEL EDGING PRIOR TO INSTALLATION
- B. ALL STEEL EDGING SHALL BE FREE OF BENDS OR KINKS.
- C. TOP OF EDGING SHALL BE 1/2" MAXIMUM HEIGHT ABOVE FINAL FINISHED GRADE.
- D. STAKES ARE TO BE INSTALLED ON THE PLANTING BED SIDE OF THE EDGING, NOT THE GRASS SIDE.
- E. STEEL EDGING SHALL NOT BE INSTALLED ALONG SIDEWALKS OR CURBS.
- F. EDGING SHOULD BE CUT AT A 45 DEGREE ANGLE WHERE IT MEETS SIDEWALKS OR CURBS.

3.5 CLEANUP

- A. REMOVE CONTAINERS, TRASH, RUBBISH AND EXCESS SOILS FROM SITE AS WORK PROGRESSES.
- B. REPAIR RUTS, HOLES AND SCARES IN GROUND SURFACES.
- C. PREMISES SHALL BE KEPT NEAT AT ALL TIMES AND ORGANIZED.
- D. ALL PAVED AREAS SHOULD BE CLEANED AT THE END OF EACH WORK DAY.

3.6 ACCEPTANCE

- A. ENSURE THAT WORK IS COMPLETE AND PLANT MATERIALS ARE IN VIGOROUS AND HEALTHY GROWING CONDITION.
- B. UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.
- C. WHENEVER THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNERS SATISFACTION WITHIN 24 HOURS.
- D. THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE.

END OF SECTION

PROJECT NO. : XXX

DATE : 9/20/16

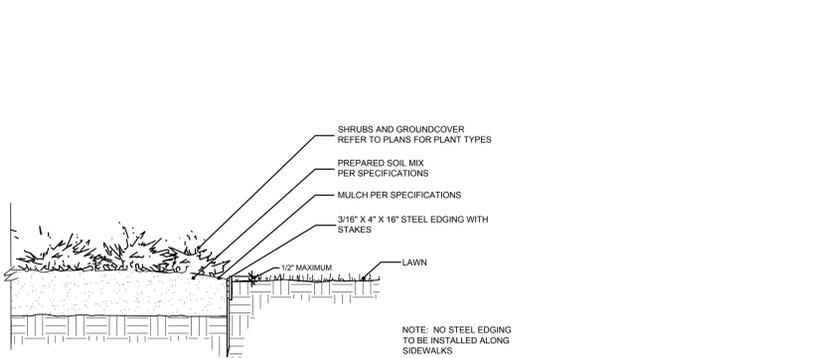
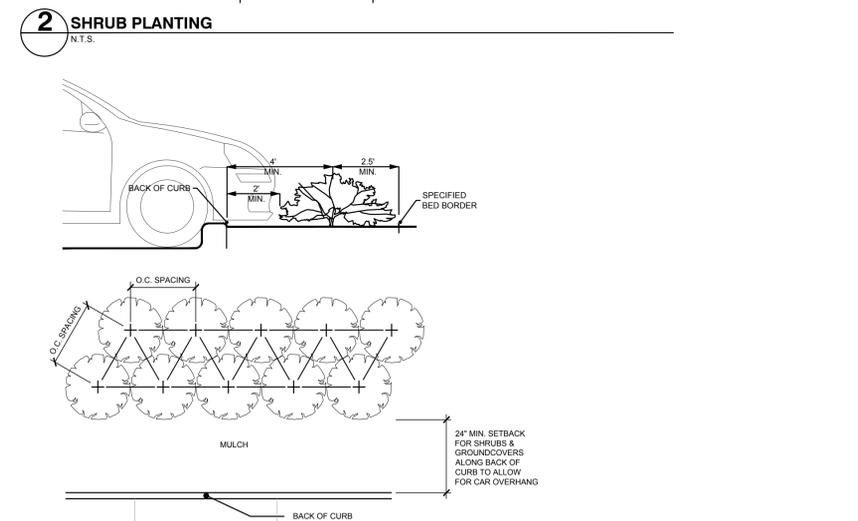
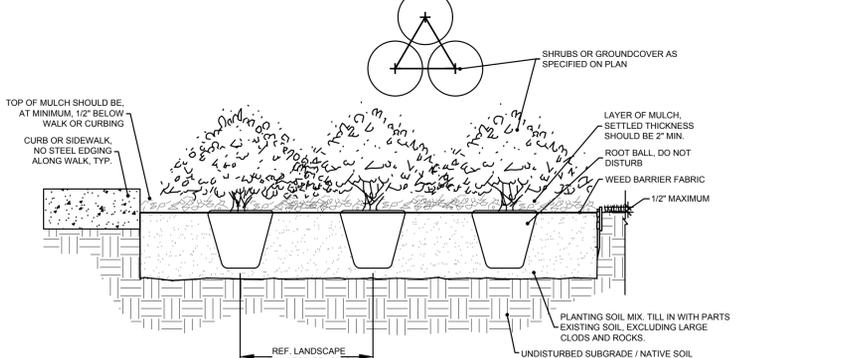
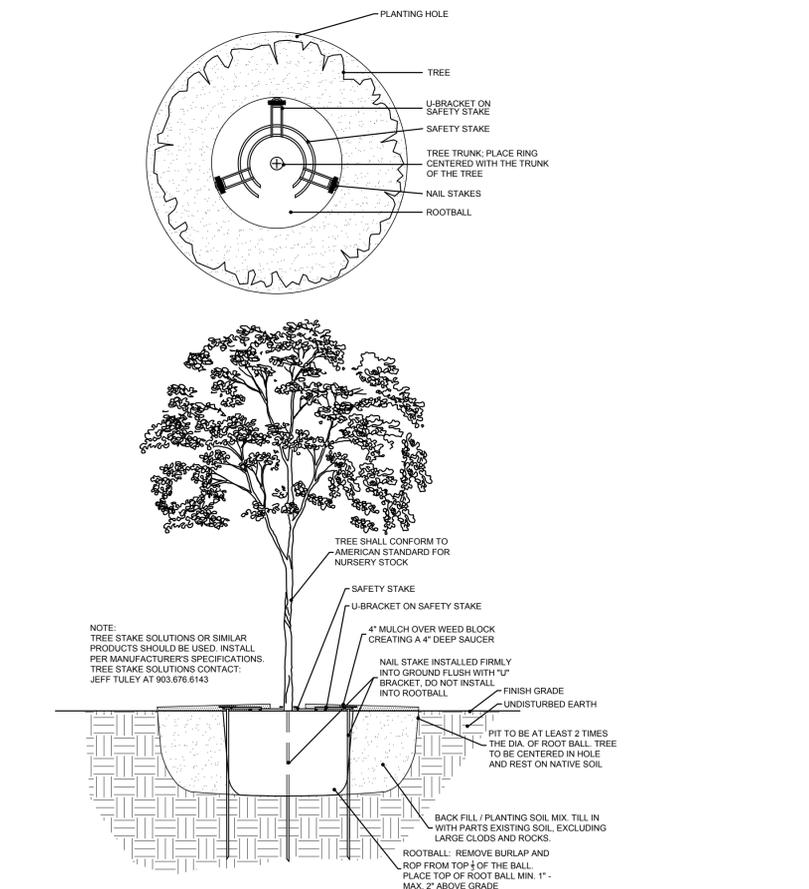
DRAWN BY : AWR

SCALE : AS NOTED

SQFT : 8,746

REVISIONS :

MESO MAYA  
TRACT II - PRESTON WOOD PLACE /  
OAK NORTH-WEST NO. 3  
5280 BELT LINE ROAD  
ADDISON / DALLAS COUNTY, TEXAS 75254  
PROJECT #



1 TREE PLANTING

N.T.S.

3 SHRUB SPACING AND PLANTING AT B.O.C.

N.T.S.

4 STEEL EDGING DETAIL

N.T.S.

LANDSCAPE  
SPECS AND DETAILS



AWR Designs, LLC  
P.O. Box 1746  
Aledo, Texas 76008  
awr.designs@mail.com  
c. 512.517.5589

**TOWN OF ADDISON, TEXAS**

**ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE OF THE TOWN OF ADDISON, TEXAS, AMENDING THE COMPREHENSIVE ZONING ORDINANCE TO REPEAL ORDINANCES NO. 483 AND O86-067 AND TO GRANT SPECIAL USE PERMITS FOR A RESTAURANT AND THE SALE OF ALCOHOLIC BEVERAGES FOR ON-PREMISES CONSUMPTION, ON APPLICATION FROM MESO MAYA, FOR PROPERTY LOCATED AT 5280 BELT LINE ROAD; PROVIDING A PENALTY NOT TO EXCEED TWO THOUSAND AND NO/100 DOLLARS (\$2,000.00) FOR EACH OFFENSE AND A SEPARATE OFFENSE SHALL BE DEEMED COMMITTED EACH DAY DURING OR ON WHICH A VIOLATION OCCURS OR CONTINUES; SAVINGS, NO SEVERABILITY AND AN EFFECTIVE DATE.**

**WHEREAS**, the property located at 5280 Belt Line Road is zoned LR - Local Retail; and

**WHEREAS**, after due deliberations and consideration of the recommendation of the Planning and Zoning Commission, the information received at a public hearing, and other relevant information and materials, the City Council of the Town of Addison, Texas finds that this ordinance promotes the general welfare and safety of this community.

**NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

**Section 1.** That the recitals and findings set forth above are hereby found to be true and correct and incorporated as if fully set forth herein.

**Section 2.** That Ordinances No. 483 and No. O86-067 are repealed.

**Section 3.** That a Special Use Permit authorizing a restaurant and a Special Use Permit authorizing the sale of alcoholic beverages for on-premises consumption, on the property located 5280 Belt Line Road, are hereby granted subject to the following conditions:

- (a) Prior to the issuance of a Certificate of Occupancy, said Property shall be improved in accordance with the site plan, landscape plan, floor plan, and the elevation drawings, which are attached hereto as **Exhibit A** and made a part hereof for all purposes.
- (b) The Special Use Permit granted herein for a restaurant with the sale of alcoholic beverages for on-premises consumption only shall be limited to that particular area designated on the final site plan as encompassing a total area not to exceed 8,746 square feet.
- (c) No signs advertising sale of alcoholic beverages shall be permitted other than those authorized under the Liquor Control Act of the State of Texas, and any sign ordinance of the Town of Addison, Texas.

Ordinance No. \_\_\_\_\_

- (d) The sale of alcoholic beverages under this Special Use Permit shall be permitted in restaurants. Restaurants are hereby defined as establishments which receive at least sixty percent (60%) of their gross revenues from the sale of food.
- (e) Said establishment shall make available to the city or its agents, during reasonable hours its bookkeeping records for inspection, if required, by the city to insure that the conditions of subparagraph (d) above are being met.
- (f) Any use of property considered as a nonconforming use under the Comprehensive Zoning Ordinance of the Town of Addison shall not be permitted to receive a license or permit for the sale of alcoholic beverages.
- (g) If the property for which these Special Use Permits are granted is not used for the purposes for which said permits were granted within one (1) year after the adoption of this ordinance, the City Council may authorize hearings to be held for the purpose of considering a change of zoning and repeal of the Special Use Permits granted herein.
- (h) If a license or permit to sell alcoholic beverages on property covered by this Special Use Permit is revoked, terminated or cancelled by proper authorities, the City Council may authorize hearings to be held for the purpose of considering a change of zoning repeal of the Special Use Permits granted herein.
- (i) The establishment shall not use the term “bar”, “tavern”, or any other terms or graphic depictions that relate to the sale of alcoholic beverages on any signs visible from the exterior of the premises.

**Section 4.** That any person, firm, or corporation violating any of the provisions or terms of this ordinance shall be subject to the same penalty as provided for in the Comprehensive Zoning Ordinance of the city, as heretofore amended, and upon conviction shall be punished by a fine set in accordance with Chapter 1, General Provisions, Section 1-7. General penalty for violations of Code; continuing violations, of the Code of Ordinances for the Town of Addison.

**Section 5.** That it is the intention of the City Council that this ordinance be considered in its entirety, as one ordinance, and should any portion of this ordinance be held to be void or unconstitutional, then said ordinance shall be void in its entirety, and the City Council would not have adopted said ordinance if any part or portion of said ordinance should be held to be unconstitutional or void.

**Section 6.** That all ordinances of the City in conflict with the provisions of this ordinance be, and the same are hereby repealed and all other ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

**Section 7.** That this Ordinance shall become effective from and after its passage and approval and after publication as may be required by law or by the City Charter or ordinance.

**PASSED AND APPROVED** BY THE CITY COUNCIL OF THE TOWN OF ADDISON,  
TEXAS, on this the 13th day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

\_\_\_\_\_  
Laura Bell, City Secretary

CASE NO: 1747-SUP/Meso Maya

APPROVED AS TO FORM:

\_\_\_\_\_  
Brenda N. McDonald, City Attorney

PUBLISHED ON: \_\_\_\_\_

**EXHIBIT A**

**JONES BAKER**  
 ARCHITECTS  
 1000 WEST WALK  
 DALLAS, TX 75215  
 (214) 760-0000  
 jonesbakercpa.com

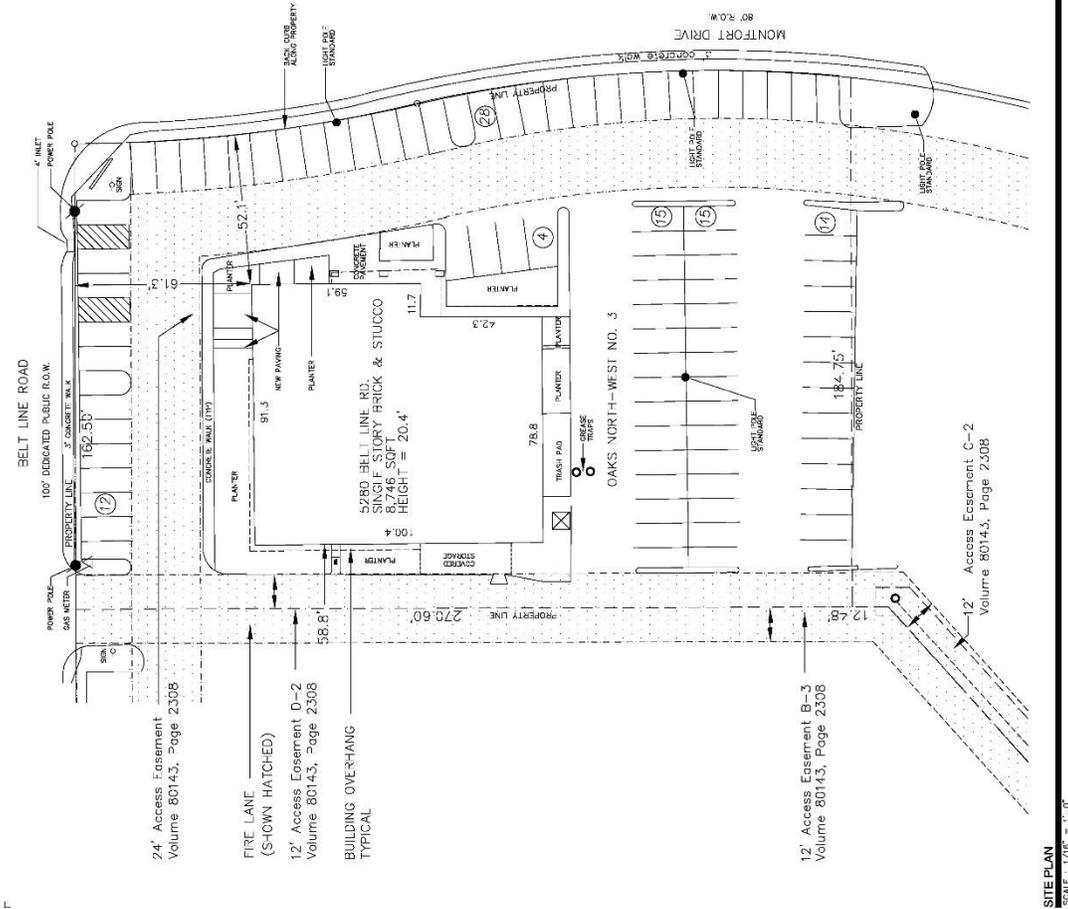


PROXIMITY MAP  
 N.T.S.

PARKING ANALYSIS  
 8,746 SQ.FT.  
 1 SPACE / 100 SQ. FT.  
 88 SPACES REQUIRED  
 88 SPACES PROVIDED

PROJECT NO.	10008
DATE	10/27/16
PROJECT NAME	TRACT II - PRESTON WOOD PLACE /
SCALE	AS NOTED
SHEET	81/88
REVISIONS:	
<b>SITE PLAN</b>	

MESO MAYA  
 TRACT II - PRESTON WOOD PLACE /  
 OAK NORTH-WEST NO. 3  
 5280 BELT LINE ROAD  
 ADDISON / DALLAS COUNTY, TEXAS 75254  
 PROJECT #



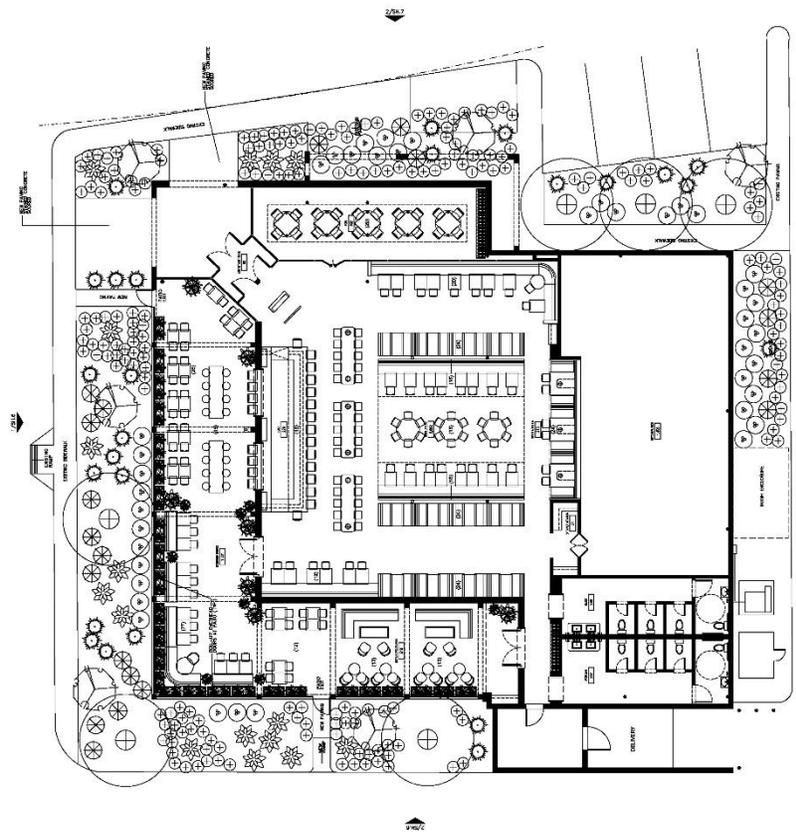
**EXHIBIT A**

**JONES BAWER**  
ARCHITECTS  
2000 W. WOODWAY  
DALLAS, TEXAS 75224  
PHONE: 214.766.1000  
WWW.JONESBAWER.COM

PROJECT NO.: 10008  
DATE: 02/27/16  
DRAWN BY: JLM/MS  
SCALE: AS NOTED  
SHEET: 81/82  
REVISIONS:  
FLOOR PLAN  
PLAN

MESO MAYA  
TRACT II - PRESTON WOOD PLACE /  
OAK NORTH-WEST NO. 3  
5290 BELT LINE ROAD  
ADISON / DALLAS COUNTY, TEXAS 75254  
PROJECT #

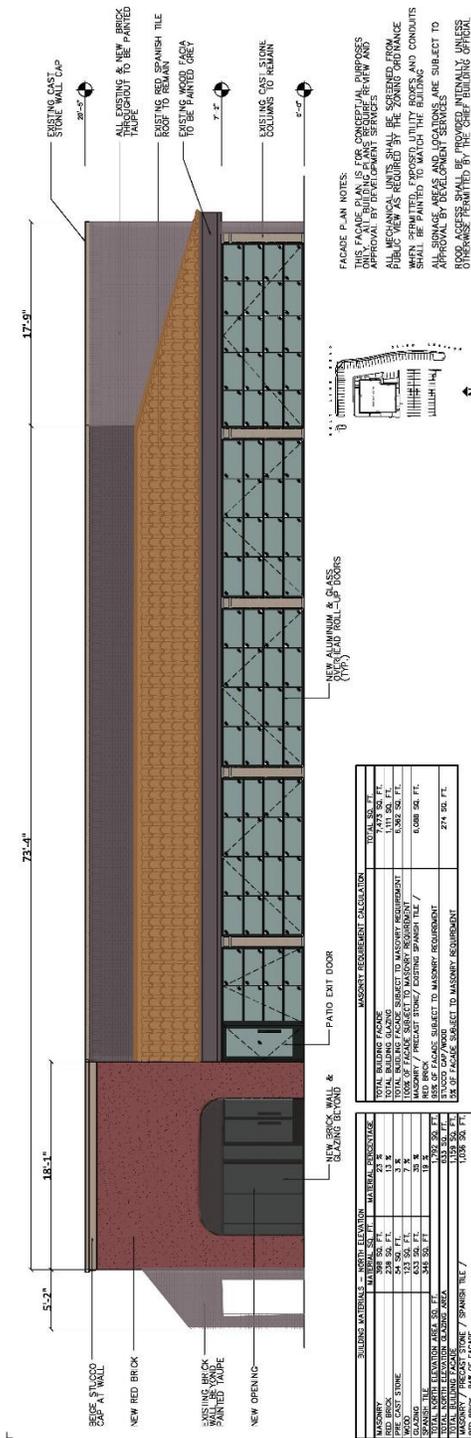
5  
N



FLOOR PLAN  
SCALE: 1/8" = 1'-0"

**EXHIBIT A**

**JONES BAWER**  
ARCHITECTS  
1001 W. WOODLAWN  
DALLAS, TX 75215  
214.766.1000  
www.jonesbauer.com



**FACE PLAN NOTES:**  
THIS FACE PLAN IS FOR CONCEPTUAL PURPOSES. APPROVAL BY BUILDING DEPARTMENT AND ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE. SPANISH TILE TO MATCH THE BUILDING AND CONDUITS SHALL BE PAINTED TO MATCH THE BUILDING. APPROVAL BY DEVELOPMENT SERVICES ARE SUBJECT TO APPROVALS BY THE CITY ENGINEERING DEPARTMENT AND THE CITY PLANNING DEPARTMENT.

**MASSING REQUIREMENT CALCULATION**

MASSING REQUIREMENT	TOTAL SQ. FT.
TOTAL BUILDING FLOOR AREA	1,111.50 SQ. FT.
TOTAL BUILDING FLOOR AREA SUBJECT TO MASSING REQUIREMENT	5,382.50 SQ. FT.
MASSING / PRECAST STONE / EXISTING SPANISH TILE /	6,096.50 SQ. FT.
15% OF FACADE SUBJECT TO MASSING REQUIREMENT	274.50 SQ. FT.

**BUILDING MATERIALS - NORTH ELEVATION**

MATERIAL	QUANTITY	MATERIAL PERCENTAGE
RED BRICK	238.50 SQ. FT.	13.4%
PRECAST STONE	54.50 SQ. FT.	3.0%
SPANISH TILE	433.50 SQ. FT.	24.4%
GLASSING	1,702.00 SQ. FT.	95.1%
TOTAL BUILDING FLOOR AREA	1,702.00 SQ. FT.	100.0%
MASSING / PRECAST STONE / SPANISH TILE /	1,098.50 SQ. FT.	64.5%
15% OF FACADE SUBJECT TO MASSING REQUIREMENT	103.50 SQ. FT.	6.1%

**NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"

PROJECT NO.: XXX  
DATE: 8/20/16  
DRAWN BY: J. MCKEE  
CHECKED BY: J. MCKEE  
SCALE: 1/4" = 1'-0"

**EXTERIOR ELEVATIONS**



**FACE PLAN NOTES:**  
THIS FACE PLAN IS FOR CONCEPTUAL PURPOSES. APPROVAL BY BUILDING DEPARTMENT AND ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE. SPANISH TILE TO MATCH THE BUILDING AND CONDUITS SHALL BE PAINTED TO MATCH THE BUILDING. APPROVAL BY DEVELOPMENT SERVICES ARE SUBJECT TO APPROVALS BY THE CITY ENGINEERING DEPARTMENT AND THE CITY PLANNING DEPARTMENT.

**MASSING REQUIREMENT CALCULATION**

MASSING REQUIREMENT	TOTAL SQ. FT.
TOTAL BUILDING FLOOR AREA	1,111.50 SQ. FT.
TOTAL BUILDING FLOOR AREA SUBJECT TO MASSING REQUIREMENT	5,382.50 SQ. FT.
MASSING / PRECAST STONE / EXISTING SPANISH TILE /	6,096.50 SQ. FT.
15% OF FACADE SUBJECT TO MASSING REQUIREMENT	274.50 SQ. FT.

**BUILDING MATERIALS - WEST ELEVATION**

MATERIAL	QUANTITY	MATERIAL PERCENTAGE
RED BRICK	132.50 SQ. FT.	7.4%
PRECAST STONE	54.50 SQ. FT.	3.0%
SPANISH TILE	392.50 SQ. FT.	21.9%
GLASSING	1,159.00 SQ. FT.	64.4%
TOTAL BUILDING FLOOR AREA	1,159.00 SQ. FT.	100.0%
MASSING / PRECAST STONE / SPANISH TILE /	1,017.50 SQ. FT.	87.7%
15% OF FACADE SUBJECT TO MASSING REQUIREMENT	98.75 SQ. FT.	8.5%

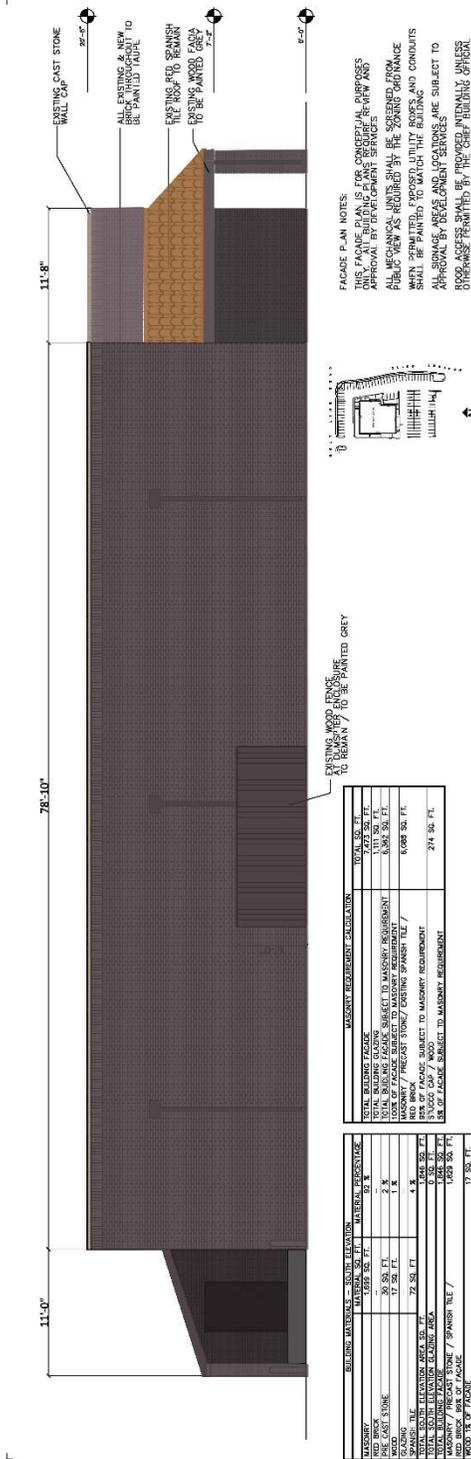
**WEST ELEVATION**  
SCALE: 1/4" = 1'-0"

PROJECT # \_\_\_\_\_  
ADDRESS / DALLAS COUNTY, TEXAS 75254  
5290 BELT LINE ROAD  
OAK NORTHWEST NO. 3  
TRACT II - PRESTON WOOD PLACE /  
MESO MAYA

**SH. 6**

**EXHIBIT A**

**JONES BAWER**  
 ARCHITECTS  
 2001 W. WOODWAY DRIVE  
 DALLAS, TEXAS 75215  
 TEL: 214.750.0000  
 WWW.JONESBAWER.COM



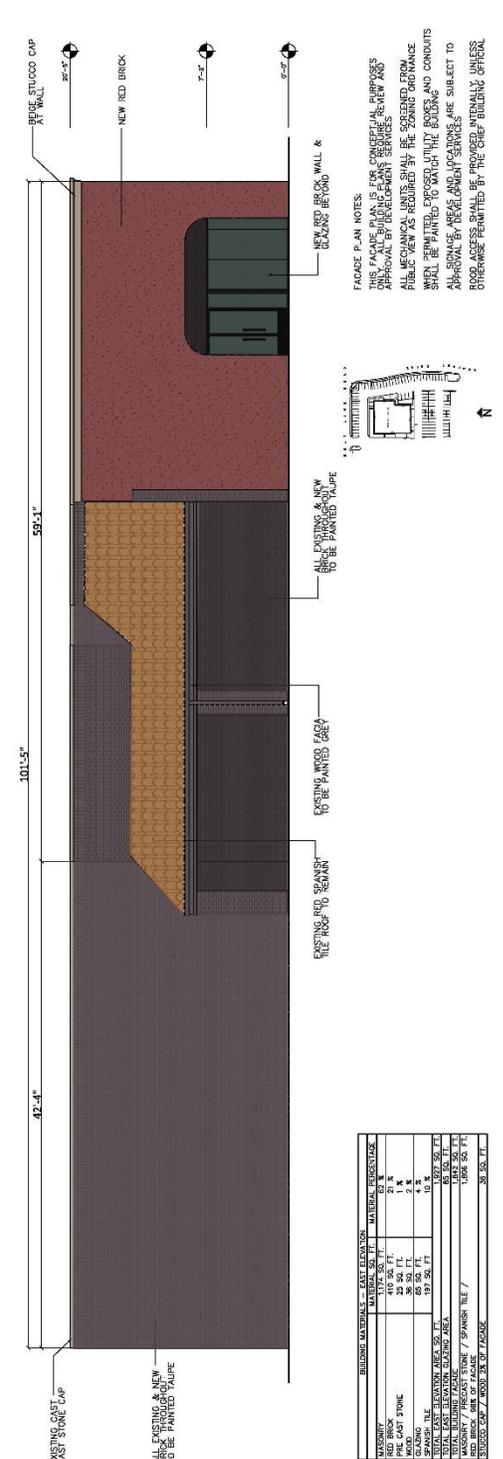
BUILDING MATERIALS - SOUTH ELEVATION		MATERIAL PERCENTAGE	
MATERIAL	AREA SQ. FT.	PERCENTAGE	PERCENTAGE
BRICK	1,478 SQ. FT.	100%	91%
STONE	30 SQ. FT.	2%	2%
WOOD	17 SQ. FT.	1%	1%
SPANISH TILE	72 SQ. FT.	5%	4%
TOTAL BUILDING AREA	1,597 SQ. FT.		
TOTAL BUILDING FLOOR AREA	1,597 SQ. FT.		
TOTAL BUILDING VOLUME	1,597 SQ. FT.		
TOTAL BUILDING FLOOR AREA / SPANISH TILE	1,597 SQ. FT.		
TOTAL BUILDING FLOOR AREA / BRICK	1,478 SQ. FT.		

MASONRY REQUIREMENT CALCULATION		TOTAL SQ. FT.	
TOTAL BUILDING FLOOR AREA	1,597 SQ. FT.	1,597 SQ. FT.	
TOTAL BUILDING FLOOR AREA SUBJECT TO MASONRY REQUIREMENT	1,597 SQ. FT.	1,597 SQ. FT.	
MASONRY / PRECAST STONE / EXISTING SPANISH TILE	1,478 SQ. FT.	1,478 SQ. FT.	
WOOD	17 SQ. FT.	17 SQ. FT.	
SPANISH TILE	72 SQ. FT.	72 SQ. FT.	
TOTAL MASONRY / PRECAST STONE / EXISTING SPANISH TILE / WOOD / SPANISH TILE	1,567 SQ. FT.	1,567 SQ. FT.	
TOTAL BUILDING FLOOR AREA	1,597 SQ. FT.	1,597 SQ. FT.	
PERCENTAGE OF MASONRY / PRECAST STONE / EXISTING SPANISH TILE / WOOD / SPANISH TILE	98%	98%	

**FACE PLAN NOTES:**  
 THIS FACE PLAN IS FOR CONCEPTUAL PURPOSES. APPROVAL BY DEVELOPMENT SERVICES AND ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE. APPROVAL BY DEVELOPMENT SERVICES AND ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE. APPROVAL BY DEVELOPMENT SERVICES AND ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE. APPROVAL BY DEVELOPMENT SERVICES AND ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE.

**SOUTH ELEVATION**  
 SCALE: 1/4" = 1'-0"

PROJECT NO.: 2008  
 DATE: 08/07/18  
 DRAWN BY: J. BAWER  
 CHECKED BY: J. BAWER  
 SCALE: 1/4" = 1'-0"



BUILDING MATERIALS - EAST ELEVATION		MATERIAL PERCENTAGE	
MATERIAL	AREA SQ. FT.	PERCENTAGE	PERCENTAGE
BRICK	1,478 SQ. FT.	100%	91%
STONE	30 SQ. FT.	2%	2%
WOOD	17 SQ. FT.	1%	1%
SPANISH TILE	72 SQ. FT.	5%	4%
TOTAL BUILDING AREA	1,597 SQ. FT.		
TOTAL BUILDING FLOOR AREA	1,597 SQ. FT.		
TOTAL BUILDING VOLUME	1,597 SQ. FT.		
TOTAL BUILDING FLOOR AREA / SPANISH TILE	1,597 SQ. FT.		
TOTAL BUILDING FLOOR AREA / BRICK	1,478 SQ. FT.		

**FACE PLAN NOTES:**  
 THIS FACE PLAN IS FOR CONCEPTUAL PURPOSES. APPROVAL BY DEVELOPMENT SERVICES AND ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE. APPROVAL BY DEVELOPMENT SERVICES AND ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE. APPROVAL BY DEVELOPMENT SERVICES AND ALL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW AS REQUIRED BY THE ZONING ORDINANCE.

**EAST ELEVATION**  
 SCALE: 1/4" = 1'-0"

**EXTERIOR ELEVATIONS**

TRACT II - PRESTON WOOD PLACE / MESO MAYA  
 5290 BELT LINE ROAD  
 OAK NORTHWEST NO. 3  
 DALLAS COUNTY, TEXAS 75254  
 PROJECT #

**SH. 7**

**EXHIBIT A**



PROJECT NO. 1747  
 DATE: 10/11/17  
 DRAWN BY: J. B. JONES  
 CHECKED BY: J. B. JONES  
 SCALE: AS SHOWN

REVISIONS:

TRACT II - PRESTON WOOD PLACE /  
 OAK NORTH-WEST NO. 3  
 5280 BELT LINE ROAD  
 ADDISON / DALLAS COUNTY, TEXAS 75254  
 PROJECT #

L1.01

**GENERAL NOTES:**

1. ALL PLANTING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF DALLAS PLANTING SPECIFICATIONS.
2. ALL PLANTING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF DALLAS PLANTING SPECIFICATIONS.
3. ALL PLANTING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF DALLAS PLANTING SPECIFICATIONS.
4. ALL PLANTING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF DALLAS PLANTING SPECIFICATIONS.
5. ALL PLANTING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF DALLAS PLANTING SPECIFICATIONS.
6. ALL PLANTING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF DALLAS PLANTING SPECIFICATIONS.
7. ALL PLANTING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF DALLAS PLANTING SPECIFICATIONS.
8. ALL PLANTING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF DALLAS PLANTING SPECIFICATIONS.
9. ALL PLANTING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF DALLAS PLANTING SPECIFICATIONS.
10. ALL PLANTING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF DALLAS PLANTING SPECIFICATIONS.

**LANDSCAPE SCHEDULE**

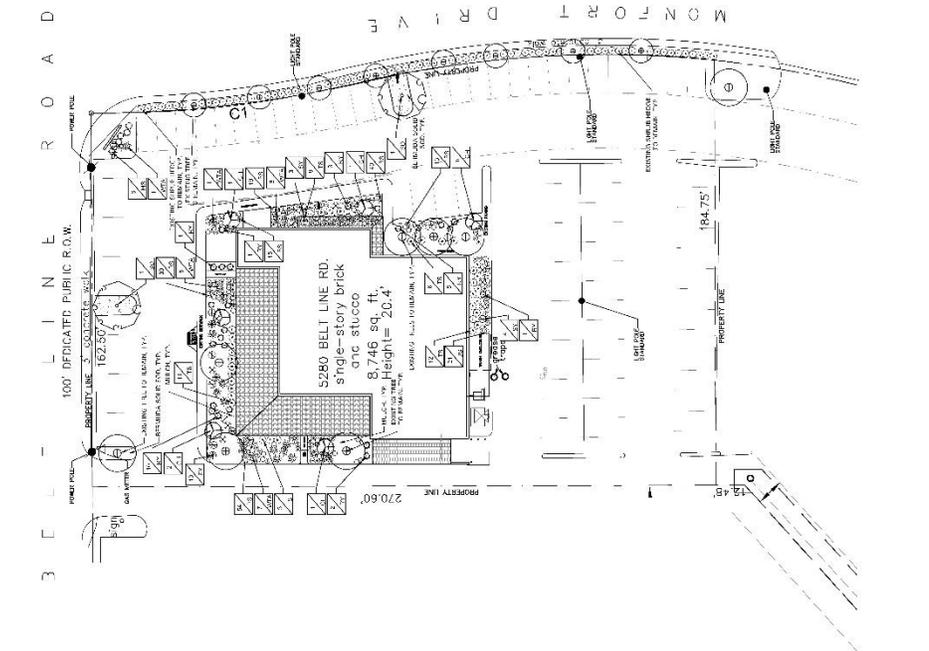
QTY	LEVEL	COMMON NAME	SCIENTIFIC NAME	SIZE	NOTES
1	100'	100' MONITOR ROAD		100' x 100'	
2	100'	100' MONITOR ROAD		100' x 100'	
3	100'	100' MONITOR ROAD		100' x 100'	
4	100'	100' MONITOR ROAD		100' x 100'	
5	100'	100' MONITOR ROAD		100' x 100'	
6	100'	100' MONITOR ROAD		100' x 100'	
7	100'	100' MONITOR ROAD		100' x 100'	
8	100'	100' MONITOR ROAD		100' x 100'	
9	100'	100' MONITOR ROAD		100' x 100'	
10	100'	100' MONITOR ROAD		100' x 100'	

**PLANT SCHEDULE**

QTY	LEVEL	COMMON NAME	SCIENTIFIC NAME	SIZE	NOTES
1	100'	100' MONITOR ROAD		100' x 100'	
2	100'	100' MONITOR ROAD		100' x 100'	
3	100'	100' MONITOR ROAD		100' x 100'	
4	100'	100' MONITOR ROAD		100' x 100'	
5	100'	100' MONITOR ROAD		100' x 100'	
6	100'	100' MONITOR ROAD		100' x 100'	
7	100'	100' MONITOR ROAD		100' x 100'	
8	100'	100' MONITOR ROAD		100' x 100'	
9	100'	100' MONITOR ROAD		100' x 100'	
10	100'	100' MONITOR ROAD		100' x 100'	

**LANDSCAPE PLAN**

GRAPHIC SCALE: 1" = 100'-0"





**Work Session and Regular Meeting****Meeting Date:** 12/13/2016**Department:** City Manager

---

**AGENDA CAPTION:**

Present, Discuss, And Consider Action On An **Ordinance To Reappoint Larry Dwight As Presiding Municipal Judge To The Addison Municipal Court Of Record, And Of Agreement For Service Of The Said Judge.**

**BACKGROUND:**

This item will reappoint Judge Larry Dwight as the Presiding Municipal Judge for the Town of Addison for another two year term from January 1, 2017 to December 31, 2018. Judge Dwight has served as a municipal court judge for the past twenty-eight years, specifically serving as a presiding judge for the last 14 terms. Also attached is a compensation agreement for Judge Dwight to perform services as the presiding judge. Judge Dwight received his evaluation by the City Council during an executive session at the November 14, 2016 council meeting and was provided a five percent compensation increase. The attached ordinance reflects this increase.

Judge Woody Specht has resigned as Associate Judge effective February 2017. With this resignation, the Town will now need to appoint a new Associate Judge(s). The Town will be advertising and accepting letters of interest and resumes during the month of December. The City Council will complete an interview process and appoint a new Associate Judge(s) in early 2017. The position will be on posted on the Town's website, and also advertised in various municipal related publications.

**RECOMMENDATION:**

Administration recommends approval.

---

**Attachments**

Ordinance with Agreement

---

**TOWN OF ADDISON, TEXAS**

**ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS RE-APPOINTING LARRY DWIGHT AS PRESIDING MUNICIPAL JUDGE OF ADDISON MUNICIPAL COURT OF RECORD NO. 1; APPROVING A COMPENSATION AGREEMENT WITH LARRY DWIGHT TO PERFORM SERVICES AS A PRESIDING MUNICIPAL JUDGE, AND AUTHORIZING THE CITY MANAGER TO EXECUTE THE SAID AGREEMENT; PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, the City Council of the Town of Addison has determined that a Presiding Municipal Judge is necessary to perform the judicial functions of the Municipal Court of Record No. 1; and

**WHEREAS**, the City Council of the Town of Addison has determined that Larry Dwight should be re-appointed as Presiding Municipal Judge of Addison Municipal Court of Record No. 1; and

**WHEREAS**, the City Council of the Town of Addison has determined that a compensation agreement should be entered into with Larry Dwight to perform services as Presiding Municipal Judge of Addison Municipal Court of Record No. 1.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

Section 1. Incorporation of Premises. The above and foregoing premises are true and correct and are incorporated herein and made a part hereof for all purposes.

Section 2. Appointment. The City Council of Addison hereby re-appoints Larry Dwight as Presiding Municipal Judge of Addison Municipal Court of Record No. 1 to serve for a two-year term, which term shall begin on January 1, 2017, and shall end on December 31, 2018.

Section 3. Authorization to Execute. The Compensation Agreement by and between the City and Larry Dwight regarding Larry Dwight's service as the Presiding Municipal Judge of the Addison Municipal Court of Record No. 1, a true and correct copy of which is attached hereto, is hereby approved. The City Manager or the City Manager's designee is authorized to execute the said Compensation Agreement on behalf of the City.

Section 4. Effective Date. This Ordinance shall take effect on January 1, 2017.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this \_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda McDonald, City Attorney

**EXHIBIT A**

STATE OF TEXAS       §  
                                  §  
COUNTY OF DALLAS   §

**KNOW ALL MEN BY THESE PRESENTS**

**AGREEMENT**

For and in consideration of the mutual terms, conditions and covenants herein contained, the following Agreement is entered into by and between THE TOWN OF ADDISON, TEXAS (hereinafter referred to as "City") and LARRY DWIGHT (hereinafter referred to as "Dwight") (hereinafter collectively the City and Dwight are referred to as the "Parties").

I.

The City does hereby appoint Dwight as the Presiding Municipal Judge of Addison Municipal Court of Record No. 1 for a term of two (2) years. Said term shall commence on January 1, 2017 and will expire December 31, 2018.

II.

In consideration for such services, Dwight shall receive:

1. a biweekly (that is, once every two (2) weeks) salary in the amount of \$4,745.33 starting January 1, 2017, paid in the same manner as are other employees of the City;
2. the City's obligations are funded from current funds.

III.

Dwight may be removed from office by the City at any time for incompetency, misconduct, malfeasance, or disability, or other reason(s) as may be authorized by or not inconsistent with law. Dwight shall be required to provide at least thirty (30) days' notice of resignation.

IV.

All other provisions of the City Charter relating to removal from office shall be applicable.

V.

The terms, obligations, and requirements of this Agreement shall be construed in accordance with the laws of the State of Texas, without regard to conflict of laws provisions of any jurisdiction. The obligations and requirements of the Parties hereto are performable in Dallas County, and any dispute relating to this Agreement shall be tried in Dallas County, exclusive venue being in Dallas County, Texas.

VI.

The Parties further agree that Dwight may only serve beyond the term of this Agreement as provided by the laws and Constitution of this State.

**EXHIBIT A**

VII.

This Agreement is executed on behalf of the City by the City Manager or his designee who is authorized to execute this instrument by order heretofore passed and duly recorded in its minutes.

VIII.

This instrument shall be the entire agreement and understanding between the parties and supersedes any and all prior agreements, arrangements, or understandings between the parties relating to the subject matter. No oral understandings, statements, promises, or inducements contrary to the terms of this Agreement exist. This Agreement cannot be changed orally.

WITNESS the signatures of all parties hereto in single or multiple originals on this the \_\_\_\_ day of \_\_\_\_\_, 2016, in Addison, Dallas County, Texas.

TOWN OF ADDISON, TEXAS

\_\_\_\_\_  
Larry Dwight

By: \_\_\_\_\_  
Wes Pierson, City Manager

**Work Session and Regular Meeting****Meeting Date:** 12/13/2016**Department:** City Manager

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**AGENDA CAPTION:**

Present And Discuss The **Finance Department Quarterly Financial Report Of The Town For The Quarter Ended September 30, 2016.**

**BACKGROUND:**

The Town of Addison's financial policies require the publication of a financial report subsequent to the end of each fiscal quarter. This report covers the financial performance for the fourth quarter for Fiscal Year 2016 (October 1, 2015 - September 30, 2016). Enclosed in the report is an executive dashboard that provides a high level look at some the key financial indicators along with more detailed exhibits which demonstrate the current financial position for the various funds. This report includes the following: General, Hotel, Airport, Economic Development, Utility, Storm Water Funds and Investment reports. The financial condition of the Town remains strong and all reported funds adhere to the 25% fund balance requirement.

## Key highlights:

- Overall General Fund revenues are up nearly 5.8% compared to last year.
- Sales tax collections in the General fund are down about 2.9% compared to last year.
- Revenues for the Utility fund are down 6.1% compared to compared to last year.
- Occupancy Tax Revenues for the Hotel fund are up 11.26% compared to last year.

Staff has reviewed the financial reports with the Finance Committee.

**RECOMMENDATION:**

Information only, no action required.

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**Attachments**

Quarterly Financial Report

Quarterly Investment Report

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Department of Finance  
*Quarterly Review*

*For the Period Ended September 30, 2016\**

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*Town of Addison*

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*\*All actuals for fiscal year 2016 are preliminary and unaudited.*

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## Executive Dashboard – 4<sup>th</sup> Quarter, 2016 Fiscal Year

### Financial Indicators

Key Revenue Sources	FY16 Budget	Actual through 9/30/16	% Annual Budget
Ad Valorem Taxes - General Fund	\$ 13,963,710	\$ 13,476,268	96.51%
Non-Property Taxes - General Fund	13,775,000	14,059,094	102.06%
Hotel Tax	5,500,000	6,133,821	111.52%
Franchise Fees - General Fund	2,680,000	2,784,088	103.88%
Service/Permitting/License Fees - General Fund	2,402,600	2,423,012	100.85%
Rental Income - All Funds	5,262,022	5,454,815	103.66%
Fines and Penalties - All Funds	856,900	633,712	73.95%
Special Event Revenue - Hotel Fund	3,403,317	2,744,578	80.64%
Fuel Flowage Fees - Airport Fund	791,680	828,240	104.62%
Water and Sewer Charges - Utility Fund	10,283,530	9,462,990	92.02%

Key Expenditures	FY16 Budget	Actual through 09/30/16	% Annual Budget
General Fund	\$ 34,239,564	\$ 32,852,874	95.95%
Hotel Fund	8,421,358	8,312,247	98.70%
Economic Development	1,685,707	1,399,615	83.03%
Airport Operations	4,225,261	3,999,320	94.65%
Utility Operations	9,177,247	8,684,197	94.63%

# Executive Dashboard – 4<sup>th</sup> Quarter, 2016 Fiscal Year

## Financial & Staffing Indicators

### Personnel Information:

New Hires - Benefitted Positions				
07/2016 - 09/2016				
Department	Part-Time Positions	Full-time positions	Total 4th Qtr	YTD
City Manager	0	0	0	1
Conference Centre	0	0	0	1
Finance	0	2	2	9
Fire	0	2	2	5
Human Resources	0	0	0	1
Infrastructure	0	2	2	3
Parks	0	1	1	5
Police	0	1	1	7
Recreation	0	0	0	4
Streets	0	1	1	4
<b>Grand Total</b>	<b>0</b>	<b>9</b>	<b>9</b>	<b>40</b>

Separations - Benefitted Positions				
07/2016 - 09/2016				
Department	Part-Time Positions	Full-time positions	Total 3rd Qtr.	YTD
City Manager	0	1	1	1
Conference Centre	0	1	1	1
Emergency Comm.	0	0	0	13*
Finance	0	1	1	4
Fire	0	1	1	7
Infrastructure	0	1	1	3
Parks	0	1	1	5
Police	0	2	2	13
Recreation	0	0	0	2
Streets	0	2	2	5
<b>Grand Total</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>54</b>

\* Transfer of dispatchers to NTECC (North Texas Emergency Communications Center)

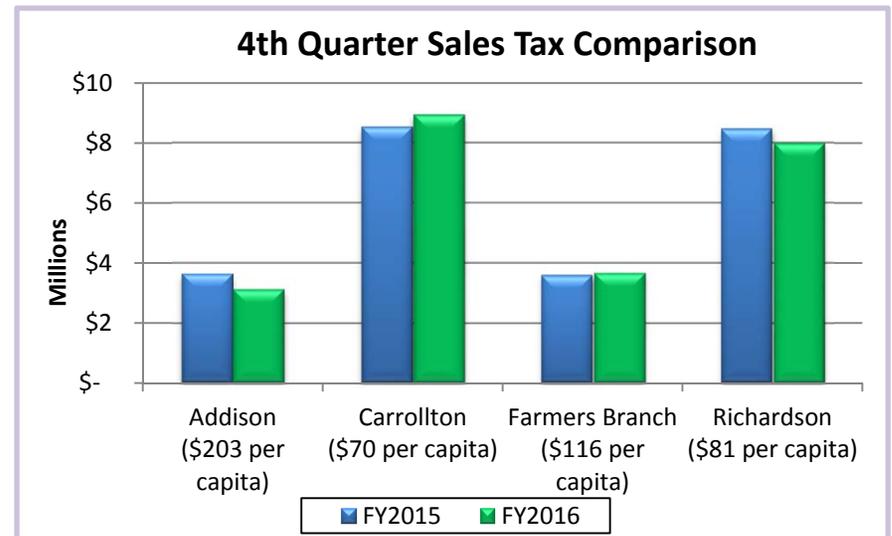
### Economic Development Incentives:

Executed Agreements	Amount Paid FY16	Total Incentives Committed
4	\$52,000	\$443,000

### Purchasing Information:

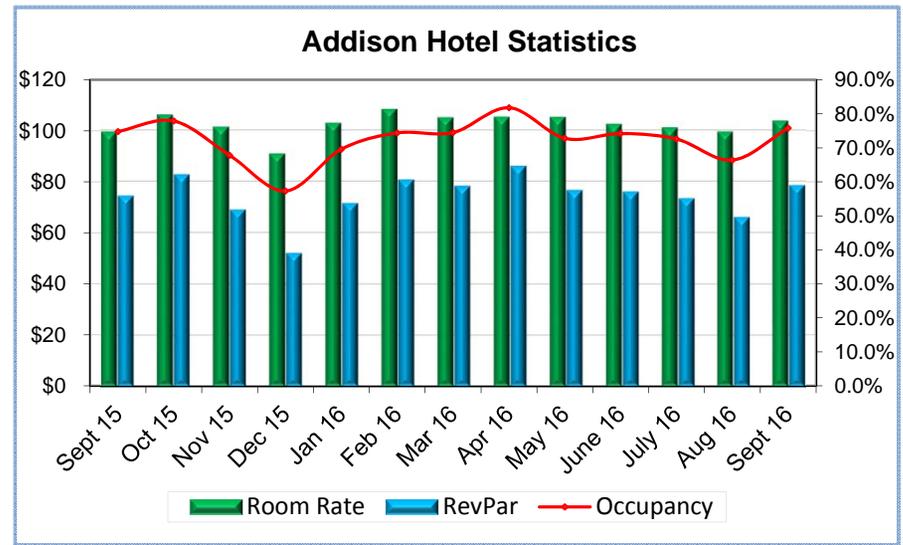
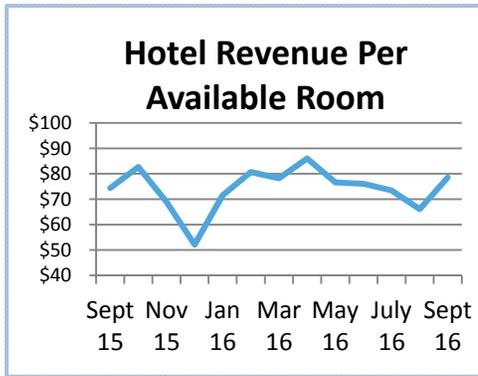
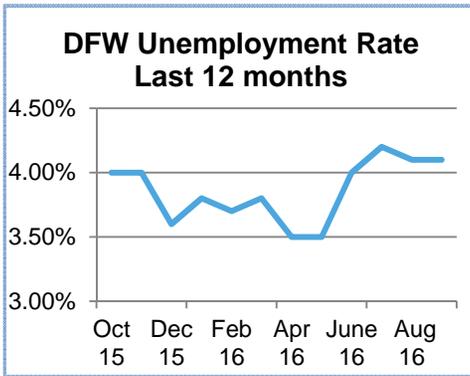
Savings = Difference between Low Bid and Next Highest bid

FY15 Bid Savings	YTD FY16 Bid Savings	FY16 Savings Goal
\$1,675,971	\$955,159	\$650,000



# Executive Dashboard – 4<sup>th</sup> Quarter, 2016 Fiscal Year

## Economic Indicators



### Occupancy Indicators:

Office Occupancy = 86.4%

Retail Occupancy = 93%



Source: CoStar (compares to prior year)

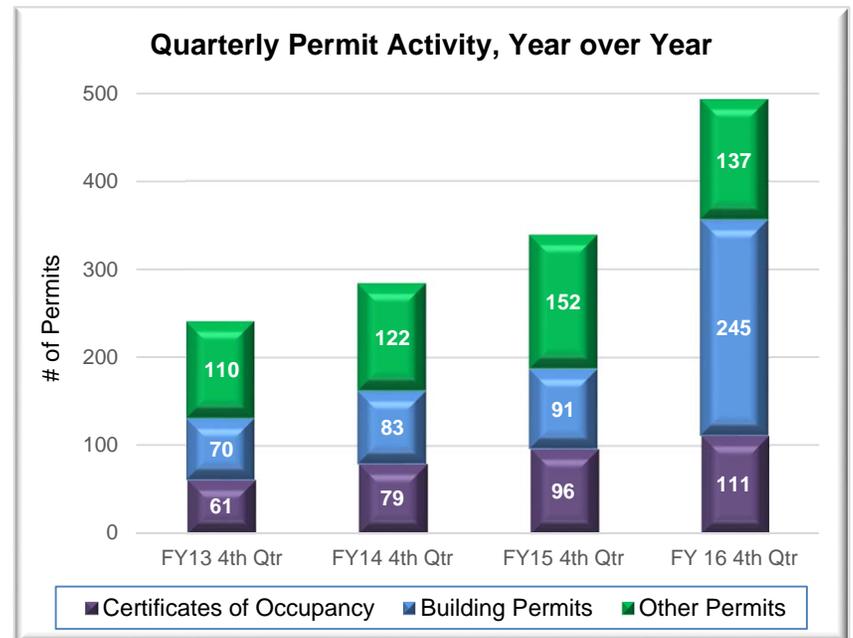
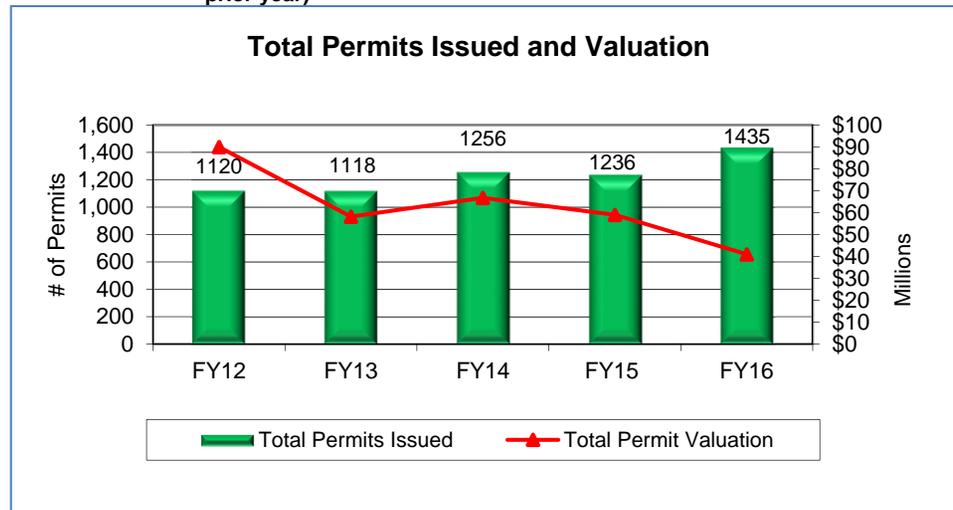
### Hotel Indicators:

Hotel Occupancy = 71.6%

RevPAR = \$72.66



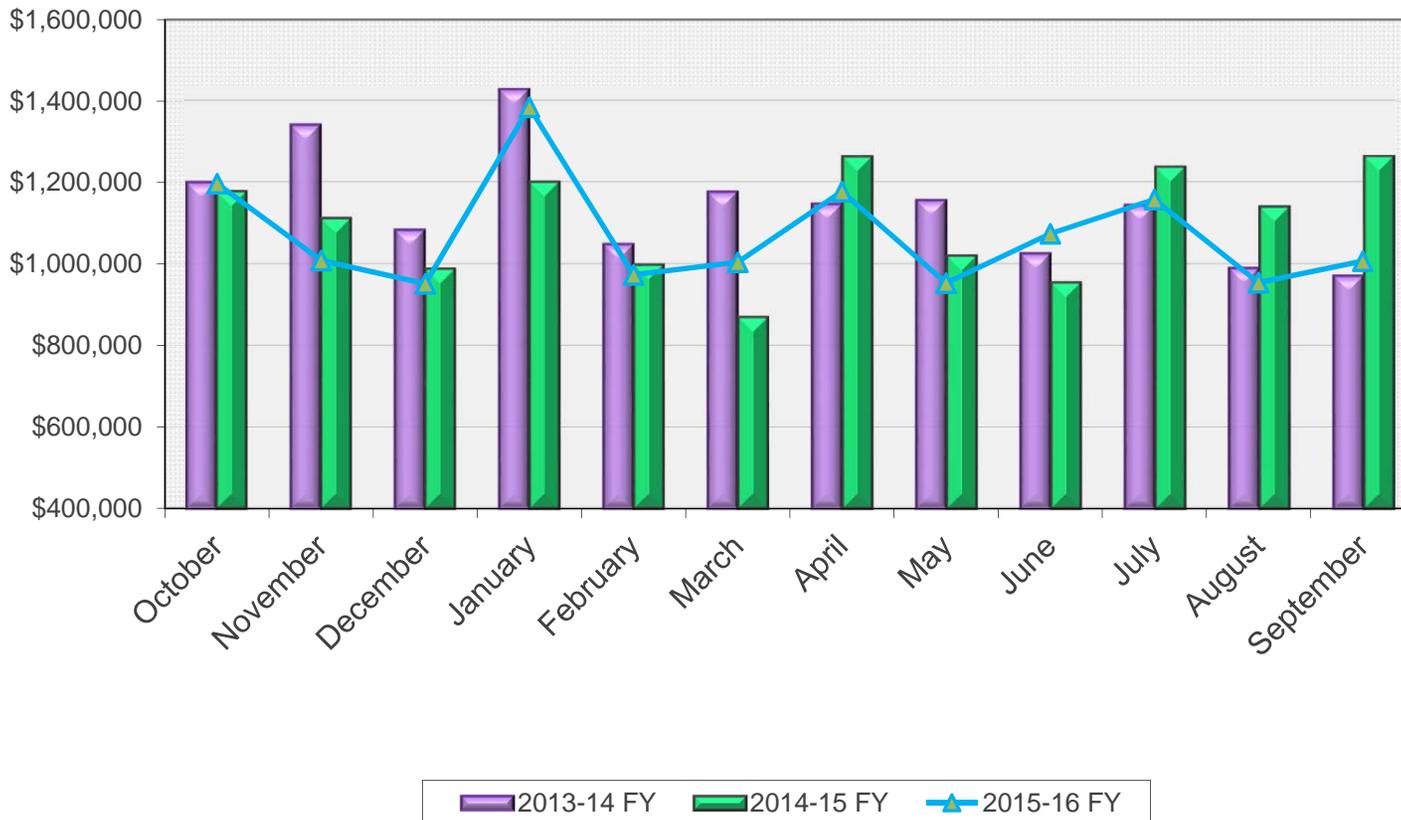
Source: STR Report (compares to prior year)



# Executive Dashboard – 4<sup>th</sup> Quarter, 2016 Fiscal Year

## Sales Tax Information

### Monthly Sales Tax Collections





# MEMO

**To:** Wes Pierson, City Manager  
**From:** Olivia Riley, Interim Chief Financial Officer  
**RE:** Fourth Quarter Financial Review  
**Date:** December 6, 2016

This is the fourth quarter report for the 2015-2016 fiscal year. Revenues and expenditures reflect activity from October 1, 2015 through September 30, 2016. *All actuals for fiscal year 2016 are preliminary and unaudited.*

## GENERAL FUND

- Fiscal year-to-date revenue totaled approximately \$34 million, which is 100 percent of the overall budget amount. Property tax collections finished the year under budget due to appeals that resulted in reduced taxable property values and delinquent tax collections were significantly under budget due to refunds. Net sales tax collections totaled almost \$12.85 million, which is 2.9 percent lower than the previous year-to-date collections. However, net sales tax collections for the year ended September 30, 2016 were above the budgeted total by approximately one percent. Current year alcoholic beverage tax collections are higher than the amount received this time last year by approximately \$35 thousand and exceeded budget by about thirteen percent. Municipal Court fines, Licenses and Permits are trending below budgeted amounts and the amount received last year. Overall total revenues as of September 30, 2016 are slightly lower than budgeted revenues by about eleven thousand dollars but they are higher than the previous year's revenues by about 5.8 percent.
- Fiscal year-to-date expenditures and transfers totaled approximately \$32.9 million, which is about 96 percent of budget. Current year expenditures were lower than previous year expenditures due primarily to the large transfer of four million dollars last year from the General Fund to setup the Infrastructure Investment Fund. Most departments ended the year under budget except for the City Manager and Combined Services departments which were over budget due to benefits paid out as triggered by staff retirement, additional costs incurred during transitioning of interim city manager and new city manager, purchase of additional library cards, and increased legal fees.
- Ending Fund Balance is \$12.7 million, or 38.7 percent of operating expenditures.

## HOTEL FUND

- Revenues year-to-date totaled approximately \$9.7 million, about \$2.2 million or 28.7% higher than the same period in the prior year. Hotel occupancy tax collections of \$6.1 million are about \$621 thousand or 11.26% higher than the same period last year. Tax collections exceeded budgeted amounts by about 11.5%. Proceeds from Special Events are more than same period last year. The majority of the increase in revenue and expense for Special Events is related to a change in accounting method.
- Hotel Fund expenditures of \$8.3 million are about 98.7 percent of budget. All departments are under budget except the Special Events department, which ends the year over budget. As noted above, the increase in revenue and expense for Special Events is related to a change in accounting method.
- Ending Fund Balance is \$3.4 million, or 40.8 percent of operating expenditures.

## AIRPORT FUND

- Operating revenue year-to-date was about \$5.6 million, or 1 percent less than the prior year. Total revenues are about 7 percent above budget.
- Year-to-date operating expenses amounted to almost \$4 million, resulting in net operating income of approximately \$1.6 million. Total operating expenses are below budget.
- Ending Working Capital is \$4 million, or 100.1 percent of operating expenses.

## UTILITY FUNDS

- Utility operating revenue through the fourth quarter totaled approximately \$9.6 million, compared to \$10.2 million in the prior year. This represents a decrease of 6.1 percent. As of September 30, 2016, total operating revenues are below budgeted amount. This decrease can be attributed to a decline in the volume of water consumption by customers due to a wetter summer season.
- Water purchases were 3.5 percent lower than last year, while sewer treatment expenses were approximately \$79 thousand lower. Total utility operating expenses year-to-date totaled almost \$8.7 million, which was approximately \$83 thousand or 1 percent lower than last year. Overall total operating expenses were under budget by about 5.4 percent.
- Storm water operating revenues were 4.5 percent higher than last year, while operating expenses were 26 percent below last year. Net operating income was approximately \$1.4 million, a 20 percent increase over last year. Overall total revenues were over budget by about 1.9 percent while operating expenses were below budgeted amount.

- Ending Working Capital for Utility Fund is \$9.6 million, or 110.3 percent of operating expenses; ending Working Capital for Stormwater Fund is \$8.2 million, or 1892.1 percent of operating expenses.

## INVESTMENT REPORT

- Cash held in investments for all funds as of September 30, 2016 totaled \$83.6 million, representing a decrease of approximately \$4.3 million from the previous quarter. Most of this decrease is related to use of funds required for capital projects.
- The Town's average investment yield to maturity at the end of September was 0.601 percent, slightly lower than the previous quarter's yield of 0.703 percent. This yield is higher than the TexPool benchmark of 0.38 percent. The average weighted maturity decreased from 291 to 228 days. Portfolio weighted average maturity is in compliance with Town's investment policy, which states that the weighted average maturity shall not exceed 18 months (547 days).
- The Town's current portfolio consists of 32 percent Agency Securities, 36 percent CDs, and 32 percent Local Government Investment Pools. The portfolio has 52 percent of its maturities at 90 days or less. All ratios are in compliance with the Investment Policy.
- Staff will continue to seek out CDs and callable agency securities in order to maximize yields. Finally, with interest rates expected to rise in late 2016, we will look to extend the portfolio's duration to the extent that cash flow allows.

## TOWN OF ADDISON

### GENERAL FUND

#### FY 2016 QUARTERLY STATEMENT OF REVENUES AND EXPENDITURES COMPARED TO BUDGET\*

*With Comparative Information from Prior Fiscal Year*

CATEGORY	FY 2014-15 ACTUAL PRIOR YEAR	FY 2015-16 REVISED BUDGET	FY 2015-16 ACTUAL 4TH QTR	FY 2015-16 ACTUAL Y-T-D	ACTUAL YTD as % of Budget
<b>Revenues:</b>					
Ad Valorem taxes:					
Current taxes	\$ 11,424,738	\$ 13,940,240	\$ (77,045)	\$ 13,489,611	97%
Delinquent taxes	(71,220)	6,750	11,453	(45,520)	-674%
Penalty & interest	25,457	16,720	11,605	32,177	192%
Non-property taxes:					
Sales tax	13,038,912	12,705,000	4,194,460	12,847,333	101%
Alcoholic beverage tax	1,176,643	1,070,000	603,162	1,211,761	113%
Franchise / right-of-way use fees:					
Electric franchise	1,539,972	1,500,000	373,156	1,552,083	103%
Gas franchise	273,320	190,000	-	216,745	114%
Telecommunication access fees	593,387	650,000	262,138	592,062	91%
Cable franchise	414,891	335,000	102,958	418,578	125%
Street rental fees	6,850	5,000	-	4,620	92%
Licenses and permits:					
Business licenses and permits	259,487	170,750	34,764	137,282	80%
Building and construction permits	751,736	649,450	91,238	631,681	97%
Service fees:					
General government	849	500	-	106	21%
Public safety	849,998	886,000	208,086	878,543	99%
Urban development	3,830	3,000	-	(1,300)	-43%
Streets and sanitation	400,562	382,600	93,423	356,956	93%
Recreation	72,279	80,300	20,228	72,293	90%
Interfund	230,000	230,000	86,863	347,452	151%
Court fines	723,931	781,900	126,909	554,393	71%
Interest earnings	20,992	30,000	23,727	101,510	338%
Rental income	236,667	275,000	43,317	229,157	83%
Other	118,739	58,905	83,728	328,508	558%
<b>Total Revenues</b>	<b>\$ 32,092,020</b>	<b>\$ 33,967,115</b>	<b>\$ 6,294,168</b>	<b>\$ 33,956,030</b>	<b>100%</b>

\* All actuals for FY2016 are preliminary and unaudited.

## TOWN OF ADDISON

### GENERAL FUND

#### FY 2016 QUARTERLY STATEMENT OF REVENUES AND EXPENDITURES COMPARED TO BUDGET\*

*With Comparative Information from Prior Fiscal Year*

CATEGORY	FY 2014-15 ACTUAL PRIOR YEAR	FY 2015-16 REVISED BUDGET	FY 2015-16 ACTUAL 4TH QTR	FY 2015-16 ACTUAL Y-T-D	ACTUAL YTD as % of Budget
<b>Expenditures:</b>					
General government:					
City manager	\$ 1,521,976	\$ 1,298,565	\$ 414,813	\$ 1,357,198	104.5%
Finance	1,009,649	1,460,286	435,434	1,393,330	95.4%
General services	684,803	827,310	224,758	769,759	93.0%
Municipal court	502,250	598,428	148,324	549,333	91.8%
Human resources	492,879	592,959	172,525	559,435	94.3%
Information technology	1,585,509	1,925,708	508,609	1,653,547	85.9%
Combined services	1,278,768	890,980	386,926	1,042,593	117.0%
Council projects	578,233	351,879	24,144	355,177	100.9%
Public safety:					
Police	8,561,703	8,279,606	2,217,767	8,073,492	97.5%
Emergency communications	1,383,173	1,468,483	72,739	1,412,600	96.2%
Fire	6,732,790	6,829,772	1,925,167	6,723,586	98.4%
Development services	1,090,973	1,227,637	393,795	1,074,983	87.6%
Property standards	-	176,656	39,329	127,029	71.9%
Streets	1,803,135	2,022,482	630,427	1,788,567	88.4%
Parks and Recreation:					
Parks	3,103,939	3,511,320	964,210	3,228,240	91.9%
Recreation	1,651,393	1,685,493	546,968	1,652,006	98.0%
Other financing uses:					
Transfers	4,015,000	1,092,000	1,080,750	1,092,000	100.0%
<b>Total Expenditures</b>	<b>35,996,170</b>	<b>34,239,564</b>	<b>10,186,687</b>	<b>32,852,874</b>	<b>96.0%</b>
Net Change in Fund Balance	(3,904,150)	(272,449)	<u>\$ (3,892,519)</u>	1,103,156	
<b>Fund Balance at Beginning of Year</b>	<b>15,506,011</b>	<b>11,201,712</b>		<b>11,601,861</b>	
<b>Fund Balance at End of Year</b>	<b>\$ 11,601,861</b>	<b>\$ 10,929,263</b>		<b>\$ 12,705,017</b>	<b>38.7%</b>

\* All actuals for FY2016 are preliminary and unaudited.

## TOWN OF ADDISON

### HOTEL FUND

#### FY 2016 QUARTERLY STATEMENT OF REVENUES AND EXPENDITURES COMPARED TO BUDGET\*

*With Comparative Information from Prior Fiscal Year*

CATEGORY	FY 2014-15 ACTUAL PRIOR YEAR	FY 2015-16 REVISED BUDGET	FY 2015-16 ACTUAL 4TH QTR	FY 2015-16 ACTUAL Y-T-D	ACTUAL YTD as % of Budget
<b>Revenues:</b>					
Hotel/Motel occupancy taxes	\$ 5,512,956	\$ 5,500,000	\$ 1,496,819	\$ 6,133,821	111.5%
Proceeds from special events	1,014,650	3,403,317	1,790,243	2,744,578	80.6%
Conference centre rental	638,045	630,000	189,197	659,027	104.6%
Visit Addison rental	183,429	-	-	30,337	0.0%
Theatre centre rental	143,248	122,290	(9,425)	110,183	90.1%
Interest and miscellaneous	19,719	10,000	5,214	(12,223)	-122.2%
<b>Total Revenues</b>	<b>7,512,047</b>	<b>9,665,607</b>	<b>3,472,048</b>	<b>9,665,723</b>	<b>100.0%</b>
<b>Expenditures:</b>					
Visit Addison	765,286	400,000	291,073	331,856	83.0%
Conference centre	959,139	1,216,466	425,561	1,151,767	94.7%
Marketing	872,579	972,224	282,966	813,250	83.6%
Special events	2,279,533	3,886,896	2,333,805	4,098,134	105.4%
Performing arts	542,067	581,385	20,586	569,491	98.0%
General hotel operations	36,310	107,263	24,643	90,626	84.5%
Other financing uses:					
Transfer to debt serv & ED funds	1,211,082	1,257,124	314,281	1,257,124	100.0%
<b>Total Expenditures</b>	<b>6,665,996</b>	<b>8,421,358</b>	<b>3,692,915</b>	<b>8,312,247</b>	<b>98.7%</b>
Net Change in Fund Balance	846,053	1,244,248	<u>\$ (220,866)</u>	1,353,476	
<b>Fund Balance at Beginning of Year</b>	<b>1,194,674</b>	<b>2,315,028</b>		<b>2,040,729</b>	
<b>Fund Balance at End of Year</b>	<b>\$ 2,040,729</b>	<b>\$ 3,559,277</b>		<b>\$ 3,394,205</b>	<b>40.8%</b>

\* All actuals for FY2016 are preliminary and unaudited.

**TOWN OF ADDISON**  
**ECONOMIC DEVELOPMENT FUND**  
**FY 2016 QUARTERLY STATEMENT OF REVENUES AND EXPENDITURES COMPARED TO BUDGET\***  
*With Comparative Information from Prior Fiscal Year*

CATEGORY	FY 2014-15 ACTUAL PRIOR YEAR	FY 2015-16 REVISED BUDGET	FY 2015-16 ACTUAL 4TH QTR	FY 2015-16 ACTUAL Y-T-D	ACTUAL YTD as % of Budget
<b>Revenues:</b>					
Ad Valorem taxes:					
Current taxes	\$ 973,607	\$ 998,800	\$ (5,510)	\$ 965,009	96.6%
Delinquent taxes	(6,062)	480	822	(3,257)	-678.5%
Penalty & interest	2,169	1,190	831	2,268	190.6%
Business license fee	68,395	70,000	1,950	65,276	93.3%
Interest income and other	3,844	10,200	5,782	10,796	105.8%
Transfers from General/Hotel Fund	515,282	560,524	140,131	560,524	100.0%
<b>Total Revenues</b>	<b>1,557,235</b>	<b>1,641,194</b>	<b>144,006</b>	<b>1,600,615</b>	<b>97.5%</b>
<b>Expenditures:</b>					
Personnel services	354,313	381,809	109,914	388,306	101.7%
Supplies	20,854	29,700	23,736	41,466	139.6%
Maintenance	62,447	50,541	13,552	52,787	104.4%
Contractual services	824,881	1,198,076	285,273	891,475	74.4%
Capital replacement/lease	19,154	25,581	6,395	25,581	100.0%
<b>Total Expenditures</b>	<b>1,281,649</b>	<b>1,685,707</b>	<b>438,869</b>	<b>1,399,615</b>	<b>83.0%</b>
Net Change in Fund Balance	275,586	(44,513)	<u>\$ (294,863)</u>	201,000	
<b>Fund Balance at Beginning of Year</b>	<u>477,233</u>	<u>473,332</u>		<u>752,819</u>	
<b>Fund Balance at End of Year</b>	<u>\$ 752,819</u>	<u>\$ 428,819</u>		<u>\$ 953,818</u>	<b>68.1%</b>

\* All actuals for FY2016 are preliminary and unaudited.

## AIRPORT FUND

### FY 2016 QUARTERLY STATEMENT OF REVENUES AND EXPENDITURES COMPARED TO BUDGET\*

*With Comparative Information from Prior Fiscal Year*

CATEGORY	FY 2014-15 ACTUAL PRIOR YEAR	FY 2015-16 REVISED BUDGET	FY 2015-16 ACTUAL 4TH QTR	FY 2015-16 ACTUAL Y-T-D	ACTUAL YTD as % of Budget
<b>Operating Revenues:</b>					
Operating grants	\$ -	\$ 50,000	\$ 50,000	\$ 98,140	196.3%
Fuel flowage fees	829,044	791,680	215,214	828,240	104.6%
Rental	4,248,056	4,234,732	1,142,892	4,426,111	104.5%
User fees	512,888	161,250	29,165	120,990	75.0%
Other income	61,379	-	2,727	128,077	0.0%
<b>Total Operating Revenues:</b>	<b>5,651,367</b>	<b>5,237,662</b>	<b>1,439,999</b>	<b>5,601,558</b>	<b>106.9%</b>
<b>Operating Expenses:</b>					
Town - Personnel services	318,036	361,152	91,894	325,461	90.1%
Town - Supplies	58,326	41,000	2,113	7,984	19.5%
Town - Maintenance	88,270	112,910	30,754	113,270	100.3%
Town - Contractual services	560,906	172,990	16,975	131,380	75.9%
Town - Capital replacement/lease	1,778,693	19,160	4,790	19,160	100.0%
Grant - Maintenance	100,000	100,000	110,551	110,551	110.6%
Operator - Operations and maintenance	675,158	3,004,748	725,244	2,863,810	95.3%
Operator - Service contract	398,061	413,301	90,916	427,703	103.5%
<b>Total Operating Expenses:</b>	<b>3,977,450</b>	<b>4,225,261</b>	<b>1,073,236</b>	<b>3,999,320</b>	<b>94.7%</b>
<b>Operating Income/(Loss) (excluding depreciation)</b>	<b>1,673,918</b>	<b>1,012,401</b>	<b>366,763</b>	<b>1,602,239</b>	
<b>Non-Operating revenues (expenses):</b>					
Interest earnings	13,588	5,000	6,294	24,302	486.0%
Principal & interest on debt, fiscal fees & other	(137,468)	(587,691)	(65,433)	(588,691)	100.2%
Capital outlay	(777,489)	(122,000)	-	(20,315)	16.7%
<b>Net Total Non-Operating revenues (expenses):</b>	<b>(901,369)</b>	<b>(704,691)</b>	<b>(59,140)</b>	<b>(584,704)</b>	<b>83.0%</b>
Net Change to Working Capital	772,549	307,710	<u>\$ 307,624</u>	\$ 1,017,534	
<b>Working Capital at Beginning of Year</b>	<u>2,211,678</u>	<u>1,783,670</u>		<u>2,984,227</u>	
<b>Working Capital at End of Year</b>	<u>\$ 2,984,227</u>	<u>\$ 2,091,380</u>		<u>\$ 4,001,761</u>	<b>100.1%</b>

\* All actuals for FY2016 are preliminary and unaudited.

## UTILITY FUND

### FY 2016 QUARTERLY STATEMENT OF REVENUES AND EXPENDITURES COMPARED TO BUDGET\*

*With Comparative Information from Prior Fiscal Year*

CATEGORY	FY 2014-15 ACTUAL PRIOR YEAR	FY 2015-16 REVISED BUDGET	FY 2015-16 ACTUAL 4TH QTR	FY 2015-16 ACTUAL Y-T-D	ACTUAL YTD as % of Budget
<b>Operating revenues:</b>					
Water sales	\$ 5,678,134	\$ 5,758,909	\$ 1,913,621	\$ 5,391,057	93.6%
Sewer charges	4,436,230	4,524,621	1,185,785	4,071,932	90.0%
Tap fees	12,580	7,000	8,525	25,275	361.1%
Penalties	64,949	75,000	18,669	79,319	105.8%
Other Income/(Expenses)	1,200	15,000	70	570	3.8%
<b>Total Operating Revenues:</b>	<b>10,193,093</b>	<b>10,380,530</b>	<b>3,126,669</b>	<b>9,568,154</b>	<b>92.2%</b>
<b>Operating expenses:</b>					
Water purchases	3,223,750	3,459,088	895,622	3,112,034	90.0%
Wastewater treatment	2,496,828	2,298,729	473,051	2,418,303	105.2%
Utility operations	3,046,128	3,419,430	1,165,189	3,153,860	92.2%
<b>Total Operating Expenses:</b>	<b>8,766,706</b>	<b>9,177,247</b>	<b>2,533,862</b>	<b>8,684,197</b>	<b>94.6%</b>
<b>Operating Income/(Loss) (excluding depreciation)</b>	<b>1,426,387</b>	<b>1,203,284</b>	<b>592,807</b>	<b>883,957</b>	
<b>Non-Operating revenues (expenses):</b>					
Debt proceeds					
Interest earnings and other	48,098	(110,510)	15,490	30,527	-27.6%
Principal and interest on debt, fiscal fees & other	(504,965)	(1,091,014)	(241,318)	(1,065,011)	97.6%
Capital outlay	(2,547,822)	(3,427,164)	(197,460)	(498,404)	14.5%
<b>Net Total Non-Operating revenues (expenses):</b>	<b>(3,004,689)</b>	<b>(4,628,688)</b>	<b>(423,288)</b>	<b>(1,532,888)</b>	<b>33.1%</b>
Net Change to Working Capital	(1,578,302)	(3,425,405)	<u>\$ 169,519</u>	(648,931)	
<b>Working Capital at Beginning of Year</b>	<b>11,810,139</b>	<b>9,846,741</b>		<b>10,231,837</b>	
<b>Working Capital at End of Year</b>	<b>\$ 10,231,837</b>	<b>\$ 6,421,336</b>		<b>\$ 9,582,906</b>	<b>110.3%</b>

\* All actuals for FY2016 are preliminary and unaudited.

## STORM WATER UTILITY FUND

FY 2016 QUARTERLY STATEMENT OF REVENUES AND EXPENDITURES COMPARED TO BUDGET\*

*With Comparative Information from Prior Fiscal Year*

CATEGORY	FY 2014-15 ACTUAL PRIOR YEAR	FY 2015-16 REVISED BUDGET	FY 2015-16 ACTUAL 4TH QTR	FY 2015-16 ACTUAL Y-T-D	ACTUAL YTD as % of Budget
<b>Operating revenues:</b>					
Drainage fees	\$ 1,729,899	\$ 1,773,900	\$ 482,001	\$ 1,808,466	102%
<b>Total Operating Revenues:</b>	<b>1,729,899</b>	<b>1,773,900</b>	<b>482,001</b>	<b>1,808,466</b>	<b>101.9%</b>
<b>Operating expenses</b>					
Personnel services	72,315	105,614	23,762	74,317	70.4%
Supplies	946	12,700	3,738	4,652	36.6%
Maintenance	803	186,500	18,187	57,941	31.1%
Contractual services	510,195	247,475	100,957	295,517	119.4%
<b>Total Operating Expenses:</b>	<b>584,258</b>	<b>552,289</b>	<b>146,643</b>	<b>432,427</b>	<b>78.3%</b>
<b>Operating Income/(Loss) (excluding depreciation)</b>	1,145,641	1,221,611	335,357	1,376,039	
<b>Non-Operating revenues (expenses):</b>					
Interest earnings and other	39,242	5,000	-	(1,932)	-39%
Interest and principal on debt, fiscal fees & other	(266,218)	(544,716)	(136,008)	(544,716)	100.0%
Capital outlay	(379,018)	(5,070,000)	(2,083,316)	(2,223,587)	44%
<b>Net Total Non-Operating revenues (expenses):</b>	<b>(605,994)</b>	<b>(5,609,716)</b>	<b>(2,219,325)</b>	<b>(2,770,235)</b>	<b>49.4%</b>
Net Change to Working Capital	539,647	(4,388,105)	<u>\$ (1,883,967)</u>	(1,394,197)	
<b>Working Capital at Beginning of Year</b>	<b>9,036,498</b>	<b>8,900,014</b>		<b>9,576,145</b>	
<b>Working Capital at End of Year</b>	<b>\$ 9,576,145</b>	<b>\$ 4,511,909</b>		<b>\$ 8,181,948</b>	<b>1892.1%</b>

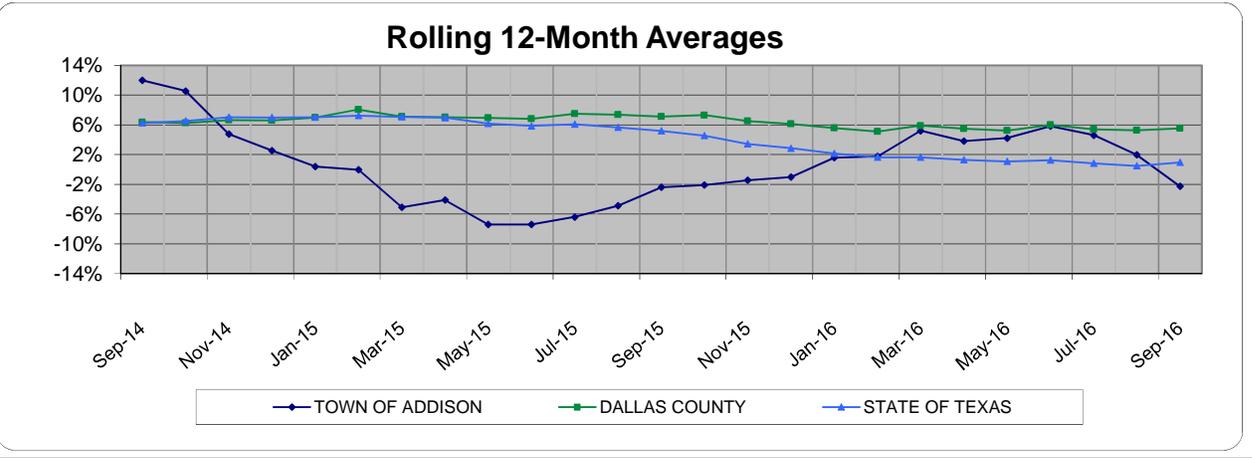
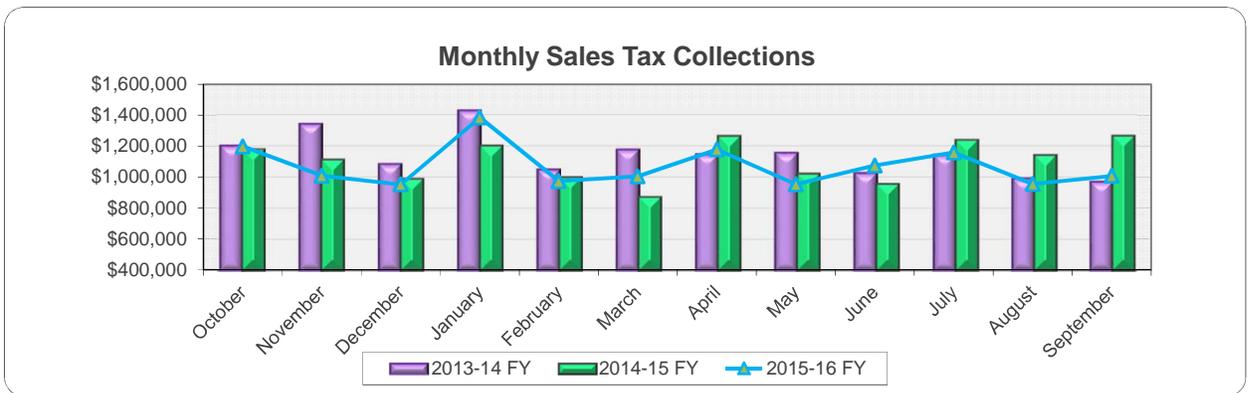
\* All actuals for FY2016 are preliminary and unaudited.

## TOWN OF ADDISON

### Schedule of Sales Tax Collections and Related Analyses

For the period ending September 30, 2016

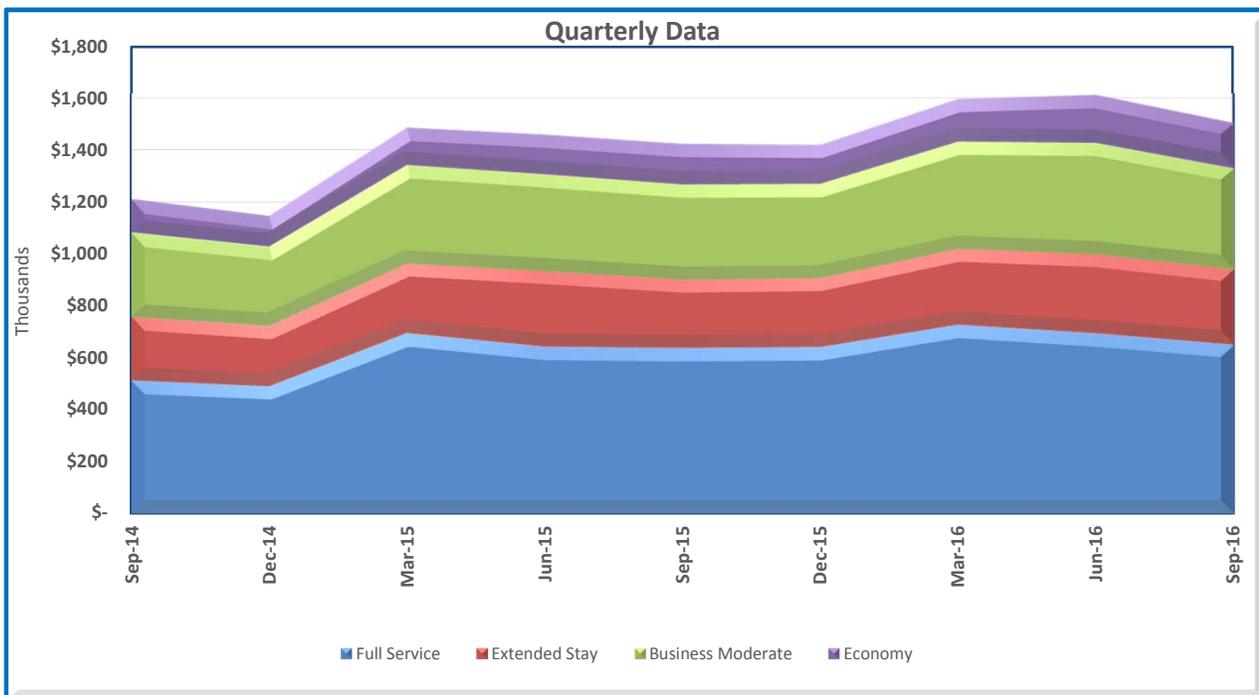
	TOWN OF ADDISON				DALLAS COUNTY		STATE OF TEXAS	
	2015-16 Collections		% Change from Prior Year		% Change from Prior Year		% Change from Prior Year	
	Monthly	Cumulative	Monthly	Cumulative	Monthly	Cumulative	Monthly	Cumulative
October	\$ 1,197,786	\$ 1,197,786	1.7%	1.7%	8.4%	8.4%	1.8%	1.8%
November	1,008,587	2,206,373	-9.3%	-3.6%	1.1%	4.9%	-2.4%	-0.2%
December	951,849	3,158,222	-3.7%	-3.7%	4.1%	4.7%	0.0%	-0.1%
January	1,385,203	4,543,425	15.4%	1.4%	3.7%	4.4%	-0.1%	-0.1%
February	973,782	5,517,207	-2.5%	0.7%	5.0%	4.5%	-0.1%	-0.1%
March	1,004,487	6,521,694	15.3%	2.7%	10.0%	5.3%	3.4%	0.4%
April	1,178,059	7,699,753	-6.7%	1.2%	3.7%	4.4%	1.4%	0.3%
May	953,129	8,652,882	-6.6%	0.2%	3.8%	-11.5%	-1.2%	16.0%
June	1,074,295	9,727,178	12.4%	1.5%	10.6%	5.8%	2.7%	0.9%
July	1,158,495	10,885,673	-6.4%	0.6%	4.0%	5.89%	1.8%	1.33%
August*	954,335	11,840,008	-16.3%	-1.0%	3.9%	5.71%	-1.6%	1.07%
September*	1,007,325	12,847,333	-20.3%	-2.9%	7.9%	5.46%	5.4%	1.41%
Revised Budget 15-16:	\$	12,705,000						
Year End Total:	\$	12,847,333						



\*The months of August and September have experienced a significant percentage drop year over year. This apparent "decline" is a reflection of higher audit adjustments made by the Comptroller for those months in FY2015. Audit adjustments total \$122k in August of FY2015, and \$258k in September of FY2015.

**TOWN OF ADDISON HOTEL OCCUPANCY TAX COLLECTION**  
**Hotels By Service Type for the Quarter and Year-to-Date Ended September 30, 2016**  
*With Comparative Information from Prior Fiscal Year*

	Rooms		July-Sept		16 to 15 % Diff.	YTD FY 16		16 to 15 % Diff.
	Number	Percentage	Amount	Percentage		Amount	Percentage	
<b>Full Service</b>								
Marriott Quorum	547	14%	\$ 253,890	17%	10%	\$ 1,070,376	17%	23%
Intercontinental	528	13%	242,149	16%	-3%	989,903	16%	10%
Crowne Plaza	428	11%	152,176	10%	9%	644,709	11%	13%
	<u>1,503</u>	<u>38%</u>	<u>648,215</u>	<u>43%</u>		<u>2,704,988</u>	<u>44%</u>	
<b>Extended Stay</b>								
Budget Suites	344	9%	5,231	0%	34%	18,887	0%	25%
Hawthorne Suites	70	2%	23,894	2%	25%	92,694	2%	30%
Marriott Residence	150	4%	60,445	4%	-4%	247,954	4%	1%
Summerfield Suites	132	3%	67,477	4%	21%	258,482	4%	28%
Homewood Suites	120	3%	64,008	4%	10%	230,179	4%	6%
Springhill Suites	159	4%	70,296	5%	6%	309,409	5%	7%
	<u>975</u>	<u>25%</u>	<u>291,351</u>	<u>19%</u>		<u>1,157,605</u>	<u>19%</u>	
<b>Business Moderate</b>								
Marriott Courtyard Quorum	176	4%	87,005	6%	10%	372,969	6%	14%
LaQuinta Inn	152	4%	53,200	4%	7%	225,729	4%	10%
Marriott Courtyard Proton	145	4%	69,650	5%	10%	278,070	5%	18%
Radisson - Addison	101	3%	46,014	3%	10%	191,418	3%	13%
Hilton Garden Inn	96	2%	57,829	4%	4%	226,544	4%	7%
Holiday Inn - Arapaho	102	3%	40,793	3%	8%	167,571	3%	8%
Best Western Plus	85	2%	33,578	2%	15%	128,867	2%	26%
	<u>857</u>	<u>22%</u>	<u>388,069</u>	<u>26%</u>		<u>1,591,168</u>	<u>26%</u>	
<b>Economy</b>								
Motel 6	124	3%	28,820	2%	34%	118,933	2%	33%
Hampton Inn	158	4%	68,220	5%	8%	282,086	5%	12%
Red Roof Inn	105	3%	32,262	2%	44%	107,244	2%	55%
Comfort Suites	78	2%	26,263	2%	13%	109,291	2%	32%
Super 8	65	2%	12,523	1%	-11%	45,515	1%	4%
Best Value	50	1%	7,318	0%	-38%	10,680	0%	-65%
	<u>580</u>	<u>15%</u>	<u>175,406</u>	<u>12%</u>		<u>673,749</u>	<u>11%</u>	
<b>TOTAL</b>	<u>3,915</u>	<u>100%</u>	<u>\$ 1,503,041</u>	<u>100%</u>		<u>\$ 6,127,510</u>	<u>100%</u>	

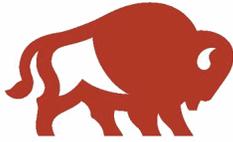


**COLLATERAL SUMMARY**

The first and most important objective for public funds investments is safety of assets. Therefore, all non-government security investments and bank accounts in excess of FDIC coverage must be secured by collateral. The bank balances and investments are monitored on a regular basis for appropriate coverage by marking the collateral to market. Collateral levels are adjusted to secure the varying levels of receipts throughout the fiscal year.

**Town of Addison  
Collateral Analysis  
Demand Deposit Cash  
September 30, 2016**

<b>Pledging Institution</b>	<b>Safekeeping Location</b>	<b>Account Title</b>	<b>Pledged Security Description</b>	<b>Security Par Value</b>	<b>Market Value</b>	<b>FDIC Insurance</b>	<b>Ending Bank Balance</b>	<b>Difference Over(Under)</b>
Frost Bank	Federal Reserve	Operating	U.S. Treas. due 8/31/21	\$ 395,000	\$ 411,078			
Frost Bank	Federal Reserve	Operating	U.S. Treas. due 8/31/19	988,000	1,009,613			
Frost Bank	Federal Reserve	Operating	U.S. Treas. due 11/30/21	2,500,000	2,587,110			
Frost Bank	Federal Reserve	Operating	U.S. Treas. due 11/30/21	6,500,000	6,726,486			
Frost Bank	Federal Reserve	Operating	GNMA due 9/15/2024	470,101	501,583			
Frost Bank	Federal Reserve	Operating	GNMA due 9/15/2024	862,621	920,391			
Frost Bank	Federal Reserve	Operating	GNMA due 9/15/2024	1,450,017	1,547,124			
Frost Bank	Federal Reserve	Operating	GNMA due 9/15/2024	528,102	563,468			
				<u>\$ 13,693,840</u>	<u>\$ 14,266,852</u>	<u>\$ 250,000</u>	<u>\$ 3,388,297</u>	<u>\$ 11,128,555</u>



**Town of Addison**



**For the Quarter Ended**  
**September 30, 2016**

**Report Name**

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- Certification Page
- Executive Summary
- Benchmark Comparison
- Detail of Security Holdings
- Change in Value
- Earned Income
- Investment Transactions
- Amortization and Accretion
- Projected Fixed Income Cash Flows

**MARKET RECAP - SEPTEMBER 2016:**

Investors spent much of September with one eye on the data and the other on the Fed as speculation over whether the Fed would or would not raise rates at its September 21st FOMC meeting reached a fever pitch. A heavy slate of Fed speakers espousing hawkish rhetoric fanned the rate hike flames mid-month, but markets weren't buying what they were selling as economic data generally proved weaker than forecast. The August employment report was the first in a string of underwhelming data as the economy added just +151k new jobs, short of the +180k median forecast. While some will view the August result as mediocre, it comes on the heels of a +275k revised gain in July and +271k in June, so some pullback should have been expected. The three month average is a healthy +232k and the August gain was sufficient to keep the unemployment rate steady at 4.9% for a third straight month. The national purchasing managers surveys were more concerning as the ISM manufacturing index unexpectedly plunged from 52.6 to 49.4, indicating contraction in the factory sector. The ISM non-manufacturing index dropped 4.1 points to 51.4. That was the lowest in six years and according to the ISM is consistent with GDP growth of just 1%. The combined economy-weighted index stands at a 6½-year low of 51.2. Although these surveys are considered "soft data," they are important indicators of the general health of the economy and they are heading in the *wrong direction*. A fact which makes the hawkish Fed-speak all the more puzzling.

The weak ISM survey data was corroborated by other indicators during the first half of September. Retail sales fell -0.3% in August with broad based weakness as 8 of 13 categories declined. Auto sales were a particular disappointment, dropping -0.9% during the month. The retail sales control group (used in GDP calculations) fell -0.1% in August, much weaker than the expected +0.4%. Adding to the gloom was a -0.4% decline in industrial production during August, which completely wiped out July's +0.4% gain. According to a Morgan Stanley report, since July 2014 manufacturing output has shown cumulative growth of just +0.1%.

Inflation firmed in August, but there is no cause for alarm just yet. The consumer price index rose +0.2%, led by the biggest monthly increase in healthcare costs in 25 years at +1.0%. Core CPI rose +0.3% in August, bringing the year-over-year rate to +2.3%. The Fed's preferred Core PCE inflation measure is running at +1.7% year-over-year, still short of the Fed's +2.0% target. Rounding out the major data for the month was the final revision to Q2 GDP which was bumped up to +1.4% from +1.0%. This is still a painfully slow rate of growth. Current estimates for Q3 hover just below +3.0%.

By the time the FOMC meeting rolled around on September 21st, markets had decided no hike was coming. The Fed concurred, saying the case for an increase had "strengthened" but the committee "decided, for the time being, to wait for further evidence of continued progress toward its objectives." So for all the hawkish talk early in the month, the FOMC concluded the data didn't support a hike just yet and they could afford to wait a while longer. Finally, in what has become a recurring theme, the latest "dot plot," which charts each member's interest rate outlook, was trimmed yet again. The median now calls for one 25 basis point hike before this year is out, two hikes in 2017, three more in 2018, and eventually a terminal rate of 3.00%. That would put the target rate in a range of 1.00% to 1.25% to end 2017. *Don't hold your breath.*

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**For the Quarter Ended**  
**September 30, 2016**

This report is prepared for the **Town of Addison** (the "Entity") in accordance with Chapter 2256 of the Texas Public Funds Investment Act ("PFIA"). Section 2256.023(a) of the PFIA states that: "Not less than quarterly, the investment officer shall prepare and submit to the governing body of the entity a written report of the investment transactions for all funds covered by this chapter for the preceding reporting period." This report is signed by the Entity's investment officers and includes the disclosures required in the PFIA. To the extent possible, market prices have been obtained from independent pricing sources.

The investment portfolio complied with the PFIA and the Entity's approved Investment Policy and Strategy throughout the period. All investment transactions made in the portfolio during this period were made on behalf of the Entity and were made in full compliance with the PFIA and the approved Investment Policy.

**Officer Names and Titles:**

*Olivia E Riley*

Name: Olivia Espinoza-Riley, CPA

Title: Interim Chief Financial Officer

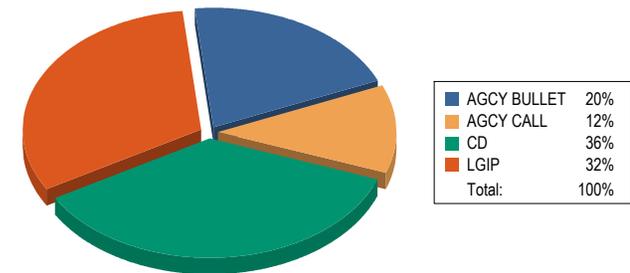
**Account Summary**

**Allocation by Security Type**

Beginning Values as of 06/30/16

Ending Values as of 09/30/16

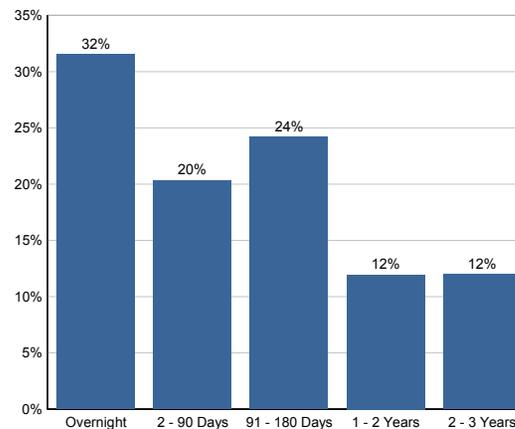
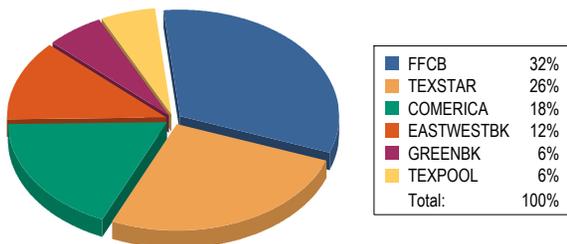
Par Value	87,971,748.76	83,637,337.13
Market Value	87,977,769.76	83,642,224.13
Book Value	87,952,619.32	83,624,137.68
Unrealized Gain/(Loss)	25,150.44	18,086.45
<b>Market Value %</b>	<b>100.03%</b>	<b>100.02%</b>
Weighted Avg. YTW	0.703%	0.601%
Weighted Avg. YTM	0.703%	0.601%



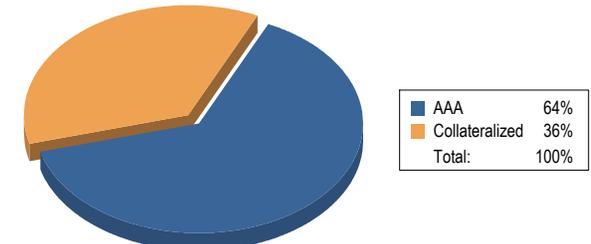
**Allocation by Issuer**

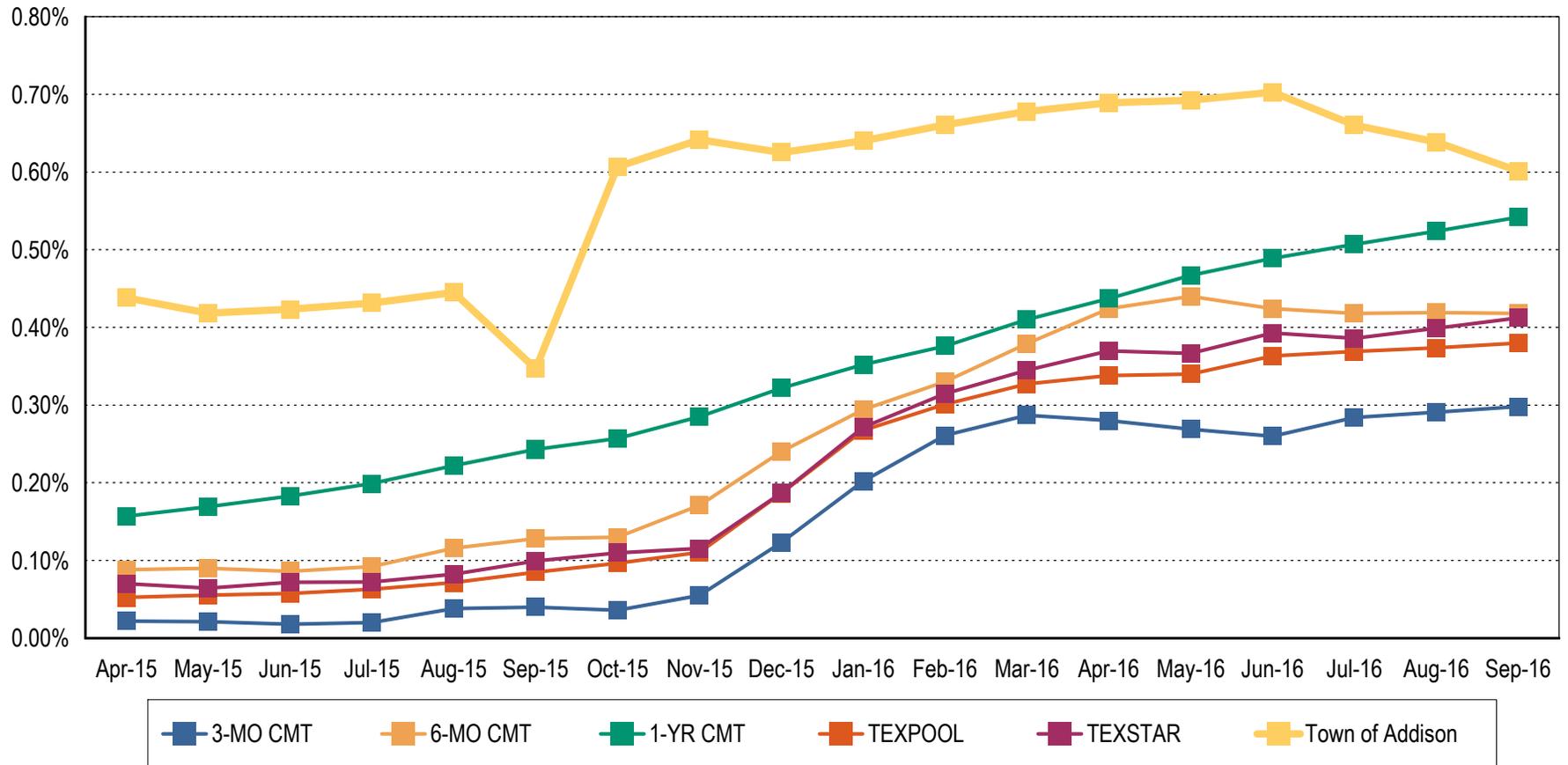
**Maturity Distribution %**

**Credit Quality**



**Weighted Average Days to Maturity: 227**





**Note 1:** CMT stands for Constant Maturity Treasury. This data is published in Federal Reserve Statistical Release H.15 and represents an average of all actively traded Treasury securities having that time remaining until maturity. This is a standard industry benchmark for Treasury securities. The CMT benchmarks are moving averages. The 3-month CMT is the daily average for the previous 3 months, the 6-month CMT is the daily average for the previous 6 months, and the 1-year and 2-year CMT's are the daily averages for the previous 12-months.

**Note 2:** Benchmark data for TexPool is the monthly average yield.

**Note 3:** Benchmark data for TexSTAR is the monthly average yield.

CUSIP	Settle Date	Sec. Type	Sec. Description	CPN	Mty Date	Next Call	Call Type	Par Value	Purch Price	Orig Cost	Book Value	Mkt Price	Market Value	Days to Mty	Days to Call	YTM	YTW
<b>Pooled Funds</b>																	
TEXPOOL		LGIP	TexPool					4,624,407.71	100.000	4,624,407.71	4,624,407.71	100.000	4,624,407.71	1		0.380	0.380
TEXSTAR		LGIP	TexSTAR					21,767,595.46	100.000	21,767,595.46	21,767,595.46	100.000	21,767,595.46	1		0.412	0.412
3133EFMW4	11/03/15	AGCY BULET	FFCB	0.400	11/03/16			10,000,000.00	99.974	9,997,354.00	9,999,764.50	100.012	10,001,160.00	34		0.427	0.427
3133EEFA3	12/23/14	AGCY BULET	FFCB	0.720	12/15/16			7,000,000.00	99.901	6,993,070.00	6,999,275.85	100.082	7,005,747.00	76		0.771	0.771
CD-7917	03/02/15	CD	Comerica Bk CD	0.800	03/02/17			5,060,544.10	100.000	5,060,544.10	5,060,544.10	100.000	5,060,544.10	153		0.800	0.800
CD-8583-1	03/02/16	CD	East West Bk CD	0.445	03/02/17			5,032,895.90	100.000	5,032,895.90	5,032,895.90	100.000	5,032,895.90	153		0.445	0.445
CD-7123-1	09/06/16	CD-IAM	Comerica Bk CD	0.370	03/06/17			10,143,428.01	100.000	10,143,428.01	10,143,428.01	100.000	10,143,428.01	157		0.370	0.370
3133EFJM0	10/30/15	AGCY CALL	FFCB	0.930	04/13/18	Anytime	CONT	10,000,000.00	99.805	9,980,500.00	9,987,760.20	99.980	9,997,980.00	560	5	1.011	1.011
CD-3820-2	01/30/16	CD	Green Bk CD	1.000	01/29/19			5,000,000.00	100.000	5,000,000.00	5,000,000.00	100.000	5,000,000.00	851		1.000	1.000
CD-8603	07/28/16	CD	East West Bk CD	0.950	07/28/19			5,008,465.95	100.000	5,008,465.95	5,008,465.95	100.000	5,008,465.95	1,031		0.950	0.950
<b>Total for Pooled Funds</b>								<b>83,637,337.13</b>	<b>99.965</b>	<b>83,608,261.13</b>	<b>83,624,137.68</b>	<b>100.006</b>	<b>83,642,224.13</b>	<b>228</b>		<b>0.601</b>	<b>0.601</b>
<b>Total for Town of Addison</b>								<b>83,637,337.13</b>	<b>99.965</b>	<b>83,608,261.13</b>	<b>83,624,137.68</b>	<b>100.006</b>	<b>83,642,224.13</b>	<b>228</b>		<b>0.601</b>	<b>0.601</b>

CUSIP	Security Type	Security Description	06/30/16 Book Value	Cost of Purchases	Maturities / Calls / Sales	Amortization / Accretion	Realized Gain/(Loss)	09/30/16 Book Value	06/30/16 Market Value	09/30/16 Market Value	Change in Mkt Value
<b>Pooled Funds</b>											
TEXPOOL	LGIP	TexPool	4,620,049.57	4,358.14	0.00	0.00	0.00	4,624,407.71	4,620,049.57	4,624,407.71	4,358.14
TEXSTAR	LGIP	TexSTAR	13,149,110.15	9,614,447.13	(995,961.82)	0.00	0.00	21,767,595.46	13,149,110.15	21,767,595.46	8,618,485.31
46640PGR8	CP - DISC	J.P.Morgan Sec 0.000 07/25/16	3,998,266.68	0.00	(4,000,000.00)	1,733.32	0.00	0.00	3,998,876.00	0.00	(3,998,876.00)
3133EEQG8	AGCY BULET	FFCB 0.550 08/17/16	4,000,101.00	0.00	(4,000,000.00)	(101.00)	0.00	0.00	4,000,836.00	0.00	(4,000,836.00)
CD-7123	CD	Comerica Bk CD 0.710 09/06/16	10,124,953.73	11,984.74	(10,136,938.47)	0.00	0.00	0.00	10,124,953.73	0.00	(10,124,953.73)
3133EFMW4	AGCY BULET	FFCB 0.400 11/03/16	9,999,102.30	0.00	0.00	662.20	0.00	9,999,764.50	9,997,580.00	10,001,160.00	3,580.00
3133EEFA3	AGCY BULET	FFCB 0.720 12/15/16	6,998,395.18	0.00	0.00	880.67	0.00	6,999,275.85	7,007,399.00	7,005,747.00	(1,652.00)
CD-7917	CD	Comerica Bk CD 0.800 03/02/17	5,050,381.34	10,162.76	0.00	0.00	0.00	5,060,544.10	5,050,381.34	5,060,544.10	10,162.76
CD-8583-1	CD	East West Bk CD 0.445 03/02/17	5,027,253.97	5,641.93	0.00	0.00	0.00	5,032,895.90	5,027,253.97	5,032,895.90	5,641.93
CD-7123-1	CD-IAM	Comerica Bk CD 0.370 03/06/17	0.00	10,143,428.01	0.00	0.00	0.00	10,143,428.01	0.00	10,143,428.01	10,143,428.01
3133EFJM0	AGCY CALL	FFCB 0.930 04/13/18	9,985,784.20	0.00	0.00	1,976.00	0.00	9,987,760.20	10,000,270.00	9,997,980.00	(2,290.00)
3134G7P54	AGCY CALL	FHLMC 1.200 10/29/18	9,999,221.20	0.00	(10,000,000.00)	778.80	0.00	0.00	10,001,060.00	0.00	(10,001,060.00)
CD-3820-2	CD	Green Bk CD 1.000 01/29/19	5,000,000.00	0.00	0.00	0.00	0.00	5,000,000.00	5,000,000.00	5,000,000.00	0.00
CD-8603	CD	East West Bk CD 0.950 07/28/19	0.00	5,008,465.95	0.00	0.00	0.00	5,008,465.95	0.00	5,008,465.95	5,008,465.95
<b>Total for Pooled Funds</b>			<b>87,952,619.32</b>	<b>24,798,488.66</b>	<b>(29,132,900.29)</b>	<b>5,929.99</b>	<b>0.00</b>	<b>83,624,137.68</b>	<b>87,977,769.76</b>	<b>83,642,224.13</b>	<b>(4,335,545.63)</b>
<b>Total for Town of Addison</b>			<b>87,952,619.32</b>	<b>24,798,488.66</b>	<b>(29,132,900.29)</b>	<b>5,929.99</b>	<b>0.00</b>	<b>83,624,137.68</b>	<b>87,977,769.76</b>	<b>83,642,224.13</b>	<b>(4,335,545.63)</b>

CUSIP	Security Type	Security Description	Beg. Accrued	Interest Earned	Interest Rec'd / Sold / Matured	Interest Purchased	Ending Accrued	Disc Accr / Prem Amort	Net Income
<b>Pooled Funds</b>									
TEXPOOL	LGIP	TexPool	0.00	4,358.14	4,358.14	0.00	0.00	0.00	4,358.14
TEXSTAR	LGIP	TexSTAR	0.00	18,485.31	18,485.31	0.00	0.00	0.00	18,485.31
46640PGR8	CP - DISC	J.P.Morgan Sec 0.000 07/25/16	0.00	0.00	0.00	0.00	0.00	1,733.32	1,733.32
3133EEQG8	AGCY BULET	FFCB 0.550 08/17/16	8,188.89	2,811.11	11,000.00	0.00	0.00	(101.00)	2,710.11
CD-7123	CD	Comerica Bk CD 0.710 09/06/16	4,997.91	13,476.37	18,474.28	0.00	0.00	0.00	13,476.37
3133EFMW4	AGCY BULET	FFCB 0.400 11/03/16	6,444.44	10,000.00	0.00	0.00	16,444.44	662.20	10,662.20
3133EEFA3	AGCY BULET	FFCB 0.720 12/15/16	2,240.00	12,600.00	0.00	0.00	14,840.00	880.67	13,480.67
CD-7917	CD	Comerica Bk CD 0.800 03/02/17	3,210.11	10,169.22	10,162.76	0.00	3,216.57	0.00	10,169.22
CD-8583-1	CD	East West Bk CD 0.445 03/02/17	61.29	5,642.00	5,641.93	0.00	61.36	0.00	5,642.00
CD-7123-1	CD-IAM	Comerica Bk CD 0.370 03/06/17	0.00	2,570.59	0.00	0.00	2,570.59	0.00	2,570.59
3133EFJM0	AGCY CALL	FFCB 0.930 04/13/18	20,150.00	23,250.00	0.00	0.00	43,400.00	1,976.00	25,226.00
3134G7P54	AGCY CALL	FHLMC 1.200 10/29/18	20,666.67	9,333.33	30,000.00	0.00	0.00	778.80	10,112.13
CD-3820-2	CD	Green Bk CD 1.000 01/29/19	8,630.14	12,465.74	12,328.76	0.00	8,767.12	0.00	12,465.74
CD-8603	CD	East West Bk CD 0.950 07/28/19	0.00	8,596.31	8,465.95	0.00	130.36	0.00	8,596.31
<b>Total for Pooled Funds</b>			<b>74,589.45</b>	<b>133,758.12</b>	<b>118,917.13</b>	<b>0.00</b>	<b>89,430.44</b>	<b>5,929.99</b>	<b>139,688.11</b>
<b>Total for Town of Addison</b>			<b>74,589.45</b>	<b>133,758.12</b>	<b>118,917.13</b>	<b>0.00</b>	<b>89,430.44</b>	<b>5,929.99</b>	<b>139,688.11</b>

Trade Date	Settle Date	CUSIP	Security Type	Security Description	Coupon	Mty Date	Call Date	Par Value	Price	Principal Amount	Int Purchased / Received	Total Amount	Realized Gain / Loss	YTM	YTW
<b>Pooled Funds</b>															
<b>Calls</b>															
07/26/16	07/29/16	3134G7P54	AGCY CALL	FHLMC	1.200	10/29/18	07/29/16	10,000,000.00	100.000	10,000,000.00	30,000.00	10,030,000.00		1.203	
<b>Total for: Calls</b>								<b>10,000,000.00</b>		<b>10,000,000.00</b>	<b>30,000.00</b>	<b>10,030,000.00</b>		<b>1.203</b>	
<b>Maturities</b>															
07/25/16	07/25/16	46640PGR8	CP - DISC	J.P.Morgan Sec		07/25/16		4,000,000.00	100.000	4,000,000.00	0.00	4,000,000.00		0.653	
08/17/16	08/17/16	3133EEQG8	AGCY BULET	FFCB	0.550	08/17/16		4,000,000.00	100.000	4,000,000.00	0.00	4,000,000.00		0.530	
09/06/16	09/06/16	CD-7123	CD	Comerica Bk CD	0.710	09/06/16		10,136,938.47	100.000	10,136,938.47	0.00	10,136,938.47		0.710	
<b>Total for: Maturities</b>								<b>18,136,938.47</b>		<b>18,136,938.47</b>	<b>0.00</b>	<b>18,136,938.47</b>		<b>0.658</b>	
<b>Purchases</b>															
07/28/16	07/28/16	CD-8603	CD	East West Bk CD	0.950	07/28/19		5,000,000.00	100.000	5,000,000.00	0.00	5,000,000.00		0.950	0.950
09/06/16	09/06/16	CD-7123-1	CD-IAM	Comerica Bk CD	0.370	03/06/17		10,143,428.01	100.000	10,143,428.01	0.00	10,143,428.01		0.370	0.370
<b>Total for: Purchases</b>								<b>15,143,428.01</b>		<b>15,143,428.01</b>	<b>0.00</b>	<b>15,143,428.01</b>		<b>0.562</b>	<b>0.562</b>
<b>Income Payments</b>															
07/02/16	07/02/16	CD-7917	CD	Comerica Bk CD	0.800	03/02/17				0.00	3,311.72	3,311.72			
07/04/16	07/06/16	CD-7123	CD	Comerica Bk CD	0.710	09/06/16				0.00	5,892.39	5,892.39			
07/29/16	07/29/16	CD-3820-2	CD	Green Bk CD	1.000	01/29/19				0.00	12,328.76	12,328.76			
08/02/16	08/02/16	CD-7917	CD	Comerica Bk CD	0.800	03/02/17				0.00	3,424.36	3,424.36			
08/04/16	08/06/16	CD-7123	CD	Comerica Bk CD	0.710	09/06/16				0.00	6,092.35	6,092.35			
08/17/16	08/17/16	3133EEQG8	AGCY BULET	FFCB	0.550	08/17/16				0.00	11,000.00	11,000.00			
09/02/16	09/02/16	CD-7917	CD	Comerica Bk CD	0.800	03/02/17				0.00	3,426.68	3,426.68			
09/04/16	09/06/16	CD-7123	CD	Comerica Bk CD	0.710	09/06/16				0.00	6,096.01	6,096.01			
09/06/16	09/06/16	CD-7123	CD	Comerica Bk CD	0.710	09/06/16				0.00	393.53	393.53			
09/30/16	09/30/16	CD-8603	CD	East West Bk CD	0.950	07/28/19				0.00	8,465.95	8,465.95			
09/30/16	09/30/16	CD-8583-1	CD	East West Bk CD	0.445	03/02/17				0.00	5,641.93	5,641.93			
<b>Total for: Income Payments</b>										<b>0.00</b>	<b>66,073.68</b>	<b>66,073.68</b>			

Trade Date	Settle Date	CUSIP	Security Type	Security Description	Coupon	Mty Date	Call Date	Par Value	Price	Principal Amount	Int Purchased / Received	Total Amount	Realized Gain / Loss	YTM	YTW
<b>Pooled Funds</b>															
<b>Capitalized Interest</b>															
07/02/16	07/02/16	CD-7917	CD	Comerica Bk CD	0.800	03/02/17		3,311.72	100.000	3,311.72	0.00	3,311.72			
07/06/16	07/06/16	CD-7123	CD	Comerica Bk CD	0.710	09/06/16		5,892.39	100.000	5,892.39	0.00	5,892.39			
08/02/16	08/02/16	CD-7917	CD	Comerica Bk CD	0.800	03/02/17		3,424.36	100.000	3,424.36	0.00	3,424.36			
08/06/16	08/06/16	CD-7123	CD	Comerica Bk CD	0.710	09/06/16		6,092.35	100.000	6,092.35	0.00	6,092.35			
09/02/16	09/02/16	CD-7917	CD	Comerica Bk CD	0.800	03/02/17		3,426.68	100.000	3,426.68	0.00	3,426.68			
09/30/16	09/30/16	CD-8603	CD	East West Bk CD	0.950	07/28/19		8,465.95	100.000	8,465.95	0.00	8,465.95			
09/30/16	09/30/16	CD-8583-1	CD	East West Bk CD	0.445	03/02/17		5,641.93	100.000	5,641.93	0.00	5,641.93			
<b>Total for: Capitalized Interest</b>								<b>36,255.38</b>		<b>36,255.38</b>	<b>0.00</b>	<b>36,255.38</b>			

Trade Date	Settle Date	CUSIP	Security Type	Security Description	Coupon	Mty Date	Call Date	Par Value	Price	Principal Amount	Int Purchased / Received	Total Amount	Realized Gain / Loss	YTM	YTW
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**Total for All Portfolios**

Transaction Type	Quantity	Total Amount	Realized G/L	YTM	YTW
Total Calls	10,000,000.00	10,030,000.00		1.203	
Total Maturities	18,136,938.47	18,136,938.47		0.658	
Total Purchases	15,143,428.01	15,143,428.01		0.562	0.562
Total Income Payments	0.00	66,073.68			
Total Capitalized Interest	36,255.38	36,255.38			

CUSIP	Settle Date	Security Type	Security Description	Next Call Date	Purchase Qty	Orig Price	Original Cost	Amrt/Accr for Period	Total Amrt/Accr Since Purch	Remaining Disc / Prem	Book Value
<b>Pooled Funds</b>											
46640PGR8	10/30/15	CP - DISC	J.P.Morgan Sec 0.000 07/25/16		0.00	99.514	0.00	1,733.32	0.00	0.00	0.00
3133EEQG8	02/27/15	AGCY BULET	FFCB 0.550 08/17/16		0.00	100.029	0.00	(101.00)	0.00	0.00	0.00
CD-7123	09/04/14	CD	Comerica Bk CD 0.710 09/06/16		0.00	100.000	0.00	0.00	0.00	0.00	0.00
3133EFMW4	11/03/15	AGCY BULET	FFCB 0.400 11/03/16		10,000,000.00	99.974	9,997,354.00	662.20	2,410.50	235.50	9,999,764.50
3133EEFA3	12/23/14	AGCY BULET	FFCB 0.720 12/15/16		7,000,000.00	99.901	6,993,070.00	880.67	6,205.85	724.15	6,999,275.85
CD-7917	03/02/15	CD	Comerica Bk CD 0.800 03/02/17		5,060,544.10	100.000	5,060,544.10	0.00	0.00	0.00	5,060,544.10
CD-8583-1	03/02/16	CD	East West Bk CD 0.445 03/02/17		5,032,895.90	100.000	5,032,895.90	0.00	0.00	0.00	5,032,895.90
CD-7123-1	09/06/16	CD-IAM	Comerica Bk CD 0.370 03/06/17		10,143,428.01	100.000	10,143,428.01	0.00	0.00	0.00	10,143,428.01
3133EFJM0	10/30/15	AGCY CALL	FFCB 0.930 04/13/18		10,000,000.00	99.805	9,980,500.00	1,976.00	7,260.20	12,239.80	9,987,760.20
3134G7P54	10/30/15	AGCY CALL	FHLMC 1.200 10/29/18	07/29/16	0.00	99.990	0.00	778.80	0.00	0.00	0.00
CD-3820-2	01/30/16	CD	Green Bk CD 1.000 01/29/19		5,000,000.00	100.000	5,000,000.00	0.00	0.00	0.00	5,000,000.00
CD-8603	07/28/16	CD	East West Bk CD 0.950 07/28/19		5,008,465.95	100.000	5,008,465.95	0.00	0.00	0.00	5,008,465.95
<b>Total for Pooled Funds</b>					<b>57,245,333.96</b>		<b>57,216,257.96</b>	<b>5,929.99</b>	<b>15,876.55</b>	<b>13,199.45</b>	<b>57,232,134.51</b>
<b>Total for Town of Addison</b>					<b>57,245,333.96</b>		<b>57,216,257.96</b>	<b>5,929.99</b>	<b>15,876.55</b>	<b>13,199.45</b>	<b>57,232,134.51</b>

CUSIP	Security Type	Security Description	Pay Date	Interest	Principal	Total Amount
<b>Pooled Funds</b>						
CD-7917	CD	Comerica Bk CD 0.800 03/02/17	10/02/16	3,373.69	0.00	3,373.69
3133EFJM0	AGCY CALL	FFCB 0.930 04/13/18	10/13/16	46,500.00	0.00	46,500.00
CD-3820-2	CD	Green Bk CD 1.000 01/29/19	10/29/16	12,500.00	0.00	12,500.00
CD-7917	CD	Comerica Bk CD 0.800 03/02/17	11/02/16	3,373.69	0.00	3,373.69
3133EFMW4	AGCY BULET	FFCB 0.400 11/03/16	11/03/16	20,000.00	10,000,000.00	10,020,000.00
CD-7917	CD	Comerica Bk CD 0.800 03/02/17	12/02/16	3,373.69	0.00	3,373.69
3133EEFA3	AGCY BULET	FFCB 0.720 12/15/16	12/15/16	25,200.00	7,000,000.00	7,025,200.00
CD-8583-1	CD	East West Bk CD 0.445 03/02/17	12/31/16	5,599.09	0.00	5,599.09
CD-8603	CD	East West Bk CD 0.950 07/28/19	12/31/16	11,895.10	0.00	11,895.10
CD-7917	CD	Comerica Bk CD 0.800 03/02/17	01/02/17	3,373.69	0.00	3,373.69
CD-3820-2	CD	Green Bk CD 1.000 01/29/19	01/29/17	12,500.00	0.00	12,500.00
CD-7917	CD	Comerica Bk CD 0.800 03/02/17	02/02/17	3,373.69	0.00	3,373.69
CD-7917	CD	Comerica Bk CD 0.800 03/02/17	03/02/17	3,373.69	5,060,544.10	5,063,917.79
CD-8583-1	CD	East West Bk CD 0.445 03/02/17	03/02/17	3,742.95	5,032,895.90	5,036,638.85
CD-7123-1	CD-IAM	Comerica Bk CD 0.370 03/06/17	03/06/17	18,611.10	10,143,428.01	10,162,039.11
<b>Total for Pooled Funds</b>				<b>176,790.38</b>	<b>37,236,868.01</b>	<b>37,413,658.39</b>

CUSIP	Security Type	Security Description	Pay Date	Interest	Principal	Total Amount
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**Total for All Portfolios**

	October 2016	62,373.69	0.00	62,373.69		
	November 2016	23,373.69	10,000,000.00	10,023,373.69		
	December 2016	46,067.88	7,000,000.00	7,046,067.88		
	January 2017	15,873.69	0.00	15,873.69		
	February 2017	3,373.69	0.00	3,373.69		
	March 2017	25,727.74	20,236,868.01	20,262,595.75		
<b>Total Projected Cash Flows for Town of Addison</b>				<b>176,790.38</b>	<b>37,236,868.01</b>	<b>37,413,658.39</b>

AI-1971

25.

**Work Session and Regular Meeting**

**Meeting Date:** 12/13/2016

**Department:** Human Resources

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**AGENDA CAPTION:**

Present, Discuss, And Consider Action On An **Ordinance Providing For Increased Prior And Current Service Annuities Under The Act Governing The Texas Municipal Retirement System For Retiree And Beneficiaries Of Deceased Retirees Of The Town Of Addison (COLA).**

**BACKGROUND:**

Based on the adopted Fiscal Year 2017 budget, staff is bringing the attached ordinance to Council for action that would provide a cost of living adjustment in 2017 for Town retirees.

**RECOMMENDATION:**

Administration recommends approval.

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**Attachments**

TMRS Ordinance

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**TEXAS MUNICIPAL RETIREMENT SYSTEM**

**AN ORDINANCE PROVIDING FOR INCREASED PRIOR AND CURRENT SERVICE ANNUITIES UNDER THE ACT GOVERNING THE TEXAS MUNICIPAL RETIREMENT SYSTEM FOR RETIREES AND BENEFICIARIES OF DECEASED RETIREES OF THE CITY OF ADDISON, AND ESTABLISHING AN EFFECTIVE DATE FOR THE ORDINANCE.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ADDISON, TEXAS:**

**Increase in Retirement Annuities.**

(a) On the terms and conditions set out in Section 854.203 of Subtitle G of Title 8, Government Code, as amended (hereinafter referred to as the "TMRS Act"), the City hereby elects to allow and to provide for payment of the increases below stated in monthly benefits payable by the System to retired employees and to beneficiaries of deceased employees of the City under current service annuities and prior service annuities arising from service by such employees to the City. An annuity increased under this section replaces any annuity or increased annuity previously granted to the same person.

(b) The amount of the annuity increase under this section is computed as the sum of the prior service and current service annuities on the effective date of retirement of the person on whose service the annuities are based, multiplied by **70%** of the percentage change in Consumer Price Index for All Urban Consumers, from December of the year immediately preceding the effective date of the person's retirement to the December that is 13 months before the effective date of the increase under this Section.

(c) An increase in an annuity that was reduced because of an option selection is reducible in the same proportion and in the same manner that the original annuity was reduced.

(d) If a computation hereunder does not result in an increase in the amount of an annuity, the amount of the annuity will not be changed hereunder.

(e) The amount by which an increase under this Section exceeds all previously granted increases to an annuitant is an obligation of the City and of its account in the Benefit Accumulation Fund of the System.

**Effective Date.** Subject to approval by the Board of Trustees of the System, this ordinance shall be and become effective on the 1st day of January 2017.

Passed and approved this the \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**ATTEST:**

**APPROVED:**

\_\_\_\_\_  
Laura Bell, City Secretary

\_\_\_\_\_  
Todd Meier, Mayor

\_\_\_\_\_  
Brenda N. McDonald, City Attorney

**Work Session and Regular Meeting****Meeting Date:** 12/13/2016**Department:** City Manager

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**AGENDA CAPTION:**

Present, Discuss And Consider Action On A Resolution **Adopting A Revised Housing Policy For The Town of Addison.**

**BACKGROUND:**

The City Council has held a series of discussions regarding the Town's current housing policy. At the September 29, 2016, city Council Meeting, staff was instructed to prepare a Resolution that revised the policy in two ways:

First, Council requested that "Where feasible and appropriate: be added to the first section of the policy, so that it would read:

Where feasible and appropriate, new housing should increase the proportion of fee-simple ownership in Addison's housing mix. Apartment-only rezoning is unlikely to be approved, as currently the ratio of rental to ownership properties is higher than desired.

Second, Council requested that a fifth section be added that would allow for exceptions to the policy. This new section would read as follows:

The City Council acknowledges that there may exceptional projects tht do not comply with elements of this policy. The Council encourages developers and start to pursue projects that represent the highest and best use of each property and that advance portions of this policy or other Town goals.

This language recognizes that there may be projects that warrant special consideration, defines staff's role in bringing such projects forward and broadly states the criteria for considering exceptions to the policy.

The other components of the policy were left unchanged.

The full policy can be found in the attached resolution.

**RECOMMENDATION:**

Administration recommends approval.

Resolution

Housing Policy - Red Line Version

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**TOWN OF ADDISON, TEXAS**

**RESOLUTION NO. R016-\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE TOWN OF ADDISON, TX APPROVING AND SUPPORTING A HOUSING POLICY WITHIN THE TOWN OF ADDISON PURSUANT TO THE LAWS OF THE STATE OF TEXAS AND THE ADDISON CODE OF ORDINANCES; PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, the City Council has researched the current housing stock and discussed and deliberated a wide range of housing alternatives for the Town of Addison, Texas; and

**WHEREAS**, the City Council desires to make a policy statement to guide City Staff and potential developers as new housing developments are proposed and brought forward for City Council consideration.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:**

Section 1. Addison Housing Policy. When new housing is proposed in Addison, the Addison City Council encourages it to be developed according to the following principles:

1. Where feasible and appropriate, new housing should increase the proportion of fee-simple ownership in Addison's housing mix. Apartment-only rezoning is unlikely to be approved, as currently the ratio of rental to ownership properties is higher than desired.
2. A proposal should offer a 'best fit' mix of uses and housing choices within the context of the surrounding Addison community. The Town may use a study area committee (with staff, elected, and appointed members such as area residents and business representatives) to evaluate a proposal's fit in Addison.
3. New housing should create or enhance neighborhoods of urban character rather than locate on a stand-alone, nonintegrated property and should continue the high quality design and walkability that make Addison's existing neighborhoods distinctive,
4. Proposals for independent and/or assisted living may be considered by the Town of Addison. Since there are no assisted living housing units in Addison today, the Town will conduct research to understand how this housing could or should be included in Addison's future.
5. The City Council acknowledges that there may be exceptional projects that do not comply with elements of this policy. The Council encourages developers and staff to pursue projects that represent the highest and best use of each property and that advance portions of this policy or other Town goals.

Section 2. Recitals. The above and forgoing recitals are true and correct and are incorporate herein and made part hereof for all purposes.

Section 3. Effective Date. This Resolution shall take effect upon its passage and approval.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 13<sup>th</sup> day of December, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

**TOWN OF ADDISON, TEXAS**

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2. A proposal should offer a 'best fit' mix of uses and housing choices within the context of the surrounding Addison community. The Town may use a study area committee (with staff, elected, and appointed members such as area residents and business representatives) to evaluate a proposal's fit in Addison.
3. New housing should create or enhance neighborhoods of urban character rather than locate on a stand-alone, nonintegrated property and should continue the high quality design and walkability that make Addison's existing neighborhoods distinctive,
4. Proposals for independent and/or assisted living may be considered by the Town of Addison. Since there are no assisted living housing units in Addison today, the Town will conduct research to understand how this housing could or should be included in Addison's future.
5. The City Council acknowledges that there may be exceptional projects that do not comply with elements of this policy. The Council encourages developers and staff to pursue projects that represent the highest and best use of each property and that advance portions of this policy or other Town goals.

Section 2. Recitals. The above and forgoing recitals are true and correct and are incorporate herein and made part hereof for all purposes.

Section 3. Effective Date. This Resolution shall take effect upon its passage and approval.

**PASSED AND APPROVED** by the City Council of the Town of Addison, Texas this the 11<sup>th</sup> day of October, 2016.

\_\_\_\_\_  
Todd Meier, Mayor

ATTEST:

By: \_\_\_\_\_  
Laura Bell, City Secretary

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Brenda N. McDonald, City Attorney

**Work Session and Regular Meeting****Meeting Date:** 12/13/2016**Department:** City Manager**AGENDA CAPTION:**

Discussion And Possible Action Regarding The **Role Of The City Council In The Consideration And/Or Approval Of Severance Agreements Between The Town Of Addison And Town Employees.**

**BACKGROUND:**

Mayor Todd Meier requested that the Addison City Council have a discussion about the Town's policy related to employee severance agreements.

The City Council appoints four employees:

- City Attorney
- City Manager
- City Secretary
- Municipal Court Judge

Severance arrangements with these appointed officials are typically the purview of the City Council.

General employees of the Town are under the supervision and authority of the City Manager as outlined in the Town Charter. Accordingly, severance arrangements with general employees are typically handled by the City Manager.

Mayor Meier would like to discuss what the City Council's role should be related to consideration and/or approval of severance agreements for employees.

**RECOMMENDATION:**

Provide policy direction to staff.