



# ADDENDUM 1

PROJECT NAME: MEDICAL CENTER INTERSECTION IMPROVEMENTS – PHASE X

DATE: 08/16/17

This Addendum shall be included in and considered part of the solicitation documents for the construction of the Medical Center Intersection Improvements – Phase X Project. Contractor shall be required to sign its acknowledgement of the receipt of this Addendum and submit its signed Addendum Acknowledgement Form (attached hereto) with its bid.

PROJECT NO.: **40-00309A**

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## **PROJECT MANUAL**

- Replace “010 Invitation for Bids” with Addendum 01 “010 Invitation for Bid”
  - Calendar days were revised to 380 days.
- Replace “025 Unit Pricing Form” with Addendum 01 “025 Unit Pricing Form”
  - Removed item 0508-2001
  - Removed item 306.1
    - Per TxDOT Specification 400 Excavation and Backfill for Structures is subsidiary to the pertinent bid items.
  - Revised quantity for item 551.1
  - Revised item numbers for landscape items.
    - Replaced 560.1 with 0528-6011
    - Replaced 560.2 with 0528-6012
    - Replaced 570.1 with 0170-6001
    - Replaced 570.3 with 0192-6014
    - Replaced 570.4 with 0192-6012
    - Replaced 580.1 with 0752-6005, 0752-6006 and 0752-6007
    - Replaced 580.2 with 1004-6001
    - Replaced 580.3 with 0192-6039
  - Removed items 680.its01 to 680.its08
  - SAWS Water and Sewer quantities were adjusted.
- Replace “Governing Specifications” with Addendum No. 1 “Governing Specifications”
  - City of San Antonio Standard Specifications: Removed item 306.
    - Per TxDOT Specification 400 Excavation and Backfill for Structures is subsidiary to the pertinent bid items.



- City of San Antonio Special Specifications: Removed items 560, 570, 580 and replaced with TxDOT specifications.
- TxDOT Standard Specifications: Added items 0170, 0192, 0528 and 0752. Removed item 0508.
- TxDOT Special Provisions: Added provisions SP0192-001, SP528-999 and SP752-001.
- TxDOT Special Specifications: Added SS1004.
- Project Manual
  - Added standard specifications, special provisions and special specifications noted above.

## **PLANS**

### Design Package 1

- Replace Sheet 11 “Estimate and Quantity” with Addendum 01 “Estimate and Quantity”.
  - Removed Item 0508-2001 from the quantities.
  - Removed Item 306.1 from the quantities.
  - Revised quantity for item 551.1.
  - Item numbers for landscaping changed as stated above.
  - Removed 680.its01 to 680.its08 from the quantities.
- Replace Sheet 15 “Traffic control plan narrative and special notes” with Addendum 01 “Traffic control plan narrative and special notes”.
  - Special note was added in regards to WellMed parking lot construction timeline.
- Replace Sheets 83-89 “Storm Drain Plan and Profile” with Addendum 01 “Storm Drain Plan and Profile”.
  - Included callouts to describe limits of Temporary Special Shoring.
- Replace Sheet 148 “Traffic Signal Summary” with Addendum 01 “Traffic Signal Summary”.
  - Removed items 680.its01 to 680.its08 from the table.
  - Clarified note regarding spare mast arm.

### Design Package 2

- Replace Sheet 4 “Estimate and Quantity” with Addendum 01 “Estimate and Quantity”.
  - Removed Item 0508-2001 from the quantities.
  - Item numbers for landscaping changed.
  - Removed 680.its01 to 680.its08 from the quantities.
- Replace Sheet 26 “Traffic Signal Plan Proposed Layout” with Addendum 01 “Traffic Signal Plan Layout”.
  - Removed note regarding installation of LTE communication equipment.
- Replace Sheet 27 “Traffic Signal Plan Conduit & Conductor Schedule” with Addendum 01 “Traffic Signal Plan Conduit & Conductor Schedule”.
  - Removed installation of LTE equipment from controller cabinet (Labeled as B on plans)
- Replace Sheet 29 “Traffic Signal Plan Summary” with Addendum 01 “Traffic Signal Plan Summary”.
  - Removed items 680.its01 to 680.its08 from the table.



#### SAWS Water plans

- Replace Sheet 2 of 15 “General Notes and Quantities” with Addendum 01 “General Notes and Quantities”.
  - Updated summary of water quantities table
- Replace Sheet 9 of 15 “Enlarged Plan and Section Detail” with Addendum 01 “Enlarged Plan and Section Detail”.
  - Updated table of quantities
- Replace Sheet 12 of 15 “Enlarged Plan and Section Detail” with Addendum 01 “Enlarged Plan and Section Detail”.
  - Updated table of quantities
  - Updated note about service connection.

#### SAWS Sewer plans

- Replace Sheet 2 of 5 “General Notes and Quantities” with Addendum 01 “General Notes and Quantities”.
  - Updated summary of sanitary sewer quantities.
- Replace Sheet 4 of 5 “Plan and Profile” with Addendum 01 “Plan and Profile”.
  - Updated table of quantities.

### **CONTRACTOR’S QUESTIONS**

1. Could you please clarify the duration of the job? It states 235 Calendar days, but there are 15 months in the barricades. Please clarify.

*Response: Addendum 01 will be issued to correct days to 380 calendar days.*

2. Please verify where all the Temporary Shoring is. It isn’t called out on the plans.

*Response: Temporary shoring is for main drainage trunk line and is called out in addendum No. 1 drainage plans. Contractor to choose their method of shoring approved by an engineer.*

3. Where does the concrete removal for the channel pay for?

*Response: Item 103.4 “Remove Miscellaneous Concrete” will pay for removal of concrete drainage channel.*

4. Where does the extra 6” of asphalt that we have to take out for the box culverts pay under? Is it subsidiary to the box culvert excavation?

*Response: Subsidiary to item 106.1 “Box Culvert Excavation and Backfill”*

5. What is involved in the Constructing Detours Item? Could you provide details on any detours that are needed?

*Response: This item is not needed and will be removed as part of Addendum 01. All TCP items are paid for individually.*



6. Where is the Pipe Removal paid for? Is this subsidiary to the Box Culverts?  
*Response: Paid for under Item 0496-6007 "Remove Str (Pipe)".*
7. I'm having trouble locating items because there are no summary sheets. Is there a way we could get summary sheets showing us the pages where the Bid Items occur?  
*Response: Summary sheets are not provided. Please submit questions for individual items that are unclear.*
8. How was special shoring calculated? The item quantity seems low.  
*Response: The quantity has been revised with Addendum 01.*
9. Where is street excavation located?  
*Response: Street excavation is on Sheet 61, 62 and 63. Most excavation is used for the bus pads.*
10. How is backfill paid for on manholes and reinforced concrete pipes?  
*Response: Per TxDOT Specification 400 Excavation and Backfill for Structures is subsidiary to the pertinent bid items.*
11. Does special shoring protect only box culverts in the main trunk line or does it also protect the pipes at the end of Line A2 on sheet 89?  
*Response: Temporary special shoring also protects the pipes at the end of Line A2. See Addendum No. 1 Drainage sheets.*
12. Can we mill each phase as we work on it, to ensure that after placing the 12" TY B to cover the trench for the drainage line, there are no bumps on the road? We will overlay the entire road after all the phases are complete.  
*Response: Yes. The intent is to mill the entire phase as you work on it to provide a level riding platform for the next phase with necessary ramping to make up the elevation difference between phases as needed.*
13. Who is relocating the power pole and the light poles in design package 2?  
*Response: CPS Energy will be relocating these facilities.*



**Note: The Addenda Acknowledgement Form for Addendum 1 is attached hereto. This Addenda Acknowledgement Form must be signed and submitted with Contractor's bid package.**



CITY OF SAN ANTONIO  
TRANSPORTATION & CAPITAL IMPROVEMENTS

## ACKNOWLEDGEMENT FORM

RECEIPT OF ADDENDUM NUMBER(S) 1 IS HEREBY ACKNOWLEDGED BY THE UNDERSIGNED REGARDING THE SOLICITATION OF THE CONSTRUCTION OF MEDICAL CENTER INTERSECTION IMPROVEMENTS – PHASE X PROJECT NO. 40-00309A, FOR WHICH BIDS ARE SCHEDULED TO BE OPENED ON TUESDAY, AUGUST 29, 2017 AT 2:00 P.M. CST

THIS ACKNOWLEDGEMENT FORM MUST BE SIGNED AND RETURNED WITH CONTRACTOR'S BID PACKAGE.

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

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

City/State/Zip Code: \_\_\_\_\_

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

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name/Title

CITY OF SAN ANTONIO  
025 UNIT PRICING FORM

PROJECT NAME: Medical Center Intersection Improvements Phase 10  
PROJECT NO. 40-00309A

**DESIGN PACKAGE 1**

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
				<b>The City only will accept bid pricing to the hundredths. Any pricing extended out to three decimal points will be truncated to two decimal points in the City's favor.</b>					
100.1				MOBILIZATION	LS	1			
100.2				INSURANCE AND BOND	LS	1			
101.1				PREPARING RIGHT-OF-WAY	LS	1			
103.1				REMOVE CONCRETE CURB	LF	1207			
103.3				REMOVE SIDEWALKS AND DRIVEWAYS	SF	7780			
103.4				REMOVE MISCELLANEOUS CONCRETE	SF	7688			
103.5				REMOVE RAIL (PEDESTRIAN)	LF	123			
104.1				STREET EXCAVATION	CY	182			
105.1				CHANNEL EXCAVATION	CY	374			
106.1				BOX CULVERT EXCAVATION AND BACKFILL	CY	10073			
203.1				TACK COAT	GAL	1572			
205.3				HOT MIX ASPHALTIC PAVEMENT TY C 2 IN. PAV THICKNESS (PG 76-22)	SY	15715			
208.1				SALVAGING, HAULING & STOCKPILING RECLAIM ASPH PAV 2 IN.	SY	15549			
209.1				CONCRETE PAVEMENT AT 12 INCHES OF DEPTH	SY	92			
209.2				BUS STOP CONCRETE PAD	SY	706			
307.1				CONCRETE STRUCTURE (ELEVATED SIDEWALKS) (< 10 C.Y.)	CY	9			
307.2				CONCRETE STRUCTURE (CHANNEL)	CY	133			
308.1				DRILLED SHAFTS (24")	LF	36			
308.1				DRILLED SHAFTS (36")	LF	70			
401.101				REINFORCED CONCRETE PIPE (CLASS III)(18" DIA)	LF	3			
401.102				REINFORCED CONCRETE PIPE (CLASS III)(24" DIA)	LF	327			
401.103				REINFORCED CONCRETE PIPE (CLASS III)(36" DIA)	LF	83			
413.2				FLOWABLE FILL (HIGH STRENGTH)	CY	3230			
500.1				CONCRETE CURB	LF	1012			
502.1				CONCRETE SIDEWALKS CONVENTIONALLY FORMED	SY	52			
502.2				CONCRETE SIDEWALKS 4"	SY	409			
502.3				CONCRETE SIDEWALKS 5"	SY	113			
502.5				CONCRETE SIDEWALKS (VIA BUS FOUNDATION)	CY	6			
503.2				PORTLAND CEMENT CONCRETE DRIVEWAY COMMERCIAL	SY	214			
507.2				CHAIN LINK WIRE FENCE (6 FT. HIGH)	LF	498			
511.3				REPLACING WITH HOT MIX ASPHALTIC CONCRETE PAVEMENT TYPE B 12 INCHES COMPACTED DEPTH	SY	2999			
516.1				BERMUDA SODDING	SY	303			
531.1				COMBINATION THRU/RIGHT WHITE ARROW	EA	1			
535.1				4 INCH WIDE YELLOW LINE	LF	6544			
535.2				4 INCH WIDE WHITE LINE	LF	2028			
535.4				8 INCH WIDE WHITE LINE	LF	344			
535.7				24 INCH WIDE WHITE LINE	LF	580			
535.8				RIGHT WHITE ARROW	EA	2			
535.9				LEFT WHITE ARROW	EA	3			
535.10				COMBINATION THRU/RIGHT WHITE ARROW	EA	1			
535.12				WORD "ONLY"	EA	3			

PROJECT NAME: Medical Center Intersection Improvements Phase 10  
 PROJECT NO. 40-00309A

CITY OF SAN ANTONIO  
 025 UNIT PRICING FORM

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQ. NO.
	535.23			HANDICAP SYMBOL	EA	4			
	535.24			RELOCATE SIGN	EA	6			
	537.6			PAVEMENT MARKER (TYPE I C)	EA	180			
	537.8			PAVEMENT MARKER (TYPE II A A)	EA	169			
	540.1			ROCK FILTER DAMS (INSTALL/REMOVE) (TYPE 2)	LF	13			
	540.10			CURB INLET GRAVEL FILTERS	LF	540			
	550.1			TRENCH EXCAVATION SAFETY PROTECTION	LF	94			
	551.1			TEMPORARY SPECIAL SHORING	SF	47152			
	615.1			TRAFFIC SIGNAL CONTROLLER ASSEMBLY (TYPE 332 CABINET)	EA	1			
	618.1			CONDUIT (2 INCH/PVC SCHEDULE 40)(TRENCH)	LF	545			
	618.2			CONDUIT (3 INCH/PVC SCHEDULE 40)(TRENCH)	LF	125			
	618.4			CONDUIT (2 INCH/PVC SCHEDULE 40)(BORE)	LF	350			
	618.5			CONDUIT (3 INCH/PVC SCHEDULE 40)(BORE)	LF	695			
	620.1			ELECTRICAL CONDUCTORS (NO. 6)(BARE)	LF	15			
	620.2			ELECTRICAL CONDUCTORS (NO. 8)(BARE)	LF	1585			
	620.3			ELECTRICAL CONDUCTORS (NO. 6)(INSULATED)	LF	25			
	624.8			GROUND BOXES TYPE D (162922) W/ APRON	EA	4			
	628.1			ELECTRICAL SERVICES (PER INSTALLATION)	EA	1			
	628.2			REMOVE ELECTRICAL SERVICES (PER REMOVAL)	EA	1			
	633.1			BATTERY BACKUP SYSTEM	EA	1			
	655.1			TYPE 332 CONTROLLER FOUNDATION	EA	1			
	680.1			INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (ISOLATED)	EA	1			
	682.1			INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (3 SECTION)	EA	10			
	682.3			INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (5 SECTION)	EA	1			
	682.4			INSTALL PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	8			
	683.1			LED COUNTDOWN PEDESTRIAN MODULE	EA	8			
	684.1			TRAFFIC SIGNAL CABLES (TYPE A)(12 AWG)(CONDUCTOR NO. 3) (TRAY CABLE)	EA	1355			
	684.1			TRAFFIC SIGNAL CABLES (TYPE A)(14 AWG)(CONDUCTOR NO. 9)	EA	2820			
	684.1			TRAFFIC SIGNAL CABLES (TYPE A)(16 AWG)(CONDUCTOR NO. 3)	EA	1125			
	686.1			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(STR TY B)(LUM)	EA	5			
	687.1			PEDESTAL POLE ASSEMBLY	EA	6			
	688.2			PEDESTRIAN DETECTORS [2 INCH PUSH BUTTON]	EA	8			
	688.3			AUDIBLE PEDESTRIAN SIGNAL UNITS [TYPE]	EA	8			
	695.2			EMERGENCY PREEMPTION PHASE SELECTOR	EA	4			
	695.3			EMERGENCY PREEMPTION DETECTOR	EA	4			
	695.4			EMERGENCY PREEMPTION DETECTOR CABLE	LF	620			
	696.1			RADAR ADVANCED DETECTION DEVICE (RADD)	EA	3			
	696.2			RADAR PRESENCE DETECTION DEVICE (RPDD)	EA	4			
	696.3			RADAR ADVANCED DETECTION DEVICE (RADD) COMMUNICATION & POWER CABLE(S)	LF	505			
	696.4			RADAR PRESENCE DETECTION DEVICE (RPDD) COMMUNICATION & POWER CABLE(S)	LF	825			
	5300.2			OFF-DUTY POLICE OFFICERS	HR	400			
	6007.1			REMOVAL OF TRAFFIC SIGNALS AT INTERSECTION	EA	1			
	8100.1			Install ITS Traffic Monitoring Camera Assembly	EA	1			
	8100.2			Install ITS Traffic Monitoring Camera Cabling	LF	95			
	0170	6001		IRRIGATION SYSTEM	LS	1			
	0192	6012		MULCH	CY	5			

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CITY OF SAN ANTONIO  
 025 UNIT PRICING FORM

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	0192	6014		PLANTING SOIL MIX	CY	25			
	0192	6039		PLANT MATERIAL (MIN 10' HT) (B&B)	EA	12			
	0450	6052		RAIL (HANDRAIL)(TY F)	LF	112			
	0462	6002		CONC BOX CULV (3 FT X 3 FT)	LF	141			
	0462	6004		CONC BOX CULV (4 FT X 3 FT)	LF	387			
	0462	6011		CONC BOX CULV (6 FT X 4 FT)	LF	846			
	0462	6028		CONC BOX CULV (9 FT X 9 FT)	LF	470			
	0465	2144		INLET (COMPL)(TRAFFIC)(TY X-2)	EA	1			
	0465	2145		INLET (COMPL)(TRAFFIC)(TY X-3)	EA	1			
	0465	2146		INLET (COMPL)(TRAFFIC)(TY X-4)	EA	1			
	0465	6040		INLET (COMPL)(PCU)(5FT)(BOTH)	EA	2			
	0465	6071		INLET (COMPL)(PSL)(RC)(4FTX4FT)	EA	2			
	0465	6074		INLET (COMPL)(PSL)(RC)(5FTX5FT)	EA	1			
	0465	6076		INLET (COMPL)(PSL)(RC)(6FTX6FT)	EA	4			
	0465	6077		INLET (COMPL)(PSL)(RC)(8FTX8FT)	EA	5			
	0465	6207		INLET (COMPL)(CURB)(TY 1)(10')	EA	21			
	0465	6274		MANH (COMPL)(RISER ONLY)	EA	3			
	0465	6284		MANHOLE (COMPL)(SPECIAL)	EA	2			
	0496	6007		REMOV STR (PIPE)	LF	210			
	0502	6001		BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	12			
	0512	6009		PORT CTB (FUR & INST)(LOW PROF)(TY 1)	LF	740			
	0512	6010		PORT CTB (FUR & INST)(LOW PROF)(TY 2)	LF	440			
	0512	6033		PORT CTB (MOVE)(LOW PROF)(TY 1)	LF	1300			
	0512	6034		PORT CTB (MOVE)(LOW PROF)(TY 2)	LF	560			
	0512	6057		PORT CTB (REMOVE)(LOW PROF)(TY 1)	LF	740			
	0512	6058		PORT CTB (REMOVE)(LOW PROF)(TY 2)	LF	440			
	0528	6011		LANDSCAPE PAVERS TYPE I	SY	46			
	0528	6012		LANDSCAPE PAVERS TYPE II	SY	124			
	0529	6015		CONC CURB (TY C1)	LF	145			
	0662	6060		WK ZN PAV MRK REMOV (W)4"(BRK)	LF	1050			
	0662	6063		WK ZN PAV MRK REMOV (W)4"(SLD)	LF	5150			
	0662	6071		WK ZN PAV MRK REMOV (W)8"(SLD)	LF	312			
	0662	6075		WK ZN PAV MRK REMOV (W)24"(SLD)	LF	176			
	0662	6080		WK ZN PAV MRK REMOV (W)(ARROW)	EA	1			
	0662	6090		WK ZN PAV MRK REMOV (W)(WORD)	EA	1			
	0662	6095		WK ZN PAV MRK REMOV (Y)4"(SLD)	LF	14289			
	0662	6109		WK ZN PAV MRK SHT TERM (TAB)TY W	EA	560			
	0662	6110		WK ZN PAV MRK SHT TERM (TAB)TY Y	EA	342			
	0677	6001		ELIM EXT PAV MRK & MRKS (4")	LF	475			
	0677	6017		ELIM EXT PAV MRK & MRKS (SYMBOL)	EA	4			
	0752	6005		TREE REMOVAL (4" - 12" DIA)	EA	3			
	0752	6006		TREE REMOVAL (12" - 18" DIA)	EA	4			
	0752	6007		TREE REMOVAL (18" - 24" DIA)	EA	1			
	1004	6001		TREE PROTECTION	EA	30			
	6001	6001		PORTABLE CHANGEABLE MESSAGE SIGN	DAY	42			

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CITY OF SAN ANTONIO  
 025 UNIT PRICING FORM

DESIGN PACKAGE 2

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
				<b>The City only will accept bid pricing to the hundredths. Any pricing extended out to three decimal points will be truncated to two decimal points in the City's favor.</b>					
100.1				MOBILIZATION	LS	1			
100.2				INSURANCE AND BOND	LS	1			
101.1				PREPARING RIGHT-OF-WAY	LS	1			
103.1				REMOVE CONCRETE CURB	LF	629			
103.3				REMOVE SIDEWALKS AND DRIVEWAYS	SF	2600			
103.4				REMOVE MISCELLANEOUS CONCRETE	SF	29			
104.1				STREET EXCAVATION	CY	588			
203.1				TACK COAT	GAL	75			
205.3				HOT MIX ASPHALTIC PAVEMENT TY C 2 IN. PAV THICKNESS	SY	741			
208.1				SALVAGING, HAULING & STOCKPILING RECLAIM ASPH PAV 2 IN.	SY	270			
209.2				BUS STOP CONCRETE PAD	SY	270			
307.1				CONCRETE STRUCTURE (FOUNDATION)	CY	0.3			
308.1				DRILLED SHAFTS (48")	LF	22			
401.104				REINFORCED CONCRETE PIPE (CLASS IV)(24" DIA)	LF	51			
413.2				FLOWABLE FILL (HIGH STRENGTH)	CY	29			
500.1				CONCRETE CURB	LF	420			
502.2				CONCRETE SIDEWALKS 4"	SY	285			
502.3				CONCRETE SIDEWALKS 5"	SY	11			
502.5				CONCRETE SIDEWALKS (VIA BUS FOUNDATION)	CY	6			
506.1				CONCRETE RETAINING WALLS COMBINATION TYPE	CY	24			
511.3				REPLACING WITH HOT MIX ASPHALTIC CONCRETE PAVEMENT TYPE B 12 INCHES COMPACTED DEPTH	SY	614			
516.1				BERMUDA SODDING	SY	247			
531.1				COSA SIGNS	EA	3			
535.1				4 INCH WIDE YELLOW LINE	LF	71			
535.2				4 INCH WIDE WHITE LINE	LF	80			
535.4				8 INCH WIDE WHITE LINE	LF	452			
535.7				24 INCH WIDE WHITE LINE	LF	325			
535.8				RIGHT WHITE ARROW	EA	3			
535.9				LEFT WHITE ARROW	EA	3			
535.11				COMBINATION THRU/LEFT WHITE ARROW	EA	3			
535.12				WORD "ONLY"	EA	2			
537.6				PAVEMENT MARKER (TYPE I C)	EA	31			
537.8				PAVEMENT MARKER (TYPE II A A)	EA	4			
540.10				CURB INLET GRAVEL FILTERS	LF	28			
550.1				TRENCH EXCAVATION SAFETY PROTECTION	LF	82			
618.1				CONDUIT (2 INCH/PVC SCHEDULE 40)(TRENCH)	LF	40			
618.2				CONDUIT (3 INCH/PVC SCHEDULE 40)(TRENCH)	LF	210			
620.2				ELECTRICAL CONDUCTORS (NO. 8)(BARE)	LF	510			
624.8				GROUND BOXES TYPE D (162922)	EA	1			
633.1				BATTERY BACKUP SYSTEM	EA	1			

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CITY OF SAN ANTONIO  
 025 UNIT PRICING FORM

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	680.2			INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (SYSTEM)	EA	1			
	682.1			INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (3 SECTION)	EA	3			
	682.2			INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (4 SECTION)	EA	3			
	682.3			INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (5 SECTION)	EA	2			
	682.4			INSTALL PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	2			
	683.1			LED COUNTDOWN PEDESTRIAN MODULE	EA	2			
	684.1			TRAFFIC SIGNAL CABLES (TYPE A)(12 AWG)(CONDUCTOR NO. 3) (TRAY CABLE)	LF	175			
	684.1			TRAFFIC SIGNAL CABLES (TYPE A)(14 AWG)(CONDUCTOR NO. 4)	LF	170			
	684.1			TRAFFIC SIGNAL CABLES (TYPE A)(14 AWG)(CONDUCTOR NO. 9)	LF	285			
	684.1			TRAFFIC SIGNAL CABLES (TYPE A)(16 AWG)(CONDUCTOR NO. 3)	LF	1370			
	686.1			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 60')(LUM)(ILSN)	EA	1			
	687.1			PEDESTAL POLE ASSEMBLY	EA	1			
	688.3			AUDIBLE PEDESTRIAN SIGNAL UNITS [TYPE]	EA	2			
	693.1			INTERNAL LIGHTED STREET NAME SIGNS [ILSN SIGN 8' S]	EA	1			
	695.2			EMERGENCY PREEMPTION PHASE SELECTOR	EA	1			
	695.3			EMERGENCY PREEMPTION DETECTOR	EA	1			
	695.4			EMERGENCY PREEMPTION DETECTOR CABLE	LF	220			
	696.1			RADAR ADVANCED DETECTION DEVICE (RADD)	EA	3			
	696.2			RADAR PRESENCE DETECTION DEVICE (RPDD)	EA	4			
	696.3			RADAR ADVANCED DETECTION DEVICE (RADD) COMMUNICATION & POWER CABLE(S)	LF	445			
	696.4			RADAR PRESENCE DETECTION DEVICE (RPDD) COMMUNICATION & POWER CABLE(S)	LF	510			
	5300.2			OFF-DUTY POLICE OFFICERS	HR	80			
	6007.1			REMOVAL OF TRAFFIC SIGNALS AT INTERSECTION	EA	1			
	8100.1			INSTALL ITS TRAFFIC MONITORING CAMERA ASSEMBLY	EA	1			
	8100.2			INSTALL ITS TRAFFIC MONITORING CAMERA CABLING	LF	165			
0170	6001			IRRIGATION SYSTEM	LS	1			
0465	6175			INLET (COMPL)(CURB)(TY C)	EA	1			
0502	6001			BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	3			
0528	6012			LANDSCAPE PAVERS TYPE II	SY	133			
0662	6071			WK ZN PAV MRK REMOV (W)8"(SLD)	LF	230			
0662	6080			WK ZN PAV MRK REMOV (W)(ARROW)	EA	2			
0662	6090			WK ZN PAV MRK REMOV (W)(WORD)	EA	2			
0677	6001			ELIM EXT PAV MRK & MRKS (4")	LF	4			
0677	6003			ELIM EXT PAV MRK & MRKS (8")	LF	4			
0677	6007			ELIM EXT PAV MRK & MRKS (24")	LF	184			
0677	6017			ELIM EXT PAV MRK & MRKS (SYMBOL)	EA	4			

**Total City Base Bid Amount:**

**SAWS WATER**

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	100			MOBILIZATION	LS	1.00			
	101			PREPARATION OF RIGHT-OF-WAY	LS	1.00			
	103			REMOVE CONCRETE CURB	LF	10.00			
	103			REMOVE SIDEWALKS & DRIVEWAYS	SF	196.00			

PROJECT NAME: Medical Center Intersection Improvements Phase 10  
 PROJECT NO. 40-00309A

CITY OF SAN ANTONIO  
 025 UNIT PRICING FORM

500		CONCRETE CURB, GUTTER, AND CONCRETE CURB AND GUTTER	LF	10.00			
502		CONCRETE SIDEWALK	SY	23.00			
550		TRENCH EXCAV. SAFETY PROTECTION	LF	290.00			
818		8" PVC WATERLINE (RESTRAINED) (0'-6' CUT)	LF	110.00			
818		12" PVC WATERLINE (RESTRAINED) (0'-6' CUT)	LF	90.00			
818		12" PVC WATERLINE (RESTRAINED) (6'-14' CUT)	LF	90.00			
824		RELAY 1-1/2", SHORT	EA	2.00			
826		VALVE BOX ADJUSTMENT	EA	2.00			
828		12" GATE VALVE, COMPLETE w/BOX	EA	3.00			
831		12"x12" CUT-IN-TEE	EA	2.00			
834		FIRE HYDRANT, COMPLETE	EA	1.00			
834.3		RELOCATE FIRE HYDRANT	EA	1.00			
836		PIPE FITTINGS, ALL SIZES AND TYPES	TON	4.05			
840		8" WATER TIE-IN	EA	7.00			
840		12" WATER TIE-IN	EA	8			
841		HYDROSTATIC TESTING	EA	7			
844		2" BLOW-OFF, TEMPORARY	EA	15			
858		CONCRETE ENCASEMENT, CRADLES, SADDLES AND COLLARS	CY	15			
Special Spec (Electrical)		REMOVE AND RELOCATE EXISTING PRESSURE POINT MONITORING PANEL. EXTEND ALL NEW COMPONENTS, UNDERGROUND CONDUITS, AND ELECTRICAL WIRING FROM THE PRESSURE MONITORING POINT PANEL, AND EXISTING METER BOX TO NEW POWER POLE. RELOCATE EXISTING YAGI ANTENNA AND SERVICE METER. AS SHOWN ON THE DRAWINGS AND SPECIFIED IN THE CONTRACT DOCUMENTS COMPLETE-IN-PLACE FOR THE LUMP SUM.	LS	1			

Total SAWS Water Base Bid Amount:

**SAWS Sewer**

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	ITEM SEQUENCE NO.
206				ASPHALT TREATED BASE (10" COMPACTED DEPTH)	SY	20.00		
413				FLOWABLE FILL	CY	2.00		
550				TRENCH EXCAVATION PROTECTION	LF	175.00		
848				10" PVC SDR-26 (2241) SEWER LINE (6'-14')	CY	175.00		
852				SANITARY SEWER MANHOLE (0'-6')	EA	1.00		
852				SANITARY SEWER DROP MANHOLE (0'-6')	EA	1		
852				EXTRA DEPTH MAHOLES (>6')	VF	5		
855				RECONSTRUCTION OF EXISTING MANHOLE	EA	2		
864				BY-PASS PUMPING	LS	2		
866				SAN. SWR. PRE TELEVISION INSP. (8"-15")	LF	175		
866				SAN. SWR. POST TELEVISION INSP. (8"-15")	LF	175		

Total SAWS Sewer Base Bid Amount:

Total City + SAWS Water + SAWS Sewer Base Bid Amount:

PROJECT NAME:Medical Center Intersection Improvements Phase 10  
PROJECT NO. 40-00309A

CITY OF SAN ANTONIO  
025 UNIT PRICING FORM

\_\_\_\_ certifies that the unit prices shown on this complete computer print-out for all of the bid items and the alternates contained in this proposal are the unit prices intended and that its bid will be tabulated using these unit prices and no other information from this print-out.

\_\_\_\_ Acknowledged and agrees that the total bid amount shown will be read as its total bid and further agrees that the official total bid amount will be determined by multiplying the unit bid prices shown in this print-out by the respective estimated quantities shown in the proposal and then totaling all of the extended amounts. \_\_\_\_\_ agrees to the terms, conditions, and requirements of the bidder's bid proposal.

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

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

**CITY OF SAN ANTONIO, TEXAS  
GOVERNING SPECIFICATIONS**

All standard specifications and special specifications applicable to this project are identified as follows:

**CITY OF SAN ANTONIO  
STANDARD SPECIFICATIONS FOR CONSTRUCTION (JUNE 2008)**

**ITEM NO.      DESCRIPTION**

100	MOBILIZATION
101	PREPARING RIGHT-OF-WAY
103	REMOVE CONCRETE
104	STREET EXCAVATION
105	CHANNEL EXCAVATION
106	BOX CULVERT EXCAVATION AND BACKFILLING
203	TACK COAT
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT
208	SALVAGING, HAULING, & STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT
209	REINFORCED CONCRETE PAVEMENT
307	CONCRETE STRUCTURES
308	DRILLED SHAFTS AND UNDER-REAMED FOUNDATIONS
401	REINFORCED CONCRETE PIPE
413	FLOWABLE FILL
500	CONCRETE CURB, GUTTER, AND CONCRETE CURB AND GUTTER
502	CONCRETE SIDEWALKS
503	ASPHALTIC CONCRETE, PORTLAND CEMENT CONCRETE, AND GRAVEL DRIVEWAYS
506	CONCRETE RETAINING WALL – COMBINATION TYPE
507	CHAIN LINK WIRE FENCE
511	REPLACING WITH HOT MIX ASPHALTIC CONCRETE PAVEMENT TY B 12 INCHES COMPACTED DEPTH
516	SODDING
531	COSA SIGNS
535	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS
537	RAISED PAVEMENT MARKERS
540	TEMPORARY EROSION, SEDIMENTATION AND WATER POLLUTION PREVENTION AND CONTROL
550	TRENCH EXCAVATION SAFETY PROTECTION
551	TEMPORARY SPECIAL SHORING
615	TRAFFIC SIGNAL CONTROLLER CABINET
618	CONDUIT
620	ELECTRICAL CONDUCTORS
624	GROUND BOXES
628	ELECTRICAL SERVICES
633	BATTERY BACKUP SYSTEM FOR TRAFFIC SIGNAL
655	CONTROLLER FOUNDATION AND PEDESTAL POST
680	INSTALLATION OF HIGHWAY TRAFFIC SIGNALS
682	VEHICLE AND PEDESTRIAN SIGNAL HEADS
683	LED COUNTDOWN PEDESTRIAN SIGNAL MODULE
684	TRAFFIC SIGNAL CABLES

686 TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)  
687 PEDESTAL POLE ASSEMBLIES  
688 PEDESTRIAN DETECTORS AND VEHICLE LOOP DETECTORS  
693 INTERNALLY LIGHTED STREET NAME SIGN ASSEMBLIES  
695 EMERGENCY VEHICLE TRAFFIC SIGNAL PRIORITY CONTROL SYSTEM  
696 RADAR ADVANCED DETECTION DEVICE (RADD)

## SPECIAL PROVISIONS

SPECIAL PROVISIONS UPDATE MAY 2009  
SPECIAL PROVISIONS UPDATE FEBRUARY 2010  
SPECIAL PROVISIONS UPDATE JUNE 2010  
SPECIAL PROVISIONS UPDATE NOVEMBER 2013  
SPECIAL PROVISION TO THE GENERAL CONDITIONS  
526SPL FIELD OFFICE

## SPECIAL SPECIFICATIONS

5300 OFF DUTY POLICE OFFICER  
6007 REMOVE TRAFFIC SIGNALS  
8100 ITS TRAFFIC MONITORING SYSTEM

## TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES 2014

STANDARD SPECIFICATIONS: ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION  
NOVEMBER 1, 2014

0170 IRRIGATION SYSTEM  
0192 LANDSCAPE PLANTING  
0450 SIDEWALK RAIL  
0462 CONCRETE BOX CULVERTS AND DRAINS  
0465 JUNCTION BOXES, MANHOLES AND INLETS  
0496 REMOVING STRUCTURES  
0502 BARRICADES, SIGNS AND TRAFFIC HANDLING  
0512 PORTABLE TRAFFIC BARRIER  
0528 COLORED TEXTURED CONCRETE AND LANDSCAPE PAVERS  
0529 CONCRETE CURB  
0662 WORK ZONE PAVEMENT MARKINGS  
0677 ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS  
0752 TREE AND BRUSH REMOVAL  
6001 PORTABLE CHANGEABLE MESSAGE SIGN

SPECIAL PROVISIONS: SPECIAL PROVISIONS WILL GOVERN AND TAKE PRECEDENCE OVER THE SPECIFICATIONS ENUMERATED HEREON WHEREVER IN CONFLICT THEREWITH.

SP192-001      LANDSCAPE PLANTING  
SP528-999      COLORED TEXTURED CONCRETE AND LANDSCAPE PAVERS  
SP752-001      TREE AND BRUSH REMOVAL

SPECIAL SPECIFICATIONS:

SS1004      TREE PROTECTION

SAWS

GOVERNING SPECIFICATIONS

All Specifications applicable to this project are identified as follows:

**SAWS STANDARD SPECIFICATIONS - 2014**

ITEM NO.	DESCRIPTION
ITEM 100	MOBILIZATION
ITEM 101	PREPARATION OF RIGHT-OF-WAY
ITEM 413	FLOWABLE FILL
ITEM 550	TRENCH EXCAVATION SAFETY PROTECTION
ITEM 818	PVC (C-900, C-905 AND C-909) PIPE INSTALLATION
ITEM 824	WATER SERVICE SUPPLY LINES
ITEM 826	VALVE BOX ADJUSTMENT
ITEM 828	GATE VALVES
ITEM 831	CUT-IN-TEE
ITEM 834	FIRE HYDRANTS
ITEM 836	GREY-IRON AND DUCTILE-IRON FITTINGS
ITEM 840	WATER TIE-INS
ITEM 841	HYDROSTATIC TESTING OPERATIONS
ITEM 844	BLOW OFF-ASSEMBLIES
ITEM 848	SANITARY SEWERS
ITEM 852	SANITARY SEWER MANHOLES
ITEM 855	RECONSTRUCTION OF EXISTING MANHOLES
ITEM 858	CONCRETE ENCASEMENT, CRADLES, SADDLES AND COLLARS
ITEM 864	BY-PASS PUMPING
ITEM 866	SEWER MAIN TELEVISION INSPECTION
SPECIAL SPECIFICATIONS	
ELECTRICAL	
ITEM 16010	BASIC ELECTRICAL REQUIREMENTS
ITEM 16050	BASIC ELECTRICAL MATERIALS AND METHODS
ITEM 16073	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
ITEM 16110	RACEWAYS
ITEM 16120	CONDUCTORS
ITEM 16451	GROUNDING
ITEM 16950	ELECTRICAL TESTING

# Special Provision to Item 192

## Landscape Planting



Item 192, "Landscape Planting," of the Standard Specifications, is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Section 3.15., "Maintenance".** The second sentence is voided and replaced by the following:

Perform the maintenance work for a minimum of 365 calendar days at designated locations by following the work schedule and frequencies shown on the plans.

**Section 3.15.9., "Plant Replacement,"** is voided and replaced by the following:

Remove and dispose of dead and damaged plants from the worksite as directed. Replace plants as originally specified prior to each payment as specified under Article 192.5. , "Payment".

**Article 192.5., "Payment,"** is voided and replaced by the following:

The work performed and the materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Plant Material" of the size, "Plant Material" of the type, "Plant Material" of the size and type specified, "Plant Material" of the group specified or "Palm Material" of the type specified. This price is full compensation for furnishing the plant, mulch, plant soil mix, landscape edge, plant bed preparation and vegetation barrier, unless mulch, plant soil mix, landscape edge, plant bed preparation and vegetation barrier are specified as separate items. Payment for "Plant Material" and "Palm Material" will be handled in the following manner:

5.1. **Initial Payment.** When the planting and installation of related materials are completed and approved, 55% of the unit price bid for each plant will be paid.

5.2. **Eleven 30-Day Payment.** Following the initial payment, when the eleven 30-day periods of the 365-day maintenance (see Section 192.3.15, "Maintenance") are completed and approved, an additional 3.75% of the total price bid for all plants will be paid, but if the maintenance is not completed and approved for a 30-day period, that 3.75% will be forfeited.

5.3. **Final Payment.** When the final 35 days of the 365-day maintenance are completed and approved, and after final inspection and acceptance, an additional 3.75% of the total price bid for all plants will be paid, but if the maintenance is not completed and approved, that 3.75% will be forfeited.

When mulch, plant soil mix, landscape edge, plant bed preparation and vegetation barrier are specified as separate pay items, the work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Mulch" or "Mulch" of the type specified, "Plant Soil Mix" or "Plant Soil Mix" of the type specified, "Landscape Edge" or "Landscape Edge" of the type specified, "Plant Bed Preparation" or "Plant Bed Preparation" of the type specified, and "Vegetation Barrier" or "Vegetation Barrier" of the type specified. Each price is full compensation for materials, equipment, labor, tools, and incidentals.



# Special Provision to Item 528

## Colored Textured Concrete and Landscape Pavers

Item 528, "Colored Textured Concrete and Landscape Pavers" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Article 1.2 Landscape Pavers.** The paragraph is amended to include the following:

- 1.2.1. **Summary.** Section Includes:
  1. Interlocking precast concrete pavers.
  2. Sand bed over concrete sub-slab.
- 1.2.2. **References.** ASTM International (ASTM):
  1. C33 - Standard Specification for Concrete Aggregates.
  2. C136 - Standard Test Method for Sieve Analysis for Fine and Coarse Aggregate.
  3. C144 - Standard Specification for Aggregate for Masonry Mortar.
  4. C936 - Standard Specification for Solid Concrete Interlocking Paving Units.
  5. C979 - Standard Specification for Pigments for Integrally Colored Concrete.
- 1.2.3. **Related Documents.** Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- 1.2.4. **Submittals.** Submittals for Review:
  1. Samples: Paver samples showing maximum color range.
- 1.2.5. **Quality Assurance.** Mockup:
  1. Size: Minimum 2 feet x 4 feet of buffer and full in place version for pedestrian ramp.
  2. Show: Paver color and texture, maximum color range, paver pattern, and joint profile.
  3. Locate where directed.
  4. Approved mockup may remain as part of the Work.

**Article 2.2 Landscape Pavers.** The paragraph is amended to include the following:

- 2.2.1. **Materials**
  - A. Concrete Pavers:
    1. "Plaza Stone I and II", 2-2/8" and 3-1/8" thick (and as below), as available from Pavestone Company, San Marcos, Texas, or approved equivalent.
    2. "Detectable Warning Paver", 2-3/8" thick x 3-7/8" wide x 7-13/16" long as available from Pavestone Company, San Marcos, Texas, or approved equivalent.
    3. Existing Concrete Pavers: carefully salvage and store whole on wooden pallets for re-setting. Broken pavers shall be discarded. Should new pavers be required – whether due to breakage or insufficient quantity, provide new ones to match size, finish, and color of existing.
    4. Physical requirements: Meet ASTM C936.
    5. Coloring admixture: ASTM C979, pure mineral oxide, alkali resistant, colorfast, water insoluble, chemically inert, and weather resistant.
- 2.2.2. **Patterns and Colors**
  - A. Pattern: Three patterns are required:
    1. Rowlock Pattern: "Plaza Stone", Large Rectangular Stones
    2. Field Courses Pattern: "Plaza Stone", Large Rectangular Stones, Square Stones, Small Rectangular Stones, 3/4 Rectangular Stones, and Half Squares, in a well-distributed range of these different sizes. Refer to drawings for pattern locations.

3. Basketweave Pattern: "Detectable Warning Paver", one size only.
4. Existing Concrete Pavers: re-set salvaged pavers in the same pattern as previously existing, or as indicated on drawings

B. Colors:

1. For "Plaza Stone Pavers", a color blend in the following proportions:
  - a. 25% Cast Stone
  - b. 25% Dark Brown
  - c. 25% Buff
  - d. 25% Charcoal Gray
2. For "Detectable Warning Paver": Dark Brown
3. Colors as available from Pavestone Company, San Marcos, Texas. Submit samples of each

C. Bedding Sand: ASTM C33, normal weight sand, graded per ASTM C136:

SIEVE SIZE	PERCENT PASSING
3/8 inch	100
No. 4	95 to 100
No. 8	85 to 100
No.	16 50 to 85
No. 30	25 to 60
No. 50	10 to 30
No. 100	2 to 10

D. Joint Sand: ASTM C144, normal weight sand, graded per ASTM C136:

SIEVE SIZE	PERCENT PASSING
No. 4	100
No. 8	95 to 100
No. 16	70 to 100
No. 30	40 to 75
No. 50	10 to 35
No. 100	2 to 15
No. 200	0

2.2.3. **Accessories.** Masonry Cleaner: Type recommended by masonry manufacturer.

**Article 3.2 Landscape Pavers.** The paragraph is voided and replaced by the following:

3.2.1. **Installation**

- A. Place bedding sand to minimum 1-inch uncompacted thickness. Scree off to true surface conforming to required line and grade.
- B. Place pavers in pattern indicated from straight reference line.
- C. Sequence laying to prevent placing pavers between previously placed units.
- D. Machine cut units at perimeter and around obstructions. Minimize units less than one-half normal size.
- E. Discard cracked, broken, chipped, stained, and otherwise damaged pavers.
- F. Vibrate to final level with plate type vibrator.
- G. After initial vibration, brush joint sand over surface and vibrate into joints.
- H. Place pavers with final surface 1/8 to 1/4 inch above drainage inlets, concrete collars, and drainage channels.
- I. Do not pass vibrator closer than 3 feet of unrestrained edges.
- J. Sweep off excess sand.
- K. Allowable Tolerances: Surfaces true to level or indicated slopes with plus or minus 3/8 inch in 10 feet tolerance.

3.2.2. **Cleaning**

- A. Protect adjacent and underlying surfaces.
- B. Apply masonry cleaner in accordance with manufacturer's instructions.
- C. Thoroughly rinse surfaces with clean water after completion of cleaning; remove all traces of cleaning solution.



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## Special Provision to Item 752

### Tree and Brush Removal

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Item 752, "Tree and Brush Removal" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Article 752.5.2 "Measurement"** is voided and replaced by the following:

**752.5 Tree Trimming and Brush Removal.** By the linear foot parallel to the roadway.

**Article 752.6. "Paymentt"** is voided and replaced by the following:

The work performed in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Tree Removal" of the diameter specified, "Tree Trimming" of the dimension specified, "Brush Removal," "Tree Trimming and Brush Removal," and "Stump Removal." This price is full compensation for removal, trimming, disposal, equipment, traffic control, labor, and incidentals.

When not shown on the plans as a separate pay item, payment for tree trimming and brush removal in channels will be included in payment by the linear foot. When shown on the plans as a separate pay item, tree trimming and brush removal in channels will be paid for at the unit price bid for "Tree Trimming and Brush Removal (Channels)."



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# **Special Specification 1004**

## **Tree Protection**

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### **1. DESCRIPTION**

Install tree protection as shown on the plans or as directed.

### **2. MATERIALS**

Furnish materials in accordance with the plans.

### **3. CONSTRUCTION**

Use construction methods in accordance with the plans.

### **4. MEASUREMENT**

This Item will be measured by the acres of trees protected or by each tree protected.

### **5. PAYMENT**

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Tree Protection." This price is full compensation for furnishing all materials, equipment, labor, and incidentals.

## DESIGN PACKAGE 1 QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QTY	ITEM NO.	DESCRIPTION	UNIT	QTY	ITEM NO.	DESCRIPTION	UNIT	QTY									
<b>TRAFFIC CONTROL PLAN</b>																				
CoSA				CoSA				CoSA												
5300.2	OFF-DUTY POLICE OFFICERS	HR	400	502.2	CONCRETE SIDEWALKS 4"	SY	409	531.1	COSA SIGNS	EA	1									
TXDOT				502.3	CONCRETE SIDEWALKS 5"	SY	113	535.1	4 INCH WIDE YELLOW LINE	LF	6,544									
0502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	12	502.5	CONCRETE SIDEWALKS (VIA BUS FOUNDATION)	CY	6	535.2	4 INCH WIDE WHITE LINE	LF	2,028									
0512-6009	PORT CTB (FUR & INST) (LOW PROF) (TY 1)	LF	740	516.1	BERMUDA SODDING	SY	303	535.4	8 INCH WIDE WHITE LINE	LF	344									
0512-6010	PORT CTB (FUR & INST) (LOW PROF) (TY 2)	LF	440	TXDOT				535.7	24 INCH WIDE WHITE LINE	LF	580									
0512-6033	PORT CTB (MOVE) (LOW PROF) (TY 1)	LF	1,300	0170-6001	IRRIGATION SYSTEM	LS	1	535.8	RIGHT WHITE ARROW	EA	2									
0512-6034	PORT CTB (MOVE) (LOW PROF) (TY 2)	LF	560	0192-6012	MULCH	CY	5	535.9	LEFT WHITE ARROW	EA	3									
0512-6057	PORT CTB (REMOVE) (LOW PROF) (TY 1)	LF	740	0192-6014	PLANT SOIL MIX	CY	25	535.10	COMBINATION THRU/RIGHT WHITE ARROW	EA	1									
0512-6058	PORT CTB (REMOVE) (LOW PROF) (TY 2)	LF	440	0192-6039	PLANT MATERIAL (MIN 10' HT) (B&B)	EA	12	535.12	WORD "ONLY"	EA	3									
0662-6060	WK ZN PAV MRK REMOV (W) 4" (BRK)	LF	1,050	0528-6011	LANDSCAPE PAVERS (TYPE I)	SY	46	535.23	HANDICAP SYMBOL	EA	4									
0662-6063	WK ZN PAV MRK REMOV (W) 4" (SLD)	LF	5,150	0528-6012	LANDSCAPE PAVERS (TYPE II)	SY	124	535.24	RELOCATE SIGN	EA	6									
0662-6071	WK ZN PAV MRK REMOV (W) 8" (SLD)	LF	312	0529-6015	CONC CURB (TY C1)	LF	145	537.6	PAVEMENT MARKER (TYPE I C)	EA	180									
0662-6075	WK ZN PAV MRK REMOV (W) 24" (SLD)	LF	176	0752-6005	TREE REMOVAL (4" - 12" DIA)	EA	3	537.8	PAVEMENT MARKER (TYPE II A A)	EA	169									
0662-6080	WK ZN PAV MRK REMOV (W) (ARROW)	EA	1	0752-6006	TREE REMOVAL (12" - 18" DIA)	EA	4	TXDOT												
0662-6090	WK ZN PAV MRK REMOV (W) (WORD)	EA	1	0752-6007	TREE REMOVAL (18" - 24" DIA)	EA	1	0677-6001	ELIM EXT PAV MRK & MRKS (4")	LF	475									
0662-6095	WK ZN PAV MRK REMOV (Y) 4" (SLD)	LF	14,289	1004-6001	TREE PROTECTION	EA	30	0677-6017	ELIM EXT PAV MRK & MRKS (SYMBOL)	EA	4									
0662-6109	WK ZN PAV MRK SHT TERM (TAB) TY W	EA	560	<b>STORM WATER POLLUTION PREVENTION PLAN</b>																
0662-6110	WK ZN PAV MRK SHT TERM (TAB) TY Y	EA	342																	
6001-6001	PORTABLE CHANGEABLE MESSAGE SIGN	DAY	42																	
<b>ROADWAY</b>																				
CoSA				CoSA				CoSA												
103.1	REMOVE CONCRETE CURB	LF	1,193	308.1	DRILLED SHAFTS (24")	LF	36	540.1	ROCK FILTER DAMS (INSTALL/REMOVE) (TYPE 2)	LF	13									
103.3	REMOVE SIDEWALKS AND DRIVEWAYS	SF	7,780	308.1	DRILLED SHAFTS (36")	LF	70	540.10	CURB INLET GRAVEL FILTERS	LF	540									
103.4	REMOVE MISCELLANEOUS CONCRETE	SF	3,015	615.1	TRAFFIC SIGNAL CONTROLLER ASSEMBLY (TYPE 332 CABINET)	EA	1	<b>NOTES:</b>												
104.1	STREET EXCAVATION	CY	182	618.1	CONDUIT (2 INCH/PVC SCHEDULE 40) (TRENCH)	LF	545	1.	EXISTING PAVEMENT MARKING IN CONFLICT WITH WORK ZONE PAVEMENT MARKINGS SHALL BE REMOVED. THIS WORK IS SUBSIDIARY TO THE WORK ZONE PAVEMENT MARKING ITEMS.											
203.1	TACK COAT	GAL	1,572	618.2	CONDUIT (3 INCH/PVC SCHEDULE 40) (TRENCH)	LF	125													
205.3	HOT MIX ASPHALTIC PAVEMENT TY C 2 IN. PAV THICKNESS (PG 76-22)	SY	15,715	618.4	CONDUIT (2 INCH/PVC SCHEDULE 40) (BORE)	LF	350													
208.1	SALVAGING, HAULING & STOCKPILING RECLAIM ASPH PAV 2 IN.	SY	15,549	620.1	ELECTRICAL CONDUCTORS (NO. 6) (BARE)	LF	695													
209.1	CONCRETE PAVEMENT AT 12 INCHES OF DEPTH	SY	92	620.2	ELECTRICAL CONDUCTORS (NO. 8) (BARE)	LF	1,585													
209.2	BUS STOP CONCRETE PAD	SY	706	620.3	ELECTRICAL CONDUCTORS (NO. 6) (INSULATED)	LF	25													
500.1	CONCRETE CURB	LF	992	624.8	GROUND BOXES TYPE D (162922) W/ APRON	EA	4													
502.1	CONCRETE SIDEWALKS CONVENTIONALLY FORMED	SY	39	628.1	ELECTRICAL SERVICES (PER INSTALLATION)	EA	1													
503.2	PORTLAND CEMENT CONCRETE DRIVEWAY COMMERCIAL	SY	214	628.2	REMOVE ELECTRICAL SERVICES (PER REMOVAL)	EA	1													
<b>DRAINAGE</b>																				
CoSA				682.3	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (5 SECTION)	EA	1													
103.1	REMOVE CONCRETE CURB	LF	14	682.4	INSTALL PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	8													
103.4	REMOVE MISCELLANEOUS CONCRETE	SF	4,673	683.1	LED COUNTDOWN PEDESTRIAN MODULE	EA	8													
103.5	REMOVE RAIL (PEDESTRIAN)	LF	123	684.1	TRAFFIC SIGNAL CABLES (TYPE A) (12 AWG) (CONDUCTOR NO. 3) (TRAY CABLE)	EA	1,355													
105.1	CHANNEL EXCAVATION	CY	374	684.1	TRAFFIC SIGNAL CABLES (TYPE A) (14 AWG) (CONDUCTOR NO. 9)	EA	2,820													
106.1	BOX CULVERT EXCAVATION AND BACKFILL	CY	10,073	684.1	TRAFFIC SIGNAL CABLES (TYPE A) (16 AWG) (CONDUCTOR NO. 3)	EA	1,125													
307.1	CONCRETE STRUCTURE (ELEVATED SIDEWALKS) (< 10 C.Y.)	CY	9	686.1	INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (STR TY B) (LUM)	EA	5													
307.2	CONCRETE STRUCTURE (CHANNEL)	CY	133	687.1	PEDESTRIAN POLE ASSEMBLY	EA	6													
401.101	REINFORCED CONCRETE PIPE (CLASS III) (18" DIA)	LF	3	688.2	PEDESTRIAN DETECTORS [2 INCH PUSH BUTTON]	EA	8													
401.102	REINFORCED CONCRETE PIPE (CLASS III) (24" DIA)	LF	327	688.3	AUDIBLE PEDESTRIAN SIGNAL UNITS [TYPE]	EA	8													
401.103	REINFORCED CONCRETE PIPE																			

## TRAFFIC NOTES AND SPECIAL CONDITIONS

- ENSURE THAT ALL TRAFFIC CONTROL DEVICES ARE PROPERLY INSTALLED AND MAINTAINED AT THE JOB SITE IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, TMUTCD AND RELATED INDUSTRY STANDARDS AND REGULATIONS. THESE NOTES, DO NOT, IN AND OF THEMSELVES, CONSTITUTE A TRAFFIC CONTROL PLAN. IN THE EVENT THAT THESE PLANS DO NOT INCLUDE TRAFFIC CONTROL, OR THAT THE CONTRACTOR WISHES TO VARY FROM TRAFFIC CONTROL INCLUDED WITH THESE PLANS, HE SHALL SUBMIT FOR REVIEW A TRAFFIC CONTROL PLAN SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS, INCLUDING A SIGN AND BARRICADE PLAN CONFORMING TO THE REQUIREMENTS OF THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE CITY'S CONSTRUCTION OBSERVER / INSPECTOR (COI) AND THE TRAFFIC ENGINEERING REPRESENTATIVE WILL ONLY BE RESPONSIBLE TO INSPECT THE TRAFFIC CONTROL DEVICES BEING DEPLOYED. IF, IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVE AND THE COI, THE TRAFFIC CONTROL DEVICES DO NOT CONFORM TO ESTABLISHED STANDARDS OR ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE COI SHALL HAVE THE OPTION TO STOP CONSTRUCTION OPERATIONS AT NO EXPENSE TO THE CITY UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED BY THE CONTRACTOR.
- PRIOR TO STARTING CONSTRUCTION, CONTACT THE CITY OF SAN ANTONIO TRAFFIC OPERATIONS SECTION AT 207-7765 FOR A TRAFFIC SIGN AND TRAFFIC SIGNAL INVENTORY. PRIOR TO COMPLETION OF THE CONTRACT AND REMOVAL OF THE BARRICADES, AGAIN CONTACT THE TRAFFIC OPERATIONS SECTION. THE BARRICADES SHALL NOT BE REMOVED UNTIL ALL APPLICABLE PERMANENT TRAFFIC SIGNS AND SIGNALS ARE IN PLACE.
- OBTAIN AND MAINTAIN TEMPORARY STOP SIGNS AND ALL OTHER TRAFFIC CONTROL DEVICES REQUIRED TO PROTECT THE GENERAL PUBLIC. IF THE CITY OF SAN ANTONIO HAS REMOVED PERMANENT STOP SIGNS, THE CONTRACTOR SHALL REQUEST THAT THE SIGNS BE RETURNED TO THE CONSTRUCTION SITE TO BE REINSTALLED BY THE CONTRACTOR. ALL PERMANENT SIGNS OR TRAFFIC CONTROL DEVICES MISSING OR DAMAGED UPON COMPLETION OF CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- AS WORK PROGRESSES, LOCATION OF TEMPORARY TRAFFIC CONTROL DEVICES WILL BE ADJUSTED AND MODIFIED, AS NECESSARY BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
- IF THE NEED ARISES, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES, SPECIAL DIRECTIONAL DEVICES, AND/OR BUSINESS NAME SIGNS MAY BE ORDERED BY THE TRAFFIC ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
- TEMPORARY TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CITY'S "TYPICAL SIGN AND BARRICADE STANDARDS" SHEETS, TXDOT'S STANDARD'S, AND TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- Maintain all streets within project limits open to through traffic by repairing trenches, potholes, leveling up with asphalt, etc. at no direct payment, with the cost to be included in other items.
- Provide suitable access accommodations for school children and pedestrians if needed.
- Provide access for delivery of mail by the U.S. Postal Service.
- Provide for access to residences and all businesses at all times within all phases of the work.
- When construction work necessitates the utilization of vehicle paths other than the lanes normally used, traffic control markings no longer applicable shall be removed and approved temporary pavement markings and signs installed in accordance with part VI-D of the Texas Manual on Uniform Traffic Control Devices.
- The COI will monitor the contractor's traffic control devices and will be responsible to furnish all residents and businesses with an information flyer on all jobs during construction.
- Any damage to permanent traffic signals, the controller box, loops or conduits during or upon completion of the project shall be repaired or replaced at the contractor's expense. The decision to repair, as opposed to replace, the damaged equipment shall be made by the city's traffic engineer.
- The contractor is responsible for repairing all streets outside of the project limits, which are damaged due to construction activities. The replaced section must be approved by the city's street engineer. There will be no direct payment for this work. The cost is to be included in other items.
- Off-duty police officers will be required as directed by the traffic engineer.
- Provide the city an emergency telephone number for evenings, weekends, and holidays by the first working day of the project. This telephone number must be a commercial answering service. The answering service must be able to contact the contractor and have the contractor respond to the city staff within two hours of the initial contact.

17. MAINTAIN CONTINUOUS ACCESS TO ALL INTERSECTING STREETS UNLESS OTHERWISE SHOWN ON THESE PLANS. WHEN CONTINUOUS ACCESS IS SCHEDULED TO BE BLOCKED, CONTACT THE DISPATCHERS FOR THE FIRE DEPARTMENT AND EMS AT (210) 227-8341 AND THE POLICE DEPARTMENT AT (210) 207-2257, TO APPRISE THEM OF THE PENDING STREET CLOSURE AT LEAST FORTY-EIGHT HOURS IN ADVANCE. IF THE CLOSURE FALLS ALONG A BUS ROUTE, CONTACT VIA AT (210) 362-5220.

18. MAINTAIN EITHER THE EXISTING OR TEMPORARY STREET NAME SIGNS AT EACH INTERSECTION ON SITE THROUGHOUT CONSTRUCTION. IF THE EXISTING STREET NAME SIGNS ARE USED, THEY MUST BE MAINTAINED IN THE CONDITION ENCOUNTERED PRIOR TO THE BEGINNING OF CONSTRUCTION, AND THEN BE TURNED IN TO THE CITY INSPECTOR AT THE END OF THE PROJECT. IF TEMPORARY SIGNS ARE USED DURING CONSTRUCTION, THEY SHALL HAVE A MINIMUM OF 4-INCH LETTERS, AND MAY BE FABRICATED WITH CONSTRUCTION ZONE MATERIAL (BLACK LEGEND ON ORANGE BACKGROUND, USING PLYWOOD SUBSTRATE, ETC.).

## PHASING AND STAGING NOTES - STREET AND DRAINAGE CONSTRUCTION

- ANY QUESTIONS REGARDING PHASING OR STAGING WILL BE STRICTLY HANDLED BY THE DEPARTMENT OF PUBLIC WORKS WHICH HAS COMPLETE AUTHORITY TO MAKE FINAL DECISIONS ON ANY CHANGES OR MODIFICATIONS. THE CONTRACTOR MUST CONTACT THE CITY'S CONSTRUCTION INSPECTOR 48 HOURS IN ADVANCE (NOT INCLUDING WEEKENDS OR HOLIDAYS) OF ANY MINOR STREET CLOSURE. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ADVISE CONSTRUCTION INSPECTIONS TEN (10) DAYS IN ADVANCE OF ANY ARTERIAL STREET CLOSURE. THIS MUCH TIME IS NECESSARY TO INSTALL ADVISORY SIGNS AND GIVE THE MOTORISTS A MINIMUM OF SEVEN (7) DAYS NOTICE BEFORE STREET CLOSURE. THE CONSTRUCTION INSPECTOR, AFTER HAVING BEEN NOTIFIED, WILL CONTACT THE ENGINEERING OFFICE IMMEDIATELY TO MAKE THE NECESSARY ARRANGEMENTS. THE TEMPORARY BARRICADES AND WARNING SIGNS SHALL BE LOCATED SO AS TO AFFORD THE MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT AND TO FACILITATE AN EXPEDIENT FLOW OF TRAFFIC AT ALL TIMES DURING CONSTRUCTION.
- IF THERE ARE TWO (2) OR MORE PHASES IN THE PROJECT, NO MORE THAN TWO (2) PHASES OF CONSTRUCTION MAY BE WORKED AT ONE TIME, UNLESS OTHERWISE INDICATED IN THE PLANS. PARTIAL CONSTRUCTION AT DIFFERENT SCATTERED LOCATIONS WITHIN THE PROJECT WILL NOT BE ALLOWED. PROJECTS THAT CONSIST OF DISTINCT AND SEPARATE AREAS MAY BE UNDER CONSTRUCTION AT THE SAME TIME WITH AN APPROVED FIELD ALTERATION. ALL REMAINING STREETS WITHIN THE PROJECT OR SEPARATE AREA SHALL REMAIN OPEN AT ALL TIMES.
- UNLESS OTHERWISE INDICATED IN THE PLANS, TWO (2) PHASES IN SEQUENCE MAY BE WORKED AT THE SAME TIME, IN PROJECTS WHERE THERE ARE AT LEAST THREE (3) PHASES, SUCH AS PHASE 1 AND PHASE 2 AND BEFORE GOING TO PHASE 3, PHASE 1 MUST BE COMPLETED 100% WITH CASE MATERIAL AND APPROVED DENSITIES (PRIME COATED IF BASE MATERIAL IS ITEM NO. 200 "FLEXIBLE BASE") BEFORE BEGINNING PHASE 3. IF THERE ARE ONLY TWO (2) PHASES IN THE PROJECT, PHASE 1 MUST BE COMPLETED 100% WITH BASE MATERIAL AND APPROVED DENSITIES (PRIME COATED IF BASE MATERIAL IS ITEM NO. 200 "FLEXIBLE BASE") BEFORE PROCEEDING TO PHASE 2.
- IF THE PROJECT HAS MORE THAN SIXTEEN (16) PHASES, BEFORE THE CONTRACTOR CAN BEGIN PHASE 17, HE MUST COMPLETELY FINISH WITH TYPE "B" OR TYPE "D" ASPHALT AT LEAST 50% OF THE LOWER PHASES HE HAS WORKED ON. (EXAMPLE: IF THE PROJECT HAS 20 PHASES, BEFORE THE CONTRACTOR CAN START CONSTRUCTION OF PHASE 17, HE MUST FINISH TYPE "B" OR TYPE "D" ASPHALT UP TO PHASE 8.).
- THE PLANS ARE PHASED FOR STREET AND STORM DRAINAGE CONSTRUCTION. NO STORM SEWER CONSTRUCTION WILL TAKE PLACE OUTSIDE OF THE PHASING LIMITS UNDER CONSTRUCTION, UNLESS SPECIFICALLY NOTED ON THE PLANS OR AUTHORIZED IN WRITING BY THE TRAFFIC DIVISION.
- ALL STORM DRAINAGE PIPES ARE NOT CONSIDERED UTILITIES, REGARDLESS OF SIZE. THIS WORK SHALL BE PART OF THE PHASE.
- UNLESS OTHERWISE INDICATED IN THE PLANS, INTERSECTING STREETS SHALL BE CONSTRUCTED IN STAGES SO AS TO MAINTAIN ACCESS. INTERSECTION WORK SHALL BE DONE DURING WEEKEND HOURS OR AS DIRECTED BY THE ENGINEER. NO TWO ADJACENT INTERSECTIONS MAY BE CONSTRUCTED SIMULTANEOUSLY. WITH APPROVAL FROM THE ENGINEER, THE CONTRACTOR MAY CLOSE AN ENTIRE INTERSECTION. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE A DETOUR PLAN FOR SUCH A CLOSURE TO THE ENGINEER FOR APPROVAL.

## TCP PLAN ADDITIONAL NOTES

- GENERAL.
  - IF SO PERMITTED BY THE ENGINEER, WORK ACTIVITIES ON SUNDAY SHALL BE APPROVED IN ADVANCE. LANE CLOSURES WILL BE ALLOWED IN ONE DIRECTION ONLY. NOTIFY THE ENGINEER OF IMPENDING UPCOMING LANE CLOSURES AT LEAST (7) DAYS IN ADVANCE OF LANE CLOSURES. THE LANE CLOSURES SHALL BE IN COMPLIANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD).

B. LANE CLOSURES OTHER THAN THOSE SHOWN ON THE PHASING PLAN WILL NOT BE ALLOWED DURING NON-WORK HOURS. NO EQUIPMENT SHALL BE LEFT IN A POSITION THAT WILL ENDANGER THE TRAVELING PUBLIC.

C. MAINTAIN ADEQUATE DRAINAGE THROUGHOUT ALL PHASES OF CONSTRUCTION, WITH THE STORM WATER POLLUTION PREVENTION PLAN IN PLACE.

D. ACCESS TO PROPERTIES MUST BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE SHOWN.

E. MOVEMENT OF LPCB WILL BE REQUIRED TO ALLOW ADEQUATE PROTECTION WHEN INSTALLING STORM DRAIN IN FRONT OF DRIVEWAYS. COORDINATE CLOSURE OF DRIVEWAYS WITH THE RESPECTIVE OWNERS.

## 2. POLICE OFFICER NOTES

- REQUIRED POLICE OFFICER TIMES ARE: MONDAY THROUGH FRIDAY 6:00 A.M. TO 6:00 P.M. WHEN LANE CLOSURES OTHER THAN DETAILED IN THE PLANS ARE BEING USED. POLICE OFFICERS WILL BE REQUIRED AT THE ENGINEERS DISCRETION.
- WHEN THE OFFICER IS PRESENT HE IS REQUIRED TO BE DIRECTING TRAFFIC AT ALL TIMES. THE TRAFFIC SIGNAL WILL BE PUT ON FLASHING RED WHEN OFFICER IS PRESENT.

## SPECIAL NOTES AND PROVISIONS:

- BEGIN CONSTRUCTION ON DESIGN PACKAGE 2. DESIGN PACKAGE 1 CONSTRUCTION MAY BE CONCURRENT. LIMIT WORK TIME ON DESIGN PACKAGE 2 TO A MAXIMUM OF 3 MONTHS.
- WORK MAY NOT BEGIN ON WELLMED PARKING LOT PRIOR JANUARY 1, 2018. COORDINATE WITH BUILDING MANAGER BEFORE CONSTRUCTION.
- DO NOT CONSTRUCT FINAL HOTMIX LIFT UNTIL INSTRUCTED TO DO SO BY THE ENGINEER.
- ALL CONFLICTING PAVEMENT MARKINGS MUST BE REMOVED.

## PHASE I

- INSTALL TEMPORARY EROSION CONTROL MEASURES.
- INSTALL TEMPORARY TRAFFIC CONTROL DEVICES INCLUDING PAVEMENT MARKINGS AND CHANNELIZATION DEVICES AS SHOWN IN THE PLANS FOR PHASE I AND IN ACCORDANCE WITH COSA AND TXDOT BC STANDARDS AND TMUTCD.
- SHIFT TRAFFIC TO THE PROPOSED TCP PHASE I.
- BEGIN UTILITY WORK FOR SAW'S WATER. ALL UTILITY WORK FOR SAW'S WATER THAT CANNOT BE COMPLETED IN PHASE I WILL BE COMPLETED IN PHASE II.
- CONSTRUCT TRAFFIC SIGNAL AND REMOVE EXISTING SIGNAL. BAG PEDESTRIAN HEADS IN CONFLICT WITH WORK ZONE.
- CONSTRUCT PHASE I AS SHOWN IN THE PLANS. BEGIN WORK AT DRAINAGE CHANNEL AND CONSTRUCT STORM DRAIN FROM DOWNSTREAM TO UPSTREAM. UTILITY WORK FOR SAW'S WATER AND ROAD WORK (PHASE I) MAY BE CONCURRENT.
- USE ONE-LANE TWO-WAY TRAFFIC CONTROL TCP (2-2)-12 FOR CONSTRUCTING LATERALS IF NEEDED.
- COMPLETE ALL WORK IN PHASE I BEFORE CONTINUING TO PHASE II.

## PHASE II

- INSTALL/ADJUST TEMPORARY EROSION CONTROL MEASURES.
- INSTALL TEMPORARY TRAFFIC CONTROL DEVICES INCLUDING PAVEMENT MARKINGS AND CHANNELIZATION DEVICES AS SHOWN IN THE PLANS FOR PHASE II AND IN ACCORDANCE WITH COSA AND TXDOT BC STANDARDS AND TMUTCD.
- BAG PEDESTRIAN SIGNAL HEADS IN CONFLICT WITH WORK ZONE.
- SHIFT TRAFFIC TO THE PROPOSED TCP PHASE II.
- CONSTRUCT PHASE II AS SHOWN IN THE CONSTRUCTION PLANS. UTILITY WORK FOR SAW'S WATER AND ROAD WORK (PHASE II) MAY BE CONCURRENT.
- COMPLETE ALL WORK IN PHASE II BEFORE CONTINUING TO PHASE III.

## PHASE III

- INSTALL/ADJUST TEMPORARY EROSION CONTROL MEASURES.
- INSTALL TEMPORARY TRAFFIC CONTROL DEVICES INCLUDING PAVEMENT MARKINGS AND CHANNELIZATION DEVICES AS SHOWN IN THE PLANS FOR PHASE III AND IN ACCORDANCE WITH COSA AND TXDOT BC STANDARDS AND TMUTCD.
- BAG PEDESTRIAN SIGNAL HEADS IN CONFLICT WITH WORK ZONE.
- SHIFT TRAFFIC TO THE PROPOSED TCP PHASE III.
- CONSTRUCT PHASE III AS SHOWN IN THE PLANS. UTILITY AND ROAD WORK (PHASE III) MAY BE CONCURRENT.
- UPON COMPLETION OF PHASE III, MILL AND OVERLAY ACCORDING TO LIMITS ON PLANS. MARKING TABS ARE TO BE USED AS TRAFFIC LANE DELINEATORS UNTIL FINAL STRIPING HAS BEEN COMPLETED.
- STRIPE ROADWAY TO ITS ULTIMATE CONFIGURATION.



**PAPE-DAWSON**  
**ENGINEERS**

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028800

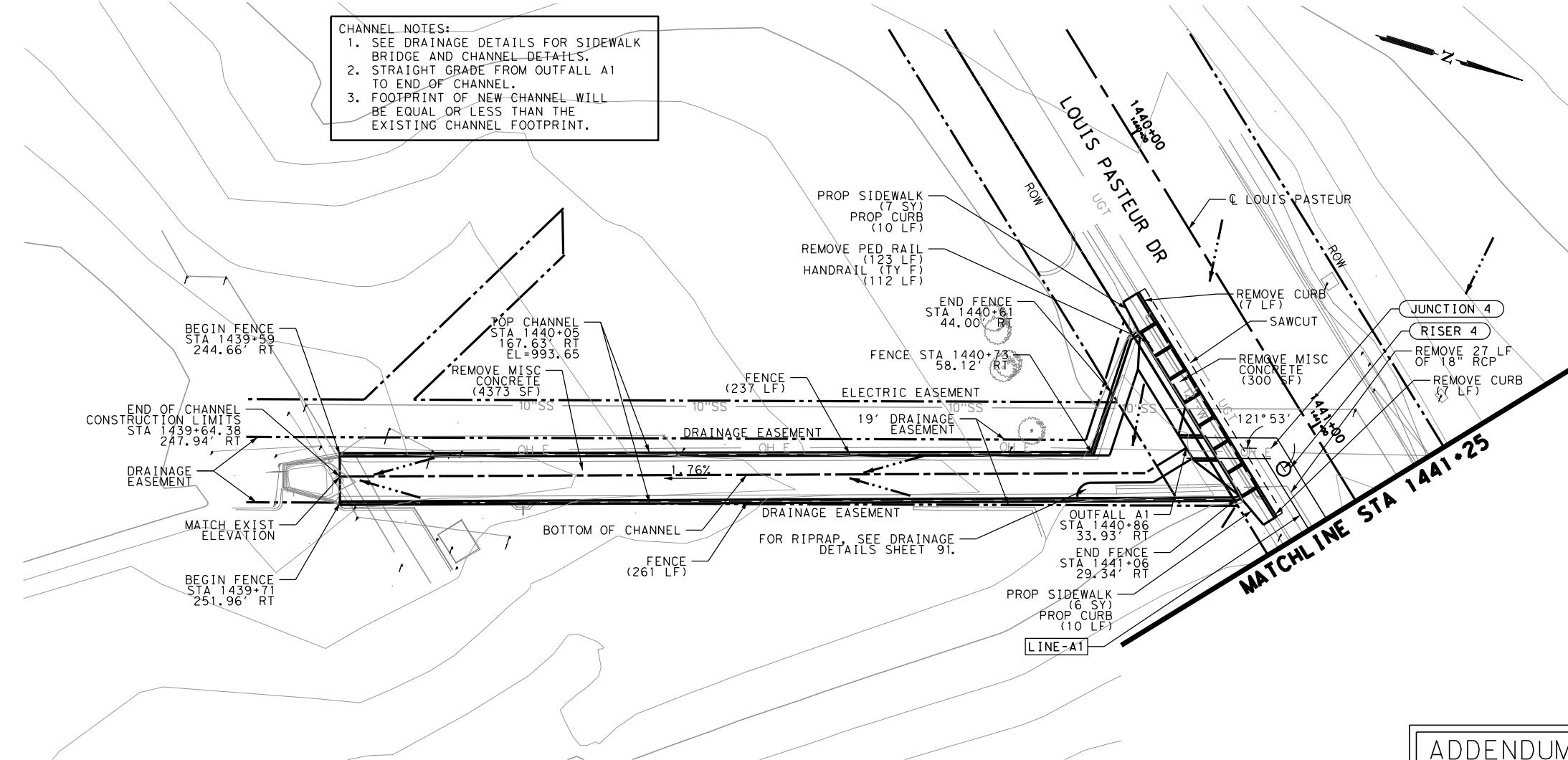
**CITY OF SAN ANTONIO**  
TRANSPORTATION & CAPITAL IMPROVEMENTS

**MEDICAL CENTER PHASE X**  
**LOUIS PASTEUR & EWING HALSELL**  
TRAFFIC CONTROL PLAN  
NARRATIVE AND SPECIAL NOTES

DESIGN PACKAGE 1

ADDENDUM NO. 01

100 % SUBMITTAL	PROJECT NO.:	5241-46	DATE:	8/7/2017
DRWN. BY: JG	DSGN. BY: JG	CHKD. BY: LR	SHEET NO.:	15



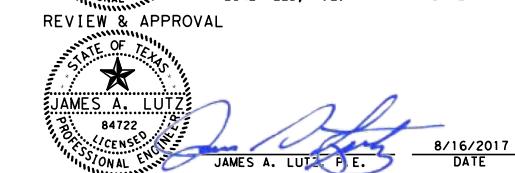
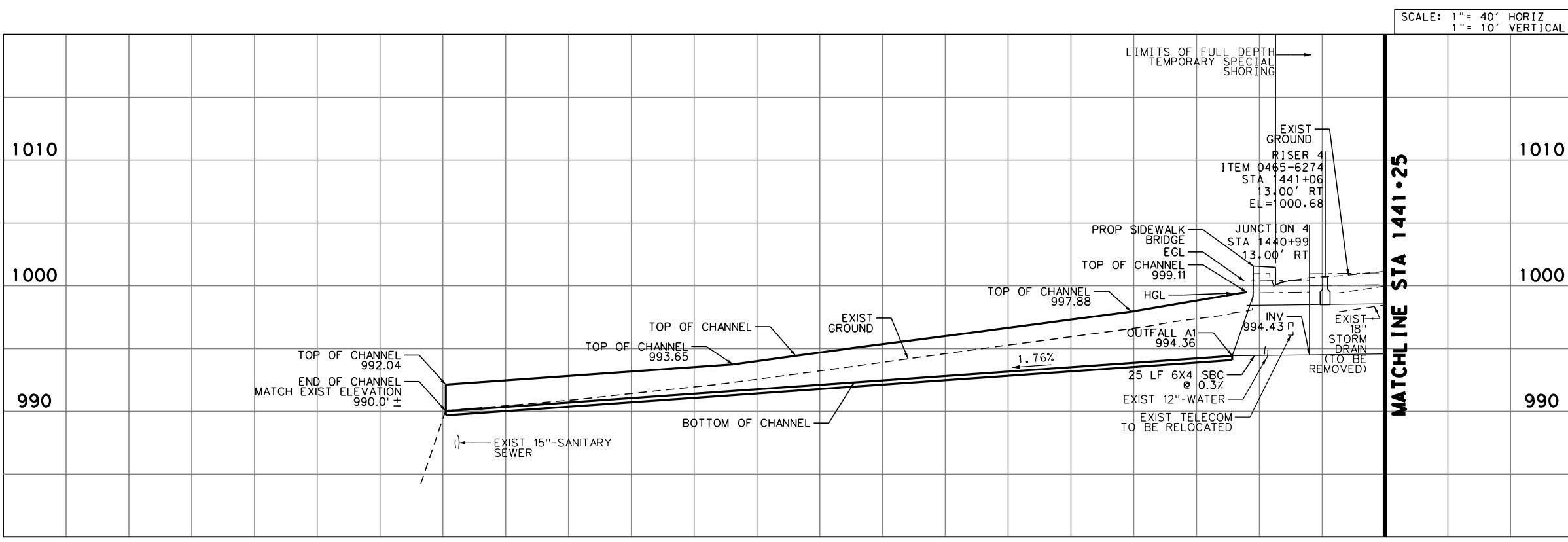
NOTES:

1. ALL PIPES ARE NORMAL TO AND STRAIGHT FROM STRUCTURE TO STRUCTURE UNLESS OTHERWISE SHOWN.
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3. THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES INDICATED IN THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE. CONTRACTOR SHALL VERIFY ACTUAL LOCATION PRIOR TO BEGINNING CONSTRUCTION.
4. REFER TO SAN ANTONIO DISTRICT STDS FOR INLET CONTROL POINTS
5. SEE HORIZONTAL ALIGNMENT SHEETS FOR ROADWAY ALIGNMENT.
6. SHORING OF EXIST POLES SUBSIDIARY TO INLET & MANHOLE ITEMS.
7. INLETS AND MANHOLES TO BE GROUTED TO PROVIDE POSITIVE DRAINAGE. SUBSIDIARY TO INLET AND MANHOLE ITEMS.
8. MANHOLE LIDS TO BE BOLTED AND PLACED AT FINISHED GRADE AND OUTSIDE OF NORMAL WHEEL PATH (CENTER OF LANE).
9. MANUFACTURER TO PROVIDE DESIGN OF NON-STANDARD BOX SIZES AND DETAILS FOR EQUALIZATION OPENINGS.
10. ALL STORM DRAIN SYSTEMS TO BE INSTALLED IN ACCORDANCE WITH TXDOT ITEM 402 "TRENCH EXCAVATION PROTECTION."
11. ALL INLET STATION, OFFSET, AND ELEVATION REFERENCES ARE TO THE INLET STRUCTURE CONTAINING THE DOWNSTREAM LATERAL/PIPE.
12. KNOCKOUTS BETWEEN CONNECTING INLETS TO MAINTAIN A MINIMUM OPENING OF 3.6' x 2.0' FOR CONVEYANCE.
13. INSTALL CURB INLETS AT THE SAME LONGITUDINAL SLOPE AS ROADWAY PROFILE.
14. CONCRETE COLLARS SHALL BE CONSIDERED SUBSIDIARY TO VARIOUS DRAINAGE ITEMS.

#### LEGEND

LINE-A1	STORM DRAIN LINE W/ DESIGNATION
DI-A1	DROP INLET W/ DESIGNATION
MH-A1	JUNCTION BOX W/ DESIGNATION
—	DRAINAGE FLOW ARROW
— OH E —	OVERHEAD ELECTRIC LINE
— 10" SS —	SANITARY SEWER LINE
— 8" G —	CPS GAS LINE
— UGE —	UNDERGROUND ELECTRIC
— 12" W —	WATER LINE
— 24" RW —	RECYCLED WATER LINE
[Drainage Inlet Icon]	DRAINAGE INLET
[Manhole Icon]	MANHOLE

ADDENDUM NO. 01



0 20 40 60  
SCALE: 1" = 40'

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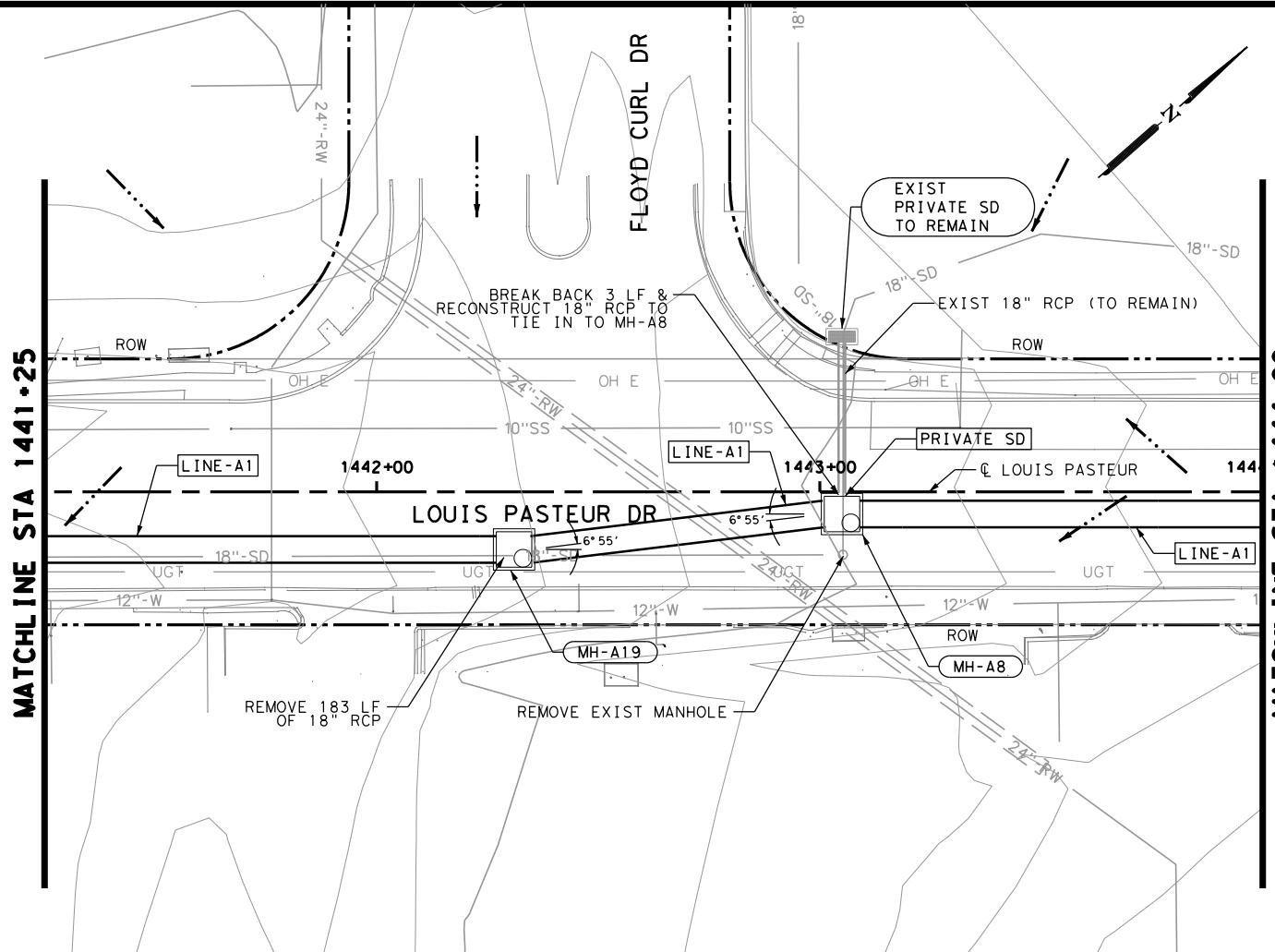
**CITY OF SAN ANTONIO  
TRANSPORTATION & CAPITAL IMPROVEMENTS**

**MEDICAL CENTER PHASE X  
LOUIS PASTEUR & EWING HALSELL  
STORM DRAIN PLAN AND PROFILE**

DESIGN PACKAGE 1

SHEET 1 OF 7

100 % SUBMITTAL	PROJECT NO.:	5241-46	DATE:	8/16/2017
DRWN. BY: JG	DSGN. BY: JG	CHKD. BY: LR	SHEET NO.:	83



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[Inlet symbol]	DRAINAGE INLET
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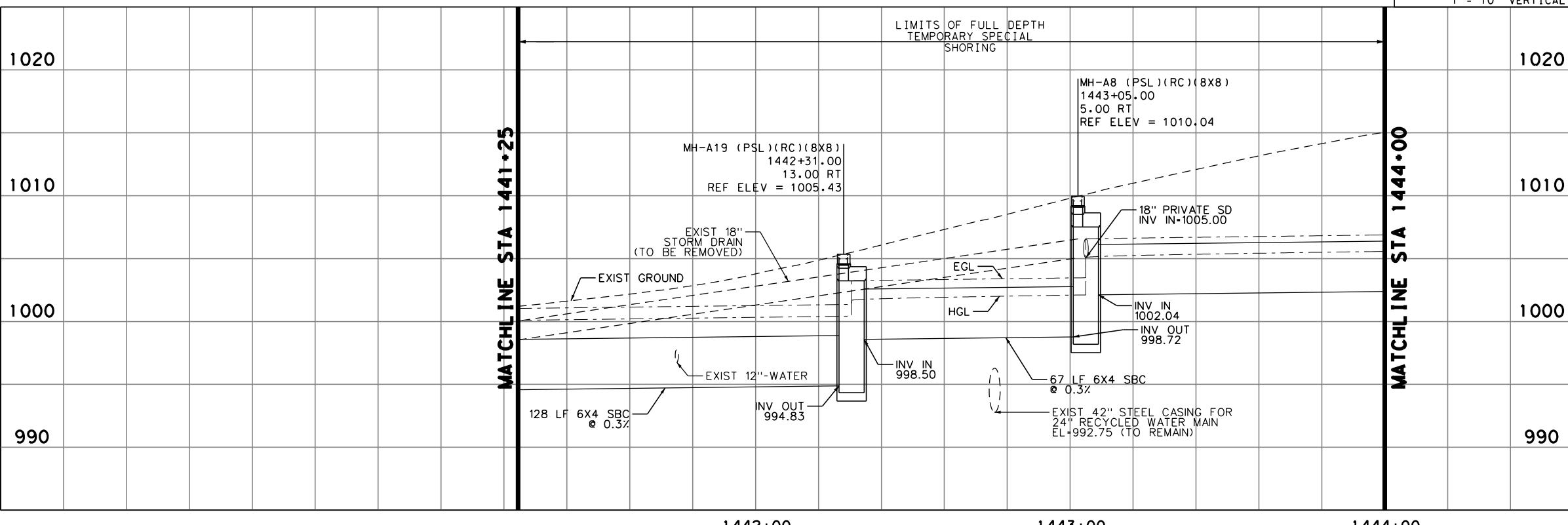
*Luke Reed*  
LUKE REED, P.E.  
8/16/2017

REVIEW & APPROVAL



*James A. Lutz*  
JAMES A. LUTZ, P.E.  
8/16/2017

0 20 40 60  
SCALE: 1" = 40'



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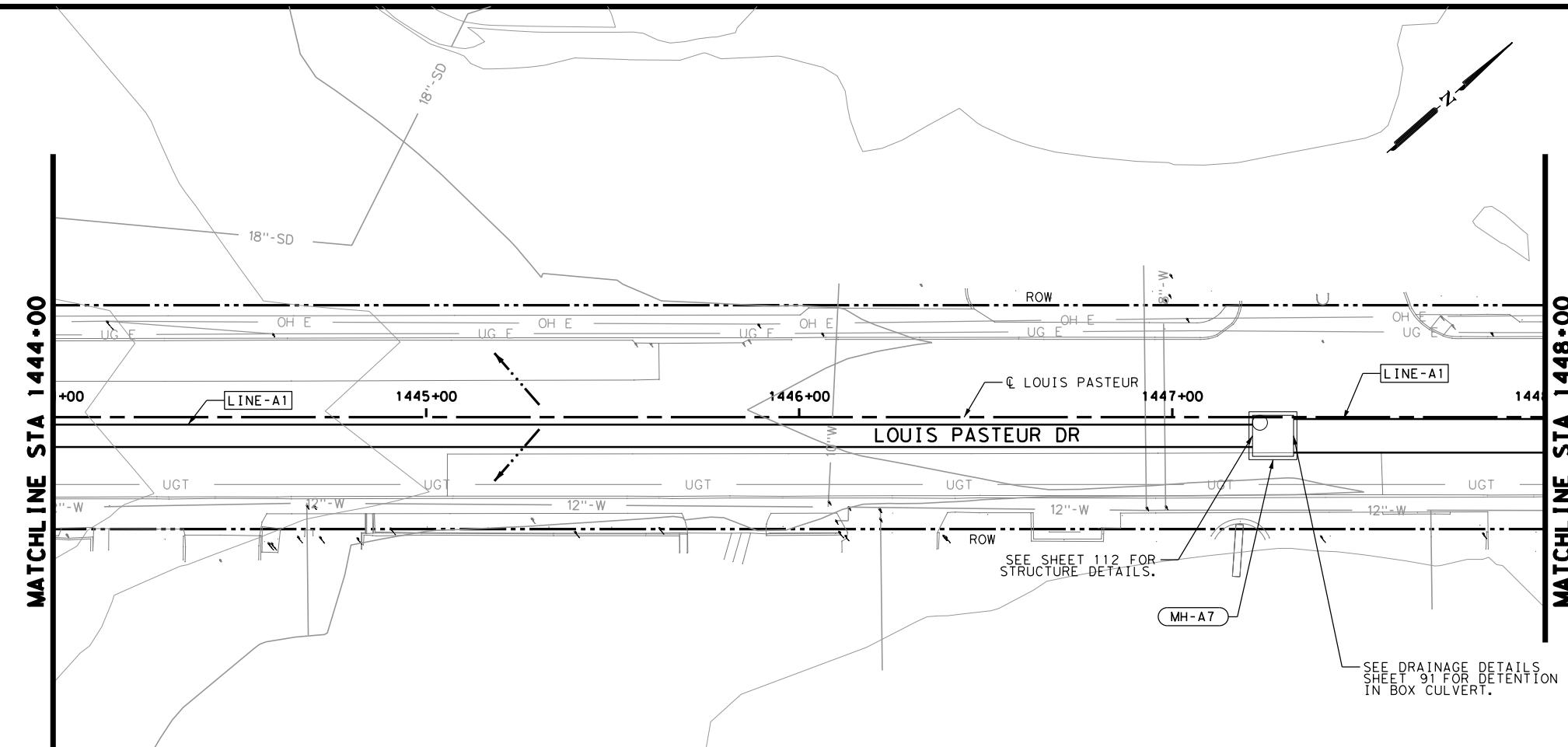
**CITY OF SAN ANTONIO  
TRANSPORTATION & CAPITAL IMPROVEMENTS**

**MEDICAL CENTER PHASE X  
LOUIS PASTEUR & EWING HALSELL  
STORM DRAIN PLAN AND PROFILE**

DESIGN PACKAGE 1

SHEET 2 OF 7

100 % SUBMITTAL	PROJECT NO.:	5241-46	DATE:	8/16/2017
DRWN. BY: JG	DSGN. BY: JG	CHKD. BY: LR	SHEET NO.:	84



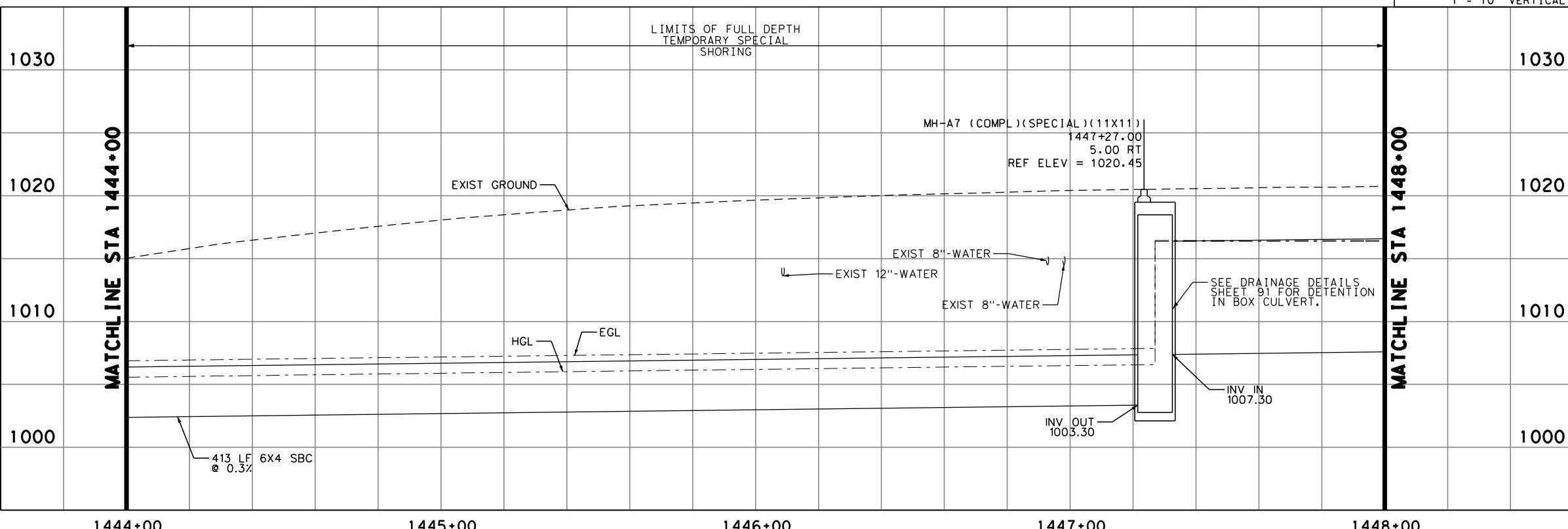
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- KNOCKOUTS BETWEEN CONNECTING INLETS TO MAINTAIN A MINIMUM OPENING OF 3.6' x 2.0' FOR CONVEYANCE.
- INSTALL CURB INLETS AT THE SAME LONGITUDINAL SLOPE AS ROADWAY PROFILE.
- CONCRETE COLLARS SHALL BE CONSIDERED SUBSIDIARY TO VARIOUS DRAINAGE ITEMS.

## LEGEND

LINE-A1	STORM DRAIN LINE W/ DESIGNATION
DI-A1	DROP INLET W/ DESIGNATION
MH-A1	JUNCTION BOX W/ DESIGNATION
—→	DRAINAGE FLOW ARROW
— OH E —	OVERHEAD ELECTRIC LINE
— 10" SS —	SANITARY SEWER LINE
— 8" G —	CPS GAS LINE
— UGE —	UNDERGROUND ELECTRIC
— 12" W —	WATER LINE
— 24" RW —	RECYCLED WATER LINE
[ ]	DRAINAGE INLET
[ ]	MANHOLE

ADDENDUM NO. 01

SCALE: 1" = 40' HORIZ  
1" = 10' VERTICAL

REVIEW &amp; APPROVAL

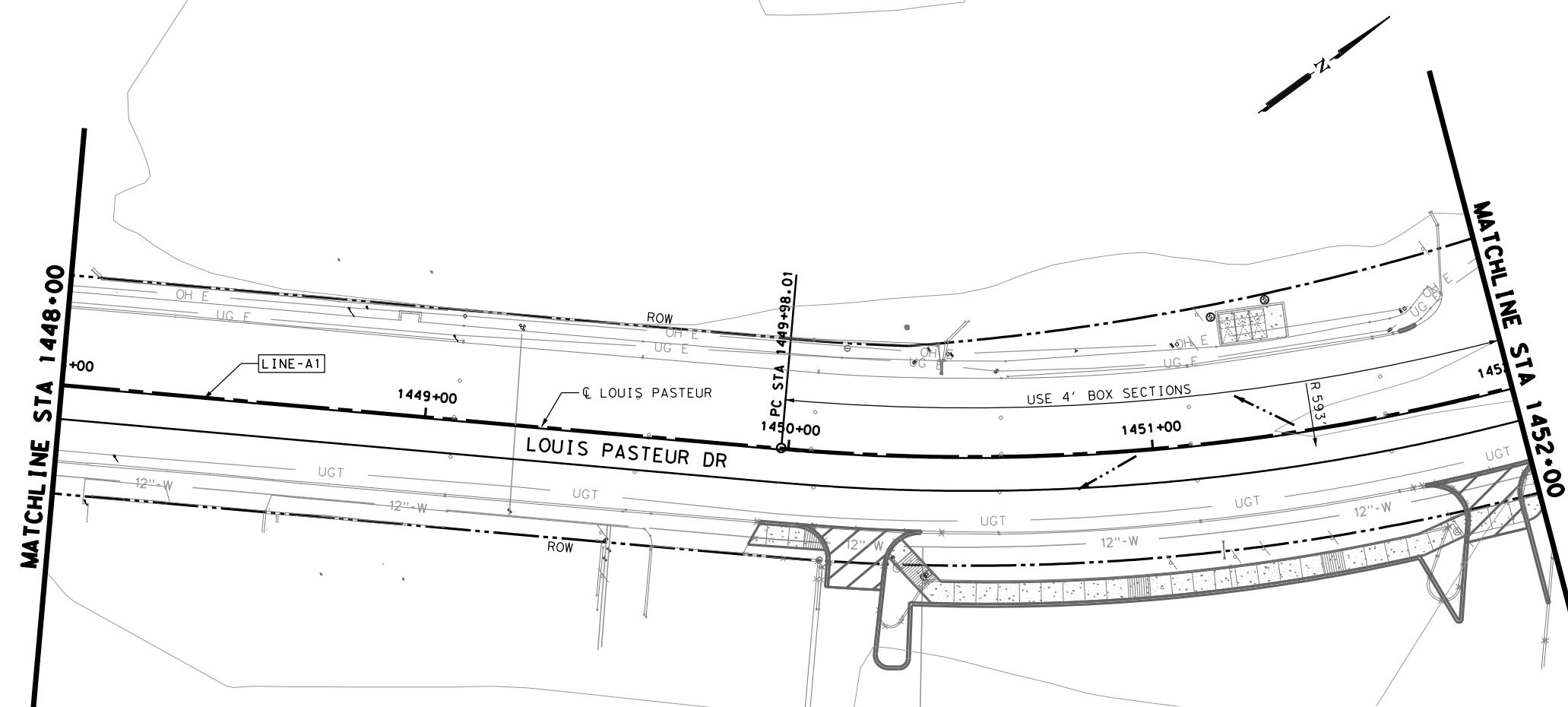
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SCALE: 1" = 40'
**PAPE-DAWSON  
ENGINEERS**
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028800
**CITY OF SAN ANTONIO**  
TRANSPORTATION & CAPITAL IMPROVEMENTS

**MEDICAL CENTER PHASE X**  
**LOUIS PASTEUR & EWING HALSELL**  
**STORM DRAIN PLAN AND PROFILE**

DESIGN PACKAGE 1

SHEET 3 OF 7

100 % SUBMITTAL	PROJECT NO.:	5241-46	DATE:	8/16/2017
DRWN. BY: JG	DSGN. BY: JG	CHKD. BY: LR	SHEET NO.:	85



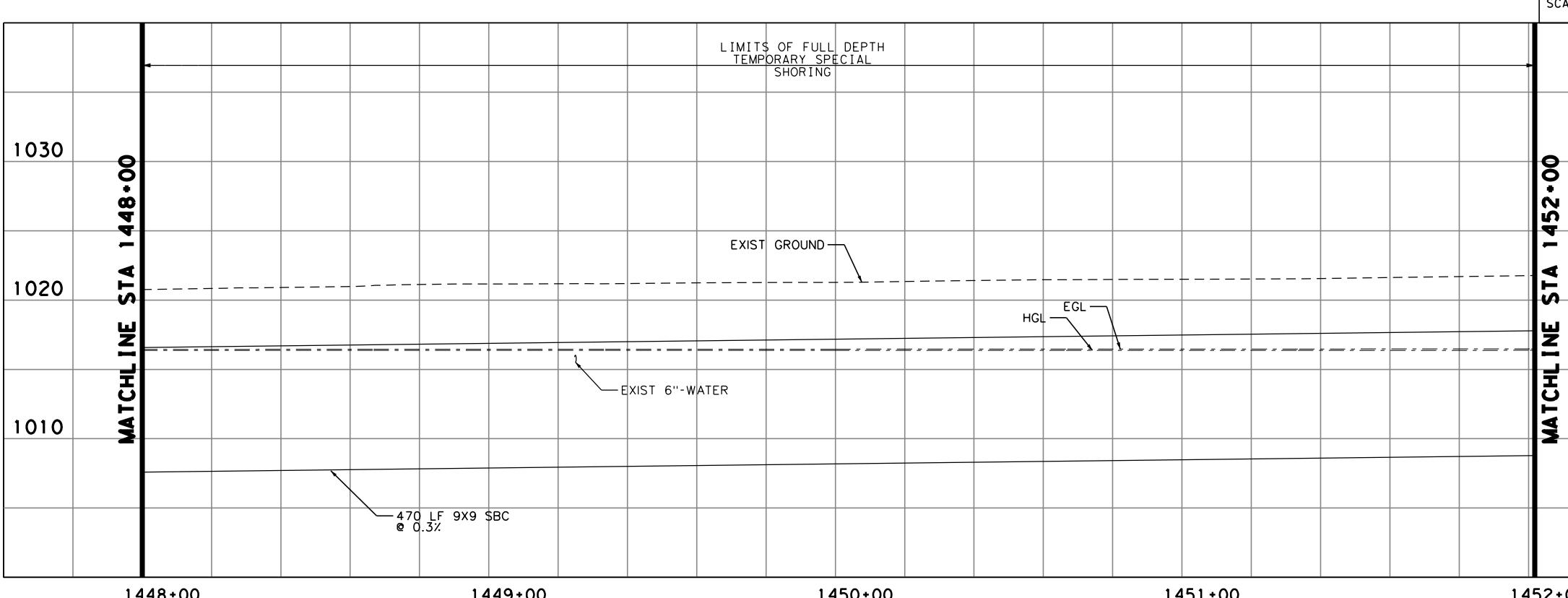
NOTES:

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[Inlet icon]	DRAINAGE INLET
[Manhole icon]	MANHOLE

ADDENDUM NO. 01



SCALE: 1" = 40' HORIZ  
1" = 10' VERTICAL



REVIEW & APPROVAL



DATE

8/16/2017

DATE

8/16/2017

DATE

0 20 40 60

SCALE: 1" = 40'

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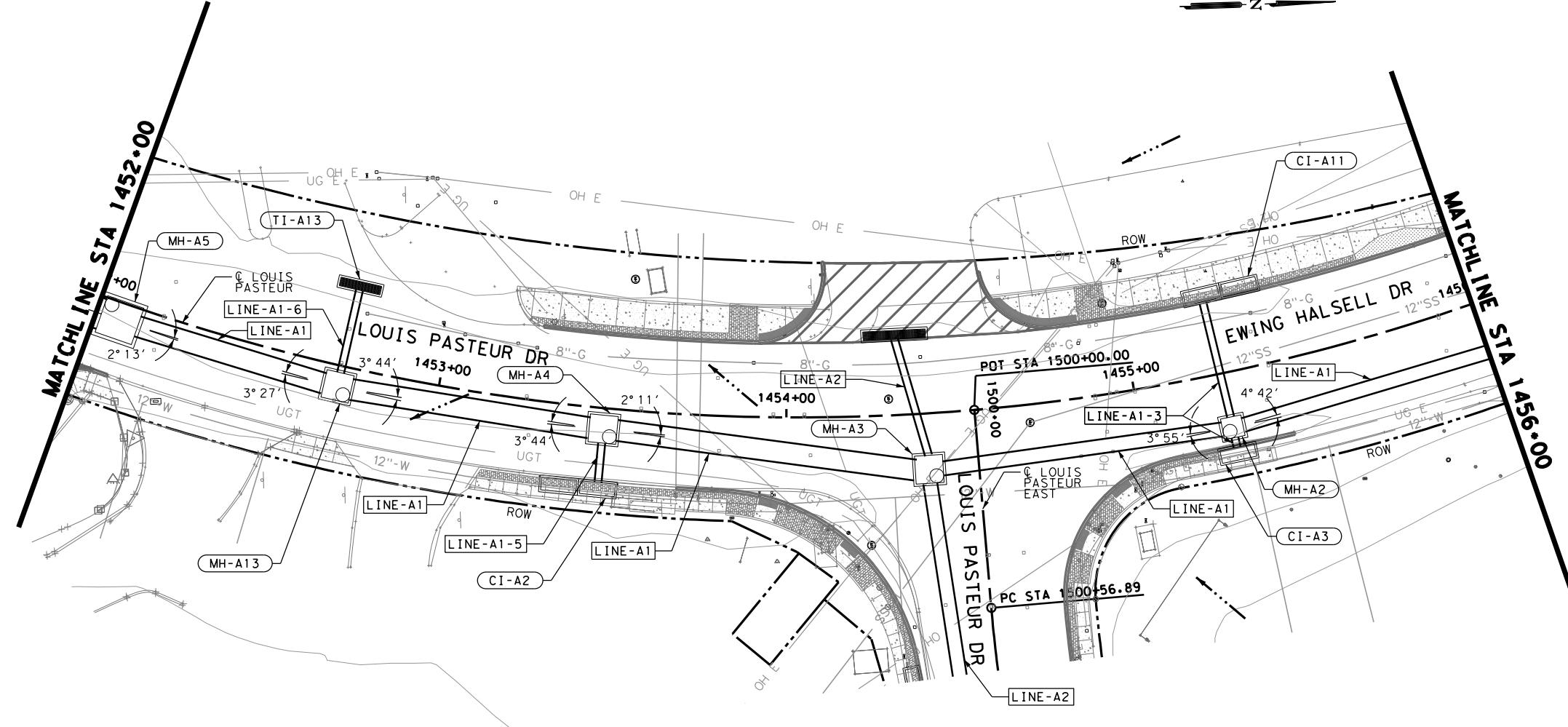
**CITY OF SAN ANTONIO**  
TRANSPORTATION & CAPITAL IMPROVEMENTS

**MEDICAL CENTER PHASE X  
LOUIS PASTEUR & EWING HALSELL  
STORM DRAIN PLAN AND PROFILE**

DESIGN PACKAGE 1

SHEET 4 OF 7

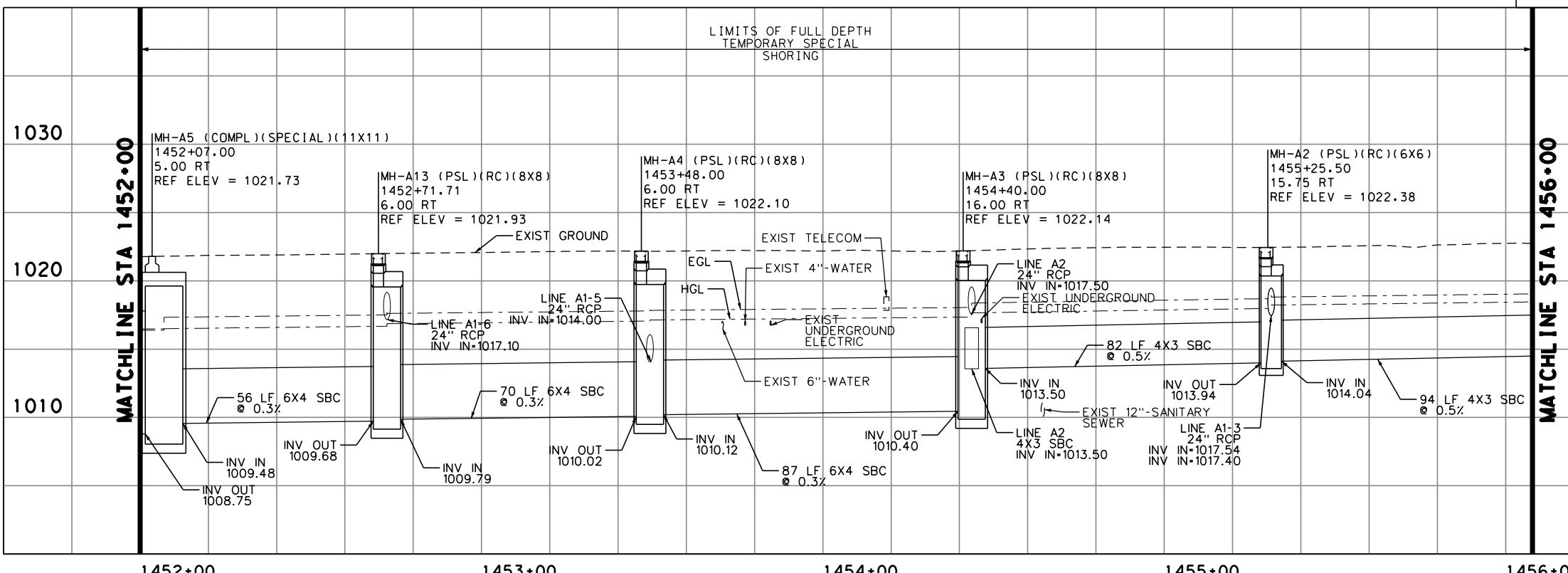
100 % SUBMITTAL	PROJECT NO.:	5241-46	DATE:	8/16/2017
DRWN. BY: JG	DSGN. BY: JG	CHKD. BY: LR	SHEET NO.:	86



FOR LINE A2 INFORMATION, SEE  
SHEET 89.

ADDENDUM NO. 01

SCALE: 1" = 40' HORIZ  
1" = 10' VERTICAL



DESIGN PACKAGE 1 SHEET 5 OF 7

100 % SUBMITTAL PROJECT NO.: 5241-46 DATE: 8/16/2017  
DRWN. BY: JG DSGN. BY: JG CHKD. BY: LR SHEET NO.: 87

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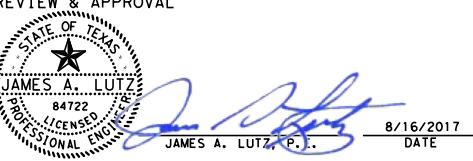
LEGEND

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— 24" RW —	RECYCLED WATER LINE
[Drainage Inlet Icon]	DRAINAGE INLET
[Manhole Icon]	MANHOLE

DESIGN



REVIEW & APPROVAL



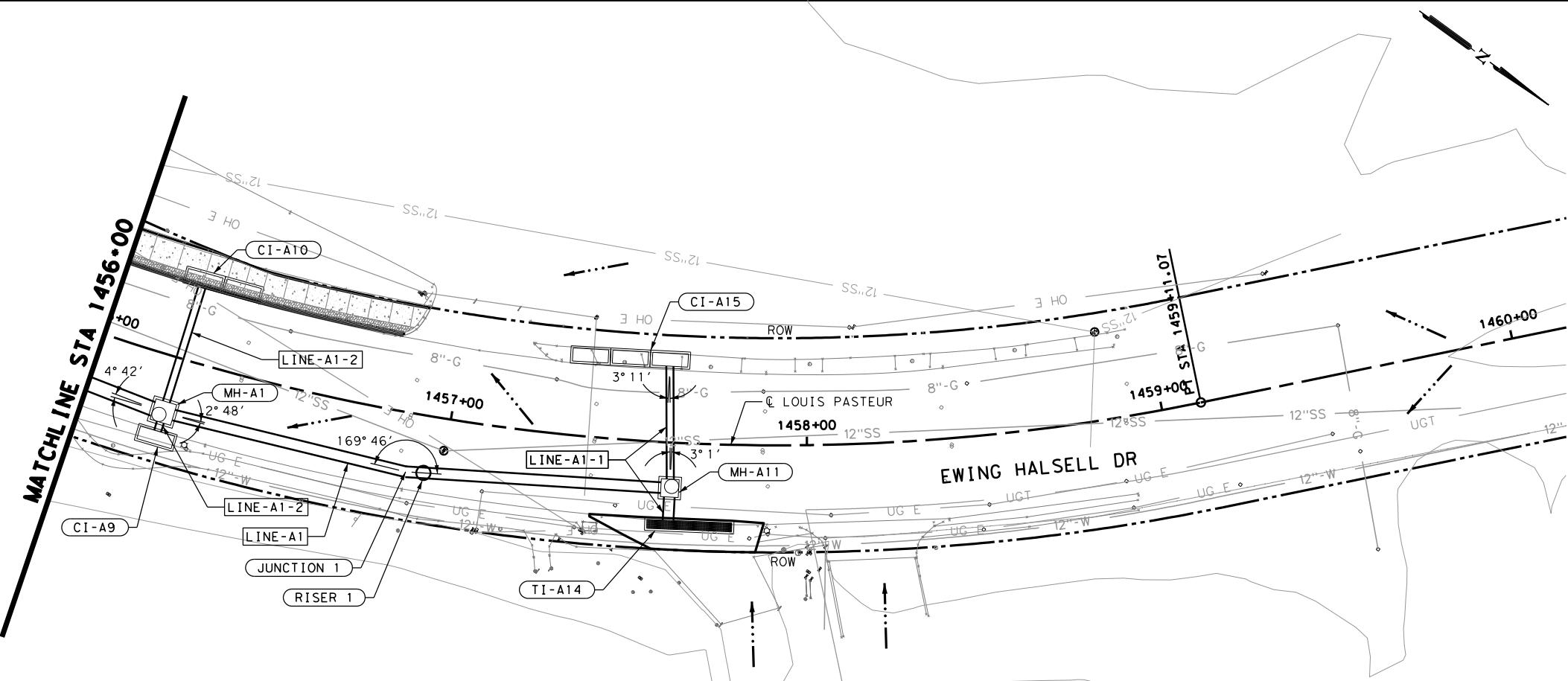
0 20 40 60  
SCALE: 1" = 40'

**PAPE-DAWSON  
ENGINEERS**

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TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028800

**CITY OF SAN ANTONIO  
TRANSPORTATION & CAPITAL IMPROVEMENTS**

**MEDICAL CENTER PHASE X  
LOUIS PASTEUR & EWING HALSELL  
STORM DRAIN PLAN AND PROFILE**



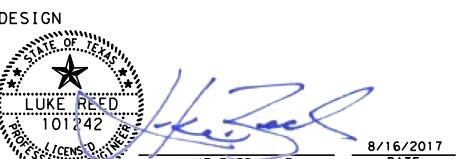
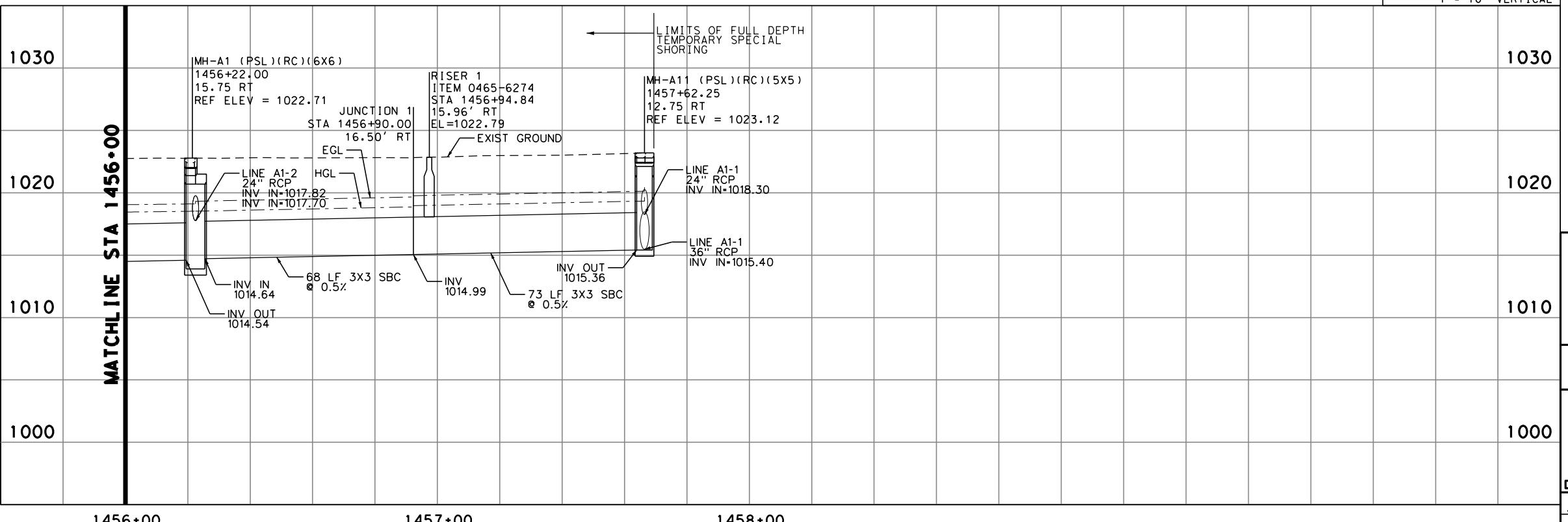
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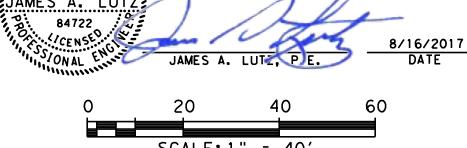
ADDENDUM NO. 01

SCALE: 1" = 40' HORIZONTAL  
1" = 10' VERTICAL

REVIEW &amp; APPROVAL



JAMES A. LUTZ, P.E.

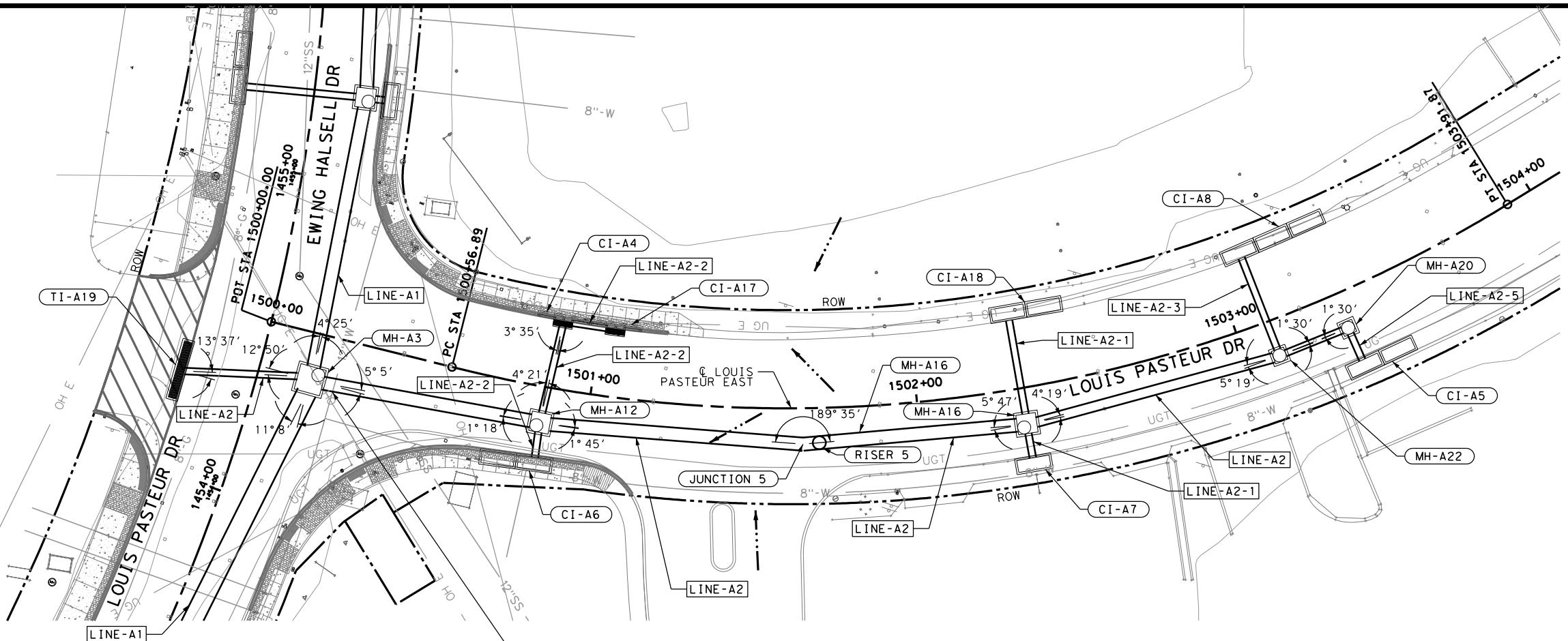


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**ENGINEERS**
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 CITY OF SAN ANTONIO  
TRANSPORTATION & CAPITAL IMPROVEMENTS
MEDICAL CENTER PHASE X  
LOUIS PASTEUR & EWING HALSELL  
STORM DRAIN PLAN AND PROFILE

DESIGN PACKAGE 1 SHEET 6 OF 7

100 % SUBMITTAL	PROJECT NO.:	5241-46	DATE:	8/16/2017
DRWN. BY: JG	DSGN. BY: JG	CHKD. BY: LR	SHEET NO.:	88



NOTES:

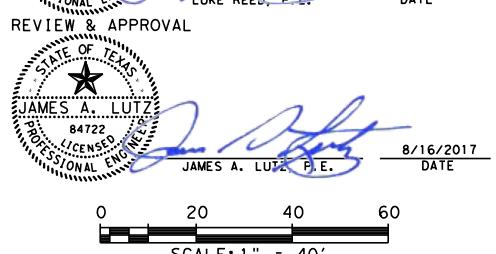
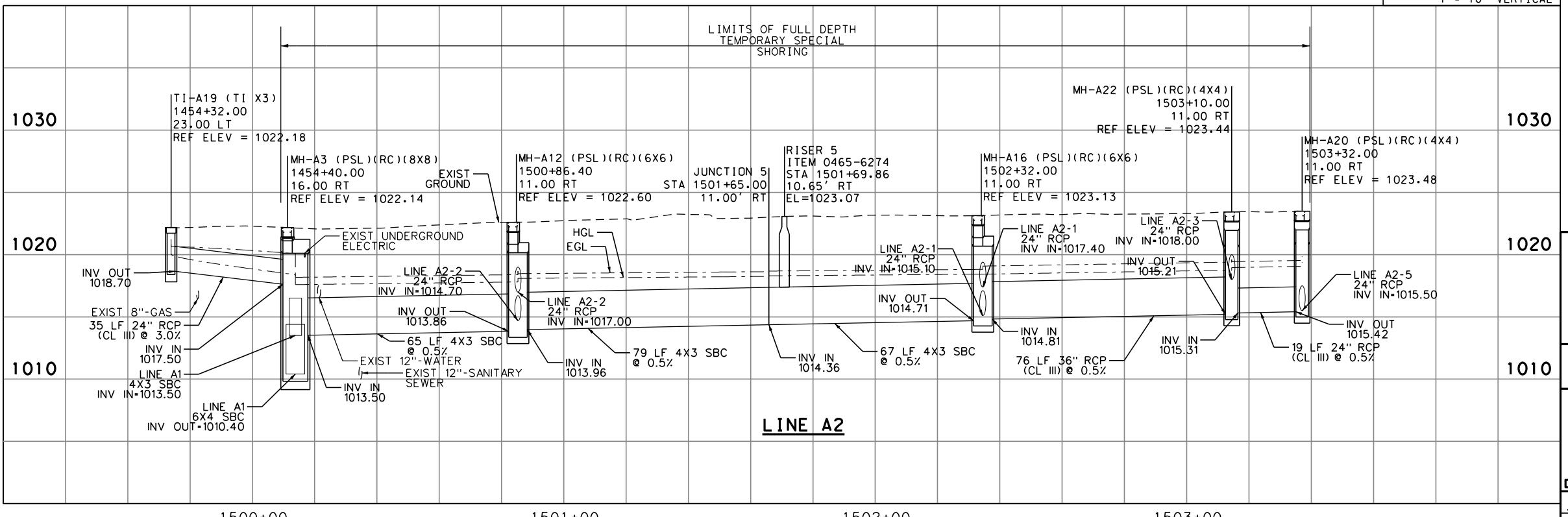
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#### LEGEND

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ADDENDUM NO. 01

SCALE: 1" = 40' HORIZ  
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**CITY OF SAN ANTONIO**  
TRANSPORTATION & CAPITAL IMPROVEMENTS

**MEDICAL CENTER PHASE X  
LOUIS PASTEUR & EWING HALSELL  
STORM DRAIN PLAN AND PROFILE**

DESIGN PACKAGE 1

SHEET 7 OF 7

100 % SUBMITTAL	PROJECT NO.:	5241-46	DATE:	8/16/2017
DRWN. BY: JG	DSGN. BY: JG	CHKD. BY: LR	SHEET NO.:	89

ITEM	DESCRIPTION	UNIT	QTY
308.1	DRILLED SHAFTS (24")	LF	36
308.1	DRILLED SHAFTS (36")	LF	70
** 615.1	TRAFFIC SIGNAL CONTROLLER ASSEMBLY (TYPE 332 CABINET)	EA	1
618.1	CONDUIT (2 INCH/PVC SCHEDULE 40) (TRENCH)	LF	545
618.2	CONDUIT (3 INCH/PVC SCHEDULE 40) (TRENCH)	LF	125
618.4	CONDUIT (2 INCH/PVC SCHEDULE 40) (BORE)	LF	350
618.5	CONDUIT (3 INCH/PVC SCHEDULE 40) (BORE)	LF	695
620.1	ELECTRICAL CONDUCTORS (NO. 6) (BARE)	LF	15
620.2	ELECTRICAL CONDUCTORS (NO. 8) (BARE)	LF	1585
620.3	ELECTRICAL CONDUCTORS (NO. 6) (INSULATED)	LF	25
624.8	GROUND BOXES TYPE D (162922) W/ APRON	EA	4
628.1	ELECTRICAL SERVICES (PER INSTALLATION)	EA	1
628.2	REMOVE ELECTRICAL SERVICES (PER REMOVAL)	EA	1
633.1	BATTERY BACKUP SYSTEM	EA	1
655.1	TYPE 332 CONTROLLER FOUNDATION	EA	1
680.1	INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (SYSTEM)	EA	1
682.1	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (3 SECTION)	EA	10
682.3	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (5 SECTION)	EA	1
682.4	INSTALL PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	8
683.1	LED COUNTDOWN PEDESTRIAN MODULE	EA	8
684.1	TRAFFIC SIGNAL CABLES (TYPE A) (12 AWG) (CONDUCTOR NO. 3) (TRAY CABLE)	LF	1355
684.1	TRAFFIC SIGNAL CABLES (TYPE A) (14 AWG) (CONDUCTOR NO. 9)	LF	2820
684.1	TRAFFIC SIGNAL CABLES (TYPE A) (16 AWG) (CONDUCTOR NO. 3)	LF	1125
* 686.1	INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (STR TY B) (LUM)	EA	5
687.1	PEDESTAL POLE ASSEMBLY	EA	6
688.2	PEDESTRIAN DETECTORS [2 INCH PUSH BUTTON]	EA	8
688.3	AUDIBLE PEDESTRIAN SIGNAL UNITS [TYPE]	EA	8
695.2	EMERGENCY PREEMPTION PHASE SELECTOR	EA	4
695.3	EMERGENCY PREEMPTION DETECTOR	EA	4
695.4	EMERGENCY PREEMPTION DETECTOR CABLE	LF	620
696.1	RADAR ADVANCED DETECTION DEVICE (RADD)	EA	3
696.2	RADAR PRESENCE DETECTION DEVICE (RPDD)	EA	4
696.3	RADAR ADVANCED DETECTION DEVICE (RADD) COMMUNICATION & POWER CABLE(S)	LF	505
696.4	RADAR PRESENCE DETECTION DEVICE (RPDD) COMMUNICATION & POWER CABLE(S)	LF	825
6007.1	REMOVAL OF TRAFFIC SIGNALS AT INTERSECTION	EA	1
8100.1	Install ITS Traffic Monitoring Camera Assembly	EA	1
8100.2	Install ITS Traffic Monitoring Camera Cabling	LF	95

\* SIGNAL POLE & MAST ARM ASSEMBLIES ARE TO BE COSA SPECIAL STMC STYLE MAST ARM ASSEMBLY W/2 LUMINAIRES. GENERAL DETAILS ARE PROVIDED IN THE PLAN SET. DETAILED SHOP DRAWINGS SEALED BY A TEXAS LICENSED ENGINEER SHALL BE PROVIDED BY THE CONTRACTOR FOR APPROVAL BY THE CITY OF SAN ANTONIO PRIOR TO FABRICATION. EXTRA 35 FT MAST ARM AND SIGNAL POLE ASSEMBLY TO BE PROVIDED TO CITY AS SPARE PER INCLUDED VALMONT SHOP DRAWING NUMBER: TX4467604

\*\* CONTRACTOR TO FURNISH AND DELIVER CONTROLLER AND CABINET ASSEMBLY TO COSA SHOP FOR PROGRAMMING AND TESTING FOUR WEEKS PRIOR TO CONTRACTOR INSTALLING EQUIPMENT IN THE FIELD.

2070 CONTROLLER & NEXT PHASE SOFTWARE TO BE PROVIDED WITH ITEM 615. THE CONTRACTOR SHALL SUPPLY A CONFLICT MONITOR THAT CONFORMS TO THE TEES SPECIFICATION FOR MODEL 2070L CONTROLLER. THE CONFLICT MONITOR SHALL BE EDI, MODEL 2018 KCLIP, OR APPROVED EQUAL.

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**CITY OF SAN ANTONIO  
TRANSPORTATION & CAPITAL IMPROVEMENTS**

**MEDICAL CENTER PHASE X  
LOUIS PASTEUR & EWING HALSELL  
TRAFFIC SIGNAL  
SUMMARY**

**ADDENDUM NO. 01**

100 % SUBMITTAL	PROJECT NO.:	5241-46	DATE:	8/16/2017
DRWN. BY: CBC	DSGN. BY: JWC	CHKD. BY: LR	SHEET NO.:	148

## DESIGN PACKAGE 2 QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QTY	ITEM NO.	DESCRIPTION	UNIT	QTY	ITEM NO.	DESCRIPTION	UNIT	QTY
	TRAFFIC CONTROL PLAN				TRAFFIC SIGNAL				SIGNING AND PAVEMENT MARKINGS		
CoSA				CoSA				CoSA			
5300.2	OFF-DUTY POLICE OFFICERS	HR	80	307.1	CONCRETE STRUCTURE (FOUNDATION)	CY	0.3	531.1	COSA SIGNS	EA	3
TXDOT				308.1	DRILLED SHAFTS (48")	LF	22	535.1	4 INCH WIDE YELLOW LINE	LF	71
0502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	3	618.1	CONDUIT (2 INCH/PVC SCHEDULE 40) (TRENCH)	LF	40	535.2	4 INCH WIDE WHITE LINE	LF	80
0662-6071	WK ZN PAV MRK REMOV (W) 8" (SLD)	LF	230	618.2	CONDUIT (3 INCH/PVC SCHEDULE 40) (TRENCH)	LF	210	535.4	8 INCH WIDE WHITE LINE	LF	452
0662-6080	WK ZN PAV MRK REMOV (W) (ARROW)	EA	2	620.2	ELECTRICAL CONDUCTORS (NO. 8) (BARE)	LF	510	535.7	24 INCH WIDE WHITE LINE	LF	325
0662-6090	WK ZN PAV MRK REMOV (W) (WORD)	EA	2	624.8	GROUND BOXES TYPE D (162922)	EA	1	535.8	RIGHT WHITE ARROW	EA	3
	ROADWAY			633.1	BATTERY BACKUP SYSTEM	EA	1	535.9	LEFT WHITE ARROW	EA	3
CoSA				680.2	INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (SYSTEM)	EA	1	535.11	COMBINATION THRU/LEFT WHITE ARROW	EA	3
103.1	REMOVE CONCRETE CURB	LF	629	682.1	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (3 SECTION)	EA	3	535.12	WORD "ONLY"	EA	2
103.3	REMOVE SIDEWALKS AND DRIVEWAYS	SF	2,600	682.2	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (4 SECTION)	EA	3	537.6	PAVEMENT MARKER (TYPE I C)	EA	31
103.4	REMOVE MISCELLANEOUS CONCRETE	SF	29	682.3	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (5 SECTION)	EA	2	537.8	PAVEMENT MARKER (TYPE II A A)	EA	4
104.1	STREET EXCAVATION	CY	588	682.4	INSTALL PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	2	0677-6001	ELIM EXT PAV MRK & MRKS (4")	LF	4
203.1	TACK COAT	GAL	75	683.1	LED COUNTDOWN PEDESTRIAN MODULE	EA	2	0677-6003	ELIM EXT PAV MRK & MRKS (8")	LF	4
205.3	HOT MIX ASPHALTIC PAVEMENT TY C 2 IN. PAV THICKNESS	SY	741	684.1	TRAFFIC SIGNAL CABLES (TYPE A) (12 AWG) (CONDUCTOR NO. 3) (TRAY CABLE)	LF	175	0677-6007	ELIM EXT PAV MRK & MRKS (24")	LF	184
208.1	SALVAGING, HAULING & STOCKPILING RECLAIM ASPH PAV 2 IN.	SY	270	684.1	TRAFFIC SIGNAL CABLES (TYPE A) (14 AWG) (CONDUCTOR NO. 4)	LF	170	0677-6017	ELIM EXT PAV MRK & MRKS (SYMBOL)	EA	4
209.2	BUS STOP CONCRETE PAD	SY	270	684.1	TRAFFIC SIGNAL CABLES (TYPE A) (14 AWG) (CONDUCTOR NO. 9)	LF	285		STORM WATER POLLUTION PREVENTION PLAN		
500.1	CONCRETE CURB	LF	420	684.1	TRAFFIC SIGNAL CABLES (TYPE A) (16 AWG) (CONDUCTOR NO. 3)	LF	1,370	CoSA	CURB INLET GRAVEL FILTERS	LF	28
506.1	CONCRETE RETAINING WALLS COMBINATION TYPE	CY	24								
511.3	REPLACING WITH HOT MIX ASPHALTIC CONCRETE PAVEMENT TYPE B 12 INCHES COMPACTED DEPTH	SY	574								
	DRAINAGE			686.1	INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (1 ARM 60') (LUM) (ILSN)	EA	1				
CoSA				687.1	PEDESTAL POLE ASSEMBLY	EA	1				
401.104	REINFORCED CONCRETE PIPE (CLASS IV) (24" DIA)	LF	51	688.3	AUDIBLE PEDESTRIAN SIGNAL UNITS [TYPE]	EA	2				
413.2	FLOWABLE FILL (HIGH STRENGTH)	CY	29	693.1	INTERNALLY LIGHTED STREET NAME SIGNS [ILSN SIGN 8' S]	EA	1				
511.3	REPLACING WITH HOT MIX ASPHALTIC CONCRETE PAVEMENT TYPE B 12 INCHES COMPACTED DEPTH	SY	40	695.2	EMERGENCY PREEMPTION PHASE SELECTOR	EA	1				
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	82	695.3	EMERGENCY PREEMPTION DETECTOR	EA	1				
TXDOT				695.4	EMERGENCY PREEMPTION DETECTOR CABLE	LF	220				
0465-6175	INLET (COMPL) (CURB) (TY C)	EA	1	696.1	RADAR ADVANCED DETECTION DEVICE (RADD)	EA	3				
	LANDSCAPING			696.2	RADAR PRESENCE DETECTION DEVICE (RPDD)	EA	4				
CoSA				696.3	RADAR ADVANCED DETECTION DEVICE (RADD) COMMUNICATION & POWER CABLE(S)	LF	445				
502.2	CONCRETE SIDEWALKS 4"	SY	285	696.4	RADAR PRESENCE DETECTION DEVICE (RPDD) COMMUNICATION & POWER CABLE(S)	LF	510				
502.3	CONCRETE SIDEWALKS 5"	SY	11	6007.1	REMOVAL OF TRAFFIC SIGNALS AT INTERSECTION	EA	1				
502.5	CONCRETE SIDEWALKS (VIA BUS FOUNDATION)	CY	6	8100.1	INSTALL ITS TRAFFIC MONITORING CAMERA ASSEMBLY	EA	1				
516.1	BERMUDA SODDING	SY	247	8100.2	INSTALL ITS TRAFFIC MONITORING CAMERA CABLING	LF	165				
TXDOT											
0528-6012	LANDSCAPE PAVERS TYPE II	SY	133								
0170-6001	IRRIGATION SYSTEM	LS	1								

**PAPE-DAWSON**  
**ENGINEERS**

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TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028800

**CITY OF SAN ANTONIO**  
TRANSPORTATION & CAPITAL IMPROVEMENTS

**MEDICAL CENTER PHASE X**  
**LOUIS PASTEUR RIGHT TURN LANE**  
ESTIMATE AND QUANTITY

ADDENDUM NO. 01

DESIGN PACKAGE 2

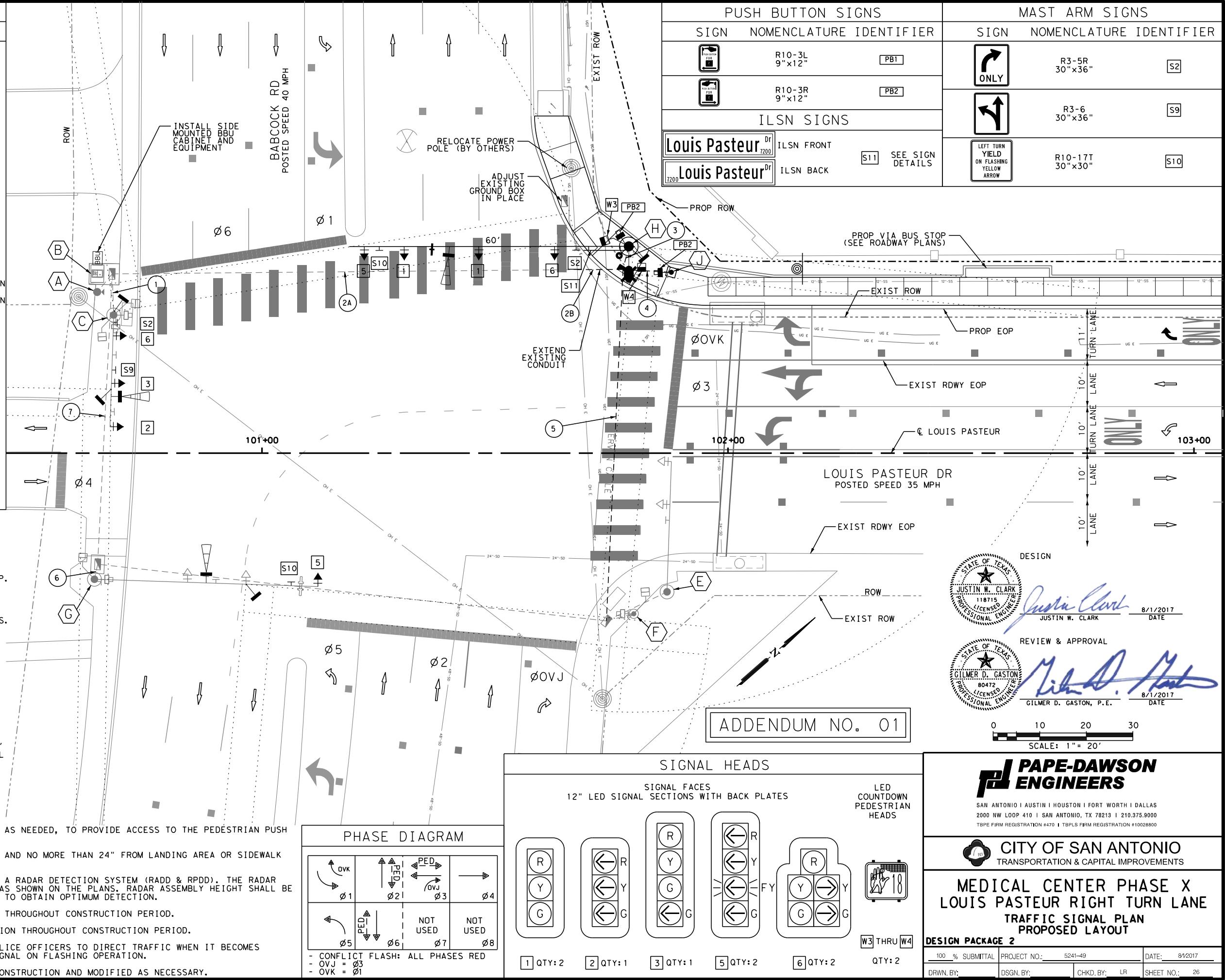
SHEET 1 OF 1

100 %	SUBMITTAL	PROJECT NO.:	5241-49	DATE:	8/16/2017
DRWN. BY:	JG	DSGN. BY:	JG	CHKD. BY:	LR

LEGEND	
SYMBOL	DESCRIPTION
—	EXISTING RIGHT-OF-WAY
—	PROPOSED RIGHT-OF-WAY
BBU	CONTROLLER, SLAB & FOUNDATION
	BATTERY BACKUP CABINET
●	POLE MOUNTED ELECTRIC SERVICE
—	EXISTING CONDUIT
—	PROPOSED CONDUIT
■	TRAFFIC SIGNAL GROUND BOX
●	TRAFFIC SIGNAL POLE & FOUNDATION
—	EXISTING SIGNAL HEAD & BACK PLATE
—	PROPOSED SIGNAL HEAD & BACK PLATE
—	EXISTING PREEMPTION DETECTOR
—	PROPOSED PREEMPTION DETECTOR
—	MAST ARM MOUNTED SIGN
●	EXISTING PED POLE ASSEMBLY & FOUNDATION
●	PROPOSED PED POLE ASSEMBLY & FOUNDATION
—	EXISTING PEDESTRIAN SIGNAL HEAD
—	PROPOSED PEDESTRIAN SIGNAL HEAD
—	EXISTING PEDESTRIAN PUSH BUTTON
—	PROPOSED PEDESTRIAN PUSH BUTTON
—	TRAFFIC FLOW ARROW
—	POLE/EQUIPMENT IDENTIFIER
10	CABLE/CONDUIT RUN IDENTIFIER
—	RADAR ADVANCED DETECTION DEVICE (RADD)
—	RADAR PRESENCE DETECTION DEVICE (RPDD)
—	RPDD DETECTION ZONE
—	LUMINAIRE
—	CCTV CAMERA

## PLAN NOTES:

1. ALL DIMENSIONS SHOWN ARE IN FEET UNLESS SPECIFIED OTHERWISE. ALL EXISTING FEATURES ARE SHOWN SCREENED BACK i.e. FADED.
2. ALL TRAFFIC SIGNAL EQUIPMENT DEEMED SALVAGEABLE BY THE COSA INSPECTOR SHALL BE DELIVERED TO THE CITY OF SAN ANTONIO SIGNAL SHOP.
3. MINIMUM CLEARANCE OF 40" RADIUS FROM NEUTRAL AND 10' RADIUS FROM PRIMARY OR SECONDARY SHALL BE MAINTAINED BETWEEN PROPOSED TRAFFIC SIGNAL EQUIPMENT AND EXISTING OVERHEAD ELECTRICAL LINES.
4. UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL CALL FOR LOCATES PRIOR TO COMMENCING EXCAVATION. ALL UTILITY LOCATIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
5. CONTRACTOR TO POTHOLE SIGNAL POLE LOCATIONS NEAR UNDERGROUND UTILITIES PRIOR TO INSTALLING POLE FOUNDATION.
6. REMOVE ABANDONED CONCRETE FOUNDATIONS TO A POINT 2 FT BELOW FINAL GRADE.
7. AN ADDITIONAL 2" SCHEDULE 80 PVC SHALL BE INSTALLED AT EACH POLE FOUNDATION STUBBED OUT 1' FROM THE FACE OF THE FOUNDATION. STUB OUTS SHALL BE APPROPRIATELY CAPPED BELOW GRADE FOR FUTURE USE.
8. NEATLY CAP/COIL ALL WIRES AND CABLES IN GROUND BOX OR AT TERMINATION.
9. ALL SIGNAL HEADS SHALL HAVE BACK PLATES.
10. SIDEWALK SHALL BE EXTENDED UP TO THE POLES, AS NEEDED, TO PROVIDE ACCESS TO THE PEDESTRIAN PUSH BUTTONS.
11. PEDESTRIAN PUSH BUTTONS SHALL BE ACCESSIBLE AND NO MORE THAN 24" FROM LANDING AREA OR SIDEWALK FOR EACH INSTALLED PEDESTRIAN POLE.
12. PERMANENT DETECTION SHALL BE PROVIDED USING A RADAR DETECTION SYSTEM (RADD & RPDD). THE RADAR ASSEMBLIES SHALL BE MOUNTED ABOVE THE ROADWAY, AS SHOWN ON THE PLANS. RADAR ASSEMBLY HEIGHT SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS TO OBTAIN OPTIMUM DETECTION.
13. CONTRACTOR SHALL MAINTAIN VEHICLE DETECTION THROUGHOUT CONSTRUCTION PERIOD.
14. CONTRACTOR SHALL MAINTAIN SIGNAL COMMUNICATION THROUGHOUT CONSTRUCTION PERIOD.
15. CONTRACTOR SHALL HIRE OFF-DUTY UNIFORMED POLICE OFFICERS TO DIRECT TRAFFIC WHEN IT BECOMES NECESSARY TO TURN OFF THE SIGNAL OR PLACE THE SIGNAL ON FLASHING OPERATION.
16. SIGNAL OPERATION SHALL BE MONITORED AFTER CONSTRUCTION AND MODIFIED AS NECESSARY.



CONDUIT AND CONDUCTOR SCHEDULE										
	RUN NUMBER	(1)	(2A)	(2B)	(3)	(4)	(5)	(6)	(7)	
	CONDUIT SIZE IN INCHES			3	2	3	2	2	3	
	NUMBER OF CONDUITS			2	1	1	1	1	2	
	LENGTH OF RUN (FT)	15	100	100	10	10	10	10	15	
	TRENCH (T)/EXISTING (E)	E	E	E	T	T	T	T	T	E
CABLE	CIRCUIT									
#8 BARE (SOLID)	BARE BOND GROUND	1	1	2	1	1	1	1	2	
9 COND. #14 SOLID TYPE "A"	SIGNALS	Ø 1							1	1
		Ø 2	1	1	1	1				
		Ø 3	1							
		Ø 5	1	1	1	1				
		Ø OVJ	1	1	1	1				
		Ø OVK	1							
9 COND. #14 SOLID TYPE "A"	PED. SIGNALS	POLE H	2	2	2					
3 COND. #16 SOLID TYPE "A"	ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTONS	POLE H	1	1	1					
		POLE J	1	1	1				1	
M138 OPTICOM CABLE	EMERG PREEMPT	POLE H	1	1	1					
4 COND. #14 SOLID TYPE "A"	ILSN SIGNS	POLE H	1	1	1					
3 COND. #12 TRAY CABLE	LUMINAIRE	POLE H		1	1	1				
POWER CABLE	CCTV	POLE H	1	1	1					
DATA CABLE		POLE H	1	1	1					
POWER & DATA CABLE	RADD	POLE C 1								
		POLE G								1 1
		POLE H	1	1	1	1				
POWER & DATA CABLE	RPDD	POLE C 2								
		POLE G								1 1
		POLE H	1	1	1	1				

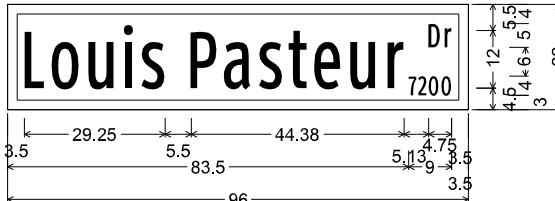
AN EXTRA 2 IN CONDUIT SHALL BE STUBBED OUT & CAPPED 2 FT FROM EACH CONCRETE FOUNDATION INCLUDING CONTROLLER & EACH DRILLED SHAFT.

POLE SCHEDULE										
	POLE	(C)	(G)	(H)	(J)					
	POLE TYPE	SMA-80	SMA-80	LMA	PED					
	POLE HEIGHT (FEET)	19	19	30	4					
	MAST ARM LENGTH (FEET)	24	48	60	N/A					
	FOUNDATION TYPE	EXIST	EXIST	48-A	SPL*					
FOUNDATION DEPTH (FEET)	EXIST	EXIST	21.9	2						
CABLE	CIRCUIT					NUMBER OF CONDUCTORS				
#8 BARE (SOLID)	BARE BOND GROUND					1	1			
9 COND. #14 SOLID TYPE "A"	SIGNALS	Ø 1				1				
		Ø 2	1	1	1					
		Ø 3	1							
		Ø 5	1	1	1					
		Ø OVJ	1	1	1					
		Ø OVK	1							
9 COND. #14 SOLID TYPE "A"	PED. SIGNALS	POLE H	2	2	2					
3 COND. #16 SOLID TYPE "A"	ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTONS	POLE H	1	1	1					
		POLE J	1	1	1				1	
M138 OPTICOM CABLE	EMERG PREEMPT	POLE H	1	1	1					
4 COND. #14 SOLID TYPE "A"	ILSN SIGNS	POLE H	1	1	1					
3 COND. #12 TRAY CABLE	LUMINAIRE	POLE H		1	1	1				
POWER CABLE	CCTV	POLE H	1	1	1					
DATA CABLE		POLE H	1	1	1					
POWER & DATA CABLE	RADD	POLE C 1								
		POLE G							1	
		POLE H	1	1	1					
POWER & DATA CABLE	RPDD	POLE C 2								
		POLE G							1	
		POLE H	1	1	1					

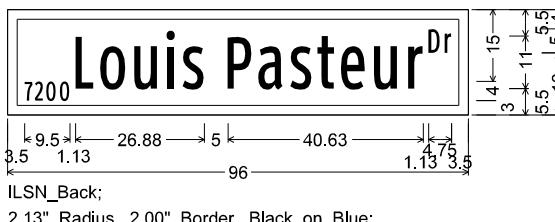
\* INSTALL PEDESTAL POST ON SPECIAL FOUNDATION (2 FT X 2 FT X 2 FT)

### ILSN SIGN DETAILS

FRONT



BACK



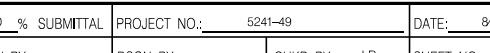
ADDENDUM NO. 01

POLE & EQUIPMENT INFORMATION										
ID	DESCRIPTION/ATTACHMENTS						NORTHING	EASTING	FND. ELEV	
A	EXISTING CPS ELECTRIC SERVICE AND DISCONNECT ON STEEL POST.									EXISTING TO REMAIN
B	EXISTING CITY OF SAN ANTONIO STANDARD MODEL 332 TRAFFIC SIGNAL CABINET AND CONTROLLER ASSEMBLY ON CONCRETE FOUNDATION. INSTALL EXTERNAL BATTERY BACKUP CABINET AND EQUIPMENT.									EXISTING TO REMAIN
C	EXISTING 19 FT SMA-80 ON DRILLED SHAFT FOUNDATION WITH ONE STREET NAME SIGN, ONE R3-5L SIGN, TWO PEDESTRIAN PUSH BUTTONS WITH AUDIBLE PEDESTRIAN SIGNAL UNITS, ONE R10-3L SIGN, ONE R10-3R SIGN, AND TWO COUNTDOWN PEDESTRIAN SIGNAL HEADS. REMOVE FLIR CAMERA ASSEMBLY, R3-8CT SIGN, AND TWO VEHICLE SIGNAL HEADS. INSTALL ONE RADD, TWO RPDDs, ONE R3-5R SIGN, ONE R3-6 SIGN, AND THREE VEHICLE SIGNAL HEADS AS ILLUSTRATED.									EXISTING TO REMAIN
D	REMOVE AND SALVAGE EXISTING 19 FT SMA-80 AND RELATED TRAFFIC SIGNAL EQUIPMENT.									EXISTING TO BE REMOVED
E	EXISTING 19 FT SMA-80 ON DRILLED SHAFT FOUNDATION WITH ONE STREET NAME SIGN, AND TWO VEHICLE HEADS AS ILLUSTRATED.									EXISTING TO REMAIN
F	EXISTING 10 FT PEDESTAL POLE ON DRILLED SHAFT FOUNDATION WITH ONE R9-3 SIGN, ONE COUNTDOWN PEDESTRIAN SIGNAL HEAD, ONE PEDESTRIAN PUSH BUTTON WITH AUDIBLE PEDESTRIAN SIGNAL UNIT AND ONE R10-3L SIGN.									EXISTING TO REMAIN
G	EXISTING 19 FT SMA-80 ON DRILLED SHAFT FOUNDATION WITH TWO PREEMPTION DETECTORS, ONE STREET NAME SIGN, ONE R9-3 SIGN, ONE PEDESTRIAN PUSH BUTTON WITH AUDIBLE PEDESTRIAN SIGNAL UNIT, ONE R10-3R SIGN, ONE COUNTDOWN PEDESTRIAN SIGNAL HEAD, AND TWO VEHICLE SIGNAL HEADS. REMOVE VIVDS CAMERA ASSEMBLY, WIRELESS ACCESS POINT, AND LEFT-TURN VEHICLE SIGNAL HEAD. INSTALL ONE RADD, ONE RPDD, ONE R10-17T SIGN AND 4-SECTION VEHICLE SIGNAL HEAD AS ILLUSTRATED.									EXISTING TO REMAIN
H	INSTALL 30 FT LMA ON 21.9 FT DRILLED SHAFT FOUNDATION (48-A) WITH 60' MAST ARM, ONE LUMINAIRE, ONE RADD, ONE RPDD, ONE CCTV CAMERA ASSEMBLY, TWO LED COUNTDOWN PEDESTRIAN SIGNAL HEADS, ONE PEDESTRIAN PUSH BUTTON WITH AUDIBLE PEDESTRIAN SIGNAL UNIT, ONE R10-3R SIGN, ONE R3-5R SIGN, ONE ILSN MAST ARM WITH SIGN, ONE R10-17T SIGN, AND FOUR VEHICLE SIGNAL HEADS AS ILLUSTRATED.						13732001.5	2103053.3		LEVEL WITH ROADWAY CROWN
J	INSTALL 4 FT PUSH BUTTON PEDESTAL POLE ON SPECIAL FOUNDATION (2 FT X 2 FT X 2 FT) WITH ONE PEDESTRIAN PUSH BUTTON WITH AUDIBLE PEDESTRIAN SIGNAL UNIT AND ONE R10-3R SIGN AS ILLUSTRATED.						13732004.7	2103063.5		FLUSH WITH LANDING

SEE POLE SCHEDULE FOR POLE TYPE, HEIGHT, MAST ARM LENGTH, FOUNDATION TYPE, AND FOUNDATION DEPTH. SIGNS SHALL BE ATTACHED TO POLES AND MAST ARMS AS INDICATED ON LAYOUT.

REMOVE ABANDONED CONCRETE FOUNDATION TO A POINT 2 FT BELOW FINAL GRADE.

ALL TRAFFIC SIGNAL EQUIPMENT DEEMED SALVAGEABLE BY THE CITY OF SAN ANTONIO INSPECTOR SHALL BE DELIVERED TO THE COSA SIGNAL SHOP.



ITEM	DESCRIPTION	UNIT	QTY
307.1	CONCRETE STRUCTURE (FOUNDATION)	CY	0.3
308.1	DRILLED SHAFTS (48")	LF	22
618.1	CONDUIT (2 INCH/PVC SCHEDULE 40)(TRENCH)	LF	40
618.2	CONDUIT (3 INCH/PVC SCHEDULE 40)(TRENCH)	LF	210
620.2	ELECTRICAL CONDUCTORS (NO. 8)(BARE)	LF	510
624.8	GROUND BOXES TYPE D (162922)	EA	1
633.1	BATTERY BACKUP SYSTEM	EA	1
680.2	INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (SYSTEM)	EA	1
682.1	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (3 SECTION)	EA	3
682.2	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (4 SECTION)	EA	3
682.3	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (5 SECTION)	EA	2
682.4	INSTALL PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	2
683.1	LED COUNTDOWN PEDESTRIAN MODULE	EA	2
684.1	TRAFFIC SIGNAL CABLES (TYPE A)(12 AWG)(CONDUCTOR NO. 3) (TRAY CABLE)	LF	175
684.1	TRAFFIC SIGNAL CABLES (TYPE A)(14 AWG)(CONDUCTOR NO. 4)	LF	170
684.1	TRAFFIC SIGNAL CABLES (TYPE A)(14 AWG)(CONDUCTOR NO. 9)	LF	1370
684.1	TRAFFIC SIGNAL CABLES (TYPE A)(16 AWG)(CONDUCTOR NO. 3)	LF	285
686.1	INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 60')(LUM)(ILSN)	EA	1
687.1	PEDESTAL POLE ASSEMBLY	EA	1
688.3	AUDIBLE PEDESTRIAN SIGNAL UNITS [TYPE]	EA	2
693.1	INTERNAL LIGHTED STREET NAME SIGNS [ILSN SIGN 8' S]	EA	1
695.2	EMERGENCY PREEMPTION PHASE SELECTOR	EA	1
695.3	EMERGENCY PREEMPTION DETECTOR	EA	1
695.4	EMERGENCY PREEMPTION DETECTOR CABLE	LF	220
696.1	RADAR ADVANCED DETECTION DEVICE (RADD)	EA	3
696.2	RADAR PRESENCE DETECTION DEVICE (RPDD)	EA	4
696.3	RADAR ADVANCED DETECTION DEVICE (RADD) COMMUNICATION & POWER CABLE(S)	LF	445
696.4	RADAR PRESENCE DETECTION DEVICE (RPDD) COMMUNICATION & POWER CABLE(S)	LF	510
6007.1	REMOVAL OF TRAFFIC SIGNALS AT INTERSECTION	EA	1
8100.1	Install ITS Traffic Monitoring Camera Assembly	EA	1
8100.2	Install ITS Traffic Monitoring Camera Cabling	LF	165

**PAPE-DAWSON**  
**ENGINEERS**

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**CITY OF SAN ANTONIO**  
TRANSPORTATION & CAPITAL IMPROVEMENTS

**MEDICAL CENTER PHASE X**  
**LOUIS PASTEUR RIGHT TURN LANE**  
**TRAFFIC SIGNAL PLAN**  
**SUMMARY**

ADDENDUM NO. 01

DESIGN PACKAGE 2

100 % SUBMITTAL	PROJECT NO.:	5241-49	DATE:	8/1/2017
DRWN. BY:	DSGN. BY:	CHKD. BY: LR	SHEET NO.: 29	

GENERAL SECTION NOTES

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
  - CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
  - CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE."
  - CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION."
  - CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION."
  - CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).
- THE CONTRACTOR SHALL OBTAIN SAWS STANDARD DETAILS FROM SAWS WEBSITE, [HTTP://WWW.SAWS.ORG/BUSINESS\\_CENTER/SPECS](http://WWW.SAWS.ORG/BUSINESS_CENTER/SPECS). UNLESS OTHERWISE NOTED WITHIN DESIGN PLANS.
- THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 233-3500, AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO EXCAVATION.
- LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:
 

SA ANTONIO WATER SYSTEM:  
SAWS UTILITY LOCATES:  
[HTTP://WWW.SAWS.ORG/SERVICE/LOCATES](http://WWW.SAWS.ORG/SERVICE/LOCATES)

COSA DRAINAGE 207-8048  
COSA TRAFFIC SIGNAL OPERATIONS 207-7720  
TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION AS A RESULT OF DAMAGES DONE BY THE PROJECT'S CONSTRUCTION.
- ALL WORK IN TEXAS HIGHWAY DEPARTMENT AND BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT.
- THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
- THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
- ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED BY THE SAN ANTONIO WATER SYSTEM.
- HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.
- WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.
- ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.
- PRE CON SITE VIDEO: BEFORE THE START OF ANY CONSTRUCTION, THE SITE MUST BE VIDEO RECORDED BY THE CONTRACTOR WITH ONE COPY SUBMITTED TO SAWS INSPECTIONS. A PRE-SITE VIDEO WILL PROVIDE ACCURATE DOCUMENTATION OF THE EXISTING CONDITIONS. (NSPI)
- POWER POLE BRACING: CONTRACTORS SHOULD BE ADVISED THAT THERE ARE EXISTING OVERHEAD UTILITY POLES ALONG THE PROJECT CORRIDOR. CONTRACTORS SHOULD FURTHER BE ADVISED THAT IF THE DISTANCE FROM THE OUTSIDE FACE OF A UTILITY TRENCH TO THE FACE OF A UTILITY POLE IS LESS THAN 5 FEET, SAID UTILITY POLE IS SUBJECT TO BRACING, BASED ON A DETERMINATION MADE BY UTILITY POLE OWNER. COSTS INCURRED BY CONTRACTOR FOR BRACING OF THESE UTILITY POLES IS SUBSIDIARY TO THAT RESPECTIVE UTILITY COMPANY'S WORK. IT IS ADVISABLE FOR THE CONTRACTOR TO REVIEW THE CONSTRUCTION DOCUMENTS, AND VISIT THE CONSTRUCTION SITE TO DETERMINE POTENTIAL IMPACTS.

WATER SECTION

14. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS INSPECTION AND/OR SAWS PRODUCTION GROUPS AT LEAST ONE WEEK OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.

SAWS PRODUCTION CONTROL CENTER 233-2016

15. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAYBE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS. PAYMENT FOR SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO. 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE".

16. VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG. (NSPI)

SEWER SECTION

17. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO SANITARY SEWER OVERFLOW (SSO) OCCURS AS A RESULT OF THEIR WORK. ALL CONTRACTOR PERSONNEL RESPONSIBLE FOR SSO PREVENTION AND CONTROL SHALL BE TRAINED ON PROPER RESPONSE. SHOULD AN SSO OCCUR, THE CONTRACTOR SHALL:

- IDENTIFY THE SOURCE OF THE SSO AND NOTIFY SAWS EMERGENCY OPERATIONS CENTER (EOC) IMMEDIATELY AT (210)233-2015. PROVIDE THE ADDRESS OF THE SPILL AND AN ESTIMATED VOLUME OR FLOW.
- ATTEMPT TO ELIMINATE THE SOURCE OF THE SSO.
- CONTAIN SEWAGE FROM THE SSO TO THE EXTENT OF PREVENTING A POSSIBLE CONTAMINATION OF WATERWAYS.
- CLEAN UP SPILL SITE (RETURN CONTAINED SEWAGE TO THE COLLECTION SYSTEM IF POSSIBLE) AND PROPERLY DISPOSE OF CONTAMINATED SOIL/MATERIALS.
- CLEAN THE AFFECTED SEWER MAINS AND REMOVE ANY DEBRIS.
- MEET ALL POST-SSO REQUIREMENTS AS PER THE EPA CONSENT DECREE, INCLUDING LINE CLEANING AND TELEVISING THE AFFECTED SEWER MAINS (AT SAWS DIRECTION) WITHIN 24 HOURS.

SHOULD THE CONTRACTOR FAIL TO ADDRESS AN SSO IMMEDIATELY AND TO SAWS SATISFACTION, THEY WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY SAWS, INCLUDING ANY FINES FROM EPA.

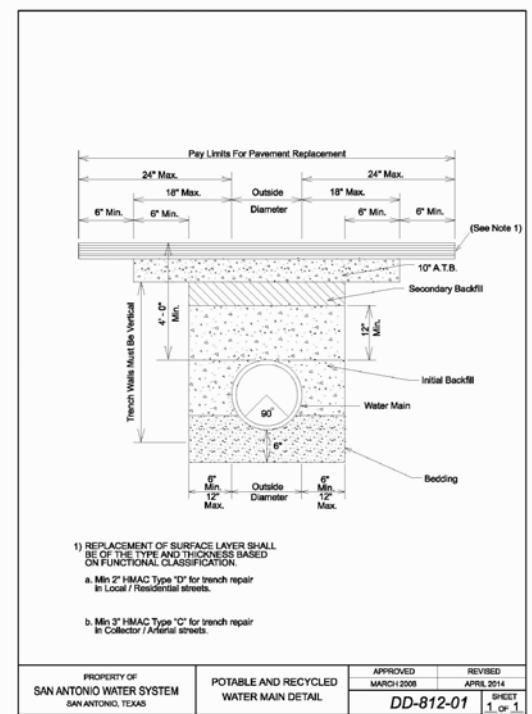
NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO GUIDELINES SET BY THE TCEQ AND SAWS.

18. THE CONTRACTOR SHALL PROVIDE BYPASS PUMPING OF SEWAGE AROUND EACH SEGMENT OF PIPE TO BE REPLACED, IN ACCORDANCE WITH SAWS STANDARD SPECIFICATION FOR WATER AND SANITARY SEWER CONSTRUCTION, ITEM NO. 864, "BYPASS PUMPING". PAYMENT FOR SUCH WORK WILL BE MADE UNDER THE BID ITEM "SANITARY SEWER (BYPASS PUMPING)" (LUMP SUM) AS PER SAWS STANDARD SPECIFICATION FOR WATER AND SANITARY SEWER CONSTRUCTION, ITEM NO. 864, "BYPASS PUMPING".

19. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING FORCE MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 233-3500 AND/OR SAWS PRODUCTION GROUPS AT LEAST ONE WEEK OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.

20. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR TOP OF MANHOLES TO MATCH THE FINISHED GRADE OF THE PROJECT'S IMPROVEMENTS. (NSPI).

21. THE CONTRACTOR SHALL NOTIFY JUAN C. RAMIREZ AT (210) 233-3558 AND SAWS E.O.C. AT (210) 233-2015 A MINIMUM OF 72 HOURS, NOT COUNTING WEEKENDS OR SAWS HOLIDAYS, BEFORE WORKING ON THE PIPE OR MANHOLE, IN ORDER TO HAVE SAWS REMOVE THE SMART COVER. ANY DAMAGE DONE TO THE SMART COVER WILL BE CHARGED TO THE CONTRACTOR THROUGH A CHANGE ORDER.



PROPERTY OF  
SAN ANTONIO WATER SYSTEM  
SAN ANTONIO, TEXAS

POTABLE AND RECYCLED  
WATER MAIN DETAIL

APPROVED  
MARCH 2008

REVISED  
APRIL 2014

DD-812-01 SHEET 1 OF 1

**CITY OF SAN ANTONIO FLATWORK NOTE**

1. ALL LIMITS FOR CURB, SIDEWALK, AND TREE PREP BEYOND WHAT IS CONSIDERED INCIDENTAL TO NORMAL UTILITY CONSTRUCTION WILL BE ADDRESSED BY THE SAWS INSPECTOR. ALL COMMUNICATION FROM THE CITY WILL BE COORDINATED THROUGH THE SAWS INSPECTOR. SAWS INSPECTOR WILL ALSO DETERMINE IF ADDITIONAL COMPENSATION IS WARRANTED IF LIMITS EXCEED INCIDENTALS.

**CPS ENERGY CLEARANCE NOTE**

1. CONTRACTOR SHALL MAINTAIN ADEQUATE WORKING CLEARANCE FROM OVERHEAD UTILITIES IN COMPLIANCE WITH C.P.S. REQUIREMENTS.

**GENERAL UTILITY NOTES**

**LOCATOR NOTE:**  
CALL THE STATE WIDE "ONE CALL LOCATOR" AT 1-800-344-8377, 48 HOURS BEFORE BEGINNING ANY EXCAVATION.

**CABLE T.V. NOTE:**  
CONTRACTOR TO CONTACT THE TIME WARNER CABLE LOCATOR 48 HOURS PRIOR TO EXCAVATION AT 352-4672. CONTRACTOR HAS THE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE T.V. PLANT DURING CONSTRUCTION.

**TELEPHONE NOTE:**  
THE EXISTENCE AND LOCATION OF UNDERGROUND CABLE INDICATED ON THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE. CONTRACTOR TO CONTACT THE TELEPHONE COMPANY CABLE LOCATOR 48 HOURS PRIOR TO EXCAVATION AT 1-800-828-5127. CONTRACTOR HAS THE RESPONSIBILITY TO PROTECT AND SUPPORT TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

**CPS ENERGY NOTES:**  
DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, C.P.S. ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT.

SUMMARY OF WATER QUANTITIES					
Item #	Description	Units	Total		
100	MOBILIZATION	LS	1		
101	PREPARATION OF RIGHT-OF-WAY	LS	1		
103	REMOVE CONCRETE CURB	LF	10		
103	REMOVE SIDEWALKS & DRIVEWAYS	SF	196		
500	CONCRETE CURB, GUTTER, AND CONCRETE CURB AND GUTTER	LF	10		
502	CONCRETE SIDEWALK	SY	23		
550	TRENCH EXCAV. SAFETY PROTECTION	LF	290		
818	8" PVC WATERLINE (RESTRAINED) (0'-6' CUT)	LF	110		
818	12" PVC WATERLINE (RESTRAINED) (0'-6' CUT)	LF	90		
818	12" PVC WATERLINE (RESTRAINED) (6'-14' CUT)	LF	90		
824	RELAY 1-1/2", SHORT	EA	2		
826	VALVE BOX ADJUSTMENT	EA	2		
828	12" GATE VALVE, COMPLETE w/BOX	EA	3		
831	12"x12" CUT-IN-TEE	EA	2		
834	FIRE HYDRANT, COMPLETE	EA	1		
834.3	RELOCATE FIRE HYDRANT	EA	1		
836	PIPE FITTINGS, ALL SIZES AND TYPES	TON	4		
840	8" WATER TIE-IN	EA	7		
840	12" WATER TIE-IN	EA	8		
841	HYDROSTATIC TESTING	EA	7		
844	2" BLOW-OFF, TEMPORARY	EA	15		
858	CONCRETE ENCASEMENT, CRADLES, SADDLES AND COLLARS	CY	15		
SPECIAL SPECS. (ELECTRICAL)			REMOVE AND RELOCATE EXISTING PRESSURE POINT MONITORING PANEL. EXTEND ALL NEW COMPONENTS, UNDERGROUND CONDUITS, AND ELECTRICAL WIRING FROM THE PRESSURE MONITORING POINT PANEL, AND EXISTING METER BOX TO NEW POWER POLE. RELOCATE EXISTING YAGI ANTENNA AND SERVICE METER. AS SHOWN ON THE DRAWINGS AND SPECIFIED IN THE CONTRACT DOCUMENTS COMPLETE-IN-PLACE FOR THE LUMP SUM.	LS	1

PLAN (LETTER)  
DESIGNATION  
Q  
12  
ENLARGED PLAN

PLAN CALLOUT

PLAN (LETTER)  
DESIGNATION  
Q  
4  
ENLARGED PLAN  
SCALE: 1"=20'  
PLAN TITLE CALLOUT

**S&GE, L.L.C.**  
TBPE Firm No. F-8038

1 ADDENDUM NO. 1 JC 8/11/17  
No. Revision Drawn Approved Date

REVISIONS

**STATE OF TEXAS**  
**JAVIER GARCIA**  
**83920**  
**PROFESSIONAL ENGINEER**  
**Daniel Haas**  
**7/2017**

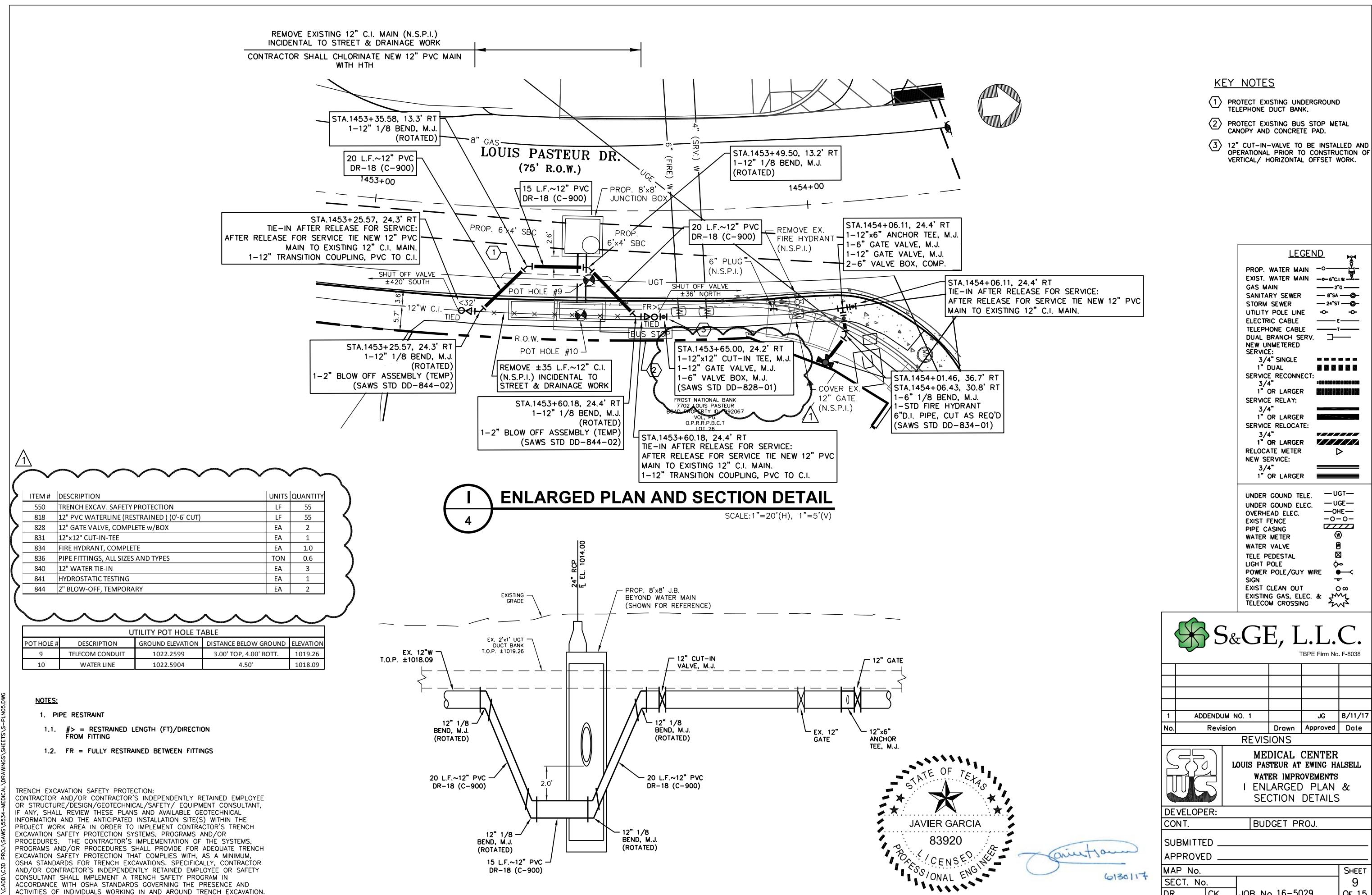
**MEDICAL CENTER**  
**LOUIS PASTEUR AT EWING HALSELL**  
**WATER IMPROVEMENTS**  
**GENERAL NOTES AND QUANTITIES**

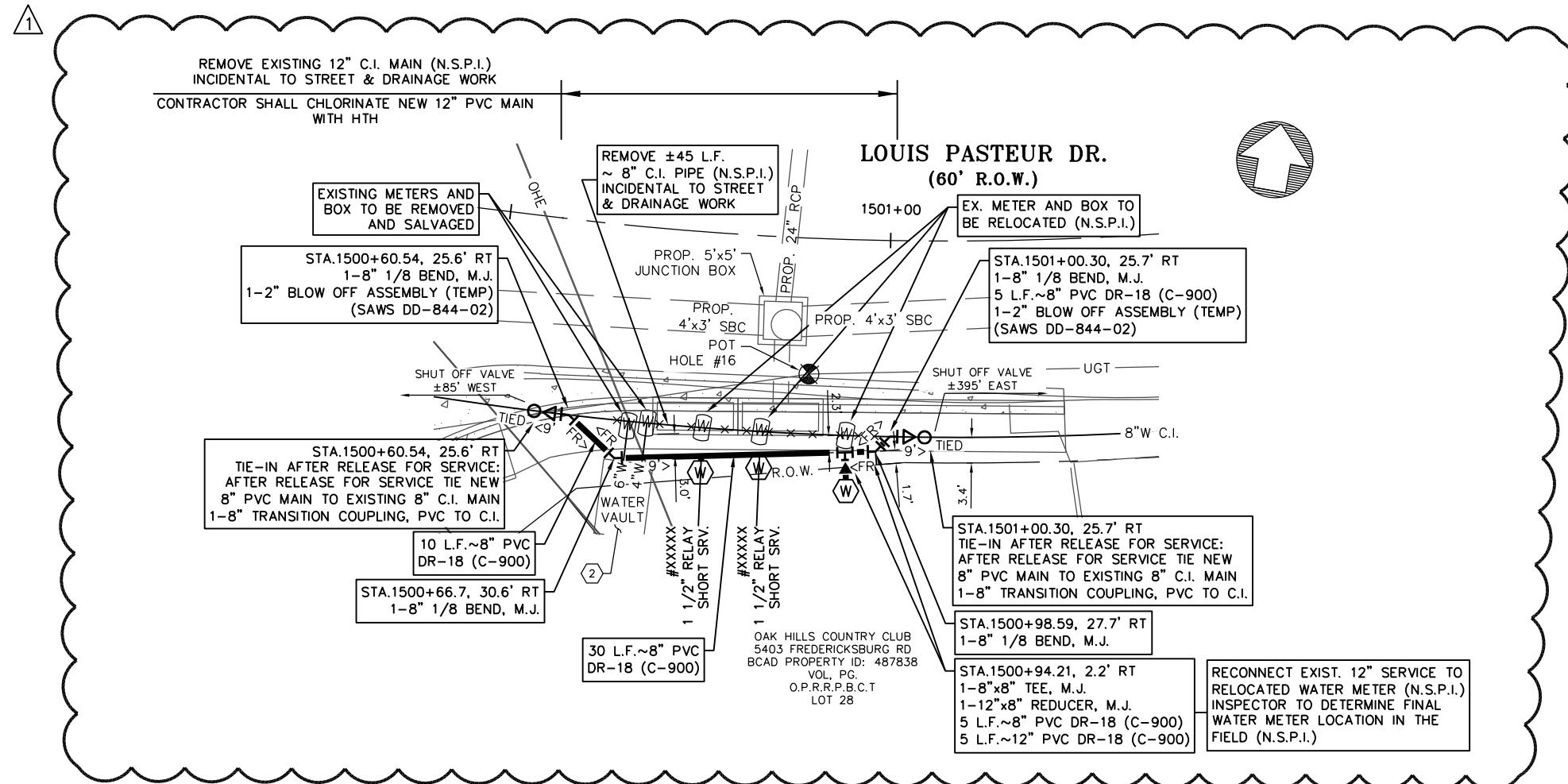
**DEVELOPER:**  
CONT. BUDGET PROJ.

**SUBMITTED**  
**APPROVED**

**MAP No.**  
**SECT. No.**  
**DR. CK. JOB No. 16-5029**

**2 OF 15**





N ENLARGED PLAN AND SECTION DETAIL

SCALE: 1" = 20' (H), 1" = 5' (V)

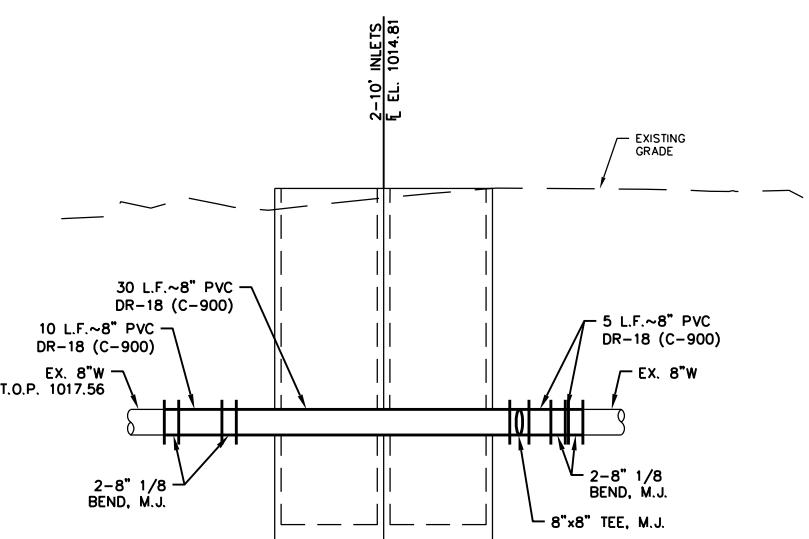
ITEM #	DESCRIPTION	UNITS	QUANTITY
550	TRENCH EXCAV. SAFETY PROTECTION	LF	55
818	8" PVC WATERLINE (RESTRAINED) (0'-6' CUT)	LF	50
818	12" PVC WATERLINE (RESTRAINED) (0'-6' CUT)	LF	5
824	RELAY 1-1/2", SHORT	EA	2
836	PIPE FITTINGS, ALL SIZES AND TYPES	TON	0.3
840	8" WATER TIE-IN	EA	2
841	HYDROSTATIC TESTING	EA	1
844	2" BLOW-OFF- TEMPORARY	EA	2

UTILITY POT HOLE TABLE				
POT HOLE #	DESCRIPTION	GROUND ELEVATION	DISTANCE BELOW GROUND	ELEVATION
16	TELECOM	1032.7500	3.50'	1019.25

## NOTES:

1. PIPE RESTRAINT
  - 1.1.  $\# >$  = RESTRAINED LENGTH (FT)/DIRECTION FROM FITTING
  - 1.2. FR = FULLY RESTRAINED BETWEEN FITTINGS

TRENCH EXCAVATION SAFETY PROTECTION: CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/ EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.



JAVIER GARCIA

83920

PROFESSIONALLY LICENSED

PROFESSIONAL ENGINEERING

• 100 •

 S&GE, L.L.C.

PE Firm No. F-8038

1	ADDENDUM NO. 1		JG	8/11/17	

REVISIONS  
MEDICAL CENTER  
LOUIS PASTEUR AT EWING HALSELL  
WATER IMPROVEMENTS  
N ENLARGED PLAN &  
SECTION DETAILS

## SECTION DETAILS

## BUDGET PROJ.

SHEET

12

JOB No 16-5029

JOB NO. 10 5029 51 15

GENERAL SECTION NOTES

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:

- A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
- B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE."
- C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION."
- D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION."
- E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).

2. THE CONTRACTOR SHALL OBTAIN SAWS STANDARD DETAILS FROM SAWS WEBSITE, [HTTP://WWW.SAWS.ORG/BUSINESS\\_CENTER/SPECS](http://WWW.SAWS.ORG/BUSINESS_CENTER/SPECS). UNLESS OTHERWISE NOTED WITHIN DESIGN PLANS.

3. THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 233-3500, AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO EXCAVATION.

4. LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.

5. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

SAN ANTONIO WATER SYSTEM:  
SAWS UTILITY LOCATES:  
[HTTP://WWW.SAWS.ORG/SERVICE/LOCATES](http://WWW.SAWS.ORG/SERVICE/LOCATES)

COSA DRAINAGE 207-8048  
COSA TRAFFIC SIGNAL OPERATIONS 207-7720  
TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR  
811

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION AS A RESULT OF DAMAGES DONE BY THE PROJECT'S CONSTRUCTION.

7. ALL WORK IN TEXAS HIGHWAY DEPARTMENT AND BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT.

8. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.

9. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.

10. ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED BY THE SAN ANTONIO WATER SYSTEM.

11. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.

12. PRE CON SITE VIDEO: BEFORE THE START OF ANY CONSTRUCTION, THE SITE MUST BE VIDEO RECORDED BY THE CONTRACTOR WITH ONE COPY SUBMITTED TO SAWS INSPECTIONS. A PRE-SITE VIDEO WILL PROVIDE ACCURATE DOCUMENTATION OF THE EXISTING CONDITIONS. (NSPI)

13. POWER POLE BRACING: CONTRACTORS SHOULD BE ADVISED THAT THERE ARE EXISTING OVERHEAD UTILITY POLES ALONG THE PROJECT CORRIDOR. CONTRACTORS SHOULD FURTHER BE ADVISED THAT IF THE DISTANCE FROM THE OUTSIDE FACE OF A UTILITY TRENCH TO THE FACE OF A UTILITY POLE IS LESS THAN 5 FEET, SAID UTILITY POLE IS SUBJECT TO BRACING, BASED ON A DETERMINATION MADE BY UTILITY POLE OWNER. COSTS INCURRED BY CONTRACTOR FOR BRACING OF THESE UTILITY POLES IS SUBSIDIARY TO THAT RESPECTIVE UTILITY COMPANY'S WORK. IT IS ADVISABLE FOR THE CONTRACTOR TO REVIEW THE CONSTRUCTION DOCUMENTS, AND VISIT THE CONSTRUCTION SITE TO DETERMINE POTENTIAL IMPACTS.

WATER SECTION

14. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS INSPECTION AND/OR SAWS PRODUCTION GROUPS AT LEAST ONE WEEK OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.

SAWS PRODUCTION CONTROL CENTER 233-2016

15. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAYBE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS. PAYMENT FOR SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO. 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE".

16. VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG. (NSPI)

SEWER SECTION

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- C. CONTAIN SEWAGE FROM THE SSO TO THE EXTENT OF PREVENTING A POSSIBLE CONTAMINATION OF WATERWAYS.
- D. CLEAN UP SPILL SITE (RETURN CONTAINED SEWAGE TO THE COLLECTION SYSTEM IF POSSIBLE) AND PROPERLY DISPOSE OF CONTAMINATED SOIL/MATERIALS.
- E. CLEAN THE AFFECTED SEWER MAINS AND REMOVE ANY DEBRIS.
- F. MEET ALL POST-SSO REQUIREMENTS AS PER THE EPA CONSENT DECREE, INCLUDING LINE CLEANING AND TELEVISIONING THE AFFECTED SEWER MAINS (AT SAWS DIRECTION) WITHIN 24 HOURS.

SHOULD THE CONTRACTOR FAIL TO ADDRESS AN SSO IMMEDIATELY AND TO SAWS SATISFACTION, THEY WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY SAWS, INCLUDING ANY FINES FROM EPA.

NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO GUIDELINES SET BY THE TCEQ AND SAWS.

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1

SUMMARY OF SANITARY SEWER QUANTITIES			
ITEM #	DESCRIPTION	UNITS	QUANTITY
206	ASPHALT TREATED BASE (10" COMPACTED DEPTH)	SY	20
413	FLOWABLE FILL	CY	2
558	TRENCH EXCAVATION PROTECTION	LF	175
848	10" PVC SDR-26 (2241) SEWER LINE (6'-14')	LF	175
852	SANITARY SEWER MANHOLE (0'-6')	EA	1
852	SANITARY SEWER DROP MANHOLE (0'-6')	EA	1
852	EXTRA DEPTH MAHOLES (>6')	VF	5
855	RECONSTRUCTION OF EXISTING MANHOLE	EA	2
864	BY-PASS PUMPING	LS	2
866	SAN. SWR. PRE TELEVISION INSP. (8"-15")	LF	175
866	SAN. SWR. POST TELEVISION INSP. (8"-15")	LF	175

CITY OF SAN ANTONIO FLATWORK NOTE

1. ALL LIMITS FOR CURB, SIDEWALK, AND TREE PREP BEYOND WHAT IS CONSIDERED INCIDENTAL TO NORMAL UTILITY CONSTRUCTION WILL BE ADDRESSED BY THE SAWS INSPECTOR. ALL COMMUNICATION FROM THE CITY WILL BE COORDINATED THROUGH THE SAWS INSPECTOR. SAWS INSPECTOR WILL ALSO DETERMINE IF ADDITIONAL COMPENSATION IS WARRANTED IF LIMITS EXCEED INCIDENTALS.

CPS NOTE

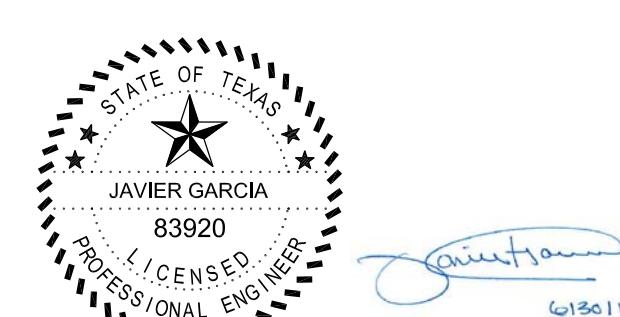
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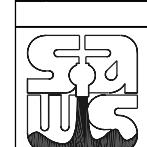
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 S&GE, L.L.C.  
TBPE Firm No. F-8038

1 ADDENDUM NO. 1 JC 8/11/17

No. Revision Drawn Approved Date

REVISIONS  
  
MEDICAL CENTER  
LOUIS PASTEUR AT EWING HALSELL  
SEWER IMPROVEMENTS  
GENERAL NOTES AND QUANTITIES

DEVELOPER: CONT. BUDGET PROJ.

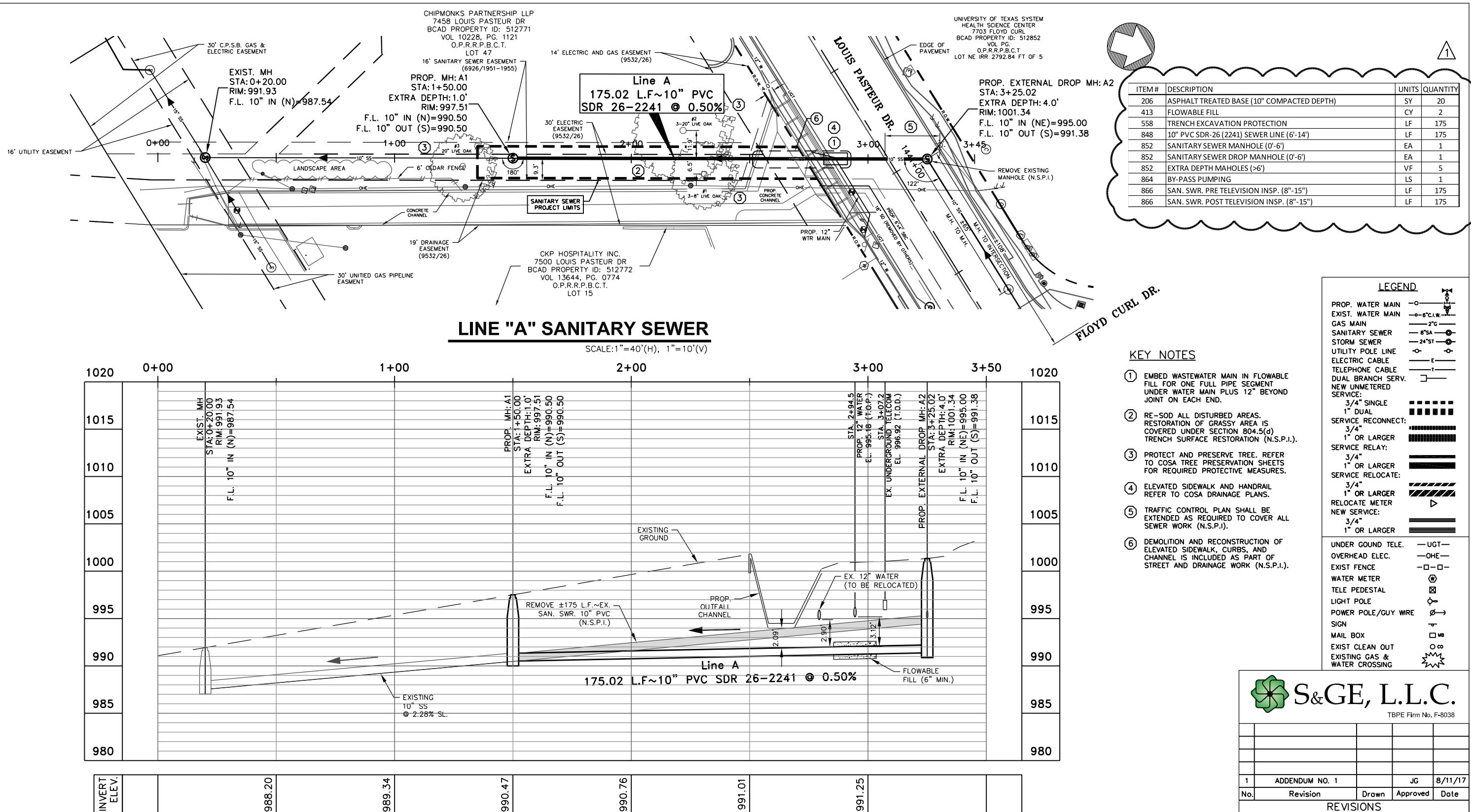
SUBMITTED \_\_\_\_\_

APPROVED \_\_\_\_\_

MAP No. SHEET

SECT. No. 2

DR. CK. JOB No. 16-5529 OF 5



CHAPTER 10 ■ THE ECONOMICS OF INVESTMENT 333

TRENCH EXCAVATION SAFETY PROTECTION: CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/ EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

A circular watermark featuring the Texas state seal. The outer ring contains the words "THE STATE OF TEXAS" in a circular pattern. The center of the seal features a five-pointed star with a smaller star inside it, surrounded by a circular border with the words "THE STATE OF TEXAS".

 S&GE, L.L.C.

TBPE Firm No. F-8038

1	ADDENDUM NO. 1	JG	8/11/17	
No.	Revision	Drawn	Approved	Date

## REVISIONS

REVISIONS

MEDICAL CENTER  
LOUIS PASTEUR AT EWING HALSELL  
SEWER IMPROVEMENTS  
LINE A STA. 0+20 TO STA.

**3+25 PLAN AND PROFILE**

CONT.	BUDGET PROJ.
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SUBMITTED \_\_\_\_\_

APPROVED \_\_\_\_\_

MAP No. SHEET

SECT. No.		4
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DR. CK. JOB No. 16-5529 OF 5