



AGENDA

City of Lucas
City Council Regular Meeting
February 18, 2016
7:00 PM
City Hall – Council Chambers
665 Country Club Road – Lucas, Texas

Notice is hereby given that a City of Lucas Regular City Council Meeting will be held on Thursday, February 18, 2016 at 7:00 pm at Lucas City Hall, 665 Country Club Road, Lucas, Texas, 75002-7651 at which time the following agenda will be discussed. As authorized by Section 551.071 of the Texas Government Code, the City Council may convene into closed Executive Session for the purpose of seeking confidential legal advice from the City Attorney on any item on the agenda at any time during the meeting.

Call to Order

- Roll Call
- Determination of Quorum
- Reminder to turn off or silence cell phones
- Pledge of Allegiance

Citizen Input

The Citizens' Input portion of the agenda is an opportunity for the public to address the City Council on any subject. By completing a "Request to Speak" form and submitting it to the City Secretary, citizens have an opportunity to speak at the City Council meeting. However, in accordance with the Texas Open Meetings Act, the City Council cannot discuss issues raised or make any decisions but may refer items to City Staff for research and possible inclusion on a future agenda.

1. Citizen Input (Mayor Jim Olk)

Community Interest

Pursuant to Section 551.0415 of the Texas Government Code, the City Council may report on the following items 1) expression of thanks, congratulations or condolences; 2) information about holiday schedules; 3) recognition of individuals; 4) reminders about upcoming City Council events; 5) information about community events; and 6) announcements involving imminent threat to public health and safety.

2. Community Interest (Mayor Jim Olk)

Consent Agenda

All items listed under the consent agenda are considered routine and are recommend to the City Council for a single vote approval. If discussion is desired, an item may be removed from the consent agenda for a separate vote.

3. Consider approval of the minutes of the February 4, 2016 City Council meeting. (City Secretary Stacy Henderson)
4. Consider approval of the contract amendment to the Interlocal Agreement with Collin County for Law Enforcement Services from \$89,575 to \$90,208 and authorize the City Manager to execute agreement. (City Secretary Stacy Henderson)

Regular Agenda

5. Presentation and Discussion from Lovejoy High School students participating in the Lovejoy ISD Independent Studies Program: (Mayor Jim Olk)
 - Ben Omonira – Stocks
 - Noah Johnson – Writing a Novel
6. Consider adopting Ordinance 2016-02-00828 ordering a General Election to be held on May 7, 2016 for the purpose of electing two City Councilmembers for Seat No. 5 and Seat No. 6, designating location of a polling place, ordering Notice of Election and authorizing execution of a joint election agreement. (City Secretary Stacy Henderson)
7. Consider adopting Ordinance 2016-02-00830 ordering a Special Election to be held on May 7, 2016 for the purpose of submitting propositions to the qualified voters of the City of Lucas for the continuation of the one-quarter of one-percent sales and use tax to provide revenue for maintenance and repair of municipal streets; to abolish the one-quarter of one-percent sales and use tax dedicated to property tax relief and approving an additional one-quarter of one-percent sales and use tax to provide revenue for maintenance and repair of municipal streets. (City Secretary Stacy Henderson)
8. Discuss, consider, and provide direction to the City Manager regarding design criteria for the Blondy Jhune Road Bridge Replacement Project. (Public Works Director/City Engineer Stanton Foerster)
9. Discuss, consider, and provide direction to the City Manager regarding following Neighborhood Connector Street Project items: I. Design Criteria, II. Project Prioritization, and III. Financing Strategies. (Public Works Director/City Engineer Stanton Foerster)
10. Consider the following items regarding the Texas Emergency Services Retirement System (TESRS) due to the inability of the City of Lucas to terminate its participation in the volunteer pension plan.
 - a. Update from City Attorney Joe Gorfida, regarding telephone conference call with Michelle Jordan TESRS Executive Director, Jim Crawson TESRS Legal Counsel, Office of the Attorney General, Joni Clarke, City Manager and Cheryl Meehan, Human Resources Manager.
 - b. Appropriate funds from the unrestricted fund balance in the general fund in the amount of \$25,000 to finance the required payments to TESRS. (City Manager Joni Clarke, HR Manager Cheryl Meehan)

Executive Session

The City Council may convene in a closed Executive Session pursuant to Chapter 551.071 of the Texas Government Code.

11. Executive Session: An Executive Session is not scheduled for this meeting. (Mayor Jim **Olk**)
12. Adjournment.

Certification

I hereby certify that the above notice was posted in accordance with the Texas Open Meetings Act on the bulletin board at Lucas City Hall, 665 Country Club Road, Lucas, TX 75002 and on the City's website at www.lucastexas.us on or before 5:00 p.m. on February 12, 2016.

Stacy Henderson, City Secretary

In compliance with the American with Disabilities Act, the City of Lucas will provide for reasonable accommodations for persons attending public meetings at City Hall. Requests for accommodations or interpretive services should be directed to Stacy Henderson at 972.912.1211 or by email at shenderson@lucastexas.us at least 48 hours prior to the meeting.



City of Lucas

City Council Agenda Request

February 18, 2016

Item No. 01

Requester: Mayor Jim Olk

Agenda Item:

Citizen Input

Background Information:

NA

Attachments/Supporting Documentation:

NA

Budget/Financial Impact:

NA

Recommendation:

NA

Motion:

NA



City of Lucas Council Agenda Request February 18, 2016

Requester: Mayor Jim Olk

Agenda Item:

Community Interest: There are no items scheduled to discuss for Community Interest.

Background Information:

NA

Attachments/Supporting Documentation:

NA

Budget/Financial Impact:

NA

Recommendation:

NA

Motion:

NA



City of Lucas Council Agenda Request February 18, 2016

Item No. 03-04

Requester: City Secretary Stacy Henderson

Agenda Item:

Consent Agenda:

3. Consider approval of the minutes of the February 4, 2016 City Council meeting.
4. Consider approval of the contract amendment to the Interlocal Agreement with Collin County for Law Enforcement Services from \$89,575 to \$90,208 and authorize the City Manager to execute agreement.

Background Information:

Agenda Item No. 4:

Our current Interlocal Agreement for Law Enforcement Services is from 2013 to 2017 with a potential 10% increase annually for maintenance and operational costs. The cost for fiscal year 2014-2015 was \$89,575 and costs for the 2015-2016 fiscal year will be \$90,208. Funds have been budgeted for Law Enforcement Services in account 11-6999-326 for \$95,000.

Attachments/Supporting Documentation:

1. Minutes of the February 4, 2016 City Council meeting.
2. Contract for Law Enforcement Services and Contract Amendment for 2015-2016.

Budget/Financial Impact:

Funds budgeted in the amount of \$95,000 in Account 11-6999-326 for Law Enforcement services.

Recommendation:

Approve the Consent Agenda as presented.

Motion:

I make a motion to approve/deny the consent agenda as presented.



**City of Lucas
City Council Meeting
February 4, 2016
7:00 PM**

City Hall - 665 Country Club Road – Lucas Texas

Minutes

Call to Order

Mayor Olk called the meeting to order at 7:00 p.m.

Council Members Present:

Mayor Jim Olk
Mayor Pro Tem Kathleen Peele
Councilmember Debbie Fisher
Councilmember Steve Duke
Councilmember Tim Baney
Councilmember Wayne Millsap
Councilmember Philip Lawrence

Staff Present:

City Manager Joni Clarke
City Attorney Joe Gorfida
City Secretary Stacy Henderson
Development Services Director Joe Hilbourn
Public Works Director/City Engineer Stanton Foerster
Finance Director Liz Exum
Fire Chief Jim Kitchens
Human Resources Manager Cheryl Meehan

Mayor Olk determined that a quorum was present. Everyone was reminded to turn off or silence their cell phones and the City Council recited the Pledge of Allegiance.

Citizen Input

1. Citizen Input

There was no citizen participation.

Community Interest

2. Community Interest Items.

Councilmember Millsap noted that open positions were still available to serve on the Friends of the Lucas Fire-Rescue Board and the deadline to accept applications was being extended to February 19.

Mayor Olk announced that a Town Hall meeting would be held on February 7 at 2:00 p.m. to discuss updates to the Neighborhood Connector Street project.

Consent Agenda

3. Consider approval of the minutes of the December 17, 2015 City Council Workshop meeting.
4. Consider approval of the minutes of the January 7, 2016 City Council meeting.
5. Consider approval of the minutes of the January 23, 2016 City Council Strategic Planning session.
6. Consider adopting Ordinance 2016-02-00824 granting Atmos Energy Corporation, a Texas and Virginia corporation franchise to construct, maintain, and operate pipelines and equipment in the City of Lucas for the transportation, delivery, sale, and distribution of gas in, out of, and through said City for all purposes.

***MOTION:** A motion was made by Mayor Pro Tem Peele, seconded by Councilmember Fisher to approve the Consent Agenda as presented. The motion passed unanimously by a 7 to 0 vote.*

Public Hearing(s)

7. Consider adopting Ordinance 2016-02-00829 amending Section 14.03.113(c) of the Code of Ordinances by amending the minimum dwelling size of the floor area of any dwelling to be eighteen hundred square feet (1,800 sq. ft.), exclusive of garages, breezeways, and porches and that dwellings shall have a minimum eight five percent (85%) of the exterior walls of masonry construction, stucco, cultured stone exterior or combination of these materials.

Development Services Director Joe Hilbourn briefed the Council on the proposed Residential-1 (R-1) proposed changes and noted that the Planning and Zoning Commission recommended allowing 85 percent coverage of the exterior walls for masonry construction.

Mayor Olk opened the public hearing at 7:07 p.m. There being no one wishing to speak, the public hearing was closed.

Councilmember Baney noted that allowing various types of masonry was more appealing and having too much stone would make the homes look too identical in appearance.

The Council discussed the need for great masonry requirements due to the smaller one acre lots that were allowed within R-1 zoning districts.

***MOTION:** A motion was made by Mayor Pro Tem Peele, seconded by Councilmember Millsap to adopt Ordinance 2016-02-00829 amending Section 14.03.113(c) of the Code of Ordinances by amending the minimum dwelling size of the floor area of any dwelling to be eighteen hundred square feet (1,800 sq. ft.), exclusive of garages, breezeways, and porches and that dwellings shall have a minimum eight*

five percent (85%) of the exterior walls of masonry construction, stucco, cultured stone exterior or combination of these materials. The motion passed by a 6 to 1 vote with Councilmember Baney voting in opposition.

Regular Agenda

- 8. Consider approving Resolution 2016-02-00445 that encourages the Commissioner's Court to vote in opposition to House Bill 1150 that was approved during the 84th Legislative Session that creates three new periods during which fireworks may be sold.**

Fire Chief Jim Kitchens discussed H.B. 1150 that recently passed in the 84th legislature allowing for three additional periods in which fireworks could be sold. As part of the House Bill, final decisions have been left to each County as to final passage of the three additional selling periods. Chief Kitchens discussed the unsafe practice and fire hazards associated with fireworks.

***MOTION:** A motion was made by Mayor Olk, seconded by Councilmember Baney to approve Resolution 2016-02-00445 that encourages the Commissioner's Court to vote in opposition to creating three new periods during which fireworks may be sold. The motion passed unanimously by a 7 to 0 vote.*

- 9. Consider approval of the preliminary plat submitted by Randy Helmberger, on behalf of Pennington Partners, Ltd., to create a 39,823 square foot lot and leaving 19.243 acres unplatted for the property located on Angel Parkway, approximately 900 feet south of the intersection of Angel Parkway and McGarity Lane north of the Kwik Lube.**

Development Services Director Joe Hilbourn briefed the Council on the preliminary plat for the veterinary clinic. He stated that any boarding that occurs would be indoors and all kennels would be located inside the building as well.

***MOTION:** A motion was made by Councilmember Olk, seconded by Councilmember Lawrence to approve the preliminary plat by Randy Helmberger, on behalf of Pennington Partners, Ltd., to create a 39,823 square foot lot for the property located on Angel Parkway, approximately 900 feet south of the intersection of Angel Parkway and McGarity Lane north of the Kwik Lube. The motion passed unanimously by a 7 to 0 vote.*

- 10. Consider approval of a site plan request by Randy Helmberger, on behalf of Pennington Partners, Ltd., for a veterinary clinic, creating a 39,823 square foot lot, for a parcel of land located on Angel Parkway, approximately 900 feet south of the intersection of Angel Parkway and McGarity Lane north of the Kwik Lube.**

Development Services Director Joe Hilbourn briefed the Council stating the information regarding the site plan was the same as for the preliminary plat.

MOTION: *A motion was made by Mayor Olk, seconded by Councilmember Lawrence to approve the site plan request by Randy Helmsberger, on behalf of Pennington Partners, Ltd., for a veterinary clinic, creating a 39,823 square foot lot, for a parcel of land located on Angel Parkway, approximately 900 feet south of the intersection of Angel Parkway and McGarity Lane north of the Kwik Lube. The motion passed unanimously by a 7 to 0 vote.*

11. Discuss and provide direction to the City Manager regarding possible design modifications associated with the Blondy Jhune Road Bridge Replacement Project.

Public Works Director/City Engineer Stanton Foerster discussed the various design elements and replacement recommendations for the Blondy Jhune Bridge.

Mayor Olk called the following individuals forward that requested to speak regarding this item:

Carol Winston, 315 E. Blondy Jhune discussed removing trail elements and the proposed retaining walls to be more cost effective and was in favor of narrowing the bridge.

Bob Winston, 315 E. Blondy Jhune, discussed the lack of flooding that had occurred on the Blondy Jhune Bridge in the last 20 years and that the height of the bridge was increasing costs.

Mayor Olk read a letter into the record from Peggy Rusterholtz, 215 W. Blondy Jhune, which outlined suggestions for the bridge replacement and was also in favor of removing the trail element associated with the design.

Mayor Olk stated that the City Council would not be providing Staff direction at this time as they would like to conduct the Town Hall meeting in order to gain additional input from the citizens before any decisions were made.

- 12. Consider placing the following sales tax proposals on the May 7, 2016 election ballot for consideration by the voters:**
- a. Continuation of the one-quarter of one-percent (.25%) sales tax dedicated for street maintenance. This revenue source for street maintenance will discontinue in September of 2016 unless the voters approve its continuation.**
 - b. Abolish the one-quarter of one-percent (.25%) sales tax dedicated to property tax relief and approve an additional one-quarter of one percent (.25%) for street maintenance.**

Finance Director Liz Exum briefed the Council on House Bill 157 that allows local governments more flexibility on how sales tax can be allocated. Ms. Exum also discussed the City's current dedicated sales tax and proposals for the May 7, 2016 election.

MOTION: *A motion was made by Councilmember Millsap, seconded by Councilmember Fisher to approve placing the following sales tax proposals on the ballot for the May 7, 2016 election for consideration by the voters:*

- a) *Continuation of the one-quarter of one-percent (.25%) sales tax dedicated for street maintenance that will discontinue in September of 2016;*
- b) *Abolish the one-quarter of one-percent (.25%) sales tax dedicated to property tax relief and approve an additional one-quarter of one percent (.25%) for street maintenance. The motion passed unanimously by a 7 to 0 vote.*

13. Discuss upgrading the water utility system from ARM (Automatic Meter Reading) to AMI (Advanced Metering Infrastructure).

Development Services Director Joe Hilbourn briefed the Council on the status of the current meters and how they are working. Mr. Hilbourn noted that staff had contacted the cities of Porter and Grapevine that currently have the same system in place. Feedback received was positive but questions were raised regarding the reliability of the Tesla 4 registers. Mr. Hilbourn recommended that the current system be further evaluated along with proposed enhancements of the automatic meter reading system and a recommendation be brought back to the Council during the 2016-2017 budget process.

The City Council was in agreement with reevaluating the water utility system during the 2016-2017 budget process.

14. Discussion and provide direction to the City Manager regarding possible changes to the Code of Ordinances associated with funding of non-safety streetlights by individuals.

Councilmember Duke stated that it was common for many neighborhoods to have homeowners associations maintain streetlights located on private property within their neighborhood. However, with some homeowners associations becoming non-operational, citizens are left without an outlet to secure lighting for their neighborhood. Councilmember Duke suggested ways in which citizens could manage funding the street lights such as placing a fee on their water bill that the City collects and forwards to GCEC.

Councilmember Fisher noted that in 2008 the Collin County Sheriff's office asked that certain street lights be installed due to safety concerns for those affected areas.

The City Council discussed the reinstatement of street lights that were a safety concern, but did not want to manage homeowner association funds.

Mayor Olk called the following individuals forward that requested to speak regarding this item:

Grant Gulickson, 200 Doris Drive, discussed the accidents that have occurred and dangers associated with not having street lights for his neighborhood. He also believed after reviewing the plat for the property, that the street lights were located on city property.

Denise Tombaugh, 15 Glenbrook Circle, discussed the safety concerns associated with not having street lights at the main intersection of their subdivision.

Mike Lucey, 1615 Lynn, also discussed the safety concerns associated with not having street lights at their subdivision entrance.

City Manager Joni Clarke stated that there would be administrative costs with managing streetlights and would like to further evaluate the situation, how billing would occur, creating a standard model, and the process of obtaining an agreement from neighborhoods regarding participation.

The City Council agreed that further analysis and evaluation was needed before any decisions would be made.

15. Consider the City of Lucas Employee Policies and Procedures Handbook and Resolution 2016-02-00446 providing the City Manager with the Authority to Implement and Modify said Handbook.

Human Resources Manager Cheryl Meehan outlined the changes proposed to the employee handbook. The more significant changes related to the increase in the number of sick days provided from 6 days to 12 days and a modification to the number of vacation hours allowed for carryover at the end of the calendar year to equal the number of hours the employee accrues was also being recommended.

The City Council discussed current benefits as well as the carryover of sick leave being used in lieu of a short term disability benefit. The Council also discussed the differences between short term and long term disability.

MOTION: *A motion was made by Councilmember Millsap, seconded by Mayor Pro Tem Peele to approve Resolution 2016-02-00446 providing the City Manager with the authority to implement and modify the City of Lucas Employee Policies and Procedures Handbook with the following modifications: 1) Sick leave may accrue up to 12 days annually with a maximum accrual of 340 hours for regular personnel and 504 for shift personnel; 2) Vacation accrual be maintained at a maximum of 80 hours annually and 120 hours annually for shift personnel; and 3) the City Manager bring back any changes to the City Council that have a budgetary impact. The motion passed unanimously by a 7 to 0 vote.*

16. Discuss and provide guidance to the City Secretary regarding the City holding a joint election with Lovejoy ISD and the City of Fairview.

City Secretary Stacy Henderson discussed election options and potential cost savings associated with holding a joint election with Lovejoy ISD. Ms. Henderson noted that the Lovejoy ISD Administration building would be designated as the early voting location for elections which would eliminate early voting at the Lucas Community Center, but with Election Day voting still being held at the Lucas Community Center.

The City Council was in agreement that maintaining voting at the Lucas Community Center was an important benefit for the residents and would like to maintain holding their own election with Collin County at this time.

Executive Session

The City Council may convene in a closed Executive Session pursuant to Chapter 551.071 of the Texas Government Code.

17. Executive Session

There was no Executive Session scheduled for this meeting.

18. Adjournment.

***MOTION:** A motion was made by Councilmember Millsap, seconded by Councilmember Duke to adjourn the meeting at 9:00p.m. The motion passed unanimously by a 7 to 0 vote.*

APPROVED:

ATTEST:

Jim Olk, Mayor

Stacy Henderson, City Secretary

STATE OF TEXAS
COUNTY OF COLLIN

INTERLOCAL COOPERATION AGREEMENT
FOR LAW ENFORCEMENT SERVICES

This Interlocal Cooperation Agreement for Law Enforcement Services (hereinafter referred to as the "Agreement") is made by and between Collin County (hereinafter referred to as "County"), and the City of Lucas, a municipal corporation (hereinafter referred to as "City").

WHEREAS, City desires to contract with County for law enforcement services to be provided by the Collin County Sheriff's Office ("Sheriff's Office"), as specified herein; and

WHEREAS, County is willing to provide such services subject to and in accordance with this Agreement, and

WHEREAS, City and County mutually desire to be subject to the provisions of the Interlocal Cooperation Act of the V.T.C.A. Government Code, 791; and

NOW THEREFORE, City and County, for the mutual consideration hereinafter stated, the receipt and sufficiency of which is hereby acknowledged, agree as follows:

1. TERM. This Agreement is effective as of October 1, 2013 (the "Effective Date"), and will continue for a period of four (4) years from the Effective Date

13 AUG - 7 AM 9:44
RECEIVED
PURCHASING AGENT

2. COUNTY'S OBLIGATIONS.

2.1 County will, through the Sheriff's Office, provide City with law enforcement services to the same extent provided to County and in accordance with the Sheriff's Office policies and procedures and local, state and federal law. Such law enforcement services include generalized preventive patrol, answering calls for police assistance, investigations, traffic control and enforcement, and any other service generally related to law enforcement and the protection of the citizens of City.

2.2 The planning, organizing, assignment, allocation, direction and supervision of County law enforcement personnel under this Agreement will be determined by County. The rendition of service, the standard of performance, the discipline of officers, and other matters incident to the performance of such services and the control of personnel so employed will be the responsibility of County.

2.3 County will give prompt consideration to all requests from City received through the Liaison Officer or the Sheriff's Office's communications division ("Dispatch") regarding the delivery of law enforcement services under this Agreement. County will make every effort to comply with these requests to the extent such requests are: (1) consistent with the terms of this Agreement; (2) consistent with the policies and procedures of the Sheriff's Office; and (3) consistent with local, state and federal law.

2.4 The Sheriff's Office will submit written reports of any and all activity within the City; to the extent such reports are consistent with the policies and procedures of the Sheriff's Office, by the 15th day of each calendar month for the services provided during the immediately preceding month.

2.5 During the term of this Agreement, the County will provide a patrol vehicle to City ("Patrol Vehicle"), the maintenance and insurance of which will be the sole responsibility of the County.

2.6 Patrol vehicle used under this agreement shall be replaced either, (whichever occurs first):

a. whenever the vehicle is deemed by County to be in need of replacement based upon County's standard vehicle replacement schedule; or,

b. at the end of the four (4) year term of agreement.

In any instance, the City agrees to bear the replacement cost of any vehicle that is taken out of service and replaced. It is agreed between the City and County that the City, at the termination of this agreement, would have reimbursed the county for all expenses associated with the agreed service. Reimbursement will have been as follows: \$45,300.00 for cost of vehicle less police equipment and accessories, \$7,000.00 for operating and maintenance, and \$77,827.00 for deputy salary in the first year, October 1, 2013 through and including September 30, 2014. Successive years' reimbursement amounts shall be negotiated and mutually agreed by both parties.

Accordingly, at the agreement end term, the City, having reimbursed/paid the county the full cost of the vehicle, then the City may claim possession of the paid vehicle and shall cover any associated costs for administrative and transfer fees. This agreement complies with Government Code 791 and Local Government Code 263.152.

2.7 County will designate the Major of Operations of the Sheriff's Office to act on behalf of County as "Liaison Officer" to City. The Liaison Officer will act on behalf of the County on matters concerning the delivery of law enforcement services to City pursuant to this Agreement. City will observe and utilize the Liaison Officer as the proper contact official and agent for County regarding this Agreement. The Liaison Officer will devote sufficient time and attention to the execution of said duties on behalf of County and will provide immediate and direct supervision of the employees, agents, contractors, sub-contractors, and/or laborers, if any, in furtherance of the purposes, terms and conditions of this Agreement for the mutual benefit of Collin County and City.

2.8 County will provide law enforcement services under this Agreement during the days and times set forth in Exhibit "A", attached hereto and incorporated herein by reference. During times not specified in the attached Exhibit "A", County will continue to provide law enforcement services at the level currently provided and comparable to that provided to other populated unincorporated areas of the County. During the times therein specified, County shall provide one (1) duly sworn uniformed peace officer who shall devote full time and attention to the provision of law enforcement services for City.

3. CITY'S OBLIGATIONS.

3.1 Year one (1), October 1, 2013 through and including September 30, 2014, City will pay to County the sum specified in Exhibit "B", which shall be paid in four equal, quarterly installments beginning on October 1, 2013.

Deputy salary, purchase cost of the vehicle, less police equipment and accessories, and annual maintenance and operations costs (Fuel & Maintenance) of \$7,000.00 are included in arriving at the total amount to be paid by the City. Successive years' reimbursement amount to be paid by City, shall be negotiated and mutually agreed upon by both parties in writing prior to October 1 of each year per Exhibit "B" and shall be paid in four equal, quarterly installments beginning October 1 of each year. During the term of this agreement, in the event the annual maintenance and operational costs exceed the agreed upon amount by more than 10% for that year period, the City shall reimburse County in full for these additional charges. County shall provide documentation, upon request for these additional costs.

3.2 City shall obtain a written opinion from competent legal counsel regarding legality and status of each of the ordinances of City. City shall provide to County on or before October 1, 2013, a copy of the opinion of counsel, as necessary.

3.3 Any Class C misdemeanor violations occurring in City's corporate or territorial limits will be, to the extent allowed by law, filed in and handled by the Municipal Court of City. City shall have the sole and exclusive right to any and all court costs, fines and fees generated by any enforcement action (including, but not limited to, court fines and fees, forfeitures, and costs) to the extent allowed by law.

3.4 The City Manager of the City of Lucas will serve as Liaison to act on behalf of City, and to serve as "Liaison Officer" for City. The Liaison Officer will devote sufficient time and attention to the execution of said

duties on behalf of City and will provide immediate and direct supervision of city employees, agent's contractors, and/or laborers, if any, in the furtherance of the purpose, terms and conditions of this Agreement for the mutual benefit of County and City.

3.5 City will continuously provide County with accurate and current maps of the territorial limits and extraterritorial jurisdiction of City.

3.6 City shall provide County a non-exclusive or exclusive office space for use by Sheriff's Office personnel performing law enforcement services pursuant to this Agreement. Such space shall contain a computer with word processing and internet capabilities, and will be utilized for administrative tasks, including, but not limited to, writing reports, making or returning phone calls and other tasks related to the obligations hereunder.

3.7 City shall provide and maintain a secure location wherein the Patrol Vehicle may be stored when not in use as contemplated by this Agreement or the Patrol vehicle shall be stored as determined by Sheriff's Office when not in use.

4. SUSPENSION OF SERVICES.

4.1 If City fails to make a payment to the County as required in Section 3.1 within thirty (30) days after the due date, the County, at its discretion, may suspend service until payment is received or may terminate this Agreement pursuant to Section 5.

4.2 If it becomes necessary for County to suspend services to City for non-payment of any monies required hereunder or for any other cause whatsoever, County will notify the City Liaison Officer by telephone and in writing of the date service will be suspended.

4.3 If the services provided by County are suspended and are not resumed within fifteen (15) days of the date of suspension, the suspension shall be considered a termination.

5. TERMINATION.

5.1 This Agreement may be terminated at any time with or without cause by either party by giving ninety (90) days written notice to the other.

5.2 City may terminate this Agreement immediately upon a breach of this Agreement by County.

5.3 County may terminate this Agreement immediately upon a breach of this Agreement by City.

5.4 In the event this Agreement is terminated by either party for any reason. County shall receive any payments due and owing under this Agreement on a pro rata basis, together with any reimbursable expenses then due and as authorized by this Agreement. Additionally, in the event this Agreement is terminated prior to expiration date, the Patrol Vehicle and all related equipment shall be returned immediately to County, and City forfeits any claim to vehicle.

6. RECOURSE. City's sole recourse for failure of County to furnish law enforcement services under this Agreement or any other breach by County will

be the right to make a proportionate reduction in the fee owed to County under this Agreement. The proportionate reduction will be determined by mutual agreement of the parties.

7. LIABILITY. This Agreement is made for the express purpose of County providing law enforcement services to City. Both parties acknowledge and agree that the provision of law enforcement services is a governmental function. In no event shall any provision of this Agreement be construed as a waiver of City's or County's sovereign immunity.

To the extent allowed by law, County shall indemnify, hold harmless and defend City from and against any and all demands, claims, causes of action, damages, losses and liabilities that arise directly or indirectly from County's performance of the terms of this Agreement to the extent such performance relates to or arises from (1) the enforcement of the laws of the State of Texas or Collin County or (2) any act in furtherance of a policy or procedure promulgated by County; provided, County shall not indemnify City for its own negligence, gross negligence or willful conduct or that of City's employees, agents, or representatives. To the extent allowed by law, City shall indemnify, hold harmless and defend County from and against any and all demands, claims, causes of action, damages, losses and liabilities that arise directly or indirectly from City's performance of the terms of this Agreement and County's performance of the terms of this Agreement to the extent County's performance relates to or arises from (1) the enforcement of the ordinances of City or (2) other act or omission in furtherance of a policy or procedure promulgated by City. This Agreement and

the indemnity provided herein is not intended to and shall not create any cause of action for the benefit of third parties or any person not a party to this Agreement.

8. NOTICES. Any notice required by this Agreement shall be sent via the United States Postal Service, Certified Mail, Return Receipt Requested to the following:

If to City:
City Manager
City of Lucas
151 Country Club Road
Lucas, Texas 75002

If to Collin County:
Collin County Sheriff's Office
Major of Operations
4300 Community Blvd.
McKinney, Texas 75071

With copy to:
Collin County Purchasing Agent
2300 Bloomdale Road, Ste. 3160
McKinney, Texas 75071

AGREED TO:

COLLIN COUNTY

Judge Keith Self

2300 Bloomdale Road

McKinney, TX 75071

Date

8/20/13

CITY OF LUCAS

City of Lucas

151 Country Club Road

Lucas, TX 75002

Date

EXHIBIT "A"
TO INTERLOCAL COOPERATION AGREEMENT
FOR LAW ENFORCEMENT SERVICES

This Exhibit "A" is incorporated into the Interlocal Cooperation Agreement for Law Enforcement Services between Collin County ("County") and the City of Lucas ("City") dated _____ (the "Agreement"), and has the same force and effect as if originally written into the text of the Agreement.

1. **Hours of Service.** Pursuant to the Agreement, County will provide law enforcement service to City during the following dates and times:

Eight (8) hours/day, Five (5) days/week

Schedule to be determined except as noted below

2. **Vacation, Compensation, Personal and Sick Time.** The law enforcement officer assigned to provide the services in accordance with the Agreement may, during the term of the Agreement, use vacation, compensation ("comp"), personal and sick time accrued or allowed pursuant to the policies and procedures of the Collin County Sheriff's Office ("Time Off"). City acknowledges and agrees that County will not provide alternate personnel during the Time Off period, and such Time Off does not alter in any way City's obligations under this Agreement. County agrees to notify City of any Time Off in advance when possible.

3. **Overtime.** In the event overtime pay is due to the law enforcement officer performing services under the Agreement because of a request by City for the officer to work more than the hours described herein, City shall reimburse the County for such pay.

The terms and provision contained in this Exhibit will be evaluated by the parties each calendar quarter, and may be changed from time to time upon agreement by the parties.

EXHIBIT "B"
TO INTERLOCAL COOPERATION AGREEMENT
FOR LAW ENFORCEMENT SERVICES

This Exhibit "B" is incorporated into the Interlocal Cooperation Agreement for Law Enforcement Services between Collin County ("County") and the City of Lucas ("City") dated _____ (the "Agreement"), and has the same force and effect as if originally written into the text of the Agreement.

1. Total reimbursement cost for year one (1), commencing October 1, 2013 through and including September 30, 2014 shall be at the total cost of \$130,127.00, to include \$77,827.00 for deputy salary, \$45,300.00 for vehicle cost less police equipment and accessories, and \$7,000.00 for operating and maintenance of vehicle. Payment shall be paid in four equal, quarterly installments beginning October 1, 2013. In the event the annual maintenance and operational costs exceed the agreed upon amount by more than 10% for that year period, the City shall reimburse County in full for these additional charges. County shall provide documentation, upon request from the City, for these additional costs.
2. Total reimbursement cost for year two (2), commencing October 1, 2014 through and including September 30, 2015, shall be negotiated and mutually agreed upon in writing prior to October 1, 2014, to include deputy salary and vehicle operating and maintenance cost. Payment shall be paid in four equal, quarterly installments beginning October 1, 2014. In the event the annual maintenance and operational costs exceed the agreed upon amount by more than 10% for that year period, the City shall reimburse County in full for these additional charges. County shall provide documentation, upon request from the City, for these additional costs.
3. Total reimbursement cost for year three (3), commencing October 1, 2015 through and including September 30, 2016, shall be negotiated and mutually agreed upon in writing prior to October 1, 2015, to include deputy salary and vehicle operating and maintenance cost. Payment shall be paid in four equal, quarterly installments beginning October 1, 2015. In the event the annual maintenance and operational costs exceed the agreed upon amount by more than 10% for that year period, the City shall reimburse County in full for these additional charges. County shall provide documentation, upon request from the City, for these additional costs.
4. Total reimbursement cost for year four (4), commencing October 1, 2016 through and including September 30, 2017, shall be negotiated and mutually agreed upon in writing prior to October 1, 2016, to include deputy salary and vehicle operating and maintenance cost. Payment shall be paid in four equal, quarterly installments beginning October 1, 2016. In

the event the annual maintenance and operational costs exceed the agreed upon amount by more than 10% for that year period, the City shall reimburse County in full for these additional charges. County shall provide documentation, upon request from the City, for these additional costs.



City of Lucas Council Agenda Request February 18, 2016

Requester: Mayor Jim Olk

Agenda Item:

Presentation and discussion from Lovejoy High School students participating in the Lovejoy ISD Independent Studies Program:

- Ben Omonira – Stocks
- Noah Johnson – Writing a Novel

Background Information:

As part of the Lovejoy ISD Independent Studies Program, students from Lovejoy High School are required to present their project of interest to a public audience and have asked if they may present their reports to the City Council. This is the second year in a row that the students of Lovejoy High School will be sharing their presentations with the City Council.

Attachments/Supporting Documentation:

NA

Budget/Financial Impact:

NA

Recommendation:

NA

Motion:

NA



City of Lucas Council Agenda Request February 18, 2016

Item No. 06

Requester: City Secretary Stacy Henderson

Agenda Item:

Consider adopting Ordinance 2016-02-00828 ordering a General Election to be held on May 7, 2016 for the purpose of electing two City Councilmembers for Seat No. 5 and Seat No. 6, designating location of a polling place, ordering Notice of Election and authorizing execution of a joint election agreement.

Background Information:

City Council seats 5 and 6 are on the ballot for the upcoming May 7, 2016 General Election. Ordinance 2016-02-00828 orders the May 7, 2016 General Election, designates the Lucas Community Center as a polling location and authorizes execution of a joint election agreement with Collin County.

Attachments/Supporting Documentation:

1. Ordinance 2016-02-000828 Ordering General Election

Budget/Financial Impact:

N/A

Recommendation:

Approve as presented.

Motion:

I make a motion to approve/deny adopting Ordinance 2016-02-00828 ordering a General Election to be held on May 7, 2016 for the purpose of electing two City Councilmembers for Seat No. 5 and Seat No. 6, designating location of a polling place, ordering Notice of Election and authorizing execution of a joint election agreement.



ORDINANCE 2016-02-00828
(Calling for May 7, 2016 General Election)

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LUCAS, COLLIN COUNTY, TEXAS, ORDERING A GENERAL ELECTION TO BE HELD ON MAY 7, 2016, FOR THE PURPOSE OF ELECTING TWO (2) CITY COUNCILMEMBERS FOR SEAT NO. 5 AND SEAT NO. 6; DESIGNATING LOCATION OF POLLING PLACE; ORDERING NOTICE OF ELECTION TO BE GIVEN AS PRESCRIBED BY LAW IN CONNECTION WITH SUCH ELECTION; AUTHORIZING EXECUTION OF JOINT ELECTION AGREEMENT; AND PROVIDING FOR AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LUCAS, COLLIN COUNTY, TEXAS, THAT:

Section 1. A General Election is hereby ordered for May 7 2016, for the purpose of electing two (2) Lucas City Councilmembers for Seat No. 5 and Seat No. 6, each such term being for a period of three (3) years; The filing period for the General Election shall begin on January 20, 2016, and end on February 19, 2016, at 5:00 p.m. in accordance with State Law.

Section 2. Pursuant to the Joint Election Agreement, the Elections Administrator of Collin County shall serve as Elections Administrator for the election. Presiding Election Judges and Alternate Presiding Election Judges appointed to serve the authorized polling places and the early voting clerk and deputy early voting clerks shall be those election officials furnished by the Elections Administrator from the list of proposed election judges as required in the Elections Services Contract. The City Manager and City Secretary are hereby authorized to execute an Elections Services Contract with the Collin County Elections Department for the General Election on May 7, 2016. The City Secretary shall have further authority to approve any minor modifications as may be necessary in the best interest of the City. A voting system or systems meeting the standards and requirements of the Texas Election Code, as amended, is hereby adopted and approved for early voting by personal appearance and by mail and for election day voting.

Section 3. Notice of the General Election shall be posted on the bulletin board used to post notice of the City Council meetings and be published in a newspaper of general circulation in the City. That said Notice must be published at least once, not earlier than the 30th day or later than the 10th day, before Election Day as provided in Section 4.003(a)(1) of the Texas Election Code. A copy of the published Notice that contains the name of the newspaper and the date of publication shall be retained as a record of such notice, and the person posting the Notice shall make a record of the time of posting, starting date, and the place of posting.

Section 4. The entire City shall constitute one election precinct for this election and Lucas Community Center located at 665 Country Club Road, Lucas, Texas is hereby designated the polling place. The election officers and maximum number of clerks for said polling place shall be determined and appointed in accordance with the provisions of the Contract.

On Election Day, the polls shall be open from 7:00 A.M. to 7:00 P.M.

Early voting by personal appearance shall also be conducted at the Lucas Community Center located at 665 Country Club Road, Lucas, Texas. City of Lucas voters may vote at any of the additional Early Voting locations open under full contract services with the Collin County Elections Administration. If the election services contract with the Collin County Elections Administrator revises the polling places listed previously, the City will utilize the polling places designated in said Election Services Contract, as the same may be amended from time to time.

Applications for ballot by mail shall be received and processed by the Collin County Elections Administrator, 2010 Redbud Boulevard, Suite 102, McKinney, Texas 75069. Applications for ballots by mail must be received no later than the close of business on April 26, 2016.

Early voting for the General Election shall begin on Monday, April 25, 2016, and end Tuesday, May 3, 2016, and the dates and hours designated for early voting by personal appearance at the early voting locations shall be as set forth below:

Dates	Hours
Monday, April 25, 2016 Through Wednesday, April 27, 2016	8:00 A.M. to 5:00 P.M.
Thursday, April 28, 2016	8:00 A.M. to 7:00 P.M.
Friday, April 29, 2016 and Saturday, April 30, 2016	8:00 A.M. to 5:00 P.M.
Monday, May 2, 2016 and Tuesday, May 3, 2016	7:00 A.M. to 7:00 P.M.

For purposes of processing ballots cast in early voting, the election officers for the early voting ballot board for this election shall be appointed and designated in accordance with the provisions of the Contract.

Section 5. The City Secretary shall present the General Election returns to the City Council at a Council meeting for the canvassing of said election in accordance with the Texas Election Code. The candidates for Councilmember for Seat No. 5 and Councilmember for Seat No. 6 that receive a majority of valid votes by qualified voters at the election shall be declared elected. In the event no candidate receives a majority of all the votes cast for all the candidates for an office, a runoff election shall be ordered by the City Council in accordance with the Lucas City Charter and State law.

Section 6. This Ordinance shall take effect immediately upon its passage.

APPROVED AND ADOPTED by the City Council of the City of Lucas this 18 day of February, 2016.

Jim Olk, Mayor

ATTEST:

Stacy Henderson, City Secretary

APPROVED AS TO FORM:

Joseph J. Gorfida, Jr.
(02-05-2016/75398)



City of Lucas Council Agenda Request February 18, 2016

Requester: City Secretary Stacy Henderson

Agenda Item:

Consider adopting Ordinance 2016-02-00830 ordering a Special Election to be held on May 7, 2016 for the purpose of submitting propositions to the qualified voters of the City of Lucas for the continuation of the one-quarter of one-percent sales and use tax to provide revenue for maintenance and repair of municipal streets; to abolish the one-quarter of one-percent sales and use tax dedicated to property tax relief and approving an additional one-quarter of one-percent sales and use tax to provide revenue for maintenance and repair of municipal streets.

Background Information:

Adopting Ordinance 2016-02-00830 will place the following propositions on the May 7, 2016 ballot for the voters consideration:

Proposition 1, the continuation of the one-quarter of one-percent sales and use tax to provide revenue for maintenance and repair of municipal streets will expire in September 2016 and an election must be held and voted upon in order for the dedicated sales tax to continue.

Proposition 2, proposes to abolish the one-quarter of one-percent sales and use tax dedicated to property tax relief and approving an additional one-quarter of one-percent sales and use tax to provide revenue for maintenance and repair of municipal streets.

Attachments/Supporting Documentation:

1. Ordinance 2016-02-000830 Ordering Special Election

Budget/Financial Impact:

N/A

Recommendation:

Approve as presented.



City of Lucas Council Agenda Request February 18, 2016

Requester: City Secretary Stacy Henderson

Motion:

I make a motion to approve/deny adopting Ordinance 2016-02-00830 ordering a Special Election to be held on May 7, 2016 for the purpose of submitting propositions to the qualified voters of the City of Lucas for the continuation of the one-quarter of one-percent sales and use tax to provide revenue for maintenance and repair of municipal streets; to abolish the one-quarter of one-percent sales and use tax dedicated to property tax relief and approving an additional one-quarter of one-percent sales and use tax to provide revenue for maintenance and repair of municipal streets.

Elections Administrator from the list of proposed election judges as required in the Elections Services Contract. The City Manager and City Secretary are hereby authorized to execute an Elections Services Contract with the Collin County Elections Department for the General Election on May 7, 2016. The City Secretary shall have further authority to approve any minor modifications as may be necessary in the best interest of the City. A voting system or systems meeting the standards and requirements of the Texas Election Code, as amended, is hereby adopted and approved for early voting by personal appearance and by mail and for election day voting.

Section 3. Notice of the Special Election shall be posted on the bulletin board used to post notice of the City Council meetings and be published in a newspaper of general circulation in the City. That said Notice must be published at least once, not earlier than the 30th day or later than the 10th day, before Election Day as provided in Section 4.003(a)(1) of the Texas Election Code. A copy of the published Notice that contains the name of the newspaper and the date of publication shall be retained as a record of such notice, and the person posting the Notice shall make a record of the time of posting, starting date, and the place of posting.

Section 4. The entire City shall constitute one election precinct for this election and Lucas Community Center located at 665 Country Club Road, Lucas, Texas is hereby designated the polling place. The election officers and maximum number of clerks for said polling place shall be determined and appointed in accordance with the provisions of the Contract. On Election Day, the polls shall be open from 7:00 A.M. to 7:00 P.M.

Early voting by personal appearance shall also be conducted at the Lucas Community Center located at 665 Country Club Road, Lucas, Texas. City of Lucas voters may vote at any of the additional Early Voting locations open under full contract services with the Collin County Elections Administration. If the election services contract with the Collin County Elections Administrator revises the polling places listed previously, the City will utilize the polling places designated in said Election Services Contract, as the same may be amended from time to time.

Applications for ballot by mail shall be received and processed by the Collin County Elections Administrator, 2010 Redbud Boulevard, Suite 102, McKinney, Texas 75069. Applications for ballots by mail must be received no later than the close of business on April 26, 2016.

Early voting for the General and Special Election shall begin on Monday, April 25, 2016, and end Tuesday, May 3, 2016, and the dates and hours designated for early voting by personal appearance at the early voting locations shall be as set forth below:

Dates	Hours
Monday, April 25, 2016 Through Wednesday, April 27, 2016	8:00 A.M. to 5:00 P.M.
Thursday, April 28, 2016	8:00 A.M. to 7:00 P.M.
Friday, April 29, 2016 and Saturday, April 30, 2016	8:00 A.M. to 5:00 P.M.
Monday, May 2, 2016 and Tuesday, May 3, 2016	7:00 A.M. to 7:00 P.M.

For purposes of processing ballots cast in early voting, the election officers for the early voting ballot board for this election shall be appointed and designated in accordance with the provisions of the Contract.

Section 5. The City Secretary shall present the General and Special Election returns to the City Council at a Council meeting for the canvassing of said election in accordance with the Texas Election Code.

Section 6. Should any word, sentence, paragraph, subdivision, clause, phrase or section of this ordinance be adjudged or held to be void or unconstitutional, the same shall not affect the validity of the remaining portions of said ordinance, which shall remain in full force and effect.

Section 7. This Ordinance shall take effect immediately upon its passage.

APPROVED AND ADOPTED by the City Council of the City of Lucas this 18 day of February, 2016.

APPROVED:

Jim Olk, Mayor

APPROVED AS TO FORM:

ATTEST:

Joseph J. Gorfida, Jr., City Attorney
(02-08-2016/75429)

Stacy Henderson, City Secretary



City of Lucas

City Council Agenda Request

February 18, 2016

Requester: Public Works Director/City Engineer Stanton Foerster

Agenda Item:

Discuss, consider, and provide direction to the City Manager regarding design criteria for the Blondy Jhune Road Bridge Replacement Project.

Background Information:

The purpose of this project is to replace the two bridges along Blondy Jhune Road. In January 2015, a bridge assessment was completed by Metropolitan Infrastructure. The challenges noted then by City Engineer Stanton Foerster were as follows:

- No Record Drawings of the Bridges
- Antiquated Guardrails
- Bridges are narrow
- Significant Structural Deterioration
- No Structural Reinforcing Steel in Deck
- Rusted or Missing Pan Forms on the Underside of Deck
- Creek Channel Erosion and Scouring
- No Pedestrian and Horse Path
- Bridges May Be Functionally Obsolete

The City Engineer has monitored the condition of the two bridges since January 2015 on a monthly basis. Temporary repairs and debris removal took place at both bridges during 2015.

During the last few months of 2015, engineers at Metropolitan Infrastructure designed the two bridges along Blondy Jhune Road with criteria set by input from citizens, City Councilmembers, and staff. The variety of input that ultimately guided the engineers is generalized by the following:

- A. Minimize right-of-way and private property impacts
- B. Eliminate flooding
- C. Eliminate maintenance of clearing debris
- D. Minimize impacts to trees
- E. Provide an area for horseback riders to cross the creeks
- F. Avoid standardization or one-size-fits-all thinking
- G. Separate traffic within the curves
- H. 20-year standard for two lane roadway pavement

These generalized ideas translate into design criteria in the following ways:



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February 18, 2016

Requester: Public Works Director/City Engineer Stanton Foerster

- A. **Minimize right-of-way and private property impacts** – To keep the impact to the surrounding area to a minimum, the City Engineer avoided the use of slopes and introduced retaining walls at both bridges.
- B. **Eliminate flooding** – The first step in analysis for a cross-drainage facility is the establishment of the flood frequency curve and the stage-discharge curve according to a hydrology study and open channel flow; and the second step is to make a decision concerning the type of cross-drainage structure. All types of facilities should be appraised based on performance and economics. The choice is usually between a bridge and culvert. If the stream crossing is wide with multiple concentrations of flow, a multiple opening facility may be in order.

At many locations, either a bridge or a culvert will fulfill both the structural and hydraulic requirements for the stream crossing. The design engineer should choose the appropriate structure based on the following criteria:

- construction and maintenance costs
- risk of failure
- risk of property damage
- traffic safety
- environmental and aesthetic considerations
- construction expedience

Although the cost of an individual bridge is usually relatively small, the total cost of bridge construction constitutes a substantial share of the total cost of roadway construction. Similarly, bridge maintenance may account for a large share of the total cost of maintaining roadway hydraulic features. The design engineer can achieve improved traffic service and reduced cost by judicious choice of design criteria and careful attention to the hydraulic design of each bridge.

The low chord elevation is established as the sum of the design normal water surface elevation (high water) and a freeboard.

For on-system bridges (such as bridges along FM 1378), the Texas Department of Transportation (TxDOT) recommends a suitable freeboard based on the flowing criteria:



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Requester: Public Works Director/City Engineer Stanton Foerster

- **Higher freeboards may be appropriate for bridges over streams that are prone to heavy debris loads, such as large tree limbs, and to accommodate other clearance needs.**
- Lower freeboards may be desirable, because of constraints such as approach geometry. However, the design high water level must not impinge on the low chord.

Generally, for off-system bridge replacement structures (such as bridges along Blondy Jhune Road), the low chord should approximate that of the structure to be replaced unless the results of a risk assessment indicate a different structure is the most beneficial option.

The bridge is integrated into both the stream and the roadway and must be fully compatible with both. Therefore, the alignment of the roadway and the bridge are the same between the ends of the bridge. Hydraulically, the complete bridge profile includes any part of the structure that stream flow can strike or impact in its movement downstream. If the stream rises high enough to inundate the structure, then the bridge and all parts of the roadway become the complete bridge profile.

It is not allowable for the design **Annual Exceedance Probability (AEP)** flow to impinge on the bridge low chord or to inundate the roadway because it violates the definition of design frequency. However, flows exceeding the design AEP flow, including the 1% AEP flow, may inundate the structure and roadway. Unless the route is an emergency escape route, it is often desirable to allow floods in excess of the design flood to overtop the road. This helps minimize both the backwater and the required length of structure.

Several vertical alignment alternatives are available for consideration, depending on site topography, traffic requirements, and flood damage potential. The alternatives range from crossings that are designed to overtop frequently to crossings that are designed to rarely or to never overtop.

As with other natural phenomena, occurrence of flooding appears to be governed by chance. The chance of flooding is described by statistical analysis of flooding history in the subject watershed or in similar watersheds. Because it is not economically feasible to design a structure for the maximum possible runoff from watershed, the engineer must choose a design frequency, or inversely the AEP of a flood appropriate for the structure. Once a design AEP is selected, the structure should be designed to provide adequate capacity to appropriately convey the discharge associated with that probability. In this process the engineer sets the level of conservatism by the selection of the design AEP. This is in contrast to the conservatism associated with structural design elements, which is typically based on safety factors in loading and structural capacity.



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Item No. 08

Requester: Public Works Director/City Engineer Stanton Foerster

The design AEP can be established by standards or limited by factors such as economic considerations. Numerous methods have been developed to assist the engineer in assessing the risk involved in choosing the design flood and the check flood. Risk is defined as the consequences associated with the probability of flooding attributable to the project, including the potential for property loss and hazard to life during the service life of the roadway. A project can be fully compliant with policy and standards yet still incur an inappropriate level of risk. Consequently, all sources of potential risk should be considered as part of the investigation for hydraulic structures in order to determine whether modified site-specific standards or criteria are appropriate. (Source: TxDOT Hydraulic Design Manual)

The general engineering practice is to use a design AEP of 1% or a 100-year storm as a minimum. The AEP of 1% was used in the Blondy Jhune Road Bridge Replacement Project to reduce the flooding to a 1% chance.

- C. **Eliminate maintenance of clearing debris** – The lower the bottom cord of the bridge, the greater the risk of damming of the flow. Two feet of freeboard and a single span bridge was designed.
- D. **Minimize impacts to trees** – To keep the impact to the surrounding area to a minimum, the City Engineer avoided the use of slopes and introduce retaining walls at both bridges. A second bridge was added to the eastern bridge to avoid the root system of a large pecan tree.
- E. **Provide an area for horseback riders to cross the creeks** – The bridges were widened by 10 feet to accommodate riders and others using the trails.
- F. **Avoid standardization or one-size-fits-all thinking** – The City Engineer and designers examined each location separately. Hydraulics, debris flow, sight distances around the approaching curves, etc. were examined at each location separately.
- G. **Separate traffic within the curves** – The minimum lane width of 12 feet was used and in areas of limited sight distance and/or acute horizontal curvature, the lane with was increased. Through the bridge approaches, a lane with of 14 feet was used. The increase in width provides off-sets to the bridge rails and a two-foot separation between the lanes thus increasing the sight distances around the curves.
- H. **20-year standard for two lane roadway pavement** – Based on traffic projections coinciding with city buildout and the geotechnical study of the soils, two pavement designs were developed: 1) Asphalt – 28-foot width, 15-inch depth and 2) Concrete – 24-foot wide, 14-inch depth. The concrete pavement was chosen for the Blondy Jhune Road Bridge



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Requester: Public Works Director/City Engineer Stanton Foerster

Replacement Project, and it was increased from 24 feet to 28 feet to accommodate the separation of traffic.

The existing roadways has no base material and are too narrow to be considered two-lane roadways. The technical term “widen” refers to adding lanes to a roadway. It is not the intent of the Neighborhood Connector Street Project to “widen” any roadways. It is the intent to increase the pavement with to accommodate two-way traffic without conflict. Most of the Lucas roadways are too narrow to be considered two lanes per the American Association of State Highway and Transportation Officials (AASHTO) geometric criteria. A 20- or 22-foot wide asphalt roadway driven as a two lane roadway will suffer accelerated deterioration due to lack of edge reinforcement. To build a two lane asphalt roadway, the minimum width of 28 feet should be constructed per AASHTO criteria. At 28 feet, the roadway will have two 11-foot lanes with a three-foot “shoulders” to reinforce the edges and keep the edges from falling away from the travel way.

Attachments/Supporting Documentation:

Blondy Jhune Bridge Layouts

Budget/Financial Impact:

This project is funded using account 21-8210-491-121, Blondy Jhune Bridges and Safety Projects. This account was established by certificates of obligation sold in mid-2015 in the amount of \$2,000,000 of which \$154,396 has been spent on engineering and design fees.

Recommendation:

To reduce the cost of the project, Public Works Director/City Engineer Stanton Foerster recommends the following design elements:

1. Obtain right-of-way or easements to eliminate the need for retaining walls. This will require the elimination of all trees within 30 feet of the new pavement where slopes are needed. (16% Reduction if all walls are eliminated)
2. Where slopes are not used then use plain, smooth retaining walls. (5 to 10% Reduction)
3. Eliminate all trail elements. If the location of a trail is determined in the future, a separate non-20-ton bridge can be built. (11 to 23% Reduction)
4. Consider other bridge structures such as trusses. The least expensive option would be selected. (5% to 10% Reduction)



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Requester: Public Works Director/City Engineer Stanton Foerster

5. Use the standard T501 Jersey rail like the rail on the Winningkoff Bridge. This does not save much money, but it is easier to build. (2% Reduction)
6. Narrow bridge width to 30 feet. (25% Reduction)
7. Narrow roadway width to 24 feet. (5% Reduction)

Due to seasonal and to economic fluctuations, the only way to determine the cost of the bridges is to bid the project. The six items listed above represent a possible savings of 43% as compared to the current plans. There is a possibility that even with the cost saving ideas designed into the plans the bids could be higher than \$2.5 million. Generally, when quantities are reduced, the unit costs increase.

There is a possibility that even if the cost saving ideas listed are incorporated into the plans, the bids could come in higher than the December bids. The relationship between quantities and unit cost is not linear; it is exponential. That is why the cost savings listed below are not cumulative. Each item impacts and is related to the other items.

The following is a detailed description of the various ideas to reduce the bridge construction costs. The first seven are recommend by the City Engineer and are denoted with an “*”. Items 8 through 13 are not recommended by the City Engineer.

1. *Reduce or eliminate retaining walls with slopes (16% Reduction)

Currently the wall designed is for a mechanically stabilized earth (MSE) system. This design was used because of the lack of right-of-way/easements and to protect trees. If we consider using 3:1 slopes in existing ROW and ask five adjacent property owners for ROW or slope easements, construction cost and time could be reduced, but the time and cost of acquiring the ROW or slope easements could both increase. We need ROW or slope easements from five property owners. Two on the west side of the western bridge, and three on the eastern bridge: northeast, southeast, and southwest. Using slopes instead of walls will eliminate all trees within 30 feet of the new roadway. This options should be considered. Staff was directed to minimize ROW and protect the trees.

2. *Use plain, smooth retaining walls (5 to 10% Reduction)

Current design calls for a stone pattern on the MSE concrete panels. If we consider using the aesthetics similar to the Winningkoff Road Bridge, there is a potential to reduce the wall cost. A standard RW1 (reinforced concrete wall) can be textured and painted. Textured MSE walls were used to satisfy request to provide “stone” look to the walls. RW1 walls can be used, but these walls are easier to vandalize with graffiti. There is some graffiti on the Winningkoff Road Bridge. This options should be considered. Staff was directed to make the walls look more natural.



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3. *Eliminate all or some of the trail elements (11 to 23% Reduction)

Current design calls for synthetic rubberized mulch surfacing over reinforced concrete trail as the trail ramps up and down to the bridge structures. The contractors' range of bids for this pad was from \$12,000 to \$69,000. Current design calls for an eight-foot wide trail on the bridges for horseback riders to cross the creeks. This options should be considered. Staff was directed to add the trail elements to the plans.

4. *Use a truss bridge (5 to 10% Reduction)

Current design is a reinforced concrete bridge deck with 28-inch TxDOT standard AASHTO prefabricated concrete girders. The City Engineer has contacted two truss design and fabrication companies, but we have not received their numbers to determine if there is a savings or not. The potential benefits of the truss are as follows: a) thinner bridge thus reducing the roadway elevation and retaining wall height, b) more "country" looking, and c) fabricated off-site. Drawbacks are as follows: a) maintenance costs are higher, and b) cannot be modified in the future. This options should be considered.

5. *Use the standard T501 "Jersey" rail (2% Reduction)

The potential cost savings between a T411 rail and a T501 rail may be too small to truly benefit the project, but the T501 is easier to build. The T501 rail is used on the Winningkoff Road Bridge. Some believe this rails looks industrial and associate the look with larger roads such as interstate highways where they are widely used. This options should be considered.

6. *Narrow bridge to 30 feet wide (30% Reduction)

The 40-foot wide bridge allows for two 12-foot lanes with two feet of separation between the lanes, shoulders, three rails, and horse trail. The two-foot separation, shoulders, one of the rails and horse trail are not required. At 30 feet, there would be two 14-foot lanes with two rails. The existing west and east bridges are 26 and 20 feet wide, respectively. This options should be considered. Staff was directed to provide for a separation between the lanes, shoulders, and the trail.

7. *Narrow roadway to 24 feet (5% Reduction)

By narrowing the roadway from 28 feet to 24 feet, the center separation between the lanes and thin shoulders would be lost. The current design has a two-foot separation that will have tactile elements to reinforce the concept of staying in one's lane while driving. This options should be considered. Staff was directed to provide for a separation between the lanes through the curves.

8. Use a more frequent storm and less freeboard (15 to 25% Reduction – Substandard)

Current 100-year storm and a positive two feet of freeboard design criteria represents standard engineering and best practices. Freeboard is the distance between the water surface and the bottom of the bridge. This means that during a storm that has one in 100 chance of happening in



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Requester: Public Works Director/City Engineer Stanton Foerster

any given year, the Blondy Jhune Bridges are designed to have a dry driving surface and the surface of the water will be two feet below the bottom of the bridge. If we consider changing the design flood to a frequency less than 100-year, the roadway could be lowered and the height and length of the retaining walls and drill shafts would be reduced thus reducing the cost of the project.

The Winningkoff Road Bridge is based on a substandard design of a 10-year storm with a **negative two feet of freeboard**. This means that during a storm that has a one in 10 chance of happening in any given year, the water level will be at the driving surface of the bridge and the bottom of the bridge will be two feet under water. During a 100-year storm, the City Engineer estimates that the Winningkoff Bridge will have water flowing two to four feet above the roadway (four to six feet of negative freeboard).

The design engineer estimates a potential savings of 15 to 25% by lowering the design storm to the 50-year or 25-year, respectively, because of shorter retaining walls and drill shafts. The bridge would not get thinner by changing the design storm. To use any storm more frequent than 100-year and freeboard less than two feet would be considered substandard. County governments frequently build structures with a substandard design to meet budget constraints. Another factor to consider is the emergency vehicle access leading to longer response time and about the inconvenience to the traveling public due to the lack of alternate routes during inclement weather.

9. Narrow the roadway to 24 feet on the bridge (35% Reduction – Substandard)

The 40-foot wide bridge allows for two 12-foot lanes with two feet of separation between the lanes, shoulders, three rails, and horse trail. The two-foot separation, shoulders, one of the rails and horse trail are not required. At 24 feet, there would be substandard lane widths with two rails. This is too narrow per standard engineering and best practices. Staff was directed to provide for a separation between the lanes, shoulders, and the trail.

10. Lower the bridge weight limit (2% Reduction)

The bridges are currently designed for HS20 loading per TxDOT and AASHTO criteria. Simply stated the bridges are design for a 20-ton limit. The weight limit could be lowered to 10- or 15-ton. Reducing the load requirements could reduce either the size or number of girders or reduce the depth of the bridge deck thus lowering the associated costs. This would not lower the elevation of the bottom of the bridge.

The Winningkoff Bridge was design for 20-tons, but staff has been told by the contractor that built the bridge that the weight limit was changed to a substandard five tons during construction.

11. Use thinner pavement design (4 to 7% Reduction)



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Current 20-year design calls for an eight-inch reinforced concrete pavement supported by lime treated subgrade. By thinning the concrete and/or eliminating the lime treated subgrade, the cost would be reduced, but the maintenance costs would increase and the lifespan of the pavement would be eight to 12 years. The roadway would not last as long as the bonds.

12. Widen creek channel (Less than 1% reduction – no significant reduction in cost)

Current design kept the channel widths similar to the existing bridge spans. The idea here is to widening the channels. This would result in a longer bridges, but it would reduce wall quantities. A cost effectiveness analysis is required to compare the cost of the bridge verses cost of walls to determine if this is an effective option. Widening the channel may also have an effect on the hydrology of the bridges and eliminate several trees.

13. Lower design speed (Less than 1% reduction – no significant reduction in cost)

Current design speed is 30 miles-per-hour with super-elevation. The super-elevation or banking of the curves is a safety element that assist the movement of vehicles. Blondy Jhune Road has a very winding roadway alignment with numerous changes in vertical grades and horizontal alignment. This does not save much money, but it is easier to build and could possibly shorten the length of the roadway construction.

Motion:

I make a motion to direct the City manager to proceed with redesign and bidding of the Blondy Jhune Bridge Replacement Project with the following design criteria (note to reader: the items listed below in **bold lettering** are the recommendations of City Engineer Stanton Foerster).

1. A. Continue using retaining walls to minimize impacts to trees and adjacent property owners
or
B. Obtain right-of-way or easements to eliminate the need for retaining walls. This will require the elimination of all trees within 30 feet of the new pavement where slopes are needed (16% Reduction).
2. A. Use stamped, tinted, and painted retaining walls
or
B. Use plain, smooth retaining walls (5 to 10% Reduction).
3. A. Keep the trail elements
or
B. Eliminate some of the trail elements and those elements are _____
or
C. Eliminate all of the trail elements (11 to 23% Reduction).



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4. A. Do not consider the use of a truss bridge
or
B. Use a truss bridge (5 to 10% Reduction).
5. A. Use the scallop T411 rail
or
B. Use the standard T501 "Jersey" rail (2% Reduction).
6. A. Keep the bridges at 40 feet wide
or
B. Narrow the bridges to 30 feet wide (25% Reduction).
7. Keep the roadway 28 feet wide and separate the traffic lanes
or
Narrow roadway to 24 feet wide and do not separate the traffic lanes (5% Reduction).
8. A. Use the _____-year storm elevations and _____ feet of freeboard at the bridges (15 to 25% Reduction – Substandard)
or
B. Use the 100-year storm elevations and two feet of freeboard at the bridges.
9. A. Narrow the roadway to 24 feet wide on the bridge (35% Reduction – Substandard)
or
B. Narrow the roadway to 30 feet wide on the bridge (25% Reduction).
10. A. Lower the bridge weight limit to _____-ton (2% Reduction)
or
B. Use a 20-ton bridge design.
11. A. Use thinner pavement design designed to last _____ years (4 to 7% Reduction)
or
B. Use a 20-year pavement design.
12. A. Widen creek channels (Less than 1% reduction – no significant reduction in cost)
or
B. Do not widen the creek channels.
13. A. Use a design speed of __ mph (Less than 1% reduction – no significant reduction in cost)
or

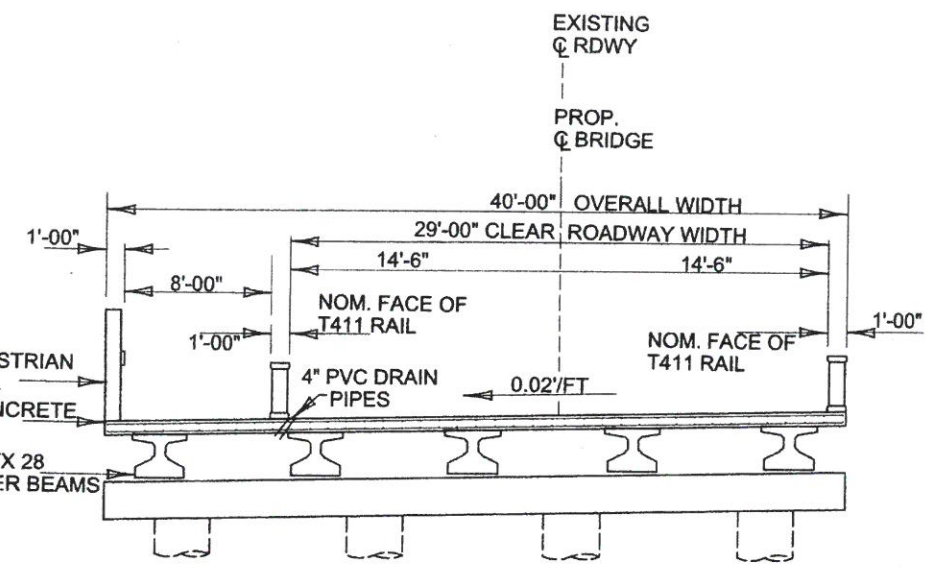
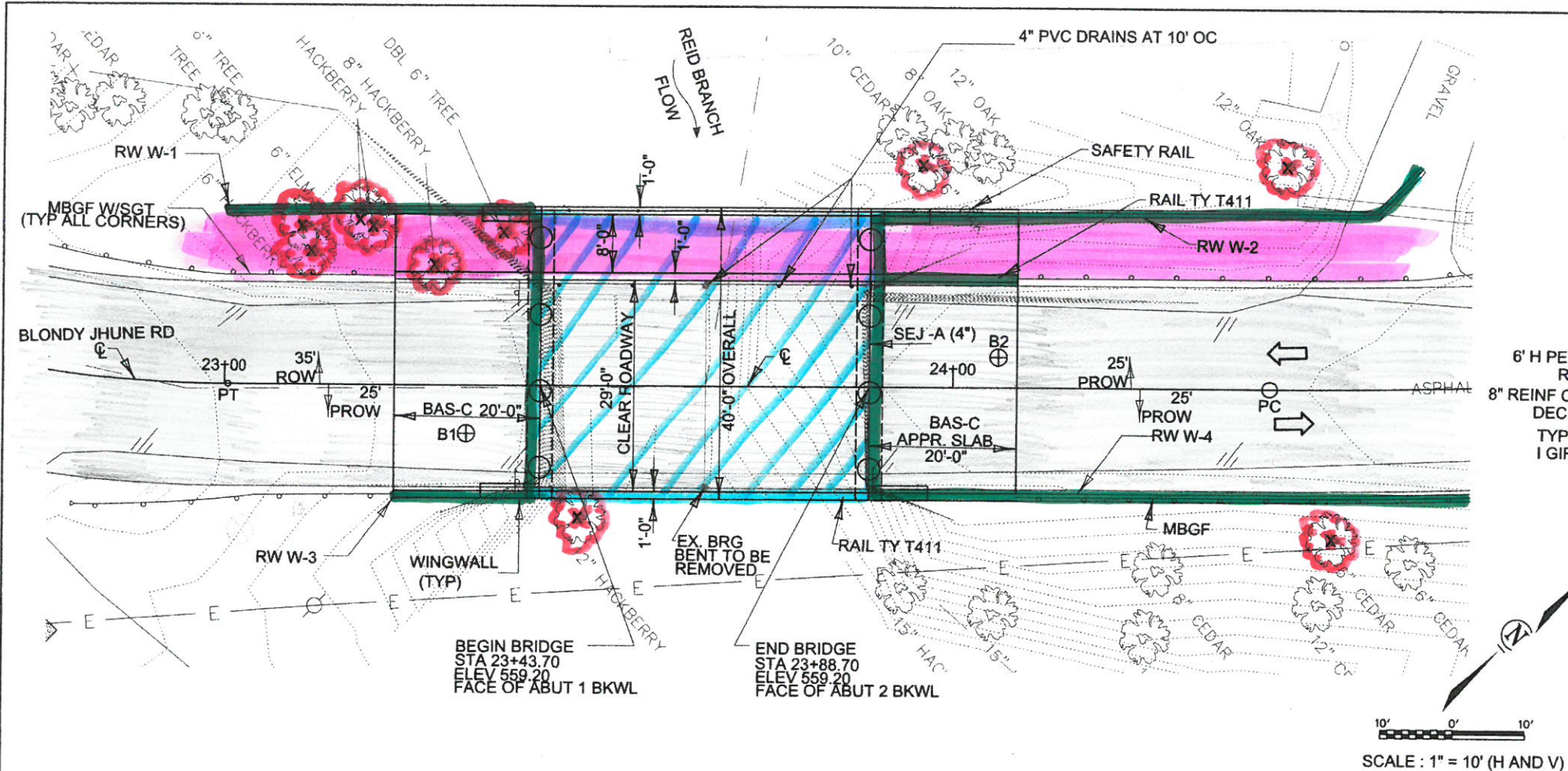


Item No. 08

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Requester: Public Works Director/City Engineer Stanton Foerster

B. Use a 30-mph design speed.



X TREE TO BE REMOVED.

GENERAL NOTES:

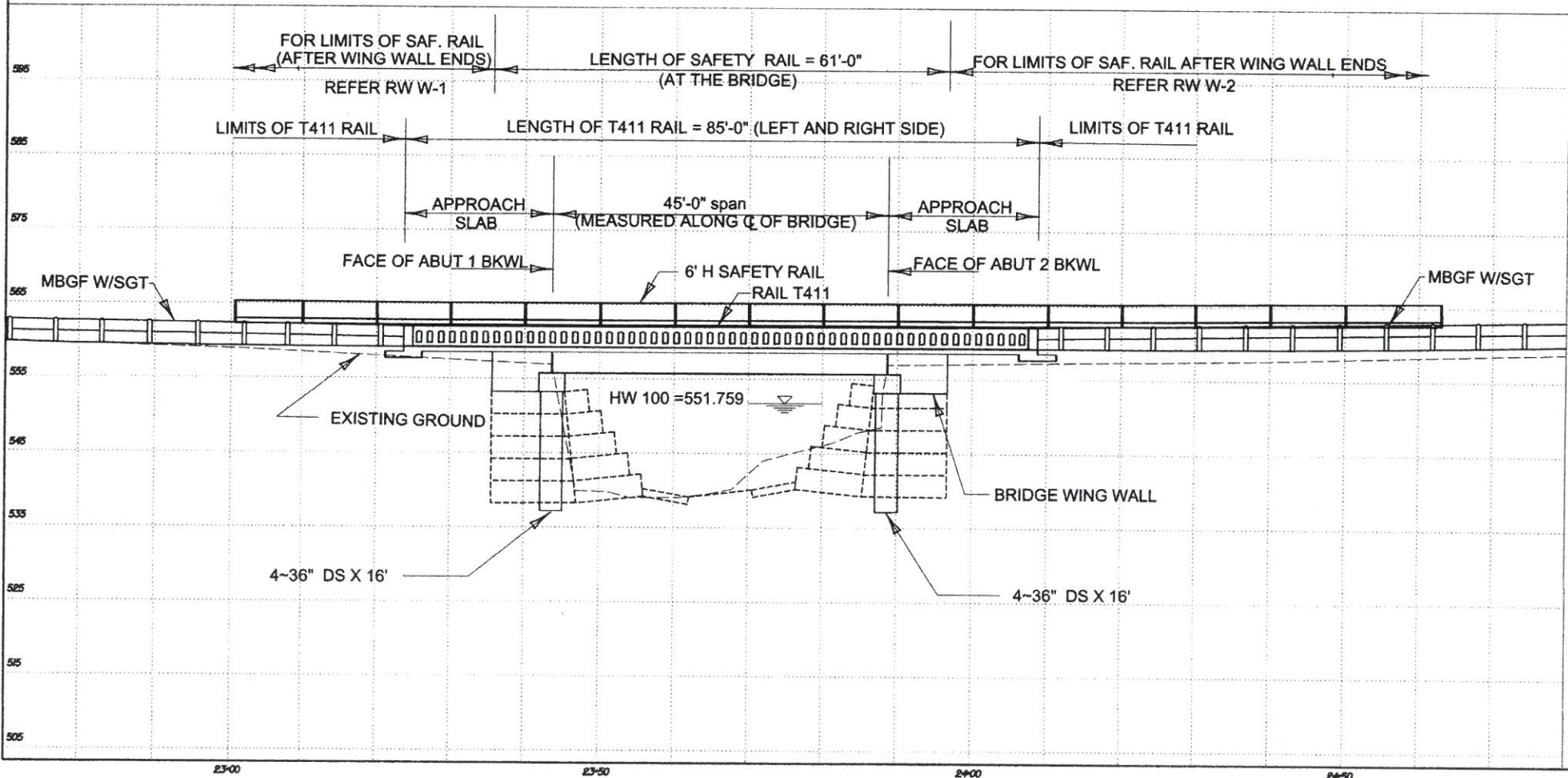
- 1) EXISTING BRIDGE, ABUTMENTS, WING WALLS, COLUMNS AND RIP-RAP TO BE DEMOLISHED AND REMOVED.
- 2) EXISTING PIERS TO BE CUT 3FT BELOW GROUND LINE.
- 3) FOR HORIZONTAL ALIGNMENT DATA SEE PROJECT LAYOUT SHEET.
- 4) PLACE 4" DIA DRAIN PIPES AS SHOWN ON STD IBMS AT 8' SPACING MAXIMUM.
- 5) BRIDGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH TxDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES, 2014 ED.
- 6) EPOXY COATED REINFORCEMENT BARS ARE NOT REQUIRED.
- 7) FOR GABIONS WALLS REF. TO GABION PLANS AND DETAIL SHEETS.
- 8) PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATIONS TO AVOID ANY CONFLICTS WITH WALLS.

DESIGN NOTES:

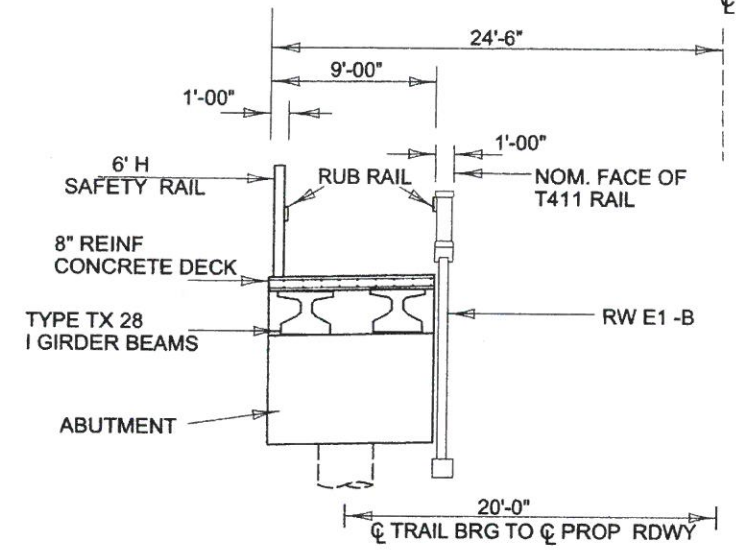
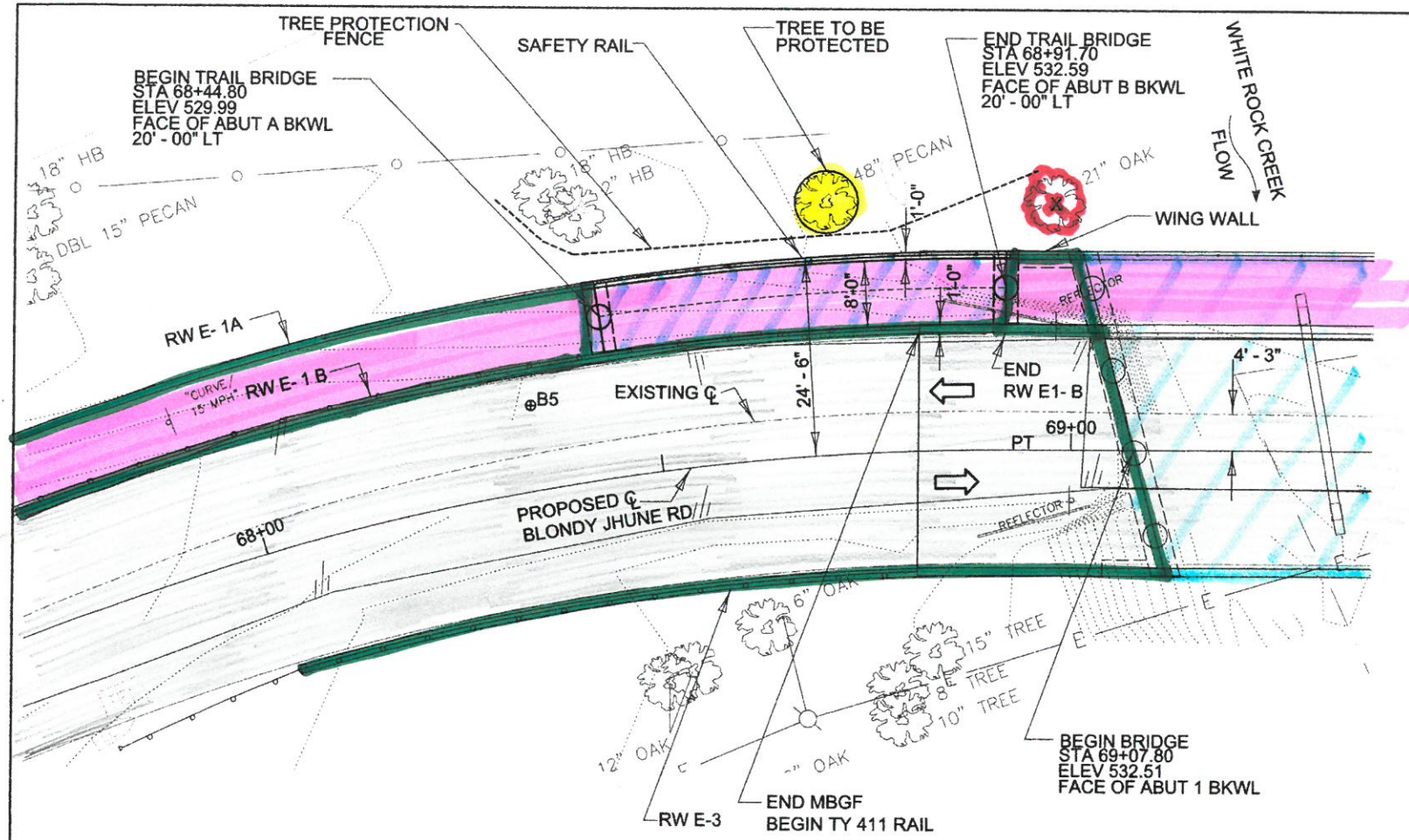
- 1) BRIDGE DESIGN FOR HL 93 LOADING UNDER AASHTO SPEC. AND INTERIM REVISION THERETO.

FOUNDATION NOTES:

- 1) DRILLED SHAFTS ARE DESIGNED FOR A LOAD OF 40 TONS EACH.
- 2) ALL DRILLED SHAFTS AT ABUTMENTS ARE DESIGNED FOR POINT BEARING.
- 3) DRILLED SHAFTS SHALL BE FOUNDED AT THE ELEVATION SHOWN OR DEEPER AS NECESSARY TO PENETRATE GREY LIMESTONE A MINIMUM DIMENSION OF 5FT.
- 4) FOR GEOTECHNICAL INFORMATION, REFER TO EWI REPORT # MI 153492 JUNE 2015.



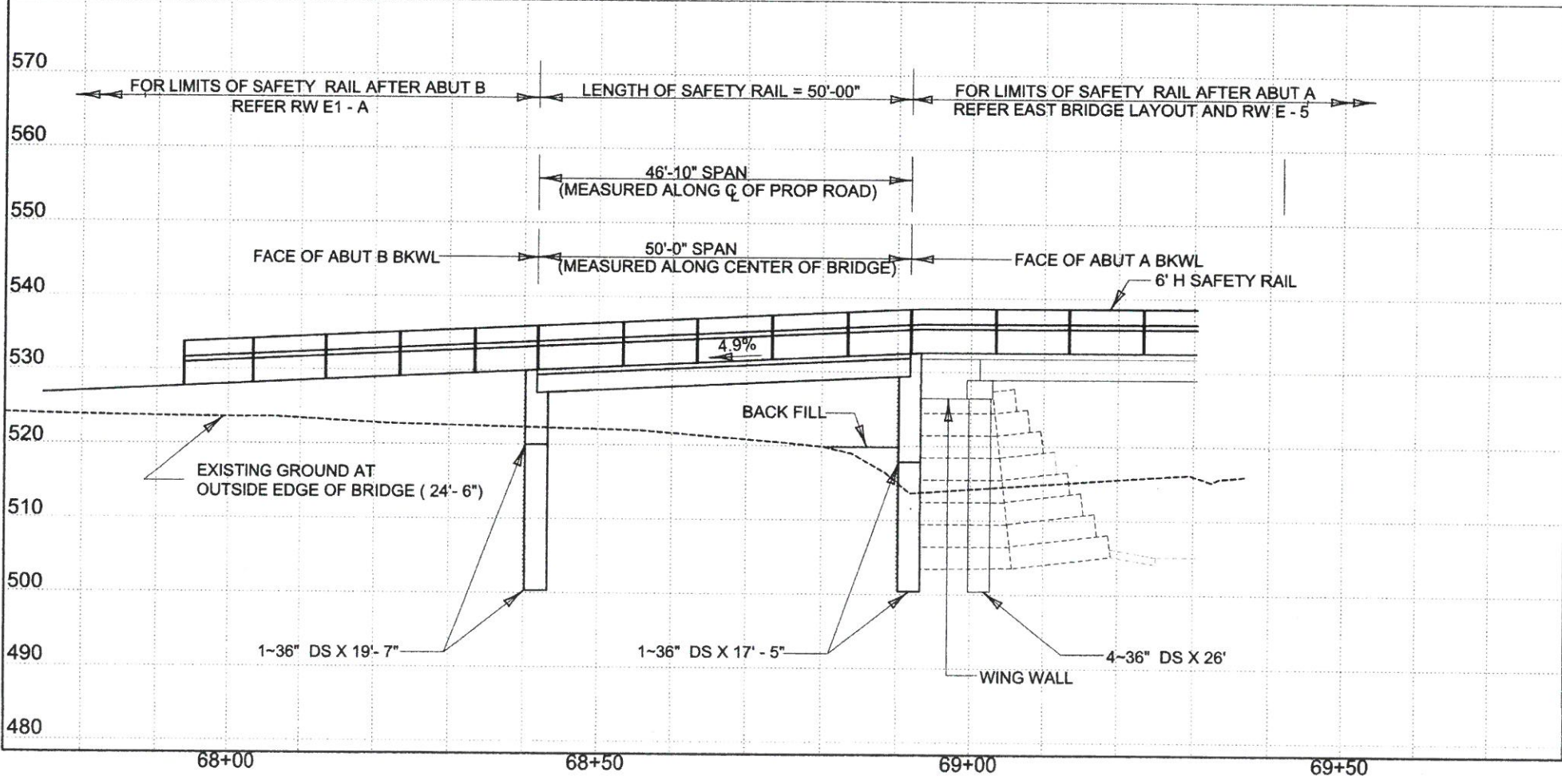
MI METROPOLITAN INFRASTRUCTURE, PLLC <small>9601 WHITE ROCK TR STE 204, DALLAS TX 75238 Tel # (214) 341-1501, Fax # (214) 341-1640 FIRM REGISTRATION No: 6339</small>					
WEST BRIDGE LAYOUT					
BLONDY JHUNE ROAD CITY OF LUCAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
LRP	WAS	NOV. 4 2015			13



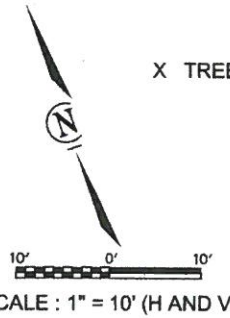
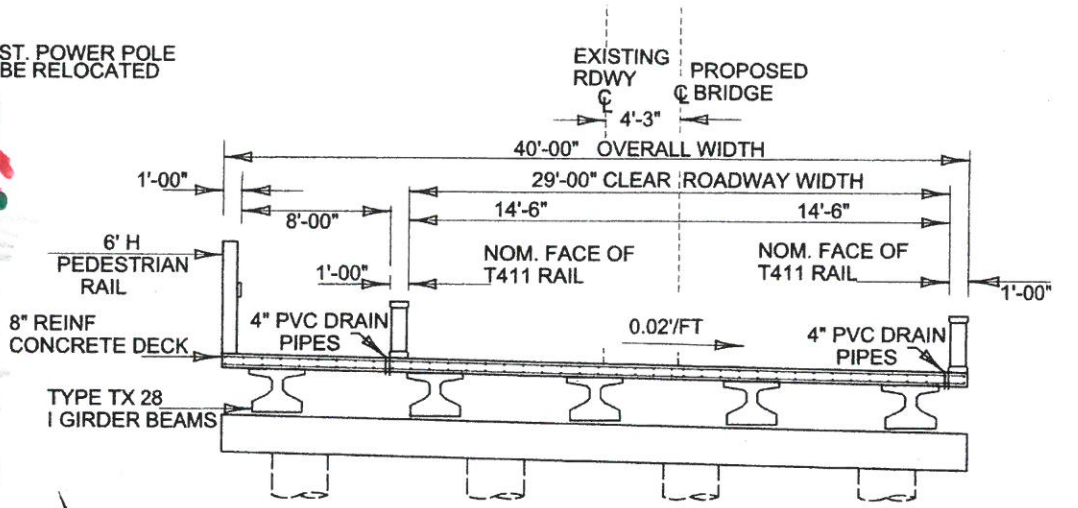
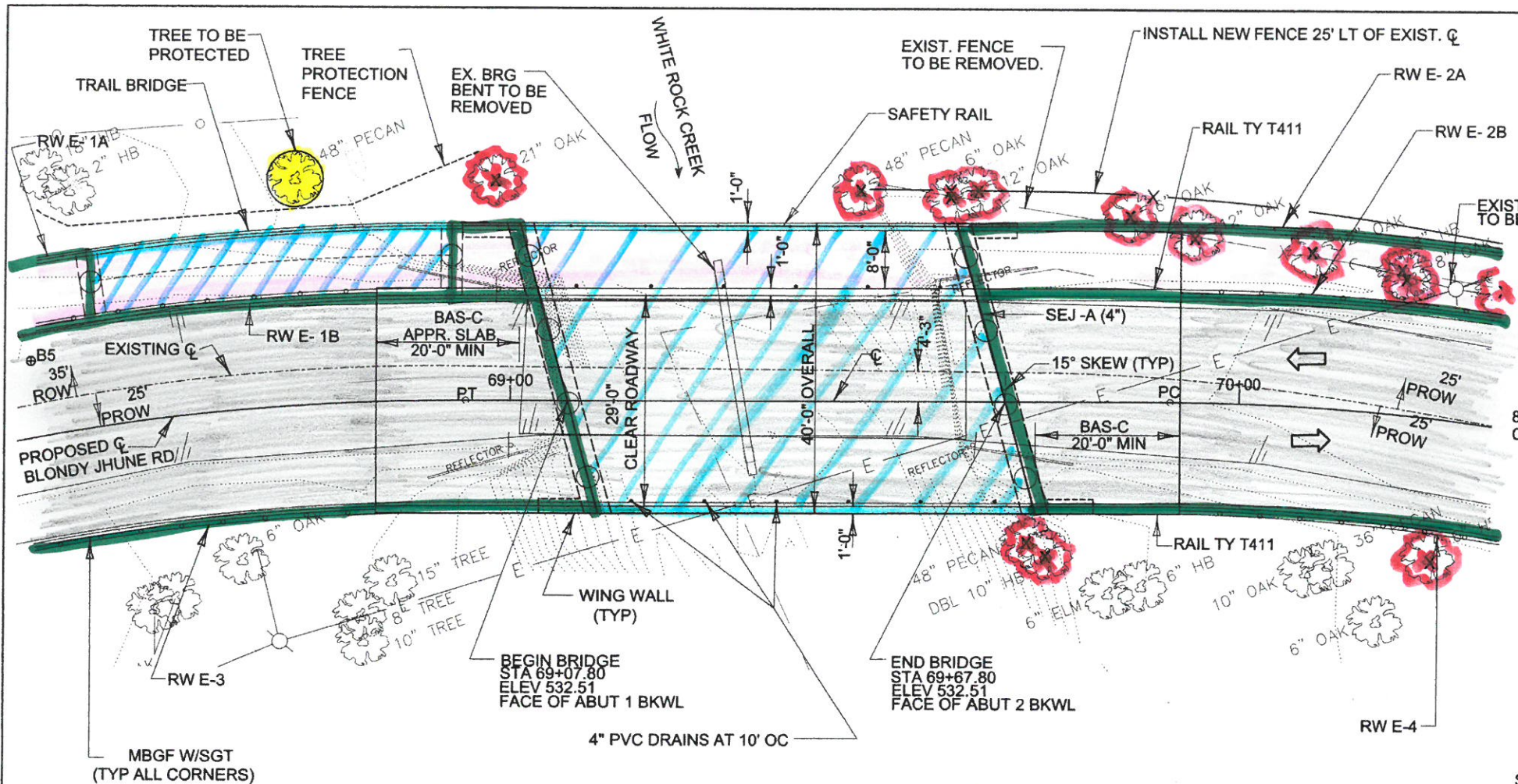
SCALE: 1" = 10' (H AND V)

X TREE TO BE REMOVED.

- NOTES:
- 1) BRIDGE APPROACH SLAB TO BE MODIFIED, LEAVE OUT SECTION AT TRAIL BRIDGE.
 - 2) ALL DRILLED SHAFTS AT ABUTMENTS ARE DESIGNED FOR POINT BEARING.
 - 3) DRILLED SHAFTS SHALL BE FOUNDED AT THE ELEVATION SHOWN OR DEEPER AS NECESSARY TO PENETRATE GREY LIMESTONE A MINIMUM DIMENSION OF 5FT.
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MI METROPOLITAN INFRASTRUCTURE, PLLC 9601 WHITE ROCK TR STE 204, DALLAS TX 75238 Tel # (214) 341-1501, Fax # (214) 341-1640 FIRM REGISTRATION No: 6939					
BRIDGE LAYOUT EAST TRAIL BRIDGE					
BLONDY JHUNE ROAD CITY OF LUCAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
LRF	WAS	NOV. 4 2015			15



GENERAL NOTES:

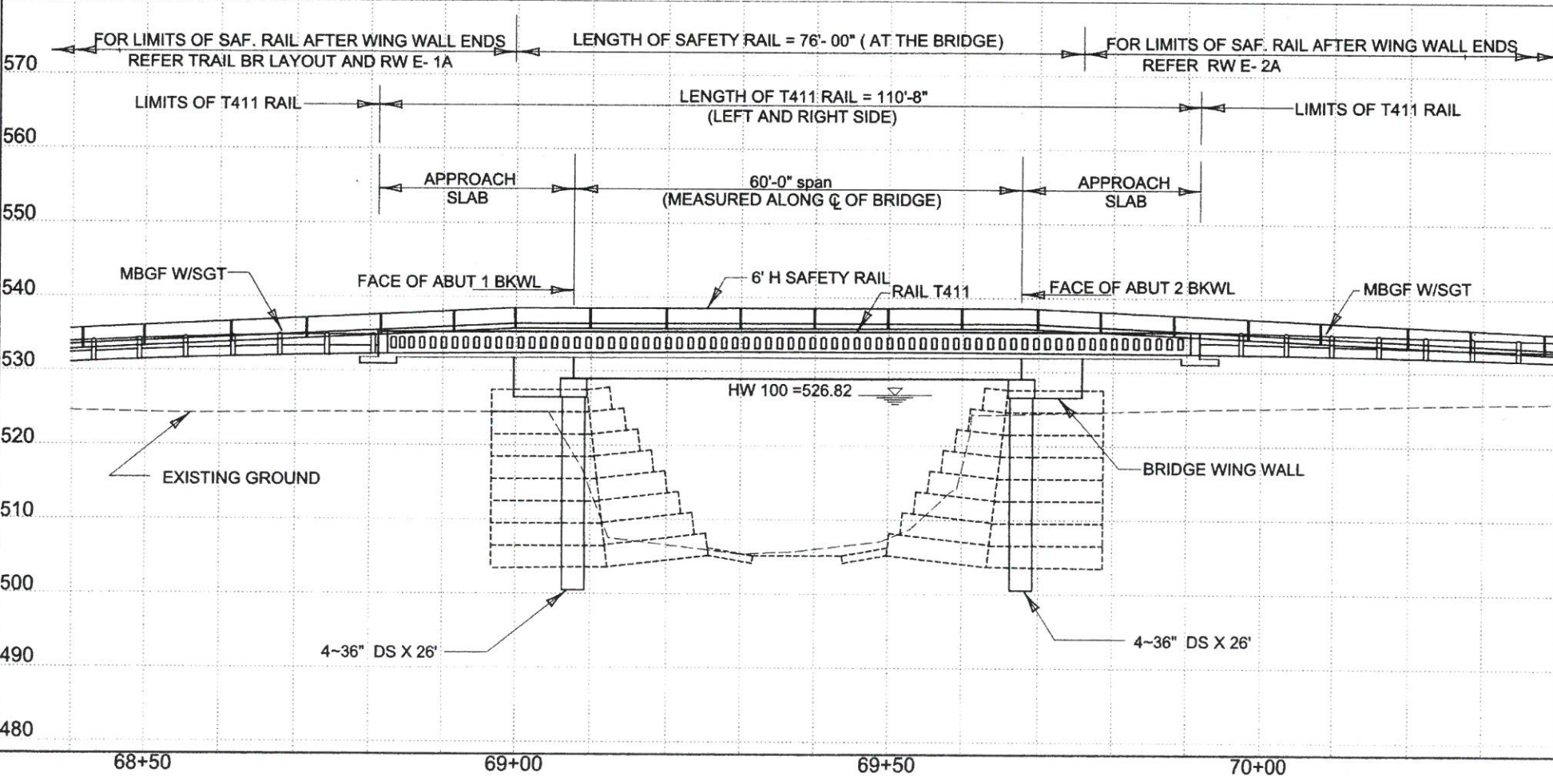
- 1) EXISTING BRIDGE, ABUTMENTS, WING WALLS, COLUMNS AND RIP-RAP TO BE DEMOLISHED AND REMOVED.
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DESIGN NOTES:

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 Tel # (214) 341-1501, Fax # (214) 341-1640
 FIRM REGISTRATION No: 6939

Louis R. Frisbie
 LOUIS R. FRISBIE
 69355
 LICENSED PROFESSIONAL ENGINEER
 STATE OF TEXAS
 Nov. 5, 2015

EAST BRIDGE LAYOUT					
15° SKEW					
BLONDY JHUNE ROAD					
CITY OF LUCAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NUMBER	SHEET
LRF	MAS	NOV. 4 2015			14



City of Lucas City Council Agenda Request February 18, 2016

Requester: Public Works Director/City Engineer Stanton Foerster

Agenda Item

Discuss, consider, and provide direction to the City Manager regarding following Neighborhood Connector Street Project items: I. Design Criteria, II. Project Prioritization, and III. Financing Strategies.

Background Information:

I. Design Criteria

Since April 2014, a collective effort under taken by citizens, City Councilmembers, consultants, and staff to develop a standard for five roadways in Lucas. These roadways carry more traffic than many residential streets but not as much traffic as state highways crossing Lucas. Initially the roadways being considered were Blondy Jhune Road, Forest Grove Road, Snider Lane, Stinson Road, and Winningkoff Road. Funding constraints shifted focus from all five roadways to more specific elements related to safety enhancements. The list was revise to including two roadways and four bridges after a bridge assessment was done in January 2015 and flooding during May 2015. The probable construction cost for the projects listed below is \$14.8 million:

- 1. Blondy Jhune Road Bridges Replacement.....\$1,800,000
- 2. Blondy Jhune Road Reconstruction.....\$3,900,000
- 3. Winningkoff Road Reconstruction\$4,300,000
- 4. Snider Lane Bridge/Floodway Crossing.....\$2,800,000
- 5. Stinson Road Bridge/Floodway Crossing.....\$2,000,000

A town hall meeting was held on February 7, 2016, to discuss various attributes of the projects including design criteria and funding. There was two hours of presentations and discussion pertaining to the following design ideals:

- 1. Minimize right-of-way and private property impacts
- 2. Eliminate flooding
- 3. Eliminate maintenance of clearing debris
- 4. Minimize impacts to trees
- 5. Provide an area for horseback riders and others to cross the creeks
- 6. Avoid standardization or one-size-fits-all thinking
- 7. Separate traffic within the curves
- 8. 20-year standard for two lane roadway pavement



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Several participants shared points-of-view that characterized some of these ideals wants as opposed to needs.

City Engineer Stanton Foerster has instructed the various consulting engineers to proceed with the following design criteria:

1. Set roadway elevations based on a 100-year storm frequency
2. Set bridge elevations based on a 100-year storm frequency plus two feet of freeboard
3. Use a 28-foot asphalt or 24-foot concrete roadway cross section
4. Use a 28-foot concrete roadway cross section on approach to a bridge
5. Apply super elevation to the horizontal geometry
6. Assume narrow, minimal rights-of-way
7. Avoid damage to trees
8. Assume open channel drainage
9. The use of curb and gutter is allowed but should be avoided
10. Eliminate obstacles or provide positive protection
11. The design speed is 30 mph

Each one of the criteria have an impact on construction costs.

II. Project Prioritization

Initially the projects were prioritized in the following order:

1. Blondy Jhune Road
2. Winningkoff Road
3. Stinson Road
4. Snider Lane
5. Forest Grove Road

Since the list above was created, various elements impacting design, cost, timing, etc. have lead to the following priority three lists:

1. Safety Enhancements Projects
 - a) Blondy Jhune Road Bridges Replacement
 - b) Winningkoff Road Reverse Curve Reconstruction
2. Priority Projects
 - a) Blondy Jhune Road Reconstruction
 - b) Winningkoff Road Reconstruction



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- c) Snider Lane Bridge/Floodway Crossing
 - d) Stinson Road Bridge/Floodway Crossing
3. Nonpriority Projects
- a) Stinson Road
 - b) Snider Lane
 - c) Forest Grove Road

At the February 7, 2016, Town Hall Meeting, the following priority list was presented by staff based on the input from citizens, City Councilmembers, and consultants:

- 1. Blondy Jhune Road Bridges Replacement
- 2. Blondy Jhune Road Reconstruction
- 3. Winningkoff Road Reconstruction
- 4. Snider Lane Bridge/Floodway Crossing
- 5. Stinson Road Bridge/Floodway Crossing

III. Financing Strategies

- 1. Projects are Needs vs Wants
 - a) Safety vs Aesthetics
 - b) Infrastructure vs Amenities
- 2. Fund Projects as Required and Ability to Pay
- 3. Minimize Impact on Tax Rate
 - Debt Capacity is a Function of:
 - i. Current Tax Base and Appreciation
 - ii. Increase in Tax Base (Residential and Commercial)
- 4. Consider Other Funding Sources

Attachments/Supporting Documentation:

- a. (I. Design Criteria) Refer to Item 7 – Discuss, consider, and provide direction to the City Manager regarding design criteria for the Blondy Jhune Road Bridge Replacement Project for a discussion concerning design criteria and acceptable engineering practices.
- b. (III. Financing Strategies) Updated Funding Presentation from the Town Hall.



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Budget/Financial Impact:

A Blondy Jhune Road Bridge Replacement Project is funded using account 21-8210-491-121, Blondy Jhune Bridges and Safety Projects. This account was established by certificates of obligation sold in mid-2015 in the amount of \$2,000,000 of which \$154,396 has been spent on engineering and design fees. An additional \$12.8 million is needed to fund the rest of the Neighborhood Connector Street Project.

Recommendation:

I. Design Criteria

Notwithstanding the recommendations made the City Engineer in Item 7, City Engineer Stanton Foerster recommends considering the following design modifications as they related to the rest of the project excluding the Blondy Jhune Road Bridge Replacement Project to possibly lower project costs:

1. Reduce or eliminate retaining walls with slopes

Use retaining walls on the northeast quadrant of the Stinson Road Bridge/Floodway Crossing project to protect a single row tree line.

2. Eliminate all of the trail elements

The exception to this is at the Snider Lane Bridge/Floodway Crossing. On this structure the trail should be constructed.

3. Widen creek channel

The widening of the Stinson Road Bridge creek channel will result in the lowering of the 100-year storm elevation of almost two feet. The channel should be widened.

II. Project Prioritization

Staff will make a recommendation in the City Council meeting based on the possible changes to design criteria discussed in the previous item. If there is no changes to the design criteria, the Public Works Director/City Engineer Stanton Foerster will make the following recommendation at the meeting:

1. Blondy Jhune Road Bridges Replacement
2. Snider Lane Bridge/Floodway Crossing
3. Stinson Road Bridge/Floodway Crossing



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4. Winningkoff Road Reverse Curve Reconstruction
5. Winningkoff Road Reconstruction
6. Blondy Jhune Road Reconstruction

III. Financing Strategies

Staff makes no recommendation regarding funding strategies.

Motions:

I. Design Criteria

I make a motion to direct the City manager to proceed with redesign and bidding of Neighborhood Connector Street Project with the following design criteria (note to reader: the items listed below in bold lettering are the recommendations of City Engineer Stanton Foerster):

1. a) Do not eliminate retaining walls
or
b) Eliminate retaining walls and use slopes
or
c) Eliminate retaining walls and use slopes except on the Stinson Road Bridge northeast quadrant.
2. a) Use stamped, tinted, and painted retaining walls
or
b) Use plain, smooth retaining walls.
3. a) Set roadway elevations based on a ____-year storm elevation
or
b) Set roadway elevations based on a 100-year storm elevation.
4. a) Set bridge elevations based on a ____-year storm frequency plus ____ feet of freeboard
or
b) Set bridge elevations based on a 100-year storm frequency plus two feet of freeboard.
5. a) Use a ____-foot asphalt or ____-foot concrete roadway cross section
or
b) Use a 28-foot asphalt or 24-foot concrete roadway cross section.



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6. a) Use a _____-foot concrete roadway cross section on approach to a bridge
or
b) **Use a 24-foot concrete roadway cross section on approach to a bridge.**
7. a) Do not assume a narrow, minimal right-of-way
or
b) **Assume narrow, minimal right-of-way.**
8. a) Do not avoid damage to trees
or
b) **Avoid damage to trees.**
9. a) Do not assume open channel drainage
or
b) **Assume open channel drainage.**
10. a) Do not use of curb and gutter
or
b) **Use of curb and gutter is allowed but should be avoided.**
11. a) The design speed is _____ mph
or
b) **The design speed is 30 mph.**
12. a) Keep the trail elements on Stinson Road and Snider Lane Bridges
or
b) Eliminate some of the trail elements Stinson Road and Snider Lane Bridges and those specific elements are _____.
or
c) **Eliminate all of the trail elements on the Stinson Road Bridge and keep all trail elements on the Snider Lane Bridge.**
13. a) Do not consider the use of a truss bridge
or
b) **Consider using a truss bridges.**
14. a) Use the scallop T411 rail
or
b) **Use the standard T501 "Jersey" rail.**



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15. a) Use a _____-foot wide bridge

or

b) Use a 30-foot wide bridge.

16. a) Use a _____-ton bridge design

or

b) Use a 20-ton bridge design.

17. a) Design the pavement to last _____ years

or

b) Design the pavement to last 20 year.

18. a) Widen creek channels at the _____ Bridge(s)

or

b) Do not widen the creek channel at the Snider Lane Bridge and widen the creek channel at the Stinson Road Bridge.

II. Project Prioritization

I make a motion to direct the City Manager to prioritize the Neighborhood Connector Street Project in the following order:

- _____ Blondy Jhune Road Bridges Replacement
- _____ Blondy Jhune Road Reconstruction
- _____ Forest Grove Road Reconstruction
- _____ Snider Lane Bridge/Floodway Crossing
- _____ Snider Lane Reconstruction
- _____ Stinson Road Bridge/Floodway Crossing
- _____ Stinson Road Reconstruction
- _____ Winningkoff Road Reverse Curve Reconstruction
- _____ Winningkoff Road Reconstruction

III. Financing Strategies

I make a motion to direct the City Manager regarding various elements and financing strategies for the Neighborhood Connector Street Project in the following way(s) _____.

Neighborhood Connector Street Project Funding Strategies

February 18, 2016

Issues and Concerns:

- Bridge & roadway flooding results in high maintenance costs to remove debris after floods
- No base to support roadway results in pavement failures and high maintenance costs
- Hazards due to edge drop-offs, slopes, culvert headwalls and roadside obstacles
- Traffic avoiding FM 1378 is using Winningkoff Road and Snider Lane
- Drainage too close to pavement and erosion near pavement edge
- Rough, uneven pavement impedes emergency vehicles
- Traffic conflicts due to narrow pavement on bridges and at curves such as Winningkoff Road reverse curves

Goals and Benefits:

- Eliminate flooding at the bridges and reduce maintenance costs for debris removal
- Provide for a substantial roadway foundation to support traffic for the next 20 years
- Install safety enhancements along roadside slopes and obstacles
- Reduce cut through/non-Lucas traffic
- Improve drainage and reduce erosion
- Protect tree canopy and maintain country/rural attractiveness
- Improve access for emergency vehicles
- Reduce potential traffic conflicts due to narrow pavement
- Establish utility corridors

Probable Construction Cost

• Blondy Jhune East & West Bridge Replacement	\$1,800,000
• Blondy Jhune Road	\$3,900,000
• Winningkoff Road	\$4,300,000
• Snider Lane Bridge/Floodway Crossing	\$2,800,000
• Stinson Road Bridge/Floodway Crossing	<u>\$2,000,000</u>
 Total	 \$14,800,000

⁽¹⁾ Does not include right-of-way, easements, engineering, surveying, tree mitigation and utilities.

Funding Goals

- ✓ Projects are needs vs wants
 - Safety vs Aesthetics
 - Infrastructure vs Amenities
- ✓ Fund projects as required and ability to pay
- ✓ Minimize impact on tax rate
 - Debt capacity is a function of:
 - Current tax base and appreciation
 - Increase in tax base (residential and commercial)
- ✓ Consider other funding sources

Source of Funds

Funding Required - Probable Construction Cost⁽¹⁾ \$14,800,000

Source of Funds:

Certificates of Obligation (issued in 2015) ⁽²⁾	\$ 2,000,000
Impact Fees	\$ 600,000
General Fund Reserves ⁽³⁾	\$ 2,400,000
Additional Debt Financing	
2016	\$ 6,000,000
2019	\$ 2,000,000
2021	<u>\$ 2,000,000</u>
	<u>\$15,000,000</u>

⁽¹⁾ Does not include right-of-way, easements,, engineering, surveying, tree mitigation, and utilities.

⁽²⁾ \$154,396 has been spent for Engineering

⁽³⁾ Excess General Fund Reserves:

General Fund Balance (unrestricted)	\$ 4,700,000
Less: 6 month reserve	<u>(\$2,300,000)</u>
Excess General Fund Reserves	<u>\$2,400,000</u>

Historical Taxable Values

<i>Historical Valuations</i>				
Tax Year	Fiscal Year Ending Sept 30	Taxable Values	Growth Rate	Residential Bldg Permits
2010	2011	551,500,014		91
2011	2012	567,043,409	2.82%	90
2012	2013	589,607,007	3.98%	96
2013	2014	663,672,428	12.56%	101
2014	2015	768,920,713	15.86%	126
2015	2016	847,504,395	10.22%	37 (4 mths)
Average Growth Rate			9.09%	

Historical Tax Rates

	<u>2010/2011</u>	<u>2011/2012</u>	<u>2012/2013</u>	<u>2013/2014</u>	<u>2014/2015</u>	<u>2015/2016</u>
M&O	\$ 0.2472	\$ 0.2577	\$ 0.2612	\$ 0.2540	\$ 0.2331	\$ 0.2156
I&S	0.1269	0.1165	0.1130	0.1016	0.0876	0.1051
Total	<u>\$ 0.3742</u>	<u>\$ 0.3742</u>	<u>\$ 0.3742</u>	<u>\$ 0.3556</u>	<u>\$ 0.3207</u>	<u>\$ 0.3207</u>

Taxable Value Growth Rate Assumptions

2017	10%
2018	5%
2019	5%
2020	2%
2021-2038	0%

Tax Rate Impact

1	2	5	6	7	8	9	10	11	12
Fiscal Year Ending Sept 30	Projected Net Taxable Values	Net Debt Service	Debt Service for Proposed Funding			Debt Service w/ additional funding	I&S (debt service) Tax Rate ⁽⁴⁾		
			\$6,000,000 Series 2016 ⁽²⁾	\$2,000,000 Series 2019 ⁽³⁾	\$2,000,000 Series 2021 ⁽³⁾		For the fiscal year	Increase (Decrease)	Cumulative Change
2016	764,664,187	747,142				747,142	\$0.1051	(1)	
2017	841,130,606	703,351	303,700			1,007,051	\$0.1197	\$0.0146	\$0.0146
2018	883,187,136	705,662	350,100			1,055,762	\$0.1195	-\$0.0002	\$0.0144
2019	927,346,493	702,066	404,300			1,106,366	\$0.1193	-\$0.0002	\$0.0142
2020	945,893,423	702,294	431,600	158,500		1,292,394	\$0.1366	\$0.0173	\$0.0315
2021	945,893,423	696,346	433,000	155,500		1,284,846	\$0.1358	-\$0.0008	\$0.0307
2022	945,893,423	699,722	434,000	157,375	158,500	1,449,597	\$0.1533	\$0.0174	\$0.0481
2023	945,893,423	456,478	464,000	159,000	155,500	1,234,978	\$0.1306	-\$0.0227	\$0.0254
2024	945,893,423	451,378	463,000	155,500	157,375	1,227,253	\$0.1297	-\$0.0008	\$0.0246
2025	945,893,423	450,353	466,500	156,875	159,000	1,232,728	\$0.1303	\$0.0006	\$0.0252
2026	945,893,423	443,878	464,500	158,000	155,500	1,221,878	\$0.1292	-\$0.0011	\$0.0240
2027	945,893,423	441,953	462,100	158,875	156,875	1,219,803	\$0.1290	-\$0.0002	\$0.0238
2028	945,893,423	341,603	464,200	159,500	158,000	1,123,303	\$0.1188	-\$0.0102	\$0.0136
2029	945,893,423	342,828	465,700	159,875	158,875	1,127,278	\$0.1192	\$0.0004	\$0.0140
2030	945,893,423	343,503	466,600	160,000	159,500	1,129,603	\$0.1194	\$0.0002	\$0.0143

(1) I&S established tax rate for 2016 is slightly higher than calculated rate due to change in Taxable Value for 2016.

(2) Series 2016 CO interest rate calculated at 4%. Current interest rates indicate +/- 3%.

(3) Series 2019 & 2021 CO interest rate calculated at 5%.

(4) Based on questions from Town Hall meeting columns 11 and 12 have been revised from original presentation to clarify the impact on the I&S rate.

Debt Alternatives

- General Obligation Bonds
 - Requires Election
 - Requires Bond Council
 - Subject to H.B. 1378
- Certificates of Obligation
 - Authorized by City Council
 - Subject to Public Hearing
 - Prior to sale Subject to Petition by Citizens

Legislative Constraints

House Bill 1378 (effective on January 1, 2016)

- Section 140.008 - Its purpose is to increase financial transparency via reporting
- Section 271.047(d) - restricts the City's ability to issue debt for related projects for 3 years if the voters do not support a general obligation proposal.

Failure of bond election would push all work out at least 3 – 4 years

Summary and Council Recommendation

- ✓ Projects are needs vs wants
 - Safety vs Aesthetics
 - Infrastructure vs Amenities

- ✓ Funding will have little impact on tax rate
 - Debt issued as tax base increases

- ✓ Council recommendation
 - Proceed with Certificates of Obligations
 - Supplement funding with excess General Fund reserves and Impact Fees



City of Lucas Council Agenda Request February 18, 2016

Requester: City Manager Joni Clarke
HR Manager Cheryl Meehan

Agenda Item:

Consider the following items regarding the Texas Emergency Services Retirement System (TESRS) due to the inability of the City of Lucas to terminate its participation in the volunteer pension plan.

- a. Update from City Attorney Joe Gorfida, regarding telephone conference call with Michelle Jordan TESRS Executive Director, Jim Crawson TESRS Legal Counsel, Office of the Attorney General, Joni Clarke, City Manager and Cheryl Meehan, Human Resources Manager.
- b. Appropriate funds from the unrestricted fund balance in the general fund in the amount of \$25,000 to finance the required payments to TESRS.

Background Information:

After considerable discussions with the Attorney General's Office and TESRS, the City has determined that it cannot currently terminate its participation in the TESRS. Additionally, staff presented to the City Council at the January 7, 2016 meeting that only 3 members met the definition of "qualified service" under the Texas Government Code. After the City sent communications to TESRS in an attempt to settle the outstanding balance owed, the Attorney General's office contacted the City to communicate that the calculation was incorrect. Staff set up a meeting with the Attorney General's representative, TESRS and the City Attorney. As a result of this phone conference, staff recalculated the members that would have been deemed to be active volunteers for which the city must contribute.

The City of Lucas did not include funding in the current fiscal year 15/16 budget. The Lucas Volunteer Firefighter Pension Board met on December 8, 2015 and made a recommendation to reduce the contribution rate to \$36 per month per emergency responder volunteer which is the minimum required contribution. The Board also took action to move forward with reconciliation of the outstanding quarterly reports to bring the City current with its financial obligation with TESRS.

Texas Emergency Services Retirement System and Jim Crawson TESRS Legal Counsel, Office of the Attorney General position is that the City of Lucas must list all volunteer emergency responders on their roster as members of the Texas Emergency Services Retirement System. The amount paid would be to cover disability insurance and death benefits.



City of Lucas Council Agenda Request February 18, 2016

Requester: City Manager Joni Clarke
HR Manager Cheryl Meehan

Attachments/Supporting Documentation:

None.

Budget/Financial Impact:

The current rate is \$60 per month per member. A credit of \$3,830 has been authorized by TESRS to reduce the outstanding balance. We are in the process of obtaining authorization from Michelle Jordan, TESRS Executive Director and Jim Crawson TESRS Legal Counsel, Office of the Attorney General regarding the request for the reduction to \$36 per month per member with an effective date January 1, 2015 and reconciliation of the City's account.

Recommendation:

The City Council will receive an update from the City Attorney regarding the position of the Texas Emergency Services Retirement System (TESRS) and Legal Counsel for TESRS from the Office of the Attorney General regarding how to proceed in resolving this situation.

Motion:

I make a motion to approve/deny an appropriation of funds from the unrestricted fund balance in the general fund in the amount of \$25,000 to Line Item 11-6300-128 Other Retirement to finance payments to TESRS through the end of fiscal year 15/16.



City of Lucas City Council Agenda Request February 18, 2016

Requester: Mayor Jim Olk

Agenda Item:

Executive Session:

An Executive Session is not scheduled for this meeting.

Background Information:

NA

Attachments/Supporting Documentation:

NA

Budget/Financial Impact:

NA

Recommendation:

NA

Motion:

NA