



CITY OF LIBERTY PUBLIC WORKS

2024 CITY OF LIBERTY STREET REHABILITATION CITY-WIDE PROJECT

BID NO. 2023-14

ADDENDUM NUMBER 1

DATE: JANUARY 26, 2024

GENERAL

The following changes, additions, or deletions shall be made to the following documents as indicated and all other conditions shall remain the same:

1. BID SCHEDULE

- Remove Bid Schedule sheet 12 and 13, replace with sheets 12 and 13 marked "Addendum no. 1", see attachments.

2. GENERAL NOTES AND SPECIFICATIONS

- Remove General note and specification sheets 85, 87 and 89, and replace with sheets 85, 87 and 89 marked "Addendum No. 1", see attachment.

3. EXHIBIT AND DETAILS

- Remove exhibit sheet 116 and replace with sheet 116 marked "Addendum No.1", see attachments.
- Add exhibit sheets 116A – 116U marked "Addendum No.1", see attachments.

- Add exhibit sheets 118A – 118G marked “Addendum No.1”, see attachments.

SUBMITTED QUESTIONS VIA EMAIL

- **Asphalt Interlayers can be placed before the 2" HMAC in between the stabilization and asphalt Layer in the Mill & Overlay. Asphalt Interlayers can be significantly increase the service life of asphalt and reduce maintenance while being a reflective crack mitigator. This material will increase service life, reduce maintenance and protect the subgrade for future mill & overlay.**

ANSWER: Asphalt interlayer will not be required on this project.

- **Will the pre-bid sign in sheet be posted?**

ANSWER: It will be emailed to all the attendees

- **ANY PLANS ASSOCIATED WITH THIS PROJECT**

ANSWER: There will only be detail exhibits of each street which will be included in Addendum No.1 on January 25th, 2024

- **What size is the water main where the (8) 6" Hot Tap will be performed? There are no plans and cannot not bid accordingly..**

ANSWER: THE EXHIBITS OF EACH STREET AND THE EXHIBITS OF THE WATER LINE WORK WILL BE ADDED WITH SHEETS MARKED “ADDENDUM NO.1”.

- **When will addendum 1 be posted?**

ANSWER: YES ADDENDUM NO.1 WILL BE POSTED ON JANUARY 26, 2024.

Section 0210
BID SCHEDULE
For construction of: 2024 CITY OF LIBERTY CITY WIDE STREET REHABILITATION PROJECT
For the City of Liberty, Texas

Item No.	Item Code	Alt	Description	Estimated Quantity	Unit	Unit Price	Unit Price (Written)	Total
			TOTAL BID			\$	and /100 Dollars	\$
			STREET REHABILITATION					
100			PREP ROW (NOT TO EXCEED \$300 PER STATION)	140	STA	\$	and /100 Dollars	\$
247			FL BS(COMPLETE IN PLACE), (ORD. COMP.),TYPE 4, GRADE 1-2	475	TON	\$	and /100 Dollars	\$
275			COMPLETE CEMENT TREATED (MIX EXISTING MATERIAL (8" – 10"))(3-5% SLURRY)(ORD. COMP.)	35,000	SY	\$	and /100 Dollars	\$
340			COMPLETE HOTMIX ASPHALT PAVEMENT COMPACTED (PG 70-22), 2", TYPE "D"	3,800	TON	\$	and /100 Dollars	\$
500			MOBILIZATION (NOT TO EXCEED 5%)	1	LS	\$	and /100 Dollars	\$
502			BARRICADES, SIGNS & TRAFFIC HANDLING (NOT TO EXCEED \$5,000 PER MONTH)	12	MON	\$	and /100 Dollars	\$
530			COMPLETE INTERSECTIONS, DRIVEWAYS & TURNOUTS (ACP)(TY D)	320	TON	\$	and /100 Dollars	\$
9005			COMPLETE 10" RCP INSTALLATION	35	LF	\$	and /100 Dollars	\$
			STREET REHAB TOTAL			\$	and /100 Dollars	\$

			WATER / WASTEWATER REHAB					
8000			COMPLETE SANITARY SEWER MANHOLE REMOVE AND REPLACE MAX 8'	7	EA	\$	and /100 Dollars	\$
9000			COMPLETE 6" C900 WATER LINE INSTALLED	3,000	LF	\$	and /100 Dollars	\$
9001			COMPLETE RECONNECT WATER SERVICES	31	EA	\$	and /100 Dollars	\$
9002			COMPLETE 6" TAP AND VALVE INSTALLED	7	EA	\$	and /100 Dollars	\$
9003			COMPLETE FIRE HYDRANT INSTALLATION WITH 6" VALVE	1	EA	\$	and /100 Dollars	\$
			WATER / WASTE WATER TOTAL			\$	and /100 Dollars	\$

7. The approximate location of the known underground utility installations is as shown on the plans. Confirm the location of these utility lines and the exact location of any others which may exist. Assume full responsibility for notifying the utility involved in case of conflict or damage and he/she shall be responsible for damage that occurs due to his/her negligence. Remove and dispose of abandoned lines encountered that interfere with the construction of this project. Consider this work to be subsidiary to the various bid items of the contract.
8. Allow City forces to enter this project to accomplish such work as shown in the plans (by others) and as may be deemed necessary by the engineer.
9. Maintain for the duration of this project, those sections of existing and proposed travel ways and appurtenances which are to be constructed, reconstructed, or modified under this project. City forces will maintain the existing sections of roadway and its appurtenances not a part of this project. Any portion of roadway and its appurtenances damaged by the contractor's forces shall be repaired by the contractor at his/her expense. Any portion of roadway damaged by sub-contractors on this project shall be repaired by the contractor at no expense to the City.
10. Place all equipment and vehicles not in operation a minimum of 10 feet from the travel way unless protected behind positive barrier. All damages caused by the Contractor shall be repaired at his/her expense. Protect all areas of the right of way which are not included in the actual limits of the proposed construction areas from destruction. Restore any damaged areas to original or better condition. No payment will be made for this work. City forces will maintain the existing section of streets and its appurtenances not a part of this project except that those sections damaged by the contractor's forces shall be repaired by the contractor at his entire expense.
11. All materials received or removed from the project are to access from City of Liberty 40 approved route.
12. Assume ownership for all designated waste material and dispose of it at a place off of the right of way, as approved by the engineer.
13. Control the dust caused by construction operations. For sweeping the finished concrete pavement, use one of the following types of sweepers or equal:

Tricycle Type
Wayne Series 900
Elgin White Wing
Elgin Pelican
Mobile TE-4

Truck Type -4 Wheel
M-B Cruiser II
Wayne Model 945
Mobile TE-3
Murphy 4042

14. The contractor shall be responsible for all maintenance of the travel way and appurtenances within the barricades for the duration of the project. Ingress and egress to adjacent property shall be maintained by the contractor at all times.
15. **The contractor is to have a lab to test all (ACP). All in-place density testing shall be performed at least every 1000 linear feet or one per street if the street is less than 500 linear feet. In-place densities shall be performed by nuclear density gauge by an independent lab. Cores shall be done to verify depth of mat if there is a thickness concern as directed by the Public Works Director. All testing with the independent lab will not be paid separately and shall be considered subsidiary to various bid items. If the Contractor schedules an independent lab for testing and cancels services, the contractor will be responsible for any charges that occur for cancellation. Test results are to be submitted to Public Works.**

30. The Contractor will notify the Engineer 48 hours in advance of completed work per site. The Engineer will inspect each site and submit a punch list per location to the Contractor as necessary. The Contractor will not demobilize from site until the Engineer has approved all work including punch list items.
31. Final surface courses are to be paved within four calendar days of paved level-up courses. The City shall have the authority to add or remove streets from the rehabilitation list in the exhibits as directed by the Public Works Director.

2. ITEM 5: CONTROL OF WORK

1. Station the project prior to commencing work. Mark the stations every 100 feet. Contractor shall maintain stationing throughout the duration of the project. Remove the station markings at the completion of the project. Consider this work to be subsidiary to the various bid items of the contract.

3. ITEM 7: LEGAL RELATIONS AND RESPONSIBILITIES

1. Furnish all materials, labor and incidentals required to provide for traffic across the street and for temporary ingress and egress to private property in accordance with article 7.7 of the standard specifications at no additional cost to the City. Consider this work to be subsidiary to the various bid items of the contract.
2. Maintain the roadway slope stability. Temporary retaining structures or shoring may be required. Before installing any proposed temporary retaining structures or shoring, secure written approval. Submit design calculations, working drawings and a plan of operations including sequencing. Maintaining slope stability is subsidiary to the various bid items.

4. ITEM 8: PROSECUTION AND PROGRESS

1. Compute and charge working days in accordance with Article 8.3.1.4 Standard Work Week.
2. Gather information and direct attention to the aspects of adjoining projects that may be in the progress during the construction of a portion of this project. Plan and prosecute the sequence of construction and the traffic control plan with adjacent construction projects so as not to interfere with, or hinder the completion of the work in progress on the adjoining projects. Coordinate projects to ensure an uninterrupted flow of traffic.

5. ITEM 9: MEASUREMENT AND PAYMENT

1. The Contractor shall submit all tickets, As-Built drawings and updated schedule with each pay request.
2. The City will withhold a 5% retainage from each pay request.

6. ITEM 100: PREP RIGHT OF WAY

Due to nature of work Prep Right of Way price shall be set at no more than \$300 per station.

7. ITEM 104: REMOVING CONCRETE

Saw the longitudinal break-back line when removing the existing concrete pavement for staged construction. Saw cut full depth through the existing asphalt and full depth through existing concrete pavement and curb. This work is not paid for directly but considered subsidiary to item 361, 8000, 9000 and 9001, **9002, 9003**.

8. ITEM 105: REMOVING TREATED AND UNTREATED BASE AND ASPHALT PAVEMENT

This item is not paid for directly but considered subsidiary to various bid items.

9. ITEM 134: BACKFILLING PAVEMENT EDGES

This item is not paid for directly but considered subsidiary to various bid items.

10. ITEM 150: BLADING

The shoulders shall be bladed so that the slurry mixing application is free of all vegetation/organic material. This item shall not be paid for directly but shall be considered subsidiary to various bid items.

11. ITEM 247: FLEXIBLE BASE

Furnish Type A, Grade 4 crushed limestone. This item will be paid by tonnage. Location of flexible base will be determined by the Public Works Director. Type D Crushed Concrete will be **NOT** permitted.

12. ITEM 251: REWORKING BASE COURSES

Saw cut all tie-ins to intersecting and continuing roadways to provide smooth transitions. Consider this work to be subsidiary to various bid items of the contract.

Windrow scarified base material for backfilling edge of pavement. Skid steers not allowed on travel lanes. This work is not paid for directly but considered subsidiary to various bid items.

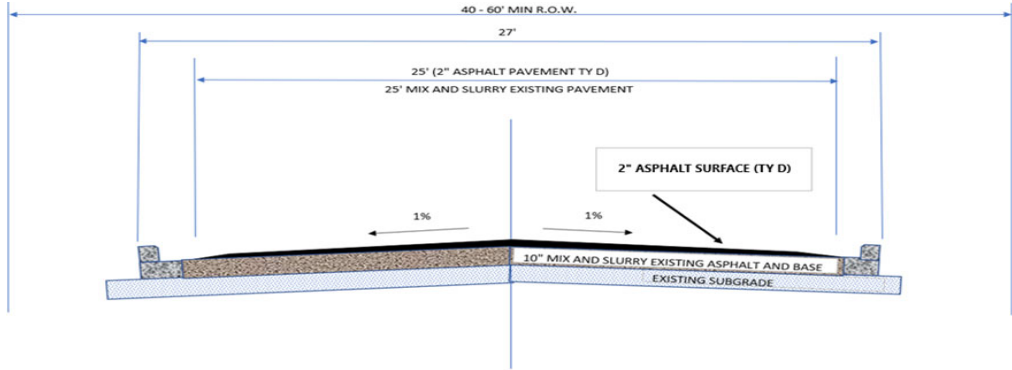
This item shall not be paid for directly but shall be considered subsidiary to Item 275.

13. ITEM 275: CEMENT TREATMENT (ROAD-MIXED)

Provide 3% - 5% Cement slurry (By Weight) per manufacturer specifications. Cement slurry shall be SuperSlurry by Martin Marietta or an approved equal. Dry Cement will not be permitted. Micro-cracking will be done only at the direction of the Engineer. Asphalt surface must be place between 4 to 7 days after final grading and ordinary compaction. Contractor shall "Proof Roll" completed base work prior to placing asphalt surface. Cement slurry and proof rolling (item 216) will not be paid for separately and shall be considered subsidiary to this item.

TABLE OF ESTIMATED QUANTITIES																
					ITEM NUMBERS											
No.	STREET NAMES	STREET LIMITS			100	247	275 (8")	275 (10")	340 (2")TONS	530	8000	9000	9001	9002	9003	9005
1	OKLAHOMA	US 90	TO	WASHINGTON	5.0			1444.4	158.9	0		500	5	1		
2	FORT WORTH	US 90	TO	WASHINGTON	9.8		2177.8		239.6	15		750	6	1	1	
3	ALABAMA	LAMAR	TO	TRINITY	2.0		444.4		48.9	5						
4	OHIO	US 90	TO	WASHINGTON	5.5		1222.2		134.4	15		550	5	2		
5	ALABAMA	US 90	TO	MLK	1.5			416.7	45.8	20						
6	LOUISIANA	RR	TO	TRINITY	5.5		1558.3		171.4	20						
7	LOUISIANA	US 90	TO	WASHINGTON	5.5		1222.2		134.4	50		550	6	2		
8	ABLE	BEAUMONT	TO	END OF ROAD	13.6		2720.0		299.2	10						
9	GEORGIA	US 90	TO	WASHINGTON	6.0		1666.7		183.3	10	1					
10	ALABAMA	US 90	TO	WASHINGTON	7.0		1555.6		171.1	20	2					
11	LOBLOLLY	WALLISVILLE	TO	LINDEN LANE	5.2			1502.2	165.2	30						
12	CORNELL	TEXAS	TO	INDEPENDENCE	10.0		2444.4		268.9	5	4					
13	LAKELAND	1515 LAKELAND	TO	GRAND	13.5	175.0		3555.0	391.1	15						35
14	LAKELAND	JEFFERSON	TO	1500' SOUTH	15.0			4000.0	440.0	10						
15	ROBBIE	GRAND	TO	NORTH END	6.3		1400.0		154.0	40						
16	BROWNING	MONTA	TO	MAGNOLIA	6.8		1511.1		166.2	10						
17	WASHINGTON	LOUISIANA	TO	EAST END	8.0	300.0		1777.8	195.6	10		650	9	1		
18	MONTA	MILAM	TO	BOWIE	12.0			3975	380.0	35						
***THE QUANTITIES IN THE TABLE ARE FOR INFORMATION ONLY				TOTALS:	138.2	475.0	17922.8	16671.1	3748.1	320.0	7.0	3000.0	31.0	7.0	1.0	35.0

NAME OF STREET: OKLAHOMA ST.



**PROPOSED TYPICAL SECTION
OKLAHOMA ST FROM US 90 TO WASHINGTON ST.**

LIMITS OF STREET: US 90 TO WASHINGTON ST.
LENGTH OF BASE: 500 BASE WIDTH: 25 FT
LENGTH OF STREET: 500 STREET WIDTH: 25 FT

ITEM	ESTIMATED QUANTITY
------	--------------------

275	1445 SY
340	160 TONS

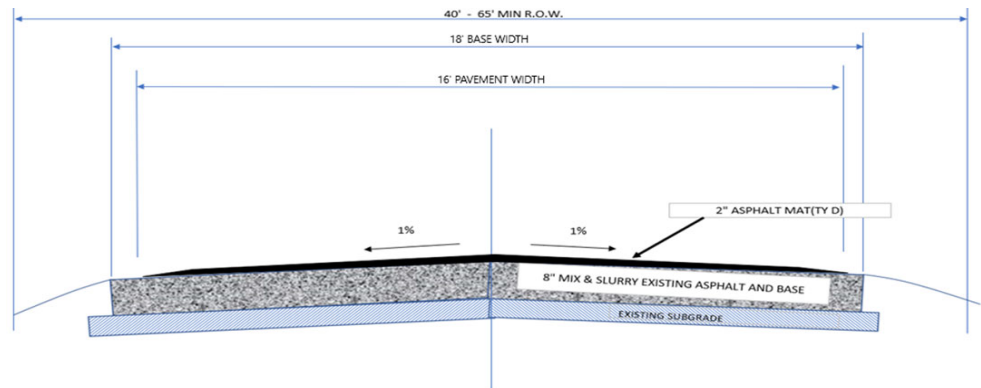
ITEM	ESTIMATED QUANTITY
------	--------------------

9000	500 LF
9001	3 EA
9002	1 EA



PLAN VIEW

NAME OF STREET: FORT WORTH ST.

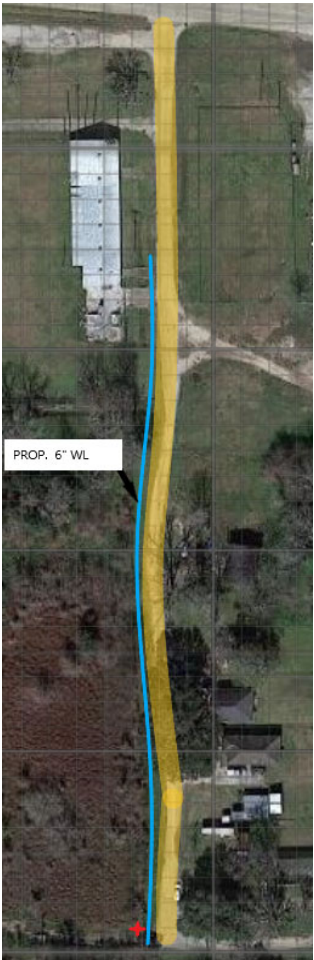


PROPOSED TYPICAL SECTION
FORT WORTH FROM US 90 TO WASHINGTON ST.

LIMITS OF STREET: US 90 TO WASHINGTON ST
LENGTH OF BASE: 2180 BASE WIDTH: 18 FT
LENGTH OF STREET: 2180 STREET WIDTH: 16 FT

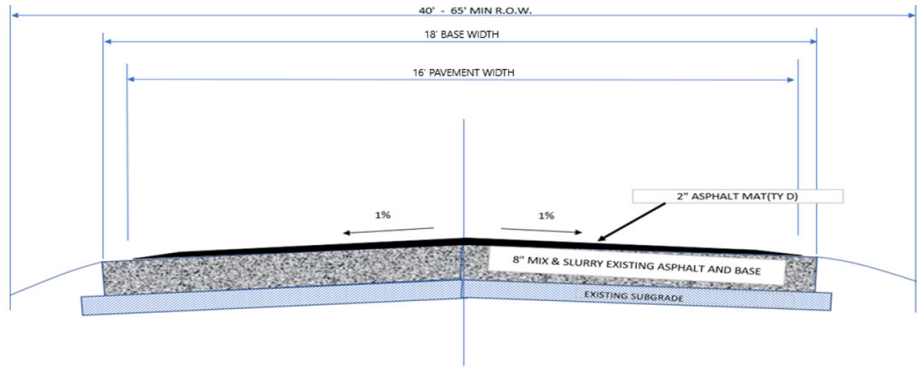
ITEM	ESTIMATED QUANTITY
275	2180 SY
340	240 TONS
530	15 TONS

ITEM	ESTIMATED QUANTITY
9000	750 LF
9001	5 EA
9002	1 EA
9003	1 EA



PLAN VIEW

NAME OF STREET: ALABAMA ST.



PROPOSED TYPICAL SECTION

ALABAMA: LAMAR ST. TO TRINITY ST.

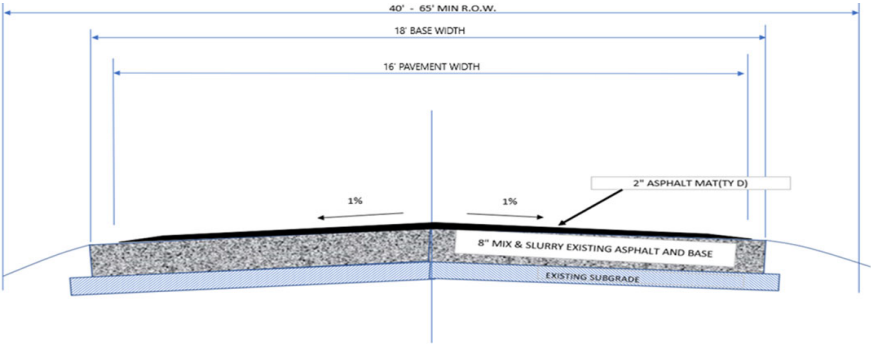
LIMITS OF STREET: LAMAR ST TO TRINITY ST
 LENGTH OF BASE: 320 BASE WIDTH: 18 FT
 LENGTH OF STREET: 320 STREET WIDTH: 16 FT

ITEM	ESTIMATED QUANTITY
275	450 SY
340	50 TONS
530	5 TONS



PLAN VIEW

NAME OF STREET: OHIO ST.



PROPOSED TYPICAL SECTION
OHIO ST FROM US 90 TO WASHINGTON ST.

LIMITS OF STREET: US 90 TO WASHINGTON ST.
LENGTH OF BASE: 550 BASE WIDTH: 18 FT
LENGTH OF STREET: 550 STREET WIDTH: 16 FT

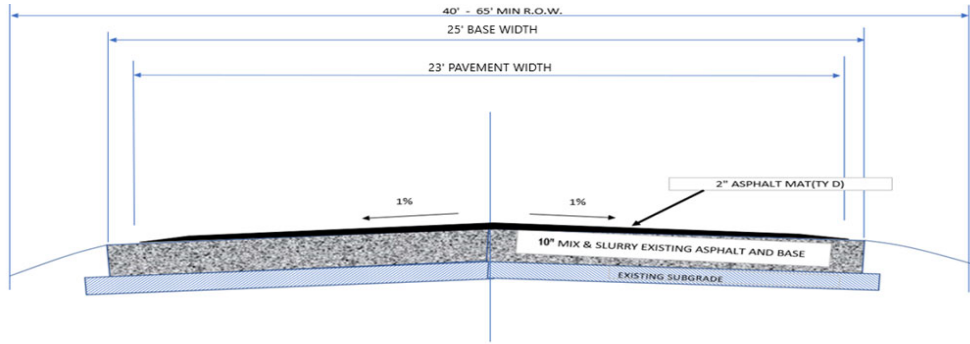
ITEM	ESTIMATED QUANTITY
275	1223 SY
340	135 TONS
530	15 TONS

ITEM	ESTIMATED QUANTITY
9000	550 LF



PLAN VIEW

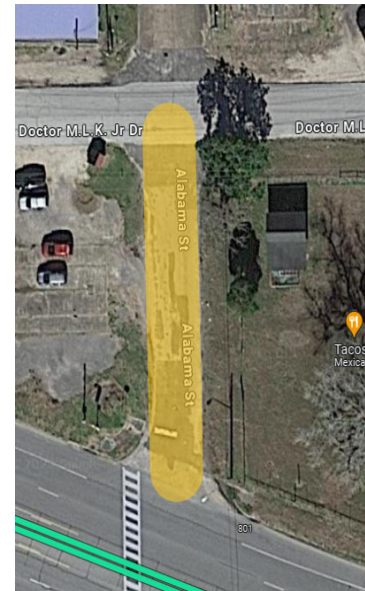
NAME OF STREET: ALABAMA ST.



**PROPOSED TYPICAL SECTION
ALABAMA ST. FROM US90 TO MLK**

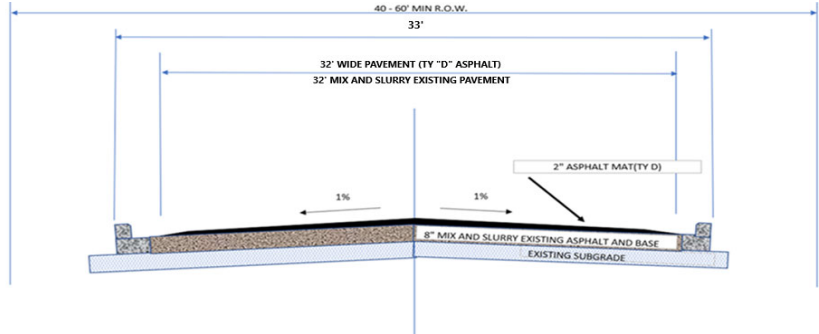
LIMITS OF STREET: US90 TO MLK
 LENGTH OF BASE: 150 BASE WIDTH: 25 FT
 LENGTH OF STREET: 150 STREET WIDTH: 23 FT

ITEM	ESTIMATED QUANTITY
275	420 SY
340	46 TONS
530	20 TONS



PLAN VIEW

NAME OF STREET: LOUISIANA ST.



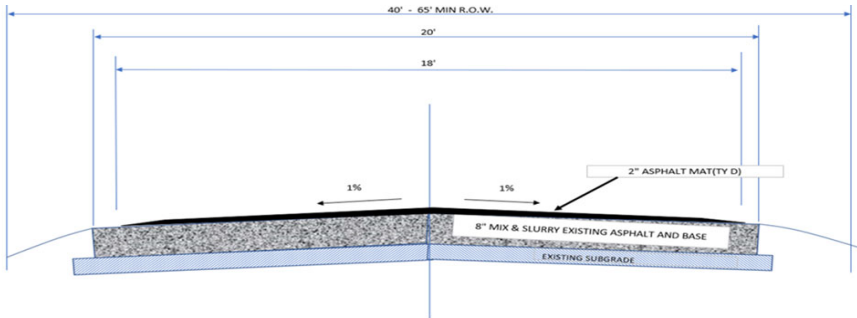
PROPOSED TYPICAL SECTION
LOUISIANA ST. FROM SAM HOUSTON ST. TO TRINITY ST.

LIMITS OF STREET: RR TO TRINITY ST.
LENGTH OF BASE: 200 BASE WIDTH: 32 FT
LENGTH OF STREET: 200 STREET WIDTH: 32 FT

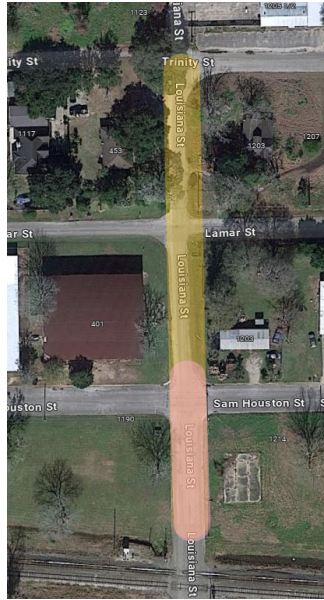
ITEM	ESTIMATED QUANTITY
275	720 SY
340	80 TONS
530	10 TONS

LIMITS OF STREET: RR TO TRINITY ST.
LENGTH OF BASE: 350 BASE WIDTH: 20 FT
LENGTH OF STREET: 350 STREET WIDTH: 18 FT

ITEM	ESTIMATED QUANTITY
275	800 SY
340	90 TONS
530	10 TONS



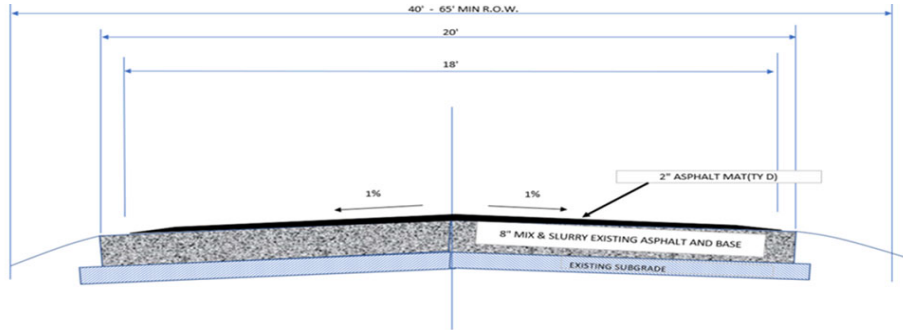
PROPOSED TYPICAL SECTION
LOUISIANA ST. FROM RR TO SAM HOUSTON



GOLD - WITHOUT CURB AND GUTTER
PINK - WITH CURB AND GUTTER

PLAN VIEW

NAME OF STREET: LOUISIANA ST.



PROPOSED TYPICAL SECTION
LOUISIANA ST. FROM US90 TO WASHINGTON ST.

LIMITS OF STREET: US90 TO WASHINGTON ST.
LENGTH OF BASE: 550 BASE WIDTH: 20 FT
LENGTH OF STREET: 550 STREET WIDTH: 18 FT

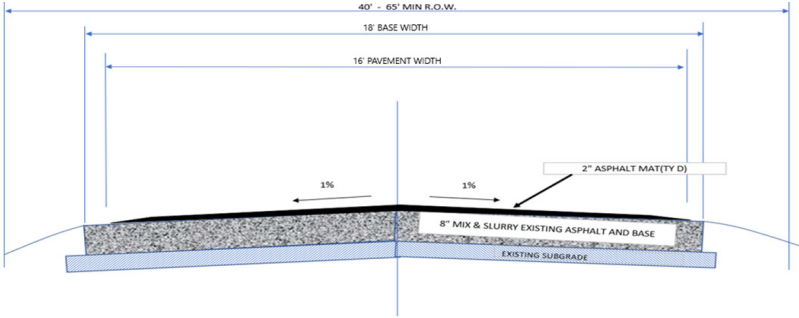
ITEM	ESTIMATED QUANTITY
275	1223 SY
340	135 TONS
530	50 TONS

ITEM	ESTIMATED QUANTITY
9000	550 LF
9001	6 EA
9002	2 EA



PLAN VIEW

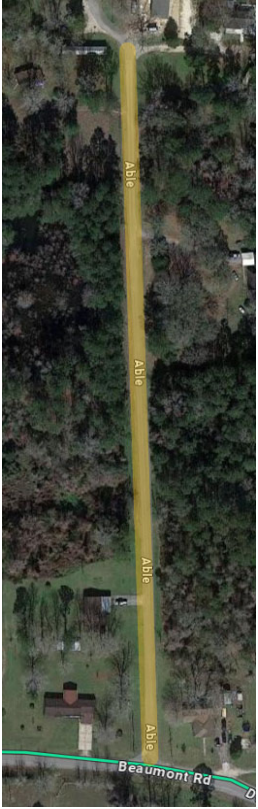
NAME OF STREET: ABLE ST.



PROPOSED TYPICAL SECTION
ABLE FROM BEAUMONT ST. TO END OF ROADWAY

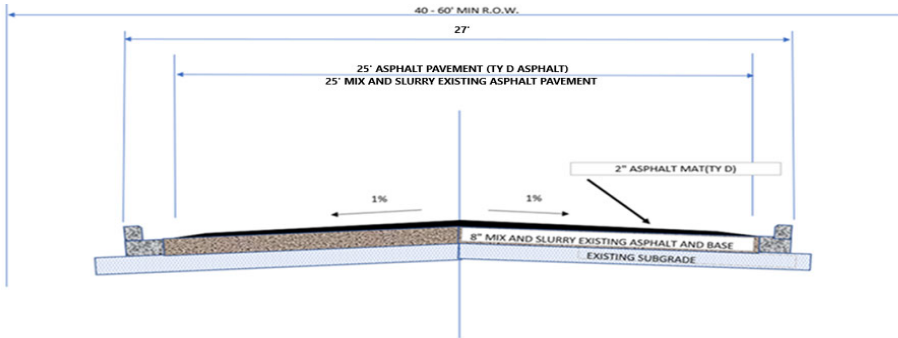
LIMITS OF STREET: BEAUMONT ST. TO END OF ROADWAY
LENGTH OF BASE: 1360 BASE WIDTH: 18 FT
LENGTH OF STREET: 1360 STREET WIDTH: 16 FT

ITEM	ESTIMATED QUANTITY
275	2720 SY
340	300 TONS
530	10 TONS



PLAN VIEW

NAME OF STREET: GEORGIA ST.

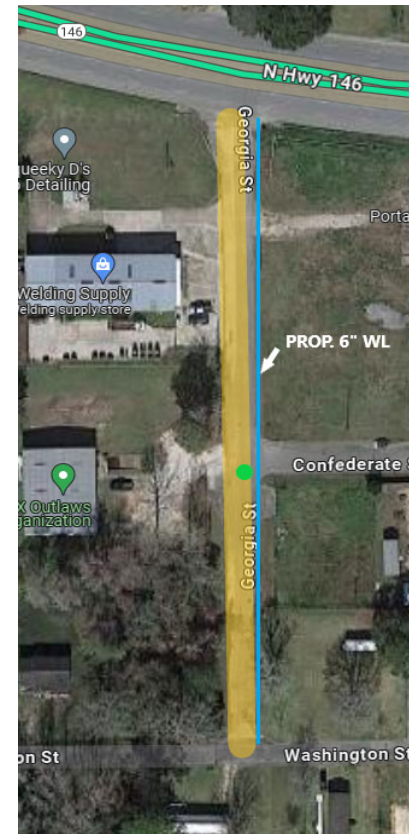


**PROPOSED TYPICAL SECTION
GEORGIA ST. FROM US 90 TO WASHINGTON ST.**

LIMITS OF STREET: US90 TO WASHINGTON ST.
 LENGTH OF BASE: 600 BASE WIDTH: 25 FT
 LENGTH OF STREET: 600 STREET WIDTH: 25 FT

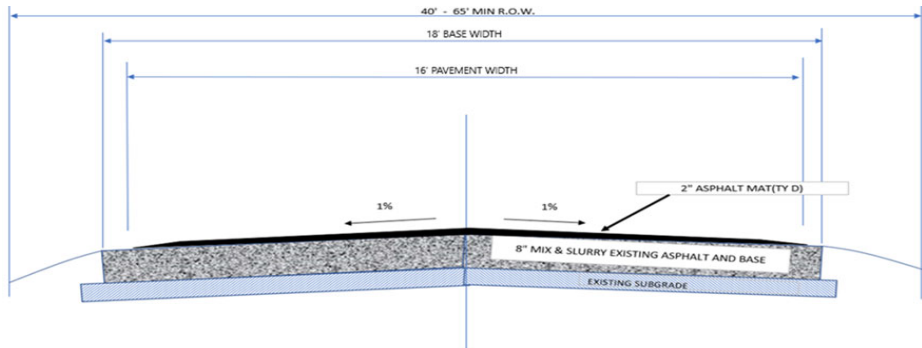
ITEM	ESTIMATED QUANTITY
275	1670 SY
340	185 TONS
530	10 TONS

ITEM	ESTIMATED QUANTITY
8000	1 EA
9000	600 LF
9001	5 EA
9002	2 EA



PLAN VIEW

NAME OF STREET: ALABAMA ST.



**PROPOSED TYPICAL SECTION
ALABAMA ST. FROM US90 TO WASHINGTON ST.**

LIMITS OF STREET: EDGEWOOD TO MONTA
 LENGTH OF BASE: 600 BASE WIDTH: 18 FT
 LENGTH OF STREET: 600 STREET WIDTH: 16 FT

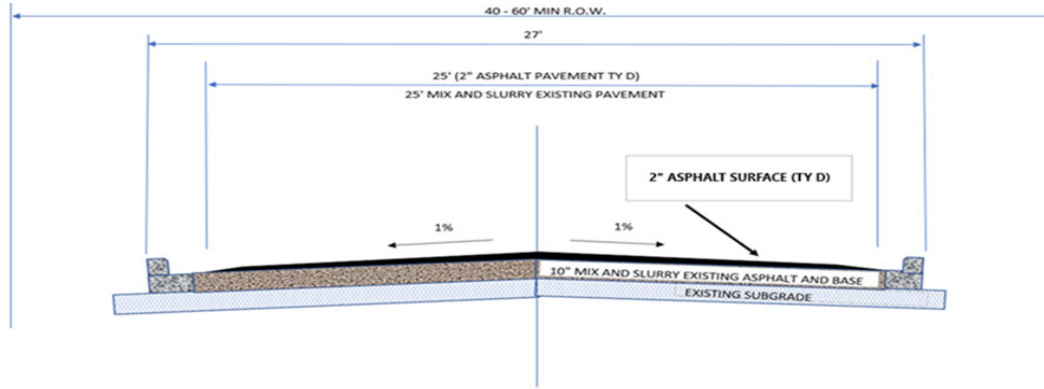
ITEM	ESTIMATED QUANTITY
275	1650 SY
340	172 TONS
530	20 TONS

ITEM	ESTIMATED QUANTITY
8000	2 EA
9000	700 LF
9001	3 EA
9002	2 EA



PLAN VIEW

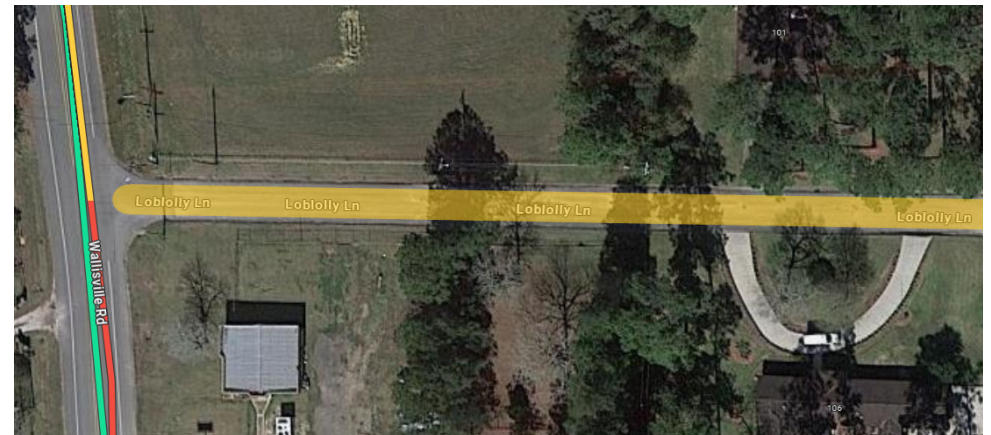
NAME OF STREET: LOBLOLLY ST.



**PROPOSED TYPICAL SECTION
LOBLOLLY FROM WALLISVILLE RD. TO LINDEN LANE**

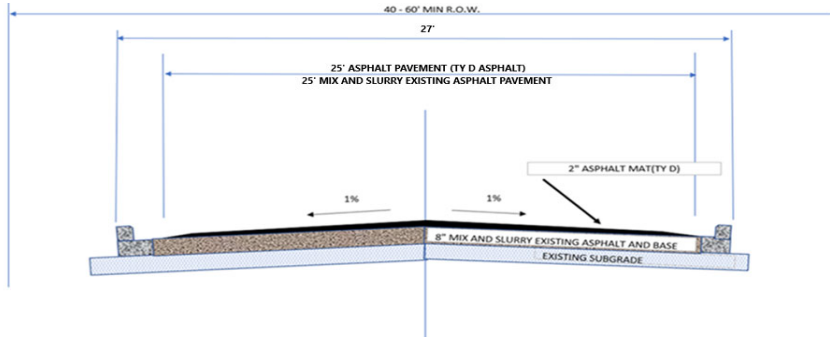
LIMITS OF STREET: WALLISVILLE TO LINDEN LANE
 LENGTH OF BASE: 520 BASE WIDTH: 25 FT
 LENGTH OF STREET: 520 STREET WIDTH: 25 FT

ITEM	ESTIMATED QUANTITY
275	1500 SY
340	165 TONS
530	30 TONS



PLAN VIEW

NAME OF STREET: CORNELL ST.

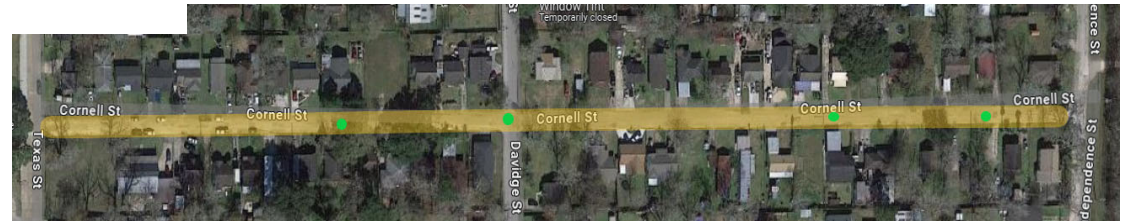


PROPOSED TYPICAL SECTION
CORNELL ST. FROM TEXAS ST. TO INDEPENDENCE ST.

LIMITS OF STREET: TEXAS ST. TO INDEPENDENCE ST.
LENGTH OF BASE: 1300 BASE WIDTH: 25 FT
LENGTH OF STREET: 1300 STREET WIDTH: 25 FT

ITEM	ESTIMATED QUANTITY
275	2450 SY
340	270 TONS
530	5 TONS

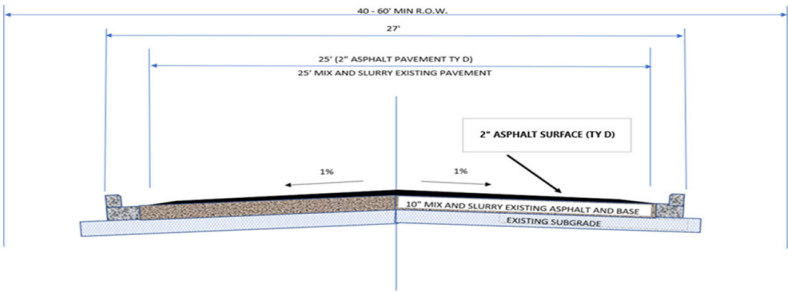
ITEM	ESTIMATED QUANTITY
8000	4 EA



● PROP. MH

PLAN VIEW

NAME OF STREET: LAKELAND DR.



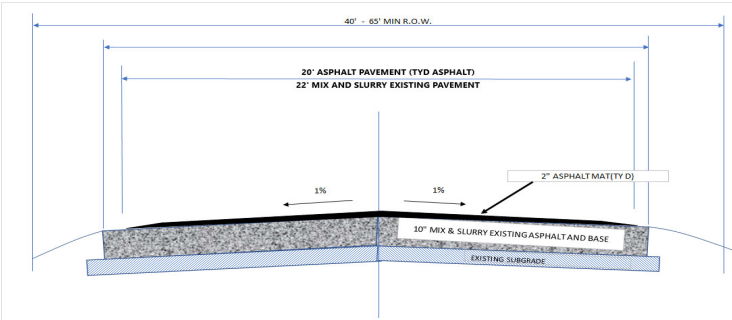
PROPOSED TYPICAL SECTION
LAKELAND DR. FROM GRAND TO 790' NORTH

LIMITS OF STREET: GRAND TO 790' NORTH
LENGTH OF BASE: 790 BASE WIDTH: 25 FT
LENGTH OF STREET: 790 STREET WIDTH: 25 FT

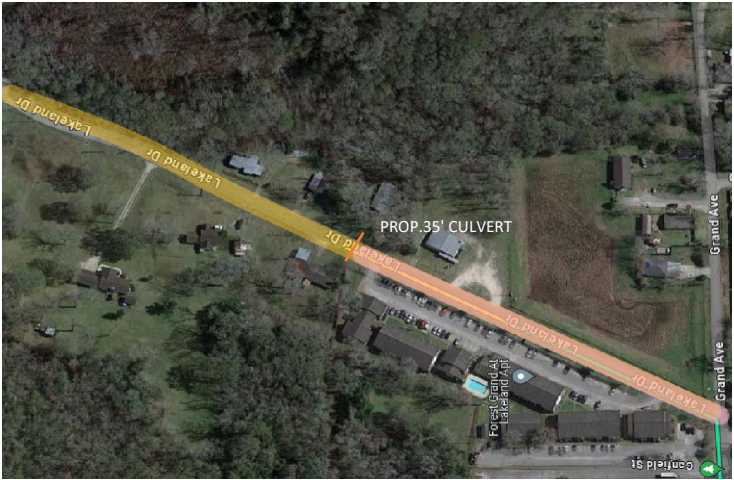
ITEM	ESTIMATED QUANTITY
275	2200 SY
340	245 TONS
530	15 TONS

LIMITS OF STREET: RR TO TRINITY ST.
LENGTH OF BASE: 560 BASE WIDTH: 22 FT
LENGTH OF STREET: 560 STREET WIDTH: 22 FT

ITEM	ESTIMATED QUANTITY
275	1370 SY
340	150 TONS
530	5 TONS
9005	35 LF



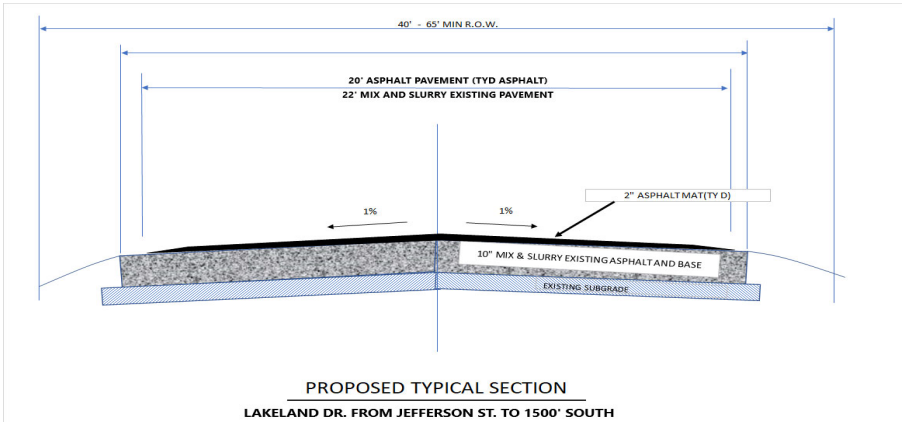
PROPOSED TYPICAL SECTION
LAKELAND DR. FROM 1515 LAKELAND TO 560' SOUTH



PLAN VIEW

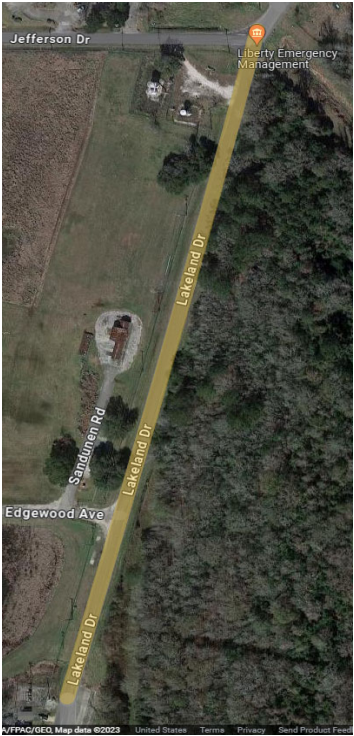
GOLD - WITHOUT CURB AND GUTTER
PINK - WITH CURB AND GUTTER
10" - 35' RCP CROSSING
W/ 25K STAB. SAND BACKFILL AND BEDDING

NAME OF STREET: LAKELAND DR.



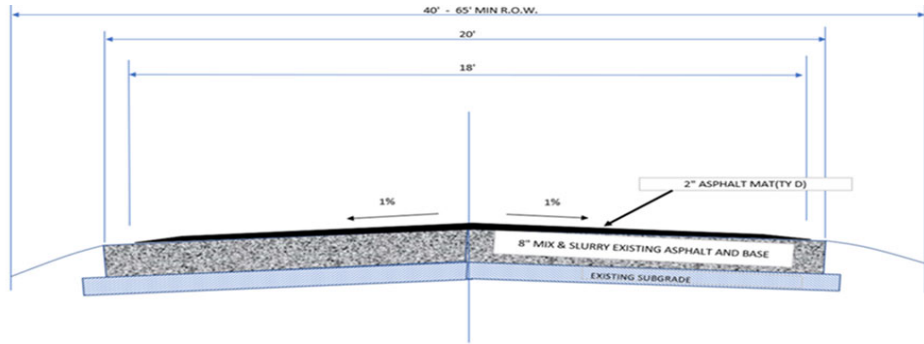
LIMITS OF STREET: JEFFERSON TO 1500' SOUTH
LENGTH OF BASE: 1500 BASE WIDTH: 22 FT
LENGTH OF STREET: 1500 STREET WIDTH: 22 FT

ITEM	ESTIMATED QUANTITY
275	4000 SY
340	440 TONS
530	10 TONS



PLAN VIEW

NAME OF STREET: ROBBIE ST.



PROPOSED TYPICAL SECTION

ROBBIE ST. FROM GRAND TO THE END OF ROADWAY

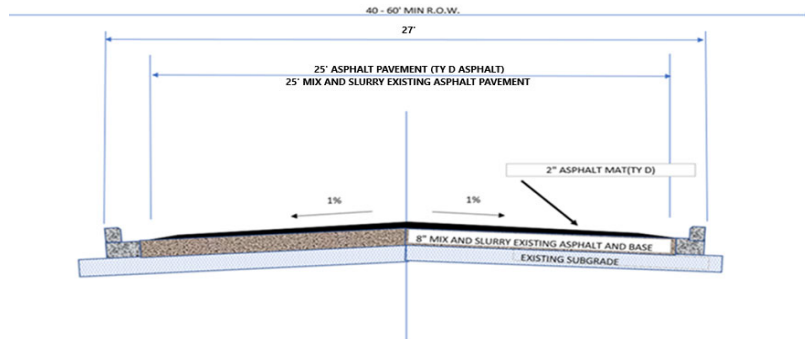
LIMITS OF STREET: ROBBIE ST. FROM GRAND TO THE END OF THE ROADWAY
 LENGTH OF BASE: 630 BASE WIDTH: 22 FT
 LENGTH OF STREET: 630 STREET WIDTH: 22 FT

ITEM	ESTIMATED QUANTITY
275	1400 SY
340	155 TONS
530	40 TONS



PLAN VIEW

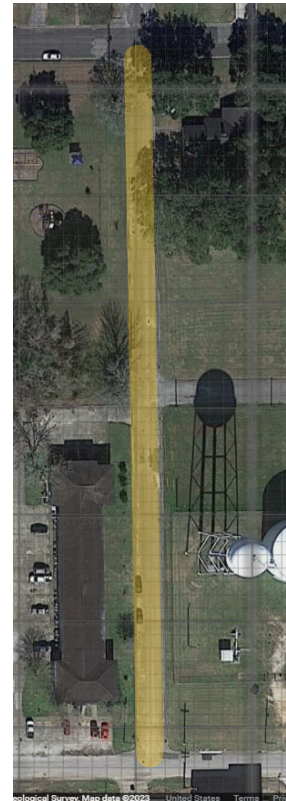
NAME OF STREET: BROWNING ST.



**PROPOSED TYPICAL SECTION
BROWNING ST. FROM MONTA TO MAGNOLIA**

LIMITS OF STREET: MONTA TO MAGNOLIA
 LENGTH OF BASE: 680 BASE WIDTH: 25 FT
 LENGTH OF STREET: 680 STREET WIDTH: 25 FT

ITEM	ESTIMATED QUANTITY
275	1510 SY
340	166 TONS
530	40 TONS

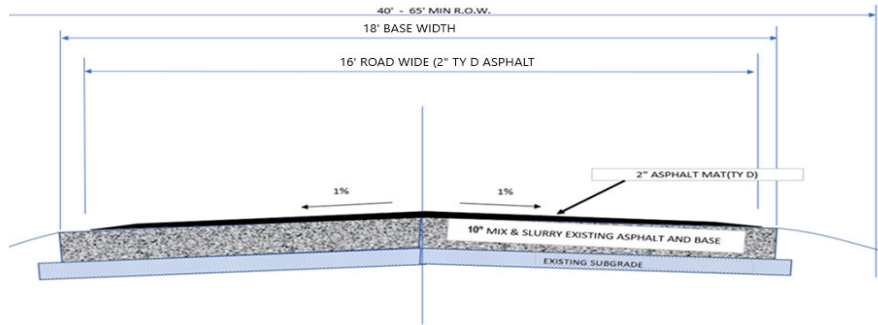


PLAN VIEW

LEGEND

- SANITARY MANHOLE TO BE REMOVED AND REPLACED

NAME OF STREET: WASHINGTON ST.



PROPOSED TYPICAL SECTION
LOUISIANA ST. TO EAST END OF THE ROAD

LIMITS OF STREET: LOUISIANA TO EAST END OF ROAD
 LENGTH OF BASE: 800 BASE WIDTH: 18 FT
 LENGTH OF STREET: 800 STREET WIDTH: 16 FT

ITEM	ESTIMATED QUANTITY
247	300 TONS
275	1780 SY
340	196 TONS
530	10 TONS

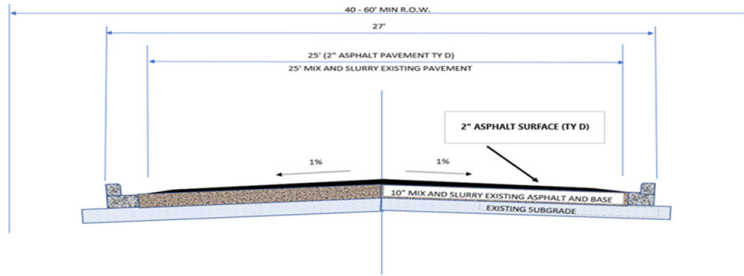
ITEM	ESTIMATED QUANTITY
9000	650 LF
9001	9 EA



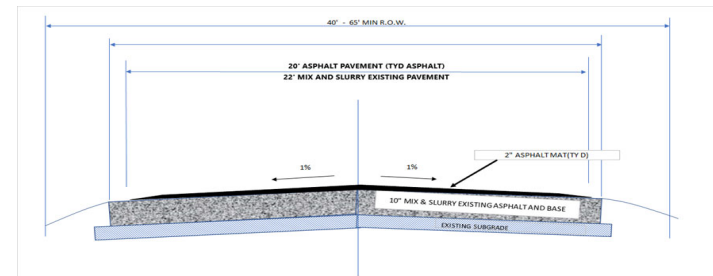
PLAN VIEW

NOTE: 80 FEET FROM THE EAST END OF THE ROAD WILL BE GRADED TO MEET THE EXISTING FIRE STATION DRIVEWAY. 18" OF FLEX BASE WILL BE ADDED TO MAKE THE TRANSITION TO THE FIRE STATION DRIVEWAY AND THE RESIDENT DRIVEWAY IN RED.

NAME OF STREET: MONTA ST.



PROPOSED TYPICAL SECTION
MILAM ST. TO JARRETT ST.



PROPOSED TYPICAL SECTION
JARRETT ST. TO BOWIE ST.

LIMITS OF STREET: MILAM ST. TO JARRETT ST.
LENGTH OF BASE: 290 BASE WIDTH: 25 FT
LENGTH OF STREET: 290 STREET WIDTH: 25 FT

ITEM	ESTIMATED QUANTITY
275	1065 SY
340	90 TONS
530	30 TONS

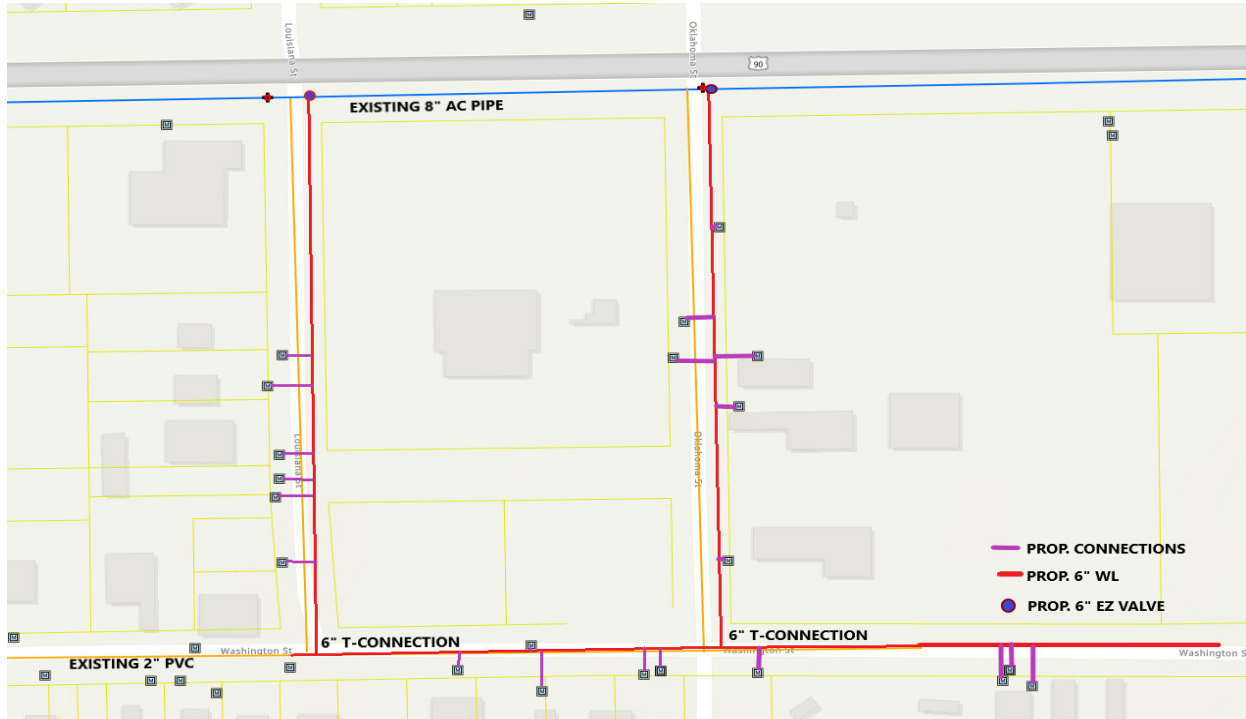
LIMITS OF STREET: JARRETT ST. TO BOWIE ST.
LENGTH OF BASE: 910 BASE WIDTH: 22 FT
LENGTH OF STREET: 910 STREET WIDTH: 20 FT

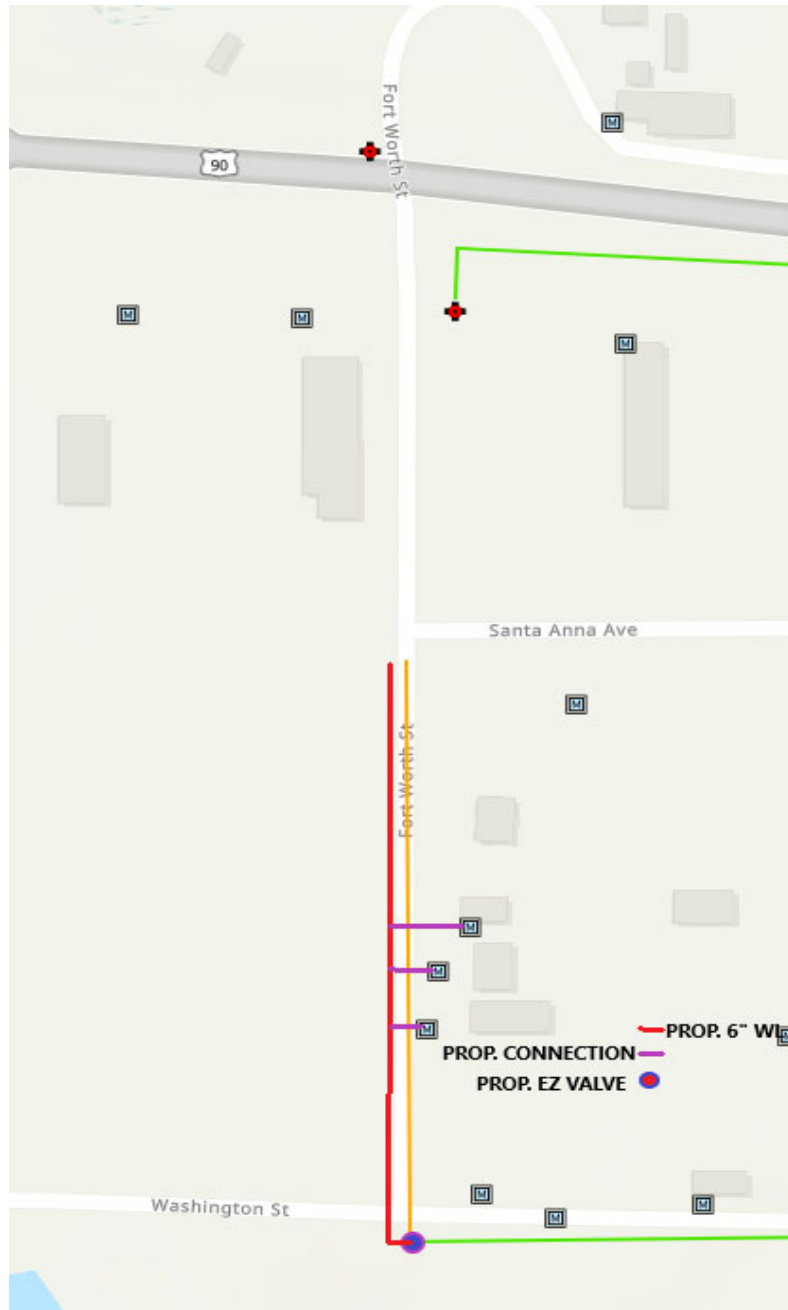
ITEM	ESTIMATED QUANTITY
275	2910 SY
340	290 TONS
530	5 TONS

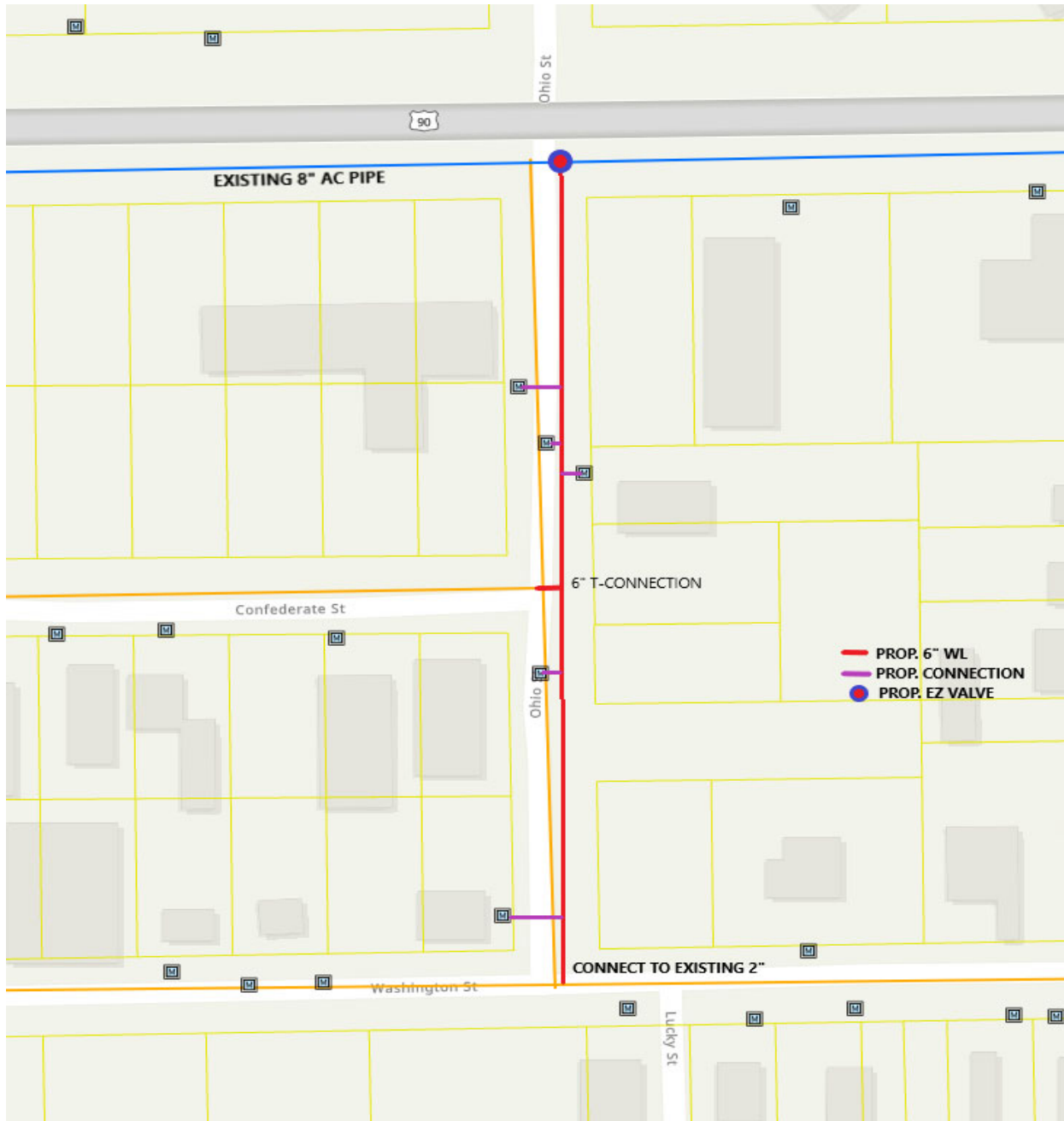


PLAN VIEW

GOLD - WITHOUT CURB AND GUTTER
PINK - WITH CURB AND GUTTER

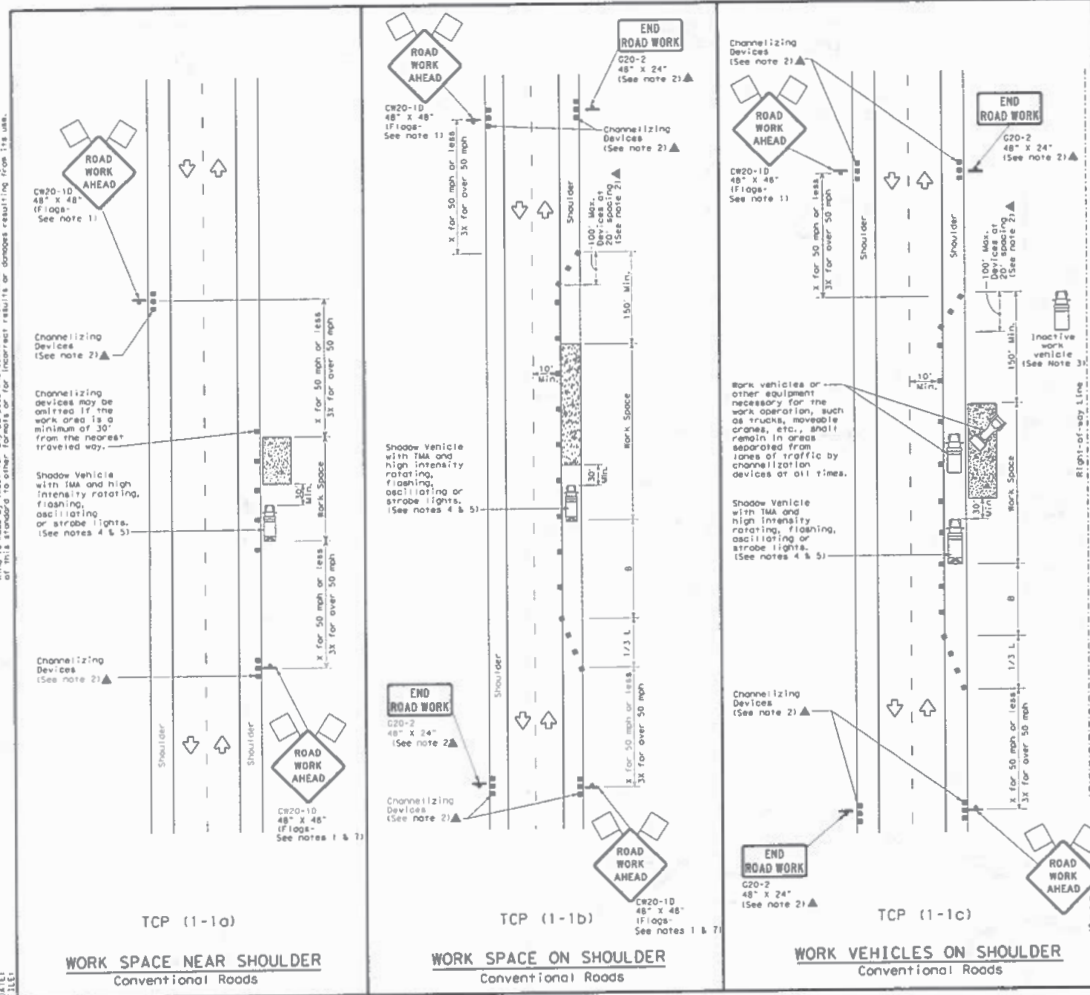






DISCLAIMER: This standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any use of these plans other than for the project and location for which they were prepared. TxDOT is not responsible for any errors or omissions in these plans or for any consequences resulting from their use.

DATE: 1/1/01



LEGEND

Type 3 Barricade	Channelizing Devices
Heavy Work Vehicle	Truck Mounted Attenuator (TMA)
Trailer Mounted Flashing Arrow Board	Portable Changeable Message Sign (PCMS)
Sign	Traffic Flow
Flag	Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths ft	Suggested Maximum Spacing of Channelizing Devices ft	Minimum Spacing of Channelizing Devices ft	Suggested Length of Buffer ft
30	L = 1.5S	10' 11' 12'	On a Taper	60'	120'
35		150' 165' 180'	30'	70'	160'
40		205' 225' 245'	40'	80'	240'
45		265' 295' 320'	45'	90'	320'
50	L = WS	450' 495' 540'	50'	100'	400'
55		500' 550' 600'	55'	110'	500'
60		600' 660' 720'	60'	120'	600'
65		650' 715' 780'	65'	130'	700'
70	L = WS	700' 770' 840'	70'	140'	800'
75		750' 825' 900'	75'	150'	900'

* Conventional Roads Only
 W: Work Vehicle Length
 S: Taper Length
 L: Length of Taper (ft) x Width of Offset (ft) x Posted Speed

TYPICAL USAGE

MOBILE	SHORT DURATION	INTERMEDIATE STATIONARY	LONG TERM STATIONARY

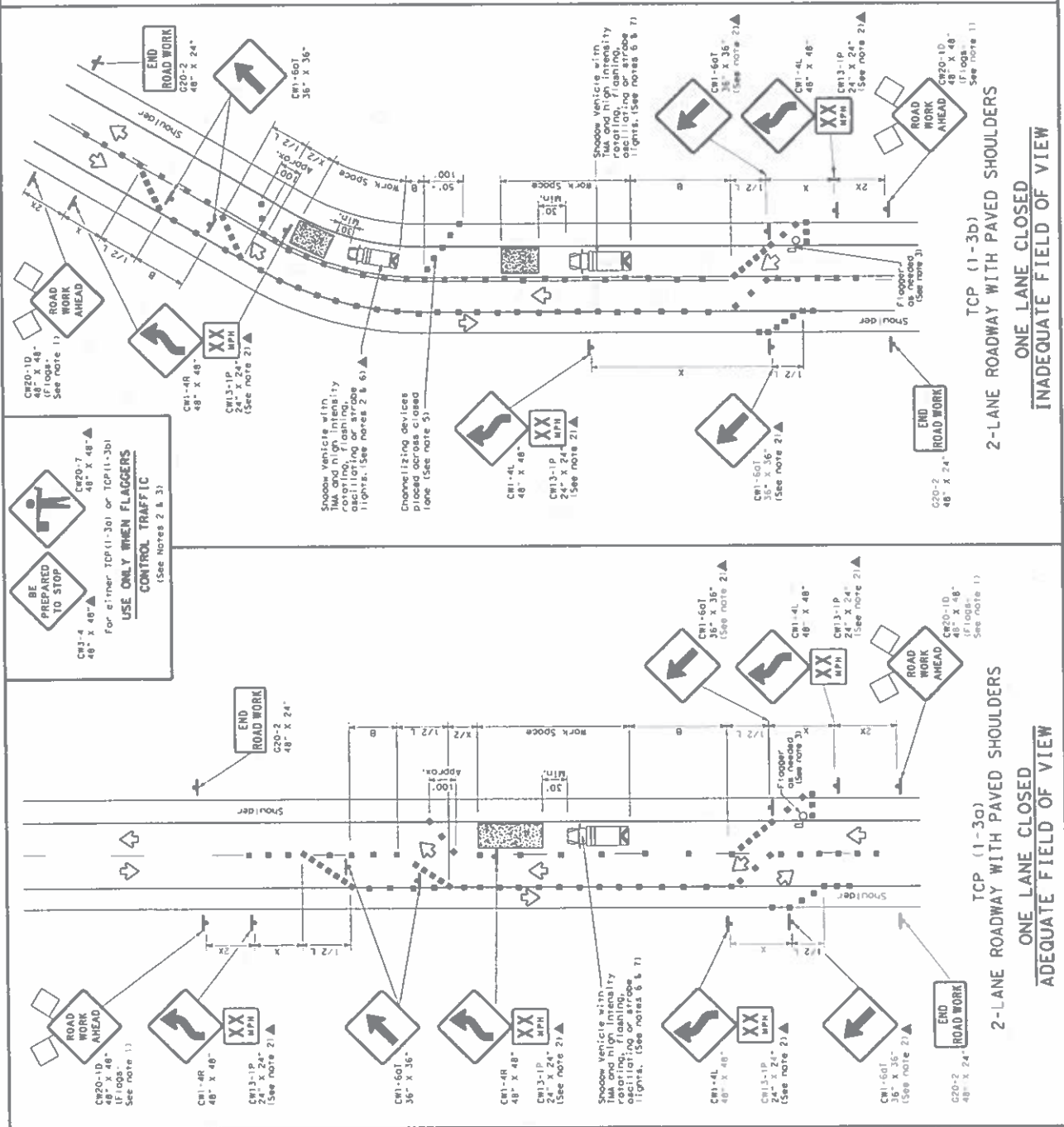
- GENERAL NOTES**
- Flags attached to signs where shown are REQUIRED.
 - All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stored elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
 - Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
 - A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are longer present but road or work conditions require the traffic to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
 - Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect other work spaces.
 - See TCE-11 for shoulder work on divided highways, expressways and freeways.
 - CE-15 SHOULDER WORK signs may be used in place of CE-10 ROAD WORK AHEAD signs for shoulder work on conventional roadways.

Texas Department of Transportation

TRAFFIC CONTROL PLAN
CONVENTIONAL ROAD
SHOULDER WORK

TCP (1-1)-18

FILE: TCP(1-1)-18.gpi	DATE: 1/1/01	DESIGNED BY: [blank]	CHECKED BY: [blank]
2-94 4-98	REVISIONS	DATE: [blank]	BY: [blank]
0-95 2-12			
1-97 2-18			



LEGEND			
Type	3	4	5
Channelizing Devices	Truck Mounted Attenuator (TMA)	Portable Changeable Message Sign (PCMS)	Traffic Flow
Heavy Work Vehicle	Trailer Mounted Flashing Arrow Board	5/8"	Flag
Flag			

Posted Speed Limit (mph)	Minimum Desirable Taper Length (ft)	Minimum Spacing of Devices (ft)	Minimum Spacing of Devices (ft) - On Taper	Minimum Spacing of Devices (ft) - On Tangent	Minimum Spacing of Devices (ft) - On Curve	Minimum Spacing of Devices (ft) - On Grade	Minimum Spacing of Devices (ft) - On Intersection	Minimum Spacing of Devices (ft) - On Bridge	Minimum Spacing of Devices (ft) - On Overpass	Minimum Spacing of Devices (ft) - On Underpass	Minimum Spacing of Devices (ft) - On Tunnel	Minimum Spacing of Devices (ft) - On Viaduct	Minimum Spacing of Devices (ft) - On Culvert	Minimum Spacing of Devices (ft) - On Drainage Structure	Minimum Spacing of Devices (ft) - On Other Structure
30	150'	165'	180'	30'	60'	120'	90'								
35	165'	180'	195'	35'	70'	140'	105'								
40	180'	195'	210'	40'	80'	160'	120'								
45	195'	210'	225'	45'	90'	180'	135'								
50	210'	225'	240'	50'	100'	200'	150'								
55	225'	240'	255'	55'	110'	220'	165'								
60	240'	255'	270'	60'	120'	240'	180'								
65	255'	270'	285'	65'	130'	260'	195'								
70	270'	285'	300'	70'	140'	280'	210'								
75	285'	300'	315'	75'	150'	300'	225'								

* Conventional Roads Only
 ** Taper Lengths have been rounded off.
 L = Length of Taper (ft) W = Width of Offset (ft) S = Posted Speed (mph)

TYPICAL USAGE		
MOBILE	SHORT TERM STATIONARY	LONG TERM STATIONARY
✓	✓	✓

GENERAL NOTES

- Flags attached to signs where shown are required.
- All traffic control devices illustrated are required, except those denoted by a dashed line. The use of these devices is optional in the presence of a police officer or other authorized personnel.
- Flagger control should not be used unless roadway conditions or heavy traffic volume require additional personnel to safely control traffic. Additional flaggers may be positioned in advance of traffic queues to alert traffic to reduce speed.
- When the work zone is located in a curve, channelizing devices should be placed laterally across the closed low to re-emphasize the curve. When the work zone is located in a curve, channelizing devices should be placed laterally across the closed low to re-emphasize the curve. When the work zone is located in a curve, channelizing devices should be placed laterally across the closed low to re-emphasize the curve.
- When the work zone is located in a curve, channelizing devices should be placed laterally across the closed low to re-emphasize the curve. When the work zone is located in a curve, channelizing devices should be placed laterally across the closed low to re-emphasize the curve. When the work zone is located in a curve, channelizing devices should be placed laterally across the closed low to re-emphasize the curve.
- When the work zone is located in a curve, channelizing devices should be placed laterally across the closed low to re-emphasize the curve. When the work zone is located in a curve, channelizing devices should be placed laterally across the closed low to re-emphasize the curve. When the work zone is located in a curve, channelizing devices should be placed laterally across the closed low to re-emphasize the curve.

TCP (1-3)-18

TRAFFIC CONTROL PLAN
TRAFFIC SHIFTS ON
TWO LANE ROADS

TCP (1-3)-18

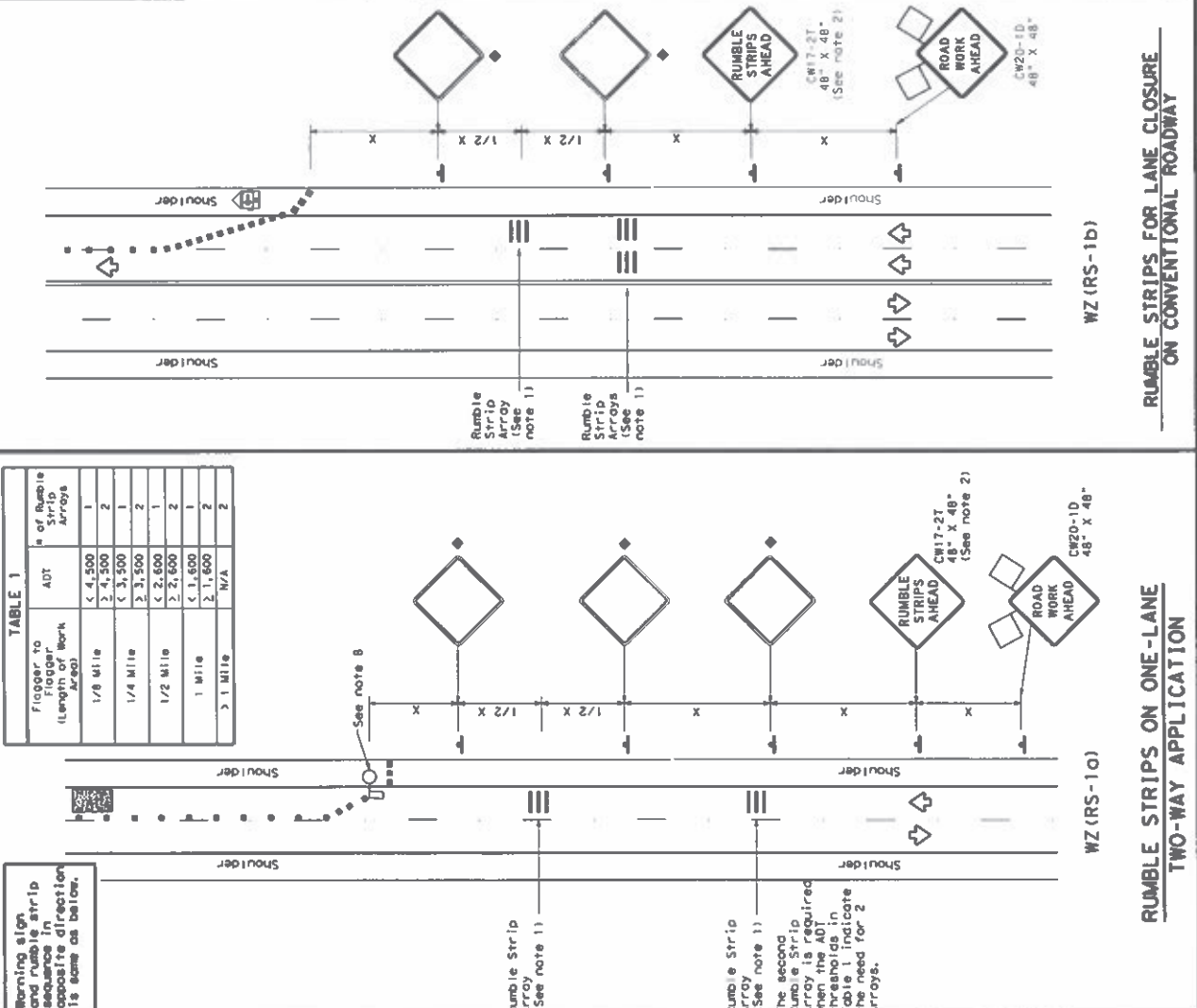
Project: _____
 Date: _____
 Drawn by: _____
 Checked by: _____
 Approved by: _____

DISCLAIMER: The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TCEQ for any purposes and no liability is assumed by TCEQ for the consequences of the use of this standard or for incorrect results or damages resulting from its use.

Warning sign and rumble strip sequence in opposite direction is same as below.

TABLE 1

Flagger's No. (Length of Work Area)	ADT	# of Rumble Strips in Array
1/8 Mile	< 4,500	1
1/8 Mile	2,4,500	2
1/4 Mile	< 3,500	1
1/4 Mile	2,3,500	2
1/2 Mile	< 2,600	1
1/2 Mile	2,2,600	2
1 Mile	< 1,600	1
> 1 Mile	2,1,600	2
	N/A	2



GENERAL NOTES

- Each Rumble Strip Array should consist of three rumble strips spaced center to center at the spacing shown in Table 2, placed transverse across the lane at locations shown.
- The CW17-2T "RUMBLE STRIPS AHEAD" sign should be located after the CW20-1D "ROAD WORK AHEAD" sign and spaced as shown. If traffic is observed to be queuing, or is expected to queue beyond the Rumble Strips, the CW17-2T sign and the CW20-1D sign may be located closer together or the CW20-1D sign as necessary to provide needed warning.
- Temporary Rumble Strips will be considered subsidiary to Item 505, and shall be a product listed on the Compliant Work Zone Traffic Control Devices.
- Remove Temporary Rumble Strips before removing the advanced warning signs.
- Temporary Rumble Strips should not be used on horizontal curves, loose gravel, soft or bleeding asphalt, heavily rutted pavements or unopened surfaces.
- Temporary Rumble Strips shall be installed and maintained as per manufacturer's recommendations.
- This standard sheet shall be used in conjunction with other appropriate TCD standards, MUTCD typical application or project specific detail for the project.
- The one-lane two-way application may utilize a flagger, an Automated Flagger Assistance Device (AFAD) or a Portable Traffic Signal (PTS).
- Replace defective Temporary Rumble Strips as directed by the Engineer.
- Temporary Rumble Strips may be used on freeways or expressways based on engineering judgment and written direction from the Engineer.

LEGEND

Type 3 Barricade	Heavy Work Vehicle	Trailer Mounted Flagging Arrow Panel	Sign	Flag	Channelizing Devices
					Truck Mounted Attenuator (TMA)
					Portable Changeable Message Sign (PCMS)
					Traffic Flow
					Flagger

Formula	Minimum Taper Length	Suggested Maximum Channelizing Device On a Roadway	Minimum Sign Spacing	Supported Buffer Spacing
$L = 3.5 \times S$	11'	30'	60'	120'
30	150'	180'	30'	60'
35	205'	225'	35'	70'
40	265'	295'	40'	80'
45	325'	355'	45'	90'
50	385'	415'	50'	100'
55	445'	475'	55'	110'
60	505'	535'	60'	120'
65	565'	595'	65'	130'
70	625'	655'	70'	140'
75	685'	715'	75'	150'

* Conventional Roads Only
 ** Taper lengths have been rounded off.
 L=Length of Taper (FT) Width of Offset (FT)
 S=Posted Speed (MPH)

TYPICAL USAGE

MOBILE	SHORT TERM DURATION	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY

- Signs are for illustrative purposes only. Signs required may vary depending on the TCD, MUTCD Typical Application, or project specific details for the project.
- For posted speeds in excess of 65 MPH, it is recommended that spacing be increased as speed limits increase. Increasing space between rumble strips will improve effectiveness.

TABLE 2

Speed	Approximate distance between strips in an array
≤ 40 MPH	10'
> 40 MPH & ≤ 55 MPH	15'
= 60 MPH	20'
≥ 65 MPH	= 35' +

TEMPORARY RUMBLE STRIPS

WZ (RS) - 22

Project: 07422.dgn
 Date: 11/01/2012
 User: jmc
 Title: 2-14
 Revision: 1-22
 Sheet: 4-16

End of Addendum Number 1

City of Liberty Public Works Director

Damon Jones