



# CITY OF SAN ANTONIO

## CAPITAL IMPROVEMENTS MANAGEMENT SERVICES (CIMS DEPARTMENT) PROJECT: SEELING CHANNEL IMPROVEMENTS - PHASE I

### ADDENDUM NO. 1

**DATE: August 16, 2012**

This addendum shall 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 acknowledgment of the receipt of this addendum at the time he receives it.

Addendum No.1 is issued to add the Pre-Bid Conference Meeting Minutes, update the Plans, Specifications and Bid Proposal. The attached documents should be used in place of the documents of the same title found within the plans and Project Manual.

1. Pre-Bid Conference Meeting Minutes
  - a. A copy of the Pre-Bid Conference Meeting Minutes held on August 8, 2012 is included in this addendum.
2. Questions and Answers
  - a. A copy of Questions and Answers is included in this addendum
3. 025 Bid Form

Revisions made to the Bid Form have been listed below calling out all Items removed, revised, or added.

  - a) SAWS Sewer Main Base Bid
    - i) Items Removed
      - 852 – 48” Drop Manhole (0’-6’ Deep)
      - 852 – 48” Drop Manhole Extra Depth
      - 852 – 60” Drop Manhole (0’-6’ Deep)
      - 852 – 60” Drop Manhole Extra Depth
    - ii) Items Revised
      - 848 – 15” PVC Sanitary Sewer Line (10’-14’)
      - 848 – 15” PVC Sanitary Sewer Line (14’-18’)
      - 850 – Sanitary Sewer Structures – 96”
      - 852 – 48” Manhole Extra Depth

- 852 – 48” Manhole (0’-6’ Deep)
- 852 – 60” Manhole Extra Depth
- 862 – Abandonment of Sanitary Sewer (15” or Larger)
- 864 – Bypass Pumping
- iii) New Items Added to Unit Pricing Form
  - None
- b) SAWS Water Main Base Bid
  - i) Items Removed
    - 824 – Service Reconnect
  - ii) Items Revised
    - 550 – Trench Excavation Safety Protection
    - 833 – Existing Meter & Existing Meter Box Relocation
    - 833 – Meter Box
    - 840 – 8” Water Line Tie In
    - 834 – Fire Hydrant Assembly, Complete
  - iii) New Items Added to Unit Pricing Form
    - 824 – Relay 1” Short Service
    - 858 – Concrete Encasement
- c) Landscape Base Bid
  - i) Items Removed
    - PB. 9 – Electrical Improvements to Power Pedestrian Bridge Lighting
    - VB. 13 – Electrical Improvements to Power Vehicular Bridge and Monument Lighting and Irrigation
  - ii) Items Revised
    - LM. 5 – Channel Plants
  - iii) New Items Added to Unit Pricing Form
    - None
- d) Landscape – Electrical Base Bid (Entirely New Section)
  - i) Items Removed
    - None
  - ii) Items Revised
    - None
  - iii) New Items Added to Unit Pricing Form
    - PBE. 1 – #8 THHN Wire, Conduit and Junction Boxes
    - PBE. 2 – Trenching and Backfill
    - PBE. 3 – Demolition

PBE. 4 – #10 THHN Wire, Conduit and Junction Boxes

PBE. 5 – Riser Diagram

PBE. 6 – Lighting Installed

PBE. 7 – Panel - Terminations

PBE. 8 – General Conditions

VBR. 1 – #8 THHN Wire, Conduit and Junction Boxes

VBE. 2 – Trenching and Backfill

VBE. 3 – #10 THHN Wire, Conduit and Junction Boxes

VBE. 4 – Lighting Installed

VBE. 5 – General Conditions

e) Additive Alternates #1 Pedestrian Bridge Upgrades

i) Items Removed

None

ii) Items Revised

PB. 10 – Pedestrian Bridge Steel Inset

PB. 11 – Pedestrian Bridge Steel Tube

PB. 12 – Pedestrian Bridge Steel Frame

PB. 13 – Glass Lithocrete Banding

iii) New Items Added to Unit Pricing Form

None

f) Additive Alternates #2 Concrete Park Trail

i) Items Removed

None

ii) Items Revised

Pl. 1 – Concrete Trail

iii) New Items Added to Unit Pricing Form

Pl. 2 – Retaining Wall Complete (Concrete, Cap, French Drain, NDS Pipe & Stone Veneer)

g) Additive Alternates #3 Park Trail Lighting

i) Items Removed

None

ii) Items Revised

Pl. 3 – Under Vehicular Bridge Light

Pl. 4 – New Bega Pole Lights

iii) New Items Added to Unit Pricing Form

TE. 1 – #8 THHN Wire, Conduit and Junction Boxes

TE. 2 – Trenching and Backfill

TE. 3 – #10 THHN Wire, Conduit and Junction Boxes

TE. 4 – Lighting Installed

TE. 5 – General Conditions

h) Additive Alternates #4 Park Shade Structure and Picnic Areas

i) Items Removed

Pl. 12 – Electrical Improvements to Power Pavilion Lights

ii) Items Revised

Pl. 5 – Pavilion (Prefabricated)

Pl. 6 – BBQ Grill

Pl. 7 – ADA Picnic Tables

Pl. 8 – Trash or Recyclable Receptacles – CoSA Parkas & Recreation Standard

Pl. 9 – Pedestal Drinking Fountain (w/ Pet fountain)

Pl. 10 – Pavilion Lights

iii) New Items Added to Unit Pricing Form

PE. 1 – #8 THHN Wire, Conduit and Junction Boxes

PE. 2 – Trenching and Backfill

PE. 3 – #10 THHN Wire, Conduit and Junction Boxes

PE. 4 – Lighting Installed

PE. 5 – General Conditions

4. 040 Bid Form

- a. To clarify the maximum total offer for Item SP.1 Diversion and Care of Water, Bid Form 040 is amended to include “k” to Section 3, to read as follows:

(k) The total offer for Item SP.1 Diversion and Care of Water shall not exceed two percent (2%) of the total project offer. The 2% allowed for the Diversion and Care of Water will be calculated based upon the total of all offer components. An offer containing a total for the Diversion and Care of Water in excess of two (2%) percent may be considered unbalanced and may be rejected.

5. Specifications

- a. Special Environmental Specification 110: Remove this specification from the Project Manual in its entirety and replace with the revised and attached specification.

6. Construction Schedule

- a. A copy of the Estimated Project Construction Schedule is included in this addendum.

7. Summary of Bid Items

- a. Remove plan sheet 27a and replace with the revised sheet attached to this addendum.

8. Landscape Details/ Woodlawn Lake Park Details

- a. Remove the following plan sheets and replace with the revised and attached sheets:

- 375 (LC 1.0) Landscape Materials Schedule
- 410 (LS 2.9) Sitework Details
- 411 (LS 2.10) Sitework Details

9. SAWS Waterline Replacement Details/ SAWS Sanitary Sewer Replacement Details

- a. Remove the following plan sheets and replace with the revised and attached sheets:
- Summary Quantity Sheet- Water (5 of 16)
  - Summary Quantity Sheet- Sanitary Sewer (5 of 15)

10. Addendum No. 1 Acknowledgement Form

- a. A copy of the Addendum No. 1 Acknowledgement Form is included. Please complete and sign the form and include with the bid package to acknowledge receipt of Addendum No. 1.

ATTACHMENTS

- Pre-Bid Conference Meeting Minutes
- Questions and Answers
- Revised 025 Bid Form- Unit Pricing Form
- Revised Special Environmental Specification 110
- Estimated Project Construction Schedule
- Construction Plan Sheets:
  - 27a Summary of Bid Items
  - 375 (LC 1.0) Landscape Materials Schedule
  - 410 (LS 2.9) Sitework Details
  - 411 (LS 2.10) Sitework Details
  - SAWS Summary Quantity Sheet- Water (5 of 16)
  - SAWS Summary Quantity Sheet- Sanitary Sewer (5 of 15)
- Addendum Acknowledgement Form

Stephanie D. Blew  
Stephanie D. Blew, PE

8.16.2012  
Date

END OF ADDENDUM NO. 1



## Meeting Minutes

**Project reference:** Seeling Channel Improvements Phase I– Pre-Submission Bid Meeting

**Place:** 114 W. Commerce  
City of San Antonio  
Public Works 9<sup>th</sup> Floor Conference Room

**Meeting date:** August 8, 2012

**Attendees:** Please see Sign-In Sheet posted on the City's Web Portal

**Date prepared:** August 9, 2012

**Prepared by:** Mary Jane Phillips

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**Distribution:** Attendees

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### Discussion Items

#### 0) Introductions made & Project Scope reviewed

#### 1) Project Schedule/Review of Contract Requirements/Upcoming Submissions

- a) Type of contract: Low Bid
- b) Calendar days: 1089 days
- c) Bid Submittals due Tuesday August 28, 2012, by 2:00p. Please incorporate traffic and parking time when making submittals; submittals will be rejected at 2:01p and later.
- d) Required Forms
  - i) Please ensure to sign and date the 010, 025, & SBEDA Subcontractor/Supplier Utilization Plan Form and all Addendum acknowledgment forms.
  - ii) Bid Bond is required.

#### 2) Comments from the Consultant

- a) Please refer to Engineer's Notes with special attention to notes 19, 22, 31 & 35.
- b) Variable change message boards and police are required for information and traffic control, as directed by engineer (TCP Note 25/Sequence of Work, Payment Section, paragraph 6)
- c) Removal of cypress trees at Woodlawn Park must be performed according to plan notes and delivered to CoSA.
- d) Tree arborist required for the project.
- e) Shop drawings required for:
  - i) Pedestrian bridge/railing/panels
  - ii) Ornamental steel railing for both pedestrian and vehicular bridges
  - iii) Entry monument tower/letters & ornamental steel
  - iv) Cast stone cap for retaining walls; prefer to match historical features
  - v) Park pavilion
- f) Sitework mock-ups requested for stone veneer/concrete/steel finish
- g) Plant watering schedule provided in specifications

- h) Landscape Alternates
  - i) Pedestrian bridge upgrades
  - ii) Additional concrete trails and park features
  - iii) Concrete trail lighting
  - iv) Concrete trail shape structures/furnishings

### 3) Utility Update

- a) AT&T- Construction firms currently on site performing conduit job; expected 3 month duration; AT&T to pull cables and splice following conduit job.
- b) CPS Energy
  - i) Overhead construction ongoing (crews on site setting poles) –the 5 purchased lots will need service.
  - ii) At least two weeks' notice is required prior to underground illumination work as noted in CPS plans.
  - iii) Gas is joint bid
- c) Time Warner (did not attend)
  - i) Utilities are overhead on CPS poles and will need to be adjusted once CPS poles are moved.
- d) SAWS
  - i) Water and sewer utilities are joint bid with CoSA, designed by AECOM
  - ii) Pay particular attention to project phasing, as defined in TCP
  - iii) Sewer crossing under proposed channel (See sheet 7 of 12) - reinforced concrete encasement below channel paid for under separate item from standard concrete section
  - iv) Proposed Sewer crossing under existing channel at the Kampmann storm drain outfall close to tie-in point (See sheet 6 or 12) will be bored, review the area carefully.
  - v) Give special consideration to bypass pumping.
  - vi) Pay special attention to SAWS item 3000 (Bid Item based per linear foot)

### 4) City Departments

- a) Deadline to submit questions in writing: Thursday August 16, 2012, by 2:00 P.M.
- b) Primavera version 3.5 or higher is required – will send a template with built-in calendars. Use specifications for schedule adjustments, narrative, or template updates each month

### 5) Environmental – Hazardous Material

- a) Demolished houses will be inspected for asbestos
- b) Subsurface investigation was conducted for soil management – An area of concern was identified with elevated levels of mercury. Please refer to the Special Environmental Specifications in the Project Manual for detailed information.
  - i) Quantity to be excavated (revised in Addendum #1) – 59.26 cubic yards (in place).
  - ii) Highly recommended that contaminated soil be reused on site. Impacted soils may be reused in landscaping berms, but stockpiling of these soils is not permitted.
- c) Migratory birds
  - i) CIMS Environmental will remove nests prior to construction start.
  - ii) Bird deterrent may be administered during construction to deter bird nesting.
  - iii) Birds typically return March-Late Summer
  - iv) Contractor will be required to monitor the work area during construction and report any signs of nesting to CIMS Environmental for removal.

- d) A Historic bridge is located to the south of the current Josephine-Tobin bridge. Structure is not to be touched. Please refer to the construction plans for detailed guidelines during construction in this area.

#### 6) Parks

- a) Grand Entry Aesthetics – Metal work for rails, walls, monuments
- b) Alternate 1A for Pedestrian Bridge is the selected choice of aesthetic treatment.

#### 7) Public Relations - CPO

- a) This is a High profile project – Woodlawn Lake Park
- b) Jefferson & Woodlawn Lake Neighborhood Associations are heavily involved
- c) Contractor must provide 2-3 week look-ahead schedules in order for CPO to be able to inform the community.
- d) There are numerous areas requiring fencing relocations. Recommend to take pre-construction photographs in the event discrepancies are raised by homeowners.
- e) Special attention is directed to existing oak trees at 2402 W. Mistletoe. Special care instructions are provided in Tree Preservation Plans - Sheet 381 for tree numbers 21147 and 21011. The Mercado's have been working with a certified tree arborist of their own. They will be watching closely. Council District 7 has been involved in meetings and discussions with the Mercado's.

#### 8) Issues

- a) Storm Drain line "F" construction between 814 & 818 Wilson. Proposed drainage structures will be located within drainage easements. Homeowners have been contacted and are aware of the proposed improvements. Contractor may be required to coordinate directly with homeowners to address handling of any existing improvements located within the drainage easements.
- b) Contractor to maintain access to Woodlawn Lake Park pavilions at all times due to regular citizen bookings.
- c) Trash pick-up and mail for residents will need to be coordinated- especially during full roadway closures.
- d) Five (5) properties along the channel are being acquired and existing structures will be demolished. All have right-of-entry but some residents still remain; Right-of-Way partial acquisitions are ongoing along Mistletoe Ave.
- e) Holidays and special events to anticipate increased traffic for Park.
  - i) 4<sup>th</sup> of July Celebration
  - ii) Earth Day April 20<sup>th</sup>, 2013
  - iii) Bark in the Park is scheduled for March 2, 2013, all day. Tent setup will begin March 1.
  - iv) Dia De Los Muertos November 2<sup>nd</sup>, 2012

## Addendum No. 1 Questions & Answers

- 1) Is there a schedule?
  - a) Yes – an Estimated Project Construction Schedule will be issued with Addendum #1.
- 2) Is there a provision for temporary illumination in the park area?
  - a) No – if during construction this is necessary, it may be reviewed at that time.
- 3) Is there a water diversion plan the city has in mind that is more detailed than the Diversion and Care of Water specification?
  - a) It is the City's intent for bidders to provide a detailed plan at a cost not to exceed 2% of the total project offer.
- 4) What is the estimated construction cost?
  - a) Anticipated project cost is \$11.3 million excluding the SAWS water and sanitary sewer components and Landscaping additive alternates.
  - b) Anticipated project cost is \$14 million including the SAWS and Landscaping Additive Alternate components.
  - c) Detailed breakdown of cost is not available.
- 5) Are there any historical data for flows in the existing channel?
  - a) Estimated flow data is provided in the Diversion and Care of Water Specification section **3.05 Flood Control**.
- 6) What are the existing water depths in the channel?
  - a) The Channel Cross Sections in the construction set are representative of the existing channel in the project area.
- 7) Does the city have any intent to drain lake level for construction purposes?
  - a) No. The Woodlawn Lake normal pool elevation is 672.10 as controlled by the weir outlet.
- 8) Are houses being purchased strictly for construction limits, or do they flood?
  - a) They are purchased to make room for the proposed channel widening improvements; the project area is in the regulated flood plain.
- 9) Do citizens support or oppose the project?
  - a) Citizens predominantly support this project, but contractors should anticipate frustration from residents during roadway closures. Residents are concerned about tree loss/impacts.
- 10) Who will remove houses in the 5 lots purchased?
  - a) The City of San Antonio will demolish the existing structures.
- 11) Will improvements remove area from 100-year floodplain?
  - a) Improvements are aimed at reducing flooding in the area.

- 12) Is the pedestrian bridge in base bid or alternate bid?
  - a) The bridge is in the base bid, but the aesthetic treatment to the bridge is to be included as an additive alternate.
  
- 13) What is the process for qualifying other pedestrian bridge suppliers?
  - a) Please refer to Form 040 Section 12(b).
  
- 14) What type of erosion control matting is required?
  - a) Please refer to the note located on the typical channel sections sheets.
  
- 15) Is this an LAN project?
  - a) No
  
- 16) How will Bird Deterrant be paid?
  - a) A force account will be issued during construction. The frequency of the application will also be identified when the force account is issued.

CITY OF SAN ANTONIO  
025 UNIT PRICING FORM

PROJECT NAME: Sealing Channel Improvements, Phase I  
PROJECT NO.: 40-00213

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
<b>ROADWAY AND DRAINAGE BASE BID</b>									
	COSA 100.1			MOBILIZATION	LS	1			
	COSA 100.2			INSURANCE & BOND	LS	1			
	COSA 101.1			PREPARING RIGHT OF WAY	LS	1			
	COSA 104.1			STREET EXCAVATION	CY	8361			
	COSA 105.1			CHANNEL EXCAVATION	CY	18783			
	COSA 107.1			EMBANKMENT (FINAL)(DENS CONT)(TY C)	CY	4137			
	COSA 108.1			LIME TREAT. SUBGRADE (6" COMPACTED DEPTH)	SY	21505			
	COSA 108.2			LIME	TON	162			
	COSA 110.2.1			TRANSPORTATION OF IMPACTED SOILS	CY	71			
	COSA 110.2.2			DISPOSAL OF IMPACTED SOILS	CY	71			
	COSA 110.4.1			REMOVAL, STORAGE & TREATMENT OF IMPACTED GROUNDWATER	GAL	500			
	COSA 110.5.1			HEALTH & SAFETY PLAN	LS	1			
	COSA 110.5.2			WASTE MANAGEMENT PLAN	LS	1			
	COSA 200.1			FLEXIBLE BASE (6" COMPACTED DEPTH)	SY	5466			
	COSA 202.1			PRIME COAT	GAL	2238			
	COSA 203.1			TACK COAT	GAL	963			
	COSA 205.2a			HOT MIX ASPHALTIC PAVEMENT, TYPE B (4" COMP. DEPTH)	SY	686			
	COSA 205.2b			HOT MIX ASPHALTIC PAVEMENT, TYPE B (8" COMP. DEPTH)	SY	2020			
	COSA 205.2c			HOT MIX ASPHALTIC PAVEMENT, TYPE B (9" COMP. DEPTH)	SY	3252			
	COSA 205.3b			HOT MIX ASPHALTIC PAVEMENT, TYPE C (2" COMP. DEPTH)	SY	2370			
	COSA 205.4b			HOT MIX ASPHALTIC PAVEMENT, TYPE D (2" COMP. DEPTH)	SY	6706			
	COSA 205.4c			HOT MIX ASPHALTIC PAVEMENT, TYPE D (3" COMP. DEPTH)	SY	2994			
	COSA 230.1			FLEXIBLE PAVEMENT STRUCTURE REPAIR (6" HMAC TY B)	SY	112			
	COSA 306			STRUCTURAL EXCAVATION	CY	24863			
	COSA 307.1			CONCRETE STRUCTURE (RETAINING WALLS)	CY	4454			
	COSA 307.1b			CONCRETE STRUCTURE (ELEVATED SIDEWALKS)	CY	15.4			
	COSA 401.1a			REINFORCED CONCRETE PIPE (CLASS III)(24" DIA)	LF	283			
	COSA 401.1b			REINFORCED CONCRETE PIPE (CLASS III)(36" DIA)	LF	11			
	COSA 401.1c			REINFORCED CONCRETE PIPE (CLASS III)(42" DIA)	LF	215			
	COSA 401.1d			REINFORCED CONCRETE PIPE (CLASS III)(48" DIA)	LF	70			
	COSA 401.1e			REINFORCED CONCRETE PIPE (CLASS III)(60" DIA)	LF	59			
	COSA 401.1f			REINFORCED CONCRETE PIPE (CLASS III)(66" DIA)	LF	87			
	COSA 403.7a			INLET TYPE I (COMPLETE)(10FT)	EA	15			
	COSA 403.7b			INLET TYPE II (COMPLETE)(10FT)	EA	5			
	COSA 403.9			INLET EXTENSIONS (10 FT)	EA	24			
	COSA 407.1			CONCRETE ENCASEMENT	CY	36			
	COSA 410.2			GRAVEL SUBGRADE FILLER	CY	840			
	COSA 412.1			CEMENT STABILIZED SAND	CY	114			
	COSA 413.1			FLOWABLE BACKFILL (LOW STRENGTH)	CY	80			
	COSA 500.1			CONCRETE CURBING	LF	5100			
	COSA 500.4			CONCRETE CURB & GUTTER	LF	787			
	COSA 502.1			CONCRETE SIDEWALKS	SY	1822			
	COSA 503.1			PORTLAND CEMENT CONCRETE DRIVEWAY	SY	971			
	COSA 503.2			PORTLAND CEMENT CONCRETE DRIVEWAY-COMMERCIAL	SY	136			
	COSA 503.5			GRAVEL DRIVEWAY	SY	15			
	COSA 505.1			CONCRETE RIPRAP (4" THICK)	SY	70			
	COSA 505.11			CONCRETE RIPRAP (6" THICK)	SY	67			
	COSA 505.12			CONCRETE RIPRAP (8" THICK)	SY	1368			
	COSA 506.1			CONCRETE RETAINING WALLS - COMB TY	CY	36.4			
	COSA 507.2			CHAINLINK WIRE FENCE (6' HIGH)	LF	1831			
	COSA 507.4			GATE- PEDESTRIAN	EA	4			
	COSA 507.5			GATE- VEHICULAR (20 FEET)	OPENING	1			
	COSA 508.1			RELOCATING WIRE FENCE	LF	748			
	COSA 509.1			METAL BEAM GUARD RAIL	LF	915			
	COSA 511.1			FLEXIBLE PAVEMENT STRUCTURE REPAIR	SY	27			
	COSA 513.1			REMOVING AND RELOCATING MAIL BOXES	EA	1			
	COSA 515.1			TOPSOIL (6")	CY	2129			

CITY OF SAN ANTONIO  
025 UNIT PRICING FORM

PROJECT NAME: Sealing Channel Improvements, Phase I  
PROJECT NO.: 40-00213

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	COSA 516.1			BERMUDA SODDING	SY	3213			
	COSA 516.2			ST. AUGUSTINE SODDING	SY	3213			
	COSA 520.1			HYDROMULCH	SY	6319			
	COSA 522.1			SIDEWALK PIPE RAILING	LF	301			
	COSA 523.1			ADJUST CHAIN LINK VEHICULAR GATE	EA	1			
	COSA 523.3			ADJUST CHAIN LINK PEDESTRIAN GATE	EA	1			
	COSA 523.4			ADJUST WROUGHT IRON VEHICULAR GATE	EA	2			
	COSA 523.6			ADJUST WROUGHT IRON PEDESTRIAN GATE	EA	2			
	COSA 524.1			CONCRETE STEPS	CY	2			
	COSA 525.1			CONCRETE TRAFFIC BARRIER (PORTABLE)(LOW PROFILE)	LF	740			
	COSA 530.1			BARRICADES, SIGNS & TRAFFIC HANDLING	LS	1			
	COSA 531.03			R1-1 STOP (30")(HIGH DENSITY)	EA	6			
	COSA 531.06			R2-1 SPEED LIMIT (24"x30")(HIGH DENSITY)	EA	6			
	COSA 531.13			R3-7 LEFT LANE MUST TURN LEFT OR RIGHT LANE MUST TURN RIGHT	EA	1			
	COSA 531.14			R3-8 LANE-USE CONTROL (30"x30")(HIGH DENSITY)	EA	1			
	COSA 531.44			W16-7 DIAGONAL ARROW SIGN	EA	1			
	COSA 531.51			W11-2 PED CROSSING	EA	3			
	COSA 531.57			9 INCH [229mm] STREET NAME, BLOCK NUMBER (VARIES x9")(HIGH DENSITY)	EA	12			
	COSA 531.62			W16-9 AHEAD	EA	2			
	COSA 531.68			R3-17 BIKE LANE	EA	8			
	COSA 531.69			R3-17aP AHEAD PLAQUE	EA	2			
	COSA 531.7			R3-17bP END PLAQUE	EA	1			
	COSA 531.71			R4-4 BEGIN RIGHT TURN YIELD TO BIKES	EA	1			
	COSA 531.86			R8-3a No PARKING	EA	8			
	COSA 531.87			R7-201P TOW AWAY ZONE PLAQUE	EA	8			
	COSA 531.88			W8-20 WATCH FOR WATER ON ROAD	EA	2			
	COSA 531.89			RS-031 BUS STOP	EA	3			
	COSA 535.01			4 INCH WIDE YELLOW LINE	LF	5119			
	COSA 535.04			8 INCH WIDE WHITE LINE	LF	3910			
	COSA 535.07			24 INCH WIDE WHITE LINE	LF	579			
	COSA 535.08			RIGHT WHITE ARROW	EA	2			
	COSA 535.09			LEFT WHITE ARROW	EA	1			
	COSA 535.12			WORD "ONLY"	WORD	3			
	COSA 535.16			STRAIGHT WHITE ARROW BICYCLE FACILITY	EA	28			
	COSA 535.17			BICYCLE RIDER SYMBOL	EA	28			
	COSA 535.18			SHARROW SYMBOL (BICYCLE AND CHEVRON)	EA	3			
	COSA 537.8			TRAFFIC BUTTON (TYPE II A-A)	EA	76			
	COSA 540.01.1			ROCK FILTER DAMS (INSTALL/REMOVE) (TYPE 1)	LF	70			
	COSA 540.06			CONSTRUCTION EXITS (INSTALL/REMOVE)	SY	800			
	COSA 540.09			TEMPORARY SEDIMENT CONTROL FENCE	LF	7111			
	COSA 540.1			CURB INLET GRAVEL FILTERS	LF	1187			
	COSA 550.1			TRENCH EXCAVATION SAFETY PROTECTION	LF	1944			
	COSA 551.1			TEMPORARY SPECIAL SHORING	SF	4622			
	COSA 554.1			EROSION CONTROL MATTING	SY	7930			
	COSA 618.1			CONDUIT TRENCHED 1-1/2 INCH PVC	LF	30			
	COSA 618.1			CONDUIT ON POLE 1-1/2 INCH RMC	LF	150			
	COSA 620.1			ELECTRICAL CONDUCTORS (NO 6) (BARE)	LF	120			
	COSA 680.2			INSTALLATION OF HIGHWAY TRAFFIC SIGNALS ( SYSTEM)	EA	1			
	COSA 682.4			INSTALL PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	8			
	COSA 684.1			TRAFFIC SIGNAL CABLES (TYPE A) (14 AWG) (9-CONDUCTOR)	LF	550			
	COSA 688.2			PEDESTRIAN DETECTORS (2 INCH PUSH-BUTTON)	EA	8			
	COSA 694.1			VIVDS PROCESSOR UNIT	EA	4			
	COSA 694.2			VIVDS CAMERA ASSEMBLY	EA	4			
	COSA 694.4			VIVDS SET-UP SYSTEM	EA	1			
	COSA 694.6			VIVDS COMMUNICATIONS CABLE (COAXIAL)	LF	380			
	TXDOT 354 2002			PLANE & TEXT ASPH CONC PAV (0" - 2")	SY	2370			
	TXDOT 360 2015			CONC PVMT (JOINTED - CPCD) (9.5")	SY	155			
	TXDOT 360 2016			CONC PVMT (JOINTED - CPCD) (10.5")	SY	597			
	TXDOT 400 2001			STRUCT EXCAV	CY	50			

CITY OF SAN ANTONIO  
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PROJECT NO.: 40-00213

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 400 2005			CEM STABIL BKFL	CY	139			
	TXDOT 400 2020			CEMENT STABILIZED SAND	CY	74.4			
	TXDOT 416 2002			DRILLED SHAFT (24")	LF	1642			
	TXDOT 416 2003			DRILLED SHAFT (30")	LF	660			
	TXDOT 420 2003			CL C CONC (ABUT)	CY	170.5			
	TXDOT 420 2004			CL C CONC (BENT)	CY	130			
	TXDOT 420 2006			CL C CONC (RAIL FOUNDATION)	CY	13			
	TXDOT 420 2029			CL S CONC (SLAB)	CY	425.5			
	TXDOT 420 2033			CL S CONC (APPR SLAB)	CY	289.3			
	TXDOT 420 2034			CL S CONC (BRIDGE SDWLK)	CY	154.6			
	TXDOT 420			CL C CONC (MONUMENT)	CY	36			
	TXDOT 425 2014			PRESTR CONC SLAB BEAM (4SB12)	LF	808			
	TXDOT 425 2016			PRESTR CONC SLAB BEAM (4SB15)	LF	1471			
	TXDOT 425 2017			PRESTR CONC SLAB BEAM (5SB15)	LF	2112			
	TXDOT 428 2001			CONC SURF TREATMENT (CLASS I)	SY	2837			
	TXDOT 432 2001			RIPRAP (CONC) (4IN)	CY	46.7			
	TXDOT 432 2021			RIPRAP (STONE PROTECTION)(18 IN)	CY	1251.5			
	TXDOT 450 2166			RAIL (TY C223)	LF	440			
	TXDOT 450 2203			RAIL (TY T221)(MOD)	LF	436			
	TXDOT 454 2001			SEALED EXPANSION JOINT (4 IN)(SEJ-A)	LF	350			
	TXDOT 459 2015			GABIONS (PVC)(GALV)(3FTX3FT)	CY	231			
	TXDOT 459 2017			GABIONS (PVC)(GALV)(3FTX1.5FT)	CY	35			
	TXDOT 462 2001			CONC BOX CULV (3 FT X 2 FT)	LF	13			
	TXDOT 462 2012			CONC BOX CULV (6 FT X 5 FT)	LF	173			
	TXDOT 462 2016			CONC BOX CULV (7 FT X 5 FT)	LF	113			
	TXDOT 462 2021			CONC BOX CULV (8 FT X 6 FT)	LF	294			
	TXDOT 462 2026			CONC BOX CULV (9 FT X 7 FT)	LF	328			
	TXDOT 465 2001			INLET (COMPL) TY C	EA	1			
	TXDOT 465 2090			MANH (COMPL)(JUNCT BOX)(TY 2)	EA	3			
	TXDOT 465 2093			MANH (COMPL)(TY 1-C)	EA	5			
	TXDOT 465 2474			INLET EXT (TY C-E)	EA	1			
	TXDOT 465 2736			INLET (COMPL)(TY H WITH GRATE)	EA	1			
	TXDOT 466 2048			WINGWALL (PW)(HW=4 FT)	EA	2			
	TXDOT 466 2053			WINGWALL (PW)(HW=9 FT)	EA	1			
	TXDOT 474 2005			SLOT DRAIN (GAL STL)(18 IN)	LF	120			
	TXDOT 474 2006			SLOT DRAIN OUTFALL (GAL STL)(18 IN)	LF	252			
	TXDOT 496 2010			REMOV STR (BRIDGE)	EA	1			
	TXDOT 508 2002			CONSTRUCTING DETOURS	SY	242			
	TXDOT 512 2004			PORT CTB (FUR & INST)(SNGL SLP OR F-SHAPE)(TY 1)	LF	120			
	TXDOT 512 2022			PORT CTB (MOV)(SNGL SLP OR F-SHAPE)(TY 1)	LF	120			
	TXDOT 512 2040			PORT CTB (REMOVE)(SNGL SLP OR F-SHAPE)(TY 1)	LF	120			
	TXDOT 544 2001			GUARDRAIL END TREATMENT (INSTALL)	EA	2			
	TXDOT 545 2001			CRASH CUSH ATTEN (VIA SFPM)(INSTL)(WORK ZONE)	EA	2			
	TXDOT 545 2002			CRASH CUSH ATTEN (VIA SFPM)(MOVE & RESET)(WORK ZONE)	EA	2			
	TXDOT 545 2003			CRASH CUSH ATTEN (VIA SFPM)(REMOVE)(WORK ZONE)	EA	2			
	TXDOT 545 2028			CRASH CUSH ATTEN (INSTL)(QUAD)(N)	EA	2			
	TXDOT 658 2238			INSTL DEL ASSM (D-SW)SZ 1 (FLX)SRF(BI)	EA	43			
	TXDOT 658 2259			INSTL DEL ASSM (D-SW)SZ (TYC)CTB(BI)	EA	20			
	TXDOT 658 2267			INSTL DEL ASSM (D-SY)SZ 1 (FLX)SRF	EA	21			
	TXDOT 658 2315			INSTL OM ASSM (OM-2Y)(WC) GND	EA	4			
	TXDOT 658 2316			INSTL OM ASSM (OM-2Z)(FLX)GND	EA	4			
	TXDOT 658 2339			INSTL OM ASSM (OM-2Y)(WC) GND (BI)	EA	14			
	TXDOT 658 2383			INSTL OM ASSM (OM-3R)(WC) GND	EA	1			
	SP.1		SP. 1	CARE AND DIVERSION OF WATER	LS	1			
	SP.2		SP. 2	SOLDIER PILE & LAGGING	SF	9903			
	SP.3		SP. 3	CONTECH PEDESTRIAN BRIDGE	LS	1			
	SP.4		508	REMOVE & RESET WROUGHT IRON FENCE	LF	368			

TOTAL ROADWAY AND DRAINAGE BASE BID \_\_\_\_\_

CITY OF SAN ANTONIO  
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ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
<b>SAWS SEWER MAIN BASE BID</b>									
	100			MOBILIZATION	LS	1			
	101			PREPARATION OF R.O.W.	LS	1			
	550			TRENCH EXCAVATION SAFETY PROTECTION	LF	2,255			
	848			8" PVC SANITARY SEWER LINE (14' - 18')	LF	272			
	848			10" PVC SANITARY SEWER LINE (10' - 14')	LF	67			
	848			10" PVC SANITARY SEWER LINE (14' - 18')	LF	125			
	848			15" PVC SANITARY SEWER LINE (6' - 10')	LF	13			
	848			15" PVC SANITARY SEWER LINE (10' - 14')	LF	234			
	848			15" PVC SANITARY SEWER LINE (14' - 18')	LF	286			
	848			18" PVC SANITARY SEWER (6' - 10')	LF	10			
	848			21" PVC SANITARY SEWER (14' - 18')	LF	436			
	848			30" FIBERGLASS REINFORCED GRAVITY SANITARY SEWER (6' - 10')	LF	40			
	848			30" FIBERGLASS REINFORCED GRAVITY SANITARY SEWER (14' - 18')	LF	894			
	851			ADJUST EXISTING MANHOLES	EA	4			
	850			SANITARY SEWER STRUCTURES - 60"	EA	4			
	850			SANITARY SEWER STRUCTURES - 72"	EA	2			
	850			SANITARY SEWER STRUCTURES - 96"	EA	1			
	852			48" MANHOLE (0' - 6' DEEP)	EA	13			
	852			60" MANHOLE (0' - 6' DEEP)	EA	1			
	852			48" MANHOLE EXTRA DEPTH	VF	103			
	852			60" MANHOLE EXTRA DEPTH	VF	10			
	854			SANITARY SEWER LATERALS	LF	118			
	854			SANITARY SEWER CLEANOUT	EA	6			
	855			RECONSTRUCT EXISTING MANHOLE	EA	2			
	856			JACKING, BORING OR TUNNELING (48")	LF	122			
	856			CARRIER PIPE - 30" FIBERGLASS REINFORCED GRAVITY SEWER PIPE	LF	122			
	856			CASING - 48" STEEL PIPE	LF	122			
	858			CONCRETE ENCASEMENT	CY	19			
	860			VERTICAL STACKS	VF	20			
	862			ABANDONMENT OF SANITARY SEWERS (15" OR LARGER)	LF	1,463			
	864			BYPASS PUMPING	LS	1			
	866			8" - 15" SEWER MAIN TELEVISION INSPECTION	LF	984			
	866			18" - 21" SEWER MAIN TELEVISION INSPECTION	LF	446			
	866			24" - 30" SEWER MAIN TELEVISION INSPECTION	LF	934			
	866			8" - 15" SEWER MAIN CLEANING & PRE-TELEVISION (EXISTING MAINS)	LF	226			
	866			18" - 21" SEWER MAIN CLEANING & PRE-TELEVISION (EXISTING MAINS)	LF	1,652			

TOTAL SAWS SEWER MAIN BASE BID

<b>SAWS WATER MAIN BASE BID</b>									
ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	100			MOBILIZATION	LS	1			
	101			PREPARATION OF R.O.W.	LS	1			
	550			TRENCH EXCAVATION SAFETY PROTECTION	L.F.	2150			
	816			8" STEEL WATERLINE (SUSPENDED)	L.F.	167			
	818			6" PVC WATERLINE	L.F.	110			
	818			8" PVC WATERLINE	L.F.	1995			
	818			12" PVC WATERLINE	L.F.	45			
	824			RELAY 3/4" LONG SERVICE	EA	17			
	824			RELAY 3/4" SHORT SERVICE	EA	7			
	824			RELAY 1" SHORT SERVICE	EA	1			
	824			NEW 5/8" LONG SERVICE	EA	1			
	824			NEW 3/4" UNMETERED LONG SERVICE	EA	1			
	828			6" GATE VALVE	EA	1			
	828			8" GATE VALVE	EA	12			
	828			12" GATE VALVE	EA	1			
	833			EXISTING METER & EXISTING METER BOX RELOCATION	EA	16			
	833			METER BOX	EA	15			
	836			PIPE FITTING, ALL SIZES AND TYPES	TON	5.9			

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	840			6" WATER LINE TIE IN	EA	7			
	840			8" WATER LINE TIE IN	EA	6			
	840			12" WATER LINE TIE IN	EA	1			
	834			FIRE HYDRANT ASSEMBLY, COMPLETE	EA	3			
	841			HYDROSTATIC TESTING	EA	6			
	844			2" BLOWOFF TEMPORARY	EA	9			
	846			AIR RELEASE ASSEMBLY	EA	2			
	858			CONCRETE ENCASEMENT	CY	17			
	3000.06			REMOVAL, TRANSPORTATION AND DISPOSAL OF AC PIPE	LF	515			

TOTAL SAWS WATER MAIN BASE BID \_\_\_\_\_

**LANDSCAPE BASE BID**

**PEDESTRIAN BRIDGE**

	PB.1	M.14		ASPHALT JOGGING TRAIL (INCLUDES CONCRETE RIBBON CURB AND DRAINAGE GAPS	SF	4,572			
	PB.2	M.7		CONCRETE BANDING ON PEDESTRIAN BRIDGE	SF	852			
	PB.3	M.8		CONCRETE WALK FOR PEDESTRIAN BRIDGE	SF	1,789			
	PB.4	L.4		PEDESTRIAN BRIDGE BEGA LIGHTS COMPLETE	EA	22			
	PB.5	L.5		REMOVABLE BOLLARD COMPLETE	EA	6			
	PB.6	XL 2-5	LB 1.0	RELOCATION OF EXISTING BEGA POLE LIGHTING COMPLETE	EA	4			
	PB.7		LS1.6	ENTRY COLUMN COMPLETE (PEDESTRIAN BRIDGE)	EA	4			
	PB.8	M.6	LS2.1	ORNAMENTAL STEEL RAILING ON CULVERT COMPLETE	LF	44			

**VEHICULAR BRIDGE AND MONUMENT**

	VB.1	S.2		LIMESTONE STONE VENEER	FF	9,944			
	VB.2	S.2		CAST STONE CAP	LF	1,988			
	VB.3	M.1 & L.3		ALUMINUM LIGHT HOUSE ENCLOSURE AND ENTRY MONUMENT TOWER LIGHT	EA	1			
	VB.4	M.2 & M.3	LS 2.3	ENTRY TOWER MONUMENT & ENTRY WALL W/ FOUNDATION COMPLETE	EA	1			
	VB.5	M.4 & M.3	LS 2.4	ALUMINUM LETTERS ON ENTRY WALL W/ STEEL BACKING	EA	16			
	VB.6	M.6		ORNAMENTAL STEEL RAILING ON WALLS COMPLETE	LF	1,907			
	VB.7		LS 2.5	VEHICULAR BRIDGE ARCH. COLUMNS COMPLETE	EA	8			
	VB.8		1/LS 1.1	ENTRY COLUMN COMPLETE (MONUMENT WALLS)	EA	2			
	VB.9	L.1		L.E.D. LIGHT IN LETTERS	EA	16			
	VB.10	L.2	LS 2.5	BEGA POLE LIGHT MOUNTED ON VEHICULAR BRIDGE ARCH. COLUMN COMPLETE	EA	4			
	VB.11		LP1.2	ENTRY LANDSCAPE BEDS WITH MAIN ENTRY PLANTS	LS	1			
	VB.12		LI1.1	IRRIGATION SYSTEM COMPLETE	LS	1			

**LANDSCAPE MITIGATION**

	LM.1		LP	FERTILIZER	LS	1			
	LM.2		LP 2.1	LANDSCAPE PLANTING - 2" TREES	EA	102			
	LM.3		LP 2.1	LANDSCAPE PLANTING - 4" TREES	EA	36			
	LM.4		LP 2.1	LANDSCAPE PLANTING - 6" TREES	EA	48			
	LM.5		Specification Section 02900, 02935 LP	CHANNEL PLANTS	LS	1			
	LM.6		Specification Section 02900, 02935 LP	NEW PLANTING WATERING / GATOR BAGS / WATER TRUCK	LS	1			
	LM.7		Specification Section 02900, 02935 LP	PLANT AND TURF MAINTENANCE (90 DAYS)	LS	1			
	LM.8		Specification Section 02900, 02935 LP	BERMUDA SOD - W/ 2" COMPOSTED TOPDRESSING	SF	6,355			
	LM.9		Specification Section 02900, 02935 LP	BERMUDA HYDROMULCH - W/ 2" COMPOSTED TOP DRESSING	SF	215,675			
	LM.10		Specification Section 02900, 02935 LP	HYDROMULCH- DRAINFIELD MIX 2" COMPOSTED TOP DRESSING	SF	61,054			
	LM.11		LTP 2.5	EXISTING TREE PROTECTION	EA	1,579			
	LM.12		LTP 1.4	EXISTING TREE FERTILIZATION AND PRUNNING	EA	2			
	LM.13		LTP 1.3	EXISTING CYPRESS TREE MILLING	EA	5			

TOTAL LANDSCAPE BASE BID \_\_\_\_\_

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ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
<b>LANDSCAPE - ELECTRICAL BASE BID</b>									
<b>PEDESTRIAN BRIDGE</b>									
	PBE.1		428	#8 THHN WIRE, CONDUIT & JUNCTION BOXES	LF	1576			
	PBE.2		428	TRENCHING & BACKFILL	LF	282			
	PBE.3		428	DEMOLITION	HR	24			
	PBE.4		428	#10 THHN WIRE, CONDUIT & JUNCTION BOXES	LF	788			
	PBE.5		429	RISER DIAGRAM	LS	1			
	PBE.6		430	LIGHTING INSTALLED	EA	11			
	PBE.7		430	PANEL -TERMINATIONS	LS	1			
	PBE.8	Specs	260000, 260500 260514	GENERAL CONDITIONS	LS	1			
<b>VEHICULAR BRIDGE AND MONUMENT</b>									
	VBE.1		428	#8 THHN WIRE, CONDUIT & JUNCTION BOXES	LF	2682			
	VBE.2		428	TRENCHING & BACKFILL	LF	282			
	VBE.3		428	#10 THHN WIRE, CONDUIT & JUNCTION BOXES	LF	1,341			
	VBE.4		430	LIGHTING INSTALLED	EA	21			
	VBE.5	Specs	260000, 260500 260514	GENERAL CONDITIONS	LS	1			

**TOTAL LANDSCAPE - ELECTRICAL BASE BID** \_\_\_\_\_

**CPS GAS BASE BID**

**INSTALL GAS MAIN OR CASING**

	G1.a			6" PLASTIC PIPE AND TRACER WIRE	LF	216			
	G1.b			2" PLASTIC PIPE AND TRACER WIRE	LF	73			
<b>INSTALL GAS MAIN BY DIRECTIONAL DRILLING</b>									
	G2			6" PLASTIC PIPE AND TRACER WIRE	LF	330			
<b>UNCOVER AND ABANDON ACTIVE GAS MAINS ONLY WHEN MAIN IS NOT BEING REPLACED</b>									
	G3			2" STEEL MAIN	EA	1			
<b>RERUN AND LOWER GAS SERVICE OFF NEW MAIN</b>									
	G4			1/2" SHORT SIDE	EA	1			
<b>RERUN AND LOWER GAS SERVICE OFF NEW MAIN</b>									
	G5			FLOWABLE FILL	CY	8			
	G6			CUT AND RESTORE PAVEMENT TO BE USED AS DIRECTED BY CPSE REP.	SY	25			

NOTE A: For each of the items above, the Contractor's work is to include: trenching, joining, testing, coating steel, building and painting risers and meter set-ups, connecting new pipe to existing pipe and installing all necessary fittings for tie-ins such as, stopper

NOTE B: Trenching is considered to be the normal method of service installation and is required on all service adjustments. A gas service can be rerun by INSERTION, when the old service is PULLED from the riser to one foot inside the property line, ONLY at the

NOTE C: Bid quantities shown are estimates by CPS Energy. Per foot prices shall be applied to the actual distance measured along the top of the trench or the actual length of the bore, as applicable.

NOTE D: Unit prices shall include insurance costs. CPS Energy's insurance requirements are specified in Exhibit GAS-6.

NOTE E: The COST to abandon the existing main(s) is not an ADDITIONAL item and is to be included in the Unit Price(s) for this item.

**TOTAL CPS GAS BASE BID** \_\_\_\_\_

**CPS UNDERGROUND ELECTRIC BASE BID**

	E1			LIGHT POLE FOUNDATIONS AND CONDUITS (COMPLETE)	LS	1			
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**TOTAL CPS UNDERGROUND ELECTRIC BASE BID** \_\_\_\_\_

CITY OF SAN ANTONIO  
025 UNIT PRICING FORM

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PROJECT NO.: 40-00213

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
<b>ADDITIVE ALTERNATE #1 - PEDESTRIAN BRIDGE UPGRADES</b>									
	PB.9	M.5		PEDESTRIAN BRIDGE SAFETY RAILING UPGRADE TO HORIZONTAL CABLES	LS	1			
	PB.10	M.9	LS 2.7, LS 2.8	PEDESTRIAN BRIDGE STEEL INSET	LF	480			
	PB.11	M.10	LS 2.7, LS 2.8	PEDESTRIAN BRIDGE STEEL TUBE	LF	480			
	PB.12	M.11	LS 2.9, LS 2.10	PEDESTRIAN BRIDGE STEEL FRAME	LF	480			
	PB.13	M.12	Specification Section 321316.15-4	GLASS LITHOCRETE BANDING	SF	852			

**TOTAL ADDITIVE ALTERNATE #1 - PEDESTRIAN BRIDGE UPGRADES BID** \_\_\_\_\_

**ADDITIVE ALTERNATE #2- CONCRETE PARK TRAIL**

	PI.1	M.7	LS 2.11	CONCRETE TRAIL	SF	8,486			
	PI.2	S.1, S.2	LS 2.11	RETAINING WALL COMPLETE (CONCRETE, CAP, FRENCH DRAIN, NDS PIPE & STONE VENEER)	LF	87			

**TOTAL ADDITIVE ALTERNATE #2 - CONCRETE PARK TRAIL BID** \_\_\_\_\_

**ADDITIVE ALTERNATE #3- PARK TRAIL LIGHTING**

	PI.3	L.6		UNDER VEHICULAR BRIDGE LIGHT	EA	1			
	PI.4	L.7		NEW BEGA POLE LIGHTS	EA	5			
	TE.1		428	#8 THHN WIRE, CONDUIT & JUNCTION BOXES	LF	150			
	TE.2		428	TRENCHING & BACKFILL	LF	75			
	TE.3		428	#10 THHN WIRE , CONDUIT & JUNCTION BOXES	LF	75			
	TE.4		430	LIGHTING INSTALLED	EA	6			
	TE.5	Specs	260000, 260500 260514	GENERAL CONDITIONS	LS	1			

**TOTAL ADDITIVE ALTERNATE #3 - PARK TRAIL LIGHTING BID** \_\_\_\_\_

**ADDITIVE ALTERNATE #4- PARK SHADE STRUCTURE AND PICNIC AREAS**

	PI.5	F.1 & M.13		PAVILION- (PREFABRICATED)	EA	1			
	PI.6	F.2		BBQ GRILL	EA	4			
	PI.7	F.3		ADA PICNIC TABLES	EA	4			
	PI.8	F.4		TRASH OR RECYCLABLE RECEPTACLES - COSA PARKS & RECREATION STANDARD	EA	3			
	PI.9	F.5		PEDESTAL DRINKING FOUNTAIN (W/ PET FOUNTAIN )	EA	1			
	PI.10	L.8		PAVILION LIGHTS	EA	2			
	PE.1		428	#8 THHN WIRE, CONDUIT & JUNCTION BOXES	LF	86			
	PE.2		428	TRENCHING & BACKFILL	LF	43			
	PE.3		428	#10 THHN WIRE, CONDUIT & JUNCTION BOXES	LF	43			
	PE.4		430	LIGHTING INSTALLED	EA	2			
	PE.5	Specs	260000, 260500 260514	GENERAL CONDITIONS	LS	1			

**TOTAL ADDITIVE ALTERNATE #4 - PARK SHADE STRUCTURE AND PICNIC AREAS BID** \_\_\_\_\_

PROJECT NAME: Seeling Channel Improvements, Phase I  
PROJECT NO.: 40-00213

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**SUMMAR**

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TOTAL ROADWAY AND DRAINAGE BASE BID	\$	-
TOTAL SAWS SEWER MAIN BASE BID	\$	-
TOTAL SAWS WATER MAIN BASE BID	\$	-
TOTAL LANDSCAPEBASE BID	\$	-
TOTAL CPS GAS BASE BID	\$	-
TOTAL CPS UNDERGROUND ELECTRIC BID	\$	-
<b>TOTAL BASE BID AMOUNT</b>		<b>-</b>

<b>TOTAL ADDITIVE ALTERNATE #1 - PEDESTRIAN BRIDGE UPGRADES BID</b>	<b>-</b>
<b>TOTAL ADDITIVE ALTERNATE #2 - CONCRETE PARK TRAIL BID</b>	<b>-</b>
<b>TOTAL ADDITIVE ALTERNATE #3 - PARK TRAIL LIGHTING BID</b>	<b>-</b>
<b>TOTAL ADDITIVE ALTERNATE #4 - PARK SHADE STRUCTURE AND PICNIC AREAS BID</b>	<b>-</b>

---

\_\_\_\_\_ certifies that the unit prices shown on this complete computer print-out for all of the bid items and the alternates

\_\_\_\_\_ Acknowledged and agrees that the total bid amount shown will be read as its total bid and further agrees that the official

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

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

**SPECIAL ENVIRONMENTAL SPECIFICATIONS**

*Seeling Channel Improvement Project (Wilson Boulevard to Woodlawn Lake)*

*San Antonio, Bexar County, Texas*

**WBS#: 40-00213**

**Environmental Project Code: 07-581D8-277CIPII**

\* \* \*

**Prepared by:**

**City of San Antonio**

**Capital Improvements Management Services Department**

**Environmental Management Division**

**San Antonio, Texas**

\* \* \*

**August 2012**

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110.5.1	Development and Implementation of a Site Specific Health and Safety Plan	8
110.5.2	Development and Implementation of a Waste Management Plan	8

## TABLES

Table 1 – Environmental Project Data Summary of AOC1

Table 2 – Maximum Media Contamination Results for AOC1

## FIGURES

Figure 1 – Project Location Map

Figure 2 – Environmental Area of Concern 1 (Site Location Map)

Figure 3 – Open Excavation Run-on Prevention

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## **SPECIAL ENVIRONMENTAL SPECIFICATIONS**

### **Introduction**

As part of the 2007-2012 Bond Program, Proposition II, the City of San Antonio seeks to provide drainage improvements and facilities to alleviate the drainage issues in and around the neighborhoods surrounding Seeling Channel/Alazan Creek. This proposition also provides for drainage or other storm water improvements and for the acquisition of lands and rights of way necessary for such purposes. This project includes the widening of the drainage channel (referred to as Seeling Channel) between Wilson Boulevard and Woodlawn Lake (Figure 1).

This project has been divided into two phases, with the first phase, Wilson Boulevard to Woodlawn Lake, being comprised of widening the downstream portion of Seeling Channel to better accommodate excess water from rain events. An Environmental Site Assessment (ESA) was conducted by a private consultant for the City of San Antonio in August 2010, to determine the presence or absence of contaminated media from the historical importing of soils from unknown sources during the realignment of the western neck of Woodlawn Lake.

The investigation of the project areas identified one (1) location of known contamination where affected soils were identified and groundwater may be encountered. Construction in this area will require environmental monitoring and management of soils and groundwater (if encountered) containing contaminants.

A review of the subsurface investigation report and Final design plans revealed one subsurface impacted area, to be known as Area of Concern (AOC) 1, located on the south bank of Woodlawn Lake near the culvert under Woodlawn Avenue between Station 33+45.55 (offset 20.33LT) and Station 33.62.23 (offset 19.62LT) and Station 33+47.24 (offset 40.21LT) and Station 33+61.54 (offset 39.60 LT) (Figure 2). Impacted depths at AOC1 were identified from three (3) to seven (7) feet below ground surface (bgs). Soils are classified as Class 2 Non-Hazardous based on the laboratory analyses. Groundwater was not encountered at AOC1.

AOC 1 (historical importing of soils, realignment of Woodlawn Lake)

- South bank near the culvert under Woodlawn Avenue
- Station 33+45.55 (offset 20.33LT) and Station 33.62.23 (offset 19.62LT) and Station 33+47.24 (offset 40.21LT) and Station 33+61.54 (offset 39.60 LT)
- Depth of impacted soil is from 3 to 7 feet bgs
- Associated improvements – channel wall

The total estimated quantity of impacted soil to be excavated is 60 cubic yards (in place). The excavation of soils will not be paid for separately, but it will be subsidiary to the various bid items governing the excavation for the project.

Although groundwater was not encountered during the investigation, if dewatering activities occur for the area previously mentioned, and there is a suspicion of the water being contaminated

(i.e., odor, visual observation of fuel, etc.), the excess water must be removed, containerized, tested, and properly disposed.

Copies of the subsurface investigation report titled “Phase II Environmental Site Assessment Seeling Channel Improvement Project,” dated August 2010, are available for review and may be obtained from the CIMS Environmental Project Manager, Ms. Jennifer L. DiCocco at (210) 207-1499 or by email at: [Jennifer.DiCocco@sanantonio.gov](mailto:Jennifer.DiCocco@sanantonio.gov).

Soils excavated or drilled from areas not addressed in this report and that do not exhibit signs of contamination (i.e., odor, discoloration, visual observation of fuel, etc.) shall be handled as non-impacted material and staged separately from suspect impacted soils. Soils from the suspected impacted area identified in this document will require management in accordance with a Contractor-prepared Waste Management Plan (WMP). However, it is recommended and highly encouraged that impacted and non-impacted impacted soils be reused on site, if possible.

Construction practices must comply with all applicable regulations concerning the prevention of stormwater pollution, as detailed in COSA’s Storm Water Pollution Prevention Plan (SWP3) Manual. New fill materials, such as topsoil, to be placed in COSA right-of-way (ROW) shall be obtained from a certified clean source outside the project limits. The contractor shall provide documentation to the Engineer to support this requirement.

Decontamination of equipment must be conducted prior to moving from a suspected impacted area to a non-impacted area. It is highly recommended to start first with the non-impacted areas and to move to the potentially impacted areas. The Contractor shall be required to document decontamination procedures and waste generated as part of decontaminating heavy equipment and trucks. Soils from potentially impacted areas shall not be tracked onto roadways. Any soils tracked onto roadways shall be immediately removed.

Appropriate decontamination shall be conducted within a designated area where it is possible to contain and collect decontamination-generated fluids and solids. These decontamination wastes shall be placed into appropriate containers for characterization and profiling prior to final disposal. The Contractor may, at their discretion, place the decontamination waste with the suspect impacted soil.

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**ITEM 110  
ENVIRONMENTAL AND SAFETY CONCERNS FOR  
HANDLING IMPACTED MEDIA**

**110.1 DESCRIPTION**

This item consists of the evaluation and disposal of excavated Mercury impacted soils, site safety and hazardous materials training, and development and implementation of a Waste Management Plan and Site Specific Health and Safety Plan in accordance with the specification requirements outlined below.

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**ITEM 110.2**  
**MANAGEMENT, TRANSPORTATION, AND DISPOSAL OF IMPACTED SOILS**

Soils at the location identified in Table 1 may contain or have the potential to contain Mercury-impacted media. Table 2 provides the maximum detected contaminant concentration associated with the impacted location. Management of the affected soil shall be governed at a minimum by the following management procedures and guidelines.

The Contractor's environmental consultant or qualified staff will be responsible for the following:

- Provide environmental oversight for the construction workers in the affected area.
- Prepare a Waste Management Plan indicating how the soils would be managed (reused within the project limits).
- Prepare a Health and Safety Plan for the workers working in the affected area
- Verify Contractor complies with the Waste Management Plan in accordance with Federal, State, and Local regulations.

The specific area and location of the impacted area is identified in Figure 2. Specific procedures required for AOC 1 are listed below:

**AOC 1**

All soils excavated from AOC1 will be required to be properly managed by complying with Local, State, and Federal regulations.

The Contractor shall make every effort to reuse impacted soils from the station limits described in this specification. Excess soils from the area identified in Table 1 not reused on the project are classified as Class 2 non-hazardous soils based on the laboratory results and should be disposed of at a TCEQ authorized landfill or other Environmental Management Division (EMD) authorized location. In the event that the Contractor cannot reuse the impacted soils, the Contractor will be required to provide written justification to support this situation. Recommendations for how to manage these soils are described below. However, the Contractor must provide a Waste Management Plan that describes, in detail, how these soils will be managed and where they will be reused within the project site before work in the AOC can begin.

1. HAZWOPER trained personnel must excavate the impacted area.
2. Over-excavation of the designated area should be minimized.
3. The top 3 feet of soil is designated as clean soil and should be segregated from the underlying impacted soils. The designated clean soil becomes the property of the Contractor.
4. The soils from three (3) to seven (7) bgs are those soils to be managed.
5. Due to the location of this project site within a floodplain, soils are not able to be stockpiled on site. In the event that the soils cannot be reused immediately upon

excavation, the Contractor will transport and store the soils at a predetermined storage site, as approved by CIMS EMD and City staff, until the soils are able to be reused within the project limits. The transportation and storage of these soils will be at the Contractor's expense.

6. At the predetermined storage site, the impacted soils shall be segregated from any designated clean soils by placing them on 10 mil (0.25mm) polyethylene sheeting.
7. The soils must be properly covered with a tarp to prevent rain infiltration and a berm must be constructed to prevent cross contamination or runoff to other areas.
8. In order to prevent unauthorized access to the soils, the Contractor should enclose the bermed and covered stockpile with construction perimeter fencing.
9. At the time that the Contractor needs soil to fill the excavations, the Contractor must first use the impacted material before using the designated clean soils. Designated clean soils shall be handled as non-impacted material by the Contractor.
10. Any costs incurred for the transportation of impacted soils from the predetermined storage site back to the project site will be the Contractor's responsibility.
11. The Contractor will be required to coordinate and notify the City's representative 72 hours in advance of beginning work in AOC 1.

The City shall be notified immediately when impacted soils and/or groundwater are encountered at locations not identified in this report. The notification should include the station numbers, specific points, exact locations, type of impacted media, evidence of impact, and measures taken to contain the impacted media and prevent public access. The impacted soil and/or groundwater shall not be removed from the location without prior City approval.

## **110.2 Contractors Bid Item – Transportation and Disposal of Impacted Soils**

**110.2.1 Transportation of Soils for Disposal (If needed, Estimated Quantity: 71 loose or truck cubic yards, Class 2 Non-hazardous) Refer to Bid Item 110.2.1**

**110.2.2 Disposal of Soils (If needed, Estimated Quantity: 71 loose or truck cubic yards, Class 2 Non-hazardous) Refer to Bid Item 110.2.2**

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### **ITEM 110.3 SITE SAFETY AND HAZARDOUS MATERIALS TRAINING**

Because of the potential for exposure to hazardous materials, all contractors, employees, and subcontractors working in or near the areas of known impacted media shall be required to have successfully completed a 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) course in accordance with the Occupational Safety and Health Administration (OSHA) guidelines contained in 29 Code of Federal Regulations 1910.120 and retain current certification in such. The site health and safety supervisor shall have completed the 8-hour HAZWOPER Supervisory Training course.

The Contractor shall be responsible for providing this training to their employees and subcontractors' employees. The Contractor shall make current completion certifications available for inspection at any time during the project. **Please note: this is not a billable item, but a Local, State, and Federal requirement.**

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**ITEM 110.4  
GROUND WATER OR RUNOFF WATER**

During the course of the project, water, either stormwater or groundwater, may accumulate in the excavations. It is in the best interest of the Contractor to provide soil berms or other protective measures around the excavated boreholes or trenches to prevent water intrusion. A map showing protective measures for stormwater intrusion is shown on Figure 3, Open Excavation Run-on Prevention. In the event that removal of water from the excavation is necessary, proper characterization and disposal is required by the Contractor's environmental consultant. Specifically, the consultant shall collect at a minimum one water sample from each identified impacted area. This water sample shall be analyzed for Mercury. Laboratory analyses of sample(s) collected must be conducted in accordance with standard Environmental Protection Agency (EPA) methods. Upon approval by the Environmental Management Division (EMD) of CIMS, non-impacted water may be discharged into the storm sewer system per the Texas Pollutant Discharge Elimination System (TPDES) permit. Impacted water must be removed and disposed of in accordance with all Federal, State, and Local regulations at the Contractor's expense. The Contractor's consultant shall be responsible for submitting analytical data and disposal documentation to the City of San Antonio, Capital Improvement Management Services Department Environmental Management Division. Upon approval, the Contractor will be directed on the appropriate disposal methods.

**110.4 Contractors Bid Item – Removal, Storage and Treatment of Impacted Groundwater**

**110.4.1 Removal, Storage and Treatment of Impacted Groundwater (Estimated Quantity: 500 gallons) Refer to Bid Item 110.4.1**

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**ITEM 110.5  
SITE SPECIFIC HEALTH AND SAFETY PLAN**

The Contractor shall prepare and implement a Site Specific Health and Safety (H&S) Plan. The Contractor shall also provide a competent Health and Safety Officer/Supervisor or environmental consultant who will comply and implement the Site Specific H&S Plan. The Project Health and Safety Officer/Supervisor or environmental consultant shall also be responsible for providing environmental oversight, air monitoring, and aiding the Contractor, City Inspector(s), and/or City's representative to coordinate handling and disposition of impacted soils at the construction site. The Construction Superintendent may also be considered as the Health and Safety Officer/Supervisor.

The Contractor's H&S Plan must comply with applicable regulations contained in 29 CFR 1910.120. The Contractor should review and apply the standards found in Section 1910.120 (hazardous waste operations), Subsection M (personal protective equipment), and Subsection Z (toxic and hazardous substances). Additionally, the Contractor should review and incorporate into the H&S Plan, all relevant construction procedures which are regulated by Section 1926. The H&S Plan shall be submitted to the City of San Antonio, Environmental Management Division to the attention of the Environmental Project Manager for review prior to beginning construction activities in the impacted areas. Once the Contractor H&S Plan meets the requirements below, the Contractor may begin construction activities in the affected areas.

Where the various sections of the Occupational Safety and Health Administration (OSHA) regulations require specific subplans/programs, such as Confined Space, Lockout/Tagout, Hazard Communication, Excavation and Trenching, etc., written documentation shall be developed by the Contractor that is specific for the potential hazards associated with this construction effort. This is in addition to standard OSHA requirements for this type of construction project. Appropriate traffic control devices and location access limitation devices shall be utilized according to applicable regulations and the approved H&S Plan.

The H&S Plan shall include at a minimum the following information:

1. A health and safety risk analysis for each location, task, or operation to be performed by the Contractor.
2. A description of the training to be provided to location workers to comply with 29 CFR 1910.120(e).
3. List of engineering controls, work practices, and personal protective equipment to be provided by the Contractor to the Contractor's employees for each task or operation to be performed. These must comply with 29 CFR 1910.120(g).
4. A description of the frequency and type of air monitoring to be provided to comply with 29 CFR 1910.120(h), including the concentrations of contaminants or air constituents that will cause the Contractor to take actions to increase or decrease protective measures.
5. A description of the location of control measures to be used to comply with 29 CFR 1910.120(d).
6. A decontamination plan to comply with requirements of 29 CFR 1910.120(k). This plan must address both personnel and equipment decontamination and disposal of decontamination-generated fluids and materials.
7. An emergency response and spill containment plan to comply with 29 CFR 1910.120(i and j (when using drums)).
8. A confined space entry program to comply with 29 CFR 1910.146.

9. An excavation safety program to comply with 29 CFR 1926, Subpart P.
10. A location map, with a route and phone number, to the nearest emergency medical facility.
11. Personal Protective Equipment (PPE) levels shall be defined as appropriate to location contaminant concentrations in order to maintain worker safety.
12. A route map showing the closest medical facility to the site.
13. A truck route map showing the designated route from the project site to the proposed disposal facility.

The Contractor shall add additional elements to the H&S Plan, as required, for the safe execution of the project. The Contractor must include a written statement that they are committed to employing/enforcing the H&S Plan and that it will be implemented for all project operations. All workers and visitors to the site shall be informed of the H&S Plan and shall sign a statement acknowledging their commitment to following the procedures of the H&S Plan. The Contractor will be required to submit a finalized copy of the H&S Plan, a copy of the 40-hour HAZWOPER training certifications, and a copy of the 8 hour supervisory training certificates of all employees qualified to work within the impacted area to the City of San Antonio, Environmental Management Division (EMD), prior to beginning construction. CIMS EMD will review the submittals and determine whether the contractor meets the requirements or not.

The following tables should be used by the Contractor to develop the H&S Plan. Table 1 provides a summary of the contaminated soil location identified by specific points (Station number) within the project limits in AOC1. Table 2 provides a summary of the highest levels of contamination identified by specific points within the project limits in AOC 1. There is the possibility that other contaminants could be encountered within the project limits. If the Contractor suspects additional contamination or impacted media outside the designated areas, the Contractor shall notify the City's inspector and/or City's representative immediately.

The Contractor is responsible for preparing a Waste Management Plan (WMP) addressing their plan to excavate, remove, reuse/dispose of the impacted media specific to the Seeling Channel Phase I improvements project. The plan should be presented in a step-wise fashion describing in detail how the impacted soils will be handled. All activities associated with handling the impacted soils should also be described. The Health and Safety Plan is a component of the Waste Management Plan.

Upon completion of work within AOC1, the Contractor is required to submit a final report for this effort. The environmental report shall include, but not be limited to: number of environmental oversight days, air monitoring frequency and results (if warranted), total yards of impacted media removed and disposed (specific to location), and a summary of environmental activities.

The Health and Safety Plan, the Waste Management Plan, and the Final Report will be paid under Item 110.5, "Site Specific Health and Safety Plan" and includes all equipment, time, materials, and labor required to complete the work.

**110.5 Contractors Bid Item -- Site Specific Health and Safety Plan**

**110.5.1 Development and Implementation of a Site Specific Health and Safety Plan - Refer to Bid Item 110.5.1.**

**110.5.2 Development and Implementation of a Waste Management Plan – Refer to Bid Item 110.5.2**

## **TABLES**

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**TABLE 1****PROJECT DATA SUMMARY  
Seeling Channel Improvement Project (Wilson Boulevard to Woodlawn Lake)**

AOC No.	Facility Name	Address	Project Design Data			Environmental Data				
			Nearest Cross Street	From Station No.	To Station No.	Affected Area	Impacted Media		Contaminant Type	On-Site Monitoring Required
						Groundwater	Soil			
1	N/A	South bank of Seeling Channel south of Woodlawn Avenue	Woodlawn Avenue	33+45.55 (offset 20.33LT) & 33+47.24 (offset 40.21 LT)	33+62.23 (offset 19.62LT) & 33+61.54 (offset 39.60 LT)	South side of bank	No	Yes	Mercury	No

**TABLE 2**  
**MAXIMUM MEDIA CONTAMINATION RESULTS**  
**Seeling Channel Improvement Project (Wilson Boulevard to Woodlawn Lake)**  
**AOC 1**

	AOC No. 1 Soil (mg/kg)	TRRP Tier 1 PCLs <sup>Tot</sup> Soil <sub>Comb</sub> (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs <sup>GW</sup> Soil <sub>Ing</sub> (mg/kg)
Depth bgs	3.0 to 7.0			
Chemical of Concern				
Mercury	<b>0.481</b>	3.6	0.04	0.0078

**Bolded value indicates that the concentration exceeded a PCL specific for that chemical.**

PCLs: Protective Concentration Levels

bgs: below ground surface

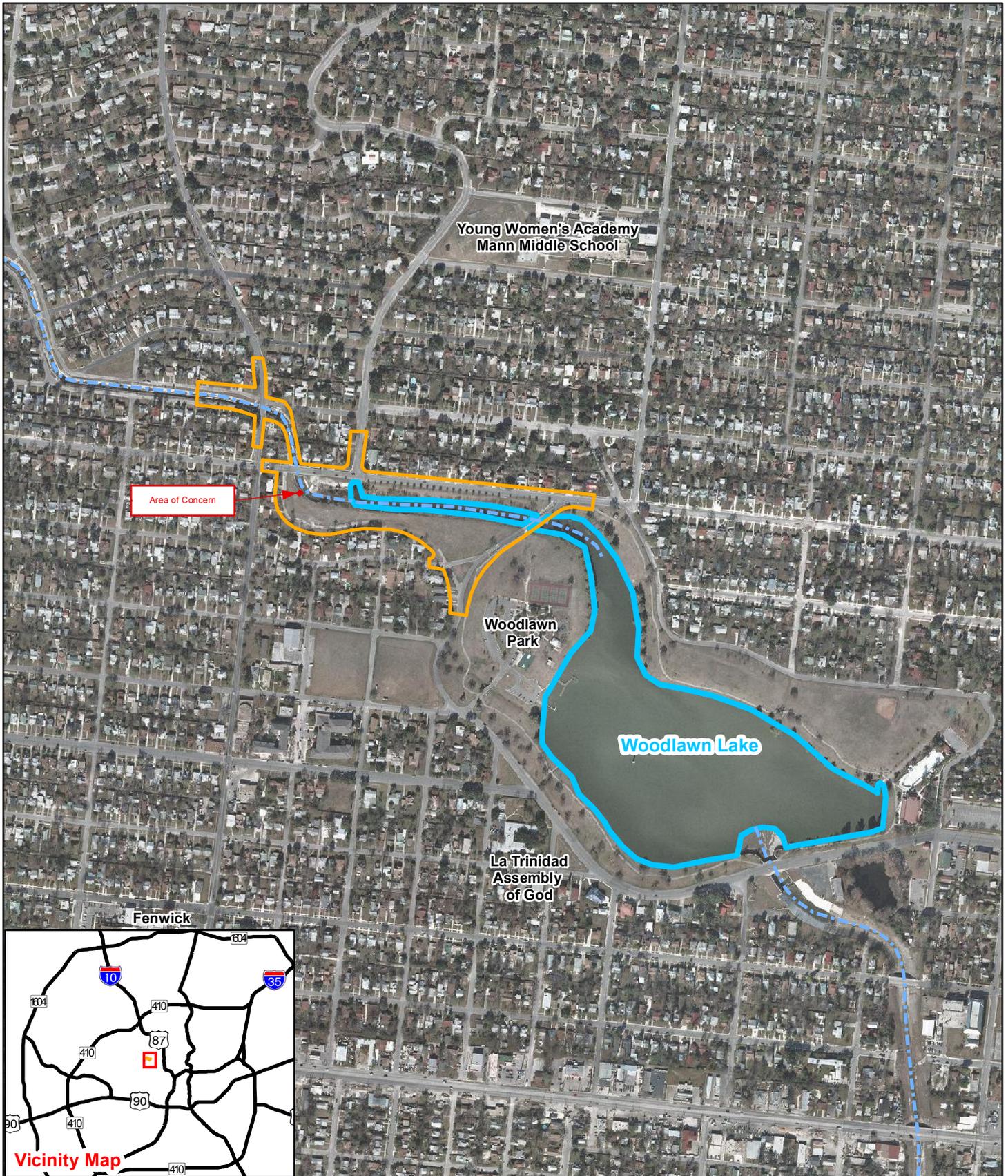
\* This information can be found at the Texas Commission of Environmental Quality (TCEQ) web site [<http://www.tceq.state.tx.us/remediation/trrp/trrppcls.html>].

## **FIGURES**

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**FIGURE 1**  
**PROJECT LOCATION MAP**

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**Legend**

- Phase 1 Project Limits
- Seeling Channel
- Woodlawn Lake
- 2010 Bexar County Parcels



0 350 700 1,400  
Feet

Source: 2008 Bexar County Aerial Photography and 2010 Bexar County Parcels

Special Environmental Specifications  
Seeling Channel Improvements - Phase 1

Project Location Map



AECOM Technical Services, Inc.  
6800 Park Ten Blvd., Suite 180S  
San Antonio, TX 78213-4216  
www.aecom.com  
TBPE Reg. No. F-3580

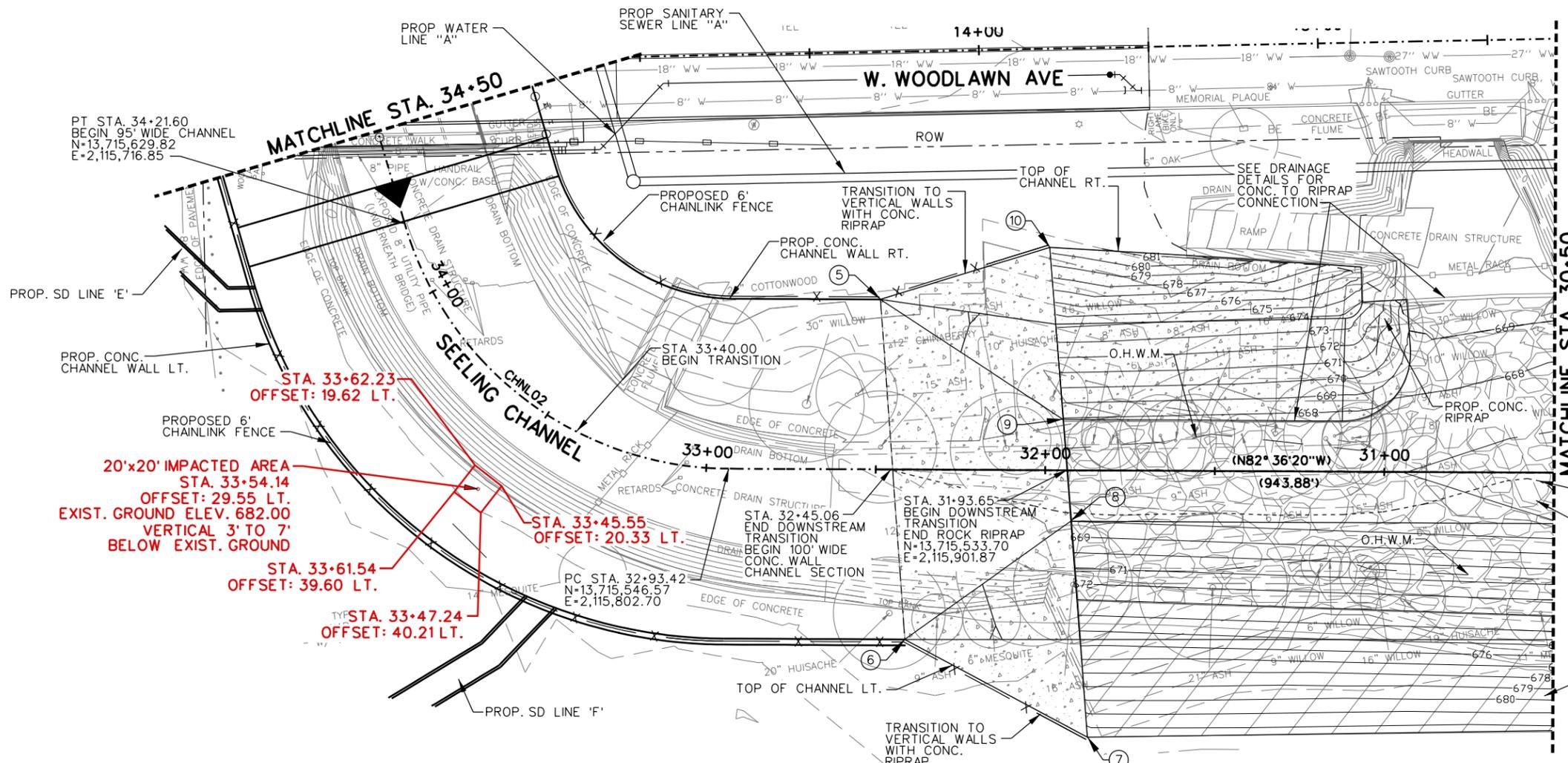
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**FIGURE 2**

**ENVIRONMENTAL AREA OF CONCERN 1**

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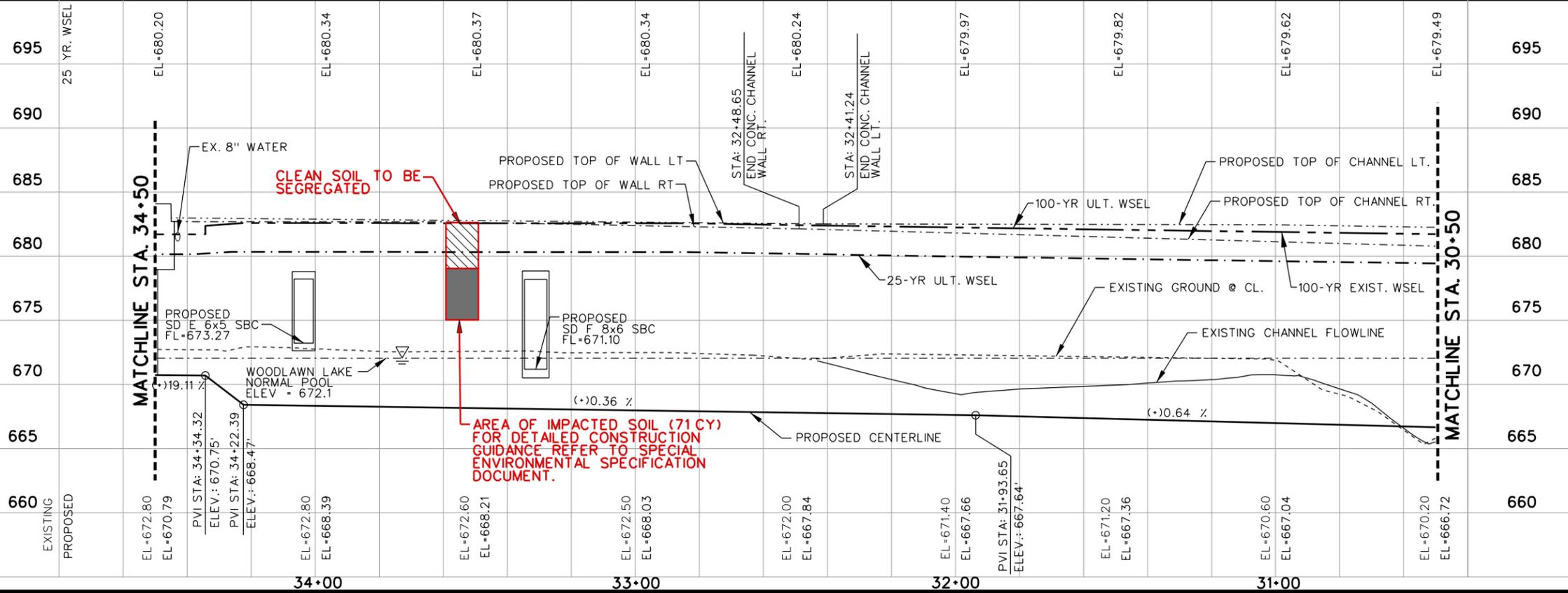
Design Filename: P:\60145866 Sealing Channel (Midcrest)\ADMIN\000\_CAD\C\G\Environmental Spec Area of Concern Figure 2 June 2012.dgn  
 Plotted on: 7/3/2012 5:01:35 PM



POINT	NORTHING	EASTING	DESCRIPTION
5	13,715,590.42	2,115,853.29	END WALL TRANSITION RT.
6	13,715,490.29	2,115,848.02	END WALL TRANSITION LT.
7	13,715,455.08	2,115,897.92	BEGIN WALL TRANSITION LT.
8	13,715,518.73	2,115,900.93	BEGIN CHANNEL TOE TRANSITION LT.
9	13,715,548.75	2,115,902.39	BEGIN CHANNEL TOE TRANSITION RT.
10	13,715,599.41	2,115,904.74	BEGIN WALL TRANSITION RT.

- NOTES:
- SEE RETAINING WALL PLAN AND PROFILE SHEETS FOR WALL INFORMATION.
  - SEE STORM DRAIN PLAN AND PROFILE SHEETS FOR STORM DRAIN PROFILES.
  - SEE STRUCTURAL DRAWINGS FOR CHANNEL WALL AND TRANSITION SECTIONS.
  - SEE PROJECT LEGEND SHEET FOR ALL PLAN AND PROFILE SHEETS.
  - SEE WATERLINE AND SANITARY SEWER REPLACEMENT SHEETS FOR PROPOSED WATER AND SANITARY SEWER PLANS.
  - SEE SPECIAL ENVIRONMENTAL SPECIFICATION FOR MANAGING IMPACTED SOILS.

CURVE DATA TABLE			
CURVE	DELTA	TANGENT	LENGTH
CHNL02	73° 26' 43"	74.60'	128.19'

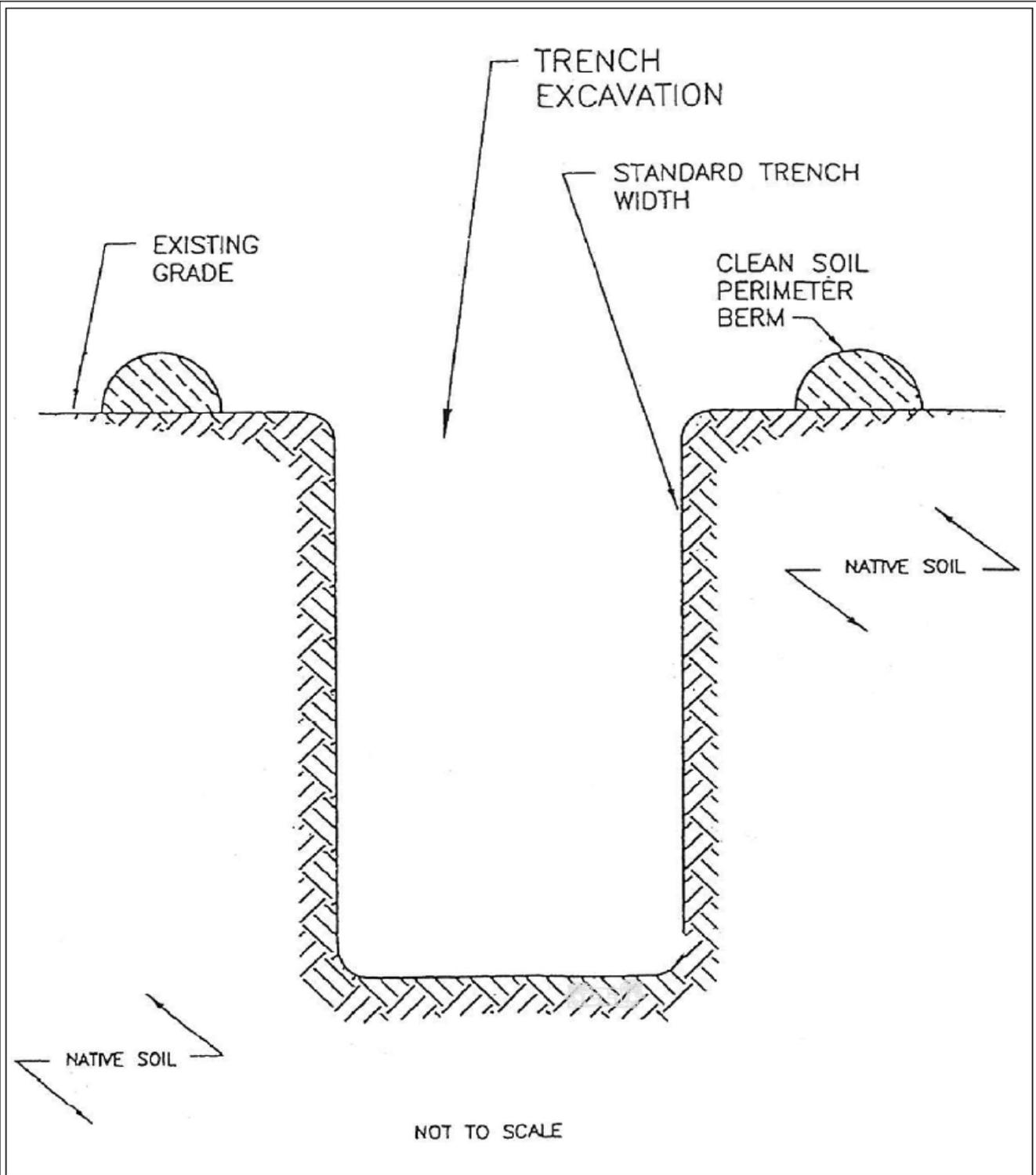


NO	DATE	DESCRIPTION	DWGCHK
REVISIONS			

**AECOM**  
 AECOM TECHNICAL SERVICES, INC.  
 6800 PARK TEN BLVD., SUITE 180 SOUTH  
 SAN ANTONIO, TEXAS 78213  
 WWW.AECOM.COM  
 TBPE REG. NO. F-3580

CITY OF SAN ANTONIO  
 CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
 SEALING CHANNEL PHASE I  
 SPECIAL ENVIRONMENTAL  
 SPECIFICATIONS AREA OF CONCERN  
 FIGURE 2  
 PROJECT NO.: 60184822 DATE: JUNE 2012  
 DSN BY: MJP CHKD BY: SDB SHEET NO. FIGURE 2

**FIGURE 3**  
**OPEN EXCAVATION RUN-ON PREVENTION**



**City of San Antonio**  
 Open Excavation Run-On Prevention

City of San Antonio  
 Capital Improvements  
 Management Services  
 Environmental Services  
 Director Mike Fricble, P.E.  
 Municipal Plaza Building  
 114 West Commerce Street  
 San Antonio, TX 78205



Created by: Ryan L. Garcia  
 File location: \\sanantonio\m\au\Technical Services\CMIS\GIS\PROJECTS\ENVIRONMENTAL\OpenExcavationRunOnPrevention.mxd  
 Map Load Edited: 3/26 November 2009  
 PDF filename: 02111814.pdf

Activity ID	Activity Description	Orig Dur	Start	Finish	2012												2013												2014												2015											
					S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O										

## Seeling Channel Improvements

1000	Total Construction Time	1,089	01OCT12	24SEP15	<b>Total</b>
------	-------------------------	-------	---------	---------	--------------

### Phase 0

Utility Adjustments				
1	Notice to Proceed	0	01OCT12	
5	Mobilize	15	01OCT12	19OCT12
10	Prepare Right of Way	10	22OCT12	02NOV12
50	Utility Adjustments - CPS Gas Lines	30	05NOV12	14DEC12

### Phase 1

Step 0				
100	Erect Barricades	5	17DEC12	21DEC12
102	Constr SAWS Water Services across Woodlawn Ave	15	24DEC12	11JAN13
104	Constr SAWS Water Impr on W. Craig Pl	10	24DEC12	04JAN13

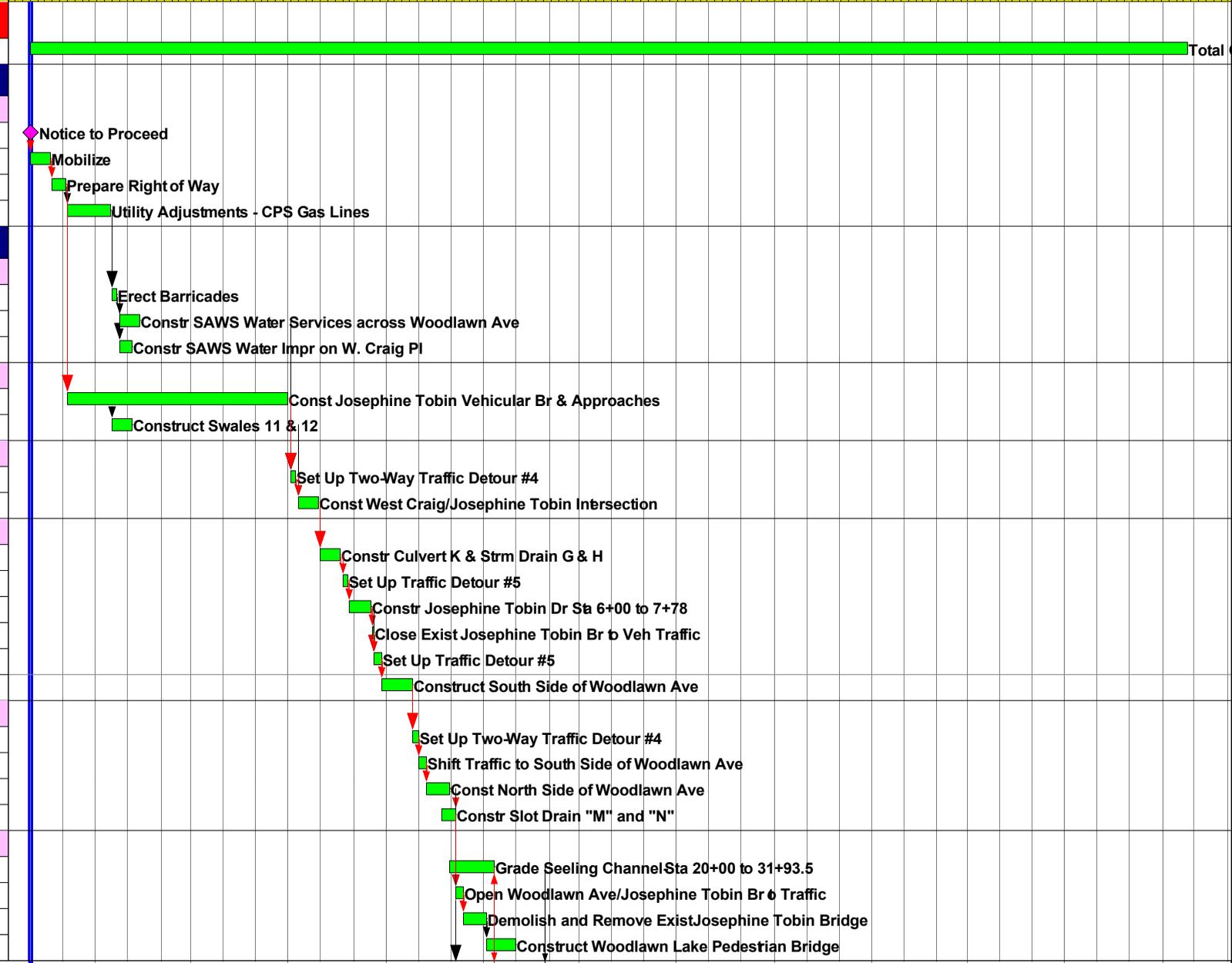
Step 1				
105	Const Josephine Tobin Vehicular Br & Approaches	150	05NOV12	31MAY13
107	Construct Swales 11 & 12	15	17DEC12	04JAN13

Step 2				
110	Set Up Two-Way Traffic Detour #4	5	03JUN13	07JUN13
115	Const West Craig/Josephine Tobin Intersection	15	10JUN13	28JUN13

Step 3				
120	Constr Culvert K & Strm Drain G & H	15	01JUL13	19JUL13
125	Set Up Traffic Detour #5	5	22JUL13	26JUL13
127	Constr Josephine Tobin Dr Sta 6+00 to 7+78	15	29JUL13	16AUG13
128	Close Exist Josephine Tobin Br to Veh Traffic	2	19AUG13	20AUG13
129	Set Up Traffic Detour #5	5	21AUG13	27AUG13
130	Construct South Side of Woodlawn Ave	20	28AUG13	24SEP13

Step 4				
135	Set Up Two-Way Traffic Detour #4	5	25SEP13	01OCT13
145	Shift Traffic to South Side of Woodlawn Ave	5	02OCT13	08OCT13
150	Const North Side of Woodlawn Ave	15	09OCT13	29OCT13
155	Constr Slot Drain "M" and "N"	10	23OCT13	05NOV13

Step 5				
170	Grade Seeling Channel-Sta 20+00 to 31+93.5	30	30OCT13	10DEC13
160	Open Woodlawn Ave/Josephine Tobin Br to Traffic	5	06NOV13	12NOV13
165	Demolish and Remove Exist Josephine Tobin Bridge	15	13NOV13	03DEC13
175	Construct Woodlawn Lake Pedestrian Bridge	20	04DEC13	31DEC13



Start Date	01OCT12	<span style="background-color: green; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Early Bar
Data Date	01OCT12	<span style="background-color: blue; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Progress Bar

City of San Antonio (CIMS)

Seeling Channel Improvements - Phase I  
95% Submittal

AECOM Technical Svcs

Date		Revision		Checked	Approved





**SUMMARY OF LANDSCAPING QUANTITIES**

NEW PEDESTRIAN BRIDGE								
ITEM	PB.1	PB.2	PB.3	PB.4	PB.5	PB.6	PB.7	PB.8
DESC.	Asphalt Jogging Trail	Concrete Banding	Pedestrian Bridge Trail Concrete	Bega Pedestrian Bridge Lighting	Removable Bollard	Relocation of Existing Bega Pole Lighting	Entry Column (Pedestrian Bridge)	Ornamental Steel Railing (on box culvert)
UNIT	SF	SF	SF	EA	EA	EA	EA	LF
QTY	4,572	852	1,789	22	6	4	4	44

NEW VEHICULAR BRIDGE & MONUMENT												
ITEM	VB.1	VB.2	VB.3	VB.4	VB.5	VB.6	VB.7	VB.8	VB.9	VB.10	VB.11	VB.12
DESC.	Stone Veneer Limestone	Cast Stone Cap	Aluminum Light House Encloser and Entry Monument Tower Light	Entry Tower Monument & Entry Wall w/ Foundation	Aluminum Letters on Entry Wall w/ Steel Backing	Ornamental Steel Railing	Vehicular Bridge Arch. Column	Entry Column (Monument Walls Only)	LED Light in Letters	Bega Pole Light Mounted on Vehicular Bridge Arch. Column	Entry Landscape Beds w/ Main Entry Plants	Irrigation System Complete
UNIT	FF	LF	EA	EA	EA	LF	EA	EA	EA	EA	LS	LS
QTY	9,944	1,988	1	1	16	1,907	8	2	16	4	1	1

LANDSCAPE MITIGATION													
ITEM	LM.1	LM.2	LM.3	LM.4	LM.5	LM.6	LM.7	LM.8	LM.9	LM.10	LM.11	LM.12	LM.13
DESC.	Fertilizer	Landscape Planting - 2" Trees	Landscape Planting - 4" Trees	Landscape Planting - 6" Trees	Channel Plants	New Planting Watering / Gator Bags / Water Truck	Plant and Turf Maintenance (90 Days)	Bermuda Sod - w/ 2" Composted Topdressing	Bermuda Hydromulch - w/ 2" Composted Top dressing	Hydromulch-Drainfield Mix 2" Composted Top dressing	Existing Tree Protection	Existing Tree Fertilization and Pruning	Existing Cypress Tree Milling
UNIT	LS	EA	EA	EA	LS	LS	LS	SF	SF	SF	EA	EA	EA
QTY	1.00	102	36	48	1	1	1	6,355	215,675	61,054	1,579	2	5

ALTERNATE #1 - PEDESTRIAN BRIDGE UPGRADES					
ITEM	PB.9	PB.10	PB.11	PB.12	PB.13
DESC.	Pedestrian Bridge Safety Railing Upgrade to Horizontal Cables	Pedestrian Bridge Panel A & B (Alt. 1A)	Pedestrian Bridge Panel A & B (Alt. 1A)	Pedestrian Bridge Panel A & B (Alt. 1A)	Glass Lithocrete Banding
UNIT	LS	LF	LF	LF	SF
QTY	1	480	480	480	852

ALTERNATE #2 - CONCRETE PARK TRAIL		
ITEM	PI.1	PI.2
DESC.	Concrete Trail	Retaining Wall Complete (concrete, cap, french drain, NDS pipe & stone veneer) Complete
UNIT	SF	LF
QTY	8,486	87

ALTERNATE #3 - PARK TRAIL LIGHTING		
ITEM	PI.3	PI.4
DESC.	Under Vehicular Bridge Light	New Bega Pole Lights
UNIT	EA	EA
QTY	1	5

ALTERNATE #4 - PARK SHADE STRUCTURE AND PICNIC AREAS						
ITEM	PI.5	PI.6	PI.7	PI.8	PI.9	PI.10
DESC.	Pavilion-(Prefabricated)	BBQ Grill	ADA Picnic Tables	Trash or Recyclable Receptacles - CoSA Parks & Recreation Standard	Pedestal Drinking Fountain (w/ Pet Fountain )	Pavilion Lights
UNIT	EA	EA	EA	EA	EA	EA
QTY	1	4	4	3	1	2

**SUMMARY OF LANDSCAPING-ELECTRICAL QUANTITIES**

NEW PEDESTRIAN BRIDGE								
ITEM	PBE.1	PBE.2	PBE.3	PBE.4	PBE.5	PBE.6	PBE.7	PBE.8
DESC.	*8 THHN WIRE, CONDUIT & JUNCTION BOXES	TRENCHING & BACKFILL	DEMOLITION	*10 THHN WIRE, CONDUIT & JUNCTION BOXES	RISER DIAGRAM	LIGHTING INSTALLED	PANEL -TERMINATIONS	GENERAL CONDITIONS
UNIT	LF	LF	HR	LF	LS	EA	LS	LS
QTY	1576	282	24	788	1	11	1	1

NEW VEHICULAR BRIDGE & MONUMENT					
ITEM	VBE.1	VBE.2	VBE.3	VBE.4	VBE.5
DESC.	*8 THHN WIRE, CONDUIT & JUNCTION BOXES	TRENCHING & BACKFILL	*10 THHN WIRE, CONDUIT & JUNCTION BOXES	LIGHTING INSTALLED	GENERAL CONDITIONS
UNIT	LF	LF	LF	EA	LS
QTY	2682	282	1,341	21	1

ALTERNATE #3 - PARK TRAIL LIGHTING					
ITEM	TE.1	TE.2	TE.3	TE.4	TE.5
DESC.	*8 THHN WIRE, CONDUIT & JUNCTION BOXES	TRENCHING & BACKFILL	*10 THHN WIRE , CONDUIT & JUNCTION BOXES	LIGHTING INSTALLED	GENERAL CONDITIONS
UNIT	LF	LF	LF	EA	LS
QTY	150	75	75	6	1

ALTERNATE #4 - PARK SHADE STRUCTURE AND PICNIC AREAS					
ITEM	PE.1	PE.2	PE.3	PE.4	PE.5
DESC.	*8 THHN WIRE, CONDUIT & JUNCTION BOXES	TRENCHING & BACKFILL	*10 THHN WIRE, CONDUIT & JUNCTION BOXES	LIGHTING INSTALLED	GENERAL CONDITIONS
UNIT	LF	LF	LF	EA	LS
QTY	86	43	43	2	1

8/14/12	REVISED QUANTITIES		
NO	DATE	DESCRIPTION REVISIONS	DWGCHK

**AECOM** AECOM TECHNICAL SERVICES, INC.  
 6800 PARK TEN BLVD., SUITE 180 SOUTH  
 SAN ANTONIO, TEXAS 78213  
 WWW.AECOM.COM  
 TBPE REG. NO. F-3580

**CITY OF SAN ANTONIO**  
 CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
 SEELING CHANNEL PHASE I

**SUMMARY OF BID ITEMS**

BASE BID - MATERIALS SCHEDULE

KEY	DESCRIPTION /MODEL NUMBER	QUANTITY	COLOR	FINISH	CONTACT	REMARKS
M1	ALUMINUM LIGHT HOUSE ENCLOSURE AT ENTRY TOWER	1	BLACK	HANDBRED FINISHED	N/A	• PROVIDE SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION • PROVIDE SAMPLE OF FINISH AND MATERIAL BUILD ELEMENT PROVIDE SEALED AND SEALED SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION
S2	CAST STONE CAP	1,988 LF	LIGHT BUFF	LIGHT SANDBLASTED	COMPANY: CONTINENTAL CAST STONE PHONE: 866-871-7866	• BEVELED EDGE DETAIL ON CAST STONE CAP • PROVIDE COLOR SAMPLE
M12	BLACK STEEL AT ENTRY TOWER	REF. DWGS	BLACK	HANDBRED FINISHED	N/A	• 1/2" THICK • SMOOTH EDGES • SEAL • DESIGN BUILD ELEMENT PROVIDE SEALED AND SEALED SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION
M13	GALVANIZED STEEL AT ENTRY TOWER	REF. DWGS	GALVANIZED	SMOOTH	N/A	• 1/2" THICK • SMOOTH EDGES • SEAL • DESIGN BUILD ELEMENT PROVIDE SEALED AND SEALED SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION
M14	ALUMINUM PIN MOUNTED LETTERS	1	BLACK MODEL: T008-BK78	50% GLOSS POWDER COAT FINISH	COLOR: CARDINAL INDUSTRIAL FINISHES PHONE: 214/333-9801	• LETTERS TO BE LASER CUT FROM 1/2" ALUMINUM PLATE. FONT TO BE 'FIRLON', BOLD FONT. LETTERS TO BE PIN MOUNTED TO STONE CAP FLUSH. • PROVIDE SAMPLE LETTER
M15	PEDESTRIAN BRIDGE CAPSTONE STEEL, PEDESTRIAN BRIDGE W/ INTERIOR PREFAB HORIZONTAL SAFETY PICKETS & RUB RAIL OR APPROVED EQUAL	SEE BRIDGE SUPPLY QUANTITY	BLACK SMD490	N/A	COMPANY: CONTECH BRIDGE SOLUTIONS, INC. CONTACT: TONY KAYAN PHONE: 210/861-9484	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • 5" CONCRETE DECK • DESIGN BUILD STRUCTURE, PROVIDE SEALED AND SEALED SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION
M16	ORNAMENTAL STEEL RAILING	148 LF ENTRY WALL, 850 LF FINISLAR (SPECIAL BRIDGE), 74 LF (CULVERT CROSSING)	BLACK MODEL: T008-BK78	50% GLOSS POWDER COAT FINISH	COLOR: CARDINAL INDUSTRIAL FINISHES PHONE: 214/333-9801	• 1 1/2" x 1 1/2" THICK STEEL TUBE • PROVIDE SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION
M17	CONCRETE BANDING	882 SF (ON BRIDGE)	STANDARD	LIGHT BROOM FINISH	N/A	• 2"4 FORMING MATERIAL • LAYOUT APPROVED BY LANDSCAPE ARCHITECT
M18	PEDESTRIAN BRIDGE TRAIL CONCRETE	1,789 SF	GREY	5 FINISH	N/A	• PROVIDE WITH 5/8" NOCK UP FOR LANDSCAPE ARCHITECT'S APPROVAL
M14	ASPHALT JOGGING TRAIL	4,572 SF	BLACK MATCH EXISTING	MATCH EXISTING	N/A	• PROVIDE WITH 5/8" NOCK UP FOR LANDSCAPE ARCHITECT'S APPROVAL • COMPACT SUBGRADE, DRAINAGE GRIPS & CONCRETE CURB

LIGHTING

KEY	DESCRIPTION /MODEL NUMBER	QUANTITY	COLOR	FINISH	CONTACT	REMARKS
L1	LED LIGHT IN LETTERS PRODUCT NUMBER: 70284-M58-718 OR APPROVED EQUAL	N/A	WHITE	N/A	COMPANY: SPECTRUM LIGHTING CONTACT: JOE ARIZOLA PHONE: 210/822-6140	• CONTRACTOR TO SUBMIT CUT SHEET FOR APPROVAL. DESIGNER POPULATE LETTERS AND LOGO PANEL FOR EVEN ILLUMINATION. CONCEAL TRANSFORMERS AND CONTROLLERS TO BE CONCEALED IN CABINET.
L2	BECA POLE LIGHT MOUNTED ON COLUMN, 14'-3" MODEL NUMBER: 7911 OR APPROVED EQUAL	4	MATCH EXISTING LIGHT FIXTURE	N/A	COMPANY: SPECTRUM LIGHTING CONTACT: JOE ARIZOLA PHONE: 210/822-6140	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • CONTRACTOR TO SUBMIT PRODUCT INFORMATION FOR OWNER'S APPROVAL PRIOR TO INSTALL
L3	ENTRY TOWER LIGHT MODEL NUMBER: 7911 OR APPROVED EQUAL	1	N/A	N/A	COMPANY: SPECTRUM LIGHTING CONTACT: JOE ARIZOLA PHONE: 210/822-6140	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • CONTRACTOR TO SUBMIT PRODUCT INFORMATION FOR OWNER'S APPROVAL PRIOR TO INSTALL
L4	BECA PEDESTRIAN BRIDGE LIGHTING MODEL NUMBER: 31515D	22	GRAPHITE	N/A	COMPANY: SPECTRUM LIGHTING CONTACT: JOE ARIZOLA PHONE: 210/822-6140	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • CONTRACTOR TO SUBMIT PRODUCT INFORMATION FOR OWNER'S APPROVAL PRIOR TO INSTALL
L5	REMOVABLE BOLLARD MODEL NUMBER: 108220-B (NO LIGHT) OR APPROVED EQUAL	2	BLACK	N/A	COMPANY: HES9 AMERICA PHONE: 866/487-3535	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • CONTRACTOR TO SUBMIT PRODUCT INFORMATION FOR OWNER'S APPROVAL PRIOR TO INSTALL

ALTERNATE 1 - PEDESTRIAN BRIDGE UPGRADES MATERIALS SCHEDULE

KEY	DESCRIPTION /MODEL NUMBER	SEE BRIDGE SUPPLY QUANTITY	COLOR	FINISH	CONTACT	REMARKS
M15	PEDESTRIAN BRIDGE SAFETY RAILING UPGRADE TO HORIZONTAL CABLES	SEE BRIDGE SUPPLY QUANTITY	BLACK SMD490	N/A	COMPANY: CONTECH BRIDGE SOLUTIONS, INC. CONTACT: TONY KAYAN PHONE: 210/861-9484	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • 5" CONCRETE DECK • DESIGN BUILD STRUCTURE, PROVIDE SEALED AND SEALED SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION
M16	PEDESTRIAN BRIDGE STEEL INSET (ALT. 1A)	480 LF RAIL	BLACK	POWDERCOAT	N/A	• 1/2" THICK • WELDED PANELS • DESIGN BUILD ELEMENT, PROVIDE SEALED AND SEALED SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION
M10	PEDESTRIAN BRIDGE PAVILION STRUCTURAL STEEL TUBE FRAME (ALT. 1A + 4B)	480 LF RAIL	BLACK	POWDERCOAT	N/A	• 1/2" WIDTH x 2 1/2" THICK • WELDED PANELS • DESIGN BUILD ELEMENT, PROVIDE SEALED AND SEALED SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION
M11	PEDESTRIAN BRIDGE ORNAMENTAL BLACK STEEL LEAF OUTLINE (ALT. 1A + 4B)	480 LF RAIL	BLACK	HANDBRED FINISHED	N/A	• 1/2" WIDTH x 1 1/2" THICK • SMOOTH EDGES • WELDED PANELS • DESIGN BUILD ELEMENT, PROVIDE SEALED AND SEALED SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION
M12	GLASS LITMORCE BANDING SAMPLE 07-055	882 SF	BLUE GLASS	N/A	CONTACT: SCOTT CARTER PHONE: (612) 287-3330	• PROVIDE WITH 3 X 3 NOCK UP FOR LANDSCAPE ARCHITECT'S APPROVAL

ALTERNATE 2 - CONCRETE TRAIL MATERIALS SCHEDULE

KEY	DESCRIPTION /MODEL NUMBER	COLOR	FINISH	CONTACT	REMARKS	
M17	CONCRETE TRAIL	STANDARD	LIGHT BROOM FINISH	N/A	• 2"4 FORMING MATERIAL • LAYOUT APPROVED BY LANDSCAPE ARCHITECT	
S1	STONE VENEER HORIZONTAL JOINTS 3/8" WIDTH MAX.	REF. DWGS & BID FORM	LLANO	KELLER MATERIAL LIMITED CONTACT: 210/290-0833	• RANDOM PATTERN • PROVIDE 6"x6" NOCKUP FOR APPROVAL BY OWNER PRIOR TO INSTALLATION • INSTALL PER MANUFACTURER'S SPECIFICATIONS • CONTRACTOR TO SUBMIT SAMPLE FOR OWNER FINAL APPROVAL	
S2	CAST STONE CAP	REF. DWGS & BID FORM	LIGHT BUFF	LIGHT SANDBLASTED	COMPANY: CONTINENTAL CAST STONE PHONE: 866-871-7866	• BEVELED EDGE DETAIL ON CAST STONE CAP • PROVIDE COLOR SAMPLE

ALTERNATE 3 - CONCRETE TRAIL LIGHTING MATERIALS SCHEDULE

KEY	DESCRIPTION /MODEL NUMBER	COLOR	FINISH	CONTACT	REMARKS
L6	UNDER VEHICULAR BRIDGE LIGHT MODEL NUMBER: REF. MEP	N/A	N/A	N/A	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • CONTRACTOR TO SUBMIT PRODUCT INFORMATION FOR OWNER'S APPROVAL PRIOR TO INSTALL
L7	BECA POLE LIGHT MODEL NUMBER: 7911	MATCH EXISTING LIGHT FIXTURE	N/A	COMPANY: SPECTRUM LIGHTING CONTACT: JOE ARIZOLA PHONE: 210/822-6140	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • CONTRACTOR TO SUBMIT PRODUCT INFORMATION FOR OWNER'S APPROVAL PRIOR TO INSTALL

ALTERNATE 4 - CONCRETE TRAIL SHADE STRUCTURE AND PICNIC AREAS

KEY	DESCRIPTION /MODEL NUMBER	COLOR	FINISH	CONTACT	REMARKS
F1	PAVILION MODEL #1 MODIFIED ORLANDO MODEL OR APPROVED EQUAL	N/A	N/A	CONTACT: DEBBIE FINCH COMPANY: PAUL E. ALLEN PHONE: 972-724-1110	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • DESIGN BUILD STRUCTURE, PROVIDE SEALED AND SEALED SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION • INCLUDES FOUNDATION, 1"13 ROOF & S1 STONE COLUMNS
M13	CLAY TILE ROOF FOR PARK SHADE STRUCTURE	576 SF	LIGHT BLEND	COMPANY: SANTA ANA UNIQUE CLAY PRODUCTS PHONE: 972-446-0005	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • DESIGN BUILD STRUCTURE, PROVIDE SEALED AND SEALED SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION
F2	BEA GRILL OUTDOOR PARK GRADE MODEL #1 96-102E OR APPROVED EQUAL	N/A	N/A	COMPANY: HIGHLAND PRODUCTS GROUP PHONE: 1-888-447-2401	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • INCLUDES FOUNDATION
F3	ADA PICNIC TABLES MODEL #1 CV-651-ADA-PF OR APPROVED EQUAL	4	ONYX	COMPANY: SITTECAPS PHONE: 888-381-9464	• SURFACE MOUNT, INSTALL PER MANUFACTURER'S RECOMMENDATIONS • INCLUDES FOUNDATION
F4	TRASH OR RECYCLABLE CITT OR SAN ANTONIO PARKS & RECREATION STANDARDS	2 TRASH 1 RECYCLE	BLACK (TRASH) BLUE (RECYCLE)	CONTACT: PETE ZAVORANO COMPANY: ZAVORANO INC. PHONE: 210-924-2320	• SURFACE MOUNT, INSTALL PER MANUFACTURER'S RECOMMENDATIONS • FIELD LOCATE FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION • INCLUDES FOUNDATION
F5	DRINKING FOUNTAIN MODEL #1 2008S1 OR APPROVED EQUAL	1	TEXTURED EMERALD	COMPANY: MOST DEPENDABLE PHONE: 800/552-6331	• SURFACE MOUNT, INSTALL PER MANUFACTURER'S RECOMMENDATIONS • FIELD LOCATE FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION • INCLUDES FOUNDATION • CONNECT TO DOMESTIC METER W/ ASSOCIATED YARD PIPING
L8	PAVILION LIGHT MODEL NUMBER: REF. MEP	2	N/A	N/A	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS • CONTRACTOR TO SUBMIT PRODUCT INFORMATION FOR OWNER'S APPROVAL PRIOR TO INSTALLATION • SHOW LOCATION ON PAVILION SHOP DRAWINGS

NOTE: THE INTERIOR RAIL OPTION FOR M.5 PEDESTRIAN BRIDGE DIFFERS ON BASE BID AND ALTERNATIVE # 1, REF. MATERIAL SCHEDULE IN THIS SHEET

NOTE: CONTRACTOR IS REQUIRED TO VERIFY ALL QUANTITIES. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT IMMEDIATELY.

NO. DATE DESCRIPTION REVISIONS DWG/CHK  
08-13-12 ADDENDUM - ALT. (1B) DELETED

07-23-12




AECOM TECHNICAL SERVICES, INC.  
6800 PARK TEN BLVD., SUITE 180 SOUTH  
SAN ANTONIO, TEXAS 78213  
WWW.AECOM.COM  
TBE REG. NO. F-3580

70 NE Loop 410  
Suite 570  
Dallas, Texas 75218  
210/880-9833 Fax: 210/880-9918  
Austin, Dallas, Houston, San Antonio



LANDSCAPE ARCHITECTS • PLANNERS

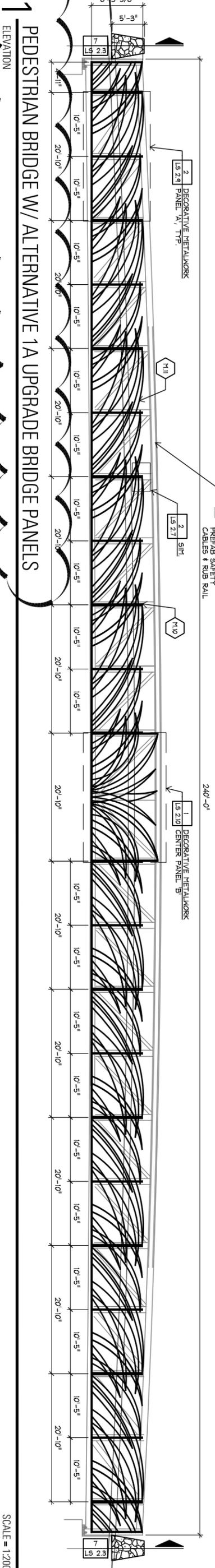
CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
SEELING CHANNEL PHASE I

LANDSCAPE MATERIALS SCHEDULE

PROJECT NO. 1 ST0083 DATES: JULY 23, 2012  
OSGN. 871 MFP CHNO. 8VUZ, WMSHEET NO. LC 1.0

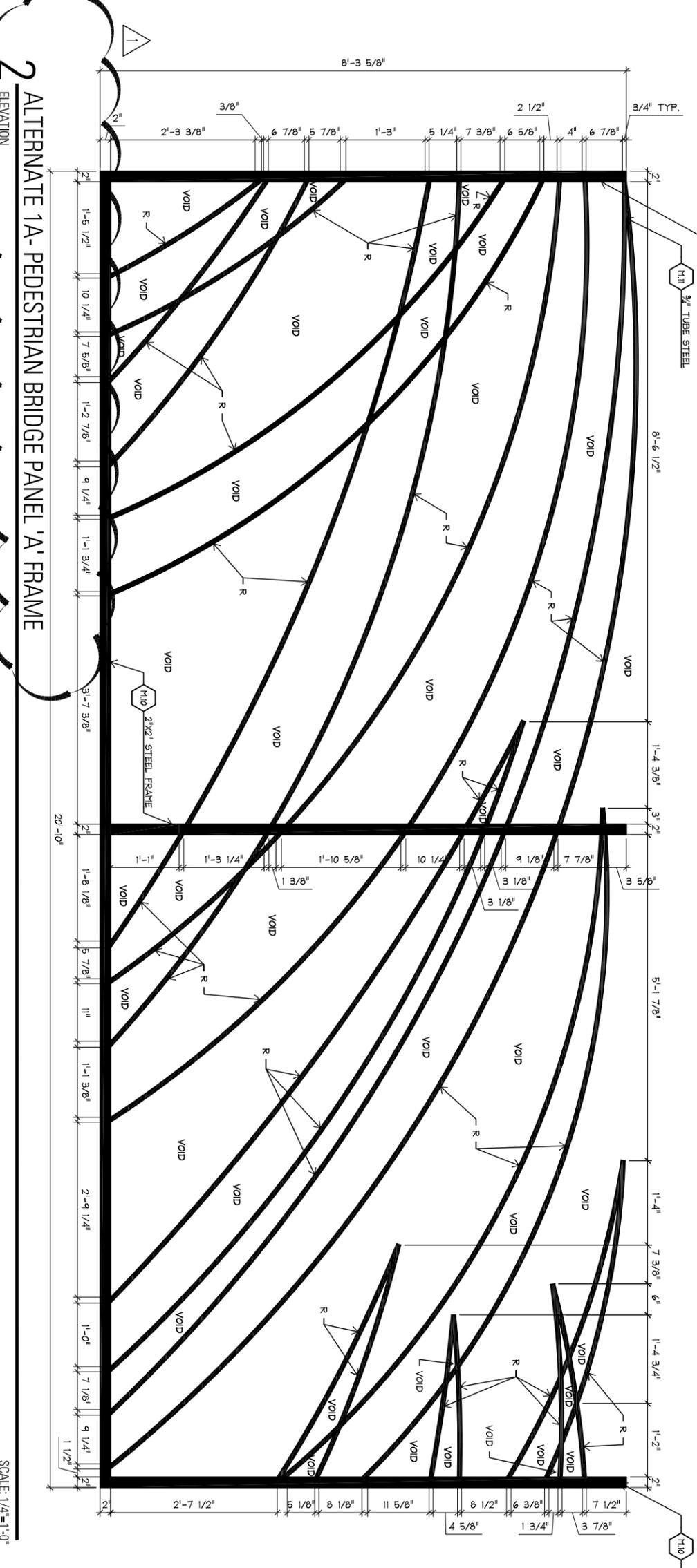
**NOTE:**  
 DESIGN BUILD STRUCTURE CONTRACTOR TO  
 SUBMIT STRUCTURAL ENGINEER SIGNED &  
 SEALED SHOP DRAWINGS OF PEDESTRIAN  
 BRIDGE, COLUMNS, AND RAIL PANELS FOR  
 REVIEW BY LANDSCAPE ARCHITECT.

**NOTE:**  
 1. CONTRACTOR TO FIELD VERIFY LF OF RAILING PRIOR TO CONSTRUCTION.  
 2. INTERIOR RAIL OPTION FOR M.5 PEDESTRIAN BRIDGE VARIES IN BASE BID, REF. MATERIAL  
 SCHEDULE IN LC 10



**1**  
 PEDESTRIAN BRIDGE W/ ALTERNATIVE 1A UPGRADE BRIDGE PANELS  
 ELEVATION

SCALE = 1:200



**2**  
 ALTERNATE 1A- PEDESTRIAN BRIDGE PANEL 'A' FRAME  
 ELEVATION

SCALE: 1/4"=1'-0"

NO. DATE DESCRIPTION REVISIONS DWG/CHK  
 1 08-13-12 ADDENDUM - ALL (TBI) DELETED

07-23-12

**REGISTERED LANDSCAPE ARCHITECT**  
**EARL CROSSARD, JR.**

**AECOM**  
 AECOM TECHNICAL SERVICES, INC.  
 6800 PARK TEN BLVD., SUITE 180 SOUTH  
 SAN ANTONIO, TEXAS 78213  
 WWW.AECOM.COM  
 TBE REG. NO. F-3580

**TBG**  
 Landscape Architects · Planners  
 70 N.E. Loop 410  
 Suite 570  
 Houston, Texas 77028  
 281/989-9833 Fax: 281/989-9918  
 Austin · Dallas · Houston · San Antonio

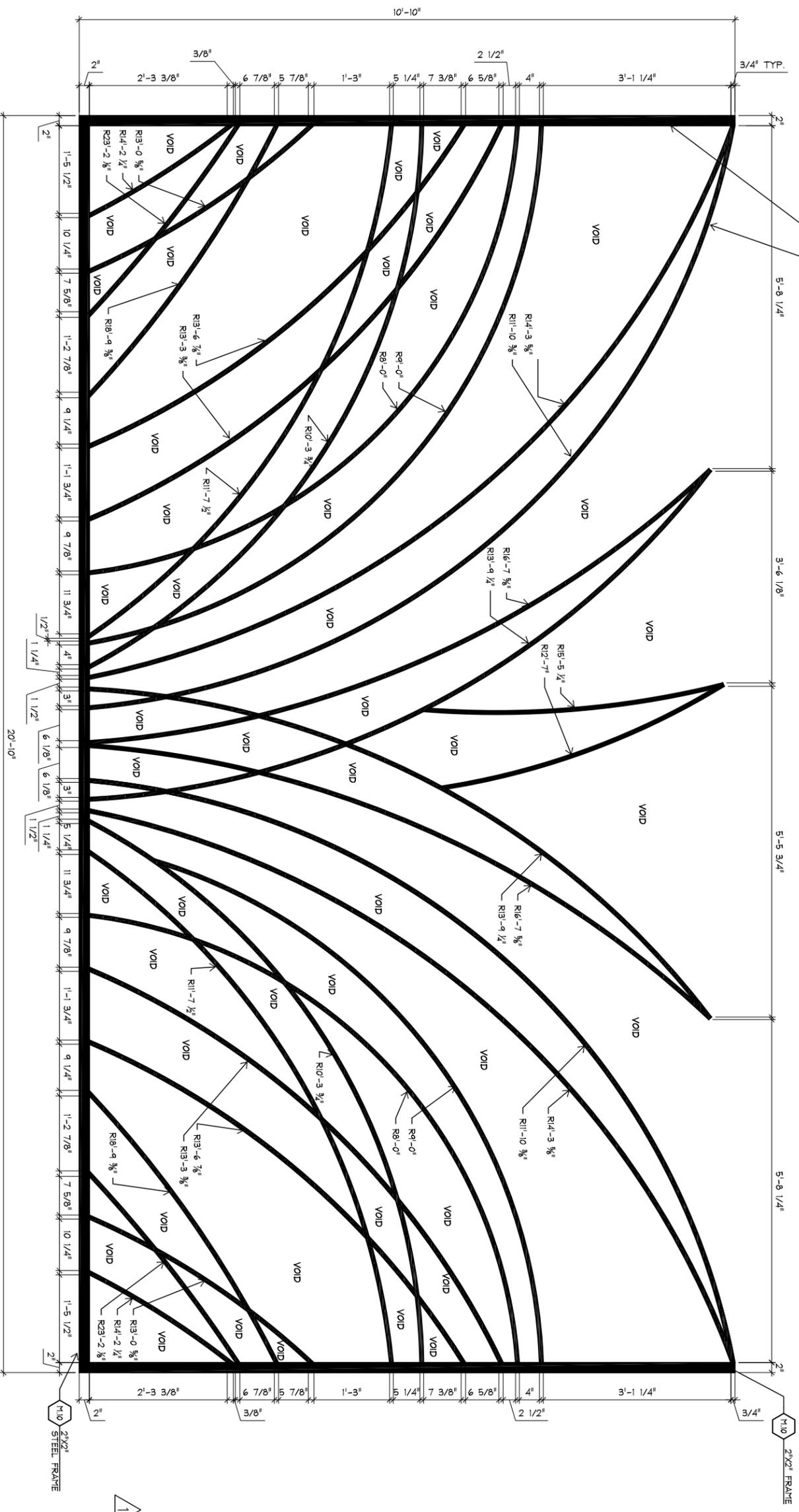
**CITY OF SAN ANTONIO**  
 CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
 SELLING CHANNEL PHASE I

**SITWORK DETAILS**

PROJECT NO. 1 STAGES PAGES JULY 23, 2012  
 DRN, BR, CH, OF, SSN, ST, MP, CHD, BRVZ, WMS, SHEET NO. L5 2.9

NOTE:  
 DESIGN BUILD STRUCTURE CONTRACTOR TO  
 SUBMIT STRUCTURAL ENGINEER SIGNED &  
 SEALED SHOP DRAWINGS OF PEDESTRIAN  
 BRIDGE, COLUMNS, AND RAIL PANELS FOR  
 REVIEW BY LANDSCAPE ARCHITECT.

NOTE:  
 CONTRACTOR TO FIELD VERIFY LF OF RAILING PRIOR TO CONSTRUCTION.



1 ALTERNATE 1A-PEDESTRIAN BRIDGE PANEL 'B' (CENTER FRAME)  
 ELEVATION

SCALE: 1/4"=1'-0"

NO. DATE DESCRIPTION REVISIONS DWGCHK  
 08-13-12 ADDENDUM - ALT (TB) DELETED

07-23-12

*Earl Grossbard, Jr.*

REGISTERED LANDSCAPE ARCHITECT  
 EARL GROSSBARD, JR.  
 STATE OF TEXAS

**AECOM**

6800 PARK TEN BLVD., SUITE 180 SOUTH  
 SAN ANTONIO, TEXAS 78213  
 WWW.AECOM.COM  
 TBE REG. NO. F-3580

Landscape Architects · Planners

70 N.E. Loop 410  
 Suite 570  
 San Antonio, Texas 78218  
 210/380-9833 Fax: 210/380-9918  
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CITY OF SAN ANTONIO  
 CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
 SEELING CHANNEL PHASE I

SITework DETAILS

PROJECT NO.:	S10083	DATES:	JULY 23, 2012
DRWN. BY:	CDL, GR	CHKD. BY:	MP
CNO. BY:	BYZ, W	DATE:	LS 2.10

WATER LINE REPLACEMENTS			
ITEM NO.	DESCRIPTION	UNIT	TOTAL
100	Mobilization	L.S.	1
101	Preparation of R.O.W.	L.S.	1
550	Trench Excavation Safety Protection	L.F.	2,150
816	8" Steel Waterline (suspended)	L.F.	167
818	6" PVC Waterline	L.F.	110
818	8" PVC Waterline	L.F.	1,995
818	12" PVC Waterline	L.F.	45
824	Relay 3/4" Long Service	EA	17
824	Relay 3/4" Short Service	EA	7
824	Relay 1" Short Service	EA	1
824	New 5/8" Long Service	EA	1
824	New 3/4" Unmetered Long Service	EA	1
828	6" Gate Valve	EA	1
828	8" Gate Valve	EA	12
828	12" Gate Valve	EA	1
833	Existing Meter & Existing Meter Box Relocation	EA	16
833	Meter Box	EA	15
836	Pipe Fitting, all sizes and types	TON	5.88
840	6" Water line tie in	EA	7
840	8" Water line tie in	EA	6
840	12" Water line tie in	EA	1
834	Fire Hydrant Assembly, Complete	EA	3
841	Hydrostatic Testing	EA	6
844	2" Blowoff Temporary	EA	9
846	Air Release Assembly	EA	2
858	Concrete Encasement	CY	17
3000.06	Removal, Transportation and Disposal of AC Pipe	LF	515

1



A	8/14/12	REVISED QUANTITIES	
NO	DATE	DESCRIPTION REVISIONS	DWGCHK



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SAN ANTONIO, TEXAS 78213  
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TBPE REG. NO. F-3580



**SAN ANTONIO WATER SYSTEM**  
SEELING CHANNEL IMPROVEMENTS - PHASE I  
WATER LINE REPLACEMENTS  
JOB NO. 10-5010

**CITY OF SAN ANTONIO**  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
SEELING CHANNEL PHASE I

**SUMMARY QUANTITY SHEET**

BID SUBMITTAL	PROJECT NO.: 60184822	DATE: JULY 2012
DRWN. BY: M.G.	DSGN. BY: T.W.	CHKD. BY: CC
		5 OF 16 SHEET NO.

SANITARY SEWER REPLACEMENT PROJECT			
ITEM NO.	DESCRIPTION	UNIT	TOTAL
100	Mobilization	LS	1
101	Preparation of R.O.W.	LS	1
550	Trench Excavation Safety Protection	LF	2,255
848	8" PVC Sanitary Sewer Line (14' - 18')	LF	272
848	10" PVC Sanitary Sewer Line (10' - 14')	LF	67
848	10" PVC Sanitary Sewer Line (14' - 18')	LF	125
848	15" PVC Sanitary Sewer Line (6' - 10')	LF	13
848	15" PVC Sanitary Sewer Line (10' - 14')	LF	234
848	15" PVC Sanitary Sewer Line (14' - 18')	LF	286
848	18" PVC Sanitary Sewer (6' - 10')	LF	10
848	21" PVC Sanitary Sewer (14' - 18')	LF	436
848	30" Fiberglass Reinforced Gravity Sanitary Sewer (6' - 10')	LF	40
848	30" Fiberglass Reinforced Gravity Sanitary Sewer (14' - 18')	LF	894
851	Adjust Existing Manholes	EA	4
850	Sanitary Sewer Structures - 60"	EA	4
850	Sanitary Sewer Structures - 72"	EA	2
850	Sanitary Sewer Structures - 96" <sup>1</sup>	EA	1
852	48" Manhole (0' - 6' deep)	EA	13
852	60" Manhole (0' - 6' deep)	EA	1
852	48" Manhole Extra Depth	VF	103
852	60" Manhole Extra Depth	VF	10
854	Sanitary Sewer Laterals <sup>1</sup>	LF	118
854	Sanitary Sewer Cleanout	EA	6
855	Reconstruct Existing Manhole	EA	2
856	Jacking, Boring or Tunneling (48")	LF	122
856	Carrier Pipe - 30" Fiberglass Reinforced Gravity Sewer Pipe	LF	122
856	Casing - 48" Steel Pipe	LF	122
858	Concrete Encasement	CY	19
860	Vertical Stacks	VF	20
862	Abandonment of Sanitary Sewers (15" or larger)	LF	1,463
864	Bypass Pumping	LS	1
866	8" - 15" Sewer Main Television Inspection	LF	984
866	18" - 21" Sewer Main Television Inspection	LF	446
866	24" - 30" Sewer Main Television Inspection	LF	934
866	8" - 15" Sewer Main Cleaning & Pre-Televising (Existing Mains)	LF	226
866	18" - 21" Sewer Main Cleaning & Pre-Televising (Existing Mains)	LF	1,652

LAST MODIFIED: Aug 14, 2012 - 4:26pm BY USER: gperera  
 FILE LOCATION: P:\01142008\_Sanitary Channel Replacements\001\_001\01.dwg  
 USER: gperera



A	8/14/12	REVISED QUANTITY DESCRIPTIONS	
NO	DATE	DESCRIPTION REVISIONS	DWGCHK



AECOM TECHNICAL SERVICES, INC.  
 6800 PARK TEN BLVD., SUITE 180 SOUTH  
 SAN ANTONIO, TEXAS 78213  
 WWW.AECOM.COM  
 T&PE REG. NO. F-3580



**SAN ANTONIO  
 WATER SYSTEM**  
 SANITARY SEWER  
 REPLACEMENT PROJECT  
 PROP. JOB NO. 10-5510

**CITY OF SAN ANTONIO**  
 CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
 SEELING CHANNEL PHASE I

**SUMMARY QUANTITY SHEET**

BID SUBMITTAL	PROJECT NO.: 60184822	DATE: JULY 2012
DRWN. BY: M.G.	OSGN. BY: T.W.	CHKD. BY: CC

5 OF 15



# CITY OF SAN ANTONIO

CAPITAL IMPROVEMENTS MANAGEMENT SERVICES (CIMS DEPARTMENT)  
PROJECT: SEELING CHANNEL IMPROVEMENTS - PHASE I

## ADDENDUM NO. 1 – Acknowledgement Form

RECEIPT OF ADDENDUM NUMBER(S) 1 IS HEREBY ACKNOWLEDGED FOR PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF Seeling Channel Improvements - Phase I FOR WHICH BIDS WILL BE OPENED ON August 28, 2012

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

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

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

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

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

\_\_\_\_\_  
Signature

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