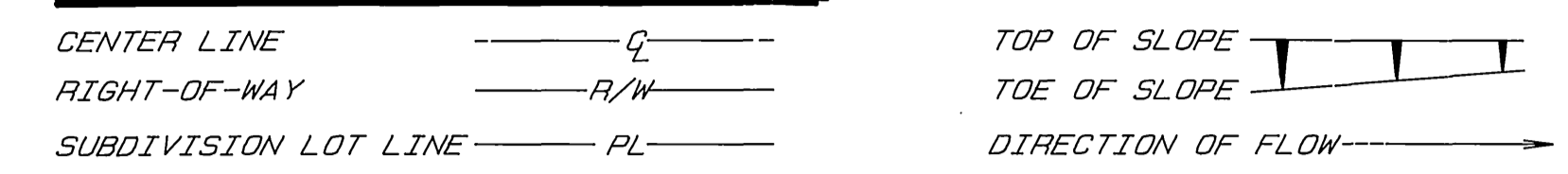


RIVERSIDE CITY OF RIVERSIDE CALIFORNIA

PUBLIC WORKS DEPARTMENT

GOLDEN AVENUE BOX CULVERTS AT LA SIERRA CHANNEL

CONSTRUCTION LEGEND



- ADJUST MH TO GRADE.
- CONST. STRUC. SEC. OF 0.4' DGAC (DENSE GRADED AC) OVER 1.4' CAB.
- VARIABLE THICKNESS DGAC OVERLAY OVER BRIDGE DECK (0.03' TO 0.25') (0.03' TO 0.25')
- VARIABLE THICKNESS DGAC OVERLAY (0.4' TO 0.9') (0.4' TO 0.9')
- PROTECT IN PLACE.

SPECIFIC CONSTRUCTION NOTES

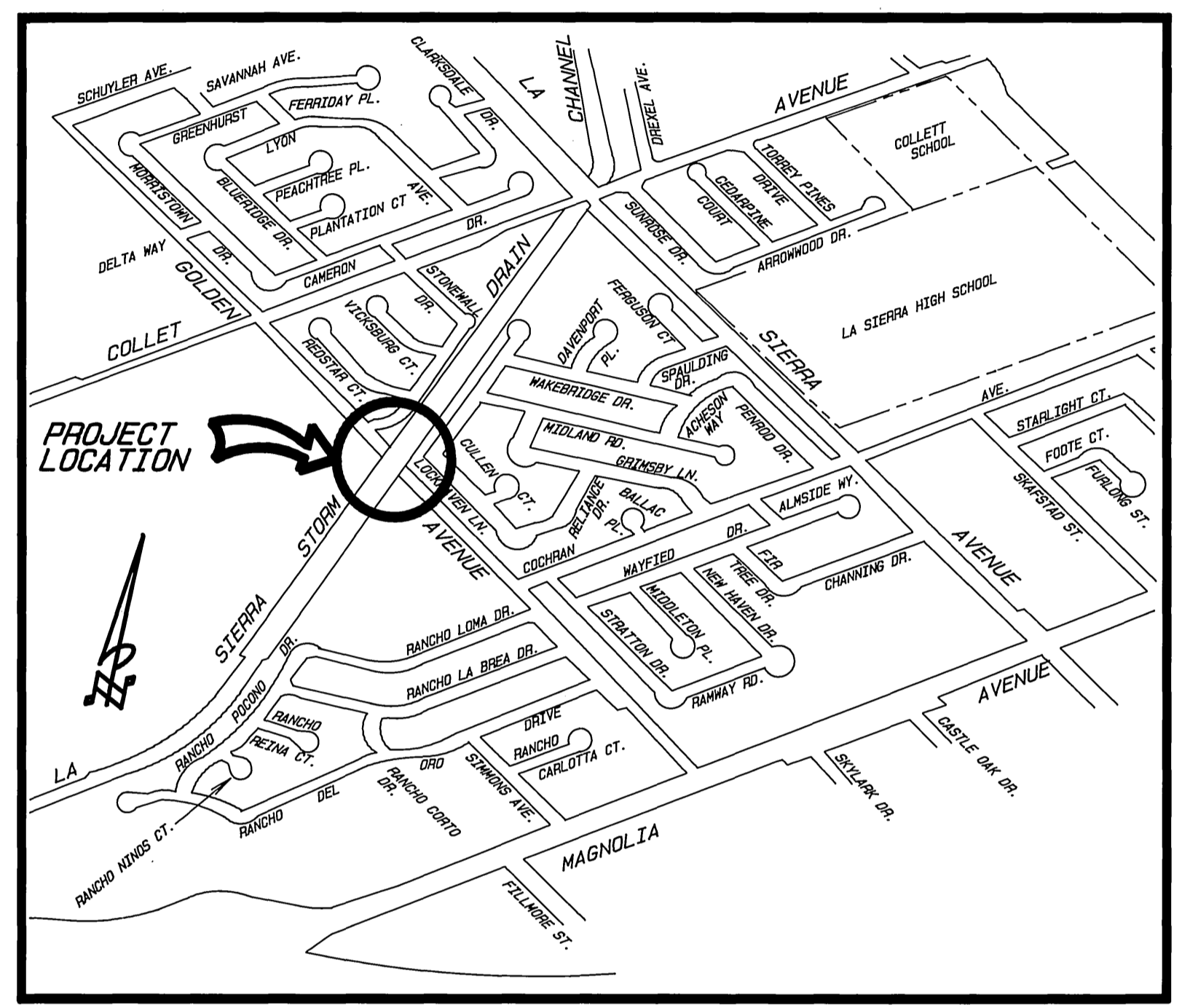
- NUMBERS ABOVE 100 IN A HEXAGON ON THE PLAN REFER TO THE RESPECTIVE STANDARD DRAWING AND SHALL BE CONSTRUCTED ACCORDINGLY, UNLESS MODIFICATIONS ARE NOTED ON THE PLAN OR COVER SHEET. ANY NUMBER SHOWN BELOW THE STANDARD DRAWING NUMBER INDICATES THE SPECIFIC ALTERNATE TO BE CONSTRUCTED.
- STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS DATED JANUARY 1988.
- RIVERSIDE COUNTY FLOOD CONTROL DISTRICT STD. DWG. DATED MAY 1971
- DETAIL SHEET

- 1 REMOVE & REPLACE EXIST. JUNCTION STRUCTURE PER R.C.F.C. STD. DWG. JS 226; A=56° 39' 15", B=60", C=26.15', T=9.5", EL. R=689.69, EL. S=689.67.
- 2 REMOVE & REPLACE EXIST. JUNCTION STRUCTURE PER R.C.F.C. STD. DWG. JS 232; A=72° 28' 55", C=10.5', D=21", SS=1.33± EL. S=691.04, STA. X=10+84.23.
- 3 ABANDON 12" (25') CMP.
- 4 INSTALL 10' LONG 6" DIA. STEEL PIPE. THIS STEEL PIPE SHALL BE WELDED TO EXIST. STEEL PIPE.
- 5 REMOVE 222.10' EXISTING CONC. CHANNEL.
- 6 CONSTRUCT 16.24' RETAINING WALL.
- 7 RELOCATE CHAIN LINK FENCE.
- 8 REMOVE ROAD BARRICADES & SIGNS.
- 9 REMOVE PEDESTRIAN BRIDGE
- 10 CONSTRUCT SUBDRAIN PER RIVESIDE COUNTY FLOOD CONTROL STD. DWG. CH332
- 11 PLUG EXIST. 6" SUBDRAIN WITH CONCRETE.
- 12 6" THICK CONC. SWALE. CONC. SHALL BE CLASS 520-C-2500.
- 13 CONSTRUCT MAINTENANCE ROAD, 5% MAX. SLOPE.
- 14 REMOVE 6" PIPE-SUBDRAIN, STA. 8+88.95 TO STA. 11+11.05.
- 15 RELOCATE EXISTING CHAIN LINK FENCE GATES 35' BACK FROM C.F. FOUR 14' WIDE

GENERAL CONSTRUCTION NOTES

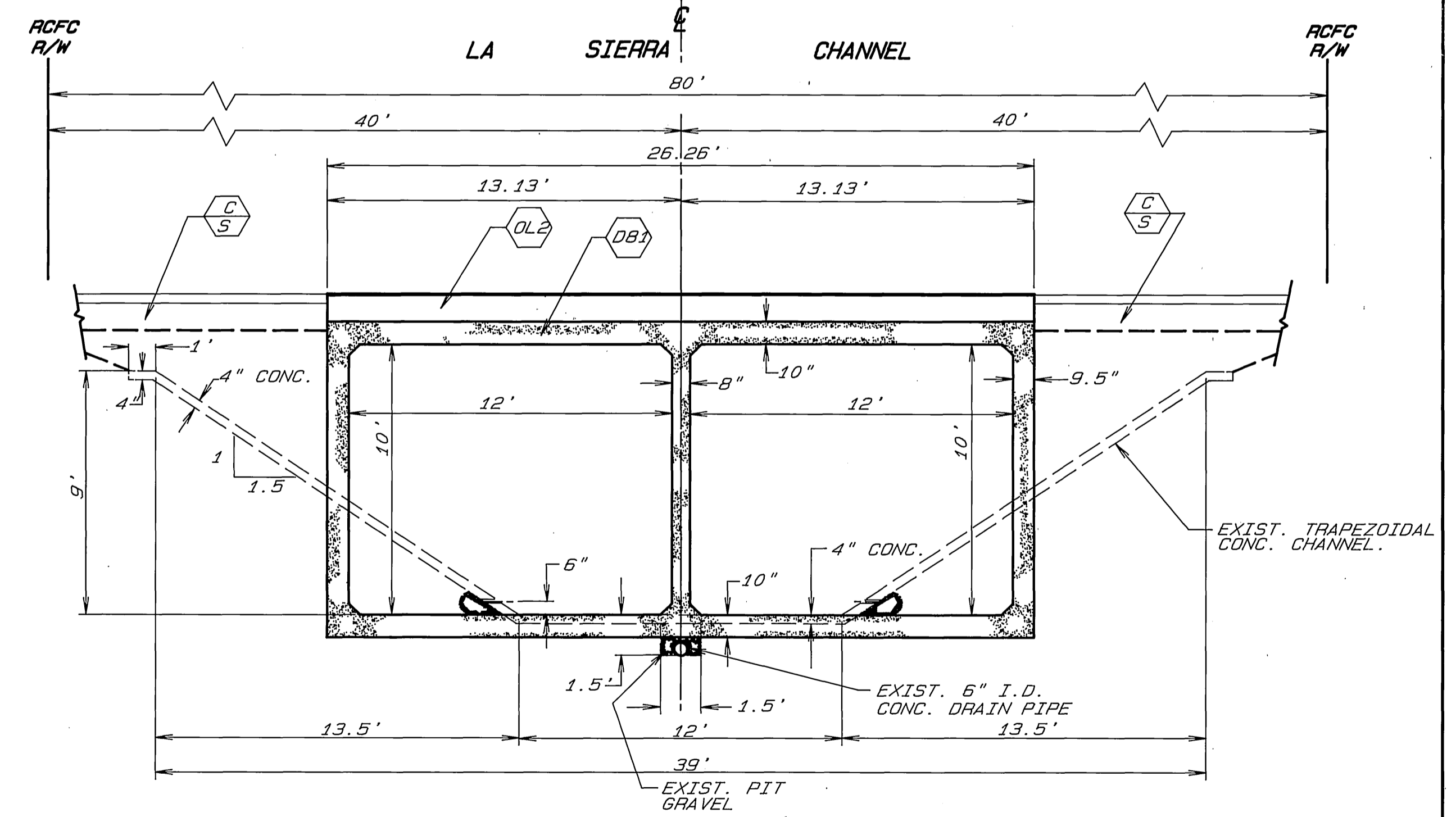
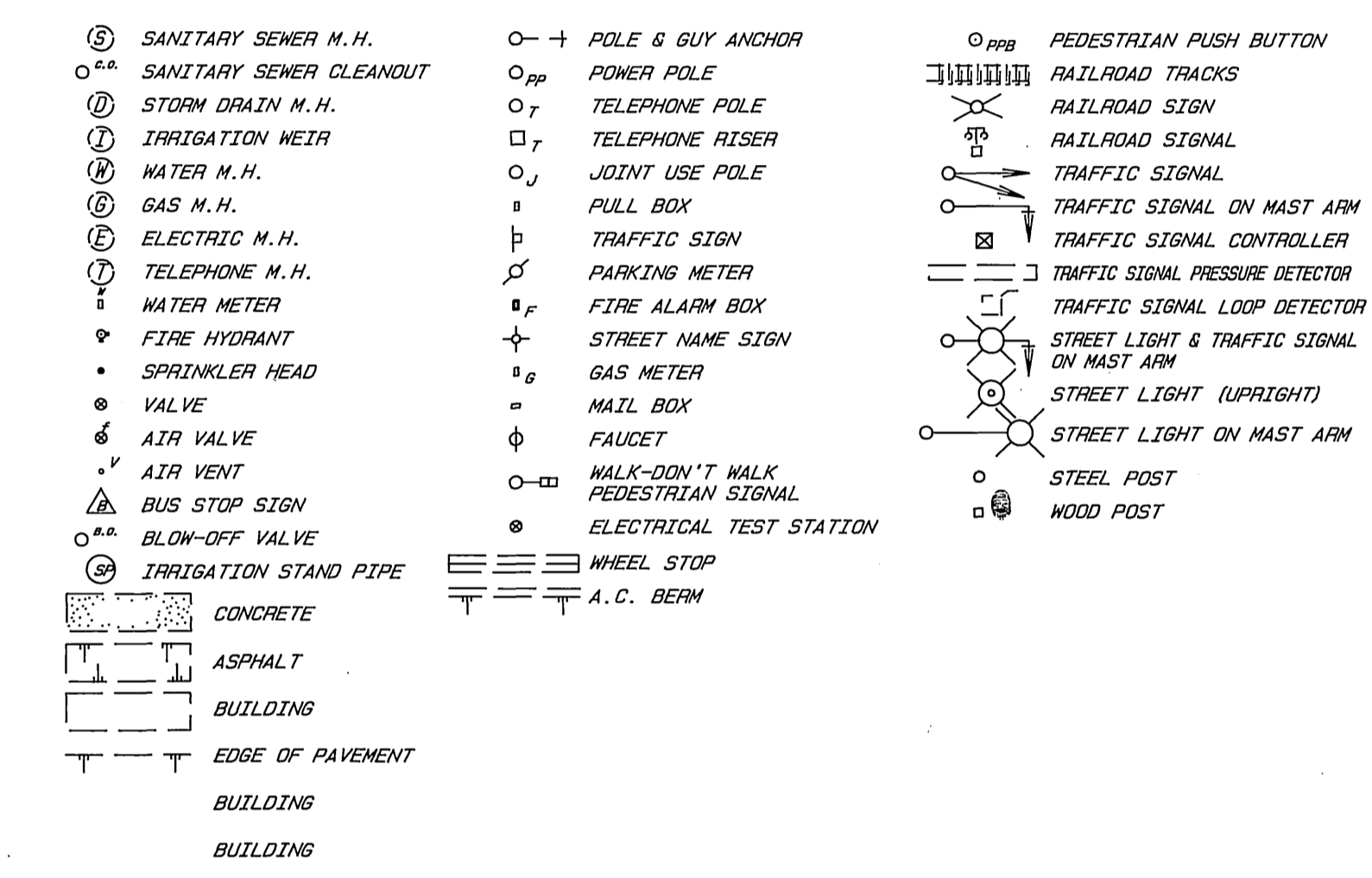
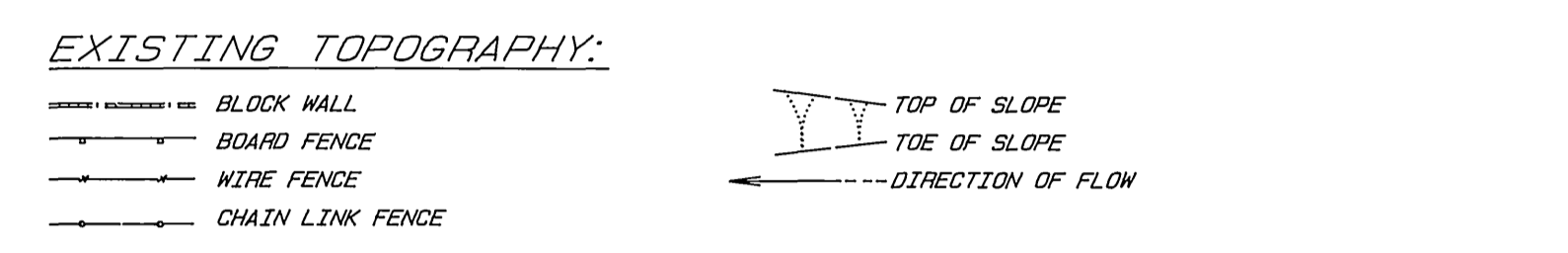
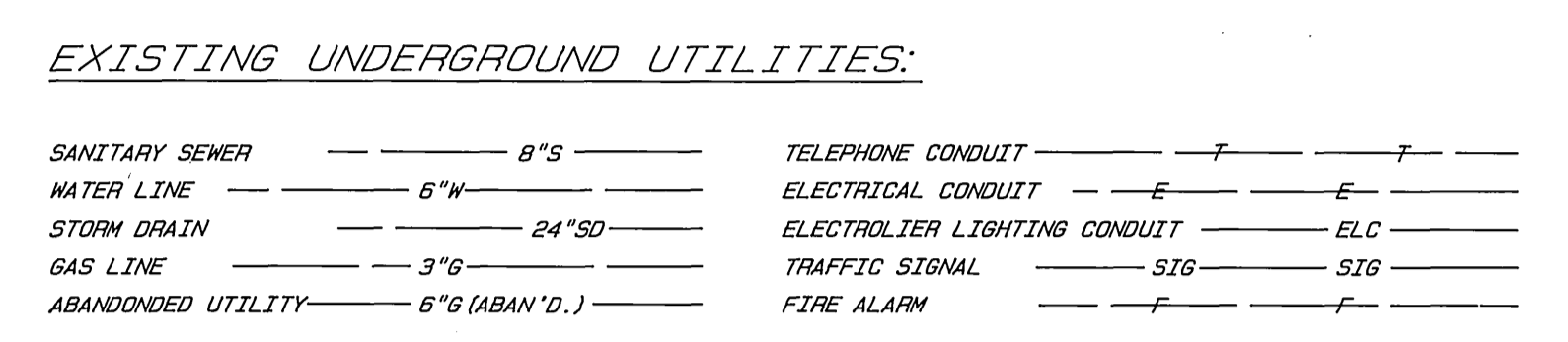
- 1 EXISTING UTILITIES SHOWN ON THIS PLAN ARE PLOTTED FROM UTILITY RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO LOCATE AND PROTECT ALL UTILITIES WHETHER OR NOT SHOWN ON THIS PLAN. IF THE COVER OF A UTILITY IS KNOWN, IT IS SHOWN IN THE PROFILE. UTILITIES IN THE PROFILE AS ——— INDICATES THAT THE COVER IS UNKNOWN, BUT THE UTILITY IS NOT EXPECTED TO CONFLICT WITH THE PROPOSED IMPROVEMENTS.
- 2 ALL ELEVATIONS SHOWN ON THE PLANS SHALL BE STAKED IN THE FIELD.
- 3 CONTRACTOR SHALL GIVE RCFC 5 DAYS, WRITTEN NOTICE PRIOR TO STARTING WORK ON CHANNEL.
- 4 CONFLICTING UTILITIES SHOWN WITHIN CONSTRUCTION AREA WILL BE LOCATED PRIOR TO CONSTRUCTION.

- 5 CURB & GUTTER SHALL BE STAKED WITH 3' OFFSETS AT 12.5' INTERVALS AND TWO ROWS OF #3 REBAR SHALL BE PLACED IN GUTTER WHERE GRADE IS LESS THAN 0.40%. PLACE 3/4" DOWEL PINS AT ALL EXPANSION JOINTS.
- 6 PRIME CONTRACTORS BIDDING THIS WORK SHALL HAVE A CLASS "A" LICENSE.
- 7 LOCATION OF SEWER LATERALS SHOWN ON THE PLAN ARE APPROXIMATE. SEWER LATERALS SHALL BE LOCATED IN THE FIELD BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION.



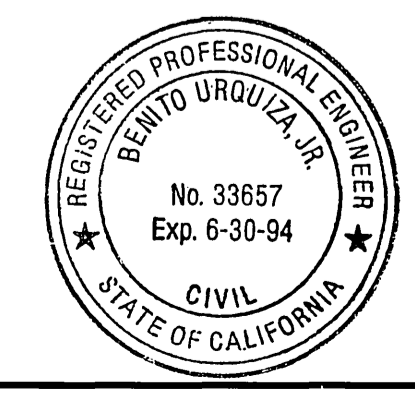
PROJECT LOCATION PLAN
N. T. S.

EXISTING UNDERGROUND & TOPOGRAPHY LEGEND



EXIST. R-C CHANNEL & BOX CULVERTS, SECTION A-A
(SCALE: 1"=5')

NOTE: BOX CULVERT REINFORCEMENT IS NOT SHOWN.

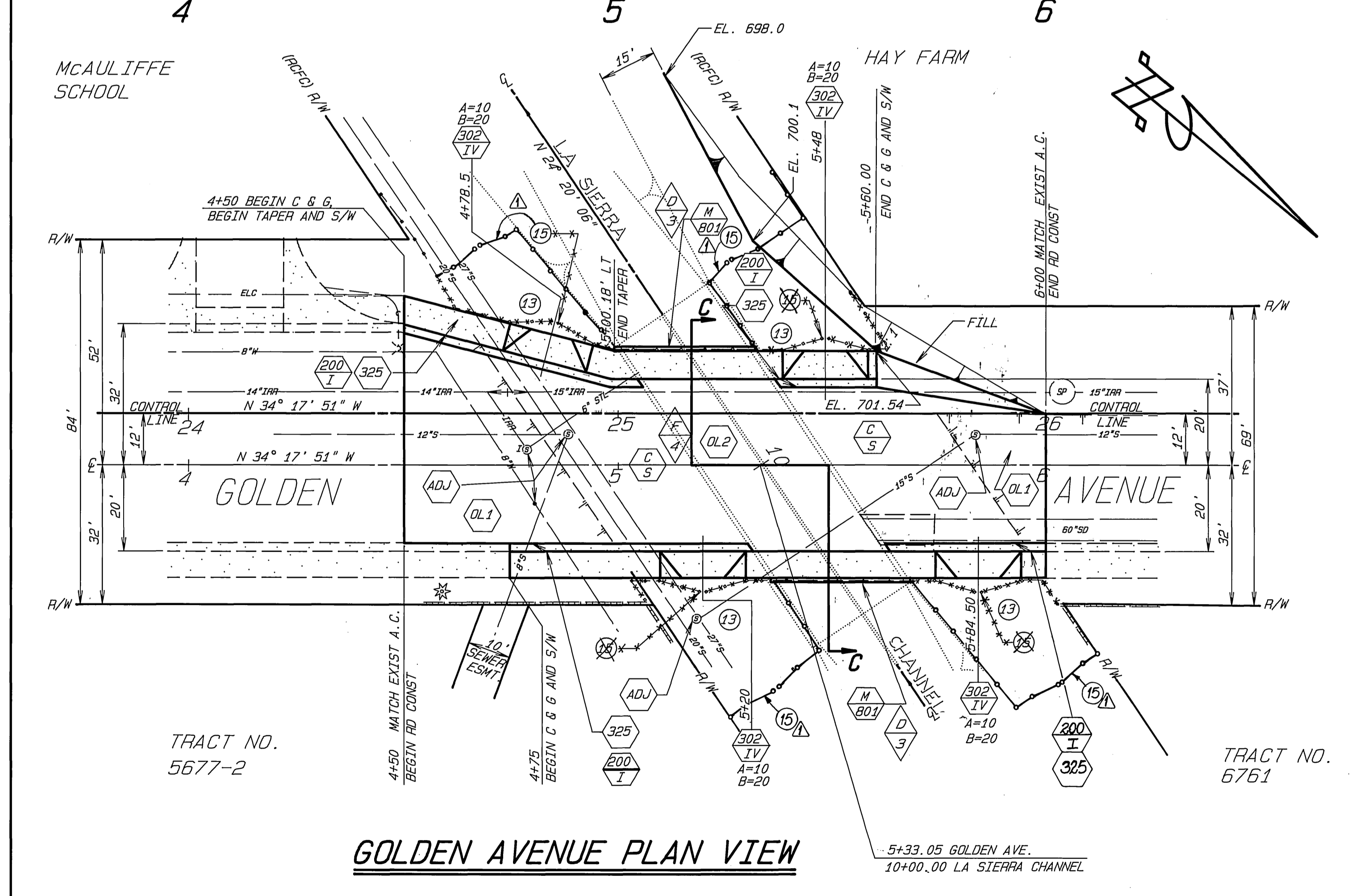
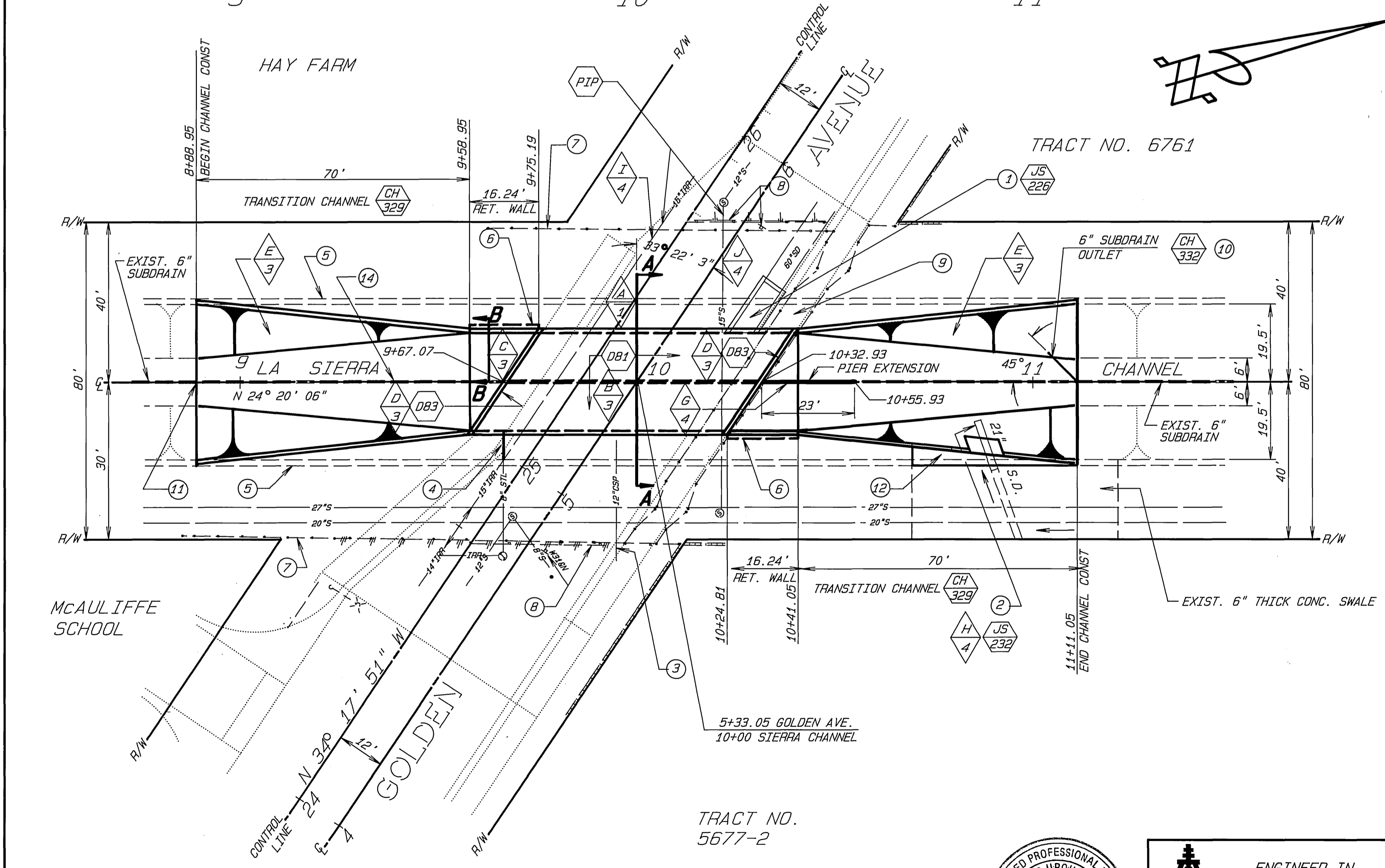
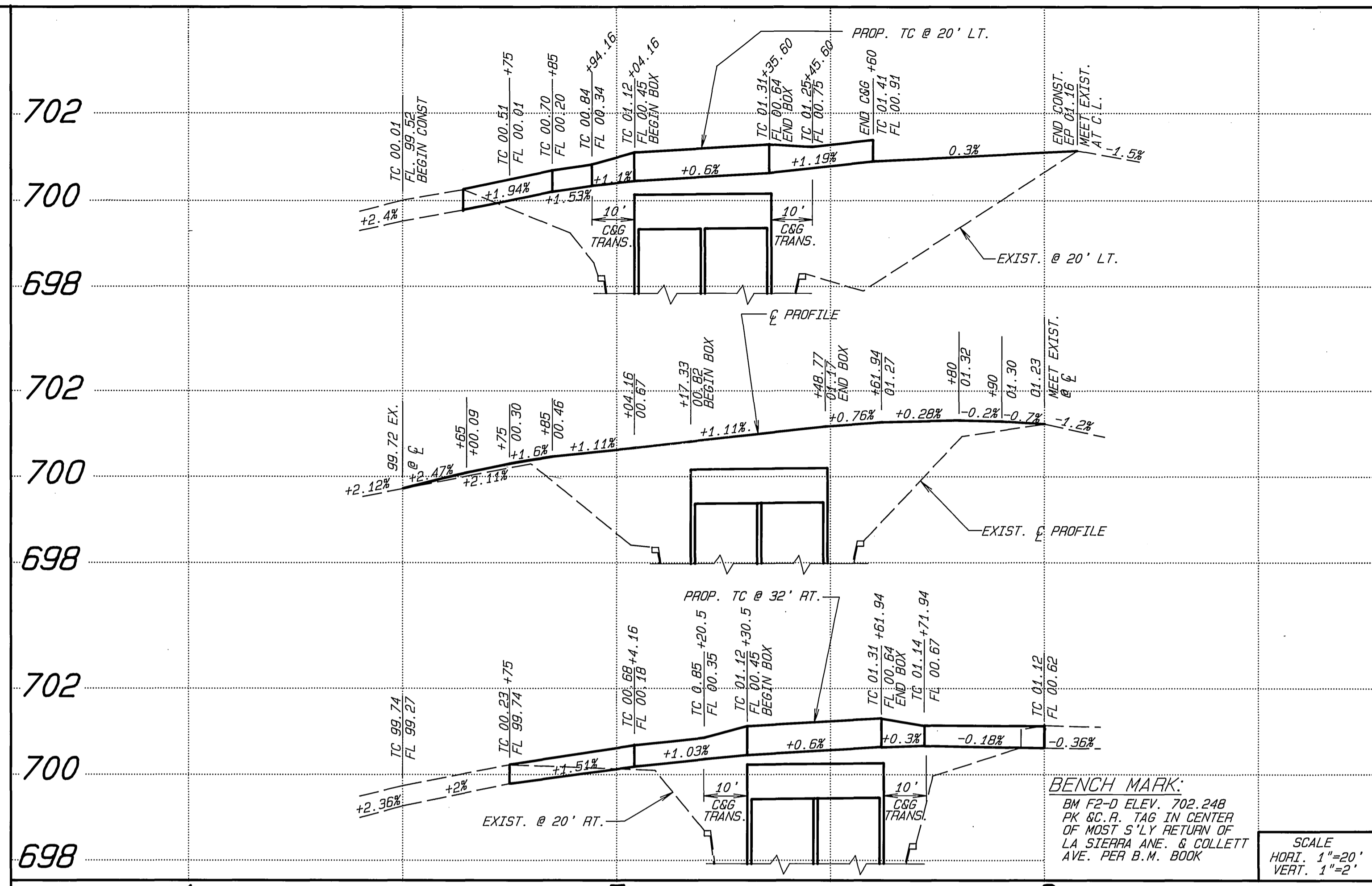
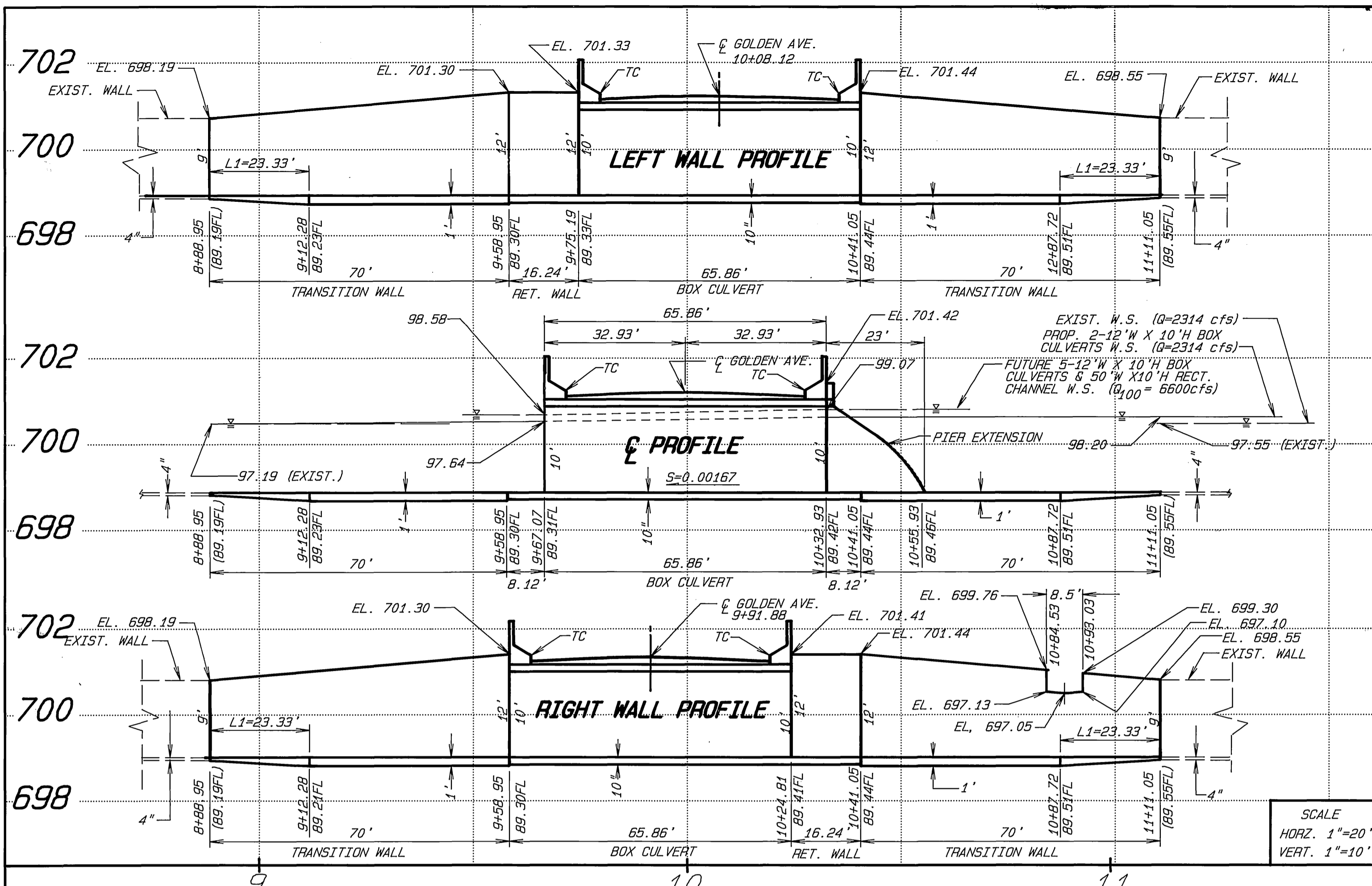


ENGINEER IN RESPONSIBLE CHARGE
Ben Urrutiza
 BEN URRUTIZA
 R.C.E. 33657 expires 6/30/94
 DATE MAY 23, 1991

CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT		APPROVED BY <i>[Signature]</i> PUBLIC WORKS DIRECTOR	DATE 5/23/91
DESIGNED BY FYL	DRAWN BY LEH, R/M	CHECKED BY SURVEYOR	DATE 5-23-91
REVISOR	REVISIONS	DATE	

GOLDEN AVENUE BOX CULVERTS		ACCOUNT NO. 30-575-231-12
AT LA SIERRA CHANNEL		R-3005
HORIZ. SCALE: 1"=	VERT. SCALE: 1"=	SHEET 1 OF 4

INDEXED 8-9-91 LPH



DOUBLE 12' W X 10' H BOX CULVERTS PLAN VIEW

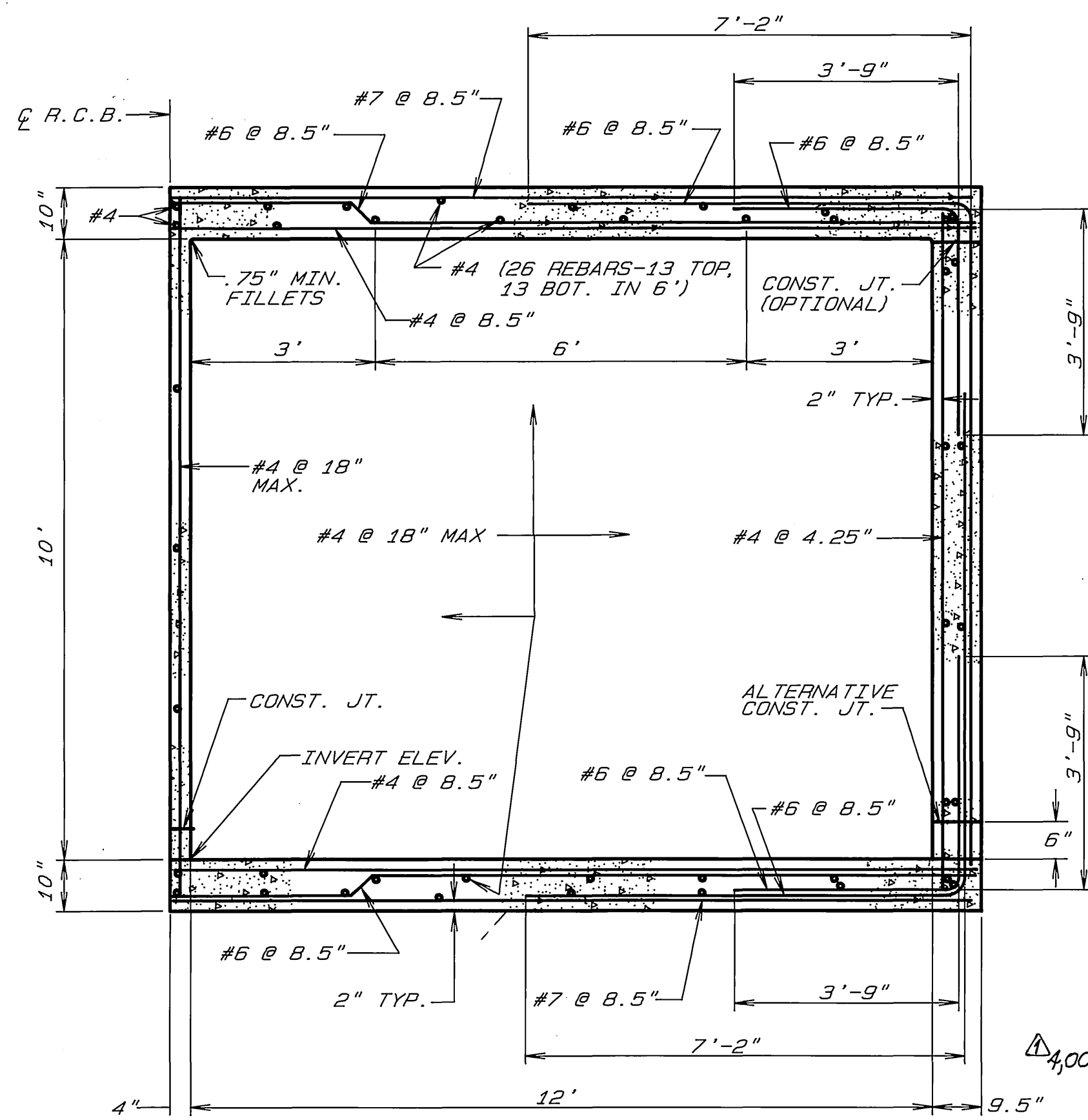
GOLDEN AVENUE PLAN VIEW



ENGINEER IN RESPONSIBLE CHARGE
 Ben Urquiza
 R.C.E. 33657 expires 6/30/94
 DATE MAY 23, 1991

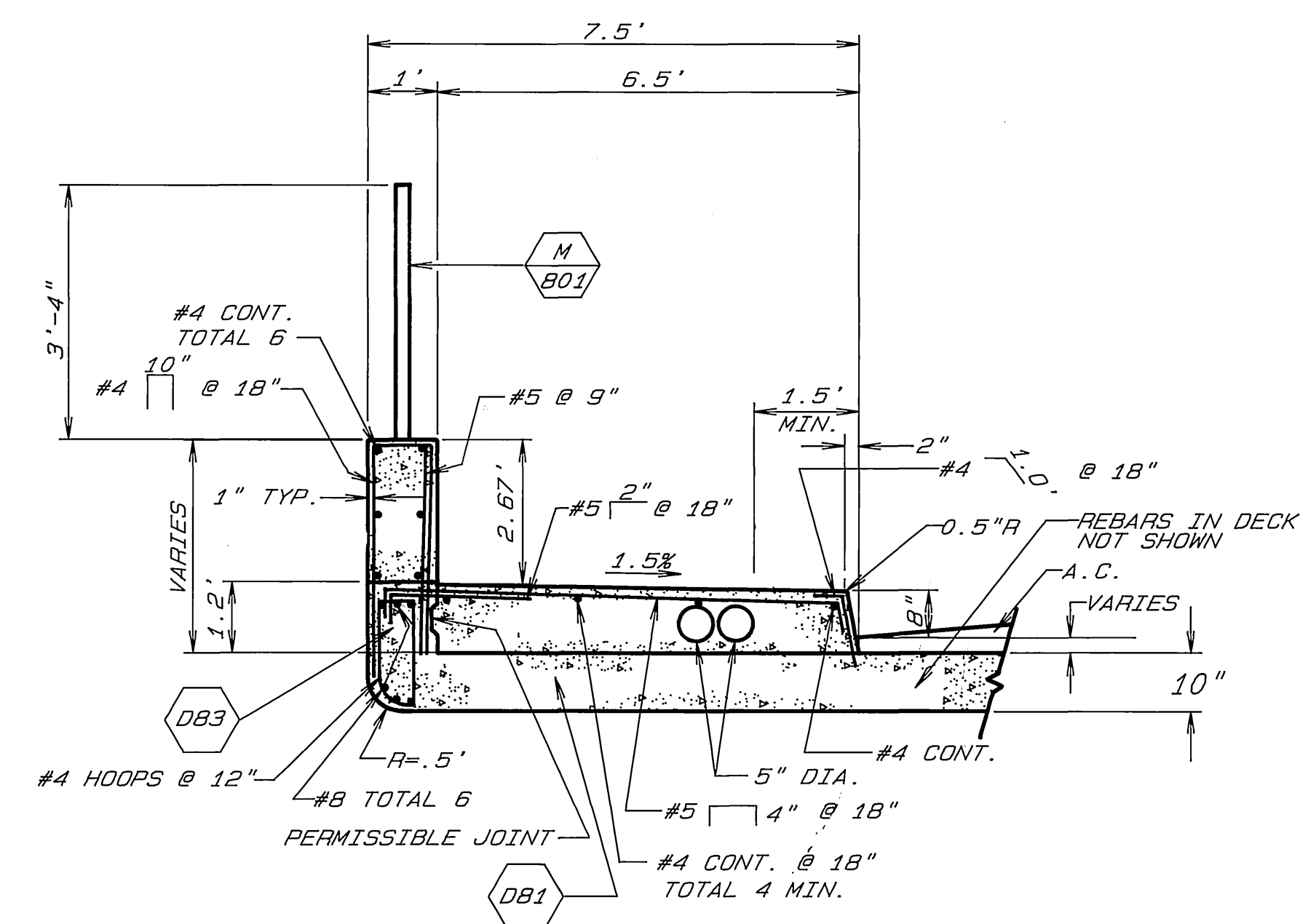
CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT		APPROVED BY [Signature] PUBLIC WORKS DIRECTOR	
DESIGNED BY: FYL	DRAWN BY: LFM	CHECKED BY: B.L.	DATE: 5/23/91
CHGD. PROP. FENCE LOCATION	8/11/91	APPR. DATE	5-23-91
REVISIONS		TRAFFIC DIVISION	
		STREET SERVICES	

GOLDEN AVENUE
 BOX CULVERTS
 AT LA SIERRA CHANNEL
 ACCOUNT NO. 30-575-231-12
 R-3005
 SHEET 2 OF 4
 HORIZ. SCALE: 1"=20' VERT. SCALE: 1"=2'
 INDEXED 8-9-91 LHM

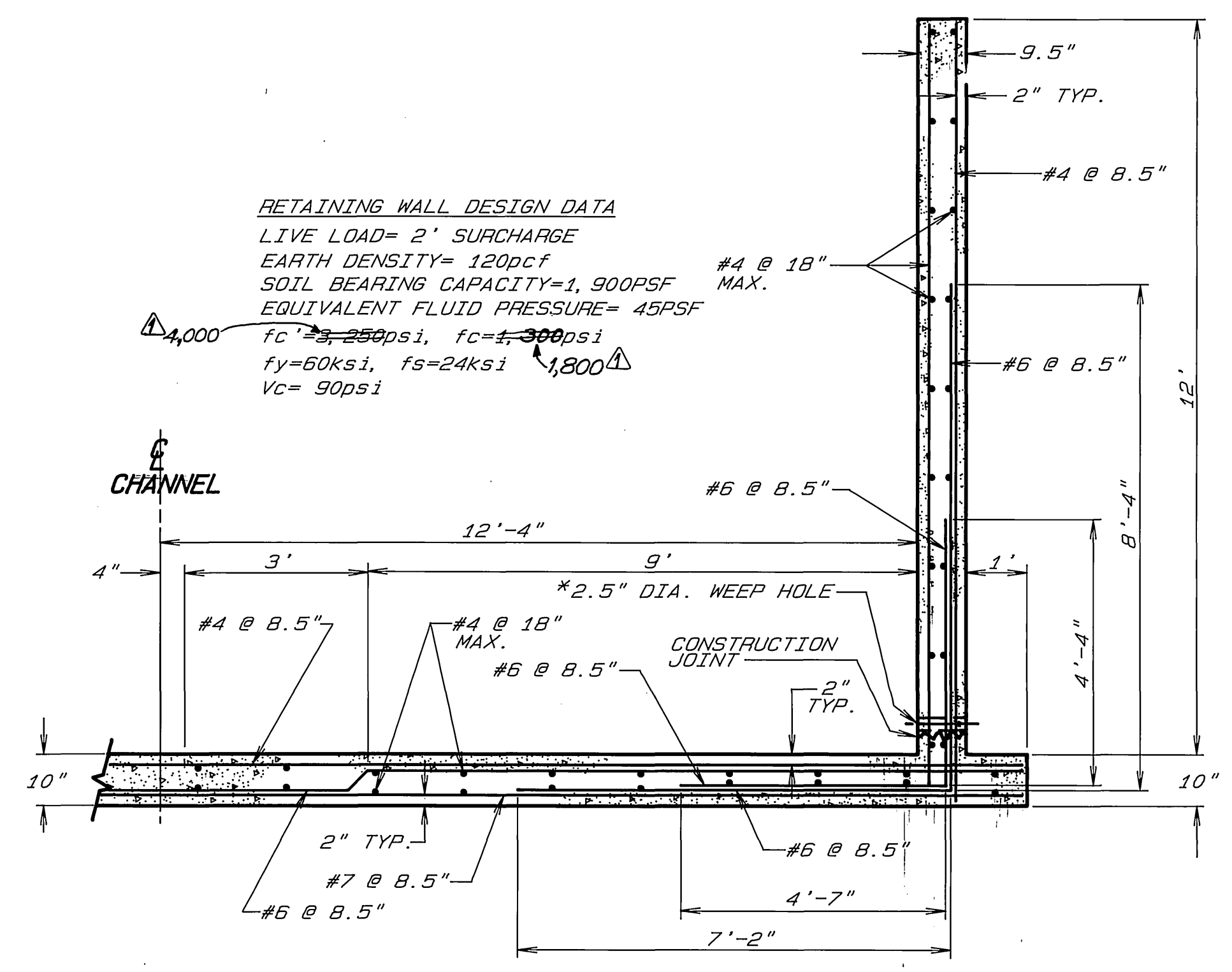


TYPICAL BOX CULVERTS (DB1)
N.T.S.

BOX CULVERTS DESIGN DATA
LIVE LOAD=HS 20-44 TRUCK
SOIL DENSITY=140pcf
fc=3,250psi, fc=3,300psi
fy=60ksi, fs=24ksi
MAX. ALLOWABLE SHEAR:
Vc=3.5√fc psi
UP TO 10' SOIL COVER



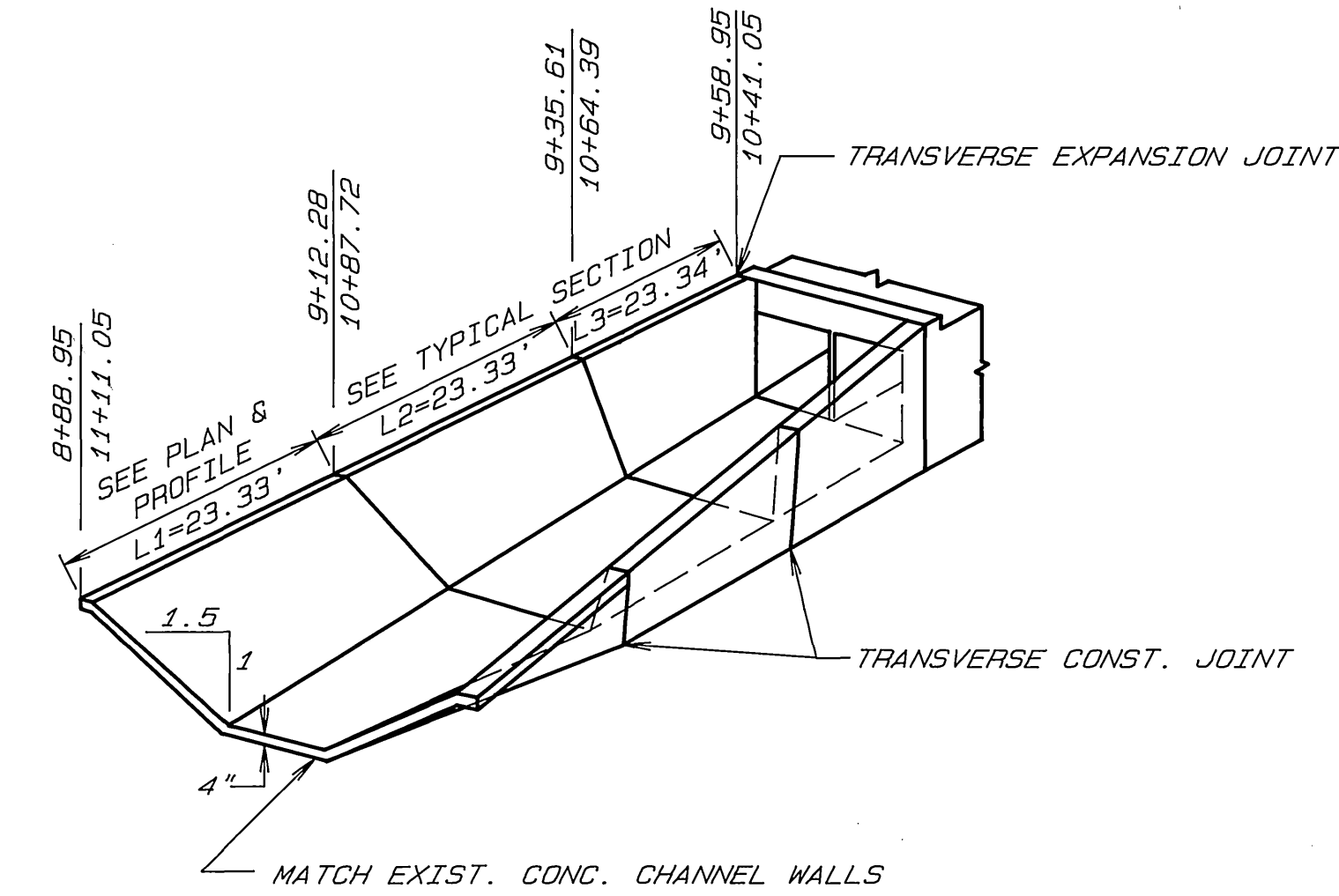
FENCE, WALKWAY & PARAPET WALL
N.T.S.



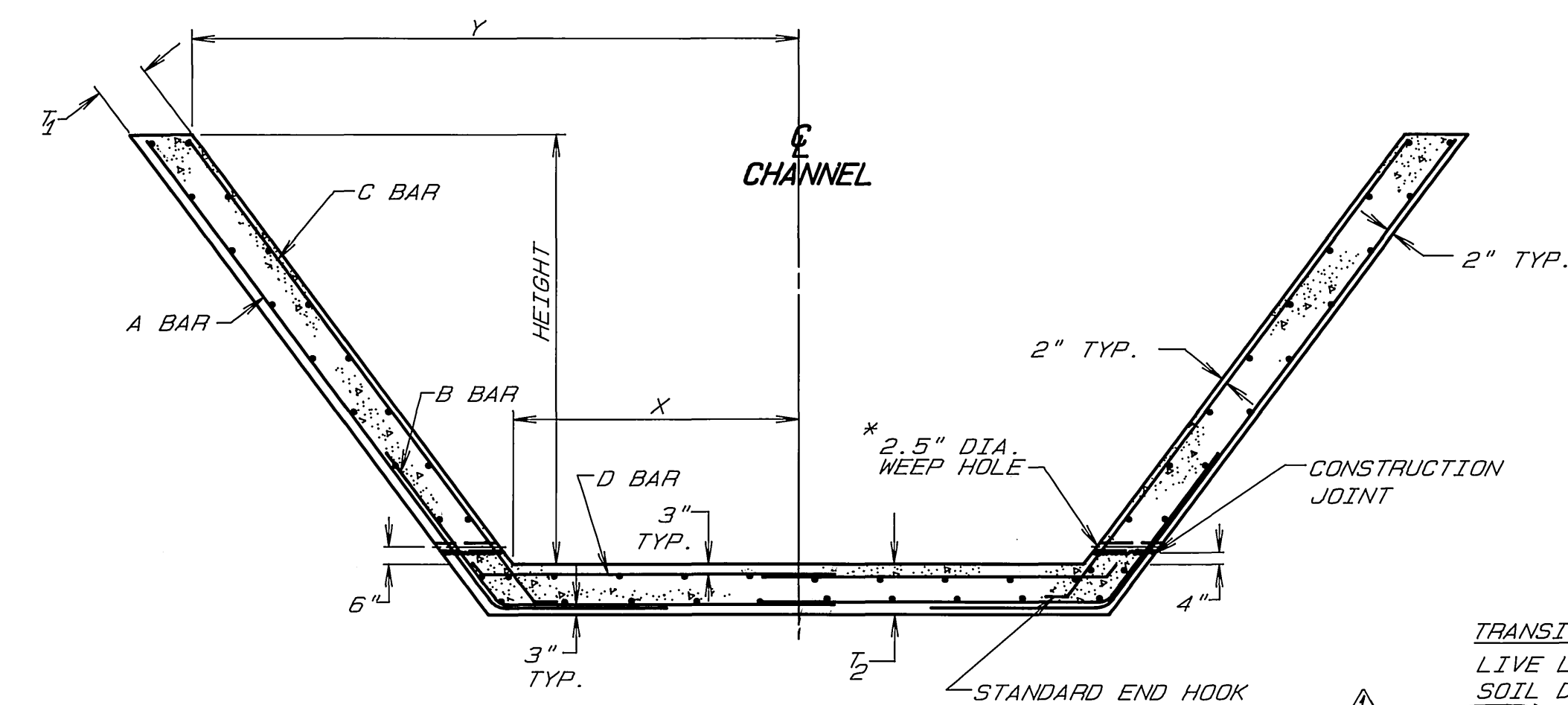
TYPICAL RETAINING WALL, SECTION B-B
N.T.S.

RETAINING WALL DESIGN DATA
LIVE LOAD= 2' SURCHARGE
EARTH DENSITY= 120pcf
SOIL BEARING CAPACITY=1,900PSF
EQUIVALENT FLUID PRESSURE= 45PSF
fc=3,250psi, fc=3,300psi
fy=60ksi, fs=24ksi
Vc= 90psi

DATA	TRANSITION WALL DETAIL SCHEDULE			
STATION TO STATION	9+12.28 TO 9+35.61 10+87.72 TO 10+64.39 (L2)		9+35.61 TO 9+58.95 10+64.39 TO 10+41.05 (L3)	
X	8'-1"	10'-4"	10'-4"	12'-4"
Y	17'-1"	14'-10"	14'-10"	12'-4"
HEIGHT	10'	11'	11'	12'
WALLS T 1	12"		12"	
BOTTOM SLAB T2	12"		12"	
A BARS	#6 @ 9 1/2"		#7 @ 8 1/2"	
HORIZ. LENGTH	2'-6"	4'-8"	4'-8"	7'-4"
SLOPE LENGTH	14'-5"	12'-7"	12'-7"	12'-7"
B BARS	#7 @ 9 1/2"		#8 @ 8 1/2"	
HORIZ. LENGTH	11'-2"	13'-3"	13'-3"	16'
SLOPE LENGTH	4'-11"	5'-3"	5'-3"	4'-8"
C BARS	#4 @ 18"		#4 @ 18"	
SLOPE LENGTH	14'-1"	12'-7"	12'-7"	13'-1"
D BARS	#4 @ 18"		#4 @ 18"	
HORIZ. LENGTH	10'-2"	12'-1"	12'-1"	14'-2"



TRANSITION WALLS
N.T.S.



TYPICAL TRANSITION WALL SECTION (CH-325)
N.T.S.

TRANSITION WALL DESIGN DATA
LIVE LOAD=2' SURCHARGE
SOIL DENSITY=120pcf
fc=3,250psi, fc=3,300psi
fy=60,000psi, fs=24,000psi



ENGINEER IN RESPONSIBLE CHARGE
Ben Urquiza
R.C.E. 33657 expires 6/30/94
DATE MAY 23, 1991

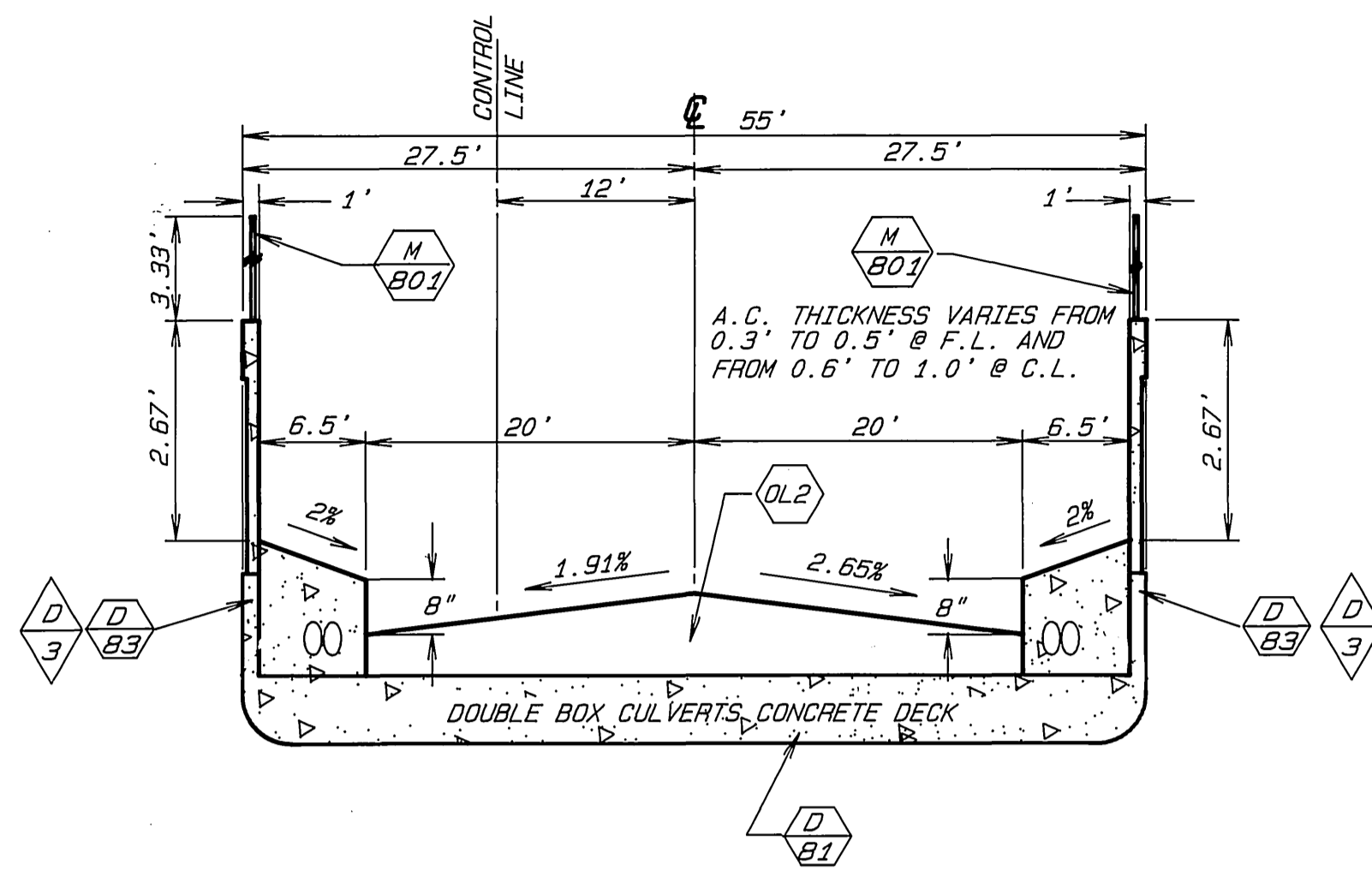
CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
APPROVED BY: [Signature]
DEPUTY P.W. DIRECTOR
DATE: 5/23/91

GOLDEN AVENUE
BOX CULVERTS
AT LA SIERRA CHANNEL

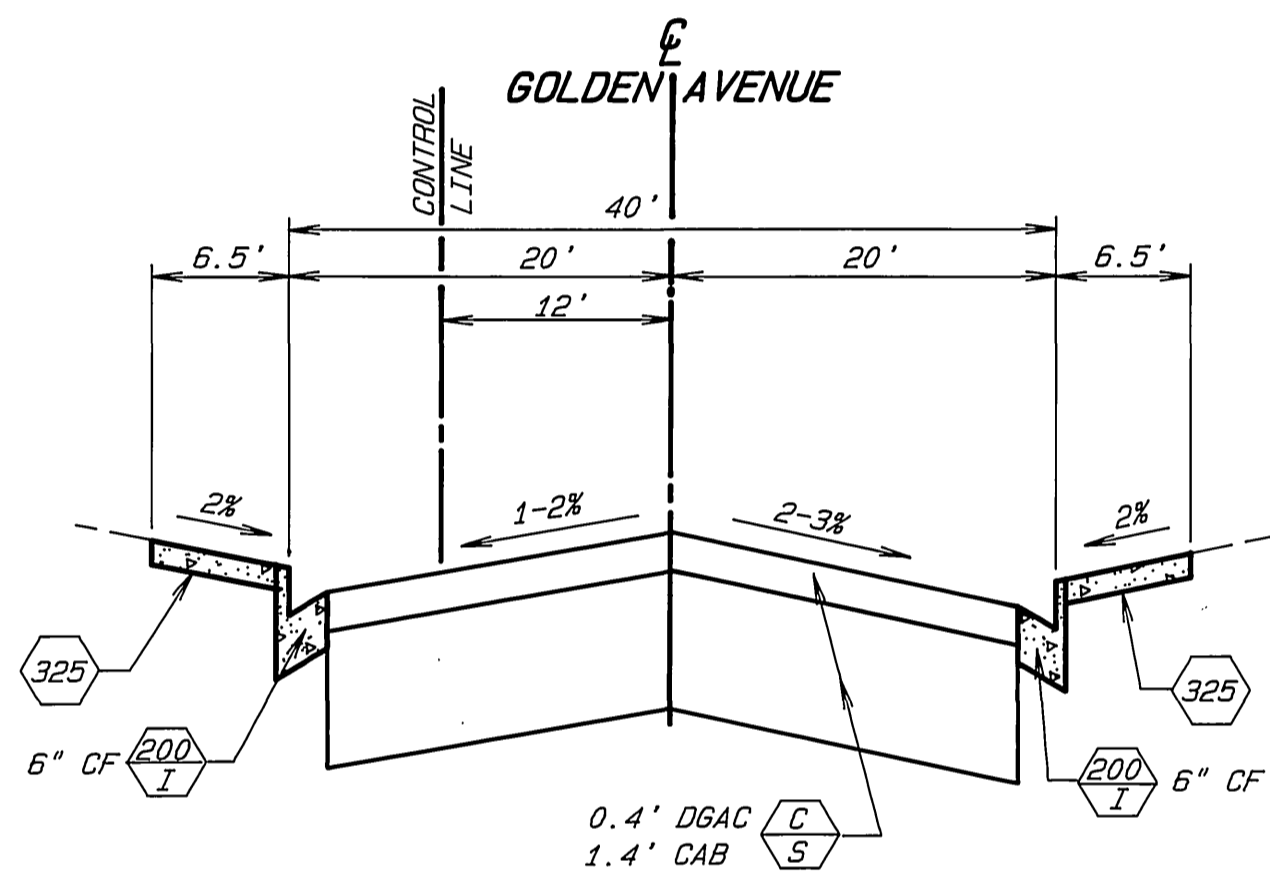
ACCOUNT NO. 30-575-231-12
R-3005
SHEET 3 OF 4

* WEEP HOLES SHALL BE FORMED AS SHOWN IN BOTH WALLS AT A SPACING OF 10 FEET WITH ONE CUBIC FOOT OF FILTER MATERIAL WRAPPED IN FILTER FABRIC PAVED AT EACH HOLE.

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 2'

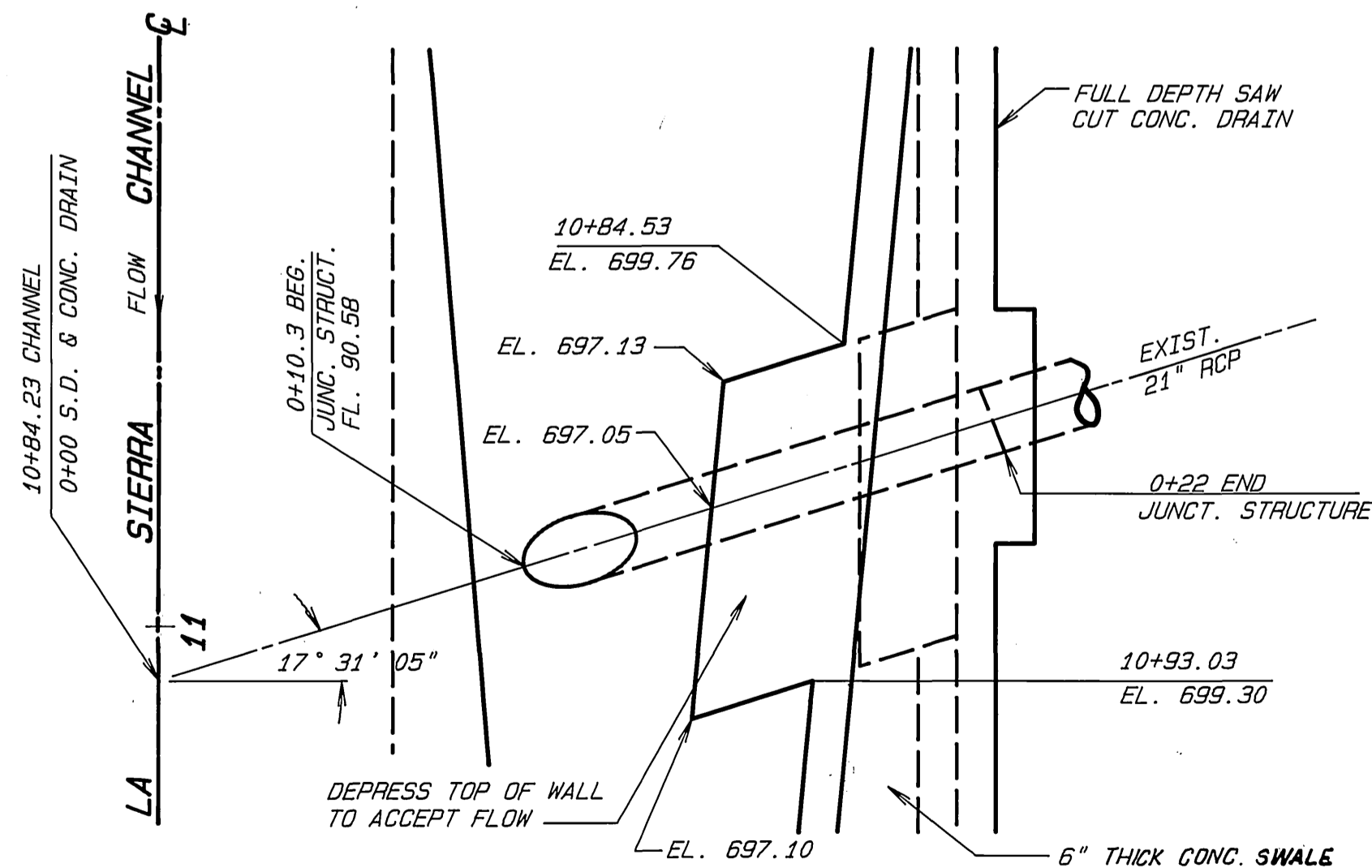


SECTION C-C
 (SCALE: HORIZ. 1"=10'; VER. 1"=2')

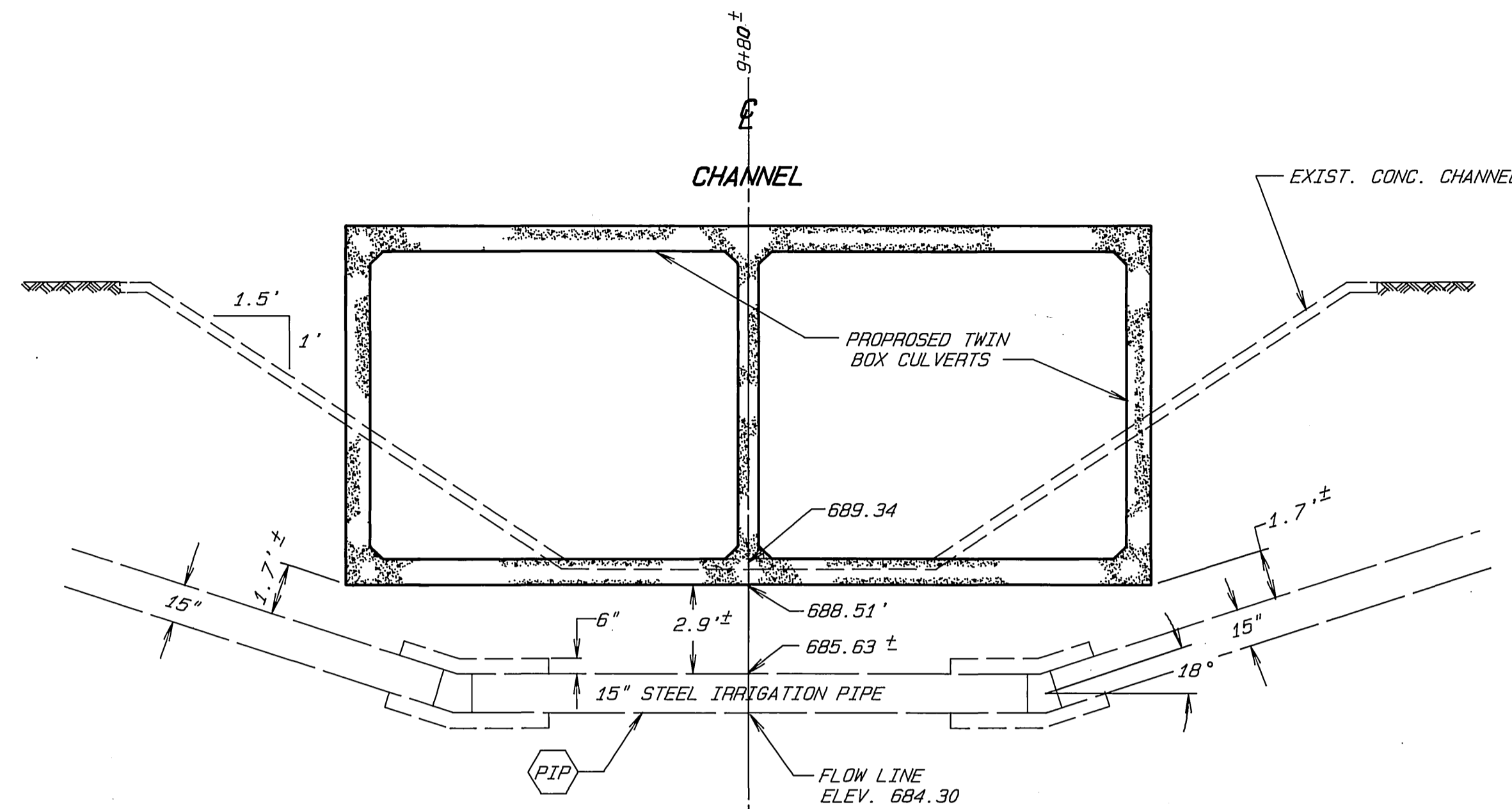


PROPOSED STRUCTURE APPROACH (T.I.=8)
 (SCALE: HORIZ. 1"=10'; VER. 1"=2')

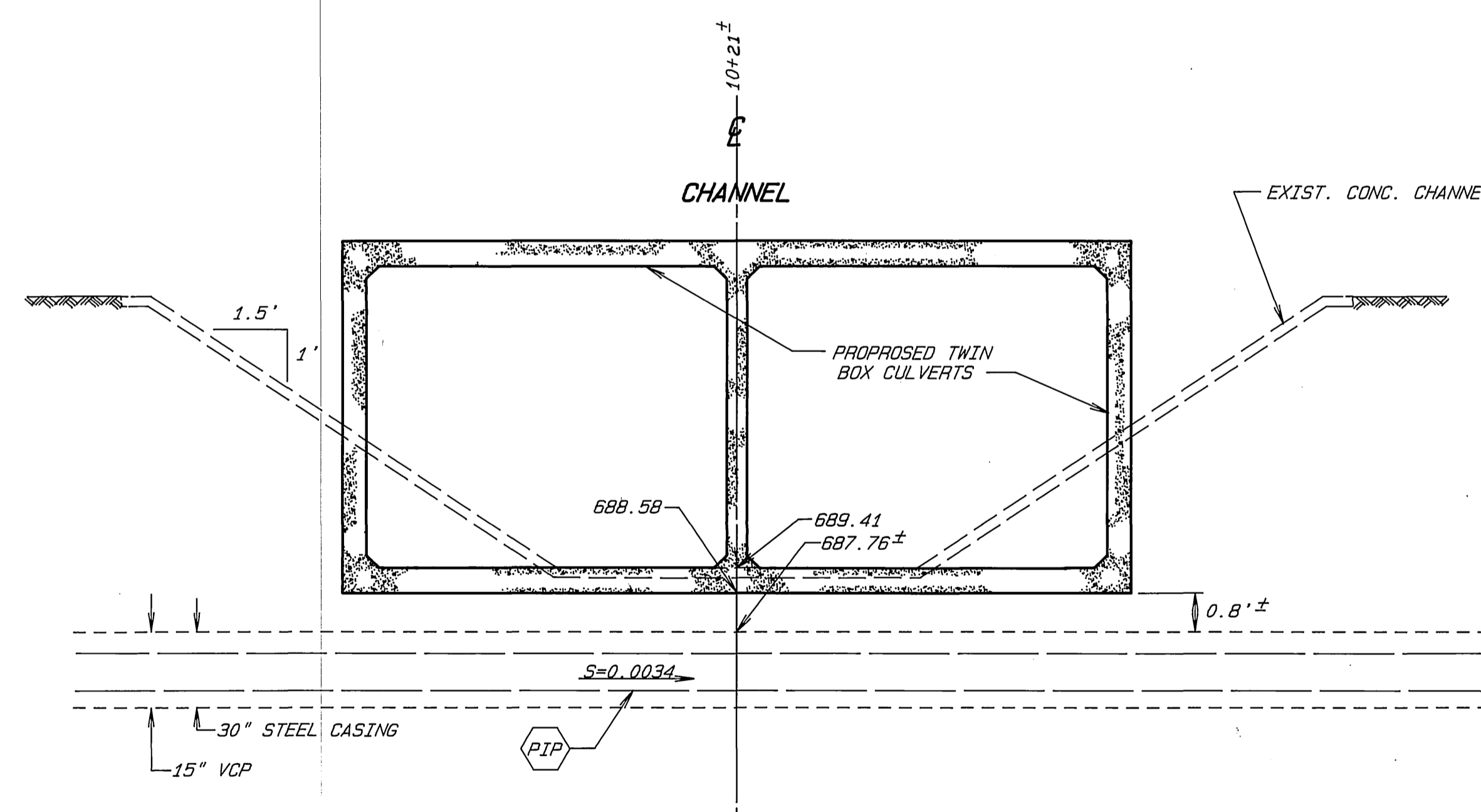
FROM STA. 4+87 TO 5+17.33 AND
 FROM STA. 5+48.77 TO 5+83



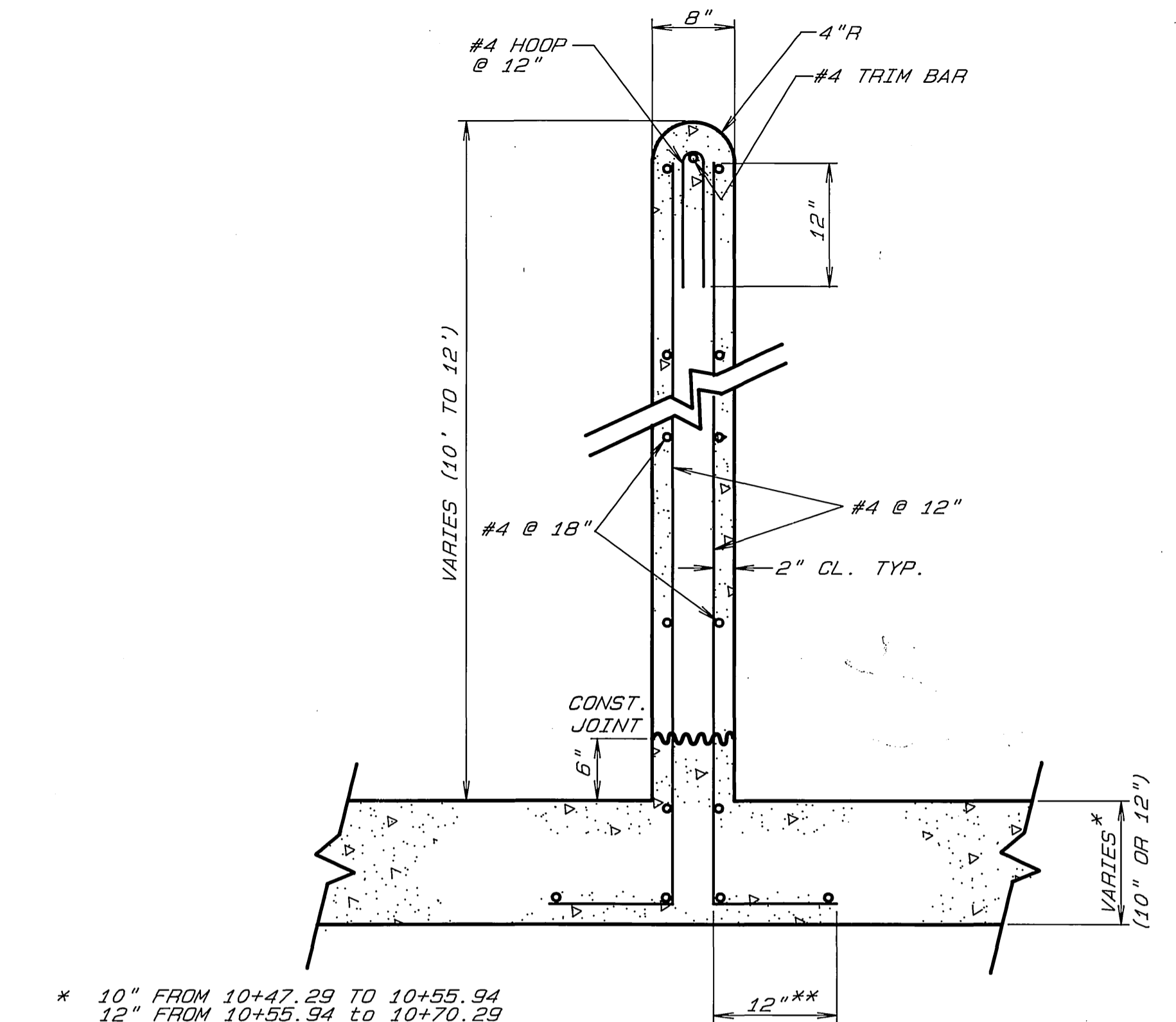
CONCRETE DRAIN @ STA. 10+84.23 RT.
 (SCALE: 1"=5')



CROSSING OF EXISTING 15" STEEL IRRIGATION PIPE
 (SCALE: 1"=5')

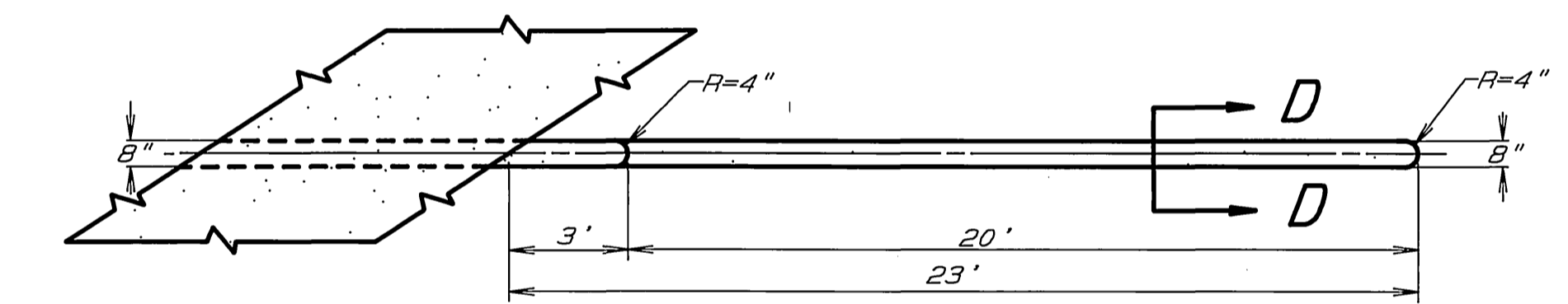


CROSSING OF EXISTING 15" SEWER (LOOKING UPSTREAM)
 (SCALE: 1"=5')

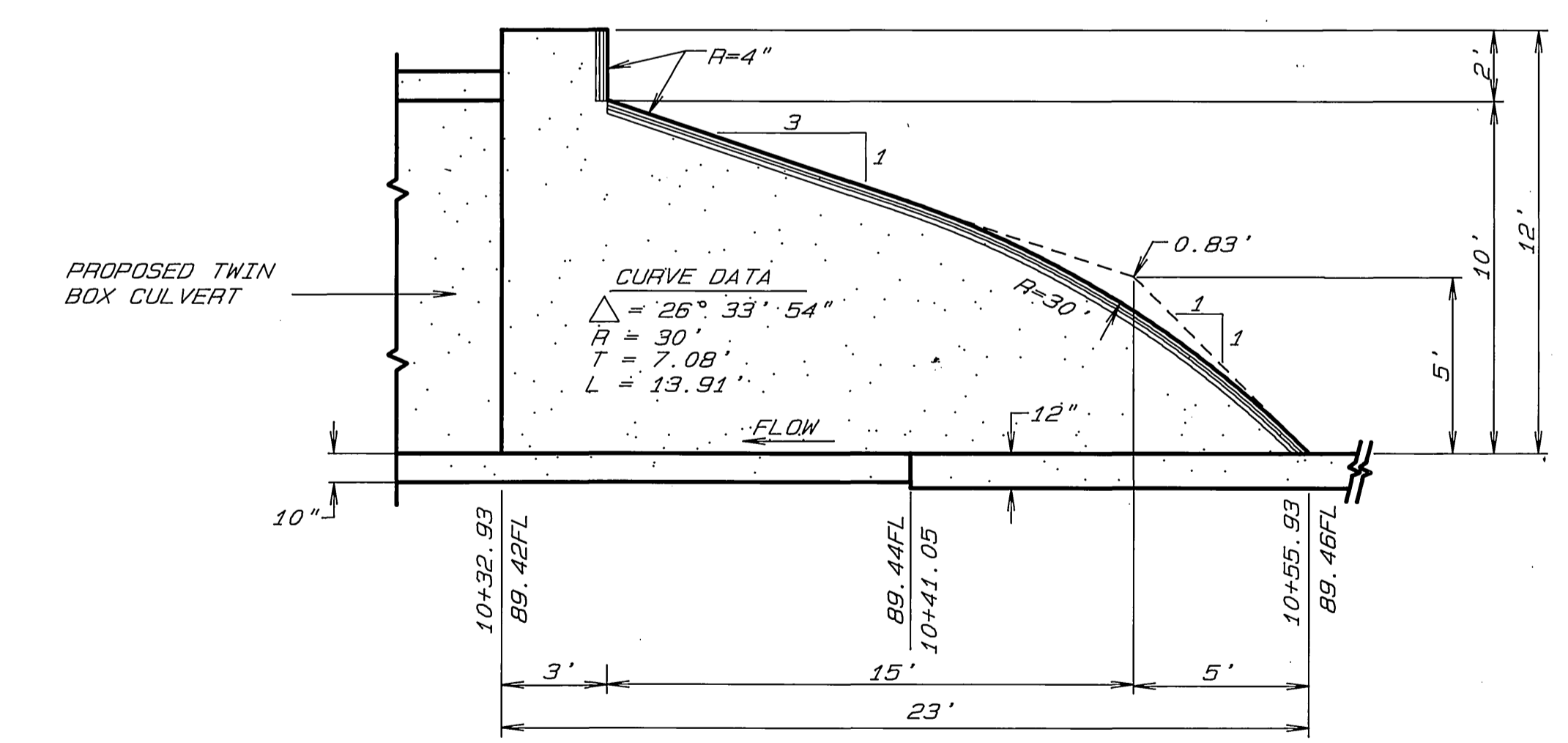


* 10" FROM 10+47.29 TO 10+55.94
 12" FROM 10+55.94 TO 10+70.29
 ** TIE PIER EXTENSION REBARS TO FOOTING REBARS (NOT SHOWN ON THIS CROSS-SECTION)

SECTION D-D
 SCALE: 1"=1'



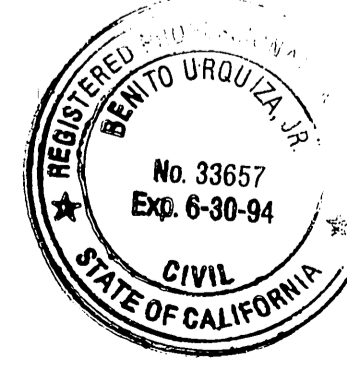
PLAN VIEW



PROFILE

PIER EXTENSION DESIGN DATA
 $\Delta = 26^\circ 33' 54''$
 $R = 30'$
 $T = 7.08'$
 $L = 13.91'$

PIER EXTENSION
 SCALE: 1"=4'



ENGINEER IN RESPONSIBLE CHARGE
 Ben Uruizta
 R.C.E. 33657 expires 6/30/94
 DATE MAY 23, 1991

APPROVED BY	DATE	BY
DEPUTY P.W. DIRECTOR	5/23/91	Ry.L.
PRINCIPAL ENGINEER	5/23/91	Ry.L.
CHIEF P.W. INSPECTOR	5-23-91	Ry.L.
SURVEYOR	5-23-91	Ry.L.
TRAFFIC DIVISION	5-23-91	Ry.L.
STREET SERVICES	5-23-91	Ry.L.

CITY OF RIVERSIDE
 PUBLIC WORKS DEPARTMENT
 APPROVED BY
 Ben Pal
 PUBLIC WORKS DIRECTOR
 DATE 5/23/91

GOLDEN AVENUE BOX CULVERTS
 AT LA SIERRA CHANNEL

ACCOUNT NO. 30-575-231-12
R-3005
 SHEET 4 OF 4