BOARD OF DIRECTORS
Enrico P. Ferro
President
Daniel E. Holtz
Vice President
Cooper T. Ness
Director
Alysha M. Stehly
Director
Patrick L. Baker
Director

February 23, 2026

VIA E-MAIL

SUBJECT: OLD CASTLE ROAD PIPELINE PH. 2 PROJECT
[PROJECT NO. 01-06-78-51420]
ADDENDUM NO. 1

Dear Bidder:

Attached is Addendum No. 1, to the Contract Documents of the subject project.

Each bidder shall acknowledge receipt of Addendum No. 1 in Section 00400 of the bid package **AND** include the signed certification page with the bid. Do **NOT** include the remaining addendum pages with the bid submittal. Failure to comply may result in bid disqualification.

If you have any further questions, please email Engineering_Projects@vcmwd.org.

Sincerely,

Melody Rocco, PE
District Engineer

ADDENDUM NO. 1
TO CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR CONSTRUCTION OF THE
OLD CASTLE ROAD PIPELINE PH. 2 PROJECT
[PROJECT NO. 01-06-78-51420]

The following additions, modifications, corrections, deletions, and clarifications are hereby made to the Contract Documents and made a part thereof.

CONDITIONS OF THE CONTRACT:

Item No. 1 – Section 00750 Special Conditions

REPLACE in its ENTIRETY with the attached revised section.

TECHNICAL SPECIFICATIONS:

Item No. 2 – Section 02200 Earthwork and Site Preparation

REPLACE in its ENTIRETY with the attached revised section.

Item No. 3 – Section 02221 Trenching, Backfilling, and Compaction

REPLACE in its ENTIRETY with the attached revised section.

PLANS AND DRAWINGS:

Item No. 4 - Sheet 2 of 34 (G-1)

REPLACE in its ENTIRETY with the attached revised sheet. The changes include:

- VCMWD General Note 8: Revised to state that the District will employ the geotechnical services.
- Water Note 12: Revised to “Not Used”.

Item No. 5 - Sheet 5 of 34 (C-2)

REPLACE in its ENTIRETY with the attached revised sheet. The changes include:

- STA 22+00: Adds storm drain slurry encasement requirement and updates existing storm drain diameter.
- Requires a full 20-foot stick of C900 centered at the storm drain crossing.

Item No. 6 - Sheet 6 of 34 (C-3)

REPLACE in its ENTIRETY with the attached revised sheet. The changes include:

- Adds storm drain slurry encasement requirement and updates existing storm drain diameter.

- Requires a full 20-foot stick of C900 centered at storm drain crossing.

Item No. 7 - Sheet 9 of 34 (C-6)

REPLACE in its ENTIRETY with the attached revised sheet. The changes include:

- STA 59+80: Adds storm drain slurry encasement requirement and updates existing storm drain diameter.
- Requires a full 20-foot stick of C900 centered at the storm drain crossing.

Item No. 8 - Sheet 10 of 34 (C-7)

REPLACE in its ENTIRETY with the attached revised sheet. The changes include:

- Requires a full 20-foot stick of C900 centered at the storm drain crossing.

Item No. 9 - Sheet 11 of 34 (C-8)

REPLACE in its ENTIRETY with the attached revised sheet. The changes include:

- Requires a full 20-foot stick of C900 centered at the storm drain crossing.

Item No. 10 - Sheet 12 of 34 (C-9)

REPLACE in its ENTIRETY with the attached revised sheet. The changes include:

- Requires a full 20-foot stick of C900 centered at the storm drain crossing.

Item No. 11 - Sheet 13 of 34 (C-10)

REPLACE in its ENTIRETY with the attached revised sheet. The changes include:

- Requires a full 20-foot stick of C900 centered at the storm drain crossing.
- Sta 107+50: Updates storm drain diameter.

Item No. 12 - Sheet 14 of 34 (C-11)

REPLACE in its ENTIRETY with the attached revised sheet. The changes include:

- Sta 117+20: Updates storm drain diameter.
- Requires a full 20-foot stick of C900 centered at the storm drain crossing.

<u>BIDDER'S QUESTIONS AND ANSWERS:</u>

Item No. 13

Q: Regarding the pipeline to be removed and replaced, is any of this pipe containing asbestos?

A: Per the District's As-builts of existing pipelines, NO pipe being replaced or removed contains asbestos.

Item No. 14

Q: Where is the nearest hydrant or blow off for construction water?

A: There are fire hydrants and blow offs within the project limits and alignment that can be used for construction water depending on which phase of the project is currently being worked on with the furthest being as far as 500ft away. The District will provide a construction meter for use of construction water. The contractor will be required to provide hoses, piping, water trailer or water truck to convey the water to the specific location of work.

Item No. 15

Q: General Note 8 on sheet 2 states the contractor is required to pay for Geotechnical services. At the pre-bid meeting the District stated they will be contracting the geotechnical services. What should the contractor follow?

A: The District will be contracting and scheduling the Geotechnical services and has updated VCMWD General Note 8 as part of Addendum No. 1.

Item No. 16

Q: Technical Specification 02200 and 02221 contradict themselves regarding who contracts geotechnical services. Can the District clarify who will be required to contract the geotechnical services?

A: The District will be contracting and scheduling the Geotechnical services and has updated Technical Specifications 02200 and 02221 as part of Addendum No. 1.

Item No. 17

Q: During the pre-bid meeting there was mention of a staging area already set up by the District. Can you provide additional information on this and if there are costs associated with the pre-determined laydown area?

A: The contractor shall be solely responsible for executing agreements with the property owner and complying with all terms and agreements with the property owner. Contractor shall furnish copies to the District of all agreements and releases of the laydown area. See updated Section 00750 Special Conditions.

Item No. 18

Q: Does the District have the County excavation and traffic control permit and who manages the permit during construction?

A: Per Section 00750 Special Conditions Item 4 - Contractor shall secure a revised County Excavation Permit and Change in Financial Responsibility form identifying their firm as the Contractor and pay all associated inspection and administrative fees and deposits for completing the work under the permit. Contractor shall provide all necessary bonds, insurance, contractor's license information and all other items required by the County to transfer the permit into the firm's name at no extra cost to the District.

Item No. 19

Q: Are Disadvantaged Business Enterprise Guidelines (DBE) participation and the mandatory Good Faith Efforts (GFE) still required? If so, what is the percentage for DBE requirements and if its met, do we still need to list/do/continue the GFE?

A: Both DBE and GFE are required. The Project's SRF Loan Agreement follows the 40 CFR Part 33 requirements for Clean Water as described in Section 00800 DRINKING WATER SRF 9DWSRF0 CONTRACT REQUIREMENTS. The Project's SRF Loan Agreement follows the 40CFR Part 33 requirements for Clean Water. Use the link provided for additional clarification.

https://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/policy0513/dbe_compliance_guidelines_instructions.pdf

ATTACHMENTS

1. Revised Section 00750 Special Conditions
2. Revised Technical Specification Section 02200 Earthwork and Site Preparation
3. Revised Technical Specification Section 02221 Trenching, Backfilling, and Compaction
4. Revised Drawing G-1
5. Revised Drawing C-2
6. Revised Drawing C-3
7. Revised Drawing C-6
8. Revised Drawing C-7
9. Revised Drawing C-8
10. Revised Drawing C-9
11. Revised Drawing C-10
12. Revised Drawing C-11

END OF ADDENDUM NO. 1

Each bidder shall acknowledge receipt of Addendum No. 1 in Section 00400 and include the Bidder's Certification Page with Bid, failure to do so may result in bid disqualification. If there are further questions, please submit them in writing 72 hours prior to the bid date.

By: ______________________ Date: February 23, 2026
Melody Rocco, PE
District Engineer

VALLEY CENTER MUNICIPAL WATER DISTRICT
VALLEY CENTER, CALIFORNIA

ADDENDUM NO. 1
TO CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR CONSTRUCTION OF THE
OLD CASTLE ROAD PIPELINE PH. 2 PROJECT
[PROJECT NO. 01-06-78-51420]

BIDDER'S CERTIFICATION

(Include this page only with Bid)

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

Name of Bidder ______________________________

Signature ______________________________

Name ______________________________

Title ______________________________

Dated ______________________________

SECTION 00750
SPECIAL CONDITIONS ADDENDUM 1

1. SPECIFIC MATERIAL

The District has not made findings pursuant to Public Contract Code Section 3400(b) regarding the use of specific materials, products, things, and/or services that must be utilized for the Project.]

2. STORMWATER SPECIFICATIONS

The District has not prepared a SWPPP or other stormwater compliance plan for the Project Site. Contractor shall be responsible for filing the NOI and for obtaining coverage under the Permit. This includes preparing and implementing a SWPPP for the Project site, and coordinating all submittals with the District's Legally Responsible Person and Authorized Signatory as those terms are defined in the Construction General Permit. Before any NOI, SWPPP, or other Permit related document may be submitted to the State Board or implemented on the Project Site, it must first be reviewed and approved by the District. If the Project is less than one acre in size Contractor is still required to develop and implement an erosion and sediment control plan for the Project Site. Contractor shall include all costs of compliance with specified requirements in the Contract amount.

3. CONSTRUCTION PROCEDURES AND PERMITS

A. Cleanup and Dust Control:

1. In addition to requirements elsewhere in the Contract including the General Conditions and the Standard Specifications, the Contractor shall be responsible for daily maintenance of the project site including cleanup and dust control.

2. The contractor shall furnish and install all temporary piping, pump(s), valves and fittings necessary to distribute the water where required for the control of dust as considered necessary for the safety and convenience of the traveling public, for the reduction of dust nuisance to adjacent property and for other purposes as directed by the Engineer.

B. Contractor Staging and Laydown Area

1. District has secured a site for staging and laydown area. *The contractor shall be solely responsible for executing agreements with the property owner and complying with all terms and conditions of the agreements with the property owner. Contractor shall furnish copies to the District of all agreements and releases of the laydown area.* Refer to ***Appendix D*** for site location. The site is located at the southeast corner of Old Castle Road and Indian Hill Road. Contractor shall use the asphalt concrete (AC) entrances on either Old Castle Road or Indian Hill Road for all construction access to the site. Contractor shall only use the AC areas for parking, staging and laydown area. Any temporary security fencing shall be placed within one foot from the edge of the AC. Contractor is prohibited from driving, parking or storing of materials on the dirt areas.

2. If Contractor decides to pursue a different location of a staging and laydown area, Contractor shall be solely responsible for executing agreements with private property owners and complying with all terms and conditions of those agreements and stipulations of the Contract Documents. Contractor shall furnish copies to the District of all agreements for offsite staging and laydown areas secured specifically for this project.

3. Use of public right-of-way for construction staging shall be allowed only with prior permission of the County of San Diego. Submit copies of executed encroachment permits or agreements to the District no less than two weeks prior to scheduled use of such rights-of-way or public properties.

4. If needed by Contractor, the Contractor shall obtain and maintain, at his own cost, a construction staging area outside of the right of way or outside the boundaries of the District's property. Any posted signs for or related to the staging area must be of professional quality and approved by the Engineer prior to placement. The staging area must be established, maintained and removed in a manner acceptable to the Engineer and the owner of the land where the staging area is situated. The Contractor shall be solely responsible for the security and liability of the staging area. The staging area may be fenced and locked. Guard dogs are not allowed at the construction staging area. Such staging areas shall meet all requirements of applicable standards, codes, ordinances and laws, and BMPs for storm water pollution prevention. The staging areas shall be established at least five (5) working days prior to commencement of work.

5. When any product, material or equipment is to be stored outside the street right-of-way or District property, the Contractor shall first obtain written permission from the property owner on whose property the storage is to be made. The Contractor shall file with the Engineer an original permission letter, together with a written release from the property owner absolving the District or its employees from any and all responsibility in connection with storage of materials, products or equipment on said property. The release letter signed by said property owner and stating that materials are no longer stored on the property and that Contractor has restored the area to its original condition is required prior to the filing of the Notice of Completion.

4. WORK IN THE COUNTY RIGHT OF WAY

All work within the San Diego County (County) right-of-way shall be per the requirements as specified in the County Excavation Permit No. **DPW2025-RWEXCP-77327**, and Encroachment Permit No. **DPW2025-RWTCP-01172** attached as ***Appendix C*** and made a part herein. Contractor shall secure a revised County Excavation Permit and Change in Financial Responsibility form identifying their firm as the Contractor and pay all associated inspection and administrative fees and deposits for completing the work under the permit. Contractor shall provide all necessary bonds, insurance, contractor's license information and all other items required by the County to transfer the permit into the firm's name at no extra cost to the District.

Contractor to coordinate all work within the County right of way with, Mark Benner, County Construction Inspector at (619) 306-8143, Marc.Benner@sdcounty.ca.gov

5. TRAFFIC CONTROL PLANS

Contractor shall provide traffic control for the Project as required for safety in accordance with the County of San Diego Excavation Permit for work in County right-of-way. Traffic control within private roadways shall be in accordance with the State of California, Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones, latest edition. Traffic control requirements may be modified by District or County of San Diego as conditions warrant. Contractor shall modify traffic control as required by District or County of San Diego at no additional cost. Throughout each work period, Contractor shall inspect traffic control (signs, barricades, arrowboards, and delineators), and shall maintain same in accordance with said manual. All temporary signs shall be placed on Type 1 barricade with flasher. Street closures are not permitted without the permission of the District.

Contractor shall maintain emergency access during construction to all emergency vehicles at all times.

Contractor may stop local traffic during construction activities. However, traffic delays shall be minimized during construction and traffic will be stopped no longer than twenty (20) minutes each occurrence or durations specified by the County Traffic Control Permit. Contractor shall be aware of the needs of the affected residents and minimize delays where possible.

Due to limited work area, Contractor may be required to haul spoil material off-site temporarily to provide vehicular travel through the work zone. Should hauling and off-site storage of spoil material be required to maintain access through the work zone, it shall be at no additional cost to the District.

6. WATER SERVICE REPLACEMENT OF EXISTING SERVICES

Water services shall be field located, outside of all pedestrian and vehicular travel ways no closer than 8-feet from the edge of the travel way. Final placement will be made in the field by the District Inspector and or per W-2. Contractor shall install new Water service where required per contract documents, complete and in place. District staff will coordinate outage and install or relocate meters and backflows in the new location. Contractor shall re-connect existing private plumbing to the customer side of the backflow using same material and size as existing, once District staff has completed their work, and within the outage window. Refer to project plans and table on G-1 for details on service replacement and relocation.

Contractor to place and compact backfill select material as necessary to obtain a minimum of 3-feet clear around all meter boxes and valves.

District will coordinate outage notices with customers. Prior to scheduling this work, Contractor shall expose existing private plumbing to determine material, size, and location. Contractor shall have all materials necessary to connect the private plumbing to the new meter and backflow prevention devices on-site prior to the outage.

7. GENERAL CONDITIONS

The Contractor shall be in possession of the Valley Center Municipal Water District (District) Standard Specifications and Standard Drawings, latest revisions, at the time of submitting a bid and at all times during construction. Contractor shall designate a qualified superintendent with full authority to act on behalf of Contractor. Said superintendent shall be on the job site at all times.

A. GENERAL CONDITIONS ARTICLE 8 – SHOP DRAWINGS
In Section a, delete **"six (6) copies"** of all shop or setting drawings. Refer to Technical Specification Section 01300 for the number of shop drawings to submit.

B. GENERAL CONDITIONS ARTICLE 15 – UTILITY USAGE
Article 15 of the General Conditions is modified herein to include the following.

The contractor shall provide the power needed for construction of all work under this Contract. The District will provide a reasonable quantity of water free of charge to the Contractor from existing fire hydrants or other appurtenances within the vicinity of the project. Construction water will be supplied by the District through a District-provided metering device. The Contractor shall, at its own expense, convey the construction water and power, in each case, to the point of use. The Contractor shall furnish and install backflow prevention devices and all necessary piping and appurtenances including pumps or water trucks as necessary.

C. GENERAL CONDITIONS ARTICLE 29; INSPECTOR'S FIELD OFFICE
Delete this section in its entirety. An inspector's field office is not required as part of this project.

D. GENERAL CONDITIONS ARTICLE 39 – INSURANCE
Article 39 of the General Conditions is modified herein as follows.

Delete Paragraph "f" Builder's Risk in its entirety. Builder's Risk is not required for this project.

8. ENVIRONMENTAL REQUIREMENTS

District has adopted Resolution 2020-35 included in ***Appendix B*** adopting the Mitigation Monitoring Program required to satisfy California Environmental Quality Act (CEQA). Mitigation Measures were adopted as part of those findings. The District will be responsible for employing required Biological and Archeological Monitors. Contractor will be required to cooperate and abide by the measures described and as determined by the monitors. If mitigation measures are determined by the monitors to cause a change in conditions resulting in additional costs to the contractor, a Change Order will be negotiated and processed per the Contract Document provisions. If change in conditions are a result of the contractor's means and methods resulting in additional costs, the contractor will be responsible to cover all costs and a time extension for lost time will not granted.

9. SHUTDOWN PROCEDURE

Shutdown periods for existing facilities shall be kept to a minimum and the Contractor shall schedule his/her work accordingly. The Contractor shall give 4 full working days' advance written notice to the District Engineer of his/her desire for an existing valve to be operated, an existing facility to be shut down, a pipeline drained, or a service to be turned off, using the request form provided by the District. The area requiring the outage will need to be pre-excavated and all material inspected and approved by the District Engineer prior to the outage request being submitted. No valve or other control device of the water system shall be operated by the Contractor without the approval of the District Engineer. The District will operate the existing valve, shut down the existing District facility or service, or supervise the draining of a line by the Contractor. Shutdowns of existing facilities can only be scheduled Tuesday through Thursday, be a maximum of 8 hours, within the hours of 8:00 am to 4:00 pm, and any individual customer cannot be without water service more than two (2) times in any calendar week nor two (2) consecutive days due to a requested shutdown. If, in the opinion of the District Engineer or contractor, the shutdown cannot be accomplished in an 8-hour period, Contractor will be required to provide necessary means for temporary water service to affected customers during the outage.

The Contractor shall provide, at his/her expense, equipment, materials, and labor whenever required by the District to facilitate the draining of lines. Contractor shall account for drain times in the shutdown duration. The District will not be responsible for any compensation for any work resulting from faulty operation or leakage through existing valves. The Contractor shall exercise any necessary precautions in performing all work in conjunction with the connections to prevent any damage to existing mains or any contamination thereof, and shall be liable for all damages and contamination caused by his/her operations.

Shutdown requests will not be considered by the District until the Contractor has positively located the existing pipe or facility, all pressure and bacteriological tests have been successful, and the Contractor has all material to be used for the connection at the project site and has made arrangements for all required labor and equipment.

10. ROCK CLAUSE ALLOWANCE

The Rock Clause Allowance will be used only if a rock condition is encountered that satisfies the criteria of non-rippable rock as defined in 02200 3.05E. ARTICLE 47 – CHANGE AND EXTRA WORK of Section 0700 GENERAL CONDITIONS will govern compensation terms. District and Contractor will negotiate to determine the best course of action to mitigate the non-rippable rock condition. Contractor will be compensated based upon terms of the approved change order(s).

11. UNKNOWN UTILITY ALLOWANCE

The Unknown Utility Allowance will be used if a utility is encountered not shown in the contract documents and is determined to impact the work. ARTICLE 47 – CHANGE AND EXTRA WORK of Section 0700 GENERAL CONDITIONS will govern compensation terms. District and Contractor will negotiate to determine the best course of action to mitigate the conditions. Contractor will be compensated based upon terms of the approved change order(s).

12. CONSTRUCTION DOCUMENTATION

A. Pre-Construction Photographs

The Contractor shall take sufficient number (minimum 100) preconstruction digital photographs prior to commencement of Work on the site. The photographs shall be minimum 500kb size and shall indicate the date and time on each. The photo file name shall indicate the subject and/or location where the photograph was taken. For each digital photograph taken, the Contractor shall record project title, date taken, photograph number, and description of view shown in photograph. Acceptable quality and identification shall be determined by the Engineer. Preconstruction photographs shall be taken in the presence of the Engineer. Additionally, the Contractor shall prepare a digital video "walk-through" of the job site prior to construction. All preconstruction photographs and videos shall be recorded to a thumb drive or an SD card and submitted to the Engineer. The Contractor shall retain a copy of the thumb drive or SD card submittal for his/her records.

B. Construction Progress Photographs

The Contractor shall provide construction color photographs showing the progress of the Work. The photographs shall be taken of such subjects as may be directed by the Engineer. The photographs shall be minimum 500kb size and shall indicate on each print the date and time. The photo file name shall indicate the subject and/or location where the photograph was taken. For each digital photograph taken, the Contractor shall record project title, date taken, photograph number, and description of view shown in photograph. Starting one month after the date of the preconstruction photographs and continuing at least on a monthly frequency for the duration that the Work is in progress, a sufficient number of photographs (minimum 100) shall be taken each month. All construction progress photographs shall be recorded to a thumb drive or SD card and submitted to the Engineer at the end of each month.

13. EXISTING ASPHALT CONCRETE PAVING IN OLD CASTLE ROAD

The District has performed a preliminary investigation into the composition and depth of the existing asphalt concrete (AC) pavement section and underlying Class 2 Aggregate Base (AB). The investigation, conducted via potholing at a discrete location, revealed the following approximate existing pavement structure:

A. AC was between 8-inches to 12-inches in thickness

B. AB was approximately 12-inches in thickness

C. Layers of Petromat (pavement reinforcing fabric) were observed within the existing pavement structure.

Due to the limited scope of the preliminary investigation and the absence of comprehensive geotechnical data for the entire project alignment, the Contractor shall assume and schedule work based on the following:

A. The entire length of the pipeline alignment shall be assumed to possess pavement and base conditions structurally equivalent to those observed during the preliminary investigation

B. The Contractor's means, methods, and equipment selection shall account for the excavation and removal of the assumed pavement structure, including the removal of asphalt concrete up to 12-inches in depth and aggregate base up to 12-inches in depth, as well as the removal and disposal of all encountered reinforcing fabrics (Petromat).

1. WORK RESTRICTION ALONG THE BRIDGE AT STA. 61+45.87 to 63+23.57

The Contractor is strictly prohibited from entering the creek channel, stream bed, or accessing the immediate creek slopes at any time during the execution of the Work. All construction activities, including but not limited to material handling, equipment staging, and active construction, shall be performed exclusively from the bridge deck and established work limits at the edges of the bridge. No equipment, personnel, or materials shall be permitted within the defined exclusion zone (creek channel and slopes). The Contractor shall implement measures to protect and preserve all existing vegetation, including trees, shrubs, and groundcover, located on the creek slopes and adjacent to the bridge structure. The cutting, trimming, removal, or relocation of any vegetation is prohibited unless specifically authorized in writing by the District or the District's designated Environmental Consultant. Any unauthorized disturbance shall be remediated by the Contractor at no additional cost to the District. The Contractor shall utilize physical barriers, catch platforms, nets, or equivalent containment systems to prevent any and all construction debris, materials, pollutants, or foreign matter from entering or falling into the creek or the surrounding riparian environment. Should any construction debris inadvertently enter the creek, the Contractor shall immediately cease work in that area and notify the District's Representative. The Contractor shall then execute prompt and proper removal of the material as directed by the District and Environmental Consultant, ensuring compliance with all regulatory requirements.

2. REMOVAL AND DISPOSAL OF EXISTING PARALLEL 12-INCH PIPELINE

Within Sta. 93+00 and Station 108+00. an existing 12-inch Cement Mortar Lined & Coated (CML&C) and Tar Wrapped pipeline has been confirmed to be abandoned and runs generally parallel to the alignment of the new water pipeline. The abandoned parallel pipeline may, at various points, encroach upon or directly intersect the alignment designated for the new pipeline installation. The Contractor is required to remove and dispose of any segment of this abandoned pipeline that conflicts with or impedes the installation of the new water pipeline or as directed by the District. The removal of this parallel abandoned pipeline is separate and distinct from the existing pipe removal required under Bid Item 20.

Payment for the removal of the abandoned parallel pipeline shall be made under Bid Item 39. Due to the pipe's intermittent encroachment into the new pipeline alignment, the Contractor shall only be compensated for the actual lineal footage of the abandoned pipe physically removed to clear the conflict and disposed of. Payment under Bid Item 39 shall constitute full compensation for all labor, materials, and equipment required to complete the removal, including, but not limited to, sawcutting of existing pavement, removal and disposal of existing Asphalt Concrete (AC) pavement, removal and disposal of the abandoned 12-inch pipe and associated materials, provision and placement of additional Class 2 Aggregate Base (AB) material necessitated by the removal, and placement and compaction of the subsequent Asphalt Concrete (AC) pavement layer required to restore the trench prism.

END OF SPECIAL CONDITIONS

SECTION 02200
EARTHWORK AND SITE PREPARATION ADDENDUM 1

PART 1 - GENERAL

1.01 DESCRIPTION.

Requirements specified in Conditions of the Contract and Division l form a part of this Section. Provide labor, equipment, tools, materials, and services needed to accomplish all site preparation, earthwork and incidental appurtenant work as described herein or shown on the Drawings.

A. Work Included in This Section. Principal items are:

1. Requirements
2. Materials
3. Site Preparation
4. Removals
5. Dust Control
6. Care of Drainage Water
7. Excavation
8. Pavement Subgrade
9. Clean-up
10. Disposal of Surplus and/or Unsuitable Materials

B. Definitions

1. Site. The property owned by Valley Center Municipal Water District, shown within the boundaries on the Drawings, along with easements and/or rights-of-way roads, drainage facilities, and pipelines, and the Contractor's working and storage areas adjacent to the facilities.

2. Structural/Slab Fill. Compacted fill of suitable material, or select material, in all areas of the site requiring filling to grade as shown on the Drawings.

3. Select Material as specified herein shall be any material imported or excavated from the cut areas that in the opinion of the Soil Engineer is suitable for use in constructing fills shallower than 36 inches below rough grade.

4. Select Granular Material. Imported coarse material, or a process material derived from on-site excavated material, for use in constructing structural fill and structural backfill.

5. Waste Excavation. Material from project excavations which is not suitable for use in backfill or compacted fills or is in excess of that required to be used for fill or backfill.

6. Rock Excavation. Excavation of solid ledge rock that, in the opinion of the Engineer, requires for its removal drilling and blasting, wedging, sledging, barring or breaking up with power-operated tools. The term “Rock Excavation” indicates a method of removal and not a geological formation.

1.02 SITE INVESTIGATION.

Contractor's Responsibility. Prior to Bid Opening, the Contractor shall carefully examine the site and make all inspections necessary in order to determine the full extent of the work required to make the completed Work conform to the Drawings and Specifications. The Contractor shall satisfy themselves as to the nature and location of the Work, the conformation and conditions of the existing ground surface, and the character of equipment and facilities needed prior to and during prosecution of the Work. The Contractor shall satisfy himself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered. Any inaccuracies or discrepancies between the actual field conditions and the Drawings, or between the Drawings and Specifications must be brought to the Owner's attention in order to clarify the exact nature of the Work to be performed.

1.03 SAFETY.

The Contractor shall familiarize himself with, and shall at all times conform to, the regulations of the "OSHA General Industry Occupational Safety and Health Standards", and "OSHA Safety and Health Regulations for Construction Safety Orders" and "Construction Safety Orders," Article 6 "Excavations, Trenches, Earthwork" of the State of California, Department of Industrial Relations, Division of Occupational Safety and Health (CAL/OSHA).

1.04 ENVIRONMENTAL SAFEGUARDS AND REGULATIONS.

The Contractor shall comply with regulations in force at all times to prevent pollution of air and water.

1.05 QUALITY ASSURANCE.

A. By Contractor. Exercise due care to assure procurement, storage and placement of materials from site or offsite sources which will comply with the requirements, Specifications and standards set out herein. On the recommendation of the Engineer, provide inspection and testing by independent testing services, approved by the owner, engaged and paid for by the *Owner* ~~Contractor~~. In this regard, a Soils Engineer will be engaged by the *Owner* ~~Contractor~~, who shall act as an independent representative, to perform inspection of the removal and replacement of unsuitable materials, all excavations, and the placement and compaction of all fills and backfills within the limits of earthwork on this Project as required by the project specifications. Costs for all such inspections and tests will be paid by the Contractor *if found to be out of compliance per the Contract Documents*.

B. By Engineer. The Engineer, through his project representative(s), will be the onsite arbiter and judge of the acceptability of the Work done, based on such observations and tests he may require or perform.

C. By Owner. The Owner may, confirm the inspection and testing performed by contractor’s Soils Engineer. In this regard, a Soils Engineer will be engaged by the Owner, who shall act as the direct representative of the Owner in soils work, to perform inspection of the removal and replacement of unsuitable materials, all excavations, and the placement and compaction of all fills and backfills within the limits of earthwork on this Project. Costs for all such inspections and tests will be paid by the Owner, except the Contractor shall reimburse the cost of retest and reinspection done by the Owner if it is determined that the Contractor’s testing was done incorrectly.

D. Applicable Criteria, Tests and Standards.

1. For Earthwork for Slabs. The Contractor will provide the services of a qualified Soils Engineer to make tests of prepared subgrade and compacted fill. Testing will be at the discretion of the Soils Engineer. The Contractor shall schedule commencement or subgrade preparation at the discretion of the Soils Engineer
2. For Waste. Material deemed unsuitable by the Soils Engineer from tests or visual inspection, and all material delivered to fill, which cannot be satisfactorily compacted, shall be wasted in an area, provided by the Contractor, that is acceptable to local authorities.
3. For Clean-up. The Contractor shall remove all rubbish, debris, junk, temporary materials, and any waste excavated materials from the Project Site and dispose of in accordance with all applicable laws, regulations, permits and approvals from Owners and property upon which the material will be disposed. The Contractor shall perform restoration of staging and storage areas and temporary roads to the satisfaction of the Owner, as a condition for acceptance and final payment.
4. Standards for Soil Classification, Properties and Tests
    a. Classification. All earthwork and embankment (including: controlled fill; backfill for trenches; structural fill; structural backfill; road embankment; and borrow) shall be classified in accordance with "Standard Test Method for Classification of Soils for Engineering Purposes" (ASTM D2487).
    b. Physical Properties. All earthwork and embankment shall be tested for specific gravity and moisture content in accordance with "Standard Test Method for Specific Gravity of Soils" (ASTM D854); and "Standard Method for Laboratory Determination of Water (Moisture) Content of Soil, Rock, and Soil-Aggregate Mixtures" (ASTM D2216).
    c. Compaction. All moisture density relationships shall be performed in accordance with "Standard Test Methods for Moisture-Density Relations of Soils and Soil Aggregate Mixtures Using 10-lb: Rammer and 18-in. Drop" (ASTM D1557). This method is known as the ``Modified Proctor Test." No other tests will be allowed for determining moisture density relationships.
    d. Nuclear Field Density Tests. Field density or field moisture content testing shall be allowed using ``Standard Test Methods for Density of Soil and Soil Aggregate in Place by Nuclear Methods - Shallow Depth" (ASTM D2922); and ``Standard Test Method for Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods - Shallow Depth" (ASTM D3017).
    e. Sand-Cone Field Density Tests. Field density of earthwork and embankment shall include tests using "Standard Test Method for Density of Soil in Place by the Sand-Cone Method" (ASTM D1556).
    f. Atterberg Limits. The plastic index and liquid limit of structural fills and structural backfills shall conform to "Standard Test for Liquid Limit, Plastic Limit, and Plasticity Index of Soils" (ASTM D4318).
    g. California Bearing Ratio (CBR). Where required for determining pavement subgrade performance by using the CBR method, use "Standard Test Method for CBR of Laboratory-Compacted Soils" (ASTM D1883).

h. R-Value. Where required for determining pavement subgrade performance by using the R-Value method, use "Standard Test Method for Resistance R-Value and Expansion Pressure of Compacted Soils" (ASTM D2844).

i. Expansion Index. Where required to determine the potential expansion of an earthwork or embankment, use the "Expansion Index Test" (UBC Standard 29-2).

1.06 COMPACTION.

The maximum dry density, optimum moisture content and field density of each soil type used in compacted fill, backfill and trench backfill shall be determined as stated above.

1.07 INSPECTION.

A. Observation and compaction tests shall be made by the Soil Engineer during the filling and/or compacting operations so that he can state his opinion that the fill was constructed in accordance with the Specifications. When nuclear field density tests are used, every tenth test shall be duplicated (at the identical location) with a sand cone test to verify accuracy.

B. The Soil Engineer shall make field density tests in the compacted materials below the surface where the surface is disturbed. When these tests indicate that the density of any layer of fill or portion thereof is below the specified density, the particular layer or portion shall be reworked until the specified density has been obtained.

1.08 REQUIREMENTS.

A. General.

1. The Work performed under this Specification shall be constructed to the lines, grades, elevations, slopes and cross sections indicated on the Drawings, specified herein, and/or directed by the Owner in writing. Slopes, graded surfaces, and drainage features shall present a neat, uniform appearance upon completion of the Work.
2. It shall be the Contractor's responsibility (1) to maintain adequate safety measures and working conditions; and (2) to take all measures necessary during the performance of the Work to protect the entire project area and adjacent properties which would be affected by this Work from storm damage, flood hazard, caving of trenches and embankments, and sloughing of material, until final acceptance by the Owner. It shall be the Contractor's responsibility to maintain completed areas until the entire project area is in satisfactory compliance with the project Specifications.

B. Utility Protection. Utility lines and structures indicated on the Drawings which are to remain in service shall be protected by the Contractor from any damage as a result of his operations. Where utility lines or structures not shown on the Drawings are encountered, the Contractor shall report them to the Owner before proceeding with the Work. The Contractor shall bear the cost of repair or replacement of any utility lines or structures which are broken or damaged by his operations.

1.09 EXPLOSIVE.

Do not use explosives unless specifically authorized, in writing, by the Engineer.

1.10 GUARANTEE.

Work done under this Section shall in all respects come under the terms of the guarantee stated in the General Conditions.

PART 2 - PRODUCTS

2.01 MATERIALS.

A. Structural/Slab Fill Materials shall consist of select granular material, either imported or manufactured from excavated on-site rocky materials.

1. The select granular material can be import course sand, import "DG" (decomposed granite) or a processed material derived from the on-site excavation. The gradation for select granular soil should fall within the following limits:

Sieve Size	% Finer
1"	100
3/4"	90 - 100
No. 4	50 - 100
No. 30	25 - 55
No. 200	0 - 20
Sand Equivalent:	50 min.

2. All select granular material shall be of quality specified in Subsection 200 of the Standard Specification for Public Works Construction, (Greenbook) latest edition.

B. Crushed Rock. Crushed Rock for the upper blanket of material in open areas shall consist of hard, durable crushed stone, and shall be free from organic material, clay balls, or other deleterious substances. Crushed rock gradation shall be 1-inch size conforming to ASTM test grading "A" as follows:

Sieve Size	Percentage Passing
1-1/2"	100
1"	90 - 100
3/4"	30 - 60
1/2"	0 - 20
No. 4	0 - 5

C. Native Backfill. Native soil prepared as necessary to be free from clods or rocks larger than 2 inches in greatest dimension, and free from organic material.

PART 3 - EXECUTION

3.01 SITE PREPARATION.

A. The Work performed under this Specification shall be constructed to the lines, grades, elevations, slopes and cross sections indicated on the Drawings, specified herein, and/or directed by the Owner. Slopes, graded surfaces, and drainage features shall present a neat uniform appearance upon completion of the Work.

B. It shall be the Contractor's responsibility (l) to maintain adequate safety measures and working conditions; and (2) to take all measures necessary during the performance of the Work to protect the entire project area and adjacent properties which would be affected by this Work from storm damage, flood hazard, caving of trenches and embankments, and sloughing of material, until final acceptance by the Owner. It shall be the Contractor's responsibility to maintain completed areas until the entire project area is in satisfactory compliance with the job specification.

C. Utility lines and structures indicated on the Drawings which are to remain in service shall be protected by the Contractor from any damage as a result of his operations. Where utility lines or structures not shown on the Drawings are encountered, the Contractor shall report them to the Owner before proceeding with the Work. The Contractor shall bear the cost of repair or replacement of any utility lines or structures which are broken or damaged by his operations.

3.02 REMOVALS, CLEARING AND GRUBBING.

A. Protection. Existing items not designated to be demolished or removed shall be protected from damage. Any such item damaged by the Contractor shall be restored or replaced immediately at the Contractor's expense.

B. Debris and Waste Material. All debris and waste material resulting from demolition, clearing, and grubbing shall be removed from the site and disposed of by the Contractor.

C. Clearing. Clearing consists of the complete removal of objectionable materials and obstructions above and below the ground surface including tree stumps, brush, grass, vegetative matter and other objectionable materials within the project limits. All brush and organic material shall be removed before placing any earth fills. It shall be the Contractor’s responsibility to save and protect all trees that lie outside the construction area. No trees shall be removed unless approved by owner.

D. Grubbing. Grubbing consists of the complete removal of stumps, including tap roots or lateral roots 1-1/2 inches or more in diameter, and the removal of brush, grass or weeds to depths below the natural ground as specified herein. Stumps shall be grubbed to a depth of 6 inches below the natural ground surface, or to the depths as determined in the field by the Engineer at the time of construction.

3.03 DUST CONTROL.

A. The Contractor shall take all steps possible to prevent and reduce dust arising from the construction activity. He shall have adequate water trucks on the site at all times and water, as necessary, the areas where dust may arise. He shall cooperate fully with the Owner and water immediately, when told to do so. The Contractor shall follow OSHA Standard, 29 CFR 1926. 1153.

3.04 CARE OF DRAINAGE WATER.

A. Contractor shall take care of drainage water from the construction operations, and of storm water and wastewater reaching the construction area from any source, so that no damage will be done to the excavation, pipe or structures. The Contractor shall be responsible for any damages to persons or property on or off the construction site due to such drainage water or to the interruption or division of such storm water or wastewater on account of his operations.

B. Such grading shall be done as may be necessary to prevent surface water from flowing into excavations, and any water accumulating therein shall be removed by pumping or by other approved methods.

3.05 EXCAVATION.

A. General. The Contractor shall perform all excavation necessary or required as shown on the Drawings. The excavation shall include the removal and disposal of all earth materials of whatever nature encountered, which shall include both rock excavation and soil excavation when either or both are present, and shall include the furnishing, placing, and maintaining of shoring and bracing necessary to safely support the sides of the excavations. The Work shall also include all pumping, ditching and other required measures for the removal or exclusion of water.

B. Common Excavation. Common excavation shall consist of all excavation not separately designated.

1. All surfaces to receive compacted fill shall be scarified six inches deep, brought to optimum moisture, and recompacted at 90 percent relative compaction ready to receive a bed of controlled fill as specified.

C. Structure or Slab Excavation. Structure or slab excavation shall include the removal of all materials of whatever nature encountered, including all obstructions of any nature which would interfere with the proper execution and completion of the Work. The removal of such materials shall conform to the lines and grades shown on the Drawings and/or herein specified. Temporary structure excavations shall at all times conform to the Requirements of the State of California, Division of Occupational Health and Safety and pertinent requirements contained in the referenced Soils Investigation Report (if provided).

1. All surfaces to receive concrete slabs-on-grade shall be over excavated and recompacted with a minimum compacted fill thickness of 12 inches at 95 percent relative compaction.
2. Rough grade excavations for structures and footings will be inspected by the Owner to verify that the excavations extend into satisfactory soils and are free of loose and disturbed materials.
3. All surfaces to receive geomembrane shall be free from rocks, stone, cobbles or anything larger than 1” that cannot be compacted and embedded into the subgrade surface. All surfaces to be lined with geosynthetics shall be firm and unyielding with no ruts or irregularities that can cause damage to the liner system. The finish subgrade surface shall be flat, smooth and level with no objects protruding from the surface that can cause damage to the geomembrane liner system. Final inspection on the subgrade surface shall be conducted by the project stakeholders prior to liner deployment.

D. Compaction. Fill material shall be placed in horizontal layers and compacted with power operated tampers, rollers, idlers, or vibratory equipment.

1. Add water to the backfill material or dry the material as necessary to obtain a moisture content within 2% of optimum. Employ such means as may be necessary to secure a uniform moisture content throughout the material of each layer being compacted.

2. If the backfill material becomes saturated from rains or any other source because it was not compacted to the specified density or was not backfilled and compacted to the surface grade, through negligence or otherwise, remove the faulty material and replace it with suitable material compacted to the specified density. No additional payment will be made for doing such work or removal and replacement.

3. Compaction of embankment and backfill materials by flooding, ponding or jetting is not permitted

E. Rock Excavation. During excavation, if rock is encountered, and deemed non rippable using heavy duty excavation equipment, Caterpillar 336 or equal 82,000 lb operating weight excavator, or some other combination of equipment that has equal ripping ability. Contractor will be entitled to additional compensation. Refer to General and Special Conditions of the Specifications.

F. Trench Excavation. Trench excavation is not a part of this Section. See Section 02221, "Trenching, Backfilling and Compacting".

3.06 PAVEMENT SUBGRADE.

All Base Course and asphalt concrete pavement shall be underlain by a minimum 12 inch thickness of compacted structural fill. In areas where less than 12 inches of fill or no filling is proposed, the existing grade shall be scarified and the moisture content adjusted to obtain optimum moisture content and recompacted to a depth of at least 12 inches. Compaction shall be a minimum of 95 percent of maximum density at optimum moisture.

3.07 CLEAN-UP.

Upon completion of Work in this Section, all rubbish and debris shall be removed from the job site. All construction equipment and implements of service shall be removed and the entire area involved shall be left in a neat, clean and acceptable condition.

3.08 DISPOSAL OF SURPLUS AND/OR UNSUITABLE MATERIALS.

Excavated materials which are determined by the Soil Engineer to be unsuitable for use in backfill or compacted fills or excavated material that is in excess of that required to be used for backfill or to construct fills shall be disposed of by the Contractor at his cost.

3.09 CRUSHED ROCK PLACEMENT.

At those locations at which rock is encountered, place a finish blanket of crushed rock in an even layer (of approximately 4 inches thickness) of crushed rock over neatly trimmed, graded and compacted earth.

END OF SECTION 02200

SECTION 02221
TRENCHING, BACKFILLING, AND COMPACTION ADDENDUM 1

PART 1 - GENERAL

1.01 DESCRIPTION.

Requirements specified in Conditions of Contract and Division 1 form a part of this Section. The Work of this Section includes all labor, machinery, construction equipment, and appliances to perform in a good workmanlike manner all trench excavation and backfill work shown on the Drawings and herein specified.

A. Work Included In This Section. Principal items include:

1. Requirements
2. Materials
3. Trench Excavation
4. Bracing Trenches
5. Pipe Bedding
6. Backfilling Pipe Trenches
7. General Pipeline Installation Requirements
8. Clean-Up

B. Related Work Not Included In This Section.

1. Earthwork & Site Preparation
2. Asphalt Concrete Paving
3. Piping & Conduit Work specified in other Divisions.

1.02 GENERAL REQUIREMENTS.

Requirements of Section 02200 apply to this Section.

1.03 SAFETY.

The Contractor shall familiarize himself with, and shall at all times conform to all applicable regulations of Subpart "P" entitled, "Excavations" as mandated in the "Occupational Safety and Health Standards" (29CFR Part 1926) of OSHA Safety and Health Regulations for Construction. Contractor shall also comply with "Construction Safety Orders," Article 6 "Excavations, Trenches, Earthwork" of the State of California, Department of Industrial Relations, Division of Occupational Safety and Health (CAL/OSHA); the Owner's Plant Rules and Regulations; and applicable requirements specified in Section 01080.

1.04 INSPECTION AND CONTROL.

A Soils Engineer will be employed by the *Owner* ~~Contractor~~ who shall act as the authority of the soils work, and shall perform inspection of the removal and replacement of unsuitable materials, and the placement and compaction of all backfills within the limits of trenching ensuring project specifications are being satisfied by the contractor. All work shall be done in accordance with these Specifications and as directed and approved by the Owner. Costs for all such inspections and tests will be paid by the *Owner* ~~Contractor~~. If retesting is required because the Contractor did not meet the Specification, all such costs shall be borne by the Contractor.

1.05 REQUIREMENTS.

A. General.

1. The Work performed under this Specification shall be constructed to the lines, grades, and elevations, indicated on the Drawings, specified herein, and/or directed by the Owner in writing. Slopes, graded surfaces and drainage features shall present a neat, uniform appearance upon completion of the Work.
2. It shall be the Contractor's responsibility (1) to maintain adequate safety measures and working conditions; and (2) to take all measures necessary during the performance of the Work to protect the entire project area and adjacent properties which would be affected by this Work from storm damage, flood hazard, caving of trenches and embankments, and sloughing of material, until final acceptance by the Owner. It shall be the Contractor's responsibility to maintain completed areas until the entire project area is in satisfactory compliance with the project Specifications.
3. Contractor shall be responsible for the excavation and disposition of unsuitable or surplus material by approved means of conveyance away from the working area. Conform with applicable requirements for "Disposal of Surplus and/or Unsuitable Materials" as specified in Section 02200.

B. Utility Protection. Utility lines and structures indicated on the Drawings which are to remain in service shall be protected by the Contractor from any damage as a result of his operations. Where utility lines or structures not shown on the Drawings are encountered, the Contractor shall report them to the Owner before proceeding with the Work. The Contractor shall bear the cost of repair or replacement of any utility lines or structures which are broken or damaged by his operations.

1.06 GUARANTEE.

Work done under this Section shall in all respects come under the terms of the guarantee stated in the General Conditions.

PART 2 - PRODUCTS

2.01 MATERIAL.

A. Bedding. Bedding shall be defined as a layer of material immediately below the bottom of the pipe and extending over the full trench width in which the pipe is bedded. Thickness of pipe bedding shall a minimum of 6 inches compacted to 90% relative compaction.

1. Sand Bedding. Sand for bedding for all pipe shall be washed natural or manufactured granular material, or a combination thereof, free of deleterious substances such as organic material, mica, loam, or clay. The material must have been tested to a minimum Sand Equivalent of 30 within two (2) weeks of its use. Sand shall conform to the gradation listed below:

	Percent Passing	
Sieve Size	Minimum	Maximum
3/8”	100	-
No. 4	75	100
No. 30	12	50
No. 100	5	20
No. 200	0	15

B. Pipe Zone Material. Pipe zone material shall be defined as that material above the bedding and extending to the sides of trench and to one foot above the top of pipe. Use sand for the Pipe Zone. A native free-draining granular material having sand equivalent of not less than 30, or having coefficient of permeability greater than 1/4 inch per hour, or other material may be used with approved by the District Engineer. Cost of any sand equivalent tests shall be borne by the Contractor.

C. Trench Backfill shall consist of excavated onsite soils, except when unsuitable soils are encountered as determined by the Owner or his representative, sand or slurry backfill shall be used.

D. Slurry Backfill. When directed by the Owner, slurry backfill shall be used to provide a stable trench backfill in an otherwise incompressive trench zone. Use Trench Backfill Slurry of Concrete Class 100-E-100 as defined in Subsection 201-1.1.2 of the Standard Specifications for Public Works Construction “GREENBOOK 2021 Edition or latest edition.

E. Pipelines. Use materials shown on the Plans and as specified in other pertinent Sections of this Specification.

PART 3 - EXECUTION

3.01 TRENCH EXCAVATION.

A. Excavation for Trenches shall include the removal of all material of any nature for the installation of the pipe or facility and shall include the construction of trench shoring and stabilization measures, timbering and all necessary installations for dewatering.

B. Minimum Width of Trench. The minimum width of pipe trenches, measured at the crown of the pipe, shall not be less than 12 inches greater than the exterior diameter of the pipe, exclusive of bells and the minimum base width of such trench shall be not less than 12 inches greater than the exterior diameter of the pipe, exclusive of special structures or connections, and such minimum width shall be exclusive of all trench supports.

C. Maximum Width of Trench. The maximum allowable width of trench for all pipelines measured at the top of the pipe shall be the outside diameter of the pipe (exclusive of bells or collars) plus 24 inches, and such maximum shall be inclusive of all timbers. A trench wider than the outside diameter plus 24 inches may be used without special bedding if the Contractor, at his expense will furnish pipe of the required strength to carry the additional trench load. Such modifications shall be submitted to the Owner and approved in writing. Whenever such maximum allowable width of trench is exceeded for any reason, except as provided for on the Plans or in the Specifications, or by the written direction of the Owner, the Owner may, at his discretion, require that the Contractor, at his own expense for all labor and materials, cradle the pipe in 2000 psi compressive strength concrete, or other approved pipe bedding.

D. Pipe Trench widths in the pipe zone shall be limited as follows:

Pipe Diameter	Minimum Trench Width	Maximum Trench Width
4" through 12"	O.D. + 12"	O.D. + 16"
14" through 48"	O.D. + 16"	O.D. + 24"

E. Maximum Length of Open Trench. Except by special permission by the Owner, only that amount of pipe construction will be permitted, including excavation, construction of pipeline, and backfill in any one location, which can be completed in one day. This length includes open excavation, pipe laying and appurtenant construction and backfill which has not been temporarily resurfaced. The use of trench plates shall be use with the approval of the Owner.

F. Trench Side Slopes.

1. Temporary trench excavations shall at all times conform to the safety requirements hereinbefore specified in Paragraph entitled "Safety".
2. Loose cobbles or boulders shall be removed from the sides of the trenches before allowing workmen into the excavation, or the trench slopes must be protected with screening or other methods. Trench side slopes shall be kept moist during construction to prevent local sloughing and raveling. Surcharge loads due to construction equipment shall not be permitted within 5 feet of the top of any excavated slope.
3. If the Contractor elects to shore or otherwise stabilize the trench sides, he shall file with the Owner copies of drawings for same prepared and signed by a Civil Engineer duly registered in the State of California before commencing excavation.

G. Excess Trench Excavation. If any trench, through the neglect of the Contractor, be excavated below the bottom grade required, it shall be refilled to the bottom grade, at the Contractor's expense for all labor and material, with sand or D.G compacted to a firm stable foundation.

3.02 BRACING TRENCHES.

The sides of the trenches shall be supported with plank sheeting and bracing in such a manner as to prevent caving of the sides of the trench. Space left by withdrawal of sheeting or shoring shall be filled completely with dry granular material blown or rammed in place. All trenches shall be shored according to OSHA standards unless cut to the angle of repose of the excavated soils. All shoring must be submitted with engineered product specifications.

3.03 PIPING BEDDING.

A. The Contractor shall bed all pipe in crushed rock as hereinbefore specified, except as follows:

1. Where directed on the plans, or as determined by the Owner or Soils Engineer, pipe shall be bedded in concrete.
2. Plastic pipe shall be bedded in sand, unless otherwise required by the manufacturer.

B. The Contractor shall excavate to 6 inches below the bells or couplings for the full width of the trench and shall place 6 inches of bedding as specified upon which the pipe is to be laid. In cases, as determined by the Owner, where trench material is suitable for use as bedding, the trench may be excavated to a point above the invert grade, and the trench bottom shall be handshaped so that the bottom segment of the pipe is firmly supported on undisturbed material.

C. Before any pipe is lowered in place, the trench bottom shall be prepared so that each pipe shall be supported for the full length of the barrel. All adjustments in line and grade shall be made by scraping away or filling and tamping in under the barrel of the pipe. Wedging or blocking are not permitted.

D. The pipe bedding shall be compacted to a minimum of 90 percent relative compaction as hereinafter specified.

3.04 BACKFILLING PIPE TRENCHES.

A. Backfilling Pipe Zone. Selected backfill material for the pipe zone shall consist of hereinbefore specified material or imported granular material as approved by Soils Engineer in advance of placement. Place material in the trench simultaneously on each side of the pipe for the full width of the trench and the depth of the pipe zone in layers 6 inches in depth. Each layer shall be thoroughly compacted by tamping or, where the material is sufficiently granular in nature as determined by the Owner.

B. Particular attention shall be given to underside of the pipe and fittings to provide a firm support along the full length of the pipe. The pipe zone shall be considered to extend and compacted 12 inches minimum above the top of the pipe, and shall be compacted to a relative compaction of not less than 90 percent of maximum dry density at optimum moisture content as hereinafter specified. Care shall be taken not to damage pipe or special coatings on the pipe.

1. For PVC Pipe, use sand or other material and methods recommended in writing by the pipe manufacturer for pipe bedding and for backfill material within pipe zone.
2. Use of Materials other than those specified shall be approved by Owner prior to use. The Contractor shall bear all cost of removal of rejected material, its hauling to an authorized disposal site, and cost of providing required material to complete the bedding and backfilling.

C. Backfilling Pipe Trench. After the pipe has been laid in the trench and has been inspected and approved, and backfilling in the pipe zone is complete and compacted, the remainder of the trench may be backfilled. The backfill material shall be suitable material as hereinbefore specified or sand, free from all stones, clods or other deleterious material or trench slurry backfill. Care shall be taken to ensure that no voids remain under, around or near the pipes.

1. Whenever imported borrow for backfill is required, the Contractor shall furnish this borrow material and dispose of the excess trench excavation and shall include the expense of this work in his bid.
2. The imported material shall be select earth, sand, or gravel, free from clods, lumps or stones over 3 inches in diameter and shall not contain over 10 percent, by volume, of clay or adobe. The imported material must be submitted and approved by the Owner prior to use.

D. Compaction. The maximum dry density and optimum moisture content of each soil type used in the controlled compacted fill shall be determined by ASTM D1557 (Modified Proctor) compaction method. Field density tests shall be determined in accordance with ASTM D2922 (Nuclear) and ASTM D1556 (Sand Cone) as directed in Section 02200 "Earthwork and Site Preparation."

E. Placement and Compaction of Trench Backfill. The placement and compaction of all trench backfill shall conform to one of the following methods subject to the qualification specified therein:

1. Mechanically Compacted Backfill. With approval of Owner, backfill shall be mechanically compacted by means of tamping rollers, sheepsfoot rollers, vibrating rollers, or other mechanical tampers to 90 percent relative compaction except that backfill compaction for trenches above the pipe zone (Trench Zone) shall be to a minimum 95 percent in areas under buildings and pavements. Where the backfill soil has a clay-like behavior and has a plasticity index of at least 12, only the upper 3 feet of material placed will require minimum compaction of 95 percent. Mechanically compacted backfill shall be placed in horizontal layers not exceeding twelve inches, or the maximum thickness recommended by the Soils Engineer. Each layer shall be evenly spread, the moisture content brought to near optimum condition and then tamped or rolled until the specific relative compaction has been attained.
2. Water Densified Backfill. Densification by flooding or jetting shall not be permitted
3. Densification of Slurry Backfill. Trench backfill slurry shall be used when directed by the Owner or Soils Engineer to attain a stable trench backfill under a structure, or in a poor or otherwise incompressive trench zone. Trench backfill slurry shall be consolidated by vibration as described in Section 03300.

3.05 GENERAL PIPELINE INSTALLATION REQUIREMENTS.

A. Depth of Pipe. Install pipelines at the depths (elevations) shown on the Drawings. If elevations are not shown, piping shall be only installed with cover adequate to resist construction loads, but in no instance shall cover be less than three (3) feet.

B. Sewer Pipe. Unless otherwise shown on the Plans, all sewer force mains shall have a coverage of at least 30 inches between the top of the pipe and the finished surface. All gravity line invert elevations and locations shown are intended to be exact and any change in alignment and grade may only be made with approval of the Owner. All force and gravity mains shall have 1 foot vertical clearance between themselves and all other utilities. When clearance of 1 foot is not feasible, the contractor will be required to request direction from the owner before proceeding. Failure to notify the owner will result in corrective action at the contractor's expense. If a delay is encountered, at no time will the Owner be held financially responsible for the contractor's lost time.

C. Changes in Line and Grade. In the event obstructions not shown on the Plans are encountered during the progress of the Work which will require alterations to the Plans, the Owner shall have the authority to change the Plans and order the necessary deviation from the line or grade. The Contractor shall not make any deviation from the specified line and grade without prior approval by the Owner. Should any deviations in line and grade be permitted by the Owner in order to reduce the amount of rock excavation or for other similar convenience to the Contractor, any additional costs for thrust blocks, valves, air and vacuum valve assemblies, blow-off assemblies, extra pipe footage, concrete, sewer structures, or other additional costs shall be borne by the Contractor.

   1. Contractor shall include in his Bid provisions to cover any deviations from the line or grade shown on the Plans to facilitate extra trenching required to eliminate possible conflicts between culverts and other utilities with the pipe trench.

D. Installing Pipe. Contractor shall, after excavating the trench and preparing the proper bedding for the pipe, furnish all necessary facilities for properly lowering and placing sections of the pipe in the trench without damage and shall properly install the pipe. The section of pipe shall be fitted together correctly and shall be laid true to line and grade in accordance with stakes established by the Owner. All pipe shall be installed per manufacturer's recommendations. The full length of the barrel of the pipe shall have a uniform bearing upon 6 inches of bedding material, but if the pipe has a projecting bell, suitable excavation shall be made to receive the bell which shall not bear on the subgrade. The requirements for closely fitting the bottom of the pipe to the bedding material for the width shown on the Drawings will be strictly enforced.

   1. Pipe shall be laid up grade. Any pipe which is not in true alignment, both vertical and horizontal, or shows any undue settlement after laying shall be replaced when so ordered by the Owner. No pipe shall be laid which is damaged, cracked, checked or spalled has any other defect deemed by the Owner to make it unacceptable, and all such sections shall be permanently removed from the Work.
   2. At all times when the Work of installing pipe is not in progress, all openings into the ends of the pipelines shall be kept tightly closed to prevent the entrance of animals and foreign materials and to prevent water from entering the pipe.
   3. Keep the pipe trench free from water at all times and take all necessary precautions to prevent the pipe from floating due to water entering the trench from any source. Any damage is the Contractor's full responsibility. Restore and replace the pipe to its specified conditions and grade if it is displaced due to floating.

3.06 CLEAN-UP.

Immediately upon completion of Work of this Section, all rubbish and debris shall be removed from the job site. All construction equipment and implements of service shall be removed and the entire area involved shall be left in a neat, clean and acceptable condition.

END OF SECTION 02221

Addendum No. 1

V.C.M.W.D. GENERAL NOTES

UNLESS OTHERWISE INDICATED HEREIN, ALL WORK SHALL BE DONE IN ACCORDANCE WITH BELOW; PRECEDENCE SHALL FOLLOW ORDER LISTED:

A. THESE PROJECT PLANS AND SPECIFICATION
B. VCMWD STANDARD WATER AND SEWER DRAWINGS, LATEST APPROVED EDITION
C. VCMWD SEWER FACILITY DESIGN MANUAL, FEBRUARY 2000 AND STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF PIPELINES AND APPURTENANCES, LATEST EDITION.
D. STANDARD SPECIFICATION FOR PUBLIC WORKS, "GREENBOOK" LATEST EDITION

1. A PRE-JOB CONFERENCE SHALL BE HELD BEFORE THE START OF CONSTRUCTION. CONTRACTOR ATTENDANCE IS MANDATORY.
2. CONTRACTOR SHALL NOTIFY THE VCMWD ENGINEERING DEPARTMENT IN WRITING ONE WEEK PRIOR TO THE START OF CONSTRUCTION AND VERBALLY 24 HOURS IN ADVANCE OF BEGINNING WORK TO ARRANGE FOR INSPECTION OF THE PROJECT.
3. CONTRACTOR MUST CALL "DIG ALERT" OF SOUTHERN CALIFORNIA TO HAVE UNDERGROUND SERVICE UTILITIES LOCATED PRIOR TO CONSTRUCTION
4. WORK DONE WITHOUT DISTRICT INSPECTION SHALL BE SUBJECT TO REMOVAL.
5. THE TELEPHONE NUMBER OF THE VALLEY CENTER MUNICIPAL WATER DISTRICT IS (760) 735-4500.
6. APPROVAL OF PLANS BY THE VALLEY CENTER MUNICIPAL WATER DISTRICT DOES NOT CONSTITUTE RESPONSIBILITY FOR ACCURACY OF INFORMATION NOR LOCATIONS OF OTHER EXISTING UTILITIES.
7. CONTRACTOR IS REQUIRED TO SUBMIT ALL MATERIALS FOR APPROVAL PRIOR TO INSTALLATION, ANY MATERIALS INSTALLED WITHOUT APPROVAL SHALL BE SUBJECT TO REMOVE.
8. ~~CONTRACTOR IS REQUIRED TO EMPLOY CERTIFIED THIRD PARTY TESTING FOR COMPACTION AND PROVIDE REPORTS ON A TIMELY BASIS.~~

1 8. THE DISTRICT WILL EMPLOY GEOTECHNICAL SERVICES FOR THE PROJECT.

9. CONTRACTOR SHALL POTHOLE ALL FACILITIES AFFECTED BY CONSTRUCTION OF THIS PROJECT TO VERIFY DEPTHS, GRADES, SIZES, LOCATIONS, ETC., MINIMUM 10 DAYS PRIOR TO THE START OF TRENCHING OPERATIONS. ANY DISCREPANCIES FOUND IN THE FIELD WITH THE INFORMATION PROVIDED ON THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE DISTRICT ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
10. ANY CHANGES TO THE DESIGN OR THESE DRAWINGS SHALL BE APPROVED BY THE DISTRICT ENGINEER, IN WRITING, PRIOR TO PROCEEDING WITH CONSTRUCTION.
11. ALL MATERIALS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION, UNLESS DIRECTED OTHERWISE
12. ANY "BREAK-INS" OR MODIFICATIONS TO EXISTING INSTALLATIONS SHALL BE MADE IN THE PRESENCE OF THE DISTRICT ENGINEER OR HIS REPRESENTATIVE.
13. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING VCMWD ABOVE AND BELOW GROUND FACILITIES AFFECTED BY CONSTRUCTION OF THIS PROJECT.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR CONSTRUCTION OF THE WORK, INCLUDING A PERMIT FROM THE COUNTY DEPARTMENT OF PUBLIC WORKS FOR ANY EXCAVATION WITHIN EXISTING COUNTY RIGHTS-OF-WAY.
15. CONTRACTOR IS TO OBSERVE ALL SAFETY AND TRAFFIC CONTROL REGULATIONS AS REQUIRED BY CAL/OSHA, COUNTY OF SAN DIEGO AND THE AMERICAN PUBLIC WORKS ASSOCIATION.
16. PRIOR TO INSTALLING ANY DISTRICT PIPELINE IN A FILL AREA, A SOILS REPORT SHALL BE SUBMITTED TO THE DISTRICT ENGINEER CERTIFYING THAT ALL EARTH FILLS WERE COMPACTED TO A MINIMUM 90% RELATIVE DENSITY TOP TO BOTTOM.
17. THE FINAL LOCATION AND ELEVATION OF SEWER AND WATER LATERALS SHALL BE SHOWN ON ORIGINAL PLANS PRIOR TO ACCEPTANCE OF WORK.
18. CONTRACTOR SHALL MAINTAIN AN UP TO DATE SET OF AS-BUILTS ONSITE.
19. CONTRACTOR SHALL POSSESS CURRENT HARD COPIES OF PROJECT PLANS AND ALL REFERENCED SPECIFICATIONS ONSITE.
20. THE CONTRACTOR SHALL FOLLOW INSURANCE, BONDING, AND WARRANTY REQUIREMENTS AS SPECIFIED IN THE DISTRICT FACILITIES AGREEMENT.
21. EXISTING VEGETATION IN CONFLICT WITH APPURTENANCE INSTALLATION IS THE CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE WHETHER SHOWN ON THE PLANS OR NOT. PROPERTY OWNER MUST BE NOTIFIED PRIOR TO REMOVAL.

SAFETY REQUIREMENTS

THE CONTRACTOR SHALL PROVIDE FOR THE PROTECTION OF ALL PERSONS AND PROPERTY AS HEREIN SPECIFIED IN ACCORDANCE WITH CAL-OSHA & OSHA, TO WHICH THE CONTRACTOR IS REQUIRED BY LAW TO CONFORM. IN THE EVENT THE CONTRACTOR FAILS TO OBSERVE ANY OF THE SAFETY PROVISIONS OF THESE STANDARDS, DIRECTOR OF OPERATIONS/FACILITIES, THE DISTRICT ENGINEER, DISTRICT SAFETY OFICER OR DISTRICT AUTHORIZED REPRESENTATIVE SHALL ORDER THE WORK STOPPED IN THE AFFECTED AREAS FOR NONCOMPLIANCE OF SAID SAFETY ORDERS UNTIL CORRECTED. CONTRACTOR IS RESPONSIBLE FOR THE SAFETY AND FIRST AID PROCEDURES OF THEIR EMPLOYEES ON THE JOB SITE. CONTRACTOR MUST NOTIFY THE DISTRICT PROJECT MANAGER OR PROJECT INSPECTOR IF AN EMPLOYEE IS INJURED ON THE JOB SITE. NOTIFICATION IS NOT REQUIRED FOR ERGONOMIC INJURIES.

THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO PROTECT THE WORK AND PREVENT ACCIDENTS DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT NIGHT LIGHTS, BARRICADES, GUARDS, TEMPORARY SIDEWALKS, TEMPORARY BRIDGES, DANGER SIGNALS, WATCHMEN, AND NECESSARY APPLIANCES AND SAFEGUARDS TO PROPERLY SAFEGUARD LIFE AND PROPERTY. HE SHALL ALSO PROTECT ALL EXCAVATIONS, EQUIPMENT, AND MATERIALS WITH BARRICADES AND DANGER SIGNALS SO THAT THE PUBLIC WILL NOT BE ENDANGERED.

TRAFFIC CONTROL

THE CONTRACTOR MUST OBTAIN, PAY ALL FEES ASSOCIATED WITH, AND COMPLY WITH ALL TRAFFIC CONTROL PERMITS AND WITH DISTRICT REQUIREMENTS AS FOR THE PROPOSED WORK. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR THE APPROVAL OF THE DISTRICT. THE CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH PROVIDING TRAFFIC CONTROL MEASURES.

CONSTRUCTION BMP'S

THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE REGIONAL WATER CONTROL BOARD (RWQCB) FOR CONSTRUCTION RUNOFF, AND SHALL BEAR ALL COSTS ASSOCIATED WITH THE CONSTRUCTION AND MAINTENANCE OF BEST MANAGEMENT PRACTICES (BMP'S) TO ENSURE THAT STORMWATER RUNOFF FROM THE SITE COMPLIES WITH RWQCB REQUIREMENTS

WATER NOTES

1. CONNECTIONS TO EXISTING DISTRICT FACILITIES WILL BE MADE IN ACCORDANCE WITH SPECIFICATION 15000, WHICH DETAIL THE NOTICE PERIODS, REQUIRED CONDITIONS, AND RESPONSIBILITIES OF THE CONTRACTOR.
2. UNLESS SHOWN DEEPER, ALL PIPELINES 14" AND SMALLER SHALL BE INSTALLED WITH A MINIMUM COVER OF 36" FOR PAVED ROADWAYS OR 42" FOR UNPAVED ROADWAYS AND EASEMENTS. PIPELINES 16" AND LARGER SHALL BE INSTALLED WITH A MINIMUM COVER OF 48" FOR PAVED ROADWAYS OR 54" FOR UNPAVED ROADWAYS AND EASEMENTS.
3. DISTRICT CANNOT GUARANTEE DRY SHUT DOWNS, CONTRACTOR SHALL ALLOW FOR REASONABLE LEAKBY AND BE PREPARED FOR DEWATERING. CONTRACTOR SHALL PROVIDE A WRITTEN SHUTDOWN PROCEDURE WITH THE SHUTDOWN REQUEST.
4. ALL MAINLINE AND HYDRANT VALVES SHALL BE FLANGED.
5. CONTRACTOR MAY BE REQUIRED TO INSTALL 2" SERVICE SADDLE WITH 2" CORPORATION STOP TO TOP OF 8" WATER MAIN TO SERVE AS MANUAL AIR RELEASE DURING PIPELINE TESTING. UPON COMPLETION OF ALL PIPELINE TESTING, CONTRACTOR WILL REMOVE 2" CORP. STOP AND INSTALL 2" THREADED BRASS PLUG INTO SERVICE SADDLE.
6. WATER SERVICE LATERALS SHALL NOT BE INSTALLED WITHIN DRIVEWAY OR SIDEWALK AREAS.
7. CONTRACTOR SHALL, AT NO COST TO THE DISTRICT, EXTEND OR RELOCATE EXISTING WATER MAIN APPURTENANCES, RELOCATE EXISTING WATER SERVICE LATERALS AND METERS; RECONNECT, EXTEND/SHORTEN ALL CUSTOMER'S PRIVATE LINES AFFECTED BY THE ROAD IMPROVEMENTS INCLUDED IN THESE PLANS, WHEN NECESSARY, AT DEVELOPERS COST. THE DEVELOPER WILL BE RESPONSIBLE FOR THE COST TO UPGRADE ALL RELOCATED WATER METERS TO CURRENT BACKFLOW STANDARDS.
8. PRESSURE TESTING SHALL BE COMPLETED PER SPECIFICATION 15044, NO MEASURABLE LEAKAGE ALLOWED, THAT IS NOT DUE TO GAUGE TOLERANCE AND AMBIENT TEMPERATURE CHANGES DURING TESTING.
9. ALL NEW WATERLINES SHALL BE DISINFECTED PER AWWA C651-14. BACTERIA SAMPLING SHALL BE DONE USING METHOD A PROCEDURE.
10. DISINFECTION AND PRESSURE TESTING OF NEW WATERLINES SHALL BE COMPLETED AND ACCEPTED BY DISTRICT PRIOR TO MAKING CONNECTION TO EXISTING SYSTEMS. AN AIR GAP OR TEST PLATE SHALL BE USED, PRESSURIZING/DISINFECTING AGAINST A CLOSED VALVE IS NOT ALLOWED.
11. PIPE DEFLECTION SHALL NOT EXCEED 80% OF MANUFACTURER ALLOWABLE TOLERANCE. ADDITIONAL DEFLECTION SHALL BE ACCOMPLISHED WITH APPROPRIATE FITTINGS, SUBMITTED AND APPROVED BY DISTRICT PRIOR.

1 ~~12. ALL ABOVE GROUND APPURTENANCES (FH, AV, BO, ETC.) AND PRV VALVES AND FITTINGS, WHICH ARE BEING ABANDONED AS A PART OF THIS PROJECT, SHALL BE REMOVED TO MINIMUM 12" BELOW GRADE AND DELIVERED TO THE VCMWD YARD OR AS DIRECTED BY INSPECTOR.~~ NOT USED.

13. MATERIALS SHALL BE ADEQUATELY RATED FOR SPECIFIED TEST PRESSURE AT 135% OF DESIGN PRESSURE.
14. BACKFLOW FOOTPRINT BEHIND METER SHALL BE KEPT CLEAR OF DRY UTILITIES, PRIVATE PLUMBING/IRRIGATION, OR INTRUSIVE LANDSCAPE. CONFLICTS WILL BE REQUIRED TO BE REMOVED PRIOR TO METER SET BY DISTRICT. CONTRACTOR IS RESPONSIBLE TO EXCAVATE FOR THE NEW METER AND BACKFLOW LOCATION TO ALLOW DISTRICT STAFF TO SET THE NEW METER AND BACKFLOW. CONTRACTOR IS RESPONSIBLE TO SET METER BOX LEVEL, AND BACKFILL AND COMPACT AROUND BOX AND BACKFLOW.
15. ALL ABOVE GROUND APPURTENANCES (FH, AV, BO, BOLLARDS, ETC.) AND PRV VALVES AND FITTINGS, WHICH ARE BEING ABANDONED AS A PART OF THIS PROJECT, SHALL BE REMOVED TO MINIMUM 12" BELOW GRADE, PLUGGED WITH CONCRETE, LOCATION BACKFILLED AND COMPACTED. ALL MATERIAL SHALL BE AND DELIVERED TO THE DISTRICT YARD OR AS DIRECTED BY INSPECTOR. ABANDONED PIPE REQUIRE ENDS ONLY TO BE FILLED WITH CONCRETE PRIOR TO BACKFILL.
16. DISTRICT HAS DEVELOPED A PHASING PLAN FOR THE INTENSION TO CORRECTLY PHASE TESTING, TIE INS AND METER SERVICE RELOCATION FOR THIS PROJECT. THE CONTRACTOR IS ABLE TO SUBMIT REQUEST FOR ALTERNATE PHASING IF IT MEETS ALL TESTING, INSTALLATION, SHUTDOWN, CONNECTION AND SERVICE TRANSFER REQUIREMENTS OF THE PROJECT SPECIFICATIONS

EASEMENT NOTES

A UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1990-227302, REC. 4/26/1990.

B UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1965-106381, REC. 6/15/1965.

C UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1991-0316832, REC. 6/28/1991.

D UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1991-0271069, REC. 6/6/1991.

E UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1976-367308, REC. 11/3/1976.

F UTILITY & ACCESS EASEMENT GRANTED TO VALLEY CENTER MUNICIPAL WATER DISTRICT PER DOC. NO. 1976-367307, REC. 11/3/1976.

CONSTRUCTION NOTES

A ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

B INSTALL NEW SERVICE(S) X PER WATER SERVICE TABLE ON G-1

C EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.

D INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12

E 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14

F 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9

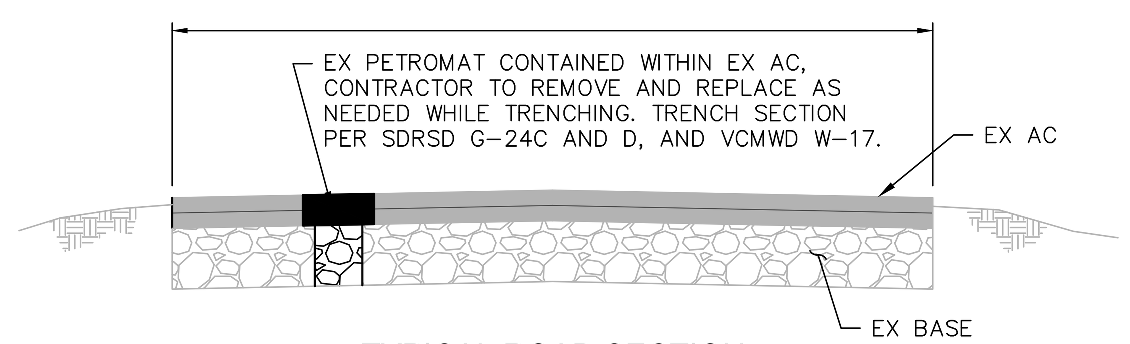
G INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25

H INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25

I POLE MOUNTED OBJECT, PROTECT IN PLACE

J ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/



TYPICAL ROAD SECTION

WATER LATERAL TABLE

ID	STATION	APN	LOT	METER SERIAL	METER SIZE	LATERAL SIZE	VCMWD DETAIL
1	11+30.00	172-120-11	1260	63799417	3/4	4	W-6A
2		172-120-13	2153	63799414	3/4		
3		172-120-18	7401	63799418	3/4		
4		172-120-04	3108	62313519	1		
5		172-120-12	8471	63799416	3/4		
6	18+13.00	172-120-15	2903	63799442	3/4	2	W-6
7		172-120-16	3278	65910501	3/4		
8		172-120-09	1959	78494989	1		
9	20+71.00	172-120-20	8001	81813858	1	1	W-3
10	23+42.00	172-040-67	1464	84435010	2	2	W-4
11	23+93.50	172-120-19	1292	89402839	3/4	1	W-3
12	29+84.00	172-040-80	2807	100480551	1.5	2	W-6
				F93015274	1		
13			12037	93015277	1		
14	31+04.00	172-040-49	4298	63799438	3/4	1	W-3
15	36+20.00	172-040-44	2947	65910513	3/4	1	W-3
16	40+50.00	185-020-01	1299	65910489	3/4	1	W-3
17	40+57.56	172-040-75	547	90205064	3/4	2	W-6
18		185-011-22	3799	90205035	3/4		
19	42+57.00	185-020-17	3299	65910492	3/4	1	W-3
20	42+95.00	185-020-25	906	65910487	3/4	1	W-3
21	45+04.00	185-020-24	907	65910490	3/4	1	W-3
22	45+13.00	185-020-04	444	65910488	3/4	1	W-3
23	46+47.00	185-011-12	4158	63799415	3/4	1	W-3
24	48+00.00	185-020-05	2550	65910491	3/4	1	W-3
25	48+41.00	185-011-13	1877	61085128	2	2	W-4
26	49+68.00	185-020-21	2282	62371344	3/4	1	W-3
27	50+15.00	185-020-22	7920	65910519	3/4	1	W-3
28	51+28.00	185-020-20	1779	65910520	3/4	1	W-3
29	51+45.00	185-011-10	9642	65910515	3/4	3	W-6
		185-011-10		F65664254	1		
30		185-011-09	10222	F65404529	1		
				66286344	3/4		
31		185-011-15	2160	63799437	3/4		
32	52+29.00	185-020-27	2567	65910517	3/4	1	W-3
33	52+72.00	185-020-26	7925	65910521	3/4	1	W-3
34	53+67.00	185-011-16	4023	63799434	3/4	1	W-3
35	55+11.00	185-020-08	445	63799422	3/4	1	W-3
36	55+16.00	185-011-17	650	62313518	1	1	W-3
37	55+75.00	185-020-15	2736	61085070	3/4	1	W-3
38	56+96.00	185-020-19	3149	62313520	1	1	W-3
39	57+91.00	185-000-18	5120	63799421	3/4	1	W-3
40	58+05.00	185-011-21	1703	89382840	1	1	W-3
41	59+07.00	185-020-13	2487	63799419	3/4	1	W-3
42	59+12.00	185-020-11	894	63799420	3/4	1	W-3
43	63+58.00	185-240-07	6029	40364406	3/4	1	W-3
44	64+96.00	185-240-08	2900	81679650	3/4	1	W-3
45	68+26.00	185-430-19	7960	I86227367	3/4	1	W-3
46	71+50.00	185-240-10	5821	63799435	3/4	1	W-3
47	74+78.00	185-240-11	3446	F68006994	1	1	W-3A
		185-240-11		1608128	3/4		
48	85+00.00	185-010-33	6413	88709954	1.5	1.5	W-4
49	85+78.00	185-010-88	560	65910512	3/4	1	W-3
50	97+79.00	185-250-21	5495	65664250	1	1	W-3
51	102+36.00	185-250-41	9051	65910514	3/4	1	W-3A
		185-250-41		F65664255	1		
52	106+36.00	185-250-23	6445	81331699	1.5	1.5	W-4
53	113+00.00	185-250-24	4887	63799436	3/4	1	W-3
54	117+17.00	185-250-08	5870	PULLED	1.5	1.5	W-4
55	119+32.00	185-250-42	145	63799432	3/4	2	W-6
56		185-250-39	6099	40364455	3/4		
57		185-250-42	11273	86836344	3/4		

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 EXP. 06/30/2027
01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	UPDATE TO GENERAL NOTE		02/23/2026
H118, H129, H204, H207, H240, H448				

VALLEY CENTER MUNICIPAL WATER DISTRICT
DISTRICT ENGINEER 01/15/2026 DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

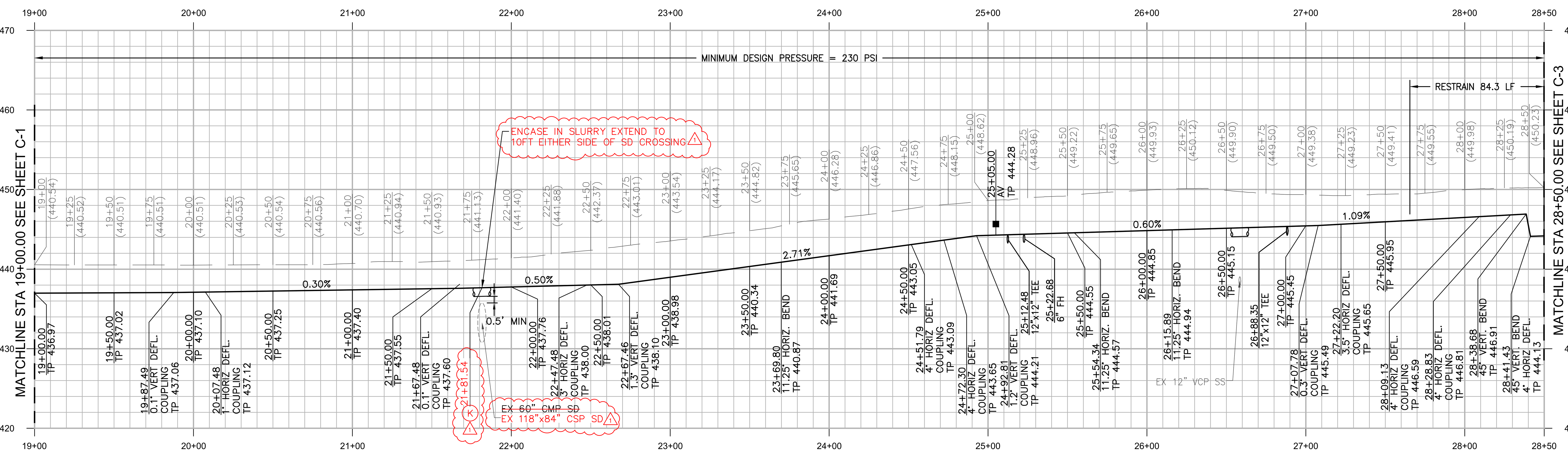
VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
NOTES, DETAILS, AND
WATER LATERAL TABLE

G-1

2 of 34

Addendum No. 1



PROFILE: OLD CASTLE ROAD (PUBLIC)

SCALE: HORIZ. 1"=40', VERT. 1"=8'

CONSTRUCTION NOTES

- (A) ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT
- (B) INSTALL NEW SERVICE(S) [X] PER WATER SERVICE TABLE ON G-1
- (C) EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.
- (D) INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12
- (E) 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14
- (F) 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9
- (G) INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (H) INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (I) POLE MOUNTED OBJECT, PROTECT IN PLACE
- (J) ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT
- (K) INSTALL FULL 20-FT STICK OF C900 CENTERED AT STORM DRAIN CROSSING

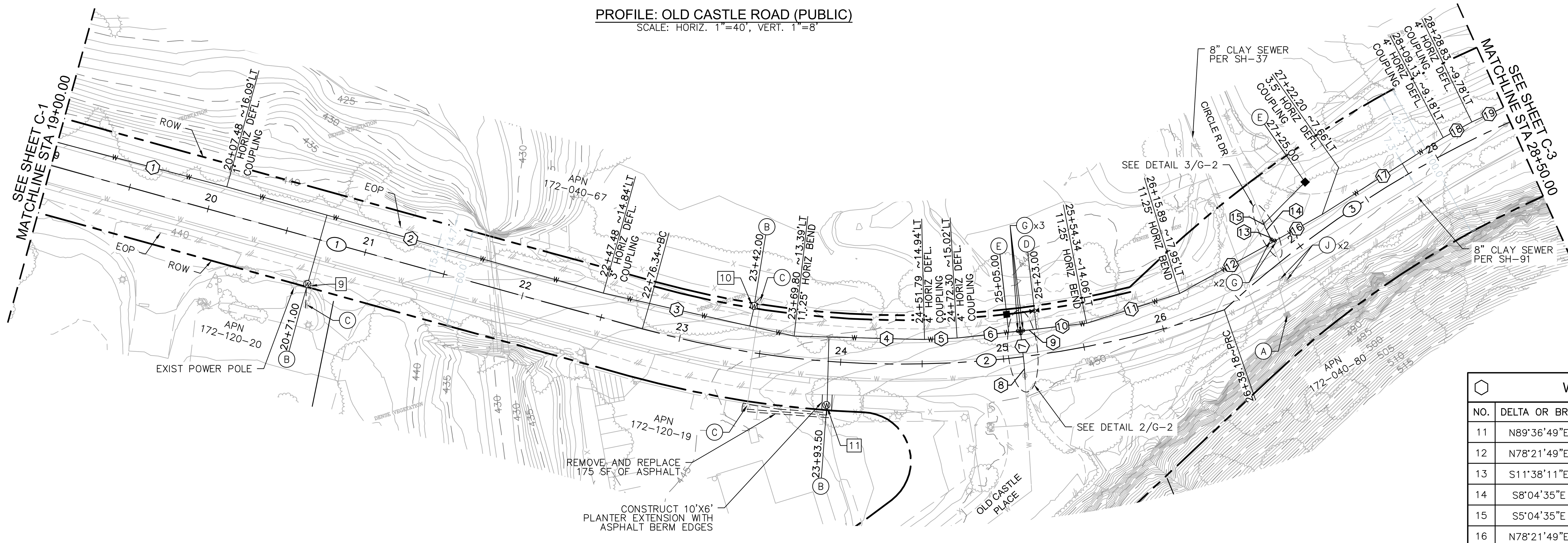
*ABANDON EXISTING METERS & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

CENTERLINE DATA

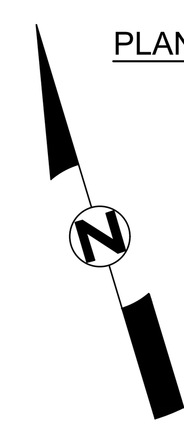
NO.	DELTA OR BRG.	RADIUS	LENGTH
1	S57°11'09"E		376.34'
2	Δ=34°39'04"	599.96'	362.84'
3	Δ=18°35'00"	650.00'	210.82'

WATER DATA

NO.	DELTA OR BRG.	LENGTH	REMARKS
1	S57°53'11"E	107.49'	12" PVC C900 CL305
2	S56°53'11"E	240.00'	12" PVC C900 CL305
3	S59°53'11"E	120.00'	12" PVC C900 CL305
4	S71°08'11"E	80.00'	12" PVC C900 CL305
5	S75°08'11"E	20.00'	12" PVC C900 CL305
6	S79°08'11"E	39.15'	12" PVC C900 CL305
7	N10°51'49"E	20.00'	14" DIP CLASS 350
8	N13°56'58"E	10.00'	14" DIP CLASS 350
9	S79°08'11"E	9.93'	12" PVC C900 CL305
10	S79°08'11"E	30.92'	12" PVC C900 CL305



PLAN: OLD CASTLE ROAD (PUBLIC)



0 40 80 120

SCALE: 1" =40'

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/

WATER DATA

NO.	DELTA OR BRG.	LENGTH	REMARKS
11	N89°36'49"E	60.00'	12" PVC C900 CL305
12	N78°21'49"E	65.32'	12" PVC C900 CL305
13	S11°38'11"E	5.00'	14" DIP CLASS 350
14	S8°04'35"E	5.00'	14" DIP CLASS 350
15	S5°04'35"E	5.00'	14" DIP CLASS 350
16	N78°21'49"E	34.68'	12" PVC C900 CL305
17	N74°54'14"E	88.01'	12" PVC C900 CL305
18	N78°51'49"E	20.00'	12" PVC C900 CL305
19	N82°51'49"E	21.48'	12" PVC C900 CL305

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 CIVIL

01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	EX CULV DIA, ENCD SLRY, ADDED NOTE "K"		02/23/2026
H118, H129, H204, H207, H240, H448				

VALLEY CENTER MUNICIPAL WATER DISTRICT

01/15/2026

DISTRICT ENGINEER DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

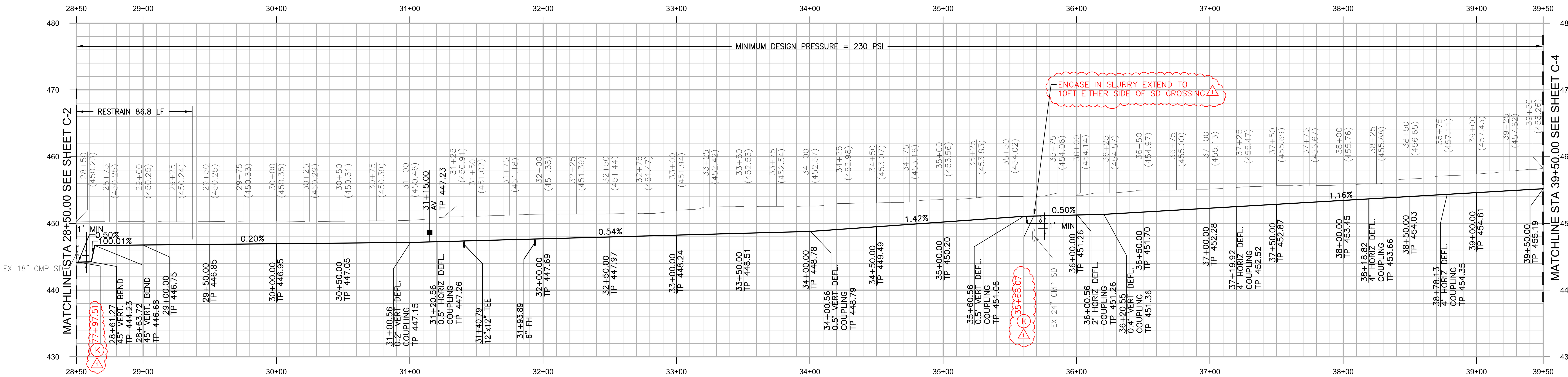
VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
19+00.00 TO 28+50.00

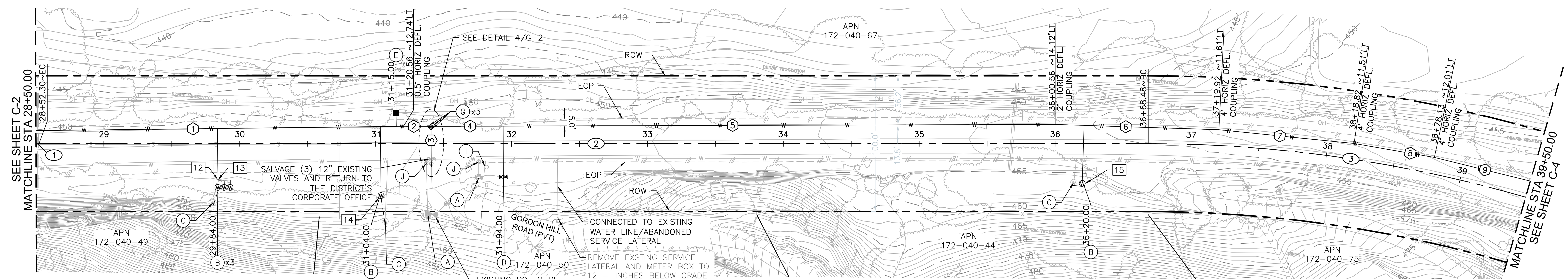
C-2

F:\Engineering_PROJECTS-CAPITAL\Old Castle Phase 2\Design\Old Castle Phase 2 CAD- Final\51420-C01-C06.dwg Feb 20, 2026 - 9:07am

Addendum No. 1



PROFILE: OLD CASTLE ROAD (PUBLIC)
SCALE: HORIZ. 1"=40', VERT. 1"=8'



PLAN: OLD CASTLE ROAD (PUBLIC)

SCALE: 1" =40'

CONSTRUCTION NOTES

- (A) ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT
- (B) INSTALL NEW SERVICE(S) X PER WATER SERVICE TABLE ON G-1
- (C) EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.
- (D) INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12
- (E) 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14
- (F) 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9
- (G) INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (H) INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (I) POLE MOUNTED OBJECT, PROTECT IN PLACE
- (J) ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT
- (K) INSTALL FULL 20-FT STICK OF C900 CENTERED AT STORM DRAIN CROSSING 1

*ABANDON EXISTING METERS & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

WATER DATA

NO.	DELTA OR BRG.	LENGTH	REMARKS
1	N82°51'49"E	270.61'	12" PVC C900 CL305
2	N83°21'49"E	20.22'	12" PVC C900 CL305
3	N6°50'14"W	24.29'	12" PVC C900 CL305
4	N83°21'49"E	53.11'	12" PVC C900 CL305
5	N83°21'49"E	406.67'	12" PVC C900 CL305
6	N85°21'49"E	120.00'	12" PVC C900 CL305
7	N89°21'49"E	100.00'	12" PVC C900 CL305
8	S86°38'11"E	60.00'	12" PVC C900 CL305
9	S82°38'11"E	72.73'	12" PVC C900 CL305

CENTERLINE DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH
1	Δ=0°12'11"	650.00'	2.30'
2	N83°31'41"E		816.18'
3	Δ=16°07'47"	1000.00'	281.52'

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 EXP. 06/30/2027 CIVIL 01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	ENC SLRY, ADDED NOTE "K"	[signature]	02/23/2026
H118, H129, H204, H207, H240, H448				

VALLEY CENTER MUNICIPAL WATER DISTRICT
DISTRICT ENGINEER 01/15/2026 DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

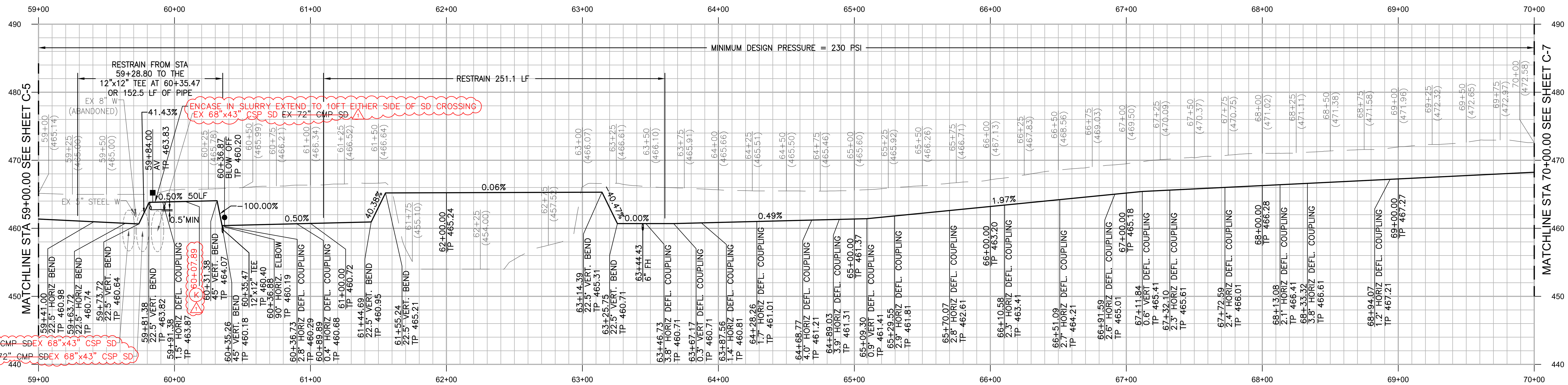
VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
28+50.00 TO 39+50.00

C-3
6 of 34

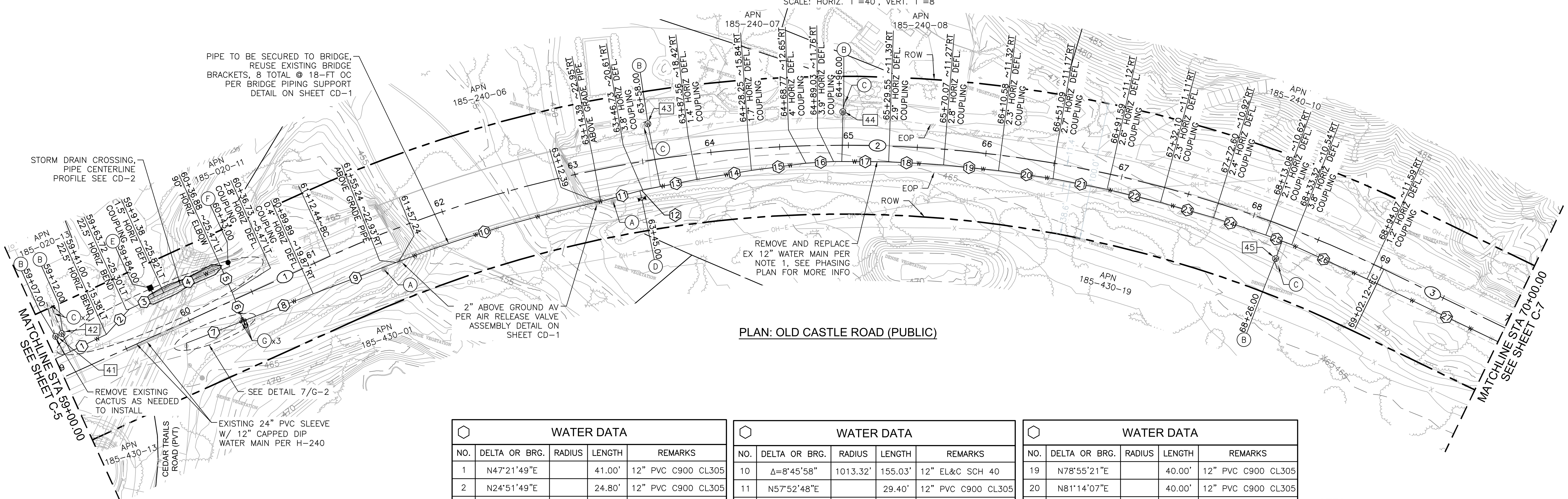
F:\Engineering_PROJECTS-CAPITAL\Old Castle Phase 2\Design\Old Castle Phase 2 CAD- Final\51420-C01-C06.dwg Feb 20, 2026 - 9:07am

Addendum No. 1



PROFILE: OLD CASTLE ROAD (PUBLIC)

SCALE: HORIZ. 1"=40', VERT. 1"=8'



PLAN: OLD CASTLE ROAD (PUBLIC)

CONSTRUCTION NOTES

- (A) ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT
- (B) INSTALL NEW SERVICE(S) X PER WATER SERVICE TABLE ON G-1
- (C) EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.
- (D) INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12
- (E) 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14
- (F) 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9
- (G) INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (H) INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (I) POLE MOUNTED OBJECT, PROTECT IN PLACE
- (J) ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT
- (K) INSTALL FULL 20-FT STICK OF C900 CENTERED AT STORM DRAIN CROSSING 1

*ABANDON EXISTING METERS & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/

CENTERLINE DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH
1	N48°26'00"E		212.44'
2	Δ=50°16'22"	900.00'	789.68'
3	S81°17'38"E		97.88'

WATER DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N47°21'49"E		41.00'	12" PVC C900 CL305
2	N24°51'49"E		24.80'	12" PVC C900 CL305
3	N47°21'49"E		27.66'	12" PVC C900 CL305
4	N48°51'49"E		45.51'	12" PVC C900 CL305
5	S41°07'15"E		20.00'	12" PVC C900 CL305
6	S38°19'10"E		22.28'	12" PVC C900 CL305
7	S51°41'40"W		44.16'	8" PVC C900 CL305
8	N51°41'40"E		54.51'	12" PVC C900 CL305
9	N52°02'28"E		64.38'	12" PVC C900 CL305

WATER DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
10	Δ=8°45'58"	1013.32'	155.03'	12" EL&C SCH 40
11	N57°52'48"E		29.40'	12" PVC C900 CL305
12	N57°52'48"E		2.26'	12" PVC C900 CL305
13	N61°40'15"E		40.00'	12" PVC C900 CL305
14	N63°33'16"E		40.00'	12" PVC C900 CL305
15	N65°14'26"E		40.00'	12" PVC C900 CL305
16	N69°13'49"E		20.00'	12" PVC C900 CL305
17	N73°09'58"E		40.00'	12" PVC C900 CL305
18	N76°06'22"E		40.00'	12" PVC C900 CL305

WATER DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
19	N78°55'21"E		40.00'	12" PVC C900 CL305
20	N81°14'07"E		40.00'	12" PVC C900 CL305
21	N83°56'12"E		40.00'	12" PVC C900 CL305
22	N86°34'01"E		40.00'	12" PVC C900 CL305
23	N88°54'02"E		40.00'	12" PVC C900 CL305
24	S88°40'40"E		40.00'	12" PVC C900 CL305
25	S86°33'28"E		20.00'	12" PVC C900 CL305
26	S82°43'52"E		60.00'	12" PVC C900 CL305
27	S81°31'00"E		105.83'	12" PVC C900 CL305

NOTES:

1. REMOVE AND DISPOSE EXISTING 12" STEEL PIPELINE AND INSTALL NEW 12" PVC C900 CL305 BELOW GRADE IN THE SAME ALIGNMENT FROM STATION 61+30.04 TO STATION 61+55.24 AND FROM STATION 63+14.39 TO STATION 70+00.
2. REMOVE AND DISPOSE EXISTING 12" STEEL PIPELINE AND INSTALL NEW 12" EL&C SCH 40 ABOVE GRADE AT THE BRIDGE IN THE SAME ALIGNMENT FROM STATION 61+55.24 TO STATION 63+14.39.

0 40 80 120

SCALE: 1" =40'

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 EXP. 06/30/2027 CIVIL STATE OF CALIFORNIA

01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	EX CULV DIA, ENCD SLRY, ADDED NOTE "K"	[signature]	02/23/2026
H118, H129, H204, H207, H240, H448				

VALLEY CENTER MUNICIPAL WATER DISTRICT

DISTRICT ENGINEER 01/15/2026 DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

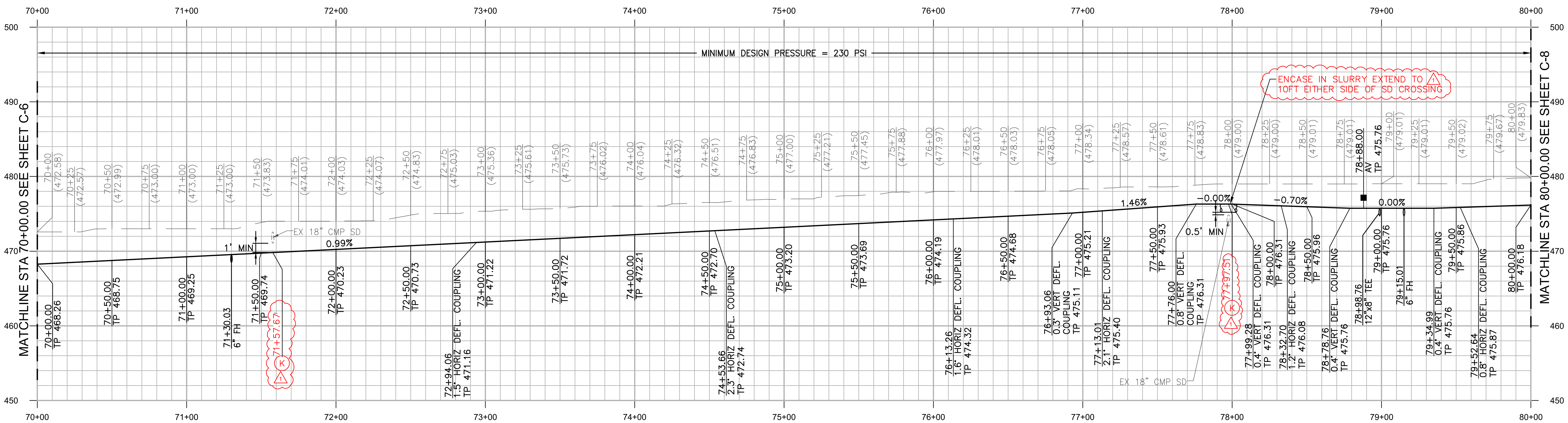
VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
60+00.00 TO 70+00.00

C-6

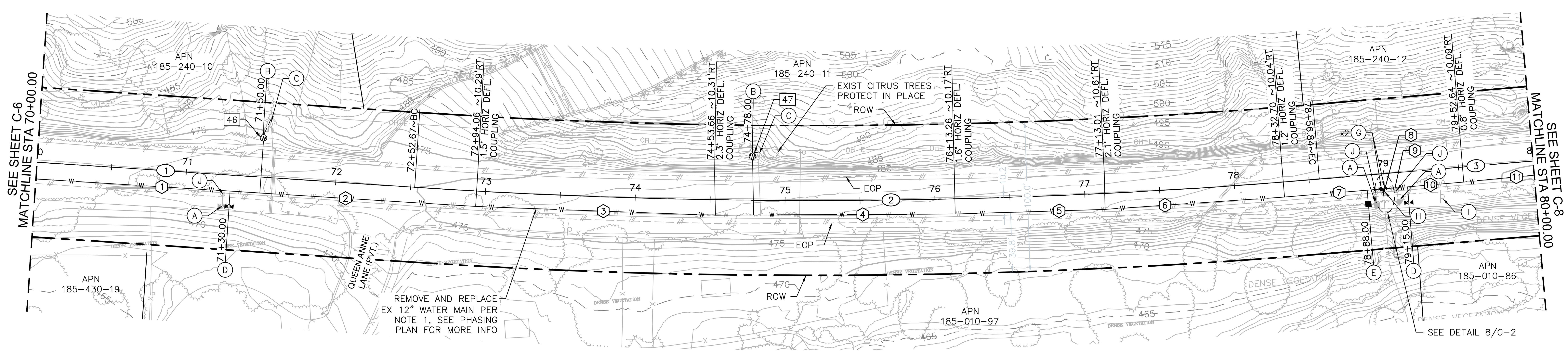
F:\Engineering_PROJECTS-CAPITAL\Old Castle Phase 2\Design\Old Castle Phase 2 CAD- Final\51420-C01-C06.dwg Feb 20, 2026 - 9:46am

Addendum No. 1



PROFILE: OLD CASTLE ROAD (PUBLIC)

SCALE: HORIZ. 1"=40', VERT. 1"=8'



PLAN: OLD CASTLE ROAD (PUBLIC)

SCALE: 1" =40'

CENTERLINE DATA			
NO.	DELTA OR BRG.	RADIUS	LENGTH
1	S81°17'38"E		252.67'
2	Δ=8°39'15"	4000.00'	604.17'
3	S89°56'53"E		143.16'

WATER DATA			
NO.	DELTA OR BRG.	LENGTH	REMARKS
1	S81°31'00"E	130.03'	12" PVC C900 CL305
2	S81°31'00"E	164.14'	12" PVC C900 CL305
3	S83°01'23"E	160.00'	12" PVC C900 CL305
4	S85°21'50"E	160.00'	12" PVC C900 CL305
5	S86°55'15"E	100.00'	12" PVC C900 CL305
6	S89°01'10"E	120.00'	12" PVC C900 CL305
7	S89°53'13"E	66.12'	12" PVC C900 CL305
8	S0°03'16"E	5.00'	8" PVC C900 CL305
9	S89°53'13"E	16.26'	12" PVC C900 CL305
10	S89°53'13"E	37.62'	12" PVC C900 CL305
11	N89°17'56"E	47.37'	12" PVC C900 CL305

CONSTRUCTION NOTES

- A — ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT
- B — INSTALL NEW SERVICE(S) X PER WATER SERVICE TABLE ON G-1
- C — EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.
- D — INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12
- E — 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14
- F — 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9
- G — INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- H — INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- I — POLE MOUNTED OBJECT, PROTECT IN PLACE
- J — ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT
- K — INSTALL FULL 20-FT STICK OF C900 CENTERED AT STORM DRAIN CROSSING 1

*ABANDON EXISTING METERS & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

NOTE:

1. REMOVE AND DISPOSE EXISTING 12" STEEL PIPELINE AND INSTALL NEW 12" PVC C900 CL305 BELOW GRADE IN THE SAME ALIGNMENT FROM STATION 70+00 TO STATION 80+00.

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 EXP. 06/30/2027 CIVIL STATE OF CALIFORNIA 01/15/2026

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/

C:\Users\JCrespo\AppData\Local\Temp\AcPublish_16960\51420-C07-C11.dwg Feb 20, 2026 - 9:09am

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	ENC SLRY, ADDED NOTE "K"		02/23/2026
H118, H129, H204, H207, H240, H448				

VALLEY CENTER MUNICIPAL WATER DISTRICT

DISTRICT ENGINEER 01/15/2026 DATE

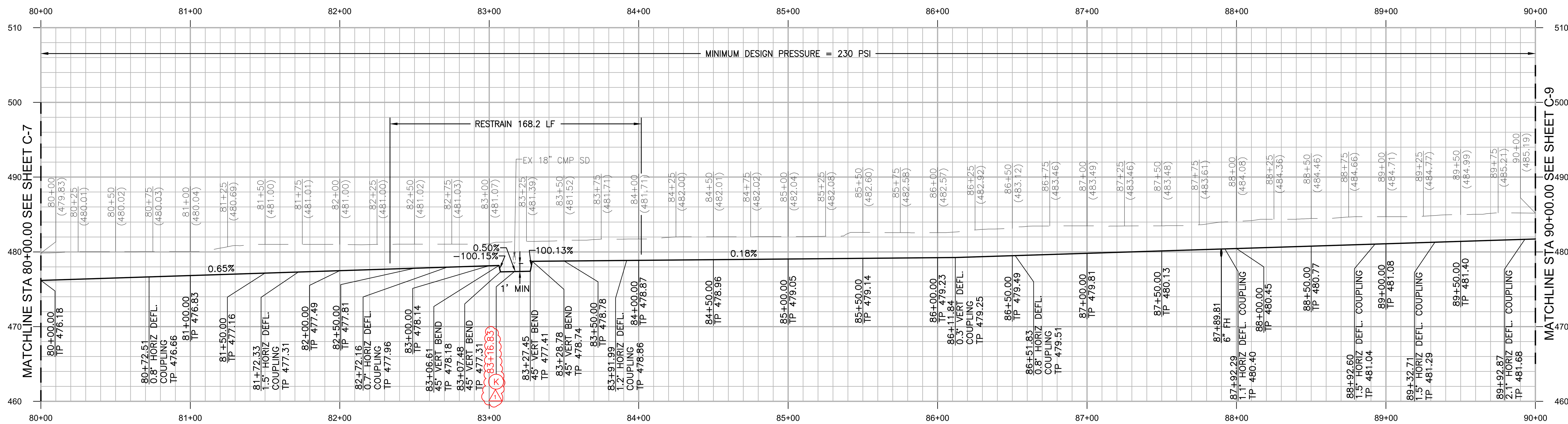
VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

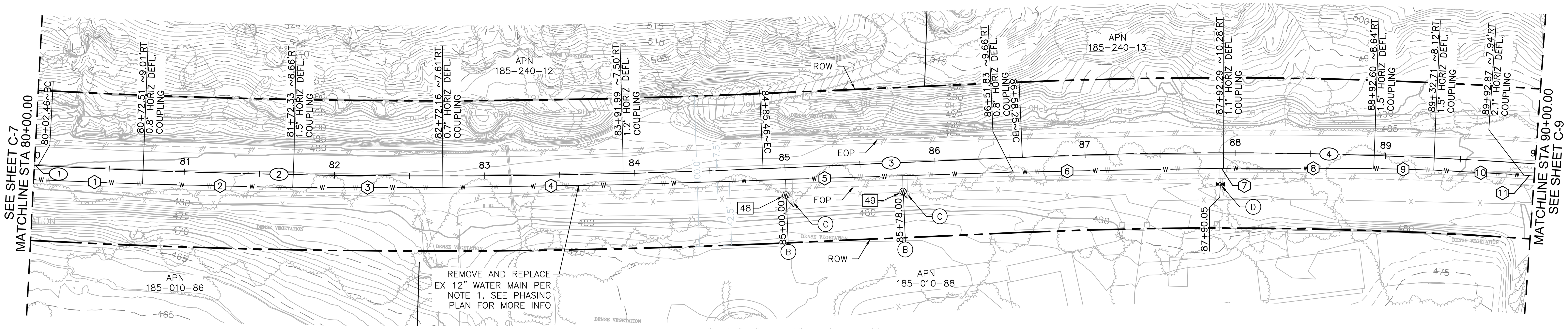
OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
70+00.00 TO 80+00.00

C-7

Addendum No. 1



PROFILE: OLD CASTLE ROAD (PUBLIC)
SCALE: HORIZ. 1"=40', VERT. 1"=8'



PLAN: OLD CASTLE ROAD (PUBLIC)

SCALE: 1" =40'

CENTERLINE DATA			
NO.	DELTA OR BRG.	RADIUS	LENGTH
1	S89°56'53"E		2.46'
2	Δ=5°32'05"	5000.00'	483.00'
3	N84°31'02"E		172.79'
4	Δ=6°31'37"	3000.00'	341.75'

WATER DATA			
NO.	DELTA OR BRG.	LENGTH	REMARKS
1	N89°17'56"E	72.63'	12" PVC C900 CL305
2	N88°28'33"E	100.00'	12" PVC C900 CL305
3	N86°56'03"E	100.00'	12" PVC C900 CL305
4	N86°13'14"E	120.00'	12" PVC C900 CL305
5	N85°11'12"E	260.00'	12" PVC C900 CL305
6	N85°59'29"E	137.53'	12" PVC C900 CL305
7	N85°59'29"E	2.47'	12" PVC C900 CL305
8	N87°05'53"E	100.00'	12" PVC C900 CL305
9	N88°37'16"E	40.00'	12" PVC C900 CL305
10	S89°50'24"E	60.00'	12" PVC C900 CL305
11	S87°40'37"E	7.11'	12" PVC C900 CL305

NOTE:

1. REMOVE AND DISPOSE EXISTING 12" STEEL PIPELINE AND INSTALL NEW 12" PVC C900 CL305 BELOW GRADE IN THE SAME ALIGNMENT FROM STATION 80+00 TO STATION 90+00.

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 EXP. 06/30/2027 CIVIL STATE OF CALIFORNIA 01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	ADDED NOTE "K"		02/23/2026
H118, H129, H204, H207, H240, H448				

VALLEY CENTER MUNICIPAL WATER DISTRICT
DISTRICT ENGINEER 01/15/2026 DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

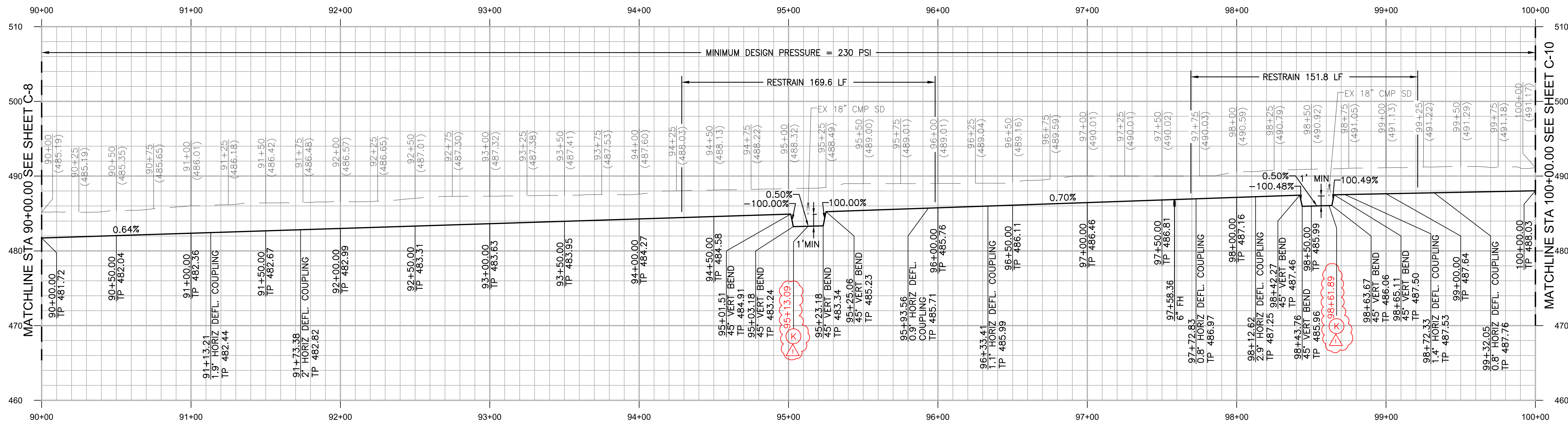
VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
80+00.00 TO 90+00.00

C-8

C:\Users\JCrespo\AppData\Local\Temp\AcPublish_16960\51420-C07-C11.dwg Feb 20, 2026 - 9:09am

Addendum No. 1



PROFILE: OLD CASTLE ROAD (PUBLIC)
SCALE: HORIZ. 1"=40', VERT. 1"=8'

CONSTRUCTION NOTES

- (A) ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT
- (B) INSTALL NEW SERVICE(S) [X] PER WATER SERVICE TABLE ON G-1
- (C) EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.
- (D) INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12
- (E) 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14
- (F) 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9
- (G) INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (H) INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (I) POLE MOUNTED OBJECT, PROTECT IN PLACE
- (J) ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT
- (K) INSTALL FULL 20-FT STICK OF C900 CENTERED AT STORM DRAIN CROSSING 1

*ABANDON EXISTING METERS & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

CENTERLINE DATA

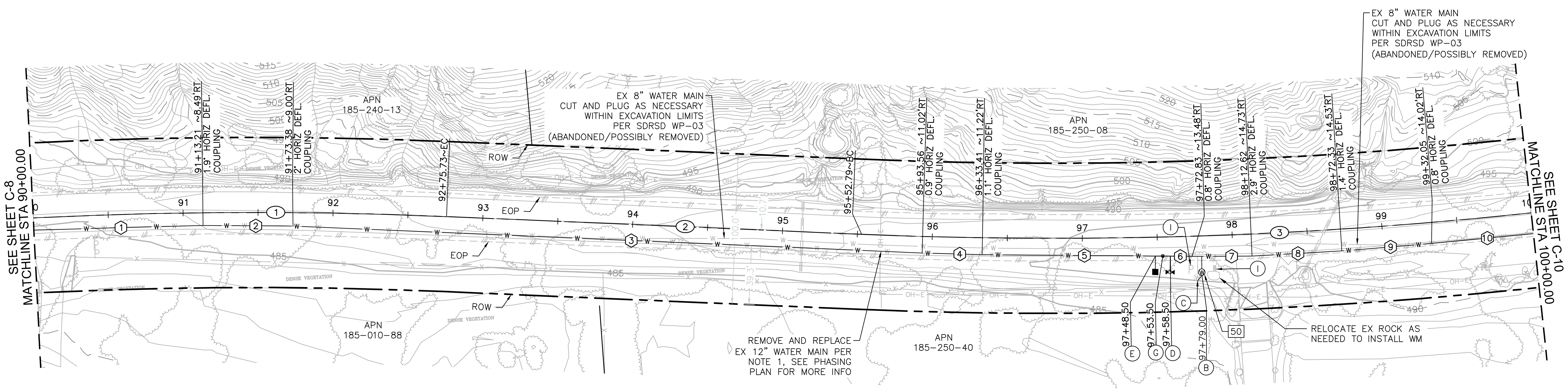
NO.	DELTA OR BRG.	RADIUS	LENGTH
1	Δ=5°15'58"	3000.00'	275.73'
2	S83°41'23"E		277.06'
3	Δ=8°32'29"	3000.00'	447.23'

WATER DATA

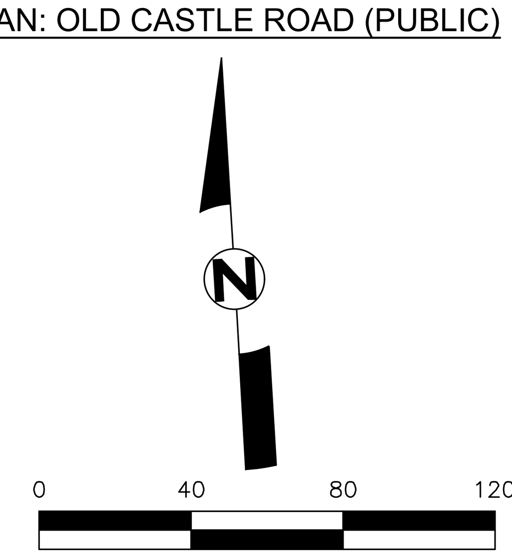
NO.	DELTA OR BRG.	LENGTH	REMARKS
1	S87°40'37"E	112.89'	12" PVC C900 CL305
2	S85°44'20"E	60.00'	12" PVC C900 CL305
3	S83°41'23"E	420.00'	12" PVC C900 CL305
4	S84°33'08"E	40.00'	12" PVC C900 CL305
5	S85°38'19"E	125.46'	12" PVC C900 CL305
6	S85°38'19"E	14.54'	12" PVC C900 CL305
7	S86°28'23"E	40.00'	12" PVC C900 CL305
8	S89°24'49"E	60.00'	12" PVC C900 CL305
9	N89°08'58"E	60.00'	12" PVC C900 CL305
10	N88°20'01"E	68.29'	12" PVC C900 CL305

NOTE:

1. REMOVE AND DISPOSE EXISTING 12" STEEL PIPELINE AND INSTALL NEW 12" PVC C900 CL305 BELOW GRADE IN THE SAME ALIGNMENT FROM STATION 90+00 TO STATION 100+00.



PLAN: OLD CASTLE ROAD (PUBLIC)



SCALE: 1" =40'

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 EXP. 06/30/2027 CIVIL STATE OF CALIFORNIA 01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	ADDED NOTE "K"		02/23/2026
H118, H129, H204, H207, H240, H448				

VALLEY CENTER MUNICIPAL WATER DISTRICT
DISTRICT ENGINEER 01/15/2026 DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

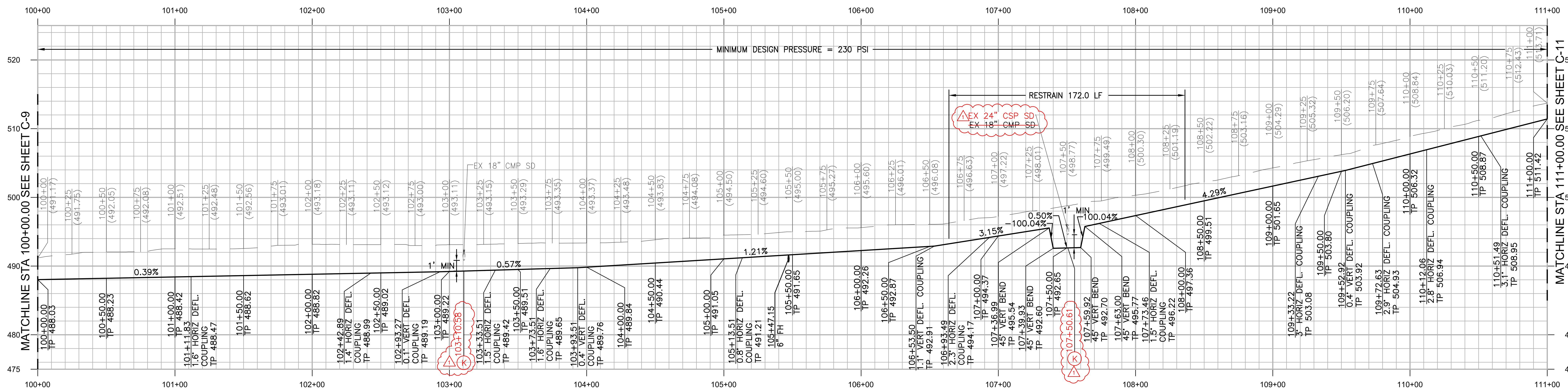
VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
90+00.00 TO 100+00.00

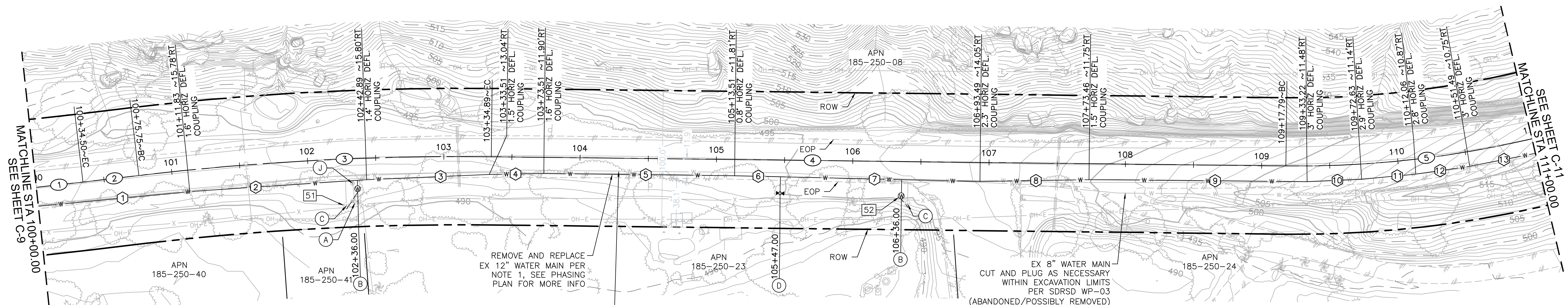
C-9

C:\Users\Crespo\AppData\Local\Temp\AcPublish_16960\51420-C07-C11.dwg Feb 20, 2026 - 9:09am

Addendum No. 1

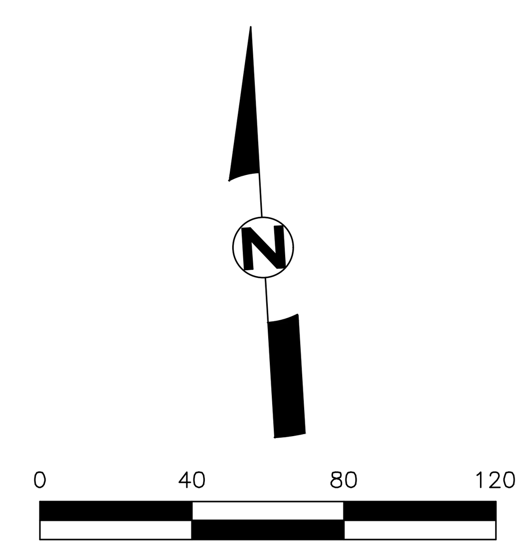


PROFILE: OLD CASTLE ROAD (PUBLIC)
SCALE: HORIZ. 1"=40', VERT. 1"=8'



PLAN: OLD CASTLE ROAD (PUBLIC)

EX 8" WATER MAIN
CUT AND PLUG AS NECESSARY
WITHIN EXCAVATION LIMITS
PER SDRSD WP-03
(ABANDONED/POSSIBLY REMOVED)



SCALE: 1" =40'

CONSTRUCTION NOTES

(A) ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

(B) INSTALL NEW SERVICE(S) [X] PER WATER SERVICE TABLE ON G-1

(C) EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.

(D) INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12

(E) 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14

(F) 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9

(G) INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25

(H) INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25

(I) POLE MOUNTED OBJECT, PROTECT IN PLACE

(J) ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT

(K) INSTALL FULL 20-FT STICK OF C900 CENTERED AT STORM DRAIN CROSSING 1

*ABANDON EXISTING METERS & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

CENTERLINE DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH
1	Δ=0°39'31"	3000.00'	34.48'
2	N87°06'37"E		41.25'
3	Δ=7°25'25"	2000.00'	259.13'
4	S85°27'58"E		582.90'
5	Δ=13°55'13"	750.00'	182.21'

NOTE:

1. REMOVE AND DISPOSE EXISTING 12" STEEL PIPELINE AND INSTALL NEW 12" PVC C900 CL305 BELOW GRADE IN THE SAME ALIGNMENT FROM STATION 100+00 TO STATION 111+00.

WATER DATA

NO.	DELTA OR BRG.	LENGTH	REMARKS
1	N88°20'01"E	111.71'	12" PVC C900 CL305
2	S89°58'19"E	130.00'	12" PVC C900 CL305
3	S88°33'35"E	90.00'	12" PVC C900 CL305
4	S87°06'08"E	40.00'	12" PVC C900 CL305
5	S85°30'15"E	140.00'	12" PVC C900 CL305
6	S84°45'13"E	33.65'	12" PVC C900 CL305
7	S84°45'13"E	146.35'	12" PVC C900 CL305
8	S87°06'52"E	80.00'	12" PVC C900 CL305
9	S85°37'06"E	160.00'	12" PVC C900 CL305
10	S88°38'45"E	40.00'	12" PVC C900 CL305
11	N88°27'29"E	40.00'	12" PVC C900 CL305
12	N85°39'04"E	40.00'	12" PVC C900 CL305
13	N82°35'52"E	49.20'	12" PVC C900 CL305

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 EXP. 06/30/2027 CIVIL STATE OF CALIFORNIA 01/15/2026

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS: https://srs.sandiegocounty.gov/

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	EX CULV DIA, ADDED NOTE "K"	[signature]	02/23/2026
H118, H129, H204, H207, H240, H448				

VALLEY CENTER MUNICIPAL WATER DISTRICT
DISTRICT ENGINEER 01/15/2026 DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

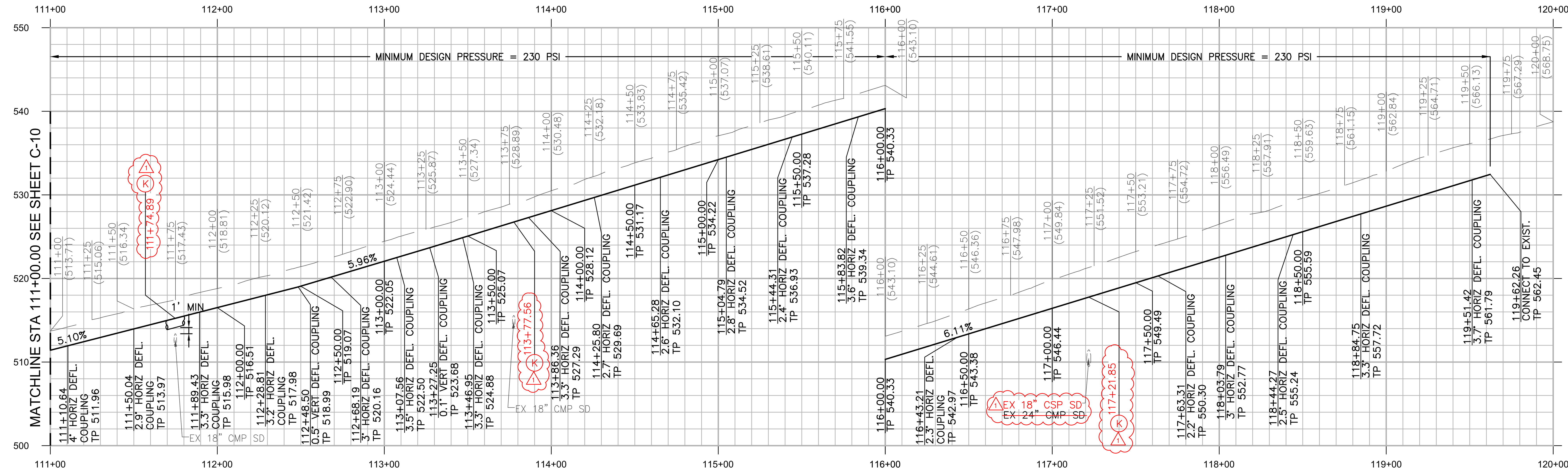
VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
100+00.00 TO 110+00.00

C-10
13 of 34

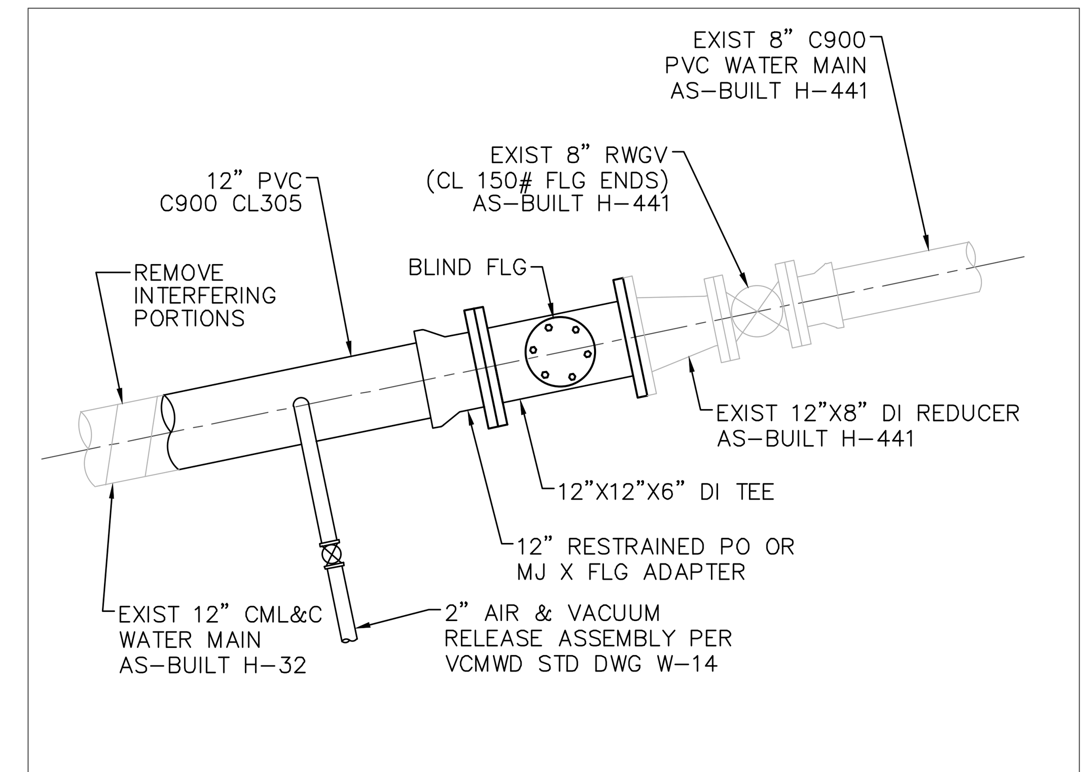
C:\Users\JCrespo\AppData\Local\Temp\AcPublish_16960\51420-C07-C11.dwg Feb 20, 2026 - 9:10am

Addendum No. 1



PROFILE: OLD CASTLE ROAD (PUBLIC)

SCALE: HORIZ. 1"=40', VERT. 1"=8'



NOTE:

1. ALL FITTINGS TO BE RESTRAINED
2. SEE PHASING PLAN FOR INSTALLATION AND TESTING PRIOR TO TIE IN.

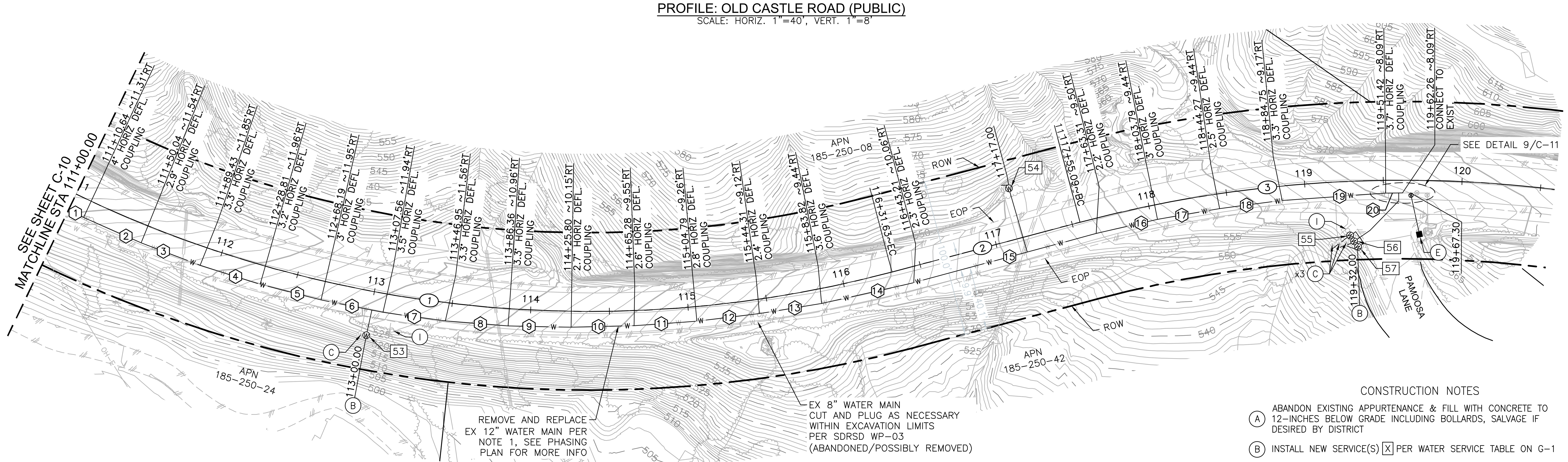
CONNECTION DETAIL "9"
OLD CASTLE ROAD @ STA 119+62.26

CENTERLINE DATA			
NO.	DELTA OR BRG.	RADIUS	LENGTH
1	Δ=40°36'47"	750.00'	531.63'
2	N40°00'02"E		123.46'
3	Δ=21°46'10"	800.00'	303.96'

WATER DATA			
NO.	DELTA OR BRG.	LENGTH	REMARKS
1	N82°35'52"E	10.80'	12" PVC C900 CL305
2	N78°37'27"E	40.00'	12" PVC C900 CL305
3	N75°43'27"E	40.00'	12" PVC C900 CL305
4	N72°26'14"E	40.00'	12" PVC C900 CL305
5	N69°15'20"E	40.00'	12" PVC C900 CL305
6	N66°15'04"E	40.00'	12" PVC C900 CL305
7	N62°42'38"E	40.00'	12" PVC C900 CL305
8	N59°22'20"E	40.00'	12" PVC C900 CL305
9	N56°04'48"E	40.00'	12" PVC C900 CL305
10	N53°21'06"E	40.00'	12" PVC C900 CL305
11	N50°47'12"E	40.00'	12" PVC C900 CL305
12	N47°59'04"E	40.00'	12" PVC C900 CL305
13	N45°37'14"E	40.00'	12" PVC C900 CL305
14	N42°03'42"E	60.00'	12" PVC C900 CL305
15	N39°45'13"E	120.00'	12" PVC C900 CL305
16	N41°56'39"E	40.00'	12" PVC C900 CL305
17	N44°56'56"E	40.00'	12" PVC C900 CL305
18	N47°26'26"E	40.00'	12" PVC C900 CL305
19	N50°44'32"E	65.94'	12" PVC C900 CL305
20	N54°27'02"E	10.73'	12" PVC C900 CL305

NOTE:

1. REMOVE AND DISPOSE EXISTING 12" STEEL PIPELINE AND INSTALL NEW 12" PVC C900 CL305 BELOW GRADE IN THE SAME ALIGNMENT FROM STATION 111+00 TO STATION 119+62.26.



PLAN: OLD CASTLE ROAD (PUBLIC)

CONSTRUCTION NOTES

- (A) ABANDON EXISTING APPURTENANCE & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT
- (B) INSTALL NEW SERVICE(S) X PER WATER SERVICE TABLE ON G-1
- (C) EXISTING METER LOCATION AND PRIVATE PLUMBING POINT OF CONNECTION, REFER TO SECTION 00750 FOR MORE INSTRUCTIONS.
- (D) INSTALL 6-INCH FIRE HYDRANT ASSEMBLY PER VCMWDSD W-12
- (E) 2-INCH AIR & VACUUM RELEASE PER VCMWDSD W-14
- (F) 2-INCH BLOW OFF ASSEMBLY PER VCMWDSD W-9
- (G) INSTALL NEW 12-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (H) INSTALL NEW 8-INCH GATE VALVE PER VCMWDSD W-21 & W-25
- (I) POLE MOUNTED OBJECT, PROTECT IN PLACE
- (J) ABANDON VALVE LID TO 12-INCHES BELOW GRADE & FILL WITH CONCRETE, SALVAGE IF DESIRED BY DISTRICT
- (K) INSTALL FULL 20-FT STICK OF C900 CENTERED AT STORM DRAIN CROSSING 1

*ABANDON EXISTING METERS & FILL WITH CONCRETE TO 12-INCHES BELOW GRADE INCLUDING BOLLARDS, SALVAGE IF DESIRED BY DISTRICT

0 40 80 120

SCALE: 1" =40'

NOTE:
EXISTING CULVERTS SHOWN ARE BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ALL FACILITIES. THE CONTRACTOR SHALL VERIFY ALL EXISTING CULVERTS AND DRAINAGE FACILITIES IN THE FIELD. NO CULVERT IMPROVEMENTS ARE PROPOSED. SEE COUNTY OF SAN DIEGO SRS:
https://srs.sandiegocounty.gov/

REGISTERED PROFESSIONAL ENGINEER WALLY GRABBE C 46631 EXP. 06/30/2027 CIVIL STATE OF CALIFORNIA 01/15/2026

REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE
H11, H16, H17, H18, H20, H32, H34, H35, H36	1	EX CULV DIA. ADDED NOTE "K"		02/23/2026
H118, H129, H204, H207, H240, H448				

VALLEY CENTER MUNICIPAL WATER DISTRICT

01/15/2026

DISTRICT ENGINEER DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500

VCMWD JOB # 01-06-78-51420
DATE:
DRAWN BY:
CHECKED BY: WG

OLD CASTLE ROAD PIPELINE- PH 2
PLAN AND PROFILE
110+00.00 TO 120+00.00

C-11

C:\Users\JCrespo\AppData\Local\Temp\AcPublish_16960\51420-C07-C11.dwg Feb 20, 2026 - 9:10am