

July 27, 2021  
KERN DELTA WATER DISTRICT  
SUNSET PONDS GRADING PROJECT

## NOTICE TO PROSPECTIVE BIDDERS

Attached is **Addendum #1** to the  
Sunset Ponds Grading Project

**This Notice and the accompanying Addendum must be signed and returned with your bid for your bid to be considered responsive.**

The following Addendum was prepared by or under the direction of the following registered persons(s):



**William (Bill) Zeiders** – [wzeiders@zeidersconsulting.com](mailto:wzeiders@zeidersconsulting.com)

### ADDENDUM CONTENTS:

1. Cover Sheet & Acknowledgment (2 pages)
2. Pre-Bid Meeting Summary & Clarifications (5 pages)
3. Amended Special Conditions (modified sections only) (1 page)
4. Amended Bid Item Measurement & Payment (full set) (13 pages)
5. Amended Section G – Concrete Structures and Piping (modified sections only) (1 page)
6. Corrections to Sheets 12, 13, and 36 of the Construction Plan Set (3 sheets)

The above addendum contents have been incorporated into the official Contract Set and issued as Revision #1 to the Contract Set.

**Acknowledgment**

Contractor/Firm Name \_\_\_\_\_

Representative's Name \_\_\_\_\_

Title \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

*By signing this cover sheet, the Contractor certifies that it has reviewed all contents of the subject addendum and that its bid has been prepared taking into consideration the changes made by said addenda.*

**KERN DELTA WATER DISTRICT – SUNSET PONDS GRADING PROJECT  
PRE-BID MEETING SUMMARY AND CLARIFICATIONS  
ADDENDUM #1 – JULY 27, 2021**

**NOTICE TO CONTRACTORS FIGURING THIS WORK**

BID DATE AND TIME: 2:00 p.m. on Friday, August 6, 2021

Place: Offices of Kern Delta Water District – 501 Taft Highway, Bakersfield, CA 93307

YOU ARE HEREBY NOTIFIED that the District has provided the following summary of and clarifications to items discussed at the mandatory pre-bid meeting conducted on July 21, 2021. **This addendum includes changes to the Contract Documents, including (but not limited to) the Bid Item Descriptions (Measurement and Payment)**, and all such changes shall take precedence over anything contrary contained in the original Contract Documents.

A) Administrative Considerations:

- 1) **This is a prevailing wage project. Bids shall be made in accordance with the prevailing rate of per diem wages for this locality and project as determined by the Department of Industrial Relations pursuant to Labor Code Section 1770 et seq.**
- 2) The District will have a third party Labor Compliance Program in place and will register the project with the Department of Industrial Relations. The Contractor and its Subcontractors will be required to submit eCPR's directly to the DIR.
- 3) **The due date and time for bids is 2:00 p.m. on Friday, August 6, 2021.** This has been changed from August 3, 2021, which is the date included in the bid documents.
- 4) The District does not have a specific policy regarding Disadvantaged Business Enterprise (DBE). DBE will not be a significant deciding factor in the awarding of the contract.
- 5) **\*BOND REQUIREMENTS\* (IMPORTANT)** - A proposal/bidder's bond in the penal sum of **10% of the accompanying bid** in the form of a certified or cashier's check or bidder's bond must be included with the bid for the bid to be considered Responsive.
- 6) Tentatively, all Requests for Information (RFI's) must be submitted **by 5:00 p.m. on Monday, August 2, 2021**. RFI's should be addressed to Chris Bellue at Kern Delta Water District – [chris@kerndelta.org](mailto:chris@kerndelta.org).
- 7) Project cost engineer's estimate is \$1.8 to \$2.0 Million dollars.

- 8) Project CAD file will not be available for bidding, but will be provided to the successful bidder for grading model creation prior to construction.

B) Construction Considerations

- 1) Survey control for establishing vertical datum and horizontal alignment will be provided by the District at the District's expense. Contractors should anticipate six to ten mutually agreed upon benchmarks to tie into. If the Contractor wishes to have any more control or staking, or if the Contractor needs to replace a control point set by the District, it shall be completed at the Contractor's expense.
- 2) Stormwater Pollution Prevention Plan (SWPPP) and Particle Matter (PM-10) permits are required. Project site is surrounded by private farming operations. Contractor may use the banks of the Eastside Canal for access. However, dust control and trackout control is very important and that will be closely monitored.
- 3) Over the course of construction, the banks of the Eastside Canal must not be blocked except during the construction of the gravity diversion. During the construction of the gravity diversion, a bypass around that construction must be provided by the Contractor for thru traffic.
- 4) **\*WATER SUPPLY\* (IMPORTANT)**
  - a) It is expected that the Eastside Canal will not be flowing water during the period of construction. Therefore, an alternative water supply will most likely be required.
  - b) If desired, water will be provided from the ag well on site. The PG&E connection to the well has been energized and the well will be operational before the Notice to Proceed is issued. There is currently no discharge on the well, so the Contractor will also be responsible for some plumbing to establish a connection to the well. The well is estimated to have an output of approximately 1,000 GPM.
  - c) **The Contractor will be required to maintain enough water storage capacity such that the ag well only needs to be turned on a maximum of once per day for the construction water supply.** The Contractor may choose to stage storage tanks on site, or may build levees in the Eastside Canal or build a temporary reservoir on site to achieve the required storage. The cost associated with maintaining water storage

capacity will be included as part of Bid Item No. 3 – Develop and Provide Water Supply from On-Site Sources.

- 5) **A sheepsfoot roller is required for subgrade re-compaction and levee construction.** Compaction only with rubber tires will not be considered adequate.
- 6) **Compaction requirements are as follows:** levees and subgrade must be compacted to a minimum compaction ratio of **95% per ASTM D698**, and moisture content must be **at or above optimal moisture content**. During the meeting, the moisture requirement was misstated as being no less than 1% below optimum; the specifications state that moisture shall be at or above optimum and that is the standard that the Contractor shall be held to. It is expected that Krazan & Associates will be providing the compaction testing.
- 7) Final dirt balance will be accomplished via the stockpile of excess dirt. There is no specific compaction requirement for the stockpile other than it must be stable and able to be driven upon.
- 8) An “As-Built” GPS survey of the levees and ponds is required to be provided by the Contractor **prior to ripping and floating the pond bottoms**. This is to ensure that the levee and pond elevations and location requirements have been met. The cost for the As-Built GPS survey shall be included in Project Wide line item #6 of the bid.
- 9) The gravity diversion between the Eastside Canal and Pond 4 shall consist of two identical cast-in-place reinforced concrete turnout structures connected by two barrels of 42” RCP pipe. Rip-Rap shall be placed around the turnout structures as directed by the Engineer. If the Eastside Canal is flowing water during the construction of this diversion, the Contractor is responsible for creating a bypass for flow by the construction site that can accommodate a minimum of **40 CFS** of flow around the turnout during construction.
- 10) **No rip-rap will need to be purchased by the Contractor.** All rip-rap will be provided by the district and is already on site in a stockpile at the northwest corner of the parcel. Rip-rap shall first be placed as directed around the gravity diversion, followed by the inter-basin structures. If there is not enough rip-rap to complete the three inter-basin structures, then more rip-rap will be brought in and placed by the District at their own expense. However, all other areas that require rip-rap shall be prepared in accordance to the plans and specifications for the placement of rip-rap.

11) Rip-rap can be machine-placed, and pickup by hand of stray individual pieces of concrete is not required if machine placement is done adequately. Clean up can be done with equipment and the District shall direct where it gets placed.

12) Raising the banks of the Eastside Canal

a) **Trucking of dirt from the Sunset Ponds down the banks of the Eastside Canal and the trucking of water to the Sunset Ponds site must adhere to the relevant prevailing wage laws pursuant to Labor Code Section 1770 et seq.**

b) Stenderup Ave and Duncan Rd are farmer roads and no permitting is required to work at those crossings. All work at the Bear Mountain Blvd (State Route 223) crossing is to be done outside of the road Right-of-Way, and therefore no permitting is required. Duncan Road is an oiled roadway. After the crossing has been raised according to the plans and specifications, the contractor will not be required to re-oil the roadway.

**Description of Changes/Corrections to Contract Set:**

1. All references to the Disadvantaged Business Enterprise (DBE) checklist have been removed, including the DBE checklist itself.
2. Section D – Special Conditions: Changed Paragraph D-7 (page D-5) to reflect changes to construction water supply source.
3. Bid Item Measurement and Payment
  - a. Bid Item No. 3 – Develop and Provide Water Supply: Changed description to reflect changes to construction water supply source. Changed description and payment basis to include maintaining adequate water storage on site.
  - b. Bid Item No. 6 – Finish Grading of Project: Changed description and payment basis to include an As-Built GPS survey of the levees, ponds, inter-basin structures and piping, gravity diversion and piping, etc.
  - c. Bid Item No. 16 – Furnish and Install 36” HDPE Pipeline Crossings Between Ponds: Changed description, revising backfill operations to include pouring 1.5-sack concrete slurry up to 1’ above the top of the pipe instead of just up to the springline.

4. Section G – Concrete Structures and Piping: Changed Section G-3, b, 3 (page G-2), revising backfill operations to include pouring 1.5-sack concrete slurry up to 1’ above the top of the pipe instead of just up to the springline.
5. Construction Plan Sheets
  - a. Sheets 12 & 13 – Corrected error on cross sections J/12 and L/13: Text callouts for over-excavation and re-compaction and scarification and re-compaction were switched.
  - b. Sheet 36 – Corrected error on both details: Text changed from including C-50 RCP piping to C-25 RCP piping. The 42” RCP piping at the gravity diversion should be C-25, not C-50.

**Please direct all questions and all Requests for Information (RFI’s) to Chris Bellue –  
Chris@kerndelta.org**

**D-7 Water Supply (page D-5)**

Kern Delta Water District (KDWD) may provide a water supply from the Eastside Canal located along the west edge of the project site. However, it is expected that the Eastside Canal will not be flowing water during the course of the Work. If Eastside Canal water is unavailable, the District will supply construction water from an existing well on site. Contractor is responsible for providing all labor, tools, equipment, incidentals, etc. required to effectively utilize the water provided by the District, including, but not limited to, discharge modifications for connection to temporary pipes for pre-wetting of all cut areas, delivery to storage for filling the water trucks, etc., as needed.

The Contractor is also responsible for providing all labor, tools, equipment, incidentals, etc. required to maintain enough water storage capacity such that the existing well on site only needs to be turned on a **maximum of once per day** for the construction water supply. The Contractor may choose to stage storage tanks on site, or may build levees in the Eastside Canal, or may build a temporary reservoir on site to achieve the required storage.

**\*\*END OF CHANGES TO SECTION\*\***



## MEASUREMENT AND PAYMENT

### CONSTRUCTING THE SUNSET PONDS GRADING PROJECT

Payment for the various items of the Bid Schedule, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the Work all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the California Division of Industrial Safety, and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). No separate payment will be made for any item that is not specifically set forth in the Bid Schedule, but which is necessary for the complete construction of the work and all costs therefore shall be included in the prices named in the Bid Schedule for the various appurtenant items of work.

### SCHEDULE "A", 147-ACRE SPREADING PONDS PROJECT

#### PROJECT WIDE ITEMS

##### 1. Mobilization (Bid Item No. 1):

- a. **Description:** Mobilization shall include all activities and costs for transportation of personnel, equipment, and operating supplies to and from the site; establishment of portable sanitary and refuse facilities; obtaining an adequate source of fresh water; location, provision and installation of field offices & equipment/materials, storage yards excavation equipment, buildings, and other necessary facilities for the Contractor's operations at the site; insurances, premiums paid for performance and payment bonds, including coinsurance and reinsurance agreements as applicable.

The site is not fenced, the contractor will be responsible to provide his own security for equipment, materials, fuel, tools, etc. that he may have on site.

The Contractor shall provide all necessary equipment & materials; all tools, accessories, power, fuel, materials, supplies, lighting, water, and other support equipment; and experienced personnel necessary to execute the work in an orderly an efficient manner.

- b. **Measurement and Payment:** The Lump Sum Price paid for Mobilization shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, and incidentals and for doing all other work and operations which

must be performed or costs incurred to complete the mobilization effort and items to complete the project that are not covered under any other line item – including, but not limited to, premiums paid for performance and payment bonds, including coinsurance and reinsurance agreements as applicable.

**2. Demobilization (Bid Item No. 2):**

- a. **Description:** Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not included in the contract from the site; including the disassembly, removal and site cleanup, of offices, equipment, buildings, restoration of facilities, roads, fences, etc. modified or disturbed during the course of the project and other facilities assembled on the site for this contract.
- b. **Measurement and Payment:** The Lump Sum Price paid for Demobilization shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, and incidentals and for doing all other work and operations which must be performed or costs incurred to complete the demobilization effort.

**3. Develop and Provide Water Supply (Bid Item No. 3):**

- a. **Description:** Kern Delta Water District may provide a water supply from the Eastside Canal located along the west edge of the project site. However, it is expected that the Eastside Canal will not be flowing water during the course of the Work. If Eastside Canal water is unavailable, the District will supply construction water from an existing well on site. Contractor is responsible for providing all labor, tools, equipment, incidentals, etc. required to effectively utilize the water provided by the District, including, but not limited to, discharge modifications for connection to temporary pipes for pre-wetting of all cut areas, delivery to on-site storage for filling the water trucks, etc., as needed.

The Contractor is also responsible, as part of this bid item, for providing all labor, tools, equipment, incidentals, etc. required to maintain enough water storage capacity such that the existing well on site only needs to be turned on a **maximum of once per day** for the construction water supply. The Contractor may choose to stage storage tanks on site, or may build levees in the Eastside Canal or build a temporary reservoir on site to achieve the required storage.

- b. **Measurement and Payment:** The Final Pay Quantity Lump Sum Price to Develop and Provide Water Supply shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all work involved in developing a sufficient supply of water, furnish pumps, temporary connections, pipeline, water trucks, and other necessary equipment to

supply water from on-site District sources to the water application equipment for all water required for the work, including maintaining an adequate amount of water storage as described above, and no additional allowance shall be made therefore.

**4. Environmental Compliance and Permitting (DCP, SWPPP, Biological, and Cultural Compliance) (Bid Item No. 4):**

- a. **Description:** The Contractor shall comply with all local, state and federal requirements for Storm Water Pollution Prevention and Site dust control and shall prepare a Storm Water Pollution Prevention Plan (SWPPP) and a Dust Control Plan (DCP) and obtain permits for each. Contractor shall install, construct, maintain all necessary measures to comply with and keep the necessary records in accordance with the requirements of the Storm Water Pollution Prevention Plan (SWPPP) and the Dust Control Plan (DCP).

The Contractor shall comply with all local, state and federal requirements for Biological Mitigation and Cultural Resources.

The Owner anticipates including additional requirements related to biological mitigation. These requirements will be issued as an addendum to this bid packet.

The contractor shall prepare all plans and shall obtain all necessary permits prior to commencement of construction.

- b. **Measurement and Payment:** The Lump Sum Price paid for Environmental Compliance and Permitting shall include full compensation for making all completed arrangements and permission, furnishing all necessary plans, permits, fees, labor, materials, tools, equipment, and incidentals and for doing all work involved in DCP, SWPPP, Biological, and Cultural compliance.

**5. Prepare, Maintain and Restore Access Routes (Bid Item No. 5):**

- a. **Description:** The Contractor shall perform all dirt work, grading, etc. as may be necessary for proper preparation and maintenance of Construction Access Routes. Following completion of the project construction, the Contractor shall restore all access routes to original design and fencing to its original location (where applicable).

- b. **Measurement and Payment:** The Lump Sum Price paid for Preparing, Maintaining and Restoring Access Routes shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, and incidentals and for doing all other work and operations which must be performed or costs incurred

prior to beginning, during and after the completion of the work on this item and no additional allowance shall be made therefore.

**6. Finish Grading of Project (Bid Item No. 6):**

- a. **Description:** The Contractor shall provide all materials, equipment, labor and incidentals to finish grade all construction areas including all Roads, Levees, Channels, Side-slopes, Ramps, etc. of the project to the following tolerances:

**Finish Grading –**

Basin Bottoms – -0.2’ to 0.0’ horizontally and -0.1’ to 0.0’ vertically.

Top of Levees and Outside Slopes – -0.0’ to +1.0’ horizontally and -0.0’ to +0.3’ vertically (with no more than 0.1’ vertical variance in any given 100’ of lineal length.

All other areas are to be left in a smooth, neat and finished condition without ruts, holes, bumps, humps, etc.

The Contractor shall also, as part of this bid item, provide all materials, equipment, labor, and incidentals to conduct an As-Built GPS survey of the levees, ponds, inter-basin structures and piping, gravity diversion and piping, etc., prior to ripping and floating the pond bottoms, as to prove that the levee and pond elevation and location requirements have been met.

- b. **Measurement and Payment:** The Final Pay Lump Sum Price paid for Finish Grading of Project shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, and incidentals and for doing all other work and operations which must be performed or costs incurred for completing finish grading of the entire project site, including all Roads, Levees, Channels, Side-slopes, Ramps, etc., as well as conduct an As-Built GPS survey of the levees, ponds, inter-basin structures and piping, gravity diversion and piping, etc., and no additional allowance shall be made therefore.

**7. Bond Costs (Bid Item No. 7)**

- a. **Description:** The Contractor shall furnish a Faithful Performance Bond and a Payment Bond. Each bond shall individually be in an amount equivalent to one hundred percent (100%) of the total amount payable under the Contract Documents. Bonds shall adhere to any and all requirements set forth in the Contract Documents.

Said bonds shall be of a form satisfactory to Kern Delta Water District and shall be obtained from responsible corporate sureties acceptable to the District.

- b. **Measurement and Payment:** The Final Pay Lump Sum Price paid for Bond Costs shall include full compensation for the preparation and acquirement of, and the associated premiums for, a Faithful Performance Bond and a Payment Bond, and no additional allowance shall be made therefore.

**8. Clearing and Grubbing (Bid Item No. 8):**

- a. **Description:** The Contractor shall perform all clearing and grubbing work project wide. Such areas shall be cleared and grubbed of all trees, vines, stumps, roots, brush, rubbish, debris, fence materials and other unsuitable or deleterious materials. No waste materials from the clearing operation shall be incorporated into compacted backfill or levees (embankments). The subgrade beneath all permanent embankments shall be grubbed and cleared of all stumps, roots, objectionable organic matter, debris, rubbish, rocks, concrete or other deleterious materials. Where directed by the Districts and/or the Engineer, all work specified herein shall be accomplished by the Contractor prior to placement of construction stakes. All cleared and grubbed organic materials may be stored on site for later re-use during the re-leveling of the pond bottoms. Organic materials shall NOT be incorporated in the fill material generated for levee construction. Trash, debris and rubbish shall be disposed of off-site. No materials or debris shall be burned without express permission from Kern Delta Water District.
- b. **Measurement and Payment:** The “Final Pay Quantity” Unit Price per Acre paid for Clearing and Grubbing shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all work in clearing and grubbing and no additional allowance shall be made therefore.

**9. Over-Excavate, Scarify and Re-Compact Sub-grade Under Levees (Bid Item No. 9):**

- a. **Description:** The Contractor shall perform all work associated with the preparation of the subgrade of the Basin Levees. A 30-foot-wide (minimum) strip of levee subgrade, as shown on the Plans, shall be uniformly over excavated to a depth of not less than twelve (12) inches followed by uniform ripping and scarifying further to a depth of not less than twelve (12) inches or as required to eliminate rodent burrows below the bottom of the over excavated area. Re-compaction of subgrade is to be completed in a minimum of two (2) lifts. The first will consist of the scarified subgrade re-compaction and the second will consist of the over excavated subgrade material re-compaction. Additional material required to bring the strip up to the original natural grade elevation shall be provided by pond bottom excavation.

- b. **Measurement and Payment:** The “Final Pay Quantity” per square foot (sq. ft.) for the over-excavation and scarification and re-compaction of basin levees shall include full compensation for all over-excavation, scarification, moisture conditioning, manufacturing, blending, the provision of material from pond bottoms due to shrinkage, and compacting of the subgrade complete, in-place, including full compensation for all materials, tools, equipment, and labor and no additional allowance shall be made therefore.

**10. Excavate Pond Bottoms/Construct Basin Levees – by IN-PLACE LEVEE FILL Volume (Bid Item No. 10):**

- a. **Description:** Pond bottoms shall be excavated to the elevations shown on the Drawings. This excavated material shall be used to construct the basin levees. These levees shall be constructed using excavated material from the pond bottoms. The earthwork balance shown in the Plans was based on the following assumptions:
- i. Pond 1: All perimeter levees will be constructed using all the cut from the pond bottom shown as cut on the plans, with most of the cut required to build the levees sourced from the bottom of Pond 4.
  - ii. Pond 2: All perimeter levees (excluding the levee that is shared with Pond 1) will be constructed using all the cut from the pond bottom shown as cut on the plans, with most of the cut required to build the levees sourced from the bottom of Pond 4.
  - iii. Pond 3: All perimeter levees (excluding the levee that is shared with Pond 2) will be constructed using all the cut from the pond bottom shown on the plans, with most of the cut required to build the levees sourced from the bottom of Pond 4.
  - iv. Pond 4: All perimeter levees (excluding the levee that is shared with Pond 3) will be constructed using cut from the pond bottom. Included in this pond is the cut required to raise the east bank of the Eastside Canal adjacent to the Sunset Ponds to a minimum elevation of 413.0.
  - v. Some of the remaining CUT from Pond 4 that is not utilized to construct the levees of the ponds will be used to raise the east and west banks of the Eastside Canal downstream of the Sunset Ponds to a minimum elevation of 408.5. See the description for Bid Item No. 11.
  - vi. Any remaining CUT from Pond 4 that is not utilized to construct the levees of the ponds or raise the banks of the Eastside Canal shall be stockpiled according to the Plans and the Specifications. See the description for Bid Item No. 12.

**Contractor will be responsible for completing his own earthwork balance and managing how the dirt is moved and where it is placed.**

Basin levees shall be prepared and constructed of suitable, approved, moisture conditioned material from within the overall project area. Before any excavated material for the first layer of the embankment is placed, the foundation of the embankment shall be prepared as provided in the over-excavation, Scarification and Re-compaction of Subgrade requirements above.

Basin levees shall be constructed to the elevations and to the top width and side slope shown on the Drawings. Approved levee fill materials shall be placed and compaction accomplished in loose level layers not exceeding six (6) inches in compacted thickness carried across the entire width of the embankment from face of slope to face of slope to a minimum of 95 percent of the Laboratory Standard Maximum Density as obtained by A.S.T.M. test method D698. The moisture content of compacted embankment lifts must be greater than or equal to the Optimum Moisture Content as determined by laboratory testing, but must not exceed 4% greater than the Optimum Moisture Content.

Fill and backfill shall consist of suitable material generated from within the project site and shall be free of trash, organic matter, or other debris and must be approved by the Engineer. No object having a largest dimension greater than five (5) inches shall be included in any compacted levee embankment over-excavation or backfill.

The layers shall be brought up in the full required width from the bottom of the embankment to avoid widening lower edges after the center has been brought up to grade. At all times, there shall be an acceptable and uniform gradation of embankment materials. Cobbles and gravel shall be well distributed through other materials and not nested in any position within or under the embankment. When the material has been moisture conditioned as specified, it shall be compacted by sheeps-foot rollers of sufficient weight for proper compaction or by other compaction equipment satisfactory to the Engineer. **Hydro-compaction of levee embankments will not be allowed.**

**Classification of Fill** – “In-Place” Fill materials will be classified for payment. Fill and backfill shall consist of suitable material generated from within the project site and shall be free of trash, organic matter or other debris and must be approved by the Engineer. No object having a largest dimension greater than five (5) inches shall be included in any compacted levee embankment over-excavation or backfill.

- b. **Measurement and Payment:** The Final Pay Quantity Unit Price per Cubic Yard for “In-Place Fill” (In-Place Fill is defined as the actual compacted, “in-place” levee embankment volume without any shrinkage factors included) shall include



full compensation for all pick up, hauling, placing, moisture conditioning, watering, manufacturing, blending, and compacting the levee embankment complete in-place, includes full compensation for all materials, tools, equipment and labor and no additional allowance shall be made therefore. Contractor shall be responsible to provide his own shrinkage factors necessary for generation of import spoil needed to construct “in-place” levee embankment.

**11. Raise the Banks of the Eastside Canal Downstream of the Sunset Ponds (as In-Place Fill) (Bid Item No. 12):**

- a. **Description:** The Contractor shall raise the banks of the Eastside Canal downstream of the Sunset Ponds project to a minimum elevation of 408.5. The areas requiring raising are indicated on the Plans. The fill material shall be sourced from the Sunset Ponds – any excess dirt not used to construct the levees may be used to raise the banks of the Eastside Canal. This item includes all materials, equipment, labor, and incidentals to haul fill material from the Sunset Ponds to the locations requiring raising and to scarify a minimum of 3” of the existing canal banks before moisture conditioning, placing, and compacting the fill material on top. After compaction, the material must be finish graded in a fashion that maintains the original top width and side slopes of the canal banks and/or as shown on the Plans.
- b. **Measurement and Payment:** The “Final Pay Quantity” Unit Price per Cubic Yard of In-Place Fill for the Raising the Banks of the Eastside Canal Downstream of the Sunset ponds shall include full compensation for all pick up, hauling, moisture conditioning, subgrade preparation, watering, manufacturing, blending, leveling, compacting, and finish grading of the canal embankments at any location requiring raising and includes full compensation for all materials, tools, equipment, labor, and incidentals and no additional allowance shall be made therefore.

**12. Relocate Excess CUT Volume to Stockpile (Bid Item No. 11):**

- a. **Description:** The Contractor shall provide all materials, equipment, labor and incidentals to relocate all additional excavated earth that is not utilized for constructing the basin levees (including subgrade) or for the raising of the banks of the Eastside Canal to a stockpile as indicated on the Plans and according to the relevant Specifications.
- b. **Measurement and Payment:** The “Final Pay Quantity” Unit Price per Cubic Yard of excavated (“CUT”) and stockpiled earth shall include full compensation for all pick up, hauling, placing, etc. required, and shall include full compensation for all materials, tools, equipment, and labor and no additional allowance shall be made therefore.



**13. Grading of Basin Bottoms (Bid Item No. 13):**

- a. **Description:** The Contractor shall provide all materials, equipment, labor and incidentals to grade smooth the sloped ponds 1, 2, and 3, and laser-level flat the bottom of pond 4 as described in the Plans.
- b. **Measurement and Payment:** The “Final Pay Quantity” Unit Price per Acre for Basin Bottom Leveling shall include full compensation for all pick up, hauling, placing, leveling, deposition of excess spoil material generated in the process in the areas indicated on the plans and as directed by the Engineer and includes full compensation for all materials, tools, equipment and labor and no additional allowance shall be made therefore.

**14. Rip and Float Basin Bottoms (Bid Item No. 14):**

- a. **Description:** The Contractor shall, upon completion of finish grading, rip the Basin bottoms in two passes. Each pass shall be to a minimum depth of 72” at 6’ on center, with the second pass at 45 or 90 degrees from the first. Ripping shall be followed by floating of the Basin bottoms to the satisfaction of the Districts and/or the Engineer.
- b. **Measurement and Payment:** The “Final Pay Quantity” Unit Price per Acre for Ripping of the Basin Bottoms shall include full compensation for furnishing all mobilization and demobilization of equipment, labor, oversight, line location, materials, tools, equipment, and no additional allowance shall be made therefore.

**15. Furnish and Install Briggs MFG. Twin Track Weir – 5’ x 8’ with 36” pipe stub, (Bid Item No. 15):**

- a. **Description:** The contractor shall furnish and install Briggs Manufacturing Twin Track Weirs – 5’ Wide x 8’ Tall with 36” Pipe Stub – in a side-by-side (“double”) configuration as depicted on the Plans. The contractor shall also provide weir boards (to top of structure): 2” x 6” Rough Cut (#2 or Better, Douglas Fir).  
Included in this bid item is the earthwork required for the shaping and grading of the flow channels in front of and downstream of any weir/crossing described by this bid item. The upstream and downstream flow channels shall be shaped and graded per the Plans. Any Rip-Rap that must be placed in or around these flow channels shall be covered under Bid Item No. 18 below.
- b. **Measurement and Payment:**  
The “Final Pay Quantity” Unit Price for the Installation of each Briggs Manufacturing Twin Track Weir with 36” Pipe Stub shall include full compensation for furnishing all labor, materials, tools, equipment, and

incidentals, and for doing the work and no additional allowance shall be made therefore.

**16. Furnish and Install 36” HDPE Pipeline Crossings Between Ponds (Bid Item No. 16):**

- a. **Description:** The contractor shall furnish and install approved 36” Diameter, HDPE Corrugated, Water-Tight Pipeline between each adjacent pond as depicted on the Plans. Included in this Bid Item is the placement of the pipe, pouring minimum 1.5-sack concrete slurry up to 1’ above the top of the pipe after placement, followed by compacted backfill over the pipe up to finished grade. Compaction Testing will be conducted on the backfill at 1’ intervals to ensure adequate compaction and soil conditioning is being achieved.
- b. **Measurement and Payment:**

The Unit Price per Lineal Foot for the Installation of 36” HDPE pipeline shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing the work and no additional allowance shall be made therefore.

**17. Furnish and Install Slurry Cut-off – Double Pipe Configuration (Bid Item No. 17):**

- a. **Description:** The contractor shall furnish and install a double-configuration slurry cut-off along each inter-pond structure that utilizes exactly two weirs and pipes as depicted on the Plans. The cement slurry used must be a minimum 1.5-sack slurry, and it shall be poured against the compacted embankment.
- b. **Measurement and Payment:**

The Unit Price for the Installation of each slurry cut-off in a double configuration shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing the work and no additional allowance shall be made therefore.

**18. Furnish and Install Rip-Rap for Inter-Pond Structures (Bid Item No. 18):**

- a. **Description:** The contractor shall place furnished (on-site), broken concrete pipe rip-rap for the inter-pond structures in the locations depicted on the Plans and as directed by the Engineer. The rip-rap materials must adhere to the size and shape requirements as described in the Specifications. The subgrade must be prepared on all sites as depicted on the Plans and the rip-rap must be placed per the Specifications. This Bid Item only includes rip-rap that shall be placed as part of the inter-pond structures. A quantity of rip-rap is already available on-site. This rip-rap shall first be placed at the Gravity Diversion as directed by the Engineer.

Rip-rap that remains after rip-rap has been both placed at the gravity diversion and approved by the Engineer (see Bid Item No. 21) shall be utilized for the inter-pond structures. This remaining rip-rap shall be apportioned between the inter-pond structures and placed as directed by the Engineer, in a fashion that best protects the pond bottoms and levees from erosion and wash-out. If additional rip-rap is required, it will be placed at a later date by the District.

**b. Measurement and Payment:**

The “Final Pay Quantity” Lump Sum Price for furnishing and placing all necessary rip-rap for the inter-pond structures shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing the work and no additional allowance shall be made therefore. Measurement and Payment for furnishing and placing any rip-rap that is not located at the inter-pond structures are included as separate line item(s) in this bid set.

**19. Furnish and Install 3-Bay Cast-In-Place Structure for Gravity Diversion (Bid Item No. 19):**

a. **Description:** The contractor shall furnish and install two three-bay reinforced concrete turnout structures for the gravity diversion from the Eastside Canal into Pond 4 and from Pond 4 back into the Eastside Canal. This bid item includes, but is not limited to, excavation into canal and levee banks, subgrade preparation, construction and placement of concrete forms, placement of rebar, pouring and immediate vibration of minimum 7.0-sack, 5000 PSI concrete mix, installation of 42” RCP pipe stubs, installation of weir boards to the top of the structure (2”x6” Douglas Fir - #2 or better), and the restoration of the levee banks to a condition acceptable to the Engineer and/or the District. There is no guarantee as to whether or not the Eastside Canal will be flowing water during the construction of the turnout structures. As such, this Bid Item may require the installation of sheet piles or a bypass for flow in the Eastside Canal if the District is flowing water in the canal during construction of the turnout structures. The Contractor will be responsible for any and all dewatering required for the completion of this Bid Item.

**b. Measurement and Payment:**

The “Final Pay Quantity” Price for furnishing and installing each 3-Bay Cast-In-Place Structure for the Gravity Diversion shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing the work and no additional allowance shall be made therefore.

**20. Furnish and Install 42” Reinforced Concrete Piping for Gravity Diversion (Bid Item No. 20):**

- a. **Description:** The contractor shall furnish and install 42” Reinforced Concrete Piping to connect the turnout structure along the east bank of the Eastside Canal to the turnout structure along the west bank of Pond 4. The piping shall be installed as depicted on the Plans and according to the relevant Specifications. This Bid Item includes, but is not limited to: excavation, installation of pipe, placement of 1.5-sack (minimum) slurry up to the springline of the pipe, backfill, compaction, etc. There is no guarantee as to whether or not the Eastside Canal will be flowing water during the construction of the turnout structure. As such, this Bid Item may require the installation of sheet piles or a bypass for flow in the Eastside Canal if the District is flowing water in the canal during construction of the turnout structure. The Contractor will be responsible for any and all dewatering required for the completion of this Bid Item.
- b. **Measurement and Payment:**

The Price per Lineal Foot for furnishing and installing 42” Reinforced Concrete Piping to connect the turnout structure along the Eastside Canal to the turnout structure along the interior bank of Pond 4 shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing the work and no additional allowance shall be made therefore.

**21. Furnish and Install Rip-Rap for Gravity Diversion (Bid Item No. 21):**

- a. **Description:** The contractor shall place furnished, broken concrete pipe rip-rap for the gravity diversion between the Eastside Canal and Pond 4 in the locations depicted on the Plans and as directed by the Engineer. The rip-rap materials must adhere to the size and shape requirements as described in the Specifications. The subgrade must be prepared and the rip-rap must be placed per the Specifications. This Bid Item only includes rip-rap that shall be placed as part of the gravity diversion. A quantity of rip-rap is already available on-site. This rip-rap shall first be placed at the Gravity Diversion as directed by the Engineer. Rip-rap that remains after rip-rap has been both placed at the gravity diversion and approved by the Engineer shall be utilized for the inter-pond structures (see Bid Item No. 18). No additional rip-rap shall be brought in from off-site sources.
- b. **Measurement and Payment:**

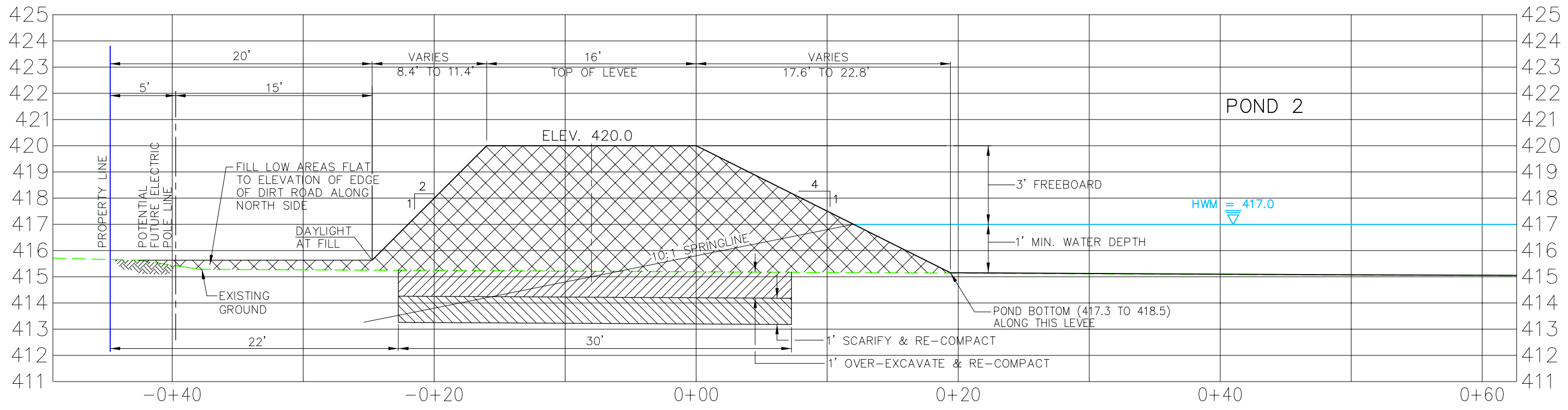
The “Final Pay Quantity” Lump Sum Price for furnishing and placing all necessary rip-rap for the Gravity Diversion structures shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing the work and no additional allowance shall be made therefore. Measurement and Payment for furnishing and placing any rip-rap that

is not located at the gravity diversion are included as separate line item(s) in this bid set.

SECTION G-3 (HDPE Piping), b, 3 (**page G-2**) - Backfilling around and over the pipe shall be accomplished as specified in Section E – Earthwork and Sitework and as follows:

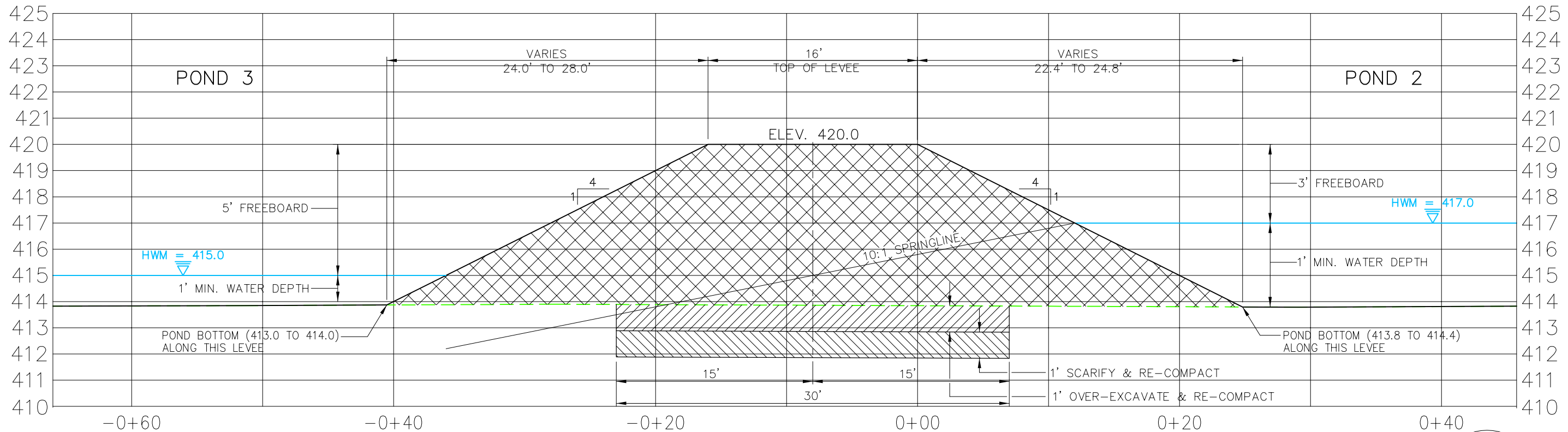
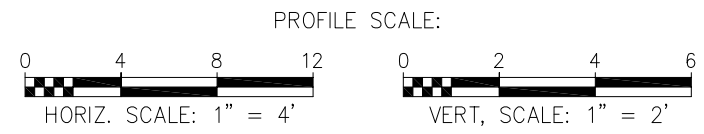
- a) A minimum 1.5-sack slurry shall be used to backfill the haunches of the pipe up to 1' above the top of the pipe. The slurry shall be poured against compacted embankment and vibrated by mechanical vibrator operated by experienced personnel as the slurry is being poured. The Contractor shall ensure that the pipe is secured in place as to prevent floating of the pipe.
- b) Backfill above the 1.5-sack slurry poured around the pipe shall consist of material excavated from the levees for the pipe trench, replaced in horizontal layers not exceeding 6 inches compacted. Backfill must be compacted to a minimum of 95 percent of maximum density per ASTM D698. Backfill shall be tested at 1' vertical intervals per paragraph E-8e.

**\*\*END OF CHANGES TO SECTION\*\***



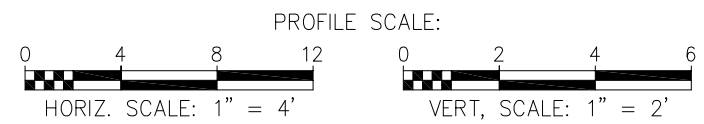
NOTE:  
 SCARIFY ALL AREAS UNDER LEVEES  
 TO A 3" MINIMUM DEPTH OUTSIDE  
 OF 30 FOOT WIDE RECOMPACTION AREA.  
 SEE TYPICAL DETAILS, SHEET 17

**J** SUNSET PONDS - LEVEE CROSS SECTION 1  
**12** POND 2 - NORTH EXTERIOR LEVEE - LOOKING EAST



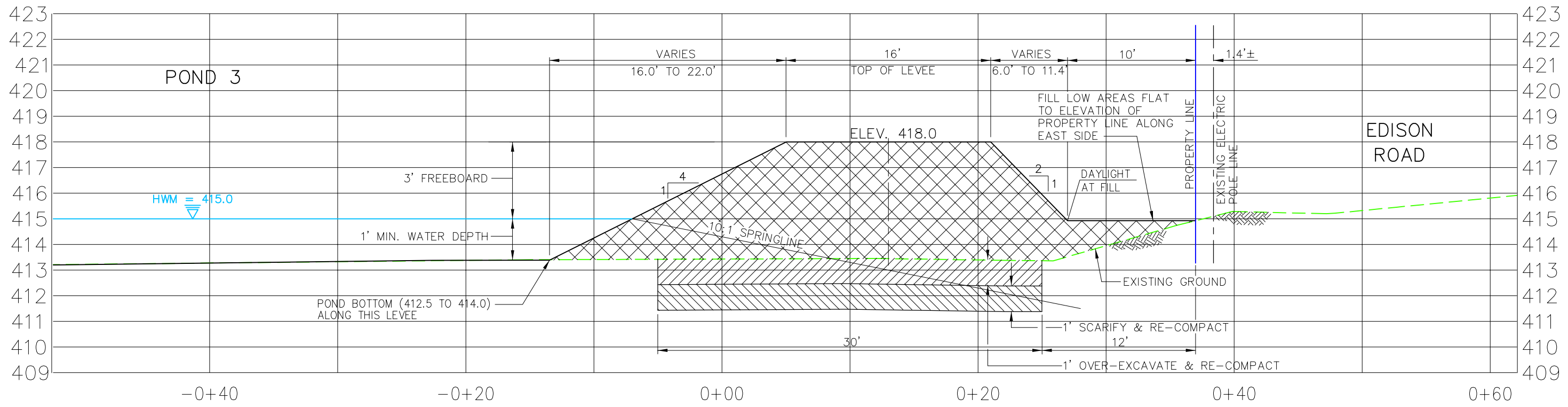
NOTE:  
 SCARIFY ALL AREAS UNDER LEVEES  
 TO A 3" MINIMUM DEPTH OUTSIDE  
 OF 30 FOOT WIDE RECOMPACTION AREA.  
 SEE TYPICAL DETAILS, SHEET 17

**K** SUNSET PONDS - LEVEE CROSS SECTION  
**12** POND 2 & POND 3 - INTERIOR LEVEE



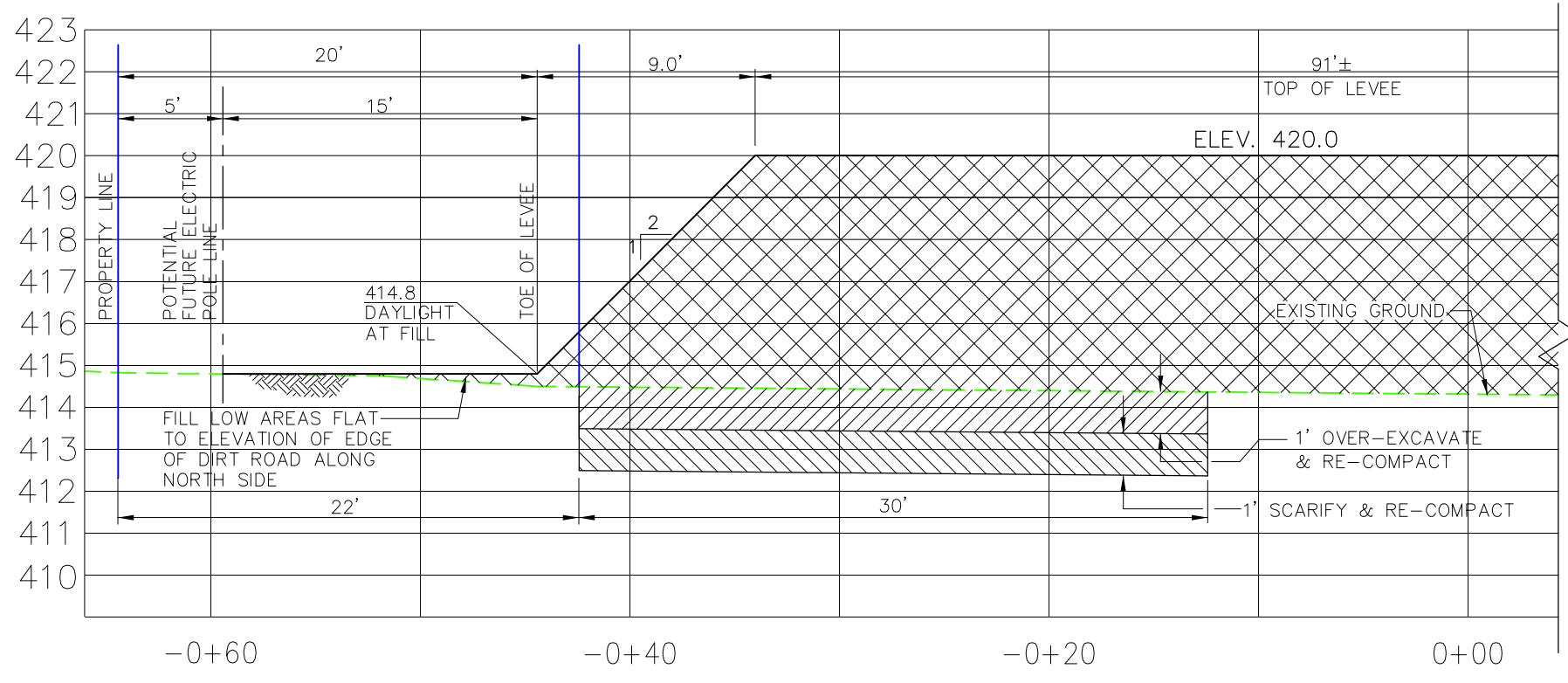
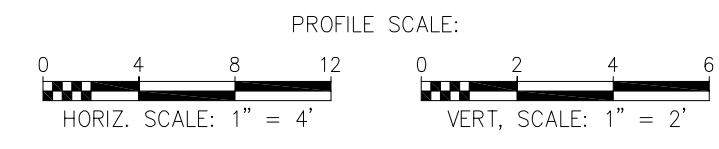
|                                 |          |                           |
|---------------------------------|----------|---------------------------|
| REV.                            | DATE     | DESCRIPTION               |
| 1                               | 07/27/21 | CORRECTION TO DETAIL J/12 |
| DATE: JULY 06, 2021             |          |                           |
| SCALE: AS NOTED                 |          |                           |
| DRAWN BY: A. TAYLOR             |          |                           |
| CHECKED BY: W. ZEIDERS          |          |                           |
| FILE NAME: SUNSET-PONDS-DETAILS |          |                           |





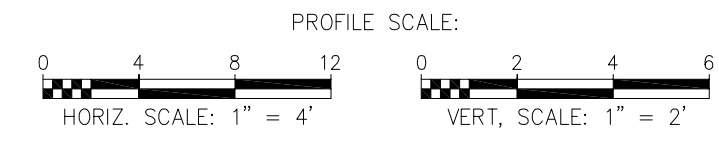
NOTE:  
 SCARIFY ALL AREAS UNDER LEVEES  
 TO A 3" MINIMUM DEPTH OUTSIDE  
 OF 30 FOOT WIDE RECOMPACTION AREA.  
 SEE TYPICAL DETAILS, SHEET 17

**L** 13 SUNSET PONDS - LEVEE CROSS SECTION  
 POND 3 - EAST EXTERIOR LEVEE - LOOKING NORTH



NOTE:  
 SCARIFY ALL AREAS UNDER LEVEES  
 TO A 3" MINIMUM DEPTH OUTSIDE  
 OF 30 FOOT WIDE RECOMPACTION AREA.  
 SEE TYPICAL DETAILS, SHEET 17

**M** 13 SUNSET PONDS - LEVEE CROSS SECTION  
 POND 3 - NORTH EXTERIOR LEVEE - LOOKING EAST

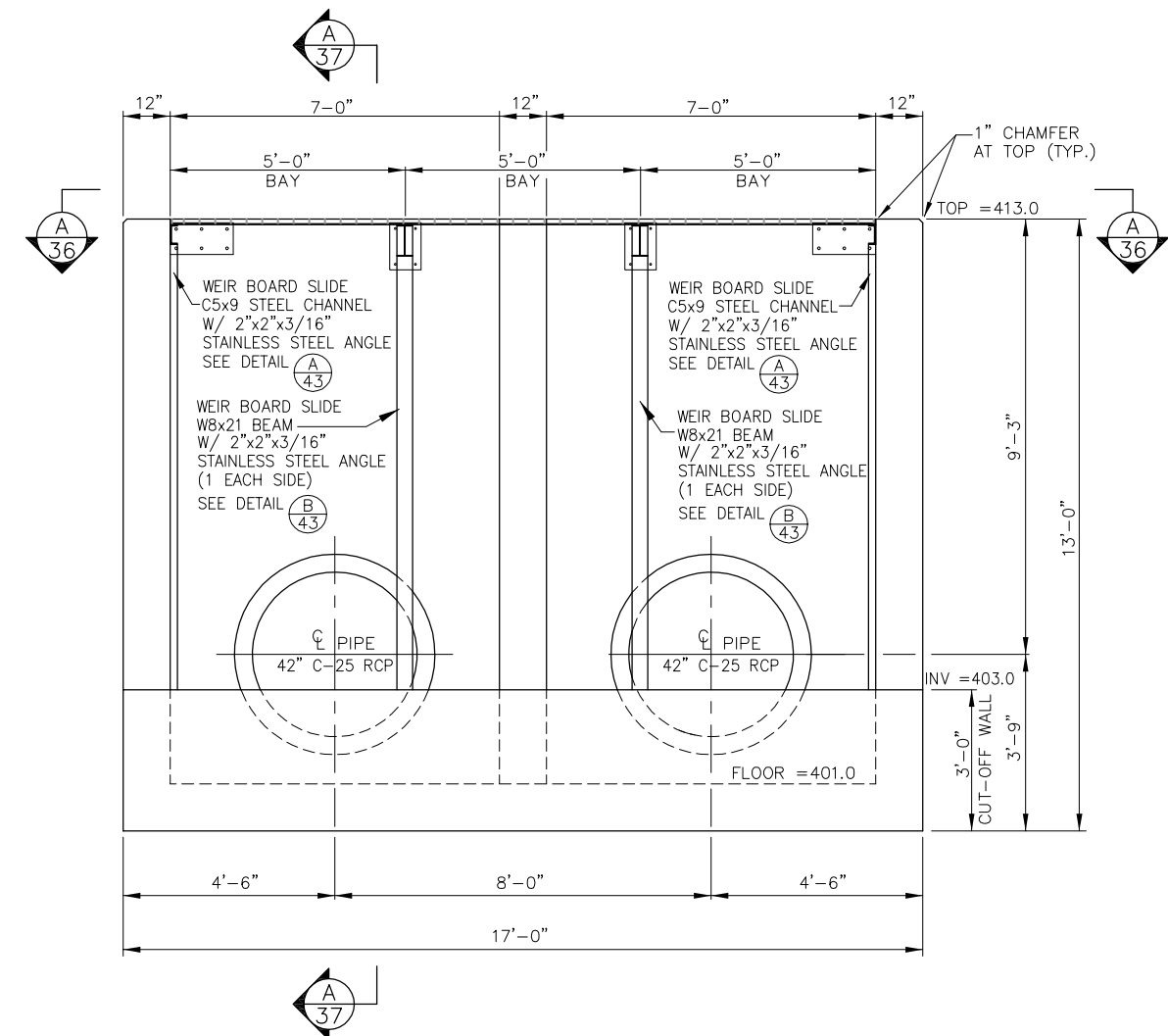


| REV. | DATE     | DESCRIPTION               |
|------|----------|---------------------------|
| 1    | 07/27/21 | CORRECTION TO DETAIL L/13 |

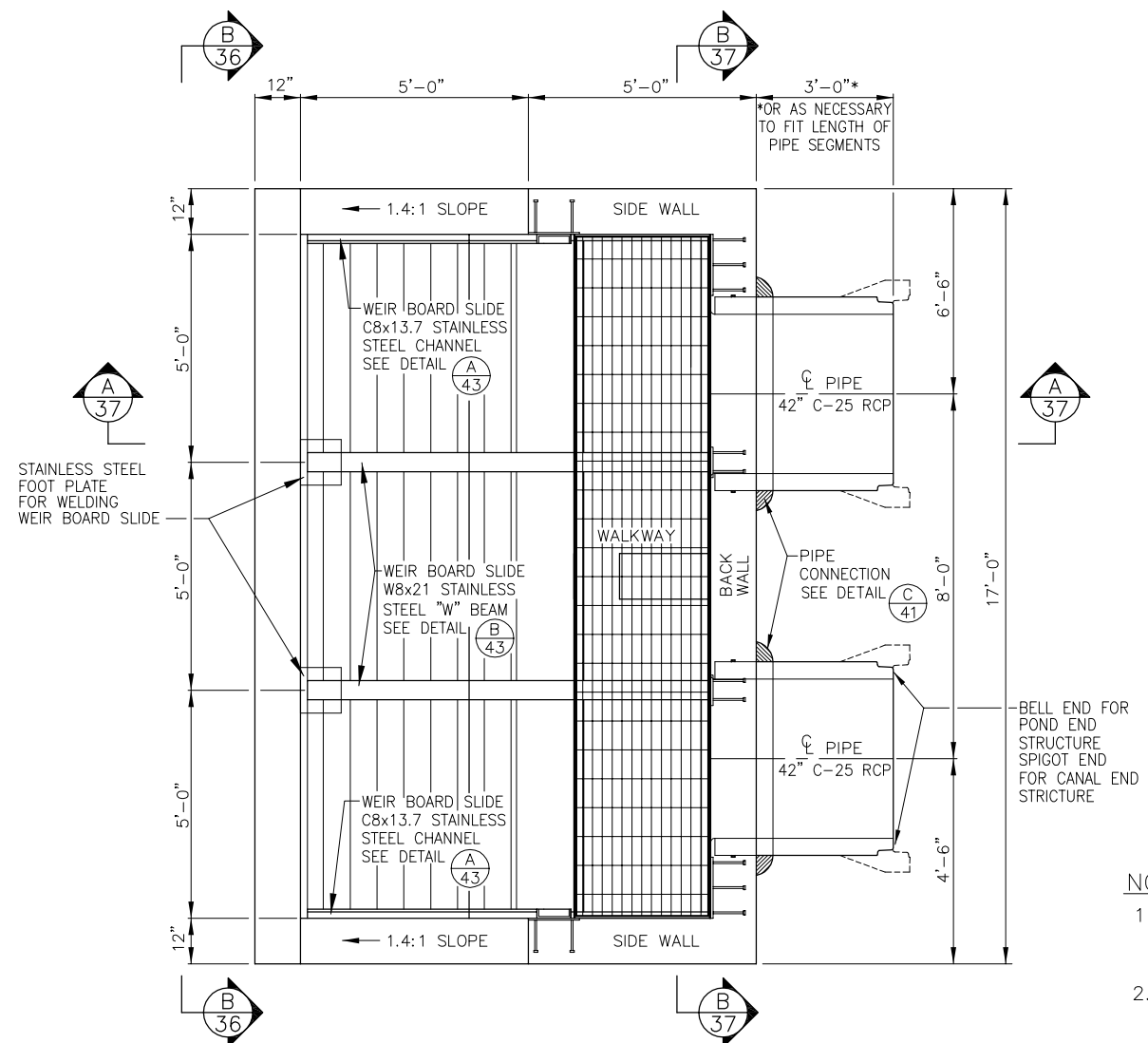
DATE: JULY 06, 2021  
 SCALE: AS NOTED  
 DRAWN BY: A. TAYLOR  
 CHECKED BY: W. ZEIDERS  
 FILE NAME: SUNSET-PONDS-DETAILS



|                        |               |                                    |
|------------------------|---------------|------------------------------------|
| REV.                   | DATE          | DESCRIPTION                        |
| 1                      | 07/27/21      | CORRECTION: 42" C-25 RCP, NOT C-50 |
| 2                      | JULY 06, 2021 | SCALE: AS NOTED                    |
| DRAWN BY: A. TAYLOR    |               | FILE NAME: SUNSET-PONDS-DETAILS    |
| CHECKED BY: W. ZEIDERS |               |                                    |



**SECTION**  
**A** GRAVITY DIVERSION STRUCTURE  
AT FRONT (CUT-OFF-WALL) SCALE: 1" = 2'



**PLAN**  
**A** GRAVITY DIVERSION STRUCTURE  
TWIN 42" RCP PIPES SCALE: 1" = 2'

- NOTE:**
1. ALL STRUCTURAL STEEL AND EMBEDS SHALL BE STAINLESS STEEL.
  2. WALKWAY SHALL BE STAINLESS STEEL OR HOT DIP GALVANIZED STEEL, McNICHOLS GHB SERIES, OR APPROVED EQUAL.
  3. SEE SHEETS 38-45 FOR CONCRETE REINFORCEMENT (REBAR) DETAILS.