



ADDENDUM NO. 01

PROJECT NAME: Callaghan Road – IH 410 to Spur 421 (Bandera Road)

BID DATE: 2:00 P.M. CST, on Friday, August 28, 2015

**PLACE: Office of the City Clerk, City Hall, 100 Military Plaza, 2nd floor
San Antonio, Texas 78205**

This addendum should be included in and be considered part of the plans and specifications for the above named project. The contractor shall be required to sign an acknowledgement of the receipt of this addendum and submit with their bid.

TCI PROJECT NO: 40-00292

The following revisions to the plans and specification constitute Addendum Number 1 to the Callaghan Road Project.

1. UNIT PRICING FORM

- a. This form (Attached to this Addendum) updates Document 003 on the City's web site. There are multiple changes to the currently published form.
- b. Revises Plan Sheets 28A and 421 (Attached to this Addendum) – SAWS Item 841 increasing from 3 to 6 hydrostatic tests.

2. EXCESS SOIL DISPOSAL

- a. Plan Sheets, Sheet 27 (Attached to this Addendum) is revised as follows:

Add a section of notes titled "ADDITIONAL NOTES" and include the following numbered notes.

"1. EXCESS SOIL DISPOSAL: Contractor shall provide a submittal regarding disposal sites to the City 45 days prior to commencement of hauling off any excavated and/or excess fill material. The conditions set forth herein are solely due to a desire by the City to manage and document the disposal of soils from this site, not due to any environmental concerns relative to the material being disposed of. Accordingly, in the soil disposal Contractor submittal:

Contractor shall certify and assure that the number of soil disposal sites does not exceed three (3) sites.

Contractor shall certify that no disposal areas are within the flood plain and known Superfund or environmental issue area, and provide OWNER evidence to that effect.

Contractor shall provide all affected landowner's written authorization to dispose of soil from this project site on his or her property.

Contractor shall include provisions in landowner agreements that the City reserves the right to conduct independent visual inspections and soil testing on listed properties prior to disposal of project excess soils to determine background levels of various elements as identified by the City. Said landowner agreements will provide an effective right of entry that will expire upon substantial completion of the project.

Contractor agrees to abide by the landowners written conditions in landowner agreements including those related to for placing, compacting, restoration, and erosion control of the site(s), and that the landowner's will be requested to provide final written approval before prior to substantial completion, and that any costs the City incurs to address legitimate landowner concerns will be considered and may be deducted from the Contractor's final payment as determined by the City.

Accordingly, landowners shall provide certification to the Contractor and the Contractor shall include said certification in his submittal that excess soils shall not be hauled to residential properties. Every attempt will be made to dispose of excess soils at either commercial or industrial properties.

Contractor agrees to comply with other regulatory agencies requirements for proper and legal implementation of the reuse plan prior to soils transport, as applicable. Contractor shall ensure an appropriate storm water pollution prevention plan is developed and implemented in accordance with Texas Pollutant Discharge Elimination System requirements, as applicable.

Contractor shall be responsible for tracking excess soil disposed of at approved designated areas. Contractor shall track loads and provide documentation, such as trip tickets or "bill of landing" for all transported soil to each approved site.

Contractor shall not begin hauling activities of excavated or excess soils to the designated disposal sites until City's Engineer or his/her designee provides written authorization.

In the event Contractor only provides one disposal location to City and an additional disposal location is needed, Contractor is required to notify City in writing of its new disposal location and provide written documentation to City's Engineer at minimum 72 hours in advance of utilizing the additional disposal location so City may review and approve the additional disposal location, prior to hauling activities.

3. SPECIAL SPECIFICATION 8004 NOISE WALLS

Add the following paragraph after the fourth paragraph of (2) Working Drawings (Updated specification Attached to this Addendum)

"Design of the noise walls on the east side of Callaghan Road (wall height 8.5') will include the need to support a backfill of 2.5' above existing ground on the road side of the wall."

4. PLAN ROOM UPDATES

The following items were inadvertently not uploaded to the plan rooms with the initial submittal but were included in the sets pickup up from CDS Muery – there are no revisions associated with these items all of which are Attached to this Addendum:

- a. Plans – Enlarged Tree Preservation Plan sheets 308 to 313.
- b. Specifications - Special Provision 008-999-COSA-1 Prosecution and Progress – Added sheets 2-9.
- c. Specifications – Index. Added Special provision 416-001 Drilled Shaft Foundations
- d. Specifications – Volume 1. General Requirements. Item 2. Instructions to Bidders (Page 11). Completed section 2.2 Bid Proposal Forms information. Updated the section numbers for Item 2.

5. SPECIFICATION INDEX UPDATE

Replaced Special Provision Special Provision (008-999-COSA), Prosecution and Progress with Special Provision (008-999-COSA-1) Prosecution and Progress. (Updated index Attached to this Addendum)

6. DBE GOAL CLARIFICATION

Prime Contractor Participation does count towards the DBE goal so long as the Prime is certified through TXDOT as well as the SCTRCA.





ADDENDUM NUMBER 01 ACKNOWLEDGEMENT

RECEIPT OF ADDENDUM NUMBER **01** IS HEREBY ACKNOWLEDGED FOR PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF **Callaghan Road – IH 410 to Spur 421 (Bandera Road)**

FOR WHICH BIDS WILL BE OPENED ON **2:00 P.M. CST, on Friday, August 28, 2015**

THIS ACKNOWLEDGEMENT MUST BE SIGNED AND RETURNED WITH THE BID PACKAGE.

Company Name: _____

Address: _____

City/State/Zip Code: _____

Date: _____

Signature: _____

Print Name/Title: _____

Addendum 1 Package includes

1. Unit Pricing Form
2. Excess Soil Disposal
3. Special Specification 8004 Noise Walls
4. Plan Room Updates
5. Specification Index Update
6. DBE Goal Clarification

CITY OF SAN ANTONIO
UNIT PRICING FORM

PROJECT NAME: CALLAGHAN ROAD

PROJECT NO.

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
TxDOT 2004 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES									
	100	2002		PREPARING ROW	STA	75.03			
	104	2009		REMOVING CONC (RIPRAP)	SY	311.00			
	104	2011		REMOVING CONC (MEDIANS)	SY	44.00			
	104	2015		REMOVING CONC (SIDEWALKS)	SY	2,906.00			
	104	2017		REMOVING CONC (DRIVEWAYS)	SY	2,413.00			
	104	2021		REMOVING CONC (CURB)	LF	9,902.00			
	104	2024		REMOVING CONC (RETAINING WALLS)	SY	23.00			
	104	2025		REMOVING CONC (WINGWALL)	CY	14.00			
	104	2031		REMOVING CONC (HEADWALL)	CY	1.00			
	104	XXXX		REMOVING CONC (SIDEWALK BRIDGE)	EA	2.00			
	104	XXXX		REMOVING CONC (INLETS)	EA	6.00			
	104	XXXX		REMOVING CONC (STEPS)	SY	8.00			
	104	XXXX		REMOVING CONC (STAMPED PAVERS)	SY	77.00			
	105	2091		REMOVING STAB BASE & ASPH PAV (8"-12")	SY	4,196.00			
	110	2001		EXCAVATION (ROADWAY)	CY	25,419.00			
	110	2002		EXCAVATION (CHANNEL)	CY	208.00			
	132	2004		EMBANKMENT (FINAL)(DENS CONT)(TY B)	CY	1,679.00			
	132	2006		EMBANKMENT (FINAL)(DENS CONT)(TY C)	CY	1,176.00			
	160	2003		FURNISHING AND PLACING TOPSOIL (4")	SY	6,267.00			
	162	2002		BLOCK SODDING	SY	6,267.00			
	164	2027		CELL FBR MLCH SEED (PERM)(URBAN)(CLAY)	SY	182.00			
	168	2001		VEGETATIVE WATERING	MG	89.00			
	169	2006		SOIL RETENTION BLANKETS (CL 2)(TY F)	SY	182.00			
	260	2002		LIME (HYDRATED LIME)(SLURRY)	TON	678.00			
	260	2027		LIME TRT (EXST MATL)(8")	SY	38,677.00			
	340	2011		D-GR HMA (METH) TY-B PG-64-22	TON	17,908.00			
	340	2034		D-GR HMA (METH) TY-C PG-64-22	TON	4,632.00			

CITY OF SAN ANTONIO
UNIT PRICING FORM

	340	2104	D-GR HMA (METH) TY-D SAC-B PG-64-22	TON	2,880.00			
	350	2001	MICROSURFACING	TON	91.00			
	354	2031	PLANE ASPH CONC PAV (0"-12")	SY	24,267.00			
	354	2045	PLANE ASPH CONC PAV (2")	SY	5,978.00			
	360	2003	CONC PVMT (CONT REINF - CRCP)(10")	SY	1,323.00			
	400	2002	STRUCT EXCAV (BOX)	CY	5,578.00			
	400	2003	STRUCT EXCAV (PIPE)	CY	3,917.00			
	401	2001	FLOWABLE BACKFILL	CY	325.00			
	401	XXXX	FLOWABLE BACKFILL (INLET OR MH)	CY	449.00			
	402	2001	TRENCH EXCAVATION PROTECTION	LF	3,671.00			
	403	2001	TEMPORARY SPL SHORING	SF	5,430.00			
	416	2002	DRILL SHAFT (24 IN)	LF	2,150.00			
	416	2004	DRILL SHAFT (36 IN)	LF	1,806.00			
	420	2001	CL A CONC (MISC) (BACKFILL)	CY	190.00			
	420	2008	CL C CONC (WINGWALLS)	CY	19.10			
	420	2009	CL C CONC (HEADWALLS)	CY	4.90			
	420	2011	CL C CONC (RETAINING WALLS)	CY	30.50			
	420	2065	CL A CONC (STEPS)	CY	8.00			
	420	XXXX	CL A CONC (SIDEWALK BRIDGE)	CY	1.60			
	420	XXXX	CL A CONC (MEDIAN)	CY	6.00			
	420	XXXX	CL A CONC (BLOCKS)	CY	5.30			
	420	XXXX	CL A CONC (DRIVEWAY RETAINING WALL)	CY	22.40			
	423	2007	RETAINING WALL (SPREAD FOOTING)	SF	3,136.00			
	423	2011	RETAINING WALL (DRILL SHAFT)(FACIA)	SF	7,222.00			
	432	2019	RIPRAP (STONE PROTECTION)(12 IN)	CY	38.00			
	432	2035	RIPRAP (CONC)(6 IN)	CY	82.90			
	442	2048	STR STL (MISC) NON-BRIDGE)	LBS	1,194.00			
	450	2072	RAIL (HANDRAIL)(TY A)	LF	1,179.00			
	450	2077	RAIL (HANDRAIL)(TY F)	LF	54.00			
	450	2166	RAIL (TY C223)	LF	52.00			
	452	2010	REMOV RAIL (PEDESTRIAN)	LF	74.00			
	462	2004	CONC BOX CULV (4 FT X 3 FT)	LF	79.86			
	462	2005	CONC BOX CULV (4 FT X 4 FT)	LF	8.58			
	462	2007	CONC BOX CULV (5 FT X 3 FT)	LF	262.85			
	462	2009	CONC BOX CULV (5 FT X 5 FT)	LF	28.00			

CITY OF SAN ANTONIO
UNIT PRICING FORM

462	2030		CONC BOX CULV (10 FT X 6 FT)	LF	833.03			
464	2005		RC PIPE (CL III)(24 IN)	LF	1,016.87			
464	2007		RC PIPE (CL III)(30 IN)	LF	294.07			
464	2009		RC PIPE (CL III)(36 IN)	LF	52.33			
464	2010		RC PIPE (CL III)(42 IN)	LF	142.00			
464	2011		RC PIPE (CL III)(48 IN)	LF	188.88			
464	2028		RC PIPE (CL IV)(48 IN)	LF	290.50			
465	2001		INLET (COMPL)(TY C-I) (COSA)	EA	14.00			
465	2002		INLET (COMPL)(TY C)(TxDOT)	EA	1.00			
465	2007		INLET EXT (COSA)	EA	13.00			
465	2008		INLET EXT (TY C-E)(TxDOT)	EA	1.00			
465	2111		INLET (COMPL)(TY C-1)(COSA)(MOD)	EA	7.00			
465	2092		MANH (COMPL)(TY PB 4'X4')(PSL-RH)	EA	4.00			
465	2193		MANH (COMPL)(TY PB 5'X5')(PSL-RH)	EA	4.00			
465	XXXX		MANH (COMPL)(TY PB 6'X6')(PSL-RH)	EA	5.00			
465	XXXX		MANH (COMPL)(TY PB 8'X8')(PSL-RH)	EA	2.00			
465	XXXX		INLET (COMPL)(TY X-5)(MOD)(TRAFFIC GRATE TY 6 MOD)	EA	2.00			
465	XXXX		INLET (COMPL)(TY X-10)(MOD)(TRAFFIC GRATE TY 6 MOD)	EA	2.00			
465	XXXX		AREA DRAIN (COMPL) (TY PB- 3'X3') (PAZD-RC)	EA	1.00			
465	XXXX		MANHL RISER (COMPL)	EA	7.00			
474	XXXX		SLOT DRAIN (GAL STL) (12 IN)	LF	24.00			
479	2001		ADJ MANHS	EA	1.00			
480	2001		CLEAN EXIST CULVS	EA	2.00			
496	2008		REMOV STR (BOX CULVERT)	LF	107.00			
496	2016		REMOV STR (PIPE)	EA	5.00			
500	2001		MOBILIZATION	LS	1.00			
502	2001		BARRICADES, SIGNS, AND TRAFFIC HANDLING	MO	20.00			
502	2004		OFF DUTY POLICE OFFICER	HR	72.00			
508	XXXX		CONSTRUCTING DETOURS (TEMP PAVEMENT) (8" TO 24") (8" HMAC TYPE B)	SY	1,600.00			
512	2008		PORT CTB (FUR & INST)(LOW PROF)(TY 1)	LF	2,480.00			
512	2009		PORT CTB (FUR & INST)(LOW PROF)(TY 2)	LF	640.00			
512	2026		PORT CTB (MOVE)(LOW PROF)(TY 1)	LF	3,460.00			
512	2027		PORT CTB (MOVE)(LOW PROF)(TY 2)	LF	1,160.00			
512	2044		PORT CTB (REMOVE)(LOW PROF)(TY 1)	LF	2,480.00			
512	2045		PORT CTB (REMOVE)(LOW PROF)(TY 2)	LF	640.00			

CITY OF SAN ANTONIO
UNIT PRICING FORM

	529	2009		CONC CURB (SPECIAL)	LF	10,514.00			
	529	2014		CONC CURB (TY C1)	LF	3,892.00			
	529	2014		CONC CURB (TY C1) (DRIVEWAY)	LF	689.00			
	529	2015		CONC CURB (TY C2)	LF	356.00			
	529	2015		CONC CURB (TY C2) (DRIVEWAY)	LF	5.00			
	529	2016		CONC CURB (TY F1)	LF	745.00			
	529	2016		CONC CURB (TY F2)	LF	926.00			
	529	2016		CONC CURB (TY F3)	LF	369.00			
	529	2018		CONC CURB (MONO)(SPECIAL)	LF	973.00			
	529	XXXX		CONC CURB (SPL-1)	LF	406.00			
	529	XXXX		CONC CURB (MEDIAN)	LF	152.00			
	530	XXXX		DRIVEWAYS (CONC)	SY	685.00			
	530	2010		DRIVEWAYS (CONC)(COMM) (6")	SY	2,878.00			
	530	2011		DRIVEWAYS (ACP)	SY	1,649.00			
	530	2011		DRIVEWAYS (ACP) (PARKING LOT)	SY	193.00			
	530	2075		DRIVEWAYS (GRAVEL)	SY	126.00			
	531	2004		CONC SIDEWALK (6")	SY	7,272.00			
	531	2004		CONC SIDEWALK (6") (PRIVATE)	SY	5.00			
	531	2006		CURB RAMPS (TY 2)	EA	5.00			
	531	2015		CONC SIDEWALKS (4")	SY	2,194.00			
	531	XXXX		CURB RAMPS (TY 3)(MOD)	EA	1.00			
	531	XXXX		CURB RAMPS (TY 6)(MOD)	EA	2.00			
	531	XXXX		CURB RAMPS (SPECIAL)(COSA TY III)(MOD)	EA	2.00			
	531	XXXX		CURB RAMPS (SPECIAL)(COSA TY IV)(MOD)	EA	14.00			
	531	XXXX		CURB RAMPS (SPECIAL)(COSA TY V)(MOD)	EA	42.00			
	531	XXXX		VIA BUS BENCH FND	SY	15.00			
	542	2001		REMOVING METAL BEAM GUARD FENCE	LF	26.00			
	550	2001		CHAIN LINK FENCE (INSTALL) (6)	LF	3,011.00			
	550	2003		CHAIN LINK FENCE (REMOVE)	LF	3,242.00			
	550	2003		CHAIN LINK FENCE (REMOVE) (4') (DRIVEWAY)	LF	15.00			
	550	2006		GATE (REMOVE)	EA	1.00			
	550	2009		CHAIN LINK FENCE (INSTALL) (4')	LF	211.00			
	550	2009		CHAIN LINK FENCE (INSTALL) (4') (DRIVEWAY)	LF	15.00			
	550	XXXX		GATE (SNGL)(6'X12')	EA	1.00			
	556	2008		PIPE UNDERDRAIN (TY 8)(6")	LF	636.00			

CITY OF SAN ANTONIO
UNIT PRICING FORM

560	2011	MAILBOX INSTALL - S (TWG - POST) TY 2 FND	EA	14.00		
644	2051	IN SM RD SN SUP & AM TY TWT (1) UB (P)	EA	31.00		
644	2052	IN SM RD SN SUP & AM TY TWT (1) UB (T)	EA	1.00		
644	2059	RELOCATE SM RD SN SUP & AM TY TWT	EA	2.00		
644	2060	REMOVE SM RD SN SUP & AM	EA	36.00		
644	XXXX	IN SM RD SN SUP & AM TY COSA "U" MOUNT (1) ANCHOR STUB (P)	EA	45.00		
644	XXXX	IN SM RD SN SUP & AM TY S80 (1) UB (T)	EA	1.00		
662	2004	WK ZN PAV MRK NON-REMOV (W) 4" (SLD)	LF	10,727.00		
662	2016	WK ZN PAV MRK NON-REMOV (W) 24" (SLD)	LF	363.00		
662	2032	WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)	LF	23,298.00		
662	2036	WK ZN PAV MRK NON-REMOV (W) 8" (SLD)	LF	235.00		
662	2056	WK ZN PAV MRK REMOV PAV MRK (W) 4" (DOT)	LF	109.00		
662	2067	WK ZN PAV MRK REMOV PAV MRK (W) 4" (SLD)	LF	1,372.00		
662	2084	WK ZN PAV MRK REMOV (W) (ARROW)	EA	2.00		
662	2094	WK ZN PAV MRK REMOV (W) (WORD)	EA	2.00		
662	2098	WK ZN PAV MRK REMOV PAV MRK (Y) 4" (DOT)	LF	37.00		
662	2099	WK ZN PAV MRK REMOV PAV MRK (Y) 4" (SLD)	LF	3,272.00		
666	2003	REFL PAV MRK TY I (W) 4" (BRK) (100 MIL)	LF	2,624.00		
666	2006	REFL PAV MRK TY I (W) 4" (DOT) (100 MIL)	LF	318.00		
666	2012	REFL PAV MRK TY I (W) 4" (SLD) (100 MIL)	LF	4,028.00		
666	2036	REFL PAV MRK TY I (W) 8" (SLD) (100 MIL)	LF	1,317.00		
666	2048	REFL PAV MRK TY I (W) 24" (SLD) (100 MIL)	LF	2,419.00		
666	2054	REFL PAV MRK TY I (W) (ARROW) (100 MIL)	EA	46.00		
666	2069	REFL PAV MRK TY I (W) (DBL ARROW) (100 MIL)	EA	2.00		
666	2096	REFL PAV MRK TY I (W) (WORD) (100 MIL)	EA	9.00		
666	2105	REFL PAV MRK TY I (Y) 4" (BRK) (100 MIL)	LF	1,424.00		
666	2111	REFL PAV MRK TY I (Y) 4" (SLD) (100 MIL)	LF	10,066.00		
666	2132	REFL PAV MRK TY I (Y) 24" (SLD) (100 MIL)	LF	155.00		
666	2141	REFL PAV MRK TY I (Y) (MED NOSE) (100 MIL)	EA	6.00		
672	2012	REFL PAV MRKR TY I-C	EA	321.00		
672	2015	REFL PAV MRKR TY II A-A	EA	411.00		
677	2001	ELIM EXT PAV MRK & MRKS (4")	LF	9,250.00		
677	2003	ELIM EXT PAV MRK & MRKS (8")	LF	380.00		
677	2007	ELIM EXT PAV MRK & MRKS (24")	LF	600.00		
677	2008	ELIM EXT PAV MRK & MRKS (ARROW)	EA	2.00		

**CITY OF SAN ANTONIO
UNIT PRICING FORM**

	677	2018		ELIM EXT PAV MRK & MRKS (WORD)	EA	2.00			
	1122	2003		ROCK FILTER DAMS (INSTALL) (TY 3)	LF	35.00			
	1122	2009		ROCK FILTER DAMS (REMOVE)	LF	35.00			
	1122	2016		CONSTRUCTION EXITS (INSTALL) (TY 1)	SY	1,121.00			
	1122	2019		CONSTRUCTION EXITS (REMOVE)	SY	1,121.00			
	1122	2024		BACKHOE WORK (EROSION & SEDM CONT)	HR	68.00			
	1,122	2037		TEMPORARY SEDIMENT CONTROL FENCE INSTL	LF	3,972.00			
	1,122	2057		TEMPORARY SEDIMENT CONTROL FENCE REMOV	LF	3,972.00			
	6834	2001		PORTABLE CHANGEABLE MESSAGE SIGN	DAY	100.00			
	SS 2164			STORMWATER TREATMENT UNIT	EA	1.00			
CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION JUNE 2008									
	308.1			DRILLED SHAFT (24 IN)	LF	188.00			
	308.1			DRILLED SHAFT (30 IN)	LF	105.00			
	308.1			DRILLED SHAFT (36 IN)	LF	161.00			
	540.1			CURB INLET GRAVEL FILTER (COSA) (INSTALL/REMOVE)	LF	1,396.00			
	615.1			TRAFFIC SIGNAL CONTROLLER ASSEMBLY (TYPE 332 CABINET)	EA	5.00			
	618.1			CONDUIT TRENCHED 2 INCH PVC (SCHEDULE 40)	LF	1,055.00			
	618.2			CONDUIT TRENCHED 3 INCH PVC (SCHEDULE 40)	LF	2,369.00			
	620.1			ELECTRICAL CONDUCTORS (NO. 6) (BARE)	LF	72.00			
	620.2			ELECTRICAL CONDUCTORS (NO. 8) (BARE)	LF	3,268.00			
	620.3			ELECTRICAL CONDUCTORS (NO. 6) (INSULATED)	LF	144.00			
	624.3			GROUND BOXES TYPE C (162911) W/APRON	EA	22.00			
	628.1			ELECTRICAL SERVICES	EA	5.00			
	633.1			BATTERY BACKUP SYSTEM	EA	5.00			
	655.1			TYPE 332 CONTROLLER FOUNDATION	EA	5.00			
	680.2			INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (SYSTEM)	EA	5.00			
	681.1			TEMPORARY TRAFFIC SIGNALS	EA	7.00			
	682.1			VEHICLE SIGNAL SECTION WITH BACK PLATE (12 INCH) (3 SEC)	EA	33.00			
	682.2			VEHICLE SIGNAL SECTION WITH BACK PLATE (12 INCH) (4 SEC)	EA	17.00			
	682.4			PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	47.00			
	683.1			LED COUNTDOWN PEDESTRIAN MODULE	EA	47.00			
	684.1			TRAFFIC SIGNAL CABLES (TYPE A) (14 AWG) (4 COND)	LF	2,567.00			
	684.1			TRAFFIC SIGNAL CABLES (TYPE A) (14 AWG) (9 COND)	LF	13,351.00			
	685.3			REMOVE FLASHING BEACON ASSYS	EA	2.00			

CITY OF SAN ANTONIO
UNIT PRICING FORM

685.4		SOLAR-POWERED SCHOOL ZONE FLASHER ASSYS	EA	2.00			
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 24')	EA	2.00			
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 28')	EA	3.00			
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 32')	EA	4.00			
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 36')	EA	3.00			
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 40')	EA	6.00			
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 44')	EA	2.00			
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 48')	EA	1.00			
687.1		PEDESTAL POLE ASSEMBLY (5')	EA	5.00			
687.1		PEDESTAL POLE ASSEMBLY (10')	EA	29.00			
688.3		AUDIBLE PEDESTRIAN SIGNAL UNITS	EA	55.00			
693.1		INTERNALLY LIGHTED STREET NAME SIGNS (ILSN SIGN 8' S)	EA	19.00			
695.2		EMERGENCY PREEMPTION PHASE SELECTOR	EA	5.00			
695.3		EMERGENCY PREEMPTION DETECTOR	EA	19.00			
695.4		EMERGENCY PREEMPTION DETECTOR CABLE	LF	2,520.00			
696.01		RADAR ADVANCE DETECTOR	EA	20.00			
696.02		RADAR PRESENCE DETECTOR	EA	27.00			
696.03		RADAR ADVANCE DETECTION DEVISE (RADD) COMMUNICATION AND POWER CABLE	LF	4,799.00			
696.04		RADAR PRESENCE DETECTION DEVICE (RPDD) COMMUNICATION AND POWER CABLE	LF	4,799.00			
696.12		INSTALL RADAR DETECTION DEVICE	EA	3.00			
800.1		PROJECT SIGNS	EA	2.00			
801.1		LEVEL I PROTECTIVE FENCING	LF	2,772.00			
802.1		MULCH	CY	240.00			
802.1		TREE TRIMMING - GENERAL PRUNING	EA	35.00			
802.1		HERITAGE TREE PRUNING/FERTILIZATION	EA	4.00			
SPL		WIRELESS BRIDGE BACKHAUL	EA	1.00			
SPL		WIRELESS ACCESS POINT	EA	5.00			
SPL		ETHERNET SWITCH	EA	5.00			
SS 8000		STAMPED CONCRETE (INSTALL)	SY	77.00			
SS 8001		GATE (PEDESTRIAN) (REMOVE)	EA	1.00			
SS 8001		GATE (VEHICULAR) (REMOVE)	EA	1.00			
SS 8001		GATE (VEHICULAR) (REMOVE & STORE)	EA	1.00			
SS 8001		WROUGHT IRON FENCE (REMOVE)	LF	1,315.00			
SS 8001		WROUGHT IRON FENCE (6') (INSTALL)	LF	1,637.00			
SS 8001		WROUGHT IRON GATE (PEDESTRIAN) (SINGLE)	EA	1.00			

CITY OF SAN ANTONIO
UNIT PRICING FORM

	SS 8001		WROUGHT IRON GATE (VEHICULAR) (MANUAL SLIDING) (INSTALL)	EA	1.00			
	SS 8001		WROUGHT IRON GATE (VEHICULAR) (DOUBLE) (REINSTALL STORED GATE)	EA	1.00			
	SS 8001		WROUGHT IRON HANDRAIL (REMOVE)	LF	20.00			
	SS 8001		WROUGHT IRON HANDRAIL (INSTALL)	LF	20.00			
	SS 8002		WOOD FENCE (6')	LF	52.00			
	SS 8002		WOOD FENCE (REMOVE)	LF	1,531.00			
	SS 8003		INSTALL TEMPORARY DRAINAGE	EA	2.00			
	SS 8003		REMOVE TEMPORARY DRAINAGE	EA	2.00			
	SS 8004.1		NOISE WALL (6')	LF	1,114.00			
	SS 8004.1		NOISE WALL (8.5')	LF	597.00			
	SS 8004.2		NOISE WALL (6') (THICKENED WALL)	LF	136.00			

SAN ANTONIO WATER SYSTEMS (SAWS) - STANDARD SPECIFICATIONS
FOR WATER MAIN CONSTRUCTION (JUNE 2009 OR LATEST REVISIONS OR ADDITONS)

	100		MOBILIZATION	LS	1.00			
	101		PREPARATION OF RIGHT-OF-WAY	LS	1.00			
	550		TRENCH PROTECTION	LF	8,285.00			
	818		8" PVC WATERLINE	LF	5,778.00			
	818		12" PVC WATERLINE	LF	1,768.00			
	818		16" PVC WATERLINE	LF	281.00			
	818		20" PVC WATERLINE	LF	110.00			
	824		RECONNECT 3/4" SHORT SERVICE	EA	17.00			
	824		RELAY 3/4" SHORT SERVICE	EA	20.00			
	824		RELAY 1" SHORT SERVICE	EA	2.00			
	824		RELAY 1 1/4" SHORT SERVICE	EA	2.00			
	824		RELAY 1 1/2" SHORT SERVICE	EA	4.00			
	824		RELAY 1 1/2" LONG SERVICE	EA	2.00			
	824		RELAY 2" SHORT SERVICE	EA	4.00			
	824		RELAY 6" FIRE LINE SERVICE AND METER	EA	1.00			
	824.5		CUSTOMER SHUT-OFF VALVE	EA	34.00			
	826		VALVE BOX ADJUSTMENT	EA	7.00			
	828		8" GATE VALVES	EA	23.00			
	828		12" GATE VALVES	EA	11.00			
	830		20" BUTTERFLY VALVES	EA	2.00			
	833		EXISTING METER AND NEW METER BOX RELOCATION	EA	1.00			
	833		METER AND METER BOX INSTALLATION - 3/4" TO 1 1/2"	EA	30.00			

CITY OF SAN ANTONIO
UNIT PRICING FORM

	833		METER AND METER BOX INSTALLATION - 2" TO 4"	EA	3.00			
	833		EXISTING METER AND NEW METER BOX ADJUSTMENT	EA	2.00			
	834.1		FIRE HYDRANT	EA	12.00			
	834.3		RELOCATE FIRE HYDRANT	EA	1.00			
	836		PIPE FITTINGS, ALL SIZES AND TYPES	TON	13.96			
	840		4" WATER TIE-INS	EA	1.00			
	840		6" WATER TIE-INS	EA	2.00			
	840		8" WATER TIE-INS	EA	10.00			
	840		12" WATER TIE-INS	EA	6.00			
	840		16" WATER TIE-INS	EA	1.00			
	840		20" WATER TIE-INS	EA	1.00			
	841		HYDROSTATIC TESTING	EA	6.00			
	844		2" BLOWOFF, TEMPORARY	EA	22.00			
	844		4" BLOWOFF, TEMPORARY	EA	1.00			
	846		1" AIR RELEASE VALVE	EA	1.00			
	846		2" AIR RELEASE VALVE	EA	1.00			
	856.2		8" CARRIER PIPE (OPEN CUT)	LF	264.00			
	856.2		12" CARRIER PIPE (OPEN CUT)	LF	84.00			
	856.3		CASING OR LINER 18" (OPEN CUT)	LF	264.00			
	856.3		CASING OR LINER 24" (OPEN CUT)	LF	84.00			
	COSA 413		FLOWABLE FILL	CY	90.09			
	1015		SERVICE LINE LEAK REPAIR	EA	2.00			
	1020		MAIN BREAK/LEAK REPAIR (ALL TYPES)	EA	2.00			
	3000		REMOVAL, TRANSPORTATION AND DISPOSAL OF A.C. PIPE	LF	286.00			
	3100		4" TEMPORARY WATERLINE, INCLUDING FITTINGS, TIE INS, SERVICE CONNECTIONS, AND ALL APPURTENANCES TO PROVIDE TEMPORARY WATER MAIN FOR WATER MAIN CONSTRUCTION	LS	1.00			
	3100		8" TEMPORARY WATERLINE, INCLUDING FITTINGS, TIE INS, SERVICE CONNECTIONS, AND ALL APPURTENANCES TO PROVIDE TEMPORARY WATER MAIN FOR WATER MAIN CONSTRUCTION	LS	1.00			
	3100		12" TEMPORARY WATERLINE, INCLUDING FITTINGS, TIE INS, SERVICE CONNECTIONS, AND ALL APPURTENANCES TO PROVIDE TEMPORARY WATER MAIN FOR WATER MAIN CONSTRUCTION	LS	1.00			
SAN ANTONIO WATER SYSTEMS (SAWS) - STANDARD SPECIFICATIONS								
FOR SANITARY SEWER CONSTRUCTION (JUNE 2009 OR LATEST REVISIONS OR ADDITONS)								
	100		MOBILIZATION	LS	1.00			
	101		PREPARATION OF RIGHT-OF-WAY	LS	1.00			
	550		TRENCH PROTECTION	LF	2,650.00			

CITY OF SAN ANTONIO
UNIT PRICING FORM

848		8" PVC SANITARY SEWER LINE (0-6')	LF	147.00		
848		8" PVC SANITARY SEWER LINE (6'-10')	LF	1,381.00		
848		8" PVC SANITARY SEWER LINE (10'-14')	LF	152.00		
848		10" PVC SANITARY SEWER LINE (14'-18')	LF	16.00		
848		12" PVC SANITARY SEWER LINE (0-6')	LF	57.00		
848		12" PVC SANITARY SEWER LINE (6'-10')	LF	28.00		
848		12" PVC SANITARY SEWER LINE (10'-14')	LF	123.00		
848		15" PVC SANITARY SEWER LINE (14'-18')	LF	186.00		
848		18" PVC SANITARY SEWER LINE (6'-10')	LF	65.00		
848		18" PVC SANITARY SEWER LINE (10'-14')	LF	235.00		
848		18" PVC SANITARY SEWER LINE (14'-18')	LF	260.00		
851		LOCATE AND ADJUSTING EXISTING MANHOLES	EA	3.00		
852.1		SANITARY SEWER MANHOLE (0-6')	EA	14.00		
852.2		SANITARY SEWER DROP MANHOLE (0-6')	EA	9.00		
852.3		EXTRA DEPTH MANHOLE (>6')	VF	119.00		
854		SANITARY SEWER LATERAL	LF	145.00		
854.1		ONE-WAY SANITARY SEWER CLEAN-OUT	EA	7.00		
855		RECONSTRUCTION OF EXISTING MANHOLES	EA	2.00		
856.1		JACKING, BORING, OR TUNNELING 24"	LF	80.00		
856.2		8" CARRIER PIPE FOR JACKING, BORING, TUNNELING	LF	40.00		
856.2		10" CARRIER PIPE FOR JACKING, BORING, TUNNELING	LF	40.00		
856.3		CASING OR LINER 24"	LF	80.00		
858		CONCRETE ENCASMENT, CRADLES, SADDLES, COLLARS	CY	1.33		
862		ABANDONMENT OF SANITARY SEWER MAIN & MANHOLES	LF	619.00		
864		BYPASS PUMPING	LS	1.00		
866		SEWER MAIN PRE-TELEVISION INSPECTION (8"-15")	LF	2,081.00		
866		SEWER MAIN PRE-TELEVISION INSPECTION (18"-24")	LF	556.00		
866		SEWER MAIN POST-TELEVISION INSPECTION (8"-15")	LF	2,170.00		
866		SEWER MAIN POST-TELEVISION INSPECTION (18"-24")	LF	560.00		
1103		POINT REPAIRS, ALL SIZES AND DEPTHS	EA	2.00		

CITY OF SAN ANTONIO
UNIT PRICING FORM

SPECIAL SPECIFICATION 9997									
CPS ENERGY (CPS)									
SPECIFICATIONS FOR CONSTRUCTION OF									
NATURAL GAS DISTRIBUTION FACILITIES									
				Install Gas Main (Distance as measured along top of trench)					
				2" Plastic Pipe and Tracer Wire	LF	543.00			
				4" Plastic Pipe and Tracer Wire	LF	352.00			
				6" Plastic Pipe and Tracer Wire	LF	5,273.00			
				4" Steel (SP) Pipe	LF	105.00			
				12" Steel (SP) Pipe	LF	310.00			
				Rerun and Lower Gas Services off New Main (Main to Meter)					
				Short Side	EA	6.00			
				Long Side	EA	4.00			
				Soil Removal and Disposal	CY	100.00			
				TDW Stopple & Bypass 20" SP	LS	1.00			

TOTAL TxDOT & COSA ITEMS

\$ -

TOTAL SAWS WATER ITEMS

\$ -

TOTAL SAWS SANITARY SEWER ITEMS

\$ -

TOTAL CPS GAS ITEMS

\$ -

GRAND TOTAL

\$ -

ITEM NO.	DESC CODE	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES
628.1		ELECTRICAL SERVICES	EA	5.00
633.1		BATTERY BACKUP SYSTEM	EA	5.00
655.1		TYPE 332 CONTROLLER FOUNDATION	EA	5.00
680.2		INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (SYSTEM)	EA	5.00
681.1		TEMPORARY TRAFFIC SIGNALS	EA	7.00
682.1		VEHICLE SIGNAL SECTION WITH BACK PLATE (12 INCH) (3 SEC)	EA	33.00
682.2		VEHICLE SIGNAL SECTION WITH BACK PLATE (12 INCH) (4 SEC)	EA	17.00
682.4		PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	47.00
683.1		LED COUNTDOWN PEDESTRIAN MODULE	EA	47.00
684.1		TRAFFIC SIGNAL CABLES (TYPE A) (14 AWG) (4 COND)	LF	2,567.00
684.1		TRAFFIC SIGNAL CABLES (TYPE A) (14 AWG) (9 COND)	LF	13,351.00
685.3		REMOVE FLASHING BEACON ASSYS	EA	2.00
685.4		SOLAR-POWERED SCHOOL ZONE FLASHER ASSYS	EA	2.00
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 24')	EA	2.00
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 28')	EA	3.00
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 32')	EA	4.00
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 36')	EA	3.00
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 40')	EA	6.00
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 44')	EA	2.00
686.1		INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 48')	EA	1.00
687.1		PEDESTAL POLE ASSEMBLY (5')	EA	5.00
687.1		PEDESTAL POLE ASSEMBLY (10')	EA	29.00
688.3		AUDIBLE PEDESTRIAN SIGNAL UNITS	EA	55.00
693.1		INTERNALLY LIGHTED STREET NAME SIGNS (ILSN SIGN 8' S)	EA	19.00
695.2		EMERGENCY PREEMPTION PHASE SELECTOR	EA	5.00
695.3		EMERGENCY PREEMPTION DETECTOR	EA	19.00
695.4		EMERGENCY PREEMPTION DETECTOR CABLE	LF	2,520.00
696.01		RADAR ADVANCE DETECTOR	EA	20.00
696.02		RADAR PRESENCE DETECTOR	EA	27.00
696.03		RADAR ADVANCE DETECTION DEVISE (RADD) COMMUNICATION AND POWER CABLE	LF	4,799.00
696.04		RADAR PRESENCE DETECTION DEVICE (RPDD) COMMUNICATION AND POWER CABLE	LF	4,799.00
696.12		INSTALL RADAR DETECTION DEVICE	EA	3.00
800.1		PROJECT SIGNS	EA	2.00
801.1		LEVEL 1 PROTECTIVE FENCING	LF	2,772.00
802.1		MULCH	CY	240.00
802.1		TREE TRIMMING - GENERAL PRUNING	EA	35.00
802.1		HERITAGE TREE PRUNING/FERTILIZATION	EA	4.00
SPL		WIRELESS BRIDGE BACKHAUL	EA	1.00
SPL		WIRELESS ACCESS POINT	EA	5.00
SPL		ETHERNET SWITCH	EA	5.00
SS 8000		STAMPED CONCRETE (INSTALL)	SY	77.00
SS 8001		GATE (PEDESTRIAN) (REMOVE)	EA	1.00
SS 8001		GATE (VEHICULAR) (REMOVE)	EA	1.00
SS 8001		GATE (VEHICULAR) (REMOVE & STORE)	EA	1.00
SS 8001		WROUGHT IRON FENCE (REMOVE)	LF	1,315.00
SS 8001		WROUGHT IRON FENCE (6') (INSTALL)	LF	1,637.00
SS 8001		WROUGHT IRON GATE (PEDESTRIAN) (SINGLE)	EA	1.00
SS 8001		WROUGHT IRON GATE (VEHICULAR) (MANUAL SLIDING) (INSTALL)	EA	1.00
SS 8001		WROUGHT IRON GATE (VEHICULAR) (DOUBLE) (REINSTALL STORED GATE)	EA	1.00
SS 8001		WROUGHT IRON HANDRAIL (REMOVE)	LF	20.00
SS 8001		WROUGHT IRON HANDRAIL (INSTALL)	LF	20.00
SS 8002		WOOD FENCE (6')	LF	52.00
SS 8002		WOOD FENCE (REMOVE)	LF	1,531.00
SS 8003		INSTALL TEMPORARY DRAINAGE	EA	2.00
SS 8003		REMOVE TEMPORARY DRAINAGE	EA	2.00
SS 8004.1		NOISE WALL (6')	LF	1,114.00
SS 8004.1		NOISE WALL (8.5')	LF	597.00
SS 8004.2		NOISE WALL (6') (THICKENED WALL)	LF	136.00
APRIL 2014 SAN ANTONIO WATER SYSTEM (SAWS) SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION SAWS				
WATER CONSTRUCTION SAWS JOB NO. 12-5117				
100		MOBILIZATION	LS	1.00
101		PREPARATION OF RIGHT-OF-WAY	LS	1.00
550		TRENCH PROTECTION	LF	8,285.00
818		8" PVC WATERLINE	LF	5,778.00
818		12" PVC WATERLINE	LF	1,768.00
818		16" PVC WATERLINE	LF	281.00
818		20" PVC WATERLINE	LF	110.00
824		RECONNECT 3/4" SHORT SERVICE	EA	17.00
824		RELAY 3/4" SHORT SERVICE	EA	20.00
824		RELAY 1" SHORT SERVICE	EA	2.00
824		RELAY 1 1/4" SHORT SERVICE	EA	2.00
824		RELAY 1 1/2" SHORT SERVICE	EA	4.00
824		RELAY 1 1/2" LONG SERVICE	EA	2.00
824		RELAY 2" SHORT SERVICE	EA	4.00

ITEM NO.	DESC CODE	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES
824		RELAY 6" FIRE LINE SERVICE AND METER	EA	1.00
824.5		CUSTOMER SHUT-OFF VALVE	EA	34.00
826		VALVE BOX ADJUSTMENT	EA	7.00
828		8" GATE VALVES	EA	23.00
828		12" GATE VALVES	EA	11.00
830		20" BUTTERFLY VALVES	EA	2.00
833		EXISTING METER AND NEW METER BOX RELOCATION	EA	1.00
833		METER AND METER BOX INSTALLATION - 3/4" TO 1 1/2"	EA	30.00
833		METER AND METER BOX INSTALLATION - 2" TO 4"	EA	3.00
833		EXISTING METER AND NEW METER BOX ADJUSTMENT	EA	2.00
834.1		FIRE HYDRANT	EA	12.00
834.3		RELOCATE FIRE HYDRANT	EA	1.00
836		PIPE FITTINGS, ALL SIZES AND TYPES	TON	13.96
840		4" WATER TIE-INS	EA	1.00
840		6" WATER TIE-INS	EA	2.00
840		8" WATER TIE-INS	EA	10.00
840		12" WATER TIE-INS	EA	6.00
840		16" WATER TIE-INS	EA	1.00
840		20" WATER TIE-INS	EA	1.00
841		HYDROSTATIC TESTING	EA	5.00
844		2" BLOWOFF, TEMPORARY	EA	22.00
844		4" BLOWOFF, TEMPORARY	EA	1.00
846		1" AIR RELEASE VALVE	EA	1.00
846		2" AIR RELEASE VALVE	EA	1.00
856.2		8" CARRIER PIPE (OPEN CUT)	LF	264.00
856.2		12" CARRIER PIPE (OPEN CUT)	LF	84.00
856.3		CASING OR LINER 18" (OPEN CUT)	LF	264.00
856.3		CASING OR LINER 24" (OPEN CUT)	LF	84.00
COSA 413		FLOWABLE FILL	CY	90.09
1015		SERVICE LINE LEAK REPAIR	EA	2.00
1020		MAIN BREAK/LEAK REPAIR (ALL TYPES)	EA	2.00
3000		REMOVAL, TRANSPORTATION AND DISPOSAL OF A.C. PIPE	LF	286.00
3100		4" TEMPORARY WATERLINE, INCLUDING FITTINGS, TIE INS, SERVICE CONNECTIONS, AND ALL APPURTENANCES TO PROVIDE TEMPORARY WATER MAIN FOR WATER MAIN CONSTRUCTION	LS	1.00
3100		8" TEMPORARY WATERLINE, INCLUDING FITTINGS, TIE INS, SERVICE CONNECTIONS, AND ALL APPURTENANCES TO PROVIDE TEMPORARY WATER MAIN FOR WATER MAIN CONSTRUCTION	LS	1.00
3100		12" TEMPORARY WATERLINE, INCLUDING FITTINGS, TIE INS, SERVICE CONNECTIONS, AND ALL APPURTENANCES TO PROVIDE TEMPORARY WATER MAIN FOR WATER MAIN CONSTRUCTION	LS	1.00
APRIL 2014 SAN ANTONIO WATER SYSTEM (SAWS) SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION SAWS				
SANITARY SEWER CONSTRUCTION SAWS JOB NO. 12-5617				
100		MOBILIZATION	LS	1.00
101		PREPARATION OF RIGHT-OF-WAY	LS	1.00
550		TRENCH PROTECTION	LF	2,660.00
848		8" PVC SANITARY SEWER LINE (0-6')	LF	147.00
848		8" PVC SANITARY SEWER LINE (6'-10')	LF	1,381.00
848		8" PVC SANITARY SEWER LINE (10'-14')	LF	152.00
848		10" PVC SANITARY SEWER LINE (14'-18')	LF	16.00
848		12" PVC SANITARY SEWER LINE (0'-6')	LF	57.00
848		12" PVC SANITARY SEWER LINE (6'-10')	LF	28.00
848		12" PVC SANITARY SEWER LINE (10'-14')	LF	123.00
848		15" PVC SANITARY SEWER LINE (14'-18')	LF	186.00
848		18" PVC SANITARY SEWER LINE (6'-10')	LF	65.00
848		18" PVC SANITARY SEWER LINE (10'-14')	LF	235.00
848		18" PVC SANITARY SEWER LINE (14'-18')	LF	260.00
851		LOCATE AND ADJUSTING EXISTING MANHOLES	EA	3.00
852.1		SANITARY SEWER MANHOLE (0-6')	EA	14.00
852.2		SANITARY SEWER DROP MANHOLE (0-6')	EA	9.00
852.3		EXTRA DEPTH MANHOLE (>6')	VF	119.00
854		SANITARY SEWER LATERAL	LF	145.00
854.1		ONE-WAY SANITARY SEWER CLEAN-OUT	EA	7.00
855		RECONSTRUCTION OF EXISTING MANHOLES	EA	2.00
856.1		JACKING, BORING, OR TUNNELING 24"	LF	80.00
856.2		8" CARRIER PIPE FOR JACKING, BORING, TUNNELING	LF	40.00
856.2		10" CARRIER PIPE FOR JACKING, BORING, TUNNELING	LF	40.00
856.3		CASING OR LINER 24"	LF	80.00
858		CONCRETE ENCASMENT, CRADLES, SADDLES, COLLARS	CY	1.33
862		ABANDONMENT OF SANITARY SEWER MAIN & MANHOLES	LF	619.00
864		BYPASS PUMPING	LS	1.00
866		SEWER MAIN PRE-TELEVISION INSPECTION (8'-15')	LF	2,081.00
866		SEWER MAIN PRE-TELEVISION INSPECTION (18"-24')	LF	556.00
866		SEWER MAIN POST-TELEVISION INSPECTION (8'-15')	LF	2,170.00
866		SEWER MAIN POST-TELEVISION INSPECTION (18"-24')	LF	560.00
1103		POINT REPAIRS, ALL SIZES AND DEPTHS	EA	2.00
CITY PUBLIC SERVICE (CPS) SPECIFICATIONS FOR CONSTRUCTION OF NATURAL GAS DISTRIBUTION FACILITIES				
#: 1850678 CPS JOB				
		ESTIMATE FOR TOTAL GAS IMPROVEMENTS	LS	1.00

1

1	8/14/15	ADDENDUM 1	OT
REV NO.	DATE	DESCRIPTION	BY

CALLAGHAN ROAD

ESTIMATE OF QUANTITIES

SHEET 2 OF 2

CITY OF SAN ANTONIO
TRANSPORTATION & CAPITAL IMPROVEMENTS
FEDERAL AID PROJECT



TEXAS DEPARTMENT OF TRANSPORTATION

CDSmuery ENGINEERS - SURVEYORS

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
6	XXXX	28A
STATE	DIST.	COUNTY
TX	SAT	BEXAR
CONT.	SECT.	JOB
0915	12	516
		CALLAGHAN RD

CDS Muery F-1733



LEGEND

	CONTROL POINT
	BASELINE
	EXISTING R.O.W. (ASSUMED)
	PROPOSED R.O.W.
	EXISTING WATER LINE
	EXISTING SANITARY SEWER
	EXISTING OVERHEAD UTILITY
	EXISTING GAS LINE
	EASEMENT LINE
	EXISTING IRON FENCE
	EXISTING EDGE OF ASPHALT
	EXISTING POWER POLE WITH GUY WIRE
	EXISTING ELECTRICAL PEDESTAL
	EXISTING SANITARY SEWER MANHOLE
	EXISTING MANHOLE
	EXISTING FIRE HYDRANT
	EXISTING WATER VALVE
	EXISTING WATER METER
	EXISTING GAS METER
	EXISTING GAS VALVE
	EXISTING SIGN
	EXISTING TREE/VEGETATION
	LIMITS OF COSA PAVEMENT WORK
	ASPHALT PAVEMENT REPLACEMENT LIMITS
	CONC. CURB, GUTTER AND SIDEWALK REPLACEMENT LIMITS

WATER LEGEND

	PROP. WATER MAIN
	EXIST. WATER MAIN
	RESISTIVITY READING
	SERVICE RECONNECT: 3/4" 1" OR LARGER
	SERVICE RELAY: 3/4" 1" OR LARGER
	SERVICE RELOCATE: 3/4" 1" OR LARGER
	RELOCATE METER
	NEW SERVICE: 3/4" 1" OR LARGER

ESTIMATED QUANTITIES			
Item No.	Description	Unit	Quantity
100	MOBILIZATION	LS	1.00
101	PREPARATION OF RIGHT-OF-WAY	LS	1.00
550	TRENCH PROTECTION	LF	8,285.00
818	8" PVC WATERLINE	LF	5,778.00
818	12" PVC WATERLINE	LF	1,768.00
818	16" PVC WATERLINE	LF	281.00
818	20" PVC WATERLINE	LF	110.00
824	RECONNECT 3/4" SHORT SERVICE	EA	17.00
824	RELAY 3/4" SHORT SERVICE	EA	20.00
824	RELAY 1" SHORT SERVICE	EA	2.00
824	RELAY 1 1/4" SHORT SERVICE	EA	2.00
824	RELAY 1 1/2" SHORT SERVICE	EA	4.00
824	RELAY 1 1/2" LONG SERVICE	EA	2.00
824	RELAY 2" SHORT SERVICE	EA	4.00
824	RELAY 6" FIRE LINE SERVICE AND METER	EA	1.00
824.5	CUSTOMER SHUT-OFF VALVE	EA	34.00
826	VALVE BOX ADJUSTMENT	EA	7.00
828	8" GATE VALVES	EA	23.00
828	12" GATE VALVES	EA	11.00
830	20" BUTTERFLY VALVES	EA	2.00
833	EXISTING METER AND NEW METER BOX RELOCATION	EA	1.00
833	METER AND METER BOX INSTALLATION - 3/4" TO 1 1/2"	EA	30.00
833	METER AND METER BOX INSTALLATION - 2" TO 4"	EA	3.00
833	EXISTING METER AND NEW METER BOX ADJUSTMENT	EA	2.00
834.1	FIRE HYDRANT	EA	12.00
834.3	RELOCATE FIRE HYDRANT	EA	1.00
836	PIPE FITTINGS, ALL SIZES AND TYPES	TON	13.96
840	4" WATER TIE-INS	EA	1.00
840	6" WATER TIE-INS	EA	2.00
840	8" WATER TIE-INS	EA	10.00
840	12" WATER TIE-INS	EA	6.00
840	16" WATER TIE-INS	EA	1.00
840	20" WATER TIE-INS	EA	1.00
841	HYDROSTATIC TESTING	EA	6.00
844	2" BLOWOFF, TEMPORARY	EA	22.00
844	4" BLOWOFF, TEMPORARY	EA	1.00
846	1" AIR RELEASE VALVE	EA	1.00
846	2" AIR RELEASE VALVE	EA	1.00
856.2	8" CARRIER PIPE (OPEN CUT)	LF	264.00
856.2	12" CARRIER PIPE (OPEN CUT)	LF	84.00
856.3	CASING OR LINER 18" (OPEN CUT)	LF	264.00
856.3	CASING OR LINER 24" (OPEN CUT)	LF	84.00
COSA 413	FLOWABLE FILL	CY	90.09
1015	SERVICE LINE LEAK REPAIR	EA	2.00
1020	MAIN BREAK/LEAK REPAIR (ALL TYPES)	EA	2.00
3000	REMOVAL, TRANSPORTATION AND DISPOSAL OF A.C. PIPE	LF	286.00
3100	4" TEMPORARY WATERLINE, INCLUDING FITTINGS, TIE INS, SERVICE CONNECTIONS, AND ALL APPURTENANCES TO PROVIDE TEMPORARY WATER MAIN FOR WATER MAIN CONSTRUCTION	LS	1.00
3100	8" TEMPORARY WATERLINE, INCLUDING FITTINGS, TIE INS, SERVICE CONNECTIONS, AND ALL APPURTENANCES TO PROVIDE TEMPORARY WATER MAIN FOR WATER MAIN CONSTRUCTION	LS	1.00
3100	12" TEMPORARY WATERLINE, INCLUDING FITTINGS, TIE INS, SERVICE CONNECTIONS, AND ALL APPURTENANCES TO PROVIDE TEMPORARY WATER MAIN FOR WATER MAIN CONSTRUCTION	LS	1.00

SHEET INDEX

SHEET NO.	DESCRIPTION
G-1 (1 OF 34)	WATER COVER SHEET
G-2 (2 OF 34)	ESTIMATED QUANTITIES AND SHEET INDEX
G-3 (3 OF 34)	GENERAL NOTES
G-4 (4 OF 34)	OVERALL WATER IMPROVEMENTS AND CONTROL PLAN- 1
G-5 (5 OF 34)	OVERALL WATER IMPROVEMENTS AND CONTROL PLAN- 2
G-6 (6 OF 34)	OVERALL WATER IMPROVEMENTS AND CONTROL PLAN- 3
G-7 (7 OF 34)	OVERALL WATER IMPROVEMENTS AND CONTROL PLAN- 4
G-8 (8 OF 34)	SURVEY CONTROL DATA SHEET
W-1 (9 OF 34)	WATERLINE PLAN (STA. 106+38.53 TO STA. 107+50.00)
W-2 (10 OF 34)	WATERLINE PLAN (STA. 107+50.00 TO STA. 111+00.00)
W-2A (11 OF 34)	WATERLINE PLAN & PROFILE (STA. 1+00.00 TO STA. 2+80.00)
W-3 (12 OF 34)	WATERLINE PLAN (STA. 111+00.00 TO STA. 114+25.00)
W-4 (13 OF 34)	WATERLINE PLAN (STA. 114+25.00 TO STA. 118+00.00)
W-5 (14 OF 34)	WATERLINE PLAN (STA. 118+00.00 TO STA. 122+00.00)
W-6 (15 OF 34)	WATERLINE PLAN (STA. 122+00.00 TO STA. 125+00.00)
W-7 (16 OF 34)	WATERLINE PLAN (STA. 125+00.00 TO STA. 128+50.00)
W-8 (17 OF 34)	WATERLINE PLAN (STA. 128+50.00 TO STA. 132+00.00)
W-9 (18 OF 34)	WATERLINE PLAN (STA. 132+00.00 TO STA. 135+50.00)
W-10 (19 OF 34)	WATERLINE PLAN (STA. 135+50.00 TO STA. 139+00.00)
W-11 (20 OF 34)	WATERLINE PLAN (STA. 139+00.00 TO STA. 143+00.00)
W-12 (21 OF 34)	WATERLINE PLAN (STA. 143+00.00 TO STA. 146+00.00)
W-13 (22 OF 34)	WATERLINE PLAN (STA. 146+00.00 TO STA. 149+50.00)
W-14 (23 OF 34)	WATERLINE PLAN (STA. 149+50.00 TO STA. 153+00.00)
W-15 (24 OF 34)	WATERLINE PLAN (STA. 153+00.00 TO STA. 156+50.00)
W-16 (25 OF 34)	WATERLINE PLAN (STA. 156+50.00 TO STA. 157+97.32)
W-17 (26 OF 34)	WATERLINE PLAN (STA. 2+00.00 TO STA. 4+55.00)
W-18 (27 OF 34)	UTILITY CROSSINGS -1
W-19 (28 OF 34)	UTILITY CROSSINGS -2
W-20 (29 OF 34)	UTILITY CROSSINGS -3
W-21 (30 OF 34)	UTILITY CROSSINGS -4
W-22 (31 OF 34)	UTILITY CROSSINGS -5
W-23 (32 OF 34)	UTILITY CROSSINGS -6
W-24 (33 OF 34)	UTILITY CROSSINGS -7
W-25 (34 OF 34)	UTILITY CROSSINGS -8



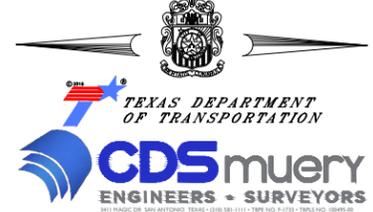
REV. NO.	DATE	DESCRIPTION	BY
1	8/14/15	ADDENDUM 1	OT

CALLAGHAN ROAD

ESTIMATED QUANTITIES AND SHEET INDEX

SHEET G-2
SHEET 2 OF 34

CITY OF SAN ANTONIO
TRANSPORTATION & CAPITAL IMPROVEMENTS
FEDERAL AID PROJECT



CDS Muery F-1733

 Curt W. Raabe
 8/14/2015

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.	
6	XXXX	421	
STATE	DIST.	COUNTY	
TX	SAT	BEXAR	
CONT.	SECT.	JOB	HIGHWAY NO.
0915	12	516	CALLAGHAN RD

F:\2012\112180.50 SAWS CALLAGHAN ROAD\Civil 3D\Dwg\112180.50-WTR-INDEX.dwg

Supplemental General Notes:

- This project is subject to The Texas Department of Transportation's 2004 "Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges".
- Prior to construction, the contractor shall obtain all required storm water permits, fees and approvals. No construction or fabrication shall begin until the contractor has received and thoroughly reviewed all permits required for construction in drainage easements, right-of-ways, and floodplains.
- The Contractor shall notify Storm Water Engineering at least 24 hours prior to the installation of any drainage facility within a drainage easement or street right-of-way not indicated on the construction plans.
- The Contractor is responsible for protecting existing drainage facilities from damage. Any damage to existing drainage systems, whether or not shown on the plans, shall be the responsibility of the Contractor to repair at his expense. The Contractor shall notify Storm Water Engineering at **210-207-8052** as soon as conflicts with utilities are encountered or any drainage system is damaged during construction.
- Construction spoils will not be allowed to be deposited anywhere within a drainage easement, right-of-way or floodplain within the limits of the projects and shall be disposed offsite in compliance with current applicable regulations.
- No structure, fences, walls, landscaping, or other obstruction that impede drainage shall be placed within the limits of the drainage easements shown on the construction documents.
- Upon completion of trenching, the area will be backfilled and compacted to its original condition. Trenches/bore pits to be open and in unattended longer than 24 hours shall be protected to withstand all hydrodynamic and hydrostatic forces and prevent downstream impacts. Trenches/bore pits to be open longer than 30 days after starting excavation shall be backfilled with a semi-permanent repair backfill.
- Improved sections of earthen channels and/or waterways will be vegetated by seeding or sodding. Eight-five percent of the channel surface area must have established vegetation before the City of San Antonio will accept the channel for maintenance.
- If any sensitive feature (caves, subsurface voids, etc) is discovered during construction, all construction activities near the sensitive feature must be suspended immediately. The Construction Inspector shall be immediately notified of any sensitive features encountered during construction. The construction activities near the sensitive feature may not proceed until a US Fish and Wildlife Service (USFWS) permitted biologist has assessed the site for evidence of habitat or listed endangered species. If it is determined that endangered species or their habitat is present within the void space, consultations with the USFWS will commence and work within the immediate vicinity of the sensitive feature will not be allowed to proceed until all parties are in agreement regarding necessary permitting.

ROLLING RIDGE VILLAGE WROUGHT IRON FENCE

THE HOMEOWNERS OF ROLLING RIDGE VILLAGE WANT TO MAINTAIN OWNERSHIP OF THE WROUGHT IRON FENCE.

CONTRACTOR TO REMOVE FENCE CAUSING MINIMAL DAMAGE TO FENCE. COORDINATE WITH PETE RODRIGUEZ (210) 207-8154 ONE WEEK PRIOR TO REMOVING FENCE TO IDENTIFY STORAGE LOCATION OF THE REMOVED FENCE. THIS ITEM DOES NOT APPLY TO THE DUAL GATES MARKED ON THE PLANS AS REMOVE, STORE & REINSTALL.

CPS TRANSMISSION TOWER NOTES:

- CONTACT SCOTT LYSSY WITH CPS ENERGY TRANSMISSION ENGINEERING @ (210) 353-5510
 - TWO WEEKS PRIOR TO START OF CONSTRUCTION.
 - SIX(6) MONTHS PRIOR TO BEGINNING WORK IN THE VICINITY OF THE CPS TRANSMISSION TOWERS IN PHASE 4. THIS NOTICE IS REQUIRED TO ALLOW CPS ENERGY TIME TO CONSTRUCT THE NECESSARY TEMPORARY GUY WIRES FOR THEIR TRANSMISSION POLES.

- COORDINATE SPECIAL SHORING DESIGN WITH CPS ENERGY.

- USE CLASS A CONCRETE TO BACKFILL STORM DRAIN IN SPECIAL SHORING AREA AS SHOWN ON PLANS. CONCRETE WILL EXTEND 1' BEYOND TO LIMITS OF THE CULVERT IN A VERTICAL PLAN TO THE LIMITS OF THE PAVEMENT SECTION.

STRUCTURE 83 (LOCATED ON CALLAGHAN ROAD BETWEEN CLEARVIEW DRIVE AND POSTWOOD DRIVE) - DURING THE CONSTRUCTION OF THE ADJACENT BOX CULVERT, THIS STRUCTURES SHALL HAVE SPECIAL SHORING ABLE TO SUPPORT THE FOLLOWING LOADS APPLIED TO THE TOP OF THE CONCRETE FOUNDATION (MOMENT = 1794 KIP-FT AND SHEAR OF 23.3 KIPS +SOIL PRESSURE+ A SURCHARGE) LOADED TRANSVERSELY TO THE CONDUCTOR. THE SPECIAL SHORING SHALL EXTEND A MINIMUM OF 30' ALONG THE TRENCH CENTERED ON THE POLE. CONSTRUCTION SHALL ALSO BE PHASED SO THAT ONLY 15' OF THE TRENCH IN THE SPECIAL SHORING AREA MAY BE EXPOSED AT ANY TIME. TRENCH EXCAVATION, CULVERT LAY AND BACKFILL WITH CONCRETE WILL BE COMPLETED IN ONE WORKING DAY PRIOR TO PRECEDING WITH THE REMAINING TRENCH EXCAVATION. EACH PHASE SHALL BE COMPLETED IN ONE DAY. 3000 PSI CONCRETE BE USED AS BACKFILL IN THE CUT ADJACENT TO THE TRANSMISSION STRUCTURE, 15' BEFORE AND AFTER THE TRANSMISSION STRUCTURE.

STRUCTURE 84 (LOCATED AT THE INTERSECTION OF CHESSWOOD DRIVE AND CALLAGHAN ROAD) - DURING THE CONSTRUCTION OF THE ADJACENT BOX CULVERT, THIS STRUCTURE WILL BE TEMPORARILY GUYED (BY CPS) AND SHALL HAVE SPECIAL SHORING INSTALLED (DESIGNED AND INSTALLED BY THE CONTRACTOR) ABLE TO SUPPORT THE FOLLOWING LOADS APPLIED TO THE TOP OF THE CONCRETE FOUNDATION (MOMENT = 1855 KIP-FT AND SHEAR OF 24.7 KIPS +SOIL PRESSURE+ A SURCHARGE LOAD) LOADED TRANSVERSELY TO THE CONDUCTOR. CONSTRUCTION SHALL ALSO BE ACCELERATED IN THE AREA AROUND THE TRANSMISSION STRUCTURE AND IT IS RECOMMENDED THAT THE SPECIAL SHORING BE PERMANENTLY BE LEFT PLACE IF POSSIBLE. 3000 PSI CONCRETE BE USED AS BACKFILL IN THE CUT ADJACENT TO THE TRANSMISSION STRUCTURE, 15' BEFORE AND AFTER THE TRANSMISSION STRUCTURE.

ANTI-GRAFFITI COATING

CONTRACTOR TO APPLY ANTI-GRAFFITI COATING TO ALL VERTICAL CONCRETE SURFACES IN ACCORDANCE WITH ITEM 740. THIS ITEM WILL NOT BE MEASURED FOR PAYMENT BUT WILL BE SUBSIDIARY TO THE CONCRETE ITEM TO WHICH IT IS APPLIED.

ADDITIONAL NOTES:

"1. EXCESS SOIL DISPOSAL: Contractor shall provide a submittal regarding disposal sites to the City 45 days prior to commencement of hauling off any excavated and/or excess fill material. The conditions set forth herein are solely due to a desire by the City to manage and document the disposal of soils from this site, not due to any environmental concerns relative to the material being disposed of. Accordingly, in the soil disposal Contractor submittal:

Contractor shall certify and assure that the number of soil disposal sites does not exceed three (3) sites.

Contractor shall certify that no disposal areas are within the flood plain and known Superfund or environmental issue area, and provide OWNER evidence to that effect.

Contractor shall provide all affected landowner's written authorization to dispose of soil from this project site on his or her property.

Contractor shall include provisions in landowner agreements that the City reserves the right to conduct independent visual inspections and soil testing on listed properties prior to disposal of project excess soils to determine background levels of various elements as identified by the City. Said landowner agreements will provide an effective right of entry that will expire upon substantial completion of the project.

Contractor agrees to abide by the landowners written conditions in landowner agreements including those related to for placing, compacting, restoration, and erosion control of the site(s), and that the landowner's will be requested to provide final written approval before prior to substantial completion, and that any costs the City incurs to address legitimate landowner concerns will be considered and may be deducted from the Contractor's final payment as determined by the City.

Accordingly, landowners shall provide certification to the Contractor and the Contractor shall include said certification in his submittal that excess soils shall not be hauled to residential properties. Every attempt will be made to dispose of excess soils at either commercial or industrial properties.

Contractor agrees to comply with other regulatory agencies requirements for proper and legal implementation of the reuse plan prior to soils transport, as applicable. Contractor shall ensure an appropriate storm water pollution prevention plan is developed and implemented in accordance with Texas Pollutant Discharge Elimination System requirements, as applicable.

Contractor shall be responsible for tracking excess soil disposed of at approved designated areas. Contractor shall track loads and provide documentation, such as trip tickets or "bill of landing" for all transported soil to each approved site.

Contractor shall not begin hauling activities of excavated or excess soils to the designated disposal sites until City's Engineer or his/her designee provides written authorization.

In the event Contractor only provides one disposal location to City and an additional disposal location is needed, Contractor is required to notify City in writing of its new disposal location and provide written documentation to City's Engineer at minimum 72 hours in advance of utilizing the additional disposal location so City may review and approve the additional disposal location, prior to hauling activities.

1

CDS Muery F-1733



REV. NO.	DATE	DESCRIPTION	BY
1	8/14/15	ADDENDUM 1	OT

CALLAGHAN ROAD

SUPPLEMENTAL GENERAL NOTES

SHEET 1 OF 1

CITY OF SAN ANTONIO
TRANSPORTATION & CAPITAL IMPROVEMENTS
FEDERAL AID PROJECT



FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.			SHEET NO.
6	XXXX			27
STATE	DIST.	COUNTY		
TX	SAT	BEXAR		
CONT.	SECT.	JOB	HIGHWAY NO.	
0915	12	516	CALLAGHAN RD	

SPECIAL SPECIFICATION

8004

Noise Walls

1. **Description.** Contractor shall furnish structural design, pertinent materials, and construct sound walls as shown on the plans and required by this Item.
2. **Materials.** Conform to the pertinent requirements of the following standard specification Items:

TxDOT Item 416, "Drilled Shaft Foundations"
TxDOT Item 420, "Concrete Structures"
TxDOT Item 421, "Hydraulic Cement Concrete"
TxDOT Item 425, "Precast Prestressed Concrete Structural Members"
TxDOT Item 426, "Prestressing"
TxDOT Item 427, "Surface Finishes for Concrete"
TxDOT Item 440, "Reinforcing Steel"
TxDOT Item 441, "Steel Structures"
TxDOT Item 442, "Metal For Structures"
TxDOT Item 445, "Galvanizing"
TxDOT Item 446, "Cleaning and Painting Steel"
TxDOT Item 449, "Anchor Bolts"

Provide concrete noise wall panels or equal as shown in the plans. Provide steel or reinforced concrete noise wall posts.

Provide Class "F" Concrete for precast and cast-in-place components with $f'c = 4000$ psi minimum.

Provide Class "H" Concrete for prestressed components with $f'c = 5000$ psi minimum. Galvanize anchor bolts, nuts and washers for corrosion protection. Galvanize or paint all with the protection system shown on the plans.

Provide joint fillers, grout, and other incidental materials as shown on the plans or approved by the Engineer.

3. **General.**

- (1) **Options.** Contractor has the option to furnish any proprietary sound wall system, which meets the requirements of this specification and complies with the design criteria shown in the plans. All sound wall systems shall utilize drilled shafts with spacing, diameter, length and reinforcing steel as required. Provide for the use of these systems in accordance with TxDOT's Standards Specifications for Construction and Maintenance

of Highways, Streets, and Bridges, Article 7.3, "Patented Devices, Materials and Processes".

The wall surface finish will match the San Antonio District "Mission Region" Sound Wall Aesthetic Guidelines. Contractor to coordinate wall finish and texture with the City of San Antonio's Construction Manager prior to supplying walls.

- (2) **Working Drawings.** Prior to fabrication, contractor shall prepare and submit working drawings and design calculations for the proposed sound wall system to the Owner/Engineer for approval. Submit drawings on 11 in. x 17 in. size sheets. Submit 7 sets of casting drawings for precast segments and shop drawings for each detail of the plans requiring the use of structural steel, 7 sets of construction drawings and 2 sets of design calculations. Upon completion of construction, submit 1 set of reproducible as-built drawings to the Owner/Engineer.

Include all information necessary for precasting wall elements in the casting drawings. Casting drawings shall reflect the shape and dimension of precast components, the size, quantity and details of the reinforcing steel, the quantity, type, size and details of connection and lifting hardware, the size and location of drain openings, and any additional details necessary.

Include a numbered wall component layout, and shall reflect field verified horizontal and vertical alignment of the wall in the casting drawings. Also include all information needed to erect the wall including the proposed drilled shaft elevations and length, limits of riprap, the type, details, and construction procedure for connecting the wall to the drilled shafts, details necessary to account for change of grade, all existing and proposed utilities, and any additional details necessary to complete the work.

Provide design calculations that include a summary of all design parameters used, including material types, strength values, allowable stresses, assumed loads and load combinations. Submit calculations covering the range of heights and loading conditions on the project.

Added by Addendum No. 1

Design of the noise walls on the east side of Callaghan Road (wall height 8.5') will include the need to support a backfill of 2.5' above existing ground on the road side of the wall.

Provide drawings and design calculations that bear the seal of a registered professional Engineer who is registered in the State of Texas.

- 4. Construction Methods.** Conform to the contractor's design and details shown in the plans and to the pertinent requirements of the following Items:

TxDOT Item 424, "Precast Concrete Structures (Fabrication)"
TxDOT Item 429, "Concrete Structure Repair"

TxDOT Item 447, "Structural Bolting"
TxDOT Item 448, "Structural Field Welding"

Set all posts plumb and firm to the required lines and grades.

Do not exceed a 3/4 in. horizontal alignment tolerance from post to post. The overall vertical tolerance of the wall (plumbness from top to bottom) shall not exceed 1/2 in. per 10 ft. of wall height.

- 5. Measurement.** This Item will be measured by the linear foot of Noise Wall, complete in place.

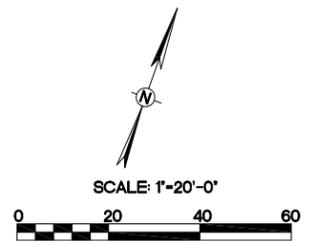
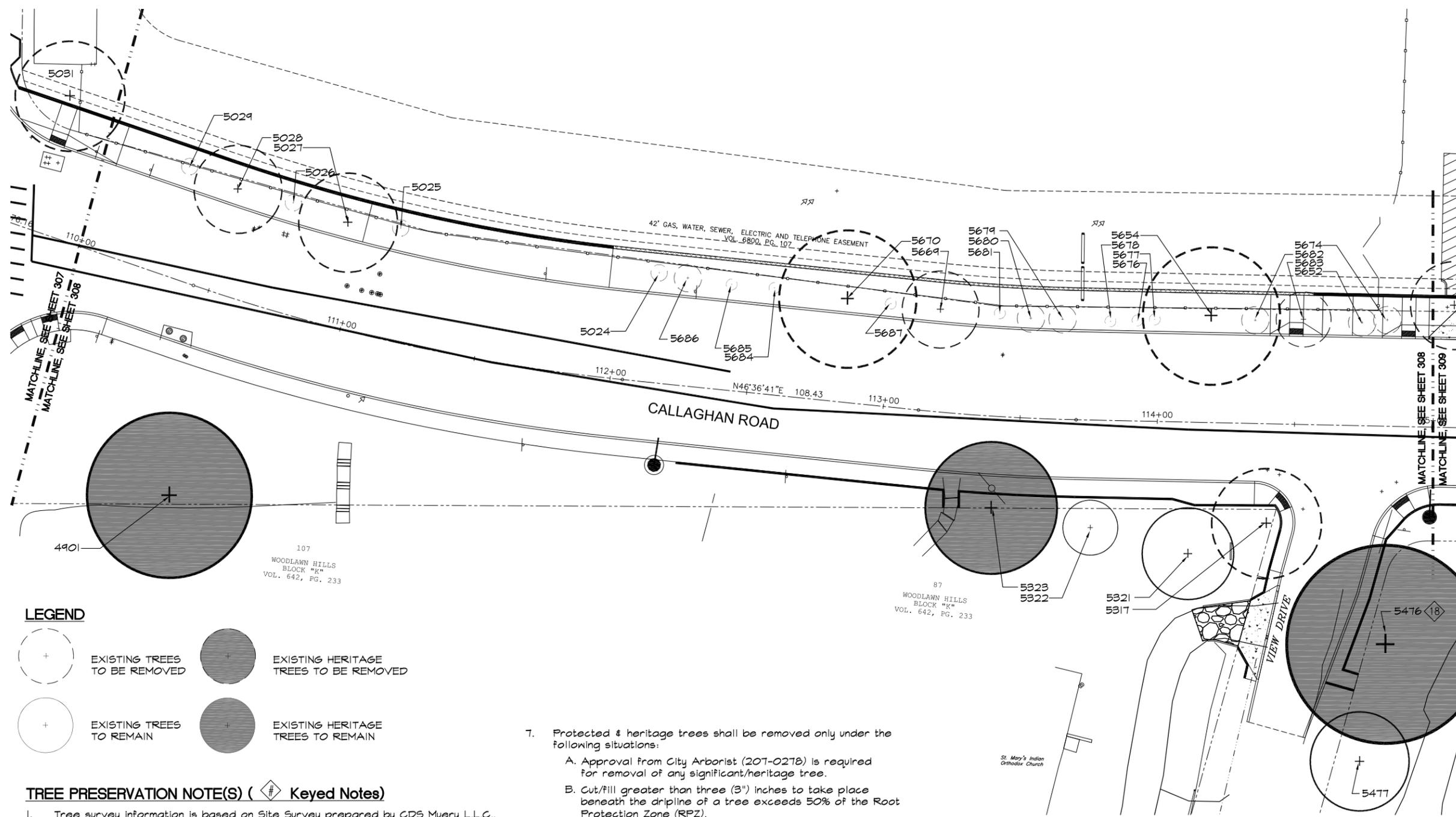
This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal and unless modified by TxDOT's Standards Specifications for Construction and Maintenance of Highways, Streets, and Bridges, Article 9.2. "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

- 6. Payment.** The structural design, work performed, and material furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Noise Wall". This price is full compensation for the wall design and furnishing and installing all drilled shafts and noise wall materials, including wall anchorage into the drilled shaft; for all sound wall preparation, hauling and erection; and for all labor, tools, equipment and incidentals.

- 7. Bid Item.**

Item 8004.1 – Noise Wall (Height)

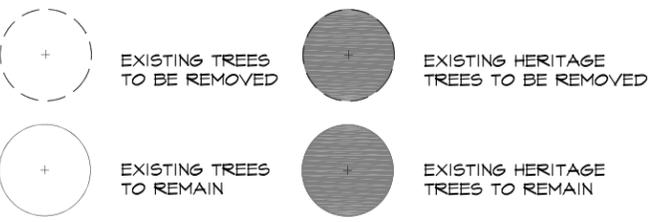
Item 8004.2 – Noise Wall (Height) – Thickened Wall



4-30-15

C•F•Z Group LLC
 Coltrane • Fernandez • Zavala
 Landscape Architecture
 & Planning
 7410 John Smith, Suite 208
 San Antonio, Texas 78229
 210-366-1911/210-366-0044 fax

LEGEND



TREE PRESERVATION NOTE(S) (Keyed Notes)

- Tree survey information is based on Site Survey prepared by CDS Muery L.L.C., San Antonio, Tx.
- Existing trees and understory are to be selectively retained as directed by Landscape Architect. Trees to remain shall include protected trees 6" caliper and larger, and small species trees 2" and larger.
- All conditions necessitating the removal or pruning of a tree shall be reviewed by Landscape Architect. The locations of any improvements with the potential of impacting trees shall be staked/delineated prior to the field review.
- Barricade fencing shall be placed to protect RPZ of all trees to remain that are adjacent to construction or disturbed areas unless otherwise approved by Landscape Architect to provide access to work. In these instances the minimum distance for barricade fencing from trunk shall be equal to 50% minimum of RPZ. Five foot (5'-0") from trunk of tree or clump of trees is allowed on one side of the tree with approved alternative construction methods only. Full RPZ is required on other side. Approval from City Arborist/Tree Inspector is required. Refer to Detail 1/Sheet 320 for tree barricade fencing.
- Prior to start of work, call 207-1111 to schedule a pre-construction and tree fencing inspection.
- Root Protection Zone (RPZ): RPZ requirements are defined as 12" diameter per 1" caliper of trunk at 42" height (Diameter Breast Height, DBH). Minimum RPZ requirements are 6" to each 1" caliper at DBH or 5' to trunk whichever is greater.

- Protected & heritage trees shall be removed only under the following situations:
 - Approval from City Arborist (207-0278) is required for removal of any significant/heritage tree.
 - Cut/fill greater than three (3") inches to take place beneath the dripline of a tree exceeds 50% of the Root Protection Zone (RPZ).
 - Construction of a building or other improvements require the removal of more than 30% of the viable portion of a tree crown.
 - Poor condition of tree.
- No equipment, vehicles or materials shall be operated or stored within the root protection zone. No clean-out areas will be constructed so that the material will be in or migrate to the root protection zone.
- All broken branches and exposed roots 2" in diameter or greater of Significant, Heritage or mitigation trees shall be cut cleanly. For oaks species, in order to prevent oak wilt infection, wound must be painted within 30 minutes.
- All wounds to the trunk, limbs, and root system of oak trees in the city that expose sapwood shall be painted within 30 min. of the wound with asphaltic, exterior oil or latex based paint.
- All woody material to be removed may be chipped into mulch & distributed on site within RPZ's at trees adjacent to construction & natural areas.
- The tree protection barrier shall be in place before any site work is initiated and maintained throughout the construction process.
- In addition, all trees, existing and planted, on a project are to be maintained in a healthy condition at all times. This includes irrigating, fertilizing, pruning and other maintenance as needed on the project. Trees that die within twelve (12) months shall be replaced with a tree of comparable size. Regarding replacement of preserved trees, significant trees shall be replaced at a 1:1 ratio (or inch-for-inch) and heritage trees shall be replaced at 1:1 ratio (or one-to-one inches).

- Contractor is responsible for providing a licensed tree maintenance professional throughout the project per City Ordinance, Part II, Chapter 21, Article VIII 21-171.
- All offsite staging, storage, project trailers, employee parking, etc. are required to comply with the terms and conditions of the approved tree permit.
- Contractor shall add a bidding line item for tree removal (each), tree pruning (each) and tree protection (linear feet).
- Trees which are damaged or lost due to contractor's negligence during construction shall be mitigated.
- Existing tree shall receive root trimming operations, tree canopy thinning and root fertilization monthly for duration of project. Employ a Certified Arborist for all tree operations. Cost shall be included in Pay Item 802. Apply 1" water weekly during construction operations. Install 4" shredded bark mulch in RPZ. Keep in place for duration of construction operations. See specifications.
- Submit a monthly Arborist report for all trees impacted by construction operations for the duration of construction operations. Cost shall be included in Pay Item 802.

REV NO.	DATE	DESCRIPTION	BY

ENLARGED TREE PRESERVATION PLAN

SHEET 308 OF 453

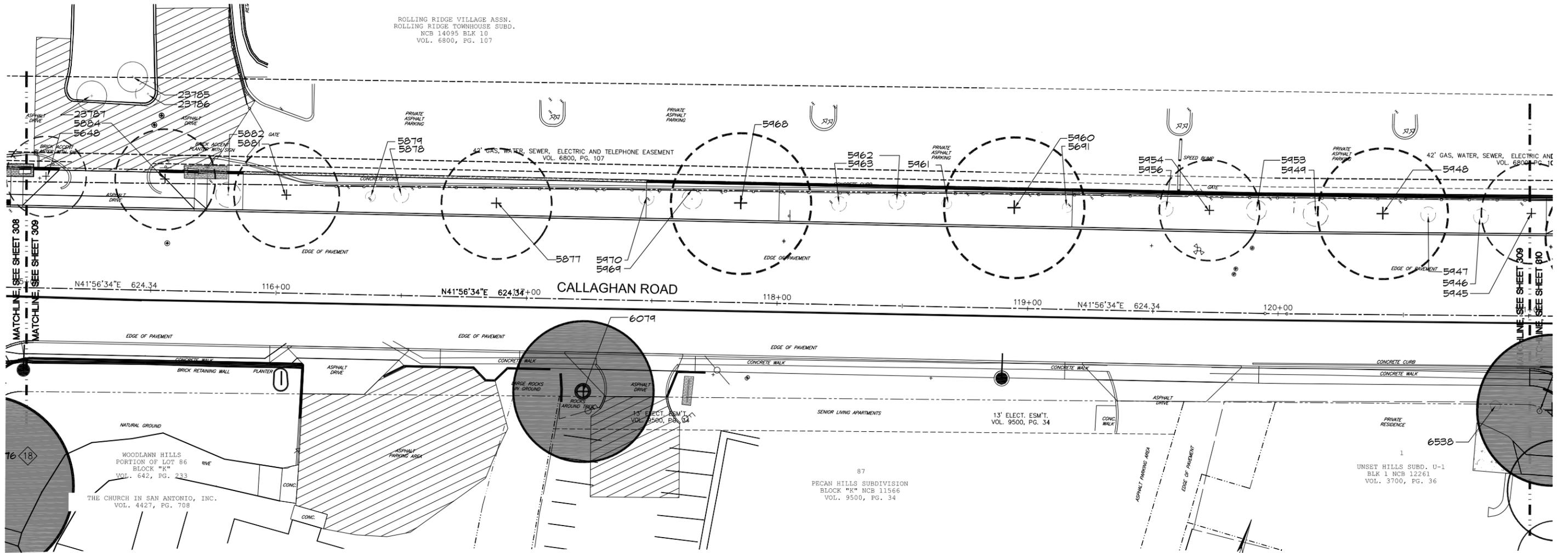
CITY OF SAN ANTONIO
 TRANSPORTATION & CAPITAL IMPROVEMENTS
 FEDERAL AID PROJECT



FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.	
6	XXXX	308 OF 453	
STATE	DIST.	COUNTY	
TX	SAT	BEXAR	
CONT.	SECT.	JOB	HIGHWAY NO.
0915	12	516	CALLAGHAN RD

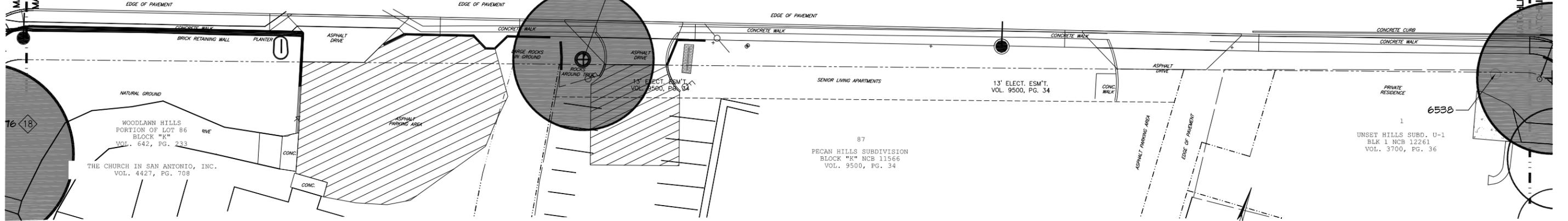
S:\13-836\Drawings\308_L3.dwg 7/30/2015 4:01 PM CFZ3

ROLLING RIDGE VILLAGE ASSN.
 ROLLING RIDGE TOWNHOUSE SUBD.
 NCB 1409'S BLK 10
 VOL. 6800, PG. 107

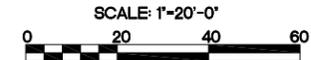


MATCHLINE SEE SHEET 308
MATCHLINE SEE SHEET 309

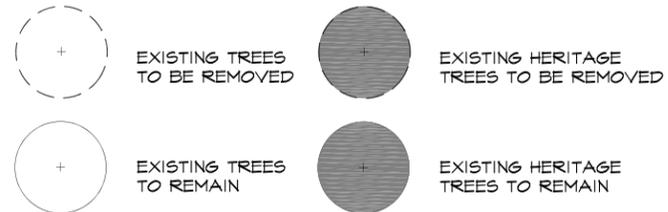
MATCHLINE SEE SHEET 309
MATCHLINE SEE SHEET 310



C•F•Z Group LLC
 Coltrane • Fernandez • Zavala
 Landscape Architecture
 & Planning
 7410 John Smith, Suite 208
 San Antonio, Texas 78229
 210-366-1911/210-366-0044 fax



LEGEND



NOTE:

1. See Sheet 308 for Tree Preservation Notes.
2. See Sheet 317-319 for Tree Preservation Schedule.
3. See Sheet 320 for Tree Preservation Details.

REV NO.	DATE	DESCRIPTION	BY

ENLARGED TREE
 PRESERVATION PLAN

SHEET 309 OF 453

CITY OF SAN ANTONIO
 TRANSPORTATION & CAPITAL IMPROVEMENTS
 FEDERAL AID PROJECT



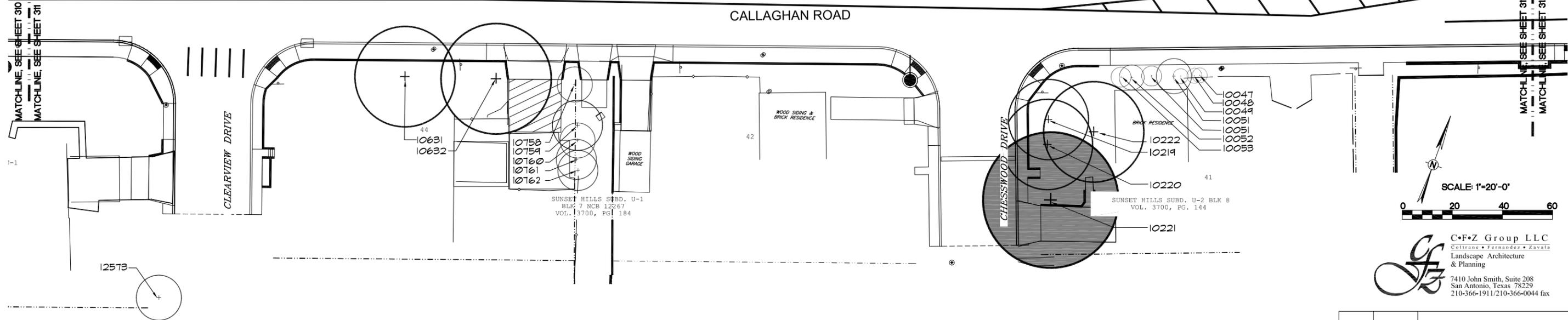
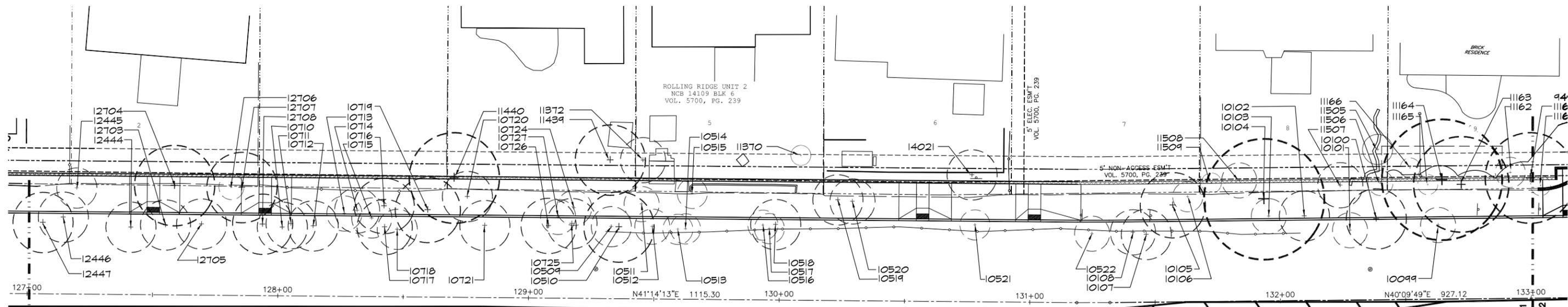
TEXAS DEPARTMENT
 OF TRANSPORTATION
CDS muery
 ENGINEERS • SURVEYORS
 381 PRUDEN DR. SAN ANTONIO, TEXAS • (210) 581-1111 • (210) 581-1453 • (210) 581-1458



4-30-15

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.	
6	XXXX	309 OF 453	
STATE	DIST.	COUNTY	
TX	SAT	BEXAR	
CONT.	SECT.	JOB	HIGHWAY NO.
0915	12	516	CALLAGHAN RD

S:\13-836\Drawings\3836_L3.dwg 7/30/2015 3:56 PM CFZ3



LEGEND



NOTE:

1. See Sheet 308 for Tree Preservation Notes.
2. See Sheet 317-319 for Tree Preservation Schedule.
3. See Sheet 320 for Tree Preservation Details.

C•F•Z Group LLC
 Coltrane • Fernandez • Zavala
 Landscape Architecture
 & Planning
 7410 John Smith, Suite 208
 San Antonio, Texas 78229
 210-366-1911/210-366-0044 fax

REV NO.	DATE	DESCRIPTION	BY

ENLARGED TREE
PRESERVATION PLAN

SHEET 311 OF 453

CITY OF SAN ANTONIO
TRANSPORTATION & CAPITAL IMPROVEMENTS
FEDERAL AID PROJECT



TEXAS DEPARTMENT
OF TRANSPORTATION
CDSmuery
 ENGINEERS • SURVEYORS
3811 FREDERICK ST. SAN ANTONIO, TEXAS • (210) 343-1111 • (210) 343-1112 • (210) 343-1113



4-30-15

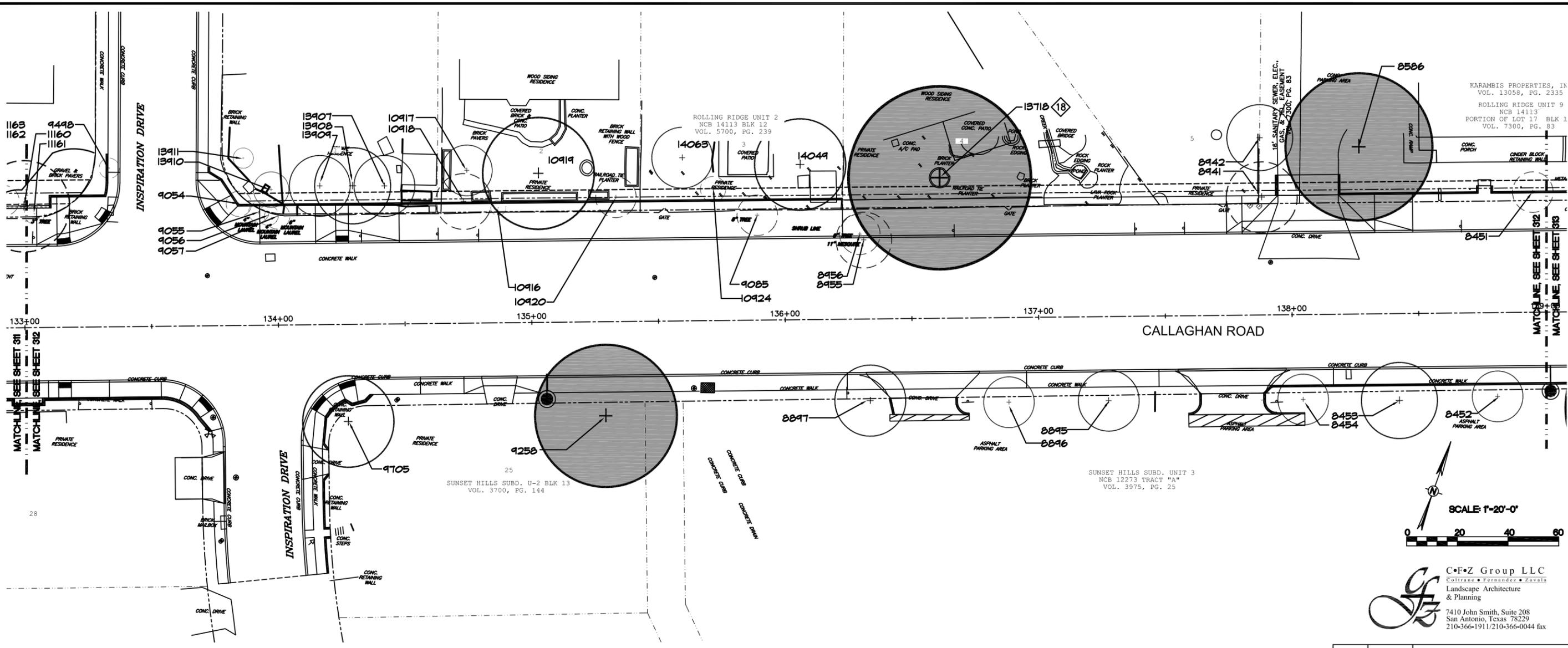
FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.	
6	XXXX	311 OF 453	
STATE	DIST.	COUNTY	
TX	SAT	BEXAR	
CONT.	SECT.	JOB	HIGHWAY NO.
0915	12	516	CALLAGHAN RD

KARAMBIS PROPERTIES, IN
VOL. 13058, PG. 2335
ROLLING RIDGE UNIT 9
NCB 14113
PORTION OF LOT 17 BLK 1
VOL. 7300, PG. 83

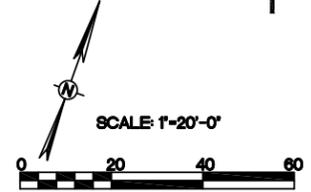
ROLLING RIDGE UNIT 2
NCB 14113 BLK 12
VOL. 5700, PG. 239

SUNSET HILLS SUBD. UNIT 3
NCB 12273 TRACT "A"
VOL. 3975, PG. 25

SUNSET HILLS SUBD. U-2 BLK 13
VOL. 3700, PG. 144

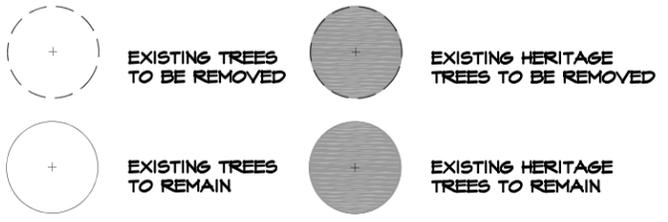


CALLAGHAN ROAD



C•F•Z Group LLC
Coltrane • Fernandez • Zavala
Landscape Architecture
& Planning
7410 John Smith, Suite 208
San Antonio, Texas 78229
210-366-1911/210-366-0044 fax

LEGEND



NOTE

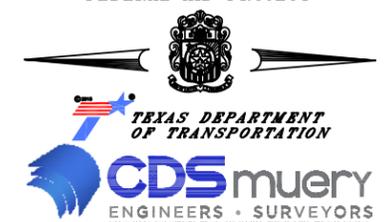
1. See Sheet 308 for Tree Preservation Notes.
2. See Sheet 317-319 for Tree Preservation Schedule.
3. See Sheet 320 for Tree Preservation Details.

REV NO.	DATE	DESCRIPTION	BY

ENLARGED TREE
PRESERVATION PLAN

SHEET 312 OF 453

CITY OF SAN ANTONIO
TRANSPORTATION & CAPITAL IMPROVEMENTS
FEDERAL AID PROJECT



4-30-15

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.	
6	XXXX	312 OF 453	
STATE	DIST.	COUNTY	
TX	SAT	BEXAR	
CONT.	SECT.	JOB	HIGHWAY NO.
0915	12	516	CALLAGHAN RD

OPERITIES, INC.
8, PG. 2335
EDGE UNIT 9
14113
OT 17 BLK 12
0, PG. 83

CONCRETE WALK
METAL EDGING
CINDER BLOCK RETAINING WALL
LIGHT POST
2" DIAMETER CONC.

8450 18

7984 18

7985

PORTION OF LOT 1 BLK 18
NCB 16070
ROLLING RIDGE UNIT 8
VOL. 6900, PG. 98

UNITED COMMUNITY INVESTORS, L.P.
VOL. 13800, PG. 1053

PORTION OF LOT 1 BLK 18
NCB 16070
ROLLING RIDGE UNIT 8
VOL. 6900, PG. 98
GCG SUMMIT, LTD. VOL.
14200, PG. 2218

7249 18

ACOSTA PROPERTIES, LLC
VOL. 12941, PG. 2377
PORTION OF LOT 1 BLK 18
NCB 16070
ROLLING RIDGE UNIT 8
VOL. 6900, PG. 98

CALLAGHAN ROAD

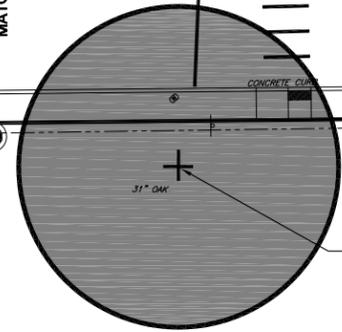
140+00 141+00 142+00 143+00 144+00 145+00

N40°09'43"E 927.12

N40°47'37"E 564.46

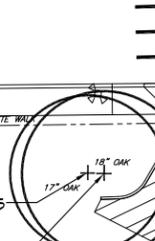
MATCHLINE, SEE SHEET 312
MATCHLINE, SEE SHEET 313

MATCHLINE, SEE SHEET 313
MATCHLINE, SEE SHEET 314



31" OAK

8443



17" OAK

8385

8386

18" OAK

SUNSET HILLS SUBD. U-4
NCB 12273 BLK 13
VOL. 3975, PG. 187

TRAILWOOD DRIVE

SUNSET HILLS SUBD. U-4
NCB 12283 BLK 20
VOL. 4080, PG. 20

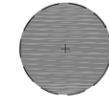
12" HACKBERRY
7706

SUNSET HILLS SUBD. U-5
NCB 12283 BLK 20
VOL. 4080, PG. 20

LEGEND



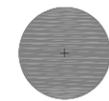
EXISTING TREES
TO BE REMOVED



EXISTING HERITAGE
TREES TO BE REMOVED



EXISTING TREES
TO REMAIN



EXISTING HERITAGE
TREES TO REMAIN

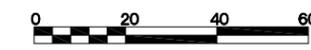
NOTE:

1. See Sheet 308 for Tree Preservation Notes.
2. See Sheet 317-319 for Tree Preservation Schedule.
3. See Sheet 320 for Tree Preservation Details.

C•F•Z Group LLC
Coltrane • Fernandez • Zavala
Landscape Architecture
& Planning
7410 John Smith, Suite 208
San Antonio, Texas 78229
210-366-1911/210-366-0044 fax



SCALE: 1"=20'-0"

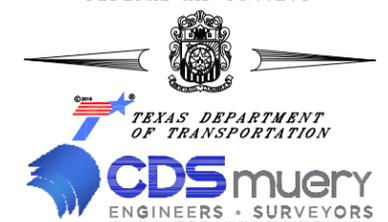


REV NO.	DATE	DESCRIPTION	BY

ENLARGED TREE
PRESERVATION PLAN

SHEET 313 OF 453

CITY OF SAN ANTONIO
TRANSPORTATION & CAPITAL IMPROVEMENTS
FEDERAL AID PROJECT



4-30-15

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.	
6	XXXX	313 OF 453	
STATE	DIST.	COUNTY	
TX	SAT	BEXAR	
CONT.	SECT.	JOB	HIGHWAY NO.
0915	12	516	CALLAGHAN RD

SPECIAL PROVISION

008 - 999 – COSA-1

Prosecution and Progress

For this project, Item 8, “Prosecution and Progress” of the City of San Antonio’s Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Guidance to Contractors in preparing LAM Project Schedules

All Contractor CPM schedules shall be calculated and delivered to COSA in Primavera Systems, Inc. software. Acceptable versions are Primavera 5.0 and above or Primavera Contractor version 4.1 and above.

8.12 Critical Path Method is voided and replaced with the following:

8.12 Critical Path Method Project Schedule. The Contractor shall create and maintain a Critical Path Method (CPM) Project Schedule showing the manner of execution of work that he intends to follow in order to complete the contract within the allotted time. The project schedule shall employ computerized CPM for the planning, scheduling and reporting of the Work as described in this specification. The CPM project schedule shall be prepared using the Precedence Diagram Method (PDM). The Contractor shall create and maintain the schedule using Primavera Project Manager 5.x or Primavera Contractor 4.1 or above. The observance of the requirements herein is an essential part of the work to be done under the contract. No direct compensation will be allowed for fulfilling these requirements, as such work is considered subsidiary to the various bid items of the contract.

.1 Personnel. The Contractor shall provide an individual, referred to hereafter as the Scheduler, to create and maintain the Project Schedule. The Scheduler shall be proficient in Critical Path Method (CPM) analysis as demonstrated through certification from Project Management Institute (PMI), Association for the Advancement of Cost Engineering (AACE) or possess sufficient experience to be able to perform required tasks on the specified software and be able to prepare and interpret reports from the software. The Scheduler shall be made available for discussion or meetings when requested by the City.

.2 Project Schedule. At least twenty (20) calendar days prior to the preconstruction conference, the Contractor shall submit a Project Schedule which shall show the sequence and interdependence of activities required for complete performance of the work. All schedule submittals shall be in the electronic form to include PDF plots of the schedule, a PDF plot defining the

Critical Path and two week look-ahead, and include the native Primavera file format. The Contractor shall submit the schedule via electronic mail, CD-Rom, floppy disc, or any other electronic media acceptable to the City. The City will review the Project Schedule within twenty (20) calendar days for compliance with the specifications and notify the Contractor at the conference of its acceptability. No work shall begin until the Project Schedule has been accepted by the City.

- a. The Project Schedule shall show the sequence and interdependence of activities required for complete performance of the work. The Contractor shall be responsible for assuring all necessary work items are included and work sequences are logical and show a coordinated plan of the work. The purpose of the City requiring the Project Schedule shall be to:
 - i. Ensure adequate planning during the execution and progress of the work in accordance with the allowable number of calendar days and all milestones;
 - ii. Assure coordination of the efforts of the Contractor, City, Utilities and others that may be involved in the project and that activities are included in the schedule highlighting coordination points with others;
 - iii. Assist the Contractor and City in monitoring the progress of the work and evaluating proposed changes to the contract; and,
 - iv. Assist the City in administering the contract time requirements.
- b. Each activity on the Project Schedule shall be described by: an activity number utilizing an alphanumeric designation system tied to the traffic control plans, and that is agreeable to the City; concise description of the work represented by the activity; and, activity durations in whole calendar days with a maximum of twenty (20) calendar days. Durations greater than twenty (20) calendar days may be used for non-construction activities (mobilization, submittal preparation, curing, etc.), and other activities mutually agreeable between the City and Contractor. The Contractor shall provide to the City a legend for all abbreviations. The activities shall be coded so that organized plots of the Project Schedule may be produced. Typical activity coding includes traffic control phase, location and work type. **Show an estimated production rate per working day for each work activity.** Activity durations shall be based on the production rates shown.
- c. Seasonal weather conditions shall be considered and included in the Project Schedule for all work influenced by temperature and/or precipitation. Seasonal weather conditions shall be determined by an assessment of average historical climatic conditions. Average historical weather data is available through the National Oceanic and Atmospheric Administration (NOAA). These effects will be simulated through the use of work calendars for each major work type (i.e., earthwork, concrete

paving, structures, asphalt, drainage, etc.). **Project and work calendars should be updated each month to show days actually able to work on the various work activities.**

- d. Total float is defined as the amount of time between the early start date and the late start date, or the early finish date and the late finish date, for each and every activity in the schedule. Float time in the Project Schedule is a shared commodity between the City and the Contractor.
- e. Only City responsible delays in activities that affect milestone dates or the contract completion date, as determined by CPM analysis, will be considered for a time extension.
- f. The project shall be grouped by PROJECT and the original and remaining duration shall be displayed. The grouping band will, by default, report work days planned. Two additional level of effort activities shall be added to the schedule as “time calculators,” one with a seven day calendar without holidays and the other with a seven day calendar with City holidays. The calculation of their days will show up in the duration columns in Primavera.
- g. Work shall be scheduled based upon the contractor’s standard work week utilizing the appropriate calendar assignments in Primavera software. If the Contractor initial baseline plan is to perform the Work on a six or seven day work week, then the appropriate calendar in Primavera must be used and the Engineer must be notified in writing through the Submittal process. This does not affect the total calendar days allotted by the contract.
- h. Setting Up working day calendar. Assign working calendars for the days you plan to work. Designate all City holidays (12) as non-working days (holidays). For dates beyond the current calendar year assume that the City holidays are the same as the current calendar year.
- i. Organization and coding:
 - i. Code and organize all work by Work Breakdown Structure (WBS). An example WBS will be provided by the City.
- j. Submittals shall be included in the schedule with a logical tie to what each drives. Rejected submittals that are re-submitted constitute adding an activity to the schedule to represent the re-Submittal and the activity number should equal the Submittal number i.e., if the original Submittal was 100, then the activity number should be 100 as well. If the re-Submittal number is 100A, then the activity number should be 100A as well.
- k. Approved Change Orders shall be added to the schedule.

- l. Constraints are limited to project start, project finish, material delivery, and use on Submittals. If a schedule requires additional constraints, then an explanation shall accompany the schedule Submittal.
- m. The schedule shall include activity milestones for material delivery.
- n. Default progress is disallowed.
- o. If work is performed out of sequence, then an explanation must be included in the project narrative.
- p. Payment may be delayed until acceptable baseline or updated schedule is received and accepted by the City.

.3 Joint Review, Revision and Acceptance. Within twenty (20) calendar days of receipt of the Contractor's proposed Project Schedule, the City shall evaluate the schedule for compliance with this specification, and notify the Contractor of its findings. If the City requests a revision or justification, the Contractor shall provide a satisfactory revision or adequate justification to the satisfaction of the City within seven (7) calendar days. If the Contractor submits a Project Schedule for acceptance, which is based on a sequence of work not shown in the plans, then the Contractor shall notify the City in writing, separate from the schedule submittal.

- a. The City's review and acceptance of the Contractor's Project Schedule is for conformance to the requirements of the contract documents only. Review and acceptance by the City of the Contractor's Project Schedule does not relieve the Contractor of any of its responsibility for the Project Schedule or of the Contractor's ability to meet interim milestone dates (if specified) and the contract completion date, nor does such review and acceptance expressly or by implication warrant, acknowledge or admit the reasonableness of the logic, durations, manpower or equipment loading of the Contractor's Project Schedule. In the event the Contractor fails to define any element of work, activity or logic and the City review does not detect this omission or error, such omission or error, when discovered by the Contractor or City shall be corrected by the Contractor at the next monthly schedule update and shall not affect the project completion date.

.4 Updates. The Project Schedule shall be updated on a monthly basis. The Project Schedule update shall be submitted one week prior to the pay application submittal. The Contractor shall meet with the City each month at a scheduled update meeting to review actual progress made through the data date of the schedule update. The review of progress will include dates activities actually started and/or completed, the percentage of work completed, the remaining duration of each activity started and/or completed, and the amount of

work to complete with an analysis of the relationship between the remaining duration of the activity and the quantity of material to install over that given period of time with a citation of past productivity. The percentage of work complete shall be calculated by utilizing the quantity installed divided by the budgeted quantity from the baseline schedule. The monthly schedule update package shall include a progress narrative explaining progress, defining the Critical Path, identification of any potential delays, etc.

The project schedule update shall be grouped by Project, then WBS. The layout shall include the following columns:

- a. Activity ID
- b. Activity Description
- c. Original Durations
- d. Remaining Durations
- e. Start and Finish Dates
- f. Baseline Start and Finish Dates
- g. Total Float
- h. Performance Percent Complete
- i. Display logic and target bars in the Gantt bar chart view

Narrative Requirements

- a. General progress for the update period
- b. Identify work performed out of sequence
- c. Change to project's logic
- d. Identify constraints
- e. Define critical path of project
- f. Identify delays that occurred and potential delays

The narrative shall be completed using the narrative template provided.

.5 Project Schedule Revisions. If the Contractor desires to make major changes in the Project Schedule, the Contractor shall notify the City in writing and submit the proposed schedule revision. The written notification shall include the reason for the proposed revision, what the revision is comprised of, and how the revision was incorporated into the schedule. Major changes are hereby defined as those that may affect compliance with the contract

requirements or those that change the critical path. All other changes may be accomplished through the monthly updating process without written notification.

.6 Time Impact Analysis. The Contractor shall notify the City when an impact may justify an extension of contract time or adjustment of milestone dates. This notice shall be made in writing as soon as possible, but no later than the end of the next estimate period after the commencement of an impact or the notice for a change is given to the Contractor. Not providing notice to the City within twenty (20) calendar days after receipt will indicate the Contractor's approval of the time charges as shown on that time statement. Future consideration of that statement will not be permitted and the Contractor forfeits his right to subsequently request a time extension or time suspension unless the circumstances are such that the Contractor could not reasonably have knowledge of the impact by the end of the next estimate period.

- a. When changes are initiated or impacts are experienced, the Contractor shall submit to the City a written time impact analysis describing the influence of each change or impact. A "time impact analysis" is an evaluation of the effects of changes in the construction sequence, contract, plans, or site conditions on the Contractor's plan for constructing the project, as represented by the schedule. The purpose of the time impact analysis is to determine if the overall project has been delayed, and if necessary, to provide the Contractor and the City a basis for making adjustments to the contract.
- b. A time impact analysis shall consist of one or all of the steps listed below:
 - Step 1. Establish the status of the project before the impact using the most recent project schedule update prior to the impact occurrence.
 - Step 2. Predict the effect of the impact on the most recent project schedule update prior to the impact occurrence. This requires estimating the duration of the impact and inserting the impact into the schedule update. Any other changes made to the schedule including modifications to the calendars or constraints shall be noted.
 - Step 3. Track the effects of the impact on the schedule during its occurrence. Note any changes in sequencing, and mitigation efforts.
 - Step 4. Compare the status of the work prior to the impact (Step 1) to the prediction of the effect of the impact (Step 2), and to the status of the work during and after the effects of the impact are over (Step 3). Note that if an impact causes a lack of access to a portion of the project, the effects of the impact may extend to include a reasonable period for remobilization.

- c. The time impact analysis shall be electronically submitted to the City. If the Project Schedule is revised after the submittal of a time impact analysis but prior to its approval, the Contractor shall promptly indicate in writing to the City the need for any modification to its time impact analysis. One (1) copy of each time impact analysis shall be submitted within fourteen (14) calendar days after the completion of an impact. The City may require Step 1 and Step 2 of the time impact analysis be submitted at the commencement of the impact, if needed to make a decision regarding the suspension of contract time. Approval or rejection of each time impact analysis by the City shall be made within fourteen (14) calendar days after receipt unless subsequent meetings and negotiations are necessary.

PROJECT SCHEDULE NARRATIVE

PROJECT NAME:	
CONTRACTOR NAME:	
PERIOD ENDING:	
SUBMITTAL DATE:	
PREPARED BY:	

Evaluation Summary	
NTP:	
Data Date:	
Contractual Completion Date:	
Current Scheduled Completion Date:	
Previous Period Scheduled Completion Date:	
Contract Calendar Days:	

Yes	No	
		Contractor has included both a hard copy (pdf) and the native Primavera file format?
		Project calendars have been updated to reflect actual charged working days for the progress period, according to the contract time statement?
		Schedule update reflects approved change orders for the progress period?
		Have any major changes been made to the schedule? <i>(A major change is defined as those that may affect compliance with the contract requirements or those that change the critical path. If yes, written notification is required to include the reason for the proposed revision, what the revision is comprised of, and how the revision was incorporated into the schedule.)</i> If yes, provide details in Section 3 & 5 below.
		Are any delays included in this schedule submittal for which the Contractor intends to submit a Time Impact Analysis (TIA) for a claim delay? If yes, provide details in Section 6 below.

<p>1. Identify general progress for the update period.</p>
<p>2. Identify work performed out of sequence and provide an explanation for the reason.</p>

3. Describe any changes made to the project's logic and the reason for the change(s).
4. Identify any new constraints used and provide an explanation for their use.
5. Define the critical path of the project, including any changes from the previous update.
6. Identify any delays that have occurred for the progress period, the reason for the delay, and current status.
7. Identify any potential delays and possible mitigation efforts.
8. Other comments.

**COSA Local Area Management Projects
Table of Contents**

CALLAGHAN ROAD

VOLUME I

1. Invitation for Bid
2. COSA General Requirements and Covenants 1 thru 9 (2004 TxDOT Specifications)
3. DBE Goal Sheet
4. Contractor's Assurance
5. Child Support Statement
6. Statement on Convict Produced Material & Convict Labor
7. List of Examples
8. Calendar Day Contract – Example
9. Performance Bond – Example
10. Payment Bond – Example
11. DBE forms – Example
12. Engineer's Seal page
13. General Notes
14. List of Governing Specifications
15. Special Provisions
 - Required Contractor Provisions, Federal-Aid Construction Contracts (Form FHWA 1273, May 2012) with current Wage Rates
 - Special Provision ((000---003 COSA), Notice to All Bidders
 - Special Provision (000---004 COSA), Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)
 - Special Provision (000---006 COSA), Standard Federal Equal Employment Opportunity Construction Contract Specifications
 - Special Provision (000---009 COSA), Certification of Nondiscrimination in Employment
 - Special Provision (000---011 COSA), Department Division Mailing and Physical Addresses
 - Special Provision (000---1483 COSA), Notice of Changes to U.S. Department of Labor Required Payroll Information
 - Special Provision (000-1966 COSA), Disadvantaged Business Enterprise in Federal-Aid Contracts
 - Special Provision (000--2329 COSA), Partnering
 - Special Provision (000--2332 COSA), Schedule of Liquidated Damages
 - Special Provision (000--2607 COSA), Nondiscrimination
 - Special Provision (000--2638 COSA), On-the-Job Training Program
 - Special Provision (000--2839 COSA), Important Notice to Contractors
 - Special Provision (000---9000 COSA), Important Notice to Contractors
 - Special Provision (001---015 COSA), Definition of Terms
 - Special Provision (002---017 COSA), Instructions to Bidders
 - Special Provision (003---033 COSA), Award and Execution of Contract
 - Special Provision (004---017 COSA), Scope of Work
 - Special Provision (005---004 COSA), Control of Work
 - Special Provision (006---030 COSA), Control of Materials
 - Special Provision (007---918 COSA), Legal Relations and Responsibilities
 - Special Provision (008---119 COSA), Prosecution and Progress

- ****Special Provision (008---999 COSA-1), Prosecution and Progress***
- Special Provision (009---009 COSA), Measurement and Payment
- Special Provision (009---015 COSA), Measurement and Payment
- Special Provision (100---002 COSA), Preparing Right of Way
- Special Provision (164---002 COSA), Seeding for Erosion Control
- Special Provision (166---001 COSA), Fertilizer
- Special Provision (169---002 COSA), Soil Retention Blankets
- Special Provision (260---003 COSA), Lime Treatment (Road Mixed)
- Special Provision (300---039 COSA), Asphalts, Oils, and Emulsions
- Special Provision (340---003 COSA), Dense-Graded Hot-Mix Asphalt (Method)
- Special Provision (360---003 COSA), Concrete Pavement
- Special Provision (350---006 COSA), Microsurfacing
- Special Provision (360---013 COSA), Concrete Pavement
- Special Provision (416---001 COSA), Drilled Shaft Foundations
- Special Provision (420---002 COSA), Concrete Structures
- Special Provision (421---035 COSA), Hydraulic Cement Concrete
- Special Provision (424---002 COSA), Precast Concrete Structures
- Special Provision (440---006 COSA), Reinforcing Steel
- Special Provision (441---008 COSA), Steel Structures
- Special Provision (442---016 COSA), Metal for Structures
- Special Provision (447---002 COSA), Structural Bolting
- Special Provision (448---002 COSA), Structural Field Welding
- Special Provision (450---001 COSA), Railing
- Special Provision (462---015 COSA), Concrete Box Culverts and Storm Drains
- Special Provision (464---006 COSA), Reinforced Concrete Pipe
- Special Provision (465---002 COSA), Manholes and Inlets
- Special Provision (492---001 COSA), Timber Preservative and Treatment
- Special Provision (500---011 COSA), Mobilization
- Special Provision (502---033 COSA), Barricades, Signs, and Traffic Handling
- Special Provision (506---010 COSA), Temporary Erosion, Sedimentation, and Environmental Controls
- Special Provision (512---002 COSA), Portable Concrete Traffic Barrier
- Special Provision (530---006 COSA), Intersections, Driveways, and Turnouts
- Special Provision (560---001 COSA), Mailbox Assemblies
- Special Provision (610---015 COSA), Roadway Illumination Assemblies
- Special Provision (620---001 COSA), Electrical Conductors
- Special Provision (624---014 COSA), Ground Boxes
- Special Provision (628---003 COSA), Electrical Services
- Special Provision (636---014 COSA), Aluminum Signs
- Special Provision (643---001 COSA), Sign Identification Decals
- Special Provision (672---034 COSA), Raised Pavement Markers
- Special Provision (681---002 COSA), Temporary Traffic Signals
- Special Provision (682---003 COSA), Vehicle and Pedestrian Signal Heads
- Special Provision (685---014 COSA), Roadside Flashing Beacon Assemblies
- Special Provision (687---005 COSA), Pedestal Pole Assemblies
- Special Provision (740---001 COSA), Graffiti Removal and Anti-Graffiti Coating
- Special Provision (6266--017 COSA), Video Imaging Detection System
- Special Provision (9800 -----COSA), Project Signs

16. Special Specifications

SPECIAL SPECIFICATIONS – COSA

- Item 526 Field Office (dated June 2010)
- Item 696 Radar Vehicle Detection Devices (RVDD)
- Item 800 Project Sign
- Item 801 Tree and Landscape Protection
- Item 802 Tree Pruning, Soil Amending and Fertilization
- Item 8000 Stamped Colored Concrete
- Item 8001 Wrought Iron Fence
- Item 8002 Wooden Privacy Fence
- Item 8003 Temporary Drainage Structures
- Item 8004 Noise Walls

SPECIAL SPECIFICATIONS – TxDOT

1. Item 1122 Temporary Erosion, Sedimentation, and Environmental Controls
2. Item 2164 Stormwater Treatment System
3. Item 6007 Removing Traffic Signals
4. Item 8606 Radar Presence Detector
5. Item 8615 Radar Advance Detection Devices
6. Item 8667 Battery Back-Up System for Signal Cabinets
7. Item 8835 Accessible Pedestrian Signal Units

VOLUME II

SPECIAL SPECIFICATIONS – CPS

8. Item 9997 CPS Energy – Specifications for Construction of Natural Gas Distribution Facilities

SPECIAL SPECIFICATIONS – SAWS

9. Item 9998 Sanitary Sewer for TxDOT/LAM Projects
10. Item 9999 Water Mains and Service Lines for TxDOT/LAM Projects
11. Item 3100 4-inch, 8-inch, and 12-inch Temporary Waterline

SPECIAL CONDITIONS – SAWS

12. Item 095 Waterworks and Sanitary Sewer Construction

17. Envelope One

- a. Bid documents (Proposal)

18. Envelope Two

- a. Bid Bond or cashier's check

- b. Assurance of Compliance with Equal Employment Opportunity Statement
- c. Certificate of Non-Segregated Facilities
- d. Statement on President's Executive Order
- e. Addenda Acknowledgement Form
- f. Disclosure of Lobbying Activities
- g. Child Support Form
- h. Certificate of Non-Collusion
- i. Certificate of Interest In Other Bid Proposals For This Work
- j. Litigation Disclosure Form
- k. Certification of Absence of Suspension, Debarment, Voluntary Exclusion, or Determination of Ineligibility

19. Driveway Plat Plans

** Revised per Addendum No. 1*

ITEM 2

INSTRUCTIONS TO BIDDERS LOCAL AGENCY MANAGED PROJECTS (LAM)

2.1. Introduction. The 2004 Specifications for the General Provisions (Items 1 – 9) are written in passive voice, indicative mood. The Special Provisions for the General Provisions are written in active voice, imperative mood. The subject of imperative sentences is understood to be “The Contractor.” Phrases such as “as approved,” “unless approved,” “upon approval,” “as directed,” “as verified,” “as ordered,” and “as determined” refer to actions of the Engineer unless otherwise stated, and it is understood that the directions, orders, or instructions to which they relate are within the limitations of and authorized by the Contract.

2.2. Bid Proposal Documents. Sealed bid proposals and other required documents will be received at the Office of the City Clerk (City Hall, 100 Military Plaza, 2nd Floor, San Antonio, Texas), as set forth in the Invitation for Bids (IFB). Information and Bidding documents are obtainable from the Consultant as set forth in the published IFB.

.1 The following documents constitute the required information to be submitted as a part of the bid proposal:

- a. Envelope #1, furnished by the City shall contain:
 - Bid document and any alternate bids
 - Bid bond or cashier’s check
 - Assurance of Compliance with Equal Employment Opportunity Statement
 - Certificate of Non-Segregated Facilities
 - Statement on President’s Executive Order
 - Addenda Acknowledgement Form
 - Disclosure for Lobbying Activities
 - Child Support Statement
 - Certificate of Non-Collusion
 - Certificate of Interest in Other Bid Proposals for This Work
 - Litigation Disclosure Form
 - Certification of Debarment

The envelope furnished by the City shall be clearly marked with the name of the project for which bids are to be submitted.

Bid Proposal Forms. The Bid shall be submitted on Bid Proposal Forms provided with the specifications. Envelope #1 shall contain the Bid Proposal and shall be clearly identified as: Bid Proposal For: Callaghan Road – IH 410 to Spur 421 (Bandera Road)

Envelope #1 will be received in the Office of the City Clerk until 2:00 p.m. CST on, Friday, August 28, 2015. All envelopes will be opened and publicly read aloud at 2:00 p.m. Any Bids received after that will be returned unopened.

2.3. Bidder Findings of Discrepancies or Ambiguities. Prospective Bidders shall notify Consultant and Owner in writing before the deadline for questions prior to scheduled Bid Opening date if discrepancies and ambiguities or omissions are found in the Project Plans and/or Specifications, or if further information or interpretation is desired.

2.4. Addenda. Answers by Consultant and/or Owner will be given in writing to all prospective Bidders in Addendum form. All provisions and requirements of such addenda will supersede or modify affected portions of the Project Plans and/or Specifications. All addenda will be incorporated in and bound with the Contract Documents. No other explanation or interpretation will be considered official or binding upon the Owner.

.1 Addendum Acknowledgement Form. The Contractor's submitted Bid Proposal shall be based on Contractor's investigation and knowledge of the conditions at the Project site, the Specifications, the Plans and any Addenda to the Specifications and/or Plans issued during time of advertisement prior to bidding. The Bidders shall sign and submit the Addendum Acknowledgement Form with the Bid Packet.

2.5. Bid Proposal to City of San Antonio (Form 9-12). The bid proposals shall be submitted on Form 9-12 (Rev. May 2003), "Bid Proposal to City of San Antonio." The envelope containing any Bid Proposal and other documents shall be endorsed as stipulated in the Invitation for Bids.

2.6. Proposal Guaranty. Unless the bid is under \$25,000, an original Bid Proposal Guaranty issued by a corporate surety company licensed to do business in the State of Texas and payable to the order of the City of San Antonio, Texas, in an amount of not less than five (5) percent of the greatest total amount of the Bid Proposal, must accompany each bid as a guarantee that if awarded the Contract the successful Bidder will promptly enter into a Contract and execute bonds on the standard forms provided, as outlined in the specifications and Contract Documents.

.1 For Bids Less Than \$25,000. Bidders shall submit either a cashier's or certified check in lieu of the Bid Bond only if the bid amount is less than \$25,000.

2.7. Omissions in Bid Proposals. Bid proposals will be submitted in duplicate copy on the City forms furnished, except as provided below. Bid proposals containing omissions (except in unit prices as described in Article 2.12), alterations of City's wording contained in Contract Documents, conditional bids or qualifications, which modify the Bidder's bid proposal from the Owner's IFB, will be rejected as non-responsive.

2.8. Computer Printout for Unit Prices. Bidders, at their option, in lieu of hand writing the unit prices in words in ink on the bid proposal form, may submit an original computer printout sheet bearing certification by and authorized signature for the bidding firm. The unit prices shown on acceptable printouts will be unit prices used to tabulate the bid and used in the contract if awarded by the City. As a minimum, computer printouts must contain the information and in the arrangement shown on the "Example of Bid Prices Submitted by Computer Printout" form at the end of this section. Bid proposals with unit prices by computer printout will be considered as non-responsive if:

- a. The bid proposal does not bear the certification verbatim, as shown on the example in the bid proposal.
- b. The computer printout does not have an authorized signature on behalf of the firm proposing the bid.
- c. The computer printout omits or alters required bid items or includes items not shown in the bid proposal.
- d. The bid proposal issued by the City is not fully executed as provided above.

.1 If the bid proposal, submitted by the Bidder, contains both the form furnished by the City and a computer printout, completed according to the instructions, only one will be considered. In this situation, the bid prices shown on the computer printout will be used to determine the bid.

2.9. Bid Alternates. Bidders shall submit a unit price for each Work element pay item for which a bid is requested, except in the case of an alternate. In such a case, the procedure is as follows:

.1 Additive Alternate. In the case of Additive Alternates, unit prices must be submitted for the base bid and the items in all proposed additive alternates.

.2 Substitute Alternate. In the case of a Substitute Alternate (these alternates appear in sets of two or more related alternates), unit prices must be submitted for all the items in the base bid and for all the items in one of the related substitute alternates in each set.

2.10. Extensions in Unit Prices. The unit price shall be inserted on the Bid Proposal sheet in words (not figures) in the "DESCRIPTION AND UNIT PRICE BID" column. Extensions, which are the unit prices multiplied by the approximate quantities for each item, shall be inserted in figures in the "EXTENSION" column. Bids shall

be submitted only on the City's bid proposal form or approved computer printout sheets. Bids not so submitted will be considered non-responsive. Conditional bids will also be considered non-responsive.

2.11. . Blank Unit Prices. All applicable blank spaces in the Bid Proposal Form shall be completed. The Signature shall be in longhand. Any interlineation, alteration or erasure must be initialed by the signatory on the Bid Proposal. In the event additional or extra blank spaces remain after completion of the various forms, Contractor shall enter the terms "none" or "not applicable" on any remaining blank spaces to indicate that the Contractor has considered City requests for information on every line presented. Any blank unit prices will be tabulated and evaluated as "no cost" to the City.

2.12. Signature Requirement. Each copy of the Bid shall include the legal name of Bidder and a statement whether Bidder is a sole proprietor, a partnership, or corporation, or any other legal entity, and each copy shall be signed by the person or persons legally authorized to bind the Bidder to a Contract. A Bid by a corporation shall further give the state of incorporation and affix the Corporate Seal thereto. A Bid submitted by a corporate agent for Bidder shall be accompanied by a valid Power of Attorney, attached, certifying the agent's authority to bind Bidder.

2.13. Amendments Past Bid Opening. Bid proposal amounts may not be amended or modified in any manner after the time set for the bid opening in the published IFB.

2.14. Right to Reject Bids. The City expressly reserves the right to reject any or all Bid Proposals submitted.

.1 Reasons for Determining Bids Non-Responsive. Any proposal that has one or more of the deficiencies listed in Articles 2.8, 2.9, 2.11 or below will be considered non-responsive and will not be read publicly.

- a. The person or, in the case of a joint venture, persons do not sign the proposal.
- b. The proposal guaranty does not comply with the requirements contained in Article 2.7, "Proposal Guaranty."
- c. The proposal is in a form other than the official proposal form issued to the Bidder or Bidders or acceptable computer printout.
- d. The proposal was not in the hands of the letting official at the time and location specified in the advertisement.
- e. The proposal submitted has the incorrect number of items.
- f. A computer printout, when used is not signed in the name of the Bidder (or joint Bidders, in the case of a joint venture), is not in the proper format, or omits required Items or includes an Item or Items not shown in the proposal.
- g. The Bidder submits more than one proposal, under the same or different name, for a specific proposed Contract. (A Bidder may submit a bid proposal and participate as a material supplier, subcontractor or both to any or all Bidders contemplating submitting a proposal for this work.)
- h. The Bidder fails to acknowledge or improperly acknowledges receipt of all addenda issued.
- i. The Bidder modifies the proposal in a manner that alters the conditions or requirements for work as stated in the proposal form.
- j. The Bidder did not attend a specified mandatory pre-bid conference.

2.15. Termination of Bid. No Bid shall be withdrawn or terminated by Bidder without consent of the Owner for a period of ninety (90) calendar days after the opening of bids by the City.

2.16. . Bid Proposal Guaranties of Three Lowest Bidders. Bid proposal guarantees of the first, second and third low Bidders will be retained until after the Contract Agreement and Bonds have been executed. Bid Proposal Guaranties in the form of any certified or cashier's check of all except the three lowest Bidders will be returned by mail to unsuccessful Bidders upon certification of the three low Bidders, unless there is a justifiable reason for Owner to hold them for the full ninety (90) calendar day period.

2.17. Time Requirement. Bid Proposals received after the time specified in the IFB will be ineligible for opening and will be returned unopened to the prospective Bidder.

2.18. Prospective Bidders' Field Examination. Each Bidder shall satisfy himself by personal field examination of the location of the proposed Work, and by any other means to enable him to develop his Bid Proposal intelligently and to his advantage. The Bidder shall make himself familiar with all of the Contract Documents and other Owner instructions including Bidder's ability to submit Pre-Bid inquiries to Owner and Design Consultant before submitting his Bid Proposal in order that no Contractor misunderstanding shall exist in regard to the nature and character of the Work to be performed. No allowance will be made by the City for any Bidders to claim that the Bid Proposal is based upon incomplete information as to the nature and character of the site or the Work involved. The submittal of the Bid by Bidder shall constitute an admission by the Bidder that he has carried out the foregoing stipulations to his entire satisfaction.

2.19. Bidder Inquiry Notification. After investigating the Project site and comparing the Plans and Specifications and other Contract Documents with the existing conditions, the prospective Bidder should immediately notify the Consultant of any conditions for which the requirements of labor and materials are not clear, or about which there is any prospective Bidder question regarding the quantity and extent of the Work involved. Bidder inquiry notifications to the Owner and/or Consultant must be made in writing at least five (5) calendar days prior to the scheduled Bid opening date.

2.20. Reasonable Work Site Investigation. It is understood and acknowledged by Bidder that full and complete allowance for conditions under which the Contractor will be required to perform construction, or that will in any manner affect Work under this Contract, are included in the Bidder's Bid Proposal and reflected in the proposed Contract Sum. A soils investigation (if applicable) may have been conducted as a potential aid to the Consultant in preparation of the Contract Plans and Specifications. THIS INFORMATION IS AVAILABLE TO PROSPECTIVE BIDDERS WITHOUT EXPRESS OR IMPLIED REPRESENTATION, ASSURANCE, WARRANTY OR GUARANTEE BY OWNER OR CONSULTANT THAT IT IS COMPLETE OR CORRECT OR THAT IT REPRESENTS A TRUE, OR APPROXIMATELY TRUE, PICTURE OF THE SUB-SURFACE CONDITIONS TO BE ENCOUNTERED ACROSS THE PROPOSED WORK SITE. THIS INFORMATION IS SPECIFICALLY NOT PART OF THE CONTRACT DOCUMENTS. This information is available to prospective Bidders for review at the Project Consultant's office. Copies may be purchased from the Consultant. This Bidder cost is non-refundable. Before submitting his Bid, each Bidder may, at his own expense, make reasonable Work site investigations and tests as the Bidder may deem necessary to determine his Bid for performance of the Work in accordance with the Contract Documents. Access for such investigations and tests must be reasonably coordinated with the Owner.

2.21. Child Support Order Compliance. A child support obligor who is more than thirty (30) days delinquent in paying child support and a business entity in which the obligor is a sole proprietor, partner, shareholder or owner with an ownership interest of at least twenty-five (25) percent is not eligible to receive payments from state funds under a contract to provide property, materials, or services; or receive a state-funded grant or loan.

.1 By signing the contract, the Contractor, under penalty of perjury under the laws of the State of Texas, certifies that the sole proprietor, partner, shareholder or owner of the firm is not thirty (30) or more days delinquent in providing child support.

.2 By signing the contract, the Contractor makes material representation of fact upon which reliance is placed as the Department enters into the contract. If it is later determined that the Contractor knowingly rendered an erroneous representation, in addition to other remedies available, the Department may terminate the contract for cause or default.

.3 The Contractor shall provide immediate written notice to the Department if at any time it learns that its representation was erroneous when submitted or has become erroneous by reason of changed circumstances.