



# Memorandum

**FEBRUARY 22, 2023**

**CONTRACT NO. 1773A**

**SHERADEN PARK ECOSYSTEM MAINTENANCE**

**ADDENDUM NO. 1**

All bidders bidding Contract No. 1773A shall read and take note of this **Addendum No. 1**. The Contract Documents for **CONTRACT NO. 1773A – SHERADEN PARK ECOSYSTEM MAINTENANCE** are hereby revised and/or clarified as stated below.

**Acknowledgement of Contract No. 1773A; Addendum No. 1**

The Acknowledgement attached to **Addendum No. 1** is to be signed and returned immediately via email to **Kathleen Uniatowski** at [contract.clerks@alcosan.org](mailto:contract.clerks@alcosan.org) and acknowledged with Bidder's Proposal.

Michael Lichte, P.E.

Director – Regional Conveyance

**February 22, 2023**

**CONTRACT NO. 1773A**

**SHERADEN PARK ECOSYSTEM MAINTENANCE**

**ADDENDUM NO. 1**

**FIRM NAME:** \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**February 22, 2023**

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**A. Contract Documents**

1. *Article 2, p. 2-3, shall replace the last sentence of the second paragraph of Section 2.4 Item No. 2 – Mechanical and Chemical Treatment of Japanese Knotweed to read: “Treatment shall be conducted in target **Areas 1-9** and in and around the riparian channel as defined in the map provided in **Appendix A.**” “**See Attachment “A” for Replacement Article 2**”*
2. *Article 2, p. 2-4, shall replace the last sentence of the second paragraph of Section 2.4 Item No. 3 – Mechanical and Chemical Treatment of Reed Canarygrass to read: “Treatment shall be conducted in target **Areas 1-9** and in and around the riparian channel as defined in the map provided in **Appendix A.**” “**See Attachment “A” for Replacement Article 2**”*
3. *Article 2, p. 2-4, shall replace the last sentence of the second paragraph of Section 2.4 Item No. 4 – Mechanical and Chemical Treatment of Poison Hemlock to read: “Treatment shall be conducted in target **Areas 1-9** and in and around the riparian channel as defined in the map provided in **Appendix A.**” “**See Attachment “A” for Replacement Article 2**”*
4. *Article 2, p. 2-4, shall replace the last sentence of the second paragraph of Section 2.4 Item No. 5 – Mechanical and Chemical Treatment of Purple Loosestrife to read: “Treatment shall be conducted in target **Areas 1-9** and in and around the riparian channel as defined in the map provided in **Appendix A.**” “**See Attachment “A” for Replacement Article 2**”*
5. *Article 2, p. 2-14, shall replace the first sentence of the first paragraph of Section 2.27 to read: “Each Bidder must be regularly engaged in and demonstrate relevant experience in, the type of work specified herein and meet the experience requirements outlined in the specifications.” “**See Attachment “A” for Replacement Article 2**”*
6. *Article 2, p. 2-14, shall replace Item A of Section 2.27 to read: “Foreman Qualifications – Foreman of the crew shall have relevant experience, and possess the necessary licensure as defined in the specifications.” “**See Attachment “A” for Replacement Article 2**”*



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**B. Contract Specifications**

1. *Article 6, Invasive Species Management Section 3 Location, Boundaries and Features, p. 1, shall replace the third sentence of the first paragraph of Section 3 to read: "The map also defines the target areas for treatment where particular species are concentrated and where they are located in relation to other features, such as the vernal pools, and the site boundaries." "See Attachment "B" for Replacement Invasive Species Management Specification"*
2. *Article 6, Invasive Species Management Section 14.3 Herbicide Application Techniques, p. 4, shall replace the second sentence of the second paragraph of Section 14.3 to read: "It is recommended that the herbicide be dabbed, squirted, wiped, and/or painted directly on the entire exposed cambium (living inner tissue) of the stem or stump." "See Attachment "B" for Replacement Invasive Species Management Specification"*
3. *Article 6, Invasive Species Management Section 14.3 Herbicide Application Techniques, p. 5, shall remove the Section 'Removal and Disposal of Cut Vegetation' "See Attachment "B" for Replacement Invasive Species Management Specification"*
4. *Article 6, Invasive Species Management Section 14.4 Japanese Knotweed, p. 5, shall replace the first sentence of the first paragraph of Section 14.4 to read: "The following procedure, or an approved equal, shall be used to control the Japanese knotweed population at Sheraden Park:" "See Attachment "B" for Replacement Invasive Species Management Specification"*
5. *Article 6, Invasive Species Management Section 14.4 Japanese Knotweed, p. 5, shall replace Item 2 of Section 14.4 to read: "2. Allow cuttings to lay on site for 4 to 6 weeks to permit drying prior to removal and proper disposal. Control migration of cuttings into nearby waterways and vernal pools." "See Attachment "B" for Replacement Invasive Species Management Specification"*
6. *Article 6, Invasive Species Management Section 14.5 Reed Canarygrass, p. 5, shall replace the first sentence of the first paragraph of Section 14.5 to read: "The following procedure, or an approved equal, shall be used to control the reed canarygrass population at Sheraden Park:" "See Attachment "B" for Replacement Invasive Species Management Specification"*

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7. *Article 6, Invasive Species Management Section 14.5 Reed Canarygrass, p. 5, shall remove Item 2 of Section 14.5 “See Attachment “B” for Replacement Invasive Species Management Specification”*
8. *Article 6, Invasive Species Management Section 14.6 Poison Hemlock, p. 6, shall replace the first sentence of the first paragraph of Section 14.6 to read: “The following procedure, or an approved equal, shall be used to control the poison hemlock population at Sheraden Park:” “See Attachment “B” for Replacement Invasive Species Management Specification”*
9. *Article 6, Invasive Species Management Section 14.6 Poison Hemlock, p. 6, shall remove Item 2 of Section 14. “See Attachment “B” for Replacement Invasive Species Management Specification”*
10. *Article 6, Invasive Species Management Section 14.7 Purple Loosestrife, p. 6, shall replace the first sentence of the first paragraph of Section 14.7 to read: “The following procedure, or an approved equal, shall be used to control the purple loosestrife population at Sheraden Park:” “See Attachment “B” for Replacement Invasive Species Management Specification”*
11. *Article 6, Invasive Species Management Section 15.1 Quality Assurance, p. 7, shall replace the first sentence of the first paragraph of Section 15.1 to read: “Qualification of Landscape Contractor: The work of this Section shall be performed by a landscape contracting firm which has successfully completed work of a similar quality, schedule requirement, and construction detailing.” “See Attachment “B” for Replacement Invasive Species Management Specification”*

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**D. Contract Appendices**

1. Update “Sheraden Park Ecosystem Maintenance Project and Invasive Species Boundary Map” to replace Total Estimated Area of Each Invasive Species Table with “Total Square Yardage of Each Defined Treatment Area” Table to read:

AREA 1	160 SY
AREA 2	684 SY
AREA 3	955 SY
AREA 4	1,563 SY
AREA 5	2,495 SY
AREA 6	1,596 SY
AREA 7	86 SY
AREA 8	420 SY
AREA 9	32,252 SY
RIPARIAN CHANNEL AREA	3,450 SY

***“See Attachment “C” for Replacement Appendix A – Sheraden Park Ecosystem Maintenance Project and Invasive Species Boundary Map”***

2. Update “Sheraden Park Ecosystem Maintenance Project and Invasive Species Boundary Map” so that Item 1 of the General Notes reads: “TREATMENT OF REED CANARYGRASS IS REQUIRED IN AREAS 1-9. IT IS ASSUMED THAT THIS SHALL MAKE UP APPROXIMATELY 10% OF THE AREAS NOTED AND SHALL BE BID AND PAYED FOR BY ITEM 3 – MECHANICAL AND CHEMICAL TREATMENT OF REED CANARYGRASS.” ***“See Attachment “C” for Replacement Appendix A – Sheraden Park Ecosystem Maintenance Project and Invasive Species Boundary Map”***
3. The existing Operations and Maintenance Manual for the site which was developed by the Army Corps of Engineers has been added as Appendix B. ***“See Attachment “D” for New Appendix B – Operations and Maintenance Manual”***

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**E. Questions**

1. Question: *How will the treatment areas be verified since the delineation bid item that was in Contract 1773 has been removed in Contract 1773A? Will the site be marked to indicate the exact areas as noted on the map prior to the start of work for this contract?*

*Answer: The Owner will provide data for marking the areas defined in the map in Appendix A. Marking of these areas shall be performed by the Contractor and shall be incidental to the Lump Sum items for treatment of the invasive species in these areas.*

2. Question: *Are contractors to assume the square yardage quantities on the map are what's under contract, or is treatment of all invasive species throughout the project areas expected?*

*Answer: Control of identified species is required for total extents of defined Areas 1-9. There may be an opportunity for undergoing a change order process if altering the expected treatment area is desired.*

3. Question: *Is there any potential for modification of the requirement for total removal of cut material from site?*

*Answer: Removal of the cuttings from the site is part of the recommended treatment procedure for Japanese knotweed and purple loosestrife. The Owner will consider and may approve as equal alternative proposed methods for the removal and disposal of cuttings.*

4. Question: *Can ALCOSAN provide additional or more updated prevailing wage information?*

*Answer: This question will be addressed in a future addendum.*

5. Question: *Is the entire stream channel section to be treated? Are the hillsides and rail beds to be treated?*

*Answer: The entire stream channel is part of the defined treatment area for the contract. Areas outside of the property boundary and/or the areas defined on the map in Appendix A are not required to be treated in this contract.*

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6. Question: *Is the layered glove wiping method in Section 14.7 of the Invasive Species Management section of the technical specifications required to be used?*

Answer: *As noted in Section B – Contract Specifications, Item 10 above, an approved equal method may be used for treatment of Purple Loosestrife, or of the other three invasive species.*

**F. Pre-Bid Meeting**

1. *Pre-Bid Meeting Agenda, Minutes, and Sign-in Sheet are included as Attachments E, F, and G respectively.*

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**ATTACHMENT A REVISED ARTICLE 2**

## **ARTICLE 2**

### **INFORMATION FOR BIDDERS**





**ARTICLE 2  
INFORMATION FOR BIDDERS**

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## 2.1 DEFINED TERMS

The terms used in this Information for Bidders have the meanings assigned to them in Article 3, General Contract Conditions (the "General Conditions").

Certain additional terms used in the Bidding Documents have the meanings indicated below which are applicable to both the singular and plural thereof.

- A. APPARENT LOW BIDDER is the responsible, responsive bidder whose bid as offered in the bid form represents the lowest total as determined by the Base Bid.
- B. BASE BID is the total of the Base Bid for the Unit Price Work, including Contingent Bid Items, if applicable. No consideration will be given to additive or deductive alternates or other credits in determining the Base Bid.
- C. BID refers to all materials, items and documents included in the Bidder's response to the Owner submitted pursuant to the Contract Documents.
- D. BIDDER is one who submits a Bid to the Owner as distinct from a sub-bidder, who submits a Bid to a Bidder.
- E. CONSENT DECREE is the legal Consent Decree as approved by ALCOSAN, United States Environmental Protection Agency (EPA), Commonwealth of Pennsylvania Department of Environmental Protection (PaDEP), and the Allegheny County Health Department and entered on January 23, 2008.
- F. SUCCESSFUL BIDDER is the lowest, responsible and responsive Bidder to whom the Owner (on the basis of the Owner's evaluation as hereinafter provided) makes an award.

## 2.2 GENERAL

The information contained in this **Article 2** of the **Contract Documents** describes the proper form and method for submitting Bids and the accompanying security to the Allegheny County Sanitary Authority (hereinafter referred to as the "Owner"), and provides certain general information regarding the award of the Contract.

Certain provisions throughout this Article may reference certain consultants retained by the Owner such as the Construction Manager, the Consulting Engineer or Final Design Consultant and the Engineering Program Manager and to certain of their duties and responsibilities. If any or all of the above-mentioned consultants are not retained for this Project, their duties and responsibilities shall, unless otherwise specified, be retained by the Director of Regional Conveyance ("Engineer") or the Engineer's written designee.

It is a condition to the Owner's evaluation of the Bid and possible award of the Contract that the Bidder carefully examines all of the Contract Documents and completely satisfies itself as to the nature and location of the Work and all Job Site conditions that may affect performance of the Work. Submission of the Bid by the Bidder is a representation by the Bidder that it has satisfied itself with respect to the foregoing.

Unless all Bids are rejected, and except as otherwise provided by law, award will be made to the lowest responsive and responsible Bidder. The Owner reserves the right to award by item or on a total Lump Sum Price basis, whichever is deemed most advantageous to the Owner. In cases of discrepancies in prices, the unit price will be binding. In any discrepancy between words and figures, the words will take precedence. For Lump Sum Bids, which include an itemized breakdown, the low Bid will be based on the stated Lump Sum Price and the Owner is not required to consider the total value of the itemized breakdown.

The Contract Documents shall be interpreted, construed and enforced in accordance with all applicable laws and regulations of the Commonwealth of Pennsylvania.

## 2.3 LOCATION AND DESCRIPTION OF WORK

The Work to be done as specified here in **CONTRACT NO. 1773A, SHERADEN PARK ECOSYSTEM MAINTENANCE** (referred to as the "Work"), includes invasive plant species control services for the Sheraden Park site. The site is a **22 acre meadow** which contains a riparian channel, **18 shallow vernal pools**, and various toad houses. The invasive species control efforts include removal, herbicide treatment, and supplemental seeding as required for the mitigation of four target plants: Japanese Knotweed, Reed Canary grass, Poison Hemlock, and Purple Loosestrife.

## 2.4 DESCRIPTION OF BID ITEMS

The following is a general description of the tasks to be completed under the Contract.

All prospective bidders are advised that access to the various sites is for information only, and the bidder should make any investigation necessary to satisfy himself/herself of the existing conditions. Furthermore, the successful bidder will be responsible for providing the means necessary to access the sites to accommodate his operations at no additional cost to the Owner.

The actual amount of work completed for each pay item may be more or less than the quantity estimated in the Bid Form. Payment will be made according to the quantity of work completed at the respective unit price provided in the Bid Form unless otherwise described below.

In this contract a **FULL CREW** shall be defined as a **four-person** vegetation management crew consisting of a foreman and skilled laborers, and include all tools, vehicles, trailers, and equipment required to complete the work specified in this contract.

**ITEM NO. 1 – MOBILIZATION/DEMobilIZATION, BONDS AND INSURANCE**

The unit price for “MOBILIZATION / DEMOBILIZATION, BONDS AND INSURANCE” shall consist of costs associated with providing initial services required to mobilize for, commence work and demobilize on this project, as described in the Contract Documents. Associated costs include, but are not limited to, obtaining all required insurance, bonds and permits; preparatory work and operations necessary for the movement of personnel, equipment, supplies, labor and other incidentals to the work; preparation of construction schedules; sample reports; submittals; health and safety plan; and all other work which must be performed, or cost incurred prior beginning work.

This item shall be bid on a **LUMP SUM (LS)** basis not to exceed **5%** of the sum of the total base bid price for **Item No. 1 – 6**. Payment shall be LUMP SUM (LS) for the entire project, and measurement shall be based on the percentage of work completed.

**ITEM NO. 2 – MECHANICAL AND CHEMICAL TREATMENT OF JAPANESE KNOTWEED**

The unit price for “MECHANICAL AND CHEMICAL TREATMENT OF JAPANESE KNOTWEED ” shall include all necessary labor, equipment, materials and incidental services necessary to perform all work, and payment shall be on a LUMP SUM (LS) basis .

Work included with this item shall be in accordance with the technical specifications for this project contained within **Article 6**. This work includes costs associated with all treatments and associated work specified in the technical specifications per calendar year. Treatment shall be conducted in target **Areas 1-9** and in and around the riparian channel as defined in the map provided in **Appendix A**.

**ITEM NO. 3 – MECHANICAL AND CHEMICAL TREATMENT OF REED CANARY GRASS**

The unit price for “MECHANICAL AND CHEMICAL TREATMENT OF REED CANARY GRASS” shall include all necessary labor, equipment, materials and incidental services necessary to perform all work, and payment shall be on a LUMP SUM (LS) basis .

Work included with this item shall be in accordance with the technical specifications for this project contained within **Article 6**. This work includes costs associated with all treatments and associated work specified in the technical specifications per calendar year. Treatment shall be conducted in target **Areas 1-9** and in and around the riparian channel as defined in the map provided in **Appendix A**.

#### **ITEM NO. 4 – MECHANICAL AND CHEMICAL TREATMENT OF POISON HEMLOCK**

The unit price for “MECHANICAL AND CHEMICAL TREATMENT OF POISON HEMLOCK” shall include all necessary labor, equipment, materials and incidental services necessary to perform all work, and payment shall be on a LUMP SUM (LS) basis .

Work included with this item shall be in accordance with the technical specifications for this project contained within **Article 6**. This work includes costs associated with all treatments and associated work specified in the technical specifications per calendar year. Treatment shall be conducted in target **Areas 1-9** and in and around the riparian channel as defined in the map provided in **Appendix A**.

#### **ITEM NO. 5 – MECHANICAL AND CHEMICAL TREATMENT OF PURPLE LOOSESTRIFE**

The unit price for “MECHANICAL AND CHEMICAL TREATMENT OF PURPLE LOOSESTRIFE” shall include all necessary labor, equipment, materials and incidental services necessary to perform all work, and payment shall be on a LUMP SUM (LS) basis .

Work included with this item shall be in accordance with the technical specifications for this project contained within **Article 6**. This work includes costs associated with all treatments and associated work specified in the technical specifications per calendar year. Treatment shall be conducted in target **Areas 1-9** and in and around the riparian channel as defined in the map provided in **Appendix A**.

#### **ITEM NO. 6 – OVERSEED AREA SURROUNDING IDENTIFIED INVASIVE SPECIES**

The lump sum price for “OVERSEED AREA SURROUNDING IDENTIFIED INVASIVE SPECIES” shall include all necessary labor, equipment, materials, and incidental services necessary to perform all work.

This item shall be bid on a LUMP SUM (LS) basis and be in accordance with the technical specifications for this project contained within **Article 6**. This work includes costs associated with work specified in the technical specifications per calendar year.

## 2.5 BYPASS PUMPING

This section is intentionally omitted from this Contract.

## 2.6 DEBRIS DISPOSAL

All cuttings and other debris from the work shall be disposed of at the following locations, or other locations approved by Owner:

- A. Republic Services (formerly Allied Waste), Route 980, 11 Boggs Road, Imperial PA 15126. Contact for the Imperial Landfill is Bernie Wilson at (724) 695-4422. ALCOSAN's grit profile number is 5083Y24767.
- B. Waste Management Landfills. Contact is Scott Dellinger at 412-475-2808 or [sdellinge@wm.com](mailto:sdellinge@wm.com)
  - i. Monroeville Landfill, 600 Thomas Street, Monroeville PA 15146. ALCOSAN's sludge/grit profile number is 1.
  - ii. Kelly Run Landfill, 1500 Hayden Blvd., Elizabeth, PA 15037. ALCOSAN's sludge/grit profile number is 1013.
  - iii. Arden Landfill, Arden Station Road, Washington PA 15301. ALCOSAN's sludge/grit profile number is 30.
  - iv. South Hills Landfill, 3100 Hill Road, Library, PA 15129. ALCOSAN's sludge/grit profile number is 5939.
  - v. Valley Landfill, Pleasant Valley Road, Irwin, PA 15642. ALCOSAN's sludge/grit profile number is 6336.

Contractors are responsible to set up a separate account for billing, confirm landfill hours of operation, capacity limitations as well as obtain appropriate waste manifests for hauling with ALCOSAN specific profile numbers listed. ALCOSAN or its designated agent will sign the contractor's waste manifests. The contractor will forward all paperwork related to disposal to ALCOSAN's designated representative.

## 2.7 SUBMISSION AND OPENING OF BIDS

Bids shall be submitted on the Bid Form which is attached hereto and shall state the proposed price of the Work (typewritten or in ink), both in words and in figures. Bids must be signed in ink. Bids that are not so priced and signed **WILL** be rejected.

The Bid must be submitted **intact, sealed and delivered in an envelope accompanied these Contract Documents**, addressed to the Allegheny County Sanitary Authority, **ALCOSAN Engineering Department, Attn: Contract Clerks, 3300 Preble Avenue, Pittsburgh, PA 15233**. The Bidder's name and address shall be marked in the upper left-hand corner and the words **"SEALED BID FOR CONTRACT NO. 1773A, SHERADEN PARK ECOSYSTEM MAINTENANCE"** shall be clearly marked in the lower left-hand corner of the sealed envelope. **Hand delivered Bids shall be delivered to the Guard House**

located at **3300 Preble Avenue, Pittsburgh, PA 15233**. The envelope shall also bear notation to clearly indicate all Addenda received by its identifying numbers and dates received. It is the responsibility of each Bidder to make sure that its Bids are received by the Owner prior to the date and time set for opening of the Bids. Upon Bidder's failure to comply with the foregoing, the Owner **WILL** treat the Bids as "nonresponsive" and return them to the Bidder unopened. **Bids will be received** at the office of the Owner until **11:00 A.M.** prevailing time on **Wednesday, March 8, 2023** at which time and place said Bids will be opened publicly and read aloud.

Bids must be firm. **If a Bid is submitted with conditions or exceptions or not in conformance with the terms and conditions of the Contract Documents, it may be rejected.** The Bid may also be rejected if the product or Work offered by the Bidder is determined by the Owner not to be in substantial conformance with the Contract Documents including the Specifications.

Bidder shall not detach and submit Bid pages separately but shall submit their Bids bound with the complete volume of Contract Documents, including all pages correctly assembled.

The Bid should be properly executed and accompanied by all Bonds, Certificates, Questionnaire Forms and other supporting information and documents, as described in the Bid Form.

## 2.8 SUPPLEMENTARY INFORMATION PACKAGE

- A. After the Bid opening, upon request of the Owner, the Apparent Low Bidder shall be required to submit, prior to the award of the contract, quadruplicate copies of a Supplementary Information Package as described in this Section. The request shall be made solely for the purposes of the Owner's evaluation and review of all proposed materials, equipment, and items of work and determination of conformance with the Contract Documents.
- B. The Supplementary Information Package shall include all such documentation as may be required elsewhere in the Contract Documents and all data and information deemed appropriate by the Bidder to completely describe its respective offering including but not necessarily limited to the following items:
  - 1. The information requested in the Information for Bidders Section 2.27 entitled "Qualifications and Experience of Bidders."
  - 2. List of all Subcontractors, with information also demonstrating compliance with Section 2.27 and this Section 2.8, as applicable.
  - 3. Applicable Experience to include References (Names, Entity, Address, Contract Name/Value, and Phone Numbers)



4. Qualifications and Licensures of the crew member(s) completing the work. For this work, that shall include proof that they are a licensed herbicide applicator certified for aquatic work within the Commonwealth of Pennsylvania waters, which includes both standing water and saturated soils.
  5. Equipment (trucks, sprayers, etc.) and Experience (see **Section 2.27**). Equipment shall have the specifications necessary to demonstrate the ability to conduct the required efforts.
- C. Upon failure to provide all the supplemental information requested in the Contract Documents, the Owner may (at its discretion) treat the Bids as nonresponsive and the Bids may be rejected for this reason alone.

## 2.9 SPARE PARTS AND SPECIAL TOOLS

This section is intentionally omitted from this Contract.

## 2.10 AWARD, CONTRACT EXECUTION AND NOTICE TO PROCEED

The Owner may reject all Bids. The Owner may, solely in its own discretion, award the Contract to the lowest responsive and responsible Bidder within **sixty (60) calendar days** from the date of Bid opening. A time extension may be made by the written mutual consent of the Owner and the Apparent Low Bidder.

All Bids will remain open for acceptance by Owner for **Sixty (60) calendar days** after the Bid opening.

In the event a Bidder fails, refuses, or neglects to provide any requested information or documents within the time stated in the Contract Documents, the Owner will have the right to reject its Bid as nonresponsive.

The Notice to Proceed will be made by registered letter mailed to the Awarded Bidder and shall be effective the date of receipt of the mailing. The Owner will endeavor to **issue the Notice to Proceed** within **ninety (90) calendar days** of the **Bid opening** and **thirty (30) calendar days** after the **Contract is awarded**. Any delays caused by the Awarded Bidder's failure to provide any required documents within the specified time may, at the Owner's option, cause an equivalent number of days to be added to these timeframes. The Awarded Bidder will commence performance immediately upon receipt of the Notice to Proceed. The Awarded Bidder should not order any materials or equipment or make any financial commitments concerning this Contract until receiving the Notice to Proceed. Awarded Bidders that do Work or prepare to do Work prior to receiving the Owner's Notice to Proceed are proceeding at their own risk.

## 2.11 CONTRACT DOCUMENTS

Contract Documents may be obtained at the office of the Allegheny County Sanitary Authority, 3300 Preble Avenue, Pittsburgh, PA 15233. A fee of **\$100.00** (delivered by check or money order, no cash will be accepted) shall be required for each set of Contract Documents obtained. If the Owner is requested to mail the Contract Documents, the above fee as well as a check or money order or the like (no cash will be accepted) must be submitted to the Owner in advance to cover delivery charges ("Cost Advance"). In such case, delivery instructions must be included in the request and only the amount received in excess of the **\$100.00** fee will be applied to delivery charges. If the Cost Advance is insufficient, the Bidder should anticipate that the Owner will not transmit the Contract Documents. No part of the Cost Advance will be refunded.

Submission of a Bid constitutes a representation by the Bidder to the Owner that the Bidder has reviewed the Contract Documents in their entirety and has analyzed all applicable provisions, terms, conditions and sections and related information in preparation of its Bid. This representation is a material inducement for the Owner's consideration of the Bidder for this Contract.

## 2.12 "OR-EQUAL" ITEMS

Whenever a product is defined in the Contract documents by trade name and catalog number of a manufacturer or vendor, the term "or-equal," if not inserted therewith, shall be implied. Any reference to a particular manufacturer's product either by trade name or by limited description is solely for the purpose of more clearly indicating the minimum standard of quality desired, except where a "no substitute" is requested. When a "no substitute" is requested, the Owner will consider Bids for the referenced product only. The term "or-equal" is defined as meaning any other make which, in the sole opinion of the Owner, is of such character, quality and performance equivalence as to meet the standard of quality and performance of the products specified and is such that offering the "or-equal" will not, in the Owner's opinion, constitute a change of the Project.

## 2.13 ALTERNATE ITEMS

Alternate Bids are optional and are not in lieu of furnishing a Base Bid for the actual Work specified. During the Bid review procedure, the Alternate may be considered in determining the low responsive, responsible Bidder. The review of the Bids will be based upon the specified Work. The Owner may, but need not, analyze the Alternate for acceptability until after the award of the Contract. The decision of the Owner with regard to the acceptability shall be final.

## 2.14 QUESTIONS REGARDING CONTRACT DOCUMENTS/ERRORS

In general, no answer will be given to prospective Bidders in reply to an oral question if the question involves an interpretation of the intent or meaning of the

Contract Documents, or the equality or use of products other than those designated or described in the Contract Documents. Any information received by Bidders other than by means of the Contract Documents or by Addenda, as described herein, is given informally, for the information and convenience of the Bidder only and is not guaranteed, is without legal effect and may not be used to bind or otherwise obligate the Owner. The Bidder agrees that such information shall not be used as a basis of, nor will the giving of any such information entitle the Bidder to assert, any claim or demand against the Owner.

To receive consideration, any question, inquiry or request for interpretation or clarification shall be submitted to the Construction Manager in writing, at least **nine (9) calendar days** prior to the **advertised date for receipt of Bids**. The Owner will review all such questions or requests and may issue Addenda, which will become a part of the Contract Documents, to provide interpretation, clarification or to answer issues or questions so raised which, in the opinion of the Owner, require formal responses. Copies of all Addenda will be delivered or sent, prior to the advertised date for receipt of Bids, to all prospective Bidders known to have received the Contract Documents. Addenda will be delivered by messenger or sent by certified mail, return receipt requested, to prospective Bidders or their designated agents, at the addresses given by them. At its option, the Owner may transmit Addenda by facsimile.

If any alleged errors are noted in the Contract Documents, Bidder should immediately notify, in writing, the Construction Manager and, if confirmed, Addenda will be sent to all prospective Bidders known to have received the Contract Documents.

## 2.15 REFERENCE INFORMATION

All information given in the Reference Information or in the Contract Documents relating to existing conditions is from the sources presently available to the Owner. All such information is furnished for the information and convenience of Bidders and is not guaranteed. All prospective Bidders agree that as a condition for Owner's review of its Bid that said information shall not be used as a basis for asserting any claims or demands against the Owner. It is understood by all prospective Bidders that they shall be responsible for determining the exact conditions prior to bidding and that they shall not be compensated for what they may feel is extra work because of their failure to discover conditions they could have discovered upon investigation.

## 2.16 BIDDERS TO INVESTIGATE

Bidders are required to submit their Bids upon the following express conditions which will apply to and be deemed a part of every Bid received:

- A. Bidders must satisfy themselves, by personal examination of the Job Site and by such other means as may be necessary or helpful as to the actual

and exact conditions existing, the character and requirements of the Work and the difficulties attendant upon its execution and analyze all laws and regulations which may affect the Work. On written advance request, the Construction Manager will provide each Bidder reasonable access to the Job Site to conduct such explorations and tests (at Bidder's own expense) for submission of a Bid. Bidder shall fill all holes and clean up and restore the Job Site to its former condition upon completion of such explorations.

- B. If any discrepancies should be found between existing conditions and the Contract Documents, prospective Bidders shall report these discrepancies to the Construction Manager for clarification prior to submitting a Bid. Failure of the Bidder to recognize Job Site conditions that affect the Work shall not be considered sufficient cause for an increase in the Contract Price.
- C. The submission of a Bid will constitute an incontrovertible representation of Bidder that Bidder has and will comply with every term, condition and requirement of the Contract Documents and that the Contract Documents are sufficient in scope to convey all terms, conditions and requirements for performance and furnishing of the Work.

## 2.17 APPROXIMATE ESTIMATE OF QUANTITIES

Any estimate of quantities of Work to be done and Materials to be furnished in these Contract Documents is an approximation and is given only as a basis of calculation upon which to determine the lowest Bidder. The Owner does not assume any responsibility for the quantities. The Bidder specifically agrees not to plead misunderstanding or deception because of such estimates, or of the character of Work or location, or other condition pertaining thereto.

By executing this contract, Contractor agrees that:

- A. Quantities. The quantities given on the contract plans or in the supplemental specifications for the various items of Work are approximate estimates of the amount required to complete this contract, with the exception of certain items designated as contingent items on the contract plans or supplemental specifications for which the extent and location could not be approximately ascertained prior to the commencement and actual progress of the Work and for which nominal quantities are given in unit prices under which Contractor shall do the Work to the extent and in the location ordered, subject to the limitations stipulated in this Section.
- B. Estimates. Contractor is satisfied with the estimates given on the contract plans or on supplemental specifications for determining the prices for which it agrees to do the Work required by this contract. Contractor will not at any time dispute or complain of such estimates nor assert that there was any misunderstanding in regard to the nature of the Work. Contractor further

agrees that the extent and location indicated on the contract plans for the several items of the Work are approximate only with the exception of contingent items which are nominal and that it will do the Work under the several items included in this contract in conformity with orders given by the Owner regardless of changes in extent or location, subject however to the limitations and qualifications hereinafter in **paragraphs (c) and (d)** of this section and that payment made at respective unit prices bid for work performed in conformity therewith shall be full compensation.

- C. Quantity of Contingent Items. Contingent items of Work shall be done when ordered by the Engineer and shall be paid for at the contract unit bid price. The purpose of the contract items designated in the bid form as "C" is to establish unit prices for work not included in other bid items. The Engineer has the right to order that contingent work be provided in smaller or larger quantities than the estimated quantity indicated in the Bid Form. The Contractor shall not have any right to demand payment for, and will not be paid for, any costs associated with the item, including, but not limited to overhead and profit, due to the fact that the item was not used in the work or was used in smaller or larger quantities than those indicated in the bid form. The Contract Sum shall be subject to adjustment according to final measured quantities and the unit prices in the bid will apply to such final quantities.
- D. Diminished, Extra Work and Omissions. The Owner shall have the right to order extra Work and alterations including but not limited to, alterations in alignment, grade, arrangement, plans, details, quantity and quality of the Work or materials as required by the Contract Documents or to omit any part thereof. All such alterations, extra Work or omissions shall be ordered in writing by the Owner. The Owner, however, need not issue a written order to partially or entirely eliminate contingent items of work.

## 2.18 HAZARDOUS AND OTHER CONTAMINATED MATERIALS

This contract requires application of glyphosate product or an approved equal herbicide. The applicator must have the necessary license for handling and applying this product as indicated in **Section 2.8** hereof entitled, "**Supplementary Information Package.**"

To the best of the Owner's knowledge, there are no other known instances where the work will require contact with any hazardous materials. Should contaminated materials be discovered during the course of work, its removal will be undertaken in accordance with the Change Order provisions in the General Conditions.

## 2.19 ACKNOWLEDGMENT OF ADDENDA

Bidders shall acknowledge receipt of all Addenda and signify same by attaching signed copies of each Addendum to the Contract Documents submitted along with

their Bid, and by noting each Addendum received, by its identifying number and date received, on the face of its sealed Bid envelope.

## 2.20 RISK OF LOSS/BID PRICES

All prices quoted shall include material delivered or obtained by the Bidder to or for the Owner F.O.B. at the Job Site. All transportation charges shall be prepaid, and the risk of injury, damage or loss in transit shall be borne by the Successful Bidder.

Such injury, damage or loss shall not release the Successful Bidder from any contractual obligations imposed in the Contract Documents. For Owner-Furnished Equipment to be installed under this Contract, prices quoted shall include materials, equipment and labor to load, transport and unload such items from the Owner's storage area to the Job Site, including all risks for damage of this equipment from the time these items are turned over to the Successful Awarded Bidder until the completion of the Contract.

## 2.21 TAX EXEMPTIONS

The Bidders shall take notice of and shall be responsible for any local or State taxes levied and applicable, and the costs for the same shall be included as part of this Bid. Sales to the Owner may be exempt from Pennsylvania Selective Sales and Use Taxes. Certain of the Bidder's tax obligations are described in more detail in **Section 3.22** of the General Conditions entitled, "**Sales and Use Tax.**"

## 2.22 BID SECURITY/CONTRACT EXECUTION

Bids shall be accompanied by a Certified Check or properly executed Bid Bond on the form included herein, with corporate surety approved to do business in the Commonwealth of Pennsylvania and satisfactory to the Owner and with valid Power of Attorney attached, in the amount of not less than **Ten percent (10%)** of the total Lump Sum Price quoted under the Bid, payable to the Allegheny County Sanitary Authority, as security that the Bidder, if awarded the Contract, shall enter into a written Contract with the Owner, on the form included herein, and supply to the Owner all required Bonds and all other documents, materials or items required to be executed, delivered or supplied by it.

Upon failure on the part of such Bidder to enter into a written Contract with the Owner (and return all required documents to the Owner, including Performance and Payment Bonds and Insurance Certificates, etc., after proper execution) within **ten (10) calendar days** (not including Sundays or Legal Holidays) from the date of mailing of such Contract to it at the address given in its Bid, such defaulting Bidder and its Surety shall be liable to the Owner for the damages sustained by the Owner by reason of such default. In such event, the Bidder's liability shall not be limited to the amount of the Bid security which accompanied its Bid. If the Bid security were a certified check, such check shall be cashed by the Owner and deposited

forthwith to the Owner's account. If the Owner's actual damages are less than the amount deposited, the excess shall be returned to the defaulting Bidder. No allowance for interest or the like shall be paid or payable by the Owner on any Bid security.

The Bid security of any Bidder that the Owner believes may receive the award may be retained by the Owner until the earlier of the tenth calendar day after the Effective Date of the Contract or the sixty-first calendar day after the Bid opening.

## 2.23 WITHDRAWAL OR MODIFICATION OF BIDS

The attention of Bidders is directed to the fact that, in submitting its Bid, the Bidder agrees that it will not withdraw it within **sixty (60) calendar days** after the actual date of opening of Bids or for **one hundred twenty (120) calendar days** if so permitted under applicable law, or for such longer period as may be agreed to by the Bidder. Upon submission of a proper request to the Owner, in writing, and identification of the one making the request, a Bid may be withdrawn, at any time prior to the designated time for the opening of Bids. Certain Bids may be withdrawn after the Bid opening if in compliance with the Act of January 23, 1974, P.L. 9 No. 4 §1 et seq. 73 P.S. §1601 et seq. entitled, "Public Contracts - Withdrawal of Bids" (for purposes of this Section, the "Act") subject to the limitations and conditions contained therein. Included in the provisions of the Act is a requirement that the Bidder present credible evidence to the Owner within **two (2) working days** after opening the Bids of a clerical mistake, as opposed to a judgment mistake, that was actually due to an unintentional and substantial arithmetical error or an unintentional omission of a substantial quantity of work, labor, material or services made directly in the compilation of the Bid.

Unless a Bid has been formally withdrawn as provided above, it shall be deemed open for acceptance until the Contract Agreement has been executed by both the Bidder and the Owner or until the Owner manifests that it does not intend to accept the Bid. Notice of acceptance of any one Bid shall not constitute rejection of any other Bid or a manifestation that Owner does not intend to accept any other Bid.

Any Bidder may modify its Bid by telegraphic or facsimile communication at any time prior to the scheduled closing time for receipt of Bids, provided that such telegraphic or facsimile communication is received by the Owner prior to such closing time and, further, provided that a written confirmation of the telegraphic or facsimile communication, over the signature of the Bidder, was postmarked prior to such closing time. Telegraphic or facsimile modifications shall not reveal the Bid price but shall provide the amount(s) to be added to, subtracted from, or other modifications necessary to be made to the prices or terms of the Bid, so that the final prices or terms will not be known to the Owner until the sealed Bid is opened. If the required written confirmation is not received by the Owner within **two (2) calendar days** (excluding Sundays or Legal Holidays) from the closing time, the Owner may, at its option, refuse to consider or give legal effect to such telegraphic or facsimile communication.

2.24 MORE THAN ONE BID

If more than one Bid is offered by any one Bidder in its own name or in the name of his agent, partner, or other person, then all but the lowest of such Bids will be rejected.

2.25 ALTERATION OF BIDS AND DOCUMENTS

No alteration, erasure, addition or omission of required information, or any change of the Contract Documents is permitted, except in accordance with the provisions of **Section 2.15** hereof entitled, **"Questions Regarding Contract Documents/Errors."**

2.26 RIGHT TO REJECT OR ACCEPT BIDS

The Owner reserves the right, which is understood and agreed to by all Bidders, to reject any or all Bids; to waive any informality, nonmaterial change or clarification in any part or provision of the submitted Contract Documents; or to accept any Bid, should the Owner determine that it is in its best interest to do so. The Owner's decision on the qualification of any Bidder or the adequacy, responsiveness, propriety or timeliness of the Bid and/or its decision to reject any or all Bids or to accept any Bid shall be final, binding and uncontestable as to the Bidder.

Any part of the Bid submitted by the Bidder which is unintelligible, or which exhibits any erasure or other manipulation, or is not properly signed or otherwise made up, will, at the discretion of the Owner, be considered nonresponsive and may be rejected for that reason alone.

The Owner may consider the qualifications and experience of subcontractors, suppliers, and other persons and organizations proposed for those portions of the Work as for which the identity of subcontractors, suppliers, and other persons and organizations is requested in the Contract Documents or made by the Bidder.

2.27 QUALIFICATIONS AND EXPERIENCE OF BIDDERS

Each Bidder must be regularly engaged in and demonstrate relevant experience in, the type of work specified herein and meet the experience requirements outlined in the specifications.. The Contractor shall supply a complete record of experience for the following:

- A. Foreman Qualifications – Foreman of the crew shall have relevant experience, and possess the necessary licensure as defined in the specifications.
- B. The Company performing the work must certify that it meets the experience requirements outlined in the Specifications for each type of Work required. **The Contractor shall submit a detailed record of experience to the Owner within ten days of the bid opening date.**



No award will be made to any Bidder who cannot warrant, and upon request cannot demonstrate, that it possesses the knowledge, experience, skill, capital, financial capacity, charters, licenses, permits, patents and personnel necessary to satisfactorily enable it to prosecute and complete the Work successfully and perform the Work within the Time For Completion as set forth in the Contract Provisions. The Owner's decision or judgment on these matters will be final, conclusive and binding. The Owner may make such investigations as it deems necessary and the Bidder shall furnish to the Owner, under oath if so required, all such information and data for this purpose as the Owner may request.

## 2.28 MINORITY AND WOMEN'S BUSINESS ENTERPRISE AND LABOR SURPLUS AREA POLICY

It is the policy of the Owner to award a fair share of contracts to minority and women's businesses. The goal of the Authority is that **10 to 25 percent** of all dollars relating to its contracts be awarded to minority or women's business enterprises. The Owner will make every effort to meet that goal in its contracts as well as encourage that goal among its contractors, suppliers and their subcontractors.

The Owner uses affirmative steps to assure that minority and women's businesses are used when possible as sources of supplies, equipment, construction, and services. The Owner encourages its contractors and suppliers to take the same measures when recruiting Subcontractors. Affirmative steps include the following:

- A. Including minority and women's businesses on solicitation lists and contacting them whenever they are potential sources.
- B. Use of area newspapers that serve minority or women's groups for advertising for contracts when work permits. A statement of this policy will be included in the ad text.
- C. Use of minority or women's business associations to contact businesses of this type. A list of these organizations is maintained at the Authority.
- D. Dividing total requirements when economically feasible into small tasks or quantities to permit maximum participation of minority and women's businesses.
- E. Establishing delivery schedules when the requirements of the Work permit that will allow these businesses to participate.
- F. Requiring each party to a sub-agreement to take the affirmative steps listed above.
- G. Procuring goods and services from labor surplus area firms.

Further information concerning this matter may be obtained from the Owner.

2.29 FICTITIOUS NAME REGISTRATION

Where the Bid is made by an individual or individuals doing business under a fictitious name, there shall be attached to the Bid, Certificates from the Office of the Secretary of the Commonwealth and from the Prothonotary's Office showing that each individual or individuals are fully registered under the Fictitious Names Act of the Commonwealth of Pennsylvania 1982, Dec. 16, P.L. 1309, No. 295 § 2, 54 Pa. C.S.A. § 301, et. seq. Additional Certificates, in as many copies as may be required shall be furnished to the Owner by the successful Bidder prior to the execution of the Contract.

2.30 NON-PENNSYLVANIA CORPORATIONS

Attention is directed to the fact that if the Bidder is a non-Pennsylvania corporation, it shall obtain a Certificate of Authority to do business in Pennsylvania, as required by the Pennsylvania Business Corporation Law of 1988, approved December 21, 1988, P.L. 1444, No. 177 § 103 amended, 1990, Dec. 19, P.L. 834, No. 198, § 102, 15 Pa. C.S.A. § 4121.

2.31 PRE-BID CONFERENCE

A Pre-Bid Conference will be held via a video conferencing call at **10:00 A.M. prevailing time, on Thursday, February 16, 2023.** Access will be made available to those who request access prior to the meeting and/or receive the bidding documents.

2.32 PATENTS AND PROPRIETARY RIGHTS

Prior to bidding, the Bidder shall acquire through assignment, purchase, license, or other means, all rights required to fully utilize all technology, know-how, trade secrets, inventions, processes, articles, procedures, equipment, apparatus, devices, or any part thereof, and any and all things or matters that are to be used in pursuance of its performance under the terms and conditions of this Contract. Under no circumstances may the Bidder infringe on any patent or any other proprietary rights of third parties in its performance under the terms and conditions of this Contract.

In the event that the Owner shall have any reason to believe that any Bid or performance of this Contract will in any way infringe on any patent or proprietary rights of third parties, the Owner may, at its sole discretion, reject any such Bid or take such other measures that it deems to be in its best interest (including requiring the Bidder to post security). The Bidder will defend, indemnify and save harmless Owner, and all persons acting for or on behalf of Owner, from all claims and liability of any nature or kind, including costs and expenses, arising from or occasioned by any infringement or alleged infringement of patent or proprietary rights on any technology, know-how, trade secret, invention, process, article, procedure, equipment, apparatus, device, or any part thereof, to be furnished, utilized or installed by said Bidder, or arising from or occasioned by the use or

manufacture thereof, including their use by the Owner. Patents and Proprietary Rights are discussed in more detail in the Contract Provisions.

2.33 MATERIALS

Submittals of a Bidder constitute a representation by the Bidder that all specified materials and equipment will be available in time for the timely completion of this Contract. The Awarded Bidder is responsible for making sure that the progress of the Work is orderly and timely. The Awarded Bidder's duties and responsibilities are discussed in more detail in the General Contract Conditions.

2.34 LIST OF MAJOR SUBCONTRACTORS/SUPPLIERS

The Bidder shall submit for approval a list of all subcontractors employed on the Work, whose work to be performed is anticipated to be in excess of **One Hundred Thousand Dollars (\$100,000.00)**, or **five percent (5%) of the Lump Sum Price**, whichever is greater, with a list of Work they are to perform. Bidders are advised that they must submit a complete list of subcontractors, as requested. Failure to provide this information will, at the Owner's election, make the Bid nonresponsive or constitute a breach of the awarded Contract. The Bidder is also cautioned that should the Contract be awarded to it, it must use the subcontractor named in its list of subcontractors for each of the items listed, unless otherwise directed in writing by the Owner.

2.35 NEW OR REMANUFACTURED EQUIPMENT

This section is intentionally omitted from this Contract.

2.36 ALCOSAN CONSENT DECREE

This section is intentionally omitted from this Contract.

2.37 SAFETY: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS

IN THE EXECUTION OF THIS CONTRACT, ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH FEDERAL OCCUPATIONAL SAFETY AND HEALTH STANDARDS AS SET FORTH BY THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (PL 91-596) AND UNDER SECTION 107 OF THE CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (PL 91-54).

The Authority will not be liable for any citations received by the Contractor from OSHA. It is the sole responsibility of the Contractor to comply with OSHA Standards.

2.38 CONFINED SPACE ENTRY REQUIREMENTS

Any work within existing manholes, diversion structures, and access shafts will be classified as “Confined Space” and will require complete compliance with current OSHA and ALCOSAN Standards.

2.39 ACCESS TO WORK AREAS

The Contractor is responsible for obtaining all necessary permits and the corresponding fees needed for the Work and the transporting of any equipment or material over private property and public streets. It is further the Contractor’s responsibility to obtain the necessary permits and/or permission from the various municipalities, Commonwealth of Pennsylvania, and/or owners of private properties. The cost of construction or improvement of any access route to the project site(s) shall be the responsibility of the Contractor.

At the conclusion of the Work, at the Contractor’s expense, the Contractor shall restore all access routes and all other areas disturbed due to the Work, to their original state prior to the Work.

2.40 SPECIAL NOTICE REGARDING MAINTENANCE AND PROTECTION OF TRAFFIC

Streets shall not be unnecessarily obstructed, and the Contractor shall take such measures as may be necessary to keep the street or road open and safe for traffic. The Contractor shall be responsible for obtaining all necessary permits and the fees associated with these permits.

2.41 COMPLIANCE WITH LAWS

The Contractor shall comply with the regulations of all regulatory agencies having jurisdiction including, but not limited to, EPA, PaDEP, OSHA regulations, US Army Corps of Engineers, US Coast Guard, ACHD, and the Allegheny County Soil Conservation District regulations. No bypassing of sewage, as a result of the Contractor’s operations, shall be allowed. Also, in order to perform the obligations, set forth in the Contract and the Work, the Contractor shall be responsible for becoming familiar with the obligations and requirements of the Consent Decree and shall perform the Work in a manner so as not to cause the Owner to fail to perform, violate, or untimely perform, any obligation or requirement of the Consent Decree. Also, from time to time, the Contractor may be requested to, and shall, provide the Owner with verifications and/or other documents which relate to the Work and which may be required by, and/or necessary for, the Consent Decree, and/or to attest to and/or verify the accuracy and/or completeness of the Work or documents or submittals provided in regard to the Work.

2.42 ACCESS TO MANHOLES AND STRUCTURES

Where access to the various manholes and structures must be cleared of heavy vegetation, the Contractor shall perform the clearing of pathways to facilitate mobilization of his equipment. Any vegetation or other debris cleared by the Contractor shall be removed and disposed of properly by the Contractor.

2.43 PROPERTY CLEANING

Immediately upon completion of any work, it shall be the Contractor's responsibility to clean the entire area of all debris. All debris is to be disposed of properly.

2.44 CONTRACTOR NOT TO OPERATE EXISTING VALVES AND/OR OTHER EXISTING SYSTEM APPURTENANCES

The Contractor shall schedule, maintain, and coordinate all activities and shall cooperate with the Owner's personnel so that a minimum of interruption results. The Contractor shall not operate existing system valves, sluice gates, controls, or other appurtenances at any time, but when the same is needed to facilitate and accommodate activities, he shall request such operation from the Owner. The Contractor shall provide the Owner with reasonable advance notice for such assistance.

2.45 SPECIAL NOTICE REGARDING WATER USE

All bidders' attention is drawn to the fact that the Contractor shall be responsible for all use and obtainment and payment for all permits and payments required for such use in order to acquire water for cleaning and construction purposes on this project. Owner makes no representations regarding the availability of source water or any other utilities required for this project.

2.46 PROJECT LABOR AGREEMENT AND LETTER OF ASSENT

A Project Labor Agreement, which includes a letter of Assent, is included herein.

The Bidder shall, when executing the Contract Agreement, acknowledge that it will abide by the Project Labor Agreement by signing and submitting a **Letter of Assent** in the format given in **Attachment A**.

The Contractor shall require each Subcontractor to execute a copy of the Letter of Assent. The Contractor must be sure that each Subcontractor has furnished an executed copy of the Letter of Assent to the CM before the Subcontractor starts work on the Project. The Contractor shall abide by and ensure that each Subcontractor abides by the terms of the Project Labor Agreement.

**February 22, 2023**

**CONTRACT NO. 1773A**

**SHERADEN PARK ECOSYSTEM MAINTENANCE**

**ADDENDUM NO. 1**

**ATTACHMENT B REVISED TECHNICAL SPECIFICATIONS – INVASIVE SPECIES  
MANAGEMENT**

## **ARTICLE 6 – TECHNICAL SPECIFICATIONS INVASIVE SPECIES MANAGEMENT**

### **1. GENERAL OVERVIEW**

The work in this contract includes invasive plant species control services for the Sheraden Park site. The site is a 22-acre meadow which contains a riparian channel, 18 shallow vernal pools, and various toad houses. The invasive species control efforts include removal, herbicide treatment, and supplemental seeding as required for the mitigation of four target plants.

### **2. SCOPE OF SERVICES**

There are four target invasive species for this project: Japanese Knotweed, Reed Canarygrass, Poison Hemlock, and Purple Loosestrife. This contract includes all equipment and materials required to complete the maintenance plan described in the contract specifications. This includes, but is not limited to, cutting, and removing the target plants, application of an approved herbicide, reseeding, and any required repetition thereof.

### **3. LOCATION, BOUNDARIES AND FEATURES**

The project site is entirely within the City of Pittsburgh. It is between Sheraden Park and the north and west banks of Chartiers Creek, and it is a total of 22 acres. The area includes 18 shallow vernal pools, the locations of which are noted in the map included in Appendix A. The map also defines the target areas for treatment where particular species are concentrated and where they are located in relation to other features, such as the vernal pools, and the site boundaries. Extreme care shall be taken to prevent herbicides from entering the vernal pools, and the Contractor shall utilize the same access and egress point to each location in order not to disturb the indigenous species.

### **4. SITE FAMILIARIZATION**

The Contractor shall fully inform themselves of the existing site conditions before submitting a bid and shall be responsible for carrying out all work required to properly execute the contract, regardless of the conditions encountered in the actual work. No claim for additional compensation or extension of time will be allowed on account of actual conditions inconsistent with those assumed.

### **5. ACCESS**

There is a vehicle access road on the North side of the Beitler Trucking, Inc. property, located at 3379 Stafford St, Pittsburgh, PA 15204.

No long-term staging operations shall occur within 50 feet of Duquesne Light power line pier foundations. Only hand work and hand tools shall be used within 5 feet of the pier foundations, regardless of the activity.

The Contractor shall coordinate with Beitler Trucking, Inc. and the relevant utility companies as required.

## **6. WORK HOURS**

Work for this contract shall be completed between the hours of 8:00 AM and 4:00 PM Monday through Friday. Access through the Beitler Trucking property will only be available during those hours. At least 48 hours advance notice must be given for requests to work outside of these hours or during holidays. The request must be approved prior to any work being completed during those hours.

## **7. EQUIPMENT AND METHODS**

The Contractor shall own and maintain all equipment necessary to perform invasive species management to the standards outlined in these specifications.

## **8. CARE AND PROTECTION OF PROPERTY**

The Contractor shall be responsible for the preservation of all public and private property and shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, the property shall be restored to a condition equal to that existing before the damage occurred, at the Contractor's expense.

## **9. SAFETY STANDARDS**

All work shall be done in a safe and professional manner, in compliance with the rules and regulations of the Division of Occupational Safety, and all other City, State and Federal agencies and authorities having jurisdiction of the types of work included in this Contract.

The Contractor will prepare and submit a Site-Specific Health and Safety Plan that shall be approved prior to beginning work. This will include all field personnel and contact information, emergency routes and maps to the nearest hospital, and Material Safety Data Sheets (MSDSs) for all relevant items to be used on site.

All label instructions and restrictions must be followed regarding the use, storage, transportation, and disposal of chemical products and containers. All required personal protective equipment (PPE) must be worn during herbicide exposure as noted in Section 13 Personnel and Staffing.

## **10. PROFESSIONAL STANDARDS**

A licensed herbicide applicator certified for aquatic work within the Commonwealth of Pennsylvania waters, which includes both standing water and saturated soils, is required to apply herbicides. The Applicator must have a current license with the appropriate category for the product being applied and shall keep said license onsite during all applications. The Contractor shall submit to the Construction Manager proof of certification of herbicide applicator license not scheduled to expire during the anticipated life of the project.



## **11. DURATION AND SCHEDULING**

The complete duration of this contract will include two (2) growing seasons: Spring through Fall 2023 and Spring through Fall 2024. These are indicated as Year 1 and Year 2 in the bid items and descriptions. The treatment efforts will be completed between April and October of each year.

## **12. SEASONAL LIMITATIONS**

Planting and seeding work shall only be completed in the designated spring (April 15 – June 15) or fall (September 15 – October 15) growing seasons. No work will be performed when the ground is saturated to field capacity, frosted or frozen. If the site is saturated at the time of herbicide application, a permit from the Pennsylvania Fish and Boat Commission will be required prior to any herbicide application.

## **13. PERSONNEL AND STAFFING**

Contractor shall employ only personnel familiar and competent with landscape maintenance and landscape installation work and who possess the required certifications noted in this Invasive Species Management Specification.

Contractor shall provide and guarantee usage of proper protective safety equipment for all activities throughout the duration of the work. This includes, but is not limited to, long sleeve shirts and long pants, boots with socks, chemical resistant gloves, protective eyewear, and chemical resistant aprons.

## **14. INVASIVE SPECIES MANAGEMENT**

### **14.1 Submittals**

The Contractor shall submit to the Construction Manager proof of certification of Foreman or Crew Leader as Pennsylvania Certified Landscape Professional, or Pennsylvania Certified Horticulturist and proof of their current valid Pennsylvania Herbicide Applicator's License not scheduled to expire during the anticipated life of the Project.

Prior to ordering materials, the Contractor shall submit to the Construction Manager certifications and manufacturer's product data for materials as specified below. No materials shall be ordered or delivered until the required submittals have been reviewed and approved by the Construction Manager. Delivered materials shall closely match the approved documentation. Approval shall not constitute final acceptance. The Construction Manager reserves the right to reject, on or after delivery, any material which does not meet these Specifications.

### **Herbicide**

Submit manufacturer's product data certifying that the herbicide being supplied conforms to these Specifications. Submit the purchasing receipt showing the total quantity purchased for the Project prior to commencement of management work. Submit empty bottles or containers of herbicide to the Construction Manager for verification of use.

### **Herbicide Application Devices**

Submit manufacturer's product data of system or submit the actual device if no manufacturer's product data is available.

#### **Dye**

Submit manufacturer's product data.

## **14.2 Products**

### **Herbicide**

Herbicide to be used for the control of invasive plants shall be a glyphosate-based product, such as Rodeo™ or approved equal, and devoid of any surfactant or spreading agents. Herbicide shall be applied at a minimum of 25% and maximum of 50% strength directly to cut stems or stumps of invasive plants.

#### **Dye**

A dye that the herbicide manufacturer deems compatible with the herbicide product chosen for use shall be mixed for application with the herbicide. The herbicide manufacturer shall certify that the dye product chosen will in no way inhibit the intended effect nor dilute the strength of the herbicide product. The dye shall be a red color. The dye shall remain visible for a minimum of one (1) month following application.

### **Herbicide Application Device**

Device shall be appropriate for cut-stem or cut-stump application, such as a "Weed Wand." It is recommended that application devices be designed specifically to directly apply herbicide to cut stems or stumps with minimal overflow onto the ground. References for direct stem herbicide application devices may be found in The Nature Conservancy's Weed Control Methods Handbook.

## **14.3 Herbicide Application Techniques**

Herbicide to be used for the control of invasive plants shall be a glyphosate-based product, such as Rodeo or approved equal, and devoid of any surfactant or spreading agents. Herbicide shall be applied at a minimum of 25% and maximum of 50% strength directly to cut stems of invasive plants, primarily woody plants. Herbicide shall contain a red dye that is compatible with and will not dilute the herbicide's strength. Dye shall be mixed with herbicide such that the dye is strong enough to be easily visible on stem or stump receiving the herbicide application. In conducting herbicide work, Foreman or Crew Leader and crew members shall follow all procedures and take all safety precautions required by Foreman's or Crew Leader's Herbicide Applicator's License.

An herbicide wand, wiper, sponge-tipped or equal hand-held cut stem or cut stump applicator is recommended to apply herbicide directly to cut stems or stumps. It is recommended that the herbicide be dabbed, squirted, wiped, and/or painted directly on the entire exposed

cambium (living inner tissue) of the stem or stump. Every attempt shall be made to use application methods and/or products which minimize overthrow or dripping of herbicide.

#### **14.4 Japanese Knotweed:**

The following procedure, or an approved equal, shall be used to control the Japanese knotweed population at Sheraden Park:

1. Cut the stands of Japanese knotweed the last week of May or first week of June to a height of 2 to 3 inches from the ground surface.
2. Allow cuttings to lay on site for 4 to 6 weeks to permit drying prior to removal and proper disposal. Control migration of cuttings into nearby waterways and vernal pools.
3. Let the plants regrow for at least eight weeks.
4. Immediately following eight weeks from initial cutting, apply glyphosate product to the regrowth in accordance with the manufacturer's recommendations for the product selected. Ensure application does not affect native vegetation. Chemical application shall be in conjunction with the procedure outlined in Section 14.3 Herbicide Application Technique.
5. In conjunction with initial chemical treatment (at eight weeks), the Contractor shall begin a second cycle of mechanical and chemical treatment for any new or remaining visible growth of Japanese knotweed. The timing and procedures shall generally follow those outlined in steps one through four of this section.
6. Following all seasonal mechanical and chemical treatments, Contractor shall remove all Japanese knotweed stems, leaves, and roots from the treatment area.
7. Overseed the area with a cover crop such as spring oats without disturbing native species. Seeding shall be in accordance with procedure outline in Section 15 Seeded Vegetation.

#### **14.5 Reed Canarygrass:**

The following procedure, or an approved equal, shall be used to control the reed canarygrass population at Sheraden Park:

1. Cut the stands of reed canarygrass when plants are beginning to flower during the last week of May or first week of June, to a height of 2 to 3 inches from the ground surface.
2. Let the plants regrow for at least 8 weeks.
3. Immediately following eight weeks from initial cutting, apply glyphosate product to the regrowth in accordance with the manufacturer's recommendations for the product selected. Ensure application does not affect native vegetation. Chemical application shall be in conjunction with the procedure outlined in Section 14.3 Herbicide Application Technique.
4. In conjunction with initial chemical treatment (at eight weeks), the Contractor shall begin a second cycle of mechanical and chemical treatment for any new or remaining

visible growth of Reed Canarygrass. The timing and procedures shall generally follow those outlined in steps one through four of this section.

5. Overseed the area with a cover crop such as spring oats without disturbing native species. Seeding shall be in accordance with procedure outline in Section 15 Seeded Vegetation.

#### **14.6 Poison Hemlock:**

The following procedure, or an approved equal, shall be used to control the poison hemlock population at Sheraden Park:

1. Cut the stand of poison hemlock, when plants are beginning to flower during the last week of May or first week of June, to a height of two to three inches from the ground surface.
2. Let the plants regrow for at least eight weeks.
3. Immediately following eight weeks from initial cutting, apply glyphosate product to the regrowth in accordance with the manufacturer's recommendations for the product selected. Ensure application does not affect native vegetation. Chemical application shall be in conjunction with the procedure outlined in Section 14.3 Herbicide Application Technique.
4. In conjunction with initial chemical treatment (at eight weeks), the Contractor shall begin a second cycle of mechanical and chemical treatment for any new or remaining visible growth of Poison Hemlock. The timing and procedures shall generally follow those outlined in steps one through four of this section.
5. Overseed the area with a cover crop such as spring oats without disturbing native species. Seeding shall be in accordance with procedure outline in Section 15 Seeded Vegetation.

#### **14.7 Purple Loosestrife:**

The following procedure, or an approved equal, shall be used to control the purple loosestrife population at Sheraden Park:

1. Contractor shall cut the flowering tops off the purple loosestrife during the months of June through September. Treatment of work areas shall occur at least in conjunction with Contractor mobilization to site for mechanical or chemical treatments of other invasive species included in this contract.
2. Cut the flowering tops of the loosestrife and bag this material for proper disposal.
3. Contractor shall use one of two alternate techniques for treating the deflowered purple loosestrife with a glyphosate product as soon as possible following the deflowering process:
  - a. Spray the target plants with the herbicide.
  - b. Use a two-layered glove, which is cotton on the outside with a chemical-resistant liner, to wipe the herbicide onto the target plants.

## **15. SEEDED VEGETATION**

### **15.1 Quality Assurance**

Qualification of Landscape Contractor: The work of this Section shall be performed by a landscape contracting firm which has successfully completed work of a similar quality, schedule requirement, and construction detailing. Proof of this experience shall be submitted prior to commencing work. Qualification of Foreman or Crew Leader: All work of seeding shall be supervised by a foreman or crew leader who is a certified landscape professional. Landscape professional shall be a Pennsylvania Landscape & Nursery Association Certified Landscape Professional.

Deliver seed in original sealed containers, labeled with analysis of seed mixture, percentage of pure seed, year of production, net weight, date of packaging, location of packaging, and name of seed grower. Damaged Packages will not be accepted. Seed mixture shall be stored under cool and dry conditions so that the endophytic seed in the mixture can maintain a high level of endophytes.

The Construction Manager will inspect all work for Substantial Completion upon written request of the Contractor. The request shall be received at least ten calendar days before the anticipated date of inspection. Acceptance of material by the Construction Manager will be for general conformance to the Contract Documents. Upon completion and reinspection of all repairs and renewals necessary in the judgement of the Construction Manager, the Construction Manager will recommend to the Owner that the work of this Section be accepted.

Seeded areas will be accepted when all areas meet the requirements in Section 15.6 Acceptance.

### **15.2 Submittals**

Prior to the first day of the seeding season described in this Section, submit to the Construction Manager proof of certification of Foreman or Crew Leader as Pennsylvania Certified Landscape Professional or Pennsylvania Certified Horticulturist in accordance with QUALITY ASSURANCE paragraph of this Section.

Submit proof of landscape contractor's experience to the Construction Manager in accordance with QUALITY ASSURANCE paragraph of this Section.

At least 30 days prior to intended use, the Contractor shall provide the following submittals for approval by Construction Manager. Do not order materials until Construction Manager approval of certifications has been obtained. Delivered materials shall closely match the approved documentation. Acceptance shall not constitute final acceptance. The Construction Manager reserves the right to reject on or after delivery any material that does not meet these Specifications.

### **Fertilizer**

Submit product literature of seeding fertilizer and certificates showing composition and analysis. Submit the purchasing receipt showing the total quantity purchased for the project prior to installation.

### **Seed**

Submit a manufacturer's Certificate of Compliance to the Specifications with each shipment of each type of seed. These certificates shall include the guaranteed percentages of purity, weed content and germination of the seed, and the net weight and date of shipment. No seed may be sown until the Contractor has submitted the certificates.

### **Erosion Control Matting**

Submit manufacturer's material descriptions and/or installation instructions

### **Hydroseeding**

Prior to the start of hydroseeding, submit a certified statement for approval as to the number of pounds of materials to be used per 100 gallons of water.

### **Wood Cellulose Fiber Mulch**

Prior to ordering submit a digital copy of manufacturer's literature.

### **Limestone**

Submit manufacturer's certificate certifying that the product meets the specified requirements.

## **15.3 Products**

### **Seed**

Seed mixture shall be fresh, clean, new crop seed. Seed shall be of the previous year's crop and in no case shall the weed seed content exceed 0.25% by weight. The seed shall be furnished and delivered in the proportion specified below in new, clean, sealed and properly labeled containers. All seed shall comply with State and Federal seed laws. Submit manufacturer's Certificates of Compliance. Seed that has become wet, moldy, or otherwise damaged shall not be acceptable.

Premixed seed mixtures should be obtained from a licensed distributor and/or seed mixing company located within Pennsylvania and be approved by the Construction Manager. The seed material to be planted should come from a local or regional source that has similar

environmental conditions to that of the site. Standard acceptable inoculant material may be necessary to treat seeded leguminous vegetation. Seed should be applied at the Site utilizing a hydroseeder. No binding agent or tackifier should be used in the slurry, as this would prevent the seed from falling onto the ground in a manner mimicking natural seed dispersal. Additionally, minimal mulch should be utilized in the slurry. The primary purpose of the mulch will be to act as a visual aid in delineating seeded areas.

Common Name	Scientific Name	Density
Oats*	<i>Avena Satvia</i>	64 lb/acre
Floodplain Mix**	--	30 lb/acre
Fox Sedge, PA Ecotype***	<i>Carex vulpinoidea</i>	--
Virginia Wild Rye, PA Ecotype***	<i>Elymus virginicus</i>	--
Big Bluestem, 'Niagra'***	<i>Andropogon gerardii</i>	--
Indiangrass, 'Prarie View', IN Ecotype***	<i>Sorghastrum nutans</i>	--
Blunt Broom Sedge, PA Ecotype***	<i>Carex scoparia</i>	--
New York Ironweed, PA Ecotype***	<i>Veronia noveboracensis</i>	--
Switchgrass, 'Shelter'***	<i>Panicum virgatum</i>	--
Fringed (Nodding) Sedge, PA Ecotype***	<i>Carex crinita</i>	--
Roughleaf Goldenrod, PA Ecotype***	<i>Solidago rugosa</i>	--
Common Sneezeweed***	<i>Helenium autumnale</i>	--
Purple Stemmed Aster, PA Ecotype***	<i>Aster puniceus</i> ( <i>Symphyotrichum puniceum</i> )	--
AWL Sedge, PA Ecotype***	<i>Carex stipata</i>	--
Boneset, PA Ecotype***	<i>Eupatorium perfoliatum</i>	--
Ox Eye Sunflower, PA Ecotype***	<i>Heliopsis helianthoides</i>	--
Purple Node Joe Pye Weed***	<i>Eutrochium purpureum</i>	--
Mud Plantain PA Ecotype***		--
Swamp Milkweed, PA Ecotype***	<i>Asclepias incarnata</i>	--
March (Dense) Blazing Star, Spiked Gayfeather PA Ecotype***	<i>Liatris spicata</i>	--

\* Utilize as necessary for temporary stabilization if invasive species residue does not provide sufficient soil cover.

\*\* Seed in areas where invasive species have been controlled.

\*\*\* Species included in floodplain mix.

### Wood Cellulose Fiber Mulch

Mulch to cover hydroseeded areas with slopes less than 3 to one shall be fiber processed from whole wood chips and clean recycled newsprint in a 1:1 proportion manufactured specifically for standard hydraulic mulching equipment. Fiber shall not be produced from recycled material such as sawdust, paper, or cardboard.

Moisture content shall not exceed 10 percent, plus or minus 3 percent as defined by the pulp and paper industry standards. Fiber shall have a water holding capacity of not less than 900 grams water per 100 grams fiber.

The mulch shall be of such character that the fiber will be dispersed into a uniform slurry when mixed with water. It shall be nontoxic to plant life or animal life.

The mulch shall contain a non-petroleum based organic tackifier and a green dye to allow for easy visual metering during application but shall be non-injurious to plant growth.

### **Straw Mulch**

Use class 'AA' straw as defined below. Fiber mulch products applied with a hydraulic seeder may be used in conjunction with straw. The use of clean straw with a low content of viable cereal grains and viable weed seed is an important component of successful seeding.

Class 'AA' straw shall be composed entirely of the air-dried stems and leaves of native grasses such as little bluestem, broomsedge, and other species which are compatible with the seeding sites. Class 'AA' straw may contain any amount of the viable seed of the native grass species from which it is derived. Class 'AA' straw shall be bright in color, and shall not be wet, musty, moldy, caked, decayed, or dusty. Straw shall be easily loosened when removed from the bale, and able to be uniformly spread by hand or with the use of a straw blower.

Class 'AA' used as mulch in seeding sites shall be free of seeds, rhizomes, or other viable parts of the following weeds:

Balloonvine	Canada Thistle	Johnsongrass & hybrids	Serrated Tussock
Bermudagrass	Curly Thistle	Musk Thistle	Sicklepod
Bindweed	Dodder	Phragmites	Spurred Anoda
Corn cockle	Giant Foxtail	Plumeless Thistle	Wild Garlic
Cocklebur	Horse Nettle	Quackgrass	Wild Onion

### **Seed Establishment Fence**

Netting shall be polypropylene goose fence netting, aperture size 1.0" x 0.75", 42-inch height, as manufactured by Pinelands Nursery and Supply, or approved equal. Hardwood stakes shall be southern yellow pine, full 1.5 inches by 1.5 inches width, by five (5) feet minimum length, free from knots or other defects that can cause splitting. Seed establishment fencing shall be secured to hardwood stakes with staples or plastic fasteners and shall run the perimeter of all new seeded areas.

### **Water**

The Contractor shall be responsible to furnish their own supply of water to the site. If possible, the Owner may furnish the Contractor upon request with a source and supply of water at no additional cost to the Contractor. However, if the Owner's water supply is not available or not functioning, the Contractor shall be responsible to furnish adequate supplies at their own cost. All work injured or damaged due to the lack of water, or the use of too



much water, shall be the Contractor's responsibility to correct. Water shall be free from impurities injurious to vegetation.

## **15.4 Execution**

### **Seeding Preparation**

Immediately prior to seeding all seedbeds shall be free of weeds. Prepare the weed-free seedbed with rototillers, disk harrows, or other soil preparation equipment and leave the soil with an irregular open surface. Bulldozers used to loosen the soil surface shall leave the surface with an open irregular surface, and with track ridges that run parallel to the slope. All rocks and other debris larger than 2.0 inches in diameter shall be removed from the soil surface. The site shall be leveled so that no irregularities greater than 2 inches above or below grade per linear foot are present. The soil at the time of seeding shall be firm, and the surface shall be loose and open, so that seeds may readily fall into soil spaces.

### **Seeding**

Seeding shall be done only in the windows outlined under Section 12. The actual planting of seed shall be done only during periods within this season which are normal for such work as determined by weather conditions and by accepted practice in this locality. Stabilization using coir erosion control matting shall be performed immediately after seeding of areas with 3:1 slope or greater. Seed only when the bed is in a friable condition, not muddy or hard. Most species used in the seed mix are generally small and do not benefit from deep planting.

### **Hydroseeding**

Prior to the start of work, furnish a certified statement as to the number of pounds of materials to be used per 100 gallons of water. This statement shall also specify the number of square feet of hydroseeding that can be covered with the quantity of solution in the hydroseeder.

Hydroseed with wood cellulose fiber mulch at a rate of 46 pounds per 1,000 square feet or 2000 pounds per acre.

At no time shall the mobile tank or tank truck be allowed onto the prepared hydroseed beds. The hose shall be equipped with a nozzle of a proper design to ensure even distribution of the hydroseeding slurry over the area to be hydroseeded and shall be operated by a person thoroughly familiar with this type of seeding operation.

### **Hydroseeding Process**

Spread 100 percent of the required seed uniformly over the prepared loam bed so that the seed comes into direct contact with the soil. To mark the progress of the hydroseeding operation the Contractor may add 10 percent of the wood cellulose fiber mulch to the slurry.

A second separate application of wood cellulose fiber mulch immediately following the first step of hydroseeding noted above. Apply the wood cellulose fiber mulch at a rate of 2,000 pounds per acre.

### **15.5 Maintenance**

Maintenance shall begin immediately after any area is seeded and mulched. If seeding operations are completed too late in the fall for adequate germination and growth of grass and forbs, then maintenance shall continue into the following spring. Maintenance shall include reseeding, watering, weeding, remulching, and replacement of straw mulch and coir erosion control matting, as necessary. During the maintenance period, any decline in the condition of seeded areas shall require timely action to identify potential problems and to undertake corrective measures. Repetition of invasive species treatment required after the completion of seeding in Year 1 shall be addressed in the invasive species treatment work defined for Year 2.

### **15.6 Acceptance**

At the end of the maintenance period for each year, work performed in the defined target areas shall be evaluated by the Owner for compliance of the work with the Contract specifications and effectiveness of invasive species removal including: purple loosestrife, Japanese knotweed, reed canary grass, and poison hemlock.

Seeded areas shall have no bare spots greater than 6 inches in diameter over greater than 75 percent of the overall seeded area. At least 90 percent of the grass and forbs established shall be permanent grass and forb species. If seeded areas are deficient, the Contractor's responsibility for maintenance of all seeded areas shall be extended until deficiencies are corrected. Seeded areas to be corrected shall be prepared and reseeded in accordance with the requirements of this Section listed above.

Remove and dispose of the Seed Establishment Fence off-site only after acceptance during the final inspection by the Construction Manager.

**END OF SECTION**

**February 22, 2023**

**CONTRACT NO. 1773A**

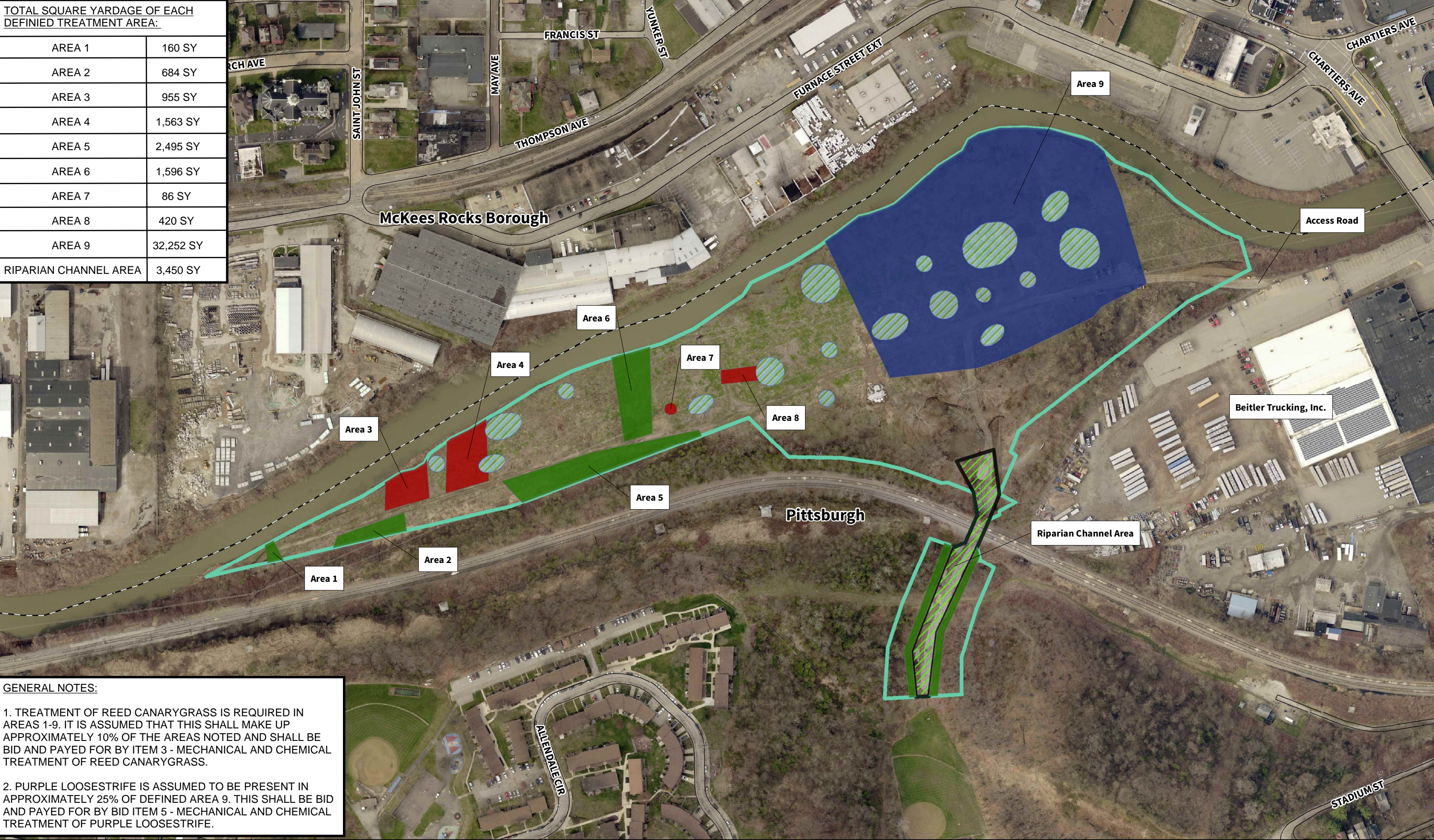
**SHERADEN PARK ECOSYSTEM MAINTENANCE**

**ADDENDUM NO. 1**

**ATTACHMENT C REVISED APPENDIX A – SHERADEN PARK ECOSYSTEM  
MAINTENANCE PROJECT AND INVASIVE SPECIES BOUNDARY MAP**



TOTAL SQUARE YARDAGE OF EACH DEFINED TREATMENT AREA:	
AREA 1	160 SY
AREA 2	684 SY
AREA 3	955 SY
AREA 4	1,563 SY
AREA 5	2,495 SY
AREA 6	1,596 SY
AREA 7	86 SY
AREA 8	420 SY
AREA 9	32,252 SY
RIPARIAN CHANNEL AREA	3,450 SY



**GENERAL NOTES:**

1. TREATMENT OF REED CANARYGRASS IS REQUIRED IN AREAS 1-9. IT IS ASSUMED THAT THIS SHALL MAKE UP APPROXIMATELY 10% OF THE AREAS NOTED AND SHALL BE BID AND PAYED FOR BY ITEM 3 - MECHANICAL AND CHEMICAL TREATMENT OF REED CANARYGRASS.

2. PURPLE LOOSESTRIFE IS ASSUMED TO BE PRESENT IN APPROXIMATELY 25% OF DEFINED AREA 9. THIS SHALL BE BID AND PAYED FOR BY BID ITEM 5 - MECHANICAL AND CHEMICAL TREATMENT OF PURPLE LOOSESTRIFE.

**Sheraden Park Ecosystem Maintenance**  
Project and Invasive Species Boundary Map

Japanese Knotweed	Constructed Vernal Pools	Street EOP
Poison Hemlock	Aquatic Habitat Restoration Area	Municipal Boundary
Purple Loosestrife		
Riparian Channel Area		

**Figure 1**  
11/2/2022

1 inch = 200 feet



**February 22, 2023**

**CONTRACT NO. 1773A**

**SHERADEN PARK ECOSYSTEM MAINTENANCE**

**ADDENDUM NO. 1**

**ATTACHMENT D NEW APPENDIX B – OPERATIONS AND MAINTENANCE  
MANUAL**



**US Army Corps  
of Engineers**  
Pittsburgh District

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## Sheraden Park Aquatic Ecosystem Restoration

Sheraden Park  
Allegheny County  
Pittsburgh, Pennsylvania



## Operations and Maintenance Manual

March 2020

Revised: May 2020

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# **O&M Manual**

## **Sheraden Park**

### **Section 206 Ecosystem Restoration Project**

### **City of Pittsburgh, Allegheny County, Pennsylvania**

#### **1. General**

This project included stripping, excavation, hauling, disposal and grading 500-ft of an existing riparian ravine. Components of the riparian ravine include a 10-ft wide gravel access road, riprap-lined channel and installation of one (1) riprap rock dam and three (3) riprap check dams with side armoring. In addition to the ravine, the project includes the installation of 18 shallow vernal pools and multiple toad houses to increase aquatic habitat, planting of native vegetative species, and removal of non-native species by clearing and herbicide application. This project is located entirely within the City of Pittsburgh. Allegheny County Sanitation Authority (ALCOSAN) is the non-federal sponsor for this project.

#### **2. Authorization**

Authorizing Legislation: Section 206, WRDA 1996, Continuing Authorities Program (CAP) Section 206 of the Water Resources Development Act of 1996, as amended, provides authority for the Secretary of the Army to carry out an aquatic ecosystem restoration, and protection project. Such projects will usually include manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. A project is adopted for construction only after a detailed investigation determines that the project will improve the quality of the environment and is in the best interest of the public, and clearly shows the engineering feasibility and environmental justification for the improvement. The federal share of the costs for any one project cannot exceed \$5 million. The Federal limitation includes all project-related costs for feasibility studies, planning, engineering, construction, and supervision and administration.

#### **3. Location**

The project is located entirely within the City of Pittsburgh, Allegheny County, Pennsylvania. It lies between Sheraden Park and the west and north sides of Chartiers Creek.

#### **4. Pertinent Information**

The Sheraden Park project site contains a ravine and an active mixed forested/grassland floodplain adjacent to Chartiers Creek. An environmental baseline study was completed in 2007 and indicated the site had experienced considerable degradation in the form of hydrologic and



soil disturbance and invasive species establishment. The ravine was partially filled and the stream flow that originated within the ravine was confined to an underground sewer line. The combined sewer periodically overflowed into Chartiers Creek during high rainfall events. A Section 219 was implemented to separate the sewer line flow from the stream flow. Soil stability is low within the ravine due to degradation of the vegetation. Poor plant root structure impacts the soil structure and stability. The ravine and floodplain area contain numerous utility lines (overhead and underground). The installation of these utility lines also caused soil disturbance. The hydrologic and soil disturbances allowed invasive species to establish and spread throughout the site. The impact of invasive species, combined with the altered hydrology and soil, significantly degrades the native plant community and wetland habitat available to wetland dependent species (i.e., amphibians and reptiles) in the region.

In the Sheraden Park Aquatic Ecosystem Restoration Detailed Project Report & Environmental Assessment dated May 2009, the following problems were identified:

- a) Degradation of ecosystem functions by way of an unmanaged or untreated stormwater runoff entering the erodible ravine
- b) Disruption of hydrology and habitat quality of the floodplain forest through the introduction of polluted stormwater runoff and sediment from erosion events originating in the ravine
- c) Dominance of non-native plant communities
- d) Low wildlife suitability

## 5. Construction History

- a) The project was designed by the U.S. Army Corps of Engineers, Pittsburgh District with assistance from Rhēa Engineers & Consultants, Inc. Design considerations and investigations are presented in Sheraden Park Section 206 Aquatic Ecosystem Restoration Project, Design Documentation Report, dated July 2015. One contract was awarded for this project to A. Merante Contracting, Inc.. Construction began on March 1<sup>st</sup>, 2017 and was completed on November 14<sup>th</sup>, 2018.
- b) Six specific objectives were identified to remedy the problems:
  - 1. Decrease erosion of the future stormwater runoff
  - 2. Improve the quality of water flowing into the adjacent floodplain mosaic from the ravine
  - 3. Reduce unnatural sediment transport into the aquatic system
  - 4. Reduce the presence of non-native and invasive plant species
  - 5. Increase the quality and acreage of native plant communities within the ravine and floodplain mosaic
  - 6. Restore the quality of habitat for wetland-dependent species
- c) Project features  
This project contains three (3) important features:
  - 1. A 500-ft graded riparian channel with three (3) check dams, a rock dam, and an access road running parallel along the length of the channel
  - 2. 18 Vernal pools with multiple toad houses

3. Invasive species removal and native plantings
- d) A complete set of as-built drawing plans, with details and specifications, are included in Appendix A.

## 6. Project Performance

The benefits of the project features are as follows:

- a) The 500-ft graded riparian channel with check dams will allow discharge from the storm sewer to flow to the floodplain with minimal erosion to the existing channel.
- b) The 18 vernal pools with multiple toad houses provide adequate habitats for wetland dependent species. Naturally, vernal pools are dry for most of the hydrologic year. The pools begin to fill in late fall, as soils become saturated with fall rains. They are then filled with water to near capacity with snowmelt in the late winter and early spring months. During the late spring and summer months, the amount of water in the vernal pools is highly dependent on precipitation and groundwater; this is important, as it allows for successful metamorphosis of certain larval amphibians. Vegetation is also very important for developing healthy vernal pools. Proper vegetation provides shelter for amphibians and reptiles, and a place for many species to lay their eggs. Degradation of vegetation over the years renders the vernal pools ineffective in supplying the environment required for growth and propagation of the species depending on it for survival. Properly vegetated vernal pools also add to the overall aesthetics of the surrounding area, and give the pools a more natural appearance.
- c) The removal of invasive species and restoration of native plantings will improve the quality of the native flora and benefit the wildlife that depend on functional native plant communities.

## 7. Project Cooperation Agreement

The U.S. Army Corps of Engineers, Pittsburgh District and Allegheny County Sanitation Authority (ALCOSAN) have entered into a Project Cooperation Agreement (PCA) for this project on September 9, 2009 as required by Public Law (99-662). A copy of the duly executed PCA is included as Appendix B of the manual.

## 8. Operation

This project does not contain any features that require operation. All actions necessary for the safe and efficient functioning of the project can be found in Section 10, Maintenance and Inspection.

## 9. Emergency Operations

There is no Emergency Operation Plan for this project.

## 10. Maintenance and Inspection

The maintenance and inspection requirements for this project are broken down by project feature below. Coordination with utility companies shall need to be made when maintenance of the project may affect any of their project features, operations, or property.

- a) 500-ft riparian channel lined with three (3) check dams and a rock dam.
  - 1. The riparian channel, rock and check dams should be checked once every three (3) months and within 48 hours after every major storm event (>1 inch rainfall depth).
  - 2. If damages are found during these inspections, return all components to As-Built design. It is permissible, at the maintainer's discretion, to alter the profile of the rock and check dams to increase the 3-inch drop at the center of the channel (refer to section C on As-Built drawing G-514) to a depth capable of alleviating overflow during high water events from passing onto the adjacent access road. Any riprap replacements and additions shall be of the same size and type as specified on the drawings. It is recommended that the maintainer keep a stockpile of approved riprap material on site for replacement, as required.

- b) Invasive species removal and native species planting:

### General Considerations:

- 1. A Health and Safety Plan for the herbicide application, current specimen labels, and Material Safety Data Sheets (MSDS) must be obtained by the applicator prior to invasive species treatment. All label instructions and restrictions must be carefully followed regarding the use, storage, transportation, and disposal of chemical products and containers. Emergency procedures and additional precautions included in the MSDS must also be carefully followed.
- 2. A licensed herbicide applicator certified for aquatic work is required to apply herbicides to plants within the Commonwealth of Pennsylvania waters; this includes both standing water and saturated soils. If the site is saturated at the time of application, a permit from the Pennsylvania Fish and Boat Commission will be required prior to any herbicide application.
- 3. All federal and state regulations and requirements regarding the use of herbicides must be followed for this project.
- 4. All application instructions regarding wind speeds, temperature, and other environmental considerations must be followed pertaining to the glyphosate herbicide. Glyphosate is a broad-spectrum herbicide and care must be taken to prevent overspray affecting the growth of desirable plants in the area.
- 5. Personal Protective Equipment (PPE) must be worn by all applicators and other handlers, including mixers and loaders, during exposure to herbicides. Expected PPE for the herbicides proposed for the treatment of invasive species at Sheraden Park include:
  - i. Long sleeve shirts and long pants
  - ii. Boots with socks
  - iii. Chemical-resistant gloves

- iv. Protective eyewear
  - v. Chemical-resistant apron when mixing concentrate, loading, or cleaning spills
6. Any absorbent materials contaminated with herbicide concentrate must be discarded and Manufacturer's instructions for cleaning and maintenance of PPE must be followed. If no guidance is provided by the manufacturer, PPE should be washed separately from other laundry in hot water with detergent.
  7. Product specific user safety recommendations included on herbicide labels shall also be followed.
  8. Maintenance and inspection of invasive species shall have minimal impact on the vernal pools.
  9. The site should be monitored on a two year cycle. The timing of the monitoring should be conducted around June 1<sup>st</sup>. During this monitoring, any invasive species that are encountered at the site should be treated with a glyphosate product. A backpack sprayer can be utilized for this effort, since this will enable more selective targeting of the invasive population.
  10. Care shall be taken to protect the vernal pools and toad houses located in the project area. Invasive species removal shall be completed to reduce the impact on the native species and vernal pools in the area. Contractor shall utilize the same access and egress point to each location in order not to disturb the indigenous species.

Japanese Knotweed:

A combination of mechanical and chemical controls is recommended to control established populations of Japanese knotweed. Timing is critical in the control of Japanese Knotweed. The following procedure is recommended to control the Japanese knotweed population at Sheraden Park:

1. Cut the stand of Japanese knotweed, around June 1<sup>st</sup>, to a height of 2 to 3 inches from the ground surface.
2. Allow cuttings to lay on site for 4 to 6 weeks to permit drying prior to disposal at an approved landfill as described in the specifications. Control migration of cuttings into nearby waterways and vernal pools.
3. Let the plants regrow for at least eight weeks
4. Apply glyphosate product to the regrowth in accordance with the manufacturer's recommendations for the product selected. Ensure spraying does not affect native vegetation.
5. If the regrowth is apparent, reapply glyphosate to green tissue in early- to mid-September, prior to frost by repeating steps 1 through 4 above.
6. Reapply glyphosate product the following July.
7. If knotweed regrowth residue does not provide sufficient soil cover, overseed the area with a cover crop such as spring oats without disturbing native species.
8. Plant the treated area with specified native plantings in the fall (September 15 to October 15), or spring (April 15 to June 15).

9. Follow up the treatment with periodic monitoring to suppress the Japanese knotweed population, and spot treat as necessary.

Multiple treatments are proposed in order to weaken the rhizome system. Cutting in late spring depletes the energy stores of the rhizomes by forcing the plant to send up new shoots. The chemical treatment eight weeks later coincides with the time that the plant is transporting energy to the rhizomes. Applying a systemic herbicide at this time will further injure the rhizomes. The presence of Japanese knotweed may survive the first round of treatment and may necessitate a repeat of this process. Treatment over three growing seasons is highly recommended to control the population.

#### Reed Canarygrass:

A combination of mechanical and chemical controls is recommended to control established populations of reed canarygrass. Timing is critical in the control of reed canarygrass. The following procedure is recommended to control the reed canarygrass population at Sheraden Park:

1. Cut the stand of reed canarygrass when plants are beginning to flower (around June 1<sup>st</sup>), to a height of 2 to 3 inches from the ground surface.
2. Let the plants regrow for at least 8 weeks.
3. Apply glyphosate product to the regrowth in accordance with the manufacturer's recommendations for the product selected.
4. If the regrowth is apparent, re-treat green tissue in early- to mid- September, prior to frost, with glyphosate product by repeating steps 1 through 3 above.
5. Reapply glyphosate product the following July.
6. If reed canarygrass residue does not provide sufficient soil cover, overseed the area with a cover crop such as spring oats without disturbing native species.
7. Plant the treated area with specified native plantings in the fall (September 15 to October 15), or spring (April 15 to June 15).
8. Follow up the treatment with periodic monitoring to suppress the canarygrass population, and spot treat as necessary.

Multiple treatments are proposed in order to weaken the rhizome system. Cutting in late spring depletes the energy stores of the rhizomes by forcing the plant to send up new shoots. The chemical treatment eight weeks later coincides with the time that the plant is transporting energy to the rhizomes. Applying a systemic herbicide at this time will further injure the rhizomes. The reed canarygrass may survive the first round of treatment and may necessitate a repeat of this process. Treatment over three growing seasons is highly recommended to control the population.

#### Poison Hemlock:

Hand-removal of poison hemlock may be effective for small infestations, but may also encourage germination of seeds at the site. Immediate seeding of any bare or disturbed areas following removal of poison hemlock is recommended to provide competition to germinating hemlock seedlings. If hand-removal is used, gloves shall be worn when

handling or digging the plant, and hands washed thoroughly following exposure. Immediate reseeding of treated areas with a cover crop such as spring oats is also recommended.

A combination of mechanical and chemical controls is recommended to control established populations of poison hemlock. The following procedure to control the poison hemlock population is recommended for Sheraden Park:

1. Cut the stand of poison hemlock, when plants are beginning to flower (around June 1<sup>st</sup>), to a height of two to three inches from the ground surface.
2. Let the plants regrow for at least eight weeks.
3. Apply glyphosate product to the regrowth in accordance with the manufacturer's recommendations for the product selected.
4. If the regrowth is apparent, re-treat green tissue in early- to mid- September, prior to frost, with a glyphosate product by repeating steps 1 through 3 above.
5. Reapply glyphosate product the following July.
6. If the poison hemlock residue does not provide sufficient soil cover, overseed the area with a cover crop such as spring oats.
7. Plant the treated area with specified native plantings in the fall (September 15 to October 15), or spring (April 15 to June 15).
8. Follow up the treatment with periodic monitoring to suppress the poison hemlock population, and spot treat as necessary.

The presence of Poison Hemlock may survive the first round of treatment and may necessitate a repeat of this process. Treatment over three growing seasons is highly recommended to control the population.

#### Purple Loosestrife:

Due to its abundant seed stock and branching woody taproot, this plant can be very difficult to control; it may require several years of vigilant monitoring and treating. A few chemical treatment techniques can be considered for control of loosestrife populations, depending on the density of the populations that are present. One of these treatment techniques is to spray the targeted plant; however, overspray onto adjacent native plants may occur. Another technique is to apply the herbicide by hand to the target plants by using a two-layered glove (cotton outside, chemical-resistant inside) system. In this procedure, a licensed herbicide applicator would apply the herbicide to the absorbent outer glove and wipe it onto the target plant. Prior to treatment, the plant should be cut below the flowering head, and the flower heads disposed of in a plastic bag. This technique minimizes the chance for accidentally treating native plants with herbicide.

Although not specifically included as a targeted species, the following procedure may be followed to control the purple loosestrife population at Sheraden Park:

1. Allow the purple loosestrife to grow to the early flowering stage. This occurs in late June to early July in Pennsylvania.

2. Cut the flowering tops of the loosestrife, and bag this material for proper disposal. By removing the flowering heads, you begin to control the seed bank at the project site.
3. Spray or wipe the cut loosestrife plants with glyphosate product.
4. Plant the treated area with specified plantings in the spring (April 15 to June 15), or fall (September 15 to October 15) by
5. Repeat this process the following year;
6. Follow up treatment with periodic monitoring to suppress purple loosestrife population, and spot treat as necessary.

Multiple treatments are proposed in order to weaken the rhizome system. Cutting in late spring depletes the energy stores of the rhizomes by forcing the plant to send up new shoots. The chemical treatment eight weeks later coincides with the time that the plant is transporting energy to the rhizomes. Applying a systemic herbicide at this time will further injure the rhizomes. The presence of purple loosestrife may survive the first round of treatment and may necessitate a repeat of this process. Treatment over three growing seasons is highly recommended to control the population.

- c) Reestablishment of Native Species: Once required invasive species are removed, replant affected and non-vegetated areas with native species and apply mulch. Care shall be taken to not affect the vernal pools during reestablishment of native species.

Seeded Vegetation:

Premixed seed mixtures should be obtained from a licensed distributor/seed mixing company located within Pennsylvania. The seed material to be planted should come from a local or regional source that has similar environmental conditions to that of the site. Prior to commencement of seeding, the contractor will ensure that the seed mix to be applied conforms to the specifications described in the construction documents prepared for the project. Standard acceptable inoculant material may be necessary to treat seeded leguminous vegetation. Seed should be applied at the Site utilizing a hydroseeder following the methods described in the special provisions of the contract. No binding agent or tackifier should be used in the slurry, as this would prevent the seed from falling onto the ground in a manner mimicking natural seed dispersal. Additionally, minimal mulch should be utilized in the slurry. The primary purpose of the mulch will be to act as a visual aid in delineating seeded areas.

Planted Vegetation:

Prior to planting, the contractor will ensure that the material to be planted in the specified areas is of the proper species and size. Furthermore, the material to be planted should come from a local or regional source/nursery that has similar environmental conditions to that of the project site. Bundles of plants will be labeled with, at least, their common name and size. Plant material to be installed will be dormant and free from disease, insects, and mechanical injury. Bare-root material purchased for use on the site shall be dipped in a rooting medium prior to packaging and shipment. Bare-root material should be covered at all times with a wetted material such as burlap. Prior to planting, all



damaged roots should be removed. Immediately upon delivery, remove any binding material for plants that were bound for transportation. Plants that are not to be immediately planted can be stored temporarily on site in an appropriate location that protects the plants from excessive sun and wind conditions. Prior to installation, planting sites should be delineated to ensure planting in the proper locations. Plant pits should be excavated with tapered sides and a flat bottom that is large enough to accommodate all plant roots without crowding. An additional six (6) inches of width should be provided for the placement of loose backfill material. Gently tamp backfill material around the roots to fill voids and eliminate air pockets without damaging roots. Planting periods should occur when soil and climatic conditions are favorable. If planting periods should occur outside of favorable periods, when soil and climatic conditions are not favorable, then supplemental water should be furnished for each individual plant.

## **11. Surveillance**

Inspections should be kept on file for record and reviews.

## **12. Repair, Replacement, and Rehabilitation (RR&R)**

Repair is considered to entail those activities of a routine nature that maintain the project in a well-kept condition. Replacement covers those activities taken when a worn-out element or portion thereof is replaced. Rehabilitation refers to a set of activities as necessary to bring a deteriorated project back to its original condition. RR&R actions are to conform to the project as-built plans and specifications unless other arrangements are made with the district commander. These activities are the responsibility of the project sponsor.

## **13. Notification of Distress**

This project does not require any special emergency notification procedures. Standard 911/Emergency notification will be utilized in the event of any emergencies or natural disasters that effect the project.



## **APPENDIX A: As-Built Information**





US ARMY CORPS  
OF ENGINEERS  
PITTSBURGH DISTRICT

SOLICITATION NO. W911WN-16-B-8008  
CONTRACT NO. W911WN-16-C-8006

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SHERADEN PARK  
CITY OF PITTSBURGH  
ALLEGHENY COUNTY  
PENNSYLVANIA

# SECTION 206

## AQUATIC ECOSYSTEM RESTORATION PROJECT

### RIPARIAN CHANNEL CONSTRUCTION AND NEW PLANTINGS CONTRACT

SEPTEMBER 2016  
AS-AWARDED CERTIFIED FINAL

**AS-BUILT DRAWING**  
**CERTIFIED**



**AS-BUILT DRAWING**

SIGNATURES AFFIXED BELOW INDICATE OFFICIAL RECOMMENDATION AND APPROVAL OF ALL DRAWINGS LISTED ON THE INDEX SHEET.	
SUBMITTED BY:	
/s/ JAMES T. SHIBATA, P.E.	28 SEPT 2015
SECTION CHIEF	DATE
APPROVAL RECOMMENDED BY:	
/s/ STEPHEN R. STOLTZ, P.E.	29 SEPT 2015
BRANCH CHIEF	DATE
APPROVED BY:	
/s/ JEANINE HOEY, P.E.	29 SEPT 2015
CHIEF ENGINEERING AND CONSTRUCTION DIVISION	DATE

THIS PROJECT WAS DESIGNED BY THE PITTSBURGH DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS AND THE A/E FIRMS IDENTIFIED ON THIS SHEET. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF U.S. ARMY CORPS OF ENGINEERS INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152.

AS-AWARDED CERTIFIED FINAL

USACE HAS OVERLAID THE MARKINGS IN THIS AS-BUILT FOR CLARITY. NO MARKINGS HAVE BEEN EDITED FROM THE ORIGINAL SUBMISSION.

[illegible]



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- PROJECT LOCATION**  
(N.T.S.)

**AS-BUILT DRAWING**  
**CERTIFIED:**

- 44TS0BPST IP PWPIDme35185\046a 203 G-0002 don



AS-AWARDED CERTIFIED FINAL

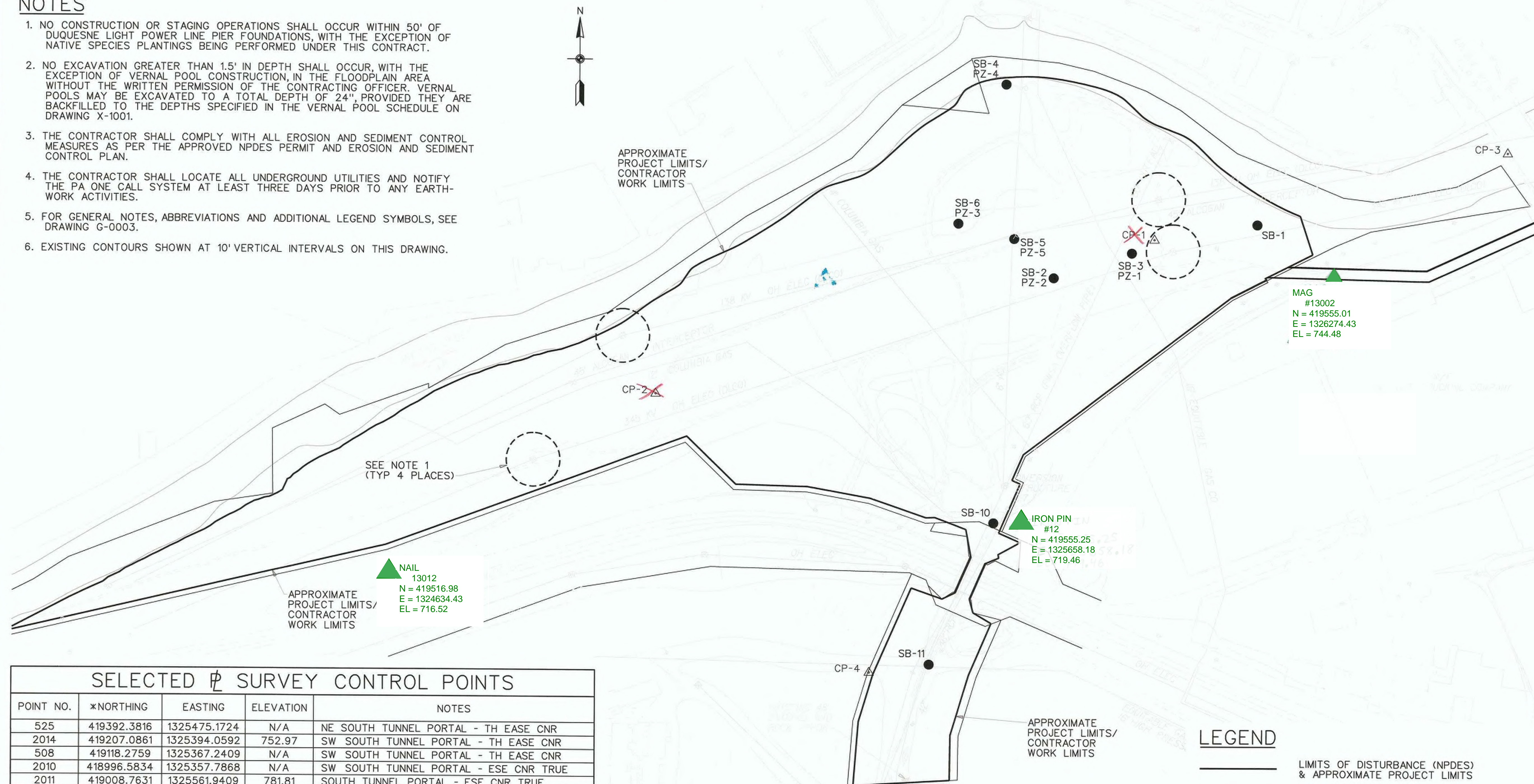
USACE HAS OVERLAID THE MARKINGS IN THIS AS-BUILT FOR CLARITY. NO MARKINGS HAVE BEEN EDITED FROM THE ORIGINAL SUBMISSION.



USACE HAS OVERLAID THE MARKINGS IN THIS AS-BUILT FOR CLARITY. NO MARKINGS HAVE BEEN EDITED FROM THE ORIGINAL SUBMISSION.



1. NO CONSTRUCTION OR STAGING OPERATIONS SHALL OCCUR WITHIN 50' OF DUQUESNE LIGHT POWER LINE PIER FOUNDATIONS, WITH THE EXCEPTION OF NATIVE SPECIES PLANTINGS BEING PERFORMED UNDER THIS CONTRACT.
2. NO EXCAVATION GREATER THAN 1.5' IN DEPTH SHALL OCCUR, WITH THE EXCEPTION OF VERNAL POOL CONSTRUCTION, IN THE FLOODPLAIN AREA WITHOUT THE WRITTEN PERMISSION OF THE CONTRACTING OFFICER. VERNAL POOLS MAY BE EXCAVATED TO A TOTAL DEPTH OF 24", PROVIDED THEY ARE BACKFILLED TO THE DEPTHS SPECIFIED IN THE VERNAL POOL SCHEDULE ON DRAWING X-1001.
3. THE CONTRACTOR SHALL COMPLY WITH ALL EROSION AND SEDIMENT CONTROL MEASURES AS PER THE APPROVED NPDES PERMIT AND EROSION AND SEDIMENT CONTROL PLAN.
4. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES AND NOTIFY THE PA ONE CALL SYSTEM AT LEAST THREE DAYS PRIOR TO ANY EARTH-WORK ACTIVITIES.
5. FOR GENERAL NOTES, ABBREVIATIONS AND ADDITIONAL LEGEND SYMBOLS, SEE DRAWING G-0003.
6. EXISTING CONTOURS SHOWN AT 10' VERTICAL INTERVALS ON THIS DRAWING.



SELECTED $\phi$ SURVEY CONTROL POINTS				
POINT NO.	*NORTHING	EASTING	ELEVATION	NOTES
525	419392.3816	1325475.1724	N/A	NE SOUTH TUNNEL PORTAL - TH EASE CNR
2014	419207.0861	1325394.0592	752.97	SW SOUTH TUNNEL PORTAL - TH EASE CNR
508	419118.2759	1325367.2409	N/A	SW SOUTH TUNNEL PORTAL - TH EASE CNR
2010	418996.5834	1325357.7868	N/A	SW SOUTH TUNNEL PORTAL - ESE CNR TRUE
2011	419008.7631	1325561.9409	781.81	SOUTH TUNNEL PORTAL - ESE CNR TRUE
2012	419089.9012	1325562.8603	774.06	SE SOUTH TUNNEL PORTAL - ESE CNR TRUE
2013	419199.4104	1325596.0093	758.33	SE SOUTH TUNNEL PORTAL - ESE CNR TRUE
526	419307.4426	1325642.3196	N/A	SE SOUTH TUNNEL PORTAL - ESE CNR TRUE
519	419295.4819	1325612.4164	N/A	SOUTH OF TUNNEL - CITY CORNER
518	419334.8737	1325520.5023	N/A	SOUTH OF TUNNEL - CITY CORNER
2002	419370.8589	1325506.1080	725.14	SE OF TUNNEL - TH ESE CNR
520	419313.8651	1325658.3756	N/A	E SOUTH TUNNEL PORTAL - CITY CORNER
428	419634.5321	1325052.7508	N/A	NW NORTH TUNNEL PORTAL - REBAR AT CNR
415	419547.2971	1325142.8354	N/A	NW NORTH TUNNEL PORTAL - POINT
414	419543.5963	1325279.6959	N/A	NW NORTH TUNNEL PORTAL - POINT
413	419522.8561	1325394.4672	N/A	NW NORTH TUNNEL PORTAL - POINT
412	419486.7365	1325499.7328	N/A	NW NORTH TUNNEL PORTAL - POINT
534	419487.4143	1325517.9957	N/A	NW NORTH TUNNEL PORTAL - TH ESE CNR
527	419472.0610	1325509.9290	N/A	NW NORTH TUNNEL PORTAL - TH ESE CNR
411	419490.4771	1325600.3922	N/A	NORTH TUNNEL PORTAL FACE - I.P.
2015	419478.4465	1325627.9726	N/A	NORTH TUNNEL (ROAD $\phi$ + BEITLER ESMT)
533	419456.4712	1325678.3515	N/A	NE NORTH TUNNEL PORTAL - REBAR
532	419396.4305	1325674.0828	N/A	E NORTH TUNNEL PORTAL - TH EASE CNR
296	419612.4854	1325685.9623	712.90	NORTH TUNNEL (ROAD $\phi$ + BEITLER ESMT)

\* NAD 83 STATE PLANE PA SOUTH, ELEVATION, NAVD 1988

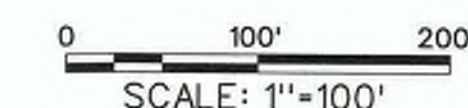
SCALE: 1" = 100'

<div style="display: flex; align-items: center;"> <h2 style="margin: 0;">SURVEY MONUMENT SCHEDULE</h2> </div>				
POINT NO.	*NORTHING	EASTING	ELEVATION	NOTES
<del>CP-1</del>	<del>420016.21729</del>	<del>1325924.08063</del>	<del>709.79</del>	<del>SKELLY + LOY POINT 1</del>
<del>CP-2</del>	<del>419725.25247</del>	<del>1324997.05076</del>	<del>712.20</del>	<del>SKELLY + LOY POINT 2</del>
CP-3	420180.1394	1326580.7202	732.68	RT. 51 DISK BRIDGE SIDEWALK
CP-4	419208.0134	1325396.4638	752.97	S&L + TERRASURV SHAKF PK

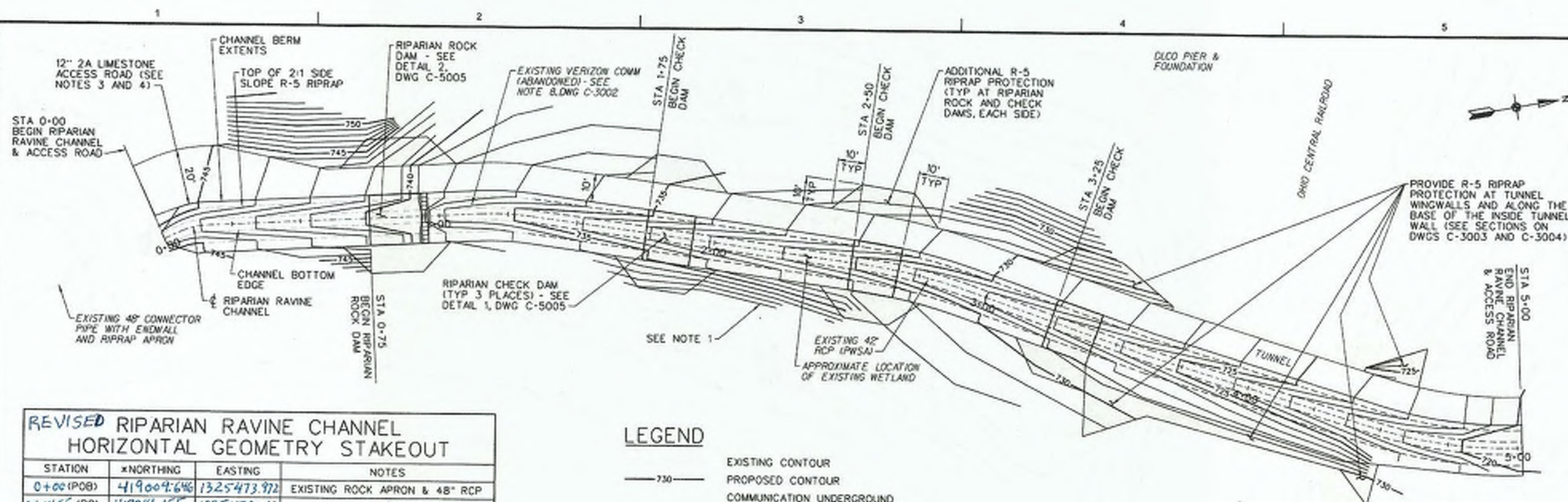
\* NAD 83 STATE PLANE PA SOUTH, ELEVATION, NAVD 1988

	LIMITS OF DISTURBANCE (NPDES) & APPROXIMATE PROJECT LIMITS
	PROPERTY LINE
	OVERHEAD ELECTRIC (DLC0)
	NATURAL GAS (OWNER AS NOTED)
	SANITARY SEWER (OWNER AS NOTED)
	COMMUNICATION UNDERGROUND (VERIZON)
	COMMUNICATION AERIAL (VERIZON)
	STORM CULVERT
● SB-6 PZ-3	APPROXIMATE SOIL BORING/ PIEZOMETER LOCATION
⊕	UTILITY POLE
⊗	ELECTRIC TOWER PIERS (DLC0)
△	SURVEY MONUMENT/CONTROL POINT

**AS-BUILT DRAWING  
CERTIFIED**

[illegible]





STATION	NORTHING	EASTING	NOTES
0+00 (POB)	419009.646	1325473.972	EXISTING ROCK APRON & 48\" RCP
0+04.55 (PC)	419014.155	1325473.363	RADIUS = 310.00'
0+05.25 (PT)	419094.134	1325462.508	D.C. (ARC) = 29° 11' 04\" R
1+02.45 (PT)	419109.224	1325492.143	LENGTH = 157.94 FT
2+40.78 (PC)	419242.104	1325520.848	RADIUS = 300.00'
2+44.10 (PT)	419265.658	1325530.185	D.C. (ARC) = 09° 38' 49\" R
2+48.29 (PT)	419287.324	1325543.218	LENGTH = 50.51 FT
3+43.56 (PC)	419332.057	1325570.250	RADIUS = 300.00'
3+48.28 (PT)	419361.777	1325588.210	D.C. (ARC) = 13° 12' 17\" L
4+12.70 (PT)	419394.812	1325598.805	LENGTH = 69.14 FT
5+00	419477.868	1325625.795	END OF CHANNEL

\* NAD 83 STATE PLANE PA SOUTH, ELEVATION, NAVD 1988

### LEGEND

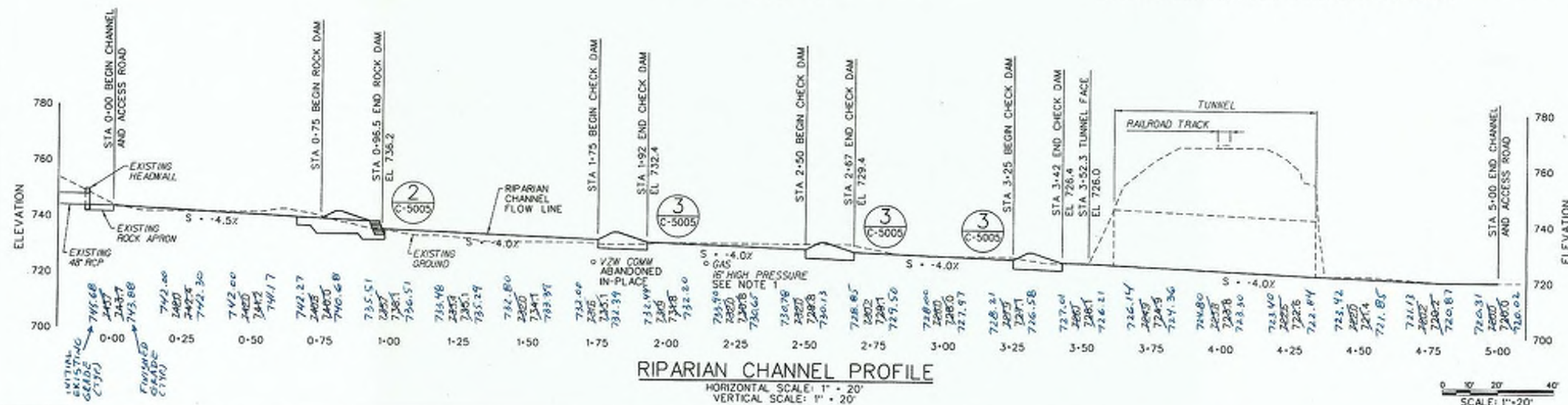
- 730 — EXISTING CONTOUR
- 730 — PROPOSED CONTOUR
- 730 — COMMUNICATION UNDERGROUND (EXISTING)
- 730 — COMMUNICATION UNDERGROUND (EXISTING, ABANDONED)
- 730 — SANITARY SEWER (EXISTING)
- 730 — SILT FENCE
- 730 — RIPARIAN CHANNEL ROCK/CHECK DAM AREA
- 730 — 12\" THICK 2A LIMESTONE ACCESS ROAD
- 730 — EROSION CONTROL BLANKET
- 730 — R-5 RIPRAP PROTECTED AREAS

### RIPARIAN CHANNEL PLAN

SCALE: 1\" = 20'

### NOTES:

- PRIOR TO WORK, THE CONTRACTOR SHALL CONTACT EQUITABLE GAS COMPANY. ANY DESIGNATED WORK WITHIN 25 FEET OF THE 18-INCH HIGH-PRESSURE GAS LINE NEAR THE RIPARIAN RAVINE WILL REQUIRE DAILY INSPECTION BY EQUITABLE GAS COMPANY PERSONNEL. ANY WORK CONDUCTED WITHIN 5 FEET OF THE PIPELINE WILL REQUIRE FULL-TIME INSPECTION AND MONITORING BY EQUITABLE GAS COMPANY PERSONNEL.
- FOR LOCATION AND COORDINATES OF SURVEY MONUMENTS AND PROPERTY LINES, SEE DRAWING C-1004.
- TRANSITION ACCESS ROADWAY FROM A 20-FOOT WIDTH AT STATION 0+30 TO A 10-FOOT WIDTH AT STATION 0+65. THE 20-FOOT WIDE AREA OF THE ROADWAY SHALL BE UTILIZED FOR MAINTENANCE VEHICLE TURN-AROUNDS.
- THE VERTICAL ALIGNMENT OF THE ACCESS ROADWAY SHALL FOLLOW THE TOP OF THE RIPARIAN RAVINE CHANNEL BANK TO WHICH IT IS ADJACENT.



### RIPARIAN CHANNEL PROFILE

HORIZONTAL SCALE: 1\" = 20'  
VERTICAL SCALE: 1\" = 20'

SCALE: 1\" = 20'

 U.S. ARMY CORPS OF ENGINEERS PITTSBURGH DISTRICT	
PROJECT: SHERADEN PARK - SECTION 206 ADJUTANT GENERAL'S OFFICE PROJECT: RIPARIAN CHANNEL RESTORATION PROJECT PROJECT: RIPARIAN CHANNEL CONSTRUCTION AND PROJECT: NEW PLANTINGS CONTRACT PROJECT: RIPARIAN CHANNEL PROJECT: PLAN AND PROFILE	DATE: 28 SEP 2016 DRAWN BY: J. SHERATA CHECKED BY: J. SHERATA PROJECT NO.: C-1001 SHEET NO.: C-1001
SHEET IDENTIFICATION NUMBER <b>C-1001</b>	

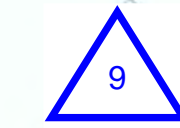
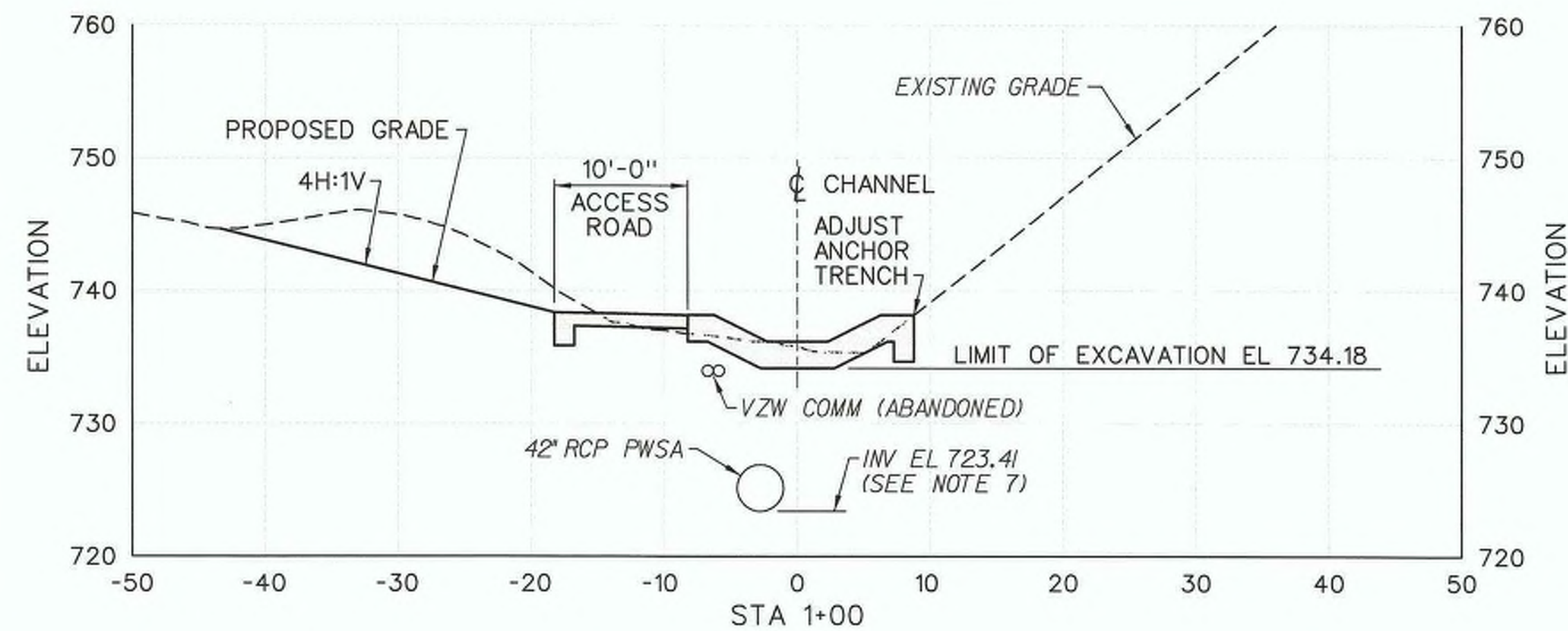
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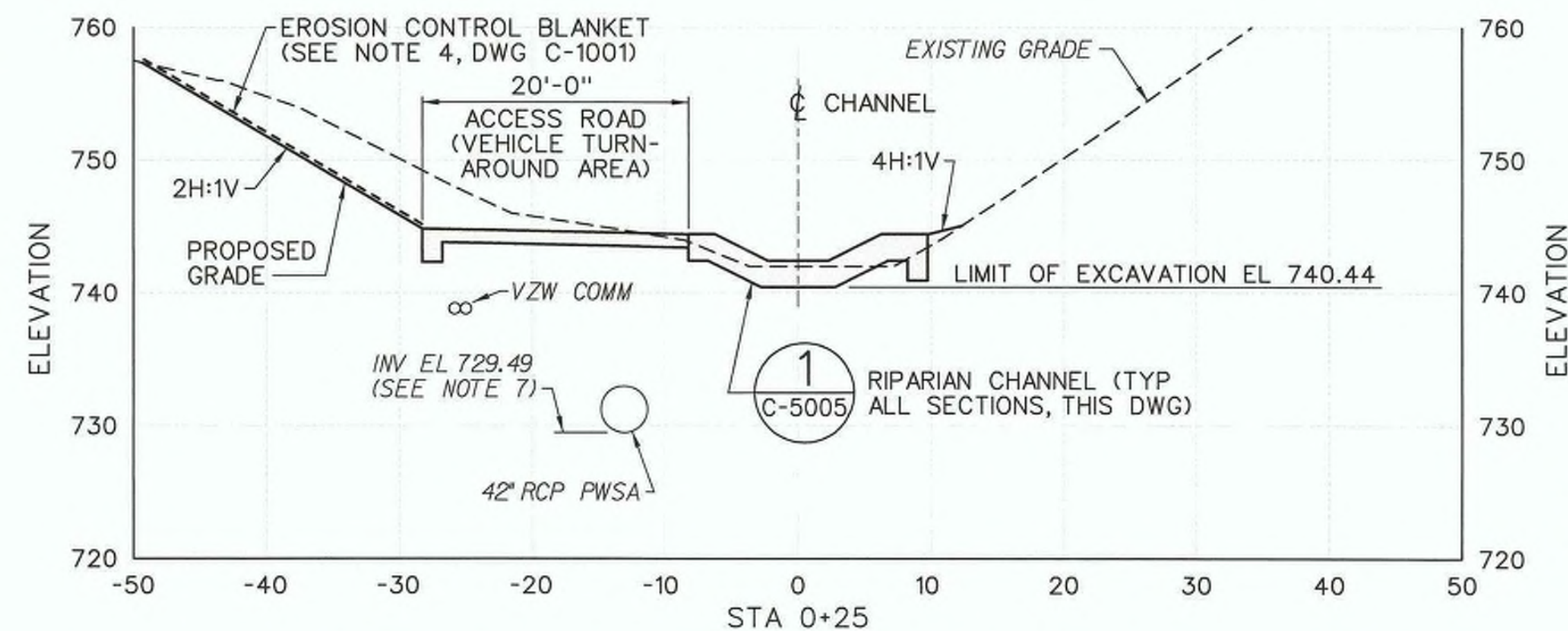
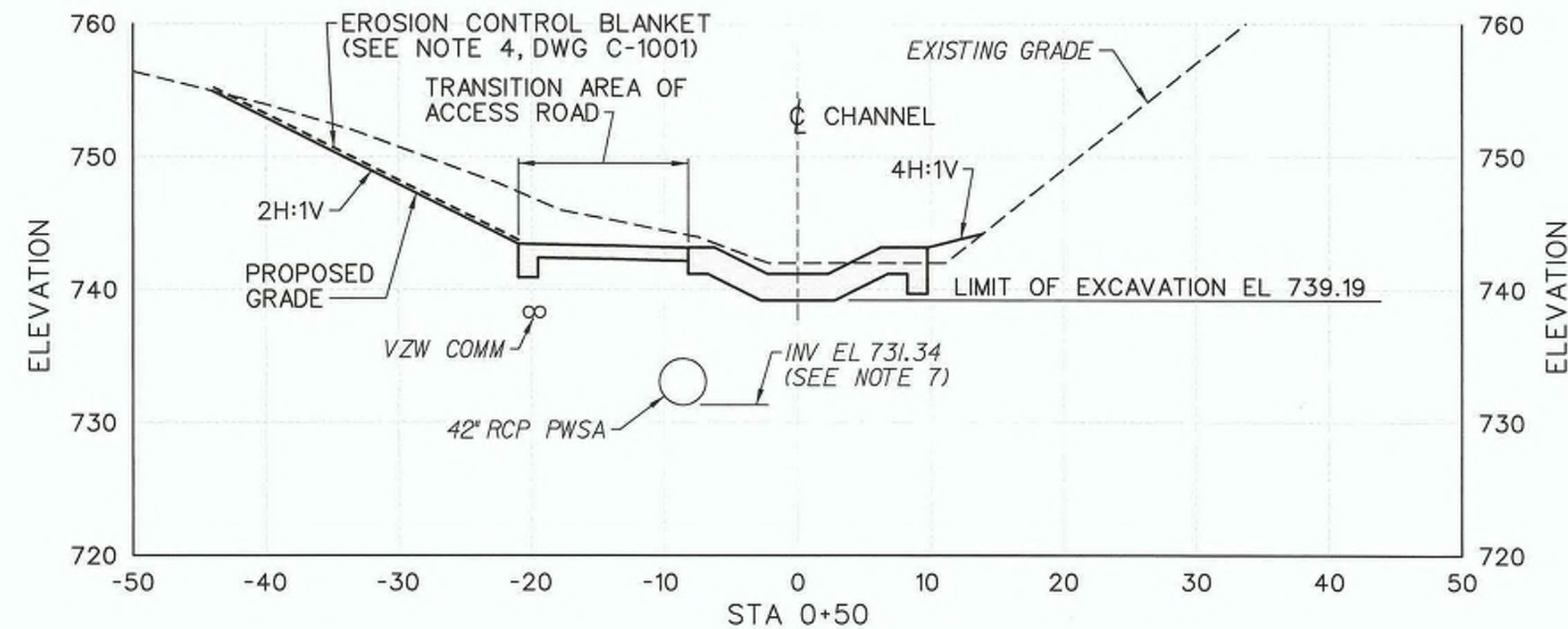
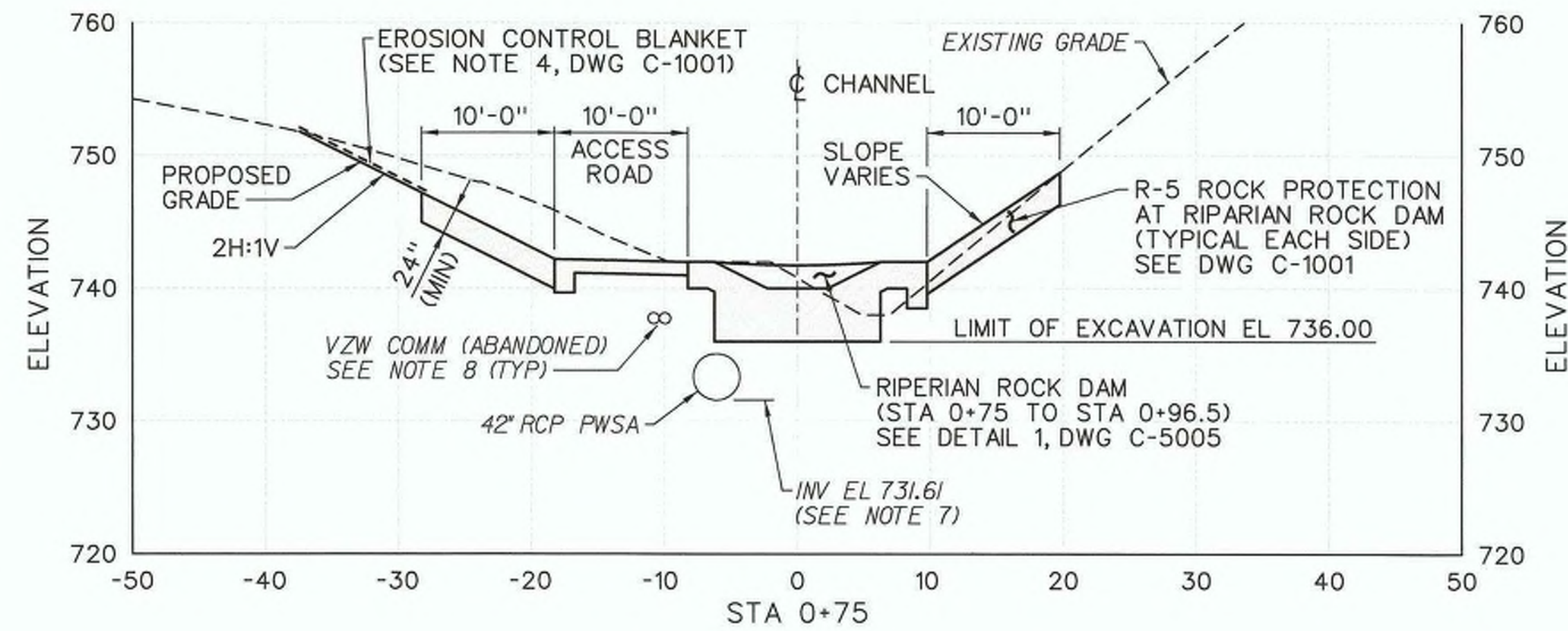




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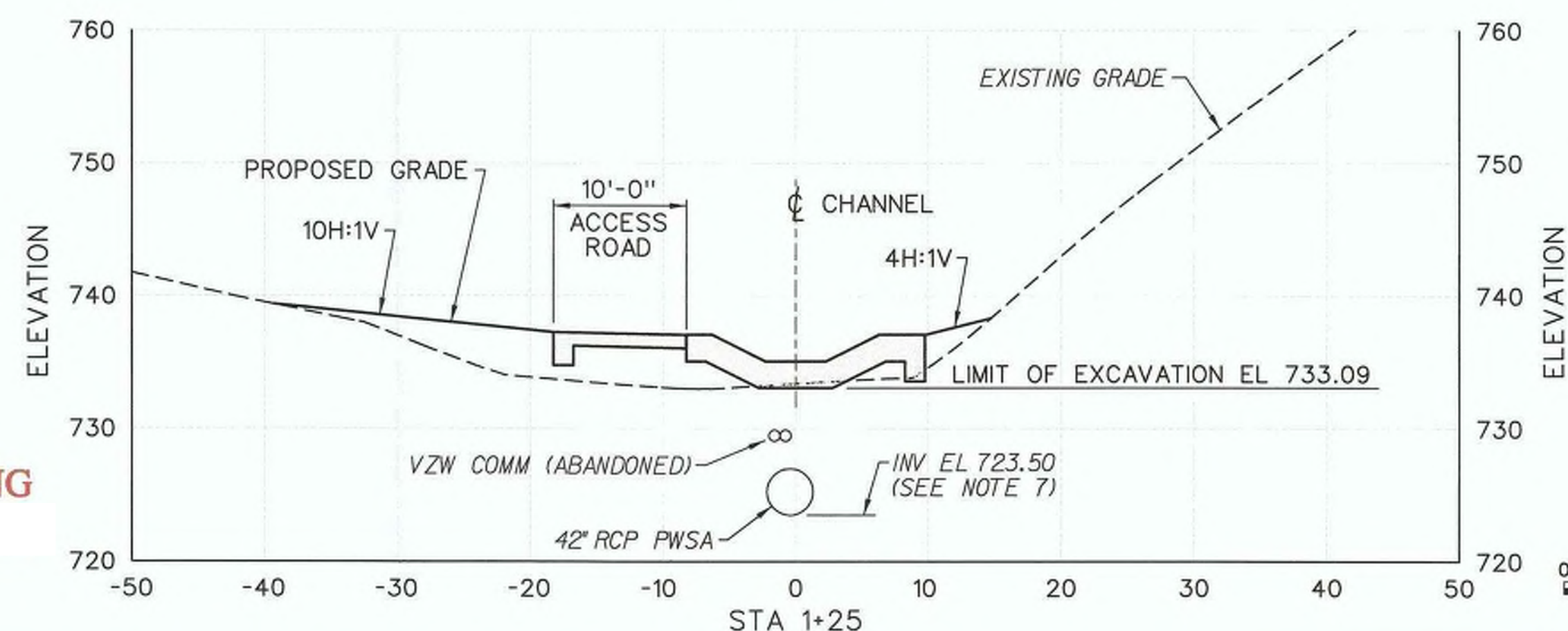
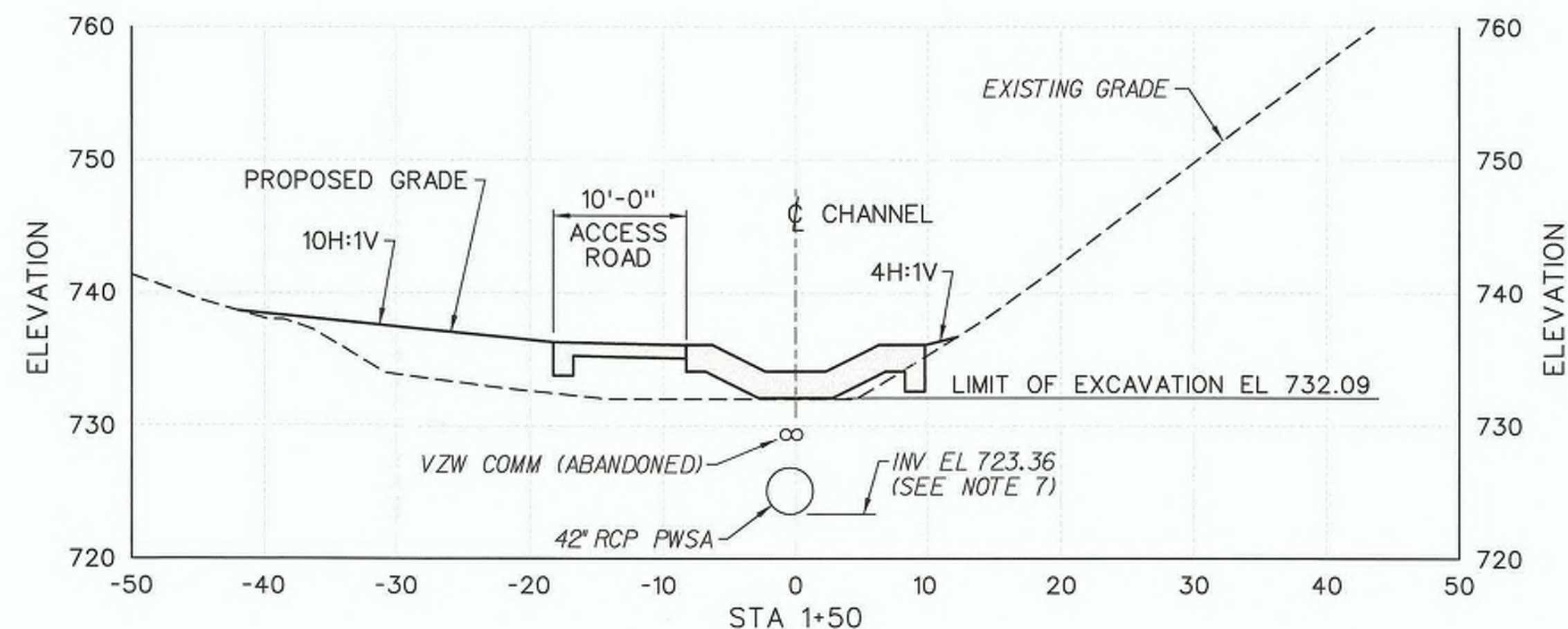
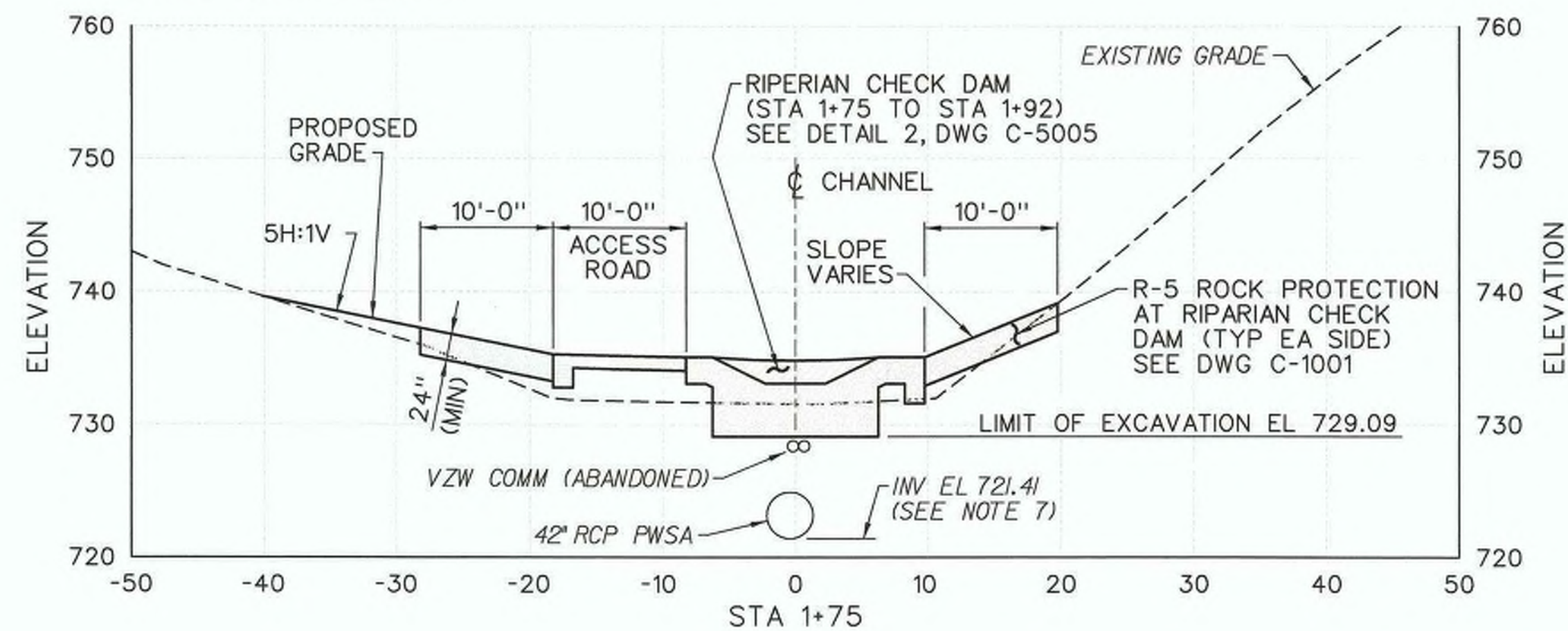
SEE ATTACHED SHEETS  
C-111, C-312, C-311 AT  
END FOR CENTERLINE AND  
ELEVATIONS



AS-BUILT DRAWING  
CERTIFIED

## NOTES

1. PRIOR TO WORK, THE CONTRACTOR SHALL CONTACT EQUITABLE GAS COMPANY. ANY DESIGNATED WORK WITHIN 25 FEET OF THE 16-INCH HIGH-PRESSURE GAS LINE NEAR THE RIPARIAN RAVINE REQUIRES DAILY INSPECTION BY EQUITABLE GAS COMPANY PERSONNEL. ANY WORK CONDUCTED WITHIN 5 FEET OF THE PIPELINE REQUIRES FULL-TIME INSPECTION AND MONITORING BY EQUITABLE GAS COMPANY PERSONNEL.
2. FOR RIPARIAN CHANNEL PLAN, SEE DWG C-1001.
3. FOR TYPICAL RIPARIAN CHANNEL SECTION AND RIPARIAN ROCK AND CHECK DAM DETAILS, SEE DWG C-5005.
4. LOCATION OF UTILITIES IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY UTILITY LOCATIONS.
5. EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR'S OPERATIONS AS SPECIFIED IN SECTION 0150 00.10, AND IN ACCORDANCE WITH DWG G-0002.
6. LIMIT OF EXCAVATION IS AT THE BOTTOM OF RIPRAP PLACEMENT.
7. THE INVERT ELEVATION OF THE 42" PWSA IS TO BE VERIFIED.
8. BEGINNING AT APPROX STA 0+60, THE EXISTING VZW COMM LINES HAVE BEEN ABANDONED (SEE DWG C-1001).
9. TEMPORARY SEED MIXTURE REQUIRED FOR ALL SLOPES.
10. WORK THIS DWG WITH DWGS C-3003 AND C-3004.
11. FOR CROSS-SECTIONS WHERE SIDE SLOPE CHANGES, CONTRACTOR SHALL TRANSITION SLOPE EVENLY OVER THE ENTIRE 25-FOOT LENGTH.



0 10' 20'  
SCALE: 1"=10'



US ARMY CORPS  
OF ENGINEERS  
PITTSBURGH DISTRICT

DESIGNED BY:  
B. GREGAN

DRAWN BY:  
B. GREGAN

CHECKED BY:  
P. GREGAN

DATE:  
28 SEP 2016

SOLICITATION NO.:  
W51N16-8-8-5008

CONTRACT NO.:  
W51N16-8-8-5008

FILE NAME:  
046c\_886\_C-3002.dgn

FILE NUMBER:  
046c\_886\_C-3002.dgn

DATE:  
22-SEP-2016 13:22

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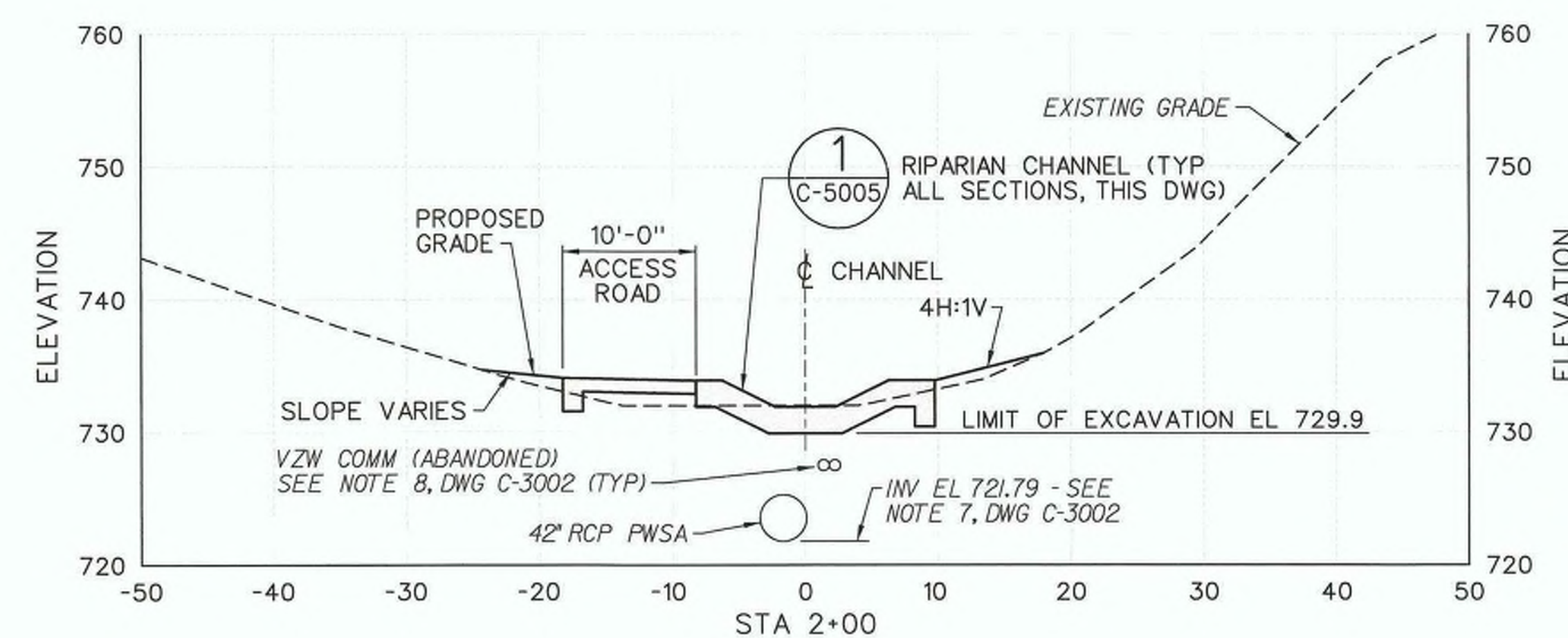
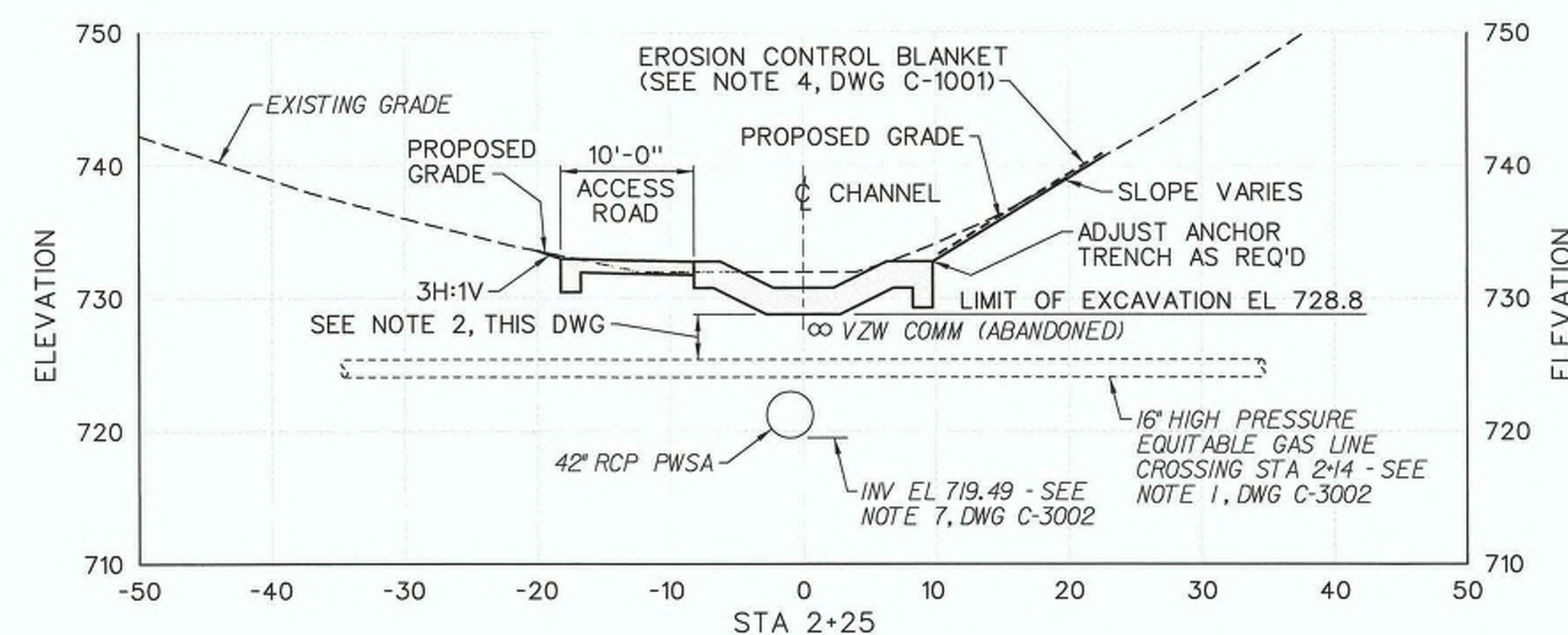
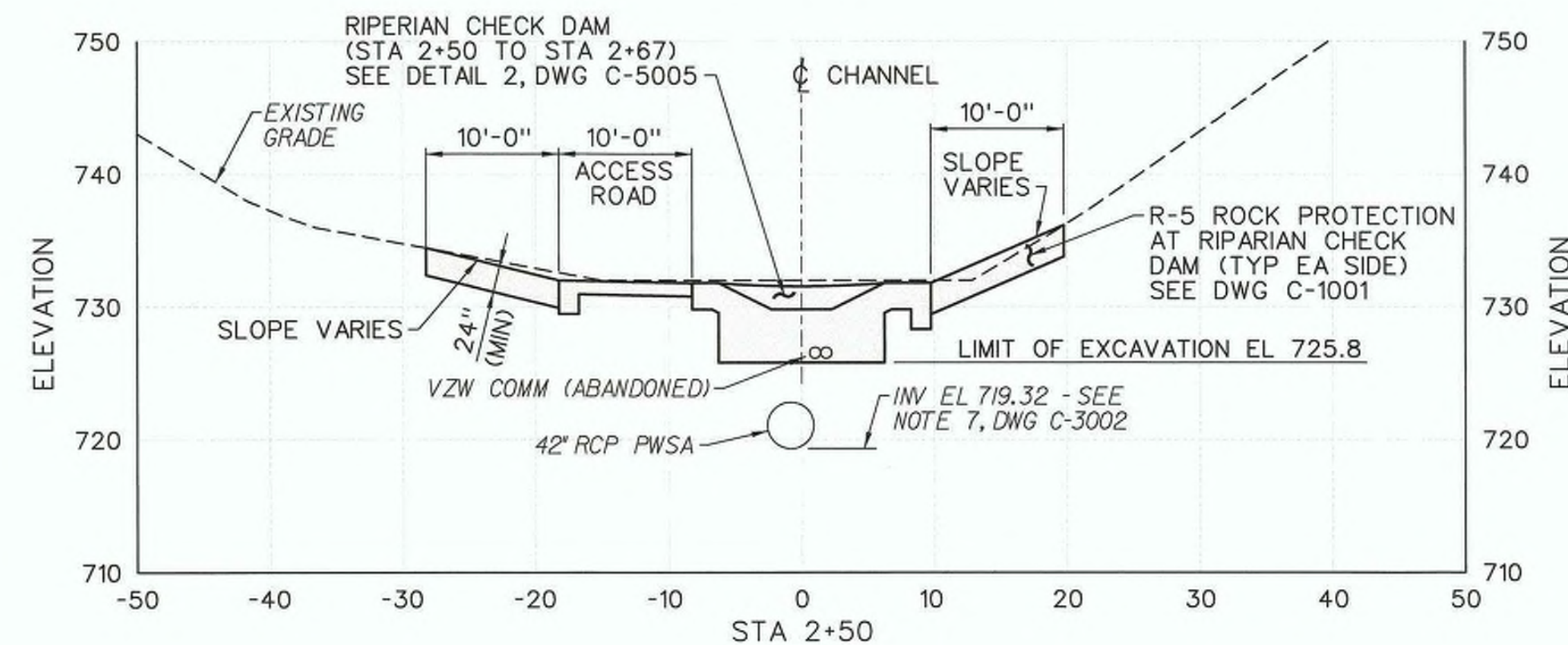
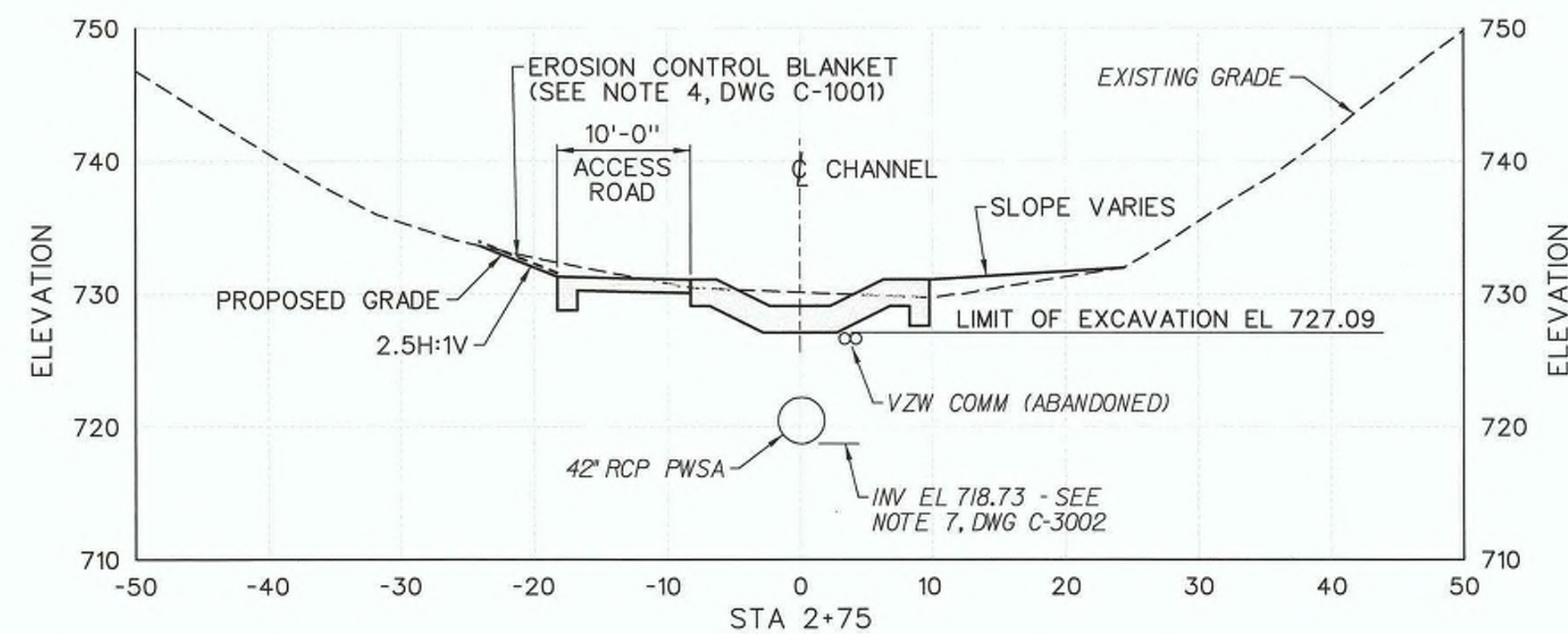
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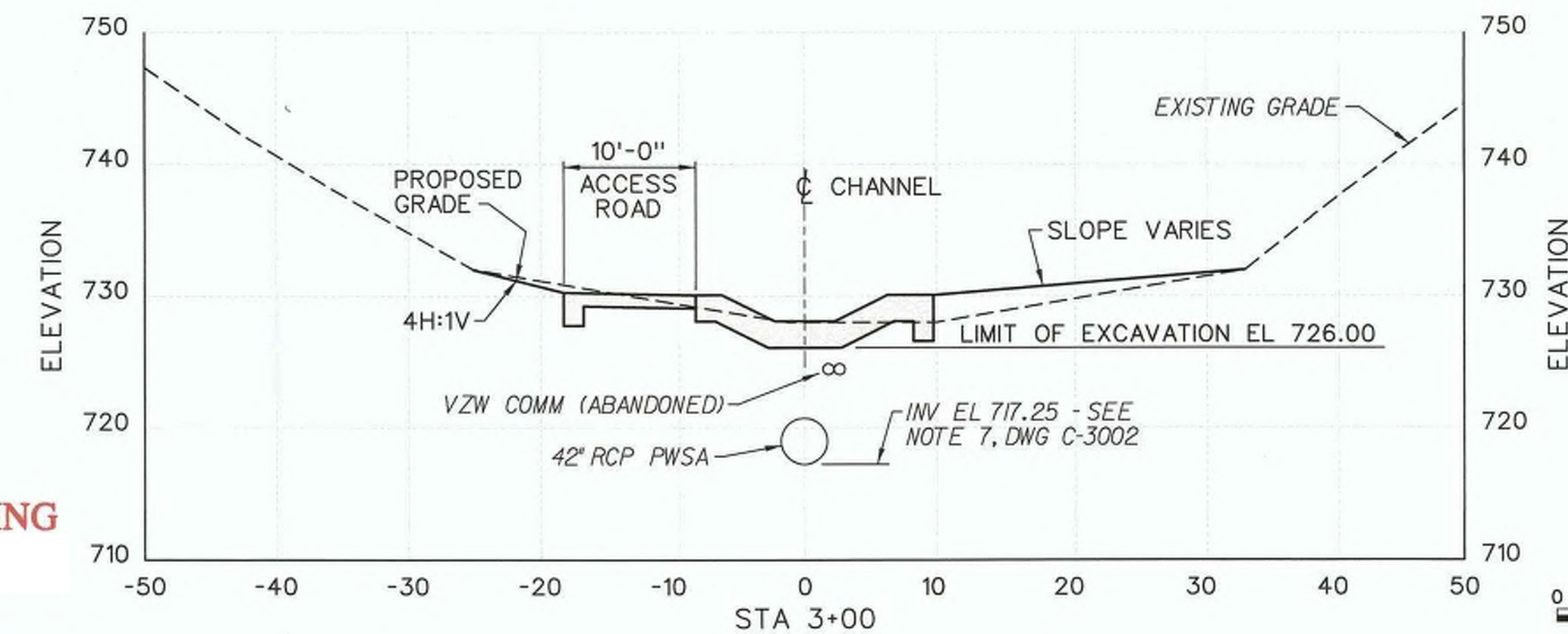
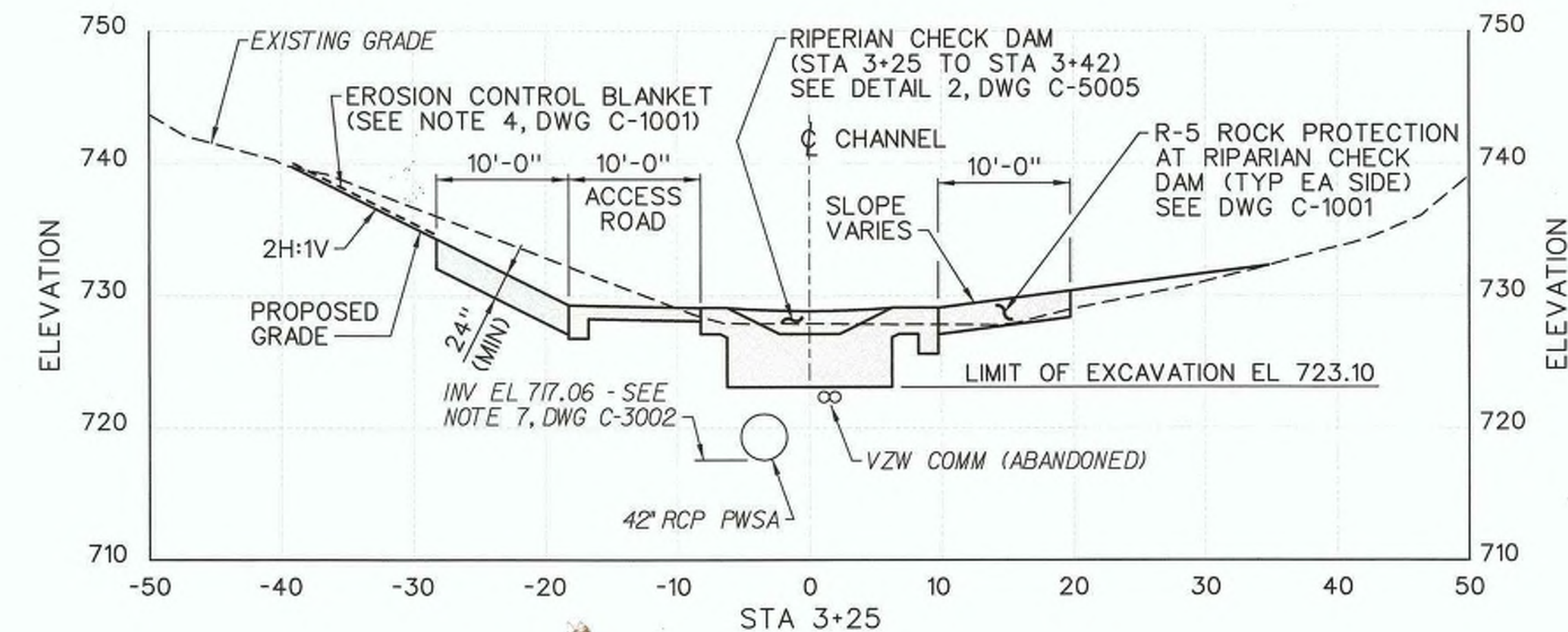
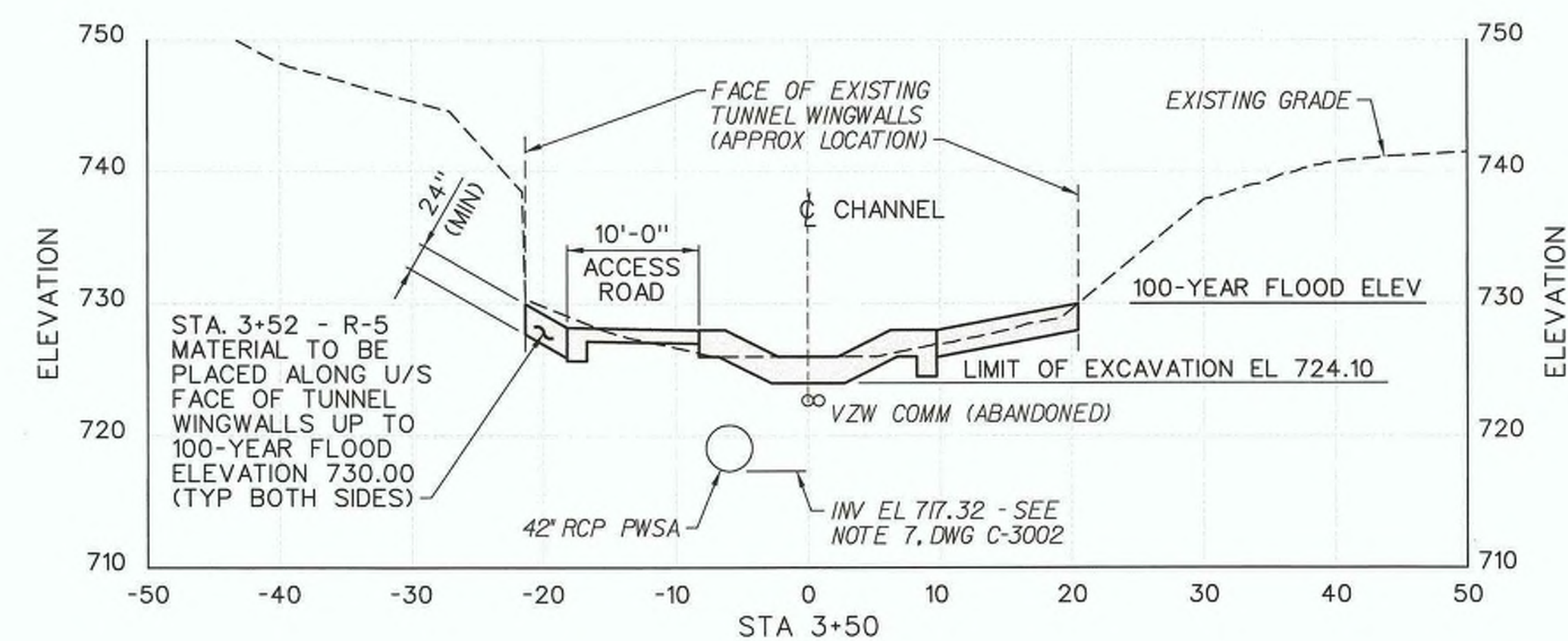


9

SEE ATTACHED SHEETS  
C-111, C-312, C-311 AT  
END FOR CENTERLINE AND  
ELEVATIONS

## NOTES

1. WORK THIS DWG WITH DWGS C-3002 AND C-3004.
2. CLEARANCE ABOVE GAS LINE TO BE FIELD-CHECKED.
3. FOR ADDITIONAL NOTES, SEE DWG C-3002.



US ARMY CORPS  
OF ENGINEERS  
PITTSBURGH DISTRICT

[illegible]

DESIGNED BY:	DATE: SEPT. 2015
W. S. GOGAN	SQ. LOCATION NO.:
B. CRATTY	9W11W-16-B-0008
C. W. DEN	CONTRACT NO.:
	9W11W-16-C-0006
SUBMITTED BY:	FILE NUMBER:
/s/ JAMES T. SHIBATA, P.E.	
FILE NAME:	
0465-885-C-3003.dgn	

SHERADEN PARK - SECTION 206  
AQUATIC ECOSYSTEM RESTORATION PROJECT  
RIPARIAN CHANNEL CONSTRUCTION AND  
NEW PLANTINGS CONTRACT  
RIPARIAN CHANNEL  
CROSS-SECTIONS

SHEET  
IDENTIFICATION  
NUMBER  
C-3003

P:\PWP:dms35185\046a\_886\_C-3003.dgn

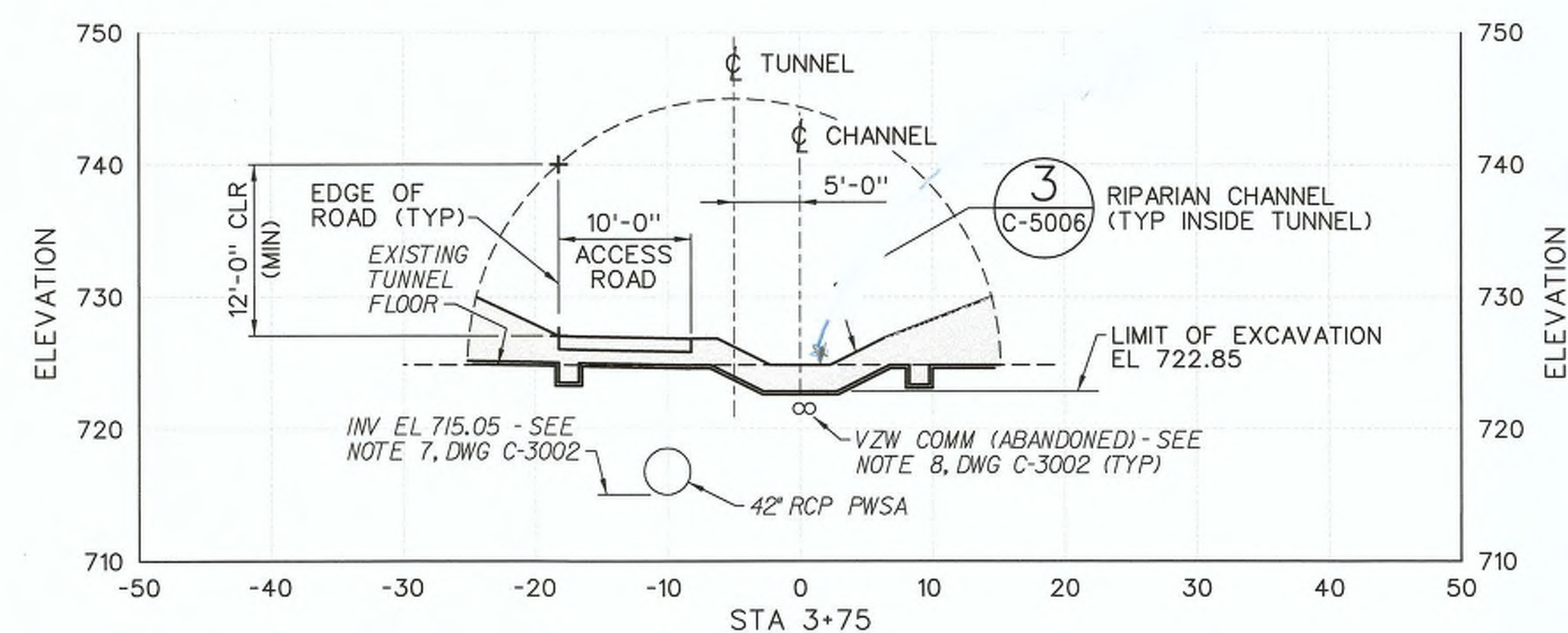
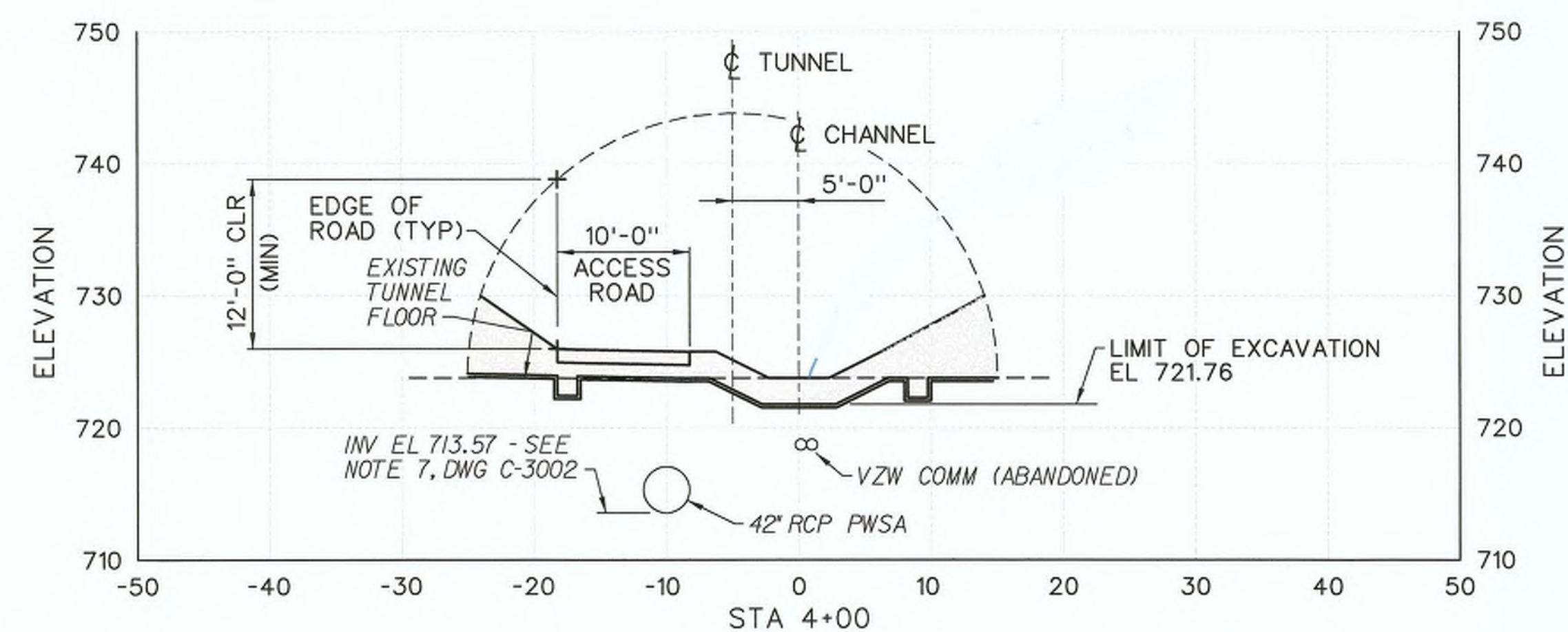
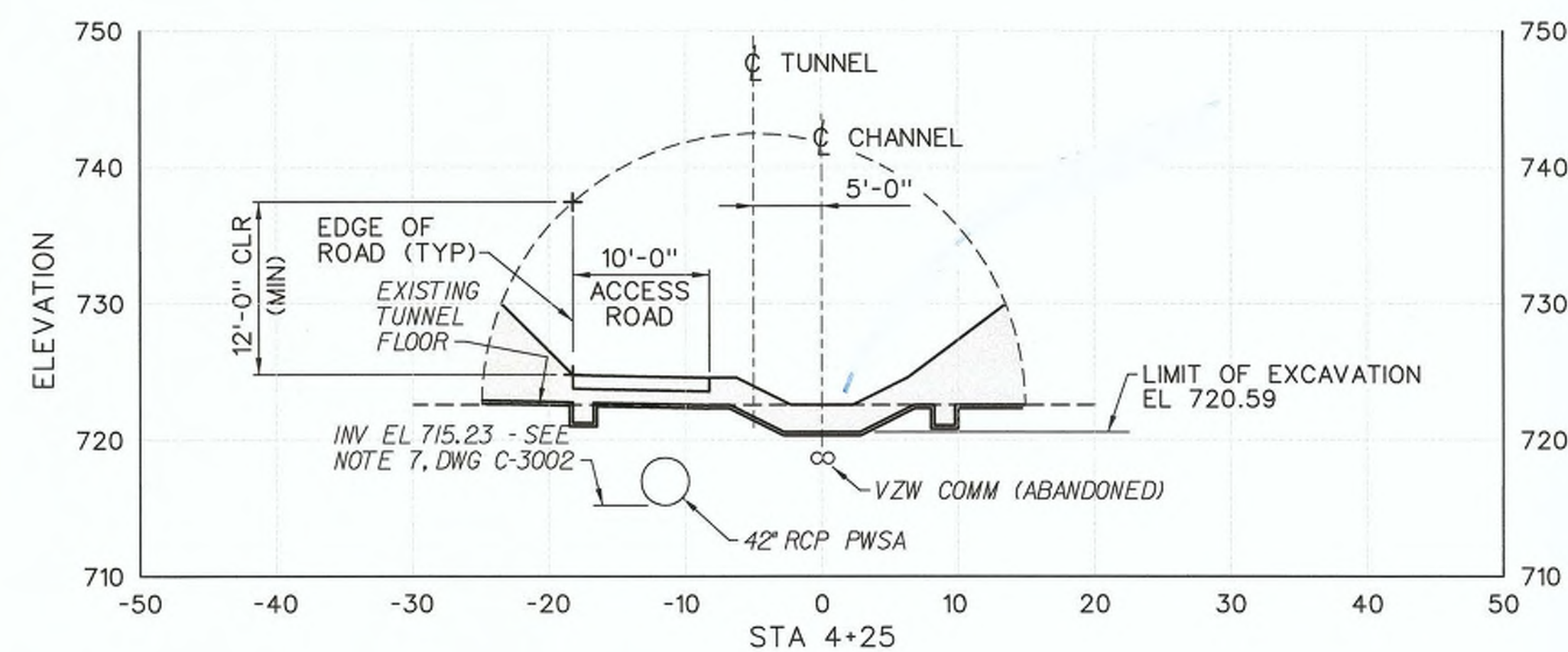
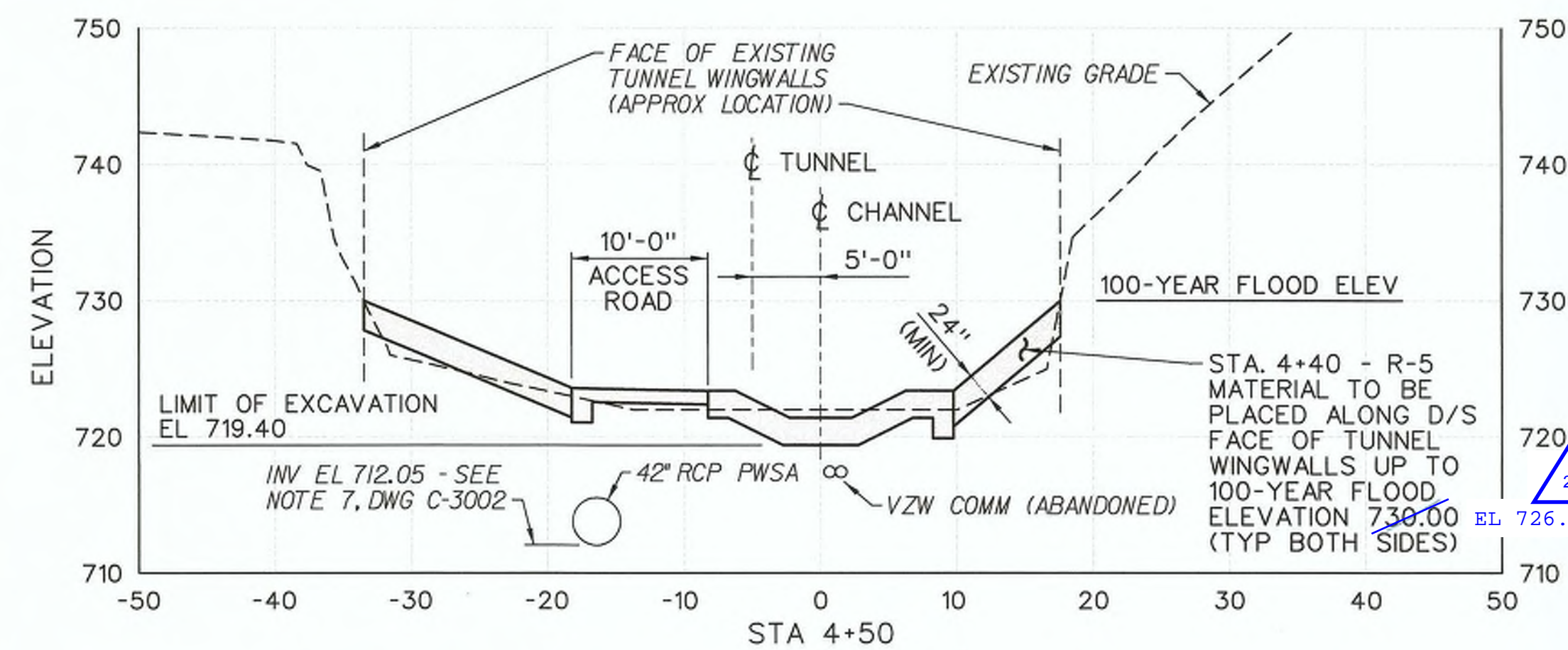
H4TSDRST

**AS-BUILT DRAWING  
CERTIFIED**

AS-AWARDED CERTIFIED FINAL

USACE HAS OVERLAID THE MARKINGS IN THIS AS-BUILT FOR CLARITY. NO MARKINGS HAVE BEEN EDITED FROM THE ORIGINAL SUBMISSION.

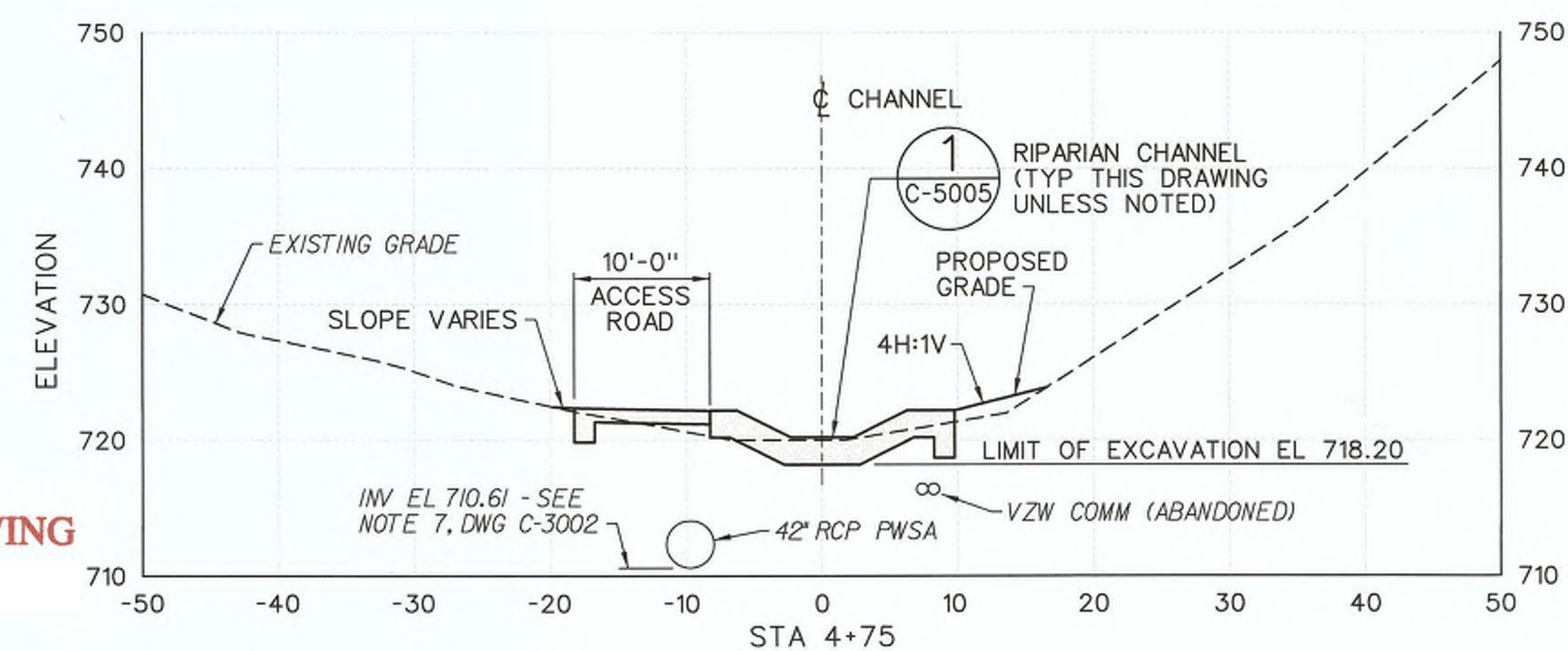
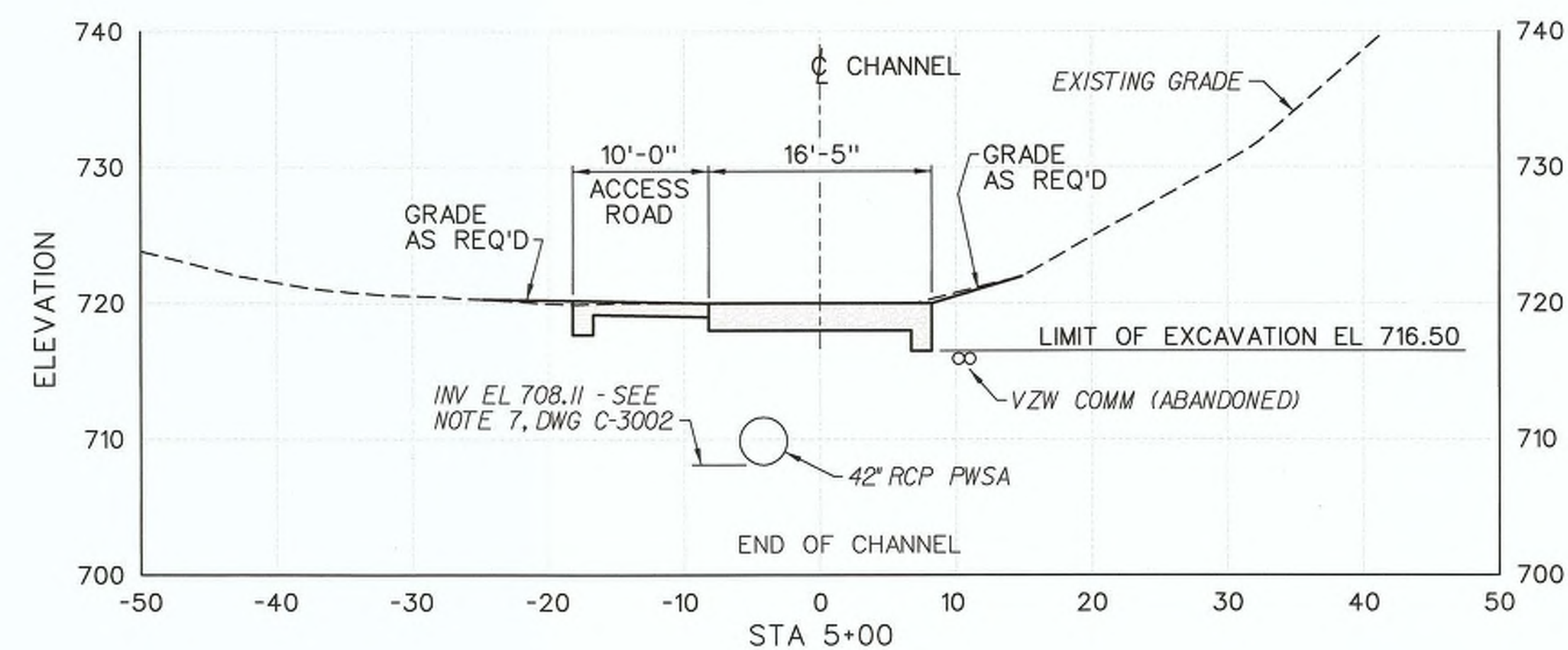




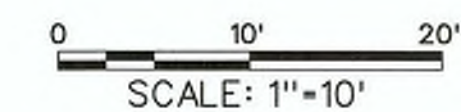
9 SEE ATTACHED SHEETS C-111,  
C-312, C-311 AT END FOR  
CENTERLINE AND ELEVATIONS

## NOTES

1. WORK THIS DWG WITH DWGS C-3002 AND C-3003.
2. FOR ADDITIONAL NOTES, SEE DWG C-3002.




**AS-BUILT DRAWING  
CERTIFIED**

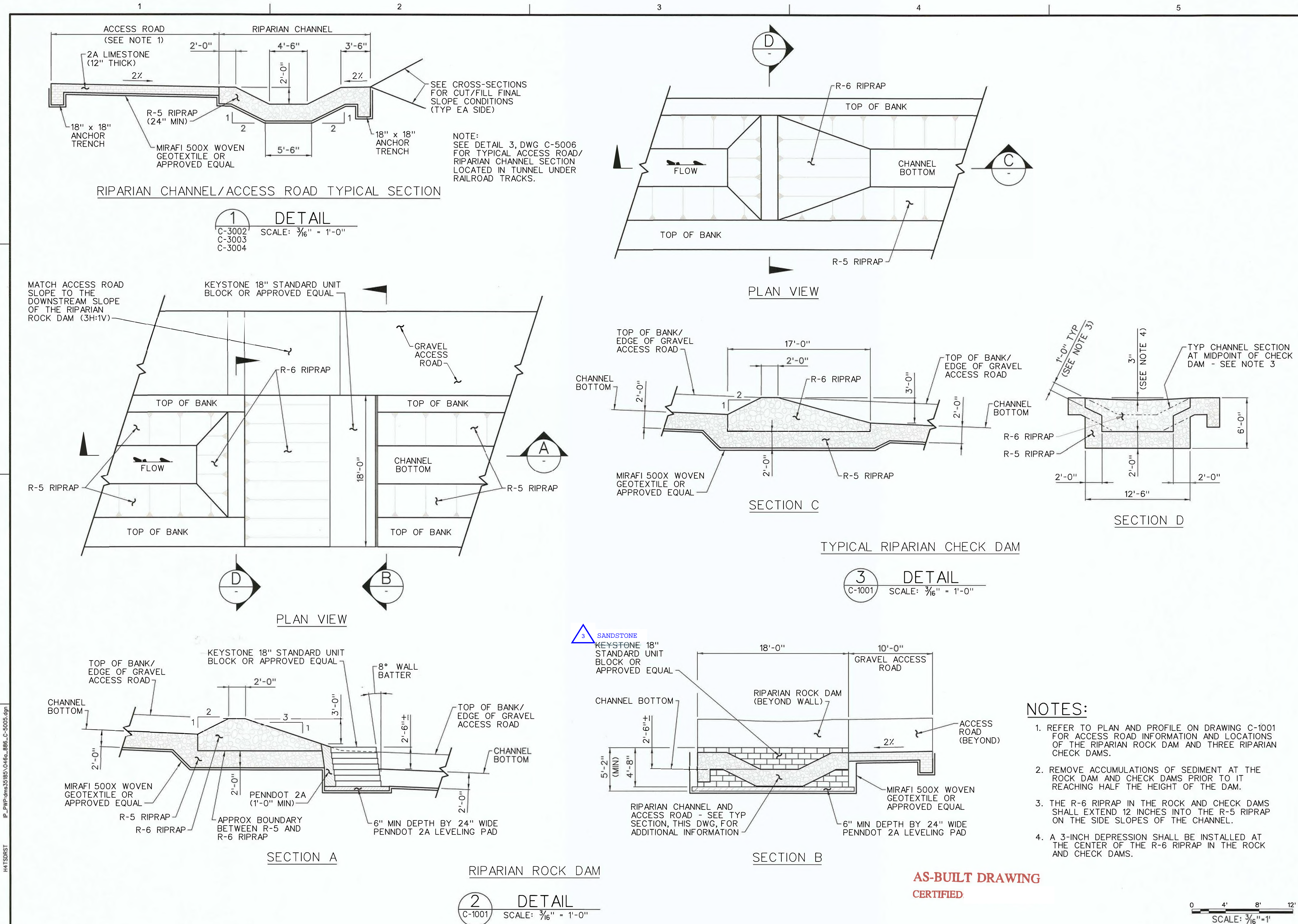


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USACE HAS OVERLAID THE MARKINGS IN THIS AS-BUILT FOR CLARITY. NO MARKINGS HAVE BEEN EDITED FROM THE ORIGINAL SUBMISSION.

 <b>US ARMY CORPS OF ENGINEERS</b> <b>PITTSBURGH DISTRICT</b>		<b>HEIGHT OF R-5 ADJUSTED DUE TO SLOPE</b>	
<b>DESIGNED BY:</b> B. GREGAN B. CRATTY SUBMITTED BY: /s/ JAMES T. SHIBATA, P.E.		<b>DATE:</b> 28 SEPT 2015 28 SEPT 2015 28 SEPT 2015 28 SEPT 2015	
<b>U.S. ARMY ENGINEER DISTRICT</b> <b>CORPS OF ENGINEERS</b> <b>PITTSBURGH, PA</b>		<b>REVISIONS:</b> 1. REVISED CENTERLINE AND ELEVATION FOR RIPARIAN CHANNEL	
<b>FILE NAME:</b> C-3004.dgn 0460-885		<b>FILE NUMBER:</b> WBTWN-16 C-8006	
<b>SCALE:</b> 10:1 ANSI D		<b>PRINT DATE:</b> 22-SEP-2016 13:22	
<b>SHERADEN PARK - SECTION 206</b> <b>AQUATIC ECOSYSTEM RESTORATION PROJECT</b> <b>RIPIRIAN CHANNEL CONSTRUCTION AND</b> <b>NEW PLANTINGS CONTRACT</b>		<b>MARK</b>	
<b>RIPIRIAN CHANNEL</b> <b>CROSS-SECTIONS</b> <b>SHEET 3 OF 3</b>		<b>DESCRIPTION</b>	
<b>SHEET IDENTIFICATION NUMBER</b> <b>C-3004</b>		<b>DATE</b>	
<b>APPROVAL</b>		<b>APPR</b>	





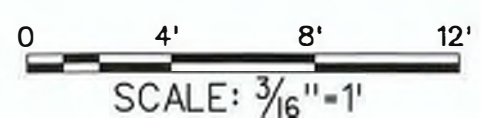
US ARMY CORPS OF ENGINEERS  
PITTSBURGH DISTRICT

DESIGNED BY: B. GREGAN	DATE: 28 SEPT 2015	APPROVED BY: [Signature]	DATE: [Blank]
DRAWN BY: B. GREGAN	SOLICITATION NO.: W91W6-16-5-5005	DESCRIPTION: [Blank]	DATE: [Blank]
SUBMITTED BY: S. SIBATA, P.E.	CONTRACT NO.: W91W6-16-5-5005	MARK: [Blank]	DATE: [Blank]
FILE NAME: 0460-886-C-5005.dgn	FILE NUMBER: [Blank]	DESCRIPTION: [Blank]	DATE: [Blank]
SIZE: ANSI D	PLOT SCALE: 5.3333331	DESCRIPTION: [Blank]	DATE: [Blank]
U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS PITTSBURGH, PA		PLOT DATE: 22-SEP-2016 13:22	

SHERADEN PARK - SECTION 206  
AQUATIC ECOSYSTEM RESTORATION PROJECT  
RIPARIAN CHANNEL CONSTRUCTION AND  
NEW PLANTINGS CONTRACT  
RIPARIAN CHANNEL AND VERNAL POOL  
CONSTRUCTION DETAILS  
SHEET 1 OF 2

SHEET  
IDENTIFICATION  
NUMBER  
**C-5005**

- NOTES:**
1. REFER TO PLAN AND PROFILE ON DRAWING C-1001 FOR ACCESS ROAD INFORMATION AND LOCATIONS OF THE RIPARIAN ROCK DAM AND THREE RIPARIAN CHECK DAMS.
  2. REMOVE ACCUMULATIONS OF SEDIMENT AT THE ROCK DAM AND CHECK DAMS PRIOR TO IT REACHING HALF THE HEIGHT OF THE DAM.
  3. THE R-6 RIPRAP IN THE ROCK AND CHECK DAMS SHALL EXTEND 12 INCHES INTO THE R-5 RIPRAP ON THE SIDE SLOPES OF THE CHANNEL.
  4. A 3-INCH DEPRESSION SHALL BE INSTALLED AT THE CENTER OF THE R-6 RIPRAP IN THE ROCK AND CHECK DAMS.











Hampton Technical Associates, Inc  
Etna Technical Center -- Suite 201  
35 Wilson Street  
Pittsburgh, PA 15223  
Phone: (412) 781-9660 Fax: (412) 781-5904

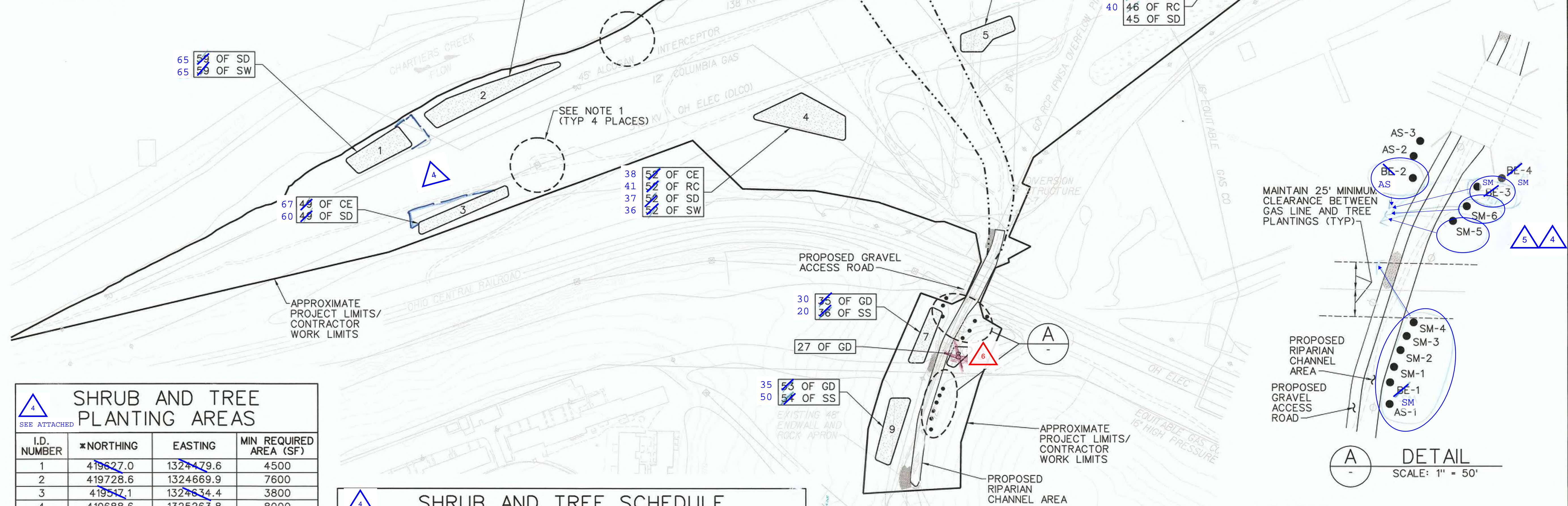


Client: A. Merante	Date: 07-12-2019	HTA Project #: 12417-4	Sheet #: 1 OF 1
Location: Sheridan Park Pittsburgh, PA	Type of Survey: As-Built Vernal Pools Locations		Done By: RM

Vernal Pool I.D.	Vernal Poll Center Point Location		
	Northing	Easting	Elevation
VP-A	419725.0	1324667.5	715.0
VP-B	419509.9	1324330.9	715.0
VP-C	419688.7	1325238.7	714.3
VP-D	419798.8	1325245.6	715.5
VP-E	419990.5	1325457.6	714.8
VP-F	419930.1	1325604.2	714.2
VP-G	419965.3	1325704.1	713.6
VP-H	419754.2	1325116.0	715.2
VP-I	419907.3	1325508.1	714.9
VP-J	419911.6	1325217.7	715.4
VP-K	420009.7	1325596.2	715.0
VP-L	419836.3	1325619.2	713.6
VP-M	419533.6	1324431.0	714.9
VP-N	419677.5	1324947.1	714.5
VP-O	420077.8	1325700.0	713.9
VP-P	419607.9	1324499.7	714.5
VP-Q	419856.6	1325388.3	715.1
VP-R	420073.6	1325861.1	712.8
VP-S	419533.6	1324431.0	714.9



1. NO LONG-TERM STAGING OPERATIONS SHALL OCCUR WITHIN 50' OF DUQUESNE LIGHT POWER LINE PIER FOUNDATIONS DURING PLANTING PLAN ACTIVITIES. ONLY HAND WORK AND HAND TOOLS SHALL BE USED WITHIN 5' OF THE PIER FOUNDATIONS, REGARDLESS OF THE ACTIVITY.
2. THE CONTRACTOR SHALL COMPLY WITH ALL EROSION AND SEDIMENT CONTROL MEASURES AS PER THE APPROVED NPDES PERMIT AND EROSION AND SEDIMENT CONTROL PLAN.
3. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES AND NOTIFY THE PA ONE CALL SYSTEM AT LEAST ONE WEEK PRIOR TO ANY EARTHWORK ACTIVITIES.
4. THE CONTRACTOR SHALL COORDINATE WITH THE U.S. ARMY CORPS OF ENGINEERS (USACE) AND BE PROVIDED WITH ADDITIONAL PROPERTY BOUNDARY SURVEY RECORDED PLAN INFORMATION DURING MOBILIZATION AND STAKE-OUT TO ENSURE PROPER LIMITS OF CONSTRUCTION ARE BEING MAINTAINED.
5. REFER TO DRAWING L-5002 FOR TREE AND SHRUB DETAILS AND SEQUENCE OF CONSTRUCTION INFORMATION.
6. NORTHINGS AND EASTINGS BASED ON 1983 NORTH AMERICAN DATUM (1983), PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, SOUTHERN ZONE, U.S. FEET.
7. FOR GENERAL NOTES, ABBREVIATIONS AND ADDITIONAL LEGEND SYMBOLS, SEE DRAWING G-0003.



SHRUB AND TREE PLANTING AREAS			
I.D. NUMBER	*NORTHING	EASTING	MIN REQUIRED AREA (SF)
1	419627.0	1324479.6	4500
2	419728.6	1324669.9	7600
3	419717.1	1324634.4	3800
4	419688.6	1325263.8	8000
5	419840.0	1325594.6	3500
6	419998.2	1326122.3	5300
7	419285.3	1325483.7	2700
8	419251.2	1325543.5	1000
9	419115.7	1325421.3	4000
BE-1	419135.2	1325493.4	N/A
BE-2	419322.8	1325614.6	N/A
BE-3	419314.7	1325573.8	N/A
BE-4	419322.5	1325596.4	N/A
AS-1	419115.4	1325492.9	N/A
AS-2	419342.9	1325515.3	N/A
AS-3	419356.7	1325521.3	N/A
SM-1	419149.5	1325497.1	N/A
SM-2	419164.8	1325503.0	N/A
SM-3	419777.8	1325508.7	N/A
SM-4	419190.2	1325515.1	N/A
SM-5	419283.3	1325551.3	N/A
SM-6	419296.8	1325564.1	N/A

SHRUB AND TREE SCHEDULE					
KEY	COMMON NAME	SCIENTIFIC NAME	PLANT SIZE	DENSITY	QUANTITY
CE	ELDERBERRY	Sambucus Canadensis	2 FT HEIGHT, BARE ROOT	7 FT OC	<del>213</del> 208
SD	SILKY DOGWOOD	Cornus Amomum	2 FT HEIGHT, BARE ROOT	7 FT OC	<del>271</del> 277
RC	RED CHOKEBERRY	Aronia Arbutifolia	2 FT HEIGHT, BARE ROOT	7 FT OC	<del>143</del> 126
SW	SILKY WILLOW	Salix Sericea	2 FT HEIGHT, BARE ROOT	7 FT OC	<del>223</del> 209
SS	STAGHORN SUMAC	Rhus Typhina	2 FT HEIGHT, BARE ROOT	7 FT OC	<del>90</del> 70
GD	GRAY DOGWOOD	Cornus Racemosa	2 FT HEIGHT, BARE ROOT	7 FT OC	<del>115</del> 65
AS	SYCAMORE	Platanus Occidentalis	1.5 INCH CALIPER B&B	SEE PLAN	<del>3</del> 6
BE	BOX ELDER	Acer Negundo	1.5 INCH CALIPER B&B	SEE PLAN	<del>1</del> 0
SM	SILVER MAPLE	Acer Saccharinum	1.5 INCH CALIPER B&B	SEE PLAN	<del>6</del> 7

\*APPROXIMATE CENTER OF PLANTING AREA - SEE  
NOTE 6, THIS DRAWING

PLANTING PLAN  
SCALE: 1" = 100'

**AS-BUILT DRAWING**  
**CERTIFIED:**

### LEGEND

50' BUFFER AROUND DLCO PIER FOUNDATIONS (SEE NOTE 1, THIS DRAWING)

LIMITS OF DISTURBANCE (NPDES) & APPROXIMATE PROJECT LIMITS

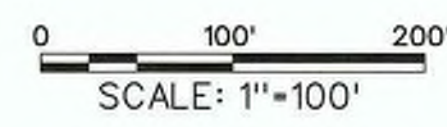
PROPOSED NATIVE SHRUB PLANTING LOCATION

PROPOSED NATIVE TREE PLANTING LOCATION

213 OF CE

QUANTITY OF TREE/SHRUB TYPE

DETAIL  
SCALE: 1" = 50'



AS-AWARDED CERTIFIED FINAL

USACE HAS OVERLAID THE MARKINGS IN THIS AS-BUILT FOR CLARITY. NO MARKINGS HAVE BEEN EDITED FROM THE ORIGINAL SUBMISSION.

<b>SHERADEN PARK - SECTION 206</b> <b>AQUATIC ECOSYSTEM RESTORATION PROJECT</b> <b>RIPARIAN CHANNEL CONSTRUCTION AND</b> <b>NEW PLANTINGS CONTRACT</b>		<b>U. S. ARMY ENGINEER DISTRICT</b> <b>CORPS OF ENGINEERS</b> <b>PITTSBURGH, PA</b>		DESIGNED BY: D. GARGAN		DATE: OCT 2015	
				CHECK BY: B. CRATY		SO. LOCATION NO.: W91WN-16-B-8008	
				SUBMITTED BY: /s/ JAMES T. SHIBATA, P.E.		CONTRACT NO.: W91WN-16-C-8008	
				FILE NAME: L-1001.dgn		FILE NUMBER:	
				SIZE: ANSI D		PLOT SCALE: 1"=100'	
				PLOT DATE: 22-SEP-2016		13/23	

<b>SHEET</b> <b>IDENTIFICATION</b> <b>NUMBER</b> <b>L-1001</b>		<b>NATIVE PLANTINGS PLAN</b>	
---	--	------------------------------	--

		<b>US ARMY CORPS</b> <b>OF ENGINEERS</b> <b>PITTSBURGH DISTRICT</b>	
--	--	---	--

MARK	DESCRIPTION	DATE	APPR.	APPR.	ACTUAL QTY OF PLANTINGS AND LOCATIONS ADJUSTED DUE TO TERRAIN
					<div style="display: flex; justify-content: space-between;"> <div>  4 BE REPLACED WITH 3 AS &amp; 1 SM         </div> <div>  PLANTING AREA REMOVED DUE TO TERRAIN         </div> </div>



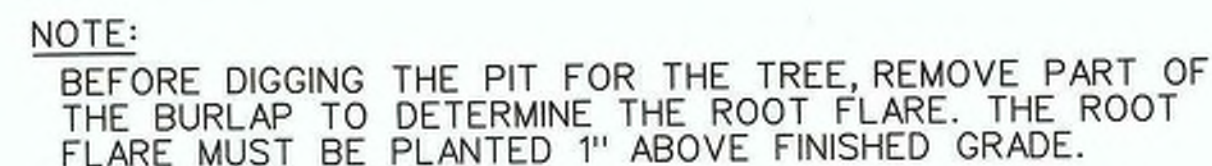


TABLE A DECIDUOUS TREES (BALLED & BURLAPPED AND WIRE ROOT PROTECTION DEVICES)	
<u>CALIPER</u> (INCHES)	<u>MIN TOP DIAMETER OF</u> <u>PLANTING PIT</u>
1"	5'
1" - 1.5"	5'
2"	6'
2" - 2.5"	6'
3"	7'
3" - 3.5"	7'
4"	8'
<u>HEIGHT</u>	<u>MIN TOP DIAMETER OF</u> <u>PLANTING PIT</u>
4'-8"	5'

1 DETAIL  
- N.T.S.

1. INVASIVE PLANT SPECIES (JAPANESE KNOTWEED, REED CANARYGRASS AND POISON HEMLOCK) WILL BE REMOVED. THE VEGETATION SHALL BE CUT, TREATED WITH A GLYPHOSATE HERBICIDE APPROVED BY THE CONTRACTING OFFICER, AND RE-TREATED, AS DIRECTED.
2. ALL DISTURBED AREAS WITH EXPOSED SOIL SHALL BE STABILIZED WITH A TEMPORARY SEED MIXTURE.
3. ONE YEAR AFTER THE INITIAL APPLICATION, GLYPHOSATE SHALL BE APPLIED TO ANY REGROWTH OF INVASIVE SPECIES.
4. ONE YEAR AFTER THE SECOND APPLICATION OF THE GLYPHOSATE, THE NATIVE PLANTINGS PRESENTED ON THE DRAWINGS SHALL BE PLANTED.
5. THE NATIVE PLANTINGS SHALL BE MONITORED QUARTERLY FOR THE FIRST YEAR FOR GROWTH AND VIABILITY. ANY PLANTINGS NOT MEETING THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS SHALL BE REPLACED.
6. FINAL INSPECTION OF THE PLANTINGS SHALL OCCUR WITH THE CONTRACTING OFFICER APPROXIMATELY ONE YEAR AFTER THE INITIAL PLANTING.



**AS-BUILT DRAWING**  
**CERTIFIED:**





Hampton Technical Associates, Inc  
Etna Technical Center -- Suite 201  
35 Wilson Street  
Pittsburgh, PA 15223  
Phone: (412) 781-9660 Fax: (412) 781-5904



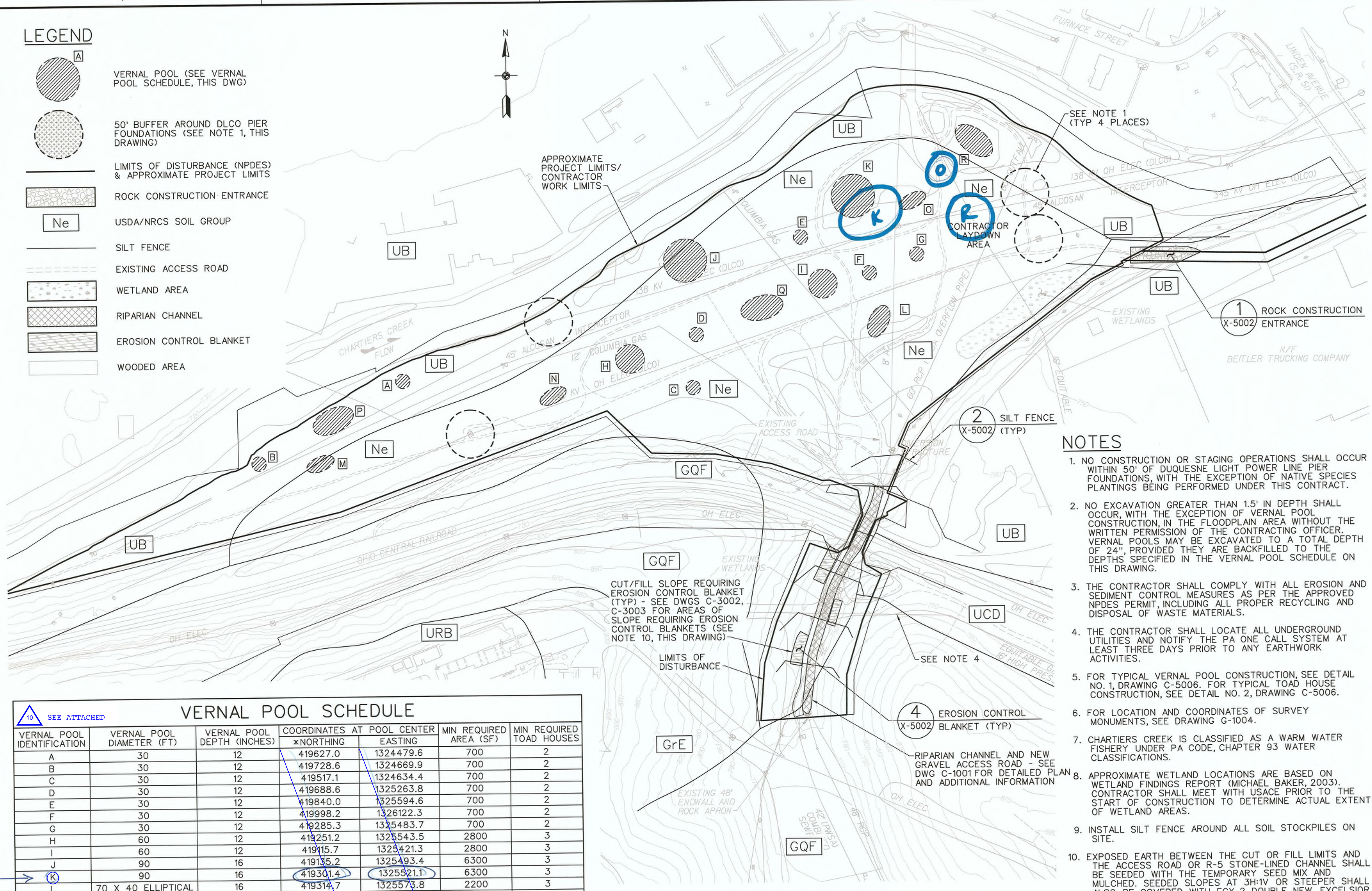
Client: A. Merante		Date: 08-22-2019	HTA Project #: 12417-4	Sheet #: 1 OF 1
Location: Sheraden Park Pittsburgh, PA		Type of Survey: As-Built Planting Areas		Done By: RM
I.D.	Northing	Easting	Area (SQ.ft.)	
1	419636.0	1324494.4	6123.00	
2	419728.6	1324669.9	7600.00	
3	419526.4	1324628.2	6750.00	
4	419688.6	1325263.8	8000.00	
5	419840.0	1325594.6	3500.00	
6	419998.2	1326122.3	5300.00	
7	419252.0	1325494.0	2714.00	
8	CANCELLED			
9	419153.0	1325445.0	1376.00	
AS-1	419300.4	1325564.7	N/A	
AS-2	419298.0	1325506.5	N/A	
AS-3	419270.3	1325494.6	N/A	
AS-4	419235.2	1325477.1	N/A	
AS-5	419219.3	1325485.9	N/A	
AS-6	419185.7	1325451.3	N/A	
SM-1	419284.7	1325500.4	N/A	
SM-2	419249.0	1325483.8	N/A	
SM-3	419233.2	1325462.6	N/A	
SM-4	419214.2	1325451.9	N/A	
SM-5	419167.1	1325459.6	N/A	
SM-6	419150.3	1325452.0	N/A	
SM-7	419138.4	1325451.8	N/A	

\* Please refer to drawing L-1001 for list of abbreviations.



# LEGEND

- VERNAL POOL (SEE VERNAL POOL SCHEDULE, THIS DWG)
- 50' BUFFER AROUND DLCO PIER FOUNDATIONS (SEE NOTE 1, THIS DRAWING)
- LIMITS OF DISTURBANCE (NPDES) & APPROXIMATE PROJECT LIMITS
- ROCK CONSTRUCTION ENTRANCE
- USDA/NRCS SOIL GROUP
- SILT FENCE
- EXISTING ACCESS ROAD
- WETLAND AREA
- RIPARIAN CHANNEL
- EROSION CONTROL BLANKET
- WOODED AREA



## NOTES

- NO CONSTRUCTION OR STAGING OPERATIONS SHALL OCCUR WITHIN 50' OF DUQUESNE LIGHT POWER LINE PIER FOUNDATIONS, WITH THE EXCEPTION OF NATIVE SPECIES PLANTINGS BEING PERFORMED UNDER THIS CONTRACT.
- NO EXCAVATION GREATER THAN 1.5' IN DEPTH SHALL OCCUR, WITH THE EXCEPTION OF VERNAL POOL CONSTRUCTION, IN THE FLOODPLAIN AREA WITHOUT THE WRITTEN PERMISSION OF THE CONTRACTING OFFICER. VERNAL POOLS MAY BE EXCAVATED TO A TOTAL DEPTH OF 24" PROVIDED THEY ARE BACKFILLED TO THE DEPTHS SPECIFIED IN THE VERNAL POOL SCHEDULE ON THIS DRAWING.
- THE CONTRACTOR SHALL COMPLY WITH ALL EROSION AND SEDIMENT CONTROL MEASURES AS PER THE APPROVED NPDES PERMIT, INCLUDING ALL PROPER RECYCLING AND DISPOSAL OF WASTE MATERIALS.
- THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES AND NOTIFY THE PA ONE CALL SYSTEM AT LEAST THREE DAYS PRIOR TO ANY EARTHWORK ACTIVITIES.
- FOR TYPICAL VERNAL POOL CONSTRUCTION, SEE DETAIL NO. 1, DRAWING C-5006. FOR TYPICAL TOAD HOUSE CONSTRUCTION, SEE DETAIL NO. 2, DRAWING C-5006.
- FOR LOCATION AND COORDINATES OF SURVEY MONUMENTS, SEE DRAWING G-1004.
- CHARTIERS CREEK IS CLASSIFIED AS A WARM WATER FISHERY UNDER PA CODE, CHAPTER 93 WATER CLASSIFICATIONS.
- APPROXIMATE WETLAND LOCATIONS ARE BASED ON WETLAND FINDINGS REPORT (MICHAEL BAKER, 2003). CONTRACTOR SHALL MEET WITH USACE PRIOR TO THE START OF CONSTRUCTION TO DETERMINE ACTUAL EXTENT OF WETLAND AREAS.
- INSTALL SILT FENCE AROUND ALL SOIL STOCKPILES ON SITE.
- EXPOSED EARTH BETWEEN THE CUT OR FILL LIMITS AND THE ACCESS ROAD OR R-5 STONE-LINED CHANNEL SHALL BE SEEDED WITH THE TEMPORARY SEED MIX AND MULCHED. SEEDED SLOPES AT 3H:1V OR STEEPER SHALL ALSO BE COVERED WITH ECX-2 DOUBLE NEW EXCELSIOR OR APPROVED EQUIVALENT EROSION CONTROL BLANKET UNTIL A UNIFORM GROWTH OF AT LEAST 70% IS ACHIEVED WITH THE TEMPORARY SEEDING.

## VERNAL POOL SCHEDULE

VERNAL POOL IDENTIFICATION	VERNAL POOL DIAMETER (FT)	VERNAL POOL DEPTH (INCHES)	COORDINATES AT POOL CENTER		MIN REQUIRED AREA (SF)	MIN REQUIRED TOAD HOUSES
			*NORTHING	EASTING		
A	30	12	419627.0	1324479.6	700	2
B	30	12	419728.6	1324669.9	700	2
C	30	12	419517.1	1324634.4	700	2
D	30	12	419688.6	1325263.8	700	2
E	30	12	419840.0	1325594.6	700	2
F	30	12	419998.2	1326122.3	700	2
G	30	12	419285.3	1325483.7	700	2
H	60	12	419251.2	1325543.5	2800	3
I	60	12	419115.7	1325421.3	2800	3
J	90	16	419135.2	1325493.4	6300	3
K	90	16	419301.4	1325521.1	6300	3
L	70 X 40 ELLIPTICAL	16	419314.7	1325573.8	2200	3
M	60 X 30 ELLIPTICAL	16	419339.7	1325579.1	1400	2
N	60 X 30 ELLIPTICAL	16	419115.4	1325492.9	1400	2
O	60 X 30 ELLIPTICAL	16	419317.0	1325524.2	1400	2
P	90 X 50 ELLIPTICAL	16	419330.8	1325530.2	3500	3
Q	90 X 50 ELLIPTICAL	16	419149.5	1325497.1	3500	3
R	90 X 50 ELLIPTICAL	16	419164.8	1325503.0	3500	3

\*NORTHINGS AND EASTINGS BASED ON NAD83 PA STATE PLANE COORDINATE SYSTEM, SOUTHERN ZONE, U.S. FEET

## EROSION & SEDIMENT CONTROL AND VERNAL POOL LOCATION PLAN

SCALE: 1" = 100'

AS-BUILT DRAWING  
CERTIFIED

0 100' 200'  
SCALE: 1"=100'

US ARMY CORPS OF ENGINEERS  
PITTSBURGH DISTRICT

DESIGNED BY	DATE	REVISION	DATE	DESCRIPTION
B. GREGAN	28 SEP 2015			
DWN BY				
B. GREGAN				
APPROVED BY				
J. SHIBATA, P.E.				
FILE NAME				
C:\66_886_X-1001.dgn				
SIZE				
1001				
PLOT DATE				
22-SEP-2016 13:23				

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
PITTSBURGH, PA

SHERADEN PARK - SECTION 206  
AQUATIC ECOSYSTEM RESTORATION PROJECT  
RIPARIAN CHANNEL CONSTRUCTION AND  
NEW PLANTINGS CONTRACT  
EROSION AND SEDIMENT CONTROL  
AND  
VERNAL POOL LOCATION PLAN

SHEET  
IDENTIFICATION  
NUMBER  
**X-1001**



## PROFILE

PLAN VIEW

\*MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

ROCK CONSTRUCTION ENTRANCE

1 DETAIL  
X-1001 N.T.S.

OUTLET CROSS-SECTION

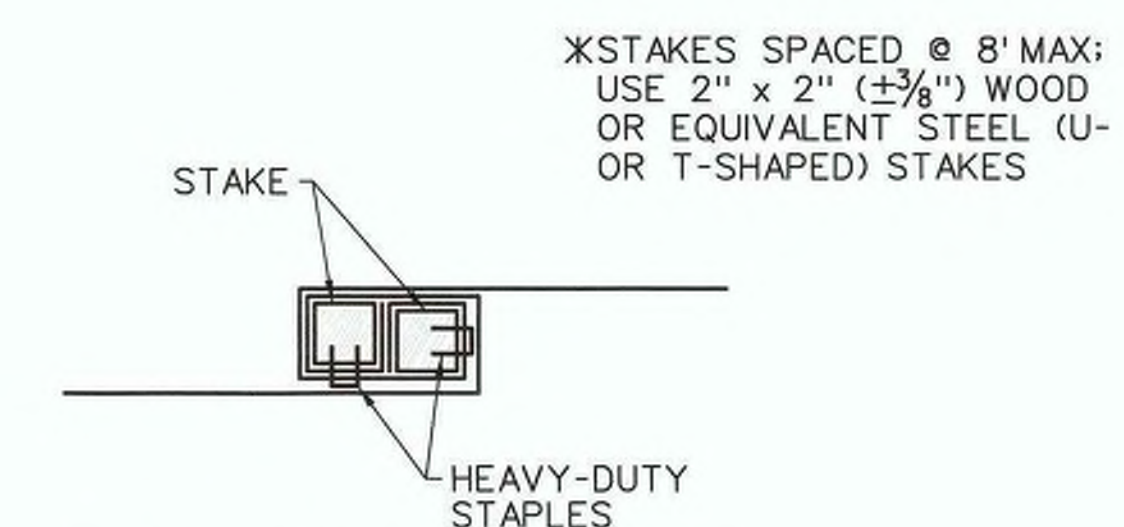
UP-SLOPE FACE

## ROCK FILTER OUTLET NOTES

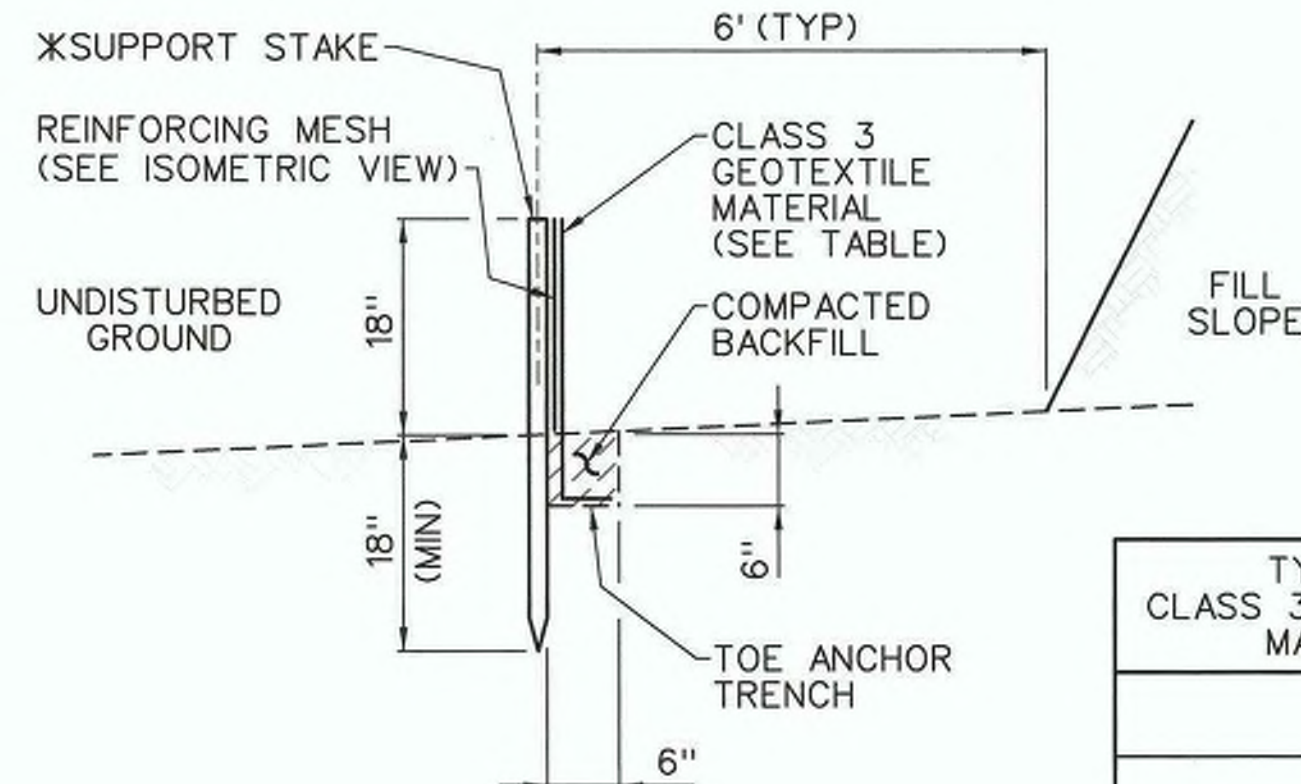
1. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH  $\frac{1}{3}$  THE HEIGHT OF THE OUTLET.
2. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

ROCK FILTER OUTLET

3  
- DETAIL  
N.T.S.

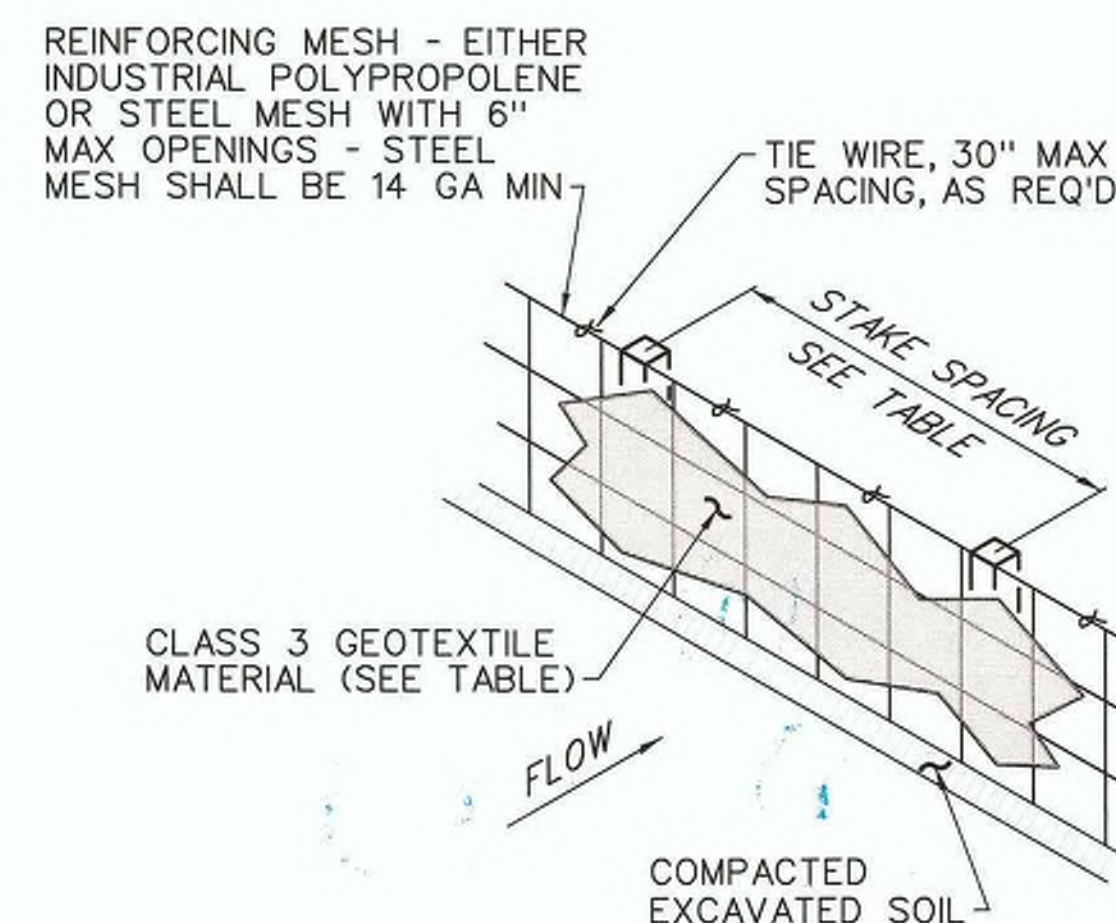


## JOINING FENCE SECTIONS



ELEVATION

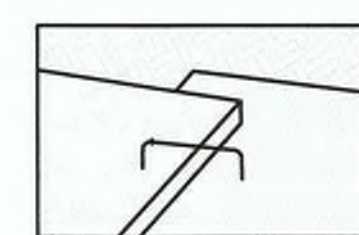
TYPE OF CLASS 3 GEOTEXTILE MATERIAL	NOMINAL FABRIC HEIGHT	MAXIMUM POST SPACING WITHOUT MESH SUPPORT	MAXIMUM POST SPACING WITH MESH SUPPORT
3A	18"	8'	NOT REQUIRED
3B	18"	4'	NOT REQUIRED



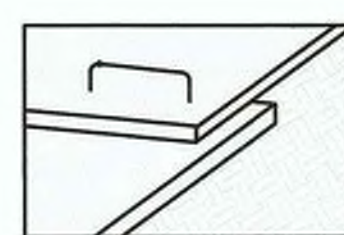
ISOMETRIC VIEW

18" HIGH SILT FENCE

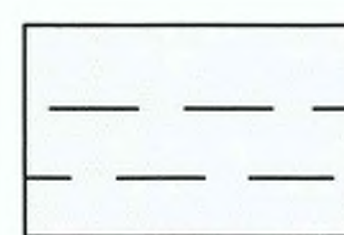
2 DETAIL  
X-1001 N.T.S.



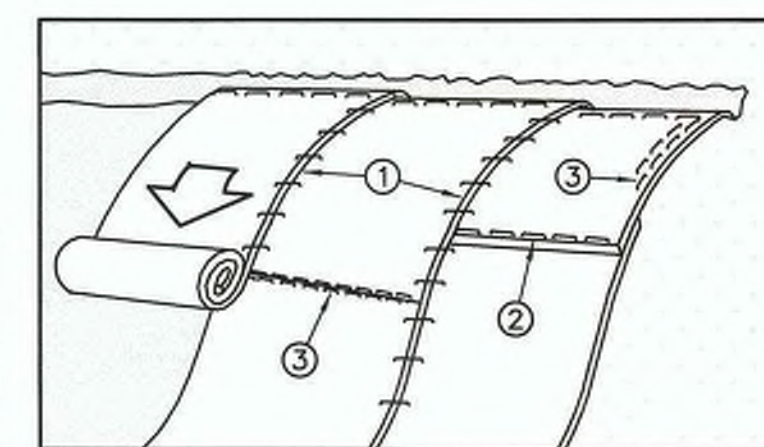
AREA 1



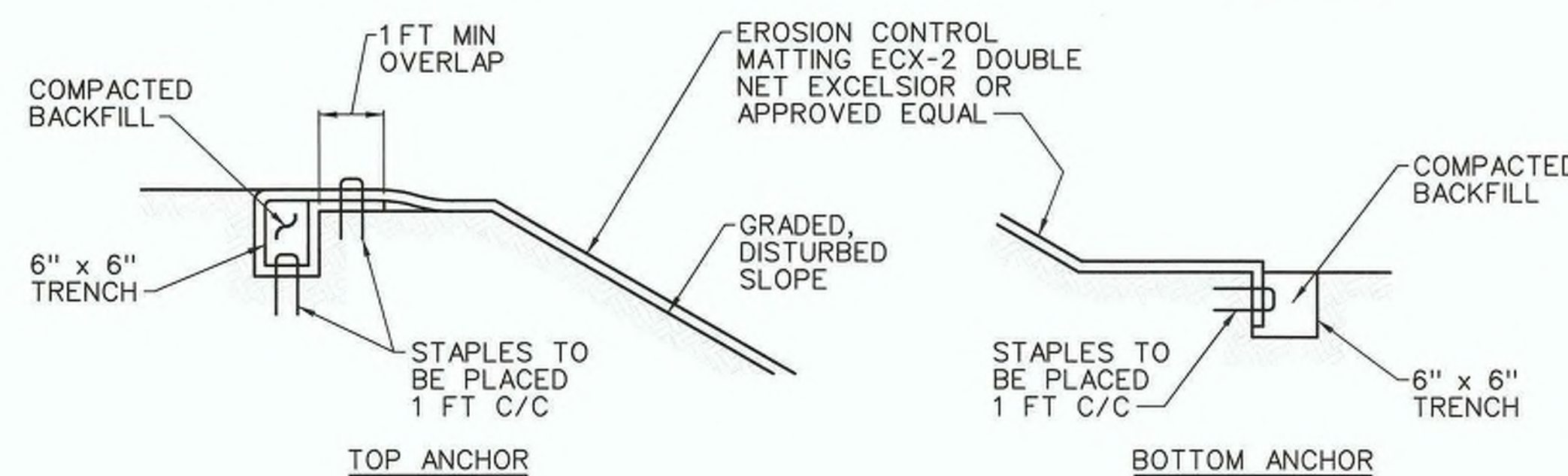
AREA 2



AREA 3



ISOMETRIC



EROSION CONTROL BLANKET

4 DETAIL  
X-1001 N.T.S.

**AS-BUILT DRAWING  
CERTIFIED**

MAINTENANCE NOTES:

1. THE FENCE INSTALLATION SHALL BE INSPECTED AFTER EVERY PRECIPITATION EVENT AND NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY.
2. SILT FENCE SHOULD BE TURNED UP AT EACH END TO TRAP SURFACE RUNOFF. INSTALL FENCE OF SUFFICIENT LENGTH TO ELIMINATE END FLOW.
3. ACCUMULATED SEDIMENT SHALL BE REMOVED AS REQUIRED TO KEEP THE FENCE FUNCTIONAL. IN ALL CASES, REMOVE DEPOSITS WHERE ACCUMULATIONS REACH ONE-HALF OF THE ABOVE-GROUND HEIGHT OF THE FENCE.
4. ALL UNDERCUTTING OR EROSION OF THE TOE ANCHOR SHALL BE REPAIRED IMMEDIATELY WITH COMPACTED BACKFILL MATERIALS.
5. ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS FOR REPLACING FILTER FABRIC FENCE DUE TO WEATHERING.
6. IF THE SILT FENCE IS BREACHED DUE TO CONCENTRATED FLOW, THE CONTRACTOR SHALL CONSTRUCT A ROCK FILTER AT THE LOCATION OF THE BREACH (SEE DETAIL, THIS DWG).

INSTALLATION NOTES:

1. THE CONTRACTOR SHALL REFER TO THE SPECIFIED MANUFACTURER'S NOTES AND TO THE LOCAL DISTRIBUTOR DURING INSTALLATION. THE FOLLOWING GUIDELINES ARE FOR GENERAL PURPOSES ONLY.
2. A 6" x 6" TRENCH SHALL BE DUG ALONG THE UPSLOPE AND DOWNSLOPE AT THE EXTENTS OF THE BLANKET PLACEMENT. PREPARE THE SURFACE ADEQUATELY BY RAKING AND SEEDING.
3. REFER TO THE TOP ANCHOR DETAIL FOR SECURING THE BLANKET WITH STAPLES, BACKFILLING AND COMPACTING THE TRENCH.
4. REFER TO THE MANUFACTURER'S GUIDELINES FOR STAPLE PATTERNS WHEN THE BLANKET IS ROLLED DOWN THE SLOPE. PARALLEL BLANKETS NEED TO BE OVERLAPPED BY 4". REFER TO AREA 1 DETAIL FOR HORIZONTAL OVERLAP STAPLE PATTERN, AND AREA 2 DETAIL IF EROSION CONTROL BLANKET IS PLACED IN A SHINGLE PATTERN.
5. FOR MAXIMUM PERFORMANCE OF THE SPECIFIED ECX-2 DOUBLE NET EXCELSIOR SYSTEM (OR APPROVED EQUAL), A CHECK SLOT IS RECOMMENDED AT 25 TO 40-FOOT INCREMENTS ALONG THE SLOPE PATH. INSTALL STAPLES IN THE METHOD DEPICTED IN AREA 3 DETAIL.
6. EROSION CONTROL BLANKET MUST BE LISTED WITH NTPEP DATABASE, MEET THE TYPE 2.C SPECIFICATION REQUIREMENTS OF THE ECTC, MEET FHWA FP-03 SECTION 713.17 SPECIFICATIONS, AND BE APPROVED BY THE PA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE ALLEGHENY COUNTY CONSERVATION DISTRICT.



US ARMY CORPS  
OF ENGINEERS  
PITTSBURGH DISTRICT

[illegible]

U. S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS PITTSBURGH, PA		DESIGNED BY: B. S. BROWN	DATE: 26 SEPT 1915
		SOLICITATION NO: W51N16-B-4008	
		OWN BY: CKD BY: P. CRATTY P. GOLDEN	
		CONTRACT NO: W51N16-B-4006	
		SUBMITTED BY: U. S. SUBGATA, P. E.	
		FILE NAME: 046a-886-X-5002.dgn	
		FILE NUMBER:	
		SIZE:	PLOT DATE: 8/2/99
		PLOT SCALE:	

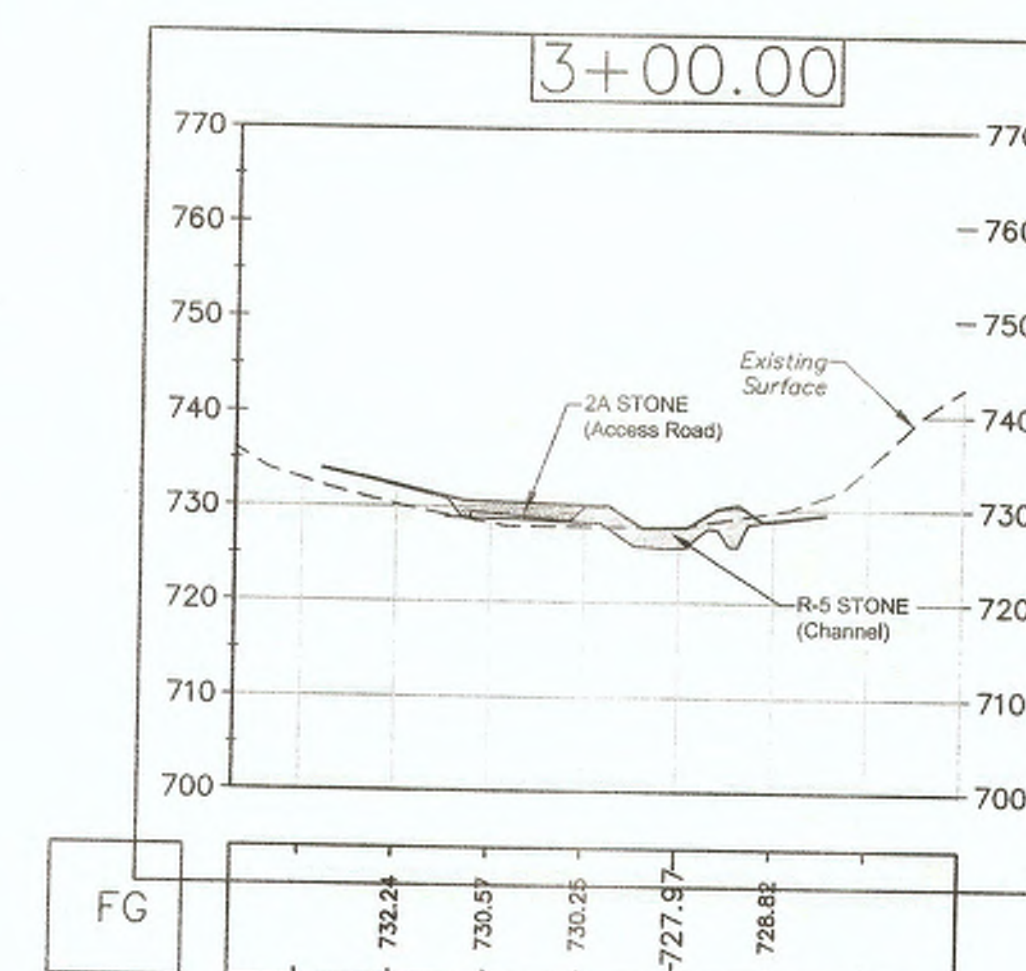
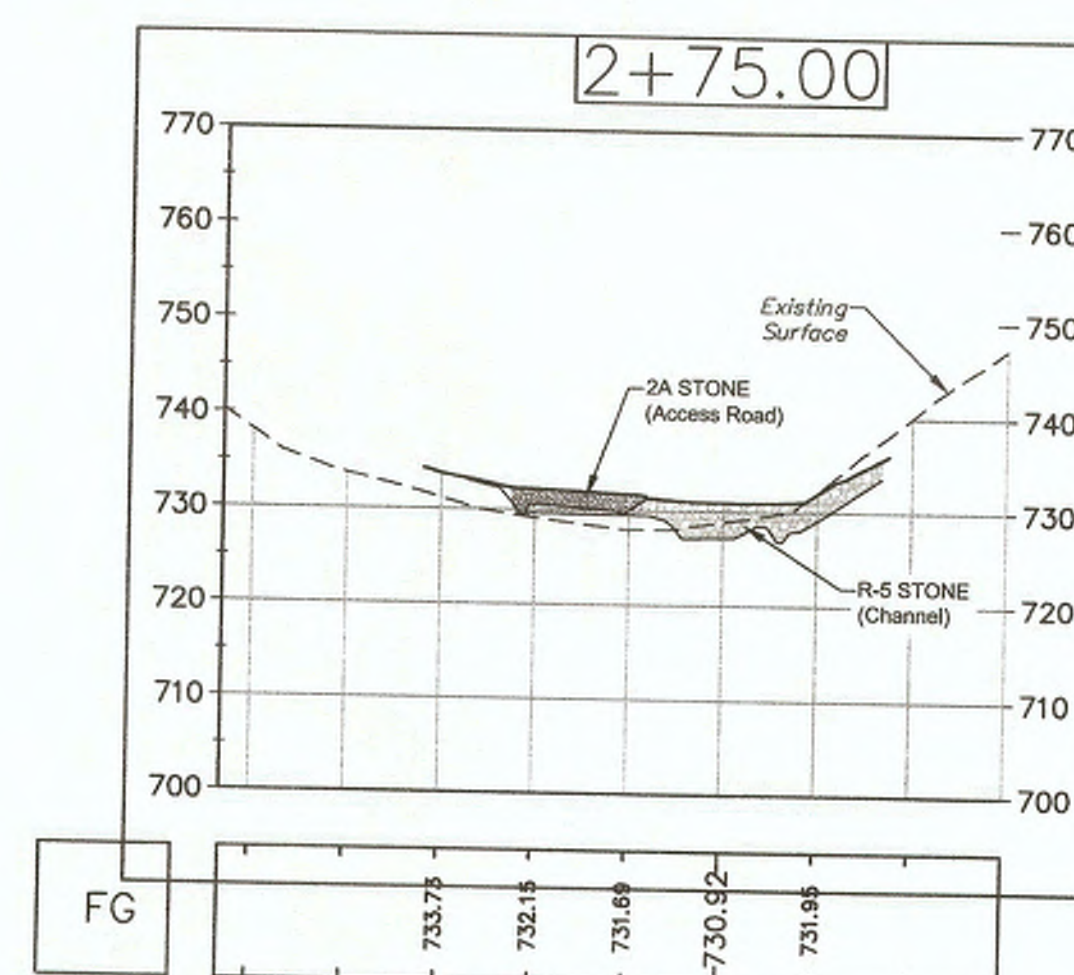
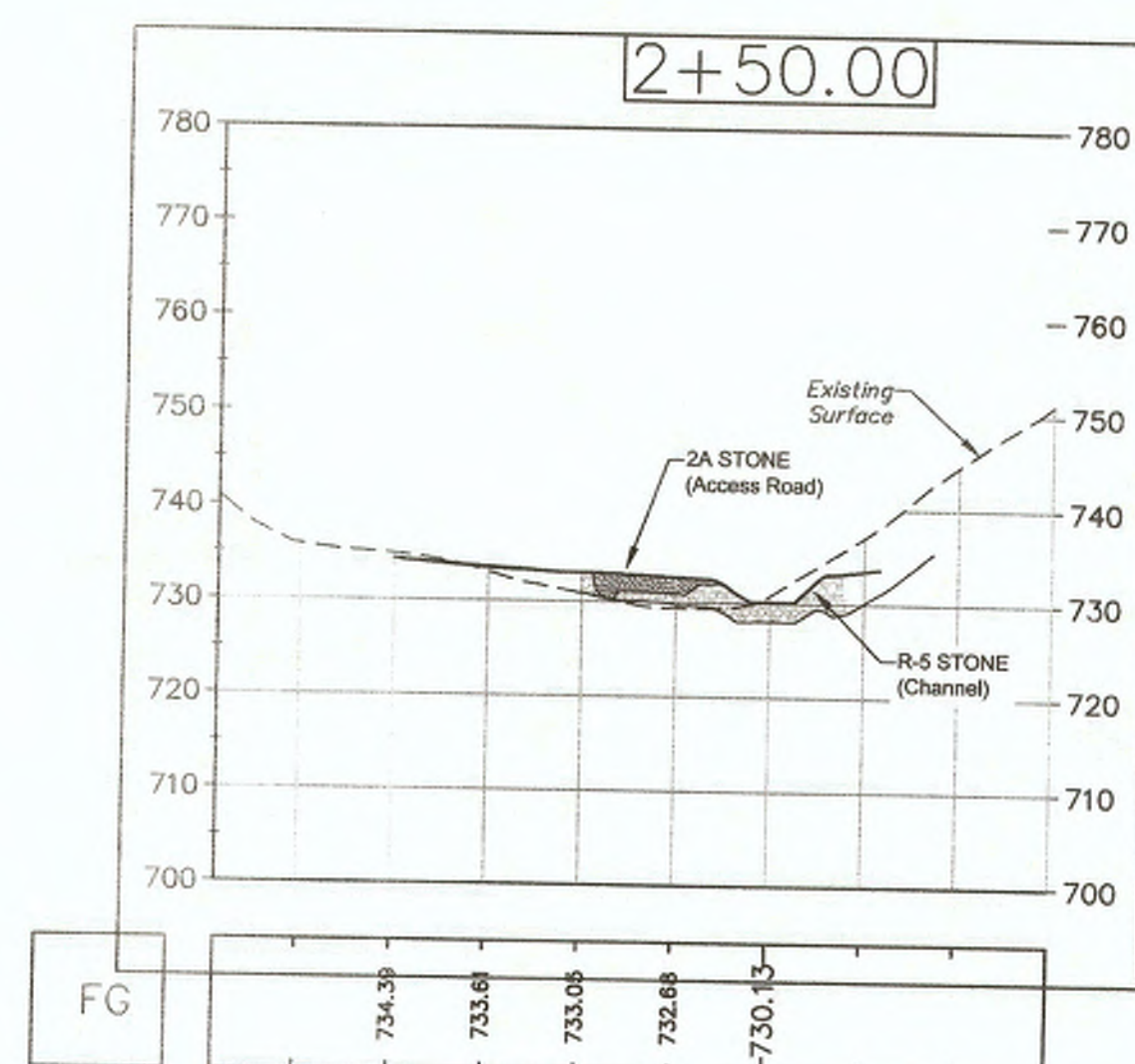
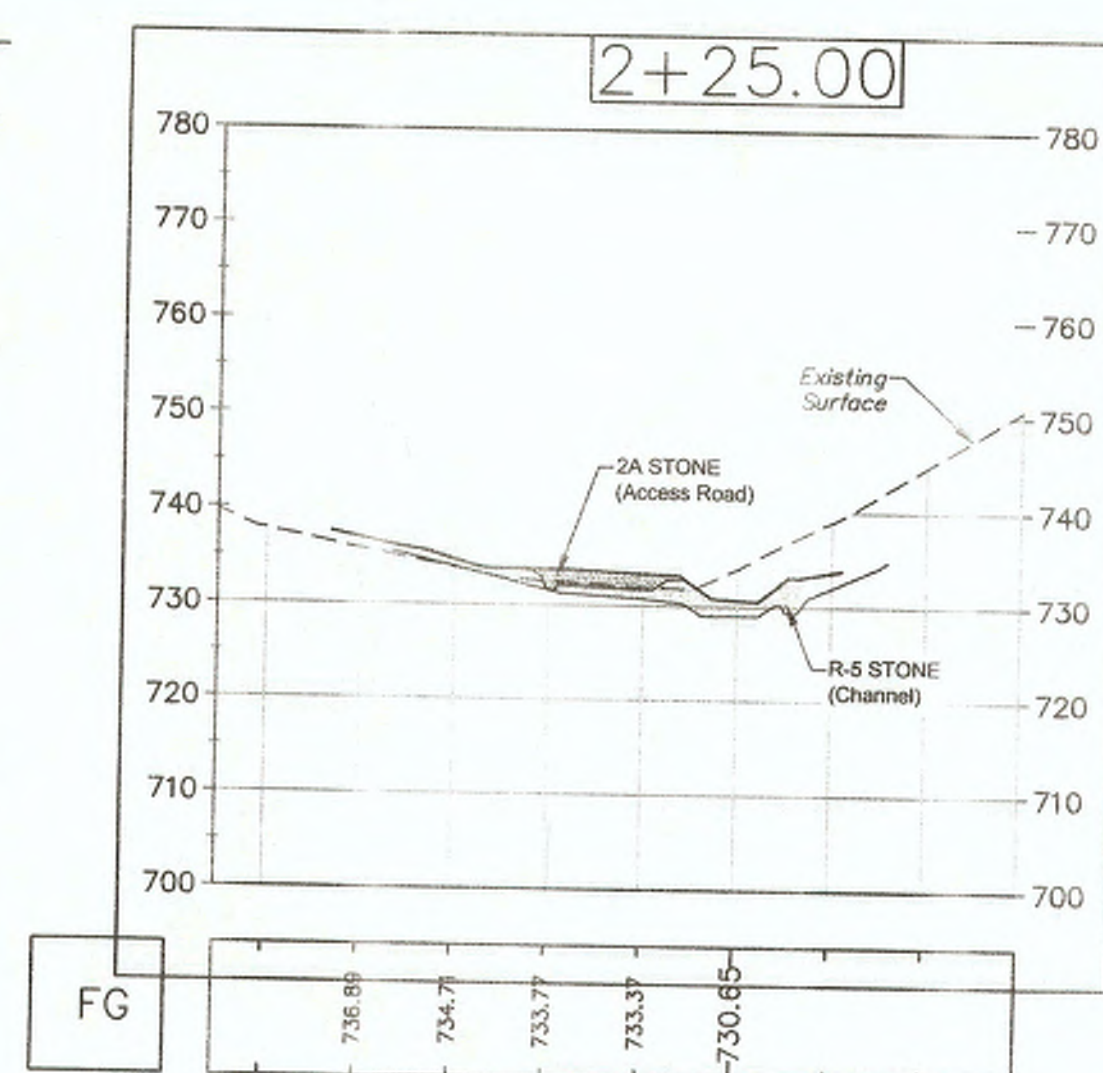
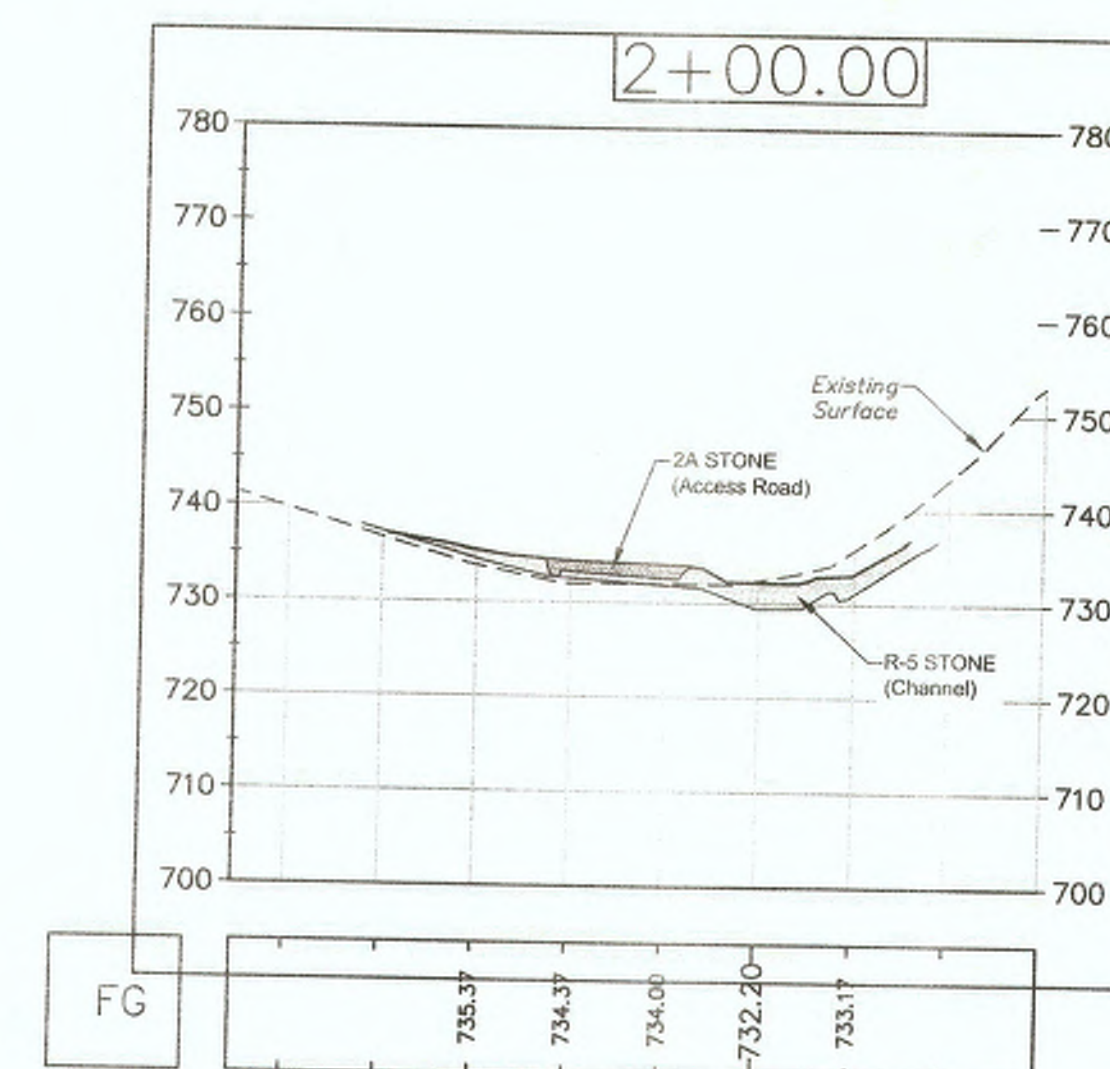
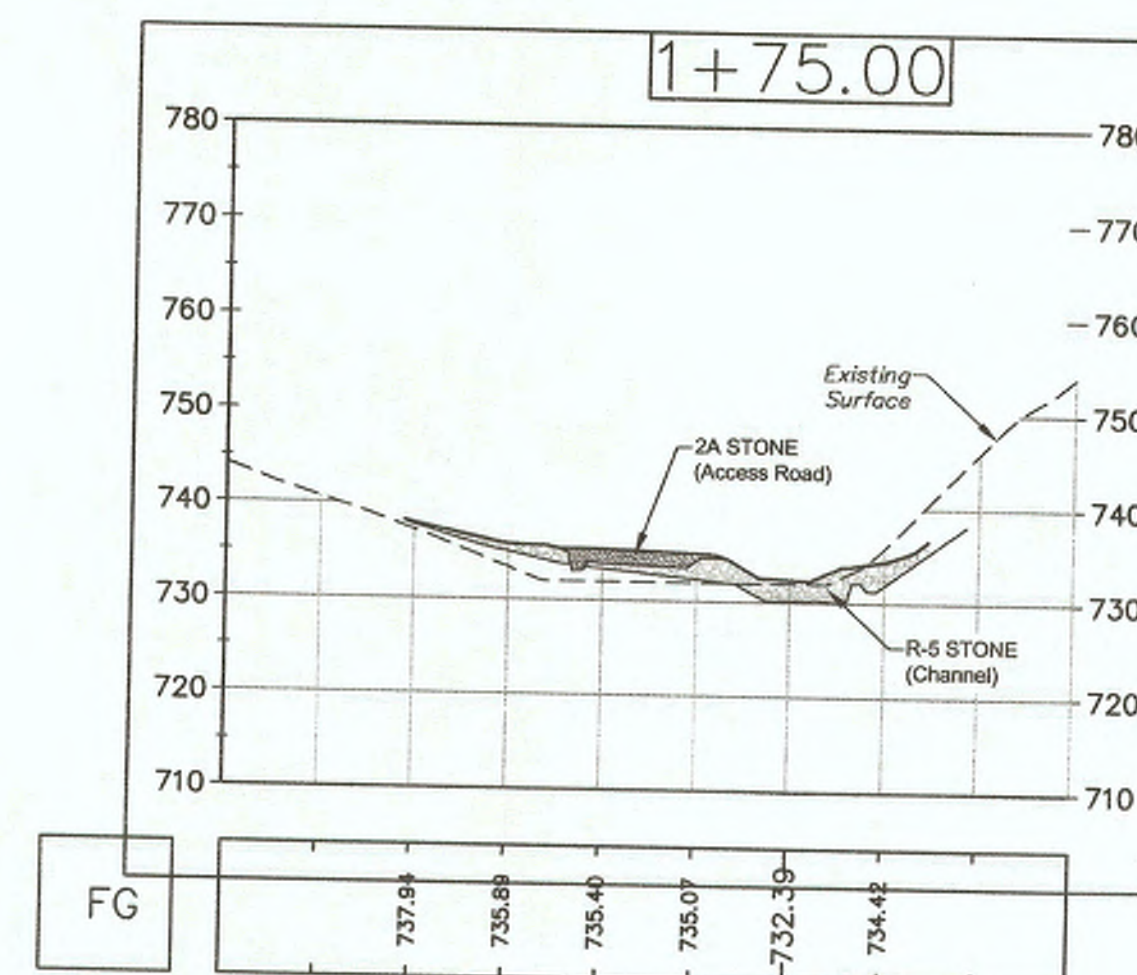
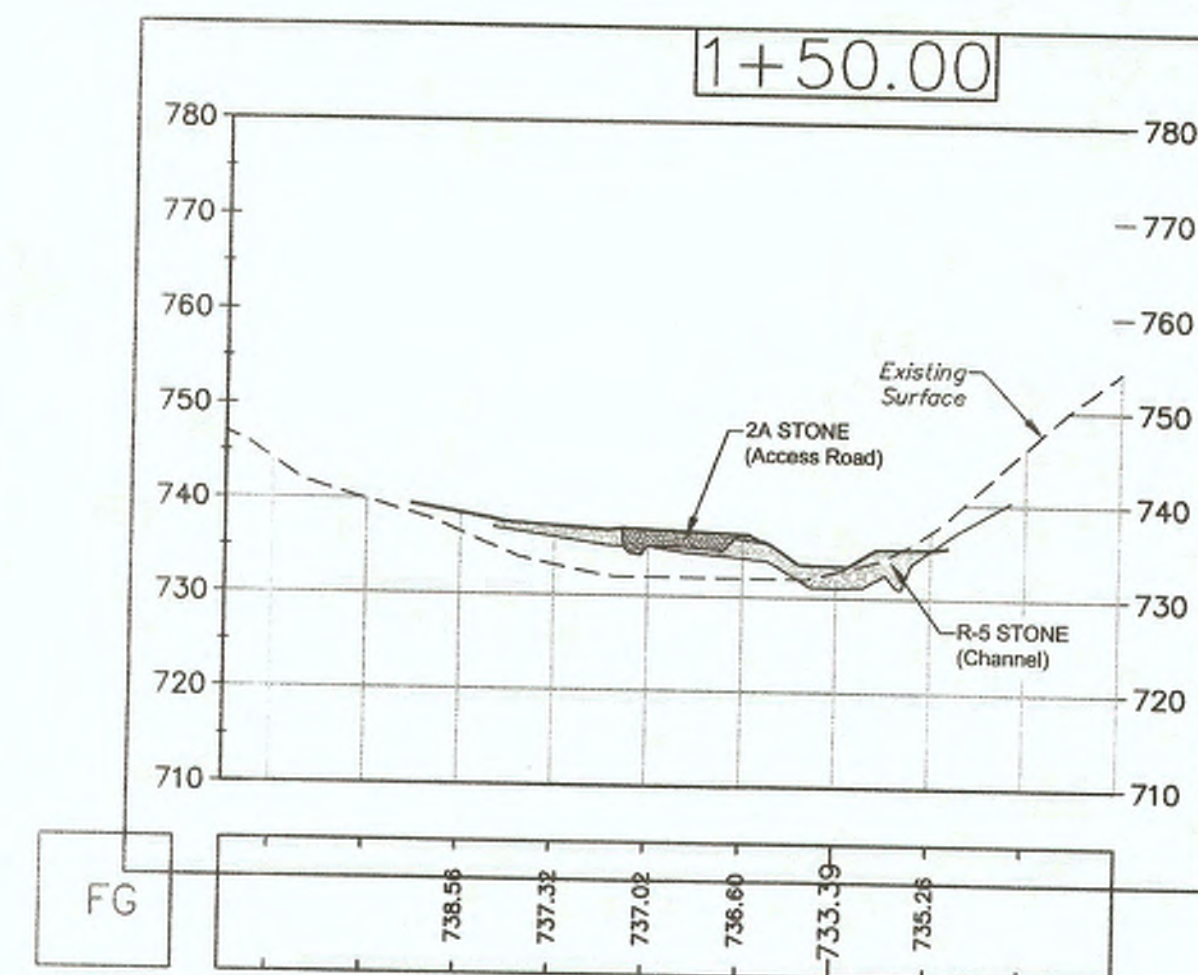
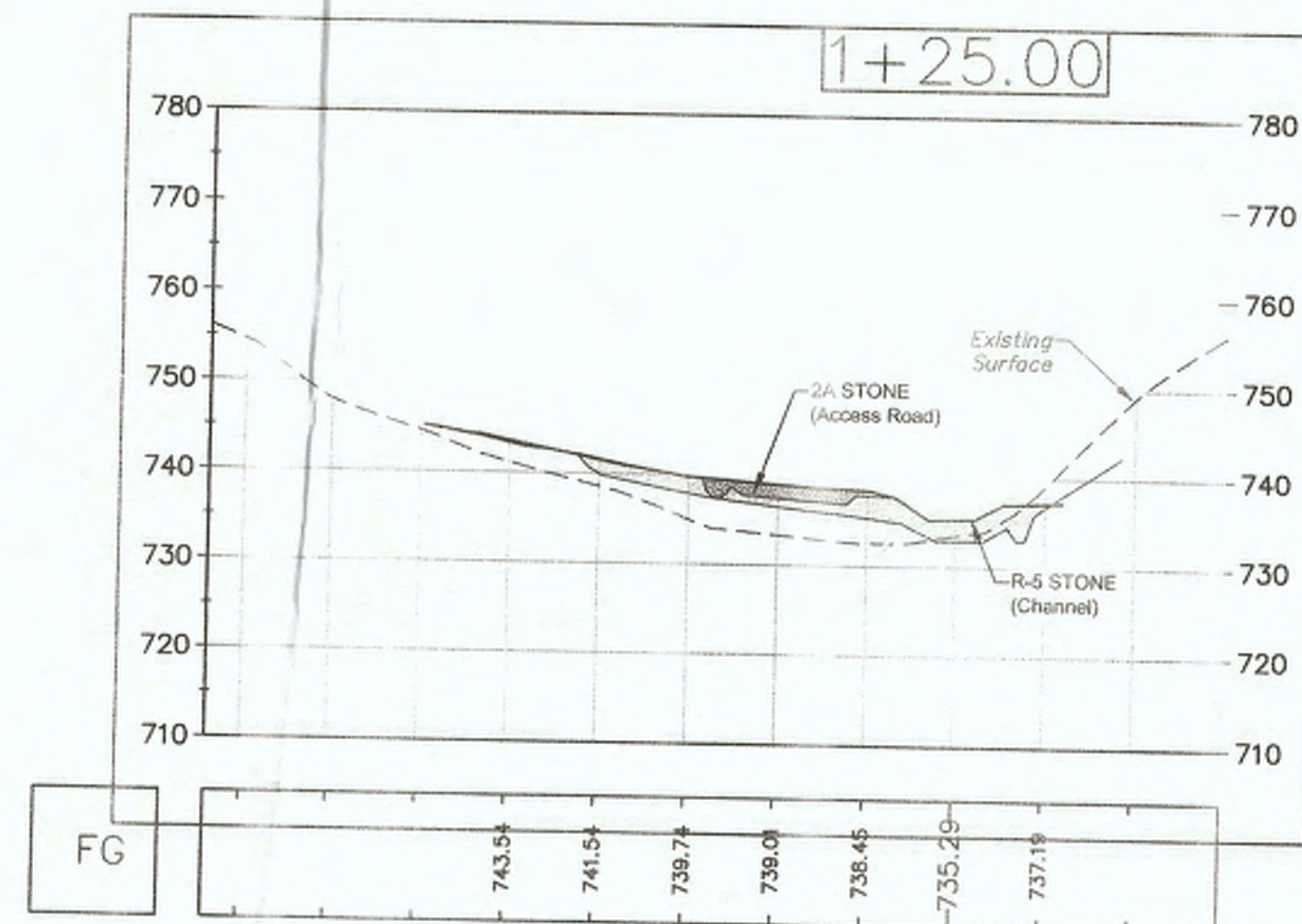
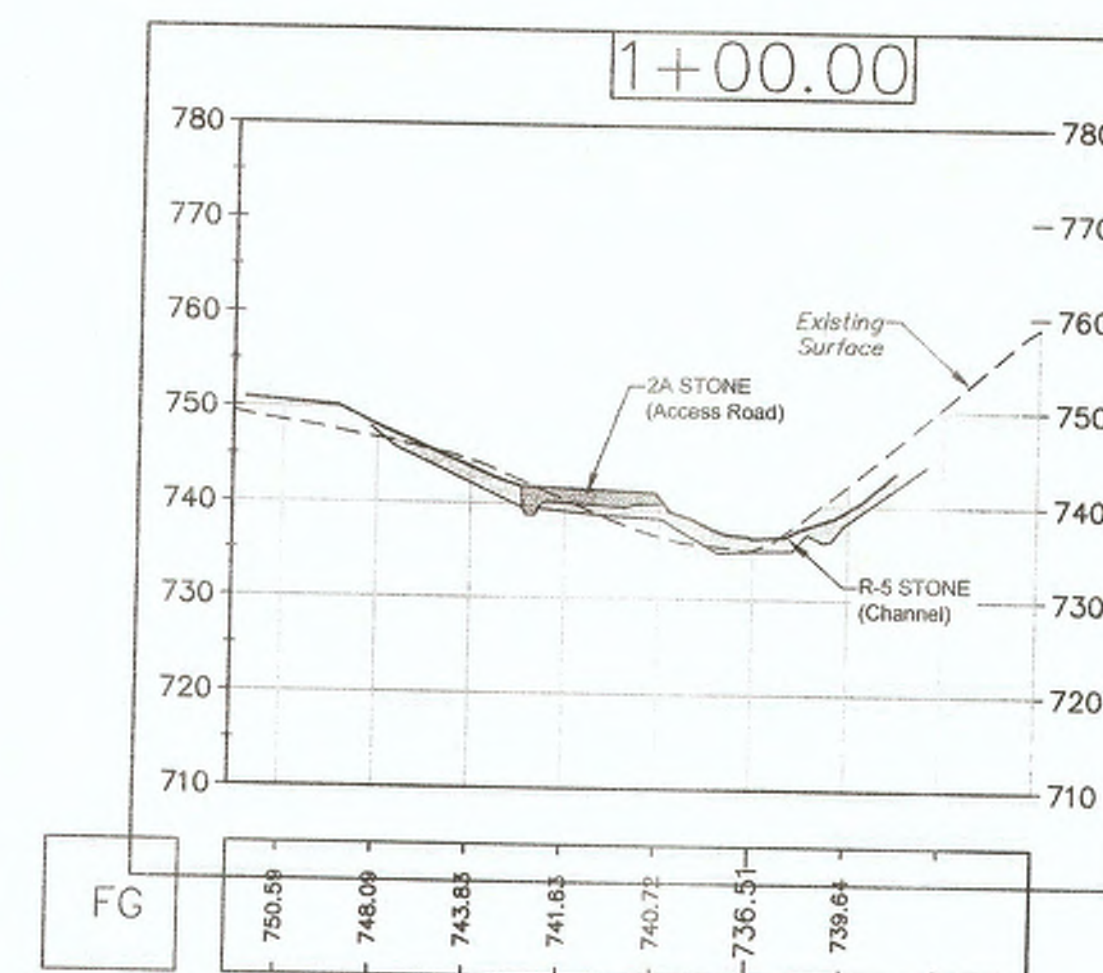
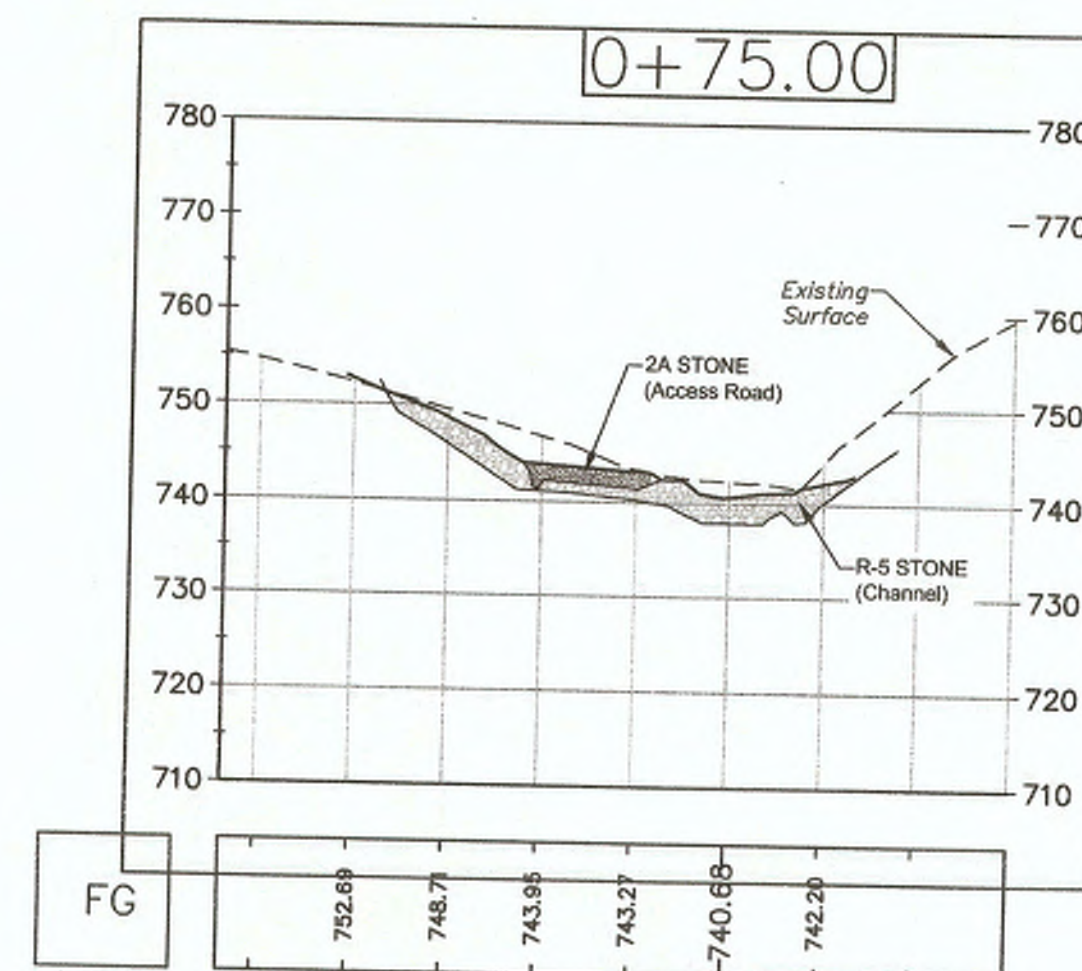
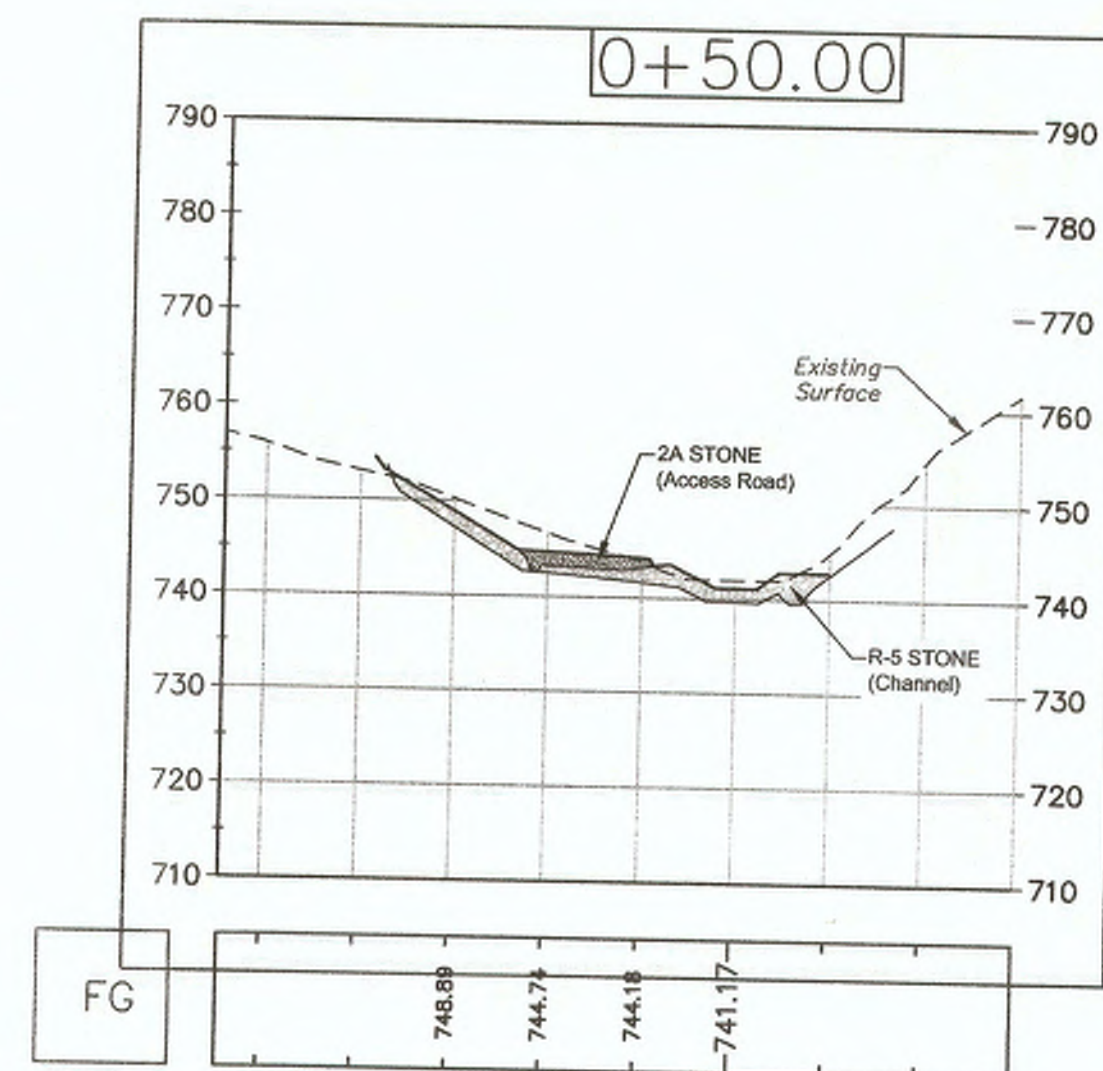
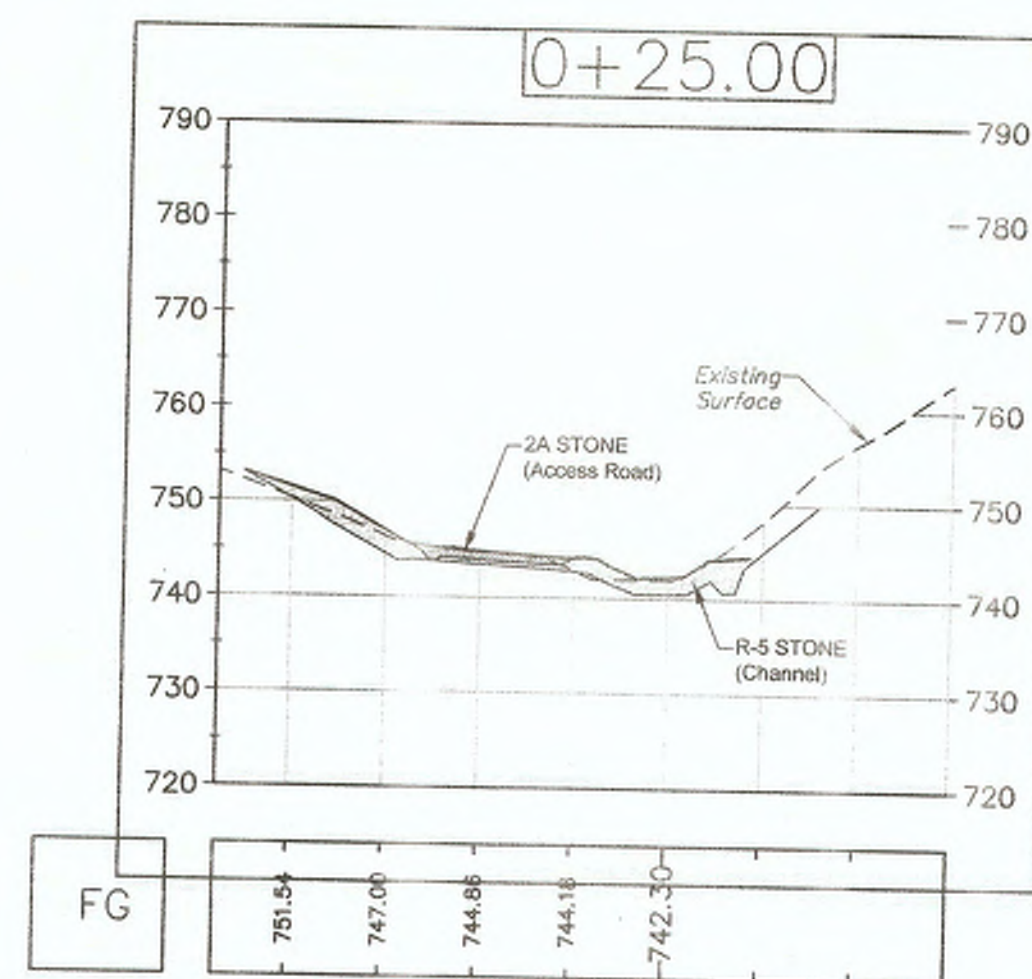
SHERADEN PARK - SECTION 206  
AQUATIC ECOSYSTEM RESTORATION PROJECT  
RIPARIAN CHANNEL CONSTRUCTION AND  
NEW PLANTINGS CONTRACT  
EROSION AND SEDIMENT CONTROL PLAN  
BMP DETAILS

SHEET  
IDENTIFICATION  
NUMBER  
X-5002









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☐ **Mars Office**  
123 Ridge Road, Suite B  
Valencia, PA 16059  
PHONE: (724) 625-4544  
FAX: (724) 625-4549

DATE ISSUED: 8-15-2017		PROJECT STATUS:	
REVISIONS:			
NO.	DESCRIPTION	NO.	DATE
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DRAWING ORIENTATION

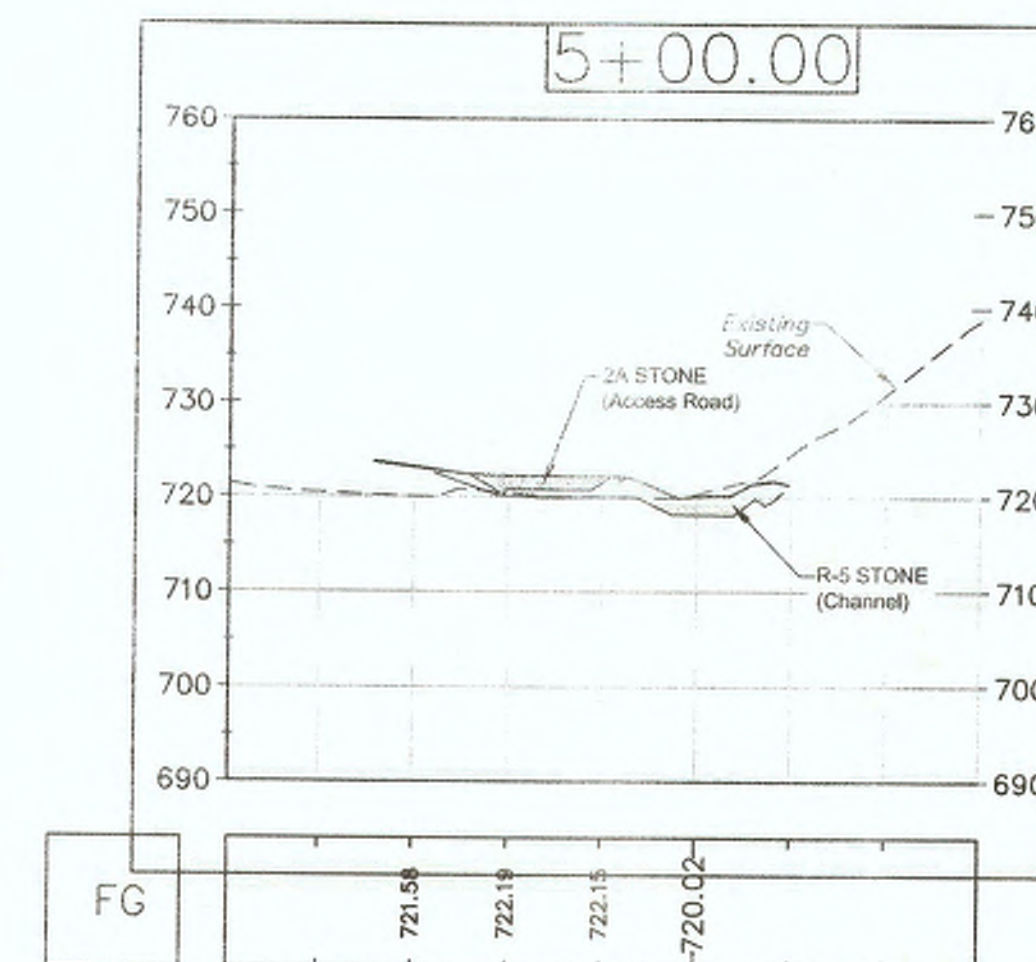
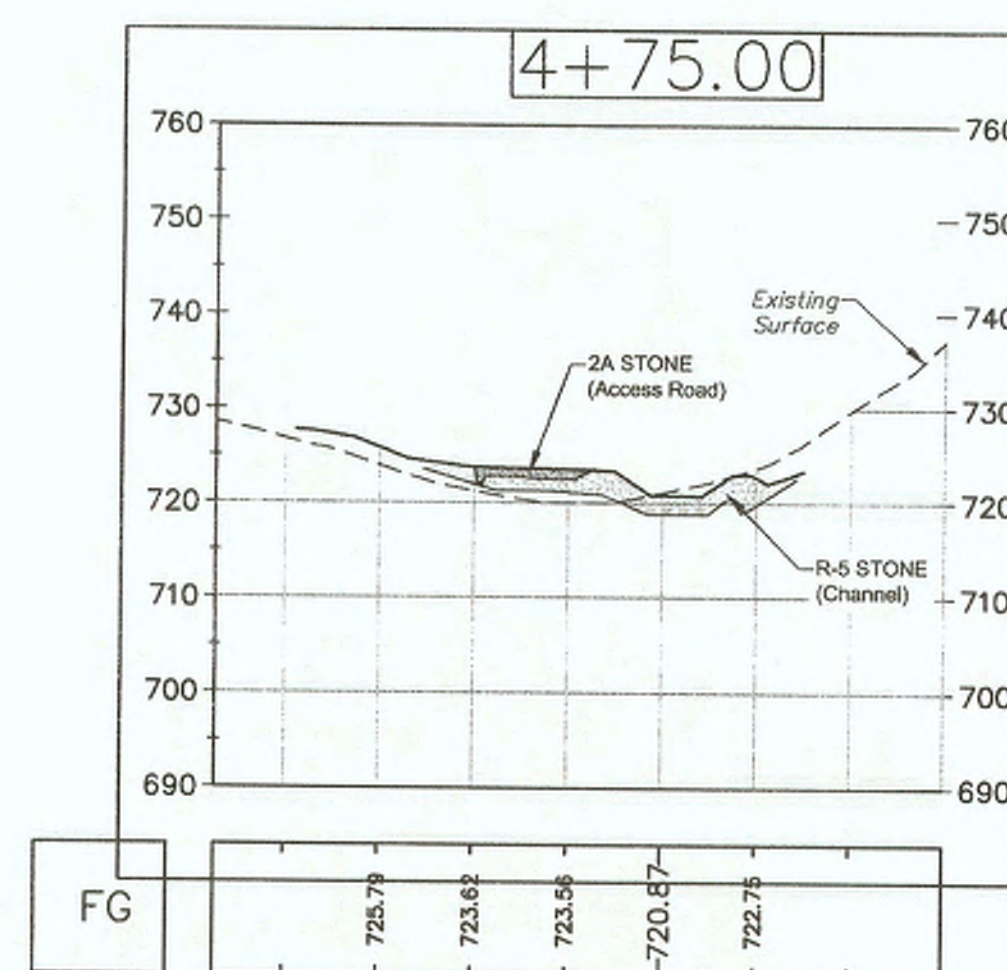
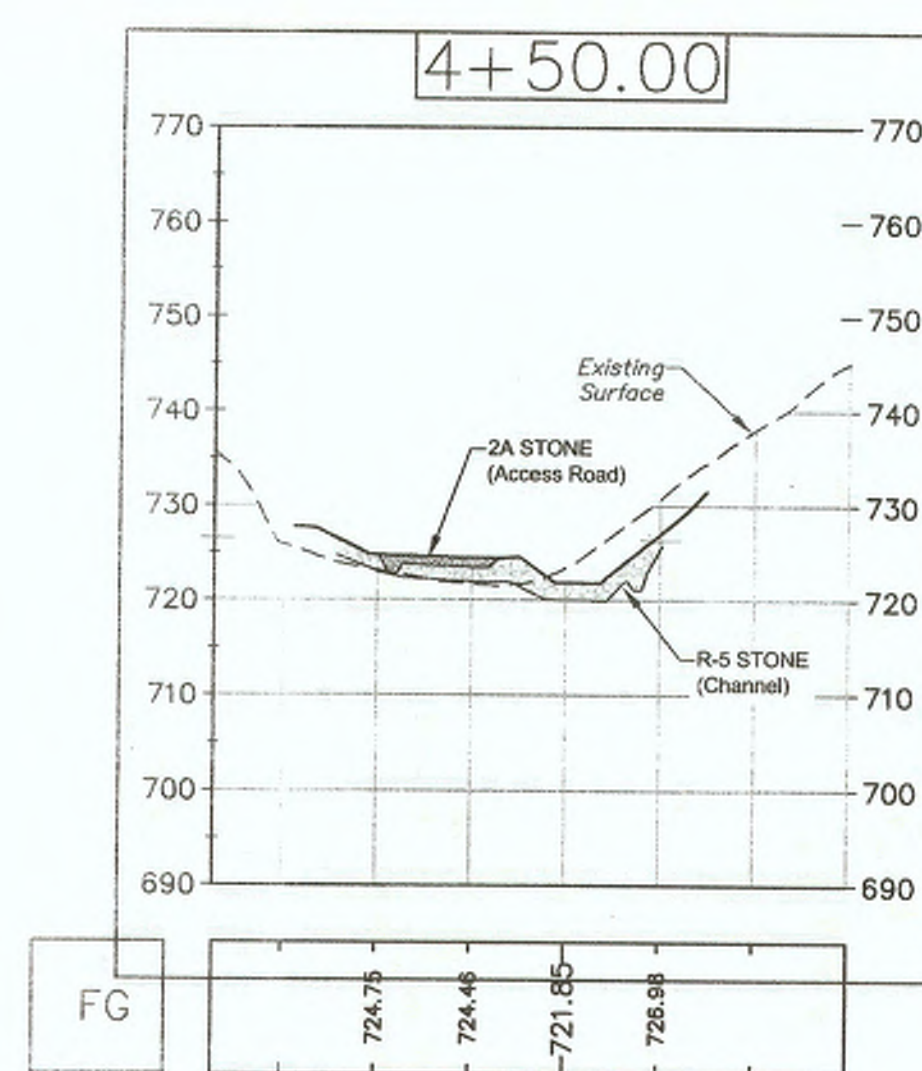
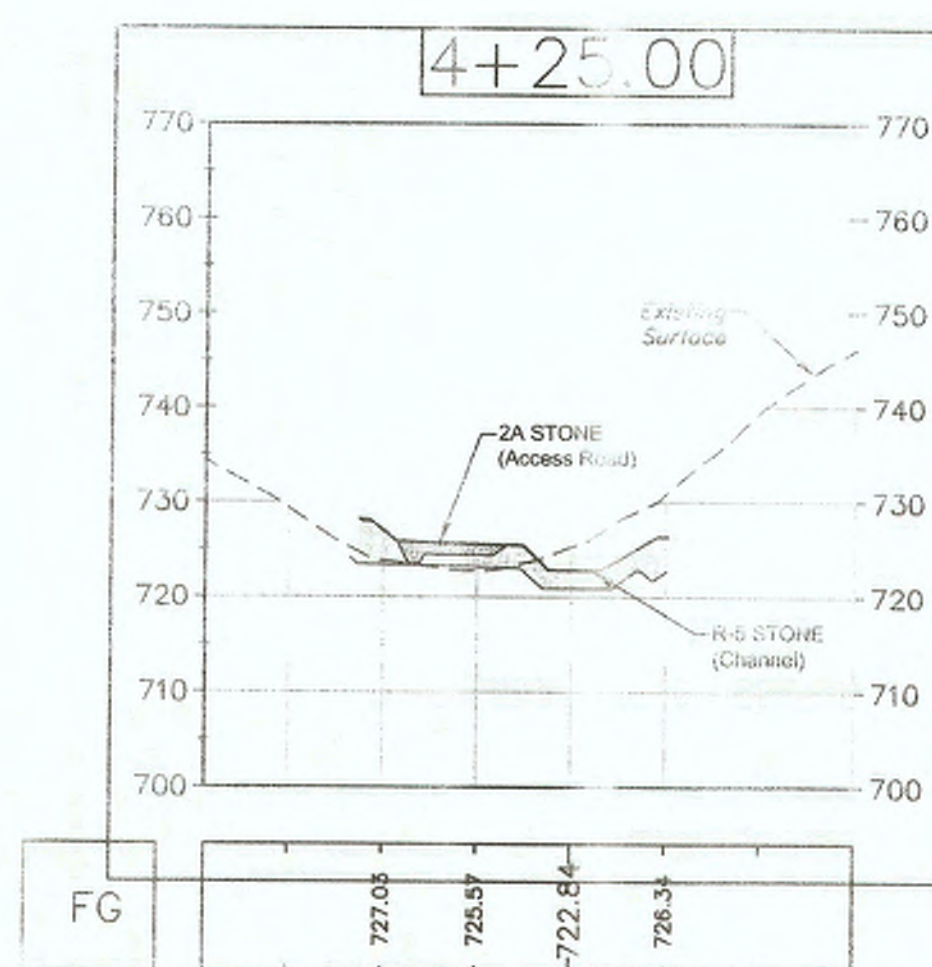
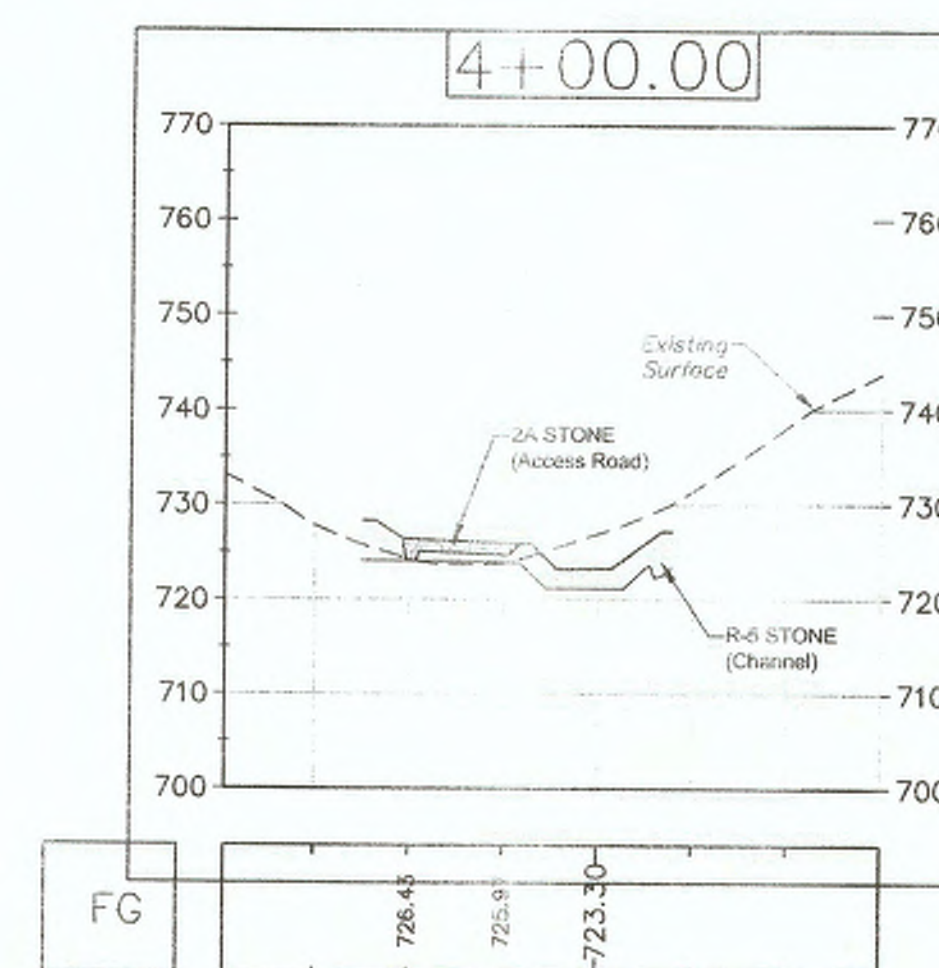
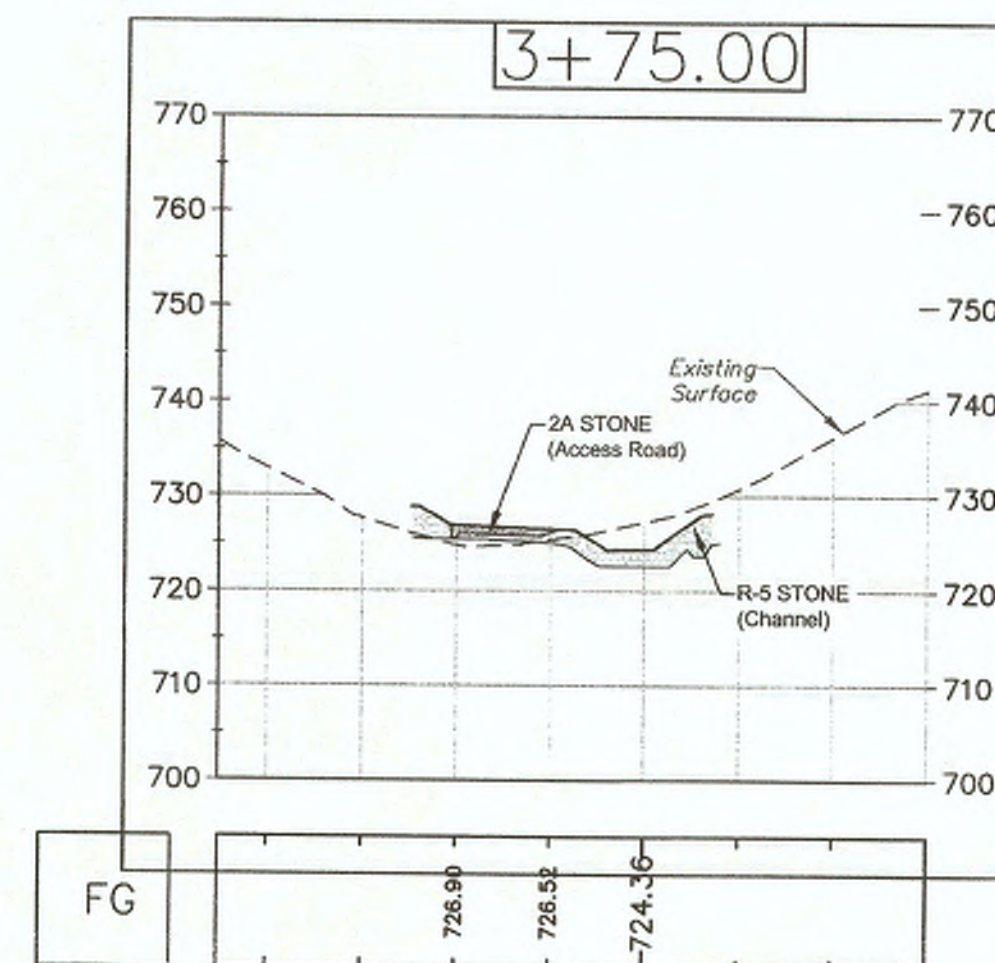
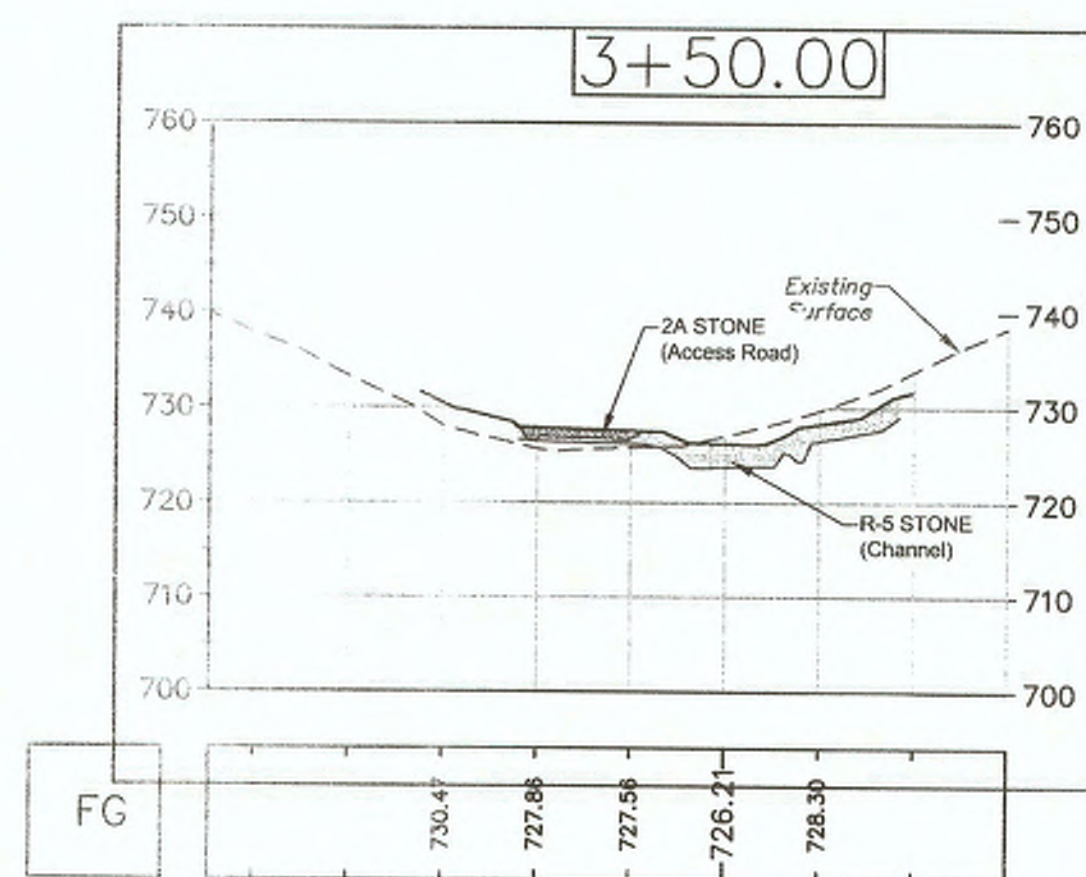
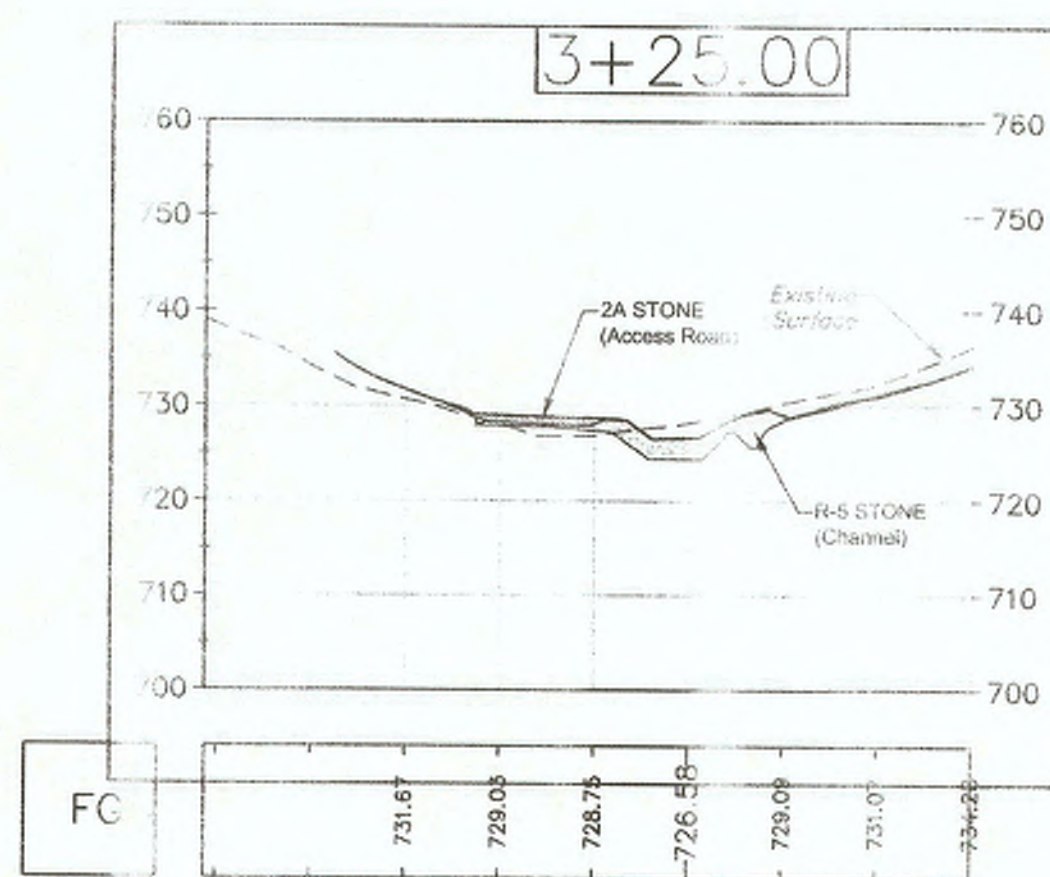
PROJECT TITLE: **AAS-BUILT RIPARIAN CHANNEL CONSTRUCTION**

**PROJECT LOCATION:**  
SHERADEN PARK  
CITY OF PITTSBURGH, ALLEGHENY CO., PA

**CLIENT ADDRESS:**  
A. MERANTE CONTRACTING, INC.  
4740 STEELES AVENUE  
PITTSBURGH, PA 15206

DRAWN BY: VP		CHECKED BY: CMS	
CAD FILE: 17-12417-2.dwg			
HORZ. SCALE: 1" = 20'		VERT. SCALE: 1" = 20'	
SHEET: <b>C.311</b>		2 OF 3	
PROJECT #: 17-12417-2			





Volume Summary							
Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
_2A_Fill Volume	full	1.000	1.000	6683.01	0.25	310.51	310.25<Fill>
_Excavation_Cut-Fill	full	1.000	1.000	23761.18	1600.71	341.85	1258.87<Cut>
_R5_Fill Volume	full	1.000	1.000	22093.65	5.59	1310.06	1304.47<Fill>



**HAMPTON TECHNICAL ASSOCIATES**  
 ENGINEERING LAND SURVEYORS  
 ESTABLISHED 1960  
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 35 Wilson Street, Suite 201  
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 FAX: (412) 781-5904  
☐ Mars Office  
 123 Ridge Road, Suite B  
 Valencia, PA 16059  
 PHONE: (724) 625-4544  
 FAX: (724) 625-4549

DATE	DESCRIPTION	NO.
6-15-2017	PROJECT STATUS	

DRAWING ORIENTATION

**AS-BUILT RIPARIAN CHANNEL CONSTRUCTION CROSS SECTIONS**  
 PROJECT LOCATION:  
 SHERADEN PARK  
 CITY OF PITTSBURGH, ALLEGHENY CO., PA  
 CLIENT ADDRESS:  
 A. MERANTE CONTRACTING, INC.  
 4740 STREETS RUN ROAD

DRAWN BY: VP  
 CHECKED BY: CMS  
 CAD FILE: 17-12417-2.dwg  
 HORIZ. SCALE: 1" = 20'  
 VERT. SCALE: 1" = 20'  
 SHEET: 3 OF 3  
**C.312**  
 PROJECT #: 17-12417-2



**February 22, 2023**

**CONTRACT NO. 1773A**

**SHERADEN PARK ECOSYSTEM MAINTENANCE**

**ADDENDUM NO. 1**

**ATTACHMENT E PRE-BID MEETING AGENDA**



**CONTRACT NO. 1773A  
SHERADEN PARK ECOSYSTEM MAINTENANCE CONTRACT  
PRE-BID MEETING AGENDA  
Thursday, February 16, 2023 10:00 AM  
Microsoft Teams**

**INTRODUCTIONS AND KICKOFF**

Joe Fedor – ALCOSAN Project Manager  
Mike Lichte – ALCOSAN Director of Regional Conveyance  
Jeffrey Livezey – ALCOSAN Environmental Construction Supervisor  
Courtney Dumm – ALCOSAN Contract Administrator/Engineer (Hatch)  
Others introduced and annotated attendees on sign-in sheet

This Pre-Bid Meeting is not mandatory. Please ensure that your clearly printed name and complete contact information are provided on the sign-in sheet and/or in the meeting chat. All addenda will be distributed via email.

Information presented at this meeting is for clarification purposes. Bidders should review bidding documents for all project details. Discussion items are not guaranteed to be part of the meeting minutes. Questions requiring formal response must be submitted in writing by the question deadline: *Monday February 27, 2023 at 4:00 PM.*

**MBE/WBE REQUIREMENTS**

Article 2 Section 2.28 and Article 1 – Pages 1-17 to 1-21. MBE/WBE requirements in the Contract urge bidders to participate in meeting the 10-25% goal. ALCOSAN accepts DBE certification from the Port Authority, Allegheny County Department of General Services and Penn DOT. Any other certification will be reviewed on a case by case basis. Lack of submittal of MBE/WBE documentation is cause for rejection of the bid.

ALCOSAN requires the submittal of a monthly MBE/WBE Utilization Report, which will accompany every pay estimate.

**CONTRACT SUMMARY**

Contract 1773A, Sheraden Park Ecosystem Maintenance Contract **is a 720-day contract for invasive plant species control services including removal, herbicide treatment, and supplemental seeding.**

The Contractor is responsible for acquiring any permits to complete the Work, as necessary. The Contractor should plan to minimize the impacts of their work to surrounding areas. The Contractor



is also responsible for coordinating and securing access through private properties to perform the Work, including the execution of any licensing or agreements.

The Contract Estimate for the Work is \$235,000 - \$300,000.

## **CONSTRUCTION INSPECTION-WORKING HOURS**

ALCOSAN will have on-site resident representatives assigned to review and monitor the work. Any work proposed outside pre-scheduled working hours as defined in Article 3.75 Working Hours requires 48-hours' notice for approval.

## **LEGAL NOTICE**

Public Bid Opening **Wednesday, March 8, 2023 at 11:00AM EST**. If the contractor is using a delivery service such as Fed Ex or UPS, they may wish to confirm delivery was made prior to this time. **The outer delivery service envelope should be clearly marked with the Contract number and the words "SEALED BID FOR CONTRACT NO. 1773A, SHERADEN PARK ECOSYSTEM MAINTENANCE" on the outside.** It is the Contractor's responsibility to ensure the bid reaches the Authority by the deadline.

Contract Documents can be obtained from the Contract Clerks on the 2<sup>nd</sup> floor, O&M Building for non-refundable cost of \$100.00.

Questions should be emailed to [joseph.fedor@alcosan.org](mailto:joseph.fedor@alcosan.org). Questions may also be faxed to the attention of Joe Fedor at **412-734-6209**. Please let Joe Fedor know if a fax has been sent.

All questions shall be submitted no later than **4:00PM EST on Monday February 27, 2023**.

Attendance at the Pre-Bid Meeting is **not mandatory**.

## **BIDDING DOCUMENTS (ARTICLE 1)**

Bidders should review Article 1 thoroughly.

Submission of Bid: All Article 1 documents must be completed and submitted with the bid.

Lowest responsive Bidder will be based on the sum of Bid Items 1 through 6.

Only the Article 1 Bid Forms and supporting documents need to be submitted in the bid envelope, not the entire specifications book. The Bid shall be properly executed and accompanied by all Bonds, Certificates, Questionnaire Forms and other supporting information & documents, as described in the Bid Form. Include proper signatures, seals, and dates. Include written and numerical values for each subtask and for the total bid. Submit Bid Security via certified check or bid bond in the dollar amount equal to 10% of the bid amount

The intent is to award this contract at the March 23, 2023 Board Meeting and issue an April 2023 Notice to Proceed.

## **INFORMATION FOR BIDDERS (ARTICLE 2)**

Bidders are urged to review Article 2 in preparing their bids.

2.3 Location: Between Sheraden Park and the north and west banks of Chartiers Creek. An electronic map is included on portable media in the Appendices attached to Contract Documents.

2.4 Description of Bid Items:

Item No. 1 is for mobilization / demobilization, bonds and insurance to facilitate the contract work; this item is not to exceed 5% of the total base bid price for Items No. 1 – 6.

Items No. 2, 3, 4, and 5 are for mechanical and chemical treatment of the four target invasive species in this contract: Japanese knotweed, reed canarygrass, poison hemlock, and purple loosestrife respectively.

Item No. 6 is for the overseeding of the treatment areas with a native seed mix to establish native vegetation at the site.

2.7 Sealed Bids to be submitted to the Contract Clerk at ALCOSAN's Engineering Department on or before **Bid Opening time and date of 11:00 AM, Wednesday, March 8, 2023**. Late bids will be treated as "nonresponsive" and returned to Bidder unopened. It is the Bidders' responsibility to ensure that the bids are received by ALCOSAN on time. If using a delivery service, make sure the **bid package is clearly marked, "SEALED BID FOR CONTRACT NO. 1773A, SHERADEN PARK ECOSYSTEM MAINTENANCE" on the outside**. If a Bid is submitted with conditions or exceptions, or not in conformance with the terms and conditions of the Contract Documents, it may be rejected.

2.8 Supplementary Information Package (SIP): Experience, Equipment Subcontractors.

SIP to be submitted at the request of the OWNER and prior to Contract award, **SIP should be submitted to the Authority within 5 days of bid submission, when requested**. The SIP includes important documents required prior to the start of work and includes the following:

1. The information requested in the Information for Bidders Section 2.27 entitled **"Qualifications and Experience of Bidders."**

- One of the qualifications required for this work is that crew members be licensed herbicide applicators certified for aquatic work within the Commonwealth of Pennsylvania waters which includes both standing water and saturated soils.

2. List of Subcontractors, experience, equipment, etc.

3. The Contractor will prepare a **Site-Specific Health and Safety Plan**. This will include all field personnel and contact information, emergency routes and maps to the nearest hospital, and Confined space entry certifications for all personnel.

4. **Work plan**

Work plan including schedule, equipment, number of and description of crew members, and expected permits.

## **5. All required insurance certificates and documentation**

Information can be found in Article 3, Exhibit A

- 2.10 ALCOSAN reserves the right to reject any and all bids. The decision to award the contract is expected within (60) days from the date of the Bid Opening.
- 2.11 Contract Documents may be purchased from ALCOSAN's Engineering Clerks Office. A fee of \$100.00 is required for each set of Contract Documents.
- 2.14 If any alleged errors are noted in the Contract Documents, Bidders should immediately notify Joe Fedor in writing. If confirmed, Addenda will be sent to all prospective Bidders known to have received the Contract Documents.
- 2.15 Information for mapping is provided on portable media included with the appendices in the Contract Documents and are for reference only.
- 2.16 Bidders should thoroughly investigate the job site and the working conditions in formulating their bid. Any questions received in writing prior to the close of the question period will be answered through an addendum. The Appendices contain a location map to assist in making the bid and locating the drop shafts considered for inspection.
- 2.17 Quantities are estimated as accurately as possible for base items, but they should be treated as a baseline estimate. The quantities given on the contract plans or in the supplemental specifications for the various items of Work are approximate estimates of the amount required to complete this contract. It is possible that there may be some variation of quantities between those estimated in the bid documents and what is observed in the field conditions.
- 2.19 The Acknowledgment page attached to Addendum No. 1 and subsequent addenda, as applicable, are to be signed and returned immediately via email to [contract.clerks@alcosan.org](mailto:contract.clerks@alcosan.org) and also included with the Bidder's Proposal.
- 2.22 Bid Security 10% of the Total Lump Sum Price certified check or bid bond for that amount.

Attachment A: Contractors and subcontractors shall review the Labor Stabilization Agreement and execute that agreement along with a Letter of Assent prior to commencing work.

## **GENERAL CONTRACT CONDITIONS (ARTICLE 3)**

Bidders should review Article 3 thoroughly.

Access coordination is considered incidental to the bid price, no additional compensation will be considered for any permits.

- 3.56 Bonds: Performance and Payment bonds applicable to this Contract.
- 3.57 Warranty: Applicable only if structure modifications are made.
- 3.73 Compliance with Health, Safety and Environmental Laws: ALCOSAN approval of Site-Specific Health and Safety Plan required prior to commencing work.

3.75 Working Hours: Work performed at the Job Site shall be performed between the hours of 8:00 A.M. and 4:00 P.M. or at other times approved by the Owner.

Should the contractor wish to request access to work outside the hours of 8:00 A.M. and 4:00 P.M., the Contractor shall provide the Owner notice in writing, no less than 48 hours prior to this need.

Work performed during the Owner holidays, and weekends shall be with hours overseen by the Construction Manager.

Exhibit A – Insurance Requirements: Certificates required before any work begins, this may include Railroad Protective Liability Insurance (if required).

#### **CONTRACT AGREEMENT (ARTICLE 4)**

Bidders should review Article 4 thoroughly.

Completion of work designated as part of Year 1: 270 Calendar days from NTP

Substantial Completion of Contract 1773A: 720 Calendar days from NTP.

Liquidated Damages for missing set Milestones:

- Completion of work designated as part of Year 1: \$500/day
- Substantial Completion of Contract No. 1773A: \$500/day

#### **BONDS, CERTIFICATES AND STATEMENTS (ARTICLE 5)**

Bidders should review Article 5 thoroughly.

Performance Bond, Labor and Material Payment Bond, Contractors Certificate of Satisfaction. A Maintenance Bond will not be required for this contract unless structure modifications are made.

#### **SPECIFICATIONS (ARTICLE 6)**

The technical specifications are located in Article 6. The Bidders should review Article 6 thoroughly. The Appendices supplied on portable media include the location map.

Submittals, communications, pay estimates and other documentation will be handled using the online e-Builder application.

#### **Site Conditions – See contract reference map**

- Please note that a reference map has been included in Appendix A.

#### **QUESTIONS?**

**February 22, 2023**

**CONTRACT NO. 1773A**

**SHERADEN PARK ECOSYSTEM MAINTENANCE**

**ADDENDUM NO. 1**

**ATTACHMENT F PRE-BID MEETING MINUTES**



**CONTRACT NO. 1773A**  
**SHERADEN PARK ECOSYSTEM MAINTENANCE CONTRACT**  
**PRE-BID MEETING MINUTES**  
**Thursday, February 16, 2023 10:00 AM**  
**Microsoft Teams**

**INTRODUCTIONS AND KICKOFF**

**MBE/WBE REQUIREMENTS**

Contractors may reach out to ALCOSAN for assistance in getting connected to MBE/WBE firms for this contract.

**CONTRACT SUMMARY**

This contract is a follow up operations and maintenance contract connected to a previously completed habitat restoration project with the Army Corps of Engineers at the Sheraden Park site. The operations and maintenance manual the Army Corps developed is the basis for the treatment plan outlined in this contract. It is a two year contract, which includes four target species.

Revisions to this contract included removal of contingent items, including stream channel maintenance.

The Contract Estimate for the Work is \$235,000 - \$300,000. This estimate is for the entire contract including Years 1 & 2.

**CONSTRUCTION INSPECTION-WORKING HOURS**

Some coordination will be required with Beitler Trucking regarding access to the site through an existing easement.

**LEGAL NOTICE**

**BIDDING DOCUMENTS (ARTICLE 1)**

**INFORMATION FOR BIDDERS (ARTICLE 2)**

2.8 Supplementary Information Package (SIP): Experience, Equipment Subcontractors.

1. The Contractor will prepare a **Site-Specific Health and Safety Plan**. This will include all field personnel and contact information, emergency routes and maps to the nearest hospital, and Confined space entry certifications for

all personnel. **This plan must be submitted and approved prior to the start of any work at the site.**

### **GENERAL CONTRACT CONDITIONS (ARTICLE 3)**

3.75 Working Hours: Work performed at the Job Site shall be performed between the hours of 8:00 A.M. and 4:00 P.M. or at other times approved by the Owner.

Should the contractor wish to request access to work outside the hours of 8:00 A.M. and 4:00 P.M., the Contractor shall provide the Owner notice in writing, no less than 48 hours prior to this need.

Work performed during the Owner holidays, and weekends shall be with hours overseen by the Construction Manager.

ALCOSAN has an existing easement with Beitler Trucking which allows access through their property during these hours. **Work outside these hours will require approval by ALCOSAN and Beitler Trucking.**

### **CONTRACT AGREEMENT (ARTICLE 4)**

### **BONDS, CERTIFICATES AND STATEMENTS (ARTICLE 5)**

### **SPECIFICATIONS (ARTICLE 6)**

#### **Site Conditions – See contract reference map**

- Please note that a reference map has been included in Appendix A.
  - Access Road through Beitler Trucking property is the best route for vehicle access.
  - There is foot access through Sheraden Park to the north of the park tennis courts along the riparian channel indicated on the map.
  - The target areas highlighted on the map are based on a delineation conducted in summer 2022 and indicate the extents of the treatment areas for Contract 1773A.

### **QUESTIONS?**

Question: *Will this meeting agenda, minutes, and questions be provided following the meeting?*

Answer: *Yes, they will all be distributed as part of Addendum 1.*

Question: *When is the final question deadline?*

Answer: *The final questions deadline is Monday, February 27, 2023 at 4:00 PM. All questions received in writing prior to that deadline will be answered in an addendum prior to the bid opening date.*

Question: *Is there a mandatory site walk through scheduled?*

Answer: *No mandatory walk through is scheduled. The contractor may investigate the site at their convenience. Contractors may reach out to Joseph Fedor regarding access. (His contact information is in the attendance list at the end of these minutes.)*

Question: *How will the treatment areas be verified since the delineation bid item has been removed? How will the contract proceed following a significant change in area being found?*

Answer: *The quantities provided in this contract are a starting point for treatment and establishment of control is not expected in a single year/season. There is an opportunity for undergoing a change order process if a significant difference is discovered between the field condition and what is outlined in the contract documents. For additional clarification, refer to the Questions section of Addendum 1.*

Question: *Are contractors to assume the square yardage quantities on the map are what's under contract, or is treatment of all invasive species throughout the project areas expected?*

Answer: *For additional clarification, refer to the Questions section of Addendum 1.*

Question: *Changes to the bid form from Contract 1773 to 1773A have been discussed, were other changes made to the specifications in Contract 1773A?*

Answer: *No other significant changes have been made. There were slight adjustments made to the permissible equipment and procedures for spraying and seeding in the technical specifications.*

Question: *Is there any potential for modification of the requirement for total removal of cut material from site?*

Answer: *For additional clarification, refer to the Questions section of Addendum 1.*

Question: *Will the site be marked to indicate the exact areas as noted on the map prior to contract?*

Answer: *For additional clarification, refer to the Questions section of Addendum 1.*



Question: *Is the estimate listed in the meeting agenda for both years?*

Answer: *Yes, the provided estimate is for the total cost for Years 1 & 2.*

Question: *Are all crew members required to be licensed herbicide applicators in aquatic environments? Can additional crew members work under the observation of one licensed supervisor?*

Answer: *If it is adequate under the license requirements for a licensed applicator to oversee additional unlicensed crew members, that is adequate for our purposes. The license requirements for herbicide applicators certified for aquatic work within the Commonwealth of Pennsylvania waters which includes both standing water and saturated soils must be followed.*

Question: *Can ALCOSAN provide additional or more updated prevailing wage information?*

Answer: *ALCOSAN will follow up with our procurement team. For additional clarification, refer to the Questions section of Addendum 1.*

Question: *Years 1 and 2 are lumped together in the bid items, how does ALCOSAN anticipate differentiating the price for each year?*

Answer: *The assumption is that the difference would be in the ballpark of a relatively even split, with a slightly greater cost in Year 1. Once the contract is awarded, the Contractor will be asked to submit a schedule of values which should be better able to define the differences between anticipated costs for Years 1 & 2 more specifically.*

Question: *Is it ok to work outside the defined 8:00 AM to 4:00 PM Monday through Friday timeframe as long as there is 48 hours' notice and approval?*

Answer: *If adequate notice is given, and all necessary parties approve the work, the Contractor may be able to work outside those hours. However, ALCOSAN has an easement with Beitler Trucking which guarantees access during those hours, and there is no guarantee that Beitler Trucking will approve access outside of that timeframe.*

Question: *Is the entire stream channel section to be treated? Are the hillsides and rail beds to be treated?*

Answer: *No treatment is expected outside of the project/property line. In some locations this will mean treatment up to the property line leaving invasive species untreated beyond that*

*point. For additional clarification, refer to the Questions section of Addendum 1.*

*Question: Is cutting required to be all hand cutting, or is machine cutting acceptable?*

*Answer: The approach to cutting is up to the contractor. There are limits to how close machinery is allowed to utility poles present on site as defined in the specifications. There are no specific requirements for hand vs machine cutting, but there is language requiring preservation of existing native growth which may make machine cutting challenging.*

*Question: Can the O&M manual be provided for context as to where some of the requirements outlined in the specifications came from?*

*Answer: The O&M Manual will be added to the Contract in Addendum 1 as Appendix B.*

*Question: Is the layered glove wiping method in Section 14.7 of the Invasive Species Management section of the technical specifications required to be used?*

*Answer: Reference to that method comes directly from the O&M manual and should be considered as an application option. For additional clarification, refer to the Questions section of Addendum 1.*

*Question: When will answers be available to the questions asked today?*

*Answer: The minutes from this meeting and answers to questions asked here will be provided in Addendum 1 as soon as possible.*

*Question: Should the contract be bid assuming overseeding will be required?*

*Answer: Yes, assume overseeding will be required.*

*Question: Who will be inspecting the work and determining compliance?*

*Answer: An ALCOSAN representative who is to be determined.*

**February 22, 2023**

**CONTRACT NO. 1773A**

**SHERADEN PARK ECOSYSTEM MAINTENANCE**

**ADDENDUM NO. 1**

**ATTACHMENT G PRE-BID MEETING SIGN-IN SHEET**

**PRE-BID MEETING**  
**1773A Sheraden Park Ecosystem Maintenance**  
**February 16, 2023 @ 10:00 AM**

<b>Full Name</b>	<b>Company</b>	<b>Email</b>
Joseph Fedor	ALCOSAN	<a href="mailto:joseph.fedor@alcosan.org">joseph.fedor@alcosan.org</a>
Kathleen P. Uniatowski	ALCOSAN	<a href="mailto:kathleen.uniatowski@alcosan.org">kathleen.uniatowski@alcosan.org</a>
Courtney Dumm	Hatch	<a href="mailto:courtney.dumm@hatch.com">courtney.dumm@hatch.com</a>
Mike Ferlin	Silvis Group Inc	<a href="mailto:mferlin@silvisgroup.com">mferlin@silvisgroup.com</a>
Peter Wurst	JJ Wurst Landscape Contractor & Garden Center Inc	<a href="mailto:jjwurst@verizon.net">jjwurst@verizon.net</a>
Cathy Fligger	Silvis Group Inc	<a href="mailto:cfligger@silvisgroup.com">cfligger@silvisgroup.com</a>
Joshua Zimmerman	ZFE LLC	<a href="mailto:zfesprayers@gmail.com">zfesprayers@gmail.com</a>
Mike Elia	ZFE LLC	<a href="mailto:admin@appalachianlandmgnt.com">admin@appalachianlandmgnt.com</a>
Josh Lark	Lark Lawn and Landscape	<a href="mailto:Office@larklawncare.com">Office@larklawncare.com</a>
Mike Takacs	CEC	<a href="mailto:mtakacs@cecinc.com">mtakacs@cecinc.com</a>
Brad Hazelwood	Eisler Landscapes	<a href="mailto:brad.hazelwood@synlawn.com">brad.hazelwood@synlawn.com</a>
Ashley JML	JML Landscape Management LLC	<a href="mailto:wkmetz@jmllandscape.com">wkmetz@jmllandscape.com</a>
Tim Nuttle	Oikos Ecology, LLC	<a href="mailto:nuttle.tim@gmail.com">nuttle.tim@gmail.com</a>
Justin O'Conner	Growing Seasons Landscapes (GSL)	<a href="mailto:Justin@gslpgh.com">Justin@gslpgh.com</a>
Eric French	Eisler Landscapes	<a href="mailto:Eric@EislerLandscapes.com">Eric@EislerLandscapes.com</a>
Ellery Troyer	Ecological Field Services LLC	<a href="mailto:ellery@ecologicalfieldservices.com">ellery@ecologicalfieldservices.com</a>

\* \* \* \* \* END OF ADDENDUM NO. 1 \* \* \* \* \*