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May 9, 2014

VIA Email: Robinson.Jeffrey@epa.gov

Jeff Robinson
Section Chief
Air Permits Section, Region 6
United States Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Responses to Comments on the Cultural Resources Assessment
Tenaska Brownsville Partners, LLC - Tenaska Brownsville Generating Station
TCEQ Customer Reference Number (CN) 604252627
TCEQ Regulated Entity Number (RN) 106579600

Dear Mr. Robinson:

On behalf of Tenaska Brownsville Partners, LLC (Tenaska), enclosed please find materials for the cultural resources consultation process under Section 106 of the National Historic Preservation Act for Tenaska's federal greenhouse gas Prevention of Significant Deterioration (GHG PSD) permit application.

Included is a document entitled *Section 106 Summary: Tenaska Brownsville Generating Station* that serves as a consolidated overview of the entire 106 process for the Generating Plant and all the linear elements, together in a single resource. As EPA has deferred making formal Section 106 findings and determinations until after receipt of comments from the Section 106 consulting parties and these responses, this *Section 106 Summary* includes both information on the Section 106 process and Tenaska's findings, which are consistent with cultural resources investigations undertaken by professionals at ERM and Atkins meeting the Secretary of the Interior's Professional Qualification Standards in their respective disciplines.

Responses to the comments received regarding the December 18, 2013, Cultural Resources Assessment (CRA) are also enclosed and respond to all written comments received from EPA, the State Historic Preservation Officer, and the National Park Service. Note that the *Responses to Comments* refer to several attachments, including a set of new visualizations showing Tenaska's planned Generating Station and views toward the Transmission Interconnect Line (Attachment C - previously sent electronically) and a memorandum with additional analysis concerning audibility (Attachment H).

Tenaska believes that the information contained in the CRA along with these submissions provides a comprehensive and sound record on which EPA can make its determinations and findings. Thus, Tenaska hopes to work with EPA, NPS and THC to identify an appropriate and expeditious path forward.

Tenaska would appreciate an opportunity to meet with EPA, NPS and THC as soon as possible. The issuance of GHG PSD permits is being transitioned from EPA to the Texas Commission on Environmental Quality for Texas sources. Thus, EPA has proposed that sources, such as Tenaska's, that have not gone to public notice before May 15, 2014 will be transition to TCEQ for issuance.

Tenaska appreciates your review of these materials. If there are any questions, please feel free to contact me at (402) 691-9577 or jfinocchiaro@tenaska.com or Larry Carlson at (402) 938-1661 or lcarlson@tenaska.com.

Sincerely,

TENASKA BROWNSVILLE PARTNERS, LLC
a Delaware limited liability company
By: Tenaska Brownsville I, LLC, Its Manager

By: _____
Joseph M. Finocchiaro
Environmental Program Manager

Enclosures

cc:

AC Dumaual, EPA
Tina Arnold, EPA
Mark Wolfe, State Historic Preservation Officer, Texas Historical Commission
Melissa R. Trenchik, Chief, Environmental Quality, National Park Service
Mark Spier, Palo Alto Battlefield National Historical Park, National Park Service
Larry Carlson, Tenaska

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Section 106 Summary: Tenaska Brownsville Generating Station

Tenaska Brownsville Partners, LLC
Cameron County, Texas

EPA Submission
May 9, 2014

www.erm.com

BACKGROUND

Tenaska Brownsville Partners, LLC (Tenaska) submitted an application to the Environmental Protection Agency (EPA) for a Clean Air Act Prevention of Significant Deterioration (PSD) permit for emissions of greenhouse gases (GHG) from the proposed power plant.[1] The issuance of the GHG PSD permit for the power plant is a federal undertaking and accordingly, Tenaska submitted an initial cultural resources assessment report prepared by ERM to EPA on August 6, 2013. A revised CRA with supplemental information requested by the EPA was submitted on December 18, 2013 and provided by EPA to the consulting parties on January 10, 2014 (CRA).

Because of the substantial scope of the CRA, and in response to comments and questions posed by the Section 106 consulting parties since December 2013, Tenaska is providing this summary document (Section 106 Summary) to support the parties' understanding of the undertaking and its effects on historic properties.

This summary represents the findings of Tenaska with respect to the Section 106 process, which are consistent with cultural resources investigations undertaken by professionals at ERM and Atkins meeting the Secretary of the Interior's (SOI) Professional Qualification Standards in their respective disciplines. Tenaska understands that the Environmental Protection Agency (EPA) has deferred making formal Section 106 findings and determinations until after receipt of comments from the Section 106 consulting parties and these responses. EPA's has indicated that formal findings and determinations will be made as part of the public notice of the federal undertaking.

INITIATE SECTION 106 PROCESS

Establish Undertaking

As described in the CRA, Tenaska is planning to build and operate a natural gas-fueled combined-cycle gas turbine (CCGT) power plant with a nominal capacity of approximately 800 megawatts (MW) (Generating Station). The issuance of the GHG PSD permit for GHG emissions from the Generating Station is the federal undertaking.

The Generating Station will be situated on an approximately 275-acre privately-owned tract in south central Cameron County, Texas, outside of Brownsville. Project components that will occur inside of the Project site boundaries include

[1] The issuance of GHG PSD permits is being transitioned from EPA to the Texas Commission on Environmental Quality for Texas sources. EPA has proposed that sources, such as Tenaska's, that have not gone to public notice before May 15, 2014 will be transition to TCEQ for issuance. No federal undertaking is associated with TCEQ's issuance of a GHG PSD permit.

generating and auxiliary equipment; storm water retention pond(s); storm water outfall structure(s); construction laydown areas; and access roads.

Project components that will occur outside the boundaries of the 275-acre Project site include:

Transmission Interconnect Line: An 11.7-mile transmission interconnect line to the Loma Alta substation (Transmission Interconnect Line), to be constructed by the BPUB. The Transmission Interconnect Line will be carried on 78 single poles constructed of dull-finished zinc galvanized steel on concrete foundations. The poles will rise no higher than 140 feet for an estimated 80% of the route. In locations where the line will span existing utility lines the poles will rise no higher than 170 feet in height. The poles will be spaced at 800-to-900-foot intervals. The concrete base will be 7 feet in width. No guy wires will be required, and FAA lighting requirements are not expected at this time.

Water/Sewer Interconnect Lines: Short interconnects between the Project site and the Southmost Regional Water Authority (SRWA) Desalination Plant or nearby utility lines for potable water, supplemental water and sanitary sewer service to be built by BPUB (collectively, Water/Sewer Interconnect Lines). The lines will run underground, and use boring or horizontal directional drilling (HDD) underneath the Olmito Branch of CCDD1.

Water Discharge Pipeline: An approximately 11.05-mile, 16-inch diameter water discharge pipeline to the Port of Brownsville (Water Discharge Pipeline) to be constructed by the Brownsville Public Utilities Board (BPUB). The following are likely project components for the Water Discharge Pipeline:

- Bored/HDD crossings would occur at Texas Department of Transportation (TxDOT) roads and Union Pacific railroads, and aerial crossings over resacas and floodways.
- Bored/HDD crossings at ditches understood to contribute to the potentially NRHP-eligible Cameron County Drainage District No. 1 (CCDD1) or open-cut methods where the ditches are returned to their original appearance.
- Minor, infrequent aboveground features, including post indicator valve operators that can extend approximately 3 feet above ground, and vent pipes that can extend to 4 or 5 feet above ground, installed at intervals of at least one mile and with considerable flexibility in terms of location,. BPUB has indicated that aboveground appurtenances will not be located within 200 feet of ditches that contribute to the CCDD1.
- Outfall at the west side of the ship channel, adjacent to an existing stormwater outfall, consisting of a manhole connecting the pipeline to the outfall, an approximately 30-inch diameter outfall pipe, and a concrete headwall above the Mean Higher-High Water level in the ship channel.
- Utilization of approximately 10 acres within the 275-acre Generating Station site for an at-grade industrial wastewater pump station with vertical turbine pumps and a firm pump station capacity of approximately 2.7 MGD, and for cooling water supply facilities.

Water Reuse Pipeline[2]: BPUB's approximately 7.6-mile, 30-inch-diameter regional water reuse pipeline to the Robindale Wastewater Treatment Plant, where the pumps/ancillary equipment will be located (Water Reuse Pipeline). BPUB has indicated that they will utilize bore/HDD crossings at ditches understood to contribute to the potentially NRHP-eligible CCDD1 or open-cut methods where the ditches are returned to their original appearance. While primarily located fully underground, this pipeline will have minor, infrequent aboveground features, (i.e. post indicator valves and vent pipes). BPUB has indicated that aboveground pipeline appurtenances will not be located within 200 feet of ditches that contribute to the CCDD1.

Natural Gas Transmission Pipeline[2]: BPUB's approximately, 50-mile, 24-inch-diameter regional natural gas pipeline from Hidalgo County (Natural Gas Transmission Pipeline). This pipeline is primarily located fully underground. It will have approximately three minor aboveground valve stations extending 7 feet from surface, as well as two meter stations (one near the western endpoint in Hidalgo County and one within the Generating Station project site). All pipeline crossings at irrigation feature locations will be underground and will be constructed by one of three methods: open-cut, conventional boring, or HDD.

The Generating Station, Transmission Interconnect Line, Water Discharge Pipeline, Water/Sewer Interconnect Lines, Natural Gas Transmission Pipeline, and Water Reuse Pipeline together are the Project (Project) for the purposes of this summary.

Identify Appropriate SHPO/THPO

Mark Wolfe, Executive Director of the the Texas Historical Commission (THC), is the designated State Historic Preservation Officer (SHPO) for the Project. As the Project will not occur on Tribal lands, no Tribal Historic Preservation Officer (THPO) will be assuming the role of the SHPO for this Project.

Plan to Involve the Public

It is Tenaska's understanding that the EPA will notify the public of its intent to issue the GHG permit via public notice and a 30-day public review and comment period. Additionally, the EPA posts permit-related documentation, including Section 106 reports, on its website.

[2] EPA has conservatively determined that these regional linear actions are part of the Section 106 undertaking associated with the issuance of a GHG PSD permit. They are therefore included in the term "Project" herein. Tenaska and BPUB believe these regional projects are independent, and not interrelated, actions and not properly considered part of the Project for purposes of this assessment, as set forth in letters from BPUB to EPA dated April 18 and 26, 2013.

Identify Other Consulting Parties

In January 2014 EPA invited the following parties to participate in the Section 106 consultation process: THC; National Park Service (NPS); Cameron County Historical Commission (CCHC); Brownville Historical Museum; Historic Brownsville Museum; and Tenaska. To date, THC, NPS, and Tenaska have actively participated in consultation.

Additionally, EPA has been in regular contact with the Advisory Council on Historic Preservation (ACHP), although the agency has not elected to participate in the consultation process.

In January 2014 EPA has also sent invitations to participate in the consultation process to twenty-seven (27) Native American Tribes. As of the date of this summary, no Native American Tribes had expressed an interest in participating in Section 106 consultation.

IDENTIFY HISTORIC PROPERTIES

Determine Scope of Efforts (Area of Potential Effects)

The Area of Potential Effects (APE) for each Project component was determined based upon consideration of the nature of each component and the environment within which the component will be located. Together, these separate APEs comprise a comprehensive APE for the Project. (Figures 1 and 2[a-s]) The analysis to determine the APE is detailed in the CRA for each Project element and the APE is summarized below.

Generating Station (Figures 2m, 2n, and 2p):

- Direct APE – The 275-acre parcel on which the Generating Station will be constructed, with the exception of a 14.51-acre wetland area and a 24.4-acre transitional area at the east end of the site (236 acres).
- Indirect APE – An approximately 14-square mile area that extends 0.4 to 2.8 miles out from the Generating Station site.

Water Discharge Pipeline (Figures 2n, 2p, 2r, and 2s):

- Direct APE – A 100-foot-wide corridor extending 50 feet from the pipeline right-of-way (ROW) centerline.
- Indirect APE – A 200-foot-wide corridor extending 100 feet from the pipeline ROW centerline.

Transmission Interconnect Line (Figures 2n, 2o, 2q, and 2s):

- Direct APE – A 100-foot-wide corridor extending 50 feet from the ROW centerline.

- Indirect APE – A 1-mile corridor extending 0.5 miles from the ROW centerline.

Water/Sewer Interconnect Lines (Figure 2n):

- Direct APE - A 100-foot-wide corridor extending 50 feet from each line centerline.
- Indirect APE - A 200-foot-wide corridor extending 100 feet from each line centerline.

Water Reuse Pipeline (Figures 2n, 2p, and 2r):

- Direct APE/Indirect APE – A 50- to 120-foot-wide corridor containing the pipeline and extending to a depth of 13 feet.

Natural Gas Transmission Pipeline (Figures 2a through 2n):

- Direct APE/Indirect APEs – A 300-foot-wide corridor containing the pipeline and extending to a depth of 8 feet.

Identify Historic Properties/Evaluate Historical Significance

Cultural resources investigations resulted in the identification of six (6) NRHP-eligible or potentially NRHP-eligible historic properties in the comprehensive Project APE (Table 1).

Table 1. Historic Properties within the APE

Name	Location	Resource Date	Resource Type	Evaluation
Palo Alto Battlefield National Historic Landmark (NHL)	Los Fresnos, Cameron Co.	1846	Site	NRHP-Listed
Cameron County Irrigation District No. 6	Olmito, Cameron Co.	1922	District	Eligible (THC, 2009)
Cameron County Drainage District No. 1	Brownsville, Cameron Co.	1905	District	Potentially Eligible
Port of Brownsville Historic District	Brownsville, Cameron Co.	1936	District	Potentially Eligible
Cameron County Irrigation District No. 2	San Benito, Cameron Co.	1916	District	Eligible (THC)
Delta Lake Irrigation District	Delta Lake, Hidalgo Co./ Willacy Co.	1929	District	Eligible (THC)

A full discussion of those properties determined ineligible for listing in the NRHP, including the bibliographic citations, may be found in the CRA.

ASSESS ADVERSE EFFECTS

As presented in the CRA, the Criteria of Adverse Effects was applied to historic properties for each separate Project component consistent with ACHP regulations and guidance.[3] For this summary, and in response to comments received from the consulting parties, Tenaska is providing the below discussion, which applies the Criteria of Adverse Effects of the Project as a whole to each historic property.

Apply Criteria of Adverse Effect

Tenaska has determined that the undertaking will not adversely affect historic properties. Table 2 summarizes the basis for these findings in a quick-reference format, including the specific criteria of adverse effect applied consistent with 36 CFR §800.5. A summary discussion of the assessment of effects presented within the CRA is provided for each resource thereafter.

Based on consulting party comments received to date, NPS and THC do not concur with Tenaska's opinion that there will be no adverse effects from the Generating Station and the Transmission Interconnect Line on the NHL. THC has concurred with Tenaska's findings of no adverse effects to historic properties with respect to the other Project components.

[3] *See NEPA and NHPA: A Handbook for Integrating NEPA and Section 106*, published by the Council on Environmental Quality, Executive Office of the President, and the Advisory Council on Historic Preservation in March 2013, p. 41.

Table 2. Description of Potential to Affect Historic Properties, Tenaska Findings of Effects and Relevant Effects Criteria

Project Component	Tenaska Finding	Generating Station			Water Discharge Pipeline			Transmission Interconnect Line			Water/Sewer Interconnect Lines			Water Reuse Pipeline			Natural Gas Transmission Line			Effects Criteria[4] 36 CFR §800.5						
Type of Potential to Effect Direct (D); Indirect (I); No Potential (N)		D	I	N	D	I	N	D	I	N	D	I	N	D	I	N	D	I	N	i	ii	iii	iv	v	vi	vii
Palo Alto Battlefield National Historic Landmark	Not Adverse		X				X		X				X			X			X				X	X		
	Adverse																									
Cameron County Irrigation District No. 6	Not Adverse	X	X		X			X	X		X	X				X	X			X	X		X	X		
	Adverse																									
Cameron County Drainage District No. 1	Not Adverse	X			X			X			X			X			X			X	X		X	X		
	Adverse																									
Port of Brownsville Historic District	Not Adverse			X	X					X			X			X			X	X	X		X	X		
	Adverse																									
Cameron County Irrigation District No. 2	Not Adverse			X			X			X			X			X	X			X	X		X	X		
	Adverse																									
Delta Lake Irrigation District	Not Adverse			X			X			X			X			X	X			X	X		X	X		
	Adverse																									

[4] (i) Physical destruction of or damage to all or part of the property; (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR Part 68) and applicable guidelines; (iii) Removal of the property from its historic location; (iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance; (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features. vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

Palo Alto Battlefield National Historic Landmark

Considerable effort has gone into the assessment of effects of the Project on the NHL, both prior to the submission of the CRA to EPA and since, in response to discussions with various NPS representatives. Based upon this analysis, it is Tenaska's position that the effects of the Project on the NHL will not be adverse. Because the purpose of this summary document is to briefly summarize the information related to the Section 106 process and Tenaska's findings, in-depth discussion is not contained here. More detailed discussion and support documentation is contained with the CRA, and is supplemented by the Response to Comments that accompanies this summary. Significantly, new visualizations of the Generating Station from the Battlefield Overlook and the Living History Area and additional noise analyses are provided therein.

The NHL will be affected by the Project as summarized below.

- Generating Station – The east boundary of the Generating Station site is located approximately 0.6 miles west of the west boundary of the NHL, and the NHL is located within the APE for this Project component. Effects will be indirect.

- Transmission Interconnect Line – The Transmission Interconnect Line is in close proximity to the north and east boundaries of the NHL, and the NHL is located within the APE for this Project component. Effects will be indirect.

The Water Discharge Pipeline, Water/Sewer Interconnect Lines, Water Reuse Pipeline, and Natural Gas Transmission Pipeline each occur wholly outside of the boundaries of the NHL and are underground pipelines with only minor aboveground appurtenances. Therefore, no effects are expected.

Accordingly, effects from the Project on the NHL have the potential to fall under Adverse Effect Criteria iv and v as defined in 36 CFR §800.5.

It is Tenaska's position that the effects of the Project on the NHL will not be adverse based on the following considerations:

- The distance of the Generating Station moderates its visibility from the NHL. Additionally, the impact of the plant's visibility within the viewshed of the NHL is further moderated by the presence of existing intrusions of inconsistent character with the NHL that have diminished its setting and feeling. The visibility of the Generating Station will not further diminish the NHL's integrity.

- The Generating Station's lighting plan is consistent with NPS recommendations for minimizing light intrusion to the night sky of the NHL.

- The Project is not expected to contribute significantly to deposition at the NHL. No indirect impacts are expected on the Park due to dust or air emissions from the Generating Station.

- The results of the VISCREEN Level 2 visibility analysis, which evaluates visibility impairment caused by the Generation Station's emissions, revealed that impacts on the NHL will be negligible. In addition, fewer than 14% of the Park's operating hours (fewer than 5% during the months of March to October) are anticipated to have a visible plume of condensed water vapor, which is a conservative number that would decrease if prevailing wind speeds were considered.

- The audibility analysis in the CRA and the refined analysis in response to NPS comments indicate audible effects always remain below Brownsville's strictest noise limit and mid-day sound level changes at the east boundary of the Park and the Battlefield Overlook should be less than the level considered "clearly noticeable."

- The Transmission Interconnect Line will be minimally visible, if at all, from the core battlefield and interpretive areas due to the distance and existing dense overstory vegetation. New visualizations demonstrate this negligible visibility.

- The impact of the Transmission Interconnect Line's visibility within the viewshed of the NHL is moderated by the presence of existing intrusions, including numerous utility lines through and adjacent to the NHL, of inconsistent character with the NHL that have diminished its setting and feeling. The visibility of the Transmission Interconnect Line will not further diminish the NHL's integrity.

- No atmospheric effects are expected from the Transmission Interconnect Line.

- Sound emitted from the transmission lines is expected to be minimally audible if at all from the ground outside of the utility ROW. Within the core battlefield area of the NHL, and along the south and west boundaries, the effects of the sound energy emitted from the transmission line will be significantly diminished by distance and the noise from traffic along Highway 550 and Paredes Line Road.

Cameron County Irrigation District No. 6

Cameron County Irrigation District No. 6 (CCID6) will be affected by the Project as summarized below.

- Generating Station – The west two-thirds of the Generating Station site is located within the boundaries of the CCID6, and the majority of the construction will occur within these boundaries. Effects will be direct inside of the boundaries of the CCID6 and indirect outside of its boundaries.

- Water Discharge Pipeline – A short segment of the Water Discharge Pipeline exiting the Generating Station site will run along the boundary of the CCID6; effects would be direct. For the portion outside the CCID6, because the pipeline will be almost entirely underground, no indirect effects are expected.

- Transmission Interconnect Line – A short segment of the Transmission Interconnect Line exiting the Generating Station site will run through the CCID6. Effects will be direct inside of the boundaries of the CCID6 and indirect outside of its boundaries.

- Water/Sewer Interconnect Lines – These will occur wholly within the boundaries of the CCID6 and entirely underground. Effects will be direct as they are inside the boundaries of the CCID6.

- Water Reuse Pipeline – This will occur wholly outside of the boundaries of the CCID6 and almost entirely underground. No effects are expected.

- Natural Gas Transmission Pipeline – The last section of the Natural Gas Transmission Pipeline, south of Resaca de los Cuates, is contained within the boundaries of the CCID6. Effects will be direct inside of the boundaries of the CCID6. For the portion outside of the CCID6, because the pipeline will be almost entirely underground, no indirect effects are expected.

Accordingly, effects from the Project on the CCID6 have the potential to fall under Adverse Effect Criteria i, ii, iv, and v as defined in 36 CFR §800.5.

It is Tenaska's position that the effects of the Project on the CCID6 will not be adverse based on the following considerations:

- The CCID6 is historically significant as an engineering feature, and as such, the primary aspect of integrity that conveys that significance is design. The Project will not affect the design or functionality of the CCID6.

- The setting and feeling of the CCID6 has changed radically since its establishment in 1922 due to industrial, residential, commercial, transportation, and infrastructural (e.g., utilities) development within and outside of its boundaries. New construction associated with the Project will

become part of this change in setting and feeling but will not, itself, diminish these aspects of integrity.

- The effects of the Water Discharge Pipeline, Water/Sewer Interconnect Lines and Natural Gas Transmission Pipeline will be minimized because they are almost entirely underground and by using boring, HDD, or restoration after open-cut at CCID6 ditches.

- Aboveground components of the Water Discharge Pipeline, the Water/SewerInterconnect Lines, and the Natural Gas Transmission Pipeline will be minimal and will be located at least 200 feet from CCID6 ditches.

Cameron County Drainage District No. 1

CCDD1 will be affected by the Project as summarized below.

- The Generating Station and Transmission Interconnect Line are entirely contained within the boundaries of the CCDD1. Effects will be direct.

- The Water Discharge Pipeline, Water/Sewer Interconnect Lines, Water Reuse Pipeline and the last section of the Natural Gas Transmission Pipeline, south of Resaca de los Cuates,[5] are contained within the boundaries of the CCDD1. Effects will be direct.

- Natural Gas Transmission Pipeline – For the rest of the Natural Gas Transmission Pipeline, because it is almost entirely underground, no indirect effects are expected.

Accordingly, effects from the Project on the CCDD1 have the potential to fall under Adverse Effect Criteria i, ii, iv, and v as defined in 36 CFR §800.5.

It is Tenaska's position that the effects of the Project on the CCDD1 will not be adverse based on the following considerations:

- The CCDD1 is potentially historically significant as an engineering feature, and as such, the primary aspect of integrity that conveys that significance is design. The Project will not affect the design or functionality of the CCDD1.

- The setting and feeling of the CCDD1 has changed radically since its establishment in 1905 due to to industrial, residential, commercial, transportation, and infrastructural (e.g., utilities) development within and outside of its boundaries. New construction associated with the Project will

[5] CCID6 and CCDD1 overlap in large areas, including area with the Water Reuse Pipeline and this stretch of the Natural Gas Transmission Pipeline.

become part of this change in setting and feeling but will not, itself, diminish these aspects of integrity.

- The effects of the Water Discharge Pipeline the Water Reuse Pipeline, the Water/Sewer Interconnect Lines and the portion of the Natural Gas Transmission Pipeline in CCDD1 will be minimized by boring, HDD, or restoration after open-cut at CCDD1 ditches.

- Aboveground components of the Water Discharge Pipeline, the Water/Sewer Interconnect Lines, the Water Reuse Line and the Natural Gas Transmission Pipeline will be minimal and will be located at least 200 feet from CCDD1 ditches.

- The Transmission Interconnect Line will span CCDD1 ditches and will not directly impact them.

- The aboveground (visible) structure of the Generating Station storm water outfall, which will discharge into the Olmito Branch of the CCDD1, has been designed for minimal visibility and will be flush with the ditch bank.

Port of Brownsville Historic District

The Port of Brownsville Historic District (POB HD) will be affected by the Project as summarized below.

- Water Discharge Pipeline – The last segment of the Water Discharge Pipeline is within the boundaries of the POB HD, and the outfall point is on the west side of the ship channel. Effects will be direct within the boundaries of the POB HD. Because the pipeline will be almost entirely underground, no indirect effects are expected.

- The Generating Station, Transmission Interconnect Line, Water/Sewer Interconnect Lines, Water Reuse Pipeline, and the Natural Gas Transmission Pipeline will each occur wholly outside of the boundaries of the POB HD, and the POB HD is not within the APE for these Project components. No effects are expected.

Accordingly, effects from the Project on the POB HD have the potential to fall under Adverse Effect Criteria i, ii, iv, and v as defined in 36 CFR §800.5.

It is Tenaska's position that the effects of the Project on the POB HD will not be adverse based on the following considerations:

- The POB HD has been, since its completion in 1936, an industrial facility characterized by utilitarian buildings and infrastructure intended for

functionality rather than aesthetics. Aboveground components of the Water Discharge Pipeline will be minimal and consistent with the existing character of the district.

- The proposed outfall will be one of many similar features along the 17-mile ship channel that will not diminish the aspects of integrity that may qualify the POB HD for listing in the NRHP.

Cameron County Irrigation District No. 2

Cameron County Irrigation District No. 2 (CCID2) will be affected by the Project as summarized below.

- Natural Gas Transmission Pipeline – A segment of the Natural Gas Transmission Pipeline will run through the CCID2. Effects will be direct inside of the boundaries of the CCID2. With respect to the portion outside CCID2, because the pipeline will be almost entirely underground, no indirect effects are expected.

- The Generating Station, Water Discharge Pipeline, Transmission Interconnect Line, Water/Sewer Interconnect Lines, and Water Reuse Pipeline each will occur wholly outside of the boundaries of the CCID2, and the CCID2 is not within the APE for these Project components. No effects are expected.

Accordingly, effects from the Project on the CCID2 have the potential to fall under Adverse Effect Criteria i, ii, iv, and v as defined in 36 CFR §800.5.

It is Tenaska's position that the effects of the Project on the CCID2 will not be adverse based on the following considerations:

- The CCID2 is potentially historically significant as an engineering feature, and as such, the primary aspect of integrity that conveys that significance is design. The Project will not affect the design or functionality of the CCID2.

- The Natural Gas Transmission Pipeline will be almost entirely underground with only minor aboveground features, the setting and feeling of the CCID2 will not be affected.

- Aboveground components of the Natural Gas Transmission Pipeline will be minimal and will be located at least 200 feet from CCID2 ditches.

- The effects of the Natural Gas Transmission Pipeline will be minimized by boring, HDD, or restoration after open-cut at CCID2 ditches. Neither the appearance nor functionality of the structures will be impacted by the Project.

Delta Lake Irrigation District

Delta Lake Irrigation District (DLID) will be affected by the Project as summarized below.

- Natural Gas Transmission Pipeline – A segment of the Natural Gas Transmission Pipeline will run through the DLID. Effects will be direct inside of the boundaries of the DLID. With respect to the portion outside DLID, because the pipeline will be almost entirely underground, no indirect effects are expected.

- The Generating Station, Water Discharge Pipeline, Transmission Interconnect Line, Water/Sewer Interconnect Lines, Water Reuse Pipeline each will occur wholly outside of the boundaries of the DLID, and the DLID is not within the APE for these Project components. No effects are expected.

Accordingly, effects from the Project on the DLID have the potential to fall under Adverse Effect Criteria i, ii, iv, and v as defined in 36 CFR §800.5.

It is Tenaska's position that the effects of the Project on the DLID will not be adverse based on the following considerations:

- The DLID is potentially historically significant as an engineering feature, and as such, the primary aspect of integrity that conveys that significance is design. The Project will not affect the design or functionality of the DLID.

- The Natural Gas Transmission Pipeline will be almost entirely underground with only minor aboveground features, the setting and feeling of the DLID will not be affected.

- Aboveground components of the Natural Gas Transmission Pipeline will be minimal and will be located at least 200 feet from DLID ditches.

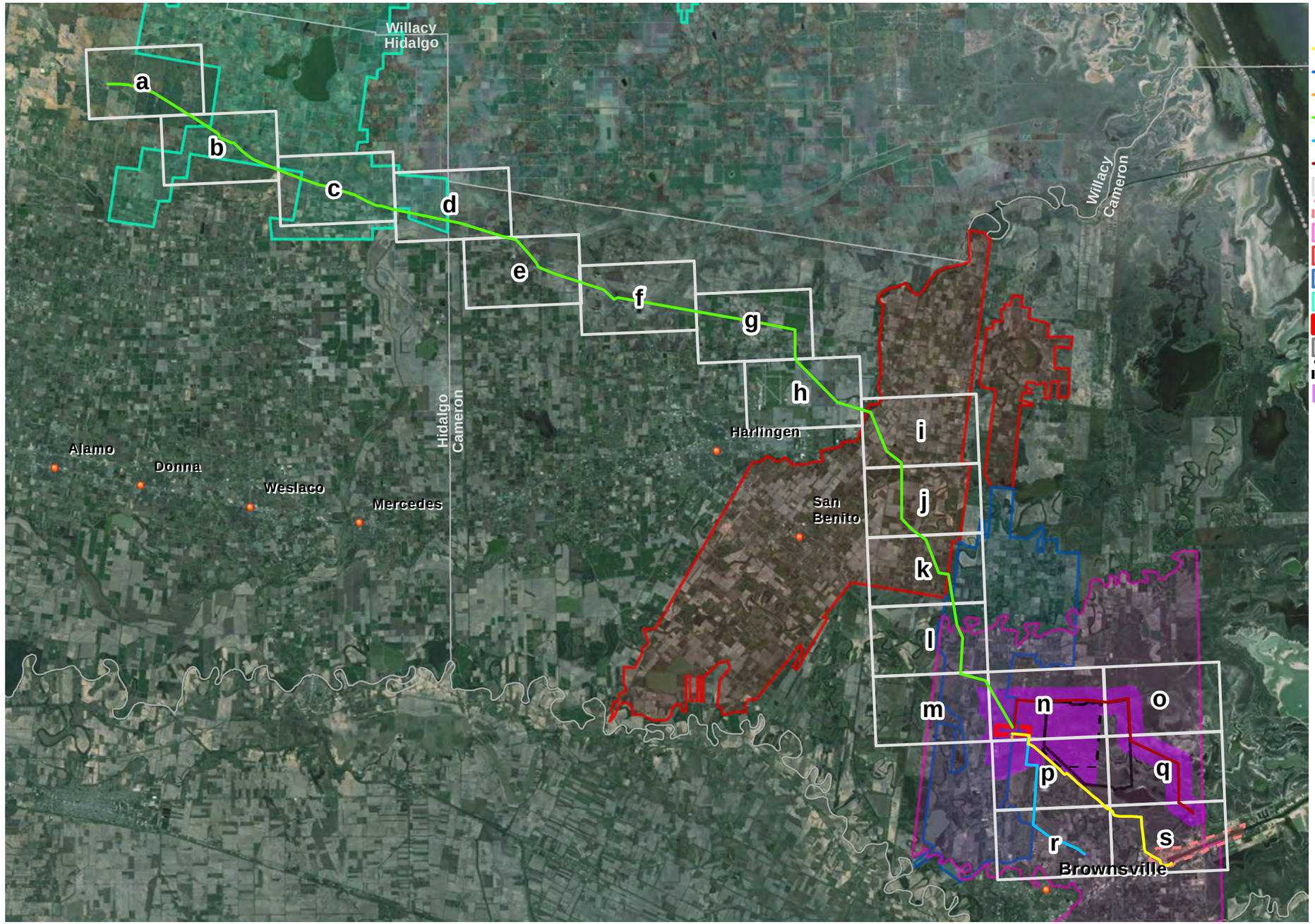
- The effects of the Natural Gas Transmission Pipeline will be minimized by boring, HDD, or restoration after open-cut at DLID ditches. Neither the appearance nor functionality of the structures will be impacted by the Project.

RESOLVE ADVERSE EFFECTS

Based upon the findings summarized above, Tenaska's opinion is that the Project will not adversely affect historic properties, and no resolution of adverse effects is needed. Based on consulting party comments received to date, NPS and THC do not concur that the Generating Station and the Transmission Interconnect Line will have no adverse effects on the NHL. Otherwise, THC indicated in a May 5, 2014 letter that it concurred with Tenaska's findings of no adverse effects

to historic properties for the other Project components. Tenaska looks forward to discussing NPS and THC concerns about indirect effects on the NHL and a path forward.

EPA intends to make a formal determination of effects concurrent with the release of the draft permit and Statement of Basis for public comment.



Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Grid
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0

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FIGURE 1
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

0 2,500 5,000
Feet

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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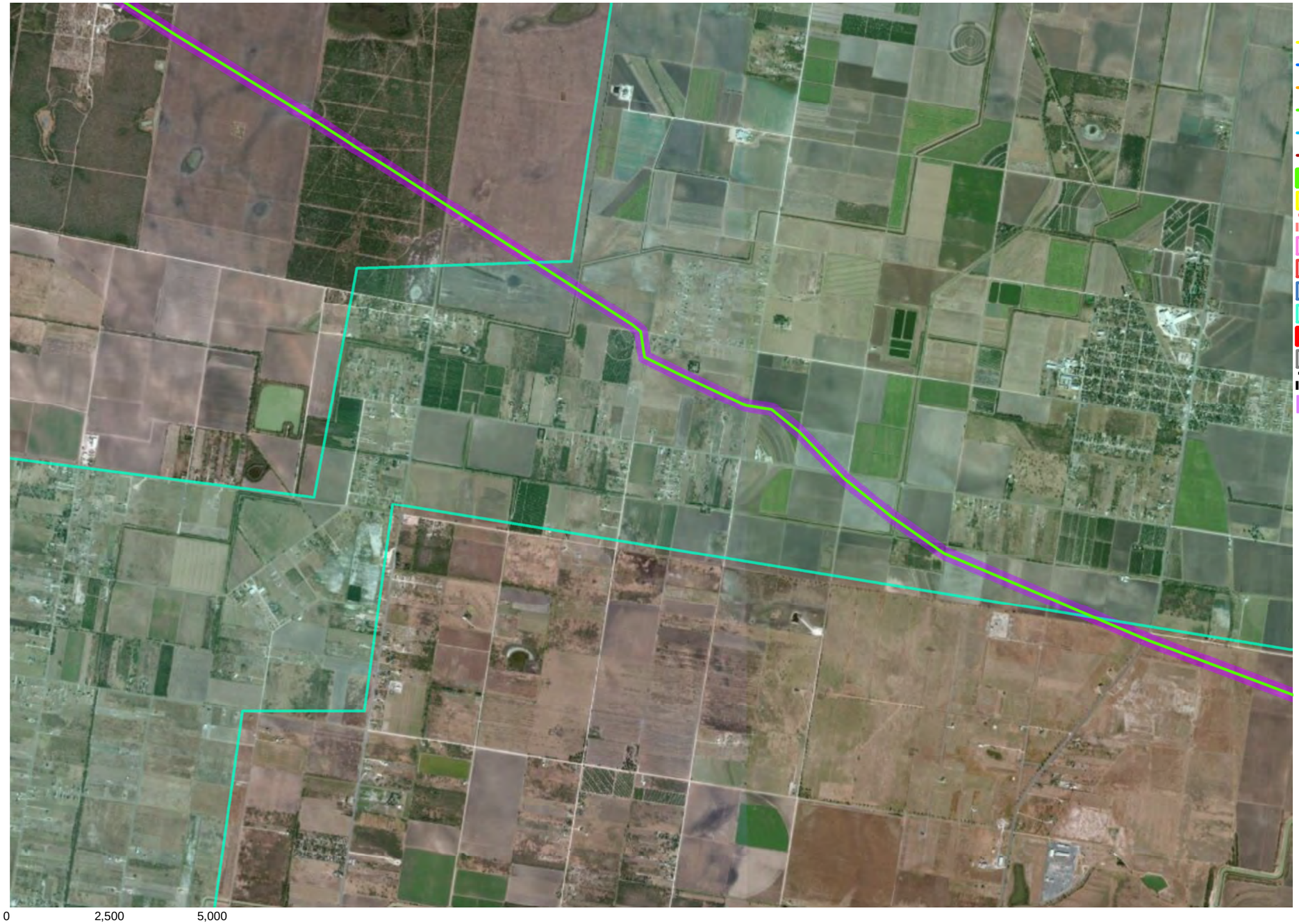
FIGURE 2a
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM



Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000
Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0

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FIGURE 2b
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000 Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0

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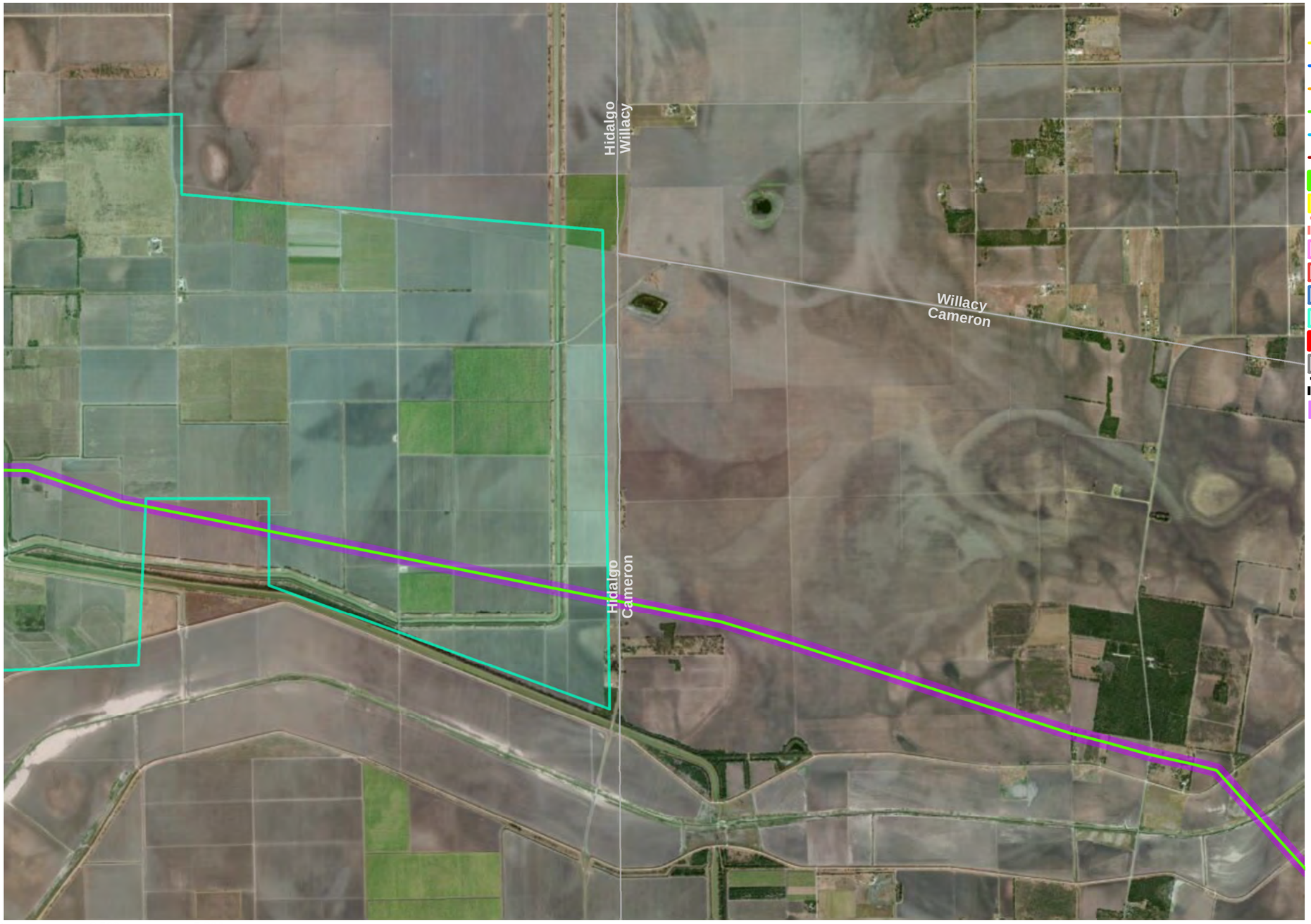
FIGURE 2c
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM



Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000 Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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FIGURE 2d
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

0 2,500 5,000
Feet

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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FIGURE 2e
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000
Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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FIGURE 2f
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000
Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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FIGURE 2g
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

0 2,500 5,000
Feet

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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FIGURE 2h
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000 Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0

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FIGURE 2i
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000
Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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FIGURE 2j
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000
Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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FIGURE 2k
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000
Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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FIGURE 2l
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000 Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0

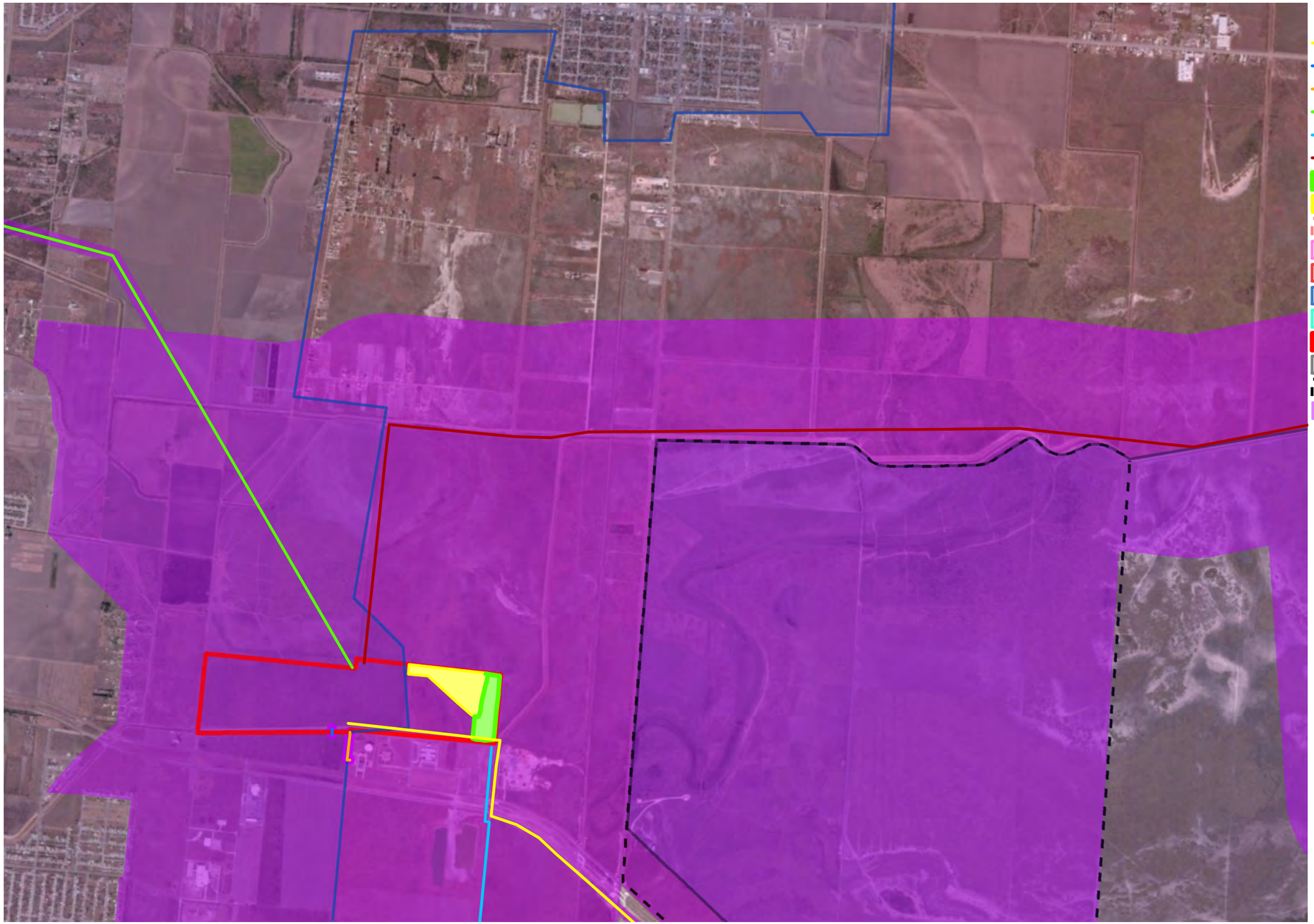
FILE: N:\Projects\Tenaska\Brownsville\Models_GIS\MXD\Cultural\Cultural_APE.mxd

FIGURE 2m
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM



Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000 Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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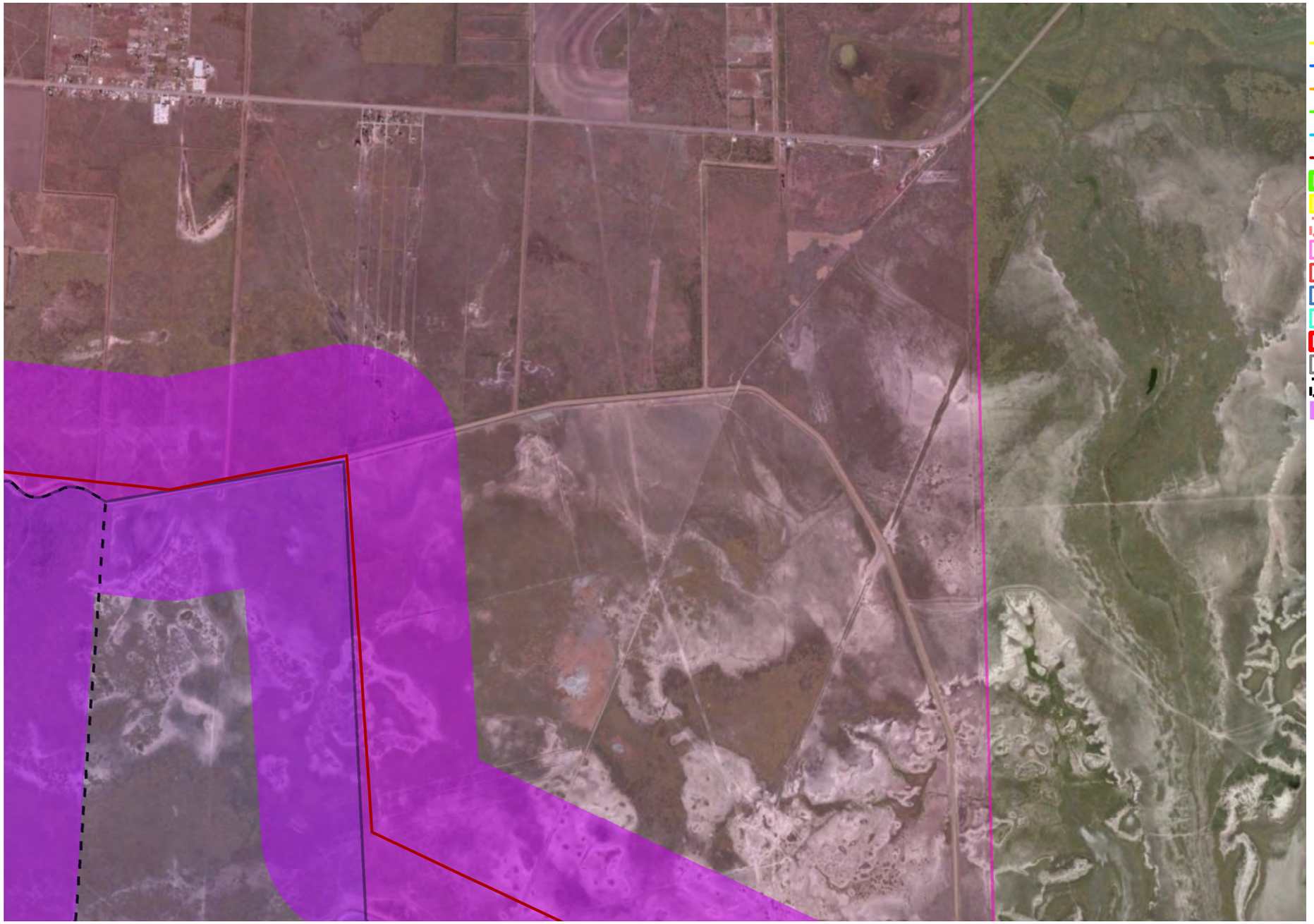
FIGURE 2n
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM



Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000
Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

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DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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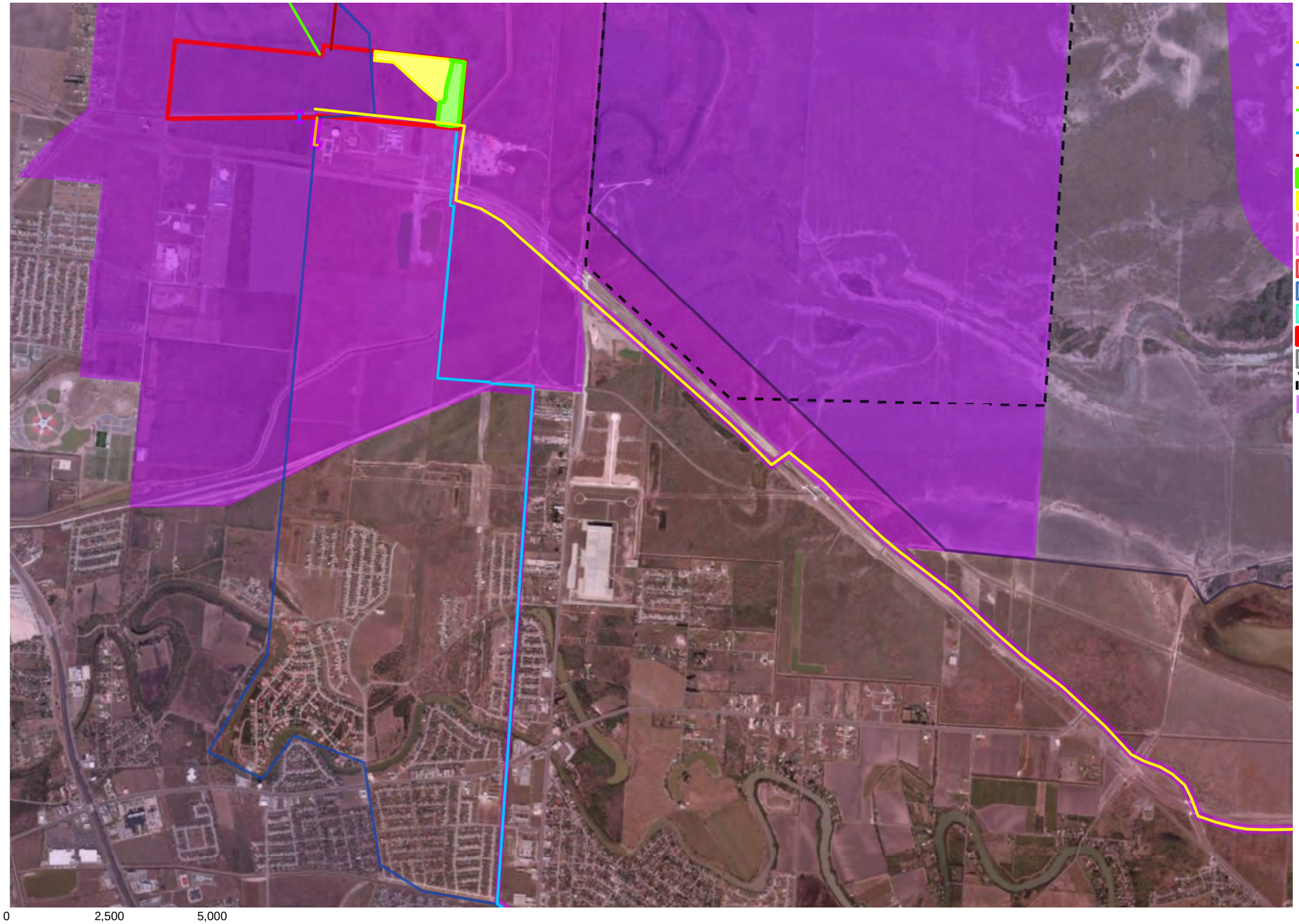
FIGURE 2o
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM



Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000
Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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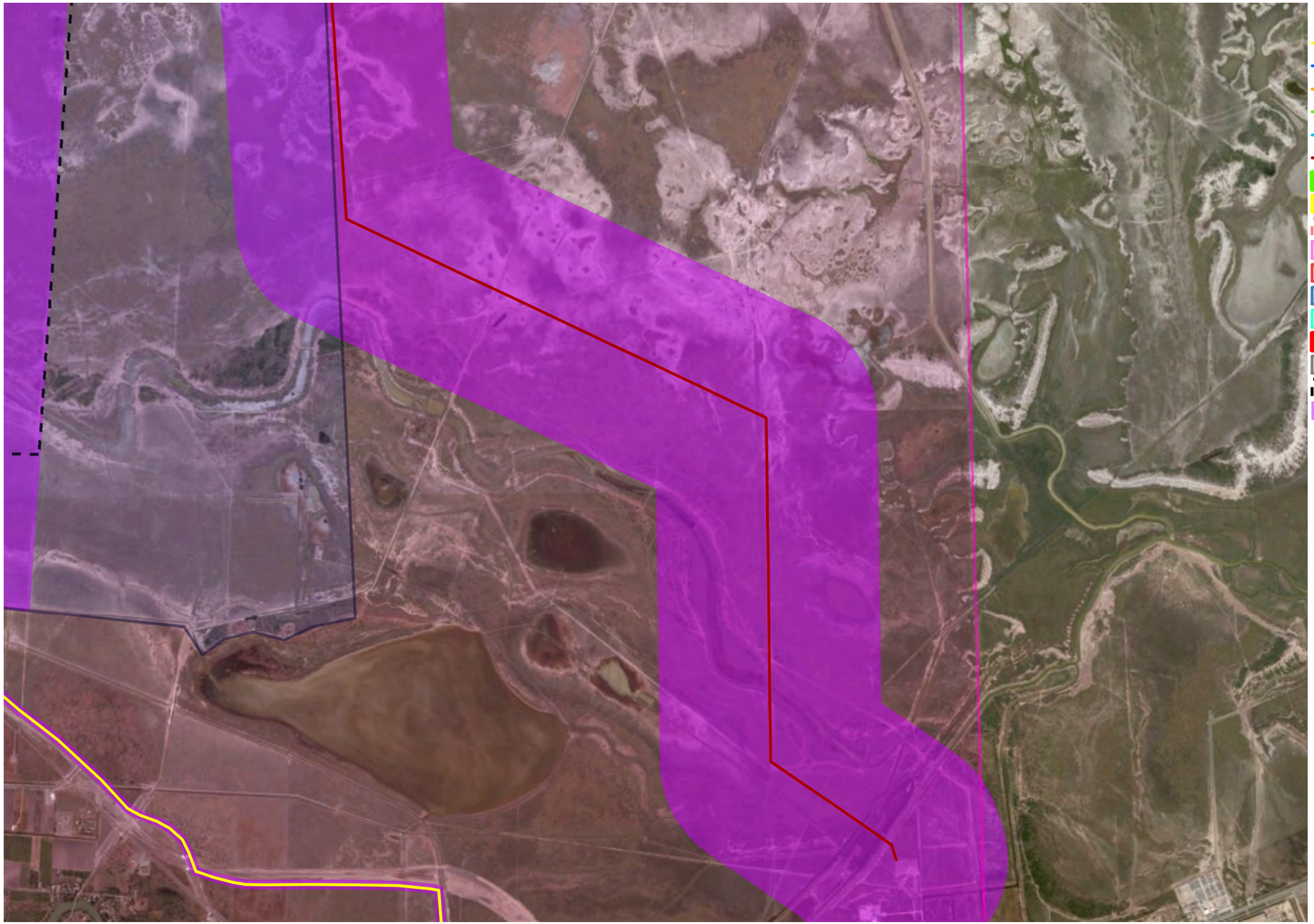
FIGURE 2p
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM



Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

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DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
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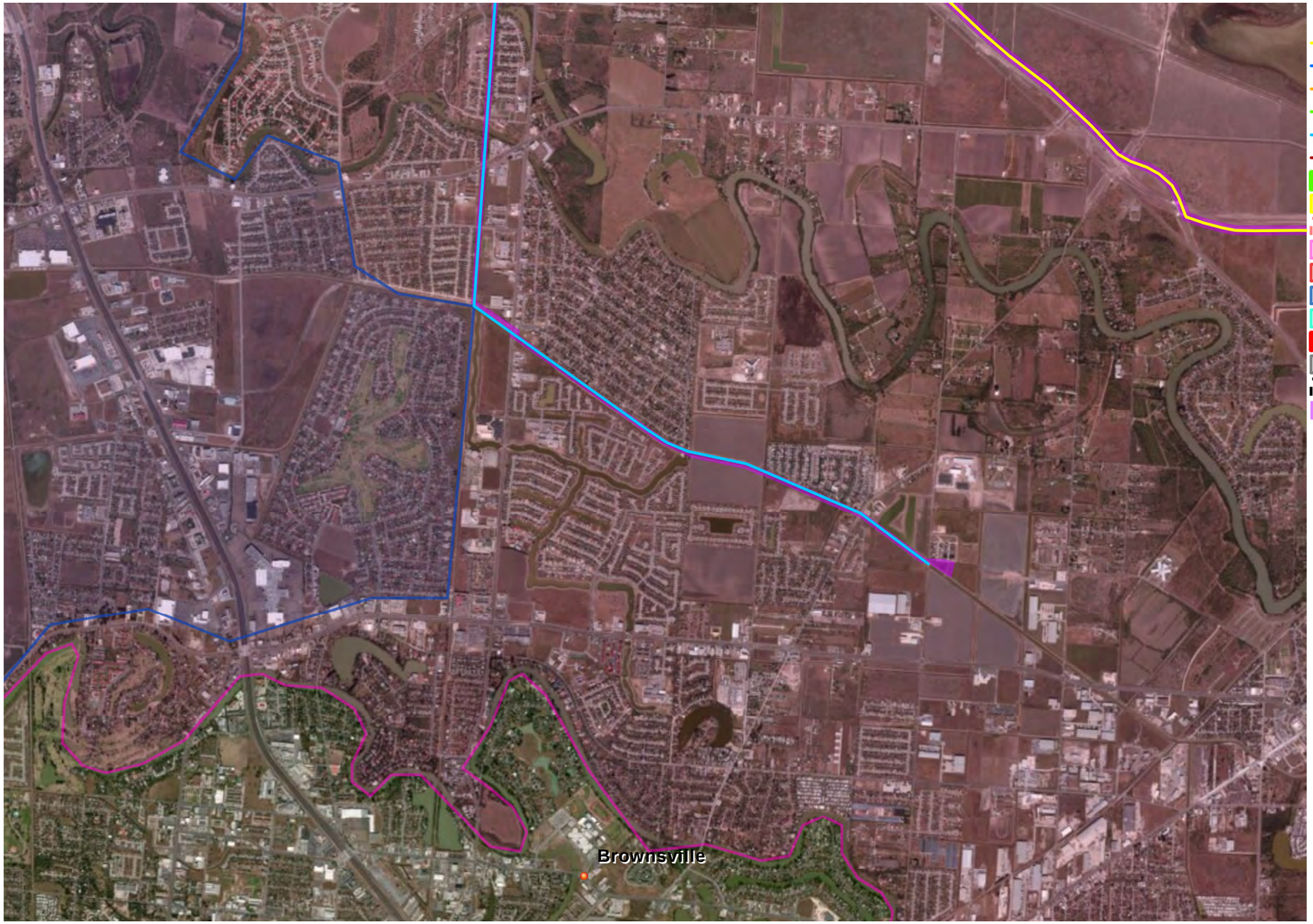
FIGURE 2q
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM



Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

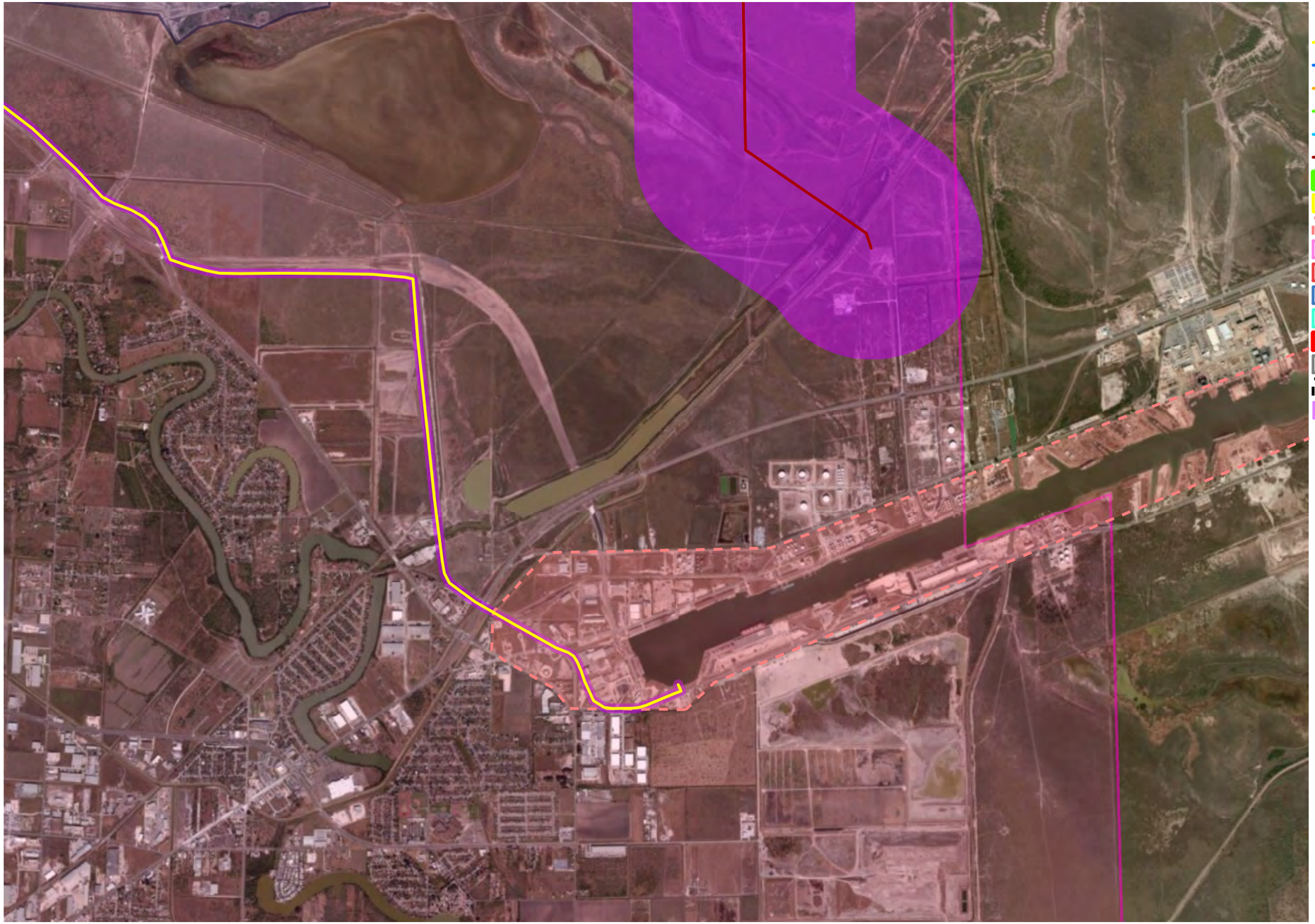
DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0
FILE: N:\Projects\Tenaska\Brownsville\Models_GIS\MXD\Cultural\Cultural_APE.mxd		

FIGURE 2r
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM



Legend

- Water Discharge Pipeline
- Supplemental Water Supply Line
- Sanitary Sewer Line
- BPUB Natural Gas Transmission Pipeline*
- Water Reuse Pipeline Project*
- Electric Transmission Interconnect with Loma Alta
- Wetland
- Transitional area
- Port of Brownsville Potential Historic District (Boundaries Approximated)
- Cameron Co. Drainage District No. 1
- Cameron Co. Irrigation District No. 2
- Cameron Co. Irrigation District No. 6
- Delta Lake Irrigation District
- Generating Station - Property Site
- Palo Alto Battlefield National Historic Landmark
- Palo Alto Battlefield National Historical Park
- Area of Potential Effects

0 2,500 5,000 Feet

Service Layer Credits: USDA NAIP, 2012 1m NC

Environmental Resources Management

DESIGN: C Albee	DRAWN: A Ragatz	CHKD.: K Schlicht
DATE: 5/6/2014	SCALE: AS SHOWN	REVISION: 0

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FIGURE 2s
PROJECT OVERVIEW MAP
Area of Potential Effects

Tenaska Brownsville Partners, LLC
Brownsville, Texas

N

ERM

RESPONSES TO COMMENTS ON THE CULTURAL RESOURCES ASSESSMENT

May 9, 2014

Tenaska Brownsville Partners, LLC (Tenaska) and Environmental Resources Management (ERM), as appropriate, respectfully set forth below and in the attached documents responses to the comments on the *Cultural Resources Assessment: Tenaska Brownsville Generating Station*, dated December 18, 2013 (herein referred to as "CRA" or the "Assessment").

These responses are organized primarily by topic and secondarily by each letter in which comments were contained, with the comments being quoted or paraphrased. The comments are set forth in *italics* and the responses are in regular font. The page number(s) of the letter in which a comment appears is noted in parentheses immediately after the notation of the commenting entity. For ease of reference, a unique number appears before each comment and response.

Comments were received from the United States Environmental Protection Agency (EPA) via letter dated April 16, 2014, the Executive Director of the Texas Historical Commission (THC) as the State Historic Preservation Officer (SHPO) via letter dated February 17, 2014, and the National Park Service (NPS) via letter received April 11, 2014. Additional comments were received from the SHPO via letter dated May 5, 2014. Attachment A contains an annotated copy of each of the four letters showing which response in this document corresponds to each comment in the letters.

A cover letter dated May 9, 2014, and a document entitled *Section 106 Summary: Tenaska Brownsville Generating Station* also dated May 9, 2014, accompany these responses to comments. Additionally, multiple attachments are referenced in various responses below.

GENERAL

1. ***EPA Comment (p.2):*** *General Comment 4: There is conflicting information in several documents which needs to be resolved or explained further. For example, on page 60 of the main report, ERM recommends that all ditches within the APE be treated as eligible for listing in the NRHP (page 60). However, in Attachment 4 Report on the Natural Gas Transmission Pipeline (page 37), it clearly states that CCID1 is ineligible for listing on the National Register.*

   Response to Comment: Since the federal undertaking associated with the issuance of a federal greenhouse gas Prevention of Significant Deterioration (GHG PSD) permit has been expanded at EPA's request to include the linear components in addition to the Generating Station, ERM has modified its approach to the eligibility of the ditches to account for the volume of irrigation-related resources in the Area of Potential Effects (APE) for the comprehensive project. As noted in the *Section 106 Summary*, the Cameron County Irrigation District No. 2 (CCID2), Cameron County Irrigation District No. 6 (CCID6), and the Delta Lake Irrigation District (DLID) were previously determined eligible by the THC prior to the cultural resources investigations conducted for the project. Cameron County Drainage District No. 1 (CCDD1) was recommended by ERM as potentially NRHP-eligible for the purposes of Section 106. Because

these districts have not been comprehensively surveyed and contributing and non-contributing resources determined, ERM has taken the approach that all ditches currently within the management and/or jurisdiction of the active irrigation or drainage districts will be treated as contributing to the larger district. As discussed in the CRA (Attachment 1 for the Water Discharge Pipeline), ditches not currently within the management and/or jurisdiction of the active irrigation or drainage district will be treated as non-contributing or otherwise ineligible for listing in the NRHP. Cameron County *Irrigation* District No. 1 (CCID1) was previously determined ineligible by THC, as noted in the CRA (Attachment 4: *Results of a Cultural Resources Survey for the BPUB Natural Gas Transmission Pipeline*).

2. ***EPA Comment (p.3):*** *5. According to Attachment 1, for the 11-mile water discharge line, approximately 5.65 miles of the pipeline was not surveyed (pg. iii) and remaining 5.4 miles of the pipeline corridor was previously surveyed. Of that 5.65 mile unsurveyed segment, a field survey was conducted for 4.38 miles while 1.17 miles was not surveyed. The resulting total miles for this unsurveyed segment is 5.55 miles not 5.65 miles as indicated previously, please correct the numbers accordingly.*

   Response to Comment: Tenaska notes this error. At this time, however, Tenaska does not intend to revise the CRA.

3. ***SHPO Comment (p.5):*** *1. Please submit at least one hard copy of future submittals, as requested by Ms. Birtchet on February 12, 2014.*

   Response to Comment: Tenaska notes this request and will proceed accordingly.

4. ***SHPO Comment (p.5):*** *2. We recommend the Special Considerations section of the report be presented prior to the determination of effects or, in the least made reference to at an earlier point in the document.*

   Response to Comment: Tenaska notes this request. At this time, however, Tenaska does not intend to revise the CRA.

5. ***SHPO Comment (p.5):*** *3. We would like to receive a copy of any project comments provided to the EPA by the Secretary of the Interior or National Park Service.*

   Response to Comment: Tenaska notes this request. EPA has forwarded all comments provided to the consulting parties. As of April 24, 2014, no formal comments have been received from the Secretary of the Interior.

6. ***SHPO Comment (p.5):*** *4. We would like to request a follow up conference call to discuss our above comments and to seek further clarification of the very technical information provided regarding visual and audio effects to the [National Historic Landmark (NHL)].*

   Response to Comment: A follow-up conference call between EPA, Tenaska and THC occurred on March 26, 2014.

7. ***SHPO Comments (p.5):*** *5. No further consultation is required through our Archeology Division, unless there is an inadvertent discovery during construction.*

   6. No further consultation is required through our History Program Division, unless Tenaska would like to undertake further analysis of the integrity and contributing elements of either the CCDD No. 1 or CCID No. 6.

   7. All future SHPO consultation for this Undertaking should be directed to Theresa A. de la Garza, as lead reviewer on behalf of the Division of Architecture. She can direct specific questions to other Divisions, if required.

   Response to Comments: Tenaska notes these comments.

8. ***NPS Comment (p.1):*** *The NPS requests an update on coordination with Native American tribes to ensure that tribes associated with NPS sites have been afforded an opportunity to engage in the project. We recommend on page 78, in the last paragraph under "Conclusions and Recommendations," Tenaska should include information about the results of tribal consultation.*

   Response to Comment: EPA sent notification to Native American tribes on January 10, 2014. As of April 22, 2014, none of the contacted Tribes had expressed any interest in participating in the Section 106 process for the project. EPA's January 10, 2014, letters are included here in Attachment B.

9. ***NPS Comment (p.1):*** *Tenaska has plans for an 800-megawatt facility with an alternative of a 400-megawatt facility. The NPS is seeking clarification on what triggered construction of the 400-megawatt alternative? [Referencing Executive Summary, p.i, of the CRA]*

   Response to Comment: It is Tenaska's intent to construct an 800-megawatt (MW) facility. Tenaska is permitting and designing for an 800 MW facility (2 combustion turbines and 1 steam turbine). All environmental analyses, including air permit applications, noise modeling, and visualization rendering are based upon the 800 MW design. The smaller 400 MW alternative (1 combustion turbine and 1 smaller steam turbine) would be considered only if market demand would not support the 800 MW design. Plant marketing is ongoing and is anticipated to support the 800-megawatt facility.

10. ***NPS Comment (p.2):*** *The NPS has found that "Palo Alto Battlefield National Historic Landmark" has been incorrectly labeled as "Palo Alto Battlefield National Historic Site." Please correct this labeling within this section and throughout the document. [Referencing Section 1.3, p. 8 Area of Potential Effect, of the CRA]*

    Response to Comment: Tenaska notes this clarification. At this time, however, Tenaska does not intend to revise the CRA. The resource is referred to as the Palo Alto Battlefield NHL in the *Section 106 Summary* and this labeling will be used going forward.

11. ***NPS Comment (p.2):*** *[On Page X, under] "Identified Resources" add: Palo Alto Battlefield National Historic Landmark.*

Response to Comment: At the time that the CRA was prepared, ERM understood the name of the National Historic Landmark to be the Palo Alto Battlefield National Historic Site. As noted above, the NPS indicated that this is incorrect and that the NHL is called the Palo Alto Battlefield National Historic Landmark. The correct name is used in the *Section 106 Summary* and will be used going forward.

12. ***NPS Comment (p.2):*** *Correction – the Battle of Palo Alto was fought May 8, 1846. [Referencing Section 3.2.5, p. 25, of the CRA]*

Response to Comment: Tenaska notes this error. At this time, however, Tenaska does not intend to revise the CRA.

UNDERTAKING

13. ***EPA Comment (p.1):*** *General Comment 2: Please revise language throughout to clearly indicate that all linear facilities to be constructed by or on behalf of Tenaska for the new plant facility are considered part of the APE.*

Response to Comment: As stated in the CRA, the Brownsville Public Utilities Board (BPUB) will own and operate a regional Natural Gas Transmission Pipeline and Water Reuse Pipeline for its broader economic development purposes. These BPUB regional projects are intended to serve multiple customers, not merely the Generating Station. Tenaska and BPUB believe these regional projects are independent, and not interrelated, actions and not properly considered part of Tenaska's proposed project for purposes of this assessment, as set forth in letters from BPUB to EPA dated April 18 and 26, 2013.

EPA has since indicated that it is its determination that these BPUB regional projects are within the scope of the Section 106 undertaking associated with the issuance of a federal GHG PSD permit for the Generating Station.

14. ***SHPO Comment (p.1):*** *Additionally [BPUB] is proposing to construct a natural gas transmission pipeline and a water reuse pipeline that will provide services to multiple customers, including Tenaska. Tenaska and BPUB have determined these projects are independent of the EPA undertaking and are being reviewed separately by THC for compliance with the Texas Antiquities Code. Therefore THC's Section 106 project review comments in this letter will be limited to the EPA undertaking (Undertaking).*

Response to Comment: On May 5, 2014, the SHPO submitted comments regarding these pipelines. These additional SHPO comments are addressed in this document.

AREA OF POTENTIAL EFFECTS (APE)

15. ***EPA Comment (p.1):*** *General Comment 3: Please revise the supplemental map and table submitted on February 21, 2014 to show the entire APE with all linear facilities and all archeological and historical sites within the prescribed 2.8 mile radius of the site facility APE and between 0.5-mile to 1.5-mile radius for the linear facilities that may be potentially impacted.*

The map should include at a minimum, the irrigation districts, the Port of Brownsville, both NPS battlefields, Rancho Viejo, Cemetario de las Burras, la feria de las flores, and Cameron County District 2. An example of such a detailed map is in Attachment 1, page 17, Figure 3-1.

Response to Comment: The February 21, 2014 map shows the entire APE with all linear facilities. The APEs for the Wastewater Discharge Pipeline, the Water Reuse Pipeline, and the Natural Gas Transmission Pipeline are not readily visible, however, at that scale. ERM provides additional aerial imagery in the *Section 106 Summary* to show the APEs more clearly and the locations of identified historic properties. Archaeological sites and aboveground resources of interest found not eligible for listing in the National Register of Historic Places are not shown on maps in the *Section 106 Summary*; however, the locations of these resources is shown in the CRA. It should be noted that the map in Attachment 1 to the CRA, page 17, Figure 3-1 represents information contained within the THC's Archaeological Sites Atlas, including archeological sites, state markers, and cultural resources study areas. This figure is shown for reference purposes and is not intended to show the locations of historic properties. It should also be noted that the Resaca de la Palma Battlefield NHL is not within the APE for the project and that Rancho Viejo is a historical location with no known extant aboveground resources.

16. ***SHPO Comments (p.2):***

a) Generating Station
i) Direct APE - We concur with the proposed 275-acre parcel where construction will occur.
ii) lndirect Visual APE - We concur with the proposed approximately 14-square miles (as shown in Figure 1-3 [of the CRA]).
b) Generating Station Water Discharge Pipeline
i) Direct APE - We concur with the proposed 50 feet from the centerline.
ii) lndirect/Visual APE - We concur with proposed 100 feet from the centerline.
c) Generating Station Transmission Interconnect Line
i) Direct APE - We concur with the proposed 50 feet from the centerline.
ii) Indirect/Visual APE - We concur with the proposed .5 miles from the centerline.

Response to Comments: Tenaska notes these comments.

17. ***SHPO Comment (May 5, 2014, pp.1-2):*** *Transmission Interconnect Line (11.7 miles): We initially concurred with the proposed 0.5-mile indirect/visual APE based on earlier recommendations to consult the 2004 FCC Nationwide Programmatic Agreement as a basis in developing an indirect/visual APE. Just as the 2004 FCC Nationwide Programmatic Agreement allows, in some events it may be determined that an alternative APE for indirect/visual effects is necessary. We understand that the NPS has expressed concerns for a larger indirect/visual APE. Based on the flat terrain and lack of substantial vegetative cover we understand that a larger indirect/visual APE of more than 0.5 miles may be warranted. However, we feel sufficient efforts have been made to identify historic properties that may be affected by the entire Undertaking within the currently proposed APE and beyond in the general project study area, and that no further investigations are necessary to identify above-ground historic properties within the general project study area or an APE.*

Response to Comment: Tenaska notes this comment. Use of the 2004 FCC Programmatic Agreement and the related issue of the Transmission Interconnect Line are discussed below in response #20.

18. ***SHPO Comment (May 5, 2014, p.2):*** *[Regarding the 7.75-mile water reuse pipeline, the 49.62-mile natural gas transmission pipeline, the 250-foot supplemental water supply line, the 250-foot potable water line, and the 800-foot sanitary sewer line:] We concur with the proposed direct and indirect APEs for these five linear facilities. Furthermore, we concur that due diligence was performed in conducting the archival research and archeological site investigations within the Direct APEs for the additional five linear facilities. We also concur that no archeological resources eligible to the NRHP are located within the Direct APEs for these additional linear facilities. Based on the research and evaluations as presented, we concur with the recommendation that sufficient efforts have been made to identify properties that may be affected by the entire Undertaking (to include the plant site and a total of seven linear facilities) and that no further investigations are necessary to identify above-ground historic properties within the Direct and Indirect APEs.*

    Response to Comment: Tenaska notes this comment.

19. ***NPS Comment (p.2):*** *[Regarding Section 1.3, p. 8 Area of Potential Effect, the] last paragraph explains that the APE takes into consideration visual effects; however, the NPS is curious if audible effects are taken into consideration? The NPS recommends that visual, audible, atmospheric and any other intrusions be included when determining the APE.*

    Response to Comment: Consistent with 36 CFR § 800.5(a)(2)(v), ERM determined the APEs to account for visual, atmospheric, and audible effects. The emphasis on visual effects in the description of the APEs simply reflects the assessment that the potential visual effects extend the furthest from the project site.

20. ***NPS Comment (p.6):*** *[Regarding Section 1.4.2 p. 7 of the Report, the] NPS does not concur with the use of the 2004 FCC Programmatic Agreement for Communications towers as a template for determining APE and Indirect Impact Areas.*

    Response to Comment: ERM's aboveground survey area for the Transmission Interconnect Line extends 0.5 miles from the ROW centerline. While the FCC Programmatic Agreement was referenced by THC in informal discussions, it was not the only factor considered by ERM in determining the survey area. ERM considered the language of the Section 106 implementing regulations which define the APE as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." (36 CFR §800.16(d)) The Transmission Interconnect Line will be visible from points outside the survey area, but given the character of the project area and the nature of the transmission line, ERM believes the survey within 0.5 mile of the centerline is sufficient to identify historic properties for which an alteration in character or use may occur, including the Palo Alto Battlefield NHL. The survey represents a reasonable and good faith effort consistent with the intent of the law. In response to NPS's request, two visualizations of the Transmission Interconnect Line are provided in Attachment C.

IDENTIFICATION

21. ***EPA Comment (p.1):*** *General Comment 1: Any work not yet completed (field surveys as indicated in additional comments below) must be completed. Please advise EPA and the consulting parties as to when ERM/Tenaska will complete this work and provide the additional information to the parties for review.*

Response to Comment: Tenaska and BPUB have made considerable efforts to proactively conduct comprehensive cultural resources identification efforts in support of this Section 106 process, and these efforts exceed the reasonable and good faith effort required under 36 CFR § 800.4(b)(1). As indicated in the Advisory Council on Historic Preservation's (ACHP's) guidance document "Meeting the 'Reasonable and Good Faith' Identification Standards in Section 106 Review" (November 2011), "the regulations do not require identification of all properties," and identification efforts "should be designed so that the federal agency can ensure that is produces enough information, in enough detail, to determine what the undertaking's effects will likely be on historic properties." (p. 2) (available online at at http://www.achp.gov/rgfe_guidance.pdf). Tenaska and BPUB believe that they have undertaken reasonable and good faith efforts to identify historic properties that will be affected by the proposed project and have produced extensive and appropriate information allowing for the determination of effects. The SHPO expressed its agreement that Tenaska has met this good faith standard in its May 5, 2014 letter.

Additionally, to protect against adversely affecting as-yet unidentified historic properties, should there be any in the APE, Tenaska and BPUB will abide by the terms of a Chance Finds Procedure during the construction process for all project components. Tenaska expects that the Chance Finds Procedure will be developed concurrent with a Memorandum of Agreement (MOA). If no MOA is required, Tenaska will submit a Chance Finds Procedure to EPA for review by the consulting parties prior to the issuance of the permit.

With respect to the Natural Gas Transmission Pipeline, some additional survey work has been completed by Atkins on behalf of BPUB where it was noted as pending and for some minor realignments. The surveys did not result in any changes to the analysis or conclusions, and a summary of changes along with updated figures are included here in Attachment D.

22. ***EPA Comment (p.2):*** *2. The cultural report discusses very little about the Resaca de la Palma Battlefield which is in the same proximity as the Palo Alto Battlefield. Please provide a discussion on Resaca de la Palma Battlefield, its historical significance, its eligibility status and what effects (direct or indirect) the Project may have on this site.*

Response to Comment: The National Register of Historic Places Inventory – Nomination Form for the Resaca de la Palma Battlefield National Historic Landmark, prepared in 1975 and approved in 1976, states "the boundary has been drawn to include the only portion of the battlefield which has retained any historical integrity," (Continuation Sheet, Item 10, p. 1), consisting of the land bounded by Paredes Line Road on the west and the Resaca. This property is 1.75 miles from the closest portion of the project APE, and 5.75 miles from the Generating

Station project site. Because the property is outside of the APE, the historical significance, eligibility status, and effects are not presented in the CRA.

23. ***EPA Comment (p.3):*** *4. There is brief mention in the main cultural report about two cemeteries nearby (Table ES-1, page iii); however there is no discussion about the historical background of these cemeteries or their locations relative to the project site? What are the impacts of the project on these sites?*

Response to Comment: Table ES-1, page iii is a summary of the entire undertaking. The cemeteries, which have not been evaluated for eligibility for listing in the National Register of Historic Places (NRHP), are discussed in the CRA, (Attachment 4: *Results of a Cultural Resources Survey for the BPUB Natural Gas Transmission Pipeline*). Following their identification in the field, BPUB shifted the project alignment to avoid direct effects to the properties. Because the line will be primarily underground, no indirect effects are anticipated.

24. ***EPA Comments (pp.3-4):*** *6. Additionally, no survey was performed for this 1.17 mile segment "due to the highly industrialized character at the southern terminus." While it may be true, EPA believes that there is insufficient information to indicate that there is no potential for deeper-buried archeological sites located beneath the disturbed soils of the industrialized area, especially since there are two archeological sites adjacent to the APE and one archaeological site within the water discharge line's APE. Please provide justification why there is no need to conduct a field survey for this segment for archaeological resources especially when in a later report, Attachment 4 (the natural gas transmission line), Atkins, the environmental consultant for BPUB, lists similar concerns and advises backhoe trenching to prevent unearthing deeper buried archaeological sites (Attachment 4, page 40). Please advise EPA as to when ERM/Tenaska will complete this additional work.*

[. . .]

8. (Page 22) It is noted that 0.6 mile segment of Transect 3 of the Transmission Line was not surveyed. The report advises that a survey is still needed. Additionally, the report advises that deeper testing by hand-augering at the pole locations be made to identify deeper buried archaeological resources (Page 31, Section 3.2.5). Without this information the report is incomplete. When does Tenaska intend to survey this area and/or perform additional surveys before construction of the transmission line? Please discuss.

[. . .]

13. Similar to Question #6, it was recommended that trenching should be done within several portions of the survey corridor to see if there are deeply buried archaeological remains before construction of the natural gas transmission line. (page 44) How many and how long are these segments along the transmission line that need trenching? Please advise EPA as to when Tenaska will complete this additional work and provide a complete CR report to EPA.

Response to Comments: As noted above, ACHP guidance states, "the regulations do not require identification of all properties" and identification efforts "should be designed so that the

federal agency can ensure that is produces enough information, in enough detail, to determine what the undertaking's effects will likely be on historic properties." (p. 2) Tenaska and BPUB have made considerable efforts to proactively conduct comprehensive cultural resources identification efforts in support of this Section 106 process, and these efforts exceed the reasonable and good faith effort required under 36 CFR § 800.4(b)(1). The SHPO expressed its agreement that Tenaska has met this good faith standard.in its May 5, 2014 letter.

Additionally, to protect against adversely affecting as-yet unidentified historic properties, Tenaska and BPUB will abide by the terms of a Chance Finds Procedure during the construction process for all project components, as noted above. Hand auger testing along the route was completed following the original inventory; no archaeological sites were found but possible buried soils were noted. Implementation of the Chance Finds Procedure will facilitate the protection of any undiscovered archaeological sites found during construction activities.

Regarding the 1.17 mile segment of the Water Discharge Line within the Port of Brownsville, ERM's opinion is that this portion of the project area has been significantly impacted by construction of infrastructure associated with the port. The likelihood of intact, significant archeological resources is low. Review of historical aerial imagery of the Port depicts significant impacts along the route over the last 50 years.

25. ***EPA Comment (p.4):*** *9. (Page 3) Old Port Isabel Road was used by troops before the Battle of Palo Alto and is located within the APE of the transmission line. Please provide a discussion on the historical significance of this location, its eligibility status for listing on the NR, and what potential impacts the transmission line may have on this site.*

Response to Comment: ERM understands that the road identified as the Port Isabel-Matamoros Road in the 2010 Cultural Landscape Inventory and the Matamoros-Point Isabel Wagon Road in *On the Prairie of Palo Alto* (Haecker and Mauck 1997) is the road traveled by the troops before the Battle of Palo Alto. This road is partially extant within the boundaries of the NHL but was not identifiable on the landscape outside of the NHL during field surveys or review of aerial imagery. An existing road called "Old Port Isabel Road" runs east of the NHL. Map records show that the alignment of Old Port Isabel Road dates to between 1907 and 1922. The extant segment of the Old Port Isabel Road in the APE for the Transmission Line Interconnect is not the same as the road used by troops before the Battle of Palo Alto. ERM did not evaluate the NRHP eligibility of Old Port Isabel Road outside of the NHL given that the current alignment is unrelated to the historic events at the Battlefield. Additionally, this was not identified as a historic property or a resource of interest in connection with the Farm Road 511 widening for State Highway 550. The 1907 and 1922 maps referenced here are enclosed as Attachment E.

26. ***EPA Comment (p.4):*** *10. There is little discussion about the four previously recorded archeological sites located 1.5 miles from the transmissions line? (Page 2 and referenced in Table 3-1 on page 16) Please expand your analysis on what is known about these sites.*

Response to Comment: These four archeological sites are not located within the proposed route or the APE for the Transmission Line Interconnect. Information gathered on these sites was used to inform the archaeological research design contained within the Texas Antiquities Permit

(#6694), issued by the Texas Archeological Commission on October 17, 2013. Additional analysis of these sites was not warranted. Based on the information available from THC's ATLAS database, none of the sites have been determined eligible for listing in the NRHP.

27. ***EPA Comment (p.4):*** *11. The report notes that the boundary of the Resaca da la Palma Battlefield was never fully delineated and yet lays within 0.5 mile of the APE. (page 19) EPA advises that Tenaska consult with the National Park Service – American Battlefield Protection Program to determine if the water reuse pipeline can potentially lay within the Resaca de la Palma Battlefield and add that discussion into the report.*

Response to Comment: The survey for the Water Reuse Pipeline was conducted within a corridor that ranged from 50 to 120 feet wide inclusive of the pipeline. The Resaca de la Palma NHL is located well outside (approximately 2 miles south) of the survey corridor. The archeological site associated with the battle, 41CF3, is located approximately 0.6 miles from the Water Reuse Pipeline survey corridor. While the archeological site boundaries for 41CF3 have not been determined, no artifacts were uncovered during the archeological investigations, and there was no indication that the site extends into the Water Reuse Pipeline APE.

Tenaska met with Kristen McMasters of the American Battlefield Protection Program (ABPP) on February 27, 2014, to discuss the Palo Alto and the Resaca de la Palma Battlefields in response to comments made by Ms. McMasters in the February 12, 2014, consulting party call. Ms. McMasters shared her perspective on the current and potential boundaries of the battlefields, stating that ABPP's position was that their study area, rather than the existing NRHP/NHL boundaries, should be used in the Section 106 process. ERM considered oral information provided by ABPP as well as written materials submitted before the February 12th call and after the February 27th meeting. While ERM acknowledges the study area boundary for the Resaca de la Palma Battlefield is useful to understand and document that battlefield, it is not supportable within the NRHP context.

Based on the above, Tenaska and BPUB believe that they have undertaken reasonable and good faith efforts to identify historic properties that will be affected by the Water Reuse Pipeline. As noted in response to comments above, to protect against adversely affecting as-yet unidentified historic properties, should there be any in the APE, BPUB will abide by the terms of a Chance Finds Procedure during the construction process for all project components.

28. ***SHPO Comments (p.2):***

2) Identification of Cultural Resources

a) Archeological Resources

i) Survey - We concur that due diligence was performed in conducting the archival research and archeological site investigations within the Direct APEs.

ii) Identification and Determination of Eligibility - We concur that no cultural resources eligible to the NRHP are located within the Direct APEs.

Response to Comments: Tenaska notes these comments.

29. ***SHPO Comment (p.2):*** *iii) Inadvertent Discovery/Chance Finding Policy – We concur that Tenaska must anticipate the possibility of a chance finding/inadvertent discovery of artifacts related to the Palo Alto Battlefield National Historic Landmark Site. Please develop and submit for review a standard operating procedure to address such the possibility of an inadvertent archeological discovery during the execution of the Undertaking.*

Response to Comment: As noted above, Tenaska and BPUB will abide by the terms of a Chance Finds Procedure during the construction process for all project components. Tenaska expects that the Chance Finds Procedure will be developed concurrent with an MOA; if no MOA is required, Tenaska will submit a Chance Finds Procedure for EPA review and approval prior to the issuance of the permit.

30. ***SHPO Comments (pp.2-3):***

[2) Identification of Cultural Resources]

b) Above Ground/Architectural Resources

i) Survey - Based on the research and evaluations as presented, we concur with the recommendation that sufficient efforts have been made to identify properties that may be affected by the Undertaking and that no further investigations are necessary to identify above-ground historic properties within the Direct and Indirect APEs.

ii) Identification and Determination of Eligibility

(1) Palo Alto Battlefield National Historic Site - We confirm this property is listed on the NRHP and designated an NHL.

(2) Cameron County Irrigation District No. 6 (CCID No.6) - We confirm the statement that this property has been previously found eligible to the NRHP.

(3) Cameron County Drainage District No. 1 (CCDD No.1) - We concur with the assessment that a full survey and evaluation of the CCDD No. 1 is beyond the scope of this Undertaking, but until further evaluation can take place we concur with the recommendation that CCDD No.1 be treated as eligible to the NRHP, in association with the previously determined eligible CCID No. 6.

(4) Port of Brownsville and the Brownsville Bay Ship Channel - We concur with the assessment that a full survey and evaluation of the Port of Brownsville and the Brownsville Bay Ship Channel is beyond the scope of this Undertaking, but until further evaluation can take place we concur with the recommendation that the Port of Brownsville Bay Ship Channel be treated as eligible to the NRHP.

(5) Port Isabel and Rio Grande Valley Railroad - We concur with the assessment that the Port Isabel and Rio Grande Valley Railroad may possess significance on a local level under Criterion A, but since the tracks have been removed within the APE it no longer retains sufficient integrity to convey its historical significance and is therefore considered not eligible.

Response to Comments: Tenaska notes these comments.

31. ***SHPO Comment (p.3):*** *(6) Properties at 32381 Lemon Drive and on Old Alice Road – We understand a small percentage of historic-age modest buildings exist within the generating station visual Indirect APE and are believed to be constructed after 1950. At this time we concur*

with the recommendation that these two notable buildings do not appear to possess historic significance as required by the National Register of Historic Places (NRHP) Criteria to be eligible, with the provision that the research documentation described in the report is provided to support this determination. The research documentation described includes the USGS maps from 1928, 1936, 1955, and 1956; a highway map from 1940, and aerial imagery from 1950.

Response to Comment: The maps and aerials cited in the CRA as the basis of the findings for 32381 Lemon Drive and the property on Old Alice Road are provided in Attachment F.

32. ***SHPO Comments (p.3):*** *(7) Southern Pacific Railroad - We concur with the assessment that the Southern Pacific Railroad background research suggests that the railroad line from Brownsville to Harlingen possesses significance on a local level under Criterion A as one of the earliest railroads in the area and instrumental in its development. We understand that some associated secondary buildings/structures, including a heavily altered station and adjacent store houses in Los Fresnos, remain but the railroad branch line to Brownsville is no longer in place and the berm has been paved. We concur with the evaluation that the portion of the Southern Pacific Railroad within the APE no longer retains sufficient integrity to convey its historical significance and is considered not eligible.*

(8) We understand that the Rancho Viejo Floodway has been previously determined not eligible and was not further evaluated.

(9) We understand that eight (8) historic-age structures within the water discharge pipeline APE have been previously determined not eligible and were not further evaluated.

(10) We understand various irrigation and drainage ditches exist with the water discharge pipeline APE, but are not associated with a recognized system, and concur with the recommendation that these are not eligible.

Response to Comments: Tenaska notes these comments.

33. ***NPS Comment (p.2):*** *[Regarding Page iii, Table ES-1, the] National Register eligibility of six of the eight historic properties listed in this table are "undetermined" or "potentially eligible". The NPS recommends that Tenaska confirms the eligibility of all cultural resources within the area of potential effect (APE) as they move forward with the Section 106 process. This table [Table ES-1] seems to be inconsistent with the information provided on page x under "Identified Resources," which lists several more cultural resources than the initial eight resources listed in Table ES-1. The NPS recommends that there be an explanation for this discrepancy in the text.*

Response to Comment: ERM understands that a comprehensive NRHP evaluation of all resources within the project APE is the ideal situation. However, many of the resources within the APE are segments or portions of much larger, complicated multi-resource properties (e.g., irrigation/drainage districts, railroads) that extend considerably beyond the APE and would require significant effort and cost to comprehensively survey and evaluate. Therefore, Tenaska has proactively elected to conservatively err on the side of eligibility for the purposes of the Section 106 process. This approach was discussed with THC in advance of the preparation of

the CRA. THC has provided formal concurrence with this approach in their February 17, 2014, letter.

The four "undetermined" resources identified within the Natural Gas Transmission Pipeline APE were not evaluated for NRHP eligibility because BPUB determined that avoidance of direct effects was possible and indirect effects are not expected from the underground structure.

34. ***NPS Comment (p.2):*** *[Table ES-1] should also list the Palo Alto Battlefield National Historical Park. The Park is de-facto listed in the National Register. We believe that the agency's undertaking related to the NHL falls under 36 CFR 800.10 Special requirements for protecting National Historic Landmarks, which requires the agency to the greatest extent possible to undertake such planning and actions as may be necessary to minimize harm to the NHL.*

Response to Comment: The Palo Alto Battlefield National Historical Park (Park) is almost wholly subsumed within the NHL and neither the NHL nor the Park is directly affected by the proposed project. Notwithstanding any distinction between the NHL and the Park, indirect effects are thoroughly presented in the CRA and in Attachments C and H hereto.

Because there will be no direct effect on the NHL, 36 CFR § 800.10 does not apply to the undertaking.

35. ***NPS Comment (p.2):*** *Concerning the Cross Valley Interconnect Transmission Line, the NPS considers this a closely and directly connected activity related to issuing a permit for the generating station and would not be constructed if not for the generating station project. This comment also applies to Section 6.2.1 Visual Effects.*

Response to Comment: Tenaska included the Transmission Line Interconnect in the CRA (see CRA Attachment 2: *Transmission Interconnect Line Report*), and this comment is noted.

36. ***NPS Comment (p.5):*** *[In the Abstract of the Report, mention] is made of additional shovel tests along a 0.6 mile section of the line north of the Palo Alto Battlefield NHP. The historic road(s) to Port Isabel from Ft. Brown and Brownsville in the 1840's to the 1860's run through this area. There is potential for discovery of cultural remains along these routes. Additionally, the northern edges of the U.S. Army positions during the battle of Palo Alto may extend beyond the boundary of the national park. Metal detector surveys may uncover more than shovel tests.*

Response to Comment: As noted above, Tenaska and BPUB have made considerable efforts to proactively conduct comprehensive cultural resources identification efforts in support of this Section 106 process, and these efforts exceed the reasonable and good faith effort required under 36 CFR § 800.4(b)(1). Additionally, Tenaska and BPUB will abide by the terms of a Chance Finds Procedure during the construction process for all project components. The CRA as supplemented by materials included with these responses to comments and the Chance Finds Procedure represent a compliant and comprehensive consideration of cultural resources.

37. ***NPS Comment (p.5):*** *The Old Port Isabel road is not in the exact location of the historic route(s) (used during wet and dry seasons respectively) through this area used during the*

Mexican War period and beyond. To state that maintenance and improvement to the modern gravel road has destroyed evidence of these earlier routes is inaccurate.

Response to Comment: ERM acknowledges this comment. As noted above, ERM understands that the road identified as the Port Isabel-Matamoros Road in the 2010 Cultural Landscape Inventory and the Matamoros-Point Isabel Wagon Road in *On the Prairie of Palo Alto* (Haecker and Mauck 1997) is the road traveled by the troops before the Battle of Palo Alto. This road is partially extant within the boundaries of the NHL but was not identifiable on the landscape outside of the NHL (i.e., where the Transmission Line Interconnect will cross to the north of the NHL) during field surveys or review of aerial imagery.

EVALUATION

38. ***EPA Comment (p.2):*** *Please provide discussion/analysis on all historical and archaeological sites discussed in all of these reports that is clear and consistent with their eligibility status for listing on the National Register, and be sure that the eligibility criteria is applied to all of these sites when determining their eligibility status. Below are examples of historical/archaeological sites discussed in the report with a recommendation for ineligibility but did not have NHPA eligibility criteria applied:*

- *The Southern Pacific railroad, Port Isabel and the Rio Grande Valley Railroad (Attachment 1: Water Discharge Pipeline Report)*
- *The historic-age canal (Attachment 3: Water Re-use Pipeline Report)*

Response to Comment: The NRHP Criteria have been applied to all resources formally evaluated for eligibility in the CRA. The level of detail and analyses presented in the cultural resources reports varies depending upon the age, potential historical significance, and current condition of the resource. The Southern Pacific Railroad is discussed in detail in the main CRA (pp. 46-47), including application of specific criteria. The Port Isabel and Rio Grande Valley Railroad is discussed in the CRA Attachment 1 (pp. 30-31). Specific NRHP Criteria were not applied to this resource because it is no longer extant on the landscape. Application of the NRHP Criteria to the Rancho Viejo Floodway, CCID1, and the Brownsville Irrigation District was not undertaken because of recent determinations of ineligibility.

ERM would like to offer clarification on the historic-age ditch discussed in the CRA Attachment 3. The report states that map records reveal the ditch to have been constructed between 1949 and 1958, and is therefore outside of the period of significance for irrigation-related resources in the Rio Grande Valley (p. 33). The east portion of this ditch is currently managed as part of CCDD1, which ERM has recommended as potentially NRHP eligible for the purposes of this Section 106 undertaking. The ditch is also present on the 1930 East Brownsville USGS map. Accordingly, the ditch will be treated as a contributing resource to the CCDD1 for the Water Reuse Pipeline as well as the Water Discharge Pipeline.

POTENTIAL EFFECTS (VISUAL, AUDIBLE, ATMOSPHERIC)

39. ***EPA Comment (p.2):*** *1. The report discusses the possibility that Cameron County Drainage District No. 1 (CCDD1) and Cameron County Drainage District No. 6 (CCID6) could be*

adversely affected by this project. For example, the analysis concerning Olmito Branch (a drainage ditch in CCDD1 that runs along the edge of the property) states: "Because of the proximity of the ditch to the project, it may be appropriate to engage a representative of this agency in the Section 106 consultation process moving forward." (pg. 64). On page 70, the report states, "Tenaska is currently considering utilizing the Olmito Branch for storm water point-source discharge, which would constitute a direct effect on the Olmito Branch and the CCDD1." The report then concludes that the development that has occurred in the area since the mid-20th century has "compromised the setting, feeling, and integrity of the irrigation and drainage systems. Within this context, the effects of the project on the setting and feeling of the CCDD1 and CCID6 and contributing resources will be minimal." (pg. 72) How was this determined? What is the basis that the "setting, feeling and integrity…..will be minimal?" Given that these ditches will be crossed numerous times, EPA expects that these resources will sustain a direct effect and should be properly analyzed for effects.

Response to Comment: In response to comments received from THC and EPA, ERM has reconsidered the approach to the assessment of effects on the NRHP-eligible irrigation and drainage districts. Rather than applying the Criteria of Adverse Effect to each feature, the effects of the project on the larger historic district is assessed. This approach is presented in the *Section 106 Summary* accompanying these responses to comments.

40. ***EPA Comment (pp.2-3):*** *3. Please clarify in the report and provide a map of the crossing locations and number of all linear facilities within the irrigation districts and other resources. It is unclear at this point what portions of CCID6 and CCDD1 were surveyed and how much was a desktop review. How much physical disturbances will occur at the CCID6 segments? Per page 58, the Project will have a more "intense impact" on Ditch No. 3 along Albelardo road, what does that exactly mean? Please explain how the "intense impact" on a historical resource does not lead to a "no adverse effects" determination?*

Response to Comment: Ditch crossings within NRHP-eligible or potentially NRHP-eligible irrigation and drainage districts are indicated throughout the CRA, specifically as follows:

- CRA Attachment 1 – *Finding of No Adverse Effect to Archeological and Historic Resources Associated with the Water Discharge Pipeline: Brownsville, Cameron County, Texas* (Appendix A – Project Maps, Map 2);
- CRA Attachment 2 – *Finding of No Adverse Effect to Archeological and Historic Resources Associated with the Transmission Line: Brownsville, Cameron County, Texas* (Additional Action #2 – Aboveground Photo Map and Photolog);
- CRA Attachment 3 – *Results of a Cultural Resources Survey for The BPUB Water Reuse Pipeline Project* (Figure 18, p. 32);
- CRA Attachment 4 – *Results of a Cultural Resources Survey For The BPUB Natural Gas Transmission Pipeline* (Figure 13, p. 38; Figure 14, p. 41); and
- Letter(s) from EPA to the Consulting Parties, February 21, 2014 (CRA Attachment 3 – Tenaska Summary Discussion of the Proposed Potable Water and Sanitary Sewer Lines, Map).

Field survey was limited to those areas of the irrigation and drainage districts located within the APEs for the various project components. This represented a small percentage of the current jurisdictional boundaries of the irrigation and drainage districts as shown in publicly-accessible online sources. Ditches shown as currently maintained by the NRHP-eligible and potentially NRHP-eligible irrigation and drainage districts are treated as contributing structures to the districts for the purposes of this Section 106 assessment.

Physical disturbance within the boundaries of the CCID6 will occur from the construction of the Generating Station within the western portion of the project site that falls within the current jurisdictional boundaries. It also will occur along the route of the Water Discharge Pipeline; along the route of the Transmission Interconnect Line; and possibly along the route of the Water Reuse Pipeline.

CCID6 ditches will not be directly affected by the Generating Station construction or operation, the Water Discharge Pipeline, the Transmission Interconnect Line or the Water Reuse Pipeline.

Physical disturbance within the boundaries of the CCID6 will occur along the route of the Natural Gas Transmission Pipeline. The line has the potential to cross ditches understood to contribute to the CCID6 in two locations; in both locations BPUB proposes to bore underneath the ditches using horizontal directional drilling (HDD) to avoid adverse effects.

The assessment of effects of the Generating Station on the CCID6 and CCDD1 presented in the CRA takes into consideration the fact that ditches located closer to the project site will sustain a more significant (i.e., more intense) visual impact than those located at farther distances. As discussed in the CRA, ERM's opinion is that the existing conditions within and adjacent to the irrigation and drainage districts are such that the project elements will not further diminish the integrity of the historic properties.

41. ***EPA Comment (p.3):*** *7. Two aboveground historic properties were identified within the APE: the Port of Brownsville and the CCDD1. ERM recommends the CCDD1 irrigation ditches and the entire Port of Brownsville be treated as eligible for listing in the NRHP. ERM concluded that these historic properties will be affected by the pipeline, but not adversely affected. This was done without applying the adverse assessment criteria pursuant to 36 CFR 800.5. Please apply this criteria and incorporate it into your discussion to appropriately determine if the pipeline project will adversely affect either of historic property.*

Response to Comment: ERM applied the Criteria of Adverse Effect (36 CFR § 800.5) to all assessments of effects for the project, including effects to the Port of Brownsville Historic District and the CCDD1 from the Water Discharge Pipeline. In response to this comment, the Criteria of Adverse Effect are more explicitly referenced in the *Section 106 Summary* accompanying these responses to comments.

42. ***EPA Comment (p.3):*** *ERM does not discuss how the irrigation ditch crossings will be constructed to minimize impact, as it is discussed in the natural gas pipeline CR (Attachment 4, page 36-43). Does Tenaska plan to commit to similar mitigation measures for the water discharge line? Please discuss.*

Response to Comment: As indicated in the CRA, it is ERM's opinion that planned construction activities within the potentially NRHP-eligible CCDD1 will not result in adverse effects under Section 106. Tenaska and BPUB have indicated that for both the underground Water Discharge Pipeline and the Water Reuse Pipeline direct effects to contributing ditches within the CCDD1 will be avoided through HDD or boring, which will not alter their integrity or functionality. If open cut methods are required contributing ditches will be returned to their original dimensions and function after the pipeline installation is complete. Additionally, the limited aboveground appurtenances associated with both water pipelines will not be located within 200 feet of ditches that contribute to the CCDD1.

43. ***EPA Comment (p.4):*** *12. Page 44 of Attachment 4 states, "With regard to the irrigation resources, planned construction activities within the NRHP-eligible districts do not appear to constitute adverse effects to any of the resources under Section 106. While not finalized, construction of the underground pipeline via boring methods would avoid all impacts to the resources, including to their integrity and functionality. Similarly, if the pipeline was constructed via open cut methods, impacted sections of aboveground canals would be returned to their original dimensions and function. Project engineers have specified that aboveground standpipes within the ROW will be avoided by project construction. As no adverse impacts to any NRHP-eligible irrigation features are anticipated in association with the proposed project, no further consideration of the resources under Section 106 is recommended." Since construction plans have not been finalized, what assurances can Tenaska/BPUB provide that aboveground standpipes will not be constructed as this would visually impact the irrigation districts and potentially result in an adverse impact on NRHP-eligible sites?*

Response to Comment: The statement on page 44 of the Atkins report (CRA Attachment 4) refers to avoidance of effects on existing standpipes. Regarding the separate issue of assurances concerning construction, Tenaska and BPUB will have direct oversight of design and construction plans. Tenaska's contractors are contractually obligated to comply with all environmental regulations and permit conditions and will be instructed on compliance with commitments related to the Section 106 process. Tenaska has and will continue to select bidders that demonstrate an awareness of and sensitivity to these commitments. Tenaska understands that it is ultimately accountable for the commitments made in the GHG application; however, should the Section 106 process conclude with an MOA, Tenaska expects to include a stipulation on the notification and education of contractors.

Since the completion of the CRA, BPUB and Tenaska have concluded that the Water Discharge Pipeline and Water Reuse Pipeline, while primarily located underground, are likely to have minor aboveground features such as post indicator valves or vent pipes that can extend from 3 to 5 feet in height. However, because they will be installed at intervals of at least one mile and with considerable flexibility in terms of location, ERM believes these aboveground elements will not adversely affect historic properties, including the NRHP-eligible and the potentially NRHP-eligible irrigation and drainage districts. The Natural Gas Transmission Pipeline will have aboveground metering near its northwestern endpoint and within the Generating Station project property boundary, as well as aboveground meter valves at three locations along the route: none

of these locations are within 200 feet of ditches maintained by NRHP-eligible and potentially NRHP-eligible irrigation and drainage districts.

44. ***SHPO Comments (p.3):***

[Assessment of Effects]
a) Archeological Resources - We concur that the proposed project has no potential to directly affect archeological resources.
[b) Above Ground/Architectural Resources]
(1) Direct Effects - We find that the Undertaking will not have a direct effect on the Palo Alto Battlefield National Historic Site.

Response to Comments: Tenaska notes these comments.

45. ***SHPO Comment (pp.3-4):*** *(2) Indirect Effects – We concur that the proposed Undertaking has the potential to affect this historic property (Palo Alto Battlefield NHL). We appreciate Tenaska's plans to minimize visibility of the towers to the extent feasible through the paint color scheme. We do not agree that the existing intrusions minimize the visual effects of the towers and expected plumes to the degree in which a determination can easily be made. In contrast, we find that the massing of the towers and plume to be quite noticeable and that their addition to the existing visual impacts to be one that warrants further discussion of the VISCREEN analysis and findings. Therefore, we find that additional consultation is required to make a determination of indirect effect to the Palo Alto Battlefield National Historic Site.*

Response to Comment: In response to this and comments received from the NPS, Tenaska has prepared additional and revised analyses to aid in the assessment of the effects of the project on the NHL, including: additional visualizations; revisions to the noise study; and specifications regarding the lighting plan as discussed below. Materials regarding potential visual and noise effects are included here in Attachments C and H.

46. ***SHPO Comment (p.4):*** *(1) Direct Effects -We concur that the introduction of a storm water point-source discharge into the Olmito Branch is a direct impact and would directly affect the "eligible" CCDD No. 1. However, we cannot make the determination of direct effect on CCDD No. 1 and CCID No. 6 at this time, as insufficient information has been provided. Please provide additional information regarding the design and specifications of the construction activities associated with the storm water point-source discharge, in addition to photographs of existing conditions. We would like to address the discussion regarding lack of integrity due to modifications to the system and setting as it pertains to the impact of the proposed Undertaking and justification for a recommended finding of "no adverse effect" by ERM/Tenaska. This discussion is tied to the historic resources' eligibility to the NRHP and is, therefore, in contradiction to the previous assertion ERM/Tenaska makes to treat it as eligible to the NRHP for the purpose of assessment of effects, the latter of which with we concur (see above). Furthermore, as CCDD No. 1 has not been formally evaluated and the period of significance has not been established, the assertion that the "current design and appearance do not represent its historic condition" cannot be adequately substantiated at this time. Without an established period of historic significance and record of the past modifications, we cannot know whether*

they are part of the historic condition and therefore, historic in their own right. ERM/Tenaska is welcome to expand the scope of cultural resources assessment and evaluate the resource and recommend contributing and non-contributing features of that resource, along with a period of historic significance. Until that occurs, we have chosen to put aside this discussion as it pertains to assessment of effect.

(2) Indirect Effects – Although we understand the Olmito Branch and Ditch No. 3 of the CCDD No. 1 and the CCID No. 6 ditch that transects Abelardo Road are more proximate to the source of the impact, we do not agree that these elements of larger historic drainage/irrigation districts should be examined as standalone elements without consideration of the indirect impacts on the entirety of the CCDD No. 1 an CCID No. 6. We are unable to make a determination of indirect effect on CCDD No. 1 and CCID No. 6 based upon the submittal documents, as further information and discussion is required.

Response to Comment: In response to comments received from THC and EPA, ERM has reconsidered the approach to the assessment of effects on the NRHP-eligible irrigation and drainage districts. Rather than applying the Criteria of Adverse Effect to each feature, the effects of the project on the larger historic district is assessed. This approach is presented in the *Section 106 Summary* accompanying these responses to comments.

Storm water from the Generating Station site will be discharged via outfall at Olmito Branch Ditch, which is located at the southern boundary of the project site. The ditch is part of CCDD1. As required, engineering plans for all new drainage connections to CCDD1 facilities will be reviewed by District management and permitted by its Board of Directors.

Storm water from the approximate 36-acre project area will be directed to an onsite storm water management pond that will include controlled discharge via a precast discharge structure. Runoff will be conveyed from the storm water pond's discharge structure to the ditch through a culvert. The downstream invert of the culvert will be set above the Ordinary High Water Level of Olmito Branch and will appear essentially flush with the bank. The culvert outfall at the ditch will have a 48" diameter and be covered by energy dissipaters and rip rap to control the velocity of runoff discharged into the ditch and to prevent erosion within the ditch. The rip rap will be placed over an area that measures 10' by 10' and will be 24" thick. The installation of rip rap will require 10 cubic yards of cut and sub grade preparation and will include 10 cubic yards of rip rap material installed over the prepared sub grade. A drawing is provided in Attachment I.

The allowable design peak storm water discharge rate will be no greater than the Generating Station site pre-development peak discharge rate. During the 25-year, 72-hour storm event, a peak discharge rate from the project's storm water pond and outfall will be approximately 86 cubic feet per second. Best management practices will be put in place in accordance with the project Storm Water Pollution Prevention Plan to prevent storm water runoff from carrying sediments into the ditches and to inhibit erosion along the ditches. A silt fence detail is provided in Attachment I.

47. ***SHPO Comment (p.4):*** *[Regarding the Port of Brownsville and the Brownsville Bay Ship Channel,] (1) Direct Effects – No effects assessment has been provided for SHPO review.*

However, the SHPO has noted the resources fall outside the Direct APE and has determined there is no potential for direct effect to the Port of Brownsville and Brownsville Bay Ship Channel.

Response to Comment: The SHPO amended this comment by its letter of May 5, 2014. Please see response #49, below.

48. ***SHPO Comment (p.4):*** *[Regarding the Port of Brownsville and the Brownsville Bay Ship Channel,] (2) Indirect Effects – No effects assessment has been provided for SHPO review. Therefore, we cannot make a determination of indirect effect at this time. Please provide an assessment of indirect effects to these resources.*

Response to Comment: The SHPO amended this comment by its letter of May 5, 2014. Please see response #49, below.

49. ***SHPO Comment (May 5, 2014, p.1):*** *Water Discharge Pipeline (11.05 miles): We are amending our previous comment, with respect to this proposed linear facility and effects to the Port of Brownsville and Brownsville Bay Ship Channel. We concur with the ERM determination that the proposed Water Discharge Pipeline poses no adverse effect to historic properties, either directly or indirectly.*

Response to Comment: Tenaska notes this comment.

50. ***SHPO Comment (May 5, 2014, p.2):*** *[Regarding the Transmission Line Interconnect:] We agree with ERM's determination that the proposed transmission line will have no direct effect to cultural resources. However, we do not concur with the ERM determination of indirect effects to the NHL. In determining effect, we do not agree that the indirect effects to the NHL should be based on or limited to impacts to the "core battlefield area" and that existing intrusions to the setting somehow minimize the effect caused by the introduction of the sizeable towers needed to support the high-voltage line. Based upon documentation available to us and a follow up THC site visit (April 17, 2014), we have determined the proposed Transmission Interconnect Line has the potential for adverse effect to the NHL.*

Response to Comment: Tenaska notes this comment and looks forward to discussing the indirect effects of concern to the SHPO and a path forward. For more detail regarding the Transmission Line Interconnect, please see responses #56, #63, #64, #65 and #66, below.

51. ***SHPO Comment (May 5, 2014, p.2):*** *[Regarding the 7.75-mile water reuse pipeline, the 49.62-mile natural gas transmission pipeline, the 250-foot supplemental water supply line, the 250-foot potable water line, and the 800-foot sanitary sewer line:] We concur with the Atkins assessment of effects for the Water Reuse and Natural Gas Transmission Pipelines; these linear facilities will have no adverse effect to historic properties. Additionally, we concur with the Environmental Resources Management assessment of effects for the Supplemental Water Supply, Potable Water and Sanitary Sewer Lines; these linear facilities will have no adverse effect to historic properties.*

Response to Comment: Tenaska notes this comment.

52. ***NPS Comment (p.2):*** *[Regarding Table ES-1, the] NPS asks for Row 1 within the Project Effect to be reexamined; largely for the reason that putting such a large facility so close to the park is a direct adverse effect to the viewshed and soundscapes of Palo Alto Battlefield NHL and Palo Alto Battlefield National Historical Park (NHP). This is also true for the proposed transmission lines, which are proposed abutting Palo Alto Battlefield NHL northern boundary and to the east of the park.*

Response to Comment: The analysis of "direct" and "indirect" effects in the CRA is consistent with guidance published in *NEPA and NHPA: A Handbook for Integrating NEPA and Section 106*, published by the Council on Environmental Quality, Executive Office of the President, and the Advisory Council on Historic Preservation in March 2013 (the "Handbook") (available online at http://www.achp.gov/docs/NEPA_NHPA_Section_106_Handbook_Mar2013.pdf). On page 41, the Handbook defines "indirect effects" as those that "may change the character of the property's use or physical features within the property's setting that contribute to its historic significance; [indirect effects] are often audible, atmospheric, and visual effects; and may relate to viewshed issues." The Handbook states, "A direct effect to a historic property would include demolition of a historic building, major disturbance of an archaeological site, or any other actions that occur to the property itself." Thus, effects to the viewshed and soundscapes are properly considered indirect effects.

The proposed project will not result in direct effects to the Palo Alto Battlefield NHL. Therefore, Section 110(f) of the National Historic Preservation Act, which applies to Federal undertakings that "may directly and adversely affect" NHLs, is not applicable.

ERM has applied the Criteria of Adverse Effect (36 CFR § 800.5(a)) to the undertaking as defined by EPA for the issuance of the GHG PSD permit and has found that the project will not adversely affect the NHL. The justification for these findings is presented in the CRA. At NPS's request, Tenaska has produced additional materials and analyses to aid in the assessment of effects since the preparation of the CRA. *See* Attachments C and H. These materials and analyses have not revealed additional information to warrant reconsideration of ERM's findings with respect to the effect of the project on the NHL.

ERM understands the NPS position regarding the potential effects of Tenaska's proposed project, and notwithstanding any differences of opinion regarding potential effects, ERM recognizes that the EPA will make a determination and that Tenaska is fully engaged in the ongoing process to address potential effects as ultimately determined by the EPA. As part of that process, Tenaska looks forward to discussing the indirect effects of concern to the NPS and a path forward.

53. ***NPS Comment (p.2):*** *There is mention of a biological assessment being prepared concurrently under Endangered Species Act (ESA). The NPS has significant concerns for the biological resources contained within Palo Alto Battlefield NHP. As development surrounds the park, this green space will become critical habitat for migratory birds as well as other small indigenous*

fauna. The effects of the undertaking on the park must be considered for these resources as well. [Referencing Introduction, p. 1, of the CRA]

Response to Comment: A thorough evaluation of biological resources was completed and submitted to the EPA in the biological assessment. As part of that evaluation, ERM's biological assessment team concluded that there will be no adverse impacts to biological resources.

54. ***NPS Comments (pp.2-3):*** *The NPS does not support the statement that the addition of two 95-foot tall Heat Recovery Steam Generator's (HRSG), two 160 foot tall smoke stacks and a 55-foot tall cooling tower with visible steam plumes of several hundred feet would not change the character of the Palo Alto Battlefield NHP or the underlying NHL. Character, setting and sense of place are paramount qualities we work to preserve for visitor understanding and visitor experience of the site. [Referencing Section 1.1, p. 8, of the CRA]*

[. . .]

With regards to the United States Border Patrol radio communications tower and the Southmost Regional Water Authority water treatment facility that are visible within the project area, it is unknown if the NPS was invited to comment on the installation of the radio tower. The water treatment facility may not have been a project that invited comment under NEPA or National Historic Preservation Act regulations. The structures mentioned above have minimal impact upon the park in contrast to the significant impacts of the proposed Tenaska structures. [Referencing Section 4.3.1, p. 42, of the CRA]

[. . .]

The NPS does not agree with the effects of the undertaking being labeled "moderate". The effects, in combination with the transmission line and cumulative impacts, are likely to be significant. With the exception of the Highway 550 overpass, the other visual intrusions on the viewshed are further away, partially screened by vegetation or narrow enough to be somewhat less intrusive in comparison to the large, tall structures planned only 0.6 miles from high visitor use areas. With regards to the asphalt plant, this facility is a temporary facility associated with area road construction and is under a limited time use permit issued by the City of Brownsville zoning department. We assume once road construction is complete, the plant will be removed. [Referencing Section 6.2.1, p. 60, of the CRA]

Response to Comments: ERM understands the NPS position regarding the potential effects of these elements and Tenaska's project. However, while additional analyses have been generated (*see* Attachments C and H), the additional information has not changed the professional opinions expressed by ERM in the CRA. Notwithstanding any differences of opinion regarding potential effects, ERM recognizes that the EPA will make a determination and that Tenaska is fully engaged in the ongoing process to address potential effects as ultimately determined by the EPA. As part of that process, Tenaska looks forward to discussing the indirect effects of concern to the NPS and a path forward.

It is Tenaska's conclusion, based upon historic aerial photos, that industrial activity has been located at the asphalt plant site since at least 1995, including evidence of asphalt plant presence since 2006. Tenaska is not aware of plans for the asphalt plant to change or for operations to cease at its site. The site history indicates a likelihood of continued industrial use.

55. ***NPS Comment (p.3):*** *[Regarding Section 6.2, the] NPS is concerned with the effects of the proposed project on the NHL. The NPS is requesting clarification on the steps taken to avoid or minimize the effects of the project? Were alternative locations considered?*

Response to Comment: Tenaska is conducting ongoing discussions with the NPS regarding avoidance and minimization of potential effects on the NHL. Alternative locations for the project were considered. Indeed, the proposed location of the power block of the project (i.e., the generating equipment) has been shifted west due, in part, to the NPS concerns. Considerations factored into the location of the project include overall demands of the market and the needs of BPUB, which has subscribed to 200 MW of the power plant's capacity and which may become a 25% owner in the project. Considerations also included general commercial requirements for a location within BPUB's service territory, capability for industrial zoning, and hurricane zones. Alternative locations were impracticable due to proximity to residential areas, flood zone concerns, and insufficient size.

56. ***NPS Comment (p.3):*** *The NPS is requesting clarification on mitigation measures and how they apply to the Cross Valley Interconnect associated transmission line construction/installation? [Referencing Section 6.2.1, p. 60, of the CRA]*

Response to Comment: In terms of avoidance and minimization, Tenaska took affirmative steps to seek a route for the Transmission Interconnect Line that avoided direct impact to the NHL. In response to NPS concerns about visual effects, two visualizations of the Transmission Interconnect Line are included in Attachment C. Some additional details for consideration are that the steel poles will have a dull finish and, while some poles must be at 170' to address crossings, the majority of the poles will be 140' tall. As seen in Attachment G, the poles have a single base and a profile that tapers towards the top. ERM carefully analyzed this project element and concluded in the CRA that the Transmission Interconnect Line would not adversely impact the NHL, a determination further supported by the new visualizations. Regardless of any difference of professional opinion, Tenaska looks forward to discussing the indirect effects of concern to the NPS and a path forward.

57. ***NPS Comment (pp.3-4):*** *The digital figures and simulations provided (p. 62-64) are inadequate to draw the conclusion that the visibility of the proposed facility would be moderate. Additional simulations from 2-3 key viewing locations within the Palo Alto Battlefield NHP should be prepared based on the information provided below.*

- *Simulations should be prepared using viewpoints from within the park that represent key visitor viewing locations. Several locations were mentioned but the park should make the final selection.*
- *The simulations should be prepared according to an established methodology that will assure they depict as closely as possible what one might see if the project is built. This*

methodology should be provided as part of the simulations. As a minimum the methodology should include:

- *A detailed description of how the power plant model is spatially located to its proposed location with respect to the viewpoints.*
- *Simulations should use a model of the actual facility to be built-and it seems Tenaska already has this.*
- *Description of how the photography for the simulation base was completed. Photography should be done in such a way as to simulate the human field of view and the final product should have viewing instructions to indicate how far away it should be viewed to simulate what one would actually see from the park viewpoints. Being zoomed way in or way out does not provide good information.*

[. . .]

- *One of the simulations should also include the transmission line planned on the north side of the park.*

[Referencing Section 6.2.1 of the CRA]

Response to Comment: In response to the discussions between Tenaska and the NPS on March 12, 2014, and materials provided by the NPS leading up to and since the February 12th consulting parties call, Tenaska has produced four new visualizations of the plant from two locations within the Park and two new visualizations of the Transmission Interconnect Line to NPS standards. The two locations, Battlefield Overlook and Living History Area, were chosen in consultation with NPS representatives, including Mr. Rolando Garza at the Park. These visualizations and the related methodology are included here in Attachment C.

The plant is not expected to be visible from the Battlefield Overlook viewpoint, as confirmed by the visualization in Attachment C. A prospective earthen berm, while evaluated primarily for potential acoustic benefits, was also included to evaluate any viewscape enhancement. As shown in the applicable visualizations, it would not be visible and would not provide any such benefit.

The condensed water vapor plumes, which will occur under certain atmospheric conditions, primarily cool and/or humid, from both heat recovery steam generator (HSRG) stacks and the cooling tower, were evaluated in the renderings. A cooling tower manufacturer estimated that plume would be visible, to some degree, approximately 45% of the hours of a typical year (assuming the plant operates around the clock). Plume visibility frequency is approximately 13% when only hours during which the Park is open are considered (and drops further to 5% when evaluating only Park operating hours during the months of March-October).

With respect to paint color, Brush Brown and Shale Green were evaluated and both appear very similar. Tenaska is receptive to either color or would consider another color of NPS's choosing.

58. ***NPS Comment (p.3):*** *Bureau of Land Management (BLM) environmental colors would be a good starting point for selecting a color of the facility that could reduce its visibility, but the color does not have to be specifically one of those colors. Dark colors – especially ones with a*

gray component – will generally recede in a view while lighter colors tend to draw attention. We understand there could be limits to color selection due to maintenance issues and that some components cannot be painted. Every landscape is a bit different and the color selection should be done in the field to best reflect actual conditions. The color selected should be shown in the simulations. [Referencing Section 6.2.1 of the CRA]

Response to Comment: Tenaska is providing new visualizations that reflect two different paint colors (Brush Brown and Shale Green) from BLM's Standard Environmental Colors publication believed to represent favorable choices for this specific site (*see* response #57 above). Tenaska remains open to alternative paint colors for the Generating Station.

59. ***NPS Comment (p.4):*** *The NPS is concerned with impacts to the visitors experience at night. Palo Alto Battlefield NHL offers night time actives for visitors and offers the following. Comments and/or recommendations are targeted toward night sky friendly lighting that will help to protect park resources, both the cultural and the natural environment. In general, our recommendations are:*

- *Skillfully implement lighting fixtures that are shielded, pointing downward and inward.*
- *Use warm color lighting that is within a 2700-3500 degree Kelvin range or lower.*
- *Where possible implement motion sensor lighting to minimize lumens expended.*
- *Avoid the use of tall lighting poles or lights positioned on top of stacks which cause light to drift horizontally rather than pointing downward.*
- *Use shorter poles rather than longer lighting poles to direct lighting only where needed.*
- *Provide on/off switches on most if not all lights to ensure that the local user can turn out lights after performing a task.*
- *If FAA safety lighting is needed for towers, consider NPS recommendations (sent via a separate email transmission) for FAA required lighting.*
- *Consider switching off upper platform lighting.*

[Referencing Section 6.2.1 of the CRA]

Response to Comment: Tenaska intends to use lighting fixtures that are shielded, pointing downward and inward. Tenaska intends to use high-pressure sodium (HPS) lamps outdoors that have a warm color within the range of 2700-3500 degrees Kelvin. While motion sensor lighting is not practicable with HPS lamps due to the significant warm up time, Tenaska intends to avoid high mast poles for lighting and intends to use platform lighting at the HSRG that is capable of being switched on and off. Additionally, switches will be provided for the cooling tower, stack, and pipe rack lights; other lighting fixtures will be capable of being switched on and off at lighting power panels. Thirty-foot poles are planned for roadway lighting at the proposed project. Tenaska, of course, will comply with all FAA requirements; however, based on FAA screening tools, it is likely that there will be no FAA lighting requirements for the Generating Station.

60. ***NPS Comment (p.4):*** *The meteorological data for Cameron County used in the wind direction discussion is limited to four years of data. Is this sufficient to give a good representative sample? [Referencing Section 6.2.1, p. 67, of the CRA]*

Response to Comment: Five years of local meteorological data (2006-2010) were used to generate the wind rose. These five years are the same data set used in the air quality modeling performed for the project. EPA, by requiring five consecutive years of off-site meteorological data for modeling, has determined that is sufficient to account for year-to-year variability and is representative of long-term conditions.

61. ***NPS Comments (pp.4-5):*** *The NPS offered multiple comments regarding potential audible effects and concerning the following portions of the CRA:*

- *Section 6.2.3, pp. 70-71 Ambient Baseline Applicability*
- *Section 6.2.3, pp. 70-72 Audibility Greater than Ambient Increase Noticeability*
- *Section 6.2.3, Table 6-5, p. 71 Representative Locations for Historic Property Effects*
- *Section 6.2.3, Tables 6-4 and 6-5, pp. 70-71 Adjustment of Ambient for the NHP and NHL*

Response to Comments: In response to the discussions between Tenaska and the NPS on March 12, 2014, and materials provided by the NPS leading up to and since the February 12th consulting parties call, Tenaska's acoustic contractor Burns & McDonnell has conducted additional analysis on the acoustic effects of the project on the Palo Alto Battlefield NHL consistent with NPS standards. This additional analysis and specific responses to the NPS comments on the above-noted portions of the CRA are contained in the April 28, 2014 Burns & McDonnell memorandum included here as Attachment H.

62. ***NPS Comment (p.5):*** *The predicted noise level increases in Table 6-5 are anticipated to increase further with the lower ambient sound levels expected in the NHP and NHL. In addition, the NPS anticipates that audibility and noticeability of the generating station will be greater than predicted using the "just noticeable" and "clearly noticeable" criteria for Table 6-5 noise level increases. Given that audible effects to the historic property would likely be greater than predicted, the NPS urges Tenaska to consider all reasonable techniques for mitigation of noise to the NHP and NHL. The NPS gathered from our 3/12/14 face-to-face meeting with Tenaska that the noise specifications of generating station equipment have already been established and the creation of earth berms is one of the only practical options for noise mitigation. The NPS requests that Tenaska create a new figure in addition to Figure 6-7 that shows predicted generating station noise contours with the addition of an earth berm on the east side of the generating station. We also request that Tenaska and its noise consultant carefully consider minimum earth berm height and the height of high sound pressure level (SPL) noise sources such as blowers, turbine inlets/exhausts, compressors, and steam blows from pressure release valves. Wherever possible, the height of high SPL noise sources should be kept or moved below the height of the earth berm. The earth berm may also be used to minimize the visual effects of light and moving steam on the landscape. [Referencing Section 6.2.3, Tables 6-4 and 6-5, pp. 70-72 Need for Mitigation, of the CRA]*

Response to Comment: As noted above, the noise modeling study was refined based upon NPS comments (*see* April 28, 2014 Burns and McDonnell memorandum, Attachment H). As stated in the memorandum, the noise reduction benefits of a 15 foot tall earthen berm along the approximately 1,500 foot eastern project boundary would not be significant. The project's EPC

contractor has estimated the cost of such a landscaped berm would exceed $250,000. Therefore, Tenaska does not believe such a berm is cost effective. Further, with regard to placement of high sound pressure level (SPL) sources below a prospective berm height, the plant design does not allow for significant leeway in placement of such sources. For example, the combustion turbine inlet is designed by the manufacturer and the majority of the inlet would be at a height above the berm. In addition, the combustion turbine exhaust is at the HSRG stack outlet which will be 160 feet. Other continuous noise sources such as the cooling tower exhaust fans are, by design, located at the fan deck which will be approximately 41 feet. Most of the steam vents and steam relief valves will also be located above a 15 foot tall berm. The air compressors and gas compressors will be located at grade level and are expected to be below the height of a berm.

Tenaska will commit to include in the plant design silencers on some steam relief vents, a reduced noise gland steam packing unloading valve and a building for the demineralized water treatment system.

63. ***NPS Comment (pp.5-6):*** *The utility poles are indicated to be between 140 to 170 feet in height. There is no clarification if these single poles will consist of wood or concrete? Will these poles have guy wires? Will aircraft warning lighting be required for these poles? The NPS is unable to discern which sections of the transmission line corresponds with which type of poles. The NPS is requesting specific information about the 170 foot high poles, their proximity to the NHL and the materials proposed for construction. These poles have the potential to significantly impact the viewshed. [Referencing Section 1.4.1, p. 6, of the of the CRA]*

Response to Comment: The Transmission Interconnect Line will be carried on 78 single poles constructed of dull-finished zinc galvanized steel on concrete foundations. The poles will rise no higher than 140 feet for an estimated 80% of the route. In locations where the line will span existing utility lines the poles will rise no higher than 170 feet in height. The poles will be spaced at approximately 800 to 900 foot intervals. The concrete base will be approximately 7 feet in diameter. No guy wires are planned. FAA recommendations, if any, will be followed but lighting requirements are considered unlikely since structure heights do not exceed the FAA's 200-foot notification threshold.

64. ***NPS Comment (p.6):*** *Section 1.4.2 makes reference to 78 tower structures while the previous page refers to single poles. The NPS is requesting clarification on the direct or indirect impacts on the NHL. These determinations cannot be made until designs have been finalized. [Referencing Section 1.4.2, p. 7, of the of the CRA]*

Response to Comment: The two terms ("tower structures" and "single poles") are used interchangeably in the CRA and are the single poles described above. As previously noted, the Transmission Line Interconnect will not directly affect the Palo Alto Battlefield NHL. Indirect effects are assessed in the CRA Attachment 2, pages 37-39.

65. ***NPS Comments (p.6): Section 3.3.3, p.35*** *Despite the current location of the existing utility lines, the addition of towers ranging between 140 to 170 feet in height will negatively impact the viewshed of the park and the NHL as the proposed height is much greater than the existing 90-100 feet poles.*

Section 3.3.3, p.38
The NPS requests that Tenaska consider visual concerns in regards to the utility lines from the core of the battlefield. The existing lines are currently not 170 feet in height and the park is about to undertake a cultural landscape restoration effort to remove the invasive mesquite trees from the core of the battlefield. This will return the park to its more historically open prairie appearance as accurate to its ca. 1846. As a result, less screening vegetation in the battlefield denotes visual intrusions on the horizons.

Section 3.3.3, p.39
There are a number of visual intrusions on the western edge of the park and the NHL. We are concerned about adding additional intrusions to this viewshed. The NPS is interested in exploring other alternatives or avoidance measures to avoid viewshed intrusions. The NPS does consider the transmission line to be an adverse affect to the NHL.

Response to Comments: In response to NPS concerns about visual effects, two visualizations of the Transmission Interconnect are included in Attachment C. The visualizations are from the Battlefield Overlook, which is part of the core of the battlefield. ERM carefully analyzed this project element and concluded in the CRA's Attachment 2 that the Transmission Interconnect Line would not adversely impact the NHL; this determination is further supported by the new visualizations. Regardless of any difference of professional opinion, Tenaska looks forward to discussing the indirect effects of concern to the NPS and a path forward.

66. ***NPS Comment (pp.6-7):*** *Sound from the transmission line is largely dismissed on p. 36 and p. 39 as "minimally audible if at all from the ground outside of the utility ROW." However, it is acknowledged on p. 36 that "this sound energy may become more pronounced depending upon voltage and weather conditions (e.g. humidity)." These effects are not sufficiently articulated to inform a minimum distance from sensitive receptors. The NPS requests that Tenaska or its contractor use the Electric Power Research Institute (EPRI) AC Transmission Line Reference Book-200 kV and Above (Red Book) and/or the TL Workstation software to predict transmission line noise levels and ambient noise level increase during rainfall rate of 0.75 mm/hr for the expected transmission line voltage and conductor characteristics. Please disclose these noise levels and the estimated ambient sound level (due to rainfall) of 37 dBA and 40 dBA, for ground cover curve R-1 and R-2, respectively (see footnote 1 or 2). Transmission lines should be sited at sufficient distances from the NHP and NHL to minimize the predicted ambient noise level increase. [Referencing Attachment 2 of the CRA, Finding of No Adverse Effect, Sec. 40, pp. 35-39]*

Response to Comment: Transmission systems generally do not contribute significant noise to the environment when compared to other common sources of everyday noise. However, during wet weather conditions, water drops collect on the conductor and increase corona activity so that a crackling or humming sound may be heard near the line. This noise is caused by small electrical discharges from the water drops. Audible noise would decrease with distance away from the transmission line.

Typical sounds in most communities range from 40 dBA (very quiet) to 100 dBA (very loud) or higher. EPA has an outdoor activity noise guideline of 55 dBA (EPA 1974). Evaluation of current industry literature and other documented impact assessments related to noise emissions from transmission lines indicates that typical noise levels for transmission lines with wet conductors are well below the EPA standard. Table 1 below provides a summary of typical noise levels for transmission lines with wet conductors (EPRI).

Table 1. Transmission Line Voltage and Audible Noise Level

Line Voltage (kV)	Audible Noise Level Directly Below the Conductor (dBA)
138	33.5
240	40.4
356	51.0

Similar studies for a 345kV line (the same voltage line proposed north and east of the NHL boundary line) have found that for wet weather conditions calculated audible noise levels to be 58 dBA at the conductor, 53 dBA at a right-of-way edge distance of 80 feet, and as low as 48 dBA at a distance of 250 feet (BLM 2001). As additional example, values were measured and calculated for a 500kV line, which resulted in audible noise levels no higher than 47dBA at the conductor and less than 38dBA at a distance of 200 feet outside the conductor. Table 2 provides a summary of those results (Techachapi EIS).

Table 2 Corona Noise Levels for 500 kV Line

Location	Measured Levels	Calculated Levels
Directly under the tower	46 dBA	47 dBA
Directly below outside conductor	44 dBA	46 dBA
50 feet from outside conductor	43 dBA	44 dBA
100 feet from outside conductor	39 dBA	42 dBA
200 feet from outside conductor	(Not measured)	38 dBA

Corona noise levels have been found to drop at a rate of 3 to 4 dBA for each doubling of the distance from the conductor. It is also anticipated that corona noise levels will be further diluted by noise levels associated with a rainfall event itself, which ranges between 41 to 63 dBA.

The proposed 345kV line, will be located an average of approximately 350 feet from the northern boundaries of the NHL. Given the noise values presented and the distance from NHL boundary it is reasonable to conclude that noise levels will be well below the EPA standard and in line with the recommendations by the NPS for daytime levels of 40 dBA and nighttime levels

of 34dBA. Based on this information we have concluded that noise levels from the proposed transmission line will have no adverse effect on the NHL.

References:

- (BLM 2001) – *Falcon to Gonder 345 kV Transmission Project, Final Impact Statement and Proposed Resource Management Plan Amendments*, U.S. Department of Interior and Bureau of Land Management, Battle Mountain, Elko and Ely Field Offices, Nevada, EIS No. NV 063-EIS00-27 (December 2001).
- (EPA 1974) – *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, No. 550/9-74-004, Washington, D.C. (Mar. 1974).
- (EPRI) – *Initial Study on the Effects of Transformer and Transmission Line Noise on People*, Vol. 1- Annoyance, Vol. 2- Sleep Interference, Vol. 3- Community Reaction, Final Report, No. EA-1240, (Dec. 1979).
- (Tehachapi EIS) – *Environmental Impact Analysis and Mitigation Measures - Tehachapi Renewable Transmission Project,* Section 4.12 Noise (available online at https://www.sce.com/nrc/trtp/PEA/4.12_Noise.htm) (last visited Apr. 28, 2014).

Attachment A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

APR 16 2014

Joseph Finocchiaro
Environmental Program Manager
Tenaska
1044 North 115th Street, Suite 400
Omaha, NE 68154

RE: National Historic Preservation Act Section 106 Consultation: Comments on the Cultural Resources Report for Tenaska Brownsville Partners, LLC ("Tenaska") Tenaska Brownsville Generating Station, Cameron County, Texas

Dear Mr. Finocchiaro:

The Environmental Protection Agency (EPA), Region 6 is in providing comments after reviewing the cultural resources report for the Tenaska Brownsville Generating Station project, Cameron County, Texas. The comment letter is divided into general comments, followed by specific comments to the main cultural resources report and accompanying attachments (Attachments 1 through 4) that address linear facilities associated with the project.

General Comments

Resp. #21 General Comment 1: Any work not yet completed (field surveys as indicated in additional comments below) must be completed. Please advise EPA and the consulting parties as to when ERM/Tenaska will complete this work and provide the additional information to the parties for review.

Resp. #13 General Comment 2: Please revise language throughout to clearly indicate that all linear facilities to be constructed by or on behalf of Tenaska for the new plant facility are considered considered part of the APE.

Resp. #15 General Comment 3: Please revise the supplemental map and table submitted on February 21, 2014 to show the entire APE with all linear facilities and all archeological and historical sites within the prescribed 2.8 mile radius of the site facility APE and between 0.5-mile to 1.5-mile radius for the linear facilities that may be potentially impacted. The map should include at a minimum, the irrigation districts, the Port of Brownsville, both NPS battlefields, Rancho Viejo, Cemetario de las Burras, la feria de las flores, and Cameron County District 2. An example of such a detailed map is in Attachment 1, page 17, Figure 3-1.

Resp. #1 General Comment 4: There is conflicting information in several documents which needs to be resolved or explained further. For example, on page 60 of the main report, ERM recommends that all ditches within the APE be treated as eligible for listing in the NRHP (page 60). However, in Attachment 4 Report on the Natural Gas Transmission Pipeline (page 37), it clearly states that CCID1 is ineligible for listing on the National Register.

Resp. #38 Please provide discussion/analysis on all historical and archaeological sites discussed in all of these reports that is clear and consistent with their eligibility status for listing on the National Register, and be sure that the eligibility criteria is applied to all of these sites when determining their eligibility status.

Below are examples of historical/archaeological sites discussed in the report with a recommendation for ineligibility but did not have NHPA eligibility criteria applied:

- The Southern Pacific railroad, Port Isabel and the Rio Grande Valley Railroad (Attachment 1: Water Discharge Pipeline Report)
- The historic-age canal (Attachment 3: Water Re-use Pipeline Report)

Main Cultural Report

Resp. #39 1. The report discusses the possibility that Cameron County Drainage District No. 1 (CCDD1) and Cameron County Drainage District No. 6 (CCID6) could be adversely affected by this project. For example, the analysis concerning Olmito Branch (a drainage ditch in CCDD1 that runs along the edge of the property) states: "*Because of the proximity of the ditch to the Project, it may be appropriate to engage a representative of this agency in the Section 106 consultation process moving forward.*" (page 64). On page 70, the report states, "*Tenaska is currently considering utilizing the Olmito Branch for storm water point-source discharge, which would constitute a direct effect on the Olmito Branch and the CCDD1.*" The report then concludes that the development that has occurred in the area since the mid-20th century has "*compromised the setting, feeling, and integrity of the irrigation and drainage systems. Within this context, the effects of the Project on the setting and feeling of the CCDD1 and CCID6 and contributing resources will be minimal.*" (page 72) How was this determined? What is the basis that the "*setting, feeling and integrity.....will be minimal?*" Given that these ditches will be crossed numerous times, they should be analyzed for direct effects.

Resp. #22 2. The cultural report discusses very little about the Resaca de la Palma Battlefield which is in the same proximity as the Palo Alto Battlefield. Please provide a discussion on Resaca de la Palma Battlefield, its historical significance, its eligibility status and what effects (direct or indirect) the Project may have on this site.

Resp. #40 3. Please clarify in the report and provide a map of the crossing locations and number of all the all linear facilities within the irrigation districts and other resources. It is unclear at this point what portions of CCID6 and CCDD1 were surveyed and how much was a desktop review. How much physical disturbances will occur at the CCID6 segments? Per page 58, the Project will have a more "*intense impact*" on Ditch No. 3 along Albelardo road, what

does that exactly mean? Please explain how the "intense impact" on a historical resource does not lead to a "no adverse effects" determination?

Resp. #23 4. There is brief mention in the main cultural report about two cemeteries nearby (Table ES-1, page iii); however there is no discussion about the historical background of these cemeteries or their locations relative to the project site? What are the impacts of the project on these sites?

Attachment 1: Water Discharge Line

Resp. #2 5. According to Attachment 1, for the 11-mile water discharge line, approximately 5.65 miles of the pipeline was not surveyed (pg. *iii*) and the remaining 5.4 miles of the pipeline corridor was previously surveyed. Of that 5.65 mile unsurveyed segment, a field survey was conducted for 4.38 miles while 1.17 miles was not surveyed. The resulting total miles for this unsurveyed segment is 5.55 miles not 5.65 miles as indicated previously, please correct the numbers accordingly.

Resp. #24 6. Additionally, no survey was performed for this 1.17 mile segment "*due to the highly industrialized character at the southern terminus.*" While it may be true, EPA believes that there is insufficient information to indicate that there is no potential for deeper-buried archeological sites located beneath the disturbed soils of the industrialized area, especially since there are two archeological sites adjacent to the APE and one archaeological site within the water discharge line's APE. Please provide justification why there is no need to conduct a field survey for this segment for archaeological resources especially when in a later report, Attachment 4 (the natural gas transmission line), Atkins, the environmental consultant for BPUB, lists similar concerns and advises backhoe trenching to prevent unearthing deeper buried archaeological sites (Attachment 4, page 40). Please advise EPA as to when ERM/Tenaska will complete this additional work.

Resp. #41 7. Two aboveground historic properties were identified within the APE: the Port of Brownsville and the CCDD1. ERM recommends the CCDD1 irrigation ditches and the entire Port of Brownsville be treated as eligible for listing in the NRHP. ERM concluded that these historic properties will be affected by the pipeline, but not adversely affected. This appears have been done without applying the adverse assessment criteria pursuant to 36 CFR 800.5. Please apply this criteria and incorporate it into your discussion to appropriately

Resp. #42 determine if the pipeline project will adversely affect either of historic property. ERM does not discuss how the irrigation ditch crossings will be constructed to minimize impact, as it is discussed in the natural gas pipeline CR (Attachment 4, page 36-43). Does Tenaska plan to commit to similar mitigation measures for the water discharge line? Please discuss.

Attachment 2: Transmission Line

Resp. #24 8. (Page 22) It is noted that 0.6 mile segment of Transect 3 of the Transmission Line was not surveyed. The report advises that a survey is still needed. Additionally, the report advises that deeper testing by hand-augering at the pole locations be made to identify deeper buried archaeological resources (Page 31, Section 3.2.5). Without this information

the report is incomplete. Does Tenaska intend to survey this area and/or perform additional surveys before construction of the transmission line? Please discuss.

Resp. #25 9. (Page 3) Old Port Isabel Road was used by troops before the Battle of Palo Alto and is located within the APE of the transmission line. Please provide a discussion on the historical significance of this location, its eligibility status for listing on the NR, and what potential impacts the transmission line may have on this site.

Resp. #26 10. There is little discussion about the four previously recorded archeological sites located 1.5 miles from the transmissions line? (Page 2 and referenced in Table 3-1 on page 16) Please expand your analysis on what is known about these sites.

Attachment 3: Water Reuse Pipeline Project

Resp. #27 11. The report notes that the boundary of the Resaca da la Palma Battlefield was never fully delineated and yet lays within 0.5 mile of the APE. (page 19) EPA advises that Tenaska consult with the National Park Service – American Battlefield Protection Program to determine if the water reuse pipeline is potentially within the Resaca de la Palma Battlefield and add that discussion into the report.

Attachment 4: Natural Gas Transmission Line

Resp. #43 12. Page 44 of Attachment 4 states, "*With regard to the irrigation resources, planned construction activities within the NRHP-eligible districts do not appear to constitute adverse effects to any of the resources under Section 106. While not finalized, construction of the underground pipeline via boring methods would avoid all impacts to the resources, including to their integrity and functionality. Similarly, if the pipeline was constructed via open cut methods, impacted sections of aboveground canals would be returned to their original dimensions and function. Project engineers have specified that aboveground standpipes within the ROW will be avoided by project construction. As no adverse impacts to any NRHP-eligible irrigation features are anticipated in association with the proposed project, no further consideration of the resources under Section 106 is recommended.*" Since construction plans have not been finalized, what assurances can Tenaska/BPUB provide that aboveground standpipes will not be constructed as this would visually impact the irrigation districts and potentially result in an adverse impact on NHRP-eligible sites?

Resp. #24 13. Similar to Question #6, it was recommended that trenching should be done within several portions of the survey corridor to see if there are deeply buried archaeological remains before construction of the natural gas transmission line. (page 44) How many and how long are these segments along the transmission line that need trenching? Please advise EPA as to when Tenaska will complete this additional work and provide a complete CR report to EPA.

If you have any questions or if you would like to discuss the comments further, please contact me at (214) 665-6435 or Alfred C. "AC" Dumaual of my staff at (214) 665-6613 or email at dumaual.alfred@epa.gov.

Sincerely yours,

Jeff Robinson
Section Chief
Air Permits Section

cc: Mr. Larry Carlson, Director, Air Programs, Tenaska

February 17, 2014

Jeff Robinson
Section Chief
Air Permits Section, Region 6
U.S. Environmental Protection Agency
1445 Ross Ave., Ste. 1200
Dallas, TX 75202-2733

Re: Section 106 of the National Historic Preservation Act of 1966, as amended
Proposed Tenaska Brownsville Generating Station, Cameron County, Texas
106/EPA (THC Track #201404483 and #201402268)

Dear Mr. Robinson:

Thank you for your letter initiating Section 106 consultation regarding the above project, received on January 17, 2014, and the coordination of a conference call on February 12, 2014. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer (SHPO), the Executive Director of the Texas Historical Commission.

Tenaska Brownsville Partners, LLC (Tenaska) is proposing to build and operate a natural gas-fueled combined-cycle gas turbine power plant. The proposed project includes two combustion turbines with supplementary fired heat recovery steam generators, one steam turbine generator, one cooling tower, auxiliary equipment, storm water retention structure(s), storm water outfall(s), one transmission interconnect line, access roads, and construction laydown area. Tenaska has applied for a Greenhouse Gas Prevention of Significant Deterioration permit from the U.S. Environmental Protection Agency (EPA). As a federal undertaking, the proposed project is subject to review under Section 106 of the National Historic Preservation Act. Additionally the Resp. #14 Brownsville Public Utilities Board (BPUB) is proposing to construct a natural gas transmission pipeline and a water reuse pipeline that will provide services to multiple customers, including Tenaska. Tenaska and BPUB have determined these projects are independent of the EPA undertaking and are being reviewed separately by THC for compliance with the Texas Antiquities Code. Therefore THC's Section 106 project review comments in this letter will be limited to the EPA undertaking (Undertaking).

The Archeology Division review staff, led by Jeff Durst, has reviewed the documentation related to the archeological resources area of potential effects, site survey, and determinations of eligibility and effect. The History Programs Division review staff, led by Sarah K. Birtchet, has reviewed the documentation provided for the above-ground resources area of potential effects (APE), historic properties identification, and eligibility determinations. The Division of Architecture review staff, led by Theresa A. de la Garza, has reviewed the documentation related to the effect determinations to above-ground resources, based on HPD determinations.

Due to the complexity of the Undertaking and the involvement of multiple SHPO reviewers, we have synthesized our comments and structured them in a format we hope will be most useful to all:

Resp. #16

1) Area of Potential Effect (APE)
   a) Generating Station
      i) Direct APE – We concur with the proposed 275-acre parcel where construction will occur.
      ii) Indirect/Visual APE – We concur with the proposed approximately 14-square miles (as shown in Figure 1-3).
   b) Generating Station Water Discharge Pipeline
      i) Direct APE – We concur with the proposed 50 feet from the centerline.
      ii) Indirect/Visual APE – We concur with proposed 100 feet from the centerline.
   c) Generating Station Transmission Interconnect Line
      i) Direct APE – We concur with the proposed 50 feet from the centerline.
      ii) Indirect/Visual APE – We concur with proposed .5 miles from the centerline.

Resp. #28

2) Identification of Cultural Resources
   a) Archeological Resources
      i) Survey – We concur that due diligence was performed in conducting the archival research and archeological site investigations within the Direct APEs.
      ii) Identification and Determination of Eligibility – We concur that no cultural resources eligible to the NRHP are located within the Direct APEs.

Resp. #29

      iii) Inadvertent Discovery/Chance Finding Policy – We concur that Tenaska must anticipate the possibility of a chance finding/inadvertent discovery of artifacts related to the Palo Alto Battlefield National Historic Landmark Site. **Please develop and submit for review a standard operating procedure to address such the possibility of an inadvertent archeological discovery during the execution of the Undertaking.**

Resp. #30

   b) Above Ground/Architectural Resources
      i) Survey – Based on the research and evaluations as presented, we concur with the recommendation that sufficient efforts have been made to identify properties that may be affected by the Undertaking and that no further investigations are necessary to identify above-ground historic properties within the Direct and Indirect APEs.
      ii) Identification and Determination of Eligibility
         (1) Palo Alto Battlefield National Historic Site – We confirm this property is **listed on the NRHP and designated an NHL**.
         (2) Cameron County Irrigation District No. 6 (CCID No.6) – We confirm the statement that this property has been previously found **eligible to the NRHP**.
         (3) Cameron County Drainage District No. 1 (CCDD No.1) – We concur with the assessment that a full survey and evaluation of the CCDD No. 1 is beyond the scope of this Undertaking, but until further evaluation can take place we concur with the recommendation that CCDD No.1 be **treated as eligible to the NRHP**, in association with the previously determined eligible CCID No. 6.
         (4) Port of Brownsville and the Brownsville Bay Ship Channel – We concur with the assessment that a full survey and evaluation of the Port of Brownsville and the Brownsville Bay Ship Channel is beyond the scope of this Undertaking, but until further evaluation can take place we concur with the recommendation that the Port of Brownsville and the Brownsville Bay Ship Channel be **treated as eligible to the NRHP**.
         (5) Port Isabel and Rio Grande Valley Railroad – We concur with the assessment that the Port Isabel and Rio Grande Valley Railroad may possess significance

on a local level under Criterion A, but since the tracks have been removed within the APE it no longer retains sufficient integrity to convey its historical significance and is therefore considered not eligible.

Resp. #31

(6) Properties at 32381 Lemon Drive and on Old Alice Road – We understand a small percentage of historic-age modest buildings exist within the generating station visual Indirect APE and are believed to be constructed after 1950. At this time we concur with the recommendation that these two notable buildings do not appear to possess historic significance as required by the National Register of Historic Places (NRHP) Criteria to be eligible, **with the provision that the research documentation described in the report is provided to support this determination. The research documentation described includes the USGS maps from 1928, 1936, 1955, and 1956; a highway map from 1940, and aerial imagery from 1950.**

Resp. #32

(7) Southern Pacific Railroad – We concur with the assessment that the Southern Pacific Railroad background research suggests that the railroad line from Brownsville to Harlingen possesses significance on a local level under Criterion A as one of the earliest railroads in the area and instrumental in its development. We understand that some associated secondary buildings/structures, including a heavily altered station and adjacent store houses in Los Fresnos, remain but the railroad branch line to Brownsville is no longer in place and the berm has been paved. We concur with the evaluation that the portion of the Southern Pacific Railroad within the APE no longer retains sufficient integrity to convey its historical significance and is considered not eligible.

(8) We understand that the Rancho Viejo Floodway has been previously determined not eligible and was not further evaluated.

(9) We understand that eight (8) historic-age structures within the water discharge pipeline APE have been previously determined not eligible and were not further evaluated.

(10) We understand various irrigation and drainage ditches exist with the water discharge pipeline APE, but are not associated with a recognized system, and concur with the recommendation that these are not eligible.

3) Assessment of Effects – In determining effects to a historic property and whether such effects cross the threshold into being potentially adverse, the SHPO considers the significance of a property, its existing integrity, the various facets of the project, and known cumulative effects on the resource over time, both as a result of a given undertaking and other known projects. Regardless of whether an effect is considered potentially adverse, we work with federal agencies to reduce negative impacts to the resources through exploration of alternatives whenever feasible. If a potential adverse effect cannot be avoided or sufficiently minimized, a determination of "adverse effect" will be issued and subsequent consultation will address mitigation of such effects.

Resp. #44

a) Archeological Resources – We concur that the proposed project has no potential to directly affect archeological resources.

b) Above Ground/Architectural Resources

i) Palo Alto Battlefield National Historic Site (NHL, NRHP)

(1) Direct Effects – **We find that the Undertaking will not have a direct effect on the Palo Alto Battlefield National Historic Site**.

Resp. #45

(2) Indirect Effects – We concur that the proposed Undertaking has the potential to affect this historic property. We appreciate Tenaska's plans to minimize visibility of the towers to the extent feasible through the paint color scheme. We do not agree that the existing intrusions minimize the visual effects of the towers and

expected plumes to the degree in which a determination can easily be made. In contrast, we find that the massing of the towers and plume to be quite noticeable and that their addition to the existing visual impacts to be one that warrants further discussion of the VISCREEN analysis and findings. **Therefore, we find that additional consultation is required to make a determination of indirect effect to the Palo Alto Battlefield National Historic Site.**

Resp. #46

ii) CCDD No.1 (treated as eligible to NRHP) and CCID No. 6 (eligible to NRHP)

(1) Direct Effects – We concur that the introduction of a storm water point-source discharge into the Olmito Branch is a direct impact and would directly affect the "eligible" CCDD No. 1. However, **we cannot make the determination of direct effect on CCDD No. 1 and CCDI No. 6 at this time, as insufficient information has been provided. Please provide additional information regarding the design and specifications of the construction activities associated with the storm water point-source discharge, in addition to photographs of existing conditions.** We would like to address the discussion regarding lack of integrity due to modifications to the system and setting as it pertains to the impact of the proposed Undertaking and justification for a recommended finding of "no adverse effect" by ERM/Tenaska. This discussion is tied to the historic resources' eligibility to the NRHP and is, therefore, in contradiction to the previous assertion ERM/Tenaska makes to treat it as eligible to the NRHP for the purpose of assessment of effects, the latter of which with we concur (see above). Furthermore, as CCDD No. 1 has not been formally evaluated and the period of significance has not been established, the assertion that the "current design and appearance do not represent its historic condition" cannot be adequately substantiated at this time. Without an established period of historic significance and record of the past modifications, we cannot know whether they are part of the historic condition and therefore, historic in their own right. ERM/Tenaska is welcome to expand the scope of cultural resources assessment and evaluate the resource and recommend contributing and non-contributing features of that resource, along with a period of historic significance. Until that occurs, we have chosen to put aside this discussion as it pertains to assessment of effect.

(2) Indirect Effects – Although we understand the Olmito Branch and Ditch No. 3 of the CCDD No. 1 and the CCID No. 6 ditch that transects Abelardo Road are more proximate to the source of the impact, we do not agree that these elements of larger historic drainage/irrigation districts should be examined as standalone elements without consideration of the indirect impacts on the entirety of the CCDD No. 1 an CCDI No. 6. **We are unable to make a determination of indirect effect on CCDD No. 1 and CCDI No. 6 based upon the submittal documents, as further information and discussion is required.**

iii) Port of Brownsville and the Brownsville Bay Ship Channel (treated as eligible)

Resp. #47

(1) Direct Effects – No effects assessment has been provided for SHPO review. However, the SHPO has noted the resources fall outside the Direct APE and has determined there is **no potential for direct effect to the Port of Brownsville and Brownsville Bay Ship Channel**.

Resp. #48

(2) Indirect Effects – No effects assessment has been provided for SHPO review. Therefore, **we cannot make a determination of indirect effect at this time. Please provide an assessment of indirect effects to these resources.**

We would also like to add the following general comments:

Resp. #3 1. Please submit at least one hard copy of future submittals, as requested by Ms. Birtchet on February 12, 2014.

Resp. #4 2. We recommend the Special Considerations section of the report be presented prior to the determination of effects or, in the least made reference to at an earlier point in the document.

Resp. #5 3. We would like to receive a copy of any project comments provided to the EPA by the Secretary of the Interior or National Park Service.

Resp. #6 4. We would like to request a follow up conference call to discuss our above comments and to seek further clarification of the very technical information provided regarding visual and audio effects to the NHL.

Resp. #7 5. No further consultation is required through our Archeology Division, unless there is an inadvertent discovery during construction.

6. No further consultation is required through our History Program Division, unless Tenaska would like to undertake further analysis of the integrity and contributing elements of either the CCDD No. 1 or CCDI No. 6.

7. All future SHPO consultation for this Undertaking should be directed to Theresa A. de la Garza, as lead reviewer on behalf of the Division of Architecture. She can direct specific questions to other Divisions, if required.

We continue to avail ourselves for discussion of possible avoidance measures to the indirect adverse effects, prior to exploration of mitigating actions. Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions concerning our review or if we can be of further assistance, please contact Theresa A. de la Garza at 512/463-8952.**

Sincerely,

Theresa A. de la Garza, Project Reviewer
for: Mark Wolfe, State Historic Preservation Office

cc: Alfred Dumaual, Environmental Protection Agency (via email)
Matt Nowakowski, Environmental Protection Agency (via email)
Larry Carlson, TENASKA (via email)
Joseph Finocchiaro, TENASKA (via email)
Mark Spier, National Park Service (via email)
Kurtis Schlicht, Environmental Resources Management (via email)
Carrie Albee, Environmental Resources Management (via email)
Tara Cannon, Environmental Resources Management (via email)
Greg Hindsley, National Park Service (via email)
Theresa Ely, National Park Service (via email)
Betty Agado, Chair, Cameron County Historical Commission

MW/sb & tg

May 5, 2014

Jeff Robinson
Section Chief
Air Permits Section, Region 6
U.S. Environmental Protection Agency
1445 Ross Ave., Ste. 1200
Dallas, TX 75202-2733

Re: Section 106 of the National Historic Preservation Act of 1966, as amended
Proposed Tenaska Brownsville Generating Station, Cameron County, Texas
106/EPA (THC Track #201408089, #201406264, #201402342)

Dear Mr. Robinson:

Thank you for your letter providing additional clarification on the Environmental Protection Agency's (EPA) determination of the area of potential effect (APE) for the above project, received on April 4, 2014. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer (SHPO), the Executive Director of the Texas Historical Commission.

Tenaska Brownsville Partners, LLC (Tenaska) is proposing to build and operate a natural gas-fueled combined-cycle gas turbine power plant. The proposed project includes two combustion turbines with supplementary fired heat recovery steam generators, one steam turbine generator, one cooling tower, auxiliary equipment, storm water retention structure(s), storm water outfall(s), access roads, and construction laydown area. Tenaska has applied for a Greenhouse Gas Prevention of Significant Deterioration permit from the U.S. Environmental Protection Agency (EPA). On February 17, 2014, we provided comment on a:

- 275-acre power generating plant site,
- 11.05-mile water discharge pipeline, and
- 11.7-mile transmission interconnect line.

We would like to take this opportunity to provide additional clarification on the above facilities with respect to above ground cultural resources.

Resp. #49 1) Water Discharge Pipeline (11.05 miles): We are amending our previous comment, with respect to this proposed linear facility and effects to the Port of Brownsville and Brownsville Bay Ship Channel. We concur with the ERM determination that the proposed Water Discharge Pipeline poses no adverse effect to historic properties, either directly or indirectly.

Resp. #17 2) Transmission Interconnect Line (11.7 miles): We initially concurred with the proposed 0.5-mile indirect/visual APE based on earlier recommendations to consult the 2004 FCC Nationwide Programmatic Agreement as a basis in developing an indirect/visual APE. Just as the 2004 FCC Nationwide Programmatic Agreement allows, in some events it may be determined that an

alternative APE for indirect/visual effects is necessary. We understand that the NPS has expressed concerns for a larger indirect/visual APE. Based on the flat terrain and lack of substantial vegetative cover we understand that a larger indirect/visual APE of more than 0.5 miles may be warranted. However, we feel sufficient efforts have been made to identify historic properties that may be affected by the entire Undertaking within the currently proposed APE and beyond in the general project study area, and that no further investigations are necessary to identify above-ground historic properties within the general project study area or an APE.

Resp. #50 We understand our previous letter did not specifically address effects caused by this linear facility and would like to provide additional clarification to our previous letter. We agree with ERM's determination that the proposed transmission line will have no direct effect to cultural resources. However, we **do not concur** with the ERM determination of indirect effects to the NHL. In determining effect, we do not agree that the indirect effects to the NHL should be based on or limited to impacts to the "core battlefield area" and that existing intrusions to the setting somehow minimize the effect caused by the introduction of the sizeable towers needed to support the high-voltage line. Based upon documentation available to us and a follow up THC site visit (April 17, 2014), **we have determined the proposed Transmission Interconnect Line has the potential for adverse effect to the NHL.**

We now understand that EPA considers all linear facilities that are associated directly or indirectly with the Tenaska Power Plant to be part of the Undertaking. Therefore, five additional linear facilities fall within the APE of the project, for which we will now provide comment:

- 7.75-mile water reuse pipeline (Atkins North America, Inc. indicates a 7.57-mile line),
- 49.62-mile natural gas transmission pipeline,
- 250-foot supplemental water supply line,
- 250-foot potable water line, and
- 800-foot sanitary sewer line.

Resp. #18 We concur with the proposed direct and indirect APEs for these five linear facilities. Furthermore, we concur that due diligence was performed in conducting the archival research and archeological site investigations within the Direct APEs for the additional five linear facilities. We also concur that no archeological resources eligible to the NRHP are located within the Direct APEs for these additional linear facilities. Based on the research and evaluations as presented, we concur with the recommendation that sufficient efforts have been made to identify properties that may be affected by the entire Undertaking (to include the plant site and a total of seven linear facilities) and that no further investigations are necessary to identify above-ground historic properties within the Direct and Indirect APEs.

Resp. #51 We concur with the Atkins assessment of effects for the Water Reuse and Natural Gas Transmission Pipelines; these linear facilities will have no adverse effect to historic properties. Additionally, we concur with the Environmental Resources Management assessment of effects for the Supplemental Water Supply, Potable Water and Sanitary Sewer Lines; these linear facilities will have no adverse effect to historic properties.

We continue to avail ourselves for discussion of possible avoidance and minimization measures to the indirect adverse effects, prior to exploration of mitigating actions. Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions concerning our review or if we can be of further assistance, please contact Theresa A. de la Garza at 512/463-8952.**

Sincerely,

Theresa A. de la Garza, Project Reviewer
for: Mark Wolfe, State Historic Preservation Office

cc: Alfred Dumaual, Environmental Protection Agency (via email)
Tina Arnold, Environmental Protection Agency (via email)
Matt Nowakowski, Environmental Protection Agency (via email)
Michael Miller, Environmental Protection Agency (via email)
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Kristen McMasters, National Park Service (via email)
Melissa Trenchik, National Park Service (via email)
Mark Meyer, National Park Service (via email)
Don Shepherd, National Park Service (via email)
Randy Stanley, National Park Service (via email)
Betty Agado, Chair, Cameron County Historical Commission (via email)

MW/tg

United States Department of the Interior

NATIONAL PARK SERVICE
INTERMOUNTAIN REGION
12795 West Alameda Parkway
P.O. Box 25287
Denver, Colorado 80225-0287

IN REPLY REFER TO:
IMR-EQ-14-0009

SENT VIA ELECTRONIC EMAIL: NO HARD COPY TO FOLLOW

Alfred C. Dumaual, Ph.D
U.S. EPA Region 6
Air Permits Section (6PD-R)
1445 Ross Avenue
Dallas, TX 75202

Dear Mr. Dumaual,

The National Park Service (NPS) appreciates the opportunity to review the Tenaska Brownsville Generating Station Cultural Resources Assessment and provide the following comments/concerns. This comment letter has been organized into two sections, the first section identifies concerns in regards to Tenaska Brownsville Generating Station and the second section addresses the Transmission Interconnect Line.

Tenaska Brownsville Generating Station

As the granting of a Green House Gas Permit on behalf of the Environmental Protection Agency (EPA) is a federal undertaking, compliance with the National Historic Preservation Act (§106) is required. The NPS would like to participate in review of the §106 documents upon their availability.

The NPS respectfully requests to be a consulting party under §106. The NPS involvement in the next steps of the §106 compliance process is essential to protecting our National Historic Landmarks, predominantly the assessment of effects and the minimization of adverse effects on historic properties, particularly to the Palo Alto Battlefield National Historic Landmark (NHL). The proposed project is approximately one mile from the western border of Palo Alto Battlefield National Historical Park (NHP) and NHL.

Resp. #8 In regards to the Coordination with Potential Stakeholders (Page x): We appreciate that you have coordinated with potential stakeholders. The document indicates, on page 50 under Section 5.0 of the §106 Coordination, that EPA will be coordinating with local Native American tribes. The NPS requests an update on coordination with Native American tribes to ensure that tribes associated with NPS sites have been afforded an opportunity to engage in the project. We recommend on page 78, in the last paragraph under "Conclusions and Recommendations," Tenaska should include information about the results of tribal consultation.

Executive Summary-i

Resp. #9 Tenaska has plans for an 800-megawatt facility with an alternative of a 400-megawatt facility. The NPS is seeking clarification on what triggered construction of the 400-megawatt alternative?

Page iii, Table ES-1,

Resp. #33 The National Register eligibility of six of the eight historic properties listed in this table are "undetermined" or "potentially eligible". The NPS recommends that Tenaska confirms the eligibility of all cultural resources within the area of potential effect (APE) as they move forward with the Section 106 process. This table seems to be inconsistent with the information provided on page x under "Identified Resources," which lists several more cultural resources than the initial eight resources listed in Table ES-1. The NPS recommends that there be an explanation for this discrepancy in the text. The table should

Resp. #34 also list the Palo Alto Battlefield National Historical Park. The Park is de-facto listed in the National Register. We believe that the agency's undertaking related to the NHL falls under *36CFR 800.10 Special requirements for protecting National Historic Landmarks*, which requires the agency to the greatest extent possible to undertake such planning and actions as may be necessary to minimize harm to the

Resp. #35 NHL. Concerning the Cross Valley Interconnect Transmission Line, the NPS considers this a closely and directly connected activity related to issuing a permit for the generating station and would not be constructed if not for the generating station project. This comment also applies to Section 6.2.1 Visual Effects.

Resp. #52 The NPS asks for Row 1 within the Project Effect to be reexamined; largely for the reason that putting such a large facility so close to the park is a direct adverse effect to the viewshed and soundscapes of Palo Alto Battlefield NHL and Palo Alto Battlefield National Historical Park (NHP).This is also true for the proposed transmission lines, which are proposed abutting Palo Alto Battlefield NHL northern boundary and to the east of the park.

Page X

Resp. #11 Under "Identified Resources" add: Palo Alto Battlefield National Historic Landmark

Introduction p. 1

Resp. #53 There is mention of a biological assessment being prepared concurrently under Endangered Species Act (ESA). The NPS has significant concerns for the biological resources contained within Palo Alto Battlefield NHP. As development surrounds the park, this green space will become critical habitat for migratory birds as well as other small indigenous fauna. The effects of the undertaking on the park must be considered for these resources as well.

Section 1.1, p. 8

Resp. #54 The NPS does not support the statement that the addition of two 95-foot tall Heat Recovery Steam Generator's (HRSG), two 160 foot tall smoke stacks and a 55-foot tall cooling tower with visible steam plumes of several hundred feet would not change the character of the Palo Alto Battlefield NHP or the underlying NHL. Character, setting and sense of place are paramount qualities we work to preserve for visitor understanding and visitor experience of the site.

Section 1.3, p.8 Area of Potential Effect

Resp. #19 The last paragraph explains that the APE takes into consideration visual effects; however, the NPS is curious if audible effects are taken into consideration? The NPS recommends that visual, audible, atmospheric and any other intrusions be included when determining the APE. The NPS has found that

Resp. #10 "Palo Alto Battlefield National Historic Landmark" has been incorrectly labeled as "Palo Alto Battlefield National Historic Site." Please correct this labeling within this section and throughout the document.

Section 3.2.5, p. 25

Resp. #12 Correction – the Battle of Palo Alto was fought May 8, 1846

Section 4.3.1, p. 42

Resp. #54 With regards to the United States Border Patrol radio communications tower and the Southmost Regional Water Authority water treatment facility that are visible within the project area, it is unknown if the NPS was invited to comment on the installation of the radio tower. The water treatment facility may not have been a project that invited comment under NEPA or National Historic Preservation Act regulations. The structures mentioned above have minimal impact upon the park in contrast to the significant impacts of the proposed Tenaska structures.

Section 6.2

Resp. #55 The NPS is concerned with the effects of the proposed project on the NHL. The NPS is requesting clarification on the steps taken to avoid or minimize the effects of the project? Were alternative locations considered?

Section 6.2.1, p. 60

Resp. #54 The NPS does not agree with the effects of the undertaking being labeled "moderate". The effects, in combination with the transmission line and cumulative impacts, are likely to be significant. With the exception of the Highway 550 overpass, the other visual intrusions on the viewshed are further away, partially screened by vegetation or narrow enough to be somewhat less intrusive in comparison to the large, tall structures planned only 0.6 miles from high visitor use areas. With regards to the asphalt plant, this facility is a temporary facility associated with area road construction and is under a limited time use permit issued by the City of Brownsville zoning department. We assume once road construction is complete, the plant will be removed.

Resp. #56 The NPS is requesting clarification on mitigation measures and how they apply to the Cross Valley Interconnect associated transmission line construction/installation?

Resp. #57 The digital figures and simulations provided (p. 62-64) are inadequate to draw the conclusion that the visibility of the proposed facility would be moderate. Additional simulations from 2-3 key viewing locations within the Palo Alto Battlefield NHP should be prepared based on the information provided below.

- Simulations should be prepared using viewpoints from within the park that represent key visitor viewing locations. Several locations were mentioned but the park should make the final selection.
- The simulations should be prepared according to an established methodology that will assure they depict as closely as possible what one might see if the project is built. This methodology should be provided as part of the simulations. As a minimum the methodology should include:
    - A detailed description of how the power plant model is spatially located to its proposed location with respect to the viewpoints.
    - Simulations should use a model of the actual facility to be built - and it seems Tenaska already has this.
    - Description of how the photography for the simulation base was completed. Photography should be done in such a way as to simulate the human field of view and the final product should have viewing instructions to indicate how far away it should be viewed to simulate what one would actually see from the park viewpoints. Being zoomed way in or way out does not provide good information.

Resp. #58

- Bureau of Land Management (BLM) environmental colors would be a good starting point for selecting a color of the facility that could reduce its visibility, but the color does not have to be specifically one of those colors. Dark colors – especially ones with a gray component – will generally recede in a view while lighter colors tend to draw attention. We understand there could be limits to color selection due to maintenance issues and that some components cannot be painted. Every landscape is a bit different and the color selection should be done in the field to best reflect actual conditions. The color selected should be shown in the simulations.

Resp. #57

- One of the simulations should also include the transmission line planned on the north side of the park.

Resp. #59 The NPS is concerned with impacts to the visitors experience at night. Palo Alto Battlefield NHL offers night time actives for visitors and offers the following. Comments and/or recommendations are targeted toward night sky friendly lighting that will help to protect park resources, both the cultural and the natural environment. In general, our recommendations are:

- Skillfully implement lighting fixtures that are shielded, pointing downward and inward.
- Use warm color lighting that is within a 2700-3500 degree Kelvin range or lower.
- Where possible implement motion sensor lighting to minimize lumens expended.
- Avoid the use of tall lighting poles or lights positioned on top of stacks which cause light to drift horizontally rather than pointing downward.
- Use shorter poles rather than longer lighting poles to direct lighting only where needed.
- Provide on/off switches on most if not all lights to ensure that the local user can turn out lights after performing a task.
- If FAA safety lighting is needed for towers, consider NPS recommendations (sent via a separate email transmission) for FAA required lighting.
- Consider switching off upper platform lighting.

Section 6.2.1, p. 67

Resp. #60 The meteorological data for Cameron County used in the wind direction discussion is limited to four years of data. Is this sufficient to give a good representative sample?

Section 6.2.3, pp. 70-71 Ambient Baseline Applicability

Resp. #61 The NPS appreciates the effort to estimate audible effects using an ambient sound level measurement as a baseline for determination of effects in the area. We expressed concern on 3/04/14 and 3/07/14 via e-mails and meetings about the use of site MP3 as a surrogate for ambient sound levels at Palo Alto Battlefield NHP and NHL. Our concern is that due to the proximity of site MP3 to Highway 550 and an asphalt plant, the recorded ambient sound levels may be higher than in the NHP and NHL, and therefore, generating station noise effects to more distant locations in the NHP and NHL will be underestimated using data from site MP3.

Section 6.2.3, pp. 70-72 Audibility Greater than Ambient Increase Noticeability

Resp. #61 We appreciate the effort to estimate audible effects to the historic property. We shared our concerns in 3/04/14 and 3/07/14 e-mails and meetings about logarithmic addition of sound levels as an estimate audibility or noticeability of noise. Because the generating station is a new noise source with different broadband and/or tonal characteristics than the ambient sound level, we do not believe that ambient sound level increases will provide a conservative estimate. We anticipate that audibility and noticeability of the generating station will be greater than the "just noticeable" and "clearly noticeable" criteria traditionally utilized for increases in the same sound source.

Section 6.2.3, Table 6-5, p. 71 Representative Locations for Historic Property Effects

Resp. #61 The NPS suggests that the receiver locations in Table 6-5 and Figures 6-6 and 6-7 (pp. 73 and 74) be updated to better represent sensitive cultural soundscape locations (for the historic property).

These locations include:

- Living History Area / Picnic Area (adjacent to each other)
- Battlefield Overlook
- End of Mexican Line Trail (optional—can be omitted)
- End of the U.S. Line Trail
- Historic Road (in NE corner of park)

Receiver names, UTM coordinates, and a map were provided in a 3/17/14 e-mail. We recommend that the projected generating station noise level be compared to the estimated ambient sound level at these locations (using adjusted data from MP3 and/or MP4—see below).

Resp. #61 **Sec. 6.2.3, Tables 6-4 and 6-5, pp. 70-71 Adjustment of Ambient for the NHP and NHL** Especially given our concerns for ambient applicability and potential underestimation of audible effects, we appreciate our 3/12/14 face-to-face meeting with Tenaska and the exchange of information on how to reduce effects to the historic property. The NPS understands that the acoustic consultant noted the presence of asphalt plant noise at MP3 during midday hours but an absence during other hours. After discussion of the data and contributing noise sources, the NPS suggests that Tenaska's acoustic consultant attempt to filter or adjust ambient sound levels at site MP3 and/or MP4 to eliminate the asphalt plant noise and account for greater distances (and expected lower noise levels) from Highway 550. This approach will help to better justify use of MP3 and/or MP4 as a surrogate for ambient sound levels at more distant locations in the NHP and NHL, which were not measured directly.

Resp. #62 **Section 6.2.3, Tables 6-4 and 6-5, pp. 70-72 Need for Mitigation**
The predicted noise level increases in Table 6-5 are anticipated to increase further with the lower ambient sound levels expected in the NHP and NHL. In addition, the NPS anticipates that audibility and noticeability of the generating station will be greater than predicted using the "just noticeable" and "clearly noticeable" criteria for Table 6-5 noise level increases. Given that audible effects to the historic property would likely be greater than predicted, the NPS urges Tenaska to consider all reasonable techniques for mitigation of noise to the NHP and NHL. The NPS gathered from our 3/12/14 face-to-face meeting with Tenaska that the noise specifications of generating station equipment have already been established and the creation of earth berms is one of the only practical options for noise mitigation. The NPS requests that Tenaska create a new figure in addition to Figure 6-7 that shows predicted generating station noise contours with the addition of an earth berm on the east side of the generating station. We also request that Tenaska and its noise consultant carefully consider minimum earth berm height and the height of high sound pressure level (SPL) noise sources such as blowers, turbine inlets/exhausts, compressors, and steam blows from pressure release valves. Wherever possible, the height of high SPL noise sources should be kept or moved below the height of the earth berm. The earth berm may also be used to minimize the visual effects of light and moving steam on the landscape.

Transmission Interconnect Line

Abstract
Resp. #36 Mention is made of additional shovel tests along a 0.6 mile section of the line north of the Palo Alto Battlefield NHP. The historic road(s) to Port Isabel from Ft. Brown and Brownsville in the 1840's to the 1860's run through this area. There is potential for discovery of cultural remains along these routes. Additionally, the northern edges of the U.S. Army positions during the battle of Palo Alto may extend beyond the boundary of the national park. Metal detector surveys may uncover more than shovel tests.

Introduction, p.3
Resp. #37 The Old Port Isabel road is not in the exact location of the historic route(s) (used during wet and dry seasons respectively) through this area used during the Mexican War period and beyond. To state that maintenance and improvement to the modern gravel road has destroyed evidence of these earlier routes is inaccurate.

Section 1.4.1 p. 6
Resp. #63 The utility poles are indicated to be between 140 to 170 feet in height. There is no clarification if these single poles will consist of wood or concrete? Will these poles have guy wires? Will aircraft warning

lighting be required for these poles? The NPS is unable to discern which sections of the transmission line corresponds with which type of poles. The NPS is requesting specific information about the 170 foot high poles, their proximity to the NHL and the materials proposed for construction. These poles have the potential to significantly impact the viewshed.

Section 1.4.2 p. 7

Resp. #64 Section 1.4.2 makes reference to 78 tower structures while the previous page refers to single poles. The NPS is requesting clarification on the direct or indirect impacts on the NHL. These determinations cannot be made until designs have been finalized.

Resp. #20 The NPS does not concur with the use of the 2004 FCC Programmatic Agreement for Communications towers as a template for determining APE and Indirect Impact Areas. Cell towers are singular in nature and less intrusive on a viewshed than a long linear feature with multiple towers. There are examples of Programmatic Agreements for transmission lines that are more recent and more accurately address the direct, indirect and cumulative impacts of transmission lines. An example can be found at: http://www.achp.gov/docs/id-wy.blm.gateway%20west%20transmission%20line%20project.pa.sep13.pdf. This example uses a five mile APE which adequately addresses impacts to viewsheds on historic properties.

Section 3.3.3 p. 35

Resp. #65 Despite the current location of the existing utility lines, the addition of towers ranging between 140 to 170 feet in height will negatively impact the viewshed of the park and the NHL as the proposed height is much greater than the existing 90-100 feet poles.

Section 3.3.3 p. 38

Resp. #65 The NPS requests that Tenaska consider visual concerns in regards to the utility lines from the core of the battlefield. The existing lines are currently not 170 feet in height and the park is about to undertake a cultural landscape restoration effort to remove the invasive mesquite trees from the core of the battlefield. This will return the park to its more historically open prairie appearance as accurate to its ca. 1846. As a result, less screening vegetation in the battlefield denotes visual intrusions on the horizons.

Section 3.3.3 p. 39

Resp. #65 There are a number of visual intrusions on the western edge of the park and the NHL. We are concerned about adding additional intrusions to this viewshed. The NPS in interested in exploring other alternatives or avoidance measures to avoid viewshed intrusions. The NPS does consider the transmission line to be an adverse affect to the NHL.

Attachment 2, Finding of No Adverse Effect, Sec. 40, pp. 35-39

Resp. #66 Sound from the transmission line is largely dismissed on p. 36 and p. 39 as "minimally audible if at all from the ground outside of the utility ROW." However, it is acknowledged on p. 36 that "this sound energy may become more pronounced depending upon voltage and weather conditions (e.g. humidity)." These effects are not sufficiently articulated to inform a minimum distance from sensitive receptors. The NPS requests that Tenaska or its contractor use the Electric Power Research Institute (EPRI) AC Transmission Line Reference Book—200 kV and Above (Red Book) and/or the TL Workstation software to predict transmission line noise levels and ambient noise level increase during rainfall rate of 0.75 mm/hr for the expected transmission line voltage and conductor characteristics. Please disclose these noise levels and the estimated ambient sound level (due to rainfall) of 37 dBA and 40 dBA, for ground cover curve R-1 and