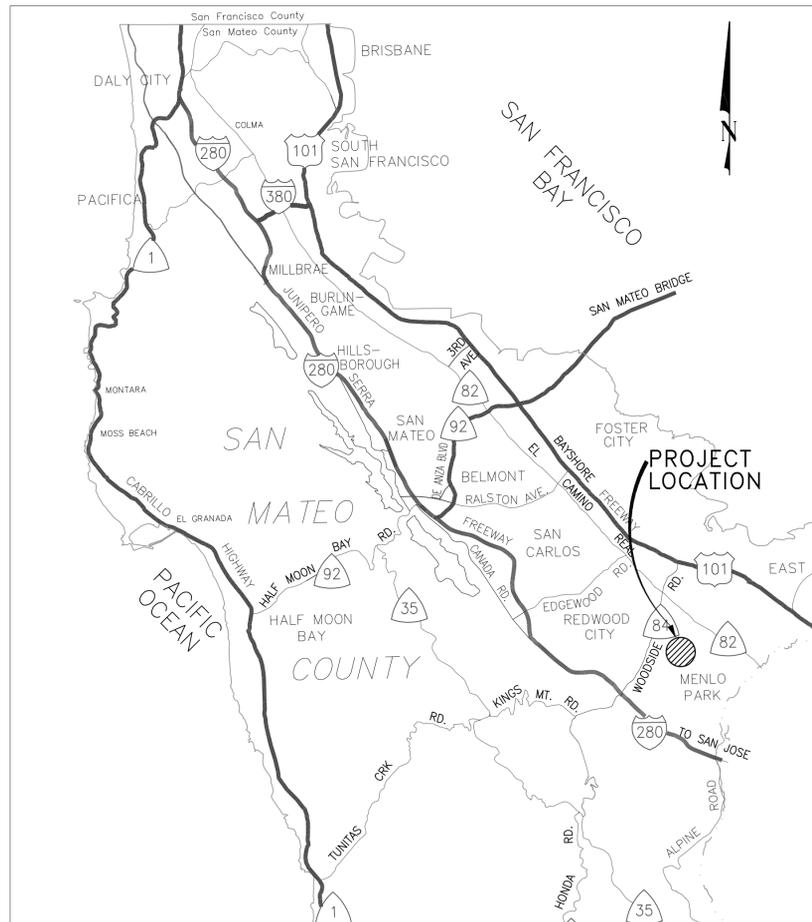


TOWN OF ATHERTON CULVERT REPAIR DRAINAGE IMPROVEMENT PROJECT

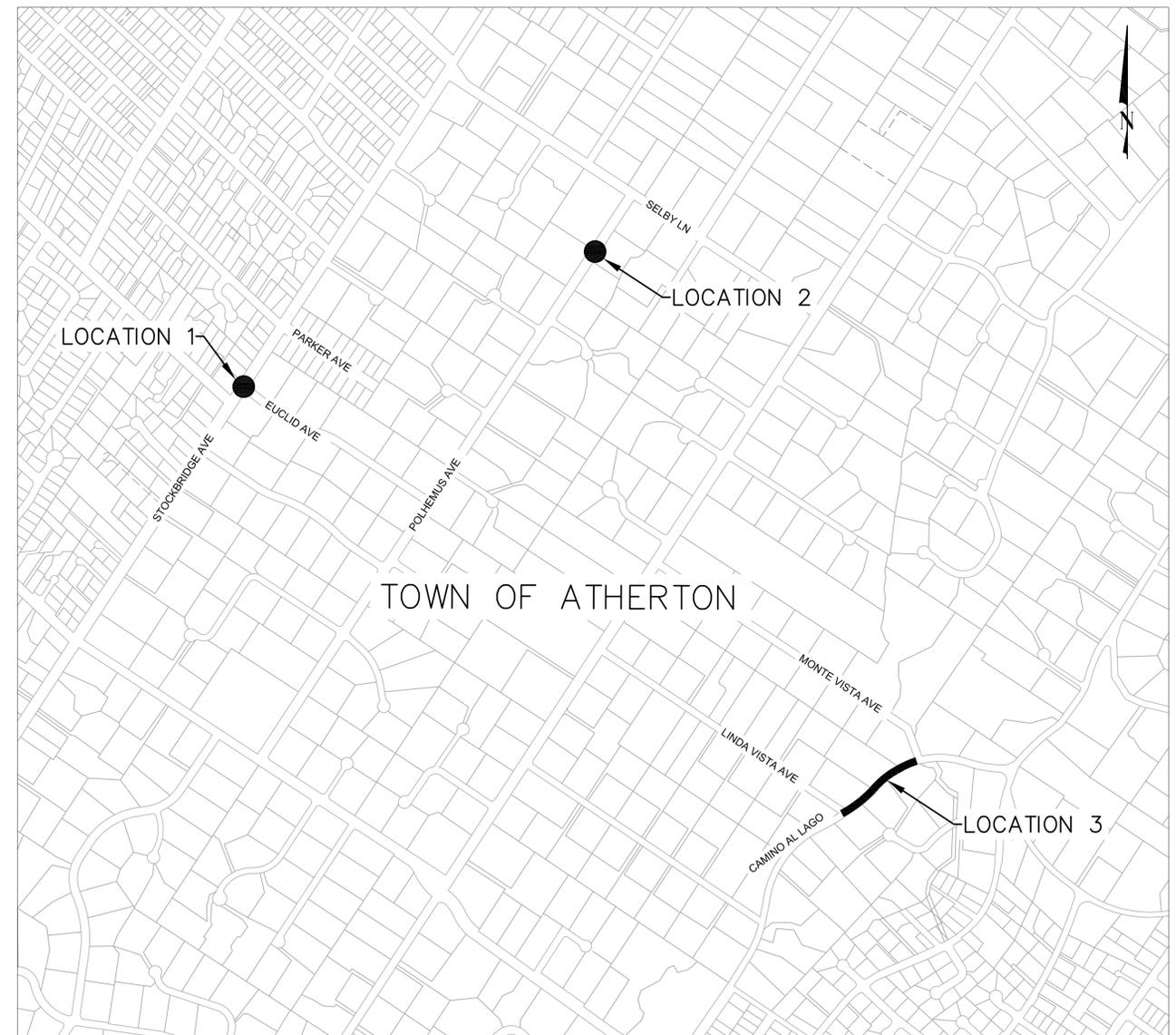
PROJECT # 56082



LOCATION MAP
NO SCALE

SHEET INDEX

SHEET NO.	DRAWING NO.	SHEET TITLE
1	T-01	TITLE SHEET
2	GN-01	GENERAL NOTES & ABBREVIATIONS
3-6	D-01 TO D-04	DRAINAGE PLAN & PROFILE
7-10	C-01 TO C-04	CONSTRUCTION DETAILS
11	WPC-01	WATER POLLUTION CONTROL PLAN



VICINITY MAP
NO SCALE

SURVEY CONTROL

THE HORIZONTAL COORDINATES SHOWN HEREON ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 3, AND DERIVED FROM A GPS RTK SURVEY CONDUCTED IN MARCH OF 2017. VERTICAL DATUM IS BASED ON NAVD88 (GEOID 12A).

100% SUBMITTAL
AUGUST, 2017



NO.	DATE	DESCRIPTION	BY
3	8/09	100% DESIGN	RP
2	5/15	65% DESIGN	RP
1	4/07	PRELIMINARY DESIGN	RP

wreco
1243 ALPINE ROAD, SUITE 108
WALNUT CREEK, CA 94596
PH (925) 941-0017 FX (925) 941-0018

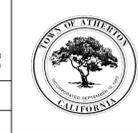


THIS PLAN WAS PREPARED UNDER SUPERVISION OF
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE _____ RCE NO. _____

DRAWN	By P. YIM	Checked R. PERIKETI
DESIGN	By R. PERIKETI	Checked A. SEKIOKA
	By _____	Checked _____

TOWN OF ATHERTON
DEPARTMENT OF PUBLIC WORKS

SCALE: HORIZONTAL: _____ VERTICAL: _____
ORIGINAL SCALE IS IN INCHES FOR REDUCED PLANS



2017 PROJECT			
T-01 TITLE SHEET			
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED	SHEET OF
		08/09/17	1 11

DWG File: G:\Projects\2017\17015 Atherton Drainage Facilities Repairs\Drawings\Sheets\T.dwg

PROJECT GENERAL NOTES

- THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY FROM THE NOTICE TO PROCEED UNTIL THE PROJECT IS ACCEPTED AND APPROVED BY THE TOWN. CONTRACTOR RESPONSIBILITY FOR JOB SITE CONDITIONS SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR POLICE, FIRE, AMBULANCE, AND THOSE AGENCIES FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF JOB SITE, SIGN SHALL BE A MINIMUM OF 4'X4' AND ALSO INCLUDE THE PROJECT NAME, CONTRACTOR RESPONSIBLE CONTACT PERSON, AND TOWN CONTACT.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL OF THE WORK PERFORMED BY HIS SUBCONTRACTORS WITHOUT EXCEPTION.
- THE CONTRACTOR SHALL IDENTIFY A RESPONSIBLE CONTACT PERSON, WHO IS AN EMPLOYEE OF THE CONTRACTOR, AND A 24-HOUR TELEPHONE NUMBER TO CALL TO RESOLVE PROBLEMS WITH SAFETY, NOISE, DUST OR OTHER CONSTRUCTION RELATED ISSUES.
- THE CONTRACTOR SHALL BE REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE RIGHT-OF-WAY AND EASEMENTS OBTAINED FOR THIS PROJECT UNLESS OTHERWISE SHOWN. THIS SHALL INCLUDE, BUT NOT LIMITED TO, VEHICLES AND EQUIPMENT, LIMITS OF DEMOLITION, AND ANY STOCKPILED NEW MATERIAL.
- THE CONTRACTOR SHALL PROVIDE PROTECTIVE DEVICES INCLUDING BARRICADES, FENCING, WARNING SIGNS, LIGHTS, FLAGGERS OR OTHER ITEMS NECESSARY TO ENSURE PUBLIC SAFETY WITHIN THE PROJECT AREA. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- EXISTING UTILITIES ARE LOCATED IN THE PROJECT AREA. UTILITIES DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE TEMPORARILY REPAIRED AND THEN REPLACED IN ACCORDANCE WITH THE UTILITY'S OR THE TOWN'S REQUIREMENTS AT THE CONTRACTOR'S OWN EXPENSE.
- CONTRACTOR SHALL EXERCISE DUE CAUTION DURING CONSTRUCTION TO PROTECT ANY EXISTING LANDSCAPING, FIXTURES, EQUIPMENT, CONCRETE SIDEWALK, CONCRETE DRIVEWAY, CONCRETE CURB AND GUTTER, AND AC PAVING TO REMAIN. ANY DAMAGE RESULTING FROM CONTRACTOR OPERATIONS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE TOWN.
- CONTRACTOR SHALL PRESERVE ALL SURVEY MARKERS AND MONUMENTATION PER THE TOWN ENGINEERING DEPARTMENT. PRIOR TO STARTING ANY WORK, THE CONTRACTOR SHALL NOTIFY THE TOWN ENGINEER OF ANY EXISTING FEDERAL, STATE, TOWN, AND PRIVATE LAND SURVEY CONTROL POINTS OR MONUMENTS THAT MAY BE DISTURBED BY THE WORK FOR THIS PROJECT. ANY SURVEY MONUMENTS WHICH WILL BE DISTURBED OR REMOVED MUST BE TIED OUT BY A CURRENTLY LICENSED CALIFORNIA LAND SURVEYOR AND CORNER RECORDS ARE TO BE PREPARED AND FILED WITH THE TOWN IN COMPLIANCE WITH THE LAND SURVEYOR ACT, SECTION 8771.
- DUST SHALL BE CONTROLLED AND ADJOINING STREET STREET AND PRIVATE DRIVES SHALL BE KEPT CLEAN OF PROJECT DIRT, MUD, MATERIALS, AND DEBRIS, TO THE SATISFACTION OF THE TOWN.
- THE CONTRACTOR SHALL COMPLY WITH THE GENERAL CONSTRUCTION PERMIT. WATER SHALL NOT BE DISCHARGED FROM THE CONSTRUCTION SITE TO THE STORM DRAINAGE SYSTEM UNLESS THE CONTRACTOR OBTAINS APPROVAL FROM THE TOWN.
- THIS PROJECT INVOLVES WORK IN PUBLIC AREAS AND NEAR PRIVATE PROPERTY. THE CONTRACTOR SHALL SPECIFICALLY INSTRUCT ALL HIS/HER WORKERS TO EXERCISE GOOD PUBLIC RELATIONS DURING THE WORK, INCLUDING BEING COURTEOUS, AVOIDING THE USE OF PROFANE LANGUAGE, AND MINIMIZING IMPACTS TO EXISTING IMPROVEMENTS.
- CONTRACTOR SHALL GIVE WRITTEN NOTICE TO ANY PRIVATE RESIDENCE THAT MAY BE IMPACTED BY THE CONSTRUCTION WORK AS DETERMINED BY THE TOWN. NOTICE SHALL INCLUDE THE CONTACT NAME AND CELL PHONE NUMBER OF THE SUPERVISOR WHO IS RESPONSIBLE FOR CONSTRUCTION ACTIVITIES. THE NOTICE SHALL ALSO INCLUDE DATES AND TIMES DURING WHICH CONSTRUCTION ACTIVITIES WILL BE CONDUCTED, THE MITIGATION MEASURES THAT WILL BE TAKEN BY THE CONTRACTOR. WRITTEN NOTICES SHALL BE APPROVED BY THE TOWN PRIOR TO DISTRIBUTION. CONTRACTOR SHALL PROVIDE PROOF OF RESIDENT NOTIFICATION TO THE ENGINEER.
- AT A MINIMUM, CONTRACTOR SHALL SWEEP AND CLEAN THE CONSTRUCTION SITE DAILY BEFORE THE END OF EACH WORKING DAY.
- CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES IN PLACE. DURING ANY SAWCUTTING OR REMOVAL ACTIVITIES, PROTECT RESIDENTIAL WATER METERS AND SEWER CLEANOUT BOXES AND RIMS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EXISTING UTILITY THAT IS DAMAGED DURING THE COURSE OF THE WORK AND SHALL REPAIR OR REPLACE THE DAMAGED UTILITY TO THE SATISFACTION OF THE UTILITY OWNER AND THE TOWN ENGINEER.
- ALL MATERIALS AND WORKMANSHIP SHALL FULLY CONFORM TO THE LATEST SPECIFICATIONS, DETAILS, STANDARDS, AND ORDINANCES OF THE TOWN OF ATHERTON. TRAFFIC CONTROL SHALL BE PER TOWN-APPROVED TRAFFIC CONTROL PLAN AND IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- TRAFFIC CONTROL PLANS ARE REQUIRED TO BE SUBMITTED AND APPROVED BY THE TOWN PRIOR TO THE START OF ANY WORK IMPACTING THE PUBLIC RIGHT-OF-WAY. TRAFFIC CONTROL PLANS MUST BE PREPARED AND STAMPED BY PERSON TRAINED/CERTIFIED TO PREPARE TRAFFIC CONTROL PLANS (IN ACCORDANCE WITH THE LATEST CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES).
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO POTHOLE AND/OR UNCOVER AND EXPOSE EXISTING UTILITIES AT CROSSING LOCATIONS. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES FROM DAMAGE DUE TO CONTRACTOR'S OPERATIONS ANY AND ALL UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO THE SATISFACTION OF THE TOWN ENGINEER.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES WITH THE APPROPRIATE AGENCIES.
- THE EXISTING UTILITIES CROSSING THE NEW PROPOSED WORK ARE SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THAT THE TYPE, SIZE, LOCATION AND DEPTH OF ALL THE UTILITY CROSSINGS (BOTH MAINS AND LATERALS) ARE CORRECT AS SHOWN. NO GUARANTEE IS MADE THAT ALL EXISTING UTILITIES (BOTH MAINS AND LATERALS) ARE CORRECT AS SHOWN. NO GUARANTEE IS MADE THAT ALL EXISTING UTILITIES (BOTH MAINS AND LATERALS) ARE SHOWN.

PROJECT GENERAL NOTES

- PROVIDE ACCESS AT ALL TIMES TO ALL PROPERTIES, EXCEPT AS APPROVED BY THE ENGINEER. 48 HOURS WRITTEN NOTICE MUST BE GIVEN TO THE AFFECTED PROPERTY OWNER(S) WHEN ACCESS IS AFFECTED. TRENCHES SHALL BE BACKFILLED AND PAVED (TEMPORARY CUTBACK ASPHALT) PRIOR TO LEAVING THE JOB SITE EACH WORKDAY.
- NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. TRENCH SHORING PLAN AND TRENCH PLATES/PLATING PLAN SHALL BE DESIGNED AND STAMPED BY AN ENGINEER.
- CONTRACTOR SHALL REPLACE EXISTING TRAFFIC STRIPING/LEGENDS THAT ARE DISTURBED BY CONSTRUCTION OPERATIONS TO THE TOWN'S SATISFACTION. ALL PAVEMENT MARKINGS ARE TO BE THERMOPLASTIC MATERIAL.
- CONTRACTOR IS REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- CONTRACTOR SHALL BE FAMILIAR WITH THE STATE OF CALIFORNIA BEST MANAGEMENT PRACTICES HANDBOOK FOR APPLICABLE CONTROL MEASURES AND EMPLOY ITS PROVISIONS THROUGHOUT ALL CONSTRUCTION.
- THE PUBLIC RIGHT-OF-WAY/STREET MUST BE KEPT CLEAR AND FREE OF DEBRIS.
- ALL UNDERGROUND SERVICE ALERT (USA) MARKINGS ON CONCRETE AND ASPHALTIC PAVEMENT OR OTHER STRUCTURES SHALL BE REMOVED WHEN THEY ARE NO LONGER REQUIRED. ACCEPTABLE MEANS OF REMOVAL INCLUDE SAND BLASTING OR HIGH PRESSURE WATER BLASTING.
- SAWCUTTING OF EXISTING ASPHALT CONCRETE SHALL BE CUT THROUGH THE FULL DEPTH OF EXISTING ASPHALT CONCRETE TO A NEAT, STRAIGHT LINE. PAVEMENT EDGES DAMAGED DURING CONSTRUCTION SHALL BE RE-CUT TO NEAT LINES PRIOR TO PAVING. PAINT BINDER (TACK COAT) SHALL BE APPLIED TO ALL VERTICAL SURFACES IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS DATED MAY, 2006.
- ALL TOWN REQUIREMENTS FOR DISINFECTION AND BACTERIOLOGICAL TESTING SHALL BE ADHERED TO BY THE CONTRACTOR.
- WORK, INCLUDING DELIVERIES AND MOVEMENT OF MACHINERY, IS ONLY ALLOWED BETWEEN 8 AM AND 5 PM, MONDAY THROUGH FRIDAY. NO WORK IS ALLOWED ON WEEKEND OR LEGAL HOLIDAYS.
- THE CONTRACTOR SHALL KEEP ADJACENT ROADS AND STREETS OPEN FOR TRAVEL BY THE PUBLIC, ADJACENT PROPERTY OWNER, THEIR VISITORS AND GUESTS AT ALL REASONABLE TIMES. BLOCKAGE OF A STREET OR ROAD EXCEEDING FIVE MINUTES IS A VIOLATION OF THE TOWN OF ATHERTON MUNICIPAL CODE.

TREE PRESERVATION NOTES

- A TREE PROTECTION AND PRESERVATION PLAN SHALL BE SUBMITTED TO THE CITY FOR COMMENT BY THE ENGINEER AND APPROVAL BY THE TOWN ARBORIST PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
- THE TREE PROTECTION PLAN SHALL FOLLOW THE STANDARDS AND SPECIFICATIONS DESCRIBED IN THE CURRENT VERSION OF THE TOWN OF ATHERTON TREE PRESERVATION GUIDELINES DATED FEBRUARY, 2004 AND ANY SUBSEQUENT AMENDMENTS. REFERENCES TO "PROPERTY OWNER", "OWNER", AND SIMILAR TERMS IN THE TREE PROTECTION GUIDELINES SHALL MEAN "CONTRACTOR" FOR THE PURPOSE OF THESE CONSTRUCTION DOCUMENTS.
- TREE PROTECTION PLAN SHALL INCLUDE THE FOLLOWING:
 - FENCING 5' AROUND TREE
 - TREE ROOTS GREATER THAN 2" SHALL NOT BE CUT; HAND DIG AROUND AND PROTECT.
 - THE BACK LIMBS OF TREES THAT CONFLICT WITH THE WORKING AREA.
 - PRUNING OF ANY LIMBS SHALL BE APPROVED BY THE TOWN.
- A PROJECT ARBORIST SHALL VERIFY, IN WRITING, THAT ALL PRE-CONSTRUCTION REQUIREMENTS HAVE BEEN MET ACCORDING TO A TREE PROTECTION AND PRESERVATION PLAN APPROVED BY THE TOWN ARBORIST.
- STORAGE: THE AREA UNDER THE DRIP LINE OF A TREE SHALL BE KEPT CLEAR. NO CONSTRUCTION MATERIALS NOR CHEMICAL SOLVENTS SHALL BE STORED OR DUMPED UNDER A TREE.
- TREE DAMAGE: ANY DAMAGE TO EXISTING TREE CROWNS OR ROOT SYSTEMS SHALL BE REPAIRED IMMEDIATELY AT THE EXPENSE OF THE CONTRACTOR BY AN APPROVED TREE SURGEON UNDER THE DIRECTION OF THE TOWN AT NO COST TO THE TOWN.

RECORD DRAWINGS

- CONTRACTOR SHALL SUBMIT TWO (2) COPIES OF MARKED-UP RECORD DRAWINGS FOR REVIEW AND APPROVAL BY THE ENGINEER. RECORD DRAWINGS SHALL BE FULL-SIZE "TO SCALE" COPIES OF ORIGINAL CONTRACT DRAWINGS, SHOP DRAWINGS, AND ANY OTHER DRAWINGS PERTAINING DIRECTLY TO THE PROJECT. CONTRACTOR SHALL INCLUDE A LICENSED SURVEY OF FINAL LOCATIONS OF STRUCTURES, SURFACE FEATURES, AND LIMITS OF ANY NEW PAVING.
- INITIAL SUBMITTAL: SUBMIT TWO (2) COPIES (TWO COMPLETE SETS) OF CORRECTED CONTRACT DRAWINGS AND SHOP DRAWINGS. THE ENGINEER WILL INITIAL AND DATE EACH DRAWING SHEET AND MARK WHETHER GENERAL SCOPE OF CHANGES, ADDITIONAL INFORMATION RECORDED, AND QUALITY OF DRAFTING ARE ACCEPTABLE. THE ENGINEER SHALL RETURN ONE INITIAL SUBMITTAL SET TO THE CONTRACTOR FOR REVISIONS AND/OR ADDITIONS.
- THE CONTRACTOR SHALL ORGANIZE REVISED RECORD DRAWINGS INTO A BOUND SET CONSISTING OF ALL DRAWING SHEETS, INCLUDING NON-ANNOTATED SHEETS, SHOP DRAWINGS SHEETS AND READY SET FOR FINAL SUBMITTAL.
- FINAL SUBMITTAL: FINAL SUBMITTAL SHALL BE IN AN ELECTRONIC FORMAT AND SUBMITTED ON A COMPACT DISC (CD) OR DIGITAL VIDEO DISC (DVD). THE CONTRACTOR SHALL HAVE THE FINAL APPROVED RECORD DRAWINGS SCANNED AND SAVED IN AN ADOBE ACROBAT (.PDF) FORMAT. THE CONTRACTOR SHALL ALSO SUBMIT ONE HARD COPY OF THE CORRECTED RECORD DRAWING SET.
- CONTRACTOR SHALL KEEP UP-TO-DATE A COMPLETE RECORD SET OF PRINTS OF THE CONTRACT DRAWINGS SHOWING EVERY CHANGE FROM THE ORIGINAL DRAWINGS MADE DURING THE COURSE OF CONSTRUCTION INCLUDING EXACT LOCATION, SIZES, MATERIALS AND EQUIPMENT.

SUBMITTAL NOTES

- THE CONTRACTOR SHALL SUBMIT PRODUCT DATA SHEETS FOR ALL ITEMS AND MATERIALS USED IN THE WORK FOR REVIEW AND APPROVAL BY THE ENGINEER. ANY PROPOSED SUBSTITUTIONS SHALL BE NOTED IN A COVER SHEET IDENTIFYING THE SUPPLIER, MANUFACTURER, PERTINENT DRAWING SHEET AND DETAIL NUMBERS.
- THE CONTRACTOR SHALL VERIFY COMPATIBILITY WITH FIELD CONDITIONS AND DIMENSIONS, PRODUCT SELECTIONS AND DESIGNATIONS, QUANTITIES, AND CONFORMANCE AS PART OF THE SUBMITTAL PROCESS.
- CONTRACTOR SHALL INDICATE PERTINENT PORTIONS AND IDENTIFY CONFLICTS BETWEEN MANUFACTURER'S INSTRUCTIONS AND CONTRACT DOCUMENTS.
- TRANSMITTAL: WHERE POSSIBLE, TRANSMIT INITIAL SUBMITTALS ELECTRONICALLY. A MINIMUM OF FIVE (5) PAPER COPY SUBMITTALS SHALL BE SUBMITTED FOR REVIEW.



COUNTY DETAIL No.
COUNTY DETAIL



DETAIL No.
SHEET No.



GRAVEL TRENCH



SAWCUT



RIGHT OF WAY



UNDERDRAIN CLEANOUT



PROPOSED DRAINAGE INLET



EXISTING DRAINAGE INLET



FLARED END SECTION



EXISTING MANHOLE



ROCK SLOPE PROTECTION

EXISTING	DESCRIPTION	PROPOSED
--- s --- s ---	SANITARY SEWER	
--- sd --- sd ---	STORM DRAIN	
---	PPP UNDERDRAIN	--- UD --- UD --- UD ---
--- e --- (oh) ---	OVERHEAD ELECTRIC	
--- w --- w ---	WATER	
--- g --- g ---	GAS	

ABBREVIATIONS

CO	--CLEANOUT	OG	--ORIGINAL GROUND
DI	--DRAINAGE INLET	PVC	--POLYVINYL CHLORIDE PIPE
(E). EX OR EXIST	--EXISTING	R/W	--RIGHT-OF-WAY
FES	--FLARED END SECTION	RSP	--ROCK SLOPE PROTECTION
HMA	--HOT MIX ASPHALT	RT	--RIGHT
HW	--HEADWALL	S	--SLOPE
INV	--PIPE INVERT	SD	--STORM DRAIN
LT	--LT	TG	--TOP OF GRADE
MIN	--MINIMUM	TYP	--TYPICAL
O.C.	--ON CENTER	UD	--UNDER DRAIN
OD	--OUTSIDE DIAMETER	W/	--WITH



NO.	DATE	DESCRIPTION	BY
3	8/09	100% DESIGN	RP
2	5/15	65% DESIGN	RP
1	4/07	PRELIMINARY DESIGN	RP

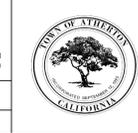
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1243 ALPINE ROAD, SUITE 108
WALNUT CREEK, CA 94596
PH (925) 941-0017 FX (925) 941-0018



THIS PLAN WAS PREPARED UNDER SUPERVISION OF
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE RCE NO.

DRAWN	By P. YIM	Checked R. PERIKETI
DESIGN	By R. PERIKETI	Checked A. SEKIOKA
	By	Checked

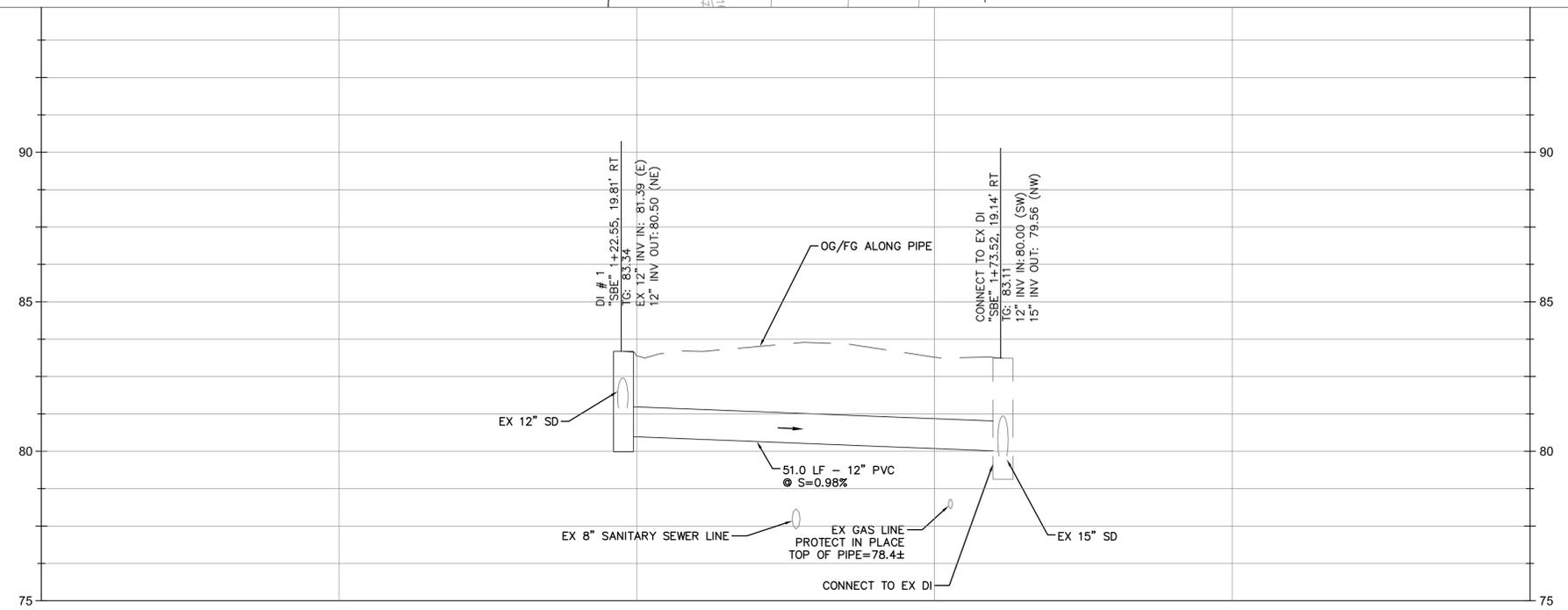
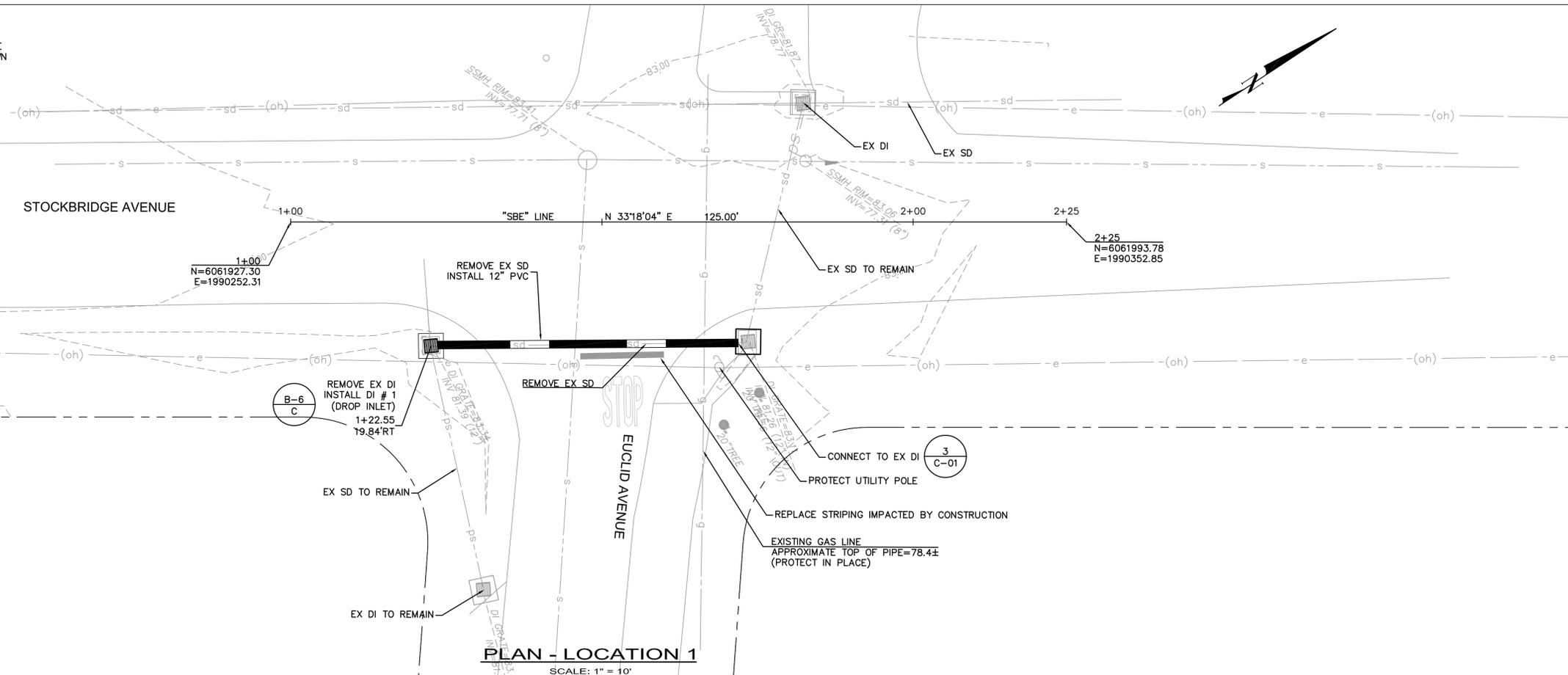
TOWN OF ATHERTON
DEPARTMENT OF PUBLIC WORKS
0 1 2 3 4
ORIGINAL SCALE IS IN INCHES FOR REDUCED PLANS



2017 PROJECT				
GN-01 GENERAL NOTES & ABBREVIATIONS				
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED	SHEET	OF
		08/08/17	2	11

NOTES:

1. DRAINAGE PROFILES SHOW OUTSIDE DIMENSIONS OF STRUCTURES. INSIDE BOTTOM FLOWLINE OF THE DRAINAGE STRUCTURES SHOULD MATCH THE LOWEST STORM DRAIN FLOWLINE ELEVATION AS SHOWN ON STRUCTURE CALLOUT.
2. SEE TOWN STANDARD DETAIL - STREET TRENCH DETAIL & SURFACE RESTORATION.
3. ALL EXISTING ROAD SIGNS/MARKERS TO BE PROTECTED IN PLACE.



NO.	DATE	DESCRIPTION	BY
3	8/09	100% DESIGN	RP
2	5/15	65% DESIGN	RP
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	By _____	Checked _____

SCALE: HORIZONTAL: _____ VERTICAL: _____

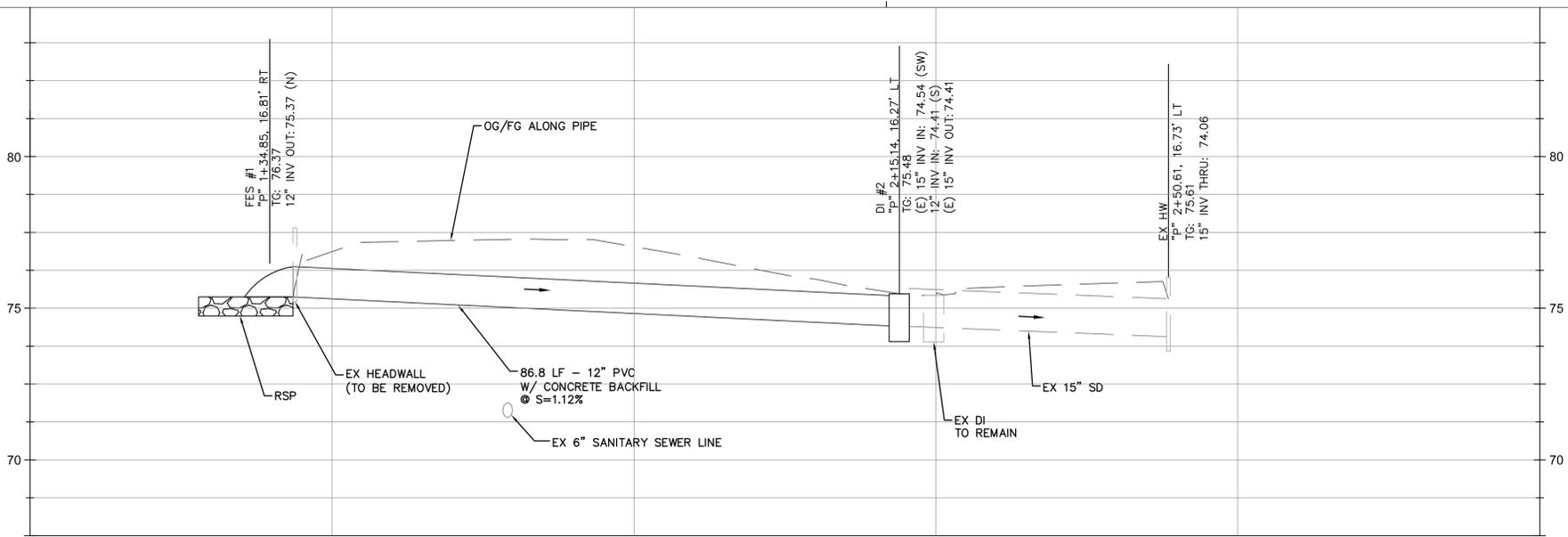
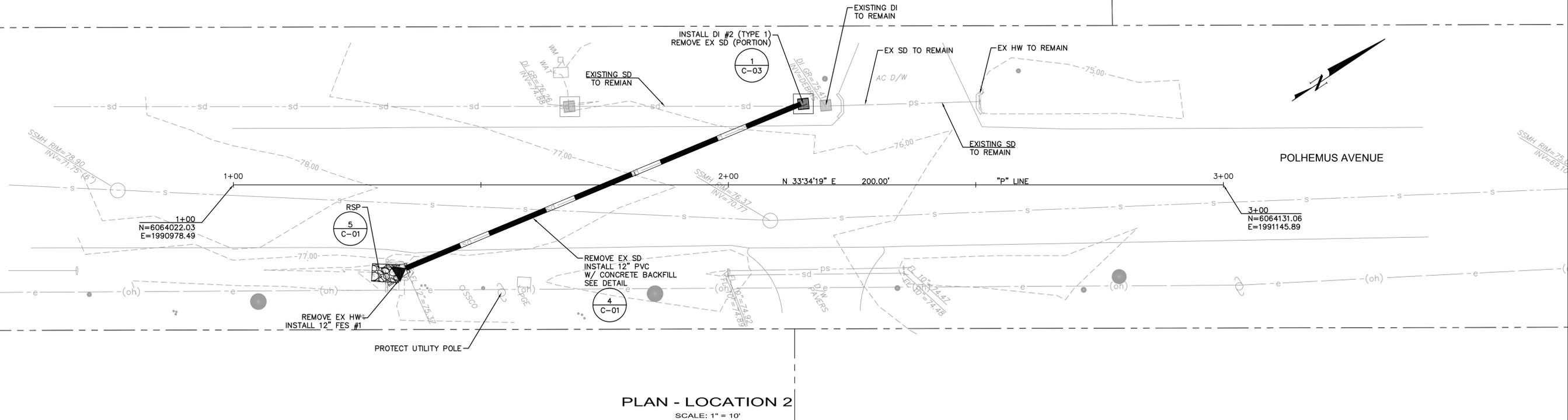
TOWN OF ATHERTON
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0 1 2 3 4
ORIGINAL SCALE IS IN INCHES FOR REDUCED PLANS



2017 PROJECT			
D-01 DRAINAGE PLAN			
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED	SHEET OF
		08/09/17	3 11

NOTES:
 1. SEE TOWN STANDARD DETAIL - STREET TRENCH DETAIL & SURFACE RESTORATION.



PROFILE
 HORZ SCALE: 1" = 10'
 VERT SCALE: 1" = 2.5'

DWG File: C:\Projects\2017\17015 Atherton Drainage Facilities Repairs\Drawings\Drainage.dwg



NO.	DATE	DESCRIPTION	BY
3	8/09	100% DESIGN	RP
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DESIGN	By R. PERIKETI	Checked A. SEKIOKA
	By _____	Checked _____

SCALE: HORIZONTAL: _____ VERTICAL: _____

TOWN OF ATHERTON
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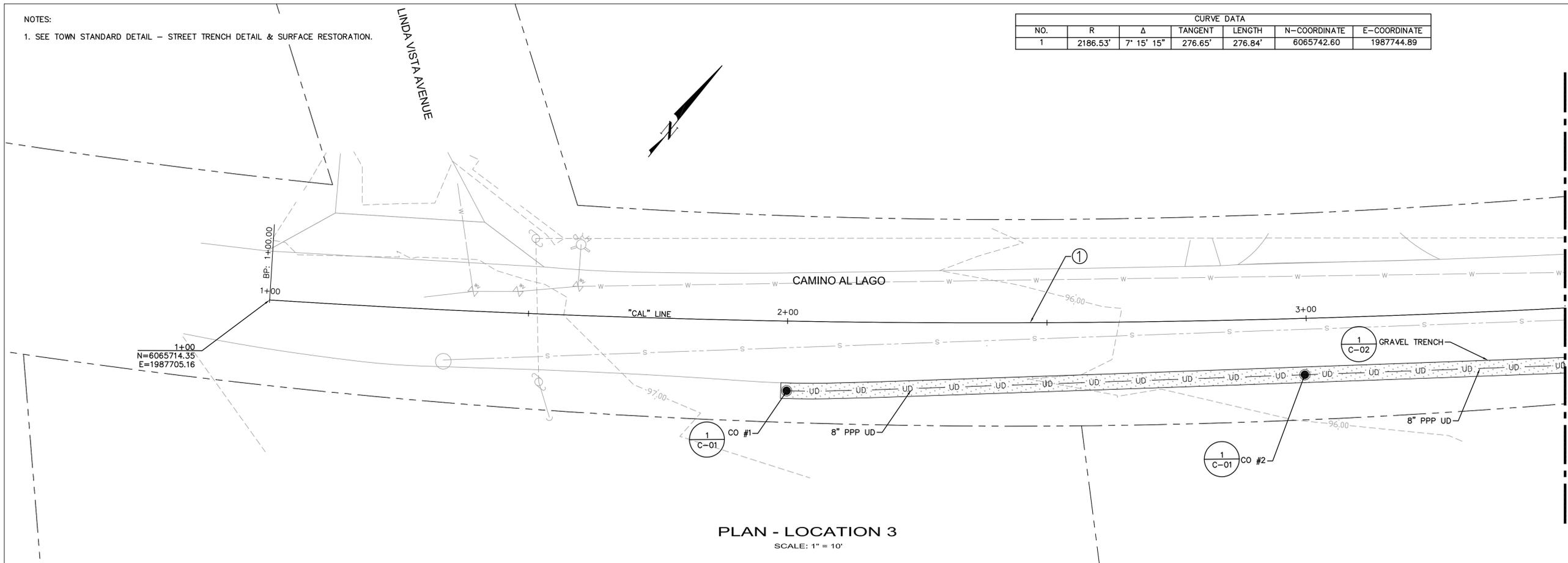
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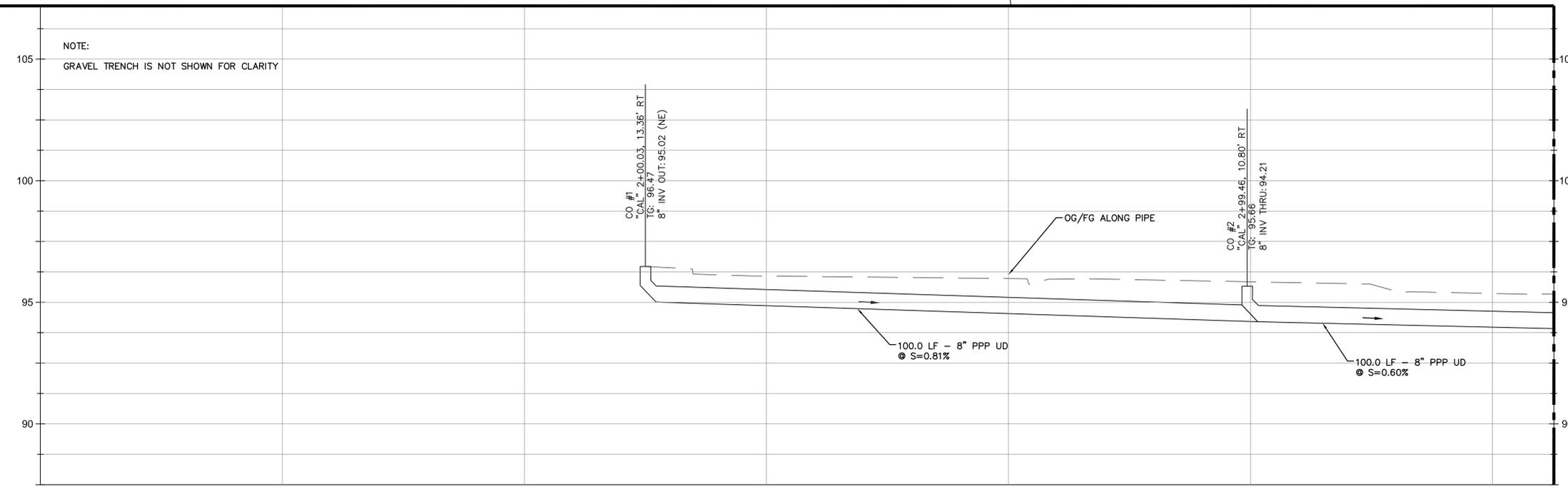
2017 PROJECT			
D-02 DRAINAGE PLAN			
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED	SHEET OF
		08/09/17	4 11

NOTES:
1. SEE TOWN STANDARD DETAIL - STREET TRENCH DETAIL & SURFACE RESTORATION.

CURVE DATA						
NO.	R	Δ	TANGENT	LENGTH	N-COORDINATE	E-COORDINATE
1	2186.53'	7° 15' 15"	276.65'	276.84'	6065742.60	1987744.89



PLAN - LOCATION 3
SCALE: 1" = 10'



PROFILE
HORZ SCALE: 1" = 10'
VERT SCALE: 1" = 2.5'



DWG File: G:\Projects\2017\17015 Atherton Drainage Facilities Repairs\Drawings\Drainage.dwg

NO.	DATE	DESCRIPTION	BY
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2	5/15	65% DESIGN	RP
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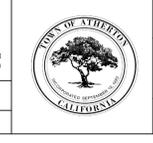
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	By	Checked

SCALE: HORIZONTAL: _____ VERTICAL: _____

TOWN OF ATHERTON
DEPARTMENT OF PUBLIC WORKS

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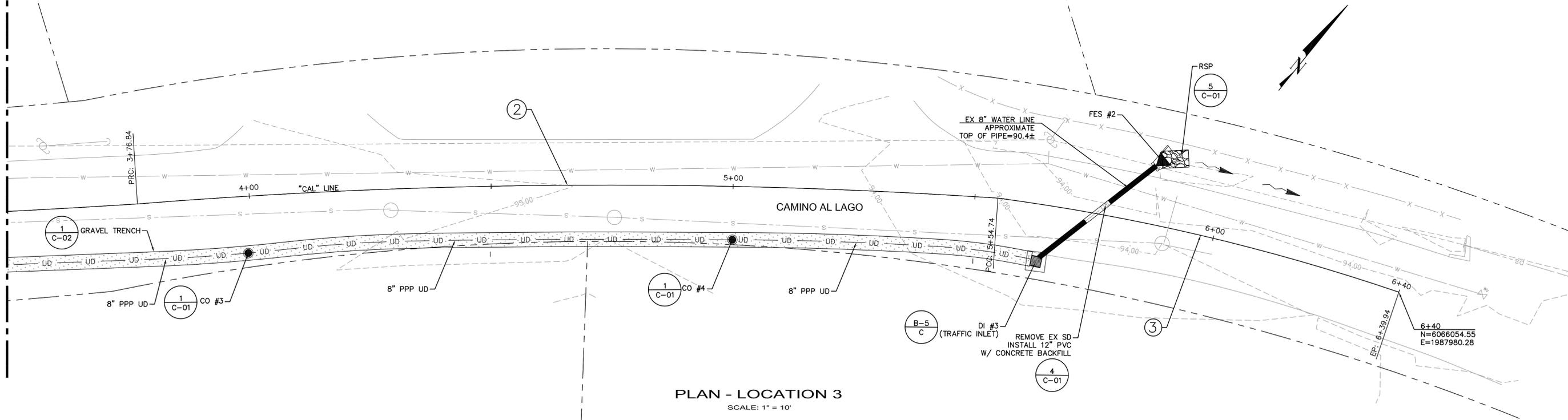
2017 PROJECT			
D-03 DRAINAGE PLAN			
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED	SHEET OF
		08/08/17	5 OF 11

NOTES:

1. SEE TOWN STANDARD DETAIL - STREET TRENCH DETAIL & SURFACE RESTORATION.

CURVE DATA						
NO.	R	Δ	TANGENT	LENGTH	N-COORDINATE	E-COORDINATE
2	177.90'	8° 24' 8"	177.74'	177.90'	6065907.34	1987889.16
3	85.20	13° 10' 15"	85.06'	85.20'	6066015.38	1987963.57

MATCH LINE 3+50
SEE D-03

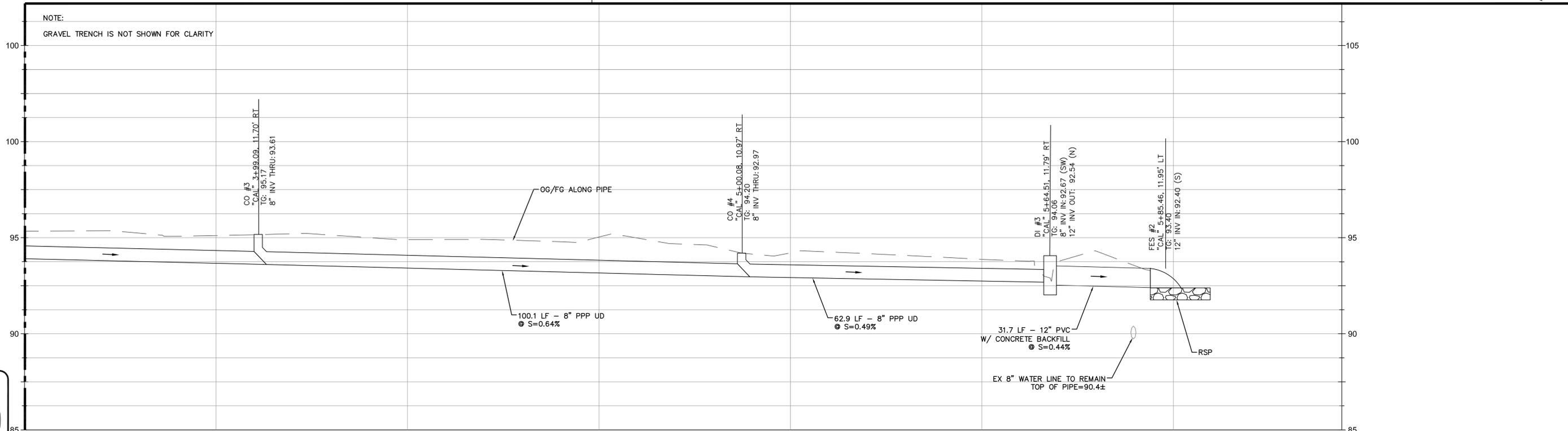


PLAN - LOCATION 3
SCALE: 1" = 10'

NOTE:

GRAVEL TRENCH IS NOT SHOWN FOR CLARITY

MATCH LINE 3+50
SEE D-03



PROFILE
HORZ SCALE: 1" = 10'
VERT SCALE: 1" = 2.5'



DWG File: G:\Projects\2017\17015 Atherton Drainage Facilities Repairs\Drawings\Drainage.dwg

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2	5/15	65% DESIGN	RP
1	4/07	PRELIMINARY DESIGN	RP

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1243 ALPINE ROAD, SUITE 108
WALNUT CREEK, CA 94596
PH (925) 941-0017 FX (925) 941-0018

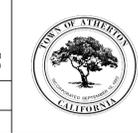


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PLANS APPROVAL DATE _____ RCE NO. _____

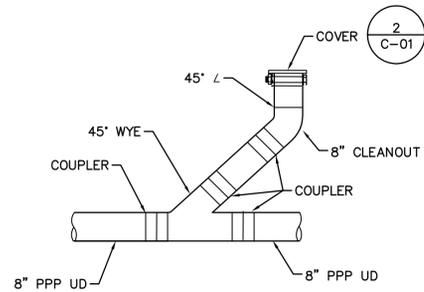
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DESIGN	By R. PERIKETI	Checked A. SEKIOKA
	By _____	Checked _____

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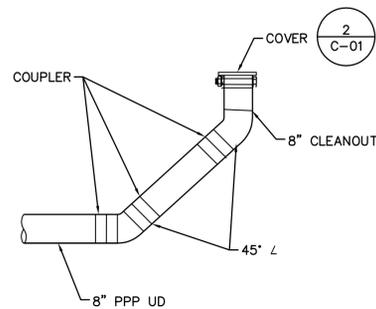


2017 PROJECT			
D-04 DRAINAGE PLAN			
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED	SHEET OF
		08/08/17	6 11



INLINE

1
C-01

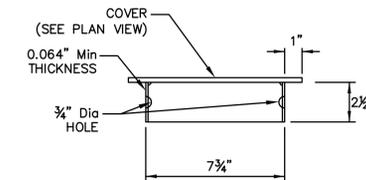


TERMINAL

2
C-01



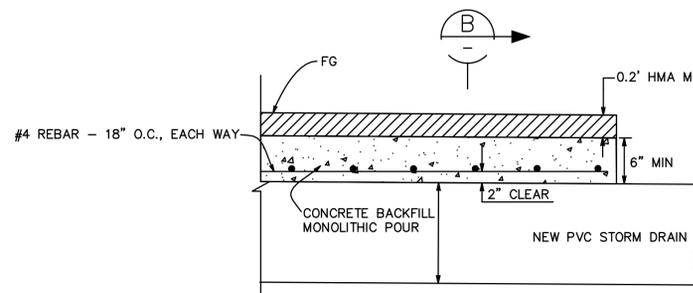
PLAN VIEW



SECTION A-A

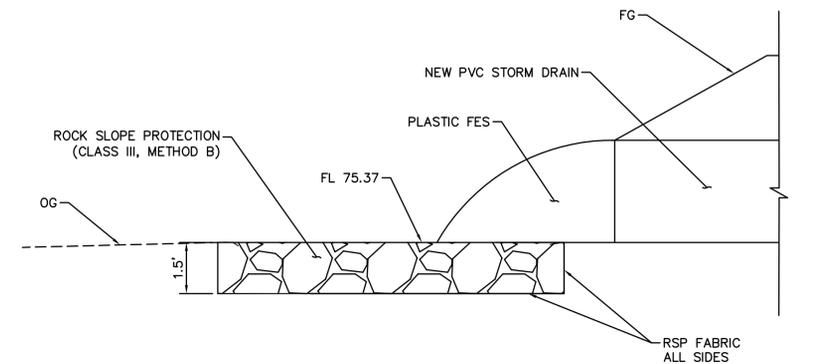
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NTS

UNDERDRAIN CLEANOUT
NTS

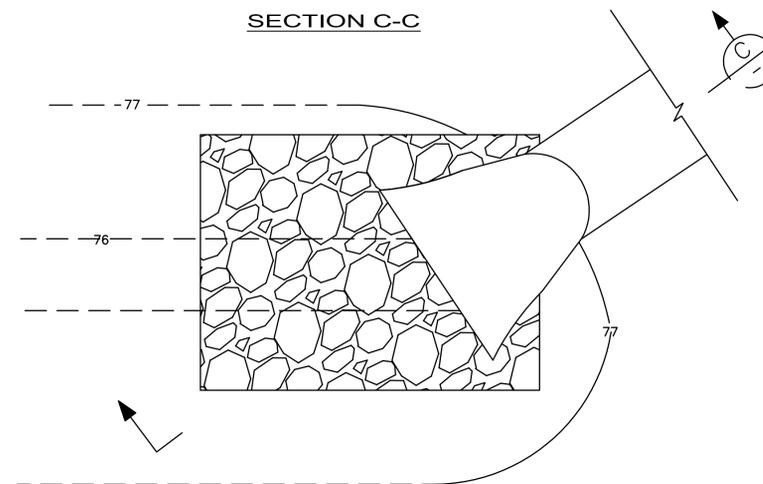


SECTION B-B

4
C-01
CONCRETE BACKFILL
NTS

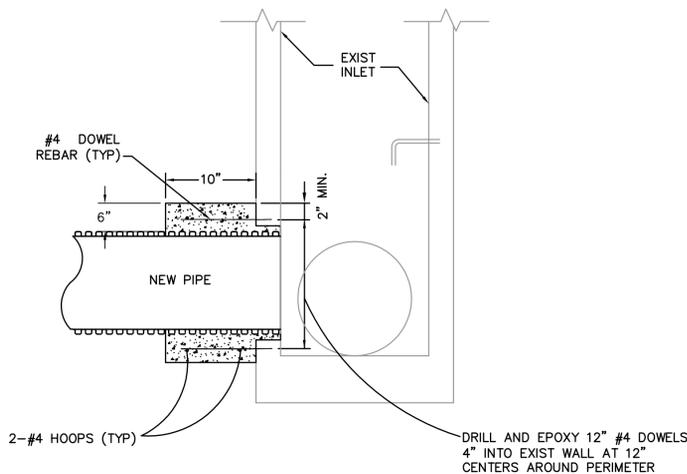


SECTION C-C



PLAN

5
C-01
ROCK SLOPE PROTECTION
AT FLARED END SECTION
(LOCATION 2)
NTS



3
C-01
PIPE CONNECTION TO
EXISTING INLET
NTS



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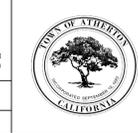
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WALNUT CREEK, CA 94596
PH (925) 941-0017 FX (925) 941-0018



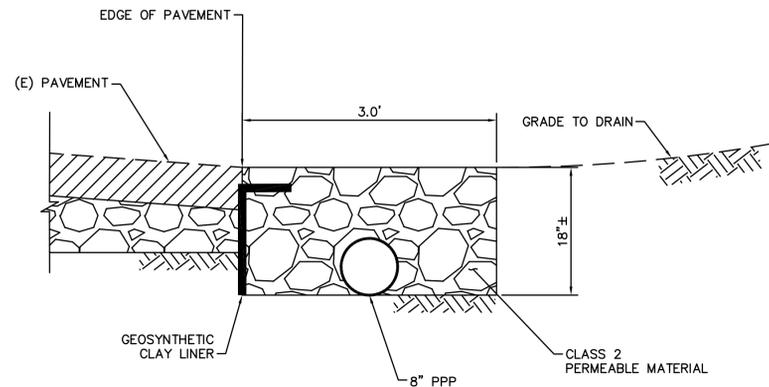
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DESIGN By R. PERIKETI Checked A. SEKIOKA
By _____ Checked _____
SCALE: HORIZONTAL: _____ VERTICAL: _____

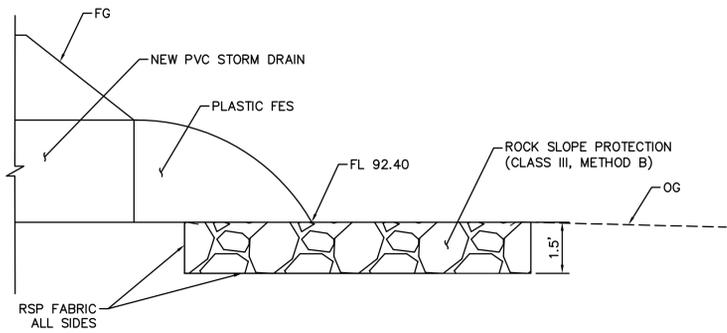
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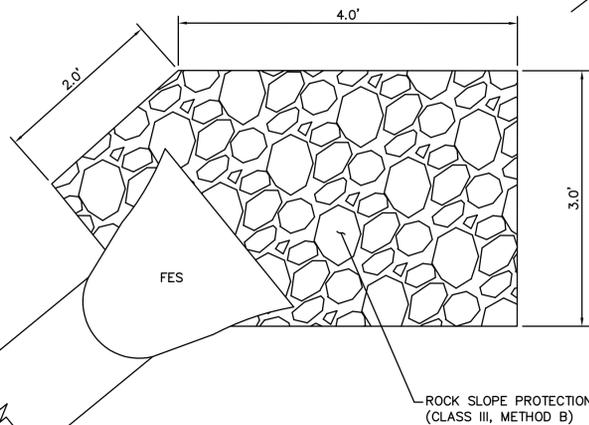
2017 PROJECT			
C-01 CONSTRUCTION DETAILS			
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED	SHEET OF
		08/09/17	7 11



1
C-02
GRAVEL TRENCH W/ 8\"/>



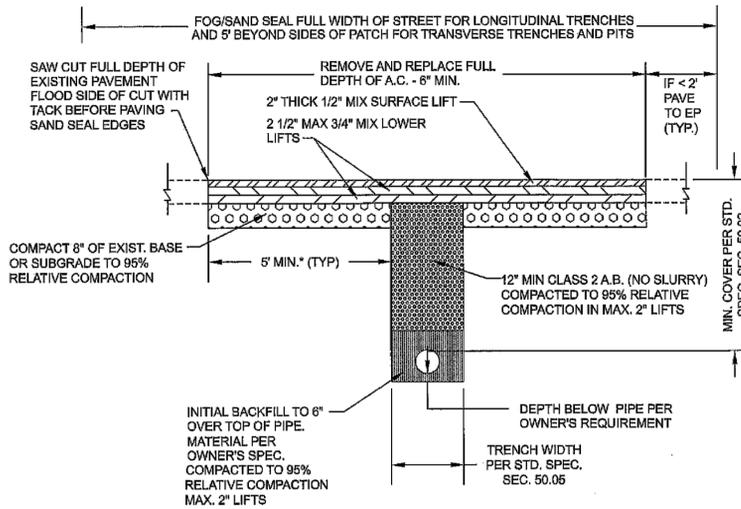
SECTION A-A



PLAN

2
C-02
**ROCK SLOPE PROTECTION
AT FLARED END SECTION
(LOCATION 3)**
NTS

STREET TRENCH DETAIL & SURFACE RESTORATION



TYPICAL TRENCH SECTION

- * WIDTH MAY BE REDUCED TO 24\"/>
1. TEMPORARY PAVEMENT SHALL BE PLACED IN UNPLATED TRENCHES AT THE END OF EACH DAY. MATERIAL SHALL BE HIGH QUALITY PATCH MIX, SUCH AS "GRANITEPATCH," "QUICKPATCH" OR "DUROPATCH." CUTBACK SHALL NOT BE USED IN STREET AREAS FOR TEMPORARY PATCHING.
 2. PERMANENT SURFACE RESTORATION SHALL BE INSTALLED NO SOONER THAN 10 DAYS AND NO MORE THAN 25 WORKING DAYS AFTER TEMPORARY SURFACE RESTORATION IS FIRST PUT IN PLACE.

TOWN OF ATHERTON
STANDARD DRAWING

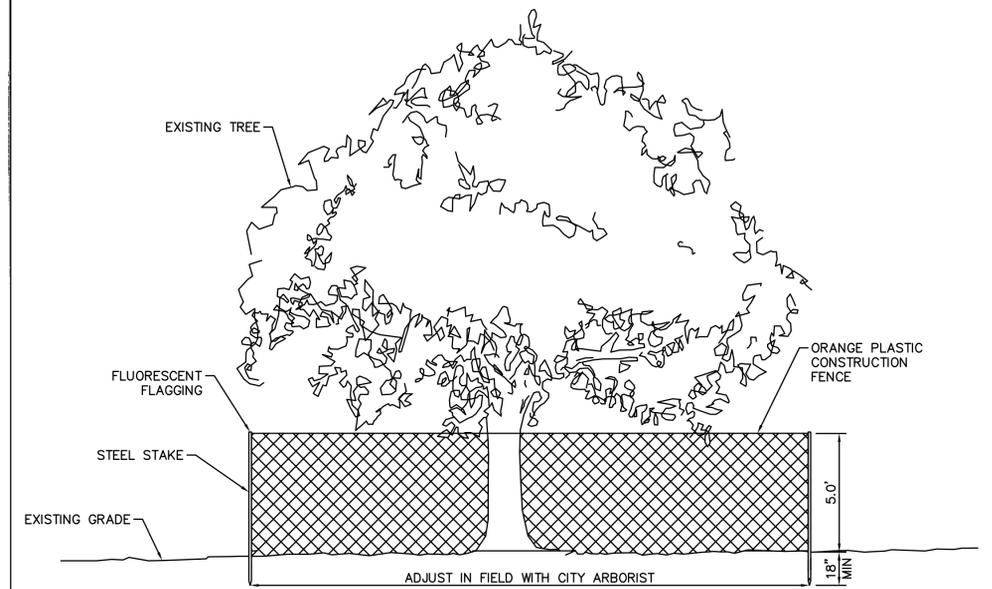
STREET TRENCH DETAIL &
SURFACE RESTORATION

April, 2007
11

...Standard Drawings\TrnchDtl.dwg 04/11/2007 09:41:00 AM

NOTES:

1. ANY TRENCHING REQUIRED WITHIN THE DRIPLINE OF THE TREE SHALL BE HAND DUG. ANY ROOTS CUT OVER 2' SHALL BE SEALED WITH BLACK ENAMEL.



3
C-02
EXISTING TREE PROTECTION
NTS



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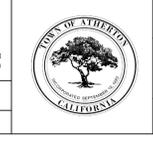
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DESIGN	By R. PERIKETI	Checked A. SEKIOKA
	By	Checked

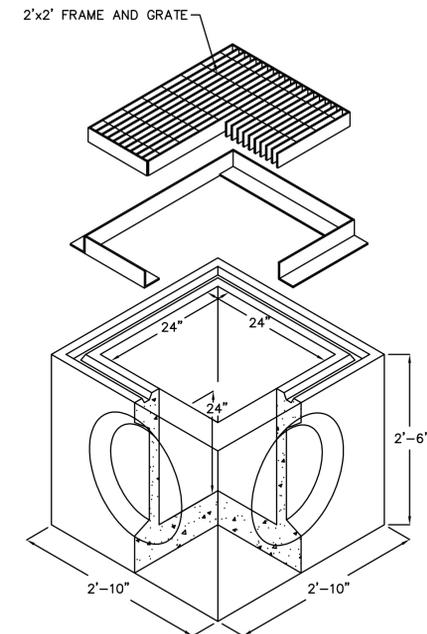
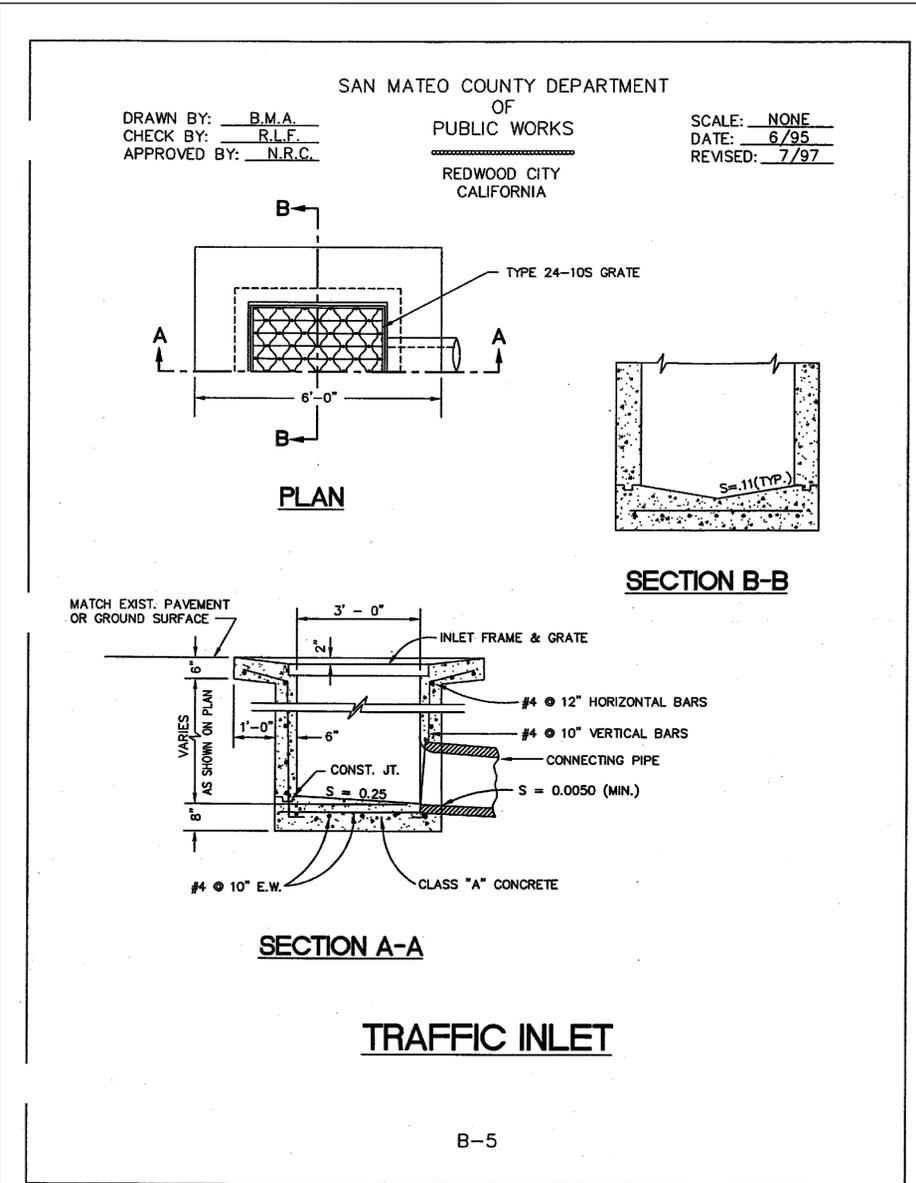
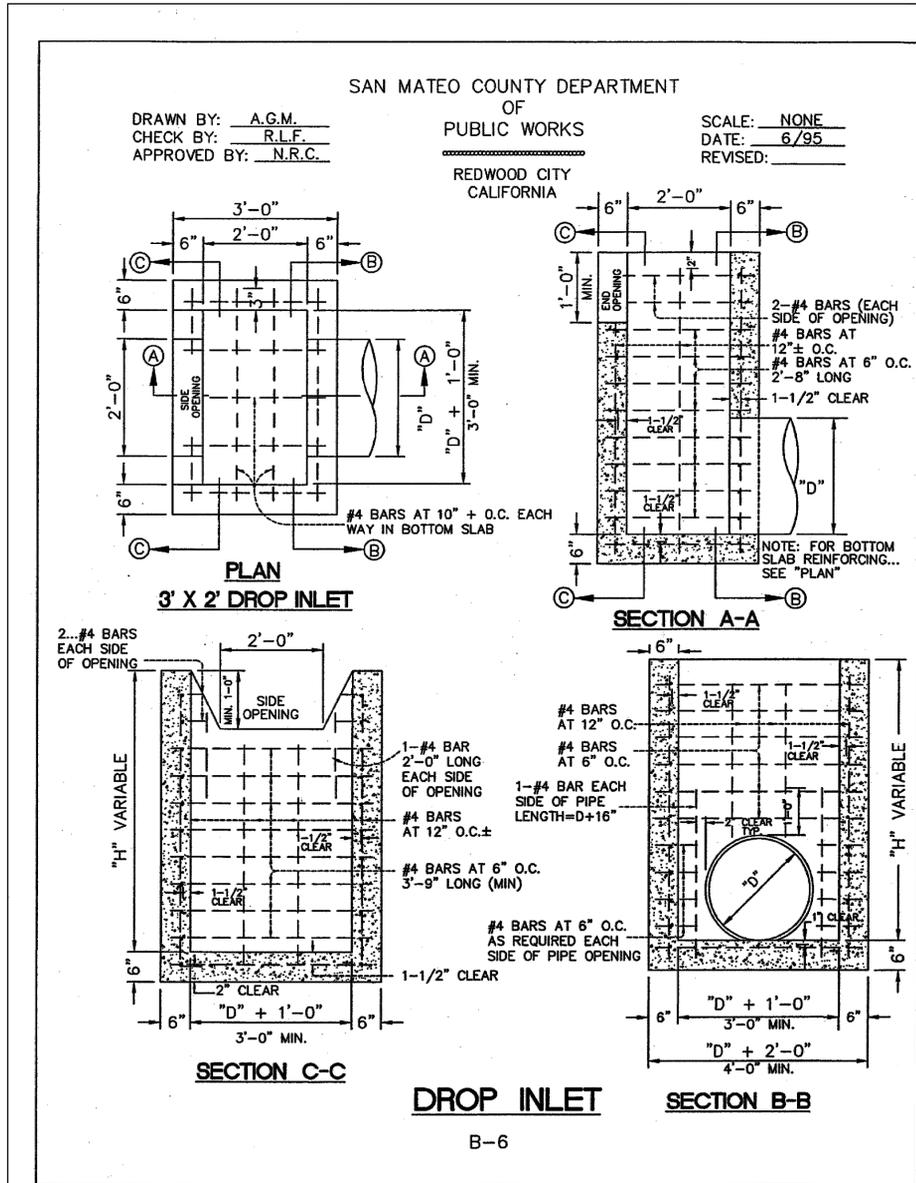
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2017 PROJECT			
C-02 CONSTRUCTION DETAILS			
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED 08/09/17	SHEET 8 OF 11



1
C-03 24" x 24" x 24" DROP INLET (TYPE 1)
JENSEN PRECAST OR SIMILAR APPROVED
NTS

DWG File: G:\Projects\2017\17015 Atherton Drainage Facilities Repairs\Drawings\ConstructionDetails.dwg



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1	4/07	PRELIMINARY DESIGN	RP

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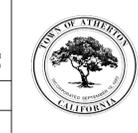
PLANS APPROVAL DATE _____ RCE NO. _____

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DESIGN	By R. PERIKETI	Checked A. SEKIOKA
	By _____	Checked _____

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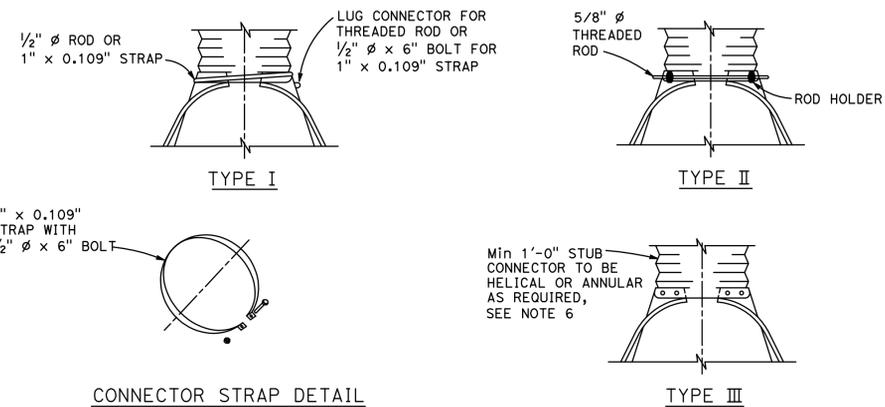
TOWN OF ATHERTON
DEPARTMENT OF PUBLIC WORKS

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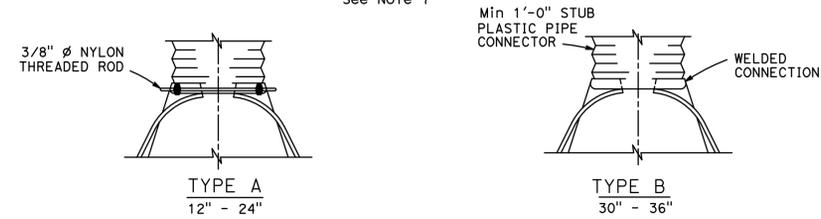
2017 PROJECT			
C-03 CONSTRUCTION DETAILS			
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED	SHEET OF
		08/09/17	9 11

212

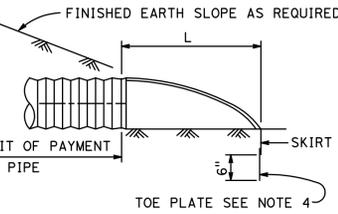
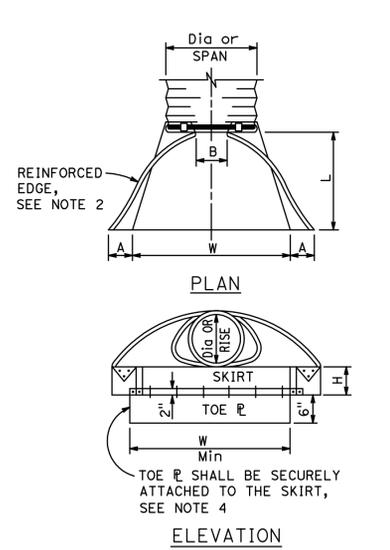


ALTERNATIVE CONNECTIONS FOR PIPE TO METAL FLARED END SECTIONS

See Note 7



ALTERNATIVE CONNECTIONS FOR PIPE TO PLASTIC FLARED END SECTIONS



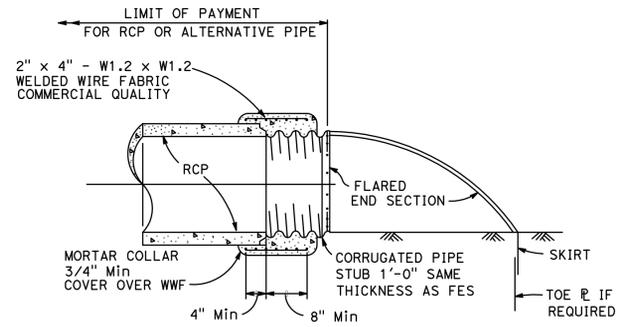
TYPICAL CROSS-SECTION

PIPE Dia	END SECTION THICKNESS	DIMENSION				
		A	B	H	L	W
12"*	0.064"	6"	6"	6"	1'-9"	2'-0"
15"*	0.064"	7"	8"	6"	2'-2"	2'-6"
18"*	0.064"	8"	10"	6"	2'-7"	3'-0"
21"	0.064"	9"	1'-0"	6"	3'-0"	3'-6"
24"*	0.064"	10"	1'-1"	6"	3'-5"	4'-0"
30"*	0.079"	1'-0"	1'-4"	8"	4'-3"	5'-0"
36"*	0.079"	1'-2"	1'-7"	9"	5'-0"	6'-0"
42"	0.109"	1'-4"	1'-10"	11"	5'-9"	7'-0"
48"	0.109"	1'-6"	2'-3"	1'-0"	6'-6"	7'-6"
54"	0.109"	1'-6"	2'-6"	1'-0"	7'-0"	8'-6"
60"	0.109"	1'-6"	2'-9"	1'-0"	7'-3"	9'-6"
66"	0.109"	1'-6"	3'-0"	1'-0"	7'-3"	10'-0"
72"	0.109"	1'-6"	3'-3"	1'-0"	7'-3"	10'-6"
78"	0.109"	1'-6"	3'-6"	1'-0"	7'-3"	11'-0"
84"	0.109"	1'-6"	3'-9"	1'-0"	7'-3"	11'-6"

* Equivalent plastic FES to meet AASHTO M-294 and ASTM D-1248 Specifications, and shall conform to all dimensions shown above except for end section thickness, which may be 0.004" thinner.

DESIGNATION	SPAN	RISE	END SECTION THICKNESS	DIMENSION				
				A	B	H	L	W
21"	15"	0.064"	7"	10"	6"	1'-11"	3'-0"	
24"	18"	0.064"	8"	1'-0"	6"	2'-4"	3'-6"	
28"	20"	0.064"	9"	1'-2"	6"	2'-8"	4'-0"	
35"	24"	0.079"	10"	1'-4"	6"	3'-3"	5'-0"	
42"	29"	0.079"	1'-0"	1'-6"	8"	3'-10"	6'-3"	
49"	33"	0.109"	1'-1"	1'-9"	9"	4'-5"	7'-1"	
57"	38"	0.109"	1'-6"	2'-2"	1'-0"	5'-3"	7'-6"	
64"	43"	0.109"	1'-6"	2'-6"	1'-0"	5'-10"	8'-6"	
71"	47"	0.109"	1'-6"	2'-9"	1'-0"	6'-5"	9'-6"	
77"	52"	0.109"	1'-6"	3'-0"	1'-0"	6'-5"	10'-6"	
83"	57"	0.109"	1'-6"	3'-3"	1'-0"	6'-5"	11'-6"	

FLARED END SECTIONS FOR CORRUGATED METAL AND PLASTIC PIPE CULVERTS



FLARED END SECTION CONNECTION TO RCP

NOTES:

- All 3-piece bodies to have 0.109" thick sides and 0.138" thick center panels. Width of center panels to be greater than 20% of the pipe periphery. Multiple panel bodies to have lap seams which are to be tightly joined by rivets or bolts.
- Reinforced edges to be supplemented with stiffener angles for the 60" thru 84" round, 77" x 52" and 83" x 57" pipe-arch sizes. The angles will be 2" x 2" x ?" for the 60" thru 72" round, 77" x 52" and 83" x 57" pipe-arch sizes and 2 1/2" x 2 1/2" x ?" for 78" and 84" round. The angles to be attached by ?" diameter nuts and bolts.
- Angle reinforcement shall be placed under the center panel seams on the 77" x 52" and 83" x 57" pipe-arch sizes.
- Toe plate to be available as an accessory when specified.
- End of pipe to be finished with annular corrugations to conform flared end section so that minimal leakage results from the connection. Other designs may be used with approval of the Engineer.
- For 12" thru 24" helical end section connection, a universal coupling band attached to the metal end section by rivets, bolts or 1" long shop tack welds spaced at same intervals as dimples may be used in place of the 12" stub. See Standard Plan D97C.
- The types of alternative connections for pipe to metal flared end sections shall conform to the following:

CIRCULAR PIPES -
12" thru 24" Type I or III
30" thru 84" Type II or III

PIPE-ARCHES -
21" x 15" thru 57" x 38" Type II or III
64" x 43" thru 83" x 57" Type III

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL AND PLASTIC FLARED END SECTIONS

NO SCALE

D94A

2015 STANDARD PLAN D94A

9-22-15



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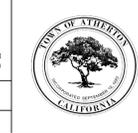
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WALNUT CREEK, CA 94596
PH (925) 941-0017 FX (925) 941-0018



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DESIGN	By R. PERIKETI	Checked A. SEKIOKA
	By	Checked

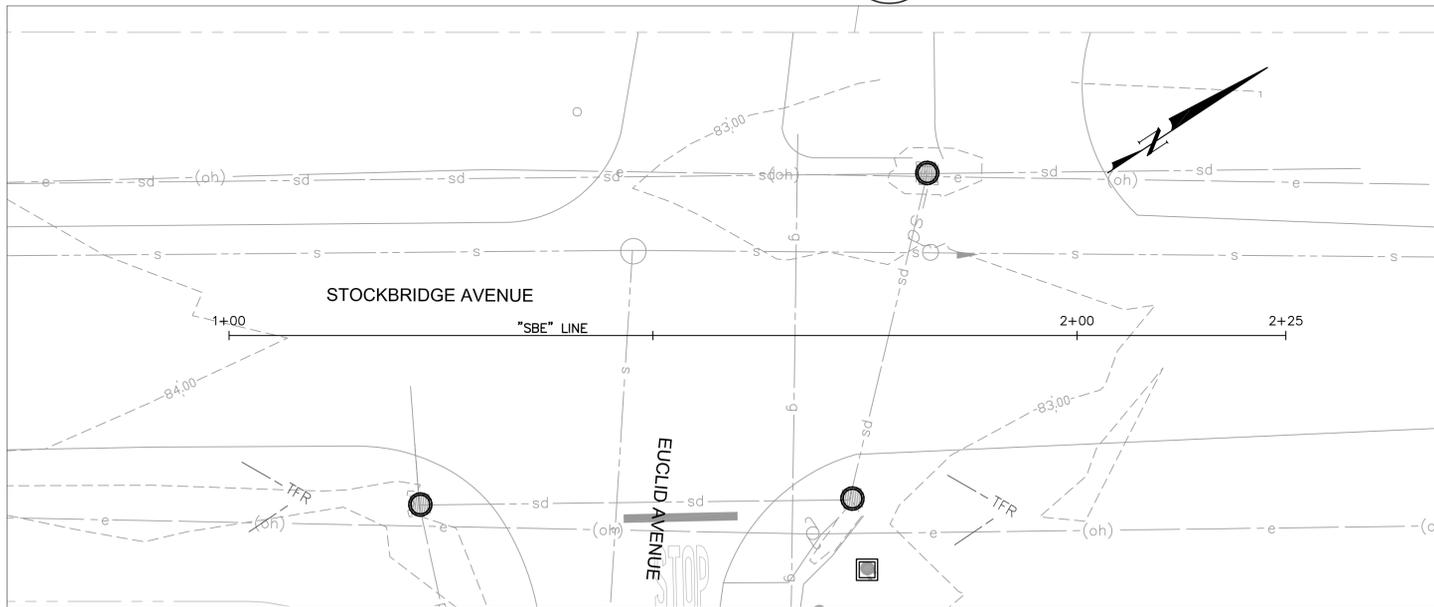
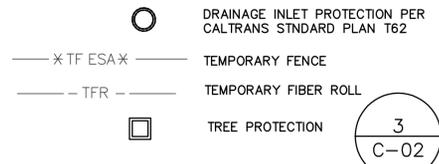
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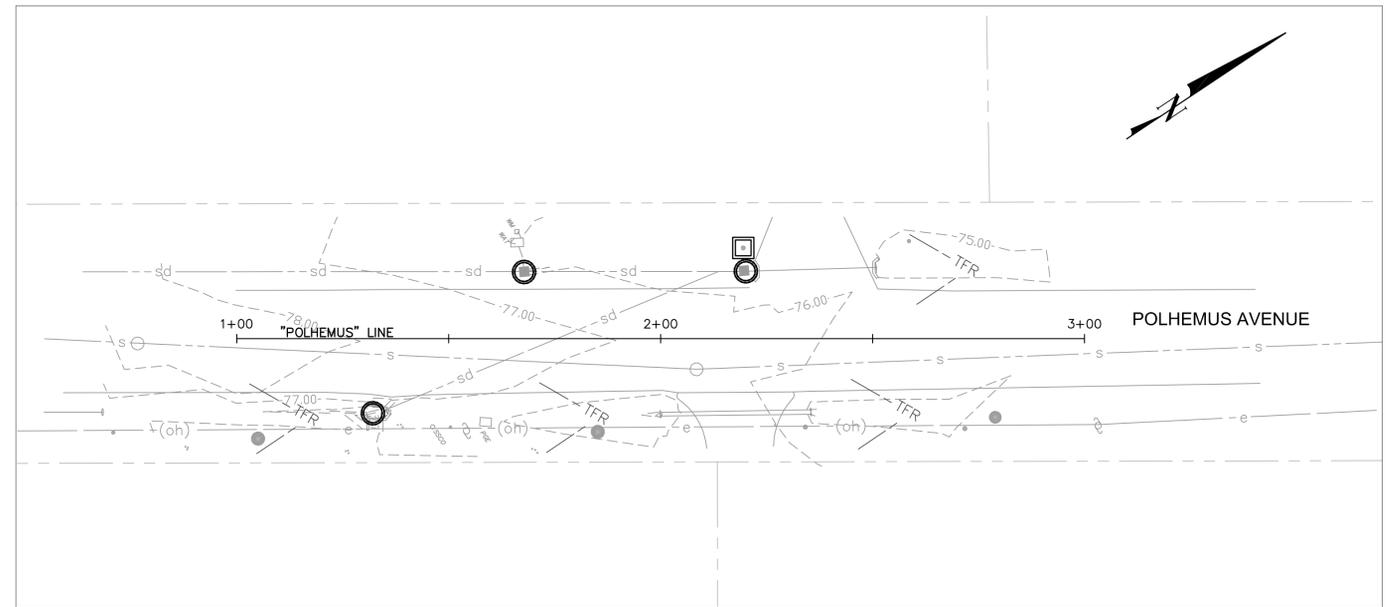
2017 PROJECT			
C-04 CONSTRUCTION DETAILS			
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED 08/09/17	SHEET 10 OF 11

NOTES:
INLET PROTECTION SHALL BE BASED ON ACTUAL STAGING OF WORK.

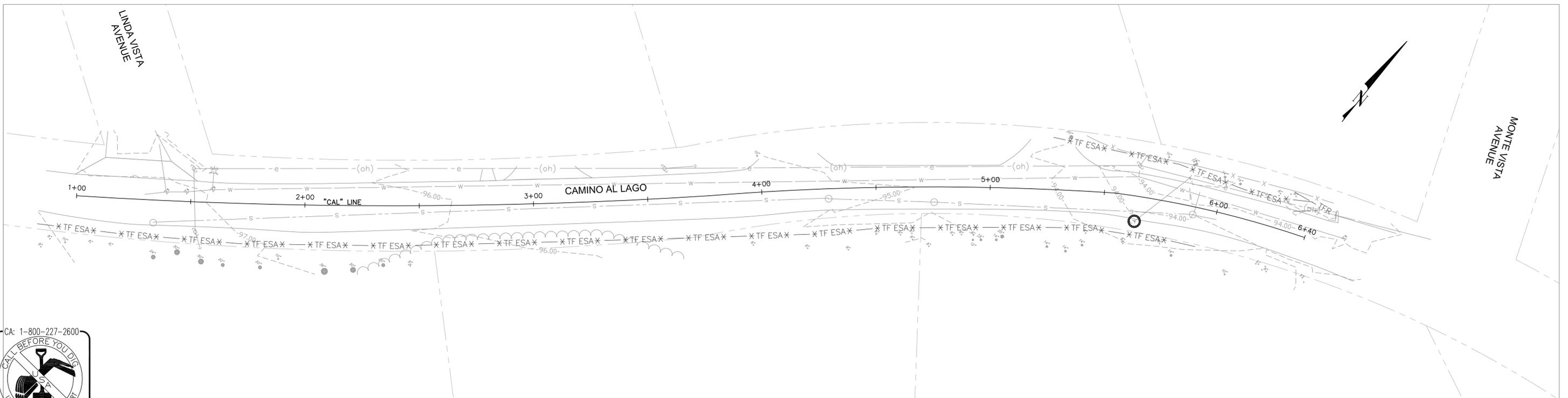
LEGEND:



LOCATION 1
SCALE: 1" = 10'



LOCATION 2
SCALE: 1" = 20'



LOCATION 3
SCALE: 1" = 20'



DWG File: G:\Projects\2017\17015 Atherton Drainage Facilities Repairs\Drawings\WaterPollutionControl.dwg

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	By _____	Checked _____

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2017 PROJECT			
WPC-01 WATER POLLUTION CONTROL PLAN			
JOB NO.	DISREGARD PRINTS BEARING EARLIER PLOT DATES	DATE PLOTTED	SHEET OF
		08/09/17	11 11