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MEMORANDUM

To:	Valmichael Leos and Barbara Nann U.S. Environmental Protection Agency	**Date:**	November 21, 2013
From:	John Laplante, John Verduin, Wendell Mears, and David Keith, Anchor QEA, LLC	**Project:**	090557-01
Cc:	Gary Miller, USEPA Philip Slowiak, IP David Moreira, MIMC		
Re:	Post-TCRA Quarterly Inspection Report – October 2013 Inspection		

Introduction

This document reports the results of the October 2013 quarterly inspection of the armored cap cover, fencing, and signage installed for the Time Critical Removal Action (TCRA) at the San Jacinto River Waste Pits Superfund Site (TCRA Site). Figure 1 shows the location of the TCRA site.

Background

The TCRA was implemented by International Paper Company (IP) and McGinnes Industrial Maintenance Corporation (MIMC) under an Administrative Settlement Agreement and Order on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA) – Docket No. 06-12-10, effective May 17, 2010. IP and MIMC are referred to together herein as the "Respondents". A full description of the TCRA implementation is provided in the associated project documentation:

- Removal Action Work Plan (RAWP; Anchor QEA 2010, 2011)
- Revised Draft Final Removal Action Completion Report[1] (RACR; Anchor QEA 2012)

[1] David Keith, the Respondents' Project Coordinator, received a RACR (in the form it was issued by USEPA) from Valmichael Leos via email on August 15, 2012; the appendices to the RACR were not provided to Dr. Keith as part of the document, and are assumed to remain unchanged from the appendices that had been provided by Respondents to USEPA. Respondents reserve all rights related to the changes made by USEPA to the Revised Draft Final RACR, submitted by Respondents to USEPA on March 9, 2012.

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The inspection summarized in this report was conducted in accordance with the requirements and schedule established in the Operations, Monitoring, and Maintenance (OMM) Plan (Appendix N of the RACR – Anchor QEA 2012).[2] The OMM Plan specifies the timing, pertinent items, tolerances, and procedures for inspection, maintenance, and repair of the armored cap protective cover, fencing, and signage installed for the TCRA Site.

Monitoring

The following sections document the October 2013 quarterly inspection of the armored cap cover, fencing, and signage installed as part of the TCRA, as well as corrective actions taken (if any), following the inspection. The inspection process began on October 4, 2013, and was completed on October 31, 2013. The inspection included evaluation of the TCRA elements referenced below:

- Visual inspection of the security fence and signage surrounding the TCRA Site.
- Visual inspection of the armored cap located above the water surface.
- Visual confirmation that waste materials are not eroding into the San Jacinto River.
- Hydrographic and topographic survey data collection of the armored cap to compare the current elevations with the survey performed during the July 2013 quarterly inspection.

Visual Inspection

The visual inspection included observing the current conditions of the perimeter fence, warning signs, and the portion of the armored cap visible above the San Jacinto River water line. Figure 2 displays the location of the perimeter fence and the stand-alone signs around the armored cap (additional signs are affixed directly to the perimeter fence). The visual inspection was performed on October 4 and 16, 2013 and then a southwest fence inspection on November 8, 2013. Representative photographs of conditions observed during the visual inspection are provided in Appendix A. A summary of each facet of the visual inspection is provided in the following sections.

[2] The OMM Plan was attached to the Draft Final RACR, submitted to USEPA on November 22, 2011, and authorization to implement the OMM Plan was contained in an email from USEPA dated January 18, 2012. The OMM Plan was also attached as an appendix to the Revised Draft Final RACR submitted to USEPA on March 9, 2012, which USEPA then revised and issued without reference to any changes to the appendices.

Armored Cap

All portions of the armored cap that were visible during the inspection were observed to be intact, with no breaches or other damage. No movement or erosion of TCRA materials into the San Jacinto River was observed at any location during the visual inspection. The woody stem vegetation maintenance continues; the third treatment was on September 19, 2013. Photographs of the armored cap from the inspection are provided in Appendix A.

Perimeter Fencing

The perimeter fencing (Figure 2) on the west and east banks of the San Jacinto River was visually inspected for breaches or other signs of damage on October 4, 2013. No breaches or other signs of fence damage were observed during this inspection for any of the three sections of the fence: the east bank, the west bank on the north side of I-10, or the west bank on the south side of I-10.

After receiving notification from Texas Department of Transportation (TxDOT) representatives that the fence had been cut on the south side of the east bank, a second inspection was performed on October 16, 2013. The fence maintenance contractor repaired the fence on October 23, 2013, and it was inspected on October 24, 2013. Photographs 14 and 15 show the damage and repairs, and are included in Appendix A. TxDOT staff continues to inspect the gates and fences and to patrol the area for trespassers. The vegetation along the southwest fence alignment facing Market Street has been mowed, and is dying off for the winter.

The portion of the fence installed along the south boundary of the San Jacinto River Fleet (SJRF) property is not included in the fencing inspection. The SJRF property is currently an active facility that conducts daily security checks, as required by the U.S. Coast Guard and Transportation Security Administration for an active maritime fleeting area.

Signage

A total of fifteen “Danger” and “No Trespassing” signs are located around the perimeter of the land portion of the TCRA Site; the signs are mounted on steel posts and set in concrete pads. As shown in the photographs in Appendix A, these signs were observed to be in place during the October 4, 2013 inspection.

Three USEPA Public Notice Signs are present around the TCRA Site located: 1) near the gate entry point for the perimeter fence north of I-10; 2) near a gate entry point south of I-10; and 3) at the end of the TxDOT right-of-way north of I-10 near the San Jacinto River. These three signs were observed to be in place and undamaged. See Appendix A for representative photographs.

Table 1 summarizes the condition of the TCRA Site signage described in this section.

Table 1

TCRA Perimeter Fencing and Sign Inspection Punch List

Task	Status	
	Completed	Date
Perimeter Fence Visually inspect the perimeter fencing on the east and west sides of the San Jacinto River.	Yes	10/4/2013 10/16/2013 10/24/2013
"Danger" and "No Trespassing" Signs Visually inspect the 15 signs to verify that they remain in place.	Yes	10/7/2013
USEPA Public Notice Signs Visually inspect the 3 signs to verify that they remain in place.	Yes	10/7/2013

Surveys

Portions of the armored cap above the water surface or at a water depth too shallow to access by boat were surveyed using land-based topographic survey techniques. A bathymetric survey was performed for the portions of the armored cap below the water surface and accessible by boat. The surveyor followed the track line spacing, measurement intervals, and accuracy requirements detailed in the OMM Plan.

Survey Tolerance Requirements

The OMM Plan requires that each survey be compared with the prior completed survey using the following criteria:

1. Areas with elevations that are within 6 inches of the previous survey require no action.
2. Contiguous areas with elevation changes exceeding plus or minus 6 inches triggers a review of the survey benchmarks for accuracy or movement.

3. Areas where surveyed elevations are 6 inches higher or lower than the prior survey for a contiguous area larger than 30 feet by 30 feet will require probing to measure the cap thickness.

Survey Results

The survey for this quarterly inspection event was conducted by Hydrographic Consultants, Ltd. Upland topographic data was collected on October 22, 24, 25, and 28, 2013, and hydrographic survey data was collected on October 29, 2013. The processed survey data was received and approved on November 1, 2013. The survey work occurred over several days because seasonal frontal systems passing through the area hampered the survey efforts. Figure 3 displays the results of the completed survey.

The survey datasets from July and October 2013 were compared to evaluate the differences in the top of the armor cap elevation between surveys. These differences are shaded and shown on Figure 3. The survey results indicate there continues to be sedimentation/deposition on the surface of the armored cap, as may be expected in a fluvial system like the San Jacinto River.

Manual probing of armored cap thickness is required at areas identified by the topographic or bathymetric surveys as more than 6 inches lower in elevation than during the prior survey over contiguous areas of 30 feet by 30 feet. When the October 2013 hydrographic survey was compared to the July 2013 survey, the results indicated that there were no areas that met the manual probing requirement. Therefore, no probing was conducted as part of the October 2013 inspection.

The small areas identified as increases and decreases in elevation can be attributed to the horizontal and vertical accuracy of the survey, minor shifts in track line location from the baseline survey, elevation data recorded in the crevices between rock surfaces, or other related measuring inaccuracies. The potential for these inaccuracies to exist was confirmed by the surveyor after reviewing the data collected hydrographically during this inspection versus the surveys taken in July 2013.

Repairs to TCRA Construction Elements

Other than the cut fence, no other TCRA construction elements were identified as deficient or damaged during this inspection event. Repairs to the fence were made; photographs of

the repaired fence are included in Appendix A. No maintenance was required to the TCRA cap in response to the October 2013 inspection.

Inspection Summary

A damaged fence area reported by TxDOT staff was repaired. There were no damaged or deficient signs. No armored cap deficiencies were identified by the topographic or bathymetric surveys.

List of Figures

Figure 1 - Vicinity Map
Figure 2 – Fence and Warning Sign Layout
Figure 3 – October 2013 Quarterly Inspection Survey

List of Appendices

Appendix A – Inspection Photographic Log

References

Anchor QEA, LLC (Anchor QEA), 2010. *Removal Action Work Plan*, San Jacinto River Waste Pits Superfund Site. Prepared for U.S. Environmental Protection Agency (USEPA) Region 6 on behalf of McGinnes Industrial Maintenance Corporation and International Paper Company. November 2010.

Anchor QEA, 2011. *Removal Action Work Plan*, San Jacinto River Waste Pits Superfund Site. Prepared for U.S. Environmental Protection Agency (USEPA) Region 6 on behalf of McGinnes Industrial Maintenance Corporation and International Paper Company. Revised February 2011.

Anchor QEA, 2012. *Revised Draft Final Removal Action Completion Report*, San Jacinto River Waste Pits Superfund Site. Prepared for McGinnes Industrial Maintenance Corporation, International Paper Company, and U.S. Environmental Protection Agency (USEPA) Region 6. Revised March 2012.

USEPA, 2010. *Administrative Settlement Agreement and Order on Consent for Removal Action*. U.S. Environmental Protection Agency Region 6 CERCLA Docket No. 06-12-10. In the matter of: San Jacinto River Waste Pits Superfund Site Pasadena, Harris County, Texas. International Paper Company & McGinnes Industrial Management Corporation, Respondents.

FIGURES

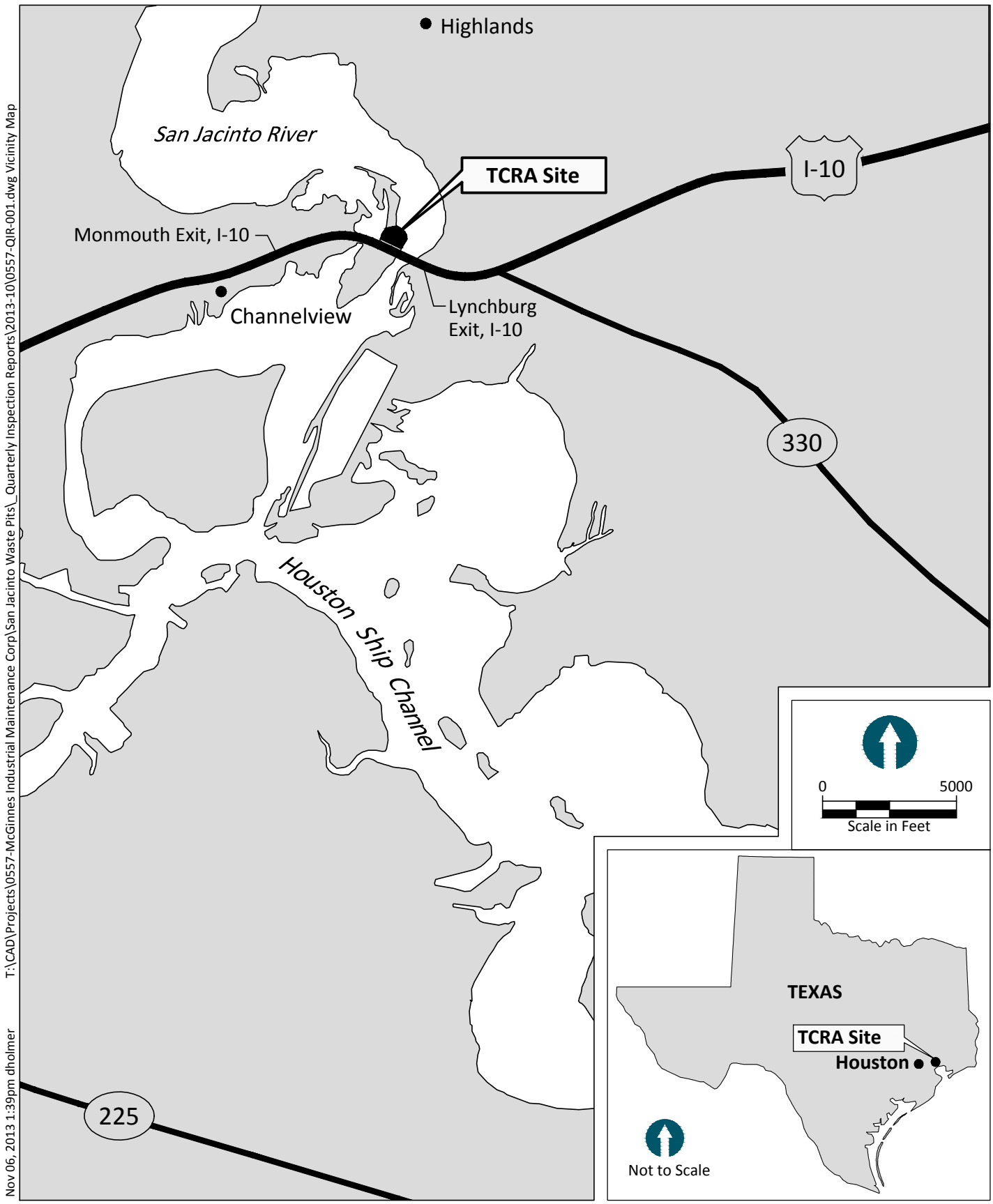

Figure 1
Vicinity Map
Post TCRA Quarterly Inspection (October 2013)
San Jacinto River Waste Pits Superfund Site

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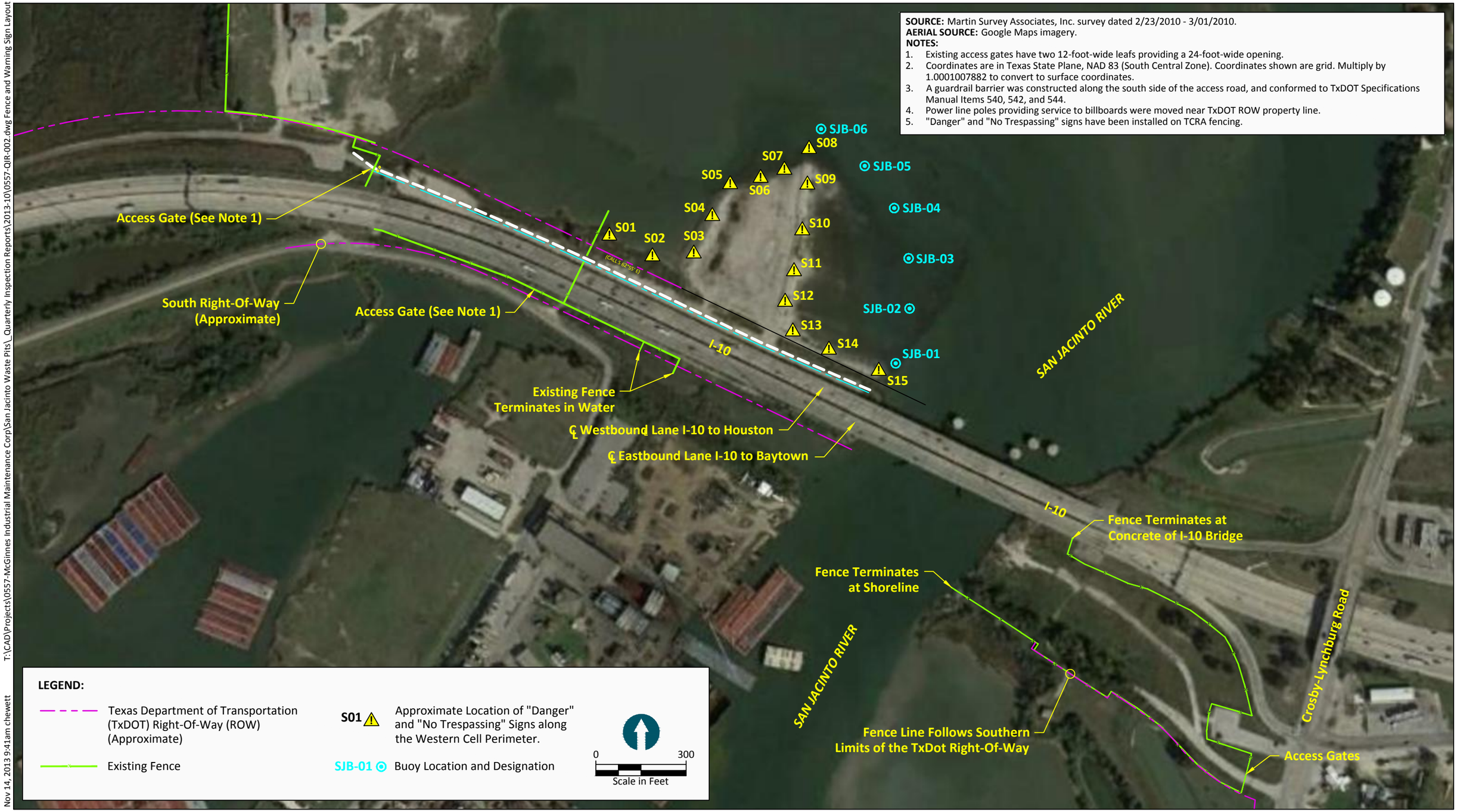

T:\CAD\Projects\0557-McGinnes Industrial Maintenance Corp\San Jacinto Waste Pits_Quarterly Inspection Reports\2013-10\0557-QIR-002.dwg Fence and Warning Sign Layout

Nov 14, 2013 9:41am chewett

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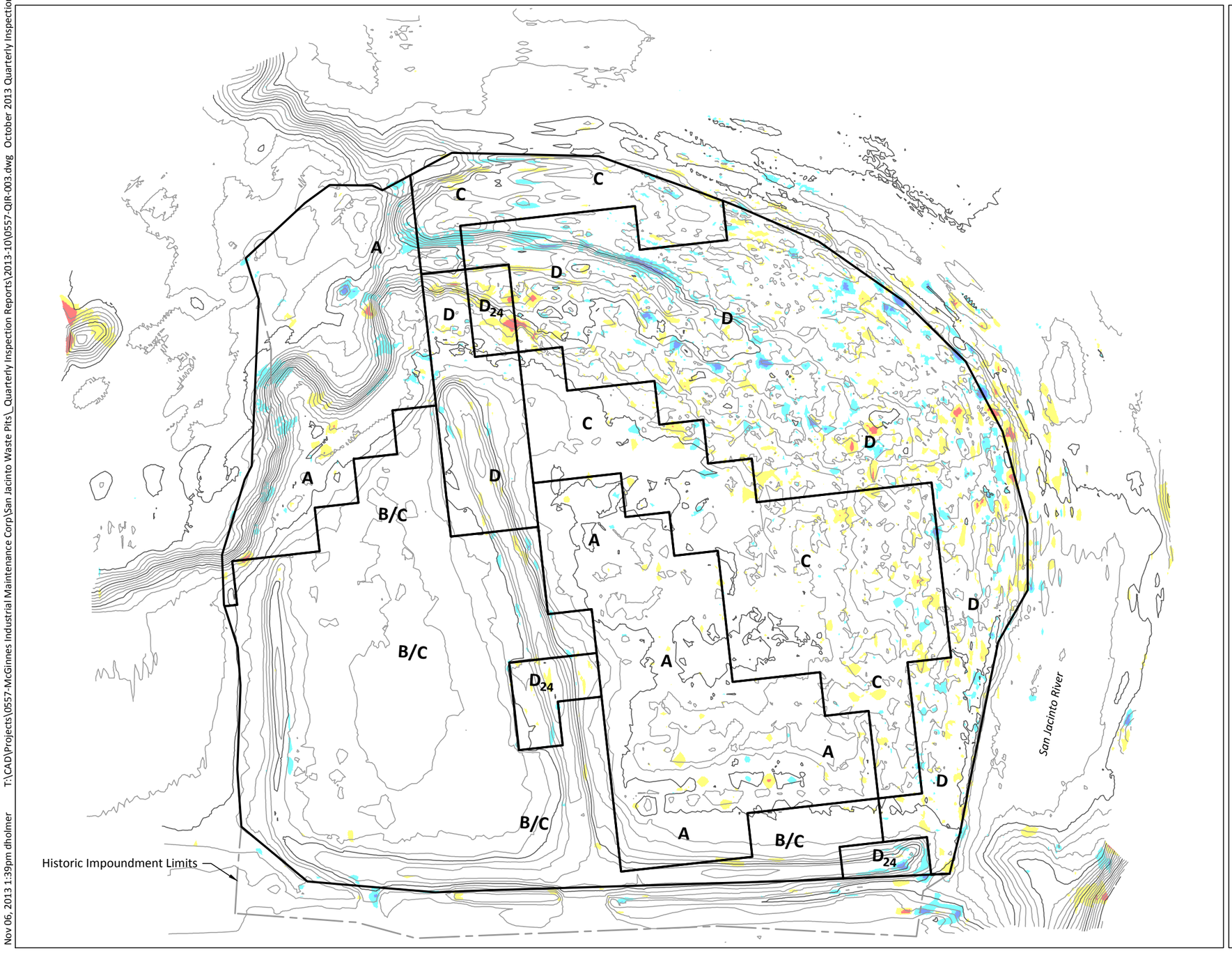
Figure 2
Fence and Warning Sign Layout
Post TCRA Quarterly Inspection (October 2013)
San Jacinto River Waste Pits Superfund Site

Nov 06, 2013 1:39pm dholmer T:\CAD\Projects\0557-McGinnes Industrial Maintenance Corp\San Jacinto Waste Pits_Quarterly Inspection Reports\2013-10\0557-QIR-003.dwg October 2013 Quarterly Inspection Survey



LEGEND:

- October 2013 Bathymetric and Topographic Contours (1 Foot Interval)
- B/C — Armored Cap Type and Boundary
- Historic Impoundment Limits
- > 1.0 Foot Increase
- 0.5 Foot Increase to 1.0 Foot Increase
- 0.5 Foot Increase to 0.5 Foot Decrease
- 0.5 Foot Decrease to 1.0 Foot Decrease
- > 1.0 Foot Decrease
- 30' × 30' — Example 30'x30' Area

SOURCE: Drawing prepared from survey provided by Hydrographic Consultants dated October 2013.
HORIZONTAL DATUM: Texas State Plane South Central, NAD83, U.S. Feet.
VERTICAL DATUM: NAVD 88.

0 120
Scale in Feet

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Figure 3
October 2013 Quarterly Inspection Survey
Post TCRA Quarterly Inspection (October 2013)
San Jacinto River Waste Pits Superfund Site

APPENDIX A
INSPECTION PHOTOGRAPHIC LOG

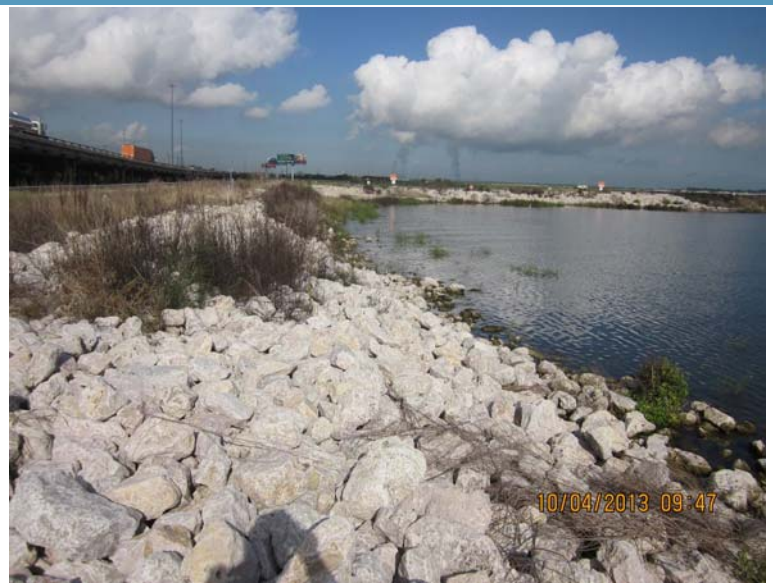

Photo 01: Vegetation and signage along southern and central berm (view south-west)

Photo 02: USEPA public notice sign, dying vegetation and signage at eastern end of southern berm (view southwest)

Photo 03: Signage and vegetation along eastern face of central berm (view north-west)

Photo 04: Vegetation along eastern face of central berm (view northwest)

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Figure A-1
Site Photographs
Post TCRA Inspection Report (October 2013)
San Jacinto River Waste Pits Superfund Site

Photo 05: Vegetation along eastern face of central berm (view south)

Photo 06: Northern edge of Western Cell with vegetation and standing water due to high tide (view northeast)

Photo 07: Vegetation and signage along western berm (view southwest)

Photo 08: Standing water and biological growth on interior portion of Western Cell (view northeast)

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Figure A-2
Site Photographs
Post TCRA Inspection Report (October 2013)
San Jacinto River Waste Pits Superfund Site

Photo 09: Warning signs and vegetation along perimeter fencing on west bank south of I-10 (view northeast)

Photo 10: Fish consumption advisory signs on west bank south of I-10 (view south)

Photo 11: USEPA public notice sign and vegetation along perimeter fencing on west bank south of I-10 (view northwest)

Photo 12: Warning signs and dying vegetation along perimeter fencing near parking lot on east bank south of I-10 (view northeast)

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Figure A-3
Site Photographs
Post TCRA Inspection Report (October 2013)
San Jacinto River Waste Pits Superfund Site

Photo 13: Warning sign along eastern bank south of I-10 (view south)

Photo 14: Opening in perimeter fencing where I-10 bridge and fencing meet along east bank south of I-10 (view northeast)

Photo 15: Repaired perimeter fencing with additional barb on east bank adjacent to and south of I-10 (view northwest)

Photo 16: Recently mowed southwest fence alignment along Market Street. (view northwest) Photo taken November 8, 2013

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Figure A-4
Site Photographs
Post TCRA Inspection Report (October 2013)
San Jacinto River Waste Pits Superfund Site