

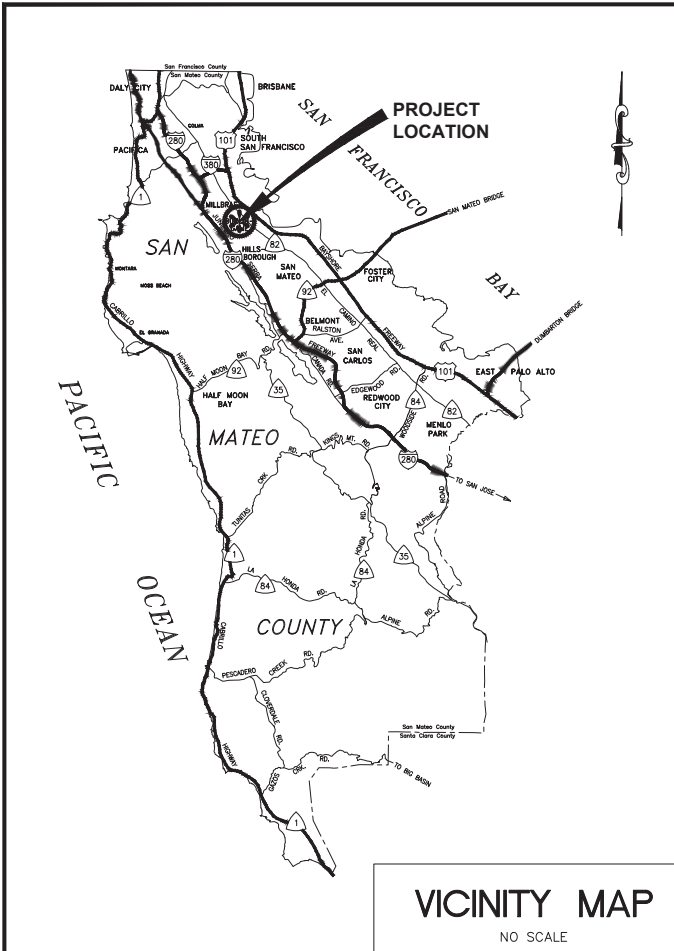
COUNTY OF SAN MATEO CALIFORNIA

HILLSIDE/ADELINE AREA SANITARY SEWER REHABILITATION PROJECT IN THE BURLINGAME HILLS SEWER MAINTENANCE DISTRICT COUNTY PROJECT NUMBER SB005, PROJECT FILE NUMBER E5025 TOTAL PROJECT LENGTH: APPROXIMATELY 6,570 LINEAR FEET TO BE SUPPLEMENTED BY STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS DATED MAY 2006 AND ADOPTED BY SAN MATEO COUNTY, NOVEMBER 14, 2006, BY RESOLUTION NO. 68389

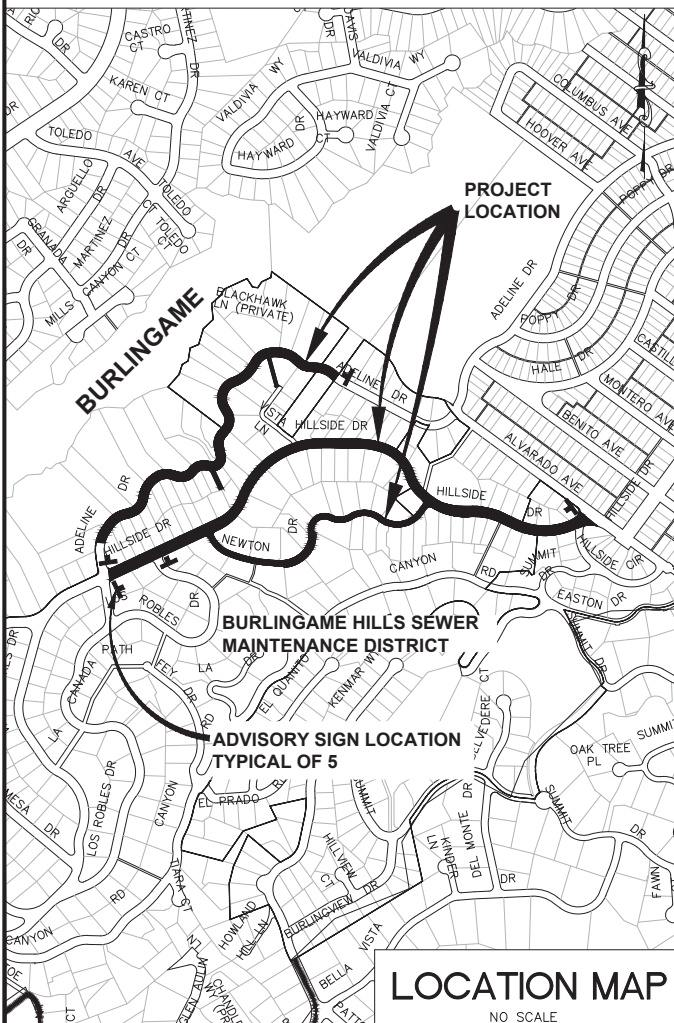


APPROVED: 8-14-2020
DATE:

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021



VICINITY MAP
NO SCALE



LOCATION MAP
NO SCALE

ABBREVIATIONS:

AB (CL.2) AGGREGATE BASE (CLASS 2)
ABN ABANDONED
AC ASPHALT CONCRETE
AC (TYPE B) ASPHALT CONCRETE (TYPE B)
ACP ASBESTOS CEMENT PIPE
AGG AGGREGATE
AV AVENUE
AWWA AMERICAN WATER WORKS ASSOCIATION
BC BACK OF CURB
BGS BELOW GROUND SURFACE
BPF BLOWS PER FOOT
BLB BOX
BW BUBBLE-UP BOX
CATV CABLE TV
CONC CONCRETE
C & G CURB AND GUTTER
CIPP CURED IN PLACE PIPELINER
CL CENTERLINE
CTN CEMENT TREATED NATIVE
DI AVERAGE WIDTH OF DRIVEWAY RAMP
DIP DRAINAGE INLET, DROP INLET
DS DUCTILE IRON PIPE
D/W DOWNSTREAM
ELE DRIVEWAY
ETW ELEVATION
EP EDGE OF TRAVEL WAY
EP EXISTING
FD FOUND
FG FINISHED GROUND
FH FIRE HYDRANT
FL FLOW LINE
G GAS LINE
GB GRADE BREAK
GV GAS VALVE
ID INSIDE DIAMETER
INV INVERT
JP JOINT UTILITY POLE
LG, LIP LIP OF GUTTER
LT, L LEFT
LH SANITARY SEWER LAMPHOLE
LR LOCALIZED REPAIR
MAX MAXIMUM
MB MAILBOX
MIN MINIMUM
MPH MILES PER HOUR
N/S NAIL & SHINER
PBMH SBC/PAC BELL MANHOLE
PCC PORTLAND CEMENT CONCRETE
PK PARKER-KALON NAIL
PL PROPERTY LINE
PNT POINT
PR PROPOSED
PVC POLYVINYL CHLORIDE PIPE
PVI POINT OF VERTICAL INFLECTION
RCP REINFORCED CONCRETE PIPE
RECON RECONSTRUCT
RT, R RIGHT
R/W, ROW RIGHT OF WAY

ABBREVIATIONS:

S SLOPE
SD STORM DRAIN
SDMH STORM DRAIN MANHOLE
SHT SHEET
SS SANITARY SEWER
SSCO SANITARY SEWER CLEANOUT
SSFI SANITARY SEWER FLUSHING INLET
SSMH SANITARY SEWER MANHOLE
ST STREET
STA STATION
T TELEPHONE
TBA TAP BREAK-IN ACTIVE
TFA TAP FACTORY ACTIVE
TFC TAP FACTORY CAPPED
TFD TAP FACTORY DEFECTIVE
TBI TAP BREAK-IN INTRUDING
TYP TYPICAL
UND UNDERGROUND
UNK UNKNOWN
US UPSTREAM
VCP VITRIFIED CLAY PIPE
VG VALLEY GUTTER
WM WATER METER
WV WATER VALVE
Ø DIAMETER

LEGEND:

SD (E) STORM DRAIN LINE
SS (E) SANITARY SEWER LINE
(E) SANITARY SEWER LINE PROFILE
W (E) WATER LINE
/G/ (E) ABANDONED GAS LINE
G (E) GAS LINE
JT (E) JOINT COMMUNICATION LINE
/UNK/ (E) ABANDONED UNKNOWN LINE
UNK (E) UNKNOWN UTILITY LINE
--- JURISDICTIONAL BOUNDARY
--- RIGHT OF WAY
X SS LATERAL (PROFILE)
ADVISORY SIGN LOCATION
SEWER MAIN TO BE REPLACED OR REHABILITATED
SEWER MAIN TO BE REPLACED OR REHABILITATED WITH SEWER LATERAL
EASEMENT LINE
PROPERTY LINE
FENCE
ROCK WALL
WALL
BUILDING

LEGEND:

FIRE HYDRANT
FIRE HYDRANT MARKERS
MAILBOX
SIGN
MONUMENT
BM BENCHMARK
CP CSG CONTROL POINT
TCP TEMPORARY CONTROL POINT FOUND DURING FIELD SURVEY
HOUSE NUMBER ADDRESS
TREE TO BE REMOVED
TREE
N/W NAIL AND WASHER
(XXX.XX) = EXISTING ELEVATION
XXX.XX = PROPOSED ELEVATION
WM WATER METER
WV WATER VALVE
GV GAS VALVE
JUT JOINT UTILITY POLE
TP TELEPHONE POLE
GWA GUY WIRE ANCHOR
SSMH NEW OR TO BE REPLACED SANITARY SEWER MANHOLE
SSMH SANITARY SEWER MANHOLE
SSCO SANITARY SEWER CLEANOUT TO BE REPLACED
SSCO SANITARY SEWER CLEANOUT
SSFI SANITARY SEWER FLUSHING INLET
SDMH STORM DRAIN MANHOLE
UD UNDERDRAIN
BBLBX BUBBLE-UP DRAIN (MAY NOT HAVE BOX)
MH UNKNOWN MANHOLE
BOLLARD
DRAINAGE INLET
CATCH BASIN

ALIGNMENTS

CONTRACTOR'S ATTENTION IS DIRECTED TO THE SEWER ALIGNMENTS LISTED BELOW:
"ADELINE SS" LINE - ADELINE DRIVE
(BETWEEN HILLSIDE DRIVE AND ALVARADO AVENUE)
"HILLSIDE SS" LINE - HILLSIDE DRIVE
(BETWEEN ADELINE DRIVE AND ALVARADO AVENUE)
"NEWTON SS" LINE - NEWTON DRIVE

THE FULL ALIGNMENTS ARE SHOWN ON SHEET 6, SITE PLAN. THESE ALIGNMENTS ATTEMPT TO CLOSELY FOLLOW THE SEWER CENTERLINE BASED UPON ELECTRONIC DATA OBTAINED. BUT THE CONTRACTOR SHOULD NOTE THAT THE ACTUAL SEWER CENTERLINE MAY VARY SIGNIFICANTLY FROM THIS ALIGNMENT AT SOME LOCATIONS.

BENCHMARKS:

REFER TO SHEET 4, SURVEY CONTROL PLAN.

BASIS OF BEARINGS:

REFER TO SHEET 4, SURVEY CONTROL PLAN.

APPLICABLE STANDARD PLANS:

A20A, A20B, A24D, A24E, A73A, A87, T13

APPLICABLE COUNTY STANDARD DETAILS:

STANDARD STRUCTURE DETAILS:
D-1 DRIVEWAY WIDTHS AND CURB OPENINGS FOR SINGLE FAMILY RESIDENTIAL DWELLINGS
D-1A DRIVEWAY WIDTHS AND CURB OPENINGS FOR SINGLE FAMILY RESIDENTIAL DWELLINGS
D-9 MAIL BOX LOCATION AND CONSTRUCTION DETAILS

SANITARY SEWER STANDARD DETAILS:
C-1 SANITARY SEWER MANHOLE DETAIL
C-2 SANITARY SEWER MANHOLE COVERS AND FRAMES
C-3 SANITARY SEWER CLEANOUT DETAIL
C-4 SANITARY SEWER FLUSHING INLET DETAIL
C-5 SEWER LATERAL DETAIL
C-6 LATERAL CONNECTION INSTALLATION DETAIL ON EXISTING PIPE
C-10 VITRIFIED CLAY AND DUCTILE IRON SEWER PIPE CROSSING REPAIR
C-11 POLYVINYL CHLORIDE SEWER PIPE CROSSING REPAIR
C-13 STANDARD SPECIFICATIONS - GENERAL NOTES
C-14 STANDARD SPECIFICATIONS - PIPE AND FITTINGS
C-15 STANDARD SPECIFICATIONS - TESTING REQUIREMENTS (1 of 2)
C-16 STANDARD SPECIFICATIONS - TESTING REQUIREMENTS (2 of 2)

SHEET INDEX:

1. TITLE SHEET
2. GENERAL NOTES
3. SURFACE FEATURE INVENTORY TABLE
4. SURVEY CONTROL PLAN
5. SHEET INDEX
6. SITE PLAN
7.-9. ADELINE DRIVE PLAN AND PROFILE
10.-13. HILLSIDE DRIVE PLAN AND PROFILE
14.-15. NEWTON DRIVE PLAN AND PROFILE
16. CONSTRUCTION DETAILS
17. CONSTRUCTION DETAILS
18. COUNTY STANDARD DETAILS
19. COUNTY STANDARD DETAILS
20. CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs)

FINAL BID PACKAGE

APPROVED DATE: 8/11/2020	REGISTERED PROFESSIONAL ENGINEER EDWARD T. SLINTAK No. C 39925 CIVIL STATE OF CALIFORNIA
EDWARD T. SLINTAK	
CSG CONSULTANTS, INC.	
R.C.E. # 39925 / EXPIRES 12-31-2021	

APPROVED DATE: 8/11/2020	REGISTERED PROFESSIONAL ENGINEER KATHERINE SHEEHAN No. C82702 CIVIL STATE OF CALIFORNIA
KATHERINE SHEEHAN	
CSG CONSULTANTS, INC.	
R.C.E. # 82702 / EXPIRES 09-30-2020	

COUNTY OF SAN MATEO PUBLIC WORKS	DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
	CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
	DRAWN BY: AS/JL	TITLE SHEET	FILE NO.: E5025
REVISION	DATE	JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		0 1 2 3 4	
		SHEET 1 OF 20	

GENERAL NOTES:

1. CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
2. ALL REFERENCES TO "COUNTY" IN THESE PLANS SHALL MEAN THE COUNTY OF SAN MATEO OR THE BURLINGAME HILLS SEWER MAINTENANCE DISTRICT.
3. CONTRACTOR SHALL CONFINE HIS OPERATIONS AND ACTIVITIES WITHIN THE PROJECT LIMITS, CONSISTING OF ROAD RIGHT-OF-WAY, EASEMENTS, RIGHTS OF ENTRY AND/OR PROJECT CONFORMS, AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR SHALL CONTACT THE COUNTY TWO (2) WORKING DAYS IN ADVANCE OF BEGINNING OF ANY WORK. THEREAFTER THE CONTRACTOR SHALL KEEP THE COUNTY'S INSPECTOR INFORMED OF THE SCHEDULE OF WORK.
5. ALL WORK CONSTRUCTED WITHOUT INSPECTION BY THE COUNTY SHALL BE REMOVED AND RECONSTRUCTED WITH INSPECTION.
6. CONTRACTOR IS ADVISED THAT EXCAVATION MAY CONFLICT WITH SANITARY SEWER LATERALS, GAS LINES, WATER LINES AND OTHER UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE COUNTY, CITY, AND UTILITY AGENCIES BEFORE BEGINNING ANY WORK.
8. UPON THE COMPLETION OF CONSTRUCTION, A COMPLETE SET OF REPRODUCIBLE "AS-BUILT" PLANS SHALL BE PROVIDED TO THE COUNTY.
9. THE CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE RULES AND REGULATION ESTABLISHED BY CAL-OSHA AND OTHER AGENCIES HAVING JURISDICTION OVER THE WORK.
10. STAGING AREAS FOR EQUIPMENT AND MATERIALS STORAGE SHALL BE LIMITED TO LOCATIONS WHERE THE CONTRACTOR HAS OBTAINED PERMISSION FROM THE ADJACENT PROPERTY OWNER OR COUNTY.
11. CONTINUOUS DUST CONTROL SHALL BE PROVIDED AS REQUIRED BY SECTION 17 OF THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER.
12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SHOULD ANY FIELD CONDITIONS BE ENCOUNTERED THAT VARY FROM THE INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS.
13. REFER TO PROJECT SPECIAL PROVISIONS SECTION 11 REGARDING REQUIREMENTS FOR ADVANCE NOTIFICATION OF PROPERTY OWNERS.
14. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL DEVELOP AND SUBMIT TO THE COUNTY A SHORING PLAN. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SHEETING, SHORING AND BRACING REQUIRED FOR THE INSTALLATION OF THE SANITARY SEWER. ALL EXCAVATIONS SHALL BE KEPT WITHIN THE DESIGNATED EASEMENT WIDTHS. EXCAVATION WITHIN PAVED AREAS SHALL BE KEPT TO A MINIMUM. SHEETING SHALL BE INSTALLED AS REQUIRED TO PROTECT EXISTING UTILITIES.
15. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL DEVELOP AND SUBMIT TO THE COUNTY A TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL COMPLY WITH THE APPROVED TRAFFIC CONTROL PLAN AT ALL TIMES. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK, AND TO PROVIDE FOR THE PROPER AND CONTINUOUS SAFE ROUTING OF VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS. THE USE OF FLAGGERS, BARRICADES AND CONSTRUCTION SIGNING SHALL COMPLY WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
16. THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION SURVEYING. ANY EXISTING SURVEY STAKES SHALL NOT BE USED BY THE CONTRACTOR. THE SURVEY AND ASSOCIATED STAKING SHALL BE IN CONFORMANCE WITH SECTION 101, "CONSTRUCTION STAKING AND LAYOUT", OF THE SPECIAL PROVISIONS.
17. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE COUNTY SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
18. STRUCTURES NOTED IN THE PLANS AS EXISTING SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ANY DISCREPANCIES NOTED SHALL BE REPORTED TO THE COUNTY.
19. TYPICAL DETAILS AND SCHEDULES INDICATED MAY NOT BE SPECIFICALLY REFERENCED ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHERE EACH TYPICAL DETAIL OR SCHEDULE APPLIES. IF LOCATIONS ARE FOUND WHERE NO TYPICAL DETAIL, TYPICAL SCHEDULE, OR SPECIFIC DETAIL APPLIES, THE COUNTY SHALL BE NOTIFIED.

UTILITY NOTES:

1. LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES BEFORE BEGINNING ANY EXCAVATION AND PROVIDE PROTECTION FOR SUCH UTILITIES AND STRUCTURES. CONTRACTOR SHALL CALL USA NORTH 811 (USA) UNDERGROUND SERVICE ALERT A MINIMUM OF FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY EXCAVATION OR TRENCHING WORK. USA MAY BE CONTACTED EITHER ON-LINE AT USANORTH811.ORG OR BY DIALING (800) 642-2444 OR 811. WHEN CALLING, BE PREPARED TO GIVE LOCATION AND NATURE OF WORK, START DATE, COMPANY NAME, ADDRESS AND TELEPHONE NUMBER.
2. PLANS MAY NOT SHOW ALL UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION AND PROTECTION OF ALL SUCH FACILITIES WHICH ARE NOT TO BE RELOCATED.
3. THE CONTRACTOR SHALL NOTIFY PACIFIC GAS & ELECTRIC (PG&E) PRIOR TO EXCAVATING CLOSER THAN FIVE FEET TO AN EXISTING UTILITY POLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ANY ADDITIONAL SUPPORT OF EXISTING POWER POLES AS REQUIRED FOR TRENCH EXCAVATION. ALL COSTS OF SUCH WORK SHALL BE PAID BY THE CONTRACTOR.
4. WATER METER ADJUSTMENTS SHALL BE COORDINATED WITH THE CITY OF BURLINGAME WATER DEPARTMENT. RESETTING OF WATER METER BOXES (REPLACING AND LOWERING OR RAISING BOXES TO GRADE) AND RESETTING OF WATER METERS (MOVING OUT OF THE WAY TO FACILITATE CONSTRUCTION AND THEN RECONSTRUCTING, WITH NEW BOXES, AT THE ORIGINAL LOCATION) SHALL BE PERFORMED BY THE CONTRACTOR. REFER TO SECTION 100-11.1 OF THE SPECIAL PROVISIONS.
5. PG&E PREFERS 12 INCHES OF VERTICAL CLEARANCE TO THEIR UNDERGROUND UTILITIES, WITH A MINIMUM CLEARANCE OF 6 INCHES, FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE. IF THE CONTRACTOR UNCOVERS A CROSSING PG&E UNDERGROUND UTILITY FOR WHICH THIS CLEARANCE CANNOT BE MET, THE CONTRACTOR SHALL CONTACT PG&E TO ASSIST IN PROTECTING THE UTILITY IN PLACE VIA SLEEVES OR OTHER PROTECTIVE MEASURES.
6. THE CONTRACTOR SHALL COORDINATE HIS/HER WORK IN THE PROJECT AREA WITH OTHER CONTRACTORS AND PUBLIC UTILITY AGENCIES SO AS TO MINIMIZE DELAYS IN THE COMPLETION OF THE CONTRACT. THERE WILL BE A PG&E GAS MAIN REPLACEMENT PROJECT UNDERWAY FROM FALL 2020 TO SPRING 2021 ON HILLSIDE DRIVE BETWEEN NEWTON DRIVE AND ALVARADO AVENUE. REFER TO SECTION 100-3 OF THE SPECIAL PROVISIONS. PROJECT INFORMATION IS AS FOLLOWS: PROJECT NAME: OCW, GPRP-COLUMBUS AVE., BURLINGAME, PM ORDER #: 31325749, PROJECT MANAGER: JOY MITCHELL (925) 588-9396.

SURFACE PROTECTION AND RESTORATION NOTES:

1. ALL EXISTING IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO LANDSCAPING, FENCES, DRIVEWAYS, CURB, GUTTER, SIDEWALK, CULVERTS, DRAINS, AND MONUMENTS, SHALL BE RESTORED TO THE CONDITION IN WHICH THEY WERE, OR BETTER BEFORE THE EXCAVATION WAS MADE, UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS. SEPARATE PAYMENT FOR RESTORATION OF EXISTING IMPROVEMENTS TO THEIR ORIGINAL CONDITION WILL NOT BE MADE. COMPENSATION FOR THIS TASK SHALL BE CONSIDERED AS INCLUDED IN THE VARIOUS CONTRACT ITEMS OF WORK INVOLVED. NOT ALL EXISTING IMPROVEMENTS ARE SHOWN. CONTRACTORS SHALL INSPECT THE SITE IN ORDER TO SATISFY THEMSELVES OF THE ACTUAL CONDITIONS OF THE WORK.
2. CONTRACTOR SHALL EXERCISE CARE WHEN EXCAVATING NEAR TREES AND ROOTS OF TREES TO REMAIN. SEE SECTION 16 OF THE SPECIAL PROVISIONS.
3. ANY DAMAGE, AS A RESULT OF THE CONTRACTOR'S OPERATION, TO PAVEMENTS AND BASE MATERIAL THAT IS TO REMAIN SHALL BE REPAIRED OR REMOVED AND REPLACED WITH SAME TYPE OF MATERIAL OR APPROVED EQUAL, AS DIRECTED BY THE COUNTY OR THE CITY OF BURLINGAME, AND AT THE SOLE EXPENSE OF THE CONTRACTOR. THE COUNTY SHALL BE THE SOLE JUDGE OF THE ADEQUACY OF THE COMPLETED REMEDIAL WORK.
4. STRIPING, MARKINGS, ETC. DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY OR COUNTY PRIOR TO COMPLETION OF PROJECT.
5. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL EXISTING FENCES AS REQUIRED FOR PIPE INSTALLATION. ANY ADDITIONAL FENCE MATERIALS REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PRIVATE PROPERTY OWNERS OR COUNTY. REPLACED FENCE SHALL MATCH EXISTING FENCE TYPE, UNLESS OTHERWISE SHOWN ON PLANS.
6. NO TREES, VEGETATION OR IMPROVEMENTS (INCLUDING FENCES) SHALL BE REMOVED WITHOUT THE PRIOR WRITTEN CONSENT AND APPROVAL OF THE COUNTY. VEGETATION AND IMPROVEMENTS WHICH ARE DESIGNATED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
7. CARE SHALL BE TAKEN TO PROTECT EXISTING PLANTS, SHRUBS, TREES, LAWN, LANDSCAPE AREAS AND IRRIGATION SYSTEMS. ANY ITEMS REMOVED OR DAMAGED SHALL BE REPLACED. ALL ITEMS WHICH REQUIRE REMOVAL OR ARE DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPLACED TO ORIGINAL CONDITION AND TO THE APPROVAL OF THE COUNTY.
8. ALL UTILITIES WITHIN 5-FT Laterally AND CROSSING THE PROPOSED ALIGNMENT SHALL BE POTHOLED. THE POTHOLED DATA (DATE AND TIME OF POTHOLE, PRECISE LOCATION OF POTHOLE, DEPTH TO UTILITY, UTILITY TYPE AND SIZE, UTILITY PIPE MATERIAL, DEPTH OF ASPHALT, DEPTH OF ROAD BASE, SOIL TYPES ENCOUNTERED, AND OTHER RELEVANT INFORMATION) SHALL BE SUBMITTED TO COUNTY. THE SUBMITTAL SHALL SPECIFICALLY IDENTIFY ANY POTENTIAL CONFLICTS. CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION IN THAT AREA UNTIL A WRITTEN RESPONSE IS RECEIVED FROM THE COUNTY REGARDING IDENTIFIED CONFLICTS.
9. RESETTING OF MAILBOXES SHALL BE COORDINATED WITH THE UNITED STATES POSTAL SERVICE, AND ALL TEMPORARY AND PERMANENT LOCATIONS MUST BE SATISFACTORY TO THE UNITED STATES POSTAL SERVICE AND THE ENGINEER. REFER TO SECTION 15-2 OF THE SPECIAL PROVISIONS.


SEWER NOTES:

1. SANITARY SEWER SERVICE SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL USE WHATEVER MEANS ARE NECESSARY (E.G. PUMPS, ETC.) TO MAINTAIN THIS SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND DAMAGES TO PUBLIC AND PRIVATE PROPERTIES CAUSED BY SEWAGE BACKUP AND OVERFLOWS DUE TO HIS/HER WORK.
2. THE CONTRACTOR SHALL VERIFY WHICH LATERAL CONNECTIONS ARE ACTIVE AND WHICH ARE INACTIVE. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING ACCESS TO THE OWNER'S PROPERTY FOR VERIFICATION OF ACTIVE LATERALS. REINSTATE ACTIVE LATERALS ONLY. PLUG INACTIVE LATERALS WITH WRITTEN PERMISSION FROM COUNTY.
3. PRIOR TO EXCAVATION OR PIPELINE REHABILITATION, THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS SHOWN, INCLUDING THE LENGTH OF MANHOLE TO MANHOLE REACHES AND DISTANCES TO SEWER LATERALS.
4. EXISTING SEWER LATERALS SHOWN ON THESE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY LOCATION, AND DEPTH OF ALL EXISTING SEWER LATERALS. THE PLANS SHOW LATERAL LOCATIONS BASED ON RECENT TELEVISION INSPECTION. TELEVISION INSPECTION REPORTS CAN BE MADE AVAILABLE TO THE CONTRACTOR, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING LATERALS.
5. REFER TO APPENDIX B OF THE SPECIFICATIONS ON SANITARY SEWER MONITORING AND REPORTING REQUIREMENTS: STATE WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC FOR MONITORING AND REPORTING PROGRAM.
6. ALL SEWER LATERALS SHOWN ARE ASSUMED TO BE 4" DIAMETER UNLESS OTHERWISE NOTED.
7. MINOR CHANGES IN THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE SEWER MAIN MAY BE PROPOSED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL TO FACILITATE CONSTRUCTION AND AVOID FIELD CONFLICTS.
8. UNLESS OTHERWISE INDICATED, ALL EXISTING GRADE ELEVATIONS SHOWN ARE ALONG THE CENTER LINE OF THE SEWER ALIGNMENT.
9. MINIMUM PIPE COVER FOR SANITARY SEWER REPLACED VIA OPEN TRENCH SHALL BE 1 FOOT UNLESS LESS COVER IS SPECIFICALLY APPROVED BY THE ENGINEER OR SHOWN ON PLANS. FOR PIPE SEGMENTS WITH LESS THAN 1 FOOT OF COVER AS SHOWN ON THE PLANS OR SPECIFICALLY APPROVED BY THE ENGINEER, USE A CLASS 3 CONCRETE CAP. REFER TO SECTION 51 OF THE SPECIAL PROVISIONS FOR CLASS 3 CONCRETE CAP REQUIREMENTS.
10. PRIOR TO ACCEPTANCE OF THE SEWER, THE PIPELINES SHALL BE PROPERLY CLEANED OF ALL DEBRIS, AIR TESTED, MANDRELLED WHEN APPLICABLE AND TELEVIEWED. PROPER CLEANING TECHNIQUES AND DEVICES SHALL BE UTILIZED TO ENSURE NO DEBRIS, SAND, GRAVEL OR SILT WILL ENTER THE EXISTING SEWER SYSTEM.
11. WHERE VERTICAL GRADE BREAKS ARE SHOWN IN PROFILE, THE CONTRACTOR SHALL PROVIDE SMOOTH TRANSITIONS IN THE PIPE PROFILE BY USING SMALLER JOINT DEFLECTIONS AND SHORTER SECTIONS OF PIPE WHILE MAINTAINING A MINIMUM COVER OF 1 FOOT.

LATERAL NOTES:

- A. RECONNECTION OF ACTIVE LATERALS WITHIN PIPE SEGMENTS TO BE REPLACED VIA OPEN TRENCH SHALL BE MEASURED AND PAID FOR UNDER THE "RECONNECT SANITARY SEWER LATERAL (OPEN TRENCH METHOD)" BID ITEM.
- B. TRENCHLESS REINSTATEMENT OF ACTIVE LATERALS WITHIN PIPE SEGMENTS TO BE REHABILITATED VIA CIPP SHALL BE MEASURED AND PAID FOR UNDER THE "REINSTATE SANITARY SEWER LATERALS" BID ITEM.
- C. FULL COMPENSATION FOR REPLACEMENT OF UP TO FIVE (5) FEET OF LATERALS CONNECTED TO THE SANITARY SEWER MANHOLE SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE PAID PER EACH FOR, "REMOVE AND REPLACE EXISTING SANITARY SEWER MANHOLES".

FINAL BID PACKAGE


APPROVED DATE: 8/11/2020

KATHERINE SHEEHAN
CSG CONSULTANTS, INC.
R.C.E. # 82702 / EXPIRES 09-30-2020



		DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
		CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
		DRAWN BY: AS/L	FILE NO.: E5025	
		GENERAL NOTES		
		JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY		
		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063		
REVISION	DATE			
		FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		
		0 1 2 3 4		
		SHEET 2 OF 20		



APPROVED: 8-14-2020

DATE: 

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

PIPE QUANTITY TABLE:

SHEET NO.	US SSMH NO.	D8 SSMH NO.	LENGTH (ft)	METHOD OF REHABILITATION OR REPLACEMENT	STREET NAME	AWWA C900 PIPE DIMENSION RATIO (D/R)	ESTIMATED OPEN TRENCH ACTIVE LATERALS (EA) (NOTE A)	ESTIMATED CIPP ACTIVE LATERALS (EA) (NOTE B)
7	52	53	325	CIPP	ADELINE DRIVE		1	5
7	53	54	323	CIPP	ADELINE DRIVE		2	4
7	54	55	90	CIPP	ADELINE DRIVE			1
7/8	55	51	273	CIPP	ADELINE DRIVE			4
9	57	55	132	CIPP	ADELINE DRIVE			1
8	51	50	293	OPEN TRENCH	ADELINE DRIVE	DR18	4	
8	50	70	315	OPEN TRENCH	ADELINE DRIVE	DR18	4	
8	70	74	133	CIPP	ADELINE DRIVE			1
8/9	71	74	168	CIPP	ADELINE DRIVE			1
8/9	74	76	229	OPEN TRENCH	ADELINE DRIVE	DR18	1	
10	56	61	465	OPEN TRENCH	HILLSIDE DRIVE	DR18	7	
10	61	84	261	OPEN TRENCH	HILLSIDE DRIVE	DR18	5	
10	84	83	50	OPEN TRENCH	HILLSIDE DRIVE	DR18	0	
10/11	83	82	315	CIPP	HILLSIDE DRIVE			4
11	82	77	315	CIPP	HILLSIDE DRIVE			2
11/12	77	93	334	CIPP	HILLSIDE DRIVE		1	3
12	93	94	339	CIPP	HILLSIDE DRIVE			3
12	94	96	200	CIPP	HILLSIDE DRIVE			3
12	96	237	172	CIPP	HILLSIDE DRIVE			0
12/13	237	238	307	CIPP	HILLSIDE DRIVE		1	8
13	238	5842	237	CIPP	HILLSIDE DRIVE			5
14	85	91	294	CIPP	NEWTON DRIVE			2
14	91	90	208	CIPP	NEWTON DRIVE			2
14	90	89	306	CIPP	NEWTON DRIVE			5
14/15	89	95	225	CIPP	NEWTON DRIVE		1	3
15	95	94A	192	OPEN TRENCH	NEWTON DRIVE	DR18	1	
15	94A	94	70	OPEN TRENCH	NEWTON DRIVE	DR18	2	
			4,696	TOTAL CIPP		TOTAL ACTIVE LATERALS	30	57
			1,875	TOTAL OPEN TRENCH				

MANHOLE QUANTITY TABLE:

SHEET NO.	SSMH NO.	CONSTRUCTION NOTES	STREET NAME	REPLACEMENT STRUCTURE	MH LATERALS (EA) (NOTE C)	MH LOCATION
7	52	REPLACE	ADELINE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)		EMBANKMENT
7	53	REPLACE	ADELINE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)		DRIVEWAY
7	54	REPLACE	ADELINE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)		EMBANKMENT
7/9	55	REPLACE	ADELINE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)	1	DRIVEWAY
9	57	REPLACE	ADELINE DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)		EASEMENT
8	51	REPLACE	ADELINE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)		EMBANKMENT
8	50	REPLACE	ADELINE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)		EMBANKMENT
8	70	REPLACE	ADELINE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)		EMBANKMENT
9	71	REPLACE	ADELINE DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)		STREET
8/9	74	REPLACE	ADELINE DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)	1	VALLEY GUTTER
9	76	PROTECT IN PLACE	ADELINE DRIVE	N/A	1	STREET
10	56	REPLACE	HILLSIDE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)	1	SHOULDER
10	61	REPLACE	HILLSIDE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)		SHOULDER (COBBLE)
10	84	REPLACE	HILLSIDE DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)		VALLEY GUTTER
10	83	REPLACE	HILLSIDE DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)		SHOULDER (DIRT)
11	82	REPLACE	HILLSIDE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)		DRIVEWAY
11	77	REPLACE	HILLSIDE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)		DRIVEWAY
12	93	REPLACE	HILLSIDE DRIVE	TYPE 3 (SEE DETAIL, SHEET 16)		EMBANKMENT
12	94	REPLACE	HILLSIDE DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)	1	STREET
12	96	REPLACE	HILLSIDE DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)	1	STREET
12	237	REPLACE	HILLSIDE DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)	1	STREET
13	238	REPLACE	HILLSIDE DRIVE	TYPE 2 (SEE DETAIL, SHEET 16)	1	STREET
13	5842	REPLACE	HILLSIDE DRIVE	TYPE 2 (SEE DETAIL, SHEET 16)	1	STREET
14	85	REPLACE	NEWTON DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)	1	STREET
14	91	REPLACE	NEWTON DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)		STREET
14	90	REPLACE	NEWTON DRIVE	TYPE 2 (SEE DETAIL, SHEET 16)		STREET
14	89	REPLACE	NEWTON DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)		STREET
15	95	REPLACE	NEWTON DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)		STREET
15	94A	NEW MANHOLE BETWEEN SEGMENT SSMH95- SSMH94	NEWTON DRIVE	TYPE 1 (SEE DETAIL, SHEET 16)		STREET

FILENAME: \\SERVER2.CSG.LOC\CLIENTS\DESIGN\19-403-HILLSIDE ADELINE AREA SS REHAB\2020-07-XX-FINALBID SET\E502502.DWG (02-- GENERAL NOTES 36x24 PLAN)

							SPECIFICATION SECTION	—#5-2	51	100-11.1	104-5	15-4, 57	15-4, 57	15-4, 57	16, 107	16, 107	51, 107	51, 107	107	107	107	107	107	107	15-3	15-3	15-3	15-3	15-3	15-4, 57	16-1	100-11				
							PAYMENT METHOD	→	BID ITEMS (NOTE 6)				TIMBER POSTS AND LAGGINGS				RESTORATION OF PAVED SURFACES AND IMPROVEMENTS (NOTE 6)										INCLUDED WITH VARIOUS ITEMS OF WORK (NOTE 6)									
STREET NAME	REHABILITATION REQUIRED	DEFECTS TO BE REPAIRED	PIPE SEGMENT NUMBER (US SSMH # - DS SSMH #)	START	END	SHEET NUMBER	LOCALIZED REPAIR	STREET ADDRESS	RESET MAILBOX	RECON. ROLLED CURB / VALLEY GUTTER (NOTE 9)	RESET WATER METER/ WATER METER BOX (NOTE 4)	REPLACE SSCO	RECON. WOOD RETAINING WALL	RECON. WOOD STAIRS	RECON. WOOD HEADER	REPLACE DEVELOPED PLANTING	REPLACE NATURAL PLANTING (NOTE 5)	RECON. PCC DWY	RECON. PCC CURB	RECON. AC DWY	RECON. PAVER DWY	RECON. AC (NOTE 3)	RECON. ROCK WALL	RECON. PCC OR PAVER STAIRS (NOTE 8)	RESET COBBLES	RESET BUBBLER	RESET TRENCH DRAIN	RESET CATCH BASIN	REPLACE DRAINAGE PIPE	RECON. DRAINAGE CHANNEL	RESET WOOD FENCE	REMOVE TREE	JOINT UTILITY POLE (NOTE 1)			
				LF	LF		LF		EA	LF	EA	EA	LF	EA	LF	LF	LF	LF	LF	LF	LF	LF	EA	LF	EA	LF	EA	LF	EA	LF	EA	EA	EA			
Adeline	Localized Repair	Broken Pipe	52 - 53	11+30	11+40	7	10	2929		10		1						6								6				6 (6"x12")						
Adeline	Localized Repair	Broken Pipe	53 - 54	13+35	13+45	7	10	2917		10								5		5																
Adeline	Localized Repair	Broken Pipe	53 - 54	13+85	13+95	7	10	2915		10								10																		
Adeline	Localized Repair	Broken Pipe	54 - 55	17+03	17+13	7	10	2895		10								10							1											
Adeline	Localized Repair	Broken Pipe	55 - 51	17+94	18+04	7	10	2889/2884		10	1							6		4																
Vista Lane	Open Trench		51 - 50	20+10	23+03	8		11		78		1	12				78																			
Vista Lane	Open Trench		51 - 50	20+10	23+03	8		15		198	1	2			12																					
Vista Lane	Open Trench		51 - 50	20+10	23+03	8		19		17																										
Vista Lane	Open Trench		50 - 70	23+03	26+18	8		19		100	1	1											1 (PCC)				1									
Vista Lane	Open Trench		50 - 70	23+03	26+18	8		23		160	1	1						15					1 (PCC)									1 (7.5" DIA.)				
Adeline	Open Trench		50 - 70	23+03	26+18	8		2855	1	40								15																		
Adeline	Localized Repair	Deformed Pipe	57 - 55	REFER TO	PLANS	9	10	2895									10																			
Adeline	Localized Repair	Joint Offset	70 - 74	26+68	26+78	8	10	2855		10							10															1 (7" DIA., 8" DIA.)				
Adeline	Localized Repair	Joint Offset	71 - 74	REFER TO	PLANS	9	10	2855									10																			
Vista Lane	Open Trench		74 - 76	27+49	29+78	9		24		114	2			1								8							1							
Adeline	Open Trench		74 - 76	27+49	29+78	9		2843		105												8							2							
Hillside	Open Trench		56 - 61	50+00	54+65	10		2938		14							14																			
Hillside	Open Trench		56 - 61	50+00	54+65	10		2932	1	42							6	20											20 (2-4" PVC) 5 (3" CLAY)							
Hillside	Open Trench		56 - 61	50+00	54+65	10		2928	1	52	2	1					5	5				52		6		1										
Hillside	Open Trench		56 - 61	50+00	54+65	10		2924	1	60		1					3	52												25 (3")						
Hillside	Open Trench		56 - 61	50+00	54+65	10		2920	1	60						5						50				1										
Hillside	Open Trench		56 - 61	50+00	54+65	10		2916	1	60						2		15		15			30													
Hillside	Open Trench		56 - 61	50+00	54+65	10		2912	1	60	1						5			20			36	1 (FLAG STONE)												
Hillside	Open Trench		56 - 61	50+00	54+65	10		2910		60	1						14						38	1 (PCC)												
Hillside	Open Trench		56 - 61	50+00	54+65	10		2900/2904		32	1					23									20											
Hillside	Open Trench		61 - 84	54+65	56+50	10		2900/2904	1	15	1						16												16 (6" CMP)							
Hillside	Open Trench		61 - 84	54+65	56+50	10		2896	1	48		1				46		37																		
Hillside	Open Trench		61 - 84	54+65	56+50	10		2892		50	1					65		47										1	16 (2-2" PVC) 20 (8" CMP) 2 (8" CMP)	30 (8"x15")						
Hillside	Open Trench		61 - 84	54+65	57+26	10		2888		50	1																	1		16 (8"x15")	65					
Hillside	Open Trench		84 - 83	57+26	57+76	10		2888														25														
Hillside	Open Trench		84 - 83	57+26	57+76	10		2891		5					10							5	25			1										
Hillside	Localized Repair	Broken Pipe	83 - 82	59+36	59+46	11	10	2885		10					10																					
Hillside	Localized Repair	Joint Offset	83 - 82	60+71	60+81	11	10	2879		10					10																					
Hillside	Localized Repair	Joint Offset	82 - 77	62+61	62+71	11	10	2867												10									1	10 (6" PVC)						
Hillside	Localized Repair	Joint Offset	82 - 77	63+89	63+99	11	10	2865														10				1										
Hillside	Localized Repair	Broken Pipe	77 - 93	64+06	64+16	11	10	2865														10														
Hillside	Localized Repair	Joint Offset	77 - 93	66+76	66+86	11	10	2849		10							10																			
Hillside	Localized Repair	Joint Offset	93 - 94	69+55	69+65	12	10	2839													10								1	10 (12" PVC, 4" PVC)						
Hillside	Localized Repair	Joint Offset	93 - 94	70+60	70+70	12	10	2835															10													
Hillside	Localized Repair	Joint Offset	94 - 96	70+84	70+94	12	10	2829															10													
Hillside	Localized Repair	Joint Offset	94 - 96	71+54	71+64	12	10	2829															10													
Hillside	Localized Repair	Protruding Lateral	96 - 237	72+84	72+94	12	10	2825															10													
Hillside	Localized Repair	Joint Offset	96 - 237	73+93	74+03	12	10	2821																												
Hillside	Localized Repair	Broken Pipe	237 - 238	75+02	75+27	12	25	2819																												
Hillside	Localized Repair	Broken Pipe	237 - 238	75+72	75+82	12	10	2817																												
Hillside	Localized Repair	Joint Offset	237 - 238	77+42	77+52	13	10	2806																												
Hillside	Localized Repair	Joint Offset	238 - 5842	79+67	79+82	13	15	280																												



APPROVED: 8-14-2020

DATE:

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

- NOTES:**
- THE CONTRACTOR SHALL ARRANGE WITH THE UTILITY OWNER FOR STABILIZATION OF UTILITY POLES DURING CONSTRUCTION. ALL UTILITY POLES SHALL BE PROTECTED IN PLACE, INCLUDING THOSE NOT LISTED HERE.
 - IT IS EXPECTED THAT THE CONTRACTOR WILL AND CAN DETERMINE THE EXISTENCE OF ALL SURFACE IMPROVEMENTS BY A SITE VISIT. THIS SHEET PRESENTS AN INVENTORY OF EXISTING FACILITIES WHICH MAY BE IMPACTED BY THE WORK. THIS INFORMATION IS PROVIDED FOR ESTIMATING PURPOSES ONLY AND THE DISTRICT MAKES NO GUARANTEE AS TO THE ACTUAL QUANTITY REQUIRED.
 - FOR EXISTING PAVEMENT CONDITIONS AND PAVEMENT REPLACEMENT SCHEDULE, SEE SHEET 6.
 - FOR THE PURPOSES OF BIDDING, 50% OF THE TOTAL NUMBER OF WATER METERS ARE ASSUMED TO BE RESET (BOX ONLY), AND 50% ARE ASSUMED TO REQUIRE RELOCATION (BOX AND METER). PAYMENT WILL BE BASED UPON ACTUAL QUANTITIES OF WATER METERS RESET OR RELOCATED. WATER METER BOX SHALL BE SALVAGED AND RESET IF NECESSARY. IF WATER METER REQUIRES RELOCATION, THE CONTRACTOR SHALL COORDINATE WORK WITH THE CITY OF BURLINGAME.
 - FOR REPLACEMENT OF NATURAL PLANTING, CONTRACTOR MAY USE NATIVE GROUNDCOVER HYDROSEED.
 - PAYMENT FOR SURFACE FEATURES DENOTED AS "BID ITEMS" WILL BE PAID FOR AS SEPARATE BID ITEMS. PAYMENT FOR SURFACE FEATURES DENOTED AS "RESTORATION OF PAVED SURFACES AND IMPROVEMENTS" ARE CONSIDERED TO BE PAID FOR IN THE "RESTORATIONS OF PAVED SURFACES AND IMPROVEMENTS" BID ITEM. PAYMENT FOR SURFACE FEATURES DENOTED AS "VARIOUS ITEMS OF WORK" ARE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS OF WORK, AND NO SEPARATE PAYMENT WILL BE MADE THEREFOR.
 - FOR LIMITS OF TRENCH FOR REPLACED SEWER PIPE, REFER TO THE DETAILS ON SHEET 17.
 - RECONSTRUCTION OF CONCRETE STAIRS MAY BE NECESSARY FOR REPLACEMENT OF SEWER PIPE. CONTRACTOR SHALL REPLACE IN KIND ANY CONCRETE STAIRS DISTURBED BY CONSTRUCTION.
 - ROLLED CURB TRANSITIONS TO VALLEY GUTTER AT DRIVEWAYS. REFER TO VALLEY GUTTER AND ROLLED CURB DETAILS ON SHEET 17.
 - LOCALIZED REPAIRS IN EXCESS OF 15 FEET WILL BE MEASURED AND PAID FOR AS 2 LOCALIZED REPAIRS. LOCALIZED REPAIRS 15 FEET OR LESS WILL BE MEASURED AND PAID FOR AS 1 LOCALIZED REPAIR.

APPROVED DATE: 8/11/2020

KATHERINE SHEEHAN
CSG CONSULTANTS, INC.
R.C.E. # 82702 / EXPIRES 09-30-2020



BENCHMARKS:

ELEVATIONS FOR THIS PROJECT ARE BASED ON THE PUBLISHED VALUES OF THE FOLLOWING MARKERS SHOWN IN THAT RECORD OF SURVEY #2276 ENTITLED "TOWN OF HILLSBOROUGH, SAN MATEO COUNTY, VERTICAL CONTROL SURVEY" RECORDED IN BOOK 41 OF LLS MAPS AT PAGE 93, BEING BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88):

- BM#25 (1/2" OPEN IRON PIPE WITH PLUG AND PUNCHED IN STANDARD MONUMENT WELL)
SUMMIT DR & KENMAR WAY
NORTHING: 2037425.429
EASTING: 6015356.179
ELEV: 360.801'
- BM#111 (2" BRASS NIAL & WASHER TAGGED "TOWN OF HILLSBOROUGH, REY ENGINEERS, LS 7616 BENCHMARK")
SKYLINE BLVD & HILLSIDE LN
NORTHING: 2036520.403
EASTING: 6012254.182
ELEV: 559.961'
- BM#123 (2" BRASS NAIL & WAHSEY TAGGED "TOWN OF HILLSBOROUGH, REY ENGINEERS, LS 7616 BENCHMARK")
SUMMIT DR, SOUTH OF EASTON DR
NORTHING: 2038011.337
EASTING: 6016733.699
ELEV: 154.773'

BASIS OF BEARINGS:

THE BEARING N 68°39'01" E IS BETWEEN 2 SET TEMPORARY CONTROL POINTS, CSG30 & CSG32 (SEE BELOW FOR EXACT LOCATION), LOCATED ON HILLSIDE DRIVE, WHICH WAS USED AS THE BASIS OF ALL BEARINGS FOR THIS PROJECT. HORIZONTAL CONTROL FOR THIS PROJECT IS BASED ON THE CA COORDINATE SYSTEM (CCS83) ZONE 3.

- CSG30 (MAG NAIL & SHINER)
HILLSIDE DR & ADELINE DR
N: 2038403.79
E: 6014003.05
- CSG32 (MAG NAIL & SHINER)
HILLSIDE DR, EAST OF ADELINE DR
N: 2038543.40
E: 6014360.23

ABBREVIATIONS:

MAG & S MAG NAIL AND SHINER
PK & S PK NAIL AND SHINER
CUT X CUT CROSS

LEGEND:

- BM BENCHMARK
- CP CSG CONTROL POINT
- TCP TEMPORARY CONTROL POINT FOUND DURING FIELD SURVEY



APPROVED: 8-14-2020
DATE: 8-14-2020
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

CONTROL POINT TABLE

PT NAME	DESCRIPTION	REF. STATION LINE	STATION	OFFSET	NORTHING	EASTING	ELEVATION
CSG10	MAG NAIL	ADELINE SS	17+70.34	33.631' LT	2039052.3700	6014643.5000	327.11
CSG11	MAG & S	ADELINE SS	17+31.69	5.234' LT	2039024.0300	6014620.2600	332.35
CSG12	MAG & S	ADELINE SS	16+05.11	1.395' RT	2038976.1600	6014507.4600	345.26
CSG14	MAG & S	ADELINE SS	25+68.30	20.682' RT	2039681.5200	6014955.4600	256.20
CSG15	MAG & S	ADELINE SS	22+47.40	19.828' LT	2039474.5900	6014699.2800	280.38
CSG16	MAG & S	ADELINE SS	20+28.73	21.274' LT	2039264.9800	6014711.5800	301.90
CSG20	MAG & S	ADELINE SS	14+22.87	19.303' LT	2038978.8700	6014321.6900	363.91
CSG21	MAG & S	N/A	N/A	N/A	2038684.5800	6014023.8700	407.56
CSG22	MAG & S	N/A	N/A	N/A	2038665.3700	6014011.1200	409.74
CSG30	MAG & S	N/A	N/A	N/A	2038403.7900	6014003.0500	435.91
CSG31	MAG & S	N/A	N/A	N/A	2038423.8100	6014106.6400	428.28
CSG32	MAG & S	HILLSIDE SS	52+26.82	27.842' RT	2038543.4000	6014360.2300	402.75
CSG33	MAG & S	HILLSIDE SS	60+02.37	37.093' LT	2039052.3700	6014919.9300	359.66
CSG34	MAG & S	HILLSIDE SS	63+14.27	29.051' LT	2039172.1000	6015225.3400	329.94
CSG35	MAG & S	HILLSIDE SS	67+24.78	26.590' LT	2039123.6300	6015644.3600	288.90
CSG36	CUT X IN CURB	HILLSIDE SS	71+04.14	7.115' RT	2038808.6800	6015866.0200	254.96
CSG37	MAG & S	HILLSIDE SS	74+42.81	18.611' RT	2038749.0300	6016199.8000	220.48
CSG38	MAG & S	HILLSIDE SS	80+07.67	37.530' RT	2038710.3500	6016748.1100	174.73
CSG50	MAG & S	NEWTON SS	111+07.28	12.724' RT	2038694.7800	6015712.4300	270.65
CSG51	MAG & S	NEWTON SS	109+46.61	12.435' RT	2038739.8500	6015553.7300	284.82
CSG52	MAG & S	NEWTON SS	108+81.06	14.030' RT	2038755.7000	6015497.9800	290.54
CSG53	MAG & S	NEWTON SS	107+13.51	11.009' RT	2038719.7400	6015336.5200	307.96
CSG54	MAG & S	NEWTON SS	105+92.52	1.717' LT	2038741.9100	6015220.4600	319.52
CSG55	MAG & S	NEWTON SS	103+74.61	6.856' RT	2038537.4100	6015165.5100	340.30
CSG56	MAG & S	NEWTON SS	102+22.30	9.796' RT	2038470.3300	6015026.0500	354.44
CSG57	MAG & S	HILLSIDE SS	55+55.19	205.96' RT	2038521.2180	6014731.5740	369.93
TCP1	PK & S	ADELINE SS	29+81.63	6.827' RT	2039519.7100	6015333.9000	212.07
TCP2	PK & S	ADELINE SS	28+79.89	17.200' LT	2039587.7700	6015250.4500	220.21
TCP3	PK & S	ADELINE SS	28+69.99	16.497' LT	2039589.6100	6015239.4400	221.56
TCP4	PK & S	ADELINE SS	29+30.65	0.841' RT	2039548.8200	6015291.1700	214.77
TCP5	PK & S	ADELINE SS	28+99.73	15.999' LT	2039579.2100	6015271.0600	217.98
TCP6	PK & S	ADELINE SS	27+84.03	20.910' LT	2039605.8700	6015157.9800	231.37
TCP7	PK & S	ADELINE SS	27+17.86	20.941' LT	2039638.2500	6015108.9600	239.15
TCP8	PK & S	ADELINE SS	25+76.87	31.632' LT	2039692.6400	6014966.3400	254.44
TCP9	PK & S	ADELINE SS	25+48.18	18.867' LT	2039675.4700	6014931.6700	259.17
TCP10	PK & S	ADELINE SS	15+66.81	4.541' RT	2038957.3700	6014472.7600	349.18
TCP11	PK & S	ADELINE SS	11+96.86	22.777' LT	2038795.7800	6014198.9200	386.26
TCP12	PK & S	ADELINE SS	14+29.25	21.800' LT	2038984.3400	6014327.2100	363.57
TCP13	PK & S	ADELINE SS	12+15.36	2.505' LT	2038791.3500	6014223.9700	385.41
TCP30	PK & S	HILLSIDE SS	54+81.10	34.464' RT	2038646.0100	6014592.5600	380.46
TCP31	PK & S	HILLSIDE SS	56+69.29	33.231' RT	2038749.0100	6014764.0600	370.91
TCP32	PK & S	HILLSIDE SS	55+32.66	34.682' RT	2038667.38	6014639.4900	378.24
TCP33	PK & S	HILLSIDE SS	58+33.09	30.692' LT	2038905.2000	6014815.5700	366.58
TCP34	PK & S	HILLSIDE SS	58+84.79	31.811' LT	2038953.1500	6014842.0200	366.42
TCP35	PK & S	HILLSIDE SS	60+01.43	29.843' LT	2039046.3300	6014924.0600	360.26
TCP36	PK & S	HILLSIDE SS	66+40.95	28.974' LT	2039157.0000	6015559.3800	297.12
TCP37	PK & S	HILLSIDE SS	70+97.81	5.857' RT	2038812.6700	6015860.9400	255.25
TCP38	PK & S	HILLSIDE SS	76+99.15	13.122' LT	2038687.3900	6016436.8300	195.86
TCP39	PK & S	HILLSIDE SS	78+39.40	15.842' RT	2038655.7000	6016575.9400	184.35
TCP40	MAG & S	N/A	N/A	N/A	2038754.3900	6016809.9400	173.28
TCP50	PK & S	NEWTON SS	107+03.83	11.835' RT	2038721.2000	6015325.8000	309.00

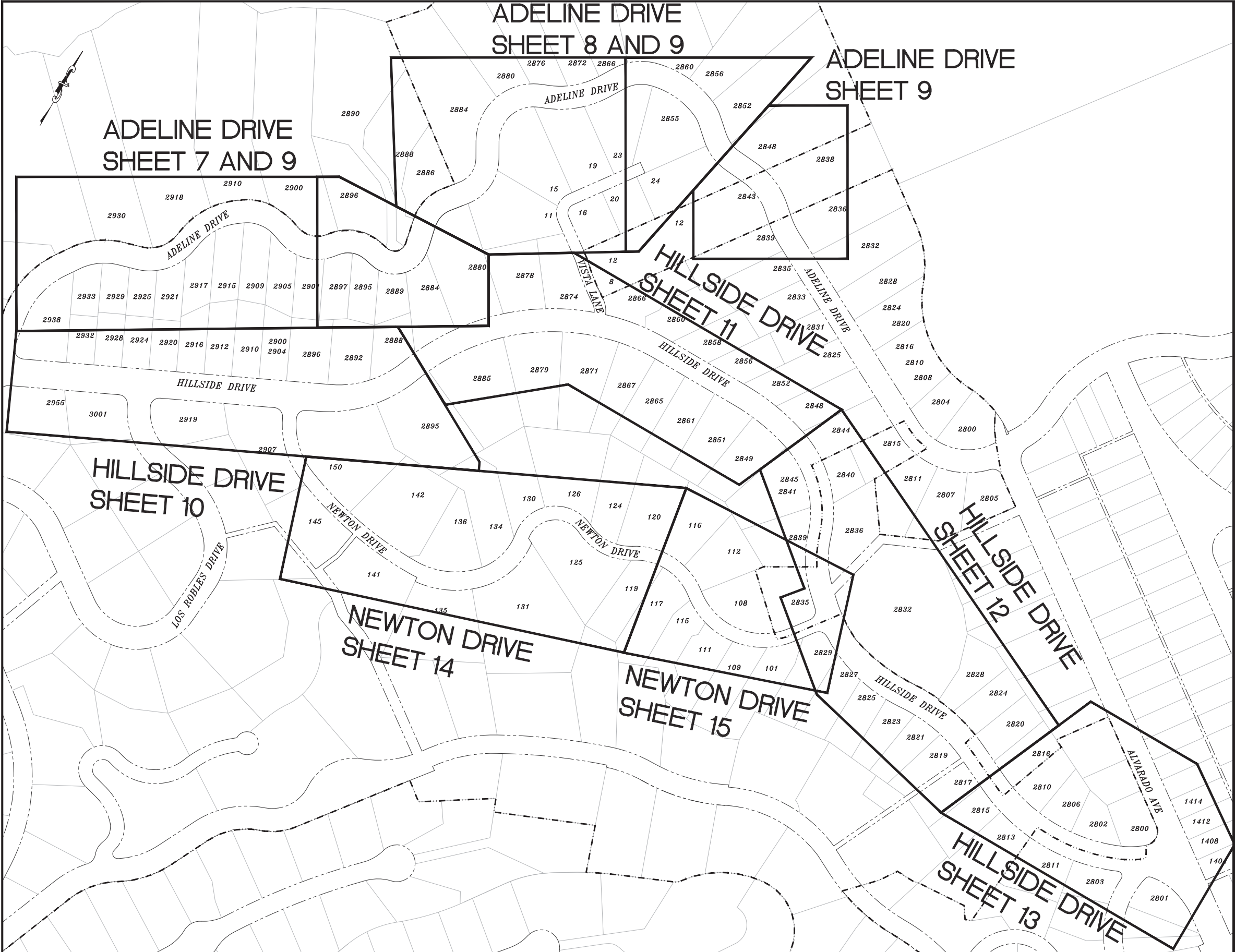
FINAL BID PACKAGE

APPROVED DATE: 8/11/2020
KATHERINE SHEEHAN
CSG CONSULTANTS, INC.
R.C.E. # 82702 / EXPIRES 09-30-2020

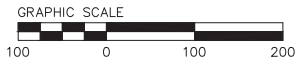


DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/JL	SURVEY CONTROL PLAN	FILE NO: E5025
REVISION	DATE	JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063

FILENAME: \\SERVER2\CSG\LOC\CLIENTS\DESIGN\19-403-HILLSIDE ADELINE AREA SS REHAB\2020-07-XX-FINAL\BID SET\E5025004.DWG (04- 24x36 SURVEY CONTROL PLAN)



APPROVED: 8-14-2020
DATE: 8-14-2020
JP
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

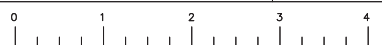


SHEET INDEX
SCALE: 1" = 100'

APPROVED DATE: 8/11/2020
Katherine Sheehan
KATHERINE SHEEHAN
CSG CONSULTANTS, INC.
R.C.E. # 82702 / EXPIRES 09-30-2020



DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/JL	SHEET INDEX	FILE NO.: E5025
REVISION	DATE	JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063



FILENAME: \\SERVER2\CSG\LOC\CLIENTS\DESIGN\19-403-HILLSIDE ADELINE AREA SS REHAB\2020-07-XX-FINAL\BID SET\E5025005.DWG (05- 24x36 SHEET INDEX)



APPROVED: 8-14-2020
DATE: 8-14-2020
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

LEGEND

- PIPE ALIGNMENT
- GEOTECHNICAL BORING NUMBER
- APPROXIMATE LOCATION OF GEOTECHNICAL BORING
- POTHOLE LOCATIONS

EXISTING PAVEMENT CONDITIONS

BORING NO.	STREET	SECTION THICKNESS (INCHES)			PETRO-MAT		SUBGRADE INFORMATION				
		AC	AB	PCC	Y/N	THICKNESS (INCHES)	MATERIAL TYPE	BLOW COUNT (BPF)	DRY UNIT WEIGHT (PCF)	MOISTURE CONTENT (%)	PETRO-MAT (INCHES) (BGS)
B-1	ADELINE DRIVE	3.0	-	5.0	Y	3	SANDY LEAN CLAY (NATIVE)	43	116	12.6	3.0
B-2*	ADELINE DRIVE	3.5	-	6.5	Y	3.5	SANDY FAT CLAY (FILL)	57	111	18.2	3.5
B-3	HILLSIDE DRIVE	4.0	3.0	-	N	-	SANDY FAT CLAY (NATIVE)	26	104	22.5	N/A
B-4	HILLSIDE DRIVE	4.0	5.0	-	Y	3.5	SANDY LEAN CLAY (FILL)	32	110	11.6	3.5
B-5	NEWTON DRIVE	4.5	4.0	-	N	-	SANDY LEAN CLAY (NATIVE)	31	120	11.9	N/A
B-6	HILLSIDE DRIVE	6.0	4.0		N	-	CLAYEY SAND WITH GRAVEL	N/A	N/A	N/A	N/A

- NOTES:
- B-3, B-4, B-5 AND B-6 WERE DRILLED ON THE ROAD SHOULDER.
 - BLOW COUNTS ARE BASED ON 3-INCH O.D. MODIFIED CALIFORNIA SAMPLER BARREL DRIVEN BY 140-LB HAMMER WITH 30-INCH FREE FALL. BLOW COUNTS WERE COLLECTED AT THE TERMINATION OF THE BORING. REFER TO APPENDIX F OF THE PROJECT SPECIFICATIONS FOR THE GEOTECHNICAL ENGINEERING INVESTIGATION BORING LOGS.
 - PAVEMENT CORES WERE OBTAINED AT BORINGS B-1 THROUGH B-6.
 - AT B-6, A STEEL PIPE WAS ENCOUNTERED APPROXIMATELY 3 FEET BELOW SURFACE. THEREFORE, NO SOIL SAMPLES WERE RECOVERED.
 - *PAVEMENT SECTION CORE WAS OBTAINED FROM THE RIGHT-OF-WAY OF THE ROAD 12 FEET ADJACENT TO BORING B-2.

PAVEMENT SECTION REPLACEMENT SCHEDULE

REPLACE PAVEMENT STRUCTURAL SECTION IN KIND, BUT NOT LESS THAN THE MINIMUM VALUES PROVIDED BELOW:

STREET NAME	SECTION THICKNESS (INCHES)		
	AC	CLASS 2 AB	PCC
ADELINE DRIVE	8.0	-	-
HILLSIDE DRIVE	8.0	-	-
NEWTON DRIVE	6.0	5.0	-

POTHOLE INFORMATION

POTHOLE #	DEPTH OF PIPE	DESCRIPTION
PH #1	2'-3"	3" BLACK STEEL ABANDONED GAS LINE (CONFIRMED BY PG&E)
PH #2	3'-6"	3" BLACK STEEL GAS LINE
PH #3	3'-4"	8" GREY ASBESTOS CONCRETE WATER LINE
PH #4	2'-4"	UNKNOWN ABANDONED 4" BLACK STEEL LINE
PH #5	N/A	UNKNOWN UTILITY SERVICE LINE NOT FOUND WITHIN A DEPTH OF 6 FEET



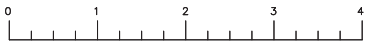
FINAL BID PACKAGE

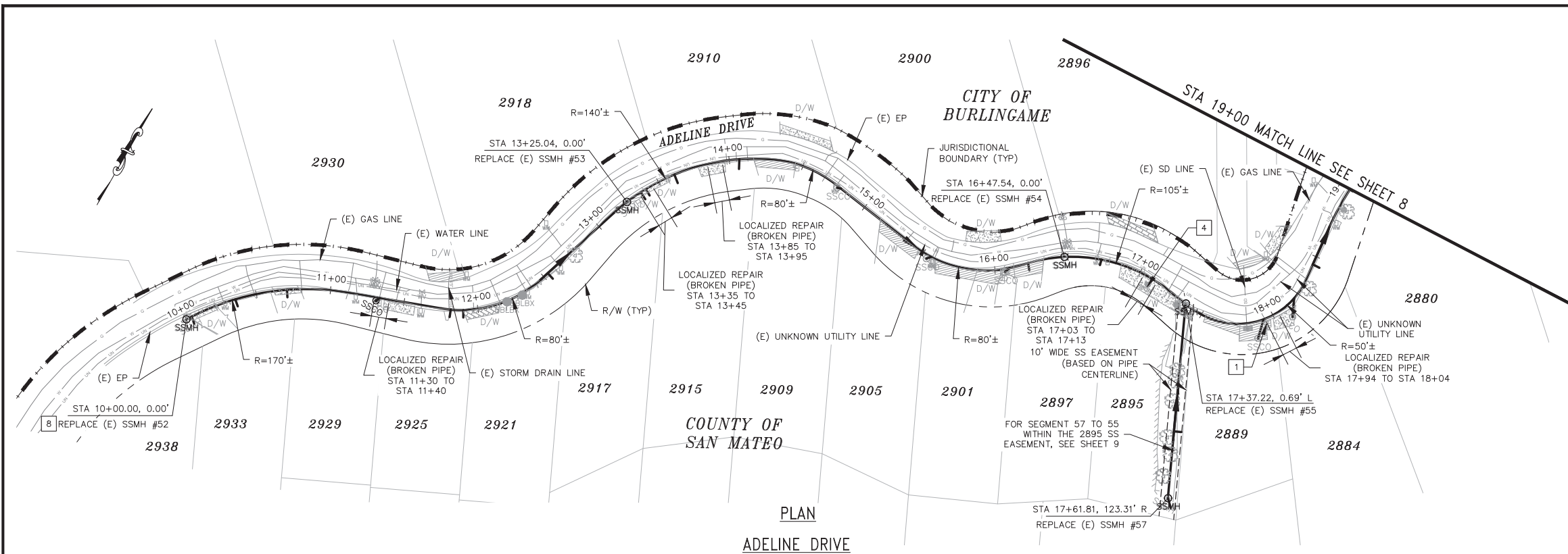
SITE PLAN
SCALE: 1" = 100'

APPROVED DATE: 8/11/2020
KATHERINE SHEEHAN
CSG CONSULTANTS, INC.
R.C.E. # 82702 / EXPIRES 09-30-2020

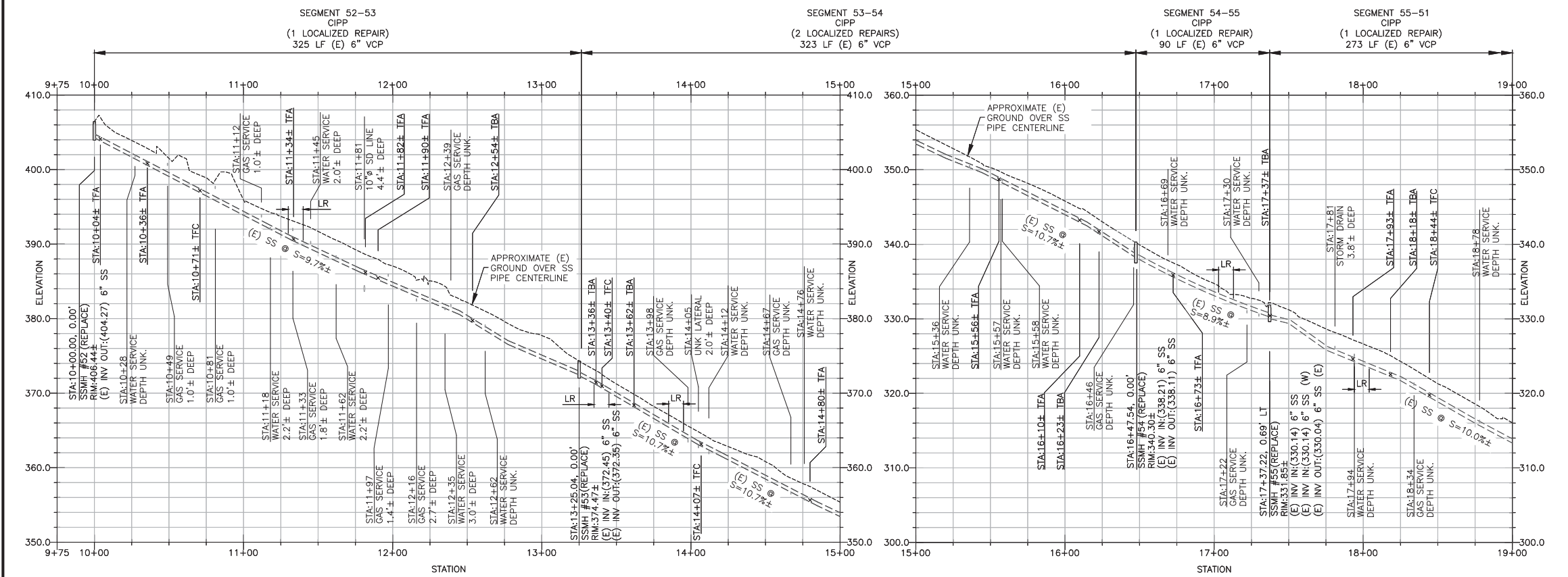


DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/JL	SITE PLAN	FILE NO.: E5025
REVISION	DATE	JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063





PLAN
ADELINE DRIVE
SCALE: 1" = 40'



PROFILE
ADELINE DRIVE
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 8'

LEGEND

- SEWER MAIN TO BE REPLACED OR REHABILITATED
- SEWER MAIN TO BE REPLACED OR REHABILITATED WITH SEWER LATERAL
- NEW OR TO BE REPLACED SANITARY SEWER MANHOLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER FLUSHING INLET
- (E) CONCRETE DRIVEWAY
- (E) AC DRIVEWAY
- (E) PAVER DRIVEWAY
- SS LATERAL (PROFILE)

FOR A COMPLETE LEGEND, REFER TO SHEET 1.

ABBREVIATIONS

- TBA TAP BREAK-IN ACTIVE
- TFC TAP FACTORY CAPPED
- TFA TAP FACTORY ACTIVE
- TFD TAP FACTORY DEFECTIVE
- TBI TAP BREAK-IN INTRUDING

CONSTRUCTION NOTES

- RESET WATER METER / RESET WATER METER BOX
- RESET MAILBOX
- RECONSTRUCT STAIRS
- RESET BUBBLER
- RESET CATCH BASIN
- REPLACE DWY DRAINAGE PIPE
- RECONSTRUCT DWY DRAINAGE CHANNEL
- CONSTRUCT WOOD RETAINING WALL AROUND SSMH (REFER TO DETAIL C-14 ON SHEET 18)
- RECONSTRUCT WOOD HEADER
- RECONSTRUCT WOOD RETAINING WALL

NOTES:

- CONTRACTOR TO VERIFY UPSTREAM AND DOWNSTREAM INVERTS OF MANHOLES PRIOR TO INSTALLATION OF NEW PIPE.
- SUBMIT SHOP DRAWING WITH PROPOSED UPSTREAM INVERT ELEVATION, DOWNSTREAM INVERT ELEVATION, AND SLOPE FOR EACH SEGMENT OF NEW PIPE.
- NEW PIPE SHALL BE CONSTRUCTED AT A UNIFORM SLOPE BETWEEN MANHOLES UNLESS STATED OTHERWISE.
- ALL EXISTING SSMH TO REMAIN UNLESS STATED OTHERWISE.
- FOR EXISTING AC/AB/CONCRETE THICKNESS MEASURED AT GEOTECHNICAL BORINGS FOR EACH STREET AND REPLACEMENT PAVEMENT SECTIONS, REFER TO SHEET 6.
- NOT ALL UTILITIES MAY BE SHOWN. EXISTING UTILITIES DEPTHS ARE APPROXIMATE AND BASED UPON ELECTRONIC UTILITY LOCATING, WHICH IS GENERALLY 10%± OF THE ACTUAL DEPTH WHEN NOT DISTORTED BY ADJACENT CONDUCTORS. ACCURACY OF ELECTRONIC DEPTHS DECREASES WHEN ADJACENT UTILITIES ARE LOCATED WITHIN 5 FEET. FOR DEPTHS OF CONDUCTIVE UTILITIES, DEPTHS ARE TO CENTER OF UTILITY. STORM DRAIN DEPTHS ARE MEASURED FROM RIM TO INVERT.
- FOR NEW OR REPLACED SSMH - RIM ELEVATION SHOWN ON PLANS IS BASED ON FIELD SURVEY. CONSTRUCT NEW SSMH WITH RIM ELEVATION TO MATCH THE FINISHED GRADE OF THE EXISTING ROADWAY OR SURROUNDING GRADE.
- PIPE SLOPES SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, ROUGHLY PARALLEL TO THE GRADE OF THE EXISTING SURFACE ELEVATION ABOVE THE PIPE. ACTUAL PIPE SLOPES MAY VARY BETWEEN STRUCTURES.
- PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, AS PROJECTED FROM A HORIZONTAL PLANE. THESE VALUES ARE CONSISTENT WITH THE ALIGNMENT STATIONING. ACTUAL LENGTHS, ACCOUNTING FOR PIPE SLOPE, MAY BE LONGER, BUT MEASUREMENT AND PAYMENT SHALL BE BASED UPON STATIONING VALUES.
- THE APPROXIMATE LIMITS OF LOCALIZED REPAIRS REQUIRED PRIOR TO CIPP REHABILITATION ARE SHOWN IN PLAN VIEW, WITH THE DEFECT CHARACTERISTIC OF THIS SEGMENT PROVIDED. CONTRACTOR SHALL VERIFY LOCATIONS AND EXTENTS OF LOCALIZED REPAIRS AFTER REVIEW OF PRE-CONSTRUCTION CCTV DATA COLLECTED BY THE CONTRACTOR. DEFECTS REQUIRING REPAIRS PRIOR TO CIPP INCLUDE MAJOR OFFSETS, PROTRUDING LATERALS, BROKEN OUT SECTIONS OF PIPE, AND MAJOR SAGS OF GREATER THAN 50% OF THE PIPE DIAMETER.
- FOR LINES THAT WILL BE REPLACED VIA OPEN TRENCH, THE CONTRACTOR SHALL REPLACE UP TO 5 FEET OF EXISTING LATERALS CONNECTED TO PIPES BEING REPLACED. LATERAL LOCATIONS SHOWN ARE APPROXIMATE PER AVAILABLE CCTV DATA OR CLEANOUT LOCATIONS. CONTRACTOR SHALL VERIFY LATERAL LOCATIONS IN THE FIELD.
- ALIGNMENT LINE MAY VARY FROM ACTUAL PIPE ALIGNMENT.
- FOR LINES THAT WILL BE CIPP REHABILITATED, THE CONTRACTOR SHALL REPAIR PROTRUDING LATERALS PRIOR TO CIPP WORK WITH A ROBOTIC CUTTER, UNLESS THE LATERAL IS WITHIN A LOCALIZED REPAIR AREA. AFTER CIPP WORK, THE CONTRACTOR SHALL REINSTATE LATERALS WITH ROBOTIC EQUIPMENT.
- CONTRACTOR SHALL ARRANGE WITH UTILITY OWNER TO RELOCATE GAS SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES.
- CONTRACTOR SHALL RELOCATE WATER SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES. WATER SHUTOFFS REQUIRE 48-HOUR NOTIFICATIONS TO AFFECTED RESIDENTS AND THE CITY OF BURLINGAME.
- REFER TO PIPE DEFLECTION DETAIL ON SHEET 17 FOR SEWER PIPES WITH HORIZONTAL CURVES.
- AT SOME LOCATIONS, SANITARY SEWER CLEANOUTS WERE FOUND BUT NO ASSOCIATED LATERAL CONNECTIONS WERE FOUND IN CCTV AT THIS LOCATION. CONTRACTOR TO VERIFY LOCATIONS OF ACTIVE LATERALS.



APPROVED DATE: 8/11/2020

KATHERINE SHEEHAN

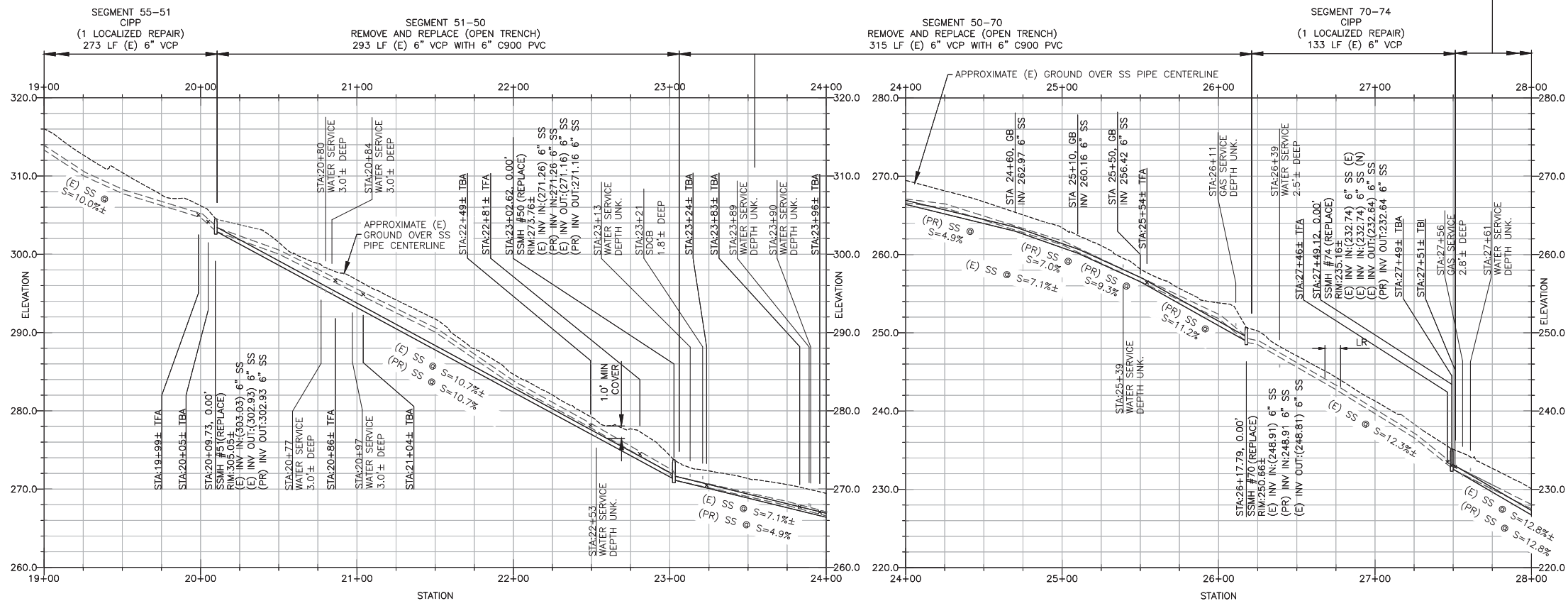
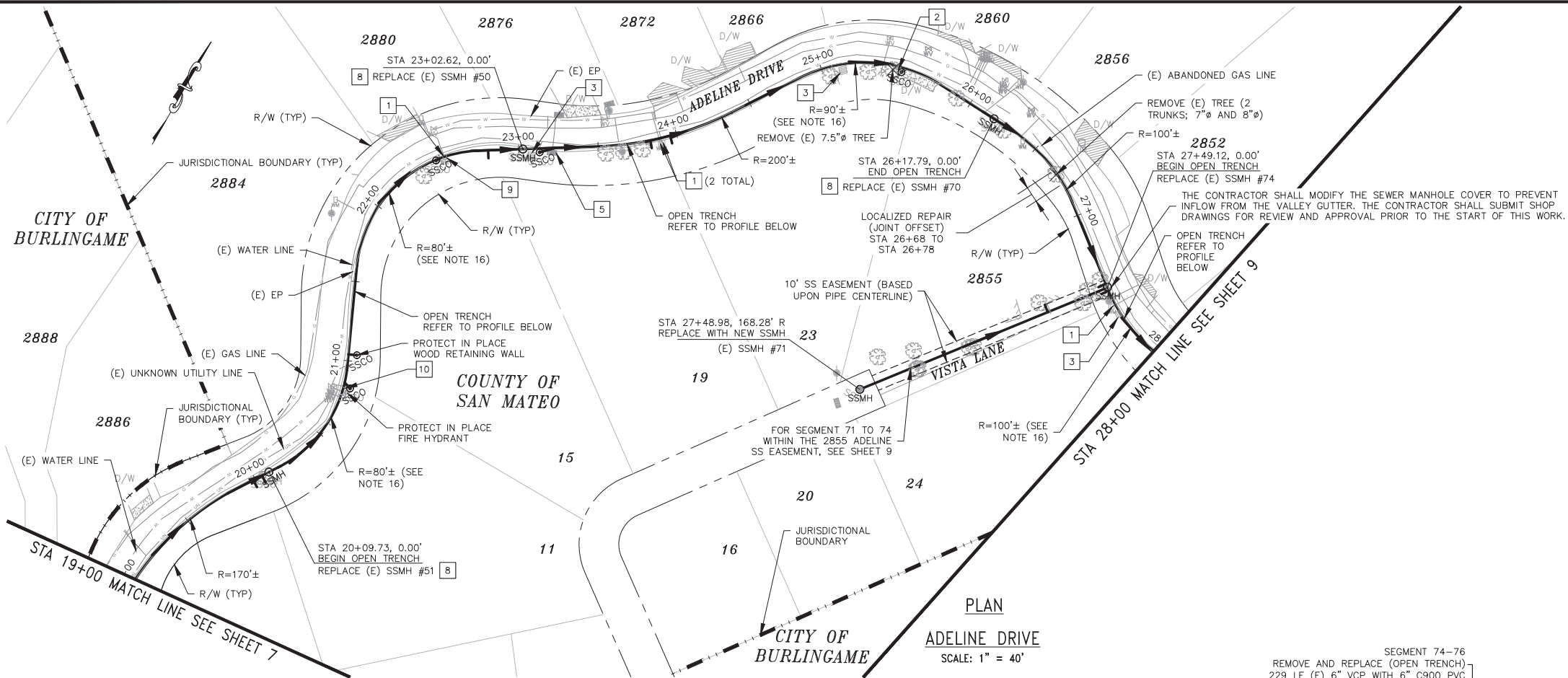
CSG CONSULTANTS, INC.

R.C.E. # 82702 / EXPIRES 09-30-2020

REGISTERED PROFESSIONAL ENGINEER
KATHERINE SHEEHAN
No. C82702
CIVIL
STATE OF CALIFORNIA



DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/L	ADELINE DRIVE PLAN AND PROFILE	FILE NO.: E5025
REVISION	DATE	
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS	555 COUNTY CENTER, 5th FLOOR	
SAN MATEO COUNTY	REDWOOD CITY, CALIFORNIA 94063	



APPROVED: **8-14-2020**
DATE:
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

LEGEND

- SEWER MAIN TO BE REPLACED OR REHABILITATED
- SEWER MAIN TO BE REPLACED OR REHABILITATED WITH SEWER LATERAL
- NEW OR TO BE REPLACED SANITARY SEWER MANHOLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER FLUSHING INLET
- (E) CONCRETE DRIVEWAY
- (E) AC DRIVEWAY
- (E) PAVER DRIVEWAY
- SS LATERAL (PROFILE)

FOR A COMPLETE LEGEND, REFER TO SHEET 1.

ABBREVIATIONS

- TBA TAP BREAK-IN ACTIVE
- TFC TAP FACTORY CAPPED
- TFA TAP FACTORY ACTIVE
- TFD TAP FACTORY DEFECTIVE
- TBI TAP BREAK-IN INTRUDING

NOTES:

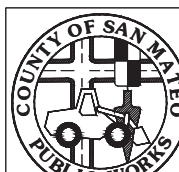
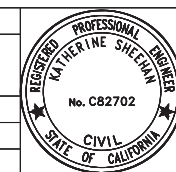
1. CONTRACTOR TO VERIFY UPSTREAM AND DOWNSTREAM INVERTS OF MANHOLES PRIOR TO INSTALLATION OF NEW PIPE.
2. SUBMIT SHOP DRAWING WITH PROPOSED UPSTREAM INVERT ELEVATION, DOWNSTREAM INVERT ELEVATION, AND SLOPE FOR EACH SEGMENT OF NEW PIPE.
3. NEW PIPE SHALL BE CONSTRUCTED AT A UNIFORM SLOPE BETWEEN MANHOLES UNLESS STATED OTHERWISE.
4. ALL EXISTING SSMH TO REMAIN UNLESS STATED OTHERWISE.
5. FOR EXISTING AC/AB/CONCRETE THICKNESS MEASURED AT GEOTECHNICAL BORINGS FOR EACH STREET AND REPLACEMENT PAVEMENT SECTIONS, REFER TO SHEET 6.
6. NOT ALL UTILITIES MAY BE SHOWN. EXISTING UTILITIES DEPTHS ARE APPROXIMATE AND BASED UPON ELECTRONIC UTILITY LOCATING, WHICH IS GENERALLY 10%± OF THE ACTUAL DEPTH WHEN NOT DISTORTED BY ADJACENT CONDUCTORS. ACCURACY OF ELECTRONIC DEPTHS DECREASES WHEN ADJACENT UTILITIES ARE LOCATED WITHIN 5 FEET. FOR DEPTHS OF CONDUCTIVE UTILITIES, DEPTHS ARE TO CENTER OF UTILITY. STORM DRAIN DEPTHS ARE MEASURED FROM RIM TO INVERT.
7. FOR NEW OR REPLACED SSMH - RIM ELEVATION SHOWN ON PLANS IS BASED ON FIELD SURVEY. CONSTRUCT NEW SSMH WITH RIM ELEVATION TO MATCH THE FINISHED GRADE OF THE EXISTING ROADWAY OR SURROUNDING GRADE.
8. PIPE SLOPES SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, ROUGHLY PARALLEL TO THE GRADE OF THE EXISTING SURFACE ELEVATION ABOVE THE PIPE. ACTUAL PIPE SLOPES MAY VARY BETWEEN STRUCTURES.
9. PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, AS PROJECTED FROM A HORIZONTAL PLANE. THESE VALUES ARE CONSISTENT WITH THE ALIGNMENT STATIONING. ACTUAL LENGTHS, ACCOUNTING FOR PIPE SLOPE, MAY BE LONGER, BUT MEASUREMENT AND PAYMENT SHALL BE BASED UPON STATIONING VALUES.
10. THE APPROXIMATE LIMITS OF LOCALIZED REPAIRS REQUIRED PRIOR TO CIPP REHABILITATION ARE SHOWN IN PLAN VIEW, WITH THE DEFECT CHARACTERISTIC OF THIS SEGMENT PROVIDED. CONTRACTOR SHALL VERIFY LOCATIONS AND EXTENTS OF LOCALIZED REPAIRS AFTER REVIEW OF PRE-CONSTRUCTION CCTV DATA COLLECTED BY THE CONTRACTOR. DEFECTS REQUIRING REPAIRS PRIOR TO CIPP INCLUDE MAJOR OFFSETS, PROTRUDING LATERALS, BROKEN OUT SECTIONS OF PIPE, AND MAJOR SAGS OF GREATER THAN 50% OF THE PIPE DIAMETER.
11. FOR LINES THAT WILL BE REPLACED VIA OPEN TRENCH, THE CONTRACTOR SHALL REPLACE UP TO 5 FEET OF EXISTING LATERALS CONNECTED TO PIPES BEING REPLACED. LATERAL LOCATIONS SHOWN ARE APPROXIMATE PER AVAILABLE CCTV DATA OR CLEANOUT LOCATIONS. CONTRACTOR SHALL VERIFY LATERAL LOCATIONS IN THE FIELD.
12. ALIGNMENT LINE MAY VARY FROM ACTUAL PIPE ALIGNMENT.
13. FOR LINES THAT WILL BE CIPP REHABILITATED, THE CONTRACTOR SHALL REPAIR PROTRUDING LATERALS PRIOR TO CIPP WORK WITH A ROBOTIC CUTTER, UNLESS THE LATERAL IS WITHIN A LOCALIZED REPAIR AREA. AFTER CIPP WORK, THE CONTRACTOR SHALL REINSTATE LATERALS WITH ROBOTIC EQUIPMENT.
14. CONTRACTOR SHALL ARRANGE WITH UTILITY OWNER TO RELOCATE GAS SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES.
15. CONTRACTOR SHALL RELOCATE WATER SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES. WATER SHUTOFFS REQUIRE 48-HOUR NOTIFICATIONS TO AFFECTED RESIDENTS AND THE CITY OF BURLINGAME.
16. REFER TO PIPE DEFLECTION DETAIL ON SHEET 17 FOR SEWER PIPES WITH HORIZONTAL CURVES.
17. AT SOME LOCATIONS, SANITARY SEWER CLEANOUTS WERE FOUND BUT NO ASSOCIATED LATERAL CONNECTIONS WERE FOUND IN CCTV AT THIS LOCATION. CONTRACTOR TO VERIFY LOCATIONS OF ACTIVE LATERALS.



APPROVED DATE: 8/11/2020

KATHERINE SHEEHAN
CSG CONSULTANTS, INC.

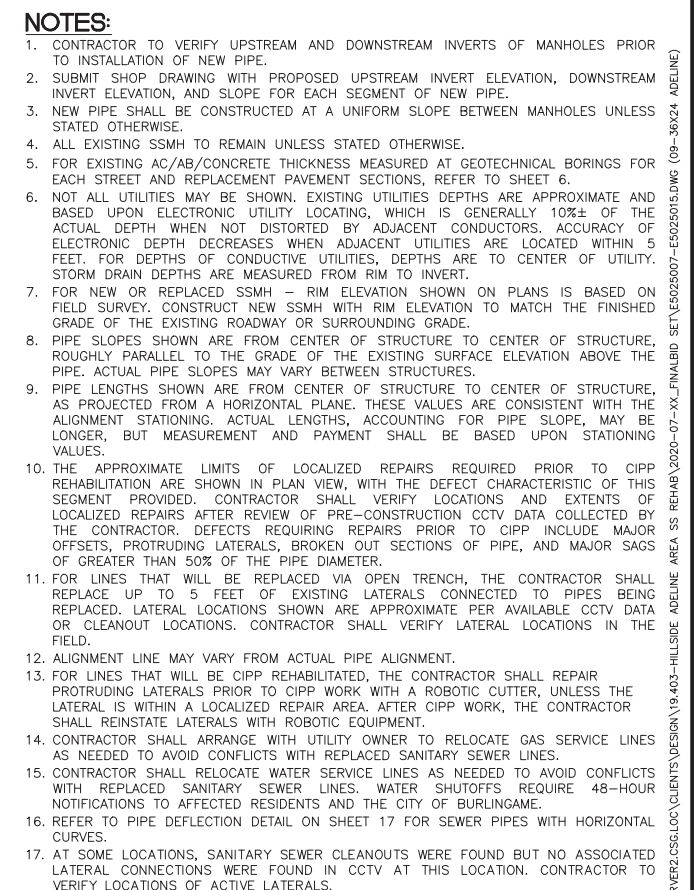
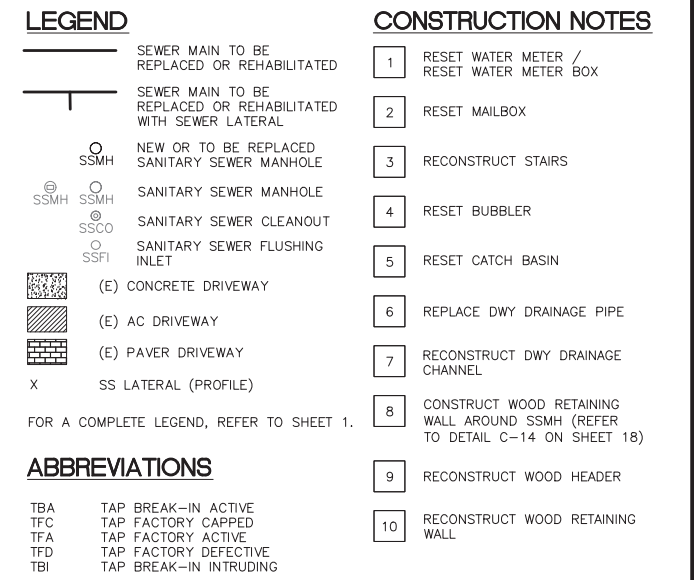
R.C.E. # 82702 / EXPIRES 09-30-2020



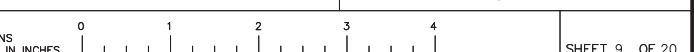
DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/L	ADELINE DRIVE PLAN AND PROFILE	FILE NO.: E5025
REVISION	DATE	
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS	555 COUNTY CENTER, 5th FLOOR	
SAN MATEO COUNTY	REDWOOD CITY, CALIFORNIA 94063	

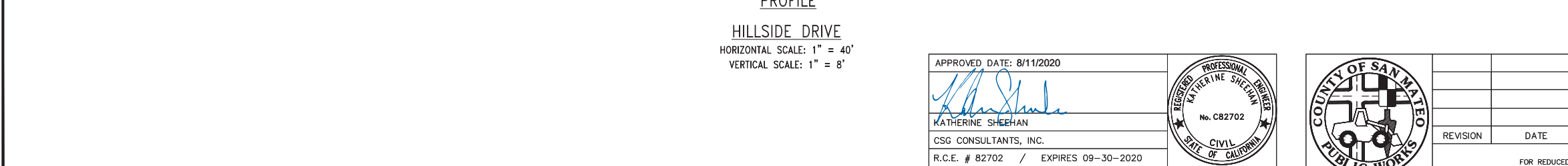
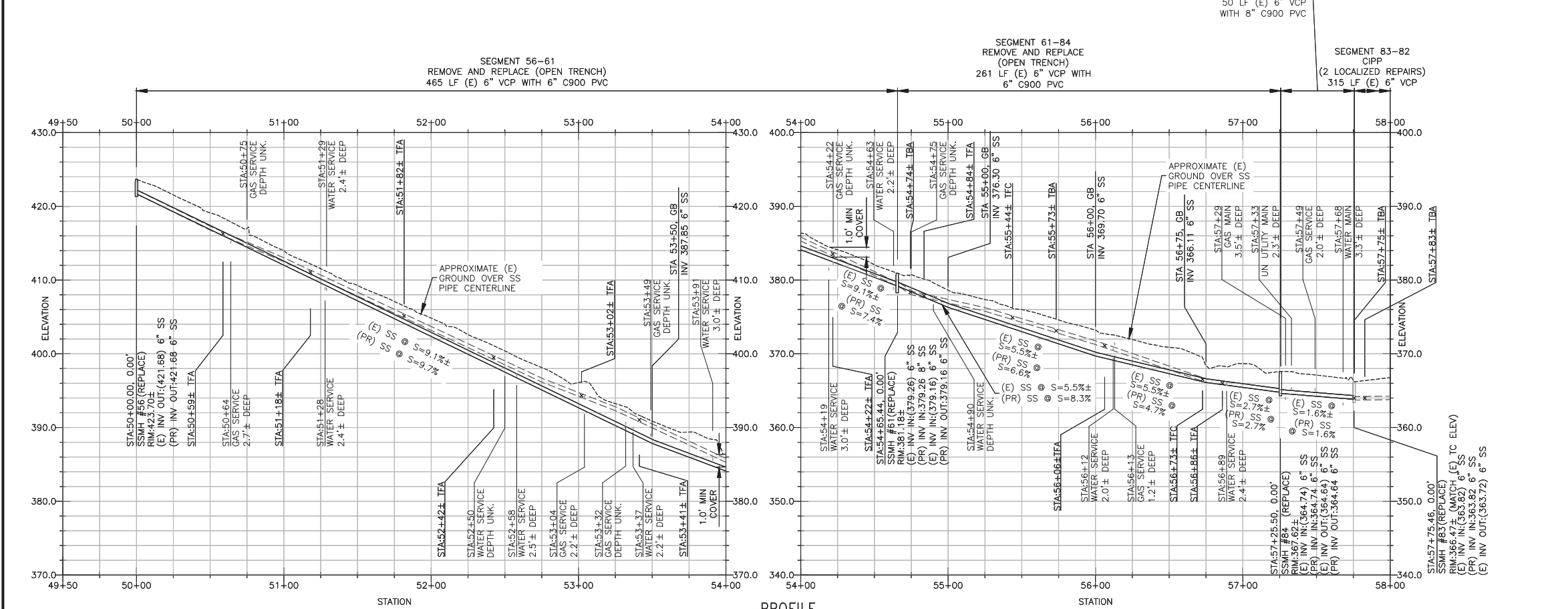
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

SHEET 8 OF 20



DESIGNED BY:	KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE:	AS SHOWN
CHECKED BY:	ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE:	08-11-20
DRAWN BY:	AS/JL	ADELINE DRIVE PLAN AND PROFILE	FILE NO.:	E5025
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063		





LEGEND		CONSTRUCTION NOTES	
SEWER MAIN TO BE REPLACED OR REHABILITATED	1	RESET WATER METER / RESET WATER METER BOX	
SEWER MAIN TO BE REPLACED OR REHABILITATED WITH SEWER LATERAL	2	RESET MAILBOX	
NEW OR TO BE REPLACED SANITARY SEWER MANHOLE	3	RECONSTRUCT STAIRS	
SANITARY SEWER MANHOLE	4	RESET BUBBLER	
SANITARY SEWER CLEANOUT	5	RESET CATCH BASIN	
SANITARY SEWER FLUSHING INLET	6	REPLACE DWY DRAINAGE PIPE	
(E) CONCRETE DRIVEWAY	7	RECONSTRUCT DWY DRAINAGE CHANNEL	
(E) AC DRIVEWAY	8	CONSTRUCT WOOD RETAINING WALL AROUND SSMH (REFER TO DETAIL C-14 ON SHEET 18)	
(E) PAVER DRIVEWAY	9	RECONSTRUCT WOOD HEADER	
SS LATERAL (PROFILE)	10	RECONSTRUCT WOOD RETAINING WALL	

FOR A COMPLETE LEGEND, REFER TO SHEET 1.

ABBREVIATIONS	
TBA	TAP BREAK-IN ACTIVE
TFC	TAP FACTORY CAPPED
TFA	TAP FACTORY ACTED
TFD	TAP FACTORY DEFECTIVE
TBI	TAP BREAK-IN INTRUDING

NOTES:

- CONTRACTOR TO VERIFY UPSTREAM AND DOWNSTREAM INVERTS OF MANHOLES PRIOR TO INSTALLATION OF NEW PIPE.
- SUBMIT SHOP DRAWING WITH PROPOSED UPSTREAM INVERT ELEVATION, DOWNSTREAM INVERT ELEVATION, AND SLOPE FOR EACH SEGMENT OF NEW PIPE.
- NEW PIPE SHALL BE CONSTRUCTED AT A UNIFORM SLOPE BETWEEN MANHOLES UNLESS STATED OTHERWISE.
- ALL EXISTING SSMH TO REMAIN UNLESS STATED OTHERWISE.
- FOR EXISTING AC/AB/CONCRETE THICKNESS MEASURED AT GEOTECHNICAL BORINGS FOR EACH STREET AND REPLACEMENT PAVEMENT SECTIONS, REFER TO SHEET 6.
- NOT ALL UTILITIES MAY BE SHOWN. EXISTING UTILITIES DEPTHS ARE APPROXIMATE AND BASED UPON ELECTRONIC UTILITY LOCATING, WHICH IS GENERALLY 10%± OF THE ACTUAL DEPTH WHEN NOT DISTORTED BY ADJACENT CONDUCTORS. ACCURACY OF ELECTRONIC DEPTH DECREASES WHEN ADJACENT UTILITIES ARE LOCATED WITHIN 5 FEET. FOR DEPTHS OF CONDUCTIVE UTILITIES, DEPTHS ARE TO CENTER OF UTILITY. STORM DRAIN DEPTHS ARE MEASURED FROM RIM TO INVERT.
- FOR NEW OR REPLACED SSMH - RIM ELEVATION SHOWN ON PLANS IS BASED ON FIELD SURVEY. CONSTRUCT NEW SSMH WITH RIM ELEVATION TO MATCH THE FINISHED GRADE OF THE EXISTING ROADWAY OR SURROUNDING GRADE.
- PIPE SLOPES SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, ROUGHLY PARALLEL TO THE GRADE OF THE EXISTING SURFACE ELEVATION ABOVE THE PIPE. ACTUAL PIPE SLOPES MAY VARY BETWEEN STRUCTURES.
- PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, AS PROJECTED FROM A HORIZONTAL PLANE. THESE VALUES ARE CONSISTENT WITH THE ALIGNMENT STATIONING. ACTUAL LENGTHS, ACCOUNTING FOR PIPE SLOPE, MAY BE LONGER, BUT MEASUREMENT AND PAYMENT SHALL BE BASED UPON STATIONING VALUES.
- THE APPROXIMATE LIMITS OF LOCALIZED REPAIRS REQUIRED PRIOR TO CIPP REHABILITATION ARE SHOWN IN PLAN VIEW, WITH THE DEFECT CHARACTERISTIC OF THIS SEGMENT PROVIDED. CONTRACTOR SHALL VERIFY LOCATIONS AND EXTENTS OF LOCALIZED REPAIRS AFTER REVIEW OF PRE-CONSTRUCTION CCTV DATA COLLECTED BY THE CONTRACTOR. DEFECTS REQUIRING REPAIRS PRIOR TO CIPP INCLUDE MAJOR OFFSETS, PROTRUDING LATERALS, BROKEN OUT SECTIONS OF PIPE, AND MAJOR SAGS OF GREATER THAN 50% OF THE PIPE DIAMETER.
- FOR LINES THAT WILL BE REPLACED VIA OPEN TRENCH, THE CONTRACTOR SHALL REPLACE UP TO 5 FEET OF EXISTING LATERALS CONNECTED TO PIPES BEING REPLACED. LATERAL LOCATIONS SHOWN ARE APPROXIMATE PER AVAILABLE CCTV DATA OR CLEANOUT LOCATIONS. CONTRACTOR SHALL VERIFY LATERAL LOCATIONS IN THE FIELD.
- ALIGNMENT LINE MAY VARY FROM ACTUAL PIPE ALIGNMENT.
- FOR LINES THAT WILL BE CIPP REHABILITATED, THE CONTRACTOR SHALL REPAIR PROTRUDING LATERALS PRIOR TO CIPP WORK WITH A ROBOTIC CUTTER, UNLESS THE LATERAL IS WITHIN A LOCALIZED REPAIR AREA. AFTER CIPP WORK, THE CONTRACTOR SHALL REINSTATE LATERALS WITH ROBOTIC EQUIPMENT.
- CONTRACTOR SHALL ARRANGE WITH UTILITY OWNER TO RELOCATE GAS SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES.
- CONTRACTOR SHALL RELOCATE WATER SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES. WATER SHUTOFFS REQUIRE 48-HOUR NOTIFICATIONS TO AFFECTED RESIDENTS AND THE CITY OF BURLINGAME.
- REFER TO PIPE DEFLECTION DETAIL ON SHEET 17 FOR SEWER PIPES WITH HORIZONTAL CURVES.
- AT SOME LOCATIONS, SANITARY SEWER CLEANOUTS WERE FOUND BUT NO ASSOCIATED LATERAL CONNECTIONS WERE FOUND IN CCTV AT THIS LOCATION. CONTRACTOR TO VERIFY LOCATIONS OF ACTIVE LATERALS.

GRAPHIC SCALE

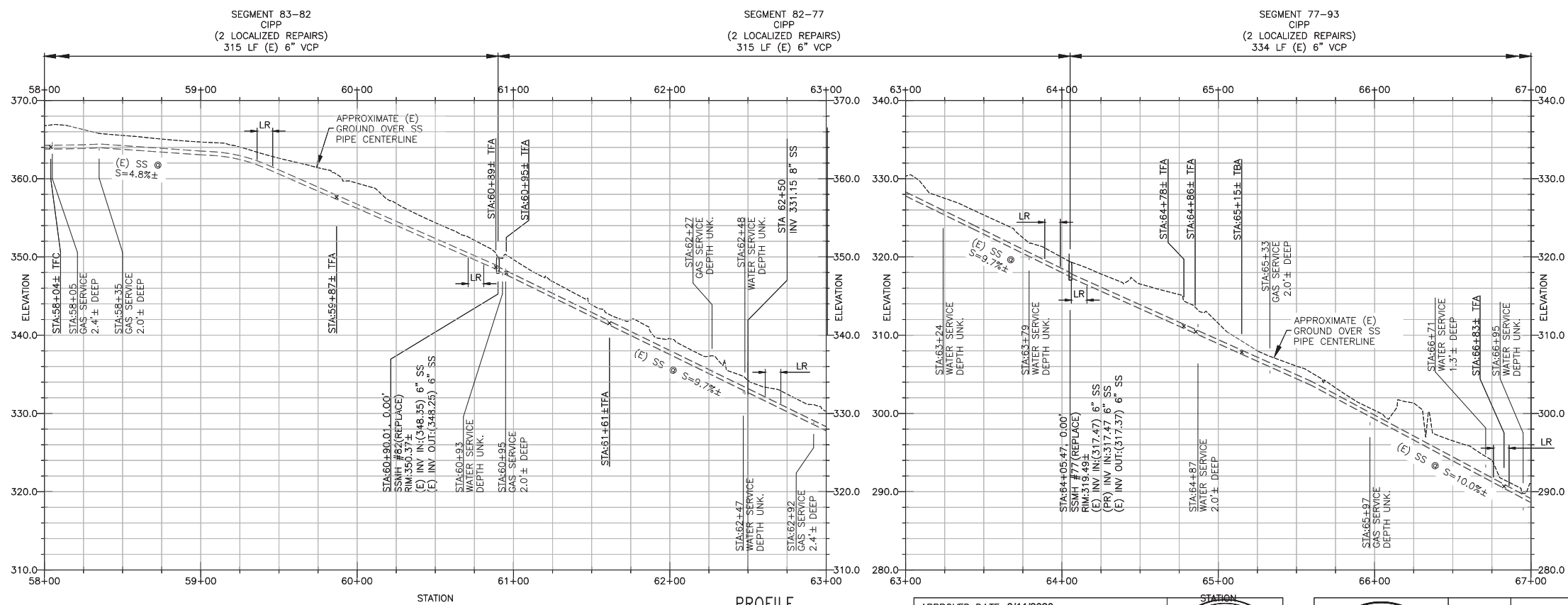
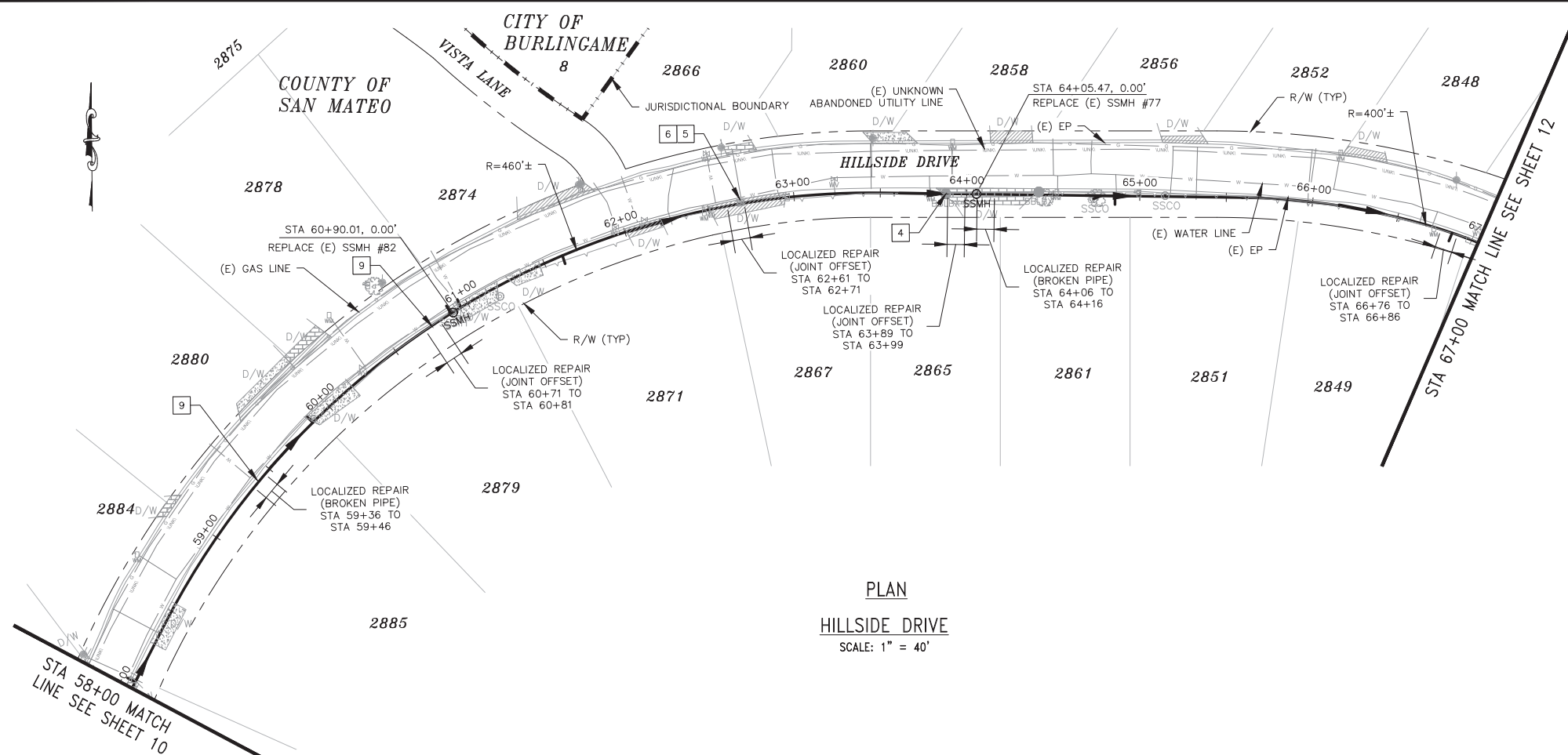
40 0 40 80

DESIGNED BY: KS/AS		BURLINGAME HILLS SEWER MAINTENANCE DISTRICT		SCALE: AS SHOWN	
CHECKED BY: ES		HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT		DATE: 08-11-20	
DRAWN BY: AS/UL		HILLSIDE DRIVE PLAN AND PROFILE		FILE NO.: E5025	
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS			555 COUNTY CENTER, 5th FLOOR		
SAN MATEO COUNTY			REDWOOD CITY, CALIFORNIA 94063		

PLANS
IS IN INCHES

0 1 2 3 4

SHEET 10 OF 20



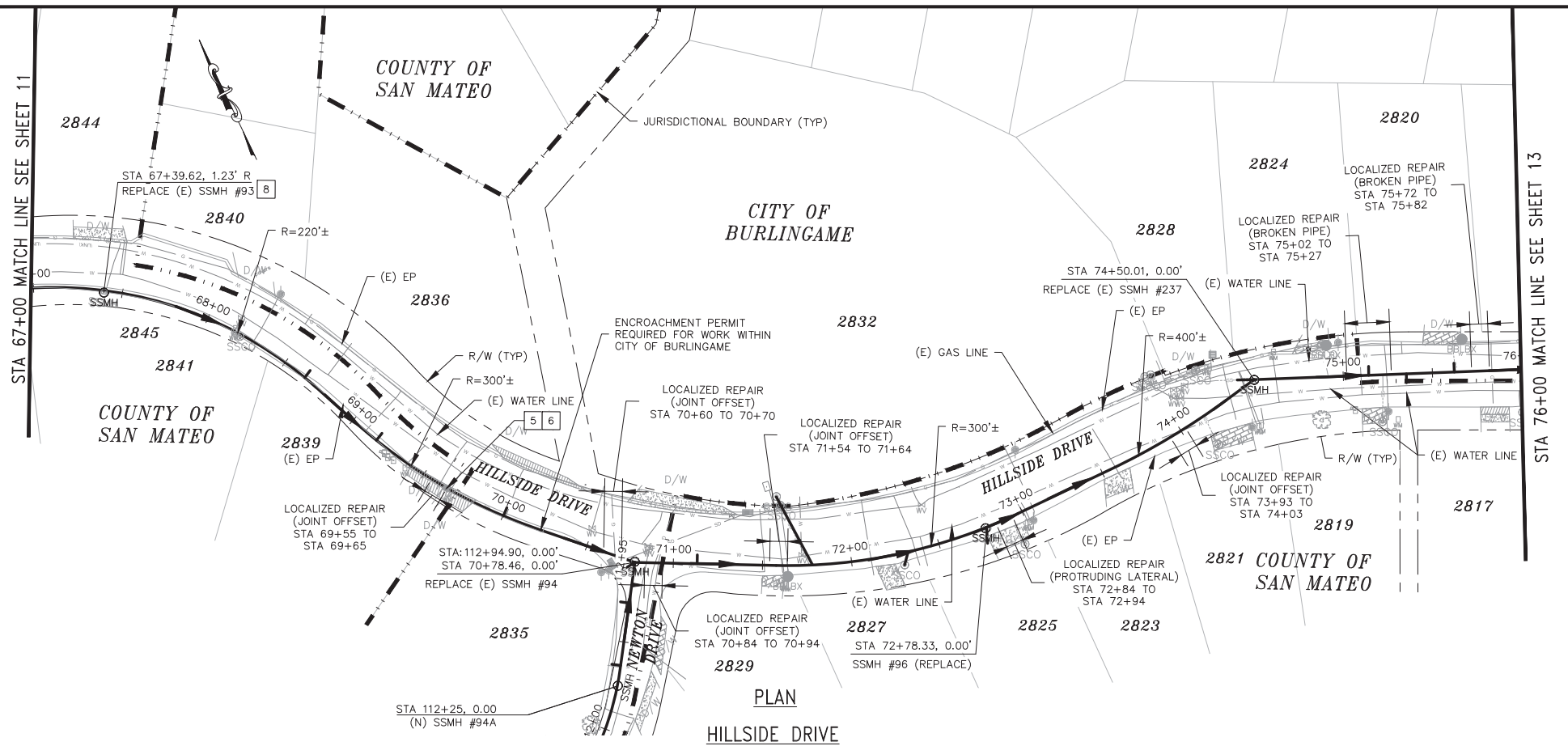
LEGEND

CONSTRUCTION NOTES

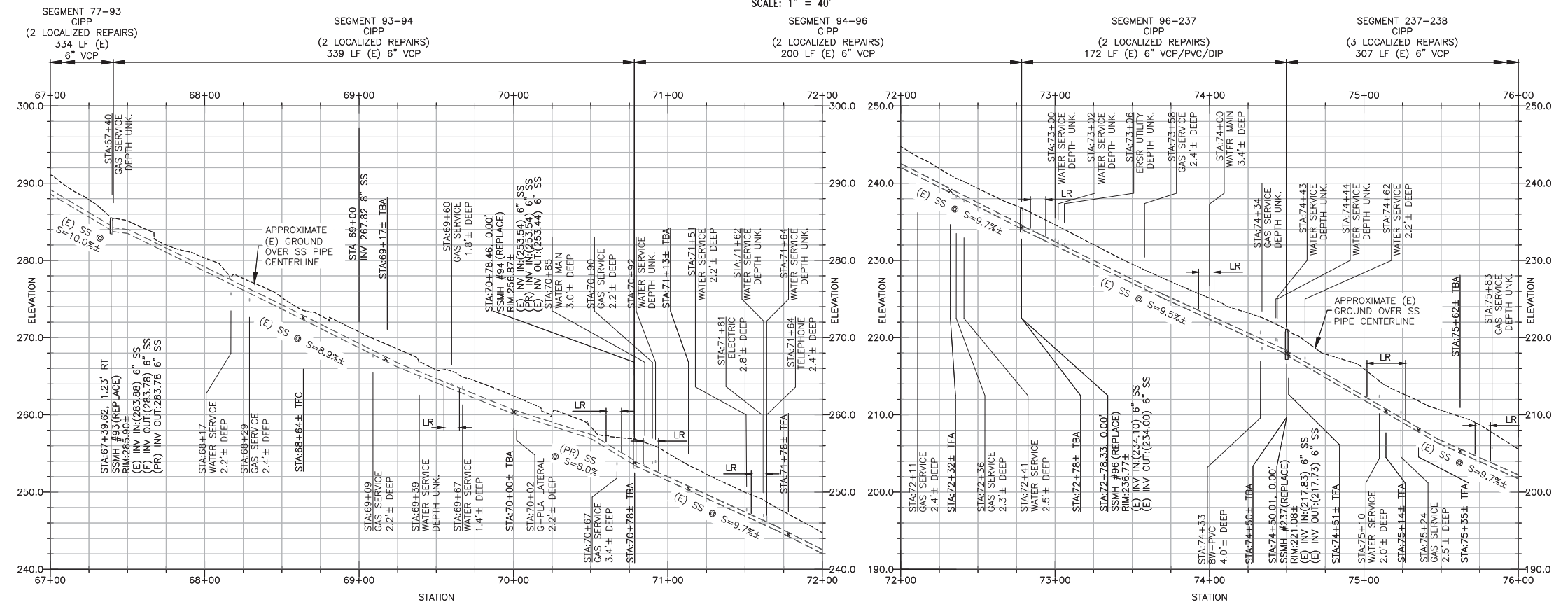
ABBREVIATIONS

NOTES:





PLAN
HILLSIDE DRIVE
SCALE: 1" = 40'



PROFILE
HILLSIDE DRIVE
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 8'



APPROVED: 8-14-2020
DATE: 8-14-2020
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

LEGEND

- SEWER MAIN TO BE REPLACED OR REHABILITATED
- SEWER MAIN TO BE REPLACED OR REHABILITATED WITH SEWER LATERAL
- NEW OR TO BE REPLACED SANITARY SEWER MANHOLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER FLUSHING INLET
- (E) CONCRETE DRIVEWAY
- (E) AC DRIVEWAY
- (E) PAVER DRIVEWAY
- SS LATERAL (PROFILE)

FOR A COMPLETE LEGEND, REFER TO SHEET 1.

ABBREVIATIONS

- TBA TAP BREAK-IN ACTIVE
- TFC TAP FACTORY CAPPED
- IFA TAP FACTORY ACTIVE
- TDF TAP FACTORY DEFECTIVE
- TBI TAP BREAK-IN INTRUDING

CONSTRUCTION NOTES

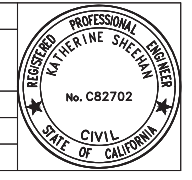
- RESET WATER METER / RESET WATER METER BOX
- RESET MAILBOX
- RECONSTRUCT STAIRS
- RESET BUBBLER
- RESET CATCH BASIN
- REPLACE DWY DRAINAGE PIPE
- RECONSTRUCT DWY DRAINAGE CHANNEL
- CONSTRUCT WOOD RETAINING WALL AROUND SSMH (REFER TO DETAIL C-14 ON SHEET 18)
- RECONSTRUCT WOOD HEADER
- RECONSTRUCT WOOD RETAINING WALL

NOTES:

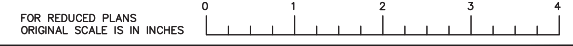
- CONTRACTOR TO VERIFY UPSTREAM AND DOWNSTREAM INVERTS OF MANHOLES PRIOR TO INSTALLATION OF NEW PIPE.
- SUBMIT SHOP DRAWING WITH PROPOSED UPSTREAM INVERT ELEVATION, DOWNSTREAM INVERT ELEVATION, AND SLOPE FOR EACH SEGMENT OF NEW PIPE.
- NEW PIPE SHALL BE CONSTRUCTED AT A UNIFORM SLOPE BETWEEN MANHOLES UNLESS STATED OTHERWISE.
- ALL EXISTING SSMH TO REMAIN UNLESS STATED OTHERWISE.
- FOR EXISTING AC/AB/CONCRETE THICKNESS MEASURED AT GEOTECHNICAL BORINGS FOR EACH STREET AND REPLACEMENT PAVEMENT SECTIONS, REFER TO SHEET 6.
- NOT ALL UTILITIES MAY BE SHOWN. EXISTING UTILITIES DEPTHS ARE APPROXIMATE AND BASED UPON ELECTRONIC UTILITY LOCATING, WHICH IS GENERALLY 10%± OF THE ACTUAL DEPTH WHEN NOT DISTORTED BY ADJACENT CONDUCTORS. ACCURACY OF ELECTRONIC DEPTHS DECREASES WHEN ADJACENT UTILITIES ARE LOCATED WITHIN 5 FEET. FOR DEPTHS OF CONDUCTIVE UTILITIES, DEPTHS ARE TO CENTER OF UTILITY. STORM DRAIN DEPTHS ARE MEASURED FROM RIM TO INVERT.
- FOR NEW OR REPLACED SSMH - RIM ELEVATION SHOWN ON PLANS IS BASED ON FIELD SURVEY. CONSTRUCT NEW SSMH WITH RIM ELEVATION TO MATCH THE FINISHED GRADE OF THE EXISTING ROADWAY OR SURROUNDING GRADE.
- PIPE SLOPES SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, ROUGHLY PARALLEL TO THE GRADE OF THE EXISTING SURFACE ELEVATION ABOVE THE PIPE. ACTUAL PIPE SLOPES MAY VARY BETWEEN STRUCTURES.
- PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, AS PROJECTED FROM A HORIZONTAL PLANE. THESE VALUES ARE CONSISTENT WITH THE ALIGNMENT STATIONING. ACTUAL LENGTHS, ACCOUNTING FOR PIPE SLOPE, MAY BE LONGER, BUT MEASUREMENT AND PAYMENT SHALL BE BASED UPON STATIONING VALUES.
- THE APPROXIMATE LIMITS OF LOCALIZED REPAIRS REQUIRED PRIOR TO CIPP REHABILITATION ARE SHOWN IN PLAN VIEW, WITH THE DEFECT CHARACTERISTIC OF THIS SEGMENT PROVIDED. CONTRACTOR SHALL VERIFY LOCATIONS AND EXTENTS OF LOCALIZED REPAIRS AFTER REVIEW OF PRE-CONSTRUCTION CCTV DATA COLLECTED BY THE CONTRACTOR. DEFECTS REQUIRING REPAIRS PRIOR TO CIPP INCLUDE MAJOR OFFSETS, PROTRUDING LATERALS, BROKEN OUT SECTIONS OF PIPE, AND MAJOR SAGS OF GREATER THAN 50% OF THE PIPE DIAMETER.
- FOR LINES THAT WILL BE REPLACED VIA OPEN TRENCH, THE CONTRACTOR SHALL REPLACE UP TO 5 FEET OF EXISTING LATERALS CONNECTED TO PIPES BEING REPLACED. LATERAL LOCATIONS SHOWN ARE APPROXIMATE PER AVAILABLE CCTV DATA OR CLEANOUT LOCATIONS. CONTRACTOR SHALL VERIFY LATERAL LOCATIONS IN THE FIELD.
- ALIGNMENT LINE MAY VARY FROM ACTUAL PIPE ALIGNMENT.
- FOR LINES THAT WILL BE CIPP REHABILITATED, THE CONTRACTOR SHALL REPAIR PROTRUDING LATERALS PRIOR TO CIPP WORK WITH A ROBOTIC CUTTER, UNLESS THE LATERAL IS WITHIN A LOCALIZED REPAIR AREA. AFTER CIPP WORK, THE CONTRACTOR SHALL REINSTATE LATERALS WITH ROBOTIC EQUIPMENT.
- CONTRACTOR SHALL ARRANGE WITH UTILITY OWNER TO RELOCATE GAS SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES.
- CONTRACTOR SHALL RELOCATE WATER SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES. WATER SHUTOFFS REQUIRE 48-HOUR NOTIFICATIONS TO AFFECTED RESIDENTS AND THE CITY OF BURLINGAME.
- REFER TO PIPE DEFLECTION DETAIL ON SHEET 17 FOR SEWER PIPES WITH HORIZONTAL CURVES.
- AT SOME LOCATIONS, SANITARY SEWER CLEANOUTS WERE FOUND BUT NO ASSOCIATED LATERAL CONNECTIONS WERE FOUND IN CCTV AT THIS LOCATION. CONTRACTOR TO VERIFY LOCATIONS OF ACTIVE LATERALS.

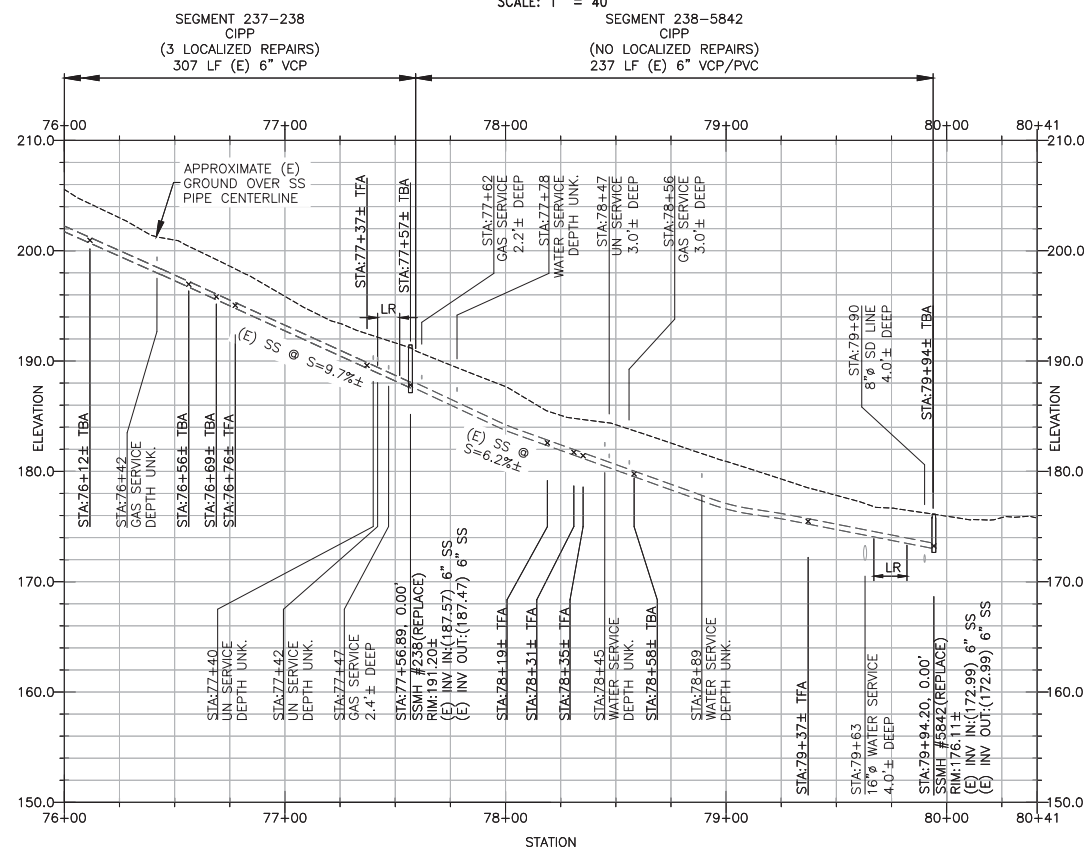
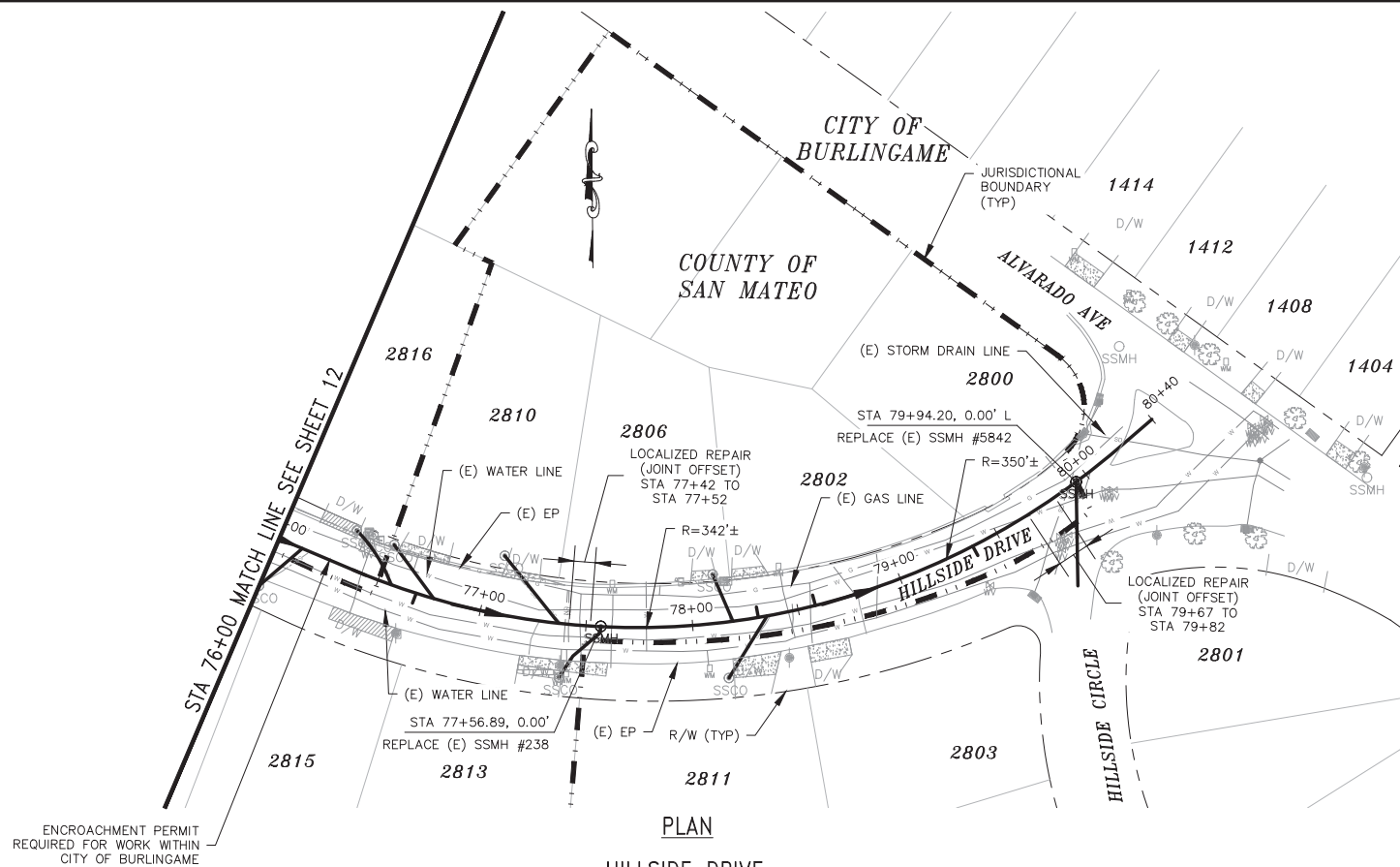


APPROVED DATE: 8/11/2020
KATHERINE SHEEHAN
CSG CONSULTANTS, INC.
R.C.E. # 82702 / EXPIRES 09-30-2020



DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/L	HILLSIDE DRIVE PLAN AND PROFILE	FILE NO.: E5025
REVISION	DATE	
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS	555 COUNTY CENTER, 5th FLOOR	
SAN MATEO COUNTY	REDWOOD CITY, CALIFORNIA 94063	





PROFILE

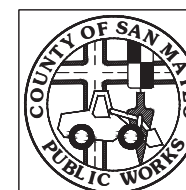
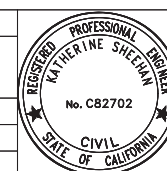
HILLSDRIVE DRIVE
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 8'

APPROVED DATE: 8/11/2020

KATHERINE SHEEHAN

CSG CONSULTANTS, INC.

R.C.E. # 82702 / EXPIRES 09-30-2020



DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSDRIVE/ADELIN AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/L	HILLSDRIVE DRIVE PLAN AND PROFILE	FILE NO.: E5025
REVISION	DATE	
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		0 1 2 3 4
		SHEET 13 OF 20



APPROVED: 8-14-2020

DATE: 8-14-2020

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

LEGEND

- SEWER MAIN TO BE REPLACED OR REHABILITATED
- SEWER MAIN TO BE REPLACED OR REHABILITATED WITH SEWER LATERAL
- NEW OR TO BE REPLACED SANITARY SEWER MANHOLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER FLUSHING INLET
- (E) CONCRETE DRIVEWAY
- (E) AC DRIVEWAY
- (E) PAVER DRIVEWAY
- SS LATERAL (PROFILE)

FOR A COMPLETE LEGEND, REFER TO SHEET 1.

ABBREVIATIONS

- TBA TAP BREAK-IN ACTIVE
- TFC TAP FACTORY CAPPED
- TFA TAP FACTORY ACTIVE
- TFD TAP FACTORY DEFECTIVE
- TBI TAP BREAK-IN INTRUDING

CONSTRUCTION NOTES

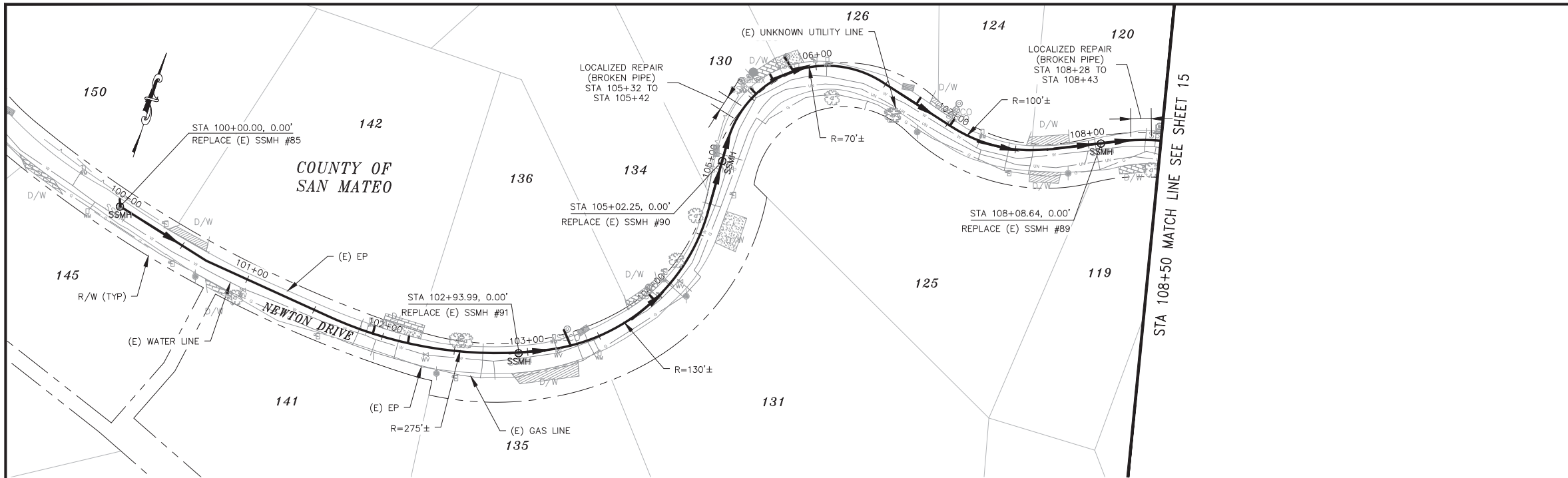
- RESET WATER METER / RESET WATER METER BOX
- RESET MAILBOX
- RECONSTRUCT STAIRS
- RESET BUBBLER
- RESET CATCH BASIN
- REPLACE DWY DRAINAGE PIPE
- RECONSTRUCT DWY DRAINAGE CHANNEL
- CONSTRUCT WOOD RETAINING WALL AROUND SSMH (REFER TO DETAIL C-14 ON SHEET 18)
- RECONSTRUCT WOOD HEADER
- RECONSTRUCT WOOD RETAINING WALL

NOTES:

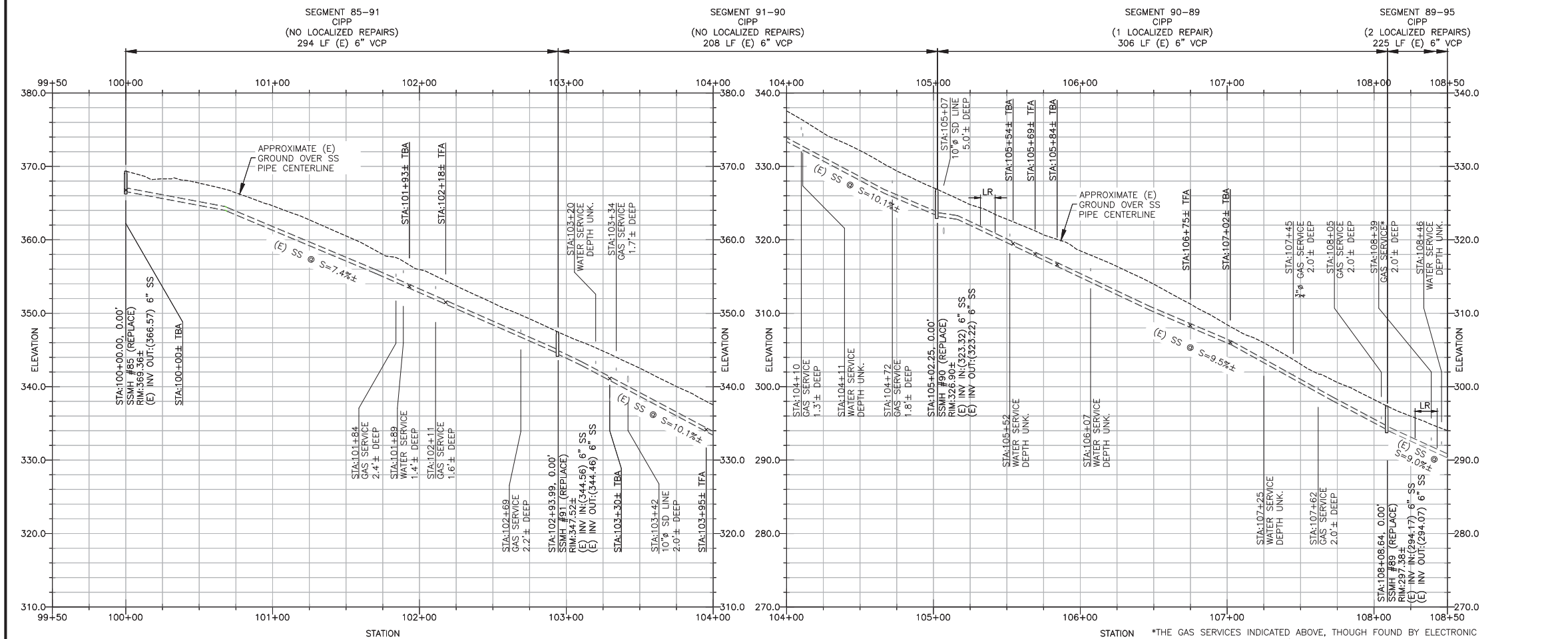
- CONTRACTOR TO VERIFY UPSTREAM AND DOWNSTREAM INVERTS OF MANHOLES PRIOR TO INSTALLATION OF NEW PIPE.
- SUBMIT SHOP DRAWING WITH PROPOSED UPSTREAM INVERT ELEVATION, DOWNSTREAM INVERT ELEVATION, AND SLOPE FOR EACH SEGMENT OF NEW PIPE.
- NEW PIPE SHALL BE CONSTRUCTED AT A UNIFORM SLOPE BETWEEN MANHOLES UNLESS STATED OTHERWISE.
- ALL EXISTING SSMH TO REMAIN UNLESS STATED OTHERWISE.
- FOR EXISTING AC/AB/CONCRETE THICKNESS MEASURED AT GEOTECHNICAL BORINGS FOR EACH STREET AND REPLACEMENT PAVEMENT SECTIONS, REFER TO SHEET 6.
- NOT ALL UTILITIES MAY BE SHOWN. EXISTING UTILITIES DEPTHS ARE APPROXIMATE AND BASED UPON ELECTRONIC UTILITY LOCATING, WHICH IS GENERALLY 10%± OF THE ACTUAL DEPTH WHEN NOT DISTORTED BY ADJACENT CONDUCTORS. ACCURACY OF ELECTRONIC DEPTH DECREASES WHEN ADJACENT UTILITIES ARE LOCATED WITHIN 5 FEET. FOR DEPTHS OF CONDUCTIVE UTILITIES, DEPTHS ARE TO CENTER OF UTILITY. STORM DRAIN DEPTHS ARE MEASURED FROM RIM TO INVERT.
- FOR NEW OR REPLACED SSMH - RIM ELEVATION SHOWN ON PLANS IS BASED ON FIELD SURVEY. CONSTRUCT NEW SSMH WITH RIM ELEVATION TO MATCH THE FINISHED GRADE OF THE EXISTING ROADWAY OR SURROUNDING GRADE.
- PIPE SLOPES SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, ROUGHLY PARALLEL TO THE GRADE OF THE EXISTING SURFACE ELEVATION ABOVE THE PIPE. ACTUAL PIPE SLOPES MAY VARY BETWEEN STRUCTURES.
- PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, AS PROJECTED FROM A HORIZONTAL PLANE. THESE VALUES ARE CONSISTENT WITH THE ALIGNMENT STATIONING. ACTUAL LENGTHS, ACCOUNTING FOR PIPE SLOPE, MAY BE LONGER, BUT MEASUREMENT AND PAYMENT SHALL BE BASED UPON STATIONING VALUES.
- THE APPROXIMATE LIMITS OF LOCALIZED REPAIRS REQUIRED PRIOR TO CIPP REHABILITATION ARE SHOWN IN PLAN VIEW, WITH THE DEFECT CHARACTERISTIC OF THIS SEGMENT PROVIDED. CONTRACTOR SHALL VERIFY LOCATIONS AND EXTENTS OF LOCALIZED REPAIRS AFTER REVIEW OF PRE-CONSTRUCTION CCTV DATA COLLECTED BY THE CONTRACTOR. DEFECTS REQUIRING REPAIRS PRIOR TO CIPP INCLUDE MAJOR OFFSETS, PROTRUDING LATERALS, BROKEN OUT SECTIONS OF PIPE, AND MAJOR SAGS OF GREATER THAN 50% OF THE PIPE DIAMETER.
- FOR LINES THAT WILL BE REPLACED VIA OPEN TRENCH, THE CONTRACTOR SHALL REPLACE UP TO 5 FEET OF EXISTING LATERALS CONNECTED TO PIPES BEING REPLACED. LATERAL LOCATIONS SHOWN ARE APPROXIMATE PER AVAILABLE CCTV DATA OR CLEANOUT LOCATIONS. CONTRACTOR SHALL VERIFY LATERAL LOCATIONS IN THE FIELD.
- ALIGNMENT LINE MAY VARY FROM ACTUAL PIPE ALIGNMENT.
- FOR LINES THAT WILL BE CIPP REHABILITATED, THE CONTRACTOR SHALL REPAIR PROTRUDING LATERALS PRIOR TO CIPP WORK WITH A ROBOTIC CUTTER, UNLESS THE LATERAL IS WITHIN A LOCALIZED REPAIR AREA. AFTER CIPP WORK, THE CONTRACTOR SHALL REINSTATE LATERALS WITH ROBOTIC EQUIPMENT.
- CONTRACTOR SHALL ARRANGE WITH UTILITY OWNER TO RELOCATE GAS SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES.
- CONTRACTOR SHALL RELOCATE WATER SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES. WATER SHUTOFFS REQUIRE 48-HOUR NOTIFICATIONS TO AFFECTED RESIDENTS AND THE CITY OF BURLINGAME.
- REFER TO PIPE DEFLECTION DETAIL ON SHEET 17 FOR SEWER PIPES WITH HORIZONTAL CURVES.
- AT SOME LOCATIONS, SANITARY SEWER CLEANOUTS WERE FOUND BUT NO ASSOCIATED LATERAL CONNECTIONS WERE FOUND IN CCTV AT THIS LOCATION. CONTRACTOR TO VERIFY LOCATIONS OF ACTIVE LATERALS.



FILENAME: \\SERVER2\CSG\LOC\CLIENTS\DESIGN\19-403-HILLSIDE ADELIN AREA SS REHAB\2020-07-KX-FINAL\BID SET\E5025007-E5025015.DWG (13-36/24 HILLSIDE)



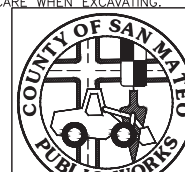
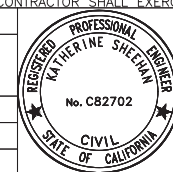
PLAN
NEWTON DRIVE
SCALE: 1" = 40'



PROFILE

NEWTON DRIVE
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 8'

APPROVED DATE: 8/11/2020
KATHERINE SHEEHAN
CSG CONSULTANTS, INC.
R.C.E. # 82702 / EXPIRES 09-30-2020



DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/L	NEWTON DRIVE PLAN AND PROFILE	FILE NO.: E5025
REVISION	DATE	
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063

LEGEND

- SEWER MAIN TO BE REPLACED OR REHABILITATED
- SEWER MAIN TO BE REPLACED OR REHABILITATED WITH SEWER LATERAL
- NEW OR TO BE REPLACED SANITARY SEWER MANHOLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER FLUSHING INLET
- (E) CONCRETE DRIVEWAY
- (E) AC DRIVEWAY
- (E) PAVER DRIVEWAY
- SS LATERAL (PROFILE)

FOR A COMPLETE LEGEND, REFER TO SHEET 1.

ABBREVIATIONS

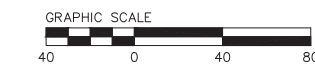
- TBA TAP BREAK-IN ACTIVE
- TFC TAP FACTORY CAPPED
- TFA TAP FACTORY ACTIVE
- TFD TAP FACTORY DEFECTIVE
- TBI TAP BREAK-IN INTRUDING

CONSTRUCTION NOTES

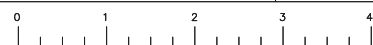
- RESET WATER METER / RESET WATER METER BOX
- RESET MAILBOX
- RECONSTRUCT STAIRS
- RESET BUBBLER
- RESET CATCH BASIN
- REPLACE DWY DRAINAGE PIPE
- RECONSTRUCT DWY DRAINAGE CHANNEL
- CONSTRUCT WOOD RETAINING WALL AROUND SSMH (REFER TO DETAIL C-14 ON SHEET 18)
- RECONSTRUCT WOOD HEADER
- RECONSTRUCT WOOD RETAINING WALL

NOTES:

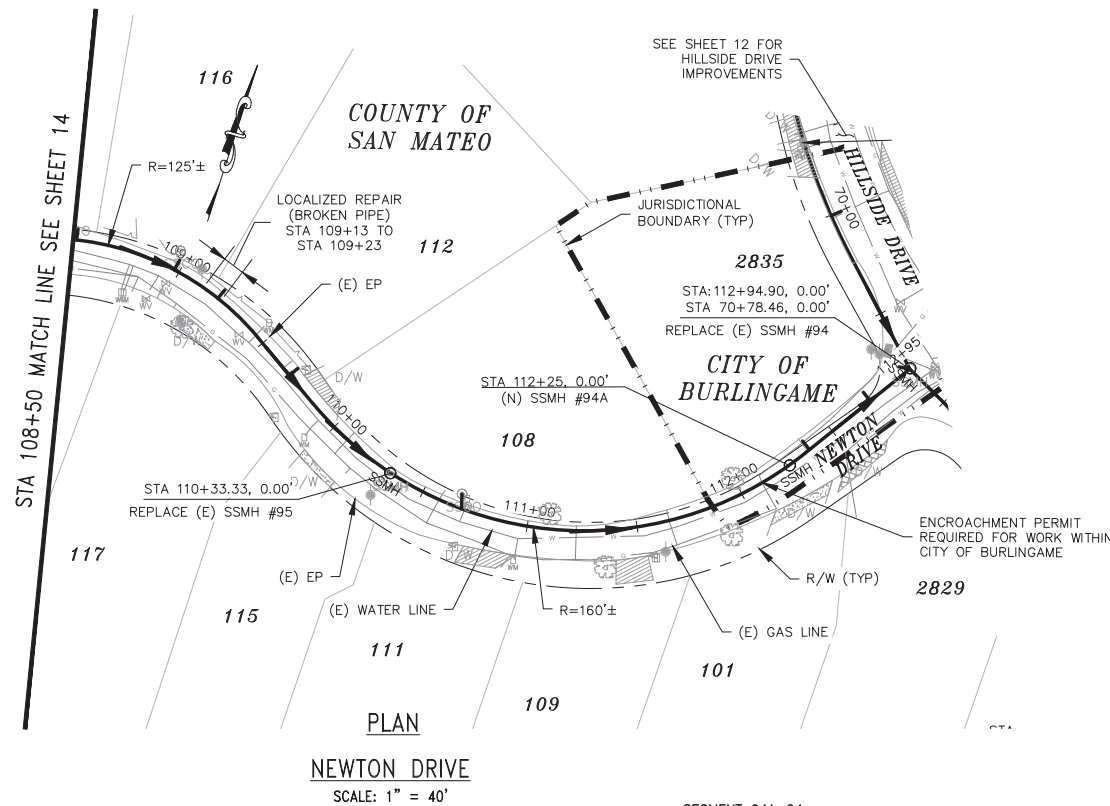
- CONTRACTOR TO VERIFY UPSTREAM AND DOWNSTREAM INVERTS OF MANHOLES PRIOR TO INSTALLATION OF NEW PIPE.
- SUBMIT SHOP DRAWING WITH PROPOSED UPSTREAM INVERT ELEVATION, DOWNSTREAM INVERT ELEVATION, AND SLOPE FOR EACH SEGMENT OF NEW PIPE.
- NEW PIPE SHALL BE CONSTRUCTED AT A UNIFORM SLOPE BETWEEN MANHOLES UNLESS STATED OTHERWISE.
- ALL EXISTING SSMH TO REMAIN UNLESS STATED OTHERWISE.
- FOR EXISTING AC/AB/CONCRETE THICKNESS MEASURED AT GEOTECHNICAL BORINGS FOR EACH STREET AND REPLACEMENT PAVEMENT SECTIONS, REFER TO SHEET 6.
- NOT ALL UTILITIES MAY BE SHOWN. EXISTING UTILITIES DEPTHS ARE APPROXIMATE AND BASED UPON ELECTRONIC UTILITY LOCATING, WHICH IS GENERALLY 10%± OF THE ACTUAL DEPTH WHEN NOT DISTORTED BY ADJACENT CONDUCTORS. ACCURACY OF ELECTRONIC DEPTH DECREASES WHEN ADJACENT UTILITIES ARE LOCATED WITHIN 5 FEET. FOR DEPTHS OF CONDUCTIVE UTILITIES, DEPTHS ARE TO CENTER OF UTILITY. STORM DRAIN DEPTHS ARE MEASURED FROM RIM TO INVERT.
- FOR NEW OR REPLACED SSMH - RIM ELEVATION SHOWN ON PLANS IS BASED ON FIELD SURVEY. CONSTRUCT NEW SSMH WITH RIM ELEVATION TO MATCH THE FINISHED GRADE OF THE EXISTING ROADWAY OR SURROUNDING GRADE.
- PIPE SLOPES SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, ROUGHLY PARALLEL TO THE GRADE OF THE EXISTING SURFACE ELEVATION ABOVE THE PIPE. ACTUAL PIPE SLOPES MAY VARY BETWEEN STRUCTURES.
- PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, AS PROJECTED FROM A HORIZONTAL PLANE. THESE VALUES ARE CONSISTENT WITH THE ALIGNMENT STATIONING. ACTUAL LENGTHS, ACCOUNTING FOR PIPE SLOPE, MAY BE LONGER, BUT MEASUREMENT AND PAYMENT SHALL BE BASED UPON STATIONING VALUES.
- THE APPROXIMATE LIMITS OF LOCALIZED REPAIRS REQUIRED PRIOR TO CIPP REHABILITATION ARE SHOWN IN PLAN VIEW, WITH THE DEFECT CHARACTERISTIC OF THIS SEGMENT PROVIDED. CONTRACTOR SHALL VERIFY LOCATIONS AND EXTENTS OF LOCALIZED REPAIRS AFTER REVIEW OF PRE-CONSTRUCTION CCTV DATA COLLECTED BY THE CONTRACTOR. DEFECTS REQUIRING REPAIRS PRIOR TO CIPP INCLUDE MAJOR OFFSETS, PROTRUDING LATERALS, BROKEN OUT SECTIONS OF PIPE, AND MAJOR SAGS OF GREATER THAN 50% OF THE PIPE DIAMETER.
- FOR LINES THAT WILL BE REPLACED VIA OPEN TRENCH, THE CONTRACTOR SHALL REPLACE UP TO 5 FEET OF EXISTING LATERALS CONNECTED TO PIPES BEING REPLACED. LATERAL LOCATIONS SHOWN ARE APPROXIMATE PER AVAILABLE CCTV DATA OR CLEANOUT LOCATIONS. CONTRACTOR SHALL VERIFY LATERAL LOCATIONS IN THE FIELD.
- ALIGNMENT LINE MAY VARY FROM ACTUAL PIPE ALIGNMENT.
- FOR LINES THAT WILL BE CIPP REHABILITATED, THE CONTRACTOR SHALL REPAIR PROTRUDING LATERALS PRIOR TO CIPP WORK WITH A ROBOTIC CUTTER, UNLESS THE LATERAL IS WITHIN A LOCALIZED REPAIR AREA. AFTER CIPP WORK, THE CONTRACTOR SHALL REINSTATE LATERALS WITH ROBOTIC EQUIPMENT.
- CONTRACTOR SHALL ARRANGE WITH UTILITY OWNER TO RELOCATE GAS SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES.
- CONTRACTOR SHALL RELOCATE WATER SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES. WATER SHUTOFFS REQUIRE 48-HOUR NOTIFICATIONS TO AFFECTED RESIDENTS AND THE CITY OF BURLINGAME.
- REFER TO PIPE DEFLECTION DETAIL ON SHEET 17 FOR SEWER PIPES WITH HORIZONTAL CURVES.
- AT SOME LOCATIONS, SANITARY SEWER CLEANOUTS WERE FOUND BUT NO ASSOCIATED LATERAL CONNECTIONS WERE FOUND IN CCTV AT THIS LOCATION. CONTRACTOR TO VERIFY LOCATIONS OF ACTIVE LATERALS.



FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES



SHEET 14 OF 20



LEGEND

- SEWER MAIN TO BE REPLACED OR REHABILITATED
- SEWER MAIN TO BE REPLACED OR REHABILITATED WITH SEWER LATERAL
- NEW OR TO BE REPLACED SANITARY SEWER MANHOLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER FLUSHING INLET
- (E) CONCRETE DRIVEWAY
- (E) AC DRIVEWAY
- (E) PAVER DRIVEWAY
- SS LATERAL (PROFILE)

ABBREVIATIONS

- TBA TAP BREAK-IN ACTIVE
- TFC TAP FACTORY CAPPED
- TFA TAP FACTORY ACTIVE
- TFD TAP FACTORY DEFECTIVE
- TBI TAP BREAK-IN INTRUDING

NOTES:

- CONTRACTOR TO VERIFY UPSTREAM AND DOWNSTREAM INVERTS OF MANHOLES PRIOR TO INSTALLATION OF NEW PIPE.
- SUBMIT SHOP DRAWING WITH PROPOSED UPSTREAM INVERT ELEVATION, DOWNSTREAM INVERT ELEVATION, AND SLOPE FOR EACH SEGMENT OF NEW PIPE.
- NEW PIPE SHALL BE CONSTRUCTED AT A UNIFORM SLOPE BETWEEN MANHOLES UNLESS STATED OTHERWISE.
- ALL EXISTING SSMH TO REMAIN UNLESS STATED OTHERWISE.
- FOR EXISTING AC/AB/CONCRETE THICKNESS MEASURED AT GEOTECHNICAL BORINGS FOR EACH STREET AND REPLACEMENT PAVEMENT SECTIONS, REFER TO SHEET 6.
- NOT ALL UTILITIES MAY BE SHOWN. EXISTING UTILITIES DEPTHS ARE APPROXIMATE AND BASED UPON ELECTRONIC UTILITY LOCATING, WHICH IS GENERALLY 10%± OF THE ACTUAL DEPTH WHEN NOT DISTORTED BY ADJACENT CONDUCTORS. ACCURACY OF ELECTRONIC DEPTH DECREASES WHEN ADJACENT UTILITIES ARE LOCATED WITHIN 5 FEET. FOR DEPTHS OF CONDUCTIVE UTILITIES, DEPTHS ARE TO CENTER OF UTILITY. STORM DRAIN DEPTHS ARE MEASURED FROM RIM TO INVERT.
- FOR NEW OR REPLACED SSMH - RIM ELEVATION SHOWN ON PLANS IS BASED ON FIELD SURVEY. CONSTRUCT NEW SSMH WITH RIM ELEVATION TO MATCH THE FINISHED GRADE OF THE EXISTING ROADWAY OR SURROUNDING GRADE.
- PIPE SLOPES SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, ROUGHLY PARALLEL TO THE GRADE OF THE EXISTING SURFACE ELEVATION ABOVE THE PIPE. ACTUAL PIPE SLOPES MAY VARY BETWEEN STRUCTURES.
- PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, AS PROJECTED FROM A HORIZONTAL PLANE. THESE VALUES ARE CONSISTENT WITH THE ALIGNMENT STATIONING. ACTUAL LENGTHS, ACCOUNTING FOR PIPE SLOPE, MAY BE LONGER, BUT MEASUREMENT AND PAYMENT SHALL BE BASED UPON STATIONING VALUES.
- THE APPROXIMATE LIMITS OF LOCALIZED REPAIRS REQUIRED PRIOR TO CIPP REHABILITATION ARE SHOWN IN PLAN VIEW, WITH THE DEFECT CHARACTERISTIC OF THIS SEGMENT PROVIDED. CONTRACTOR SHALL VERIFY LOCATIONS AND EXTENTS OF LOCALIZED REPAIRS AFTER REVIEW OF PRE-CONSTRUCTION CCTV DATA COLLECTED BY THE CONTRACTOR. DEFECTS REQUIRING REPAIRS PRIOR TO CIPP INCLUDE MAJOR OFFSETS, PROTRUDING LATERALS, BROKEN OUT SECTIONS OF PIPE, AND MAJOR SAGS OF GREATER THAN 50% OF THE PIPE DIAMETER.
- FOR LINES THAT WILL BE REPLACED VIA OPEN TRENCH, THE CONTRACTOR SHALL REPLACE UP TO 5 FEET OF EXISTING LATERALS CONNECTED TO PIPES BEING REPLACED. LATERAL LOCATIONS SHOWN ARE APPROXIMATE PER AVAILABLE CCTV DATA OR CLEANOUT LOCATIONS. CONTRACTOR SHALL VERIFY LATERAL LOCATIONS IN THE FIELD.
- ALIGNMENT LINE MAY VARY FROM ACTUAL PIPE ALIGNMENT.
- FOR LINES THAT WILL BE CIPP REHABILITATED, THE CONTRACTOR SHALL REPAIR PROTRUDING LATERALS PRIOR TO CIPP WORK WITH A ROBOTIC CUTTER, UNLESS THE LATERAL IS WITHIN A LOCALIZED REPAIR AREA. AFTER CIPP WORK, THE CONTRACTOR SHALL REINSTATE LATERALS WITH ROBOTIC EQUIPMENT.
- CONTRACTOR SHALL ARRANGE WITH UTILITY OWNER TO RELOCATE GAS SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES.
- CONTRACTOR SHALL RELOCATE WATER SERVICE LINES AS NEEDED TO AVOID CONFLICTS WITH REPLACED SANITARY SEWER LINES. WATER SHUTOFFS REQUIRE 48-HOUR NOTIFICATIONS TO AFFECTED RESIDENTS AND THE CITY OF BURLINGAME.
- REFER TO PIPE DEFLECTION DETAIL ON SHEET 17 FOR SEWER PIPES WITH HORIZONTAL CURVES.
- AT SOME LOCATIONS, SANITARY SEWER CLEANOUTS WERE FOUND BUT NO ASSOCIATED LATERAL CONNECTIONS WERE FOUND IN CCTV AT THIS LOCATION. CONTRACTOR TO VERIFY LOCATIONS OF ACTIVE LATERALS.



PROFILE

NEWTON DRIVE

HORIZONTAL SCALE: 1" = 40'

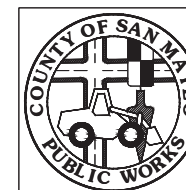
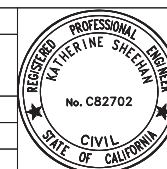
VERTICAL SCALE: 1" = 8'

APPROVED DATE: 8/11/2020

KATHERINE SHEEHAN

CSG CONSULTANTS, INC.

R.C.E. # 82702 / EXPIRES 09-30-2020



DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/L	NEWTON DRIVE PLAN AND PROFILE	FILE NO.: E5025
REVISION	DATE	
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS	555 COUNTY CENTER, 5th FLOOR	
SAN MATEO COUNTY	REDWOOD CITY, CALIFORNIA 94063	

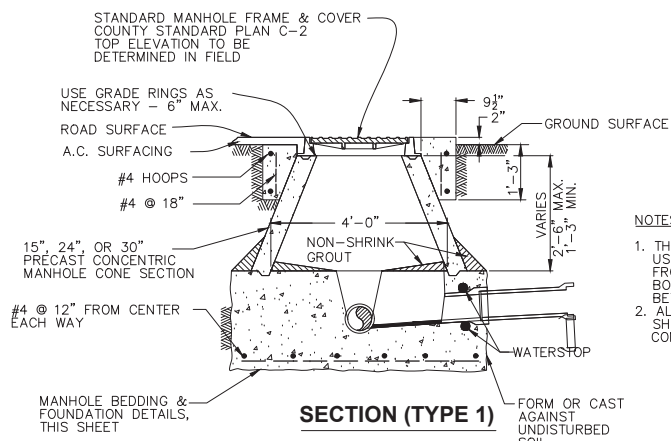
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

0 1 2 3 4

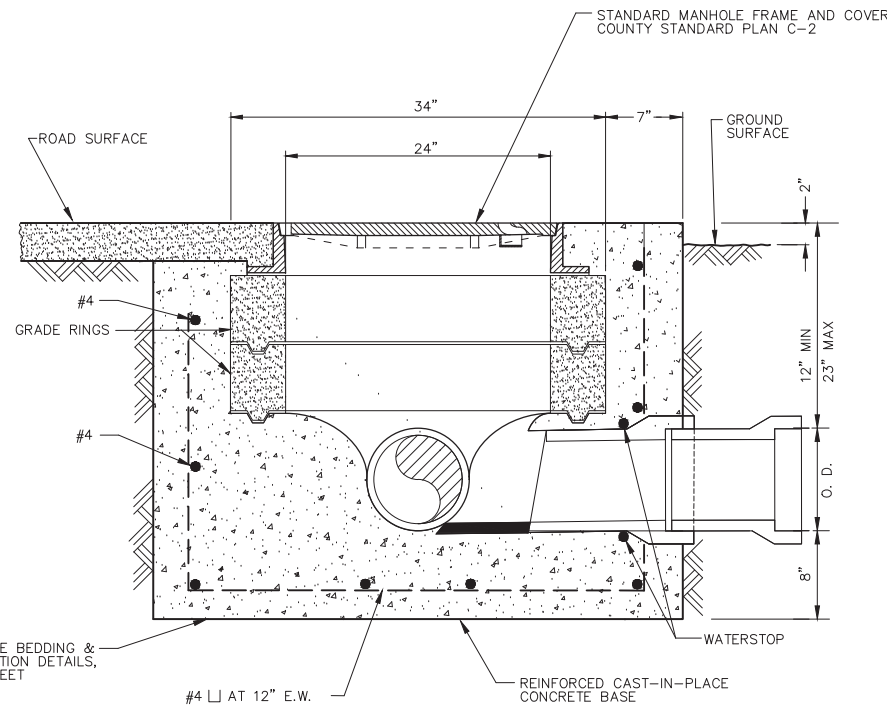
SHEET 15 OF 20



APPROVED: **8-14-2020**
DATE: **8-14-2020**
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021



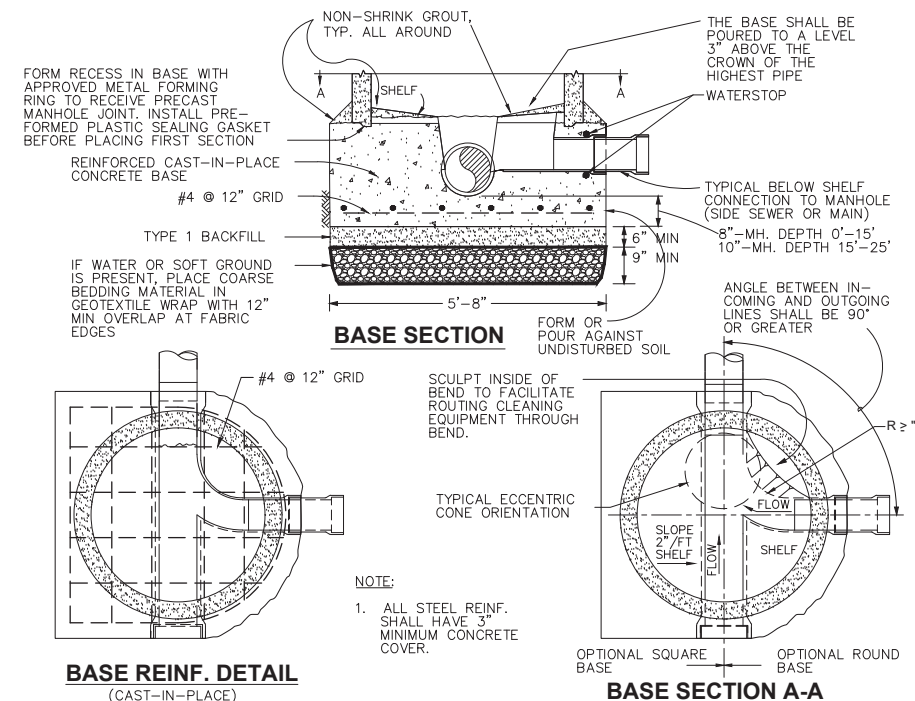
- NOTES:
1. THIS MANHOLE MAY BE USED WHERE DISTANCE FROM TOP OF BASE TO BOTTOM OF FRAME IS BETWEEN 15" AND 30".
 2. ALL STEEL REINFORCEMENT SHALL HAVE 3" MINIMUM CONCRETE COVER.



SECTION (TYPE 3)
FOR 6 & 8 INCH PIPE ONLY

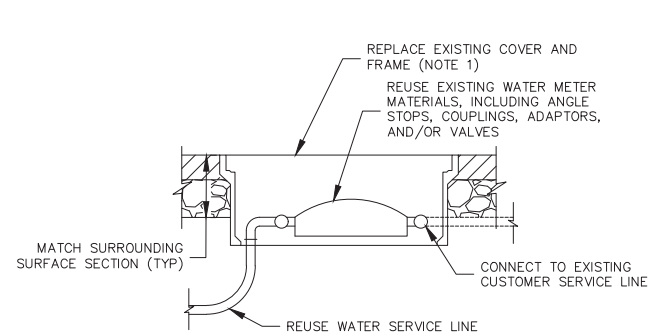
NOTES:

- A. DETAILS ARE ADAPTED FOR USE FROM THE CENTRAL CONTRA COSTA SANITARY DISTRICT STANDARD DRAWINGS.
- B. MANHOLE REMOVAL AND REPLACEMENT SHALL INCLUDE REPLACEMENT OF UP TO 5 FEET OF SEWER PIPE ON EITHER SIDE OF THE MANHOLE, AS MAY BE NEEDED TO CONNECT TO A PIPE SEGMENT WHICH IS FREE OF LARGE VOIDS OR MAJOR DEFECTS.



MANHOLE BEDDING AND FOUNDATION DETAILS
NOT TO SCALE

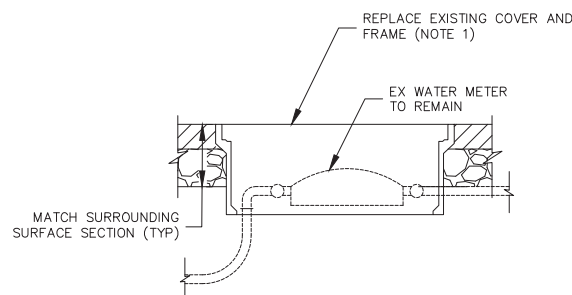
SHALLOW MANHOLE DETAILS
NOT TO SCALE



NOTES:

1. CONTRACTOR SHALL CONTACT THE CITY OF BURLINGAME CORPORATION YARD AT 650-558-7670 TO ARRANGE PICKUP OF THE BOXES AT LEAST 5 WORKING DAYS IN ADVANCE.
2. IF TEMPORARILY REMOVAL OF THE WATER METER IS NECESSARY IN ORDER TO COMPLETE THE WORK, THE CONTRACTOR SHALL COORDINATE WATER SHUTOFF WITH THE CITY OF BURLINGAME BEFORE REMOVING THE WATER METER. REMOVAL OF WATER METERS FOR THE CONTRACTOR'S CONVENIENCE WHICH IS NOT NECESSARY TO COMPLETE THE WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.
3. SALVAGE AND REUSE EXISTING MATERIALS. EXISTING MATERIALS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT NO EXPENSE TO THE COUNTY.
4. WATER SHUTOFFS REQUIRE 48 HOURS NOTICE TO THE RESIDENT AND CITY OF BURLINGAME.
5. FOR INFORMATION NOT SHOWN, REFER TO CITY OF BURLINGAME WATER SYSTEM STANDARD SPECIFICATIONS AND STANDARD DRAWINGS, DATED FEBRUARY 2020. THE CONTRACTOR'S ATTENTION IS DIRECTED TO DRAWING NO. W-1779, PERTAINING TO TYPICAL SERVICE CONNECTIONS.

RESET WATER METER
NOT TO SCALE



NOTES:

1. CONTRACTOR SHALL CONTACT THE CITY OF BURLINGAME CORPORATION YARD AT 650-558-7670 TO ARRANGE PICKUP OF THE BOXES AT LEAST 5 WORKING DAYS IN ADVANCE.
2. FOR INFORMATION NOT SHOWN, REFER TO CITY OF BURLINGAME WATER SYSTEM STANDARD SPECIFICATIONS AND STANDARD DRAWINGS, DATED FEBRUARY 2020.

RESET WATER METER BOX
NOT TO SCALE

APPROVED DATE: 8/11/2020	REGISTERED PROFESSIONAL ENGINEER KATHERINE SHEEHAN No. C82702 CIVIL STATE OF CALIFORNIA
KATHERINE SHEEHAN	
CSG CONSULTANTS, INC.	
R.C.E. # 82702 / EXPIRES 09-30-2020	

DESIGNED BY: KS/AS CHECKED BY: ES DRAWN BY: AS/JL	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	SCALE: AS SHOWN DATE: 08-11-20 FILE NO.: E5025
	JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION	DATE	
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		0 1 2 3 4
		SHEET 16 OF 20

FINAL BID PACKAGE

FILENAME: \\SERVER2\CSG\LOC\CLIENTS\DESIGN\19-403-HILLSIDE ADELINE AREA SS REHAB\2020-07-XX-FINAL\BID SET\E5025018.DWG (16-36x24 DETAILS)

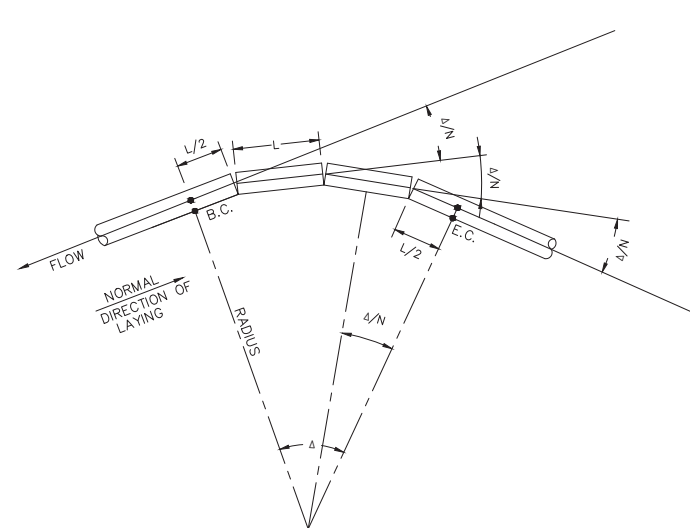
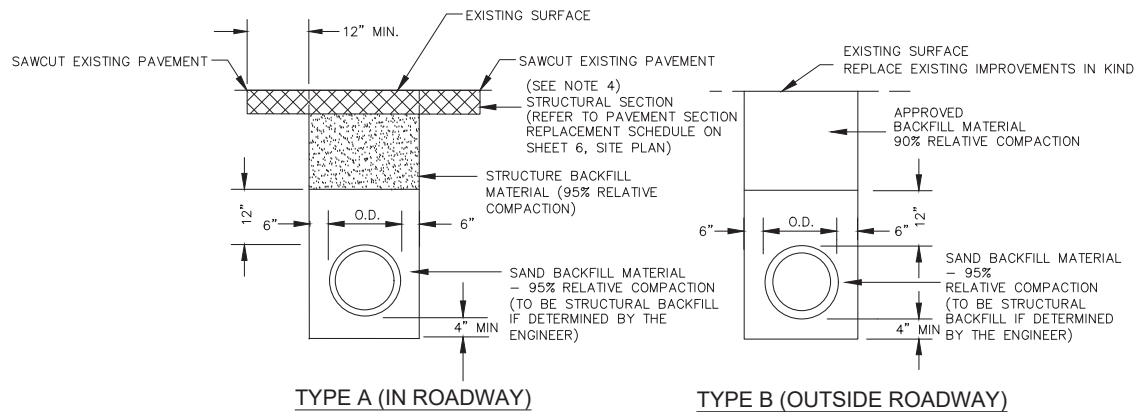


APPROVED:

DATE: 8-14-2020

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

LAYOUT OF CURVED ALIGNMENT USING STRAIGHT PIPE SEGMENTS WITH JOINT DEFLECTIONS OR FITTINGS



PLAN
(FITTINGS REMOVED FOR CLARITY)

THE LAYING LENGTH (L), RADIUS (R), AND INCLUDED ANGLE (Δ) ARE COMPUTED BY THE EQUATIONS:

$$L = 2 \times R \times \tan(\Delta/2N)$$
$$R = L / (2 \times \tan(\Delta/2N))$$
$$\Delta = 2 \times N \times \tan^{-1}(L/2R)$$

WHERE:

R = RADIUS OF CURVATURE, FEET
L = LAID LENGTH OF EACH PIPE SEGMENT MEASURED ALONG THE CENTERLINE, FEET
 Δ = TOTAL DEFLECTION ANGLE OF CURVE, DEGREES
N = NUMBER OF DEFLECTED JOINTS
 Δ/N = TOTAL DEFLECTION AT EACH JOINT, DEGREES

NOTE: "L" SHALL BE EQUAL TO OR GREATER THAN 2 FEET.

RADIUS OF HORIZONTAL CURVE	APPROACH
> 150 FEET	DEFLECTION OF PIPE JOINTS OR PIPE BENDING PER MANUFACTURER SPECIFICATIONS
< 150 FEET	CONTRACTOR MAY USE 3 DEGREE ANGLED FITTINGS

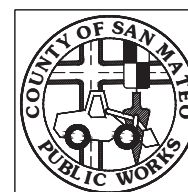
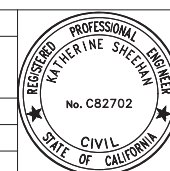
PIPE DEFLECTION DETAIL NOT TO SCALE

NOTES:

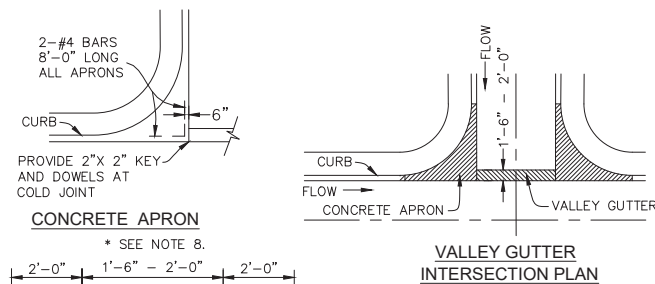
- DETAIL IS ADAPTED FOR USE FROM THE CENTRAL CONTRA COSTA SANITARY DISTRICT STANDARD DRAWINGS (DWG-45).
- FOR ADDITIONAL CALTRANS AND DISTRICT DETAILS NOT ENCLOSED HEREIN, REFER TO SHEET 1.

FINAL BID PACKAGE

APPROVED DATE: 8/11/2020
KATHERINE SHEEHAN
CSG CONSULTANTS, INC.
R.C.E. # 82702 / EXPIRES 09-30-2020

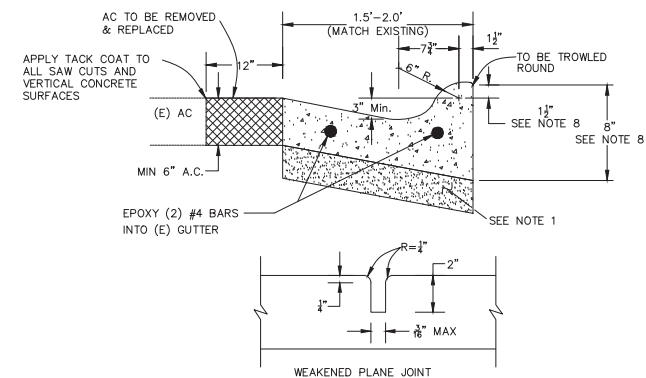


DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/L	CONSTRUCTION DETAILS	FILE NO.: E5025
REVISION	DATE	
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		0 1 2 3 4
		SHEET 17 OF 20



- CONCRETE APRON**
* SEE NOTE 8.
- CONCRETE VALLEY GUTTER AT STREET INTERSECTION**
* SEE NOTE 8.
- CONCRETE VALLEY GUTTER AT NON-STREET INTERSECTION LOCATIONS**
- NOTES:**
- OMIT GUTTER AROUND RETURN. SLOPE ALL PARTS OF APRON FROM CURB TO NEAREST FLOW LINE WITHIN LIMITS OF VALLEY GUTTER.
 - APRON TO BE 6" MIN. THICK CLASS 2 P.C.C. OVER MIN. 6" COMPACTED CLASS 2 AGGREGATE BASE.
 - REINFORCEMENT SHALL CONSIST OF 6"X 6"-#10/#10 WELDED WIRE FABRIC.
 - APRONS SHALL BE POURED MONOLITHIC WITH ADJACENT CURB AND GUTTER.
 - CONCRETE VALLEY GUTTER AND APRONS SHALL BE INSTALLED PRIOR TO PAVING.
 - PLACE 1/2" DIAMETER X 18" LONG SMOOTH DOWELS, AT EXPANSION JOINTS, AS SHOWN.
 - PLACE 1/4" THICK EXPANSION JOINTS FULL WIDTH 20" ON CENTER. DEEP SCORE AT 10' INTERVALS BETWEEN EXPANSION JOINTS.
 - WIDTH OF VALLEY GUTTER SHALL MATCH THE WIDTH OF THE EXISTING VALLEY GUTTER.

VALLEY GUTTER DETAILS NOT TO SCALE



NOTES:

- BASE THICKNESS SHALL BE 6" CLASS II A.B. COMPACTED TO 95% PER CALTRANS STANDARD SPECS OR AS DIRECTED BY THE CITY ENGINEER.
- EXPANSION JOINTS SHALL BE CONSTRUCTED AT ENDS OF CURB RETURNS, CURB INLETS, OTHER STRUCTURES AND AT 20' INTERVALS. EXPANSION JOINT MATERIAL SHALL CONSIST OF POLYSTYRENE JOINT FILLER WITH TYPE B JOINT SEAL OR APPROVED EQUIVALENT. JOINTS SHALL MATCH ADJACENT IMPROVEMENTS.
- WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 10' INTERVALS.
- DOWEL AND EPOXY TWO (2) #4 BARS 8" INTO NEW & EXISTING CONCRETE CURB AND GUTTER.
- TO UTILIZE PROPER FORMWORK, A 12" SAW-CUT IN THE EXISTING A.C. PAVEMENT (STREET SIDE) IS REQUIRED, UNLESS OTHERWISE DIRECTED BY THE PUBLIC WORKS INSPECTOR.
- FORMWORK SHALL CONSIST OF A 2x6 FORM FOR THE BACK OF CURB, AND A 2x6 FOR THE FACE OF CURB, UNLESS OTHERWISE DIRECTED BY THE PUBLIC WORKS INSPECTOR.
- PRIOR TO PLACEMENT OF THE CONCRETE, THE PUBLIC WORKS INSPECTOR REQUIRES AN INSPECTION OF THE FORMWORK. A FINAL INSPECTION IS REQUIRED ONCE CONCRETE HAS BEEN PLACED.
- FOR STREET GRADE GREATER THAN 8%, CURB HEIGHT SHALL BE 10". THE ADDITIONAL 2" IS ADDED TO THE 1-1/2" CURB DIMENSION.
- SLIP DOWELS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.

ROLLED CURB DETAIL NOT TO SCALE

NOTES:

- SAND - MATERIAL FREE FROM ORGANIC MATTER AND CLAY WITH A SIEVE GRADATION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVE
No. 4	100
No. 200	0-5

- STRUCTURE BACKFILL MATERIAL - MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVE
3"	100
No. 4	35-100
No. 30	20-100

- BACKFILL MATERIAL - MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES GREATEST DIMENSION, ORGANIC MATTER, OR OTHER UNSATISFACTORY MATERIAL. CONTROLLED LOW STRENGTH MATERIALS (CLSM) MAY BE USED AS APPROVED BY THE ENGINEER.
- ON TRENCHES THAT PARALLEL THE ROAD AND ARE WITHIN EXISTING BICYCLE LANES, THE WIDTH OF THE STRUCTURAL SECTION SHALL BE GREATER THAN OR EQUAL TO THE WIDTH OF THE EXISTING BICYCLE LANE, WHICHEVER IS WIDER. PAVING JOINTS WITHIN THE BICYCLE LANE ARE NOT ALLOWED.
- RECYCLED AB MAY BE USED PER CALTRANS STD. SPECS SECTION 25 AND SECTION 26, AS BACKFILL MATERIAL.
- SEE [HTTP://PUBLICWORKS.SMCGOV.ORG/SEWER-SERVICES](http://PUBLICWORKS.SMCGOV.ORG/SEWER-SERVICES) FOR STANDARD DETAILS.
- FOR PAVEMENT DRIVEWAYS, CONTRACTOR SHALL SALVAGE AND REPLACE EXISTING PAVERS IN KIND. ANY PAVERS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT HIS EXPENSE. REPLACEMENT PAVERS SHALL MATCH AS CLOSELY AS POSSIBLE THE EXISTING PAVERS.
- PIPE TRENCH SECTIONS THREE FEET (3') OR LESS FROM A CONCRETE CURB, GUTTER, OR VALLEY GUTTER SHALL INCLUDE THE REMOVAL AND RESTORATION OF THE THREE FEET (3') SEGMENT OF ASPHALT.
- THE COUNTY RESERVES THE RIGHT TO REQUIRE ADDITIONAL PAVING LIMITS BASED UPON THE ALIGNMENT OF THE TRENCH. PAVING LIMITS SHALL BE COORDINATED WITH THE ENGINEER.
- FOR CONCRETE DRIVEWAYS, CONTRACTOR SHALL SAWCUT CONCRETE TO NEAREST SCORELINE BEYOND THE TRENCH LIMITS AND REPLACE CONCRETE UP TO THAT SCORELINE, AS DIRECTED BY THE ENGINEER.

TRENCH BACKFILL AND BEDDING DETAILS FOR SEWER PIPE NOT TO SCALE

FILENAME: \\SERVER2\CSG\LOC\CLIENTS\DESIGN\19-403-HILLSIDE ADELINE AREA SS REHAB\2020-07-XX-FINAL\BID SET\E5025018.DWG (17- CONSTRUCTION DETAILS)



APPROVED:

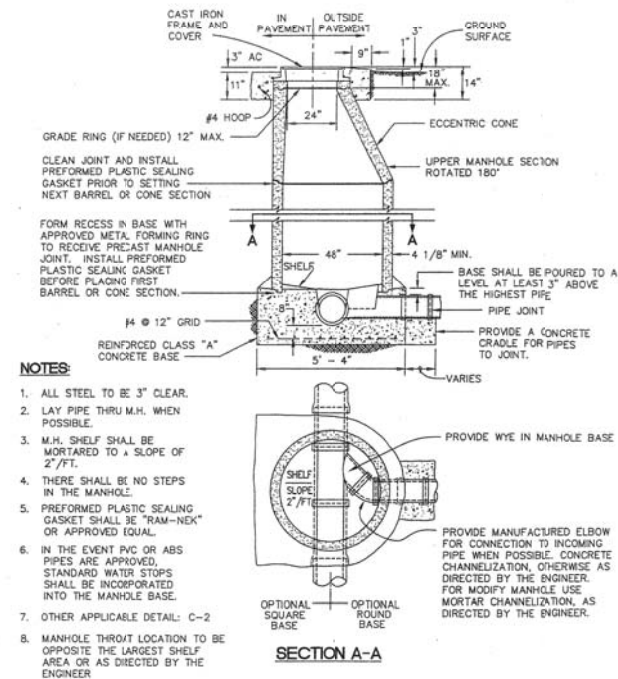
DATE: 8-14-2020

JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

SAN MATEO COUNTY DEPARTMENT
OF
PUBLIC WORKS
REDWOOD CITY
CALIFORNIA

DRAWN BY: J.P.
CHECK BY: R.O.
APPROVED BY: N.R.C.

SCALE: NONE
DATE: 6/95
REVISED: 7/97

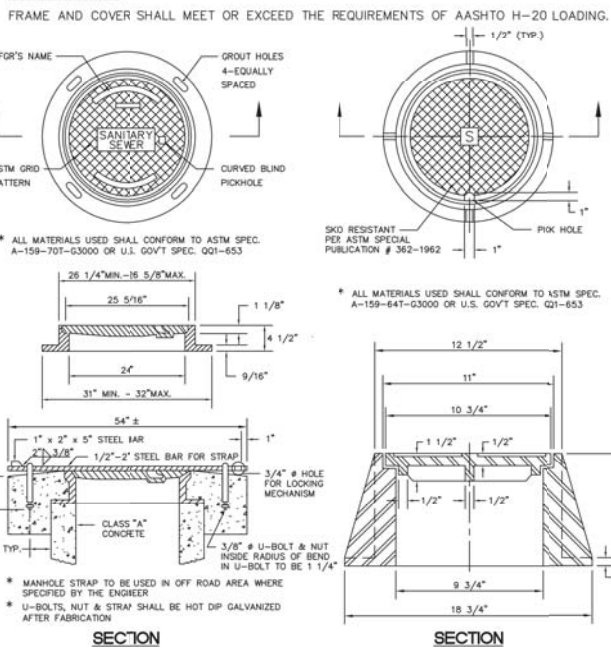
SECTION A-A
SANITARY SEWER MANHOLE DETAIL

C-1

SAN MATEO COUNTY DEPARTMENT
OF
PUBLIC WORKS
REDWOOD CITY
CALIFORNIA

DRAWN BY: M.L.
CHECK BY: R.O.
APPROVED BY: N.R.C.

SCALE: NONE
DATE: 6/95
REVISED: 7/97

SECTION
SANITARY SEWER
MANHOLE COVER FRAME
AND STRAP DETAIL

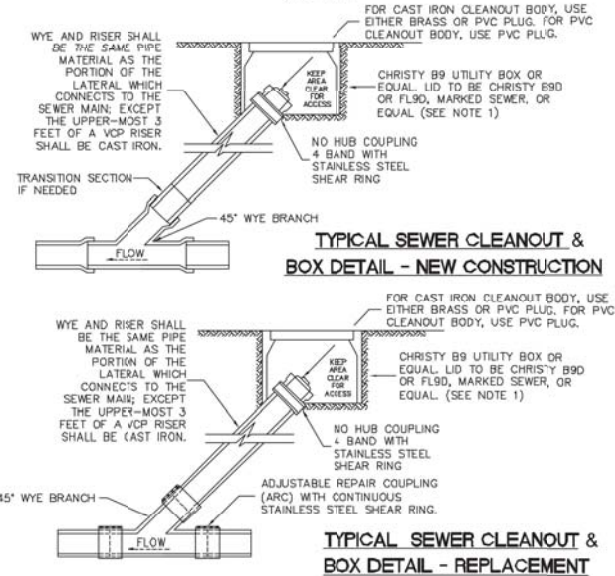
C-2

SECTION
SANITARY SEWER
FLUSHING INLET
COVER

SAN MATEO COUNTY DEPARTMENT
OF
PUBLIC WORKS
REDWOOD CITY
CALIFORNIA

DRAWN BY: N.M.
CHECK BY: A.M.S.
APPROVED BY: N.R.C.

SCALE: NONE
DATE: 8/06
REVISED: 8/06



NOTES:
1. WHEN BOX IS SUBJECT TO TRAFFIC LOADING, PROVIDE CAST IRON LID.
2. BOX TO BE PLACED SUCH THAT CLEANOUT CAP CAN BE EASILY REMOVED. SEE ILLUSTRATION.
3. PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING LATERAL FROM THE PROPERTY STRUCTURE TO DISTRICT MAIN. DISTRICT PROVIDES COURTESY SERVICE FROM DISTRICT STANDARD PROPERTY LINE CLEANOUT TO THE MAIN.
4. SDR-26 WYE, RISER, CLEANOUT BODY AND CAP CAN BE USED ONLY WHEN LATERAL FROM PROPERTY LINE TO MAIN LINE IS REPLACED WITH SDR-26.
5. WHEN ENTIRE LATERAL IS REPLACED, LATERAL FROM PROPERTY LINE CLEANOUT TO MAIN LINE SHALL HAVE A 14-1-UF QUAD MINIMUM SINGLE CONDUCTOR TRACER WIRE TAPED TO THE ENTIRE LENGTH OF THE PIPE.
CONSTRUCTION OF A STANDARD CLEANOUT REQUIRES MULTIPLE INSPECTIONS BY DISTRICT PERSONNEL:
1. FIRST INSPECTION - TO INSPECT WYE AND RISER. WYE AND RISER MUST BE EXPOSED.
2. SECOND INSPECTION - TO INSPECT PLACEMENT OF BOX, LID AND LOCATION OF CLEANOUT WITHIN BOX.

C-3

NOTES:

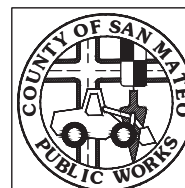
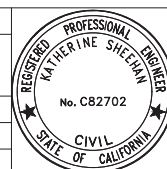
- FOR ADDITIONAL CALTRANS AND DISTRICT DETAILS NOT ENCLOSED HEREIN, REFER TO SHEET 1.
- SEE [HTTP://PUBLICWORKS.SMCGOV.ORG/SEWER-SERVICES](http://PUBLICWORKS.SMCGOV.ORG/SEWER-SERVICES) FOR DISTRICT STANDARD DETAILS.

FINAL BID PACKAGE

APPROVED DATE: 8/11/2020

KATHERINE SHEEHAN
CSG CONSULTANTS, INC.

R.C.E. # 82702 / EXPIRES 09-30-2020

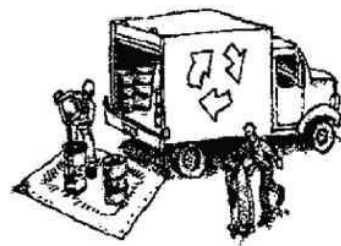


DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/JL	COUNTY STANDARD DETAILS	FILE NO.: E5025
REVISION	DATE	
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS	555 COUNTY CENTER, 5th FLOOR	
SAN MATEO COUNTY	REDWOOD CITY, CALIFORNIA 94063	
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		0 1 2 3 4
		SHEET 18 OF 20

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving



- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
 - Unusual soil conditions, discoloration, or odor.
 - Abandoned underground tanks.
 - Abandoned wells
 - Buried barrels, debris, or trash.

Paving/Asphalt Work



- ❑ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

- ❑ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application



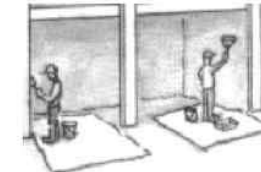
- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping



- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

Painting & Paint Removal



Painting Cleanup and Removal

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering




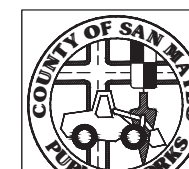
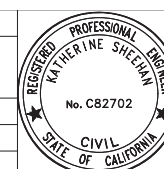
- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to \$10,000 per day!



APPROVED: 8-14-2020
DATE: 8-14-2020
JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS
R. C. E. # 48056 / EXPIRES 12-31-2021

APPROVED DATE: 8/11/2020

KATHERINE SHEEHAN
CSG CONSULTANTS, INC.
R.C.E. # 82702 / EXPIRES 09-30-2020



DESIGNED BY: KS/AS	BURLINGAME HILLS SEWER MAINTENANCE DISTRICT	SCALE: AS SHOWN
CHECKED BY: ES	HILLSIDE/ADELINE AREA SS REHABILITATION PROJECT	DATE: 08-11-20
DRAWN BY: AS/JL	CONSTRUCTION BMPs	FILE NO.: E5025
REVISION	DATE	JAMES C. PORTER, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
0 1 2 3 4		SHEET 20 OF 20