

City of Oakley
ADDENDUM NO. 1 to contract documents for
MAIN STREET DOWNTOWN UTILITY IMPROVEMENT PROJECT,
CIP # 165A

BID OPENING DATE: JUNE 16, 2016 2:00 PM

Notice is hereby given that the following clarifications and revisions are made to the above referenced contract documents:

Updates to the Plans and Specifications pages:

Specifications Part I:

Updated Notice to Contractors
Updated Bid Schedule

Specifications Part II

Updated 4-1.05 Construction Staking
Updated 7-1.12.I Notices and Posters
Updated 7-1.19 Dust Control

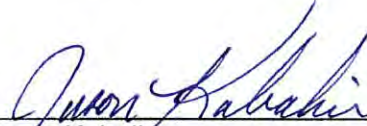
Specifications Part III

Updated Table of Contents
Updated 10-1.01 General
Updated 10-1.03 Traffic Control & Construction Area Signs
Updated 10-1.04 Clearing and Grubbing
Updated 10-1.05 Water Pollution Control
Updated 10-1.08 Saw Cutting
Updated 10-1.10 Hot Mix Asphalt (HMA)
Updated 10-1.15 Traffic Signals & Loop Detectors
Updated 10-1.16 Traffic Striping, Markings, and Raised Pavement Markers
Updated 10-1.17 Storm Drain Improvements
Updated 10-1.18 Final Clean-up
Updated 10-2.01 DWD Water Line Relocations and Installation

Plans:

Updated Sheet T-1
Updated Sheets U-1 Thru U-3
Updated Sheets U-4 Thru U-6
Updated Sheets DP-1 Thru DP 5
Updated Sheets TH-1 Thru TH-2

All bidders shall acknowledge receipt and acceptance of Addendum No. 1 by signing in the space provided at the end of this Addendum and submitting the signed addendum with their proposal.



Jason Kabalin
Associate Engineer
June 7, 2016

Contractor Signature

Date

Company Name

NOTICE TO CONTRACTORS

Sealed proposals will be received at the office of the City Clerk of the City of Oakley, 3231 Main Street, Oakley, CA 94561, until

2:00 PM

THURSDAY

June 16, 2016

for the following project:

CIP 165A – MAIN STREET DOWNTOWN UTILITY IMPROVEMENTS (NORCROSS LANE TO 2nd STREET)

at which time they will be publicly opened and read aloud. Sealed proposals must be clearly marked on the outside with the Project number, date, and time of bid.

This following information is presented to indicate the size of the project and no warrant is made or intended as to final quantities:

Project Description

The work to be performed under this contract generally consists of, but is not limited to the following: Mobilization and demobilization; traffic control and construction signage; removal and replacement of traffic striping, marking, and markers; removal and replacement of curbs, gutters and sidewalks, and construction of new concrete curb and sidewalk; hot-mix asphalt (HMA) paving; storm drain improvements; relocation of potable water services, relocation and installation of new fire service and fire hydrants; and other work as shown on the Contract Plans, as specified in the Contract Documents, and as directed by the City Engineer.

Each bid must be accompanied by a cashier's check, certified check, or Bidder's Bond executed by a responsible corporate surety authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California, payable to the City of Oakley, in an amount not less than ten percent (10%) of the amount of the Base Bid. The successful bidder will be required to furnish a Performance Bond in an amount equal to one-hundred percent (100%) of the contract price, and a Labor and Material Bond in an amount equal to one-hundred percent (100%) of the contract price. Said bonds shall also be executed by a corporate surety authorized to engage in such business in the State of California and be made payable to the City of Oakley.

If the successful bidder fails, neglects, or refuses for TEN (10) calendar days after the award of the contract to enter into the contract to perform the work, the cashier's check, certified check, or Bidder's Bond accompanying the bid and the amount therein named, shall be declared forfeited to the City and shall be collected by it and paid into its general fund. No bidder may withdraw his/her bid for a period of NINETY (90) calendar days after the date set for the opening thereof, and the same shall be subject to acceptance by the City during this period.

The City Council reserves the right to reject any or all bids, waive any irregularities in any bids and its determination as to which bid is the lowest responsible bid and is for the best interest of the City shall be final. The City Council shall have NINETY (90) calendar days from and after the opening of the bids within which to make its determination.

The Contractor receiving the award of the contract shall begin work within **TEN (10)** Working days after receipt of the Notice to Proceed and shall diligently prosecute the same to completion

within the time restrictions as listed in the technical specifications and all work shall be completed by the time allotted in the technical specifications.

The Contractor shall have **FORTY (40) Working Days** to complete this project. Working days will be counted starting from the date of the Notice-to-Proceed as day one. The amount of the liquidated damages to be paid by the Contractor to the City for failure to complete the work by the Completion Date (as extended, if applicable) is **TWO THOUSAND DOLLARS (\$2,000.00)** for each calendar day any work remains incomplete beyond the time fixed above for completion. Such amount is the actual cash value agreed upon as the loss to City resulting from Contractor's default.

At the time the Contractor's bid proposal is submitted, the Contractor shall possess a valid Class A California General Contractor's License. The Contractor shall also possess a valid City of Oakley Business License at the time the contract is awarded.

The City of Oakley, hereby notifies all bidders that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, national origin, sex, religion, age or disability. **The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR, Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract, or such other remedy as recipient deems appropriate.**

Prevailing Rate of Wages: The State general prevailing wage rates determined by the Director of Industrial Relations are considered a part of this contract. Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project, available at City of Oakley address and available from the California Department of Industrial Relations' Internet web site at: <http://www.dir.ca.gov>. In payment of labor, the Contractor shall comply with the provisions of Labor Code Sections 1770 to 1781.

For any moneys earned by the Contractor and withheld by the City to ensure the performance of the contract, the Contractor may, at the Contractor's request and expense, substitute securities equivalent to the amount withheld in the form and manner and subject to the conditions provided in Article 8, (commencing with Section 10263), Chapter 1, Part 2, Division 2 of the Public Contract Code of the State of California.

Plans and Contract Documents for bidding this project may be obtained from the **Public Works & Engineering Department located at 3231 Main Street, Oakley, CA 94561**, weekdays, excluding holidays, between the hours of 8:00 a.m. and 6:00 p.m. A Non-refundable fee for full size plans and contract documents are **\$50.00 per set**. Please include Federal Express number with mail-in requests for plans and specifications. If mailing is desired, without a Federal Express number, an additional non-refundable cost of **\$10.00 per set** will be required. For further information, contact the Public Works and Engineering Department at (925) 625-7037.

ATTEST:

Libby Vreonis, City Clerk

A. UNIT PRICE SCHEDULE

The undersigned, Pursuant to and in compliance with your Notice to Contractors and the Contract Documents relating to the **MAIN STREET DOWNTOWN UTILITY IMPROVEMENTS (NORCROSS LANE TO 2ND STREET)**, including Addenda No. _____, _____, _____, as Bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the location of the proposed work, the annexed proposed form of contract, and the plans therein referred to; and he proposes and agrees if this proposal is accepted that he will contract with the City of Oakley in the form of the scope of the contract annexed hereto, to provide all necessary machinery, tools, apparatus, and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that he will take in full payment therefore the following item prices, to wit:

BID ITEMS

ITEM NO.	DESCRIPTION OF ITEM	EST. QTY	UNIT OF MEASURE	UNIT PRICE	TOTAL
1	Mobilization	1	LS		
2	Traffic Control System and Construction Area Signs	1	LS		
3	Storm Water Pollution Control Program	1	LS		
4	Remove Traffic Striping and Markings and Prepare Lead Compliance Plan	1	LS		
5	HMA (Type A)	6	TON		
6	Remove Curb & Gutter	56	LF		
7	Remove Concrete sidewalk	80	SF		
8	Remove and Replace Traffic Loops	4	EA		
9	Thermoplastic Traffic Striping, Markings, and Markers	1	LS		
10	New Drain Inlet	17	EA		
11	New SD MH	8	EA		
12	18" HDPE SD Line	998	LF		
13	12" HDPE SD Line	654	LF		
14	Connect to Existing SDMH	2	EA		
15	Connect to Existing SD Inlet	1	EA		
16	12 inch SD cap	8	EA		
17	3" SD Cap	1	EA		
18	3" PVC Pipe (Curb Drain)	14	LF		

ITEM NO.	DESCRIPTION OF ITEM	EST. QTY	UNIT OF MEASURE	UNIT PRICE	TOTAL
19	24x24 Inlet	1	EA		
20	RELOCATE EXISTING FIRE HYDRANT	2	EA		
21	INSTALL NEW 1.5" WATER METER AND 1.5" REDUCED PRESSURE BFP	1	EA		
22	INSTALL NEW FIRE HYDRANT BURY	1	EA		
23	RELOCATE EXISTING WATER METER AND RECONNECT TO EXISTING WATER MAIN	3	EA		
24	REARRANGE EXISTING WATER METER AND CHECK VALVE	1	EA		
25	EXTEND EXISTING FIRE HYDRANT	1	EA		
26	RECONNECT EXISTING WATER METER	2	EA		
27	INSTALL NEW 8" WATER MAIN AND REVERSE TAP	1	EA		

City shall have the right to remove Bid Items 20 - 27 from the contract scope of work and have those items of work performed by Diablo Water District's (DWD) contractor. City's contractor shall coordinate and provided for DWD's contractor to perform traffic control and perform the work indicated in Bid Items 20 - 27 that may have been removed. City's contractor shall provide ten (10) consecutive calendar days working period, for DWD's contractor to perform the work in Bid Items 20 - 27, if the bid item work is performed by DWD's contractor. In the event DWD's contractor performs the work in Bid Items 20 - 27, DWD's contractor shall be responsible for the AC patch paving around the valve cans. City's contractor shall not be entitled to any additional time extension or compensation, including overhead or profit, in the event any of Bid Items 20 - 27 are removed from the project scope and the amounts entered in the Bid Schedule for the remainder of the work shall remain unchanged. City shall notify City's contractor if it will be removing any of the items from the scope of work within ten (10) working days after the Notice of Rework.

Total Bid (Items 1-27) \$ _____
(Numbers)

_____ Dollars

(Written)

The Main Street Downtown Utility Improvements requires bids to include prices for items that may be added to or deducted from the scope of the work in the contract for which the bid is being submitted.

Pursuant to the Public Contract Code § 20103.8c the lowest bid shall be "the lowest total of the bid prices on the base contract and those additive or deductive items that when taken in order from a specifically identified list of those items in the solicitation, and added to, or subtracted from, the base contract, are less than, or equal to, a funding amount publicly disclosed by the

local agency before the first bid is opened.” In this case, the funding amount publically disclosed is the Engineer’s Estimate, which totals \$560,000.

Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

4-1.04 INSPECTION

The Engineer and designees shall at all times have access to the work during its construction and shall be furnished with every reasonable facility for ascertaining that the materials and the workmanship are in accordance with the requirements and intentions of the Contract Documents. All work done and all materials furnished shall be subject to their inspection.

The inspection of the work or materials shall not relieve the Contractor of any of his obligations to perform the work as prescribed. Work and materials not meeting such requirements shall be made good and unsuitable work or materials may be rejected, notwithstanding that such work or materials have been previously inspected by the Engineer or that payment therefore has been included in a progress estimate.

4-1.05 CONSTRUCTION STAKING

Necessary bench marks and controlling lines for the work are provided in the construction drawings.

Stakes or marks will be set by the City as the City determines to be necessary to establish the lines and grades required for the completion of the work. Contractor shall coordinate with the City for Construction Staking requirements.

One set of stakes will be provided for each of the items described below.

1. **Demolition Limits** – Markings for saw-cut lines/edges of removal.
2. **GPS Control for Centerline of Trench** – Check the existing control and provide additional perimeter control points and a GPS site calibration.
3. **Curb & Gutter** – Staking for the layout of new improvements along Main Street will be placed on a predetermined offset to the face of curb at all changes in horizontal and vertical alignment at intervals no bigger than twenty-five feet, and cut/fill information to top of curb.
4. **Storm Drain** – Staking for the installation of the proposed storm drain system will be placed on a predetermined offset to the line and to each structure (2 stakes per structure) and will include cut information to the invert of the line as to the rim of the structures.
5. **Water Services** – Staking for the installation of the water services shall be placed on a predetermined offset to the line and shall include cut/fill information to finish grade and/or grades provided in the profile drawings. Line points will be set at a 25-foot interval.

All distances and measurements that are given will be made in a horizontal plane. Grades are given from the top of stakes or nails unless otherwise noted on the plans.

The Contractor shall preserve all stakes and points set for lines, grades or measurements of the work in their proper places until authorized in writing to remove them by the City of Oakley's representative. The contractor shall pay for all expenses incurred in replacing stakes that have been removed without proper authority..

Any stakes or marks required beyond those specified in these special provisions to be provided

by the City shall be set by the Contractor and no additional compensation will be allowed.

The Contractor shall verify the accuracy of the bridge control construction or construction surveying and shall notify the Engineer of the inconsistencies that may affect the lines and grades of the project.

When the Contractor requires the stakes or marks, the Contractor shall notify the Engineer of the requirements in writing 48 hours in advance of starting operations that require the stakes or marks. In no event, shall a notice of less than 2 working days be considered a reasonable length of time. Contractor shall schedule survey staking services in 4-hour increments.

Stakes and marks set by the City shall be carefully preserved by the Contractor. In case the stakes and marks are destroyed or damaged, the stakes and marks will be replaced at the City's earliest convenience. The Contractor will be charged for the cost of necessary replacement or restoration of stakes and marks which in the judgment of the City were carelessly or willfully destroyed or damaged by the Contractor's operations. This charge will be deducted from any moneys due or to become due to the Contractor.

4-1.06 FINAL PROJECT CLEAN-UP

Before final acceptance the contractor shall clean all areas of the project that were occupied during construction and in connection with the work. Contractor shall remove all, but not limited to, U.S.A markings, equipment, garbage, excess materials, temporary signs, storage containers etc. Full compensation for final project cleaning up shall be considered as included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefore.

4-1.07 NOTIFICATION OF CHANGE IN CONDITION

Pursuant to Public Contracts Code §7104, when trenches or other excavations must be dug pursuant to this Contract that extend deeper than 4 feet below the surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the Owner in writing of any:

A. Material that the Contractor believes may be material that is hazardous waste, as defined in Health & Safety Code §25117, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; or,

B. Subsurface or latent physical conditions at the site differing from those indicated; or,

C. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the work of the character provided for in the Contract.

The Owner will promptly investigate the conditions identified by the Contractor, and if the Owner finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Owner's cost of, or the time required for, performance of any part of the work will issue a change order under the procedures described in the Contract Documents.

In the event a dispute arises between the Owner and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract Documents, but shall proceed

Pursuant to Public Contract code § 6109, contractors and subcontractors who are ineligible pursuant to Labor Code §§ 1777.1 and 1777.7 are prohibited from work on the project.

7-1.12.I NOTICES AND POSTERS

Contractor shall make known its Equal Employment Opportunity responsibilities under this Contract by the following methods:

- A. Executed copies of the Contractor's *Fair Employment Practices Statement* shall be:
 - 1. Conspicuously posted in all areas where job applicants and potential employees appear for purposes of gaining employment by the Contractor;
 - 2. Conspicuously posted on all employee bulletin boards and in other areas where employees of the Contractor congregate; and,
 - 3. Transmitted to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, and to all other sources or employee referrals, including schools and employment agencies.
- B. Posters containing the following wording shall be conspicuously posted in all areas where job applicants and potential employees appear for purposes of gaining employment by the Contractor: "(NAME OF CONTRACTOR)" is an Equal Employment Employer."
- C. The Contractor's Equal Employment Opportunity policy, as described in these Specifications, Section 7-1.12, and shall be distributed in written form to all employees.

7-1.12.J FAIR EMPLOYMENT PRACTICES STATEMENT

The Contractor shall execute the following Fair Employment Practices Statement:

"Fair Employment Practices Statement": (Name of Contractor) is an Equal Employment Opportunity Employer, as such has adopted the policy and will take affirmative action to employment without regard to their race, color, religion, ancestry or national origin. On (Date), (Name of Contractor) was awarded a public works contract by the City of Oakley, a municipal corporation situated in the County of Santa Clara, State of California, for the work of (Name of Contract). Under said Contract (Name of Contractor) has agreed to comply with those Equal Employment Opportunity Conditions described in Section 7 of the Contract Documents for said project, and has agreed, among other things, that damages will be paid to the City in event it is found that the requirements of said Conditions have not been satisfied.

Dated: _____

Signed: _____

7-1.12.K RECORDS

The Contractor shall keep such records as are necessary to determine compliance with its Equal Employment Opportunity obligations under this Contract. Such records shall be retained for a period of 2 years following completion of the project. Such records show:

- A. The number of minority and non-minority group members employed in each work classification on the project.

cost to the City. Contact Diablo Water District (DWD) at (925)625-3798.

For Non-potable/recycled water services, contact Ironhouse Sanitary District (ISD) at (925) 675-2279. ISD offices are located at 450 Walnut Meadows Drive. Oakley, CA 94561.

7-1.19 DUST CONTROL

Dust control shall conform to the provisions in Section 14-11.04, "Dust Control," of the Standard Specifications and these Special Provisions. The Contractor is advised that residential housing exists adjacent to the work site and the Contractor shall control all dust such that the residential area is not adversely affected.

7-1.20 WATER POLLUTION PREVENTION

Contractor shall be responsible for ensuring that all work conforms to the provisions in Section 13, "Water Pollution Control," of the Standard Specifications and these special provisions. All operations shall be in compliance with the provisions of the Clean Water Act, Regional Water Quality Control Board, and the City of Oakley Storm Water Ordinance and policies with regard to protection of the storm water system from any pollutants. The Contractor is required to secure all necessary permits.

7-1.21 COMPENSATION

Full compensation for conforming to the requirements of this Section 7 – Legal Relations and Responsibility shall be considered as included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefore, except that this provision does not constitute a waiver, alteration, or limitation of the applicability of Section 7102 of the Public Contracts Code.

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Section 10

TECHNICAL PROVISIONS

10-1.01 GENERAL

Description of Work

The work to be done, in general, consists of relocating existing and installing new water meters, valves, laterals and fire hydrants, storm drainage and structures including inlets and storm drain manholes, trenching, installation of temporary curb and gutter and pavement, and related items or details as required by the plans and these technical specifications, and the 2015 Caltrans Standard Plans and Specifications.

The Contractor is required to inspect the site of the proposed work in order to satisfy himself, by personal examination, the location of the proposed work and the actual conditions of and at the site of the work. The Contractor is also required to have all sub-contractors personally inspect the site.

All work shall be done in conformance to the applicable provisions of the Standard Specifications except as modified herein. Payment for work, equipment and materials not specifically covered herein shall be included in the payment for related items of work. No additional payment will be made for work, equipment or materials not covered in these Technical Specifications, but necessary to insure a completed project as specified.

Any plan or method of work suggested by the City representative to the Contractor but not specified or required, if adopted or followed by the Contractor in whole or in part, may be used at the risk and responsibility of the Contractor; and the City representative shall assume no responsibility therefor and in no way be held liable for any defects in the work which may result from or be caused by use of such plans or method of work.

Order of Work

Order of Work shall conform to the provisions in Section 8-1.02, "Schedule," of the Standard Specifications and these Technical Provisions.

The City shall approve the order of work prior to the Contractor beginning construction.

The Contractor shall submit a construction schedule to the City representative for review and approval prior to the pre-construction meeting for the project. In preparing the construction schedule, the Contractor shall review, coordinate and allocate sufficient time frames to accommodate any permitting or material lead-time activities.

Twenty-Four (24)-Hour Contact Number

The Contractor shall assign a project superintendent who has the complete authority to make decisions on behalf of the Contractor. The Contractor shall provide to the City a twenty-four (24)-hour contact number for the project superintendent. This number shall not direct calls to a recorder or other message taking service. Should the project superintendent not respond when called, the City representative shall make decisions as necessary and the resultant cost of such decisions shall be borne by the Contractor.

Cooperation

Attention is directed to Section 5-1.20, "Coordination with Other Entities," and Section 5-1.36D, "Nonhighway Facilities," of the Standard Specifications.

Haul Routes

The Contractor and all subcontractors shall only use haul routes approved prior to the start of construction by the City representative.

Permits

The Contractor shall comply with Section 5-1.20B, "Permits, Licenses, Agreements and Certifications," of the Standard Specifications and these Technical Provisions.

Submittals

The materials proposed by the Contractor to be used on this contract shall be submitted for approval by the City representative, prior to the pre-construction conference. The Contractor shall submit one (1) copy of each submittal for approval by the City. The contractor shall provide two additional submittals for any water system related facilities for review and approval by Diablo Water District.

Submittals and support information shall be separated and clearly labeled when submitted to the City for approval. The list supplied is intended to be comprehensive, but no claim for its completeness is implied and submittal of the complete list will not relieve the Contractor of supplying all the information needed or of complying with any of the other requirements of the specifications. Revised lists may be issued and items may be added to the list supplied.

The Manufacturer's specifications shall be supplied along with submittal list for all applicable products on the list. Certificates of Compliance shall be submitted in accordance with Section 6-3.05E, "Certificates of Compliance," of the Standard Specifications, including the individual material specification of these Technical Provisions.

The City reserves the right to reject any item that does not fulfill the requirements of these Technical Specifications and the Standard Specifications.

Submittals shall contain:

1. The dates of submissions and the dates of any previous submissions, including identification of revision or re-submittals.
2. The Project Title and Number.
3. Contractor identification, names of subcontractors, suppliers and manufacturers.
4. Specification Section Number(s) and Bid Item(s) that pertain to the submittal.
5. Applicable standards, such as ASTM, Federal or State Specification numbers. Certified test results indicating performance of materials/products with regard to Specification requirements.
6. A 2" tall by 2.5" wide blank space for the City representative stamps. The Contractor's stamp shall be required and shall be initialed or signed, certifying the review of submittals and verification of products, field construction criteria, and coordination of the information within the submittal and the specifications.

The Contractor shall be required to review and approve all submittals and provide them stamped and signed as evidence thereof, prior to submitting to the City for review. Submittals that are not stamped and signed by the Contractor will be rejected. Submittals shall be numbered consecutively.

The preparation of plans, drawings and necessary documents, as required by the following submittal lists, shall be considered as part of the requirements of other items of work and no additional compensation shall be allowed therefor.

The City representative reserves the right to reject any item that does not fulfill the requirements of these Technical Specifications and the Standard Specifications.

The Contractor shall submit the following to the City representative the following at least two (2) working days before the pre-construction conference:

1. Construction Schedule
2. Traffic Control Plan
3. Materials Submittals
4. Water Pollution Control Plan
5. Notice to Residents
6. Utility Inventory List
7. Product information for Storm Drain pipe inlets, grates, manholes and covers
8. Product information for water line, Valves, meters, boxes and fire hydrants
7. A list of all permits and licenses the contractor has obtained indicating the agency that issued the permit, or if the permit has not been obtained, the expected date of receipt of the permit.

All submittals listed above must be received and processed by the City prior to the issuance of the Notice to Proceed. Any exceptions or rejected submittals will be remedied and resubmitted for the City representative's review prior to the issuance of the Notice to Proceed.

Project Appearance

The Contractor shall maintain a neat and orderly appearance to the work site at all times. Debris developed during construction shall be disposed concurrently with its generation. Stockpiling of debris or construction materials shall not be allowed unless otherwise approved by the City representative.

Streets immediately adjacent to the construction area streets shall be swept daily and immediately following all trenching, saw cutting, excavating, backfilling, trucking operations and other construction activity that leaves dirt or debris in roadway. The Contractor shall sweep the street with a power pick-up broom immediately prior to the paving operations. The Contractor shall keep a power sweeper on the job at all times and it shall be used to keep the streets free of loose or tracked material from the Contractor's operations. Should the Contractor fail to perform these duties, the City representative, at the City representative's sole discretion, may elect to have the City, or contract forces, perform the duties, deducting the expenses incurred from any monies that are due, or to become due, to the Contractor. By exercising this option, the Contractor is in no way relieved of the responsibility to perform these duties.

Construction Staking

Necessary bench marks and controlling lines for the work are provided in the construction drawings.

Stakes or marks will be set by the City as the City determines to be necessary to establish the lines and grades required for the completion of the work. Contractor shall coordinate with the City for Construction Staking requirements.

All distances and measurements that are given will be made in a horizontal plane. Grades are given from the top of stakes or nails unless otherwise noted on the plans.

The Contractor shall preserve all stakes and points set for lines, grades or measurements of the work in their proper places until authorized in writing to remove them by the City's representative. All expenses incurred in replacing stakes that have been removed without proper authority shall be paid for by the contractor.

Additional construction staking requirements are listed in Part II, 4-1.05 CONSTRUCTION STAKING.

MEASUREMENT AND PAYMENT

All work shall be done in conformance with the applicable provisions of the Standard Specifications. Full compensation for "General" includes, but is not limited to, all labor, equipment, and materials required to conform to the provisions of this section shall be considered as included in the prices paid for the various items of work involved and no separate payment will be made therefor. Additionally, no payment will be made for work, equipment, or materials not covered in these plans and specifications, but necessary to insure a completed project as specified.

10-1.02 MOBILIZATION

Mobilization shall conform to the provisions of Section 9-1.16D "Mobilization," of the Standard Specifications as well as these Technical Specifications.

Mobilization shall consist of preparatory work and operations, including, but not limited to, equipment shipping and delivery, equipment setup, materials shipping and delivery, those necessary for the movement of personnel, equipment, supplies, utility coordination and permitting site restoration and demobilization, and incidentals to the project sites; for the establishment of all offices, buildings and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to and during work on the various contract items on the project site.

MEASUREMENT AND PAYMENT

All work shall be done in conformance with the applicable provisions of the Standard Specifications. Measurement and payment for MOBILIZATION includes, but is not limited to, all labor, equipment, and materials required to conform to the provisions of this section and shall be on a lump sum basis as indicated in the Bid Schedule. Additionally, no payment will be made for work, equipment, or materials not covered in these plans and specifications, but necessary to insure a completed project as specified.

10-1.03 TRAFFIC CONTROL & CONSTRUCTION AREA SIGNS

General

Attention is directed to Sections 7-1.03, "Public Convenience," and Section 12, "Temporary Traffic Control," of the Standard Specifications and to the provisions in "Public Safety" of these special provisions as well as these Technical Specifications. The provision in this Section will not relieve the Contractor from his/her responsibility to provide such additional devices or take such measures as may be necessary to comply with the provisions in Section 7-1.04, "Public Safety," of the Standard Specifications.

The Contractor shall fulfill the requirements of this section, twenty-four (24) hours per day, seven (7) days a week, including holidays, from the time the Notice to Proceed is issued until the project is formally accepted.

Traffic control shall be coordinated for the minimum inconvenience and maximum safety of the public during the construction period. The Contractor shall bear full responsibility for maintaining traffic control during the construction period including cost for flagging.

The Contractor shall furnish all traffic control equipment, signs, flagmen and barricades necessary to complete the project.

Flagging

Where work reduces street width, the Contractor shall provide flaggers to guide traffic. Flaggers and all personnel working near traffic shall wear CAL OSHA-approved safety clothing and equipment. Flaggers shall guide traffic with an appropriate stop/slow sign.

Section 12-1.04, "Payment," of the State Standard Specifications is revised to provide that all flaggers and guards shall be furnished by the Contractor at his expense. The Contractor shall furnish, erect, maintain, and remove all necessary signs and devices during the length of this contract.

Property Access

Property access shall be maintained to all residents and merchants/property owners at all times unless otherwise approved by the City. Upon approval by the City, access to certain properties may be temporarily closed if the resident and/or property owner agrees to the closure.

Traffic Control Plan

The Contractor shall submit an engineered traffic control plan to the City representative a minimum of two (2) weeks prior to the start of work and a minimum of two (2) days before the pre-construction conference. The traffic control plan shall be reviewed and accepted by the City representative prior to any work commencing on the project. All traffic control plans shall be prepared in accordance with the State of California Department of Transportation, "Manual of Traffic Controls for Maintenance and Construction Work Zones 2012," or latest adopted version.

Individual Traffic Control Plans shall be required for each construction activity or proposed detour that will result in a diversion or disruption of the existing traffic flow. The Contractor shall submit the plans to the City representative a minimum of five (5) days prior to the start of work.

Notification shall be **hand-delivered** a minimum of seventy-two (72) hours prior to the beginning of any work affecting traffic. Copies of submittals shall be given to the City's Public Works Director for review and approval.

Portable Changeable Message Signs

Contractor shall provide Portable Changeable Message Signs to notify the traveling public of the work, road closures and durations. Portable Changeable Message Signs shall comply with Section 12-3.32 "Portable Changeable Message Signs" of the State Standard Specifications and RS1 of the State Standard Plans. Portable Changeable Message Signs shall be in place 7 calendar days prior to start of construction to notify the traveling public of the closures and durations. Contractor shall submit message to the City for approval forty-eight (48) hours prior to placing the sign.

MEASUREMENT AND PAYMENT

All work shall be done in conformance with the applicable provisions of the Standard Specifications. Full compensation for TRAFFIC CONTROL AND CONSTRUCTION AREA SIGNS includes, but is not limited to, all labor, equipment, flagging, placing and maintaining construction area signs, traffic signs, and portable changeable message signs, and materials required to conform to the provisions of this section and shall be on a lump sum basis as indicated in the Bid Schedule. Additionally, no payment will be made for work, equipment, or materials not covered in these plans and specifications, but necessary to insure a completed project as specified.

10-1.04 CLEARING AND GRUBBING

GENERAL

The work consists of removing objectionable material from within the road approaches, material sites within the right-of-way, and other specified areas.

All such work shall conform to Section 17-2, "Clearing and Grubbing," of the Standard Specifications and these Special Provisions.

CONSTRUCTION

General:

Clear and grub construction areas on the job site where facilities are shown to be constructed, per Subsection 17-2.03A "General," of the Standard Specifications. Clear and grub before performing earthwork in an area.

In lieu of the requirements in the seventh paragraph of Subsection 16-1.03A, "General," of the Standard Specifications, clear and grub only the area on Big Break Road where the shoulder will be widened as necessary to complete the work.

Clearing: The work shall conform to Subsection 17-2.03B, "Clearing," of the Standard Specifications.

Grubbing: The work shall conform to Subsection 17-2.03C, "Grubbing," of the Standard Specifications.

Disposal of Materials: In lieu of the requirements of paragraph two of Subsection 17-2.03D, "Disposal of Materials," the Contractor shall coordinate with the Engineer prior to spreading any

material from clearing and grubbing activities in the public right-of-way.

MEASUREMENT AND PAYMENT

Full compensation for Clearing and Grubbing includes, but is not limited to, all labor, equipment, and materials required to conform to the provisions of this section shall be considered as included in the prices paid for the various items of work involved and no separate payment will be made therefor. Additionally, no payment will be made for work, equipment, or materials not covered in these plans and specifications, but necessary to insure a completed project as specified.

10-1.05 WATER POLLUTION CONTROL

The contractor will be required to implement a Water Pollution Control Plan (WPCP) and shall use Best Management Practices (BMP's). Water Pollution Control shall conform to the provisions in Section 13, "Water Pollution Control," Section 13-6.03C, "Temporary Drainage Inlet Protection," and Section 13-7, "Temporary Tracking Control," of the Standard Specifications, project plans, and these Special Provisions. All operations shall comply with the provisions of the Clean Water Act, Regional Water Quality Control Board, and the City of Oakley Storm Water Ordinance and policies with regard to protection of the storm water system from any pollutants. The Contractor is required to secure all necessary permits.

The Contractor shall implement BMP's for the Water Pollution Control Plan (WPCP) at the start of construction. The contractor shall provide a copy of the WPCP showing the BMP's that will be used to the City and will be available for review at the office of the City Engineer, 3231 Main Street, Oakley, CA. The WPCP will be implemented and modified by the Contractor for compliance with the RWQCB requirements. Any modifications or revisions to the WPCP shall be the responsibility of the Contractor.

The Contractor shall know and fully comply with applicable provisions of the Water Pollution Control Plan and all modifications thereto, the Federal, State, and local regulations and requirements that govern the Contractor's operations and storm water and non-storm water discharges from both the project site and areas of disturbance outside the project limits during construction. Attention is directed to Sections 7-1.02, "Laws," and 7-1.05, "Indemnification," of the Standard Specifications.

The Permits shall apply to storm water and certain permitted non-storm water discharges from areas outside the project site which are directly related to construction activities for this contract. Including, but not limited to, staging areas, storage yards, and access roads. The Contractor shall comply with the Water Pollution Control Plan for those areas and shall implement, inspect and maintain the BMP's required as part of the water pollution control practices. The Engineer shall be allowed full access to these areas during construction to assure Contractor's proper implementation of water pollution control practices.

The Contractor shall be responsible for penalties assessed or levied on the Contractor or the City as a result of the Contractor's failure to comply with the provisions in this section "Water Pollution Control" including, but not limited to, compliance with the applicable provisions of the Federal, State and local regulations and requirements as set forth therein.

Penalties as used in this section, "Water Pollution Control" shall include fines, penalties and damages, whether proposed, assessed, or levied against the City or the Contractor, including

those levied under the Federal Clean Water Act and the State Porter-Cologne Water Quality Control Act, by governmental agencies or as a result of citizen suits. Penalties shall also include payments made or costs incurred in settlement for alleged violations of the Permits, the Manuals, or applicable laws, regulations, or requirements. Costs incurred could include sums spent instead of penalties, in mitigation, to remediate, or correct violations.

Notwithstanding any other remedies authorized by law, the City may retain money due the Contractor under the contract, in an amount determined by the City, up to and including the entire amount of Penalties proposed, assessed, or levied as a result of the Contractor's violation of the Permits, the Manuals, or Federal or State law, regulations or requirements. Funds may be retained by the City until final disposition has been made as to the Penalties. The Contractor shall remain liable for the full amount of Penalties until such time as they are finally resolved with the entity seeking the Penalties.

Retention of funds for failure to conform to the provisions in this section, "Water Pollution Control," shall be in addition to the other retention amounts required by the contract. The amounts retained for the Contractor's failure to conform to provisions in this section will be released for payment on the next monthly estimate for partial payment following the date when the WPCP has been implemented and maintained, and when water pollution has been adequately controlled, as determined by the Engineer.

When a regulatory agency identifies a failure to comply with the Permits and modifications thereto, or other Federal, State or local requirements, the City may retain money due the Contractor, subject to the following:

- A. The City will give the Contractor thirty (30) days' notice of the City's intention to retain funds from partial payments, which may become due to the Contractor prior to acceptance of the contract. Retention of funds from payments made after acceptance of the contract may be made without prior notice to the Contractor.
- B. No retention of additional amounts out of progress payments will be made if the amount to be retained does not exceed the amount being withheld from progress payments pursuant to Section 9-1.16, "Progress Payments," of the Standard Specifications.

During the first estimate period that the Contractor fails to conform to the provisions in this section, "Water Pollution Control," the City may retain an amount equal to 25 percent of the estimated value of the contract work performed.

The Contractor shall notify the Engineer immediately upon request from the regulatory agencies to enter, inspect, sample, monitor, or otherwise access the project site or the Contractor's records pertaining to water pollution control work. The Contractor and the City shall provide copies of correspondence, notices of violation, enforcement actions or proposed fines by regulatory agencies to the requesting regulatory agency.

No adjustment in compensation will be made for ordered changes to correct Water Pollution Control plan work resulting from the Contractor's own operations or from the Contractor's negligence.

If requested by the Contractor and approved by the Engineer, changes to the water pollution control practices, including addition of new water pollution control practices, will be allowed.

BMP Implementation

Unless otherwise specified, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting, maintaining, removing, and disposing of the water pollution control practices specified in the Water Pollution Control Plan and in the amendments. Unless otherwise directed by the Engineer, the Contractor's responsibility for WPCP implementation shall continue throughout temporary suspensions of work ordered in conformance with the provisions in Section 13-2.03, "Construction," of the Standard Specifications.

Requirements for installation, construction, inspection, maintenance, removal, and disposal of water pollution control practices shall conform to the requirements in the WPCP and these Special Provisions.

If the Contractor or the Engineer identifies a deficiency in the implementation of the Water Pollution Control Plan or amendments, the deficiency shall be corrected immediately unless requested by the Contractor and approved by the Engineer in writing, but shall be corrected prior to the onset of precipitation. If the Contractor fails to correct the identified deficiency by the date agreed or prior to the onset of precipitation, the project shall be in nonconformance with this section, "Water Pollution Control." Attention is directed to Section 5-1.03, "Engineer's Authority," of the Standard Specifications, and to "Retention of Funds" of this section for possible nonconformance penalties.

If the Contractor fails to conform to the provisions of this section, "Water Pollution Control", the Engineer may order the suspension of construction operations until the project complies with the requirements of this section.

MEASUREMENT AND PAYMENT

All work shall be done in conformance with the applicable provisions of the Standard Specifications. Full compensation for STORM WATER POLLUTION CONTROL PROGRAM includes, but is not limited to, all labor, equipment and materials required to conform to the provisions of this section, and shall be on a lump sum basis as indicated in the bid schedule. The provisions of Sections 4-1.05 "Changes and Extra Work" of the Standard Specifications, shall not apply to these items of work. Additionally, no payment will be made for work, equipment, or materials not covered in these plans and specifications, but necessary to insure a completed project as specified.

10-1.06 TEMPORARY DRAINAGE INLET PROTECTION

Temporary storm drain inlet protection shall be constructed, installed, maintained, and removed at the locations shown in the Water Pollution Control Plan, shall conform to the provisions in Section 13-6.03C "Temporary Drainage Inlet Protection," in conformance the WPCP, BMPs, and these Special Provisions, and as directed by the Engineer. Attention is directed to "Water Pollution Control" of these Special Provisions.

Temporary Storm Drain Inlet Protection shall consist of Temporary Drainage Inlet Filters and Temporary Storm Drain Inlet Protection. Temporary Drainage Inlet Filters shall be installed and maintained throughout the project and Temporary Storm Drain Inlet Protection shall be installed and maintained during the defined rainy season.

Temporary Storm Drain Inlet Protection

10-1.08 SAW CUTTING

All existing pavement edges shall be saw cut as noted on the plans and as directed by the Engineer.

Where a portion of the existing pavement surfacing is to be removed, the outline of the area to be removed shall be cut on a neat line with a power driven saw to a minimum depth of one third foot (0.33 foot) before removing the surfacing. Surfacing and base shall be removed without damage to surfacing that is to remain in place. At the Contractor's expense, damage to the surfacing which is to remain in place shall be repaired or replaced if ordered by the Engineer to a condition satisfactory to the Engineer.

All required saw cutting of concrete to be removed shall be in a straight line to a minimum depth of two inches completely across the width of the concrete sidewalk to be removed and a minimum depth of three inches completely across concrete to be removed. The portion being removed shall be taken out in such a manner as to leave an even edge with no chips.

The Contractor shall replace all detector loops damaged during saw cutting within 24 hours. Detector loops shall conform to Section 10-1.15 of these Special Provisions and no additional compensation shall be provided.

MEASUREMENT AND PAYMENT

All work shall be done in conformance with the applicable provisions of the Standard Specifications. Full compensation for sawcutting, shall include all labor, equipment, and materials required to conform to the provisions of this section shall be considered as included in the prices paid for the various items of work involved and no separate payment will be made therefor. Additionally, no payment will be made for work, equipment, or materials not covered in these plans and specifications, but necessary to insure a completed project as specified.

10-1.09 REMOVE TRAFFIC STRIPE/PAVEMENT MARKINGS & PREPARE LEAD COMPLIANCE PLAN

Traffic stripe and pavement markings shall be removed at the locations shown on the plans and as directed by the Engineer.

Waste from removal of yellow thermoplastic and yellow painted traffic stripe contains lead chromate in average concentrations greater than or equal to 350 ppm and less than 1000 ppm Total Lead. Yellow thermoplastic and yellow paint traffic stripe exist along the length of the project. Residue produced when yellow thermoplastic and yellow paint are removed may contain heavy metals in concentrations that exceed thresholds established by the California Health and Safety Code and may produce toxic fumes when heated.

The removed yellow thermoplastic and yellow paint shall be disposed of at a Class 1 disposal facility or a Class 2 disposal facility permitted by the Regional Water Quality Control Board in conformance with the requirements of the disposal facility operator within 5 days after accumulating 220 pounds of residue and dust. The Contractor shall make necessary arrangements with the operator of the disposal facility to test the yellow thermoplastic and yellow paint residue as required by the facility and these special provisions. Testing shall include, at a minimum, (1) Total Lead and Chromium by EPA Method 7000 series and (2) Soluble Lead and Chromium by California Waste Extraction Test. From the first 887 gallons of

If the yellow thermoplastic and yellow painted traffic stripe residue is transported to a Class 1 disposal facility, a manifest shall be used, and the transporter shall be registered with the California Department of Toxic Substance Control. The Engineer will obtain the United States Environmental Protection Agency Identification Number and sign all manifests as the generator within 2 working days of receiving sample test results and approving the test methods.

The Contractor shall assume that the yellow paint removed is not regulated under the Federal Resource Conservation and Recovery Act (RCRA). Additional disposal costs for removal residue regulated under RCRA, as determined by test results required by the disposal facility, will be paid for as extra work as provided in Section 4-1.05, "Changes and Extra Work," of the Standard Specifications.

Nothing in these special provisions shall relieve the Contractor of the Contractor's responsibilities as specified in Section 7-1.04, "Public Safety," of the Standard Specifications.

MEASUREMENT AND PAYMENT

The contract lump sum price paid for REMOVE TRAFFIC STRIPING AND MARKINGS AND PREPARE LEAD COMPLIANCE PLAN shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in removing and disposing of existing traffic striping, markings, markers and underlying adhesive, and preparing the Lead Compliance Plan, including paying the Certified Industrial Hygienist, and for providing personnel protective equipment, training, air monitoring, and medical surveillance, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.10 HOT MIX ASPHALT (HMA)

GENERAL

Summary. This section shall comply with Section 39, "Hot Mix Asphalt," of the latest Standard Specifications except as modified in these special provisions.

This work includes producing and placing hot mix asphalt (HMA) for trenching and temporary asphalt concrete pavement using modified Standard Process, and placing Minor Hot Mix Asphalt using the Method Process as indicated herein.

Submittals. Submit JMF information on Form CEM-3511 and Form CEM-3512. Submit Form CEM-3513 for mixes that have been verified within last 12 months. For unverified mixes, coordinate mix verification with Engineer.

Submit Quality Control Plan that conforms to the current Caltrans Quality Control Plan Review Checklist for Hot Mix Asphalt. Allow 20 calendar days for review.

MATERIALS

Mix Types: Generally, the hot mix asphalt to be used will be as follows unless modified by the Engineer:

Trenching Base Course: 3/4 inch Maximum, Type A, hot mix asphalt for base

courses greater than 2-1/2 inches (0.20 feet or 65 mm).

1/2 inch Maximum, Type A, hot mix asphalt for base courses of 2-1/2 inches (0.20 feet or 65 mm) or less.

Asphalt Binder. The grade of asphalt binder mixed with aggregate for HMA Type A must be PG 64-10 and shall conform to Subsection 92-1.02(B) of the Standard Specifications.

Aggregate. The aggregate for the trenching shall be HMA Type A and must comply with the No. 1/2" (surface course / base course) or 3/4" (base courses equal to or greater than 2-1/2" thick) grading.

CONSTRUCTION

Surface Preparation. The work shall consist of preparing the existing trench prior to the commencement of paving. Such work shall include removing debris, controlling nuisance water, sweeping, watering, and removing loose and broken hot mix asphalt pavement and foreign material as specified in the Standard Specifications and these Technical Provisions, and as directed by the Engineer.

Sampling. The Engineer may sample the hot mix asphalt from truck beds at the plant, from the hopper of the spreading machine, or from the completed mat at the discretion of the Engineer. The Contractor shall facilitate the sampling process

Construction Sequencing. The HMA for trenching shall be placed on the same day as the trenching operation for the particular segment of pipe. The HMA shall be placed and compacted in two lifts.

Quality Control.

The Contractor is not required to submit quality control test results. However, if quality control test results are not submitted to the Engineer within 3 days of paving, the Contractor waives the right to dispute the Engineer's results.

Engineer's Acceptance.

Modify 39-2.03A Testing as follows:

Change footnote e(1) to read as follows: "1. Use one location per trench if the trench area is less than 200 square feet. Use three locations for areas between 200 and 1200 sf. Use three tests per 1200 sf thereafter.

Compaction shall be between 92.0% and 97.0%.

Add the following footnotes:

k. Engineer shall perform testing in accordance with CT 375 for acceptance, except maximum specific gravity (CT 309) shall replace TMD testing. Contractor shall perform independent quality control testing continuously during paving using nuclear or non-nuclear methods.

l. Failing tests shall be verified by coring if requested by the Contractor. The Contractor will take cores at locations randomly determined by the Engineer and give them to the engineer for testing. A minimum of 1 core per 250 tons or 3 cores per street, whichever is greater, shall be taken.

Passing cores shall be paid for by the owner. Failing cores shall be paid for by the Contractor. If the core density testing produces both passing and failing cores, the cost will be prorated between the owner and Contractor.

The table for deductions indicated in the referenced revised Caltrans Section 39 shall apply to individual cores. The following table shall apply to deductions for individual compaction of a lot:

**Reduced Payment Factors for Percent of Maximum
Theoretical Density**

HMA Type A and B Percent of Maximum Theoretical Density	Reduced Payment Factor	HMA Type A and B Percent of Maximum Theoretical Density	Reduced Payment Factor
92.0	0.0000	97.0	0.0000
91.9	0.0125	97.1	0.0125
91.8	0.0250	97.2	0.0250
91.7	0.0375	97.3	0.0375
91.6	0.0500	97.4	0.0500
91.5	0.0625	97.5	0.0625
91.4	0.0750	97.6	0.0750
91.3	0.0875	97.7	0.0875
91.2	0.1000	97.8	0.1000
91.1	0.1125	97.9	0.1125
91.0	0.1250	98.0	0.1250
90.9	0.1375	98.1	0.1375
90.8	0.1500	98.2	0.1500
90.7	0.1625	98.3	0.1625
90.6	0.1750	98.4	0.1750
90.5	0.1875	98.5	0.1875
90.4	0.2000	98.6	0.2000
90.3	0.2125	98.7	0.2125
90.2	0.2250	98.8	0.2250
90.1	0.2375	98.9	0.2375
90.0	0.2500	99.0	0.2500
< 90.0	Remove and Replace	> 99.0	Remove and Replace

The Contractor shall have hand-compaction equipment immediately available for compacting all areas inaccessible to rollers. Hand-compaction shall be performed concurrently with breakdown rolling. If for any reason hand-compaction falls behind breakdown rolling, further placement of hot mix asphalt shall be suspended until hand-compaction is caught up. Hand-compaction includes vibraplates and hand tampers. Hand torches shall be available for rework of areas which have cooled.

After compaction, the surface texture of all hand work areas shall match the surface texture of the machine placed mat. Any coarse or segregated areas shall be corrected immediately upon discovery. Failure to immediately address these areas shall cause suspension of hot mix asphalt placement until the areas are satisfactorily addressed, unless otherwise allowed by the Engineer.

Temporary Transitions: The Contractor shall construct temporary pavement transitions at all transverse paving joints greater than 1 inch prior to allowing traffic onto the paved surface. Temporary pavement transitions shall have a maximum slope of 20:1 or as approved by the engineer and be constructed on Kraft paper or other suitable bond breaker such that upon removal of the temporary pavement transition, a clean notch remains. The temporary transitions may be constructed of either cold mix or hot mix.

The Contractor shall continuously maintain the temporary pavement until final paving. Each temporary transition shall be inspected by the Contractor and repaired as necessary to comply with these provisions at the end of each day including weekends and holidays.

Failure to comply with these provisions will result in a liquidated damage of \$250 per day per transition and/or the cost of City crews making the repairs if necessary to correct for public safety.

MEASUREMENT AND PAYMENT

Section 39-2.02D, "Payment," of the Standard Specifications shall not apply. Measurement and Payment for Hot Mix Asphalt HMA (TYPE A) shall be at the unit cost indicated in the Bid Schedule. The contract prices paid per ton for HMA include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in constructing HMA, complete in place, including saw cutting, pavement, base material, HMA curb and HMA sidewalk, as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Engineer.

Subsection 9-1.06B, "Increases of More Than 25 Percent" and subsection 9-1.06C, "Decreases of More than 25 Percent" shall not apply to the bid items related to HMA.

Measurement and payment for HMA (Type A) related to restoration of pavement for trenching and installation of pipe shall be included in the price paid for various types of pipe installed.

10-1.11 ASPHALT TACK COAT

GENERAL

The work to be performed shall consist of furnishing and applying tack coat in conjunction with hot mix asphalt overlays and other hot mix asphalt paving work.

MATERIALS

The tack coat shall be emulsified asphalt of grades RS1, RS2, SS1, or SS1h, conforming to Section 94, "Asphaltic Emulsions", of the Standard Specifications.

Application: The tack coat shall not be applied until the preparation of the existing surface has been completed, and then only so far in advance of placing the hot mix asphalt as permitted by the Engineer. Preparation of the surface shall be performed as described in these Special Provisions. No tack coat shall be left exposed overnight. Immediately in advance of placing the hot mix asphalt, additional tack coat shall be applied as directed by the Engineer to areas where previously applied tack coat has been destroyed or otherwise rendered ineffective, and no additional compensation will be allowed for such work.

10-1.15 TRAFFIC SIGNALS & LOOP DETECTORS

GENERAL

The work consists of placement and replacement of signal loops that are in conflict with the work as indicated on the plans.

All replaced signal loops shall be replaced in-kind unless specifically called out otherwise. **Within 24 Hours the signal loops shall be installed and in working order prior to placing the asphalt concrete surface course.** Any changes to loop type, placement pattern, or installation may be performed only as allowed by the Engineer.

Signals and Electrical Systems shall conform to the provisions in the RSS Section 86, "General" and RSS Section 87, "Electrical Systems" of the 2015 Standard Specifications and these Special provisions. No materials are to be reused.

Any necessary temporary modifications, which are required to maintain working signals, shall be performed by the Contractor as part of the work. The maximum allowable time between disconnecting the existing loops and placing the new loops into operation shall be twelve calendar days. Failure to meet this schedule will cause the work to be performed by City forces and the Contractor to be back charged for those expenses.

Prior to initiating any work on the signal loops, the Contractor shall prepare drawings of all existing signal loops in the affected work area. The drawing shall show the size and location of the existing loops, routing of wiring, and the proposed replacement locations.

MATERIALS

Loop detector wire shall conform to RSS Subsection 86-1.02E(1)(c)(iii) of the Standard Specifications.

Paint binder and asphaltic emulsion sealant shall conform to the provisions of Section 94, and RSS Subsection 86-1.02W(2) "Asphaltic Emulsion Sealant", and of the Standard Specifications.

CONSTRUCTION

Where the sump of an existing pull box is disturbed by the Contractor's operations, it shall be reconstructed. If the sump was grouted, the old grout shall be removed and new grout placed.

Detectors will be disconnected or connected by the Contractor, who shall provide the Traffic Engineer with twenty-four hours' notice prior to such activity. Timing adjustments shall be made by City traffic personnel.

The Contractor shall mark the locations of the new loop detectors in the field prior to beginning their installation. The City Traffic Division shall be contacted to review the loop locations as marked by the Contractor. Loop installation operations shall commence only after approval is granted by the Traffic Engineer.

In lieu of the requirements in the fourth paragraph of RSS Section 87-1.03V(2) "Inductive Loops Detectors", of the Standard Specifications, detector loop slots in asphalt concrete pavement

shall be filled as follows:

After conductors are installed in the slots cut in the pavement, paint binder shall be applied to all vertical surfaces of the slots. The slots shall then be filled with asphaltic concrete sealants using hot melt loop sealant.

The temperature of sealant material during installation shall be above 70 degrees Fahrenheit. Air temperature during installation shall be above 50 degrees Fahrenheit. Hot melt sealant placed in the slots shall be compacted by use of an eight inch diameter by 1/8 inch thick steel hand roller or other tool approved by the Engineer. Compacted sealant shall be flush with the pavement surface. Minimum conductor coverage shall be 5/8 inch. Excess sealant remaining after rolling shall not be reused. Traffic may be released immediately over compacted material.

The Contractor shall test all detectors with a motor-driven cycle as defined in the California Vehicle Code. Such cycle shall be licensed for street use by the Department of Motor Vehicles of the State of California. The unladen weight of the vehicle shall not exceed 220 pounds and the engine displacement shall not exceed 100 cubic centimeters. Special features, components, or vehicles designed to activate the detector will not be permitted. The Contractor shall provide an operator who shall drive the motor-driven cycle through the response or detection area of the detector at not less than three miles per hour nor more than seven miles per hour.

Traffic signal loops damaged due to trenching, paving, or any other related construction shall be replaced within two weeks following the damage.

MEASUREMENT AND PAYMENT

RSS Section 86-1.04, "Payment", of the Standard Specifications is modified herein.

Measurement and payment for REMOVE AND REPLACE TRAFFIC LOOPS, complete in place and operable, shall be paid on a unit cost basis as identified in the Bid Schedule.

Subsection 9-1.06B, "Increases of More Than 25 Percent" and subsection 9-1.06C, "Decreases of More than 25 Percent" shall not apply to the bid items related to traffic signals and loop detectors.

The above contract unit cost shall be considered full compensation for furnishing all labor, materials, tools, equipment, transportation, and incidentals; and for performing all of the work involved as detailed in the Standard Specifications, these Special Provisions, and the plans and typical sections. No additional compensation will be allowed therefor.

10-1.16 TRAFFIC STRIPING, MARKINGS, AND RAISED PAVEMENT MARKERS

GENERAL

Thermoplastic traffic stripes (traffic lines) shall conform to the provisions in Sections 84-1, "General," 84-2, "Thermoplastic Traffic Stripes and Pavement Markings" of the Standard Specifications and these Special Provisions. Painted traffic stripes and pavement markings shall conform to Section 84-1, "General" and 84-2.02C, "Painted Traffic Stripes and Pavement

Markings”, of the Standard Specifications and these Special Provisions. Delineators shall conform to Section 82-2, “Delineators”. Road Signs shall conform to Section 82, “Signs and Markers”.

MATERIALS

MATERIALS (Thermoplastic): Section 84-2.02, "Materials" of the Standard Specifications is deleted.

The thermoplastic material shall conform to State Specifications 8010-41G-21. Glass beads to be applied to the surface of the molten thermoplastic material shall conform to the requirements of State Specification 8010-22L-22 (Type II), or AASJTP Designation: M 247 (Type 1).

State Specifications for thermoplastic material and glass beads may be obtained from the Transportation Laboratory, P.O. Box 19128, Sacramento, CA. 95819, (916) 739-2400.

Thermoplastic material for traffic stripes shall be applied at a minimum thickness of 0.125-inch.

A primer of the type recommended by the manufacturer of the thermoplastic material shall be applied over all existing painted stripes and pavement legends to be covered with thermoplastic material as shown on the plans.

MATERIALS (Paint): Paint for traffic stripes and pavement markings shall comply with Section 84-2.02C, “Paint” of the Standard Specifications.

The use of either water or solvent-based paint will be determined by the Engineer according to the time of year and air pollution control requirements.

Paint shall be used at its manufactured consistency.

For each existing and new fire hydrant within the project limits, the Contractor shall install a blue marker on the street pavement as determined by the Engineer.

CONSTRUCTION

All construction shall conform to the respective provisions of the Standard Specifications, manufacturer’s installation requirements, and the Special Provisions.

Existing Striping and Markings: In areas adjacent to the reconstructed surfacing where existing striping must be changed to conform to a revised striping pattern, conflicting striping shall be removed by sand blasting, grinding, or other methods as specified in the Standard Specifications or by the Engineer.

In areas to be cape or slurry sealed, the contractor shall remove all existing thermoplastic striping by sand blasting, grinding, or other methods as specified in the Standard Specifications or by the Engineer.

The Contractor shall provide temporary striping (paint or reflectors) to temporarily replace all striping which has been damaged or obliterated by or during the work. This shall include striping replacement completely across the street even in the event that the Contractor’s work may not extend that far. Both lines of each crosswalk shall be completely repainted even if only a portion of a line has been obliterated.

When the Contractor's work removes or reduces the visual appearance of a lane or centerline, the Contractor shall replace all striping between the adjacent intersections in both directions. Where a median exists, this work will be required only in the roadway where the work has occurred, unless a detour which altered the pavement markings occurred in the other roadway. In such cases, the striping will be replaced in both directions.

Layout for Temporary and Permanent Striping: The alignment and layout of traffic stripes shall conform to Subsection 84-2, "Traffic Striping and Pavement Markings", of the Standard Specifications.

The Contractor shall be responsible for compiling an existing striping and marking plan including but not limited to stop bars, legends, parking stall stripes, crosswalks and other traffic delineation markings within the project prior to removing, obliterating, covering any existing striping, or starting work on the affected street. **This plan must be submitted to the Engineer and approved prior to commencing any striping and marking operations on the affected street.**

All alignments and layout measurements, and other work necessary to locate and replace traffic stripes and pavement markings shall be performed by the Contractor. The City will not provide any assistance, information, or materials to the Contractor. It will be entirely the responsibility of the Contractor to perform all necessary pre-construction and construction layout work, obtain all necessary measurements and information, and prepare all plans for performing the striping and marking work as specified. All traffic control systems necessary for performing striping and marking, as directed by the Engineer, shall be the responsibility of the Contractor.

The Contractor shall physically tie down the location of the beginning and ending of each paint or thermoplastic marking type in the adjacent curb top. The marking location shall not exceed 50 square inches each. Any locations exceeding this limit shall be removed by the Contractor prior to acceptance of the work. The Contractor shall contact the City Engineer for review of tie downs.

The Contractor shall be responsible for accurately referencing out and replacing the lines and positions of all traffic lines, directional lines, arrows, and other markings in accordance with the plans and City standard markings by cat tracking with painted marks. This shall occur no later than 2 hours behind the final surface course paving operation.

Cat tracking shall consist of stretching a rope on a straight line between control points on tangent alignment and on a true arc through control points on curved alignment and placing spots of paint along the rope. Temporary tab markers shall be placed not more than 12' apart on curves nor more than 24' apart on straight segments.

Temporary tab markers shall be the same color as the traffic stripe that they are replacing, shall measure 2" tall by 3-1/2" wide, and have a reflective lens across the width of the marker.

Prior to application of permanent striping and markers, the Contractor shall call for review and approval of the proposed striping by the City's Traffic Engineer or agent. The City shall have the right to make changes in the location and alignment of line stripes. Striping and traffic markings shall not be applied until after approval is granted by the Traffic Engineer. The Contractor shall allow a minimum of 3 working days for review of the layout by the City.

Schedule: Raised pavement markers (RPM's) shall be placed as specified in Subsection 81-3,

“Pavement Markers”, of the Standard Specifications. When utilizing hot melt bituminous adhesive, RPM’s shall be placed after the surface has been open to traffic for at least 7 days. When utilizing epoxy adhesive, RPM’s shall be placed after the surface has been open to traffic for at least 14 days. Regardless of which adhesive is utilized, the RPM’s shall not be placed more than 14 days after paving or surfacing.

Permanent traffic striping and markings including legends and arrows shall be placed within 14 days after paving or surfacing, unless otherwise directed by the Engineer.

Temporary yellow marking tape denoting school crosswalks shall be placed the same day that the pavement surfacing is placed.

Pavement Stencils: The Contractor shall use stencils which conform to Caltrans Standard Plans and Details.

Retroreflective and Raised Pavement Markers: Installation of both retroreflective and raised pavement markers shall conform to the provisions of Section 85 of the Standard Specifications. Pavement markers shall be placed in the same pattern and locations as they were previously, except as shown on the plans or modified herein.

Pavement Delineation – Thermoplastic: Pavement temperature shall be measured at the beginning of the shift on each working day and this information shall be provided to the Traffic Engineer.

No primer or thermoplastic shall be installed within 48 hours from the last measurable rain report as provided by the City.

Thermoplastic traffic striping, legends, and arrows shall conform to the provisions of Section 84-1, “General”; Section 84-2, “Thermoplastic Traffic Stripes and Pavement Markings”; and the Special Provisions.

Pavement Markers: Pavement markers shall be placed to the line established by the Contractor and approved by the Engineer, which will consist of temporary painted line or new or existing stripes one for each line of markers.

All additional work necessary to establish satisfactory lines for markers shall be performed by the Contractor.

The adjustment provisions in Section 9-1.06B, "Increases of More than 25 Percent," and in Section 9-1.06C, "Decreases of More than 25 Percent," shall not apply to any contract item involving pavement markers.

At the option of the Contractor, a hot melt bituminous adhesive may be used to cement the markers to the pavement instead of the Rapid Set Type or Standard Set Type epoxy adhesive specified in 81-3.03C, "Epoxy Adhesive," of the Standard Specifications. Bituminous adhesive material shall conform to the following:

Specification	ASTM	Requirement
Flash Point, COC, °F	D 92	550 Min.
Softening Point, °F	D 36	200 Min.
Brookfield Thermosel Viscosity, Centipoise, No. 27 Spindle, 20 RPM, 400°F	D 4402	3,000-6,000
Penetration dmm, 100g, 55 seconds, 77°F	D 5	10 - 20
Filler Cement, percent by weight (Insoluble in 1,1,1 Trichloroethane)	D 2371	65 - 75

Filler material used in bituminous adhesive shall be Type PC, Grade III, calcium carbonate conforming to ASTM D1199, and shall conform to the following gradation:

Sieve Size	Percent Passing
No. 100	100
No. 200	95
No. 325	75

Bituminous adhesive shall be heated indirectly in an applicator with continuous agitation or recirculation. Bituminous adhesive shall not be heated above the maximum safe heating temperature recommended by the manufacturer and shall not be applied at temperatures greater than 425°F. nor less than 375°F.

Immediately after application of the adhesive, pavement markers shall be placed in position and pressure applied until firm contact is made with the pavement.

Placement of pavement markers using bituminous adhesive shall conform to the requirements Subsection 81-3.02D of the Standard Specifications, except as follows:

1. Markers shall not be placed when the pavement or air temperature is 50°F or less.
2. Blast cleaning shall be required.

When bituminous adhesive is used for pavement marker placement, traffic control during placement operations shall conform to the requirements of "Traffic Control System" of these Special Provisions.

MEASUREMENT AND PAYMENT

Payment for traffic striping layout and placement of temporary tabs will be included in the unit price bid for THERMOPLASTIC TRAFFIC STRIPING, MARKINGS, AND MARKERS and no additional compensation will be allowed therefore.

Measurement and payment for traffic striping, characters, arrows, pavement markers, raised pavement markers, reflective pavement markers, and Class 1 delineators shall be paid on a lump sum basis as identified in the Bid Schedule.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with placing thermoplastic or painted pavement stripes and markings, including pavement markers, blue hydrant marker, as specified in these Special Provisions, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract lump sum price for THERMOPLASTIC TRAFFIC STRIPING, MARKINGS, AND MARKERS as identified in the Bid Schedule, and no additional compensation will be allowed.

10-1.17 STORM DRAIN IMPROVEMENTS

Installation of the storm drain facilities including trench excavation and backfilling, connecting to the existing storm drain manholes and inlets shall be done in accordance with the Contra Costa County Standard Details and Caltrans Standard Plans, and as shown on the Project Plans. Work shall also include the removal and legal disposal of the existing laterals and pipe and potholing of existing utilities as specified herein.

Storm drain must comply with the Contra Costa County Standard Details and Standard Specifications.

Reinforcement must comply with Section 52 of the Standard Specifications.

Miscellaneous iron and steel must comply with Section 75 of the Standard Specifications.

All steel items shall be galvanized. All cast iron items must be painted or dipped in commercial quality, asphalt paint furnished by you. Galvanizing must be performed after fabrication.

Frames and covers must be match-marked in pairs before delivery to the work and the covers must fit into their frames without rocking. The faces and seats of manhole covers must be machined finished.

Concrete must comply with Section 90 of the Standard Specifications.

Excavation and backfill must comply with section 19 of the Standard Specifications.

Potholing

The Contractor shall conduct exploratory excavations by potholing to verify or to discover the actual locations and the size of existing underground utilities and improvements. Potholing shall be done at each proposed location of signal poles to occur at least fourteen (14) calendar days in advance of any excavation or construction in that area, to avoid possible delay in the progress of the Work.

The Contractor's proposed method of potholing and schedule for potholing shall be submitted to the Engineer for approval, at least one week prior to the commencement of operation. Any utilities damaged during potholing shall be immediately reported to the Engineer and repairs made immediately in accordance with the requirements of this Contract.

MEASUREMENT AND PAYMENT

Subsection 9-1.06B, "Increases of More Than 25 Percent" and subsection 9-1.06C, "Decreases of More than 25 Percent" shall not apply to the bid items related to storm drain improvements.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with placing new inlet, including excavation, backfill, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for NEW DRAIN INLET as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with placing new storm drain manhole, including excavation, backfill, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for NEW SDMH as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with placing new 18" HDPE storm drain line, including trenching excavation, backfill, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract price paid per linear foot for 18" HDPE SD LINE as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with placing new 12" HDPE storm drain line, including trenching excavation, backfill, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract price paid per linear foot for 12" HDPE SD LINE as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with connecting new storm drain pipe to existing storm drain manhole, including grouting, excavation, backfill, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for CONNECT TO EXISTING SDMH as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with connecting new storm drain pipe to existing storm drain inlet, including grouting, excavation, backfill, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for CONNECT TO EXISTING SD INLET as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with capping 12" storm drain pipe, including adhesives, grouting, excavation, backfill, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for 12" SD CAP as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with capping 3" storm drain pipe, including adhesives, grouting, excavation, backfill, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for 3" SD CAP as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with placing new 3" PVC pipe curb drain, including trenching excavation, backfill, removal of existing trench drain, connection to the inlet, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the

Engineer, shall be considered as included in the contract price paid per linear foot for 3" PVC PIPE (CURB DRAIN) as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with placing 24" x24" storm drain inlet, including grouting, excavation, backfill, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for 24x24 INLET as identified in the Bid Schedule, and no additional compensation will be allowed.

10-1.18 FINAL CLEAN-UP

Before final inspection of the work, the Contractor shall clean the work and all ground occupied by him in connection with the work, of all rubbish, excess materials (including liquid asphalt), and equipment. The sidewalks and curbs shall be thoroughly swept clean of all dirt, dust and foreign material. The streets shall be swept in accordance with Section 13-7.02, "Street Sweeping," of the Standard Specifications. All parts of the work shall be left in neat and presentable condition. Payment for sweeping of streets with pick-up sweeper, cleaning sidewalks and curbs, and clean up in general, shall be considered as included in the unit bid price for other contract items and no additional payment shall be made.

MEASUREMENT AND PAYMENT

Items of work or other services which the Contractor is required to supply, such as clean-up or other incidental items, and which are not listed as separate bid items shall be included in the related bid items and shall be considered as paid in those items, whether or not specifically identified in the descriptions. Also included in such contract costs are any costs associated with the repair of damage, which may occur to existing improvements as a result of these construction operations.

10-2.01 DWD WATER LINE RELOCATIONS AND INSTALLATION

GENERAL

Installation and relocation of the Diablo Water District (DWD) water line facilities including trench excavation and backfilling, thrust block removal, installation of water service laterals, installation of 8-inch water main, installing water valves, water meters, fire hydrants, hydrant bury, connecting to existing water mains, and hydrotesting and disinfecting of pipelines shall all be done in accordance with the Diablo Water District Standard Specifications and Drawings, December 2013, and as shown on the Project Plans. Work shall also include the removal and legal disposal of the existing laterals and pipe as specified herein.

Contractor attention is directed to Diablo Water District General Water Notes of the Diablo Water District Standard Specifications and Drawings, December 2013 for notes pertaining to water service and fire hydrant installation:

All DWD water line relocations and installations shall be per Diablo Water District Standard Specifications and Drawings, December 2013 which may be viewed at www.diablowater.org under documents.

All removal of asbestos concrete pipe shall be in accordance with California and Federal regulations and Diablo Water District Standards.

SUBMITTALS

Contractor shall submit the following materials and procedures for review and approval in accordance with Section 10-1.01 of these Special Provisions:

1. Manufacturer's product data for all material, including bedding and backfill.
2. Shoring and bracing plans, calculations and details prepared by a Civil or Structural Engineer licensed in the State of California.
3. Utility support details including support block, bracing to prevent pipe shifting or flotation, across or parallel to trench.
4. Plan for temporary shoring of existing PG&E poles.

The Contractor shall provide two additional submittals for any water system related facilities for review and approval by Diablo Water District.

MATERIALS

All material shall be new. The only materials that shall be allowed to be reused shall be the existing fire hydrants, existing water meters, and 1" double check valve unless damaged by contractor.

All pipe materials and associated testing for new water main and relocated fire hydrants shall be per Section 02620, Polyvinyl Chloride (PVC) Pipe and Fittings of the DWD Standard Specifications and Drawings, December 2013. All pipe materials and fittings for fire hydrants and potable water services shall conform to the requirements of the DWD Standard Specifications and Drawings, December 2013.

All valves, hydrants and appurtenances shall be in accordance to Section 15100, Valves, Hydrants and Appurtenances of the DWD Standard Specifications and Drawings, December 2013.

Pipe for water service sizes up to 1.5 inch shall be Type K annealed (soft) copper tubing, polyethelene coated Mueller Streamline and shall conform to ASTM B88. No splices shall be allowed.

Water meter relocation and installation shall be in accordance with Section 15400, Services and Meter Installations of the DWD Standard Specifications and Drawings, December 2013.

All fire hydrants shall be mounted to a Clow LB 400 check valve with break-off spool. The hydrant body shall be mounted to this spool with stainless steel bolts, sized as required.

Ductile iron hydrant bury shall be by Sigma or South Bay.

All fire hydrants shall be painted with two coats of Pollard yellow #P68205 paint.

Gate valves 4 inches through 12 inches shall conform to AWWA C509, and shall be resilient seated with fully encapsulated disk with nonrising stem, and have O ring stuffing boxes. Stuffing boxes shall be bolted and constructed so as to aid valve repair. Valves shall open

counterclockwise and be fitted with 2 inch square operating nuts.

CONSTRUCTION

Trench excavation and backfill shall be in accordance to Section 02210, Trenching, Backfill and Compaction, of the DWD Standard Specifications and Drawings, December 2013.

Installation of PVC pipe and fittings for services shall be in accordance to Section 02620, Polyvinyl Chloride (PVC) Pipe and Fittings of the DWD Standard Specifications and Drawings, December 2013.

Asbestos Concrete pipe shall be removed and disposed of in a responsible manner in accordance with California and Federal regulations and Diablo Water District Standards.

MEASUREMENT AND PAYMENT

Contractor agrees to accept as full payment for the construction of all water line installations and relocations and appurtenances compensation set forth in the project contract documents, which include all costs for labor, materials, tools equipment, services, all taxes (federal, state, and local), insurance and permits, royalties, overhead, profit, warranty performances and other costs necessary to perform the work in accordance with Contract Documents.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with relocate existing fire hydrant, including pipe, pipe connections and tapping, water valves, capping existing, check valves, hydrant bury, thrust blocks, trenching and excavation, backfill, flushing and testing, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for RELOCATE EXISTING FIRE HYDRANT as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with install new 1.5" water meter and 1.5" reduced pressure BFP, including water meter, reduced pressure BFP, boxes, cage, grouting, trenching and excavation, backfill, pipe, pipe connection, tapping, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for INSTALL NEW 1.5" WATER METER AND 1.5" REDUCED PRESSURE BFP as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with install new fire hydrant bury, including fire hydrant, pipe, pipe connections, water valves,, hydrant bury with tapped blind flange, thrust blocks, trenching and excavation, backfill, flushing and testing, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for INSTALL NEW FIRE HYDRANT BURY as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with relocate existing water meter and reconnect to existing water main, including boxes, grouting, trenching and excavation, backfill, pipe, pipe connection, tapping, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid

RELOCATE EXISTING WATER METER AND RECONNECT TO EXISTING WATER MAIN as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with rearrange existing water meter and check valve, including boxes, grouting, trenching and excavation, backfill, pipe, pipe connection, tapping, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid REARRANGE EXISTING WATER METER AND CHECK VALVE as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with extend existing fire hydrant, including, pipe, pipe connections, check valves, hydrant bury, thrust block, trenching and excavation, backfill, flushing and testing, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for EXTEND EXISTING FIRE HYDRANT as identified in the Bid Schedule, and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with reconnect existing water meter, including boxes, grouting, trenching and excavation, backfill, pipe, pipe connection, tapping, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid RECONNECT EXISTING WATER METER as identified in the Bid Schedule, and no additional compensation will be allowed.

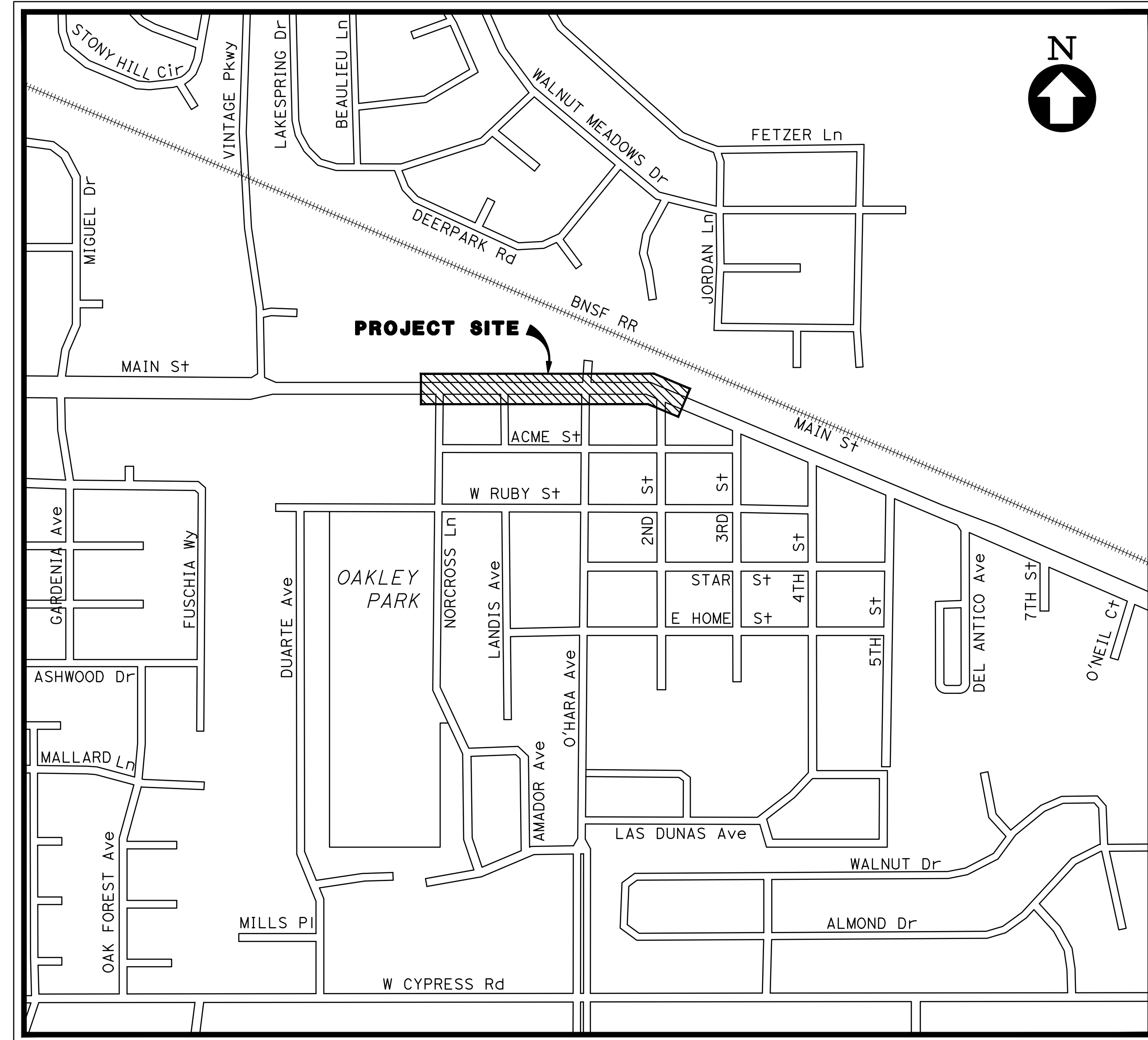
Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with install new 8" water main and reverse tap, including, pipe, pipe connections, tapping, water valves, thrust blocks, trenching and excavation, backfill, flushing and testing, and pavement restoration to finish grade, as specified herein, as shown on the plans and as directed by the Engineer, shall be considered as included in the contract unit price paid for INSTALL NEW 8" WATER MAIN AND REVERSE TAP as identified in the Bid Schedule, and no additional compensation will be allowed.

Subsection 9-1.06B, "Increases of More Than 25 Percent" and subsection 9-1.06C, "Decreases of More than 25 Percent" shall not apply to the bid items related to Diablo Water District water line relocations.

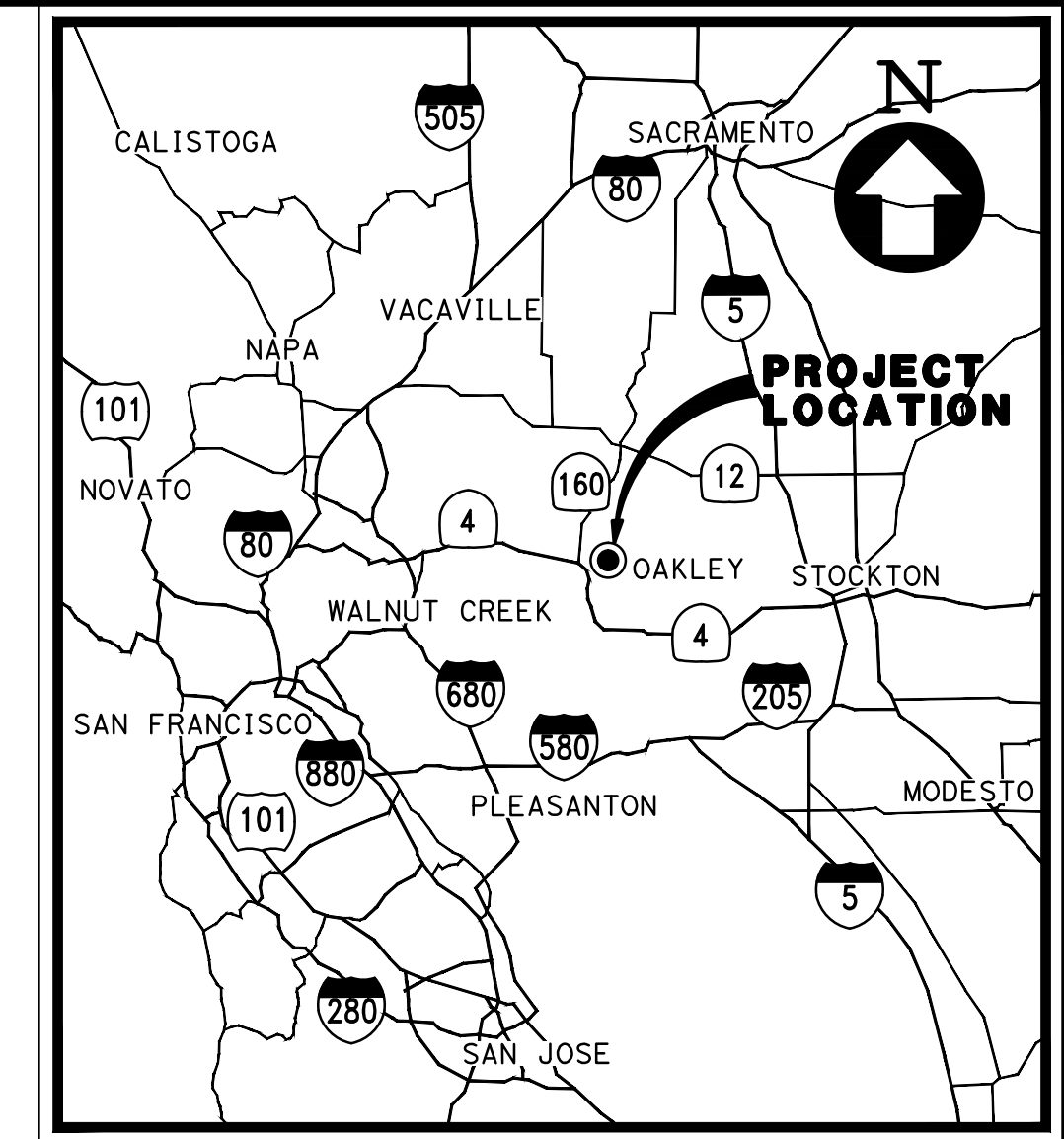
Any work related to the relocation or removal of the existing water pipe, valves and hydrants, and the installation of the new water pipe, valves and hydrants, including coordination with Diablo Water District and removal and disposal of asbestos cement pipe and waterline items not specifically described in this section, shall be considered to be included in the prices paid for various contract items listed above and no separate payment or additional compensation will be allowed.

MAIN STREET DOWNTOWN UTILITY IMPROVEMENTS FROM NORCROSS LANE TO 2ND STREET CIP PROJECT NO. 165A OAKLEY, CA

TO BE SUPPLEMENTED BY CALTRANS STANDARD PLANS & SPECIFICATIONS 2015



LOCATION MAP
NO SCALE



VICINITY MAP
NO SCALE

DRAWING INDEX:

PAGE No.	DWG No.	DESCRIPTION
1	T-1	TITLE SHEET
2	GN-1	GENERAL NOTES AND ABBREVIATIONS
3	K-1	KEY MAP
4-6	U-1 TO U-3	EXISTING COMPOSITE UTILITY PLAN
7-9	U-4 TO U-6	UTILITY REARRANGEMENT PLAN (WATER)
10-14	DP-1 TO DP-5	DRAINAGE PLAN AND PROFILES
15-18	CD-1 TO CD-4	CONSTRUCTION DETAILS
19-20	TH-1 TO TH-2	TRAFFIC HANDLING PLAN

ALL LOCATIONS AND DEPTHS OF UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING SIZES, DEPTHS, AND LOCATIONS OF ALL UTILITIES PRIOR TO PROCEEDING WITH ANY WORK OR ORDERING OF MATERIALS. ANY CHANGES TO THESE PLANS AND SPECIFICATIONS SHALL BE APPROVED BY THE ENGINEER.

CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-227-2600, A MINIMUM OF 48 HOURS BEFORE BEGINNING ANY EXCAVATIONS.



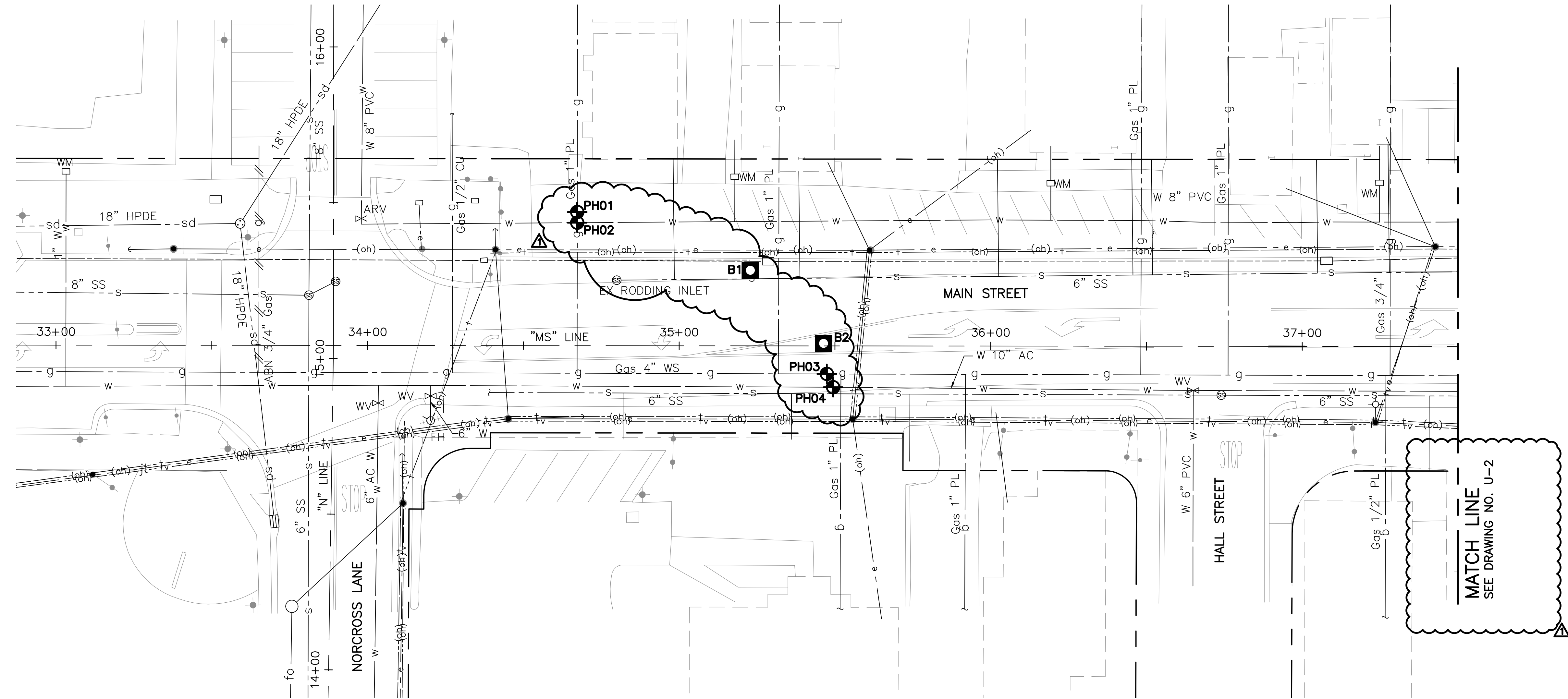
REVIEWED FOR CONFORMANCE WITH THE CITY OF OAKLEY STANDARDS AND REQUIREMENTS. APPROVAL FOR CONSTRUCTION IS SUBJECT TO THE INFORMATION SHOWN HEREIN. THE CITY OF OAKLEY AND THE UNDERSIGNED ARE NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY EXIST ON THE PLANS.

KEVIN ROMANI CITY ENGINEER DATE
R.C.E. NO. 51138 EXPIRES 09/2017



MAIN STREET
DOWNTOWN UTILITY IMPROVEMENTS
TITLE SHEET
OAKLEY CONTRA COSTA COUNTY CALIFORNIA

Date: 06/07/16	Revisions
Scale: AS NOTED	ADDENDUM No. 1
Design: TM	
Drawn: AH	
Approved: MC	
Job No: 2017084-10	
Drawing Number:	
T-1	
1 OF 20	



PLAN
SCALE: 1"=20'

NOTES:

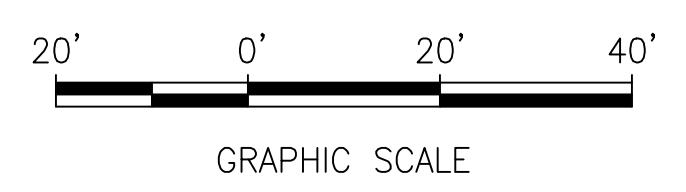
- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET GN-1.
- FOR STORM DRAIN INFORMATION, SEE DRAINAGE PLAN.
- ALL EXISTING ABOVE GROUND UTILITY FEATURES SHALL BE ADJUSTED TO GRADE UNLESS OTHERWISE NOTED.
- THIS PLAN IS ACCURATE FOR UTILITIES ONLY.
- CONTRACTOR SHALL VERIFY ALL EXISTING UNDERGROUND UTILITIES BEFORE CONSTRUCTION.
- FOR WATER DETAILS, REFER TO DIABLO WATER DISTRICT STANDARD SPECIFICATIONS AND DRAWINGS.
- ALL AC PIPE REMOVED BY CONTRACTOR SHALL BE DISPOSED OF IN ACCORDANCE WITH CALIFORNIA REGULATIONS.
- ABANDONED UTILITY LINES SHALL BE SLURRY FILLED.
- CONTRACTOR SHALL CONFIRM WITH UTILITY OWNER THAT UTILITY HAS BEEN ABANDONED BEFORE REMOVING OR MODIFYING ANY ABANDONED UTILITY.
- CONTRACTOR SHALL BE ADVISED THAT THERE IS PCC PAVEMENT WITHIN MAIN STREET. REFER TO POTHOLE AND BORING TABLES ON U-1 THRU U-3 FOR LOCATIONS WHERE PCC PAVEMENT HAS BEEN FOUND.

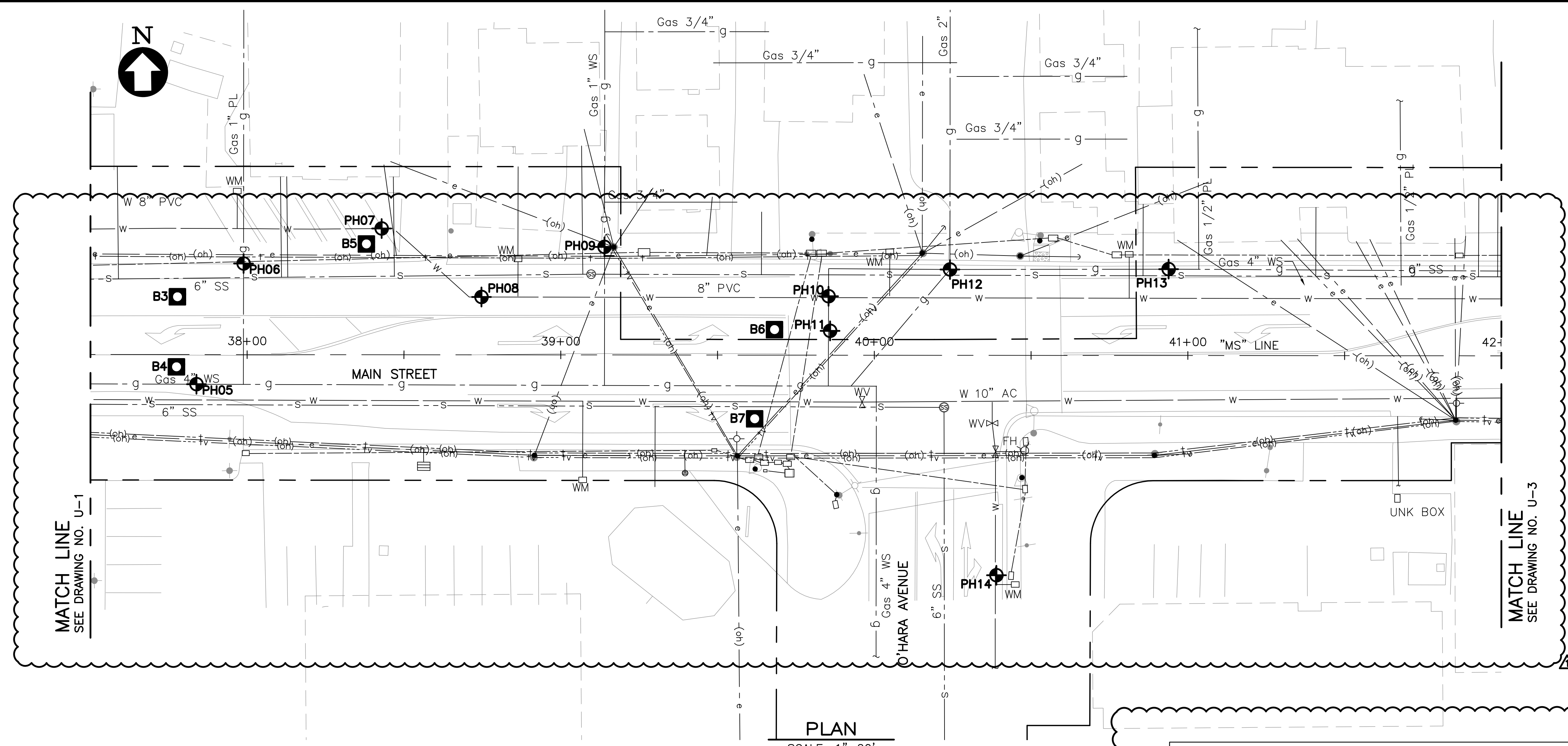
LEGEND:

- RIGHT OF WAY
- - - (oh) — Exist Elect OH LINE
- - - tv - - - (oh) — Exist CATV OH LINE
- - - t - - - (oh) — Exist TELE OH LINE
- - - g — Exist GAS LINE
- - - s — Exist SANITARY SEWER LINE
- - - jt — Exist JT LINE
- - - w — Exist WATER LINE
- - - fo — Exist FIBER OPTIC LINE
- - - sd — Exist STORM DRAIN LINE
- - - □ — Exist SIGNAL INTERCONNECT
- FH ∅ — Exist FIRE HYDRANT
- WV ∆ — Exist WATER VALVE
- ARV ∩ — Exist AIR RELEASE VALVE
- — Exist WATER METER
- ⊙ — Exist SANITARY SEWER MANHOLE
- — Exist POLE
- ↑ — Exist GUY WIRE
- ⊕ — Exist STREET LIGHT
- ⊔ — Exist SIGNAL
- — Exist SIGNAL INTERCONNECT BOX
- — Exist SIGN
- ⊙ — Exist STORM DRAIN MANHOLE
- ≡ — Exist STORM DRAIN CATCH BASIN
- — Exist ETS

POTHOLE DATA			
PH	UTILITY	DESCRIPTION	DEPTH TO TOP
PH01	1" GAS	PLASTIC	30"
PH02	8" WATER	PVC	43"
PH03	4" GAS	STEEL	36"
PH04	10" WATER	AC	41"

EXISTING PAVEMENT BORING DATA				
B	APPROXIMATE AC THICKNESS	APPROXIMATE PCC THICKNESS	APPROXIMATE AB THICKNESS	GENERALIZED SOIL DESCRIPTION
B1	8.25"	-	2.25"	SILTY SAND, BROWN
B2	8.25"	6"	-	SILTY SAND, BROWN

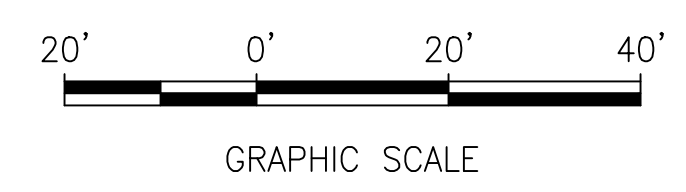




PLAN
SCALE: 1"=20'

- NOTES:**
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 - FOR STORM DRAIN INFORMATION, SEE DRAINAGE PLAN.
 - ALL EXISTING ABOVE GROUND UTILITY FEATURES SHALL BE ADJUSTED TO GRADE UNLESS OTHERWISE NOTED.
 - THIS PLAN IS ACCURATE FOR UTILITIES ONLY.
 - CONTRACTOR SHALL VERIFY ALL EXISTING UNDERGROUND UTILITIES BEFORE CONSTRUCTION.
 - FOR WATER DETAILS, REFER TO DIABLO WATER DISTRICT STANDARD SPECIFICATIONS AND DRAWINGS.
 - ALL AC PIPE REMOVED BY CONTRACTOR SHALL BE DISPOSED OF IN ACCORDANCE WITH CALIFORNIA REGULATIONS.
 - ABANDONED UTILITY LINES SHALL BE SLURRY FILLED.
 - CONTRACTOR SHALL CONFIRM WITH UTILITY OWNER THAT UTILITY HAS BEEN ABANDONED BEFORE REMOVING OR MODIFYING ANY ABANDONED UTILITY.
 - CONTRACTOR SHALL BE ADVISED THAT THERE IS PCC PAVEMENT WITHIN MAIN STREET. REFER TO POT HOLE AND BORING TABLES ON U-1 THRU U-3 FOR LOCATIONS WHERE PCC PAVEMENT HAS BEEN FOUND.

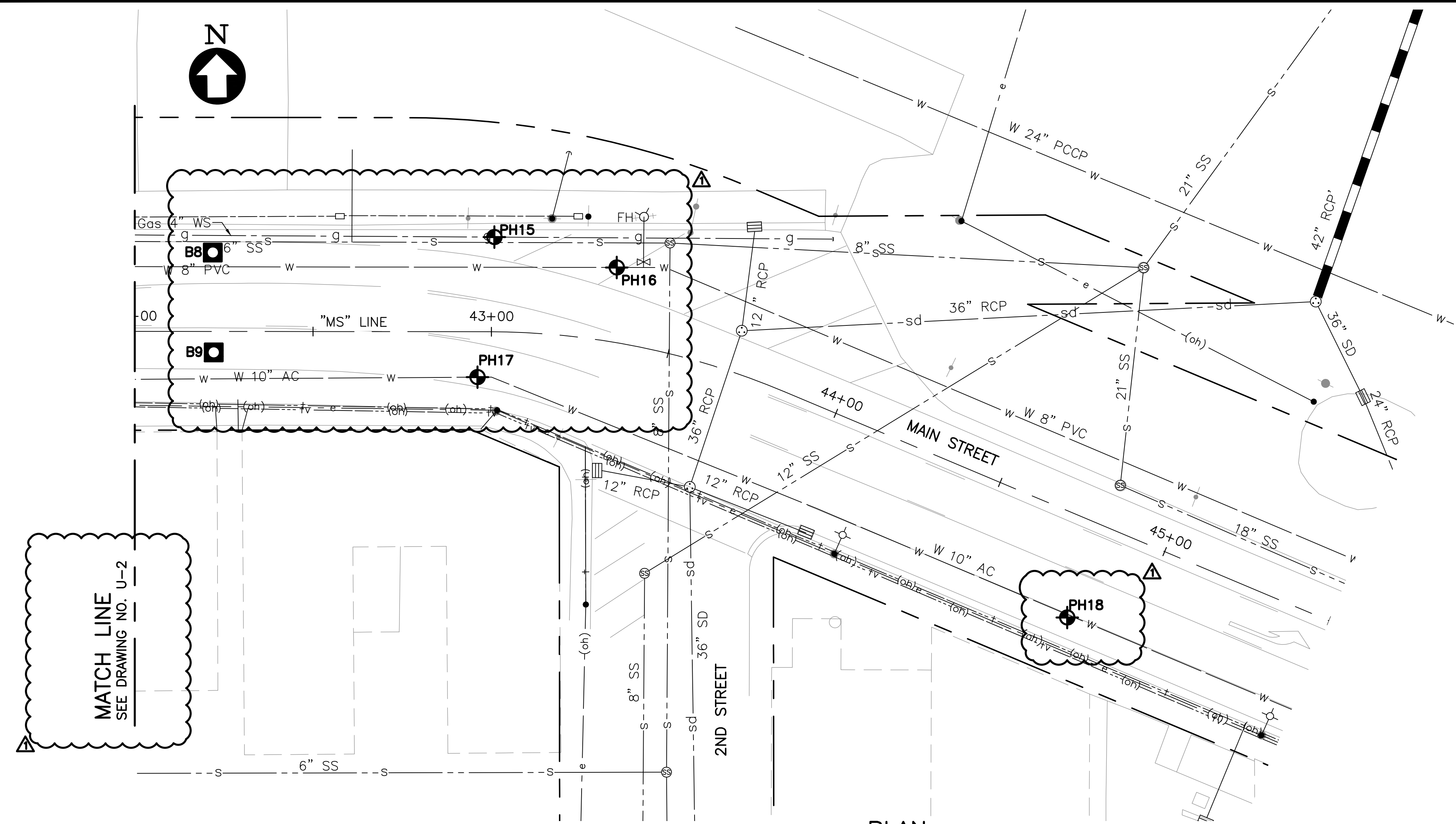
- LEGEND:**
- — — — — RIGHT OF WAY
 - - - - - (oh) — Exist Elect OH LINE
 - - - - - tv — (oh) — Exist CATV OH LINE
 - - - - - t — (oh) — Exist TELE OH LINE
 - - - - - g — Exist GAS LINE
 - - - - - s — Exist SANITARY SEWER LINE
 - - - - - jt — Exist JT LINE
 - - - - - w — Exist WATER LINE
 - - - - - fo — Exist FIBER OPTIC LINE
 - - - - - sd — Exist STORM DRAIN LINE
 - - - - - □ — Exist SIGNAL INTERCONNECT
 - FH ∅ — Exist FIRE HYDRANT
 - WV ∆ — Exist WATER VALVE
 - ARV ∆ — Exist AIR RELEASE VALVE
 - — Exist WATER METER
 - ⊗ — Exist SANITARY SEWER MANHOLE
 - — Exist POLE
 - ↑ — Exist GUY WIRE
 - ⊕ — Exist STREET LIGHT
 - ⊙ — Exist SIGNAL
 - — Exist SIGNAL INTERCONNECT BOX
 - — Exist SIGN
 - ⊙ — Exist STORM DRAIN MANHOLE
 - ≡ — Exist STORM DRAIN CATCH BASIN
 - — Exist ETS



POTHOLE DATA			
PH	UTILITY	DESCRIPTION	DEPTH TO TOP
PH05	4" GAS	STEEL	37"
PH06	1" GAS	PLASTIC	27"
PH06	1/2" UNKNOWN	STEEL	18"
PH07	8" WATER	PVC	48"
PH08	8" WATER	PVC	46"
PH09	1" GAS	STEEL	22"
PH10	4" GAS	STEEL	36"
PH11	DRY HOLE	HIT CONCRETE 16" DOWN	N/A
PH12	4" GAS	STEEL	36"
PH12	2" GAS	STEEL	39"
PH13	4" GAS	STEEL	25"
PH14	DRY HOLE	HIT CONCRETE CAP 14" DOWN	N/A

EXISTING PAVEMENT BORING DATA				
B	APPROXIMATE AC THICKNESS	APPROXIMATE PCC THICKNESS	APPROXIMATE AB THICKNESS	GENERALIZED SOIL DESCRIPTION
B3	12"	-	7"	SILTY SAND, BROWN
B4	12"	-	-	SILTY SAND, BROWN
B5	2.25"	-	-	SILTY SAND, BROWN
B6	9"	6"	1.5 (GRAVEL UP TO 3" IN SIZE)	SILTY SAND, BROWN
B7	8.5"	-	8.5"	SILTY SAND WITH GRAVEL, GREY

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MATCH LINE
SEE DRAWING NO. U-2

PLAN
SCALE: 1"=20'

NOTES:

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- CONTRACTOR SHALL CONFIRM WITH UTILITY OWNER THAT UTILITY HAS BEEN ABANDONED BEFORE REMOVING OR MODIFYING ANY ABANDONED UTILITY.
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LEGEND:

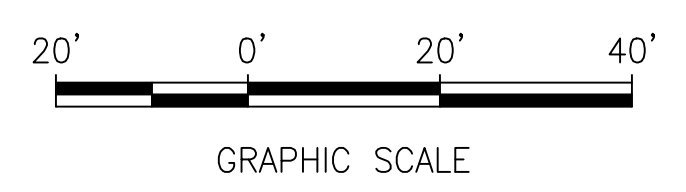
- RIGHT OF WAY
- - - (oh) — Exist Elect OH LINE
- - - tv - - - (oh) — Exist CATV OH LINE
- - - t - - - (oh) — Exist TELE OH LINE
- - - g — Exist GAS LINE
- - - s — Exist SANITARY SEWER LINE
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- ARV ∆ — Exist AIR RELEASE VALVE
- — Exist WATER METER
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- — Exist POLE
- ↑ — Exist GUY WIRE
- ⊕ — Exist STREET LIGHT
- ⊔ — Exist SIGNAL
- — Exist SIGNAL INTERCONNECT BOX
- — Exist SIGN
- ⊙ — Exist STORM DRAIN MANHOLE
- ≡ — Exist STORM DRAIN CATCH BASIN
- — Exist ETS

POTHOLE DATA

PH	UTILITY	DESCRIPTION	DEPTH TO TOP
PH15	4" GAS	STEEL	35"
PH16	8" WATER	PVC	41"
PH17	10" WATER	AC	36"
PH18	DRY HOLE	N/A	N/A

EXISTING PAVEMENT BORING DATA

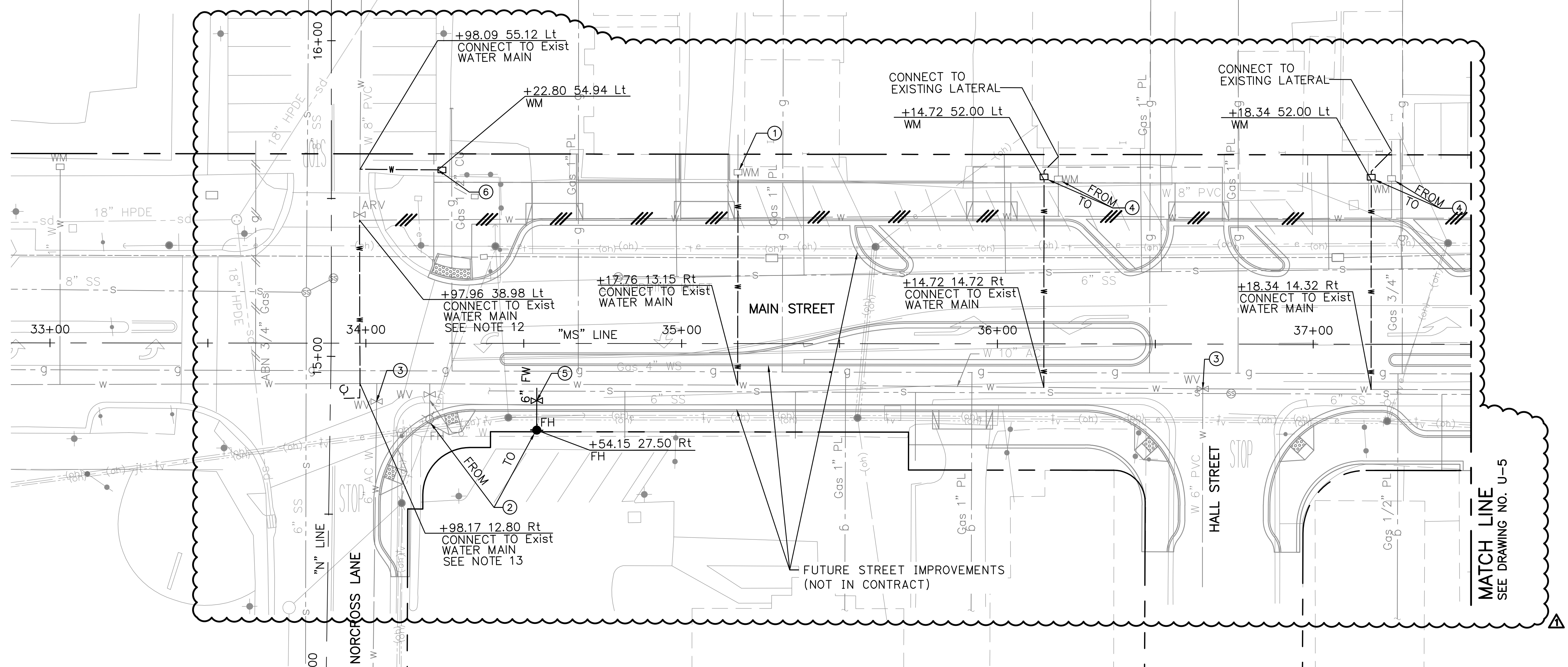
B	APPROXIMATE AC THICKNESS	APPROXIMATE PCC THICKNESS	APPROXIMATE AB THICKNESS	GENERALIZED SOIL DESCRIPTION
B8	6.25"	-	8" (SOME AC MIXTURES, GRAVEL UP TO 1.5" IN SIZE, WET)	SILTY SAND, BROWN
B9	10"	-	9" (SOME AC MIXTURES, WET)	SILTY SAND, WITH GRAVEL BROWN



Date: 06/07/16	No.	Revisions
Scale: AS NOTED	APPENDIX No. 1	
Design: TM		
Drawn: AH		
Approved: MC		
Job No: 2017084-10		

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Date: 06/07/16	No.	Revisions
Scale: AS NOTED	ADDENDUM No. 1	
Design: TM		
Drawn: AH		
Approved: MC		
Job No: 2017084-10		



PLAN
SCALE: 1"=20'

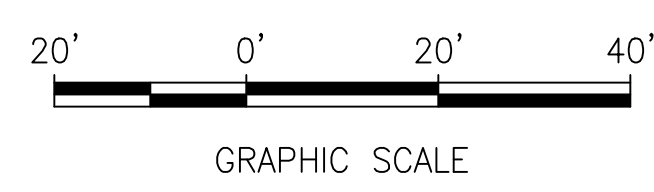
NOTES:

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- ABANDONED UTILITY LINES PER UTILITY OWNER SPECIFICATIONS.
- CONTRACTOR SHALL CONFIRM WITH UTILITY OWNER THAT UTILITY HAS BEEN ABANDONED BEFORE REMOVING OR MODIFYING ANY ABANDONED UTILITY.
- CONTRACTOR SHALL REMOVE FIRE HYDRANT, VALVE AND PIPING TO THE MAIN. CONTRACTOR SHALL INSTALL CAP AND THRUST BLOCK PER DIABLO WATER DISTRICT REQUIREMENTS. POT HOLE TO VERIFY UNDERGROUND CONDITIONS AT LEAST 7 DAYS PRIOR TO COMMENCING WORK.
- ALL WATER LINE TRENCHING SHALL CONFORM TO DIABLO WATER DISTRICT STANDARD DRAWING DWD 1, SEE DETAIL **1** CD-1.
- FOR ALL FIRE HYDRANT RELOCATIONS CONTRACTOR SHALL REUSE EXISTING FIRE HYDRANT AND PROVIDE NEW LB400 CHECK VALVE AND HYDRANT BURY.

- FOR REMOVE EXIST ELL AND THRUST BLOCK AND CONNECT NEW 8" C900 WATER MAIN AFTER EXIST WATER METERS HAVE BEEN CONNECTED TO EXIST 10" AC WATER MAIN. SWAB NEW WATER MAIN AND 8' OF EXISTING WATER MAIN WITH CLEAN CHLORINATED RAG PRIOR TO TIE-IN. CUT BACK & ABANDON EXIST WATER MAIN WITH 12" CONC. PLUG.
- REVERSE TAP & UNDER EXIST 10" AC WATER MAIN & GAS LINE WITH JCM 432 SS 10 X 8 TAPPING TEE WITH 8" GV, BY TAP MASTER. STAY 2' CLEAR FROM ANY JOINT WITH TAPPING SLEEVE. STAY 6' CLEAR OF EXISTING VALVE WITH ANY TRENCHING. LEAK TEST AFTER PLACING THRUST BLOCKS. BACKFILL THIS AREA AND 10' NORTH ALONG NEW WATER MAIN WITH 2-1/2 SACK CDF TO TOP OF ALL PIPES. SUPPORT AC PIPE AS DIRECTED BY DWD INSPECTOR. PROVIDE MIN. 3" SEPARATION WHERE NEW 8" WATER MAIN CROSSES UNDER 10" AC WATER MAIN.
- IF ABANDONED 8" WATER LINE NEEDS TO BE REMOVED FOR DRAINAGE INLETS THE 8" WATER LINE SHALL BE CUT OUT OF THE WAY AND OPEN ENDS SHALL BE PLUGGED WITH 12" OF CONCRETE.

LEGEND:

- RIGHT OF WAY
- w- Exist WATER LINE
- FH Exist FIRE HYDRANT
- WV Exist WATER VALVE
- w- Proposed WATER LATERAL
- FW- Proposed FIRE WATER LINE
- WM Proposed FIRE HYDRANT
- WM Proposed WATER METER
- /// ABANDON WATER LINE IN PLACE SEE NOTE 14



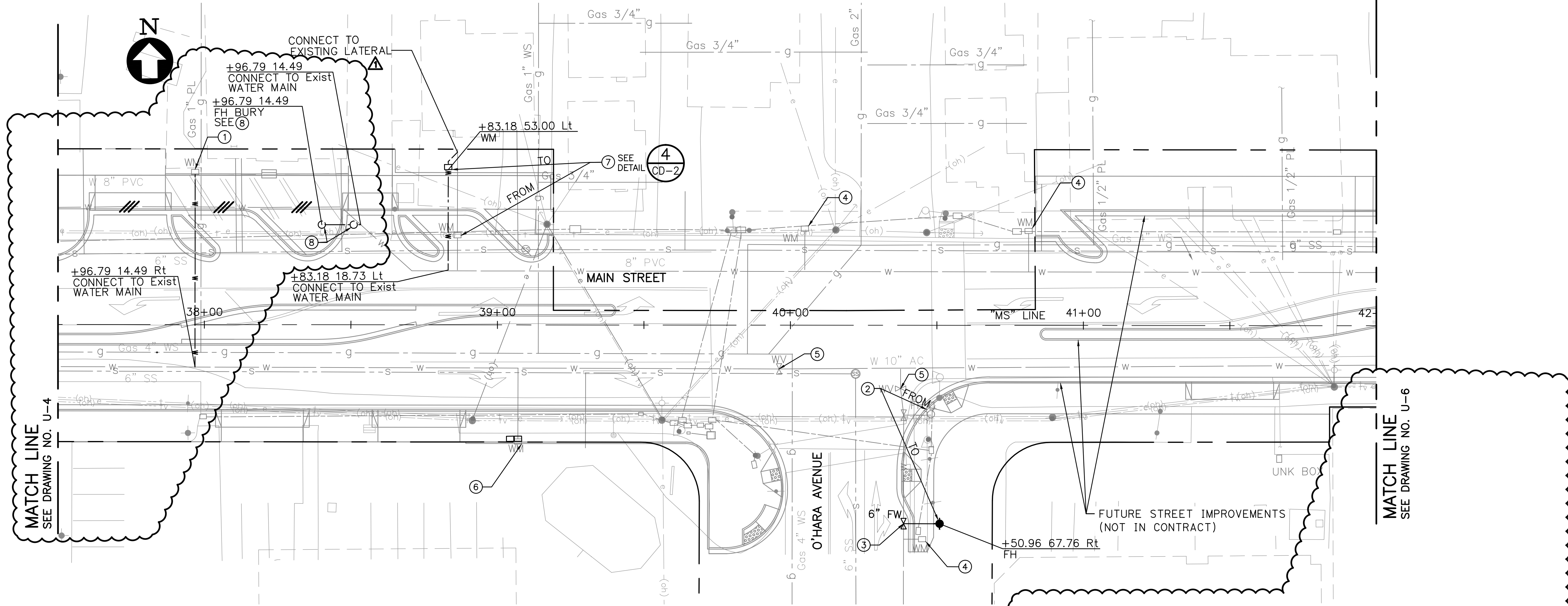
ITEMS OF WORK:

- RECONNECT 1" WATER METER TO Exist 10" AC WATER MAIN AS SHOWN PER DWD 8 WITH 1" PVC COATED COPPER SERVICE. LINE, NO SPLICES. UTILIZE 10" JCM SS FULL CIRCLE TAP CLAMP WITH 1" CC OUTLET. INSTALL NEW SERVICE LINES PRIOR TO CUTTING OVER FROM Exist METERS TO MINIMIZE CUSTOMER OUTAGE. HOT TAP BY TAP MASTER ONLY, SEE DETAIL SEE NOTE 10 **4** CD-1
- RELOCATE FIRE HYDRANT PER DIABLO WATER DISTRICT DWD 15, SEE DETAIL SEE NOTE 9,10 AND 11 **1** CD-2 **2** CD-1 **3** CD-1
- PROTECT WATER VALVE IN PLACE **3** CD-1
- RELOCATE AND RECONNECT 1" WATER METER TO EXIST 8" PVC WATER MAIN AS SHOWN PER DWD 8 WITH 1" PVC COATED COPPER SERVICE LINE, NO SPLICES. UTILIZE 10" JCM SS FULL CIRCLE TAP CLAMP WITH 1" CC OUTLET. INSTALL NEW SERVICE LINES PRIOR TO CUTTING OVER FROM EXIST METERS TO MINIMIZE CUSTOMER OUTAGE. HOT TAP BY TAP MASTER ONLY, SEE DETAIL SEE NOTE 10 **4** CD-1
- INSTALL NEW WATER VALVE AND VALVE BOX PER DIABLO WATER DISTRICT DWD 15 AND 17, HOT TAP BY TAP MASTER ONLY SEE DETAIL SEE NOTE 10 **2** CD-2
- INSTALL 1.5" WATER METER AND RP DEVICE PER DIABLO WATER DISTRICT DWD 8 AND 11, HOT TAP BY TAP MASTER ONLY SEE DETAIL SEE NOTE 10 **4** CD-1 **6** CD-1

DRAWING NAME: K:\31515\17084_001\17084-10\DWG\U-4.dwg PLOTTED BY: JRM



Date: 06/07/16	No.	Revisions
Scale: AS NOTED	1	APPENDIX No. 1
Design: TM		
Drawn: AH		
Approved: MC		
Job No: 2017084-10		



PLAN
SCALE: 1"=20'

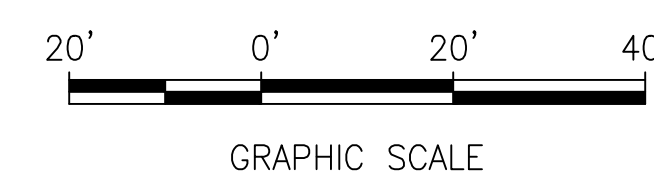
NOTES:

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- ALL WATER LINE TRENCHING SHALL CONFORM TO DIABLO WATER DISTRICT STANDARD DRAWING DWD 1, SEE DETAIL **1** CD-1
- FOR ALL FIRE HYDRANT RELOCATIONS CONTRACTOR SHALL REUSE EXISTING FIRE HYDRANT AND PROVIDE NEW LB400 CHECK VALVE AND HYDRANT BURY.

12. IF ABANDONED 8" WATER LINE NEEDS TO BE REMOVED FOR DRAINAGE INLETS THE 8" WATER LINE SHALL BE CUT OUT OF THE WAY AND OPEN ENDS SHALL BE PLUGGED WITH 12" OF CONCRETE.

LEGEND:

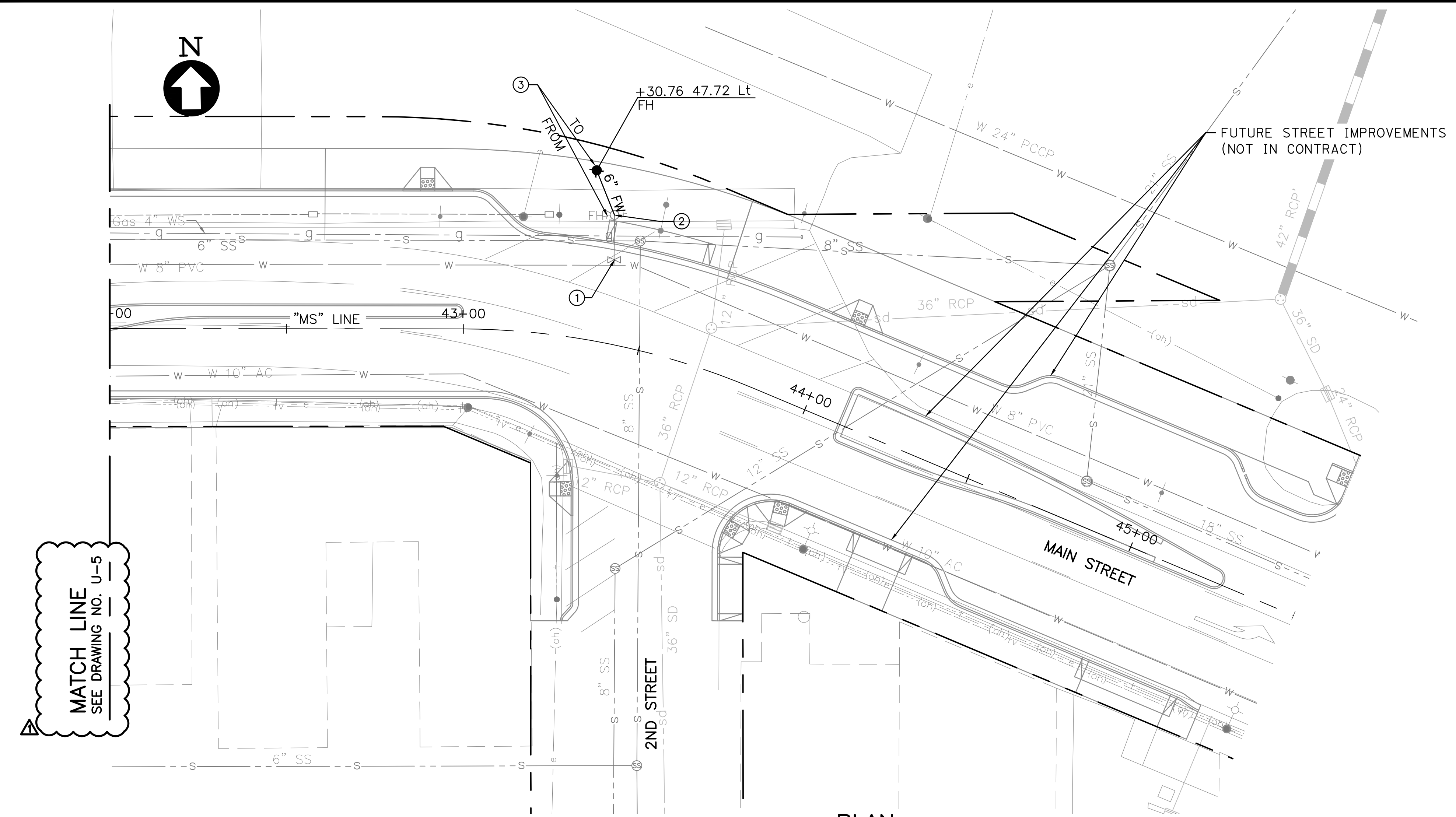
- RIGHT OF WAY
- Exist WATER LINE
- Exist FIRE HYDRANT
- Exist WATER VALVE
- PROPOSED WATER LATERAL
- PROPOSED FIRE WATER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
- ABANDON WATER LINE IN PLACE
SEE NOTE 12



ITEMS OF WORK:

- RECONNECT 1" WATER METER TO EXIST 10" AC WATER MAIN AS SHOWN PER DWD 8 WITH 1" PVC COATED COPPER SERVICE. LINE, NO SPLICES. UTILIZE 10" JCM SS FULL CIRCLE TAP CLAMP WITH 1" CC OUTLET. INSTALL NEW SERVICE LINES PRIOR TO CUTTING OVER FROM EXIST METERS TO MINIMIZE CUSTOMER OUTAGE. HOT TAP BY TAP MASTER ONLY, SEE DETAIL **4** CD-1
- RELOCATE FIRE HYDRANT PER DIABLO WATER DISTRICT DWD 15, SEE DETAIL **1** CD-2 **2** CD-1 **3** CD-1
- INSTALL NEW WATER VALVE AND VALVE BOX PER DIABLO WATER DISTRICT DWD 15 AND 17, HOT TAP BY TAP MASTER ONLY SEE DETAIL **2** CD-2
- PROTECT WATER METER AND LATERAL IN PLACE
- PROTECT WATER VALVE IN PLACE
- REARRANGE WM AND CHECK VALVE PER DIABLO WATER DISTRICT REQUIREMENTS, SEE DETAIL **3** CD-2 **4** CD-1 **5** CD-1
- RELOCATE AND RECONNECT 1" WATER METER TO EXIST 10" AC WATER MAIN AS SHOWN PER DWD 8 WITH 1" PVC COATED COPPER SERVICE. LINE, NO SPLICES. INSTALL NEW SERVICE LINES PRIOR TO CUTTING OVER FROM EXIST METERS TO MINIMIZE CUSTOMER OUTAGE. HOT TAP BY TAP MASTER ONLY, SEE DETAIL **4** CD-1
- CUT OUT 4' SECTION OF EXIST 8" WATER MAIN AND INSTALL 8X6 PUSH X FLANGE 45-DEGREE ELL WITH 6" GV AND PIPING TO HYDRANT BURY FOR FUTURE FIRE HYDRANT PER DWD 15. SET TOP OF BURY AT ELEVATION 22.45 TO ALLOW FOR FUTURE FH FLANGE TO BE SET AT ELEVATION 25.15 WITH LB 400 AND 12" SPOOL. INTENT IS TO HAVE FLANGE OF FUTURE FH SIT 3" ABOVE FUTURE TC. INSTALL BLIND FLANGE ON TOP OF BURY WITH 2" TAP AND BALL VALVE WITH G12 BOX AS BLOWOFF SIMILAR TO DWD 21. FILL OPEN END OF ABANDONED WATER MAIN WITH 12" CONC PLUG.

DRAWING NAME: K:\2017\17084 - Pleasanton\17084\000\SHEETS - 17084\17084-U-5.dwg PLOTTED BY: JON



MATCH LINE
SEE DRAWING NO. U-5

FUTURE STREET IMPROVEMENTS
(NOT IN CONTRACT)

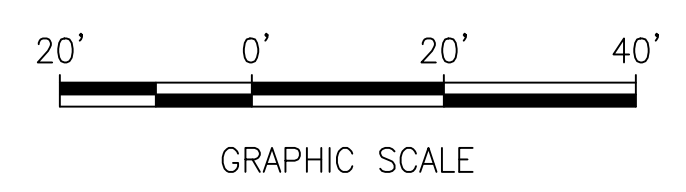
PLAN
SCALE: 1"=20'

NOTES:

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- ALL WATER LINE TRENCHING SHALL CONFORM TO DIABLO WATER DISTRICT STANDARD DRAWING DWD 1, SEE DETAIL **1** CD-1.
- FOR ALL FIRE HYDRANT RELOCATIONS CONTRACTOR SHALL REUSE EXISTING FIRE HYDRANT AND PROVIDE NEW LB400 CHECK VALVE AND HYDRANT BURY.

LEGEND:

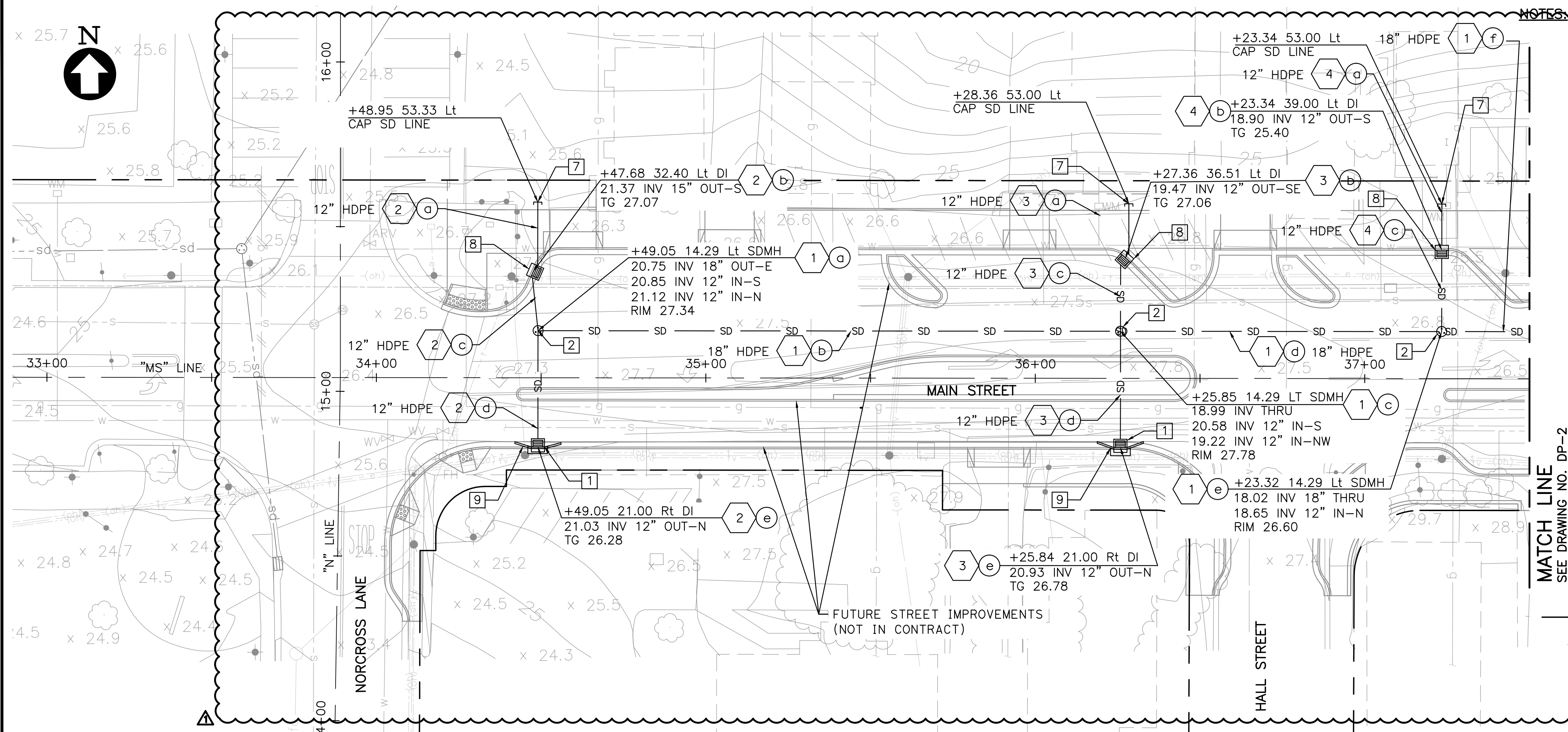
- RIGHT OF WAY
- w- Exist WATER LINE
- FH Exist FIRE HYDRANT
- WV Exist WATER VALVE
- w- -w- PROPOSED WATER LATERAL
- fw- -fw- -fw- PROPOSED FIRE WATER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER



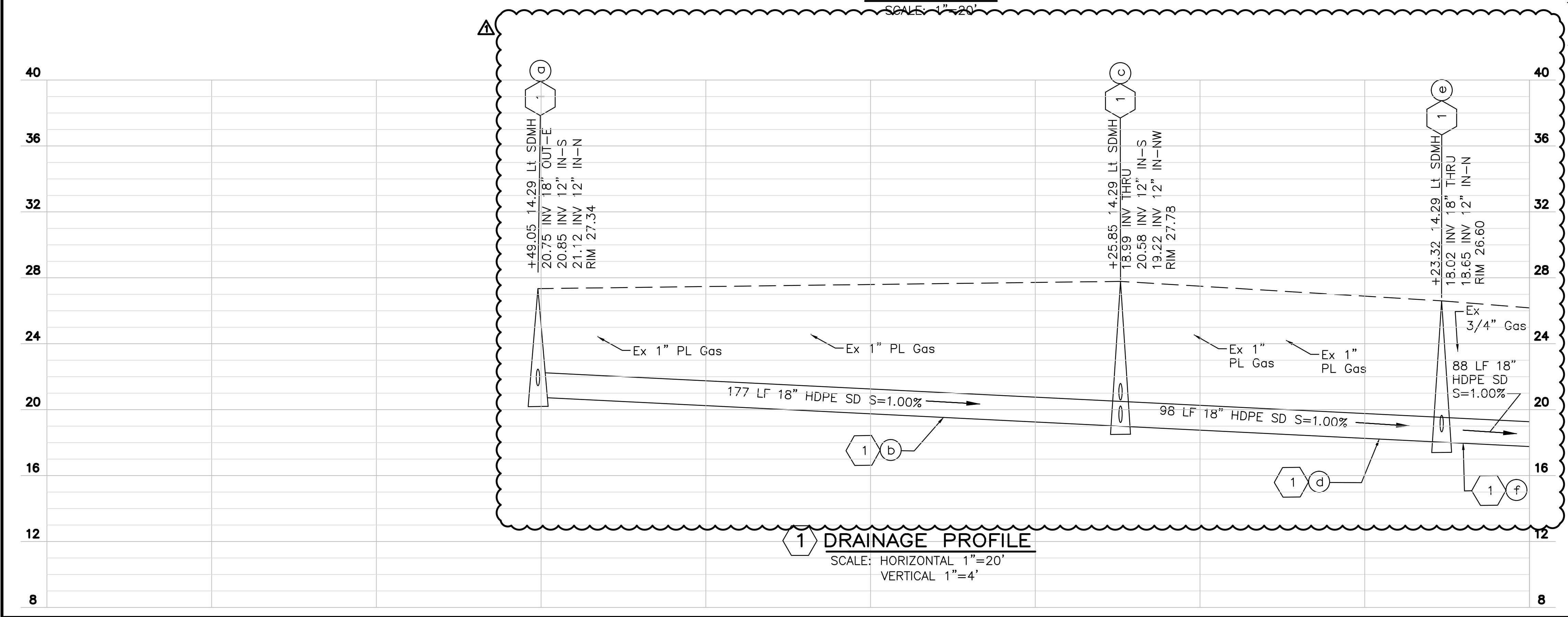
ITEMS OF WORK:

- 1** PROTECT WATER VALVE IN PLACE
- 2** CONNECT WITH 22.5° BEND AND THRUST BLOCK **2** CD-1
- 3** EXTEND FIRE HYDRANT PER DIABLO WATER DISTRICT DWD 15, SEE DETAIL **1** CD-2 **2** CD-1 **3** CD-1

DRAWING NAME: K:\2017\16\16084-10\16084-10.dwg PLOTTED BY: JRM



PLAN
SCALE: 1"=20'



1 DRAINAGE PROFILE
SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=4'

NOTES:

- FOR GENERAL NOTES, LEGENDS, AND ABBREVIATIONS, SEE SHEET GN-1.
- FOR GEOMETRY OF CONTROL LINE, SEE KEY MAP.
- THIS PLAN IS ACCURATE FOR EXISTING AND PROPOSED STORM DRAIN ONLY.
- ALL INLETS SHALL BE INSTALLED TO EXISTING GRADE EXCEPT WHERE OTHERWISE NOTED. INLET CALLOUTS ARE TO FACE OF CURB/BACK OF GRATE. SEE DETAIL **3 CD-4**
- CONTRACTOR TO POTHOLE ALL EXISTING UNDERGROUND UTILITIES AT ALL STORM DRAIN CROSSINGS AND PROVIDE POTHOLE DATA, WITH ANY CONFLICTS IDENTIFIED TO THE CITY ENGINEER BEFORE CONSTRUCTION.
- EXISTING UTILITIES SHOWN FOR REFERENCE ONLY. REFER TO UTILITY PLAN (U-1 TO U-3) FOR EXISTING UTILITY INFORMATION.
- FOR RELEVANT CITY OF OAKLEY, CONTRA COSTA COUNTY AND CALTRANS STANDARDS, SEE CD SHEETS.
- ALL GRADING INFORMATION REFERENCES THE MS LINE. GRADING NOT REFERENCING MS LINE, WILL BE LABEL ACCORDINGLY ON PLAN.
- FOR INLETS SHOWN ON THE PLANS TO BE RELOCATED, THE CONTRACTOR SHALL REMOVE EXISTING INLETS, BACKFILL WITH NATIVE MATERIAL AND ABANDON LATERAL CONNECTION. CONTRACTOR SHALL CONSTRUCT NEW INLET WITH NEW LATERAL CONNECTION AT LOCATION SHOWN ON THE PLAN. IF IN CURB LINE THEN PLACE TEMPORARY AC CURB. BACKFILL WITH NATIVE SOIL. ABANDONED LATERAL TO BE BACKFILLED WITH SLURRY AT BOTH MANHOLE AND INLET LOCATIONS.
- TRENCHING SHALL CONFORM TO CONTRA COSTA COUNTY STORM DRAIN TRENCH DETAILS CD01, SEE **5 CD-2**

LEGEND:

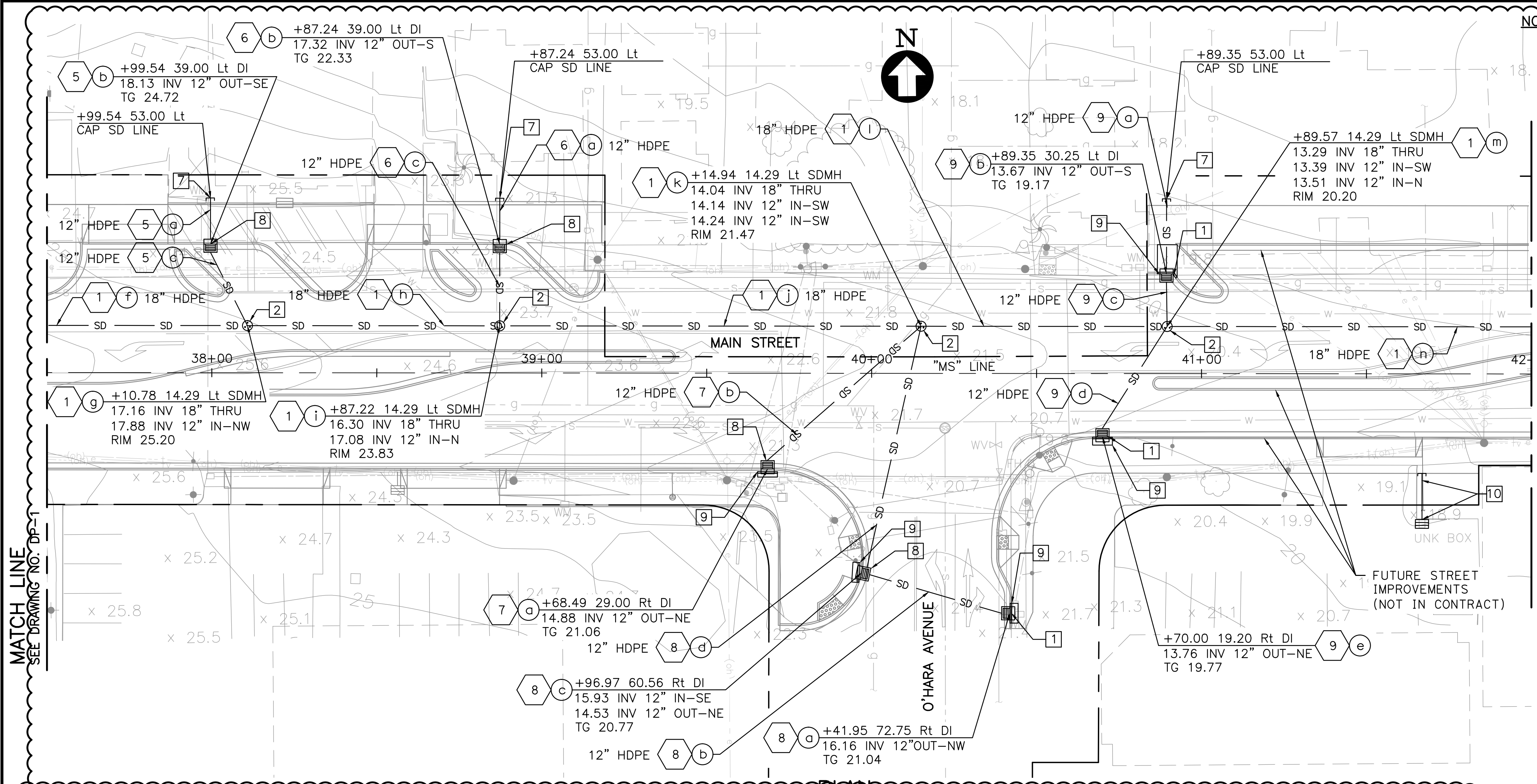
- RIGHT OF WAY
- sd- Exist STORM DRAIN LINE (SEE PLAN FOR SIZE)
- ⊞ Exist STORM DRAIN INLET
- ⊞ Exist STORM DRAIN INLET TO BE REMOVED
- ⊙ Exist STORM DRAIN MANHOLE
- SD PROPOSED STORM DRAIN LINE (SEE PLAN FOR SIZE)
- /// ABANDON STORM DRAIN LINE
- ⊞ PROPOSED STORM DRAIN INLET
- 1 DRAINAGE SYSTEM NUMBER
- ⊙ DRAINAGE STRUCTURE DESIGNATION
- ↑ PROPOSED STORM DRAIN STUB

ITEMS OF WORK

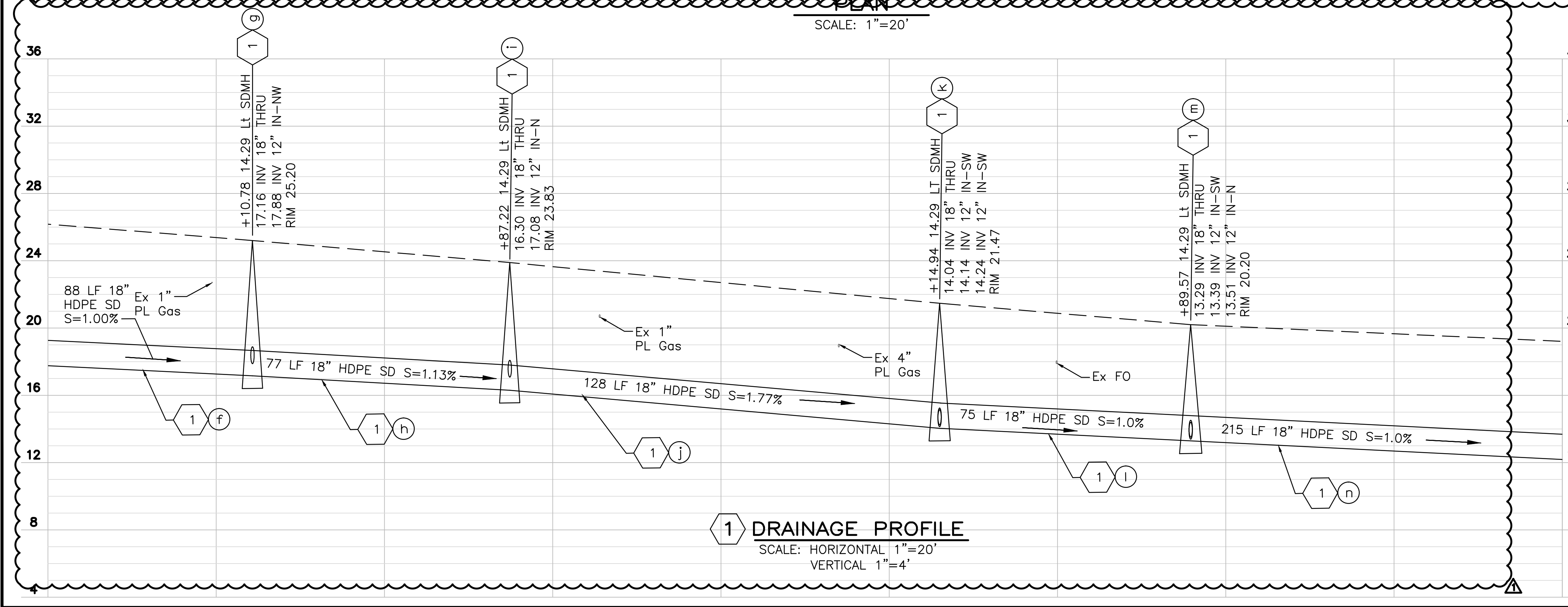
- INSTALL TYPE G4 DRAINAGE INLET PER CALTRANS STANDARD PLAN D73A, USE GRATE 24-13 SEE DETAIL **2 CD-3** **3 CD-3** **4 CD-3**
- INSTALL SDMh PER CONTRA COSTA COUNTY STANDARD PLAN CD30 SEE DETAIL **1 CD-3**
- RELOCATE EXISTING DRAINAGE INLET SEE NOTE 9
- INSTALL INLET BELOW EXISTING SIDEWALK AND PLACE TEMPORARY HMA PAVEMENT OVER INLET, SEE DETAIL **2 CD-4**
- CONNECT TO EXISTING SDMh
- CONNECT TO EXISTING DRAINAGE INLET
- CAP 12" SD LINE
- INSTALL TYPE G2 DRAINAGE INLET PER CALTRANS STANDARD PLAN D73A, USE GRATE 24-13 SEE DETAIL **2 CD-3** **3 CD-3** **4 CD-3**
- PLACE TEMPORARY HMA CURB & PLACE HMA TEMPORARY PAVEMENT
- INSTALL INLET AND CURB DRAIN PIPE, SEE DETAIL **1 CD-4**

DRAWING NAME: K:\2015\17084_001\17084-DRAINAGE\17084-DRAINAGE.dwg
DATE PLOTTED: 06/07/16
PLOT BY: JRM

Date: 06/07/16
Scale: AS NOTED
Design: TM
Drawn: AH
Approved: MC
Job No: 2017084-10



PLAN
SCALE: 1"=20'



1 DRAINAGE PROFILE
SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=4'

- NOTES:**
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 - TRENCHING SHALL CONFORM TO CONTRA COSTA COUNTY STORM DRAIN TRENCH DETAILS CD01, SEE **5** CD-2

- LEGEND:**
- RIGHT OF WAY
 - sd- Exist STORM DRAIN LINE (SEE PLAN FOR SIZE)
 - ≡ Exist STORM DRAIN INLET
 - ⊗ Exist STORM DRAIN INLET TO BE REMOVED
 - ⊙ Exist STORM DRAIN MANHOLE
 - SD PROPOSED STORM DRAIN LINE (SEE PLAN FOR SIZE)
 - /// ABANDON STORM DRAIN LINE
 - ≡ PROPOSED STORM DRAIN INLET
 - ① DRAINAGE SYSTEM NUMBER
 - ⊙ DRAINAGE STRUCTURE DESIGNATION
 - ↑ PROPOSED STORM DRAIN STUB

- ITEMS OF WORK**
- INSTALL TYPE G4 DRAINAGE INLET PER CALTRANS STANDARD PLAN D73A, USE GRATE 24-13 SEE DETAIL **2** CD-3 **3** CD-3 **4** CD-3
 - INSTALL SDMH PER CONTRA COSTA COUNTY STANDARD PLAN CD30 SEE DETAIL **1** CD-3
 - RELOCATE EXISTING DRAINAGE INLET SEE NOTE 9
 - INSTALL INLET BELOW EXISTING SIDEWALK AND PLACE TEMPORARY HMA PAVEMENT OVER INLET, SEE DETAIL **2** CD-4
 - CONNECT TO EXISTING SDMH
 - CONNECT TO EXISTING DRAINAGE INLET
 - CAP 12" SD LINE
 - INSTALL TYPE G2 DRAINAGE INLET PER CALTRANS STANDARD PLAN D73A, USE GRATE 24-13 SEE DETAIL **2** CD-3 **3** CD-3 **4** CD-3
 - PLACE TEMPORARY HMA CURB & PLACE HMA TEMPORARY PAVEMENT
 - INSTALL INLET AND CURB DRAIN PIPE, SEE DETAIL **1** CD-4

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DATE PLOTTED: 06/07/16
PLOT BY: BKH

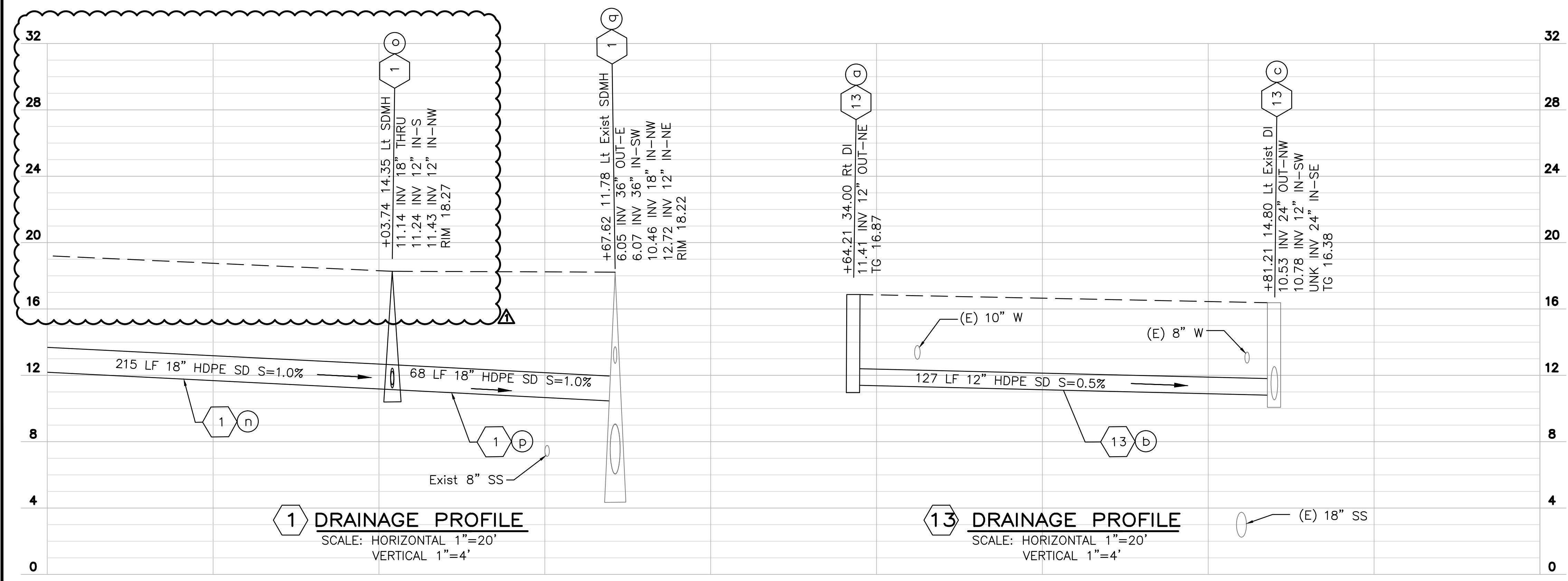
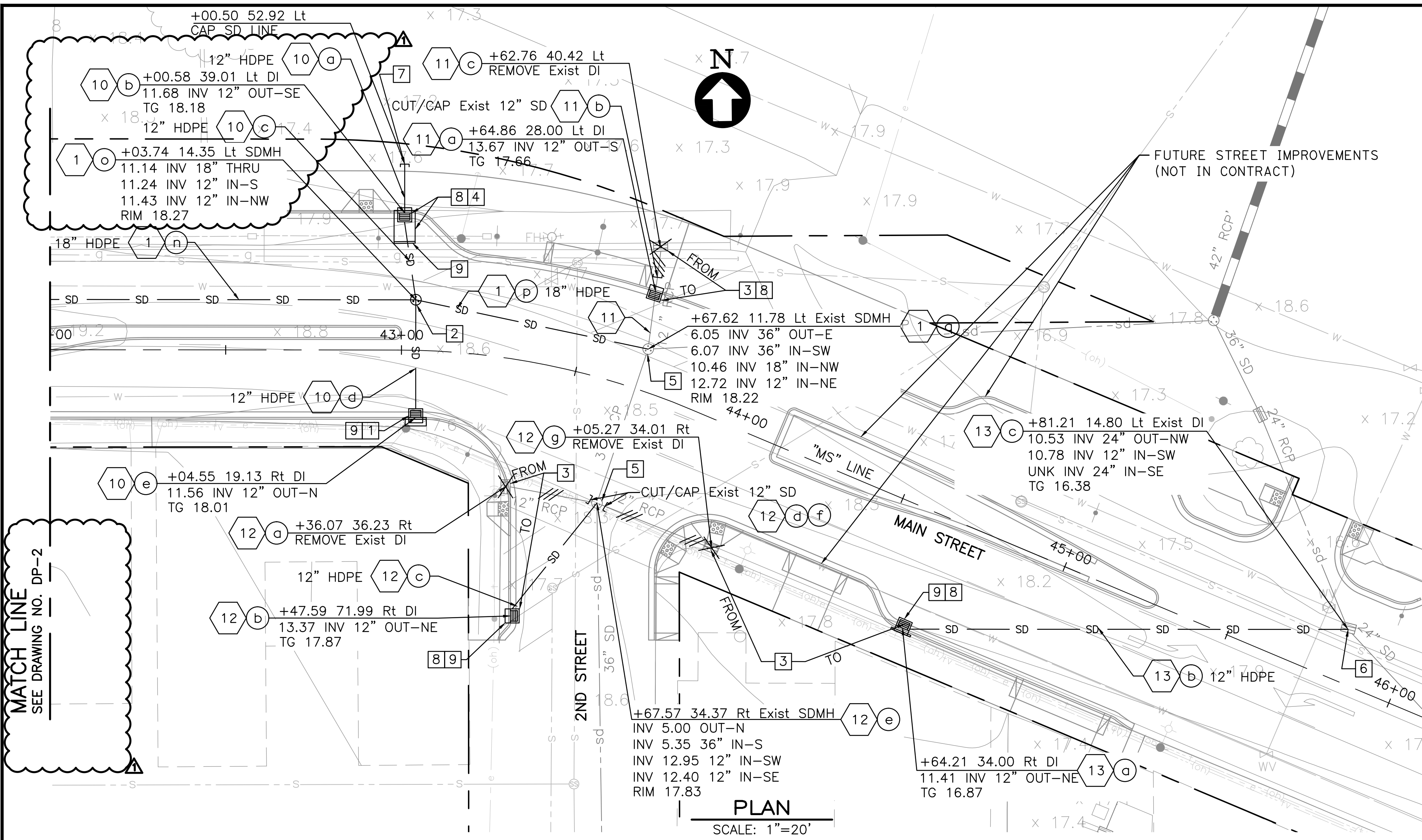
- NOTES:**
- FOR GENERAL NOTES, LEGENDS, AND ABBREVIATIONS, SEE SHEET GN-1.
 - FOR GEOMETRY OF CONTROL LINE, SEE KEY MAP.
 - THIS PLAN IS ACCURATE FOR EXISTING AND PROPOSED STORM DRAIN ONLY.
 - ALL INLETS SHALL BE INSTALLED TO EXISTING GRADE EXCEPT WHERE OTHERWISE NOTED. INLET CALLOUTS ARE TO FACE OF CURB/BACK OF GRATE. SEE DETAIL **3** CD-4
 - CONTRACTOR TO POTHOLE ALL EXISTING UNDERGROUND UTILITIES AT ALL STORM DRAIN CROSSINGS AND PROVIDE POTHOLE DATA, WITH ANY CONFLICTS IDENTIFIED TO THE CITY ENGINEER BEFORE CONSTRUCTION.
 - EXISTING UTILITIES SHOWN FOR REFERENCE ONLY. REFER TO UTILITY PLAN (U-1 TO U-3) FOR EXISTING UTILITY INFORMATION.
 - FOR RELEVANT CITY OF OAKLEY, CONTRA COSTA COUNTY AND CALTRANS STANDARDS, SEE CD SHEETS.
 - ALL GRADING INFORMATION REFERENCES THE MS LINE. GRADING NOT REFERENCING MS LINE, WILL BE LABEL ACCORDINGLY ON PLAN.
 - FOR INLETS SHOWN ON THE PLANS TO BE RELOCATED, THE CONTRACTOR SHALL REMOVE EXISTING INLETS, BACKFILL WITH NATIVE MATERIAL AND ABANDON LATERAL CONNECTION. CONTRACTOR SHALL CONSTRUCT NEW INLET WITH NEW LATERAL CONNECTION AT LOCATION SHOWN ON THE PLAN. IF IN CURB LINE THEN PLACE TEMPORARY AC CURB. BACKFILL WITH NATIVE SOIL. ABANDONED LATERAL TO BE BACKFILLED WITH SLURRY AT BOTH MANHOLE AND INLET LOCATIONS.
 - TRENCHING SHALL CONFORM TO CONTRA COSTA COUNTY STORM DRAIN TRENCH DETAILS CD01, SEE **5** CD-2

LEGEND:

- RIGHT OF WAY
- sd- Exist STORM DRAIN LINE (SEE PLAN FOR SIZE)
- ≡ Exist STORM DRAIN INLET
- ⊗ Exist STORM DRAIN INLET TO BE REMOVED
- ⊙ Exist STORM DRAIN MANHOLE
- SD PROPOSED STORM DRAIN LINE (SEE PLAN FOR SIZE)
- /// ABANDON STORM DRAIN LINE
- ≡ PROPOSED STORM DRAIN INLET
- ① DRAINAGE SYSTEM NUMBER
- ⊙ DRAINAGE STRUCTURE DESIGNATION
- ↑ PROPOSED STORM DRAIN STUB

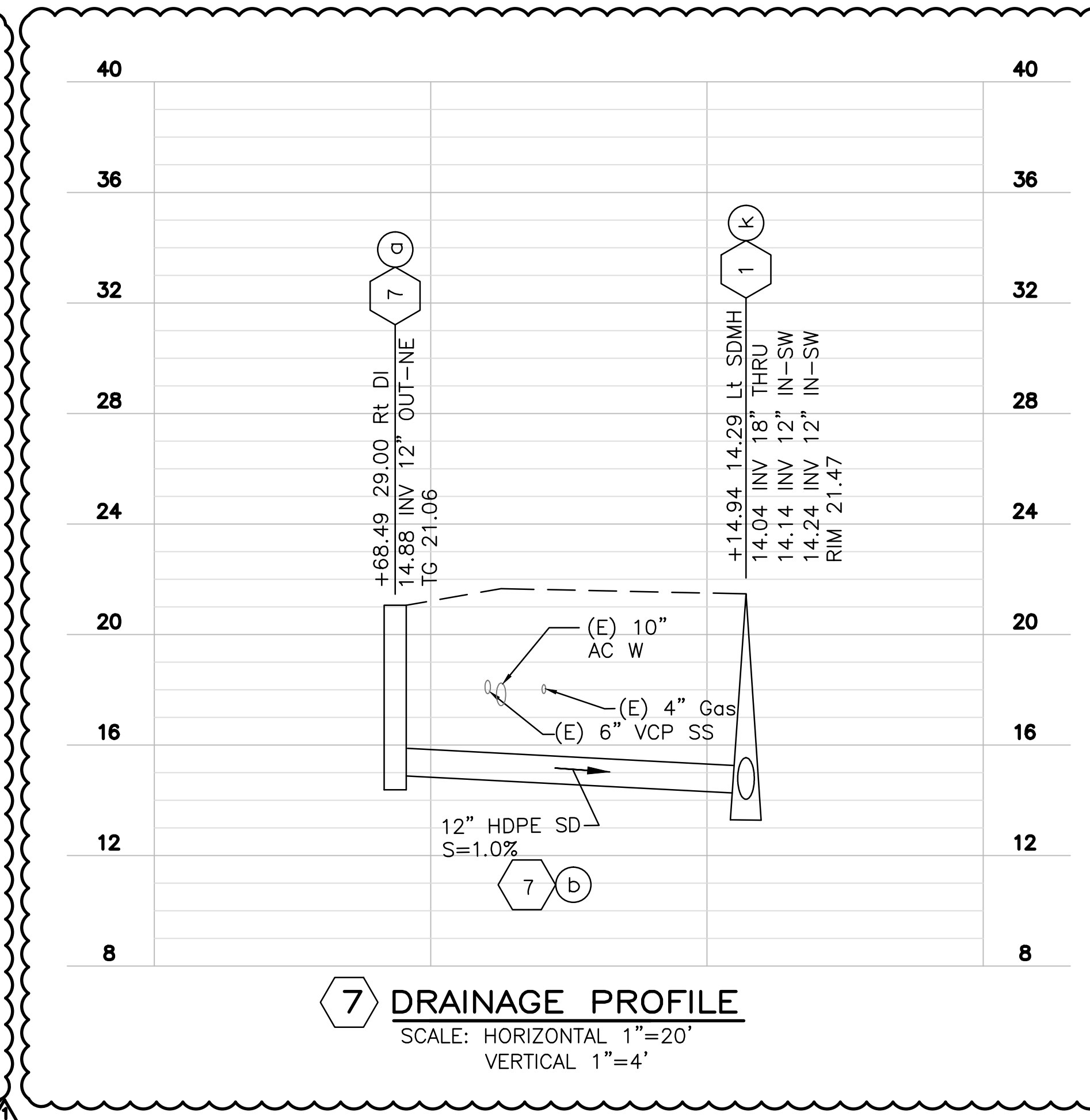
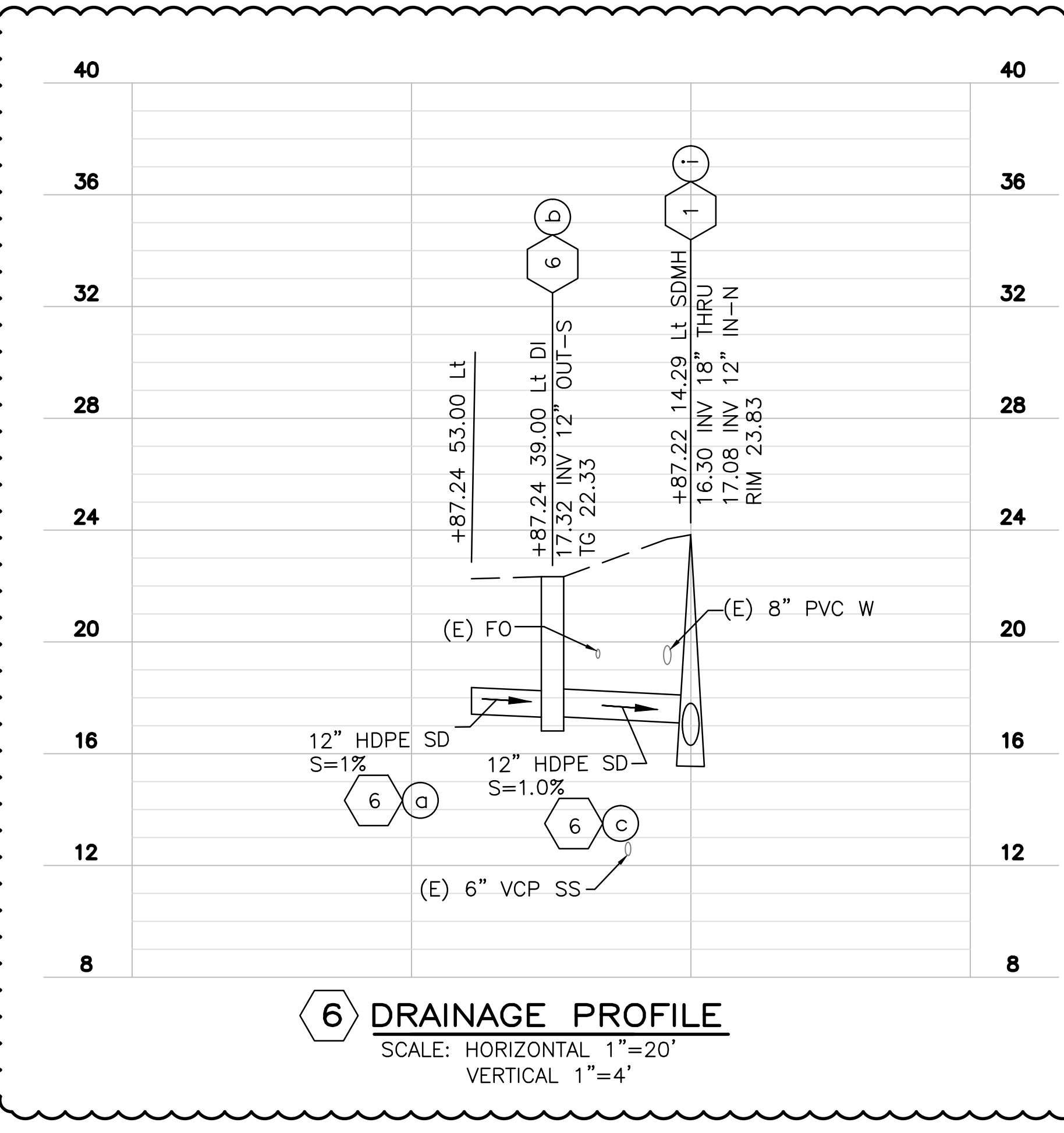
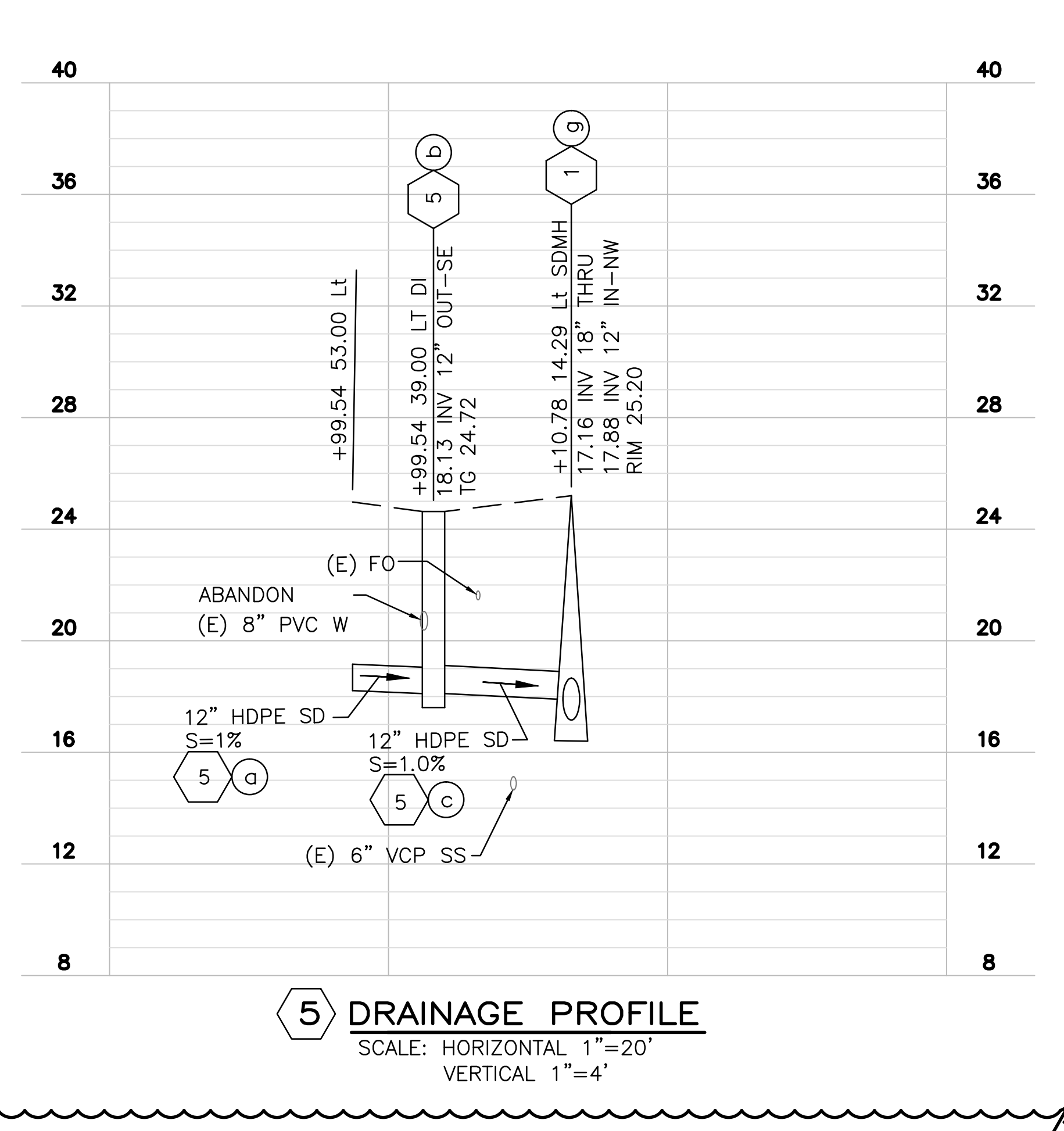
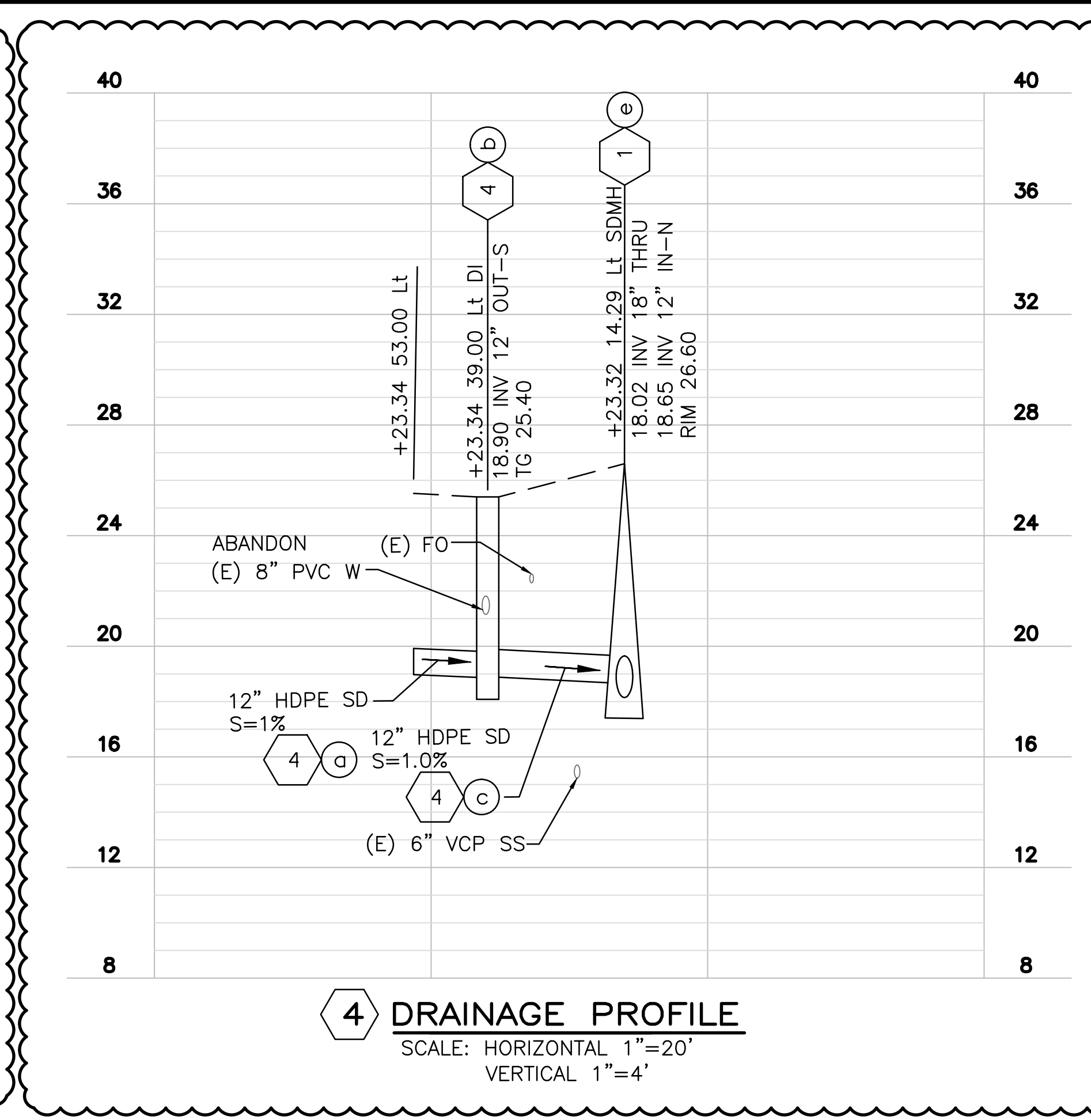
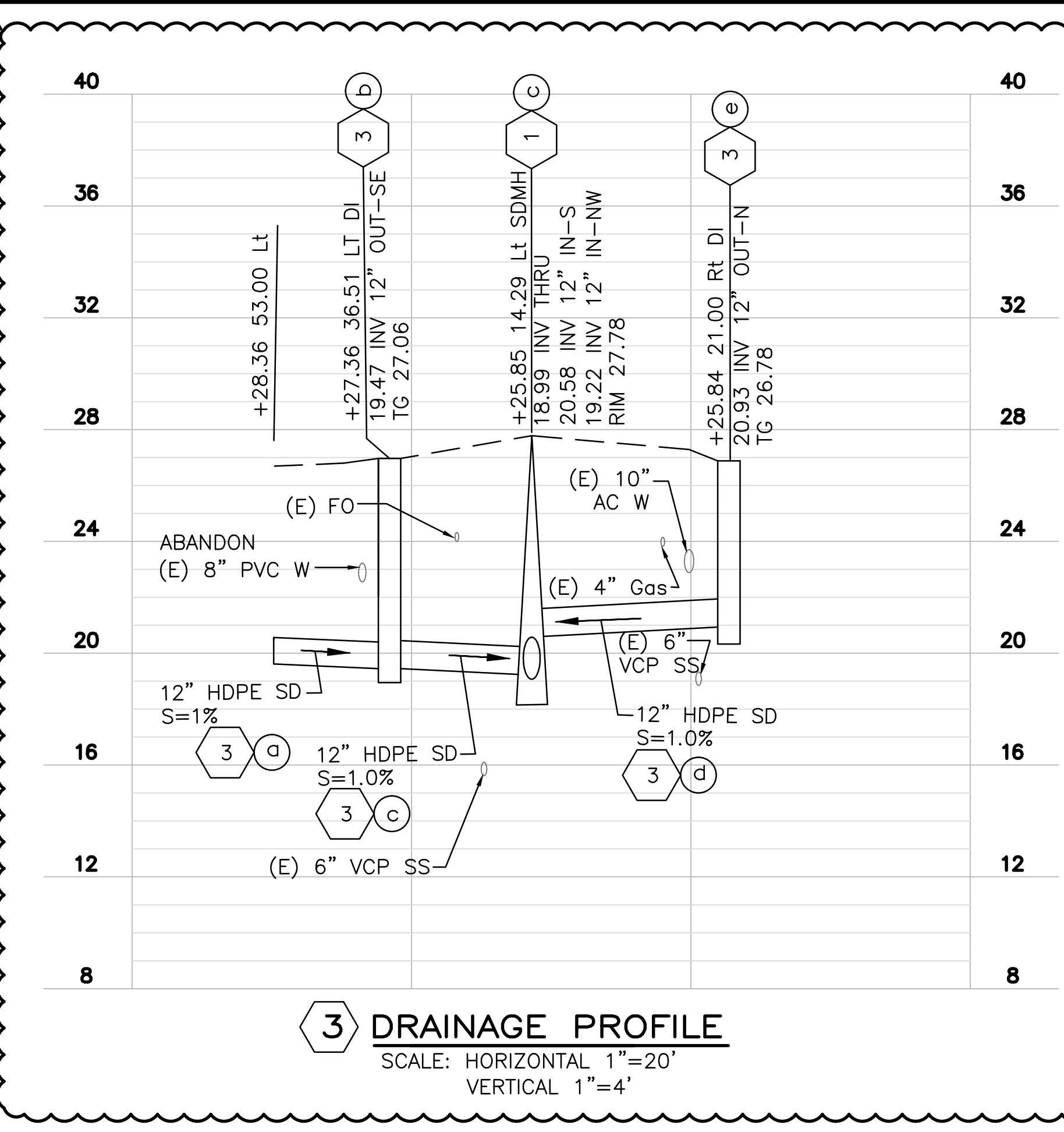
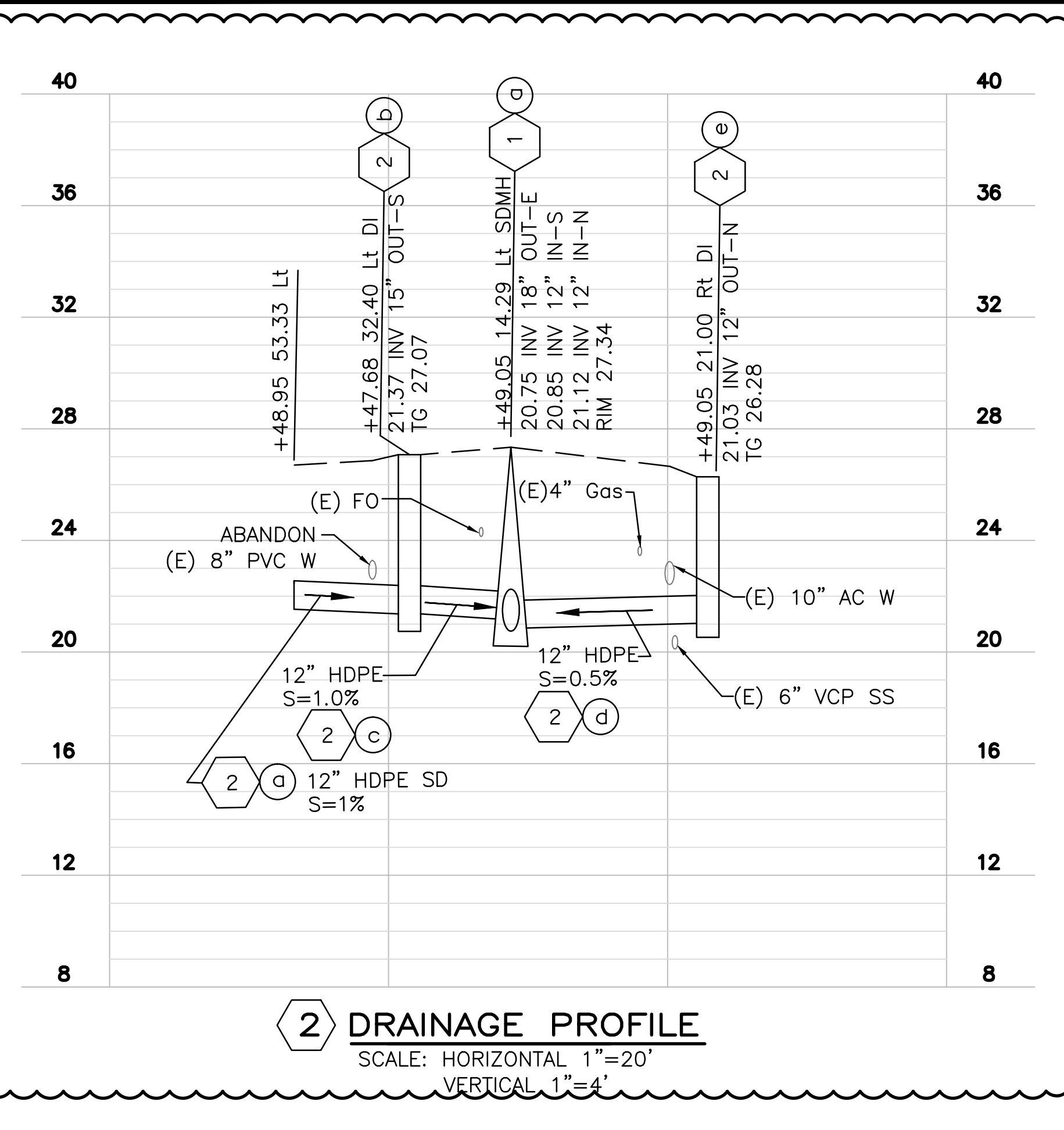
ITEMS OF WORK

- INSTALL TYPE G4 DRAINAGE INLET PER CALTRANS STANDARD PLAN D73A, USE GRATE 24-13 SEE DETAIL **2** CD-3 **3** CD-3 **4** CD-3
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- CONNECT TO EXISTING SDMH
- CONNECT TO EXISTING DRAINAGE INLET
- CAP 12" SD LINE
- INSTALL TYPE G2 DRAINAGE INLET PER CALTRANS STANDARD PLAN D73A, USE GRATE 24-13 SEE DETAIL **2** CD-3 **3** CD-3 **4** CD-3
- PLACE TEMPORARY HMA CURB & PLACE HMA TEMPORARY PAVEMENT
- INSTALL INLET AND CURB DRAIN PIPE, SEE DETAIL **1** CD-4

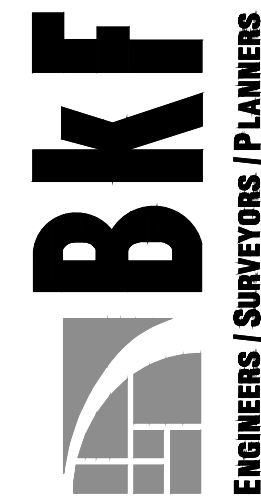


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DESIGN: TM
DRAWN: AH
APPROVED: MC
JOB NO: 2017084-10

Date: 06/07/16	Revisions
Scale: AS NOTED	APPENDIX No. 1
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Drawn: AH	
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Job No: 2017084-10	



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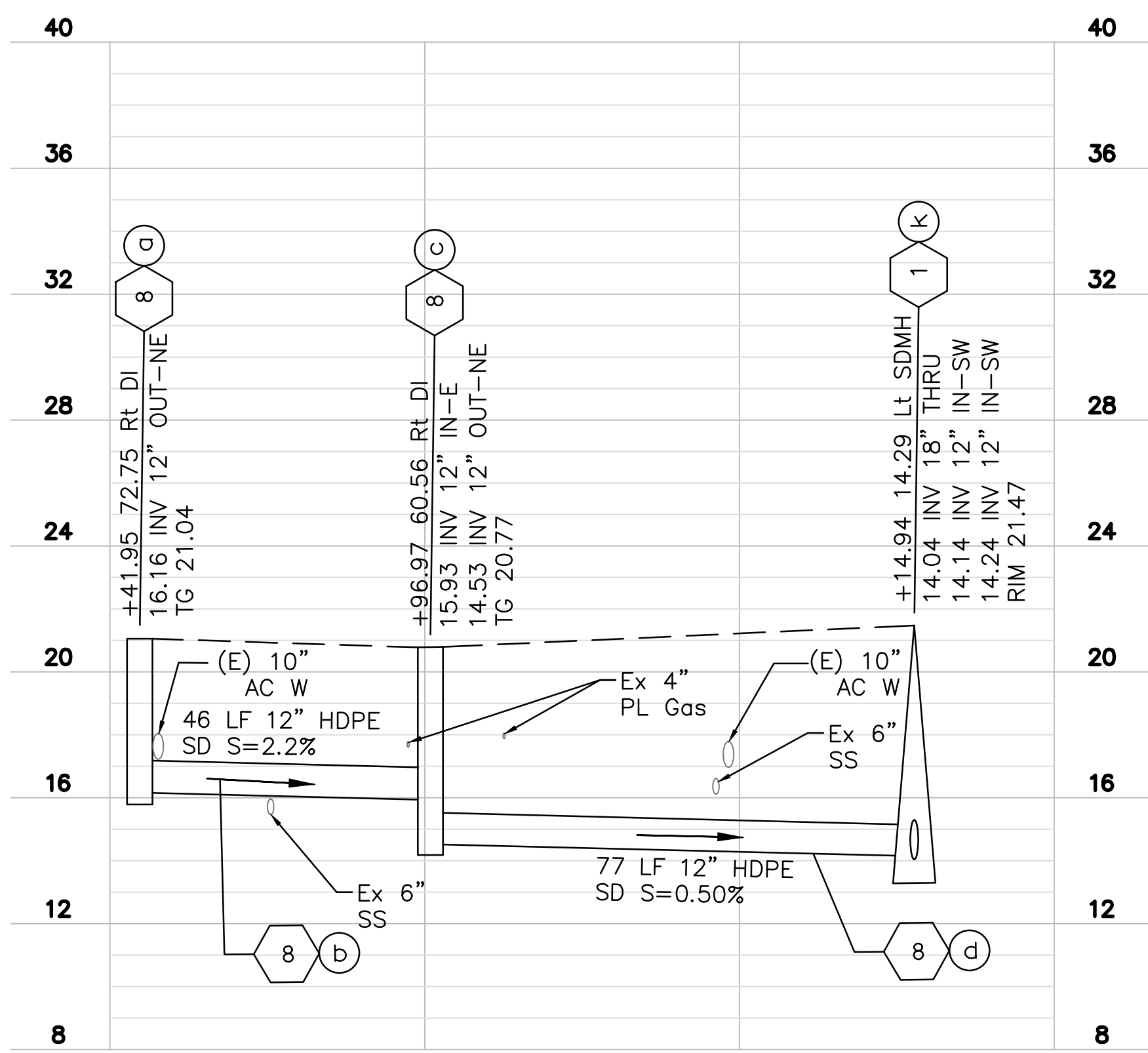


ENGINEERS / SURVEYORS / PLANNERS

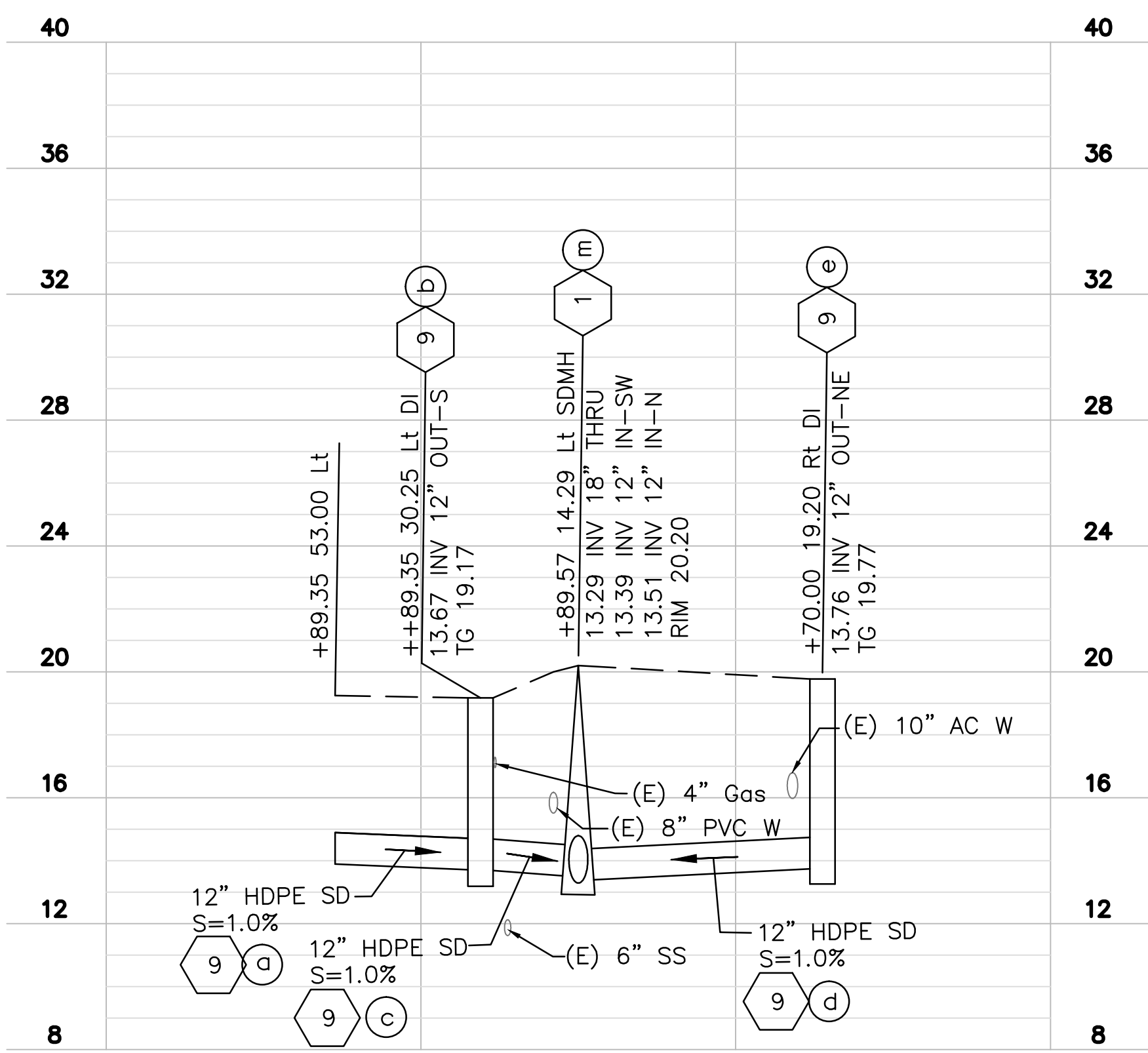


MAIN STREET
DOWNTOWN UTILITY IMPROVEMENTS
DRAINAGE PROFILES
OAKLEY CONTRA COSTA COUNTY CALIFORNIA

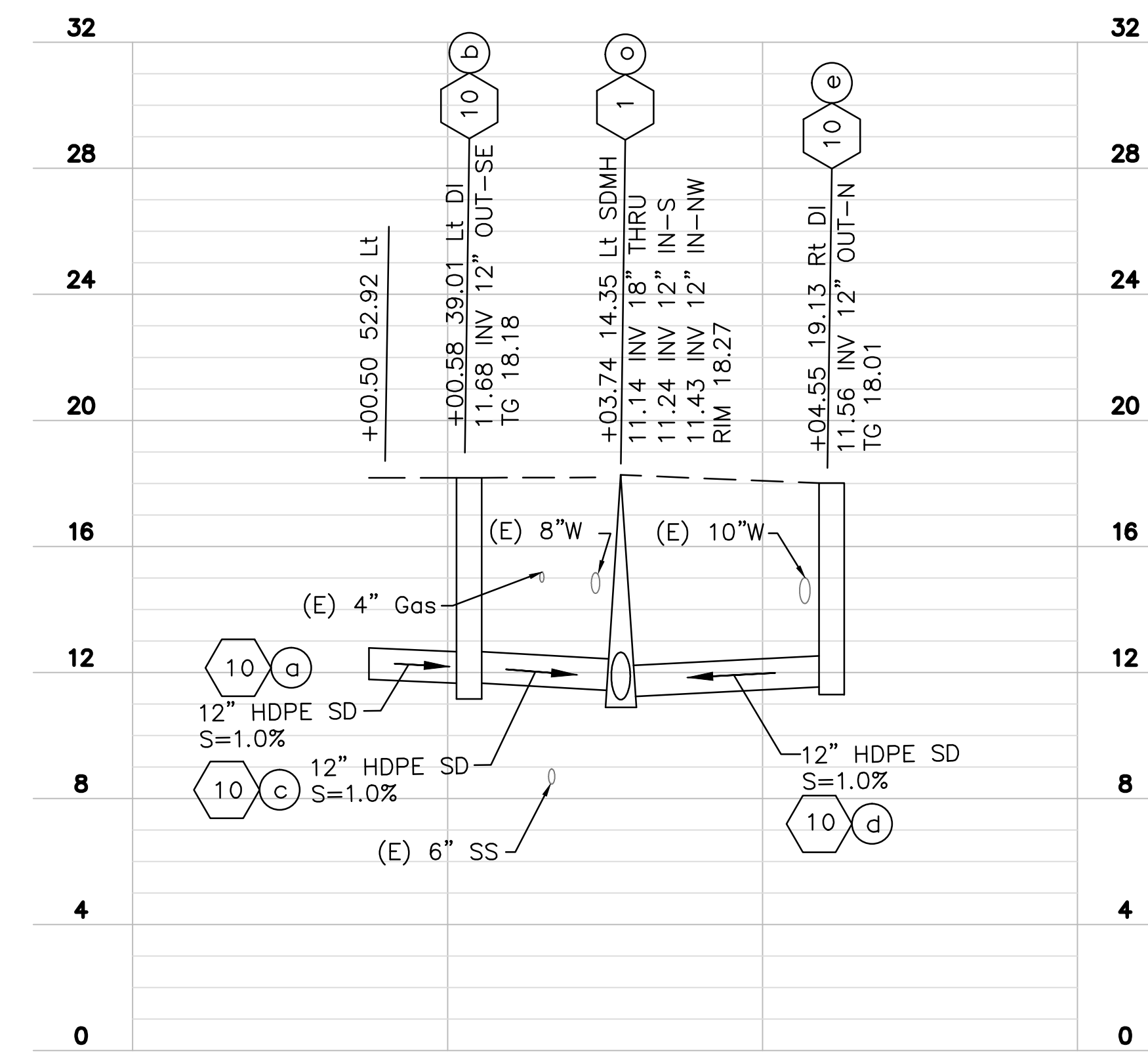
Date: 06/07/16	No.	Revisions
Scale: AS NOTED	ADDENDUM No. 1	
Design: TM		
Drawn: AH		
Approved: MC		
Job No: 2017084-10		



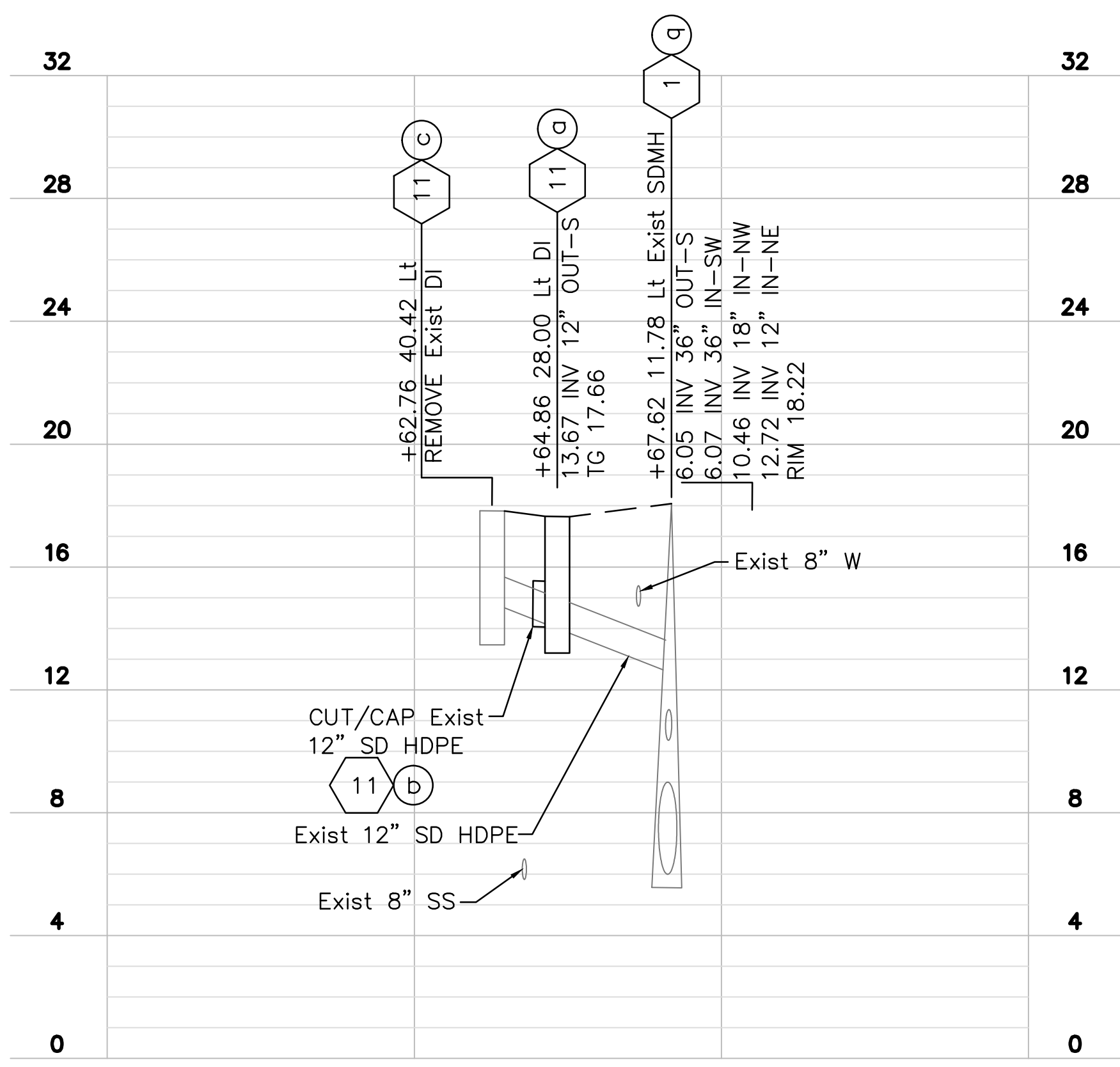
8 DRAINAGE PROFILE
SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=4'



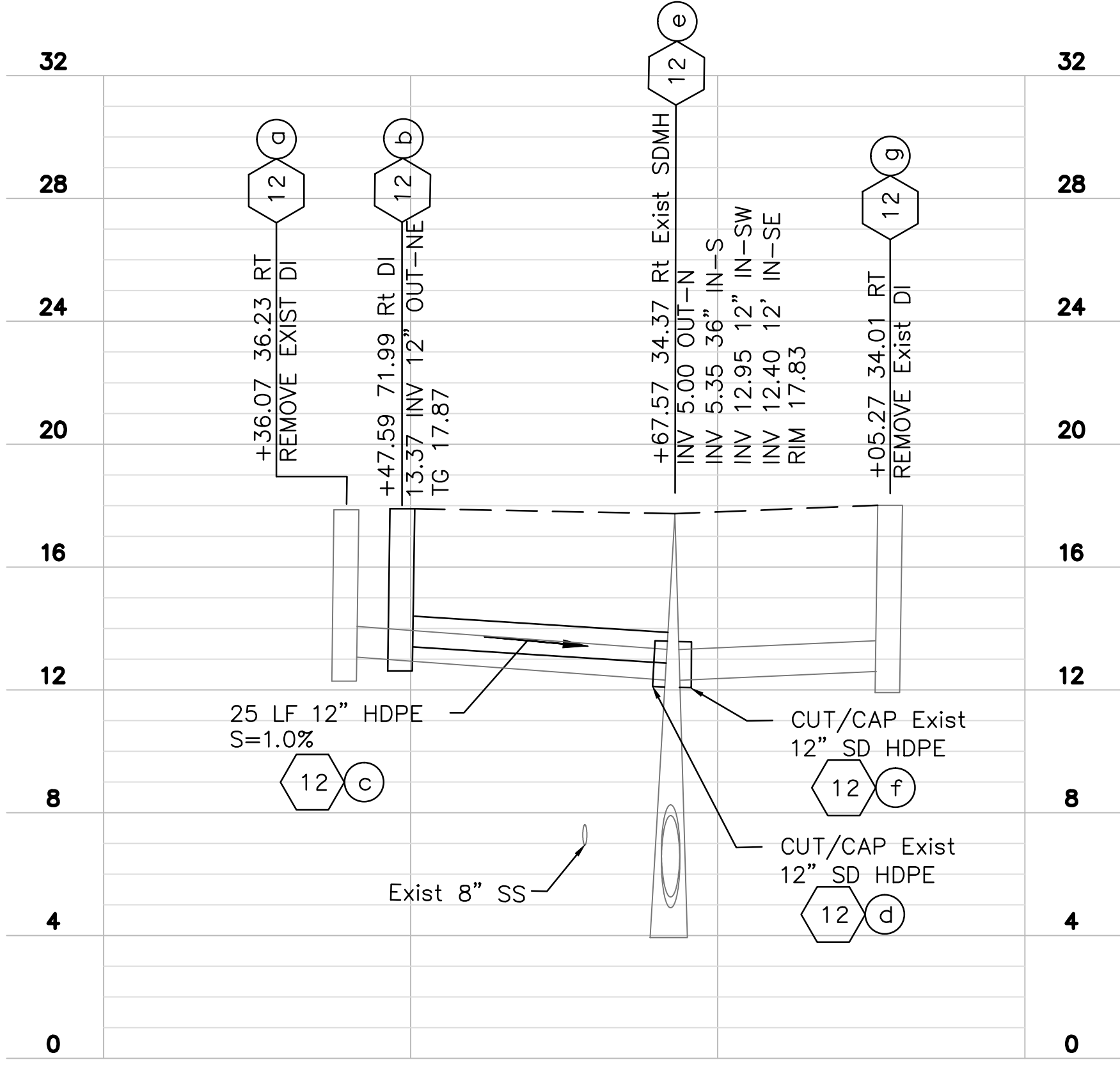
9 DRAINAGE PROFILE
SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=4'



10 DRAINAGE PROFILE
SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=4'



11 DRAINAGE PROFILE
SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=4'

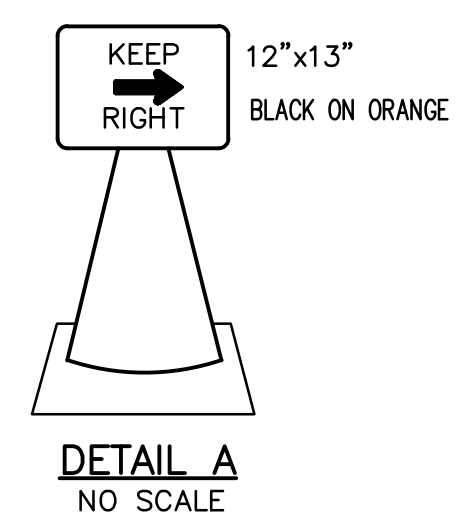
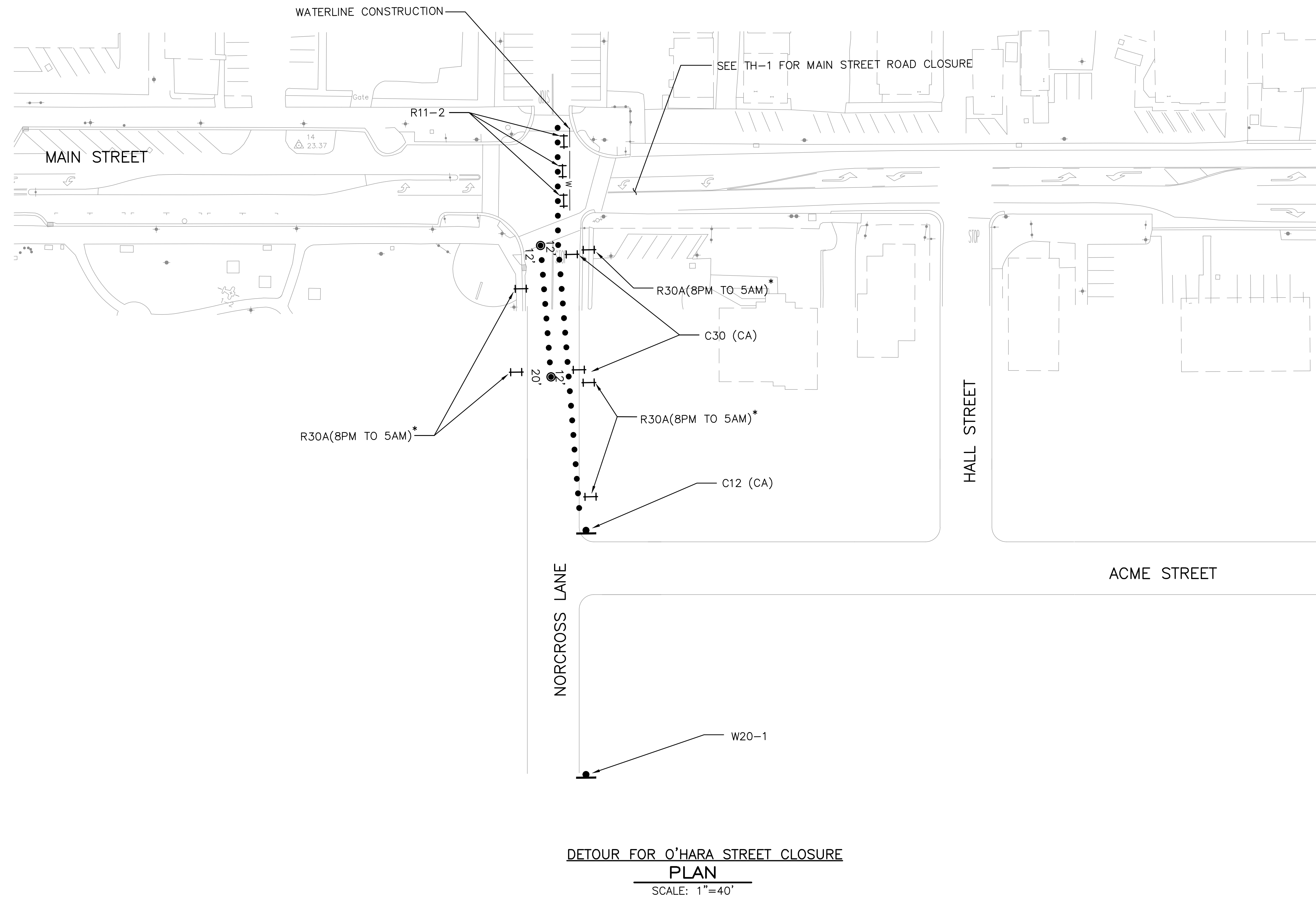


12 DRAINAGE PROFILE
SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=4'

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DATE: 06/07/16
DRAWN BY: TM

NOTES:

1. LOCATIONS OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. ALL ROADSIDE SIGNS ARE BASED ON THE 2014 CALIFORNIA MUTCD.
3. THIS TRAFFIC HANDLING PLAN IS ONLY APPLICABLE FOR THE WATERLINE CONSTRUCTION AT THE INTERSECTION OF MAIN STREET AND NORCROSS LANE DURING WORKING HOURS OF 9:00 PM TO 5:00 AM (NIGHTTIME) IN CONJUNCTION WITH THE UNDERGROUND UTILITIES CONSTRUCTION DURING MAIN STREET CLOSURE SHOWN ON SHEET TH-1. OUTSIDE OF WORKING HOURS TRAFFIC SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION WITH ALL LANES OPEN, AND STEEL PLATES COVERING ALL THE TRENCHES. ALL CONSTRUCTION SIGNS ON THIS DETOUR PLAN REMAINING ON SITE SHALL BE COVERED, UNLESS OTHERWISE NOTED, DURING NON-CONSTRUCTION HOURS.



LEGEND:

- INSTALL TEMPORARY ROADSIDE SIGN
- + TYPE III BARRICADE (LIGHTED)
- * SIGN NOT TO BE COVERED DURING NON-CONSTRUCTION HOURS
- • • DOUBLE BASED CHANNELIZERS AT 10' OC UNLESS OTHERWISE NOTED ON PLAN (MIN. 28" IN HEIGHT)
- ⊙ SIGN MOUNTED ON CONE. SEE DETAIL A ON THIS SHEET

DETOUR FOR O'HARA STREET CLOSURE
PLAN
SCALE: 1"=40'

DRAWING NAME: K:\3145\3145.dwg DATE PLOTTED: 06/07/16 PLOTTED BY: KEN

Revisions	
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