

ADDENDUM NO. 1

**CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT**

PROJECT NAME: **CULEBRA 58F PHASE IIB**

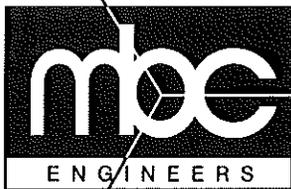
DATE: MAY 27, 2011

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 acknowledgement of the receipt of this addendum at the time he receives it and returns signed form with the bid package.

CIMS PROJECT NO.: **40-00050**

- (1) The Bidder's attention is called to certain delineated areas of the proposed earthen channel where investigation by the City indicates that material to be excavated in order to achieve design grades may require special disposal effort. Disposal of such material is quantified as separate bid Items No. 110.2.2 and 110.5, and it has its own Specification No. 110. The expected quantity of this material has been shown on Sheet No. 2C, but its initial excavation is (now) included under Item No. 105.
- (2) A Special Specification No. 999.2 has been created to clarify the work required under Bid Item No. 999.2 "Creek Bank Stabilization".
- (3) There has been a change in the manner of constructing vehicle-pedestrian crossing of tributary drainage channels "N", "O", "P", and "Q".
- (4) Minor edits to Plan Sheets No. 11-13 to clarify certain aspects of mitigation work in the Phase IIA area.
- (5) Minor edits to Plan Sheet No. 2C to clarify handling of excavated material in the identified "Area of Environmental Concern".
- (6) Certain changes to Bid Items and quantities for construction to attempt to clarify pay items.

Plan edits corresponding to the above will be available from MBC Engineers beginning on Tuesday, May 31st, 2011.



**CULEBRA 58F, PHASE IIB
SPECIAL SPECIFICATION
FOR “CREEK BANK STABILIZATION”
BID ITEM NO. 999.2**

For purpose of pricing and payment “Creek Bank Stabilization” refers to all the work necessary in order to establish a length of stabilized stream bank along one side of that perennial stream bed identified by the Corps of Engineers (in general) and these plans (more specifically) as “Jurisdictional Waters”. Work under this item shall include:

- (a) All clearing and grubbing necessary to allow reconstruction.
- (b) All grading necessary to create a stream bank section as shown on Plan Sheet No. 13.
- (c) Haul-off and disposal of all excess excavated material.
- (d) Installation of rock riprap stream bank protection as shown on the cross section detail on Plan Sheet No. 13.
- (e) All necessary care during this construction to avoid Jurisdiction Waters area(s) not being so-stabilized.

Soil Retention Blanket specified over disturbed areas has been made a separate cost item.

Note that this exercise is intended by CIMS to be limited in scope to approximately that length of single-sided bank stabilization shown on the bid quantity. Appreciable disturbance of a greater length of stream bank, unless such is expressly – directed by CIMS, shall be deemed unwarranted incursion into the Jurisdictional Waters area and require appropriate remediation by the Contractor without benefit of extra payment.

Those Lengths of stream bank to receive such stabilization are identified on Plan Sheets No. 12 and 13. CIMS reserves the prerogative to alter those locations, add to the desired length of stabilization, or deduct from that length up to a maximum difference of 25% without effect on the per LF bid price for such work. CIMS shall, upon the Contractor’s request conduct a site inspection with the Contractor after award of Contract but at least three days prior to the Contractor’s desired on-set of this phase of work and confirm those lengths of stream bank to receive such stabilization.

Payment to the Contractor for work under this pay item shall be on a per-linear-foot of stabilized stream bank on one side.

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: CULEBRA #58F PHASE IIB
PROJECT NO. 40-00050

ITEM NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT
100	Mobilization	LS	1		
101.1	Insurance and Bond	LS	1		
101	Preparation of Right-of-Way	LS	1		
102	Obliterating Abandoned Street	SY	7,435		
103.2	Remove Concrete Rip-Rap and Pipe (includes retarders and slabs)	SF	26,275		
105	Channel Excavation	CY	183,900		
107.1	Embankment in Phase 2B Area	CY	2,260		
110.2.2	Transportation of Soil to Disposal Facility	CY	36,850		
110.5	Preparation of Site Specific H & S Plan	LS	1		
300.1	Concrete Class "A" (flow blocks & structure)	CY	271		
301	Reinforcing Steel	LB	8,275		
401.1	24" Storm Drainage Pipe, R.C.P., 6'-8' Cut	LF	20		
500	Concrete Curbing	LF	80		
503.1	Laven Access Driveway	SY	580		
505	Concrete Rip-Rap (5")	SY	51,460		
505.2	(b) Large-Rock Rip-Rap (in pilot channel)	SY	7,460		
514.1	Anti-graffiti Coating System (for concrete rip-rap)	SF	83,600		
515	Top Soil	CY	6,110		
520.1	Hydromulching (Phase 2B Area)	SY	42,760		
520.2	Hydromulching (Phase 2B Restoration Area)	SY	10,500		
520	Irrigation of Planted Areas	LS	1		
526	Field Office	Not Pay Item			
530	Barricades, Signs and Traffic Handling	LS	1		
553.1	SWPPP Activities (Unspecified)	LS			
553.2	Rock Filter Berms	LF	825		

* All special provisions that apply to Project Bid Items.

**ENVIRONMENTAL SPECIFICATIONS FOR
THE WASTE MANAGEMENT PLAN**

***Culebra 58F Phase II B (Laven to Upstream of Culebra)
San Antonio, Bexar County, Texas***

WBS: 40-00050

Environmental Project Code: 07-614E2-016CIPII

* * *

Prepared by:

**City of San Antonio
Capital Improvement Management Services
Environmental Management Division
San Antonio, Texas**

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Figure 2 - Open Excavation Run-on Prevention

ENVIRONMENTAL SPECIFICATIONS

Introduction

As part of the 2007-2012 Bond Program, Proposition II, the City of San Antonio and San Antonio Waster System (SAWS) are in the process of constructing the drainage channel and related drainage structures along Zarzamora Creek at Culebra Avenue to contain the 100-year storm event. This project includes channel construction, bank stabilization, road culvert crossings, and a new sewer system. The mentioned project is listed in the Bond Program as "Culebra 58f, Phase IIB (Laven to Upstream of Culebra). (See Figures 1 and 3).

This project includes the installation of sanitary sewer, water and gas utilities. Construction of the channel will require environmental monitoring and management of metal and waste debris impacted soils. Environmental site investigations were performed by a private consultant for the City of San Antonio to determine the presence or absence of impacted media from historical releases in the vicinity associated with unpermitted landfill in December 2010 and March 2010.

A review of the subsurface investigations and 95% design plans dated February 8, 2011, revealed one impacted area identified as Area of Concern (AOC) 1, located along the proposed drainage improvements between STA 58+00 and 68+75 along Zarzamora Creek. There is potential to encounter waste debris and lead impacted soils at this AOC southeast of Culebra Road (see figure 1).

The results of the investigation identified lead impacts in the subsurface soils in the proximity of the proposed drainage improvement. Depths of waste material range from surface to 11.5 feet below ground surface. These soils are classified as Class 2 non-hazardous based on the laboratory analyses. Approximately 73,700 loose cubic yards of Class 2 non-Hazardous is estimated in AOC 1.

Groundwater was not encountered in any of the test trenches.

Soils excavated from areas not addressed in this document 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 areas identified in this document will require management in accordance with a 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 City's inspector 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 of heavy equipment and trucks. Soils from potentially impacted areas shall not be tracked on 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 lead impacted soil.

Copies of the subsurface investigation report titled "Phase II Environmental Site Assessment (Subsurface Investigation) for Culebra 58f, Phase IIB (Laven to Upstream of Culebra)," dated September, 2010, are available for review and may be obtained from the CIMS Environmental Project Manager, Michael Ortiz at (210) 207-1454 or by email at: Michael.Ortiz@sanantonio.gov.

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

110.1 DESCRIPTION

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

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

Soils at locations identified in Tables 1 and 2 may contain or have the potential to contain lead contamination. Table 2 provides the maximum detected contaminant concentrations associated with the impacted locations. Management of the affected soil shall be governed at a minimum by the following management procedures and guidelines.

The Contractor's environmental consultant will be responsible for providing environmental oversight and air monitoring activities for their construction workers in the affected areas. The environmental consultant will be on-site to perform air monitoring activities for workers working along Zarzamora Creek between STA 58+00 to 68+75 for metal vapors. The purpose of the monitoring is to assess the potential vapors arising from construction activities and potential exposure to construction workers in the affected areas. Additionally, the City or its representative will provide environmental oversight to ensure the Contractor complies with the waste management plan in accordance with Federal, State, and Local regulations.

The specific area, station numbers, cross-sections, and locations of the impacted area are identified in Figures 1 and 6A-6D. Specific procedures required for AOC 1 are listed below:

AOC 1

The City's preference is to reuse all lead impacted soil within the affected areas to minimize waste volume during construction. Therefore the City strongly recommends the Contractor manage affected soils by removing the

waste debris where encountered and reusing the potentially lead impacted soils in AOC 1. The proposed improvements are located in this affected area. Therefore, air monitoring during excavation of soils underneath the top soils and sub-base material will have to be performed in AOC 1.

The lead impacted media generated during construction in AOC 1 shall be managed by reusing as much of the impacted material as possible along Zarzamora Creek between STA 58+00 to 68+75. The waste debris should be removed from the excavated soils and disposed at a licensed TCEQ landfill. Should there be excess soils from the excavation that cannot be used within the project area; these soils must be disposed of at a licensed TCEQ landfill. It is anticipated that soils from surface to a maximum depth of 11.5 feet bgs or proposed drainage excavation depth are to be considered suspect soils and would require management and/or disposal at a licensed landfill. The Contractor will be required to coordinate and notify the City's representative 48 hours in advance prior to beginning work in AOC 1.

The total estimated quantity of impacted soils in the area of concern is approximately 73,700 in-place cubic yards. Of the 73,700 cubic yards, an approximate 50% will contain construction debris (C&D) materials requiring disposal at a permitted disposal facility. The City or City's representative will obtain a preliminary waste disposal authorization from local disposal facilities for disposal of approximate 50% of the 73,700 in-place cubic yards of C & D materials. However, the disposal facility may require additional sampling of the excavated soils/debris for waste characterization purposes. It will be the Contractor's responsibility to conduct additional soil sampling and analyses, if necessary, for waste characterization and disposal purposes. The selected disposal facility shall be approved by the City, prior to beginning work in affected areas.

When transporting any soils/debris, it is the Contractor's responsibility to ensure all dump trucks used to transport this waste are equipped with operating tarps. If the tarps are not effective, the City's inspector or City's representative will remove trucks from this project. The City inspector or City's representative will also determine if trucks need to be lined with polyethylene sheeting or not.

The Contractor will be required to obtain all necessary permits and utilize waste manifest to transport and dispose of affected media at a licensed landfill. Specifically, the trucks transporting the affected material will be required to have a solid waste haulers permit. This permit is a local requirement and will be verified prior to beginning work in the affected area. In the event the permit is not obtained or available, the inspector will immediately remove the truck from the construction project. Additionally, trucks hauling affected media to a licensed landfill without this permit are

subject to fine by the City of San Antonio, Code Compliance Department. The Contractor will be required to provide documentation of truck information, such as company, truck numbers, permit numbers, etc.

If necessary, the Contractor shall notify the City's Inspector or City's representative at least 48 hours in advance of hauling impacted soil to the approved landfill. Waste manifests shall be used to transport impacted materials from the impacted areas to the final disposal site(s). The City's Inspector or City's representative will obtain and sign the manifests as the generator for the impacted soils. Copies of the disposal records for the soils shall be submitted to the City's Inspector. The inspector will forward this documentation to the Capital Improvements Management Services (CIMS), Environmental Management Division (EMD).

The City shall be notified immediately when petroleum hydrocarbon impacted soils and/or groundwater are encountered at locations not identified in this document. The notification should be made to the City's Inspector and 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 contaminated soil and/or groundwater shall not be removed from the location without prior City's approval.

The work will be paid under Item 110.2 "Transportation and Disposal of Impacted Soils," and includes all equipment, time, materials, and labor required to complete the work. The bid proposal estimated quantity is based on the best information available as a result of the environmental investigation and in no way correlates to actual payment made for Bid Item 110.2. Final payment for Bid Item 110.2 will be based entirely on actual quantities of materials accepted by the TCEQ certified landfill facility and approved by the City. Five percent of the total amounts of pay Items 110.2 will be withheld until all disposal documentation is received by the City.

110.2 Contractors Bid Item –Transportation and Disposal of Impacted Soils

110.2.1 Reuse of Soils [COSA] (Estimated Quantity: Approximately 50% of the 73,700 in-place cubic yards after waste debris is separated from soils)

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.

ITEM 110.4
GROUNDWATER OR RUNOFF WATER

During the course of the project, water, either stormwater or groundwater, may accumulate in the excavations in AOC 1. It is in the best interest of the Contractor to provide soil berms or other protective measures around the excavated trench to prevent water intrusion. A figure depicting 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 lead. Laboratory analyses of sample(s) collected must be conducted in accordance with standards of the Environmental Protection Agency (EPA) methods. Upon approval by the Environmental Management Division 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.

Payment for item 110.4, "Groundwater or Runoff Water," will be incidental to item 110.2, "Transportation and Disposal of Impacted Soils."

**ITEM 110.5
WASTE MANAGEMENT PLAN,
SITE SPECIFIC HEALTH AND SAFETY PLAN,
AND FINAL REPORT WITH THE FINDINGS OF THE REMEDIAL
ACTIVITIES**

The Contractor is responsible for preparing a Waste Management Plan (WMP) addressing their plan to excavate, remove, reuse/dispose of the impacted media. The Health and Safety Plan is a component of the Waste Management 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(f).
- 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 location 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).
- 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 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 meet 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 contaminated soils locations identified by specific points within the project limits in AOC 1. Table 2 presents the maximum detected level of contaminants concentrations (metals) identified at the sampled locations 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 construction inspector, City's inspector, and/or City's representative immediately.

Upon completion, the Contractor is required to submit a final report for this project. The environmental report shall include but not be limited to: number of environmental oversight days, air monitoring frequency and results, total cubic yards of impacted media removed and disposed, and a summary of environmental activities.

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

110.5 Contractors Bid Item – Waste Management Plan, Site Specific Health and Safety Plan, and Final Report with the Findings of the Remedial Activities.

TABLES

TABLE 1
ENVIRONMENTAL PROJECT DATA SUMMARY
Culebra 58F Phase II B (Laven to Upstream of Culebra)
AOC 1

AOC No.	Addresses	Project Design Data			To Station No.	Improvements Of Concern	Impacted Media		Contaminant Type	On-Site Monitoring Required
		Nearest Cross Street	From Station No.	Groundwater			Soil			
1	Zarzamora Creek.	Culebra Road.	2+50	4+00	Channel Improvements at L5 Creek widening improvement	NO If dewatering activities occur, water must be removed, tested, treated, and properly disposed.	Yes Soils generated from the excavation from surface to 11.5 feet bgs, or proposed excavation depth are considered class 2, non-hazardous.	Lead	Yes ¹	

Notes:

AOC: Area of Concern

1) Onsite monitoring must be provided by Contractor's environmental consultant for workers handling impacted materials. COSA's environmental consultant is responsible for providing environmental oversight and monitoring to ensure that impacted media is properly excavated, transported, and disposed of at a licensed landfill and contractor is in compliance with these special specifications.

TABLE 2

**MAXIMUM MEDIA CONTAMINATION RESULTS
Culebra 58F Phase II B (Laven to Upstream of Culebra)
AOC 1**

Chemicals of Concern		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
TexasSpecific Background Levels(mg/kg)*		5.9	300	NL	3.0	15	0.04	.3	NL
TRRP Tier 1PCLs ^{Soil} Soil _{comb} (mg/kg)*		24.16	7,362.3 2	52.42	32,607.14	500	3.64	308.16	35.72
TRRP Tier 1PCLs ^{gw} Soil _{ing} (mg/L)*		5.01	443.83	1.50	2,400.19	3.02	0.007	2.29	0.47
TRRP Tier 1 PCLs ^{air} GW _{max} (mg/L)	Depth bgs	NL	NL	NL	NL	NL	28.41	NL	NL
AOC No. 1 Soil (mg/kg)	4.5 feet bgs at station number 58+00	<2.5	95.5	0.5	12.8	92.1	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	4 feet bgs at station number 59+50	3.47	82.2	<0.5	14.2	30.7	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	5 feet bgs at station number 60+50	3.39	183	<0.5	12	21	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	6 feet bgs at station number 60+50	3.59	74.6	<0.5	10.5	20.6	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	11 feet bgs at station number 60+50	6.29	74.2	<0.5	14.6	10.5	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	5 feet bgs at station number 62+00	4.08	80.2	<0.5	18.4	25.7	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	11.5 feet bgs at station number 62+00	3.41	89.8	<0.5	11.7	23.6	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	5 feet bgs at station number 63+50	4.37	181	<0.5	12	31.9	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	10.5 feet bgs at station number 63+50	4.14	62.8	<0.5	14.5	19.2	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	4 feet bgs at station number 65+00	<2.5	95.6	<0.5	11	75.8	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	7 feet bgs at station number 66+50	<2.5	73.8	0.65	13.1	25.8	<0.04	<2	<0.78
AOC No. 1 Soil (mg/kg)	4 feet bgs at station number 67+60	<2.5	NA	NA	NA	29.7	NA	NA	NA
AOC No. 1 Soil (mg/kg)	4.5 feet bgs at station number 67+15	3.17	NA	NA	NA	154	NA	NA	NA
AOC No. 1 Soil (mg/kg)	4.5 feet bgs at station number 62+85	2.89	NA	NA	NA	48	NA	NA	NA
AOC No. 1 Soil (mg/kg)	3.5 feet bgs at station number 4+95	3.35	NA	NA	NA	35.7	NA	NA	NA
AOC No. 1 Soil (mg/kg)	1.1 feet bgs at station number 59+15	3.86	NA	NA	NA	15.3	NA	NA	NA

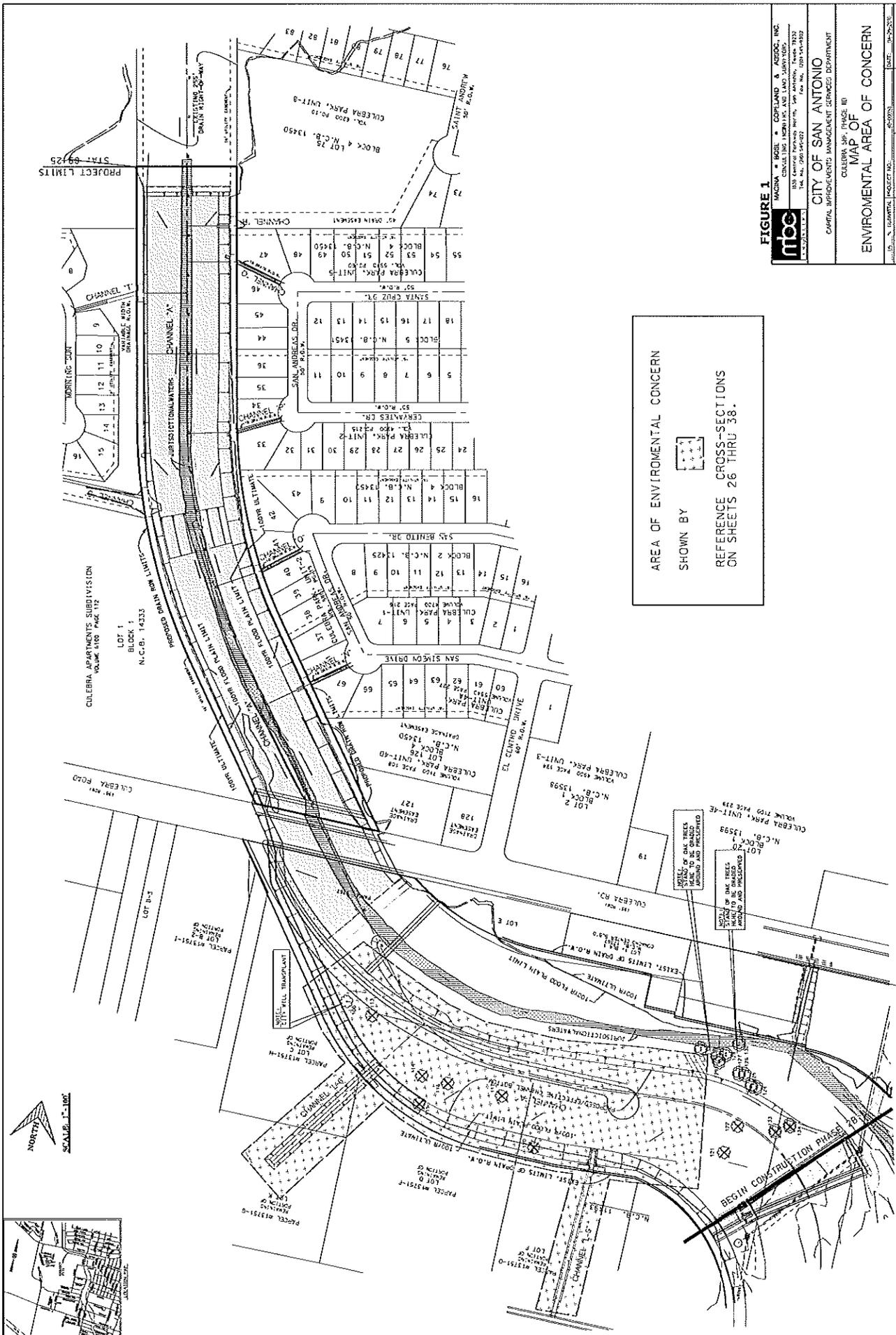
Bolded value indicated that concentration has exceeded the PCL for that chemical.

PCLs: Protective Concentration Levels, bgs: below ground surface, ND: non-detect, NL: No listed, D: Sample was diluted, NT: Not Tested

* This information might be found at the Texas Commission of Environmental Quality (TCEQ) web site [http://www.tceq.state.tx.us/remediation/trrp/trrppcls.html]. The chemicals listed in this table only reflect partial information of the potential chemicals that may be found during the construction activities. It is the contractor environmental consultant's responsibility to monitor the area where the potential contaminants exist, as it is outlined in this document.

FIGURES

FIGURE 1
ENVIRONMENTAL AREA OF CONCERN 1



AREA OF ENVIRONMENTAL CONCERN
 SHOWN BY [Symbol: Box with three asterisks] [Symbol: Box with three asterisks]
 REFERENCE CROSS-SECTIONS
 ON SHEETS 26 THRU 38.

FIGURE 1

nbc
 NICHOLS & BOEHLER CONSULTING ENGINEERS, INC.
 803 Central Expressway, Suite 200, San Antonio, Texas 78217
 Tel. No. 512-345-6789 Fax No. 512-345-6789

CITY OF SAN ANTONIO
 CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
 CULEBRA PARK, PHASE III
 MAP OF ENVIRONMENTAL AREA OF CONCERN

PROJECT NO.: 850378
 SHEET NO.: 26-38

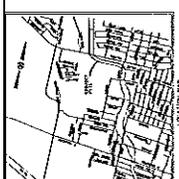
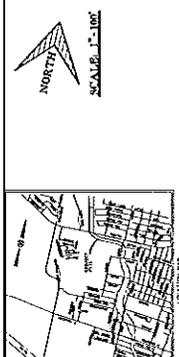


FIGURE 6A

**CROSS SECTION OF ENVIRONMENTAL AREA OF CONCERN 1
(Between Sta No. 58+00 and 60+50)**

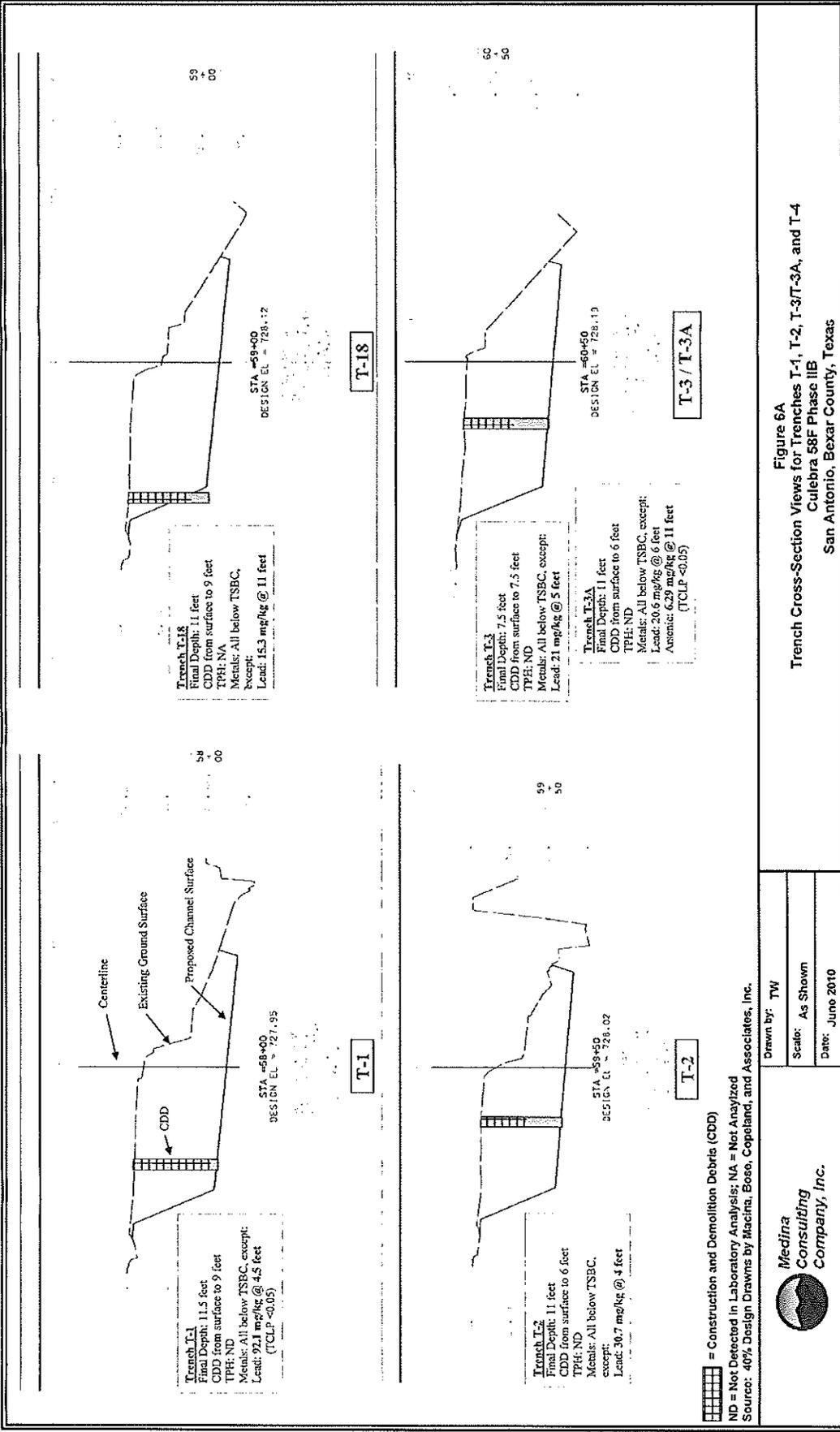


Figure 6A
 Trench Cross-Section Views for Trenches T-1, T-2, T-3/T-3A, and T-4
 Culebra S&F Phase II
 San Antonio, Bexar County, Texas

= Construction and Demolition Debris (CDD)
 ND = Not Detected in Laboratory Analysis; NA = Not Analyzed
 Source: 40% Design Drawings by Macinta, Bose, Copeland, and Associates, Inc.

Drawn by:	TW
Scale:	As Shown
Date:	June 2010



FIGURE 6B

**CROSS SECTION OF ENVIRONMENTAL AREA OF CONCERN 1
(Between Sta No. 62+00 and 65+00)**

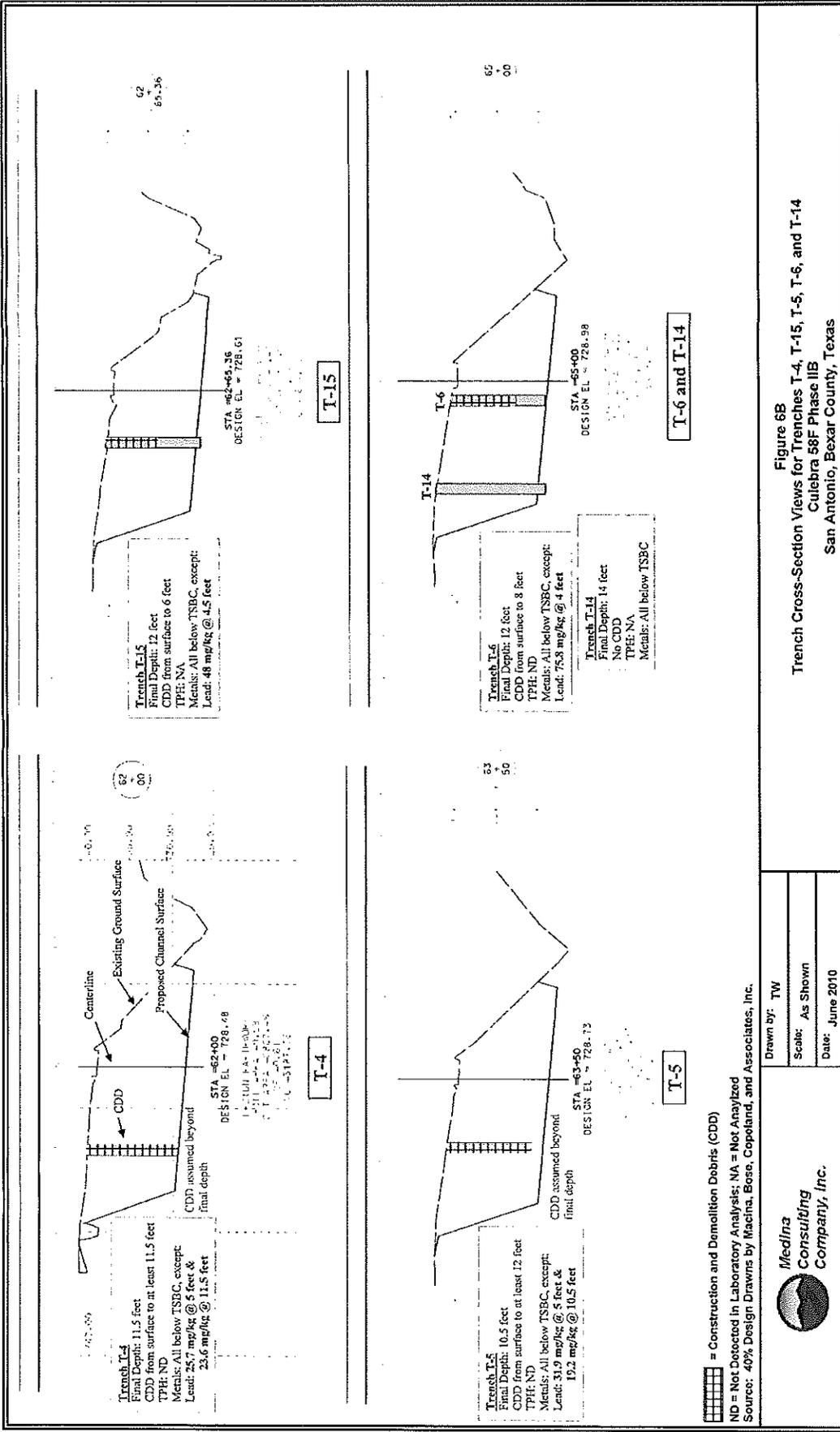


FIGURE 6C

**CROSS SECTION OF ENVIRONMENTAL AREA OF CONCERN 1
(Between Sta No. 66+50 and 68+50)**

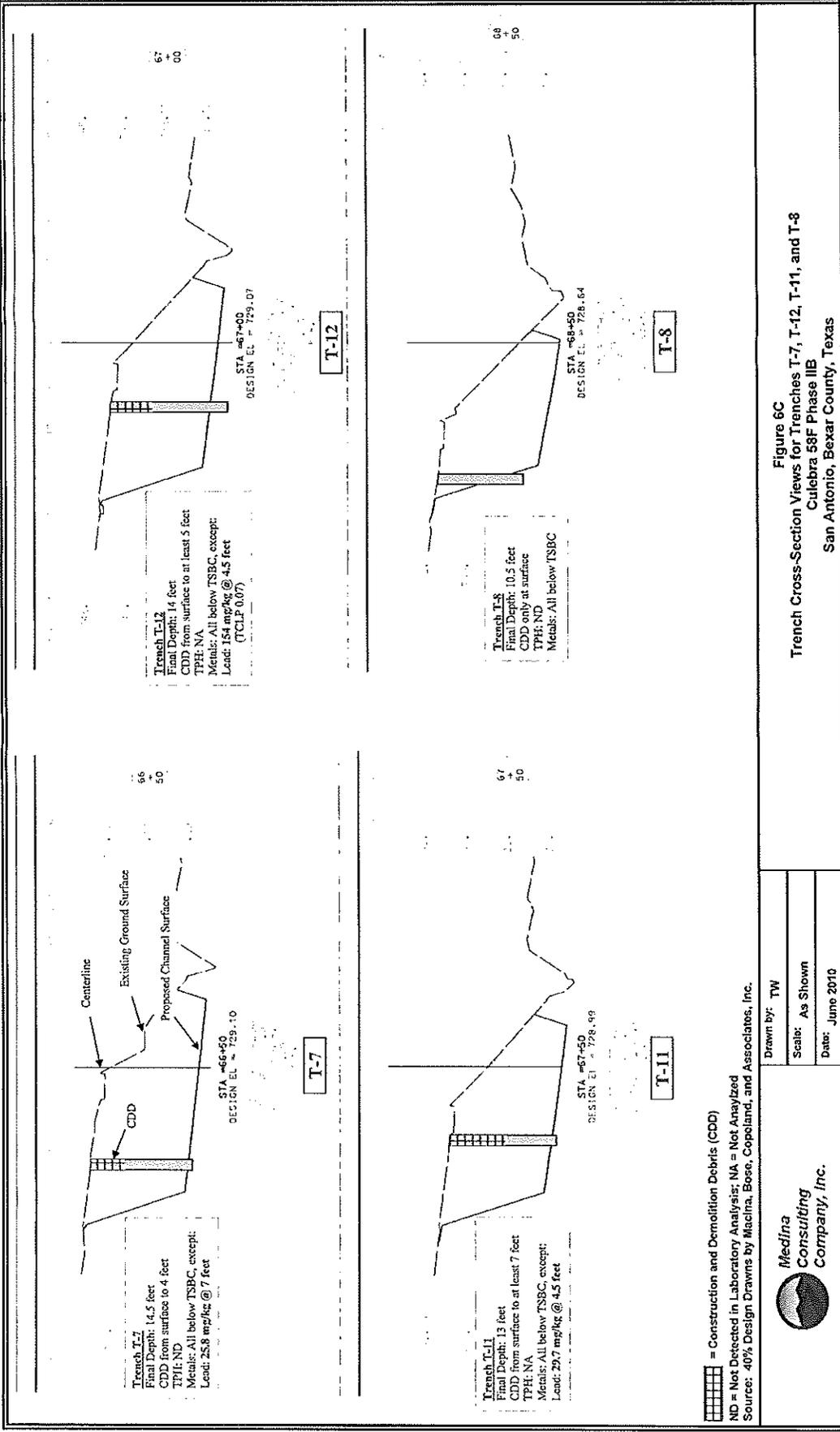


Figure 6C
 Trench Cross-Section Views for Trenches T-7, T-12, T-11, and T-8
 Culobra 58F Phase IIB
 San Antonio, Bexar County, Texas

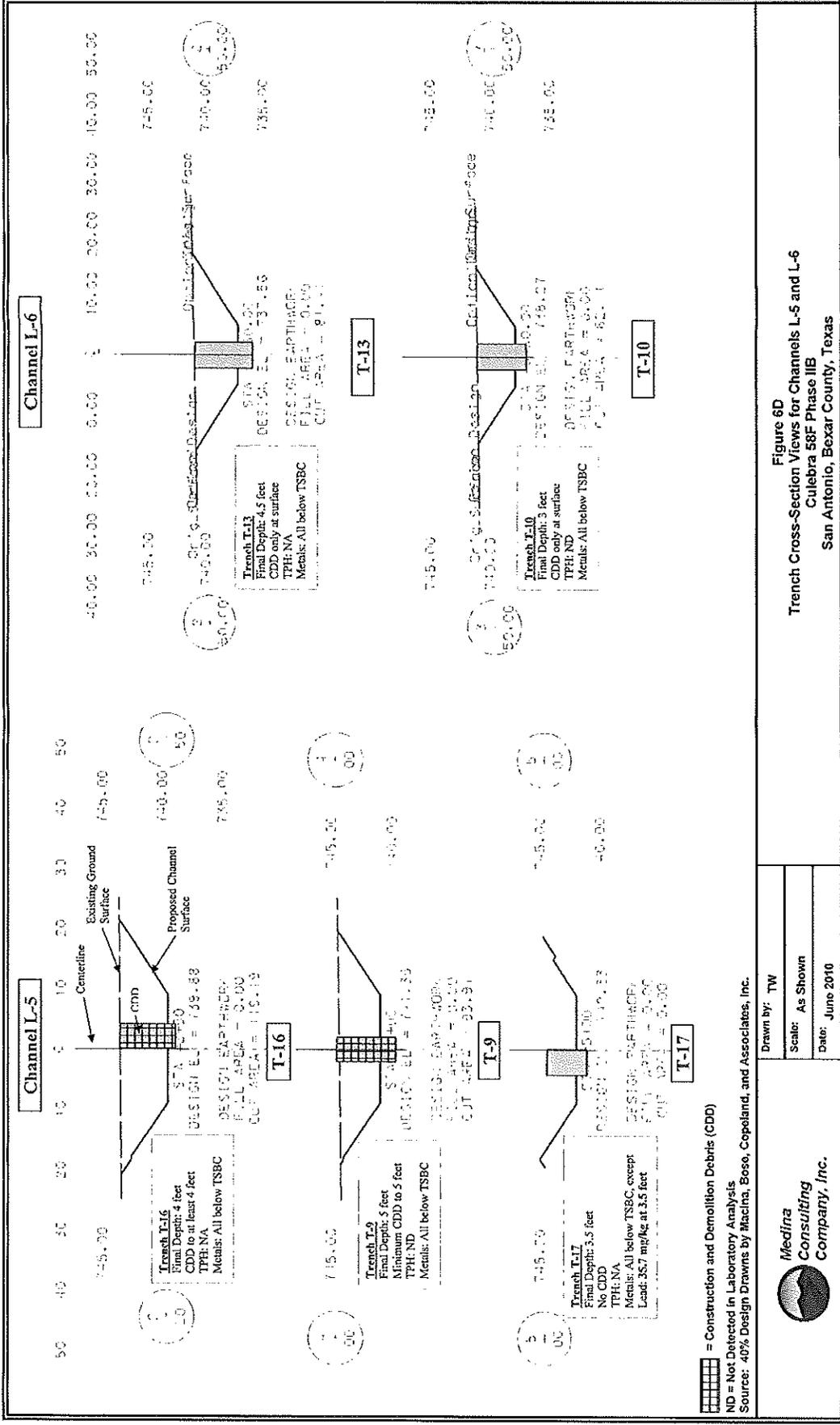
 = Construction and Demolition Debris (CDD)
 ND = Not Detected in Laboratory Analysis; NA = Not Analyzed
 Source: 40% Design Drawings by Macina, Bose, Copeland, and Associates, Inc.

Drawn by:	TW
Scale:	As Shown
Date:	June 2010



FIGURE 6D

**CROSS SECTION OF ENVIRONMENTAL AREA OF CONCERN 1
(Between Sta No. 2+50 and 5+00 of Channel L5)
(Between Sta No. 2+50 and 3+50 of Channel L6)**



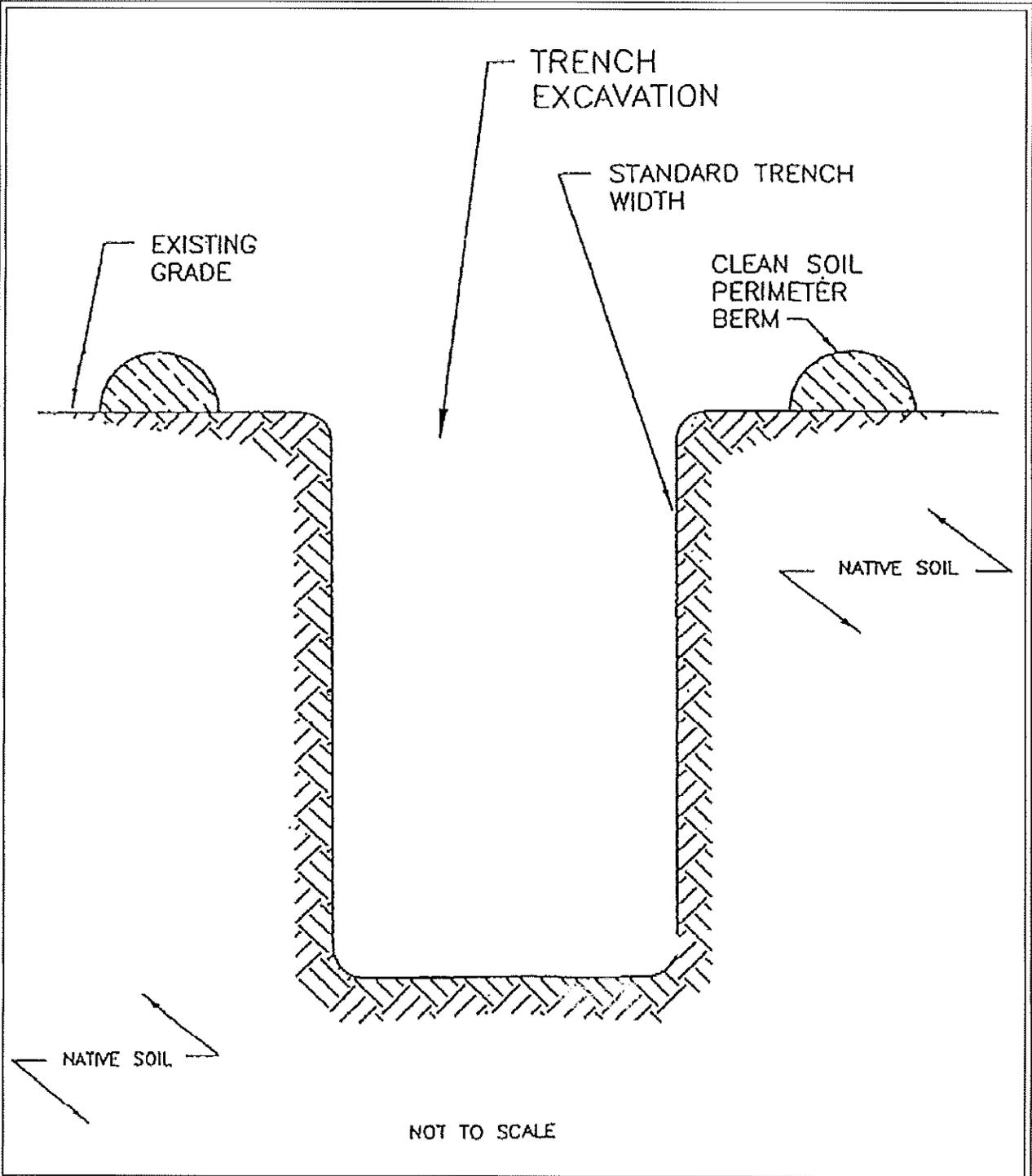
= Construction and Demolition Debris (CDD)
 ND = Not Detected in Laboratory Analysis
 Source: 40% Design Drawings by Macina, Bozo, Copeland, and Associates, Inc.



Drawn by: TW
 Scale: As Shown
 Date: June 2010

Figure 6D
Trench Cross-Section Views for Channels L-5 and L-6
 Culebra 58F Phase IIB
 San Antonio, Bexar County, Texas

FIGURE 2
OPEN EXCAVATION RUN-ON PREVENTION



NOT TO SCALE

City of San Antonio

Open Excavation Run-On Prevention

Created by: Robert Gentry
 File Path: \\server01\mst\resources\13\130101.dwg
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 Map Last Edited: 3/26/2009 10:00 AM
 PLS Reference: 02/11/07.rvt

City of San Antonio
 Capital Improvements
 Management Services
 Environmental Services
 Director MAE Fricke, P.E.
 Municipal Fleet Building
 114 West Commerce Street
 San Antonio, TX 78224



Bob Liesman

From: Bob Liesman
Sent: Thursday, May 26, 2011 2:46 PM
To: Michael.Guerra4@sanantonio.gov
Cc: RKBayer@pbsj.com; Greg Smith
Subject: Culebra 58F

Another (good) question from a contractor/supplier: For that restoration area where Ryan's detail calls for erosion control matting adjacent to the rock bank protection, this matting is part of Item # 999.2 "Creek Bank Stabilization". Question is how wide is that matting (beyond the rock)? Honest answer is it will vary continuously, and we have not attempted to detail this work to that degree.

May I separate that matting from Item 999.2 and pay for it as a new item, per square yard? I'll come up with a rough approximation of quantity, but we'll pay only for what you instruct him to cover.

Robert A. Liesman, P.E.
Senior Vice President
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**CITY OF SAN ANTONIO
DEPARTMENT OF CAPITAL IMPROVEMENTS MANAGEMENT SERVICES
CONTRACT SERVICES DIVISION**

RECEIPT OF ADDENDUM NUMBER(S) 1 IS HEREBY ACKNOWLEDGED FOR PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF CULEBRA 58F PHASE IIB

FOR WHICH BIDS WILL BE OPENED ON TUESDAY, JUNE 7, 2011 AT 2:00 PM

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

Company Name: _____

Address: _____

City/State/Zip Code: _____

Date: _____

Signature

Print Name/Title

