

TELEGRAPH CANYON RD SECANT WALL

MEDICAL CENTER DRIVE TO PASEO LADERA (CIP NO. DR199)



CONSTRUCTION NOTES:

- ALL WORK SHALL BE COMPLETED PER THESE PLANS AND APPROVED REVISIONS. ALL CHANGES OR REVISIONS THERETO MUST BE APPROVED BY THE CITY ENGINEER, IN WRITING, PRIOR TO ANY REQUEST FOR INSPECTION.
- ALL EXISTING UTILITIES AND STRUCTURES REPORTED BY OWNERS OR OTHERS, AND THOSE SHOWN ON RECORDS EXAMINED ARE INDICATED ON THE PLANS WITH THEIR APPROXIMATE LOCATIONS AND EXTENTS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED ON RECORD. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THOSE FACILITIES FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE FOLLOWING FACILITIES BEFORE STARTING WORK:

STREET LIGHTS, TRAFFIC SIGNALS	(CITY OF CHULA VISTA)	619-397-6163
STORM DRAINS, SEWER	(CITY OF CHULA VISTA)	619-397-6009
WATER	(SWEETWATER AUTHORITY)	619-409-6850
TELEPHONE	(AT&T)	619-266-4725
GAS & ELECTRIC	(SDG&E)	858-654-8339
CABLE T.V.	(COX COMMUNICATIONS - SAN DIEGO)	619-266-5220
	(NEX HORIZON - CHULA VISTA)	619-454-0268
	(NEXTG NETWORKS)	626-320-0996

IMPORTANT NOTICE

SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. TO OBTAIN A DIG ALERT IDENTIFICATION NUMBER, CALL UNDERGROUND SERVICE ALERT TOLL FREE 8-1-1 TWO WORKING DAYS BEFORE YOU DIG.

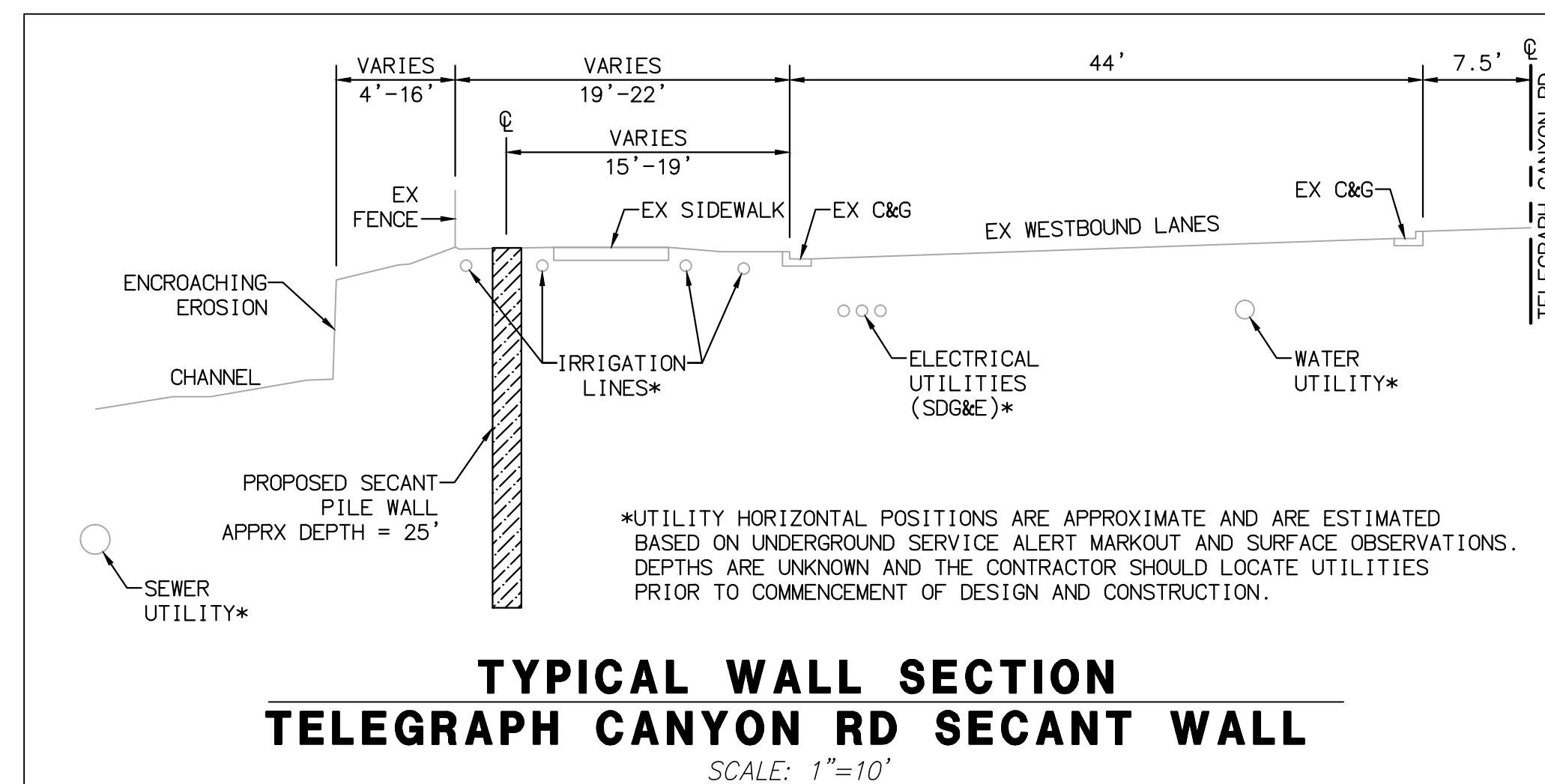
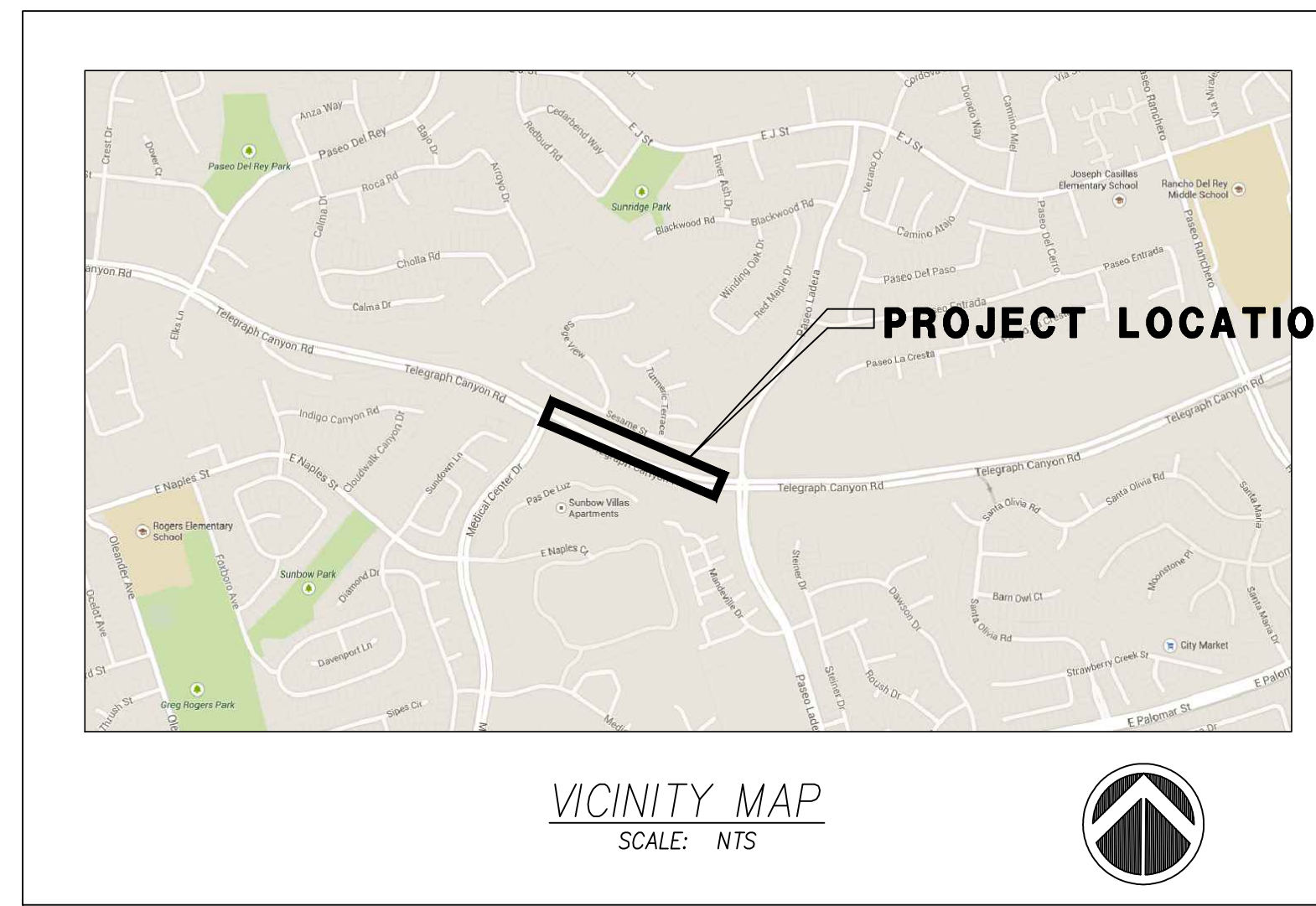
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INFORM THE OFFICE OF THE CITY ENGINEER TWO WORKING DAYS PRIOR TO STARTING WORK. THE CONTRACTOR SHALL GIVE 24 HOURS ADVANCE NOTICE ON ALL CALLS FOR INSPECTION. ANY WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL AT THE CONTRACTOR'S EXPENSE. FOR INSPECTION, CALL - - - - - 619-397-6128
- AS-BUILT DRAWINGS: A SET OF BLUELINE PRINTS AND A SET OF SPECIFICATIONS SHALL BE KEPT ON-SITE AT ALL TIMES ON WHICH ALL CHANGES OR VARIATIONS IN THE WORK, INCLUDING ALL UTILITIES FOUND, ARE TO BE RECORDED AND PLOTTED ACCURATELY BY THE CONTRACTOR.
- CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. THIS INCLUDES SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE CITY REPRESENTATIVES HARMLESS FROM ANY AND ALL LIABILITY, REAL AND/OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
- THE PERPETUATION OF EXISTING HORIZONTAL AND VERTICAL CONTROL AND PROPERTY MONUMENTS WILL BE DONE BY THE CITY SURVEYING GROUP UNLESS THERE IS A BID ITEM IN THE CONTRACT PROPOSAL FOR THE CONTRACTOR TO DO IT. ANY PROPERTY MONUMENTS DESTROYED BY THE CONTRACTOR'S NEGLIGENCE MUST BE REPLACED AT HIS/HER OWN EXPENSE. CITY BENCH MARKS AND INTERSECTION TIES WILL BE REFERENCED AND REPLACED BY THE CITY SURVEYING GROUP.
- CONSTRUCTION SURVEYING SHALL BE PROVIDED BY THE CITY. THE CONTRACTOR SHALL GIVE A MINIMUM OF 48 HOURS NOTICE FOR STAKING REQUESTS.
- THE LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS TO BE MET (OR AVOIDED) BY THE WORK TO BE DONE SHALL BE CONFIRMED BY THE CONTRACTOR'S FIELD MEASUREMENTS PRIOR TO THE CONSTRUCTION OF NEW WORK. THE CONTRACTOR SHALL REPORT TO THE OWNER ANY DISCREPANCIES BETWEEN THEIR MEASUREMENTS AND THESE PLANS.
- CONTRACTOR SHALL PROTECT IN PLACE ALL THOSE IMPROVEMENTS NOT SHOWN TO BE REMOVED, RELOCATED, ADJUSTED OR REPLACED.
- CONTRACTOR SHALL REPAIR ALL DESTROYED OR DAMAGED EXISTING SURFACE IMPROVEMENTS WITH IMPROVEMENTS EQUAL OR SUPERIOR.
- CONTRACTOR IS RESPONSIBLE FOR HAVING TRAFFIC CONTROL PLANS APPROVED BY THE CITY ENGINEER PRIOR TO COMMENCING ANY WORK IN THE PUBLIC RIGHT OF WAY.
- ACCESS TO FIRE HYDRANTS TO BE PROVIDED AND MAINTAINED AT ALL TIMES. HYDRANTS SHALL NOT BE OBSTRUCTED IN ANY MANNER.

PRE-CONSTRUCTION CONFERENCE

CONTRACTOR SHALL NOT BEGIN ANY WORK ON THIS PROJECT UNTIL A PRE-CONSTRUCTION CONFERENCE IS HELD WITH THE ENGINEER OF WORK, AND THE CITY PUBLIC WORKS INSPECTOR.

AS-BUILTS

CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK, AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL ACCORDING TO SECTION 15.04.140 OF THE CHULA VISTA MUNICIPAL CODE.



WORK TO BE DONE

- THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS AND THE FOLLOWINGS:
- 2012 CITY OF CHULA VISTA SUBDIVISION MANUAL
 - STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2006 EDITION ("GREENBOOK")
 - 2006 REGIONAL SUPPLEMENT TO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("REGIONAL SUPPLEMENT")
 - SAN DIEGO REGIONAL STANDARD DRAWINGS ("SDRSD"), DATED SEPTEMBER 2012
 - CITY OF CHULA VISTA STANDARD SPECIAL PROVISIONS (CV SPECIAL PROVISIONS), DATED OCTOBER 2008
 - CITY OF CHULA VISTA DEPARTMENT OF PUBLIC WORKS DESIGN AND CONSTRUCTION STANDARDS ("CVDS") & ("CVCS"), 2002 EDITION
 - CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS 2010 ("CALTRANS STANDARD PLANS")
 - CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS 2010 ("CALTRANS STANDARD SPECIFICATIONS")
 - 2012 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ("MUTCD")

BASIS OF COORDINATES

THE BASIS OF COORDINATES FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM NAD83, ZONE 6, (EPOCH 1991.35) BASED LOCALLY ON THE FOLLOWING CONTROL STATIONS PER THE CITY OF CHULA VISTA SURVEY CONTROL NETWORK.

STATION	NORTHING (ft.) GRID	EASTING (ft.) GRID
5101	1807644.479	6326693.872
5099	1809029.784	6329422.557

QUOTED BEARINGS FROM REFERENCE MAPS OR DEEDS MAY OR MAY NOT BE IN TERMS OF SAID SYSTEM. DISTANCES SHOWN HEREON ARE GROUND, EXCEPT WHERE NOTED AND ARE IN TERMS OF THE U.S. SURVEY FOOT.

GRID DISTANCE = GROUND DISTANCE X COMBINED SCALE FACTOR (1.0000221477)

BENCHMARK

THE BASIS OF ELEVATIONS FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) PER THE CITY OF CHULA VISTA SURVEY CONTROL NETWORK. POINT NUMBER 521 - 1 1/2" BRASS DISC LOCATED AT THE SOUTHEAST CORNER OF TELEGRAPH CANYON ROAD AND MEDICAL CENTER DRIVE ON THE WEST END OF A CURB INLET. ELEVATION: 274.33 (ft.)

LEGEND

- WATER METER
- WATER VALVE
- AIR RELEASE VALVE
- IRRIGATION CONTROL VALVE
- IRRIGATION CONTROL BOX
- STORM DRAIN MANHOLE
- UTILITY MANHOLE
- ELECTRIC PULL BOX
- TRAFFIC PULL BOX
- SIGN
- POST
- WOOD FENCE
- TREE
- SECANT WALL
- RIGHT-OF-WAY

SHEET INDEX	
SHEET NO.	TITLE OF SHEET
1.	TITLE SHEET
2.	GENERAL NOTES
3.	WALL PLAN & PROFILE
4.	WALL PLAN & PROFILE
5.	STRUCTURAL WALL DESIGN
6.	STRUCTURAL WALL DESIGN
7.	STRUCTURAL WALL DESIGN
8.	STRUCTURAL WALL DESIGN
9.	STRUCTURAL WALL DESIGN
10.	STRUCTURAL WALL DESIGN

AS-BUILT CERTIFICATE

ENGINEER OF WORK
I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE IMPROVEMENTS SHOWN ON THIS SET OF PLANS (SHEET 01 THROUGH ##) HAVE BEEN INSTALLED AND CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE SAID PLANS, ALL APPROPRIATE STANDARDS AND ANY DISCRETIONARY APPROVAL(S) FOR THE PROJECT.

SIGNED: _____ DATE: _____
PRINTED NAME: _____ R.C.E. NO.: _____
DISCIPLINE: _____ MY REGISTRATION EXPIRATION: _____

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

CITY OF CHULA VISTA
276 FOURTH AVENUE
CHULA VISTA, CALIFORNIA 91910

BY: _____ DATE: _____
(engineer, RCE No. & Exp.)



ENGINEER OF WORK:



6050 AVENIDA ENINAS, SUITE 260
CARLSBAD, CALIFORNIA 92008-4386
760.478.9193 • FAX 760.478.9198 • www.RBF.com

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

TOTAL SHEETS: 10

CONSTRUCTION RECORD		REFERENCES	BY	REVISIONS	DATE	APP'D	DATUMS	SCALE	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	APPROVED BY:	DATE:	CITY OF CHULA VISTA DEPARTMENT OF PUBLIC WORKS	DRAWING NO.
CONTRACTOR:	OWG. NO.:						VERTICAL DATUM: NAVD88	HORIZONTAL 1" = 20'	SB	SB					PLANS FOR THE IMPROVEMENT OF:	14051-01
INSPECTOR:							HORIZONTAL DATUM: CCS '83 ZONE 6, EPOCH 1991.35	VERTICAL	RESPONSIBLE CHARGE OF WORK:	DATE: 12/17/14					TELEGRAPH CANYON RD SECANT WALL	CIP # DR-199
DATE COMPLETED:									TIMOTHY THIELE	RCE NO.: 60283	(senior engineer), P.E. - SENIOR CIVIL ENGINEER		(principal), P.E. - PRINCIPAL CIVIL ENGINEER		MEDICAL CENTER DRIVE TO PASEO LADERA	

GENERAL NOTES:

- ALL UNDERGROUND UTILITIES AND LATERALS TO BE INSTALLED BEFORE CONSTRUCTION OF CURB, SIDEWALK, OR SURFACING OF STREETS.
- SIDEWALK IS TO BE SIX INCHES THICK THROUGH ALL DRIVEWAYS.
- ALL WORK SHALL BE COMPLETED PER THESE PLANS AND APPROVED REVISIONS. ALL CHANGES OR REVISIONS THERE TO, MUST BE APPROVED BY THE CITY ENGINEER, IN WRITING, PRIOR TO ANY REQUEST FOR INSPECTION.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN HEREON, HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UNDERGROUND SERVICE ALERT (PHONE 1-800-422-4133) TWO (2) WORKING DAYS IN ADVANCE OF ANY EXCAVATION OF COMMENCEMENT OF WORK. FOR ANY QUESTIONS REGARDING THE MARK OUT OF UNDERGROUND UTILITIES, THE CONTRACTOR SHOULD CONTACT THE RESPECTIVE UTILITY COMPANY:

STREET LIGHT OR SIGNAL LIGHT CONDUIT	CITY OF CHULA VISTA	(619)397-6163
SEWER OR STORM DRAIN	CITY OF CHULA VISTA	
	VERIFICATION	(619)691-5024
	NOTIFICATION	(619)397-6000
GAS AND ELECTRIC	SAN DIEGO GAS & ELECTRIC	(619)230-7800
WATER	OTAY WATER DISTRICT	(619)670-2222
	SAN DIEGO COUNTY WATER AUTHORITY	(858)522-6900
TELEPHONE	PACIFIC BELL	(619)266-4683
TELEVISION	COX CABLE OF SAN DIEGO	(619)263-9251
TELEVISION	ULTRONICS	(619)476-0177
- CITY OF CHULA VISTA INSPECTION NOTICE:
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE CITY ENGINEER 2 WORKING DAYS IN ADVANCE OF COMMENCEMENT OF WORK. PHONE: (619)397-6128.
 - THE CONTRACTOR SHALL GIVE 24 HOURS NOTICE (ONE WORKING DAY) NOTICE ON ALL CALLS FOR INSPECTION, PHONE: (619)397-6128.
 - ANY WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL AT CONTRACTOR'S EXPENSE.
 - IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND WORK PRIOR TO THE EXCAVATION FOR INSTALLATION OF NEW UNDERGROUND WORK.
- STREET LIGHT NOTE: THE STREET LIGHTS AND SERVICE POINTS SHOWN HEREON ARE APPROXIMATE ONLY. SERVICE POINTS ARE SUBJECT TO REVISION BY SAN DIEGO GAS AND ELECTRIC COMPANY FINAL PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE PROPER SERVICES TO THE STREET LIGHTS SHOWN ON THE PLAN ACCORDING TO ALL THE APPLICABLE CITY OF CHULA VISTA PLANS AND SPECIFICATIONS. THE DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING CONDUIT AND CONDUCTORS FROM STREET LIGHTS TO APPROVED SERVICE POINTS FURNISHED BY THE SAN DIEGO GAS AND ELECTRIC COMPANY. CONDUIT RUNS AND CONDUCTOR SIZE FROM STREET LIGHTS TO SERVICE POINTS SHALL BE SHOWN ON THESE PLANS AND APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION. STREET LIGHTING CONDUIT SHALL BE 1 1/2" MIN. PVC (SCHEDULE 80). FINAL LOCATION AND SIZE OF STREET LIGHTS, CONDUIT, WIRE AND PULL BOXES SHALL BE APPROVED PRIOR TO BEGINNING OF CONSTRUCTION.
- NEITHER THE OWNER NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS DURING CONSTRUCTION OPERATIONS.
- LOCATION AND TYPE OF STREET TREES FOR EACH LOT TO BE DETERMINED BY THE GENERAL SERVICES AND PUBLIC WORKS OPERATIONS DEPARTMENTS - STREET OPERATIONS.
- MAXIMUM DISTANCE BETWEEN PULL BOXES IS 190 FEET.
- ALL UTILITIES SHALL HAVE A MINIMUM OF 90% RELATIVE COMPACTION IN ALL TRENCH BACKFILL.
- THE CONTRACTOR SHALL BE RESPONSIBLE THAT ANY MONUMENT OR BENCH MARK WHICH IS DISTURBED OR DESTROYED SHALL BE RE-ESTABLISHED AND REPLACED BY A REGISTERED CIVIL ENGINEER WHO IS ALLOWED TO PRACTICE SURVEYING OR A LICENSED LAND SURVEYOR AND A CORNER RECORD, RECORD OF SURVEY, OR CERTIFICATE OF CORRECTION FILED AS REQUIRED BY THE LAND SURVEYOR'S ACT.
- AS-BUILT DRAWINGS: A SET OF BLUELINE PRINTS AND A SET OF SPECIFICATIONS SHALL BE KEPT AT ALL TIMES ON WHICH ALL CHANGES OR VARIATIONS IN THE WORK, INCLUDING ALL UTILITIES, ARE TO BE RECORDED.
- CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL.
- THE OWNER MUST OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (D.O.S.H.) PRIOR TO THE START OF CONSTRUCTION.
- ALL STORM DRAIN PIPE SHALL BE 1500 D-LOAD UNLESS OTHERWISE SHOWN ON THESE PLANS.
- DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL COMPLY WITH THE LOCAL DUST CONTROL AND UNIFORM BUILDING CODE (UBC) REQUIREMENTS WHICH INCLUDE DUST CONTROL MEASURES FOR CONSTRUCTION SITES. DUST REDUCING MEASURES SHALL INCLUDE REGULAR WATERING OF GRADED SURFACES AND RESTRICTION OF ALL CONSTRUCTION VEHICLES AND EQUIPMENT TO TRAVEL ALONG ESTABLISHED AND REGULARLY WATERED ROADWAYS.

GRADING NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE APPROVED PLANS AND APPROVED REVISIONS. ANY CHANGES OR REVISIONS THEREFROM SHALL BE APPROVED BY THE CITY ENGINEER AND MITIGATION MONITOR PRIOR TO ANY REQUEST FOR INSPECTION.
- ALL GRADING SHALL BE INSPECTED AND TESTED BY OR UNDER THE DIRECTION OF A QUALIFIED SOILS ENGINEER. THE SOILS ENGINEER SHALL INSPECT THE EXCAVATION, AND SHALL OBSERVE AND TEST THE PLACEMENT AND COMPACTION OF FILL AND BACKFILL AND COMPACTION OF TRENCHES; SUBMIT GEOTECHNICAL OR SOILS REPORTS AS REQUIRED AND DETERMINE THE SUITABILITY OF ANY FILL MATERIAL UPON COMPLETION OF GRADING OPERATIONS. THE SOILS ENGINEER SHALL STATE THAT OBSERVATIONS AND TESTS WERE MADE BY, OR UNDER DIRECTION OF THE SOILS ENGINEER, AND THAT EMBANKMENTS AND EXCAVATIONS WERE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL ASPECTS OF THE APPROVED GRADING PLANS, ANY APPROVED REVISIONS THERE TO, SUBJECT LAND DEVELOPMENT PERMIT AND ORDINANCE NO. 1797 AS AMENDED, AND THAT ALL EMBANKMENTS AND EXCAVATIONS ARE ACCEPTABLE FOR THEIR INTENDED USE.
- THE CONTRACTOR SHALL PROPERLY GRADE ALL EXCAVATED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. CONTRACTOR SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISHED WORK ON THE SITE, AND SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED TO THE SATISFACTION OF THE CITY ENGINEER AND THE MITIGATION MONITOR.
- ALL AREAS TO BE FILLED SHALL BE PREPARED PRIOR TO FILLING, AND FILL SHALL BE PLACED IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN THE SOILS REPORT. ALL VEGETABLE MATTER AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED, BY THE CONTRACTOR, FROM THE SURFACE UPON WHICH THE FILL IS TO BE PLACED. LOOSE FILL AND UNSUITABLE SOILS SHALL BE REMOVED TO SUITABLE FIRM NATURAL GROUND. THE EXPOSED SOILS SHALL BE SCARIFIED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND THEN COMPACTED TO A MINIMUM OF 90% OF ASTM-D1557. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, WATER AND COMPACT THE FILL IN STRICT ACCORDANCE WITH THE SPECIFICATIONS.
- CUT AND FILL SLOPES SHALL BE CUT AND TRIMMED TO THE FINISHED GRADE TO PRODUCE SMOOTH SURFACES AND UNIFORM CROSS SECTIONS. THE SLOPES OF EXCAVATIONS AND EMBANKMENTS SHALL BE SHAPED, TRIMMED, AND PLANTED IN ACCORDANCE WITH THE PLANTING NOTES AND AS DIRECTED BY THE ENGINEER OF WORK, AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS AND OTHER WASTE MATERIALS EXPOSED ON THE EXCAVATION OR EMBANKMENT SLOPES WHICH ARE LIABLE TO BECOME LOOSE, SHALL BE REMOVED AND DISPOSED OF. THE TOE AND TOP OF ALL SLOPES SHALL BE ROUNDED IN ACCORDANCE WITH ORDINANCE NO. 1797, THESE GRADING PLANS, AND THE STANDARD DRAWINGS CVDS 26 AND 27. SLOPE SETBACKS AND GRADES SHALL CONFORM TO CVDS 25.
- IF THERE ARE EROSION SCARS ON EXISTING SLOPES WHICH OTHERWISE WOULD NOT BE ELIMINATED BY THE PROPOSED GRADING, THESE SCARS ARE TO BE ELIMINATED BY TRIMMING, FINE GRADING AND PLANTING. IF THE SCARS ARE IN AREAS OF NATIVE VEGETATION, THE REPAIRS SHOULD BE PERFORMED WITH AN EFFORT TO AVOID OR MINIMIZE IMPACTS TO NATIVE VEGETATION. ALL SUCH REPAIRS IN AREAS OF NATIVE VEGETATION SHALL BE REVIEWED AND APPROVED BY THE CITY'S MITIGATION MONITORING COORDINATOR PRIOR TO THE BEGINNING OF THE REPAIR WORK.
- ALL TREES, BRUSH, GRASS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE COLLECTED, PILED OR OTHERWISE DISPOSED OF OFF THE SITE BY THE CONTRACTOR SO AS TO LEAVE THE AREAS THAT HAVE BEEN CLEARED WITH A NEAT AND FINISHED APPEARANCE FREE FROM UNSIGHTLY DEBRIS. APPROVAL OF LOCATIONS FOR DEBRIS FILL SHALL BE OBTAINED FROM THE SOILS ENGINEER PRIOR TO THE DISPOSAL OF ANY SUCH MATERIAL.
- SUBDRAIN LOCATIONS SHOWN ARE APPROXIMATE AND ARE RECOMMENDED FOR ALL SIGNIFICANT FILL CANYONS. THE ACTUAL LOCATION AND EXTENT OF SUBDRAINS SHALL BE DETERMINED BY THE GEOTECHNICAL CONSULTANT AT THE TIME OF CONSTRUCTION.
- BY REFERENCE HERE, THE REPORT (TITLE OF GEOTECHNICAL REPORT) PREPARED BY (GEOTECHNICAL CONSULTANT) ON (DATE) IS INCLUDED AS PART OF THESE PLANS.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES. LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND SHOWN FOR GENERAL INFORMATION ONLY.
- WHERE GRADING DOES NOT OCCUR, ALL EXISTING PLANT MATERIAL IS TO BE PROTECTED IN PLACE. NO CONSTRUCTION EQUIPMENT WILL BE ALLOWED TO TRAVEL THROUGH AND DAMAGE ANY OF THESE AREAS. ALL AREAS TO BE RETAINED IN A NATURAL CONDITION SHALL BE FENCED UNDER THE DIRECTION OF THE PROJECT BIOLOGIST. CONTRACTOR WILL BE RESPONSIBLE TO REPAIR ANY AND ALL DAMAGE/IMPACTS TO THESE AREAS.
- THE CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS AND GRADING SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL IN ACCORDANCE WITH SECTION 15.04.140 OF THE CHULA VISTA MUNICIPAL CODE.
- IN THE CASE OF CONFLICTS, THE REQUIREMENTS OF THE EARTHWORK, SPECIFICATIONS PREPARED FOR THE PROJECT BY THE SOILS ENGINEER SHALL GOVERN THE REQUIREMENTS OF THIS PLAN AND THESE NOTES AND THESE PLANS SHALL BE REVISED ACCORDINGLY.

LANDSCAPING NOTES

- ALL SLOPES SHALL BE PLANTED AND IRRIGATED IN ACCORDANCE WITH PLANS APPROVED BY THE CITY OF CHULA VISTA DIRECTOR OF PARKS AND RECREATION AND CITY ENGINEER. PLANS SHALL CONFORM TO THE CITY OF CHULA VISTA LANDSCAPE MANUAL AND ORDINANCE NO. 1797, BOTH AS AMENDED.
- FINISH GRADING AND PLANTING SHALL BE ACCOMPLISHED ON ALL SLOPES PRIOR TO OCTOBER 1 OR IMMEDIATELY UPON COMPLETION OF ANY SLOPES GRADED BETWEEN OCTOBER 1 AND APRIL 1. PADS OR OTHER RELATIVELY LEVEL AREAS SHALL BE PLANTED AS DIRECTED BY THE CITY'S DIRECTOR OF PARKS AND RECREATION.
- PRIOR TO GRADING, CONTRACTOR SHALL FIELD VERIFY EXISTING IRRIGATION SYSTEMS TO DETERMINE WHICH ARE OPERABLE. UNLESS OTHERWISE NOTED ON THESE PLANS, ALL EXISTING IRRIGATION SYSTEMS ARE TO BE PROTECTED IN PLACE AND REMAIN OPERABLE. PARKS AND RECREATION DEPARTMENT (LANDSCAPING COORDINATION NAME AND PHONE NO., PER SEC. 5-300).

PUBLIC IMPROVEMENT AND GRADING PLAN MONUMENTATION NOTE

THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK OR PROPOSED IMPROVEMENTS; AND IF DESTROYED, A LAND SURVEYOR, OR A CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING SHALL REPLACE SUCH MONUMENTS WITH THE APPROPRIATE MONUMENTS. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE CITY OF CHULA VISTA FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST THREE (3) DAYS PRIOR TO THE CONSTRUCTION. THE DEVELOPER/CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.

DIG ALERT NOTICE

SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES THAT DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 AT LEAST TWO WORKING DAYS BEFORE YOU DIG.

PAVING NOTE:

THE OFFICE OF THE CITY ENGINEER SHALL DESIGN ALL STRUCTURAL STREET SECTIONS BASED ON THE "R" VALUE METHOD SPECIFIED BY THE CITY ENGINEER. THE SOIL TEST SHALL BE PERFORMED BY A REGISTERED CIVIL ENGINEER WHOSE PRIMARY PROFESSIONAL ACTIVITY IS PERFORMING SUCH TESTS. TEST RESULTS SHALL BE PROVIDED TO THE CITY BY THE SUBDIVIDER IN THE NUMBER AND AT SUCH LOCATIONS AND TIMES AS DETERMINED BY THE CITY ENGINEER. WHERE HEAVY GRADING IS PROPOSED, GATHERING OF SAMPLES SHALL BE DELAYED UNTIL ROUGH SUBGRADE IS MADE. MINIMUM BASE THICKNESS ON ALL STREET CLASSIFICATIONS SHALL BE PER SECTION 3-405.3 OF THE SUBDIVISION MANUAL. BASE MATERIAL SHALL CONFORM TO CRUSHED AGGREGATE BASE, 3/4 INCH MAXIMUM, OR APPROVED ALTERNATIVE, AS SET FORTH IN THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 200-2.2 1997 EDITION. ALL ASPHALT CONCRETE SURFACES SHALL BE SEAL COATED IN ACCORDANCE WITH SECTION 302.5.10 OF THE REGIONAL STANDARD SPECIAL PROVISIONS.

EROSION CONTROL NOTES

PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, TEMPORARY EROSION CONTROL SHALL BE PERFORMED AND INSTALLED BY THE CONTRACTOR AS INDICATED BELOW:

- THE EROSION CONTROL CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION AND MODIFICATION OF THE EROSION CONTROL DEVICES DURING THE RAINY SEASON. THE CONTRACTOR, PERMITTEE OR OWNER SHALL BE RESPONSIBLE FOR THE CONTINUAL MAINTENANCE OF THE EROSION CONTROL DEVICES DURING THE RAINY SEASON. IN THE EVENT OF FAILURE OR REFUSAL TO PROPERLY MAINTAIN SAID DEVICES, THE CITY ENGINEER OR MITIGATION MONITOR MAY CAUSE EMERGENCY MAINTENANCE WORK TO BE DONE TO PROTECT ADJACENT PRIVATE AND PUBLIC PROPERTY, THE COST (INCLUDING AN INITIAL MOBILIZATION AMOUNT) OF WHICH SHALL BE CHARGED TO THE OWNER.
- SEDIMENTATION BASINS MAY NOT BE REMOVED OR MADE INOPERATIVE WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND MITIGATION MONITOR.
- TEMPORARY EROSION CONTROL DEVICES, WHICH INTERFERE WITH THE WORK, SHALL BE RELOCATED OR MODIFIED AS THE WORK PROGRESSES, AS RECOMMENDED BY THE ENGINEER OF WORK AND AS APPROVED BY THE CITY ENGINEER AND MITIGATION MONITOR.
- ALL REMOVABLE PROTECTION DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT. AFTER EACH RAINSTORM EXCEEDING 1/4 INCH IN A 12-HOUR PERIOD, SILT AND DEBRIS SHALL BE REMOVED FROM CHECK DAMS AND DESILTING BASINS AND BASINS SHALL BE PUMPED DRY AS DEEMED NECESSARY BY THE CITY ENGINEER AND MITIGATION MONITOR.
- EFFECTIVE PLANTING SHALL BE INSTALLED, FULLY GERMINATED, AND SHALL EFFECTIVELY COVER THE REQUIRED SLOPES PRIOR TO FINAL APPROVAL. THE PLANTING MIX SHALL BE APPROVED BY THE DIRECTOR OF PARKS AND RECREATION, PRIOR TO INSTALLATION. SPRINKLER SYSTEMS ARE REQUIRED ON ALL SLOPES OVER FIVE FEET IN HEIGHT.
- A 12 INCH HIGH BY 3 FEET WIDE BERM SHALL BE MAINTAINED ALONG THE TOP OF THE SLOPE OF THOSE FILLS ON WHICH GRADING IS NOT IN PROGRESS. CONCENTRATED WATER SHALL NOT BE CARRIED CLOSER THAN 10 FEET FROM THE TOP OF SLOPES.
- SILT BASINS, TRAPS, OR SANDBAGS SHALL BE PROVIDED AT EVERY STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM.
- FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPE, THE CONTRACTOR SHALL INSURE THAT WATER DRAINING TO THE SUMPS IS DIRECTED INTO THE INLET, AND THAT A MINIMUM OF 1.00' FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. SANDBAGS OR DIKES.
- THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL CHECK AND MAINTAIN LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
- THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH RAINFALL EXCEEDING 1/4" IN A 12-HOUR PERIOD AND WHEN SILT REACHES A DEPTH OF 1.0'
- EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
- DEVICES SHOWN ON THESE PLANS SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE PUBLIC WORKS INSPECTOR AND MITIGATION MONITOR.
- THE CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AND MITIGATION MONITOR AFTER EACH RAINFALL WHICH PRODUCES RUNOFF.
- THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEER OR MITIGATION MONITOR DUE TO INCOMPLETE GRADING OPERATIONS OR UNFORSEEN CIRCUMSTANCE WHICH MAY ARISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
- ALL EROSION CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON.
- GRADED AREA AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY.
- IN CASE EMERGENCY WORK IS REQUIRED, CONTACT (DEVELOPER'S NAME & PHONE NO.)
- THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT PROPERTY FROM ANY EROSION AND SILTATION THAT MAY RESULT FROM GRADING OPERATIONS BY APPROPRIATE MEANS (SANDBAGS, HAY BALES, TEMPORARY DESILTING BASINS, SILT FENCES, DIKES, SHORING, ETC.) UNTIL SUCH TIME THAT THE TOTAL PROJECT IS COMPLETED AND ACCEPTED FOR MAINTENANCE BY OWNER.

AS-BUILT

UTILITY NOTE

SIGNED: _____ DATE: _____
 PRINTED NAME: _____ R.C.E. NO.: _____
 DISCIPLINE: _____ MY REGISTRATION EXPIRATION: _____

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ENGINEER OF WORK:

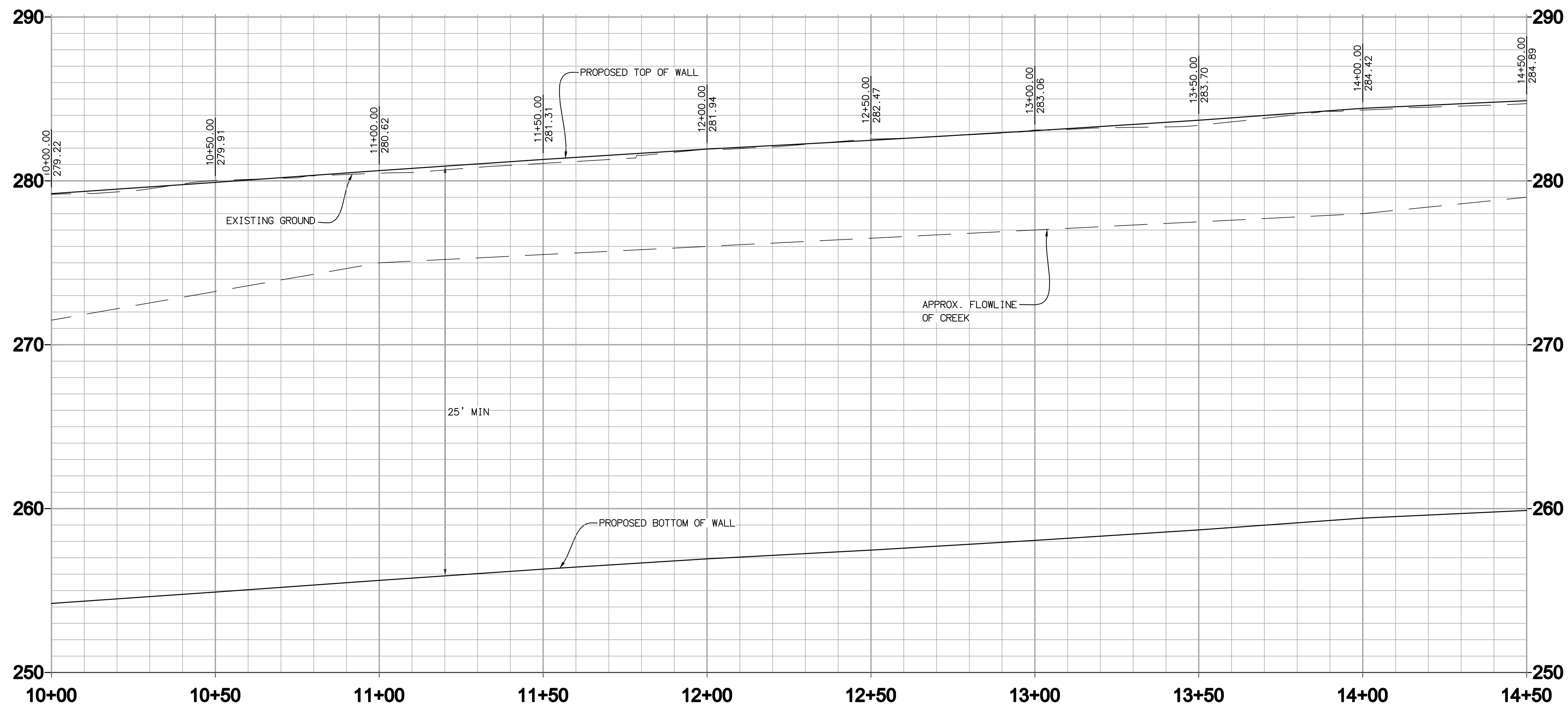


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PRELIMINARY DESIGN
 NOT FOR CONSTRUCTION

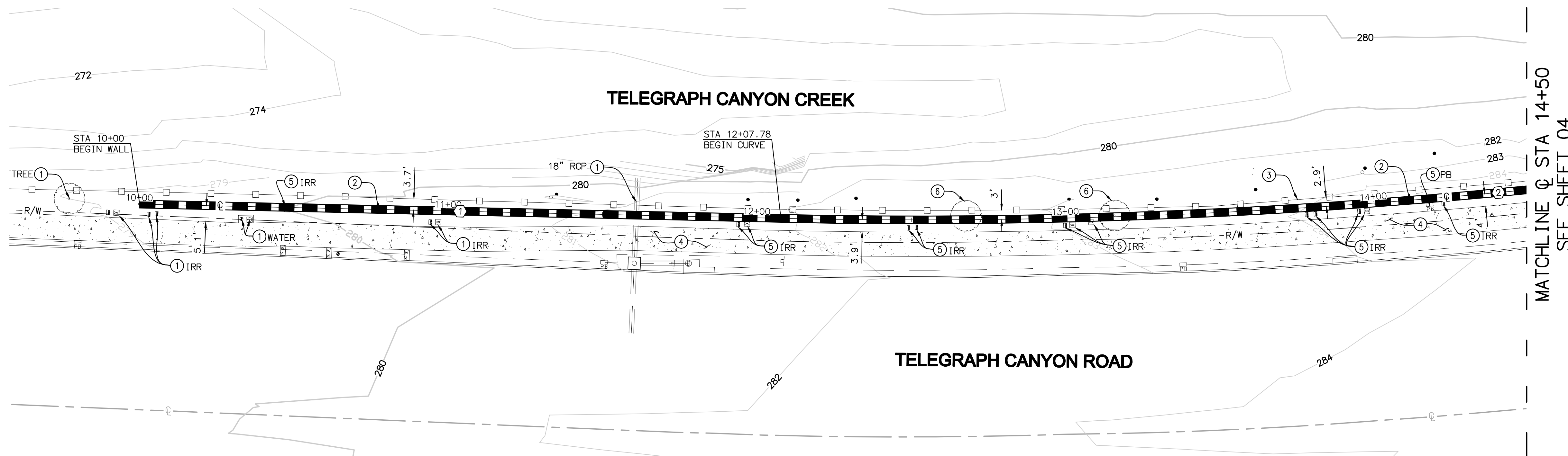
TOTAL SHEETS: 10

CONSTRUCTION RECORD		REFERENCES		BY	REVISIONS	DATE	APP'D	DATUMS	SCALE	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE: _____	APPROVED BY:	DATE: _____	CITY OF CHULA VISTA DEPARTMENT OF PUBLIC WORKS	DRAWING NO.
CONTRACTOR:	DWG. NO.:							VERTICAL DATUM: NAVD88	HORIZONTAL	SB	SB						
INSPECTOR:								HORIZONTAL DATUM: CCS '83 ZONE 6, EPOCH 1991.35	VERTICAL	RESPONSIBLE CHARGE OF WORK:	DATE: 12/17/14						
DATE COMPLETED:										TIMOTHY THIELE	RCE NO.: 60283						14051-02
										(senior engineer), P.E. - SENIOR CIVIL ENGINEER				(principal), P.E. - PRINCIPAL CIVIL ENGINEER			CIP # DR-199



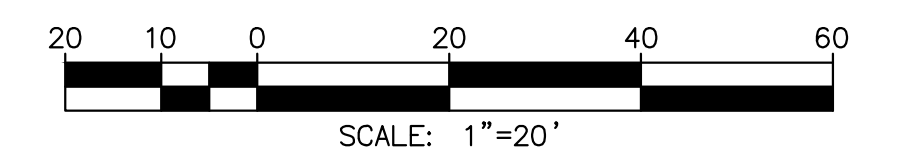
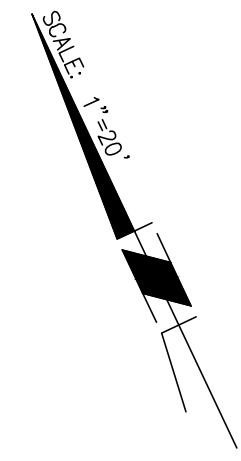
WALL PROFILE
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LINE/CURVE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N 63°28'10" W	--	207.78'	WALL
2	13°19'46"	2000.00'	465.29'	WALL



- CONSTRUCTION NOTES**
- PROTECT IN PLACE.
 - INSTALL SECANT WALL PER STRUCTURAL PLANS.
 - REPAIR AND REPLACE EXISTING FENCE.
 - REPAIR AND REPLACE EXISTING SIDEWALK.
 - RELOCATE EXISTING UTILITY.
 - RELOCATE EXISTING TREE.

MATCHLINE @ STA 14+50
SEE SHEET 04



AS-BUILT

SIGNED: _____ DATE: _____
 PRINTED NAME: _____ R.C.E. NO.: _____
 DISCIPLINE: _____ MY REGISTRATION EXPIRATION: _____

UTILITY NOTE

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ENGINEER OF WORK:
RBF CONSULTING
 A Baker Company
 5050 AVENIDA ENINAS, SUITE 260
 CARLSBAD, CALIFORNIA 92008-4386
 760.476.9193 • FAX 760.476.9198 • www.RBF.com

PRELIMINARY DESIGN
 NOT FOR CONSTRUCTION

CITY OF CHULA VISTA DEPARTMENT OF PUBLIC WORKS
 PLANS FOR THE IMPROVEMENT OF:
TELEGRAPH CANYON RD SECANT WALL
STA. 10+00 TO 14+50

TOTAL SHEETS: 10
 DRAWING NO. 14051-03
 CIP # DR-199

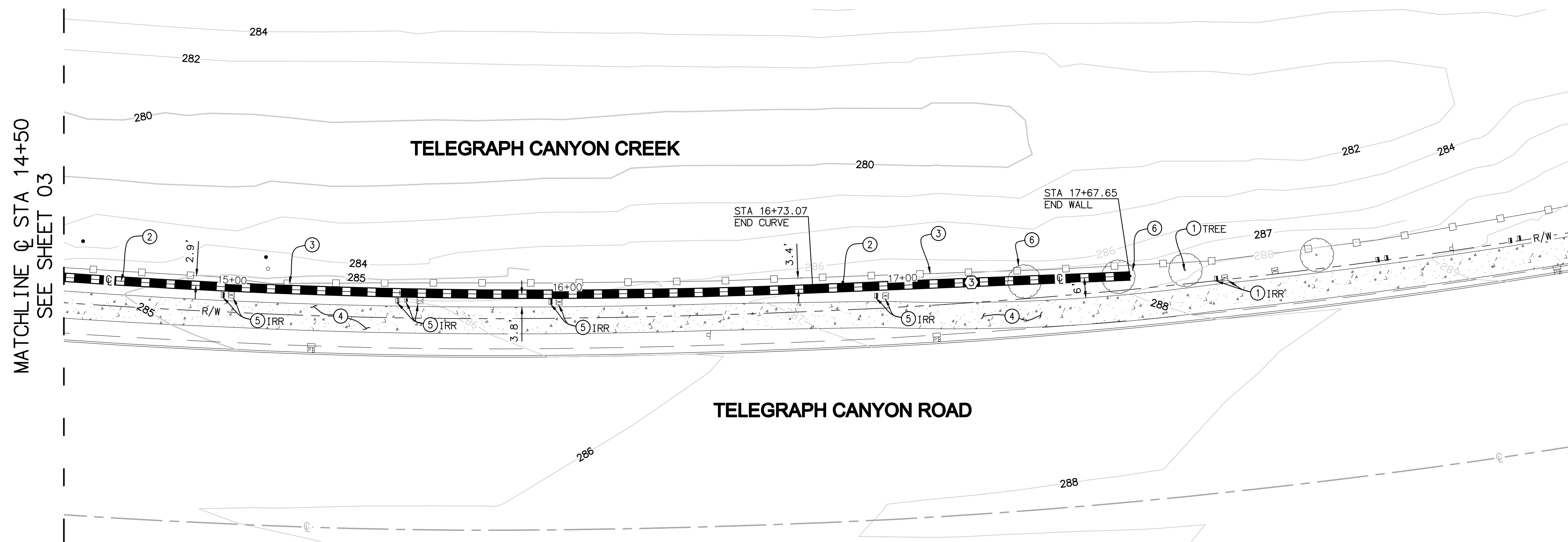
CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	DATE	APP'D	DATUMS	SCALE	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	APPROVED BY:	DATE:
CONTRACTOR:	DWG. NO.:					VERTICAL DATUM: NAVD88	HORIZONTAL	SB	SB				
INSPECTOR:						HORIZONTAL DATUM: CCS '83 ZONE 6, EPOCH 1991.35	VERTICAL	RESPONSIBLE CHARGE OF WORK:	DATE: 12/17/14				
DATE COMPLETED:								TIMOTHY THIELE	RCE NO.: S0283				
								(senior engineer), P.E. - SENIOR CIVIL ENGINEER					

H:\PDATA\144215_TELEGRAPH CANYON WALL\CADD\LAND\LV\IMPROVE\144215-03-MDWG 10/28/2014 8:55 AM



WALL PROFILE

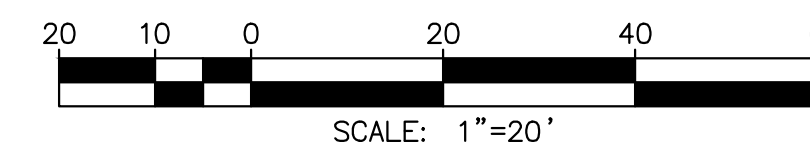
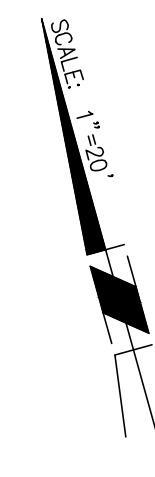
SCALE: HORZ. 1"=20'
VERT. 1"=4'



LINE/CURVE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
3	N 76°47'56" W	---	94.58'	WALL

CONSTRUCTION NOTES

- ① PROTECT IN PLACE.
- ② INSTALL SECANT WALL PER STRUCTURAL PLANS.
- ③ REPAIR AND REPLACE EXISTING FENCE.
- ④ REPAIR AND REPLACE EXISTING SIDEWALK.
- ⑤ RELOCATE EXISTING UTILITY.
- ⑥ RELOCATE EXISTING TREE.



AS-BUILT

UTILITY NOTE

SIGNED: _____ DATE: _____
 PRINTED NAME: _____ R.C.E. NO.: _____
 DISCIPLINE: _____ MY REGISTRATION EXPIRATION: _____

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ENGINEER OF WORK:



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 CARLSBAD, CALIFORNIA 92008-4386
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PRELIMINARY DESIGN
 NOT FOR CONSTRUCTION

TOTAL SHEETS: 10

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	DATE	APP'D	DATUMS	SCALE	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	APPROVED BY:	DATE:	CITY OF CHULA VISTA DEPARTMENT OF PUBLIC WORKS	DRAWING NO.
CONTRACTOR:	DWG. NO.:					VERTICAL DATUM: NAVD88	HORIZONTAL	SB	SB					CITY OF CHULA VISTA DEPARTMENT OF PUBLIC WORKS	14051-04
INSPECTOR:						HORIZONTAL DATUM: CCS '83 ZONE 6, EPOCH 1991.35	VERTICAL	TIMOTHY THIELE	DATE: 12/17/14					PLANS FOR THE IMPROVEMENT OF:	CIP # DR-199
DATE COMPLETED:									RCE NO.: 60283					TELEGRAPH CANYON RD SECANT WALL	
										(senior engineer), P.E. - SENIOR CIVIL ENGINEER				STA. 14+50 TO 17+67.65	

GENERAL NOTES & SPECIFICATIONS

REINFORCING STEEL

1. DETAILS OF REINFORCEMENT SHALL CONFORM TO WITH CHAPTER 7 OF ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE," LATEST APPROVED EDITION, WITH AMENDMENTS AS FOUND IN 2013 C.B.C. CHAPTER 19. REINFORCING STEEL DETAILING, BENDING, AND PLACING SHALL BE IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE," LATEST EDITION.
2. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
3. ALL REINFORCING STEEL AND OTHER EMBEDDED ITEMS SHALL BE SECURELY HELD IN POSITION AND INSPECTED PRIOR TO PLACING CONCRETE AND/OR GROUT.
4. ALL REINFORCING STEEL SHOP DRAWINGS SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER AND THE ARCHITECT PRIOR TO FABRICATION.
5. BAR SUPPORTS SHALL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF "BAR SUPPORT SPECIFICATION" BY THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).

STRUCTURAL OBSERVATION

1. THE OWNER SHALL EMPLOY A CALIFORNIA REGISTERED STRUCTURAL ENGINEER TO PERFORM STRUCTURAL OBSERVATIONS AS DEFINED IN 2013 CBC SECTION 1709.
2. AT CONCLUSION OF ALL PERMITTED WORK, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE REQUIRED SITE VISITS HAVE BEEN MADE TO OBSERVE GENERAL COMPLIANCE WITH THE APPROVED STRUCTURAL PLANS, SPECIFICATIONS, AND APPROVED CONSTRUCTION CHANGES. THE STATEMENT SHALL ALSO IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.
3. AT A MINIMUM, THE STRUCTURE REQUIRES STRUCTURAL OBSERVATIONS AT THE FOLLOWING MILESTONES:
 - A. PRIOR TO CONCRETE PLACEMENT OF FIRST MALE SECANT PILE, AFTER REBAR CAGE INSTALLATION. OTHER NON-INSTALLED CAGES TO BE AVAILABLE FOR OBSERVATION.
4. THE STRUCTURAL OBSERVER SHALL SUBMIT A WRITTEN REPORT FOR EACH SITE OBSERVATION DEDICATED TO THE MILESTONES LISTED ABOVE. ALL OBSERVED DEFICIENCIES SHALL BE INCLUDED WITHIN THESE REPORTS, WHICH SHALL BE SENT TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, AND CONTRACTOR. ALL DEFICIENCIES NOTED MUST BE CORRECTED BEFORE FINAL OCCUPANCY PERMIT CAN BE ISSUED.

SPECIAL INSPECTION

1. SPECIAL INSPECTION BY SPECIAL INSPECTORS SATISFACTORY TO THE BUILDING OFFICIAL IS REQUIRED FOR THE FOLLOWING TYPES OF WORK, IN CONFORMANCE WITH THE 2013 CALIFORNIA BUILDING CODE (2012 I.B.C.), CHAPTER 17. REFER TO C.B.C. SPECIAL INSPECTION TABLES IN SECTION 1705 FOR SPECIFIC INSPECTION MILESTONES, FREQUENCY, AND REFERENCE CRITERIA.
2. CONCRETE: DURING PLACEMENT AND SAMPLING OF ALL TEST SPECIMENS FOR ALL REINFORCED CONCRETE.
3. REINFORCING STEEL: FOLLOWING PLACEMENT OF REINFORCING STEEL FOR ALL CONCRETE ELEMENTS.
4. SOILS: VERIFY EXISTING SITE CONDITIONS, CAISSON DEPTHS, ETC. AS PER C.B.C. TABLE 1705.6 AND APPROVED SOILS REPORT.
5. SECANT PILE CAISSONS: DURING INSTALLATION AS PER C.B.C. TABLE 1705.8 AND APPROVED SOILS REPORT.
6. STRUCTURAL OBSERVATION PER C.B.C. 1709.
7. REFER TO SPECIAL INSPECTION TABLE FOR SUMMARY OF SPECIFIC INSPECTIONS AND REQUIRED MATERIAL STRENGTHS

SECANT PILE WALL CONSTRUCTION PROCEDURES

1. "FEMALE" SECANT PILE CAISSON CONSTRUCTION:
 - 1.1 LAYOUT AND DRILL THE HOLE DIAMETER TO DEPTH AS INDICATED IN THE DRAWINGS.
 - 1.2 PLACE SPECIFIED SLURRY CONCRETE FROM THE BOTTOM OF THE HOLE UP TO SURFACE ELEVATION SPECIFIED IN PLANS.
2. "MALE" SECANT PILE CAISSON CONSTRUCTION:
 - 2.1 LAYOUT AND DRILL THE HOLE DIAMETER TO DEPTH AS INDICATED IN THE DRAWINGS (OVERLAPPED WITH "FEMALE" PILES).
 - 2.2 PLACE THE REBAR CAGE APPROXIMATELY IN THE CENTER OF THE HOLE.
 - 2.3 PLACE SPECIFIED CONCRETE FROM THE BOTTOM OF THE HOLE UP TO SURFACE ELEVATION SPECIFIED IN PLANS.

GENERAL

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE STARTING WORK AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES FOUND.
2. SPECIFIC CODES AND DETAILS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES IN CASE OF CONFLICT, CONTACT THE ENGINEER FOR CLARIFICATION.
3. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, THE DETAILS USED SHALL BE THE SAME AS FOR OTHER SIMILAR WORK, PROVIDED THAT PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.
4. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES WITH THE STRUCTURAL REQUIREMENTS.
5. THE DESIGN IS BASED ON THE 2013 CALIFORNIA BUILDING CODE-TITLE 24 PART 2. THE CALTRANS SHORING DESIGN GUIDE IS USED AS A RESOURCE REFERENCE.
6. NEITHER THE OWNER NOR THE ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING. THE CONTRACTOR IS ALSO SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.

SOILS CRITERIA

1. AN EXPLORATION OF THE SOILS UNDERLYING THIS SITE WAS MADE BY NINYO & MOORE INC. AND IS DESCRIBED IN THEIR REPORTS DATED 3/8/2013 AND 11/4/13 UNDER PROJECT NUMBER 105198058. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE INFORMATION CONTAINED THEREIN BEFORE COMMENCING ANY WORK. ALL EXCAVATIONS AND SOIL PREPARATION SHALL BE IN CONFORMANCE WITH THIS REPORT.
2. CAISSON DEPTHS SHOWN AND ARE ASSUMED TO BE IN SUITABLE BEARING MATERIALS. THE ACTUAL ADEQUACY OF THE BEARING MATERIAL SHALL BE DETERMINED BY A REPRESENTATIVE OF THE GEOTECHNICAL CONSULTANT PRIOR TO PLACEMENT OF ANY REINFORCING STEEL OF CONCRETE. CAISSON DEPTHS SHALL BE ADJUSTED, OR OTHER REMEDIAL ACTION TAKEN, AS DIRECTED BY THIS REPRESENTATIVE AND APPROVED BY THE ENGINEER.
3. BOTTOM OF ALL EXCAVATIONS SHALL BE CLEAR OF DEBRIS PRIOR TO CONCRETE PLACEMENT.
4. ALL ANCHORS & REBAR SHALL BE TIED IN PLACE PRIOR TO CALLING FOR INSPECTION.
5. THE ACTIVE SOIL PRESSURE FOR UNRESTRAINED RETAINING WALLS WITH LEVEL BACKFILL IS 48 PCF (E.F.P.). THE BUOYANT ACTIVE SOIL PRESSURE WITH LEVEL BACKFILL IS 24 PCF (E.F.P.), IN ADDITION TO HYDROSTATIC FLUID PRESSURE OF 62.4 PCF. THE SHORT-TERM, UNIFORM SURCHARGE FOR CONSTRUCTION EQUIPMENT IS 120 PSF.
6. THE PASSIVE PRESSURE ALLOWANCE FOR EMBEDDED PORTION OF SOLDIER PILES IS 400 PCF (E.F.P.) FOR PILES THAT ARE EMBEDDED IN COMPETENT FORMATIONAL MATERIAL AS DESCRIBED IN SOILS REPORT. CAISSON DEPTHS MAY NEED TO BE ADJUSTED BY THE GEOTECHNICAL CONSULTANT BASED ON LOCALLY OBSERVED CONDITIONS.

REINFORCED CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE," LATEST APPROVED EDITION, WITH AMENDMENTS AS FOUND IN 2013 C.B.C. CHAPTER 19.
2. ALL REINFORCING DETAILS SHALL CONFORM TO THE CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE," LATEST EDITION.
3. REINFORCING, ANCHOR BOLTS, AND ALL OTHER EMBEDDED ITEMS SHALL BE SECURELY TIED IN POSITION AND INSPECTED AS REQUIRED PRIOR TO PLACING CONCRETE.
4. CONCRETE STRENGTHS: THE CONCRETE STRENGTHS SHOWN IN THE FOLLOWING TABLE ARE MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS. THE AGGREGATES SHOWN ARE THE MAXIMUM SIZE (INCHES) AND THE WATER CONTENT SHOWN IS THE MAXIMUM RATIO. THE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE PROPORTIONED AS REQUIRED ACI 318, SECTION 5.3.

ITEM OF CONSTRUCTION (145 PCF AVE.)	STRENGTH	AGGREGATE	W/C
A. "MALE" SECANT PILE CAISSONS	4500 PSI	1 1/2"	0.45
B. "FEMALE" SECANT PILE CAISSONS	5000 PSI	3/8"	N/A

 TYPE II/V PORTLAND CEMENT SHALL BE USED IN ALL "MALE" SECANT PILES.
6. THE EVALUATION AND ACCEPTANCE OF CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF C.B.C. SECTION 1905.
7. MINIMUM PROTECTIVE CONCRETE COVERAGE OF REINFORCING:
 - A. ON EARTH SIDE WHEN PLACED AGAINST EARTH.....3 IN.
 - B. EXPOSED TO EARTH OR WEATHER, NO. 6 & UP.....2 IN.
 - C. EXPOSED TO EARTH OR WEATHER, NO. 5 & LESS.....1 IN.

SPECIAL INSPECTION TABLE

1 Cast-in-place concrete	19A Verify soil conditions are substantially in conformance with the soil investigation report
2 Rebar installed in concrete	19B Verify that foundation excavations extend to proper depth and bearing strata
3 Reinforcing steel	19C Provide soil compaction test results, depth of fill, relative density, and bearing values
4 Pre-stressing steel	19D Provide soil expansion test results, expansion index, recommendations for foundation, and slab-on-grade recommendations
5A Volumetric weld examinations (UT, RT)	14 Seismic force-resisting system
5B Visual weld examinations	15 Pre-fabricated building components
6 High-strength bolting	16 Structural observations
7 Structural masonry	17 Exterior insulation and finishing systems (EIFS)
8 Precast concrete	
9 Wood construction	
10 Fireproofing or fire-resistant coatings	
11 Deep foundations (piles, piers, and caissons)	
12 Shotcrete	

No.	Description of Type of Inspection Required, Location, Remarks	Design Strength
1, 11	"MALE" SECANT PILE CAISSONS	f'c = 4500 PSI
1, 11	"FEMALE" SECANT PILE CAISSONS	f'c = 5000 PSI
3	REINFORCING STEEL PLACEMENT	f _y = 60 KSI
19A	EXISTING CONDITIONS DURING CAISSON DRILLING	
19B	CAISSON DRILLING DEPTHS	
16	STRUCTURAL OBSERVATION	

- a. Special inspections listed above are in addition to required inspections by the building official, as identified in C.B.C. Section 1709. Special inspection is not necessarily a substitute for inspection by the building official. Specially inspected work which is installed or covered without the approval of the city inspector is subject to removal or exposure.
- b. Refer to C.B.C. Tables 1704.3-1704.9 for frequency requirements of special inspection (periodic vs. continuous), unless noted otherwise.
- c. Special inspectors must be approved or certified by the City of Chula Vista to perform the types of inspection specified.
- d. It is the responsibility of the contractor to inform the special inspector or inspection agency at least one day prior to performing any work that requires special inspection. All work performed without required special inspection is subject to removal.

AS-BUILT

UTILITY NOTE

SIGNED: _____ DATE: _____
 PRINTED NAME: _____ R.C.E. NO.: _____
 DISCIPLINE: _____ MY REGISTRATION EXPIRATION: _____

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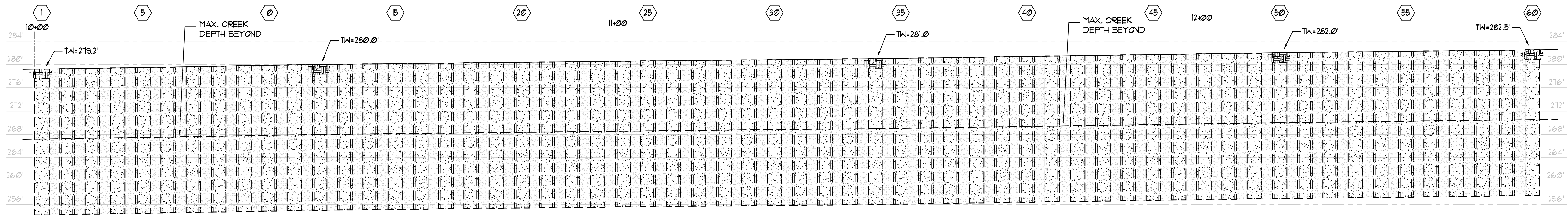


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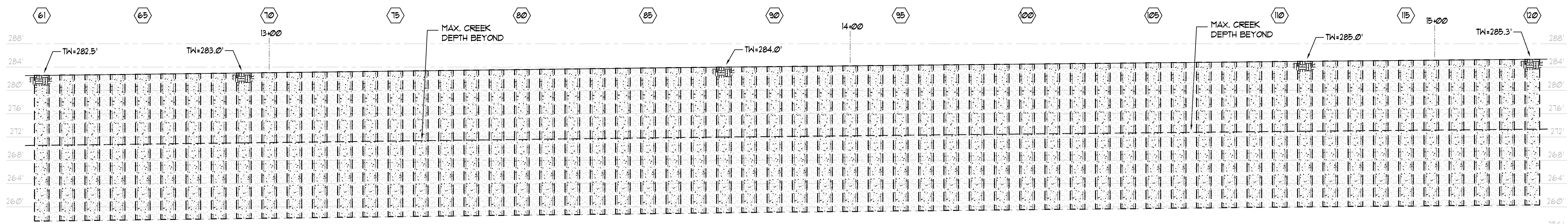
S1
 TOTAL SHEETS: XX

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	DATE	APP'D	DATUMS	SCALE	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	APPROVED BY:	DATE:	CITY OF CHULA VISTA DEPARTMENT OF PUBLIC WORKS	DRAWING NO.
CONTRACTOR:	DWG. NO.:					VERTICAL DATUM: NAVD88	HORIZONTAL	MM	MM					PLANS FOR THE IMPROVEMENT OF:	14051-XX
INSPECTOR:						HORIZONTAL DATUM: CCS '83 ZONE 6,	VERTICAL	RESPONSIBLE CHARGE OF WORK:	DATE: 12/18/14					TELEGRAPH CANYON RD SECANT WALL	
DATE COMPLETED:									SE NO.: 4825						



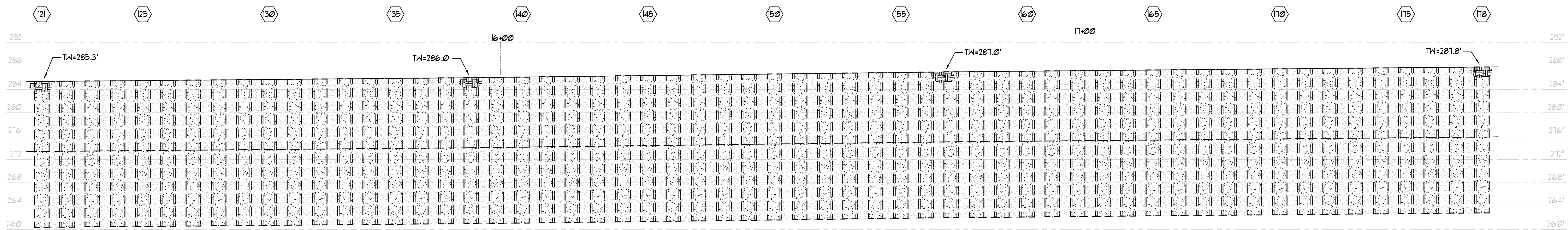
SECANT PILE RETAINING WALL ELEVATION A

1/8" = 1'-0"



SECANT PILE RETAINING WALL ELEVATION B

1/8" = 1'-0"



SECANT PILE RETAINING WALL ELEVATION C

1/8" = 1'-0"

NOTES:

- REFER TO CIVIL SHEETS FOR PRECISE ALIGNMENT, LAYOUT STATIONS, ELEVATIONS, & TOPOGRAPHY.
- REFER TO SHEET S6 FOR WALL SECTIONS.

LEGEND:

- INDICATES "MALE" SECANT PILE CAISSON MARK
- 280.0' INDICATES ELEVATION AMSL

AS-BUILT

UTILITY NOTE

SIGNED: _____ DATE: _____
 PRINTED NAME: _____ R.C.E. NO.: _____
 DISCIPLINE: _____ MY REGISTRATION EXPIRATION: _____

ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	DATE	APP'D	DATUMS	SCALE
	DWG. NO.:					VERTICAL DATUM: NAVD88	HORIZONTAL
INSPECTOR:						HORIZONTAL DATUM: CCS '83 ZONE 6, EPOCH 1991.35	VERTICAL
DATE COMPLETED:							



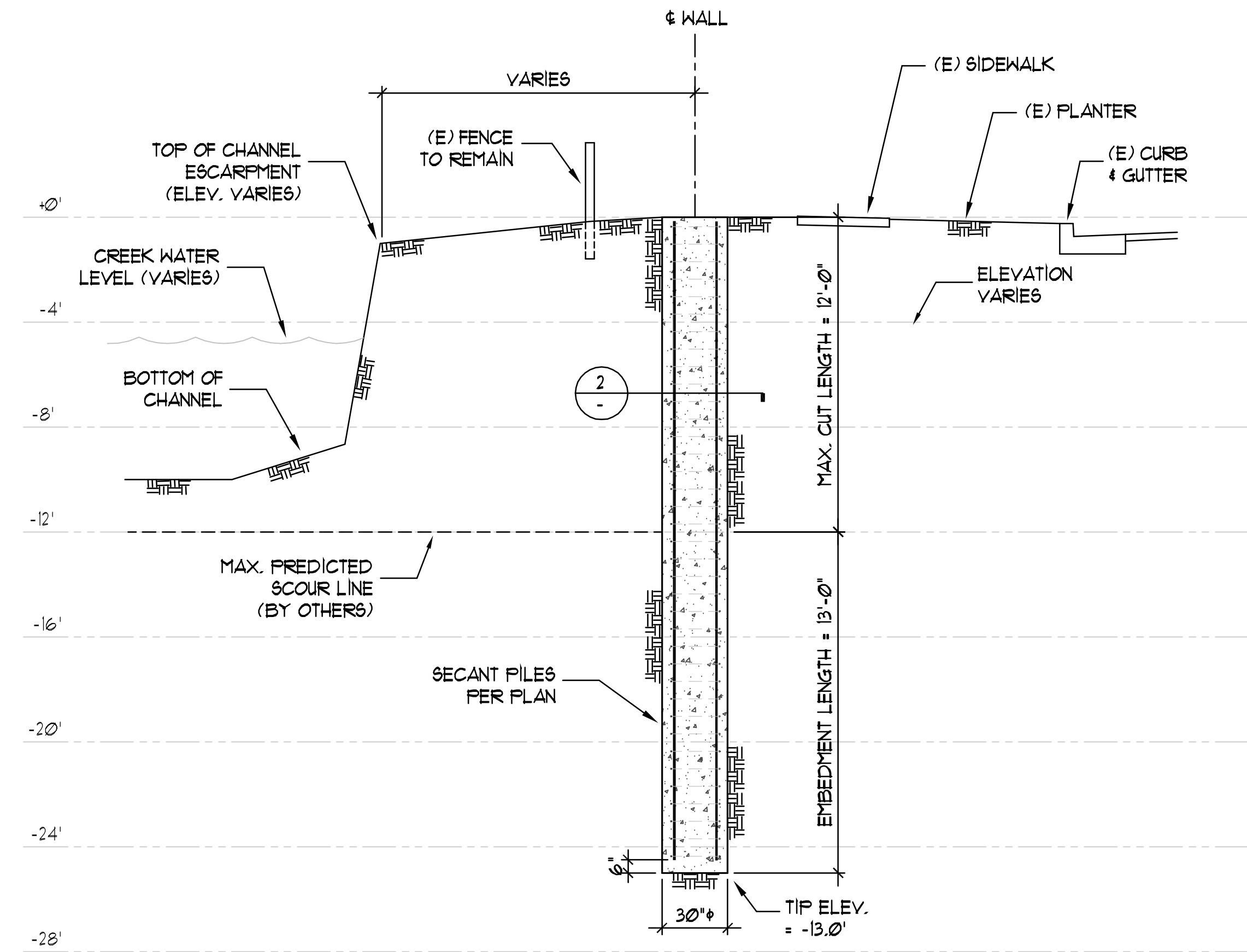
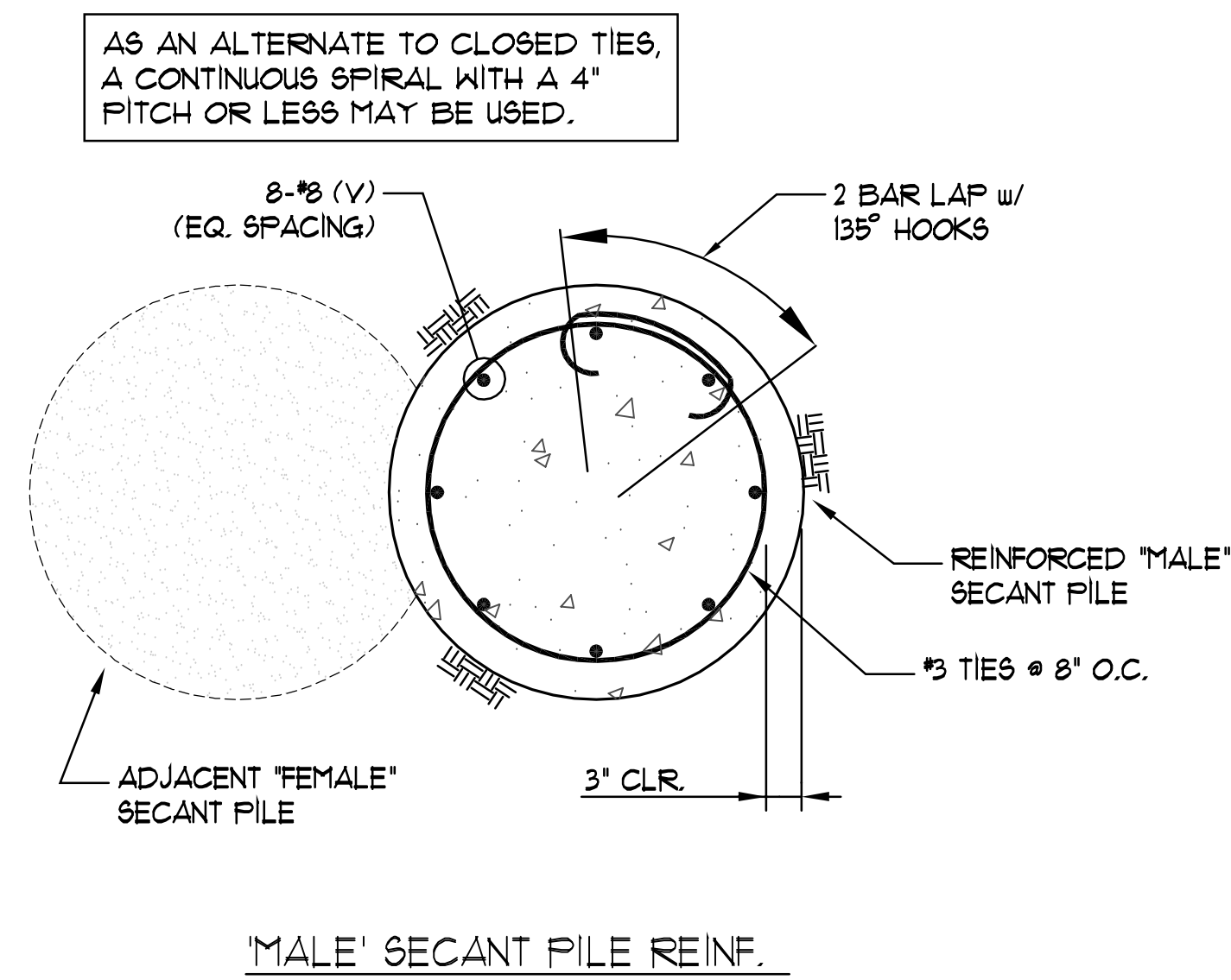
5050 AVENIDA ENCINAS, SUITE 260
 CARLSBAD, CALIFORNIA 92008-4386
 760.476.9193 • FAX 760.476.9198 • WWW.RBF.COM

DESIGNED BY: MICHAEL A. MCNEFF	DRAWN BY: MM	CHECKED BY:	DATE: _____	APPROVED BY:	DATE: _____
RESPONSIBLE CHARGE OF WORK:	DATE: 12/18/14				
SE NO.: 4825		MICHAEL A. MCNEFF, S.E.		MICHAEL A. MCNEFF, S.E.	

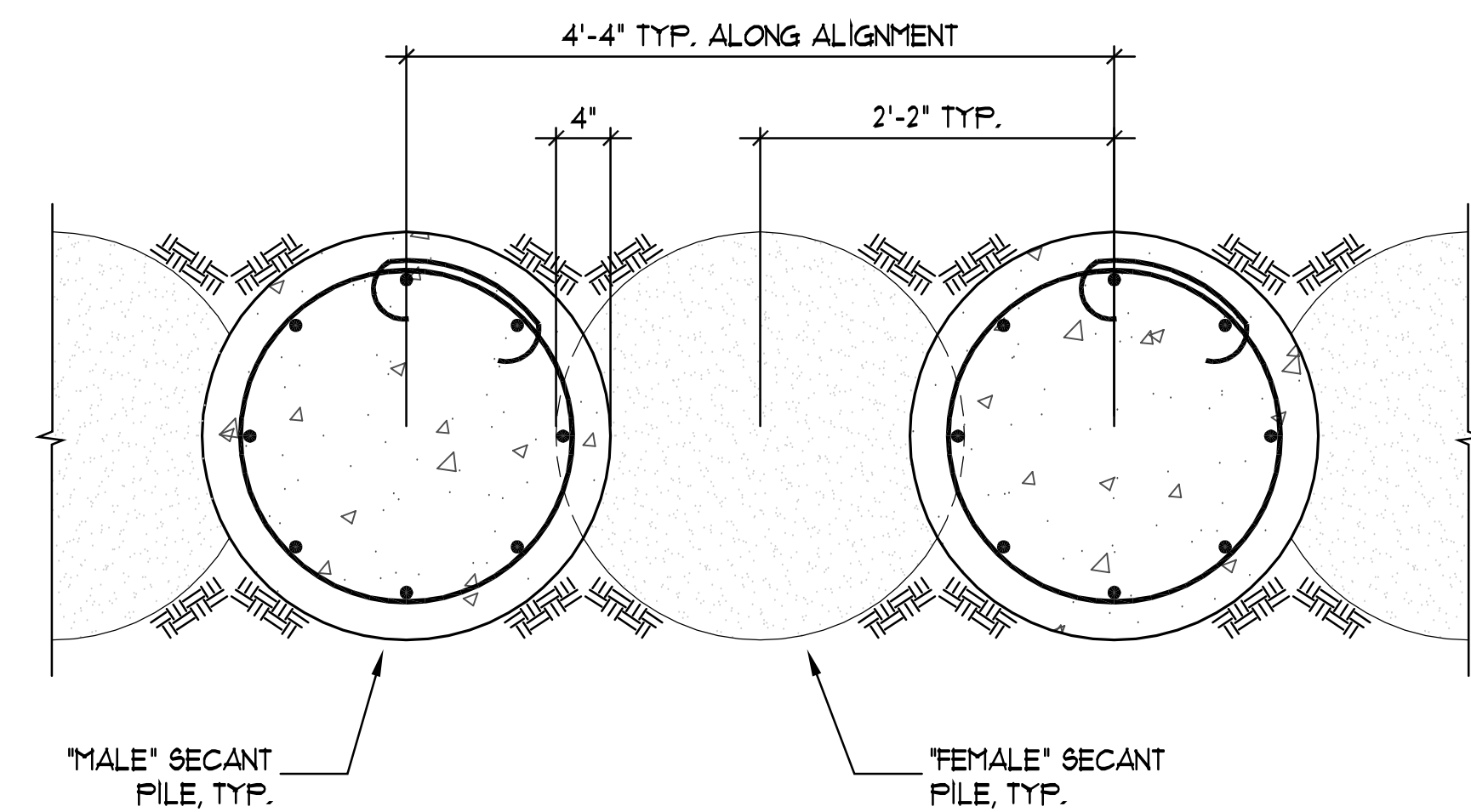
50% PLAN SUBMITTAL
 NOT FOR CONSTRUCTION

CITY OF CHULA VISTA	DEPARTMENT OF PUBLIC WORKS	DRAWING NO.
PLANS FOR THE IMPROVEMENT OF:		14051-XX
TELEGRAPH CANYON RD SECANT WALL		CIP # DR-199
location		

TOTAL SHEETS: XX



TYPICAL SECANT PILE WALL SECTION 1 2 3 4



SECANT PILE LAYOUT 2

AS-BUILT

UTILITY NOTE

SIGNED: _____ DATE: _____
 PRINTED NAME: _____ R.C.E. NO.: _____
 DISCIPLINE: _____ MY REGISTRATION EXPIRATION: _____

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S6

TOTAL SHEETS: XX

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	DATE	APP'D	DATUMS	SCALE
CONTRACTOR:	DWG. NO.:					VERTICAL DATUM: NAVD88	HORIZONTAL
INSPECTOR:						HORIZONTAL DATUM: CCS '83 ZONE 6, EPOCH 1991.35	VERTICAL
DATE COMPLETED:							

DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	APPROVED BY:	DATE:
MICHAEL A. MCNEFF			12/18/14		

RESPONSIBLE CHARGE OF WORK:	DATE:	SE NO.:
MICHAEL A. MCNEFF	12/18/14	4825

CITY OF CHULA VISTA	DEPARTMENT OF PUBLIC WORKS	DRAWING NO.
PLANS FOR THE IMPROVEMENT OF:		14051-XX
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