

Ms. Eleanor Wehner, P.G.
Texas Commission on Environmental Quality
Remediation Division
VCP-CA Section, Mail Code MC-127
Post Office Box 13087
Austin, Texas 78753

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Subject:
Upper Parker Brothers Channel and Fines Pile Design Clarifications

ENVIRONMENT

Dear Ms. Wehner:

Date:
May 16, 2016

Submitted with this letter are alternative configurations to the Improvement Plans for the Upper Parker Brothers Arroyo including the Fines Pile cover system. These plans are consistent with drawings previously submitted and approved by the Texas Commission on Environmental Quality (TCEQ) on October 28, 2015 and subsequently permitted (grading and drainage) with the City of El Paso. The alternative configurations maintain the integrity of the approved design to convey surface storm water through the Former ASARCO smelter property and minimize infiltration. Additional permitting with the City will not be needed. The approved alternative configurations to the plans are described in detail below.

Contact:
Scott Brown

Phone:
602-438-0883

Email:
scott.brown@arcadis.com

Our ref:
06835001.2014

Fines Pile

The alternative configuration for the Fines Pile is provided in Design Clarification No. 3 (see attached) and described below.

An evapotranspirative (ET) final soil cover will be used on the slopes above the Upper Parker Brothers Arroyo (UPBA), perimeter slopes and top deck. The ET soil cover section will be the same as the approved cover for the sloped area on the plant site. Surface water generated on the Fines Pile top deck will be routed to drain to a HydroTurf lined down drain discharging onto the approved HydroTurf lined UPBA channel. Surface water generated from the the Fines Pile perimeter slopes will be collected in an asphalt lined ditch at the toe of the slopes. The down drain and perimeter ditch are sized to carry the 100-year 24 hour storm to the UPBA channel.

Upper Parker Brothers Channel Inlet

An alternative configuration for UPBA channel inlet (adjacent to I-10) allows construction of a cast in place concrete wall or spraying shotcrete on the south face of the inlet area. Either of these two configurations accomplish the same function as the specified system comprised of a LLDPE liner under gabion baskets to form the channel walls. The concrete or shotcrete will be keyed into the subgrade and sealed using a combination of design details previously approved in the UPBA Fines Pile Cover System and Drainage Improvement Plans.

Ephemeral Pond

The UPBA channel extends from the I-10 property line to the flat area adjacent to the Union Pacific Railroad (UPRR) property line known as the Ephemeral Pond. The channel will be lined as originally approved with HydroTurf and the Ephemeral Pond will be lined with LLDPE overlain by a geotextile cushion fabric and riprap, which is the same system approved and used in the Lower Parker Brothers Arroyo Drainage Improvements. The outlet area of the Ephemeral Pond will be lined with asphalt over the Kinder Morgan gas line easement to the UPRR property line. We are coordinating with UPRR to assure the drainage channel termination at the TCT property line is consistent with drainage improvements planned on UPRR property.

Closure

The alternative configurations convey design flows through the Parker Brothers Arroyo and minimize infiltration to the subsurface consistent with the original design. We request TCEQ's acknowledgement that these alternative configurations are accepted for construction.

If you have any questions regarding the information submitted, please call me at 602-438-0883.

Sincerely,

Arcadis U.S., Inc.



Project Manager

Attachments

1 Design Clarification No. 3

Copies:



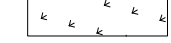



Roberto Puga, Arcadis Project Team

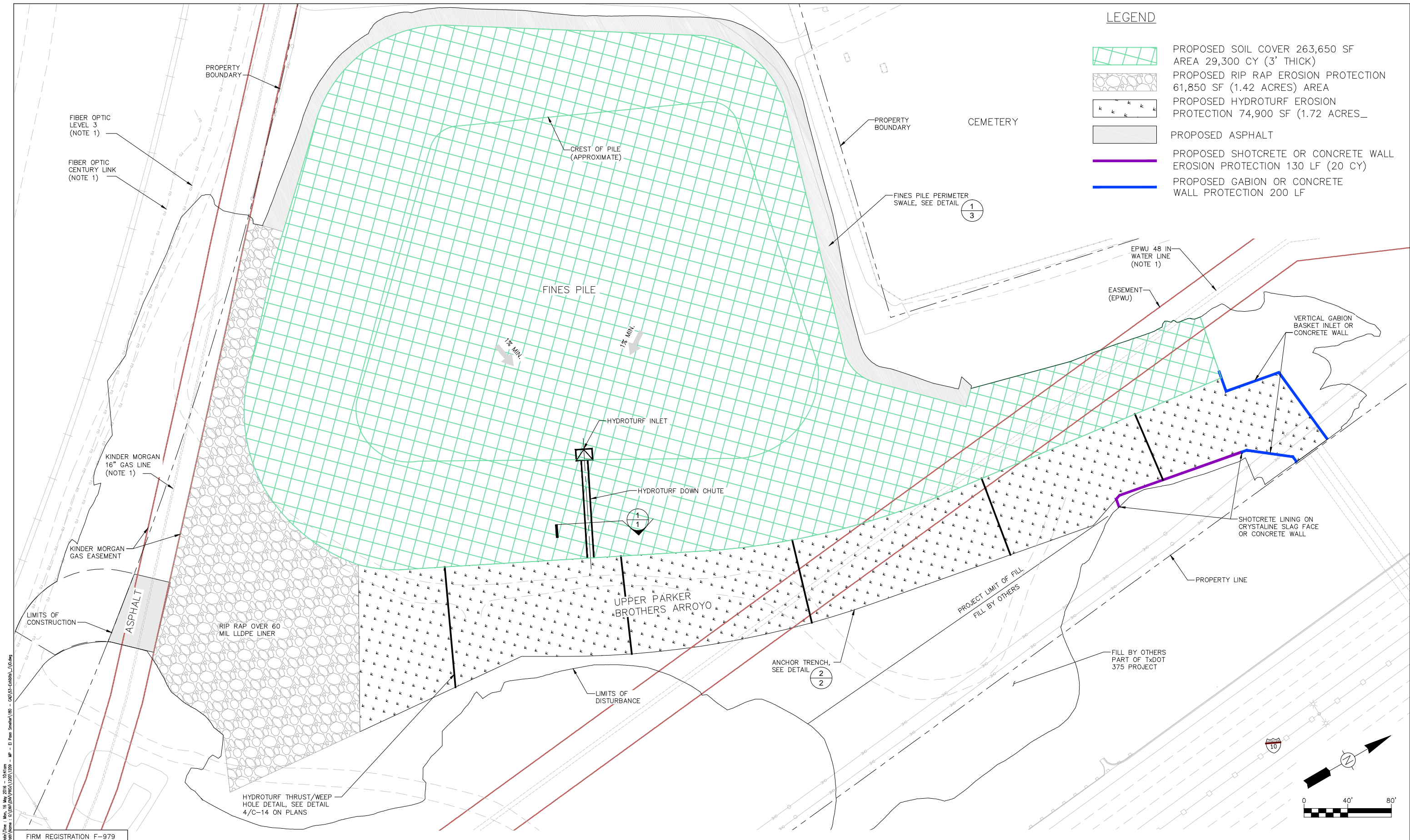
ASARCO El Paso Smelter Remediation Site

DESIGN CLARIFICATION NO. 3

PROJECT	<u>Upper Parker Bros. Arroyo Fines Pile Cover System and Drainage Improvements</u>	PAGE 1 OF 4 PAGES
LOCATION	<u>El Paso, Texas</u>	PROJECT NO. <u>6835001</u>
		DATE <u>05/16/16</u>
CONTRACTOR	<u>Arcadis Construction and Environmental Services (ACES)</u>	CROSS REFERENCE TO DAILY REPORT NO. _____
INSTRUCTIONS		
<p>Whenever any corrective change is made in field construction which is at variance with the specifications and drawings as originally issued, a complete detailed design clarification shall be filed, listing the following items, so that the designer can review and approve the clarification.</p> <ol style="list-style-type: none"> 1. Identify the area in question: Indicate why originally specified construction was not used or modified. 2. The Solution: Describe, in detail, the recommended change or changes that were made, as applicable. 3. Indicate whether this is an isolated case or a general condition which could be improved by changing future specifications or drawings. 4. Submit sketches as necessary. 		
REFERENCE DATA		
SPECIFICATION SECTION NO.	PAGE NO.	PARAGRAPH NO.
DRAWING NO(s).	C-3; C-4; C-8, C-15	ENTITLED. Fines Pile Site Plan, Upper Reach Channel Plan and Profile, Upper Reach Channel Details; Civil Details 3
SHEET NO(s) 1, 2, 3 attached	DATED 05/16/2016	ENTITLED Upper Parker Brothers Arroyo and Fines Pile VE Exhibit, Upper Reach Channel Details, Fines Pile Perimeter Swale Details
DESCRIPTION: Revisions to Railroad channel design		
1. DETAILED IDENTIFICATION OF THE AREA IN QUESTION		
Alternative configurations for the Fines Pile and Upper Reach.		
2. DETAILED SOLUTION PROPOSED OR ACCOMPLISHED		
Fines Piles capping method revised from ClosureTurf to ET Cover.		
Ephemeral Pond area liner revised from HydroTurf to Riprap over LLDPE.		
Fines Pile Perimeter Ditch revised from HydroTurf with Riprap to an asphalt liner.		
Upper Reach inlet gabion baskets revised to allow concrete walls or Shotcrete lining (South bank only).		

LEGEND

-  PROPOSED SOIL COVER 263,650 SF
AREA 29,300 CY (3' THICK)
-  PROPOSED RIP RAP EROSION PROTECTION
61,850 SF (1.42 ACRES) AREA
-  PROPOSED HYDROTURF EROSION
PROTECTION 74,900 SF (1.72 ACRES)
-  PROPOSED ASPHALT
-  PROPOSED SHOTCRETE OR CONCRETE WALL
EROSION PROTECTION 130 LF (20 CY)
-  PROPOSED GABION OR CONCRETE
WALL PROTECTION 200 LF



Date: 16 May 2016 10:04 am
 File Name: C:\BENTLEY\PROJECTS\2016\1001209 - MP - El Paso Smelter\100 - CD\CD-EP-SMELTER_100.dwg
 User: JLP

FIRM REGISTRATION F-979

REVISIONS			
NO.	BY	DATE	REMARKS

DES: JLP
 DWN: RJK
 CKD: MRB

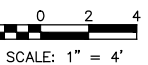
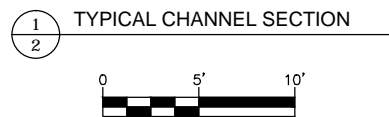
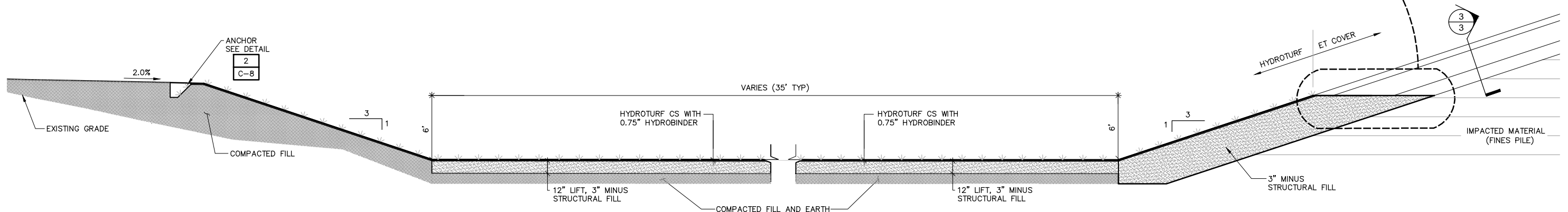
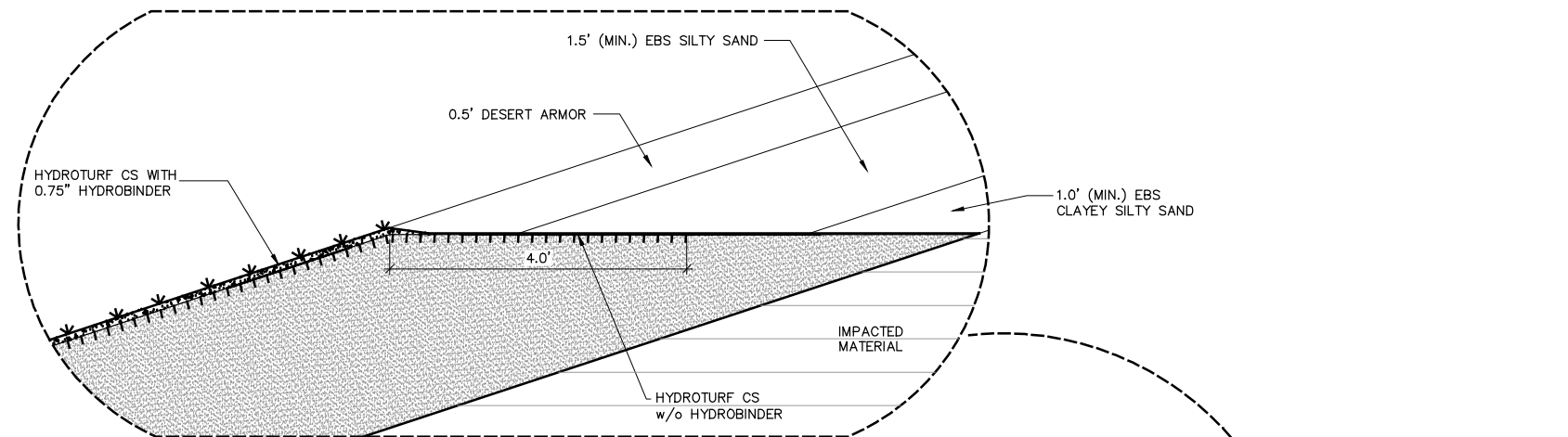
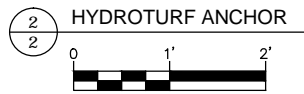
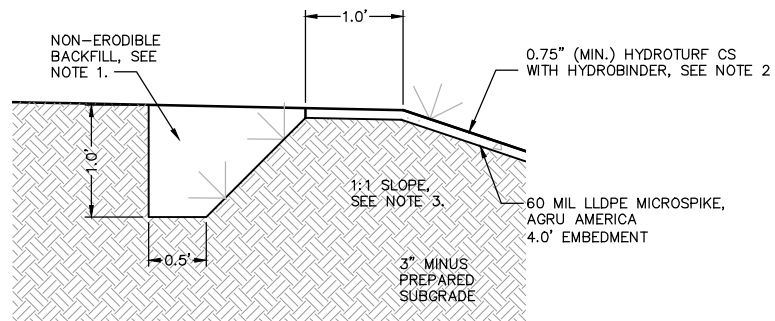
FORMER ASARCO SMELTER
 EL PASO, TEXAS

EXHIBIT
 UPPER PARKER BROTHERS ARROYO
 AND FINES PILE VE EXHIBIT
 SCALE: NOTED

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 DATE: 5/11/2016
 SHEET 1 OF 3
 CAD REF. NO. 10.dwg



- NOTES
1. ANCHOR TRENCH BACKFILL SHALL BE A NON-ERODIBLE MATERIAL WITH A MINIMUM WEIGHT OF 134.0 PCF.
 2. HYDROTURF CS INCLUDES SYNTHETIC TURF: HYDROBINDER INFILL, PP WOVEN GEOTEXTILE 60 MIL LLDPE DUAL TEXTURED LINER (AGRU AMERICA SUPER GRIPNET).
 3. ANCHOR SHALL WEIGH 134.0 LB/FT REGARDLESS OF AS-EXCAVATED SLOPE.



Date/Time: Thu, 12 May 2016 8:38:00 AM
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 Acad Version: R18.1.1 (MSD Team)
 User Name: R0000000

FIRM REGISTRATION F-979



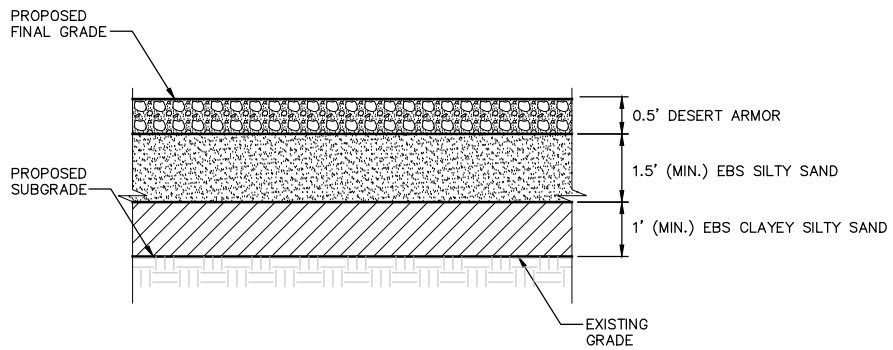
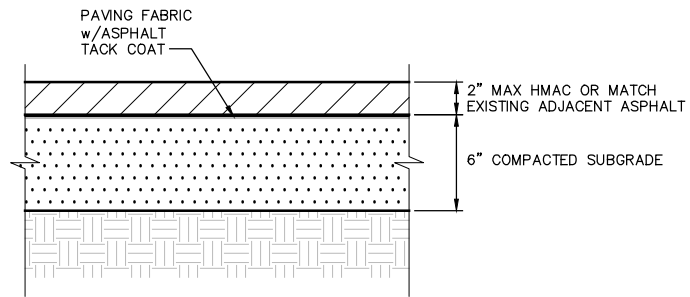
REVISIONS			
NO.	BY	DATE	REMARKS

DES JLP
 DWN RJK
 CKD MRB

FORMER ASARCO SMELTER
 EL PASO, TEXAS

EXHIBIT
 UPPER REACH
 CHANNEL DETAILS
 SCALE: NOTED

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 DATE 5/11/2016
 SHEET 2 OF 3
 CAD REF. NO. 10.dwg

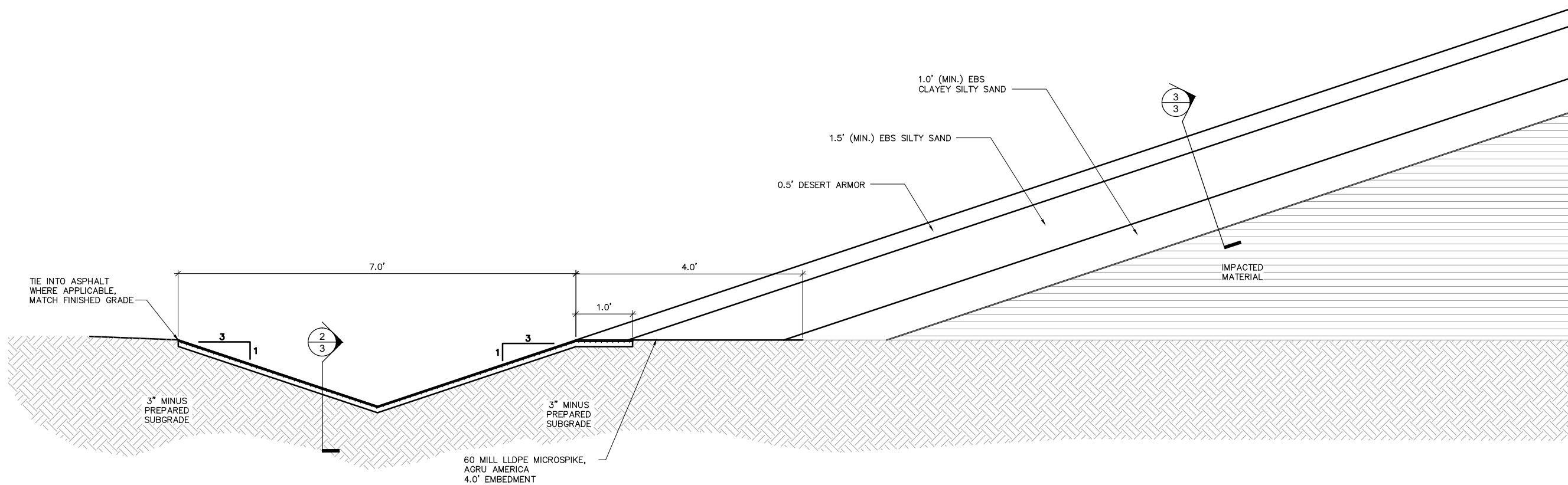


SPECIFICATIONS

1. TxDOT H.M.A.C. TYPE C MIX
2. PAVING FABRIC
NON-WOVEN POLYESTER NEEDLE-PUNCHED GEOTEXTILE, MINIMUM 4.1 oz/yd²
U.S. FABRICS US100P, MIRAFI MPV500, PROPEX PETROMAT 4598, OR EQUAL
3. TACK COAT: CMS-2P ASPHALT 0:1 EMULSION APPLIED NEAT AT 0.50 gal/yd²
4. SUBGRADE PREP: SCARIFY, MOISTURE CONDITION, COMPACT TO 90% DENSITY, UPPER 6".
NOTE: NO PRIME COAT REQUIRED ON SUBGRADE.

3
3 DESERT ARMOR COVER SYSTEM
NOT TO SCALE

2
3 HMAC PAVEMENT SECTION



1
3 FINES PILE PERIMETER SWALE



Date/Time: Thu, 12 May 2016 8:28:00am
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REVISIONS			
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EXHIBIT
FINES PILE
PERIMETER SWALE DETAILS
SCALE: NOTED

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DATE 5/11/2016
SHEET 3 OF 3
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