

RECLAMATION

Managing Water in the West

Categorical Exclusion Checklist

Sewer Line Crossing- Contra Costa Canal at Milepost 41.2

CEC-13-069

Prepared by:


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Natural Resources Specialist
South-Central California Area Office

Date: 4-2-15

Concurred by:

See Attachment
Archaeologist
Mid-Pacific Regional Office

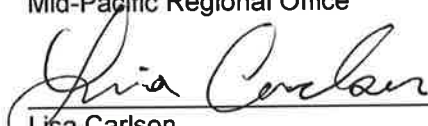
Date: See Attachment

Concurred by:

See Attachment
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Mid-Pacific Regional Office

Date: See Attachment

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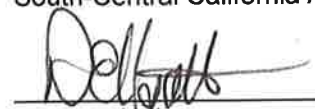
Date: 4/6/2015

Concurred by:


Rain Emerson
Supervisory Natural Resources Specialist
South-Central California Area Office

Date: 04/13/2015

Approved by:


Michael Jackson
Area Manager
South-Central California Area Office

Date: 4-14-15



Background

The Central Contra Costa Sanitary District is responsible for operating, cleaning and maintaining sewer infrastructure within their service area, which includes the City of Pleasant Hill. Central Contra Costa Sanitary District has determined that the existing Westover Drive sewer line, which services the Pleasant Hill neighborhood, is capacity-deficient, shallow, and needs to be upgraded to meet the needs of their customers in the area. The Central Contra Costa Sanitary District proposes to install additional capacity, involving approximately 12,000 feet of larger-capacity pipe.

The existing 6-inch sewer line crosses the Contra Costa Canal (Canal) at approximately Milepost 41.2, under an expired authorization from the Bureau of Reclamation (Reclamation). Central Contra Costa Sanitary District has asked Reclamation for a new authorization, covering the existing line as well as installation, operation and maintenance of an additional 18-inch line.

Purpose and Need for Action

The existing 6-inch sewer line to Pleasant Hill does not have enough capacity to serve the residents. Central Contra Costa Sanitary District's authorization for the sewer line crossing of the Canal has also expired. The Central Contra Costa Sanitary District needs Reclamation's permission to install and operate an additional, larger-diameter sewer line, to meet the needs of their customers.



Figure 1 Project Location

Proposed Action

Reclamation proposes to issue a temporary construction permit in advance of easement for the Central Contra Costa Sanitary District to install, operate and maintain an upgraded sewer line beneath the Canal at approximately milepost 41.2. Authorization for the existing 6-inch sewer line would also be renewed.

The full extent of work by Central Contra Costa Sanitary District in the Pleasant Hill area is shown in Attachment A. Construction would involve the installation of approximately 12,000 feet of 15, 18, and 24-inch sewers by open-cut, pilot tube guided boring and horizontal directional drilling construction methods. The work would include trenching, shoring, installing/modifying manholes, and asphalt paving.

A boring pit (16 feet by 8 feet) would be needed on the west side of the Canal and a receiving pit (8 feet by 8 feet) would be used on the east side. Following boring, Central Contra Costa Sanitary District would install a 36-inch steel casing containing the new 18-inch sewer line. The new casing would be 6 to 7 feet below the Canal siphon.

Work would take place during the summer of 2015. Equipment would involve pickup trucks, concrete trucks, backhoe excavator, and drill rig. Approximately 12 cubic yards of excavated soil would be removed as a result of the jack and bore construction, and deposited at a qualified landfill by the contractor.

Environmental Commitments

Central Contra Costa Sanitary District would implement the following environmental commitments to avoid any environmental consequences associated with the Proposed Action (Table 1). Environmental consequences for resource areas assume the measures specified would be fully implemented.

Table 1 Environmental Commitments

Resource	Protection Measure
Biological Resources	To prevent inadvertent entrapment of listed species and other wildlife during construction, all excavated steep-walled holes or trenches more than 1 foot deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such trenches or holes are filled, they must be thoroughly inspected for trapped animals.
Biological Resources	All food-related trash items such as wrappers, cans, bottles, and food scraps must be disposed of in closed containers and removed at least once every day from the action area.
Biological Resources	If work on the project must occur during the bird breeding season (February 1 to August 31), a qualified biologist shall conduct nesting bird surveys in trees and large shrubs immediately adjacent to the Proposed Action Area. If a nesting migratory bird is found: (1) no construction on the Proposed Action shall occur within 300 feet of the nest until the young have fledged or until a qualified biologist determines the nest is no longer active or (2) The qualified biologist may contact Reclamation to determine if construction may proceed with a smaller avoidance buffer. All survey documentation shall be submitted to Reclamation prior to the start of construction.

Resource	Protection Measure
Cultural Resources	Archaeological monitoring shall be required during all ground-disturbing activities, in accordance with the monitoring plan described in Attachment B.

Exclusion Category

516 DM 14.5 paragraph D (10): *Issuance of permits, licenses, easements, and crossing agreements which provide right-of-way over Bureau lands where the action does not allow for or lead to a major public or private action.*

Evaluation of Criteria for Categorical Exclusion:

- | | | | |
|---|---|---------------------------------------|---------------------------------|
| 1. This action would have a significant effect on the quality of the human environment (40 CFR 1502.3). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 2. This action would have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA Section 102(2)(E) and 43 CFR 46.215(c)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 3. This action would have significant impacts on public health or safety (43 CFR 46.215(a)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 4. This action would have significant impacts on such natural resources and unique geographical characteristics as historic or cultural resources; parks, recreation, and refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (EO 11990); flood plains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas (43 CFR 46.215 (b)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 5. This action would have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks (43 CFR 46.215(d)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 6. This action would establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects (43 CFR 46.215 (e)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 7. This action would have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects (43 CFR 46.215 (f)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 8. This action would have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by Reclamation (LND 02-01) (43 CFR 46.215 (g)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |

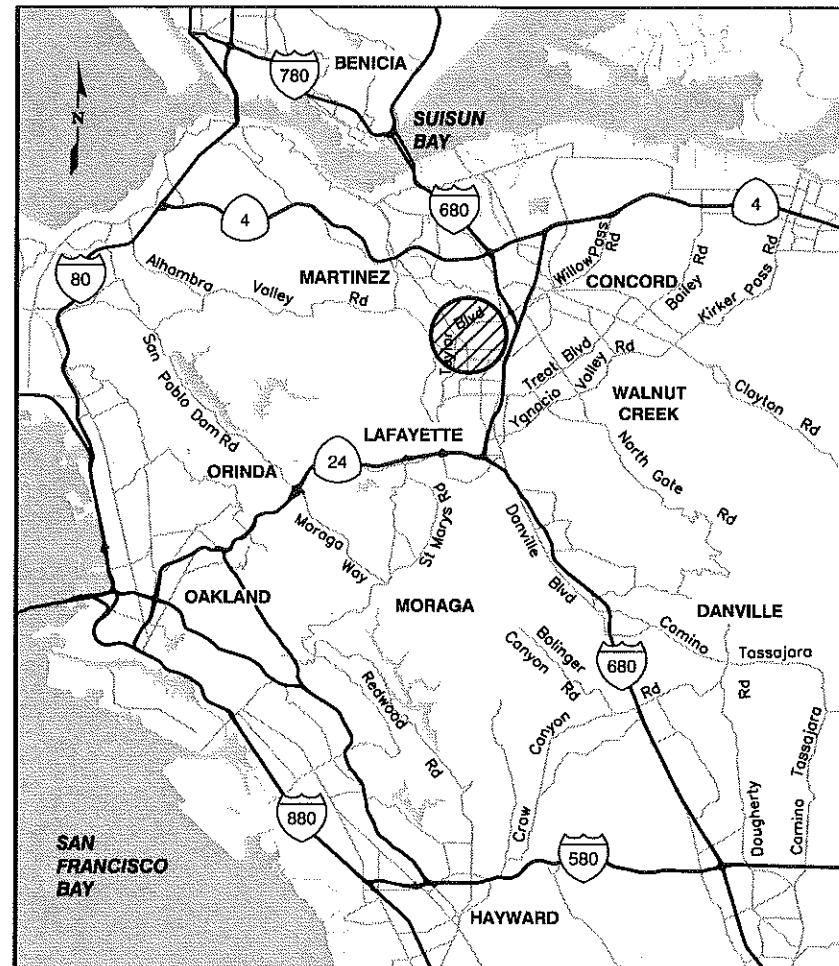
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|--|---|---------------------------------------|---------------------------------|
| 9. This action would have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated critical habitat for these species (43 CFR 46.215 (h)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 10. This action would violate a Federal, tribal, State, or local law or requirement imposed for protection of the environment (43 CFR 46.215 (i)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 11. This action would affect ITAs (512 DM 2, Policy Memorandum dated December 15, 1993). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 12. This action would have a disproportionately high and adverse effect on low income or minority populations (EO 12898) (43 CFR 46.215 (j)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 13. This action would limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007, 43 CFR 46.215 (k), and 512 DM 3)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 14. This action would contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act, EO 13112, and 43 CFR 46.215 (l)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |

Attachment A Preliminary (25%) Plans

Central Contra Costa Sanitary District

Contra Costa County California

5019 Imhoff Place, Martinez, CA 94553-4392



AREA MAP



3 0 3 6
MILES

VOLUME 3 OF 3
PART VIII

Project Drawings For Construction Of DISTRICT PROJECT No. 8412

PLEASANT HILL - GRAYSON CREEK TRUNK SEWER

25% SUBMITTAL

PRELIMINARY NOT FOR CONSTRUCTION

INDEX OF DRAWINGS

1	G-1	COVER SHEET, AREA MAP & INDEX OF DRAWINGS
2	G-2	SYMBOLS AND LOCATION MAP
3	G-3	ABBREVIATIONS & GENERAL NOTES
4	D-1	TYPICAL DETAILS I
5	D-2	TYPICAL DETAILS II
6	D-3	TYPICAL DETAILS III
7	P-1	PLAN AND PROFILE - KATHLEEN DR - LINE "A"
8	P-2	PLAN AND PROFILE - KATHLEEN DR - LINE "A"
9	P-3	PLAN AND PROFILE - KATHLEEN DR - LINE "A"
10	P-4	PLAN AND PROFILE - LUCILLE LN - LINE "A"
11	P-5	PLAN AND PROFILE - LUCILLE LN - LINE "A" - MAUREEN LN - LINE "A"
12	P-6	PLAN AND PROFILE - MAUREEN LN - LINE "A"
13	P-7	PLAN AND PROFILE - MAUREEN LN - LINE "A"
14	P-8	PLAN AND PROFILE - WESTOVER DR - LINE "A"
15	P-9	PLAN AND PROFILE - WESTOVER DR - LINE "A"
16	P-10	PLAN AND PROFILE - WESTOVER DR - LINE "A"
17	P-11	PLAN AND PROFILE - WESTOVER DR - LINE "A"
18	P-12	PLAN AND PROFILE - WESTOVER DR - LINE "A"
19	P-13	PLAN AND PROFILE - PLEASANT HILL RD - LINE "B"
20	P-14	PLAN AND PROFILE - PLEASANT HILL RD - LINE "B"
21	P-15	PLAN AND PROFILE - PLEASANT HILL RD - LINE "B"
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23	P-17	PLAN AND PROFILE - PLEASANT HILL RD - LINE "B"
24	P-18	PLAN AND PROFILE - PLEASANT HILL RD - LINE "B"
25	P-19	PLAN AND PROFILE - PLEASANT HILL RD - LINE "B"
26	P-20	PLAN AND PROFILE - PLEASANT HILL RD - LINE "C"
27	P-21	PLAN AND PROFILE - PLEASANT HILL RD - LINE "C"
28	P-22	PLAN AND PROFILE - GRAYSON RD - LINE "C"
29	P-23	PLAN AND PROFILE - GRAYSON RD - LINE "C"
30	P-24	PLAN AND PROFILE - GRAYSON RD - LINE "C"
31	P-25	PLAN AND PROFILE - GREGORY LN - LINE "C"

Nancy Molina
Project Engineer
Date _____

Sasha Mestetsky
Project Manager
Date _____

Recommended for Construction:

Andrew Antkowiak
Capital Projects Division Manager
Date _____

Approved for Construction:

Curt Swanson
Provisional General Manager
Date _____

District Project No.
X8412
Drawing No.
G-1
Sheet No.
1 of 31

Plot Date: 12-Aug-2013 09:50 By: mrvadshaw File Name: K:\Projects\8412 Pleasant Hill Grayson Ck Trunk Sewer\AutoCAD\8412_g03.dwg

ABBREVIATIONS

AB	ANCHOR BOLT, AGGREGATE BASE	FLGD	FLANGED
ABAN	ABANDON, ABANDONED	FLR	FLOOR
ABBR	ABBREVIATION	FM	FORCE MAIN
AC	ASPHALTIC CONCRETE ALTERNATING CURRENT, OR ASBESTOS CEMENT PIPE	FND	FOUNDATION
ACP	ASPHALTIC CONCRETE PAVEMENT	FOC	FACE OF CONCRETE OR FIBER OPTIC CABLE
AD	ARCA DRAIN	FOS	FACE OF STUDS
ADJ	ADJUSTABLE	FOW	FACE OF WALL
AL	ALUMINUM OR ALUM	FPC	FLEXIBLE PIPE COUPLING
ALUM	ALUMINUM	FPS	FEET PER SECOND
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	FR	FRAME
APPD	APPROVED	FT	FEET OR FOOT
APPROX	APPROXIMATE	FTG	FOOTING
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	FUT	FUTURE
ASSY	ASSEMBLY		
AWWA	AMERICAN WATER WORKS ASSOCIATION	G	GAS OR GATE
		GA	GAGE OR GUAGE
BC	BEGIN CURVE, BOLT CIRCLE OR BETWEEN CENTERS	GAL	GALLON
BCR	BEGIN CURB RETURN	CALV	CALVANIZED
BF	BLIND FLANGE	GEN	GENERAL OR GENERATOR
BFP	BACKFLOW PREVENTER	GFA	GROOVED FLANGE ADAPTER
BLDG	BUILDING	GRD	GRADE OR GROUND
BLD FLG	BLIND FLANGE	GR BRK	GRADE BREAK OR GRADE CHANGE
BLK	BLACK OR BLOCK	GRTG	GRATING
BLKG	BLOCKING	H	HEIGHT
BM	BEAM OR BENCH MARK	H/B	HOSE BIBB
BOT	BOTTOM	HDPE	HIGH DENSITY POLYETHYLENE
B & S	BELL AND SPIGOT	HDW	Hardware
BT	BOLT	HEX	HEXAGONAL
BVC	BEGIN VERTICAL CURVE	HGR	HANGER
		HGT	HEIGHT
C	CENTERLINE	HORIZ	HORIZONTAL
C	CABLE TELEVISION CONDUIT	H/P	HIGH POINT
C & C	CEMENT LINED AND COATED STEEL PIPE	HV	HORIZONTAL AND VERTICAL CONTROL POINT
C & G	CURB AND GUTTER	HYD	HYDRANT
CAP	CAPACITY OR CAPPED PIPE END		
CB	CATCH BASIN	ID	INSIDE DIAMETER
CC	CENTER TO CENTER	IF	INSIDE FACE
CCCSO	CENTRAL CONTRA COSTA SANITARY DISTRICT	IN	INCH
CCWD	CONTRA COSTA WATER DISTRICT	INSL	INSULATION OR INSULATED
CEM	CEMENT	INT	INTERIOR
CL & C	CEMENT LINED AND COATED STEEL PIPE	INV	INVERT
CLR	CLEAR	IRRG	IRRIGATION
CLSM	CONTROLLED LOW STRENGTH MATERIAL	JP	JUNCTION POLE, JOINT POLE
CHG	CHECKERED PLATE	JT	JOINT
CHKD PL	CHECKERED PLATE		
CI	CAST IRON	L	LENGTH
CJ	CONSTRUCTION JOINT	L/P	LOW POINT
CL	CHAIN LINK OR CLEARANCE	LEV	LEVEL
CLR	CLEAR	LG	LENGTH OR LONG
CLS	CEMENT LINED AND EPOXY COATED STEEL PIPE	LOC	LOCATE, LOCATION
CM	CENTIMETER	LT	LEFT
CMLC	CEMENT MORTAR LINED AND COATED		
CMP	CORRUGATED METAL PIPE	M	MANHOLE
CO	CLEANOUT OR COUNTRY	MAN	MANUAL
COL	COLUMN	MAX	MAXIMUM
CONC	CONCRETE OR CONCENTRIC	MECH	MECHANICAL
CONN	CONNECTION	MEMB	MEMBRANE
CONSTR	CONSTRUCTION OR CONSTRUCT	MFR	MANUFACTURER
CONT	CONTINUED OR CONTINUOUS	MFR'D	MANUFACTURED
CONTR	CONTRACTOR	MGD	MILLION GALLONS PER DAY
COTG	CLEAN-OUT TO GRADE	MIN	MINIMUM
COUPLG	COUPLING	MISC	MISCELLANEOUS
CTR	CENTER	MOD	MODIFY, MODIFIED
CY	CUBIC YARD	MGN	MOVEMENT
		MTG	MECHANICAL-TYPE COUPLING
DET	DETAIL	MTD	MOUNTED
DI	DUCTILE IRON	MTG	MOUNTING
DIA	DIAMETER	MTL	MATERIAL OR METAL
DIAG	DIAGONAL	MRT	MOTOR
DISCH	DISCHARGE	M2	MANHOLE NUMBER
DN	DOWN		
DR	DOOR OR DRAIN	N	NORTH
DWG	DRAWING	NBS	NATIONAL BUREAU OF STANDARDS
		NCL	NORMALLY CLOSED
E	EAST OR ELECTRICAL	NF	NEAR FACE
EA	EACH	NG	NATURAL GRADE OR NATURAL GAS
EB	EXPANSION BOLT OR ANCHOR	NIC	NOT IN CONTRACT
EBMUD	EAST BAY MUNICIPAL UTILITY DISTRICT	NO	NUMBER OR NORMALLY OPEN
END CURVE	END CURVE	NPS	NOMINAL PIPE SIZE
ECC	ECCENTRIC	NPT	NATIONAL PIPE THREAD
ECR	END CURB RETURN	NS	NEAR SIDE
EF	EACH FACE	NTS	NOT TO SCALE
EG	EXISTING GRADE		
EL	ELEVATION	O	OIL
ELEC	ELECTRICAL OR ELECTRONIC	OC	OVER-CROSSING OR ON CENTER
ENCL	ENCLOSURE	OD	OUTSIDE DIAMETER OR OVERALL DIMENSION
ENT	ENTRANCE	OF	OVERFLOW OR OUTSIDE FACE
EP	EDGE OF PAVEMENT	OH	OVERHEAD ELECTRICAL LINE
EVC	END VERTICAL CURVE	OPNG	OPENING
EO	EQUAL		
EW	EACH WAY	P	POLE, PAGE OR PIPE
EXH	EXHAUST	PART	PARTITION
EX-HY	EXTRA HEAVY	PAVMT	PAVEMENT
EX	EXISTING	PB	PULL BOX
EXIST	EXISTING	PC	POINT OF CURVATURE
EXP JT	EXPANSION JOINT	PCC	PORTLAND CEMENT CONCRETE
EXT	EXTERIOR OR EXTENSION	PCOTG	PRESSURE CLEANOUT TO GRADE
EXTR	EXTRUDED	PE	POLYETHYLENE
		PI	PLANT INFLUENT OR POINT OF INTERSECTION
F	FINISH	PL	PLATE, PROPERTY LINE OR PLACE
F & C	FRAME AND COVER	PLAS	PLASTER OR PLASTIC
FABR	FABRICATION, FABRICATE OR FABRICATED	PLT	PLANT
FB	FLAT BAR, FLOOR BEAM OR FIELD BOOK	PM	PLASTIC MANHOLE
FEM	FEMALE (PIPE THREAD)	PRCT	PRECAST
F TO F	FACE TO FACE	PREFAB	PREFABRICATED
FF	FLTER FABRIC	PRESS	PRESSURE
FG	FINISHED GRADE	PT	PAINT
FH	FIRE HYDRANT	PV	PLUG VALVE
FIG	FIGURE	PVC	POLYVINYL CHLORIDE
FIN	FINISHED	P2	PRESSURE RELIEF NUMBER
FL	FLOWLINE OR FLOOR		
FLEX	FLEXIBLE	QTY	QUANTITY
FLG	FLANGE OR FLOORING		

R	RADIUS, RISER, RETURN OR RATE OF SLOPE	T	TANGENT, TOP OR TELEPHONE
RC	REINFORCED CONCRETE	TBA	TO BE ABANDONED
RCP	REINFORCED CONCRETE PIPE	TBE	THREAD BOTH ENDS
RCPP	REINFORCED CONCRETE CYLINDER PIPE	TBM	TEMPORARY BENCH MARK
RD	ROUND, OR ROAD	TC	TOP OF CURB
RED	REDUCER OR REDUCING	TEMP	TEMPERATURE OR TEMPORARY
REF	REFERENCE OR REFER	T & G	TONGUE AND GROOVE
REIN	REINFORCE OR REINFORCED	THK	THICK OR THICKNESS
RE-STL	REINFORCING STEEL	THR'D	THREADED
REQD	REQUIRED	TK	TANK
RESIL	RESILIENT	TM	TRUNK MANHOLE
REV	REVISION	TOE	THREAD ONE END OR TOE OF SLOPE
REW	RECLAIMED WATER OR RECYCLED WATER	TOP	TOP OF PIPE
RF	ROOF OR RAISED FACE	TP	TELEPHONE POLE
RO	ROUGH OPENING	TRANS	TRANSITION OR TRANSMITTER
RR	RAILROAD	TSB	TOP SET BASE
RT	RIGHT	TW	TOP OF WALL
RTP	REINFORCED THERMOSETTING PLASTIC	TYP	TYPICAL
R/W	RIGHT OF WAY	TM2	TRUNK MANHOLE NUMBER
R2	RODDING INLET NUMBER		
R/FL	RIM TO FLOWLINE	UB	UNION BONNET
		UC	UNDER-CROSSING
S	SOUTH, SECOND OR SLOPE	UE	UNDERGROUND ELECTRIC
SA	SAMPLE	UG	UNDERGROUND
SBR	STYRENE BUTADIENE RUBBER	UGC	UNDERGROUND CONDUIT
SCAV	SEWAGE COMBINATION AIR/VACUUM	UL	UNDERWRITERS LABORATORIES
SCH	SCHEDULE	UNK	UNKNOWN
SD	STORM DRAIN	UNO	UNLESS NOTED OTHERWISE
SECT	SECTION	V	VACUUM, VALVE, VERTICAL, VENT, VOLT OR VOLUME
SHT	SHEET	VAR	VARIABLE
SH	SIMILAR	VC	VERTICAL CURVE OR VITRIFIED CLAY
SL	SLOPE OR SINGLE LINE	VCP	VITRIFIED CLAY PIPE
SPCS	SPECIFICATIONS	VERT	VERTICAL
SPECF	SPECIFIED		
SP	STEEL PIPE	W	WEST OR WATER
SQ	SQUARE	W/	WITH
SS	SANITARY SEWER, STAINLESS STEEL	W/O	WITHOUT
STA	STATION	WP	WATER PROOFING
STC	SLEEVE-TYPE COUPLING	WS	WATER SURFACE
STD	STANDARD	WSTP	WATER STOP
STL	STEEL	WT	WEIGHT
STN	STAINLESS	WWM	WELDED WIRE MESH
STN STL	STAINLESS STEEL		
STRUCT	STRUCTURAL OR STRUCTURE	XS	EXTRA STRONG
SYM	SYMMETRICAL OR SYMBOL	XXS	DOUBLE EXTRA STRONG
SYS	SYSTEM	YD	YARD
		YR	YEAR
		Z	ZERO OR ZONE
		ZN	ZINC

NOTES:
ADDITIONAL ABBREVIATIONS CONFORM TO ANSI
STANDARD ABBREVIATIONS Z32. 2.3

GENERAL NOTES

1. CONFINED SPACE ENTRIES SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF SECTIONS 5150 - 5159, GENERAL INDUSTRY SAFETY ORDERS, TITLE 8, CALIFORNIA CODE OF REGULATIONS. FOR PURPOSES OF SANITARY SEWER WORK, CONFINED SPACES SHALL INCLUDE, BUT NOT BE LIMITED TO, (1) EXISTING MANHOLES; (2) NEW MANHOLES CONSTRUCTED OVER EXISTING SANITARY SEWERS AFTER THE EXISTING PIPE IS BROKEN OUT, CUT OUT, OR REMOVED; AND (3) NEW MANHOLES THAT ARE CONSTRUCTED AT THE END OF EXISTING SANITARY SEWERS (RI'S OR PLUGS) AFTER THE TEMPORARY CONSTRUCTION PLUG HAS BEEN REMOVED FROM THE END OF THE EXISTING SEWER.
2. EXISTING UTILITIES IN THE PROJECT AREA MAY BE IN A FRAGILE CONDITION. THE CONTRACTOR SHALL EXERCISE NECESSARY CAUTION WHEN WORKING NEAR EXISTING UTILITIES.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE ALL TRAFFIC SIGNAL LOOPS, CABLES AND CONDUITS IN THE VICINITY OF THE WORK. TRAFFIC SIGNALS SHALL BE MAINTAINED IN OPERATION DURING CONSTRUCTION AT ALL TIMES. SENSOR LOOPS, CABLES AND CONDUITS THAT ARE DAMAGED BY THE WORK SHALL BE REPLACED AT NO COST TO THE DISTRICT. REPLACEMENT OF DAMAGED ITEMS SHALL BE TO THE SATISFACTION OF THE GOVERNING AGENCY.
4. PLAN ELEVATION OR DEPTHS FOR EXISTING UNDERGROUND UTILITIES ARE BASED ON RECORD DRAWINGS, POTHOLING AND SURVEY INFORMATION ARE APPROXIMATE ONLY. WHERE NO ELEVATIONS ARE SHOWN, NO SUCH INFORMATION WAS AVAILABLE DURING DESIGN.
5. UTILITY SERVICES AND THEIR LOCATION ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO LOCATE AND PROTECT SERVICES DURING CONSTRUCTION. NO INTERRUPTION OF UTILITY SERVICES SHALL BE ALLOWED.
6. THE LOCATION, PIPE DIAMETER AND MATERIAL INDICATED AND/OR ELEVATIONS OF UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY. THIS DATA IS PROVIDED SOLELY AS AN AID TO BIDDING AND SHALL NOT SUBSTITUTE FOR THE CONTRACTOR'S OWN UTILITY LOCATION RESPONSIBILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES SO THAT THOSE MAY MARK THE LOCATIONS OF THEIR LINES PRIOR TO PIPELINE INSTALLATION. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICES ALERT (USA) AT (800) 227-2600 IN ACCORDANCE WITH THE SPECIFICATIONS PRIOR TO ALL EXCAVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE EXISTING UTILITIES AND SHALL FIELD VERIFY THE LOCATION AND DEPTH OF THE EXISTING UTILITIES. FIELD VERIFICATION SHALL BE DONE IN ADVANCE OF THE CONSTRUCTION.
7. THE CONTRACTOR SHALL LOCATE AND VERIFY DEPTH OF ALL UTILITY CROSSINGS BY POTHOLES PRIOR TO CONSTRUCTION AND/OR AS DIRECTED BY THE ENGINEER.
8. CONTRACTOR SHALL PROTECT EXISTING UTILITIES PRIOR TO TRENCHING UTILITIES. THE CONTRACTOR SHALL SUBMIT A PLAN FOR REVIEW BY THE ENGINEER DETAILING HOW THE UTILITIES WILL BE PROTECTED DURING CONSTRUCTION AND A CONTINGENCY PLAN IN THE EVENT THE UTILITIES ARE DAMAGED, AND A CLEAN-UP/CONTROL PLAN.
9. CONTINUOUS SEWER SERVICE IS REQUIRED AND CONTRACTOR SHALL PROVIDE BYPASS PUMPING WHEN PERFORMING WORK ON EXISTING SEWERS.
10. CONTRACTOR SHALL NOT CONNECT NEW LATERALS TO SEWER STUB OUTS WITHOUT PRIOR APPROVAL BY THE ENGINEER.
11. DIMENSIONS FOR ALL OTHER STRUCTURES, REFERENCING PIPING, PAVING AND OTHER NONSTRUCTURAL ITEMS ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS AND REPORT ALL MAJOR DISCREPANCIES TO THE ENGINEER NO LESS THAN 14 DAYS IN ADVANCE OF CONSTRUCTION IN THE AREA.
12. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES NOT DESIGNATED FOR DEMOLITION OR REMOVAL AND REPLACEMENT. ALL DAMAGED EXISTING IMPROVEMENTS AND THOSE IMPROVEMENTS THAT HAVE BEEN REMOVED OR TEMPORARILY RELOCATED SHALL BE RESTORED BY THE CONTRACTOR TO A CONDITION AS CLOSE AS POSSIBLE TO ITS CONDITION PRIOR TO CONSTRUCTION. IMPROVEMENTS DESIGNATED FOR DEMOLITION SHALL BE DEMOLISHED AND DISPOSED OF BY THE CONTRACTOR.
13. FOR ALL STANDARD MANHOLES THE COORDINATE LOCATIONS REPRESENT THE CENTERLINE OF THE MANHOLE BASE UNLESS INDICATED OTHERWISE ON THESE DRAWINGS. MANHOLES LOCATED AT THE INTERSECTION OF PIPELINES ARE SUBJECT TO FIELD VERIFICATION BY THE CONTRACTOR. LOCATIONS OF MANHOLES THAT ARE NOT AT PIPELINE INTERSECTIONS MAY BE ADJUSTED SUBJECT TO APPROVAL BY THE ENGINEER.
14. DISCREPANCIES BETWEEN COORDINATES, BEARINGS AND LENGTHS, AND STATIONING SHALL BE RESOLVED IN THE FOLLOWING ORDER OF PRECEDENCE:
 - a. COORDINATES
 - b. BEARINGS AND LENGTHS
 - c. STATIONING (NOTE: STATIONING INCLUDES GOING THROUGH THE CENTERLINE OF ALL STRUCTURES.)
15. CONTRACTOR SHALL COORDINATE ELEVATIONS OF THE TOPS OF MANHOLE FRAMES AND COVERS TO BE LEVEL WITH FINAL PAVING.
16. PIPE LENGTHS ARE TO WALL PENETRATION OF STRUCTURES AND THROUGH MANHOLES AS INDICATED. STATIONING IS THROUGH STRUCTURES ALONG CENTERLINE OF ALIGNMENT.
17. STATIONING AND PROFILING OF GROUND SURFACE SHOWN ON PLAN IS FOR CENTERLINE OF SEWER LINE.
18. IN ALL LOCATIONS WHERE TRENCH PLATES ARE USED ON THIS PROJECT, THE CONTRACTOR SHALL SUPPLY SKID RESISTANT COATING ON THE TRENCH PLATE AND COLD MIX A.C. AT THE EDGES. TRENCH PLATES SHALL BE NOTCHED INTO AC PAVING, WEDGED AND SHIMMED TO PREVENT SLIPPAGE AND ROCKING UNDER TRAFFIC. ADJACENT TRENCH PLATES SHALL BE TACK-WELDED TOGETHER TO PREVENT SEPARATION.
19. ALL OPEN CUT CONSTRUCTION FOR PIPING AND STRUCTURES SHALL HAVE SHORING SYSTEMS IN COMPLIANCE WITH CAL OSHA AND CCCSO REQUIREMENTS.
20. THE CONTRACTOR SHALL DAILY REMOVE AND DISPOSE OF ALL SURPLUS EXCAVATION MATERIALS AND DEBRIS FROM EACH SITE AND SHALL MAINTAIN EACH SITE IN A NEAT AND ORDERLY CONDITION.
21. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING FOR REQUIRED INSPECTIONS. THE PRESENCE OR ABSENCE OF A DISTRICT, CITY OR OTHER INSPECTOR WILL NOT RELIEVE THE CONTRACTOR OF FULL RESPONSIBILITY FOR THE PROPER PERFORMANCE OF THE WORK.
22. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES ADJACENT TO THE WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.
23. THE CONTRACTOR SHALL COMPLY WITH ALL STATE, COUNTY AND CITY LAWS AND ORDINANCES RELATING TO THE SAFETY AND CHARACTER OF WORK, EQUIPMENT AND LABOR PERSONNEL. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO THE SHORING OF TRENCHES, VENTILATION OF CONFINED SPACES, CONFORMANCE TO TRAFFIC CONTROL REQUIREMENTS INCLUDING THE PROVISION AND MAINTENANCE OF BARRICADES, AND THE PREPARATION AND IMPLEMENTATION OF TRAFFIC CONTROL PLANS AS REQUIRED.
24. ENCROACHMENT PERMITS ARE REQUIRED FOR THE WORK FROM GOVERNING/REGULATORY AGENCIES. THE CONTRACTOR SHALL ABIDE BY ALL REQUIREMENTS THEREOF.
25. ALL PAVEMENTS INCLUDING A.C. AND P.C.C. PAVING SHALL BE SAW CUT PRIOR TO INSTALLATION OF PAVEMENT PATCH. ROUGH EDGES THAT DEVELOP DURING CONSTRUCTION SHALL BE SAW CUT PRIOR TO INSTALLATION OF PAVEMENT PATCH IN ACCORDANCE WITH THE ENCROACHMENT PERMIT BY THE GOVERNING AGENCY. AREAS OF A.B. UNDERMINING SHALL BE SAW CUT 12 INCHES BEYOND UNDERMINING AND PAVED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL GOVERNING AGENCY OR THESE DRAWINGS.
26. CONTRACTOR SHALL PROTECT ALL TREES AND SHRUBS THAT ARE WITHIN THE CONSTRUCTION AREA EXCEPT THOSE THAT ARE MARKED FOR REMOVAL AND/OR REPLACEMENT.
27. CONTRACTOR SHALL HAND DIG FOR THE SEWER WITHIN THE DRIPLINE OF EXISTING TREES WHEN ROOTS LARGER THAN 2" DIAMETER ARE ENCOUNTERED.
28. CONTRACTOR SHALL BE AWARE THAT ALL EASEMENT SITES CONTAIN POISON OAK.
29. CONTRACTOR SHALL REPLACE ALL DAMAGED FENCING, GATES, CURBS, GUTTERS AND SIDEWALKS.
30. CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AT ALL LOCATIONS WHERE FENCING HAS BEEN REMOVED.
31. CONTRACTOR SHALL PROVIDE A MINIMUM OF 7 DAYS NOTIFICATION TO RESIDENTS PRIOR TO STARTING WORK.
32. TYPICAL FOR ALL SHORT RADIUS CURVES: IF PVC IS USED ON A CURVE THAT IS LESS THAN 250-FOOT RADIUS THEN THE CONTRACTOR SHALL COMPLETE THE CURVE USING 3" FITTINGS AND NON STANDARD LENGTH PIPE. IF DIP IS USED ON A CURVE THAT IS LESS THAN 250-FOOT RADIUS THEN THE CONTRACTOR SHALL COMPLETE THE CURVE BY DEFLECTING THE PIPE NO MORE THAN 5" AT EACH JOINT AND USING NON STANDARD PIPE LENGTHS. NO PIPE LENGTH SHALL BE LESS THAN 3- FEET IN ANY CASE.
33. CONTRACTOR SHALL LOCATE AND RE-CONNECT ALL ACTIVE LATERALS. ALL ACTIVE LATERALS MAY NOT BE SHOWN ON PLANS. LATERAL LOCATIONS SHOWN ON THE PLANS ARE PRIMARILY FROM CCTV INFORMATION. IN LOCATIONS WITH A SAG OR BLOCKAGE, LATERALS MAY NOT BE VISIBLE WITH CCTV AND/OR INDICATED ON THESE DRAWINGS. CONTRACTOR IS RESPONSIBLE TO LOCATE ALL ACTIVE LATERALS BY ALTERNATE MEANS WHEN NECESSARY.
34. CONTRACTOR SHALL REVIEW PRIVATE PROPERTY CONSTRAINTS IN VOLUME 2, DIVISION 1 AND APPENDIX E OF THE SPECIFICATIONS.
35. ELEVATIONS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NGVD 88). COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM ZONE 3 NAD 83.

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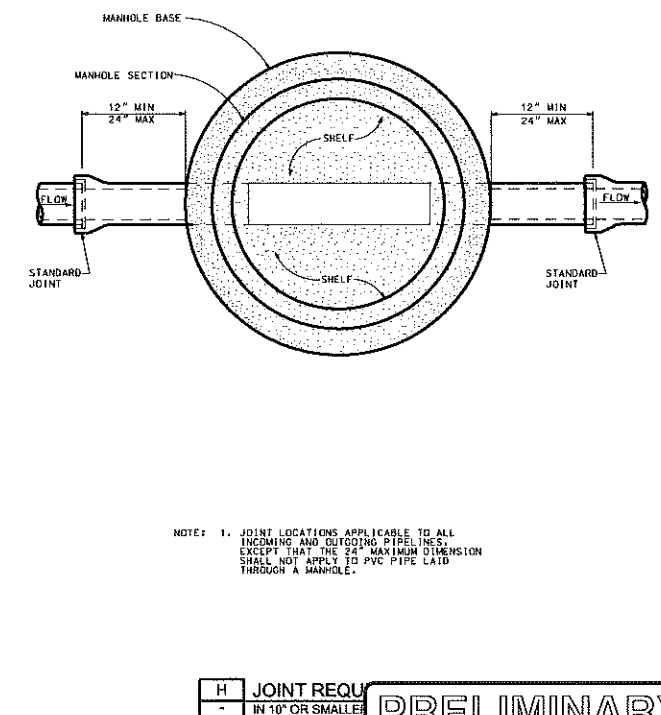
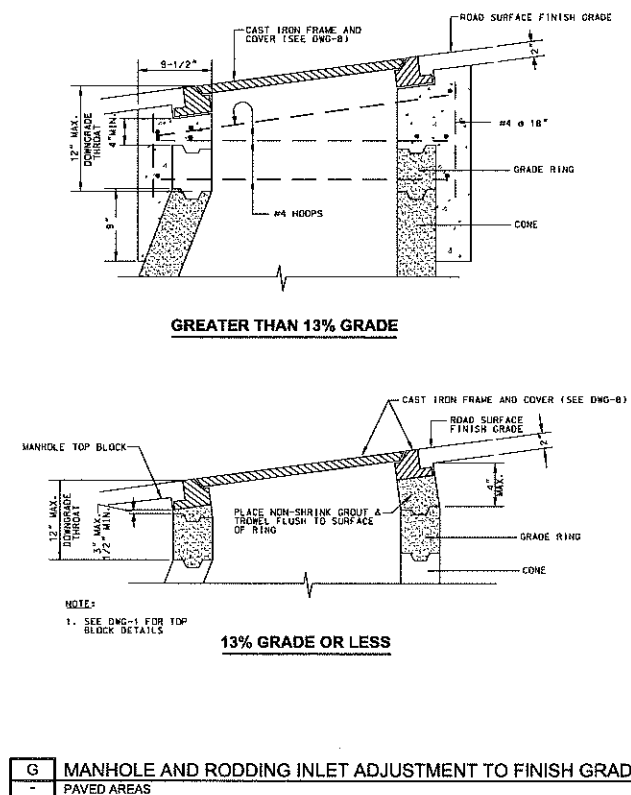
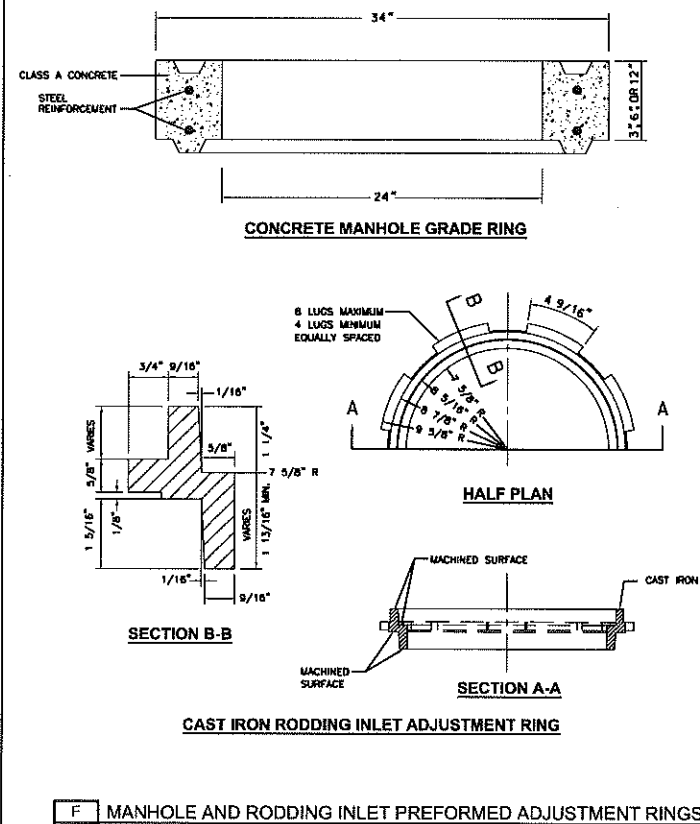
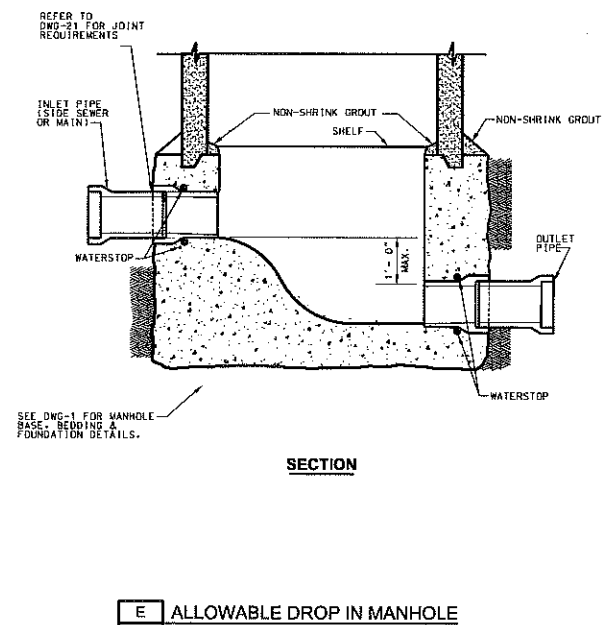
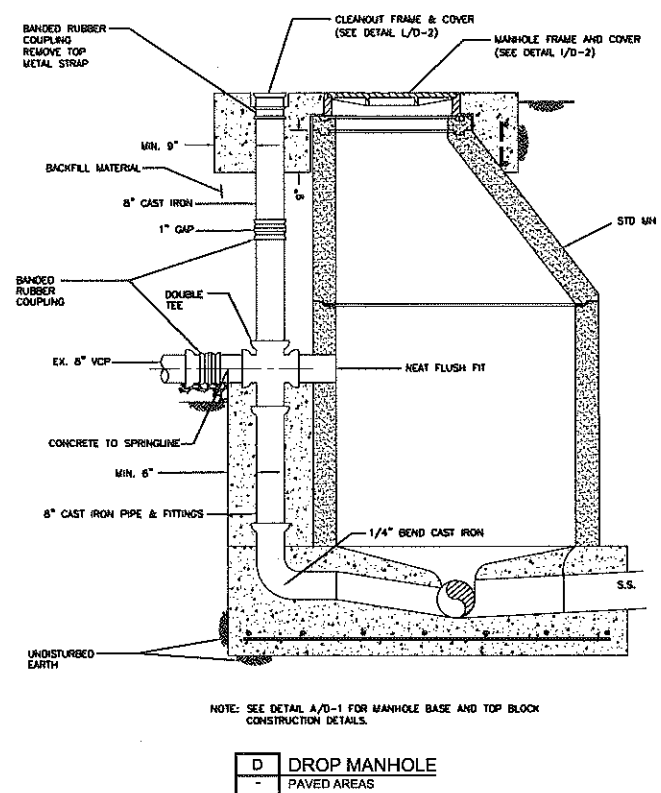
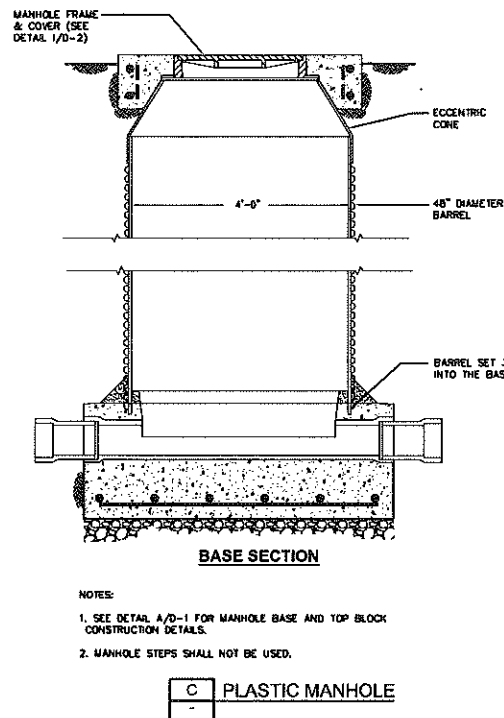
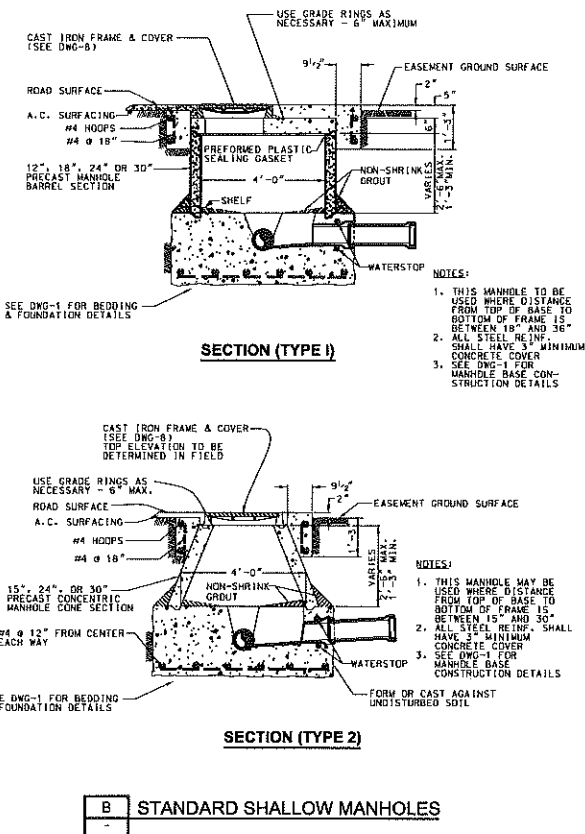
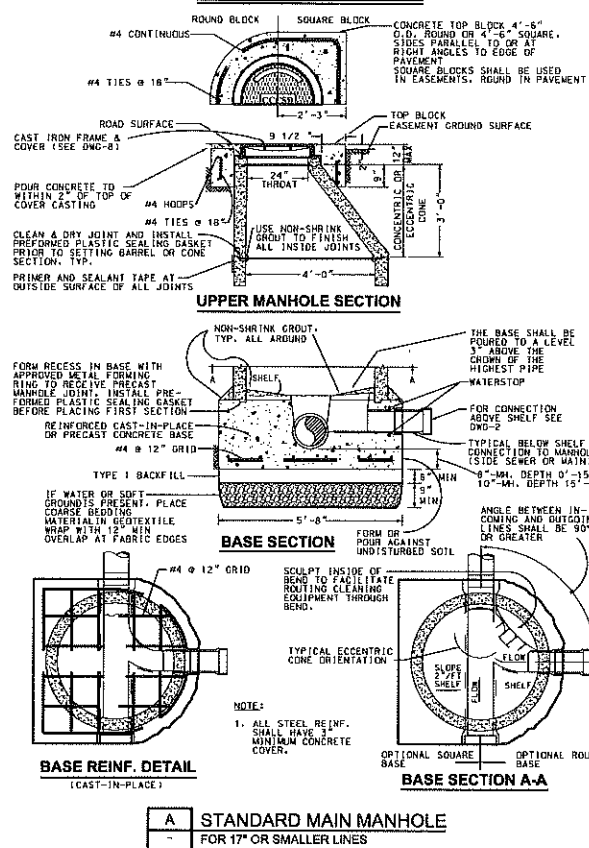
PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

ABBREVIATIONS AND GENERAL NOTES

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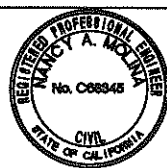
STANDARD MAIN MANHOLE



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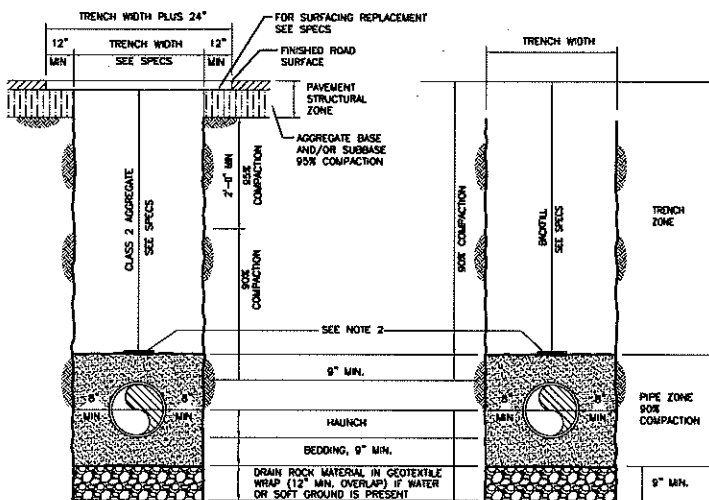
PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

TYPICAL DETAILS - I

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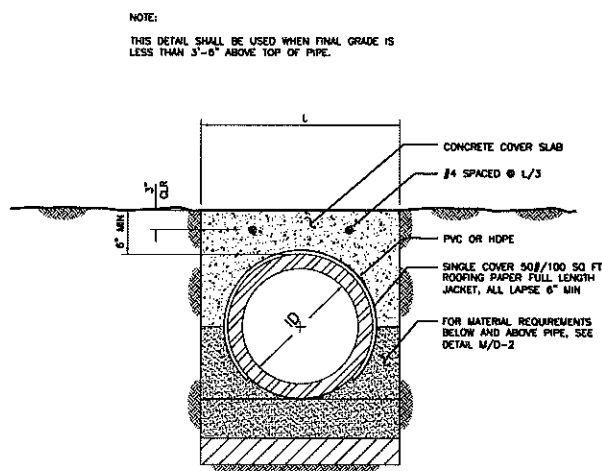
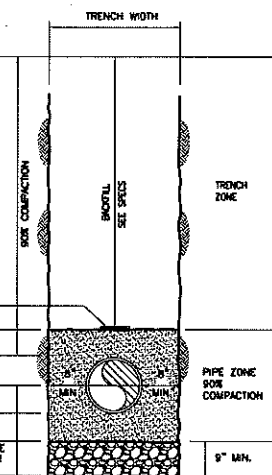
TRENCH SECTION IN EXISTING PAVED AREAS (PUBLIC & PRIVATE)



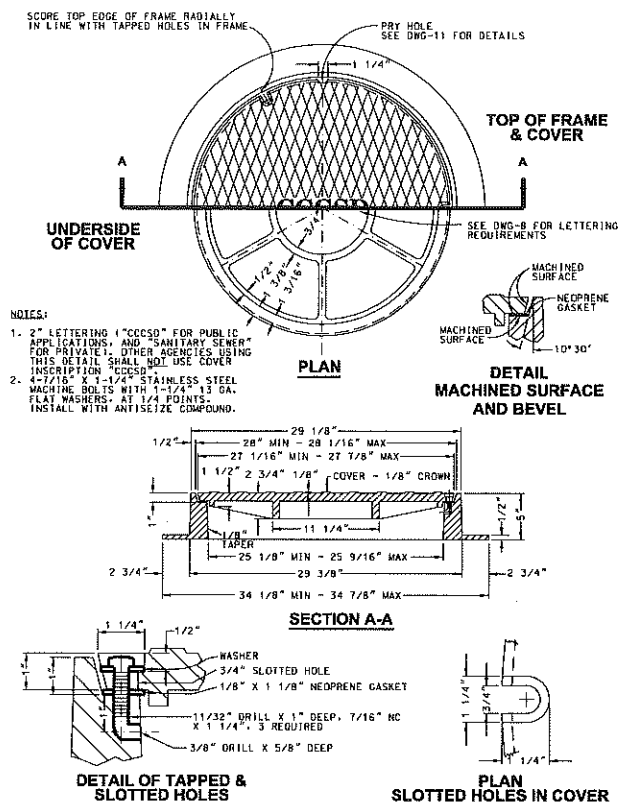
- NOTES:
1. ALL PIPE BEDDING SHALL CONFORM TO THE APPLICABLE REQUIREMENTS AND PROVISIONS OF THE SPECIFICATION.
 2. SEWER DETECTOR TAPE PER REQUIREMENTS OF TECHNICAL SPECIFICATION'S SECTION 02205.
 3. THESE ARE MINIMUM REQUIREMENTS. IF OTHER JURISDICTIONAL AGENCY REQUIREMENTS EXCEED THOSE SHOWN, THE HIGHER REQUIREMENTS SHALL BE MET.

M TRENCH STRUCTURAL DETAIL

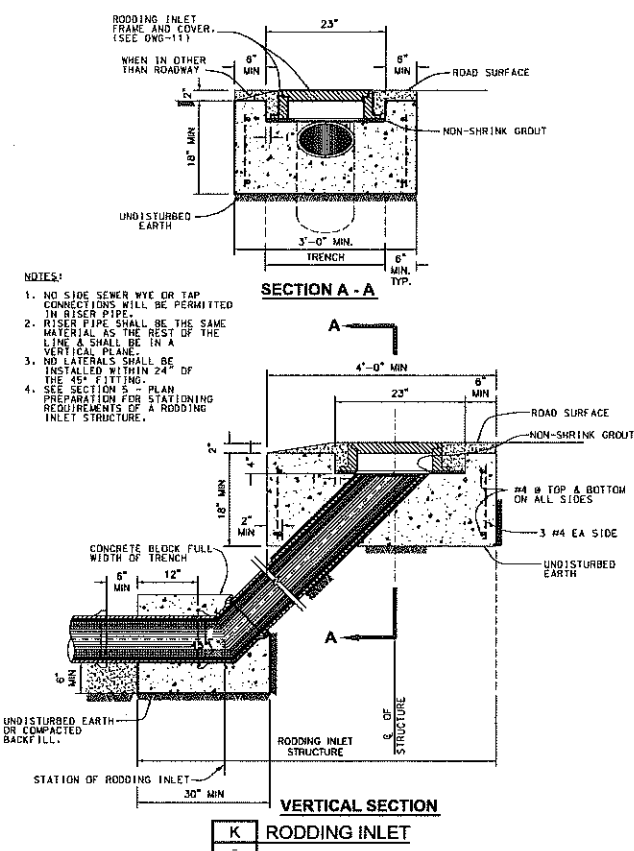
TRENCH SECTION IN UNPAVED AREAS



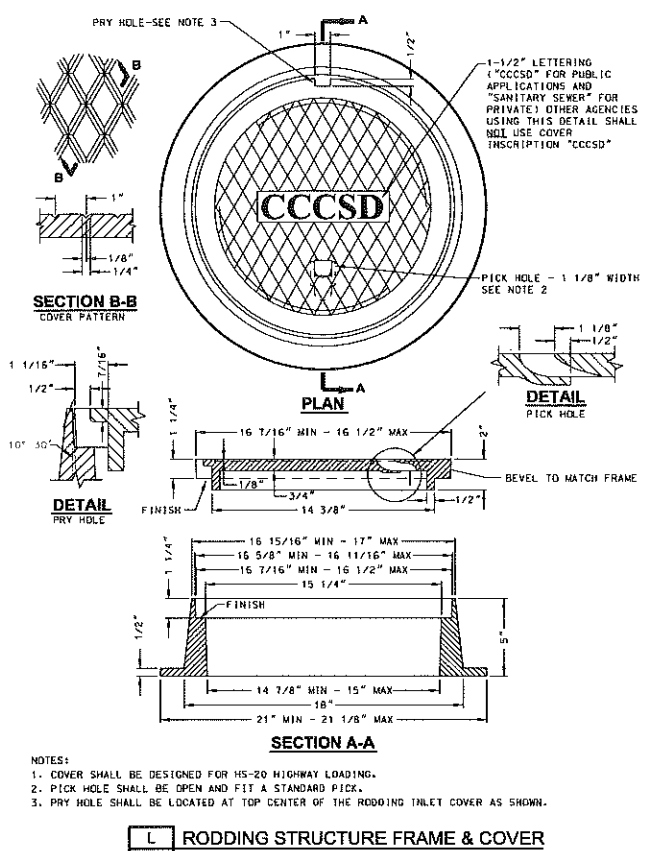
N SHALLOW PIPE COVER DETAIL



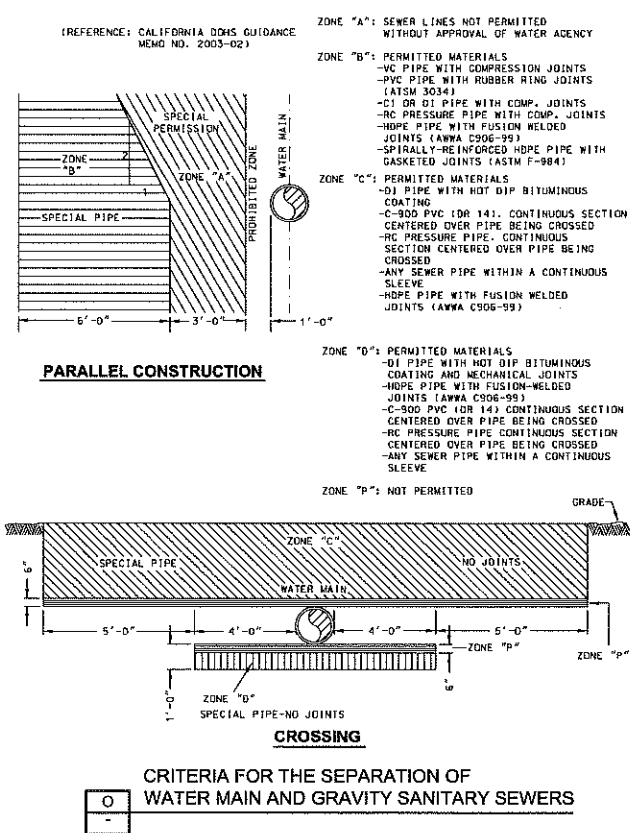
J BOLT-DOWN MANHOLE FRAME & COVER



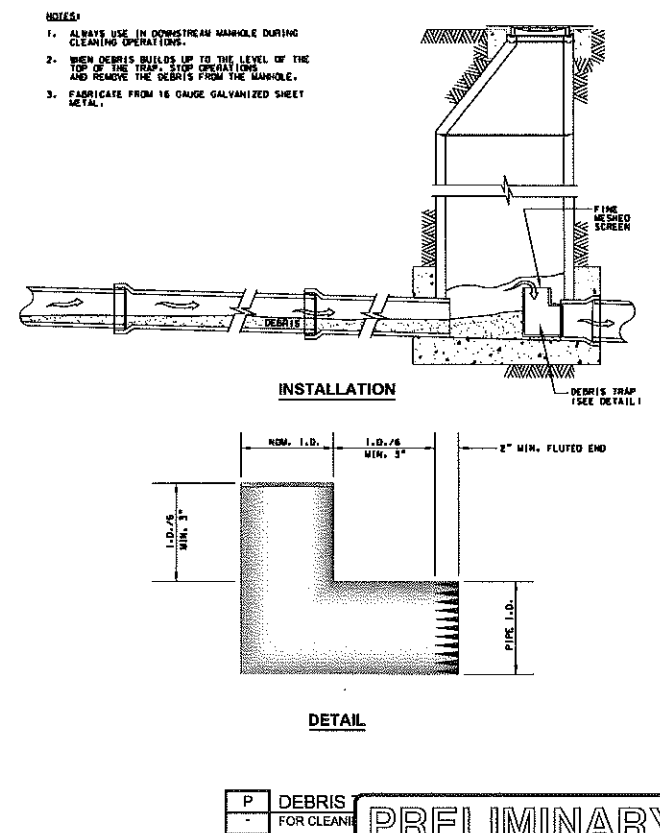
K RODDING INLET



L RODDING STRUCTURE FRAME & COVER



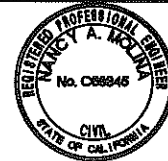
O CRITERIA FOR THE SEPARATION OF WATER MAIN AND GRAVITY SANITARY SEWERS



P DEBRIS TRAP FOR CLEANOUT

PRELIMINARY

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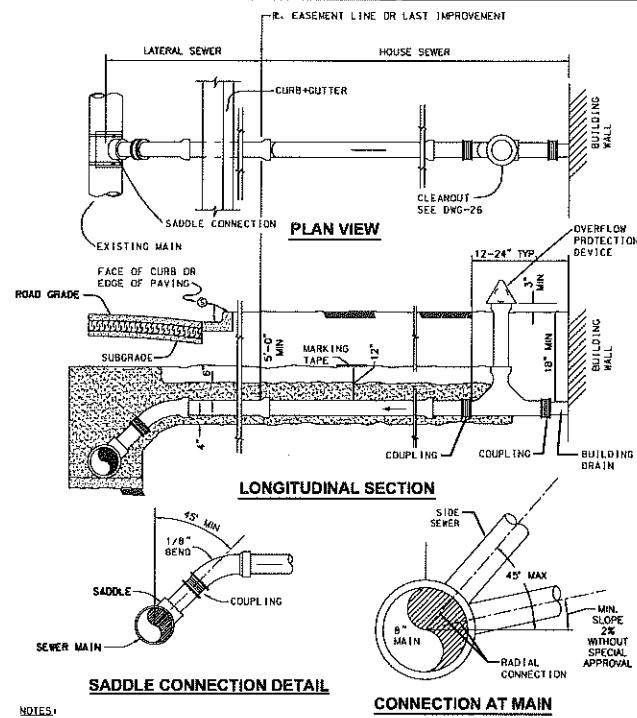
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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

TYPICAL DETAILS - II

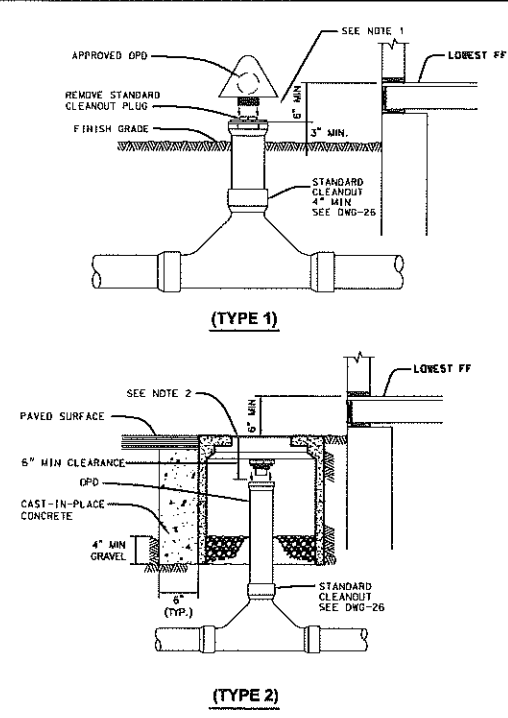
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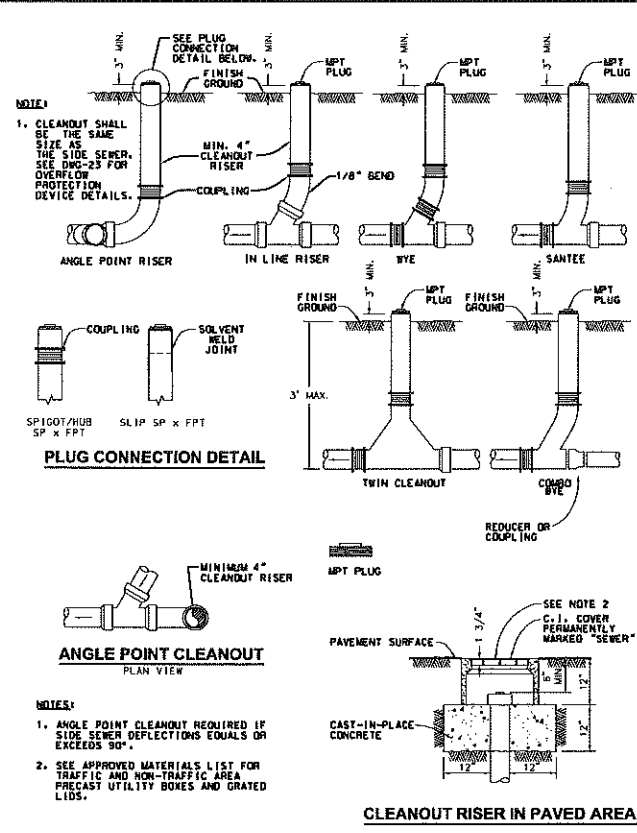
- NOTES:
1. WHEN A LATERAL SEWER IS INSTALLED IN ADVANCE OF THE BUILDING SEWER, IT SHALL BE TERMINATED WITH A CAP OR PLUG 5' PAST THE PROPERTY LINE, EASEMENT LINE OR LAST IMPROVEMENT AND THE CONTRACTOR SHALL MARK THE LOCATION OF THE CAPPED/PLUGGED END WITH A 2X4 PRESSURE TREATED STAKE PAINTED GREEN.
 2. REFER TO SECTION 15.02205 FOR BEDDING AND BACKFILL REQUIREMENTS.
 3. SEE NOTE 2 ON DWG-25 FOR COVER REQUIREMENTS.

Q TYPICAL SIDE SEWER



- NOTES:
1. AN OVERFLOW PROTECTION DEVICE, PER CCCSO'S APPROVED MATERIALS LIST, IS REQUIRED ON ALL SIDE SEWERS. SPECIFIC LOCATION SHALL BE DETERMINED BY THE CONTRACTOR AND THE PROPERTY OWNER.
 2. SEE APPROVED MATERIALS LIST FOR TRAFFIC AND NON-TRAFFIC AREA PRECAST UTILITY BOXES AND GRATED LIDS.

R TYPICAL OVERFLOW PROTECTION DEVICE



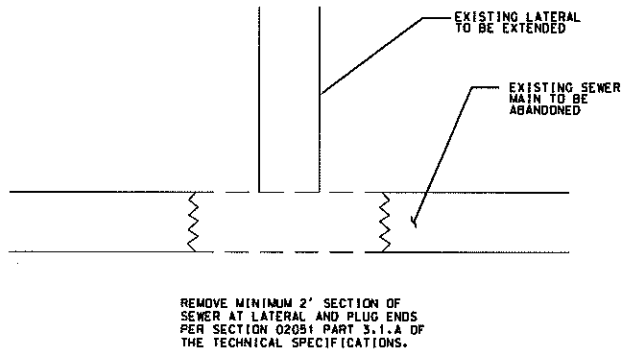
- NOTES:
1. ANGLE POINT CLEANOUT REQUIRED IF SIDE SEWER DEFLECTIONS EQUALS OR EXCEEDS 90°.
 2. SEE APPROVED MATERIALS LIST FOR TRAFFIC AND NON-TRAFFIC AREA PRECAST UTILITY BOXES AND GRATED LIDS.

K CLEANOUT RISERS

PIPE TYPE	PIPE LENGTH	PIPE DIAMETER										
		4"	6"	8"	10"	12"	14"	16"	18"	20"	21"	24"
ABS/PVC TRUSS				(A)	(B)	(C)		(D)				
	* STANDARD COUPLING			475	600	725		900				
	* 3" COUPLING			131	163	175		200				
ABS/PVC SOLID												
	* 3" COUPLING			100	160							
	* (FORCED BEND)	127	191	290	313	375		436				
DIP-CL52				(E)	(E)	(E)	(F)	(F)	(G)	(G)		(G)
	* 11.25" COUPLING			260	260	260		325				430
	* (15' / JOINT)			45	45	45						
VCP												
	(2' / JOINT)	171	171	171	171	171		222			222	222
	(1.5' / JOINT)	143	143	143	143	143		189			189	189
RCP												
	(2' / JOINT)						220	220		295	295	356
	(1.5' / JOINT)											

ALLOWABLE DEFLECTION PER JOINT:
(A) 1.5"; (B) 1.2"; (C) 1.0"; (D) 0.8"; (E) 4"; (F) 3.2"; (G) 2.4"

T MINIMUM ALLOWABLE CURVATURE RADIUS
(IN FEET)



U EXISTING MAIN ABANDONMENT AT LATERAL EXTENSION

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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

TYPICAL DETAILS III

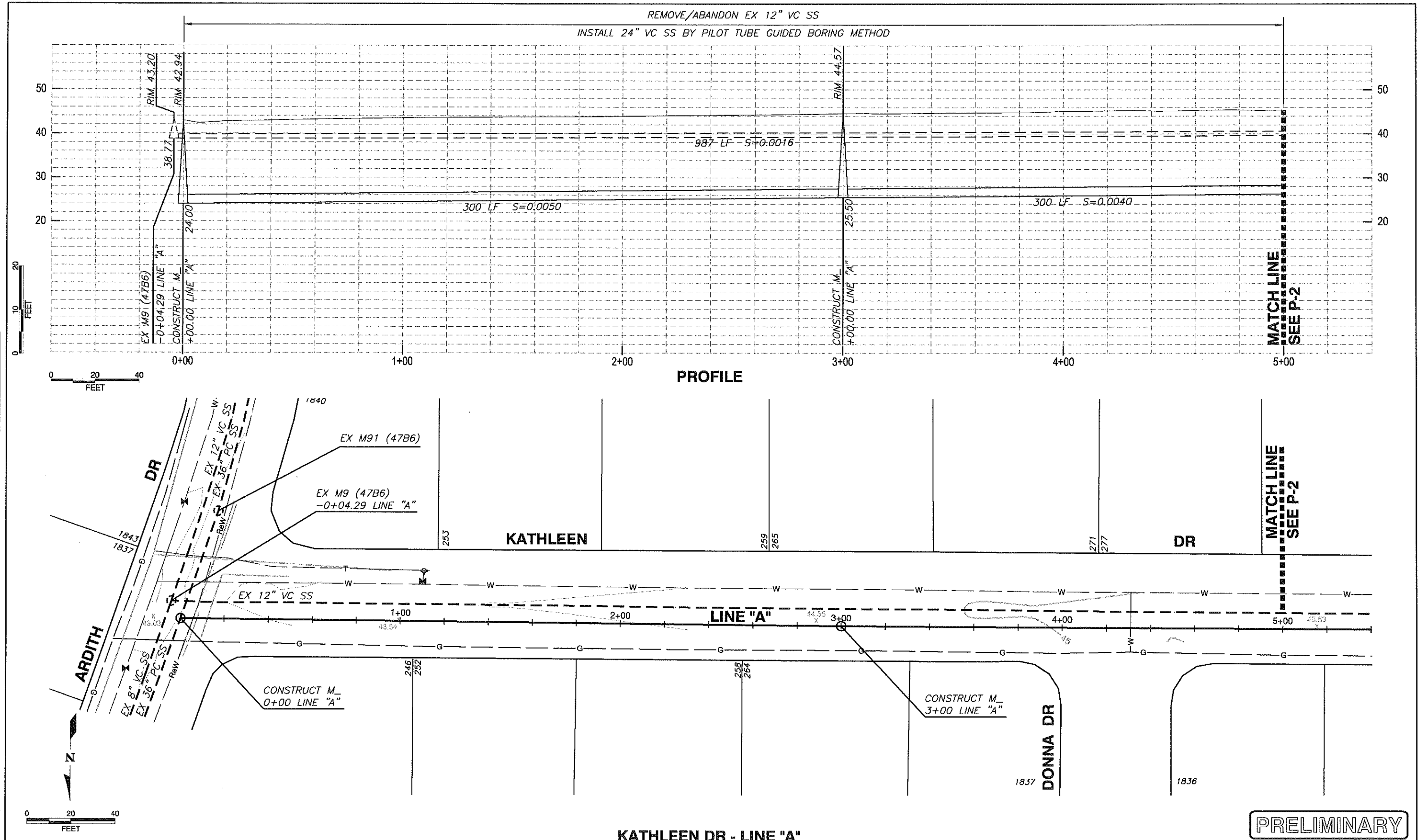
District Project No.
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PRELIMINARY

Plot Date: 12-Aug-2013 09:50 By: mbradshaw File Name: K:\Projects\8412 Pleasant Hill Grayson Ck Trunk Sewer\AutoCAD\8412 p01.dwg



KATHLEEN DR - LINE "A"

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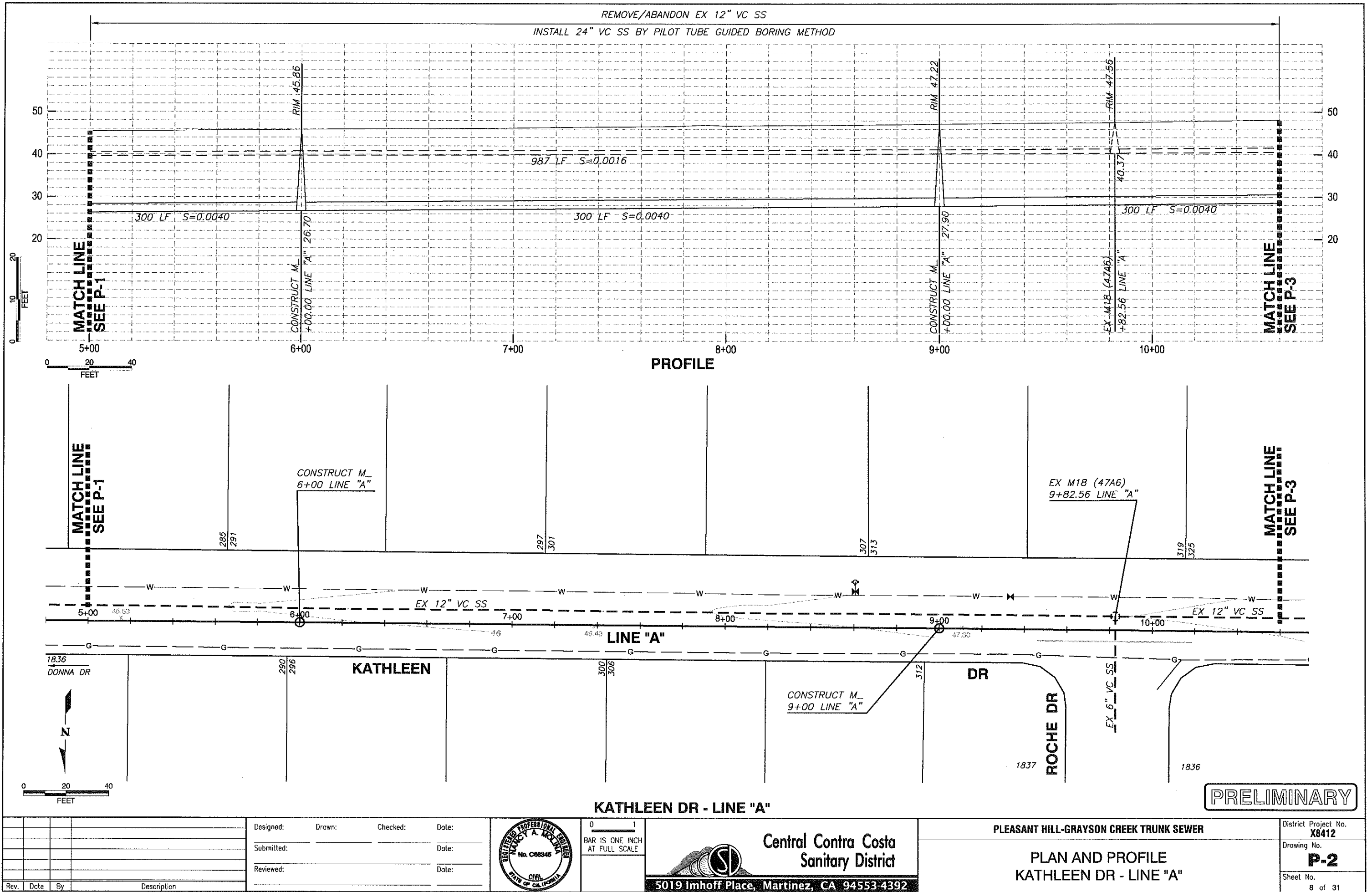
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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

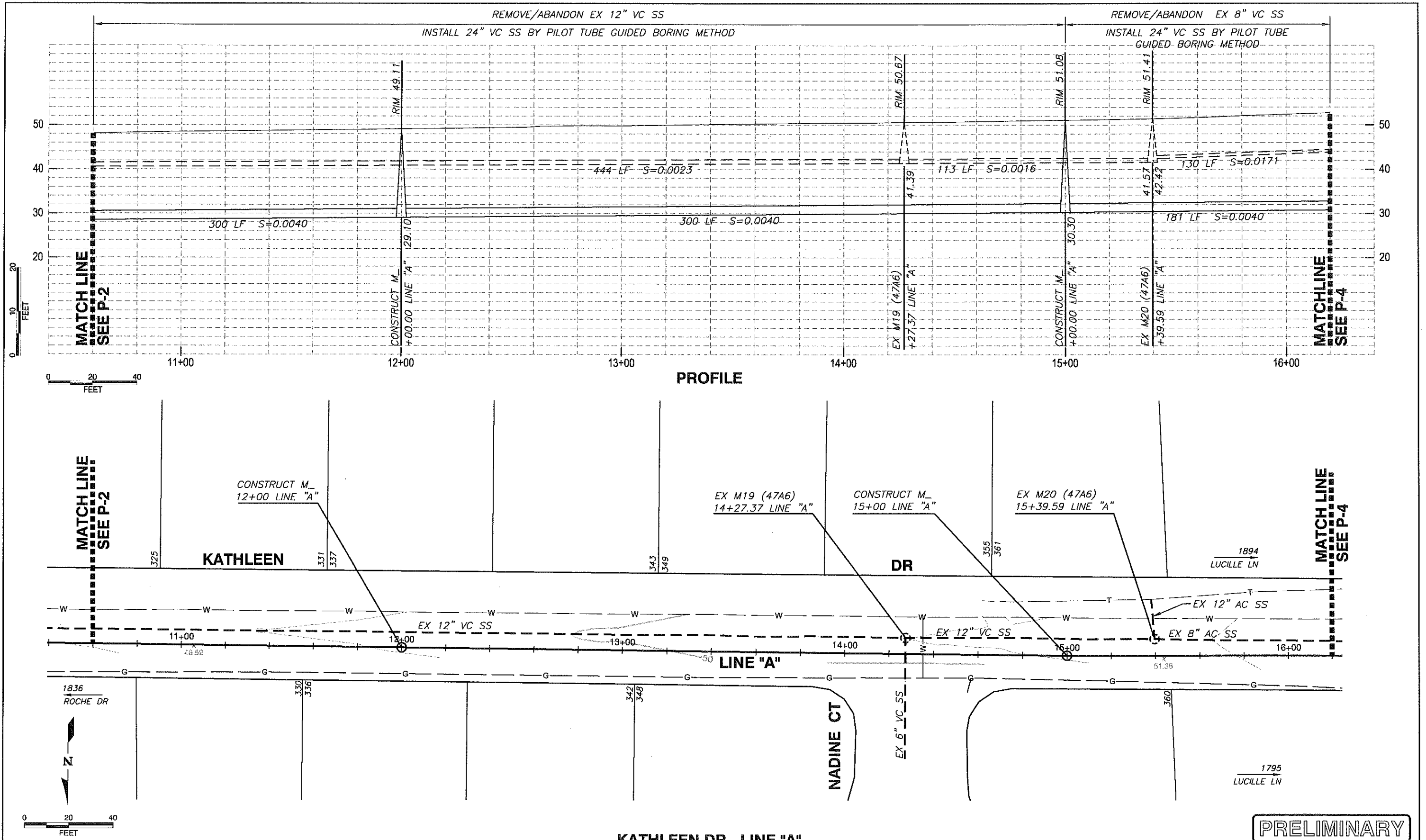
PLAN AND PROFILE
KATHLEEN DR - LINE "A"

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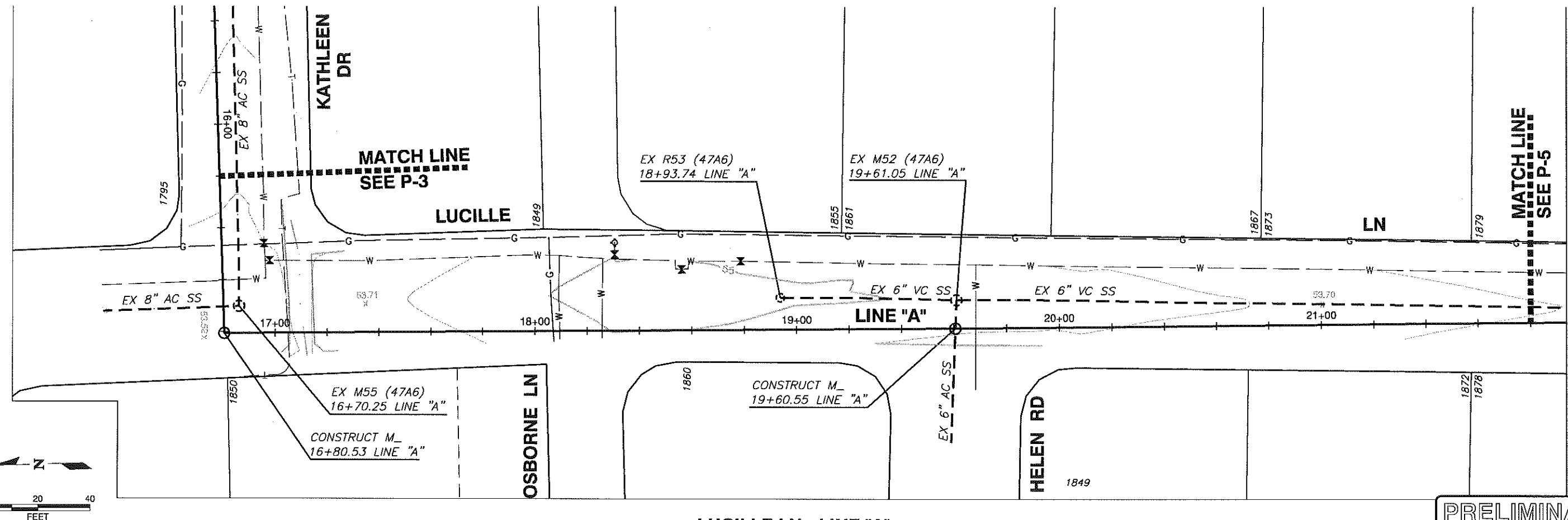
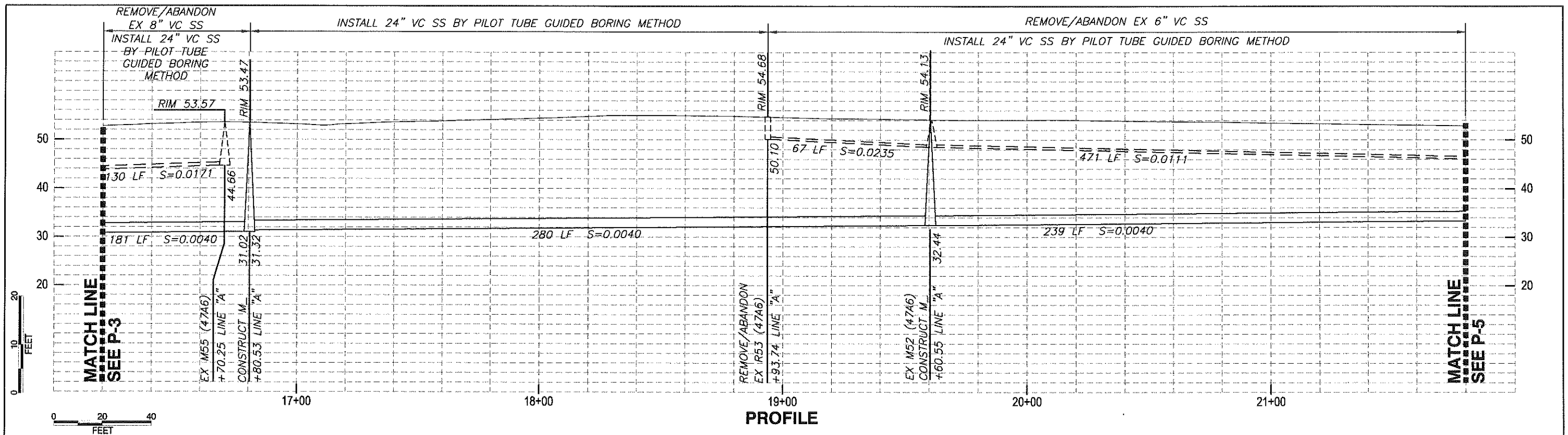


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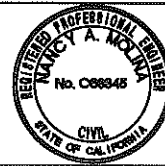
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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER
PLAN AND PROFILE
KATHLEEN DR - LINE "A"

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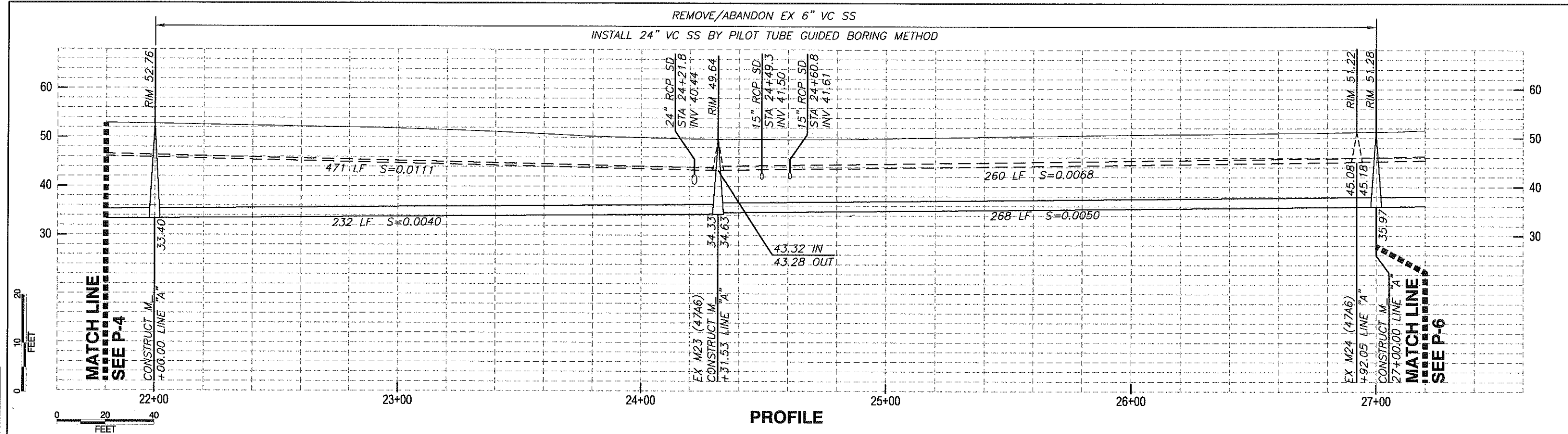


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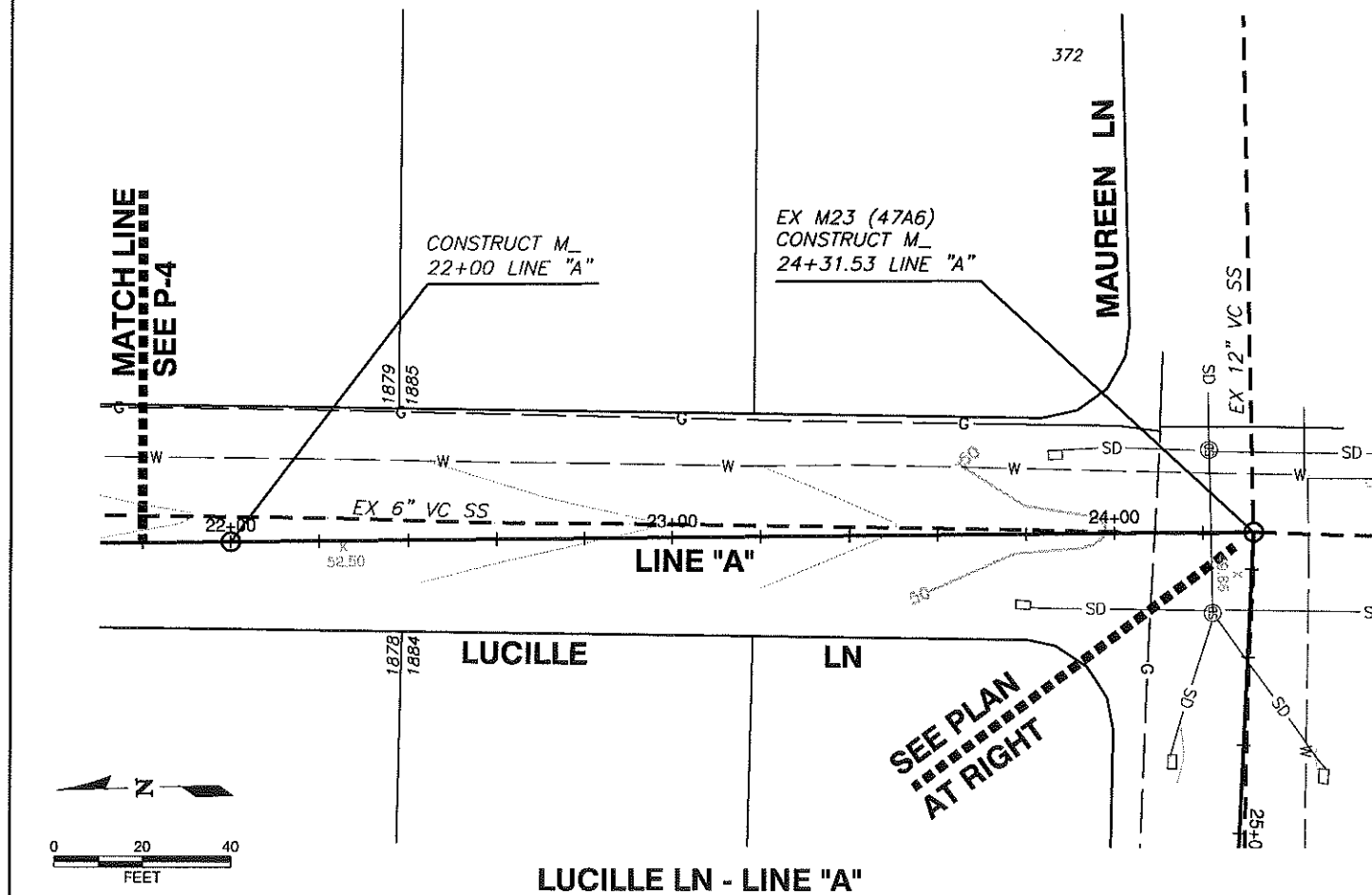
PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

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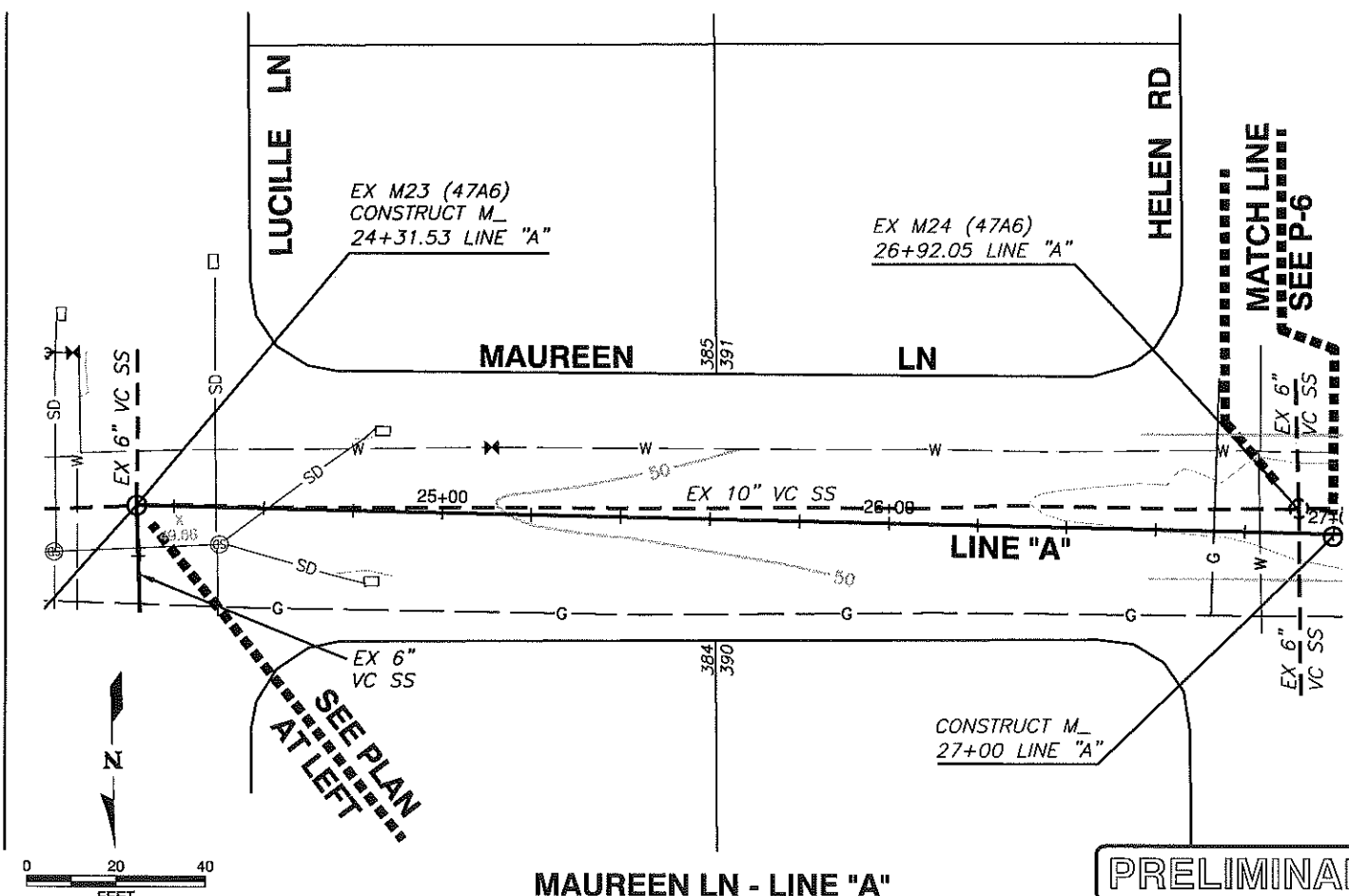
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PROFILE



LUCILLE LN - LINE "A"



MAUREEN LN - LINE "A"

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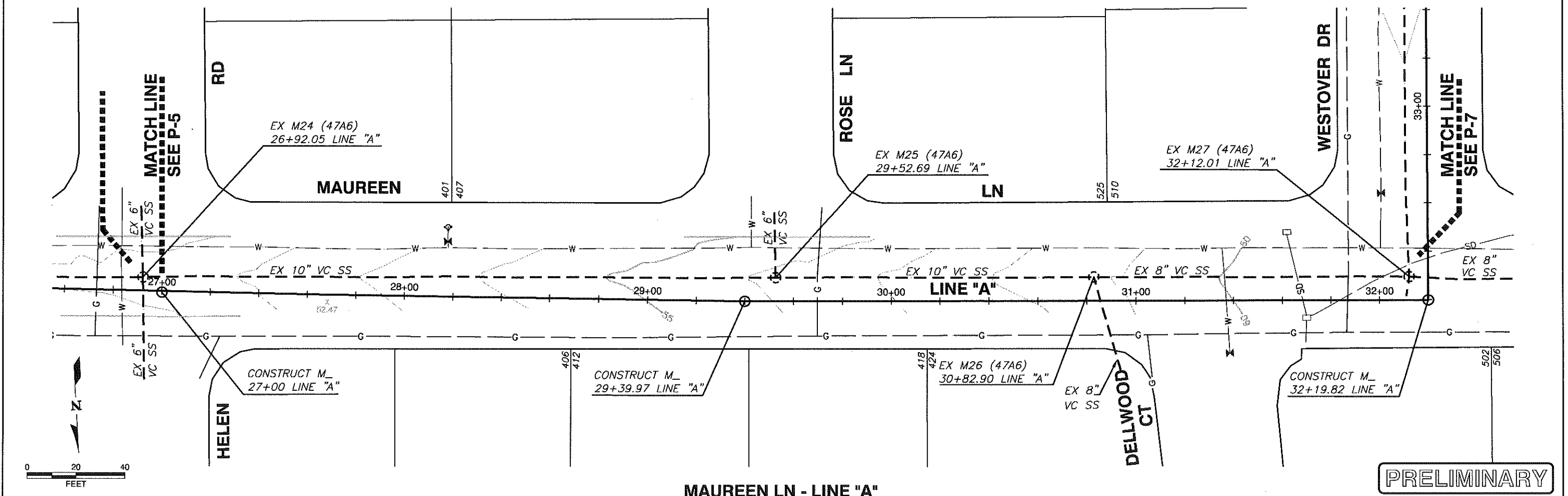
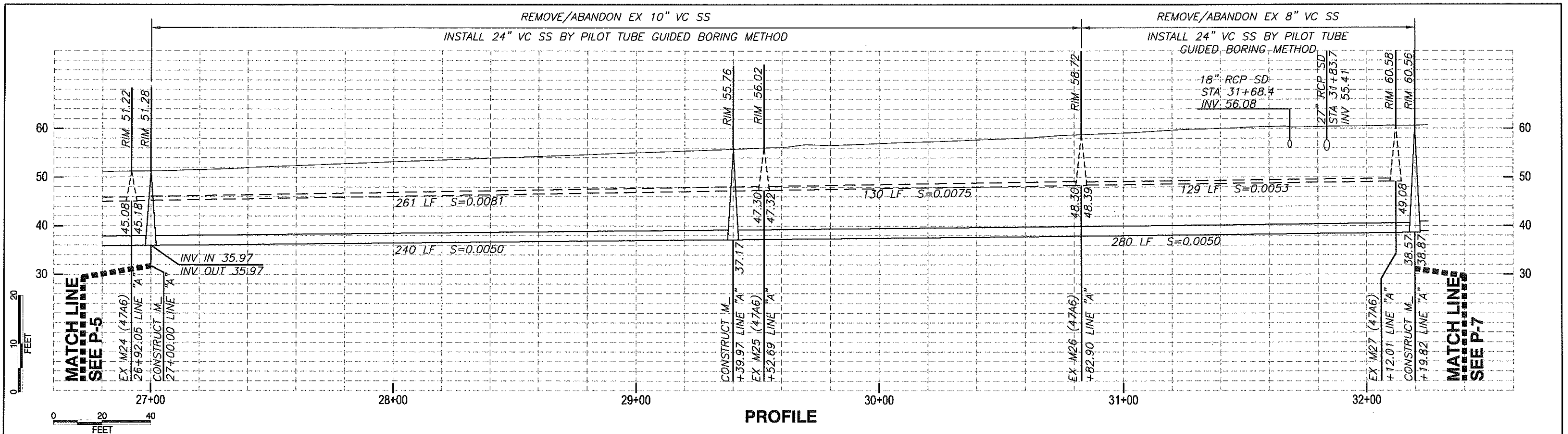
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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER
PLAN AND PROFILE
LUCILLE LN - LINE "A"
MAUREEN LN - LINE "A"

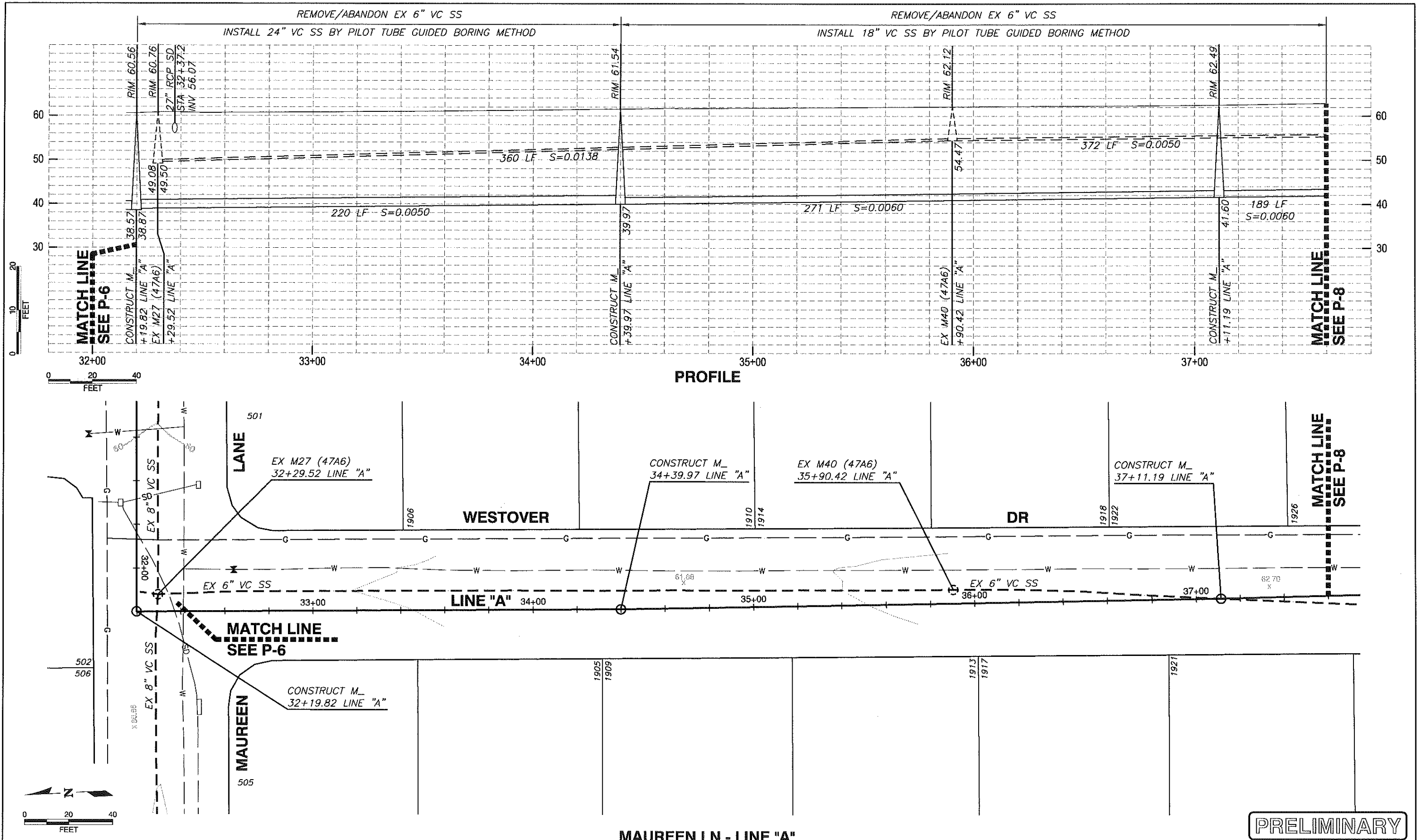
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				Submitted: _____ Date: _____							PLAN AND PROFILE MAUREEN LN - LINE "A"		Drawing No. P-6	
				Reviewed: _____ Date: _____									Sheet No. 12 of 31	
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Plot Date: 12-Aug-2013 09:51 By: mbradshaw File Name: K:\Projects\8412 Pleasant Hill Grayson Ck Trunk Sewer\AutoCAD\8412 p07.dwg



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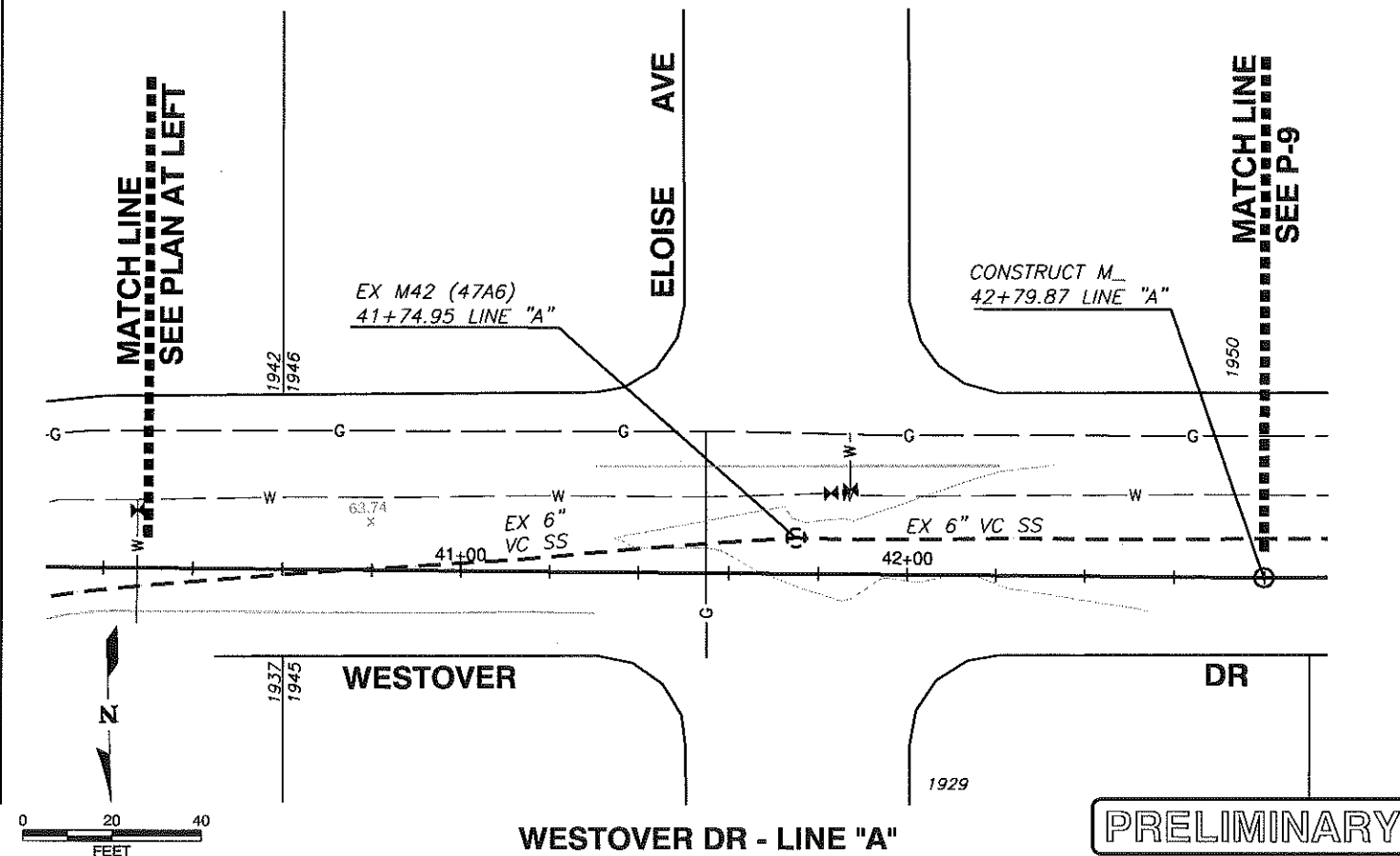
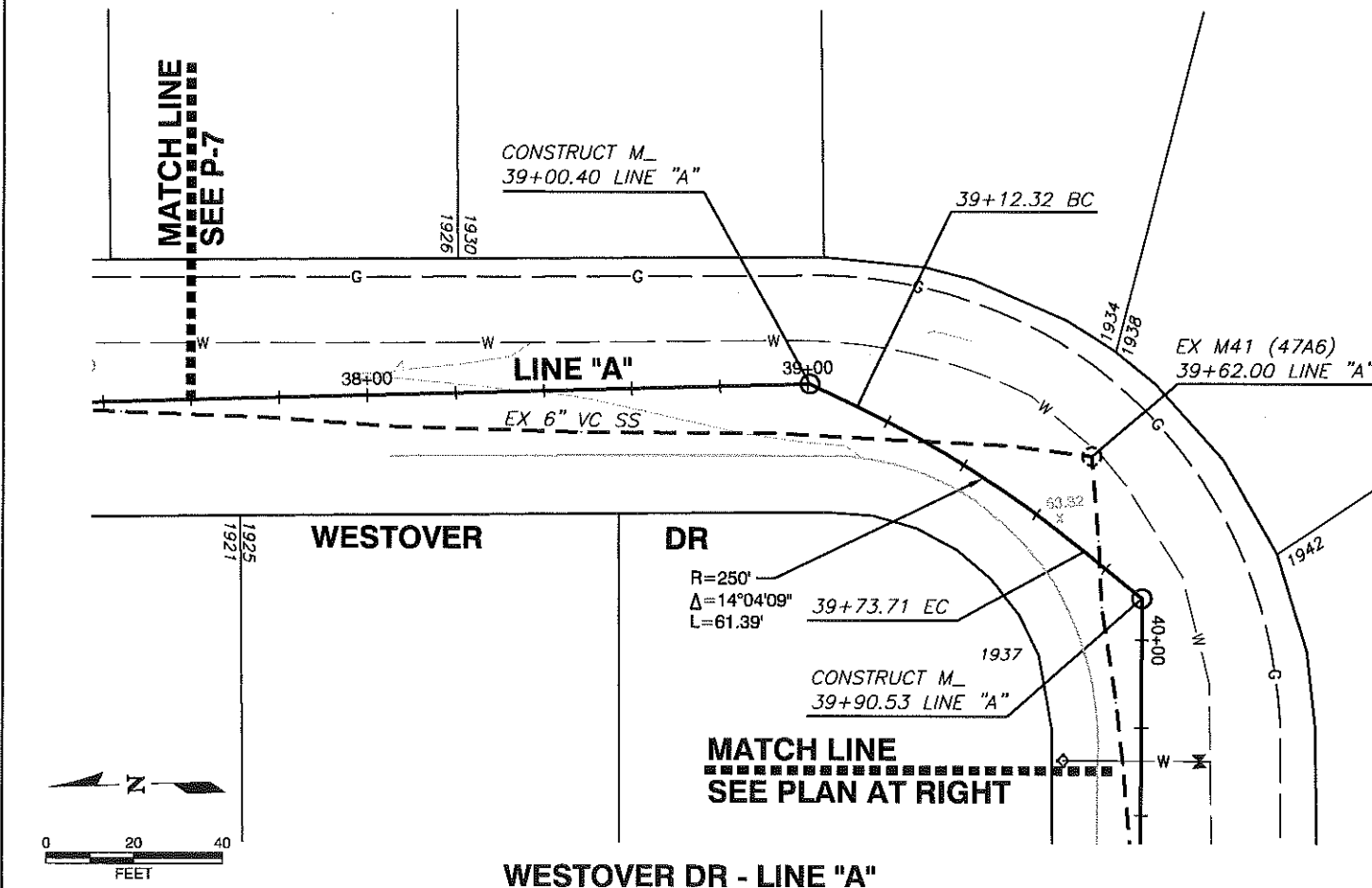
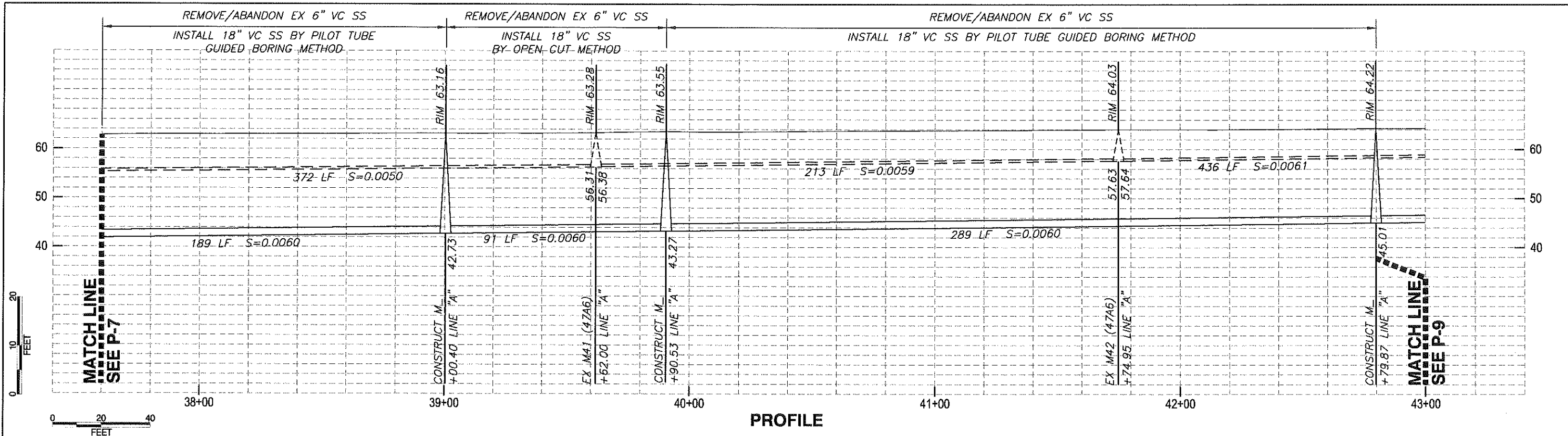
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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER
PLAN AND PROFILE
MAUREEN LN - LINE "A"

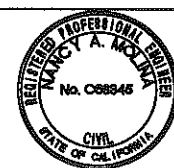
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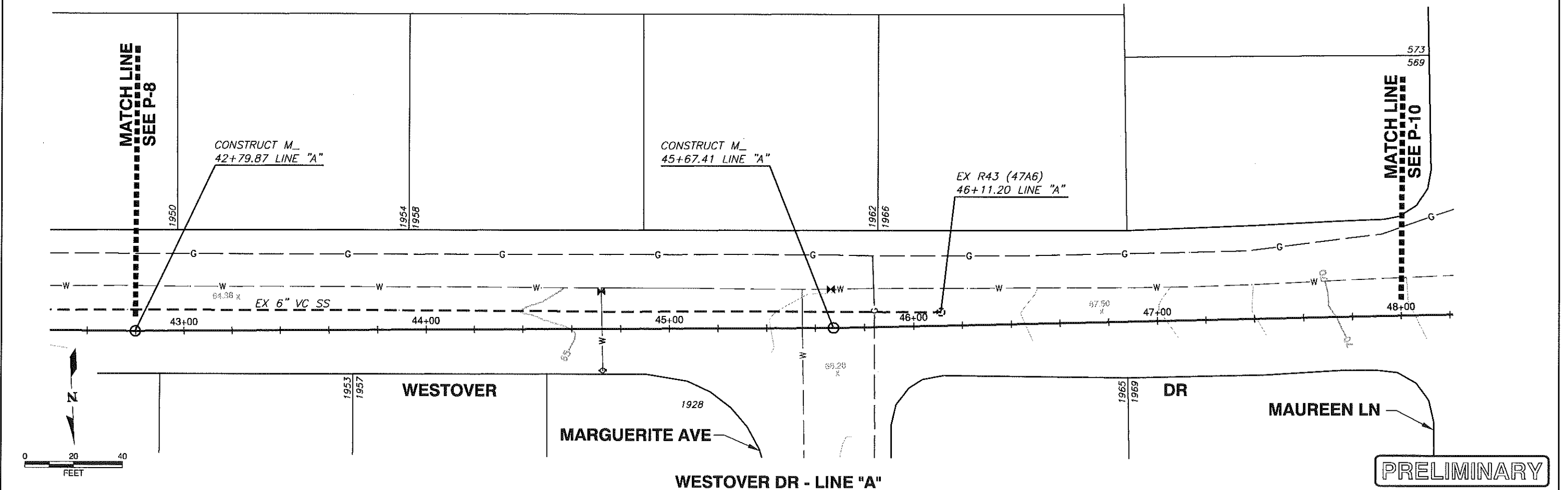
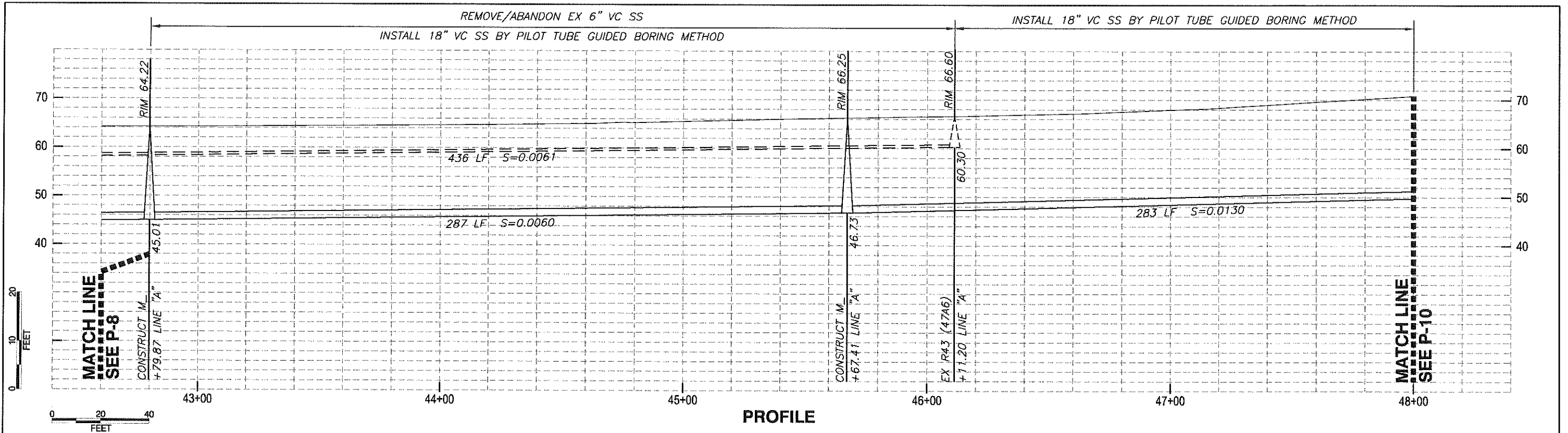
PLAN AND PROFILE
WESTOVER DR - LINE "A"

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X8412

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Sanitary District
5019 Imhoff Place, Martinez, CA 94553-4392

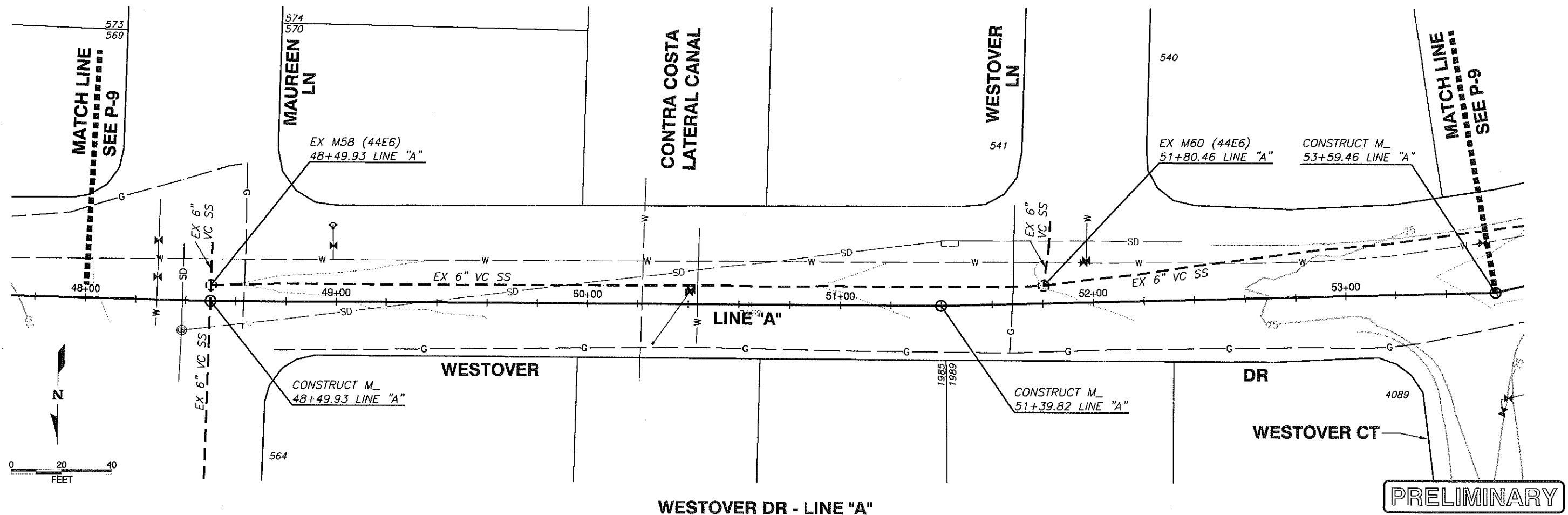
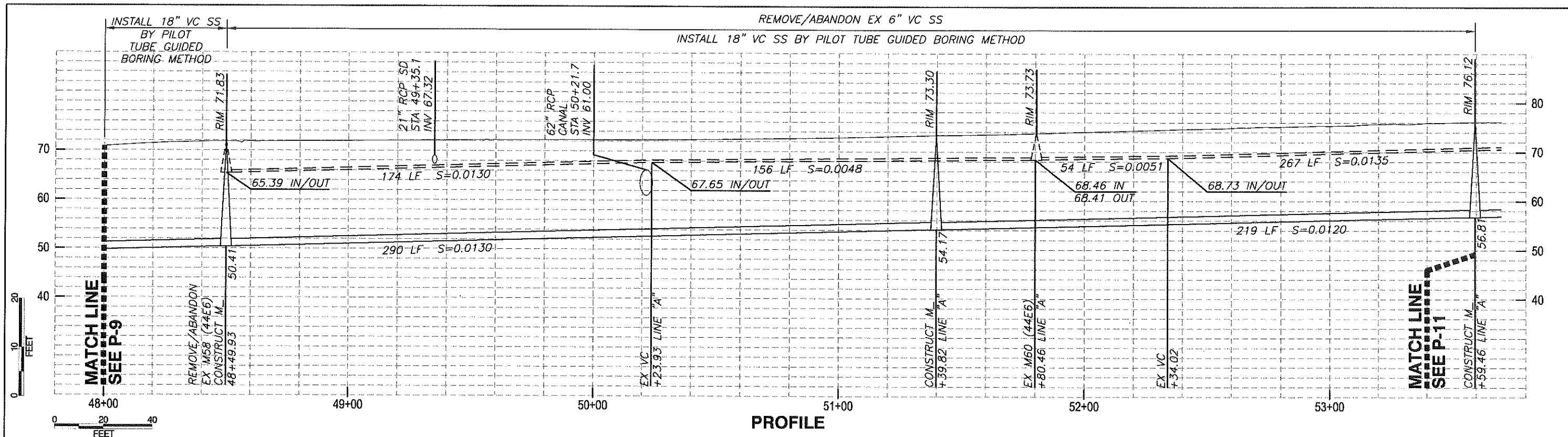
PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

PLAN AND PROFILE
WESTOVER DR - LINE "A"

District Project No.
X8412

Drawing No.
P-9

Sheet No.
15 of 31



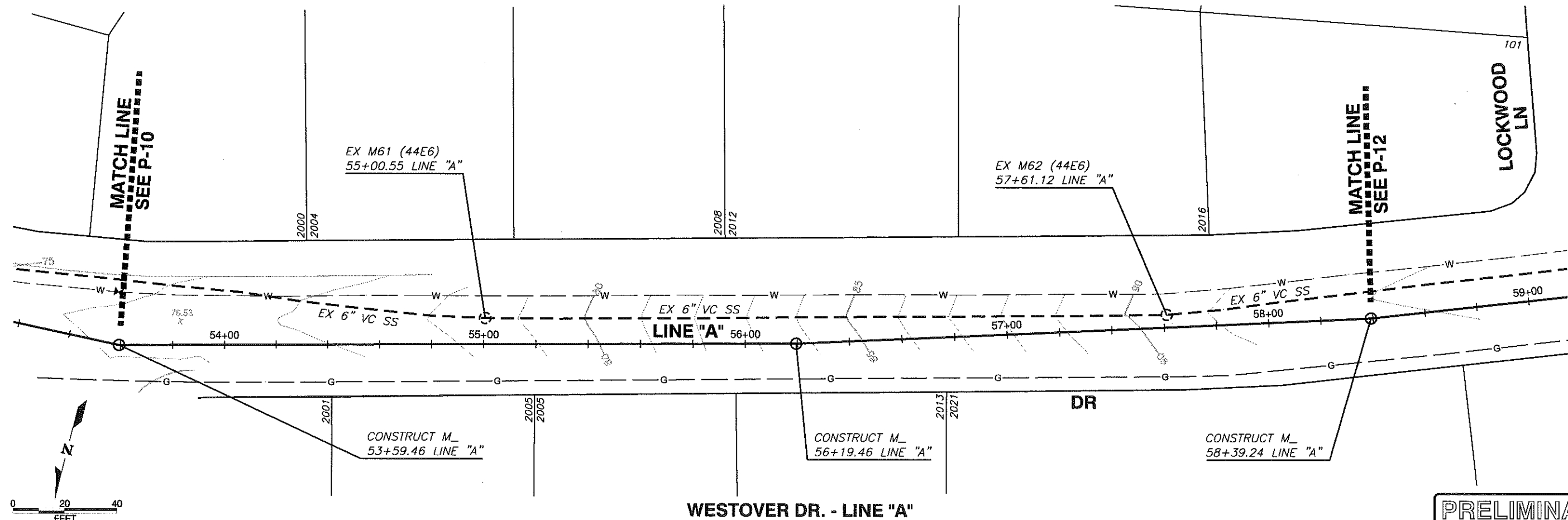
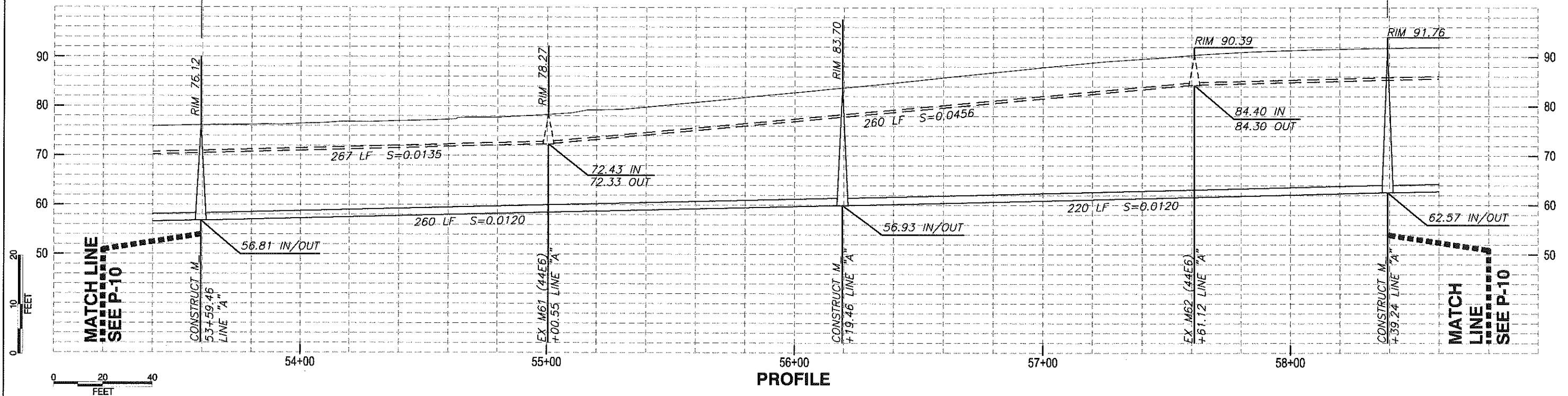
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**Central Contra Costa
Sanitary District**

PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

REMOVE/ABANDON EX 6" VC SS
INSTALL 18" VC SS BY PILOT TUBE GUIDED BORING METHOD



PRELIMINARY

12-Aug-2013 09:51 By: mbradshaw File Name: K:\Projects\8412 Pleasant Hill Grayson Crk Trunk Sewer\AutoCAD\8412 p11.dwg

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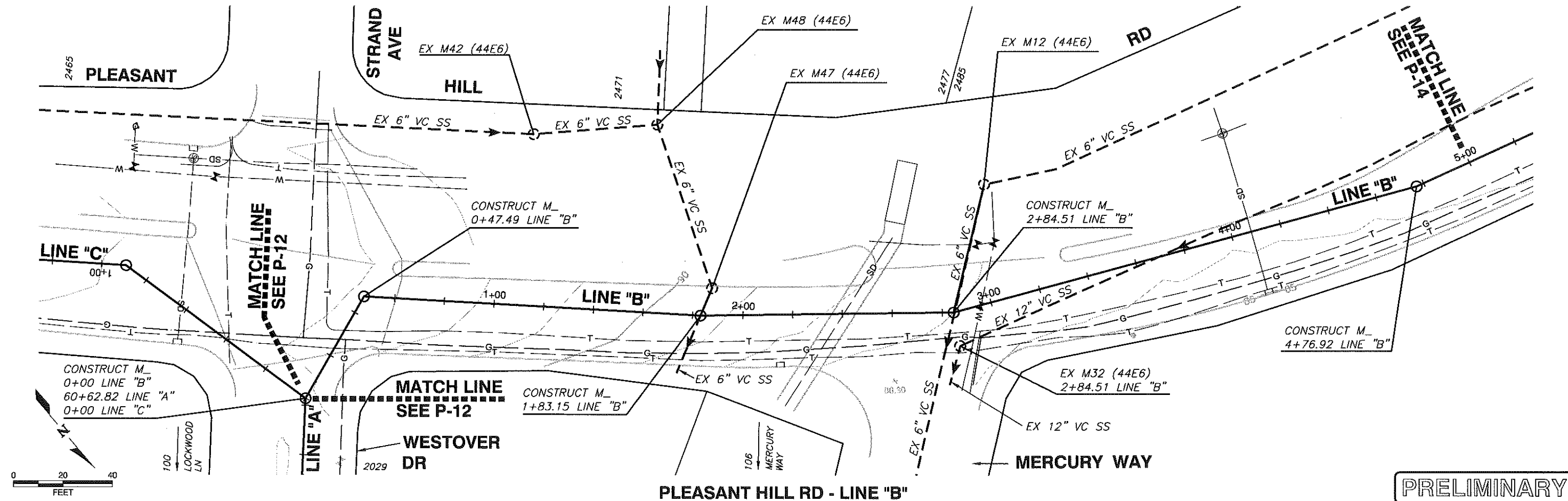
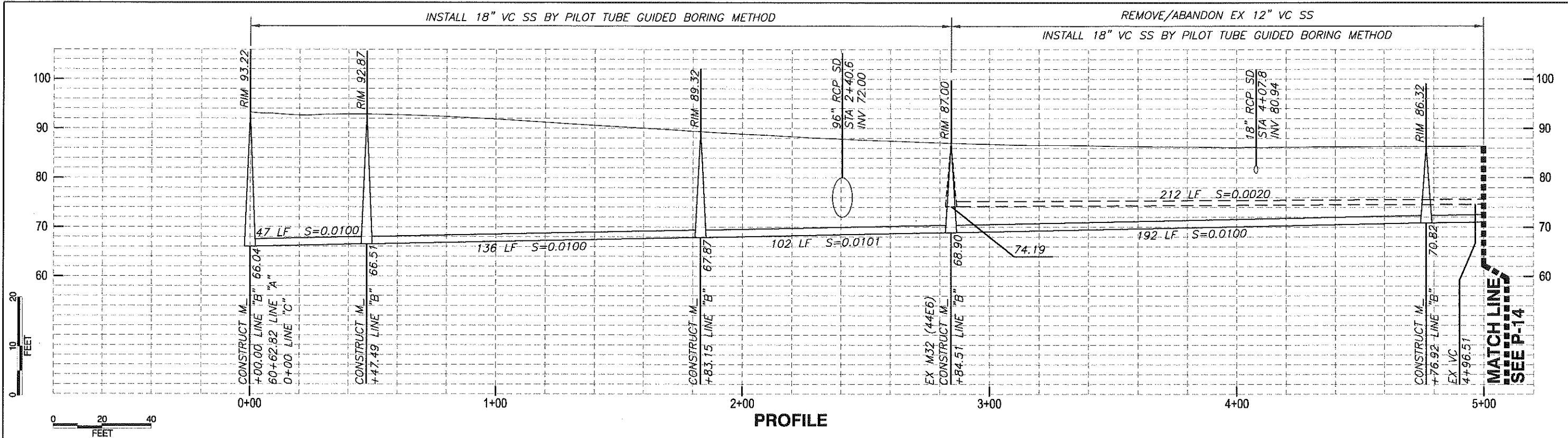
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Central Contra Costa
Sanitary District
5019 Imhoff Place, Martinez, CA 94553-4392

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PLAN AND PROFILE
WESTOVER DR - LINE "A"

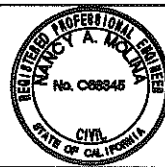
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Drawing No.
P-11
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17 of 31

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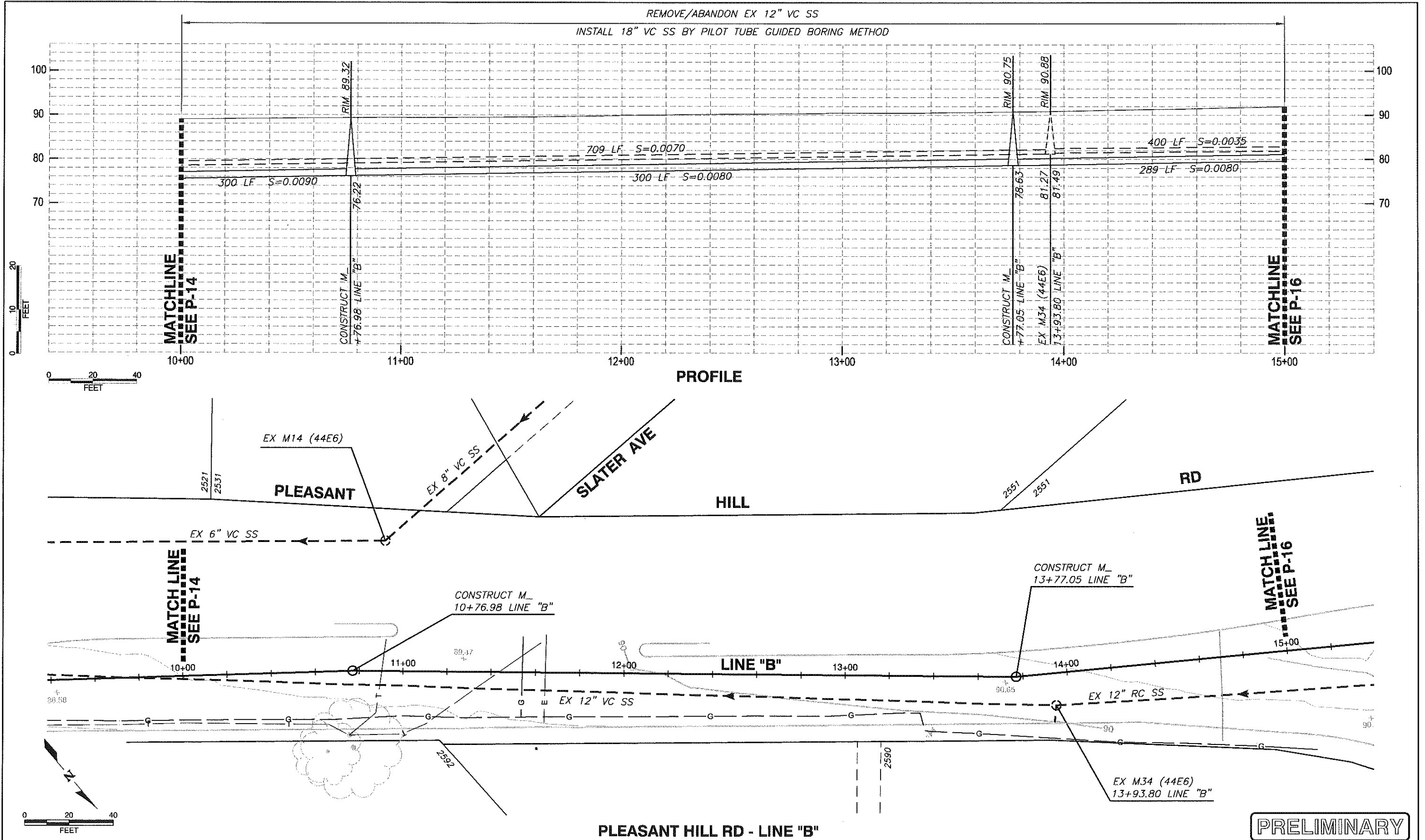
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Central Contra Costa
Sanitary District
5019 Imhoff Place, Martinez, CA 94553-4392

PLEASANT HILL-GRAYSON CREEK TRUNK SEWER
PLAN AND PROFILE
PLEASANT HILL RD - LINE "B"

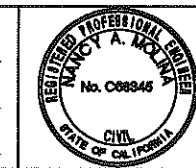
District Project No.
X8412
Drawing No.
P-13
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19 of 31

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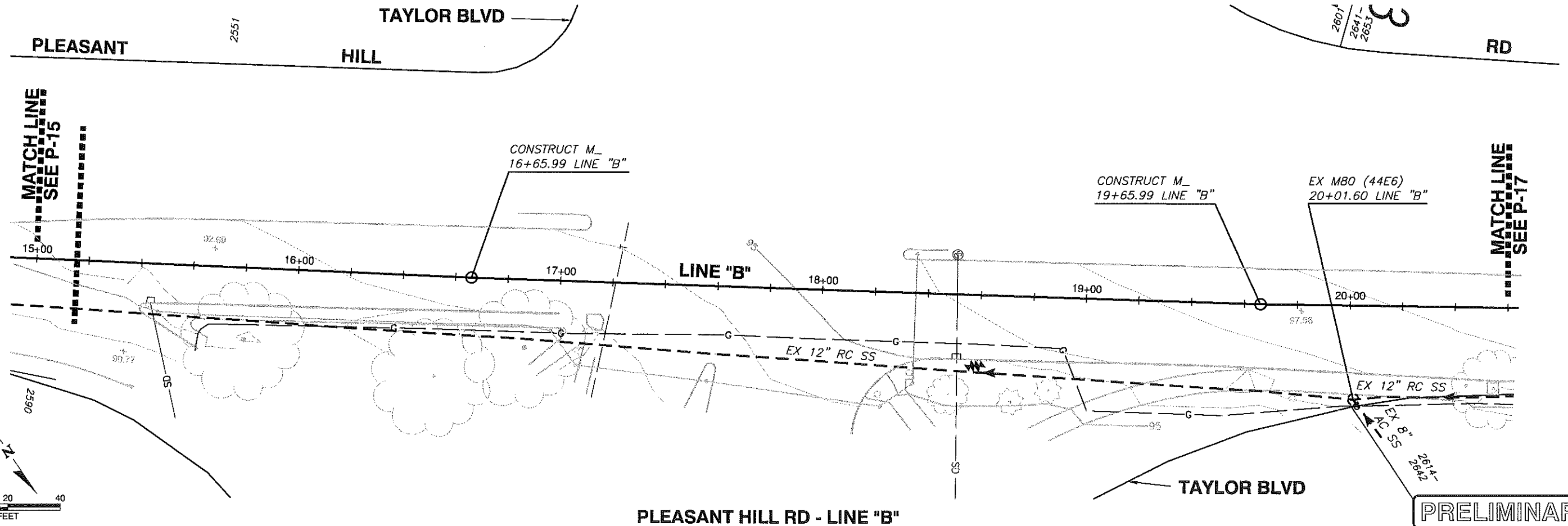
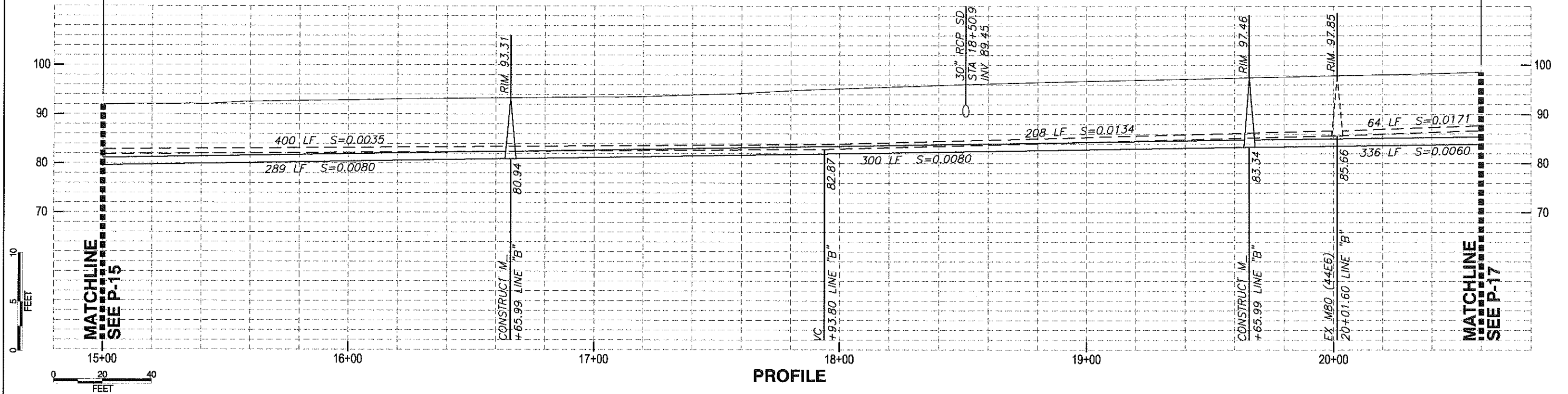
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**Central Contra Costa
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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER
**PLAN AND PROFILE
PLEASANT HILL RD - LINE "B"**

District Project No. X8412
Drawing No. P-15
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REMOVE/ABANDON EX 12" VC SS
INSTALL 18" VC SS BY PILOT TUBE GUIDED BORING METHOD



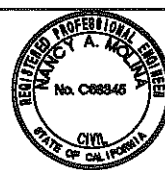
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PRELIMINARY

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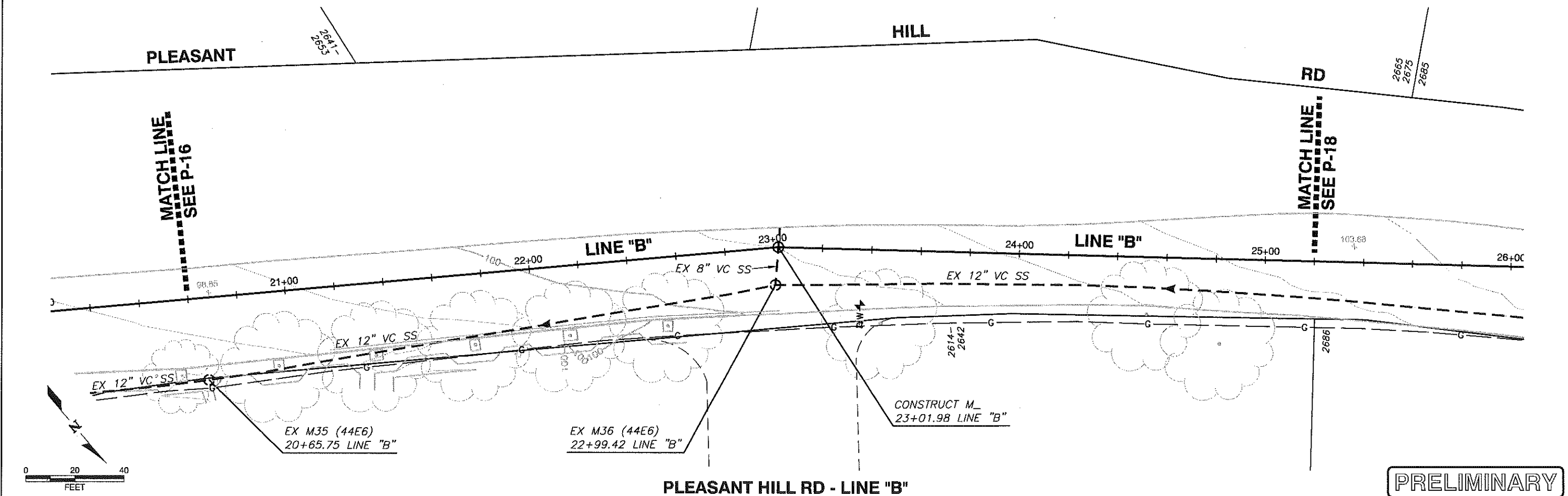
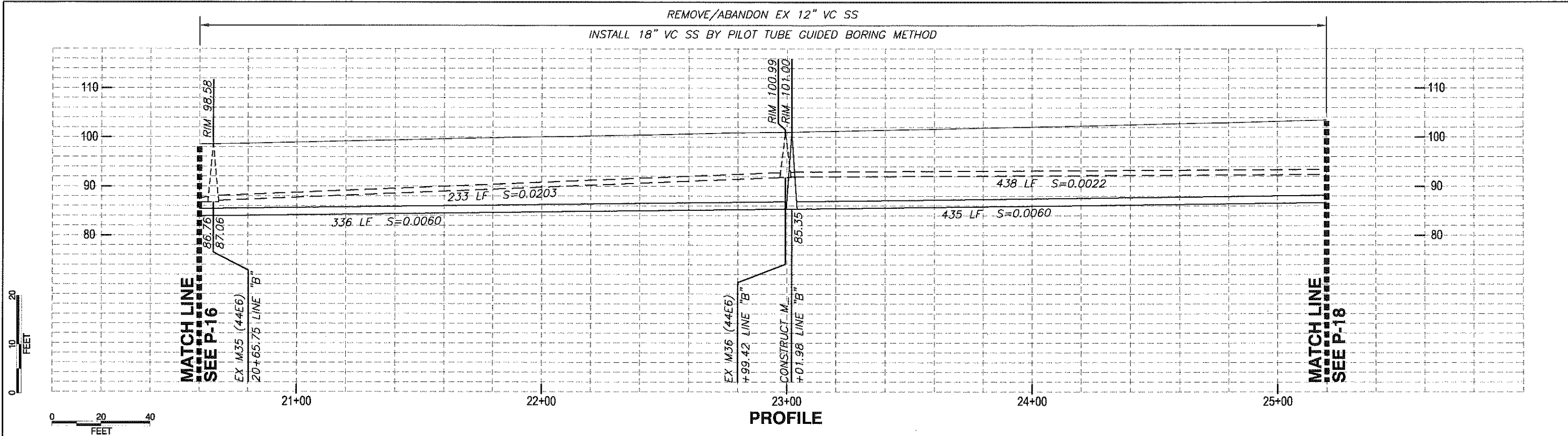
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Central Contra Costa
Sanitary District
5019 Imhoff Place, Martinez, CA 94553-4392

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PLAN AND PROFILE
PLEASANT HILL RD - LINE "B"

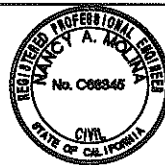
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Drawing No.
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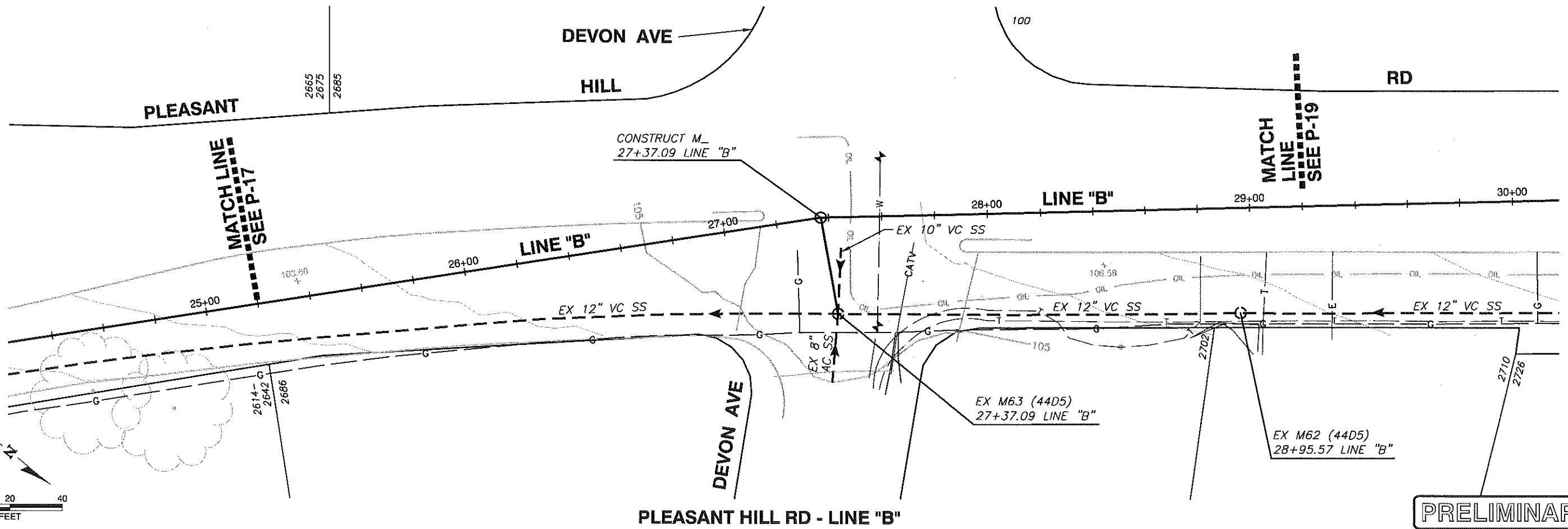
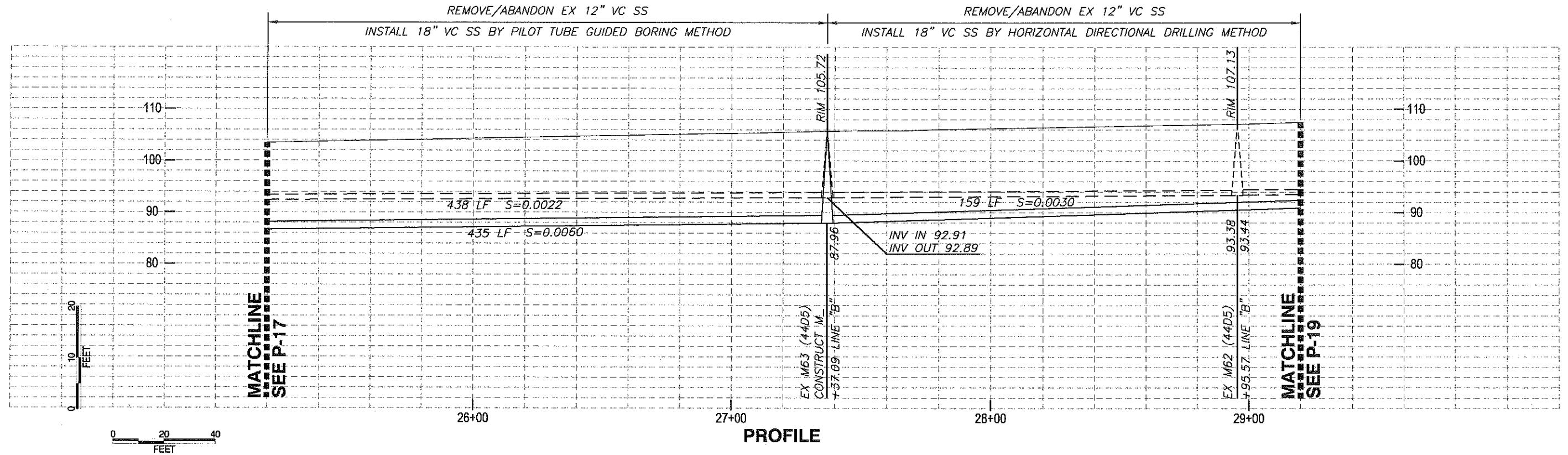


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Sanitary District
5019 Imhoff Place, Martinez, CA 94553-4392

PLEASANT HILL-GRAYSON CREEK TRUNK SEWER	District Project No. X8412
PLAN AND PROFILE PLEASANT HILL RD - LINE "B"	Drawing No. P-17
	Sheet No. 23 of 31

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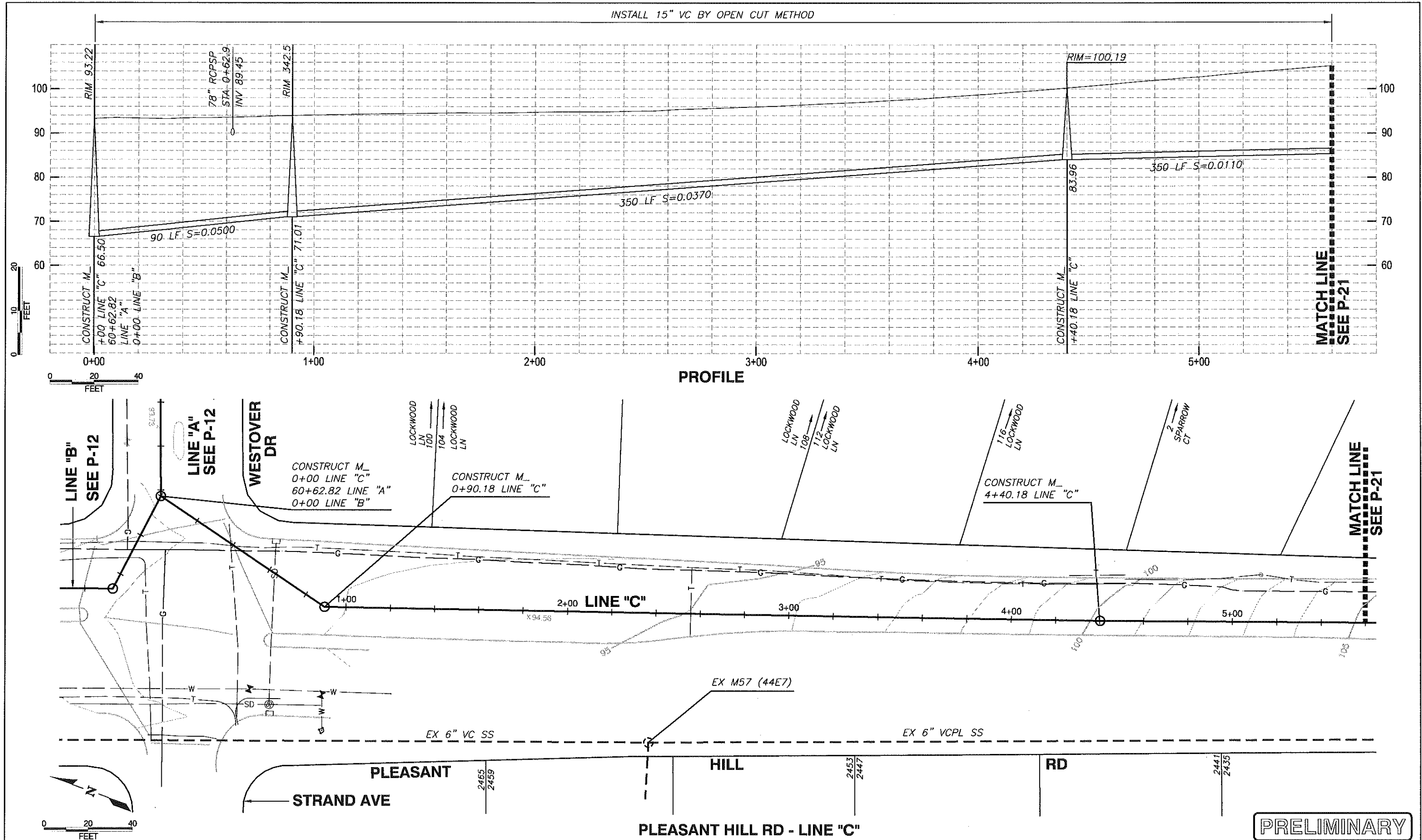
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Central Contra Costa
Sanitary District
5019 Imhoff Place, Martinez, CA 94553-4392

PLEASANT HILL-GRAYSON CREEK TRUNK SEWER
PLAN AND PROFILE
PLEASANT HILL RD - LINE "B"

District Project No.
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29 of 31

P: 12-Aug-2013 09:52 By: mbradshaw File Name: K:\Projects\8412 Pleasant Hill Grayson Crk Trunk Sewer\AutoCAD\8412 p20.dwg



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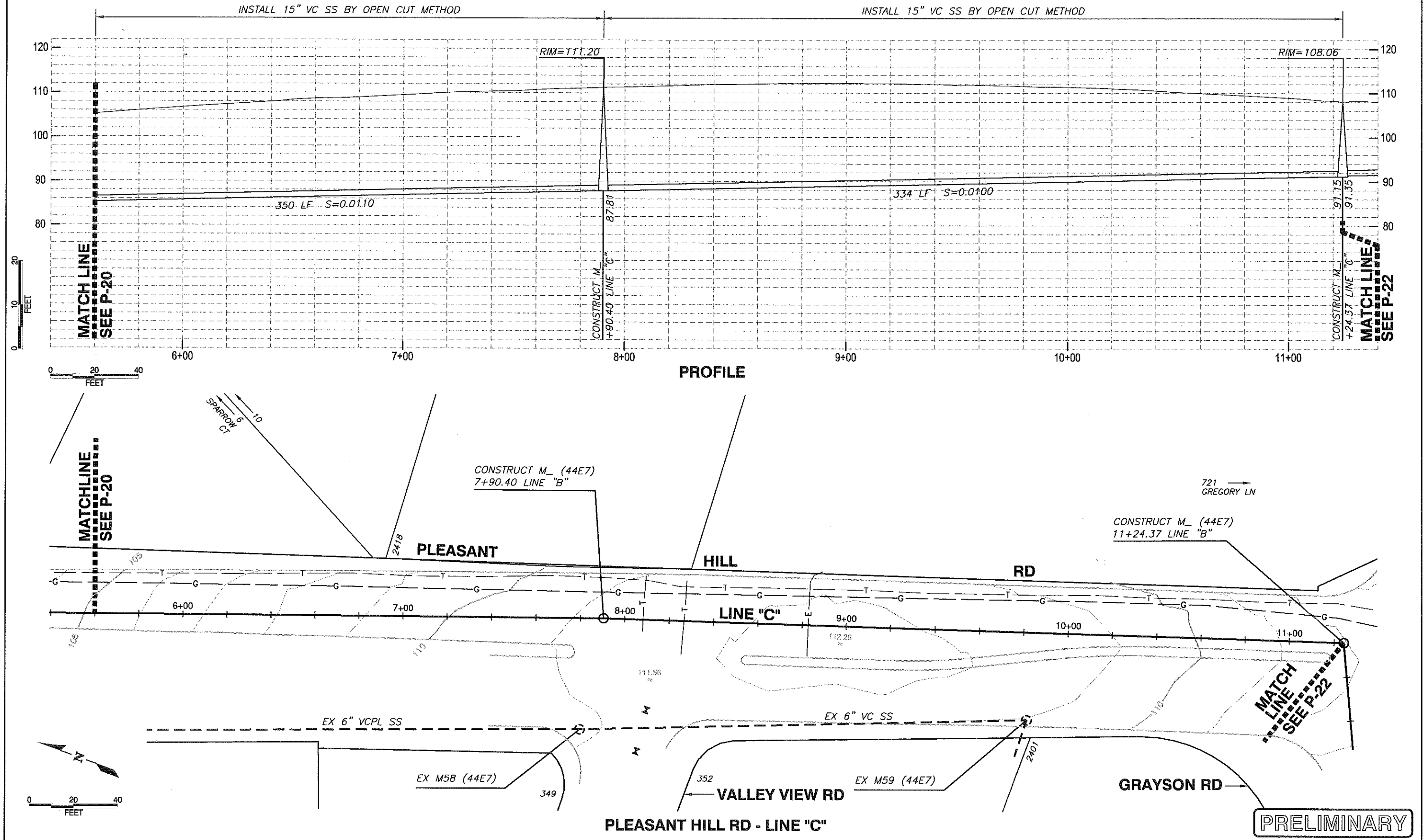
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Central Contra Costa Sanitary District
5019 Imhoff Place, Martinez, CA 94553-4392

PLEASANT HILL-GRAYSON CREEK TRUNK SEWER
PLAN AND PROFILE
PLEASANT HILL RD - LINE "C"

District Project No.
X8412
Drawing No.
P-20
Sheet No.
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By: mbradshaw Date: 12-Aug-2013 09:52 File Name: K:\Projects\16412 Pleasant Hill Grayson Crk Trunk Sewer\AutoCAD\16412 p21.dwg



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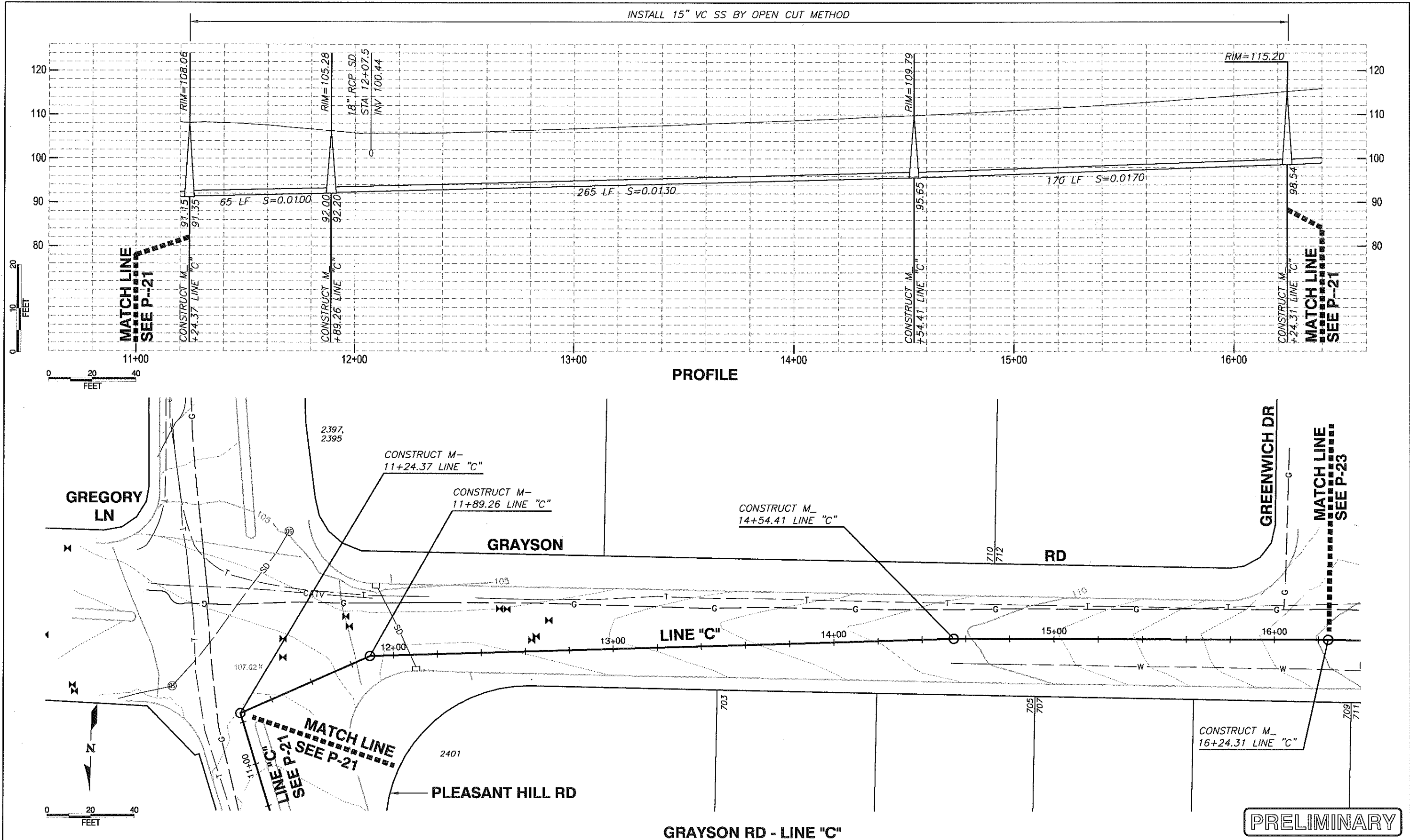
Central Contra Costa
Sanitary District
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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

PLAN AND PROFILE
PLEASANT HILL RD - LINE "C"

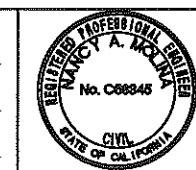
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Drawing No.	P-21
Sheet No.	27 of 31

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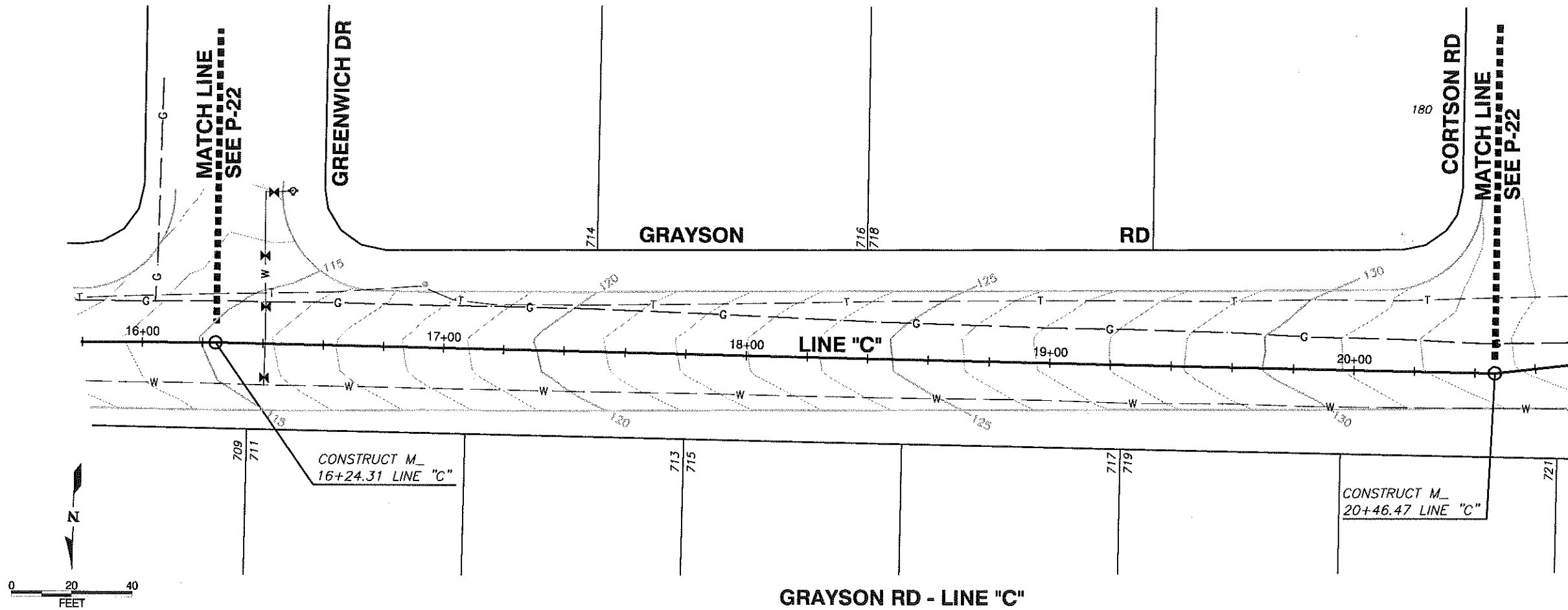
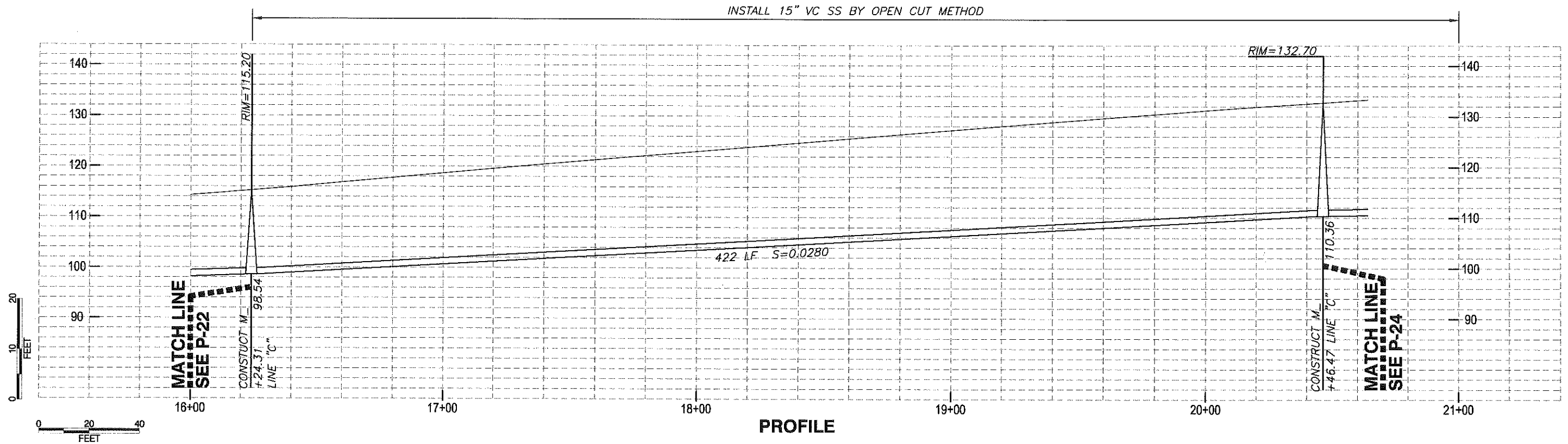
**Central Contra Costa
Sanitary District**
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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

**PLAN AND PROFILE
GRAYSON RD - LINE "C"**

District Project No.
X8412
Drawing No.
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28 of 31

P:\C:\Date: 12-Aug-2013 09:52 By: mbradshaw File Name: K:\Projects\8412 Pleasant Hill Grayson Crk Trunk Sewer\AutoCAD\8412_P23.dwg



GRAYSON RD - LINE "C"

PRELIMINARY

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Central Contra Costa
Sanitary District

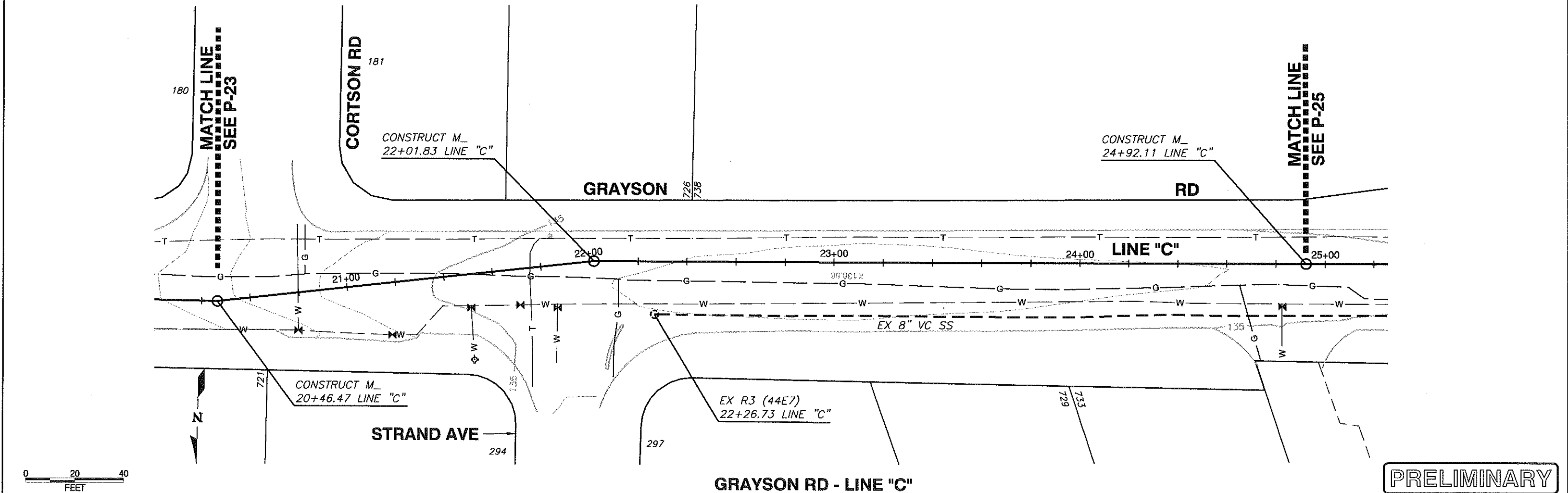
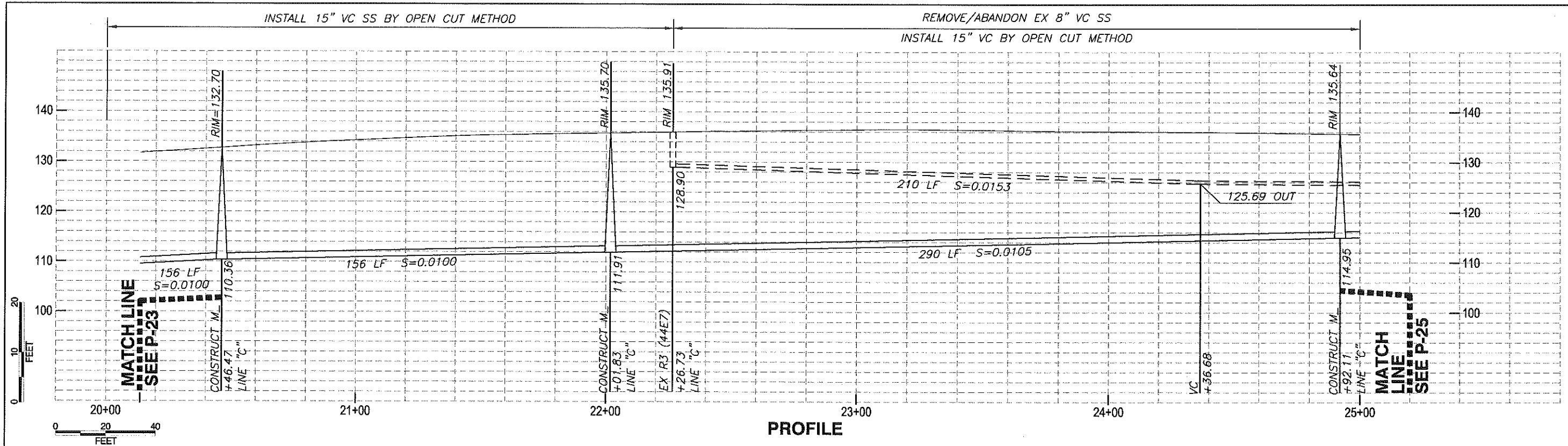
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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

PLAN AND PROFILE
GRAYSON RD - LINE "C"

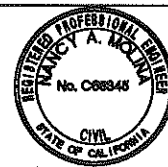
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X8412
Drawing No.
P-23
Sheet No.
29 of 31

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**Central Contra Costa
Sanitary District**
5019 Imhoff Place, Martinez, CA 94553-4392

PLEASANT HILL-GRAYSON CREEK TRUNK SEWER

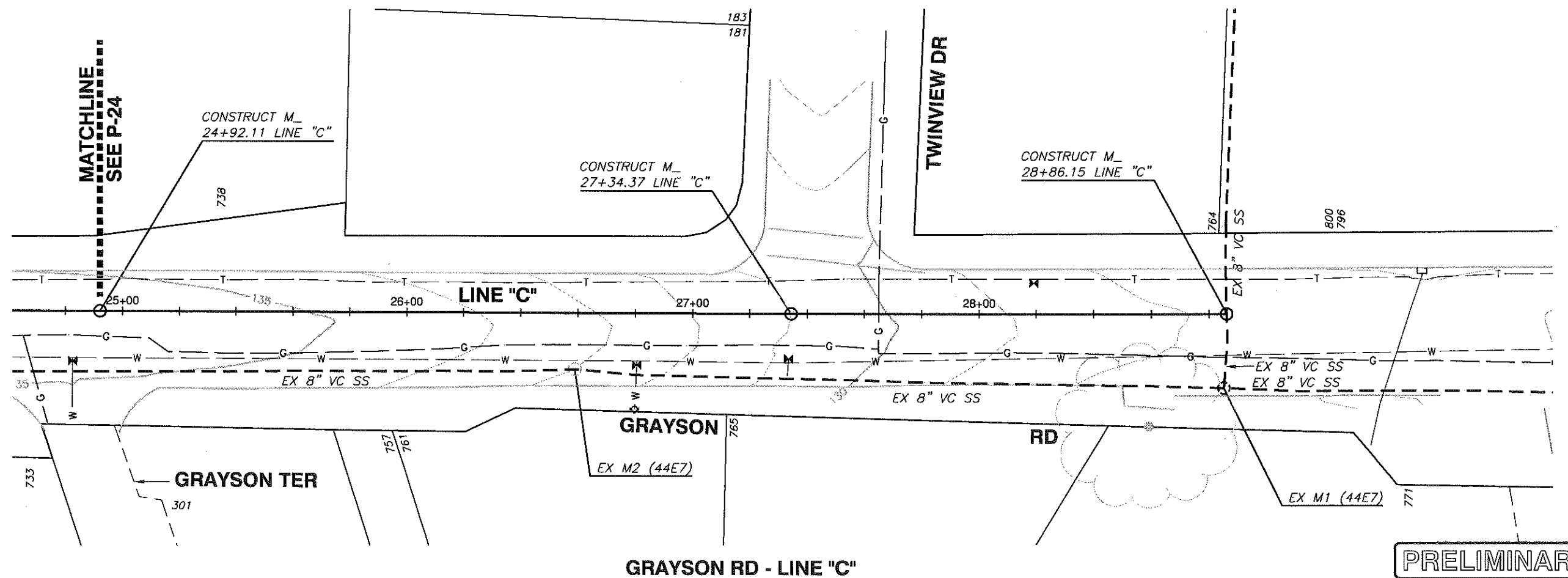
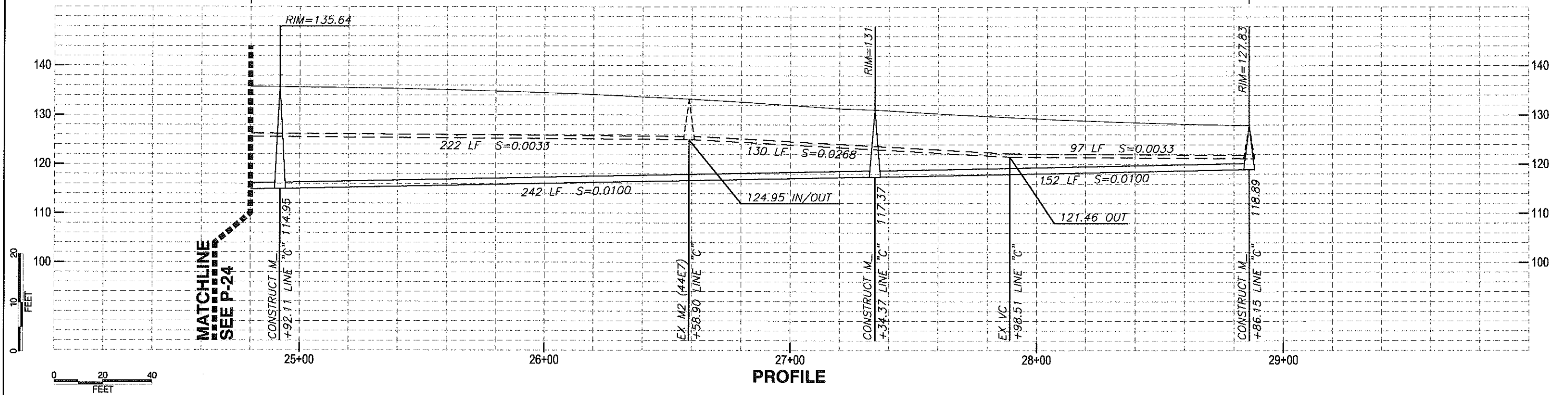
**PLAN AND PROFILE
GRAYSON RD - LINE "C"**

District Project No.
X8412

Drawing No.
P-24

Sheet No.
30 of 31

REMOVE/ABANDON EX 8" VC SS
INSTALL 15" VC SS BY OPEN CUT METHOD

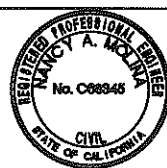


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GRAYSON RD - LINE "C"

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Sanitary District
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PLEASANT HILL-GRAYSON CREEK TRUNK SEWER
PLAN AND PROFILE
GRAYSON RD - LINE "C"

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Attachment B Cultural Resources Determination

CULTURAL RESOURCE COMPLIANCE
Mid-Pacific Region
Division of Environmental Affairs
Cultural Resources Branch

MP-153 Tracking Number: 14-SCAO-060

Project Name: Pleasant Hill-Grayson Creek Trunk Sewer Project, Contra Costa County, California

NEPA Document: CEC-13-069

Project Manager/NEPA Contact: Ben Lawrence

MP 153 Cultural Resources Reviewer: Mark Carper 

Determination: No Historic Properties Affected

Date: 3/12/2015

This proposed undertaking by Reclamation is to issue a permit to the Contra Costa County Sewer District (CCCSD) to renew an expired authorization to cross the Contra Costa Canal (CCC). Reclamation's issuance of a permit constitutes an undertaking as defined in Section 301(7) of the NHPA (16 U.S.C. 470), as amended, and requires compliance with Section 106 of the NHPA.

The proposed project will include the installation of 12,000 feet of sewer lines using a combination of open trenches and lateral borings. A new, higher capacity, pipeline (18-inch) will replace an existing 6- to 12-inch-diameter sewer pipeline that will divert sewage away from the existing wet weather capacity deficient sewers. The proposed pipeline will be installed within city streets along existing buried sewer and other utility lines. The new line will run either within or immediately adjacent to the existing sewer and other utility lines. Where open trenches are not feasible for installation, a lateral bore will be constructed for the 18-inch pipeline. The borings will be pilot-tube guided using horizontal directional-drilling construction methods. The boring pit bell-holes will be approximately 16 feet by 8 feet, and the receiving pits will be approximately 8 feet by 8 feet. Boring pit bell-holes will be approximately 8 feet deep. A segment of the new sewer line, to which the proposed project is dependent, will need to be bored under the CCC through Reclamation land thus prompting the requirement of Reclamation's issuance of a permit.

CULTURAL RESOURCE COMPLIANCE
Mid-Pacific Region
Division of Environmental Affairs
Cultural Resources Branch

In an effort to identify potential historic properties within the APE, CCCSD contracted LSA Associates (LSA) to conduct a record search at the Northwest Information Center, prepare a geoarchaeological assessment for the potential for buried historic properties, and to coalesce this information as well as historic and prehistoric contextual information into a cultural resources inventory report. As the entire area of potential effects (APE) is situated below urban development and pavement a pedestrian survey of the APE was not warranted. The efforts by LSA identified no cultural resources within the APE.

Although no historic properties were identified within the APE, the inventory report identified an elevated sensitivity for buried historic properties within the buried and paved soils. To account for this potential LSA prepared a monitoring plan that requires an archaeologist to monitor the worksites during all ground-disturbing activities and includes protocols in the event of an unanticipated discovery. Given the results of the historic properties identification efforts, the previously disturbed nature of the APE, and the paved and built environment context within which the project will be constructed, Reclamation agrees with this approach.

Pursuant to 36 CFR § 800.3(f)(2) Reclamation identified the Ione Band of Miwok Indians as an Indian tribe likely to have knowledge of historic properties or attach religious and cultural significance to historic properties within the APE. Reclamation sent a letter to these tribe on January 16, 2015 requesting their participation in the Section 106 process and assistance in identifying sites of religious and cultural significance of historic properties pursuant to 36 CFR § 800.4(a)(4). No such sites were identified.

Reclamation initiated consultation with the California State Preservation Office (SHPO) by letter dated February 5, 2015 requesting concurrence with a finding of no historic properties affected for the project. Pursuant to the regulations at 36 CFR §800.5(c), SHPO has 30 days from receipt to review an agency finding. The SHPO has yet to respond to Reclamation's finding of effect. If after 30 days the SHPO has not responded, the regulations state that "...the agency official shall then carry out the undertaking in accordance with paragraph (d)(1) of this section" [§800.5(c)(1)]. Because the SHPO has failed to comment on Reclamation's finding within the period of time provided to them pursuant to the Section 106 regulations, Reclamation may move on to the next step of the Section 106 process. Reclamation has concluded the NHPA Section 106 process for this undertaking.

CULTURAL RESOURCE COMPLIANCE
Mid-Pacific Region
Division of Environmental Affairs
Cultural Resources Branch

After reviewing CEC-13-069, dated March 2014, I concur with item #8 which states that this action would not have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places.

This memorandum is intended to convey the completion of the NHPA Section 106 process for this undertaking. Please retain a copy in the administrative record for this action. Should changes be made to this project, additional NHPA Section 106 review, possibly including consultation with the State Historic Preservation Officer, may be necessary. Thank you for providing the opportunity to comment.

Attachment C Indian Trust Assets Determination



Lawrence, Benjamin <blawrence@usbr.gov>

Request for Resource Determinations, SCCAO CEC 13-069, Sewer Line Crossing- Contra Costa Canal at Milepost 41.2

RIVERA, PATRICIA <privera@usbr.gov>

Mon, Jan 13, 2014 at 8:59 AM

To: Benjamin Lawrence <blawrence@usbr.gov>

Ben,

I reviewed the proposed action where the Central Contra Costa Sanitary District operates a six-inch sanitary sewer line which crosses underneath the Contra Costa Canal at approximately Milepost 41.2. The pipe is undersized for the number of customers it serves, and the existing license to cross the canal has expired. CCCSD would like to renew their authorization to cross the canal and install a higher-capacity line.

The total length of upgraded pipe would be approximately 12,000 linear feet, and it would vary in width, with 15-inch, 18-inch and 24-inch diameter cross-sections. Most of the pipe would be laid in an open trench, but the segment crossing the canal would be directionally bored.

The proposed action does not have a potential to impact Indian Trust Assets. The nearest ITA is the Lytton Reservation, approximately 14 Miles West of the project locations.

Patricia Rivera
Native American Affairs Program Manager
US Bureau of Reclamation
Mid-Pacific Region
2800 Sacramento, California 95825
(916) 978-5194