

SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

CIENEGUITAS CHANNEL REPAIR PROJECT 24STM1-SC13

IN THE UNINCORPORATED AREA
OF
SANTA BARBARA COUNTY, CALIFORNIA



DISTRICT BOARD OF DIRECTORS

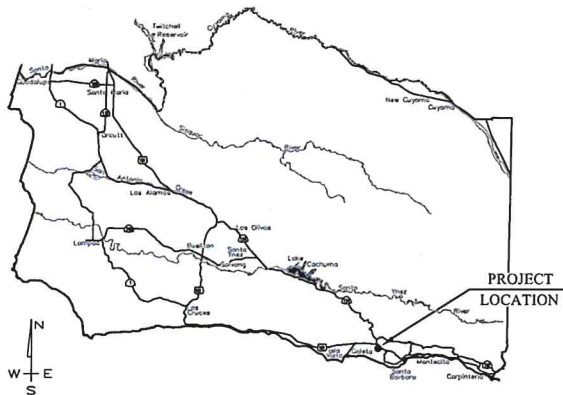
FIRST DISTRICT	Das Williams
SECOND DISTRICT	Laura Capps
THIRD DISTRICT	Joan Hartmann
FOURTH DISTRICT	Bob Nelson
FIFTH DISTRICT	Steve Lavagnino

CHAIR, BOARD OF DIRECTORS

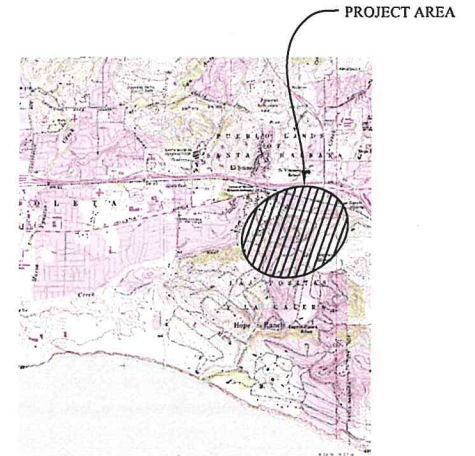
Steve Lavagnino

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VICINITY MAP
No Scale



SITE MAP
No Scale



NO.	REVISIONS	DATE	APP.
	DESCRIPTION		



DESIGNED BY:	7/18/2024 9:46 AM PDT
FLOOD CONTROL DESIGN ENGINEER	DATE
REVIEWED BY:	7/18/2024 10:35 AM PDT
FLOOD CONTROL ENGINEERING MANAGER	DATE
REVIEWED BY:	7/18/2024 8:46 AM PDT
FLOOD CONTROL DEPUTY DIRECTOR	DATE

REVIEWED BY:	7/18/2024 9:49 AM PDT
MANITENANCE MANAGER	DATE
REVIEWED BY:	7/18/2024 3:54 PM PDT
ENVIRONMENTAL SERVICES MANAGER	DATE

SANTA BARBARA COUNTY
FLOOD CONTROL AND
WATER CONSERVATION DISTRICT
130 E. VICTORIA STREET
SANTA BARBARA, CA 93101
(805) 568-3440



CIENEGUITAS CHANNEL
REPAIR PROJECT
UNINCORPORATED AREA
SANTA BARBARA COUNTY, CALIFORNIA

TITLE SHEET

DESIGNED BY:	EA	<h1>O-1164</h1>
DRAWN BY:	OR/EA	
CHECKED BY:	MG	
SHEET 1 OF 5		Filename: Cieneguitas Design.dwg

SYMBOL LEGEND

CONTROL POINT	EX. ROCK	EX. TREE
EX. CABLE TV BOX	EX. SEWER CLEANOUT	EX. TREE - EUCALYPTUS
EX. CABLE TV VAULT	EX. SEWER MANHOLE	EX. TREE - LEMON
EX. ELECTRIC BOX	EX. SIGNAGE	EX. TREE - PALM
EX. ELECTRIC GUY WIRE	EX. STORM DRAIN GRATE	EX. TREE - PINE
EX. ELECTRIC MANHOLE	EX. STORM DRAIN MANHOLE	EX. TREE - STUMP
EX. ELECTRIC METER	EX. STRUCTURE BENCH	EX. TREE - SYCAMORE
EX. FIRE HYDRANT	EX. STRUCTURE BOLLARD/POST	EX. TREE - WILLOW
EX. GAS METER	EX. TELEPHONE BOX	EX. TREE - YUCCA
EX. GAS VALVE	EX. TELEPHONE MANHOLE	EX. WATER METER
EX. IRRIGATION SPRINKLER	EX. TELEPHONE POLE	EX. WATER SPIGOT
EX. LUMINARY	EX. TELEPHONE VAULT	EX. WATER VALVE
EX. MAILBOX	EX. BUSH/HEDGE	EX. WATER WELL
EX. MONUMENT	EX. CACTUS	
EX. POWER & TELEPHONE POLE	EX. SHRUB	

LINETYPE LEGEND

BOUNDARY EASEMENT LINE	EX. FLOWLINE
BOUNDARY RIGHT OF WAY LINE	EX. GAS
BOUNDARY PROPERTY LINE	EX. GUARDRAIL
CENTERLINE	EX. SEWER
CONTOUR LINE-MAJOR	EX. SIDEWALK
CONTOUR LINE-MINOR	EX. STORM DRAIN
EX. AC EDGE OF PAVEMENT	EX. STRUCTURE CONCRETE
EX. BARBED WIRE FENCE	EX. STRUCTURE WALL
EX. BRUSH	EX. TELEPHONE
EX. BUILDING	EX. WATER
EX. CABLE TV	EX. WOOD RAIL FENCE
EX. CHAINLINK FENCE	PROPOSED FACILITIES
EX. DRAINAGE	PROPOSED STORM DRAIN
EX. ELECTRIC	RETAINING WALL GUTTER
EX. ELECTRIC OVERHEAD	TEMP. CONSTRUCTION FENCE
EX. FACILITIES	

EXISTING UTILITY INFORMATION

ALL UNDERGROUND UTILITIES SHOWN ARE PLOTTED BASED ON INFORMATION PROVIDED BY OTHERS, AND ARE APPROXIMATE. OVERHEAD UTILITIES ARE NOT SHOWN. NOTE THAT INDIVIDUAL SERVICE LATERALS AND CONNECTIONS ARE NOT PLOTTED ON THE PROFILE.

THE SANTA BARBARA COUNTY FLOOD CONTROL DISTRICT IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS INFORMATION. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT A MINIMUM OF TWO WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION @ 1-800-422-4133.

UTILITY DISPOSITION NOTE SYMBOLS:

- ◆ FACILITIES TO BE REMOVED BY OTHERS
- ◆ FACILITIES TO BE RE-LOCATED BY OTHERS TO A LOCATION IN CLOSE PROXIMITY TO THE WORK. NEW FACILITY TO BE PROTECTED IN PLACE BY THE CONTRACTOR.
- ◆ FACILITIES TO BE RELOCATED BY CONTRACTOR
- ◆ PROTECT EXISTING UTILITY IN PLACE. EXACT HORIZONTAL AND VERTICAL LOCATION UNKNOWN
- ◆ ABANDONED UTILITY IN PLACE. INTERFERING PORTIONS TO BE REMOVED BY CONTRACTOR

STANDARD DETAILS AND PLANS LIST

STANDARD NO.	DESCRIPTION
STATE DEPARTMENT OF TRANSPORTATION STANDARD PLANS (2018 EDITION)	
The Standard Plan sheets applicable to this contract include, but are not limited to those indicated below. The Revised Standard Plans (RSP) and New Standard Plans (NSP) which apply are attached to the contract.	
A1A-A3C	ABBREVIATIONS
A10A-A10E	LEGEND - LINES AND SYMBOLS
P20	JOINT SEALS
B01-B03	BRIDGE DETAILS

HORIZONTAL AND VERTICAL CONTROL

Surveyor's Notes:
Horizontal positions for points CP8, CP100, CP101, originated from file S-715 project from sbco surveyors office 02/2008. Site control was set by RIK with base on CP100, and site control points set and stored as 102, 103, 104, 106. Points set were then traversed through using Trimble S-6 holding CP102 as benchmark for horizontal and vertical position, conventional control was stored as 203, 204, 206 on same points. 207 and 208 were resection method points from 102-206 and no point set.

Elevations (orthometric heights) were derived by GPS-RTK observation holding CP102 fixed based on the North American Vertical Datum 1988 (NAVD88) using the National Geodetic Survey's program GEND 128.

Points CP102, CP203, CP204, CP206, were traversed thru conventionally.

All coordinate values shown are grid values. All distances are based on the U.S. Survey Foot (one survey foot = 1200/39.37 meters).

Contour Interval:
The contour interval is shown at 1 foot intervals with majors at every 5 feet

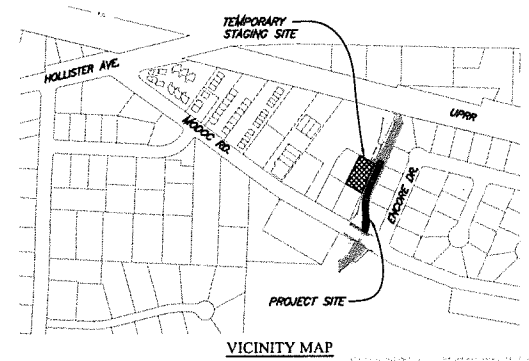
Basis of Bearings:
The site Basis of Bearings is between CP206 and CP102.
Calculated as: S23°33'10"W, 303.79'
Measured as: S23°33'13"W, 303.82'

CONTROL POINT TABLE

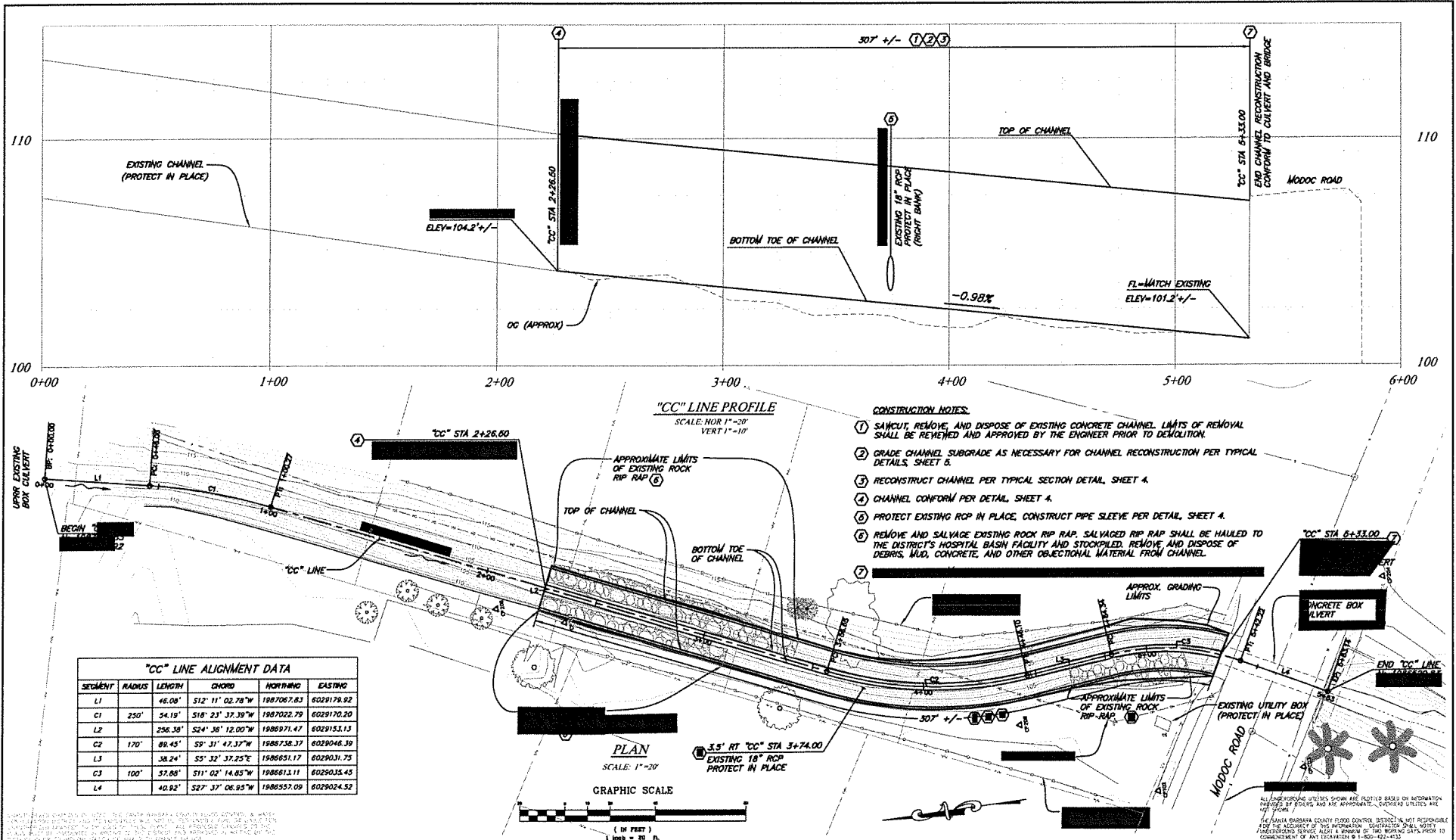
CONTROL POINT	NORDBG	EASTING	ELEVATION	DESCRIPTION	RECORD
CP8	198729.30	6031045.26	165.14	FOUND SCRIBED 1/2 IN SW	COUNTY SURVEYOR OFFICE FIELD NOTES PROJECT S-715
CP100	198836.30	6028486.30	48.26	FOUND 1 1/2" BRASS CAP STAMPED "SANTA BARBARA COUNTY SURVEYOR CONTROL #1"	COUNTY SURVEYOR OFFICE FIELD NOTES PROJECT S-715
CP101	198726.63	6031281.64	167.26	FOUND 1 1/2" BRASS CAP STAMPED "SANTA BARBARA COUNTY SURVEYOR CONTROL #1"	COUNTY SURVEYOR OFFICE FIELD NOTES PROJECT S-715
CP102	198800.88	6028913.08	102.45	SET SCRIBED 1/2 IN SW	CENEGUITAS TOPO 1024-04-01
CP203	198836.20	6028914.24	102.15	SET SPIKE & CHASER IN DIRT	CENEGUITAS TOPO 1024-04-01
CP204	1988489.61	6028905.27	107.2	SET MAG NAIL IN BUREAU	CENEGUITAS TOPO 1024-04-01
CP206	1988479.15	6028904.44	111.14	SET SPIKE & CHASER IN DIRT	CENEGUITAS TOPO 1024-04-01
CP207				NORING SET	
CP208				NORING SET	

ABBREVIATIONS

APN	ASSESSORS PARCEL NUMBER	IN	INCH
APWA	AMERICAN PUBLIC WORKS ASSOC.	MJ	MECHANICAL JOINT
AT	ARCHITECTURAL TEXTURE	n	MEANING'S COEFFICIENT
BW	BOTH WAYS	N	NORTH OR NORTHING
CFS	CUBIC FEET PER SECOND	OC	ON CENTER
CL or C/L	CENTER LINE	OK	PK NAIL
CALTRANS	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	O	FLOW VELOCITY
COUNTY	COUNTY OF SANTA BARBARA	RI	RECORD PER BOOK NN, PAGE NN OF MAPS
CP	CONTROL POINT	S	SEWER OR SLOPE OR SOUTH
CP	DUCTILE IRON OR DROP INLET	SOMH	STORM DRAIN MANHOLE
DW	DRIVEWAY	SH	SHINER
E	EAST OR EASTING	SPK	SPIKE
EG	EXISTING GROUND	S/W	SIDEWALK
EGL	ENERGY GRADE LINE	TW or TW	TOP OF WALL
EL	ELEVATION	TC	TEMPORARY CONSTRUCTION EASEMENT
EP	EDGE OF PAVEMENT	TBM	TEMPORARY BENCH MARK
ELEC	ELECTRIC	TSW	TOP OF SIDEWALK
FD	FEET	TP	TOP OF PAVEMENT
FT	FEET	W or WL	WATER LINE
G	GAS LINE	WF	WALL FACE
GB	GRADE BREAK	WHF	WELDED WIRE FABRIC
HOPE	HIGH DENSITY POLYETHYLENE	V	VELOCITY
HGL	HYDRAULIC GRADE LINE	VB	VALVE BOX
IP	IRON PIPE		



REVISIONS NO. DESCRIPTION DATE APR			DESIGNED BY: FLOOD CONTROL DESIGN ENGINEER DATE: 7/15/2024	SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 130 E. VICTORIA STREET SANTA BARBARA, CA 93101 (805) 568-3440		CIENEGUITAS CHANNEL REPAIR PROJECT UNINCORPORATED AREA SANTA BARBARA COUNTY, CALIFORNIA	GENERAL INFORMATION	DESIGNED BY: EA DRAWN BY: EA CHECKED BY: MG	O-1164 SHEET 2 OF 5 Thomas Cieneguitas Design Inc.

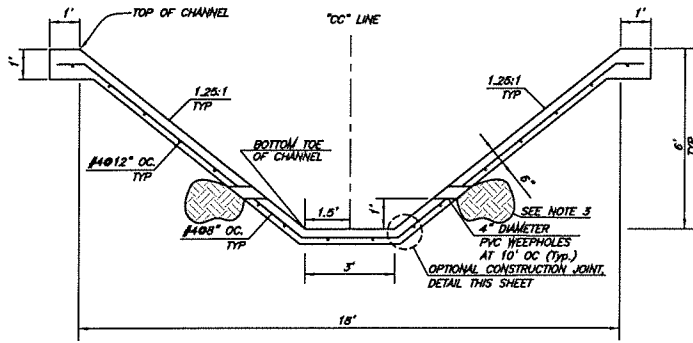


"CC" LINE ALIGNMENT DATA

SEGMENT	RADIUS	LENGTH	CHORD	HORN ANG	EASTING
L1	48.00'	S12° 11' 02.78"W	1987067.83	6029179.92	
C1	250'	S4.19° 51' 23" 37.39"W	1987022.79	6029170.20	
L2	256.39'	S24° 38' 12.00"W	1986971.47	6029153.13	
C2	170'	S9.45° 59' 31" 47.37"W	1986738.37	6029048.39	
L3	38.24'	S5° 32' 37.25"E	1986631.17	6029031.75	
C3	100'	S7.66° 51' 02" 14.85"W	1986613.11	6029035.45	
L4	40.92'	S27° 37' 06.95"W	1986557.09	6029024.52	

- CONSTRUCTION NOTES:**
- 1 SAWCUT, REMOVE, AND DISPOSE OF EXISTING CONCRETE CHANNEL LIMITS OF REMOVAL SHALL BE REVEALED AND APPROVED BY THE ENGINEER PRIOR TO DEMOLITION.
 - 2 GRADE CHANNEL SUBGRADE AS NECESSARY FOR CHANNEL RECONSTRUCTION PER TYPICAL DETAILS, SHEET 5.
 - 3 RECONSTRUCT CHANNEL PER TYPICAL SECTION DETAIL, SHEET 4.
 - 4 CHANNEL CONFORM PER DETAIL, SHEET 4.
 - 5 PROTECT EXISTING RCP IN PLACE, CONSTRUCT PIPE SLEEVE PER DETAIL, SHEET 4.
 - 6 REMOVE AND SALVAGE EXISTING ROCK RIP RAP. SALVAGED RIP RAP SHALL BE HAULED TO THE DISTRICT'S HOSPITAL BASIN FACILITY AND STOCKPILED. REMOVE AND DISPOSE OF DEBRIS, MUD, CONCRETE, AND OTHER OBJECTIONAL MATERIAL FROM CHANNEL.
 - 7

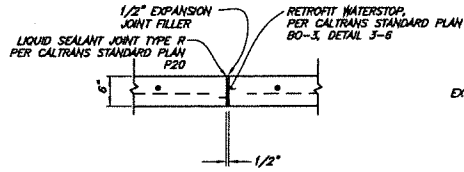
<p>DESIGNED BY: LIA CHECKED BY: HONNER DATE: 7/18/2024</p>		<p>SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 130 E. VICTORIA STREET SANTA BARBARA, CA 93101 (805) 566-3440</p>		<p>CIENEQUITAS CHANNEL REPAIR PROJECT UNINCORPORATED AREA SANTA BARBARA COUNTY, CALIFORNIA</p>		<p>DESIGNED BY: EA DRAWN BY: EA CHECKED BY: MG</p>		<p>O-1164 SHEET 3 OF 5 Filename: Cienequitas Design.dwg</p>	
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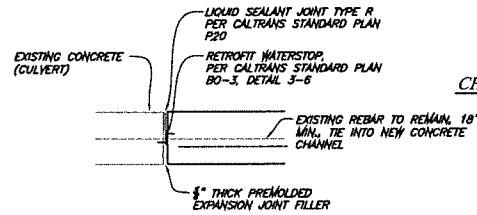
TYPICAL CROSS SECTION
SCALE: 1"=2'

TYPICAL CHANNEL SECTION NOTES:

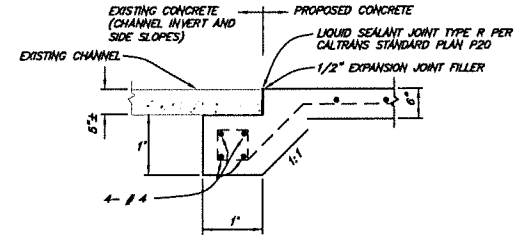
1. REINFORCING STEEL SHALL BE PLACED WITH 2" MINIMUM CONCRETE CLEAR COVER EXCEPT WHERE CONCRETE IS PLACED AGAINST EARTH THE CONCRETE CLEAR COVER SHALL BE 3".
2. ALL LAP SPACE SHALL BE 15" MIN.
3. BACK WEEPHOLES ON BOTH SIDES OF CHANNEL WITH NO. 4 GALVANIZED SCREEN AND 1 CUBIC FOOT OF CLASS 1 PERMEABLE MATERIAL, TYPE A, IN FILTER FABRIC, PROVIDE CONTINUOUS GRAVEL DRAIN BETWEEN WEEPHOLES. PROVIDE FILTER FABRIC BETWEEN ALL GRAVEL MATERIAL AND SUBGRADE.
4. WEAKENED PLANE JOINTS (TRANSVERSE) SHALL BE PLACED AT 10' MIN AND 15' MAX SPACING PER DETAIL THIS SHEET. APPLIES TO INVERT AND SIDE SLOPES.
5. CONSTRUCTION JOINTS (TRANSVERSE) SHALL BE PLACED AT THE END OF EACH DAYS PLACEMENT OR WHENEVER PLACEMENT CEASES FOR MORE THAN 1 HOUR PER DETAIL THIS SHEET. REINFORCING STEEL TO BE PLACED CONTINUOUS THROUGH CONSTRUCTION JOINT.
6. EXPANSION JOINTS SHALL BE PLACED AT THE BEGINNING AND END OF CURVES, PER DETAIL THIS SHEET.



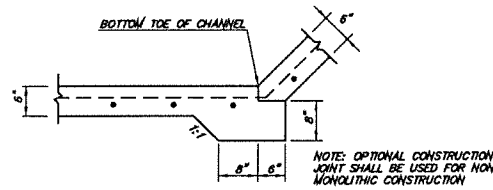
EXPANSION JOINT DETAIL (TRANSVERSE)
N.T.S.



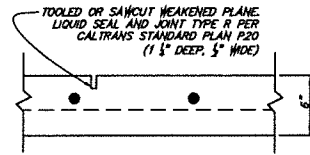
CULVERT CONFORM DETAIL
N.T.S.



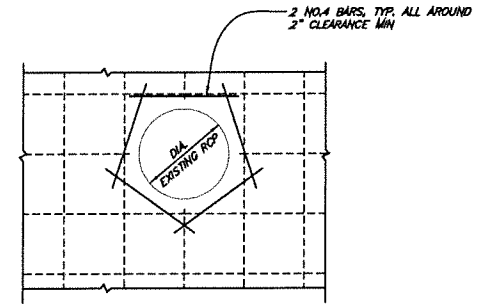
CHANNEL CONFORM DETAIL (TRANSVERSE)
N.T.S.



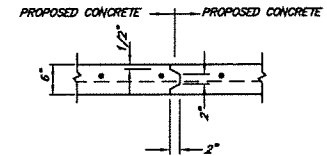
OPTIONAL CONSTRUCTION JOINT (LONGITUDINAL)
N.T.S.



WEAKENED PLANE JOINT DETAIL (TRANSVERSE)
N.T.S.



PIPE SLEEVE DETAIL
N.T.S.



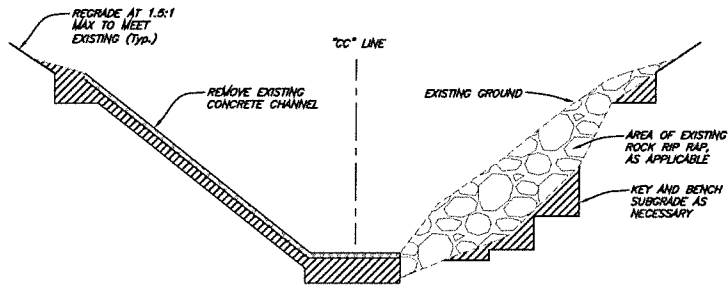
CONSTRUCTION JOINT DETAIL (TRANSVERSE)
N.T.S.

ALL UNDESIGNATED UTILITIES SHOWN ARE LOCATED BASED ON INFORMATION PROVIDED BY OTHERS, AND ARE APPROXIMATE. UNDESIGNED UTILITIES ARE NOT SHOWN.

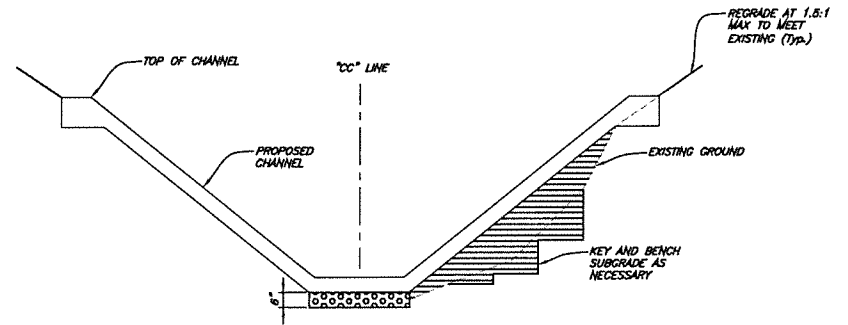
THE SANTA BARBARA COUNTY FLOOD CONTROL DISTRICT IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS INFORMATION. CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS AGAINST A RECORD OF THE RELEVANT DATA PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. 911-800-422-4255.

CONTRACTOR SHALL VERIFY ALL UTILITIES AND RECORDS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND RECORDS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND RECORDS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND RECORDS PRIOR TO CONSTRUCTION.

REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DESCRIPTION	DATE	APP.														DESIGNED BY: <u>12.6.2024</u> DATE: <u>7/18/2024</u> FLOOD CONTROL DISTRICT ENGINEER	SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 130 E. VICTORIA STREET SANTA BARBARA, CA 93101 (805) 568-3440		CIENEGUITAS CHANNEL REPAIR PROJECT UNINCORPORATED AREA SANTA BARBARA COUNTY, CALIFORNIA	DESIGNED BY: EA DRAWN BY: EA CHECKED BY: MC	O-1164 SHEET 4 OF 5 (Filename: Cieneguitas Design.dwg)
NO.	DESCRIPTION	DATE	APP.																					








CHANNEL EXCAVATION
N.T.S.



CHANNEL BACKFILL
N.T.S.

LEGEND:

-  CHANNEL EXCAVATION
-  CHANNEL BACKFILL
-  CLASS 1 PERMEABLE MATERIAL TYPE B IN CLASS C FILTER FABRIC
-  SALVAGE ROCK RIP RAP
-  EXISTING CONCRETE CHANNEL

CONSTRUCTION NOTES:

1. EXISTING CONCRETE CHANNEL TO BE REMOVED IS APPROXIMATELY 2" THICK. CONTRACTOR SHALL EXCAVATE AND GRADE CHANNEL SUBGRADE NECESSARY TO ACCOMMODATE NEW CHANNEL DIMENSIONS. SUBGRADE SHALL BE COMPACTED TO 90% MINIMUM RELATIVE COMPACTION TO A MINIMUM DEPTH OF 9 INCHES.
2. PREPARE SUBGRADE AREA BY REMOVING AND SALVAGING EXISTING ROCK RIP RAP, KEYING AND BENCHING INTO STABLE SUBGRADE MATERIAL BEYOND THE LIMITS OF ERODED AREA, AND PLACE BACKFILL TO AT LEAST 90% RELATIVE COMPACTION.

ALL UNDERGROUND UTILITIES SHOWN ARE LOCATED BASED ON INFORMATION PROVIDED BY OTHERS AND ARE APPROXIMATE. OVERHEAD UTILITIES ARE NOT SHOWN.

THE SANTA BARBARA COUNTY FLOOD CONTROL DISTRICT IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS INFORMATION. CONTRACTOR SHALL VERIFY UNDERGROUND SERVICE ALIAS A MINIMUM OF TWO BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION @ 1-800-422-4133.

UNAPPROVED CHANGES ON SHEET: THE SANTA BARBARA COUNTY FLOOD CONTROL DISTRICT RESERVES THE RIGHT TO MAKE CHANGES TO ANY SHEET WITHOUT NOTICE. ALL CHANGES SHALL BE MADE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION, AS APPLICABLE. CONTRACTOR SHALL VERIFY UNDERGROUND SERVICE ALIAS A MINIMUM OF TWO BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION @ 1-800-422-4133.

<table border="1"> <thead> <tr> <th>NO.</th> <th>REVISIONS</th> <th>DATE</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			NO.	REVISIONS	DATE	APP.														DESIGNED BY: FLOOD CONTROL DESIGN ENGINEER DATE: 7/15/2024	SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 130 E. VICTORIA STREET SANTA BARBARA, CA 93101 (805) 568-3440		CIENEGUITAS CHANNEL REPAIR PROJECT UNINCORPORATED AREA SANTA BARBARA COUNTY, CALIFORNIA	EXCAVATION & BACKFILL	DESIGNED BY: EA DRAWN BY: EA CHECKED BY: MG	O-1164 SHEET 5 OF 5 (Thematic Cartographic Design)
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