

TRACT No. 28828-1

SEWER IMPROVEMENT PLANS

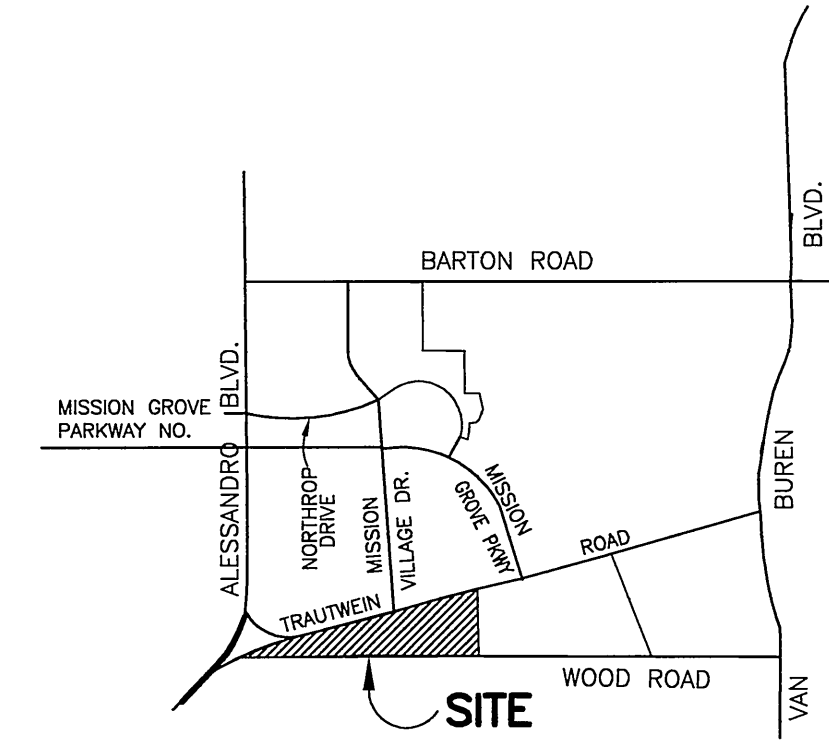
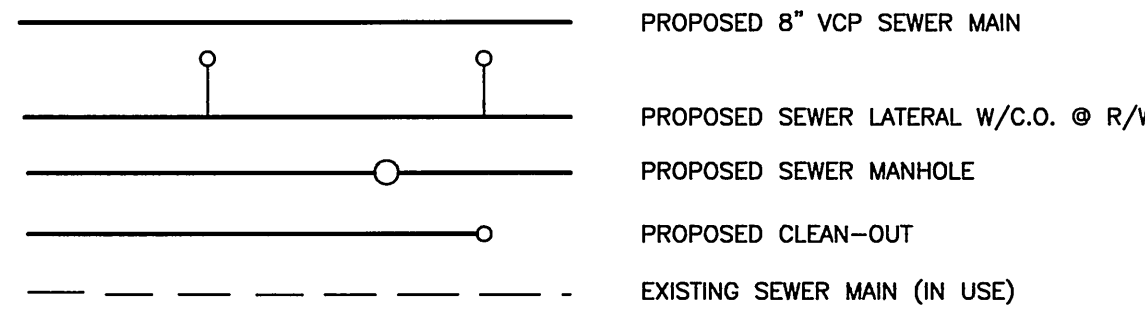
GENERAL NOTES

1. The private engineer signing these plans is responsible for assuring the accuracy and acceptability of the work hereon. In the event of discrepancies arising during construction, the private engineer shall be responsible for determining an acceptable solution and revising the plans for approval by the City.
2. It shall be the responsibility of the contractor to clear the right of way in accordance with the provisions of law as it affects each utility including irrigation lines and appurtenances and at no cost to the City.
3. Construction shall be in accordance with the City of Riverside Dept. of Public Works, Standard Drawings, its supplemental notes and the Standard Specifications for Public Works Construction, Current Edition.
4. Location of laterals to be determined in the field at the direction of the owner. Avoid conflict with proposed and/or existing facilities.
5. Contractor is to verify existing sewer elevation prior to construction.
6. The sewer contractor shall adjust manholes to final grade after paving is completed.
7. No finished floor elevation shall be less than 6" above the upper manhole rim elevation of the sewer line segment being connected to, without having a proper backwater valve installed in the lateral.
8. A plug shall be installed and will remain in place where the new sewer connects with the existing sewer until the new sewer is accepted by the City of Riverside.
9. Any traffic control striping obliterated and/or badly worn during construction shall be restored by the contractor within five days after notification from the City inspectors.
10. All flagged elevations shall be staked in the field by the private engineer.
11. The contractor shall call in a locations request to UNDERGROUND SERVICE ALERT (USA), Phone No. 1-800-227-2600 two working days before digging. No construction permit will be issued by the Public Works Department involving excavation for underground facilities unless the applicant has been provided an Inquiry Identification Number by U.S.A.
12. The developer shall be responsible for preserving or re-establishing and referencing survey monuments destroyed, disturbed or buried as a result of construction shown hereon.
13. Notice to contractor. The existence and location of any underground utility pipes or 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 on these plans. The contractor is required to take precautionary measures to protect the utility lines shown on any other lines not of record or not shown on these plans.
14. Prior to construction the contractor shall pothole all utility crossings and connections and verify the location and elevation of all utilities affected. The engineer shall be notified of any discrepancies before construction begins.
15. No person shall perform any construction activity or install any objects within the public rights-of-way or easements of the City of Riverside without a valid Construction Permit or, a Street Opening Permit or an Encroachment Permit issued by the City's Public Works Department.

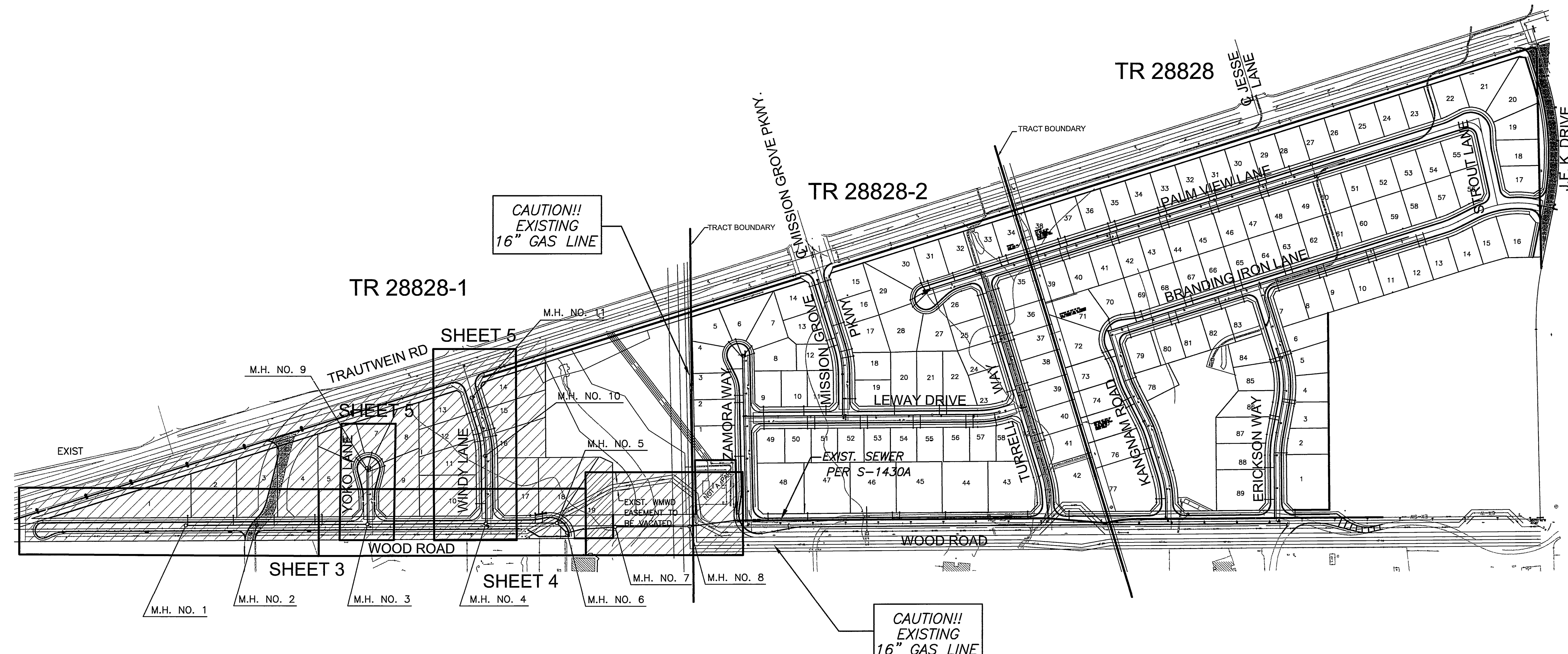
CONSTRUCTION NOTES

- ① CONSTRUCT 8" VCP SEWER MAIN W/PIPE BEDDING PER CITY OF RIV. STD. 452. (CASE 1)
- ② CONSTRUCT 4" LATERAL PER CITY OF RIV. STD. 562A WITH CLEANOUT AT R/W.
- ③ CONSTRUCT SEWER M.H. PER CITY OF RIV. STD. 500

LEGEND



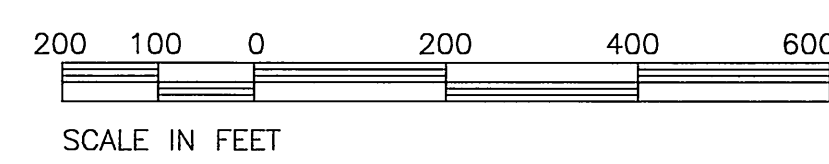
VICINITY MAP
N.T.S.



CONTACT QUESTAR PIPELINE CO.
PRIOR TO ANY CONSTRUCTION
BILL LAMB AT (909) 849-9396

* AS-BUILT 5-27-03 *fh*

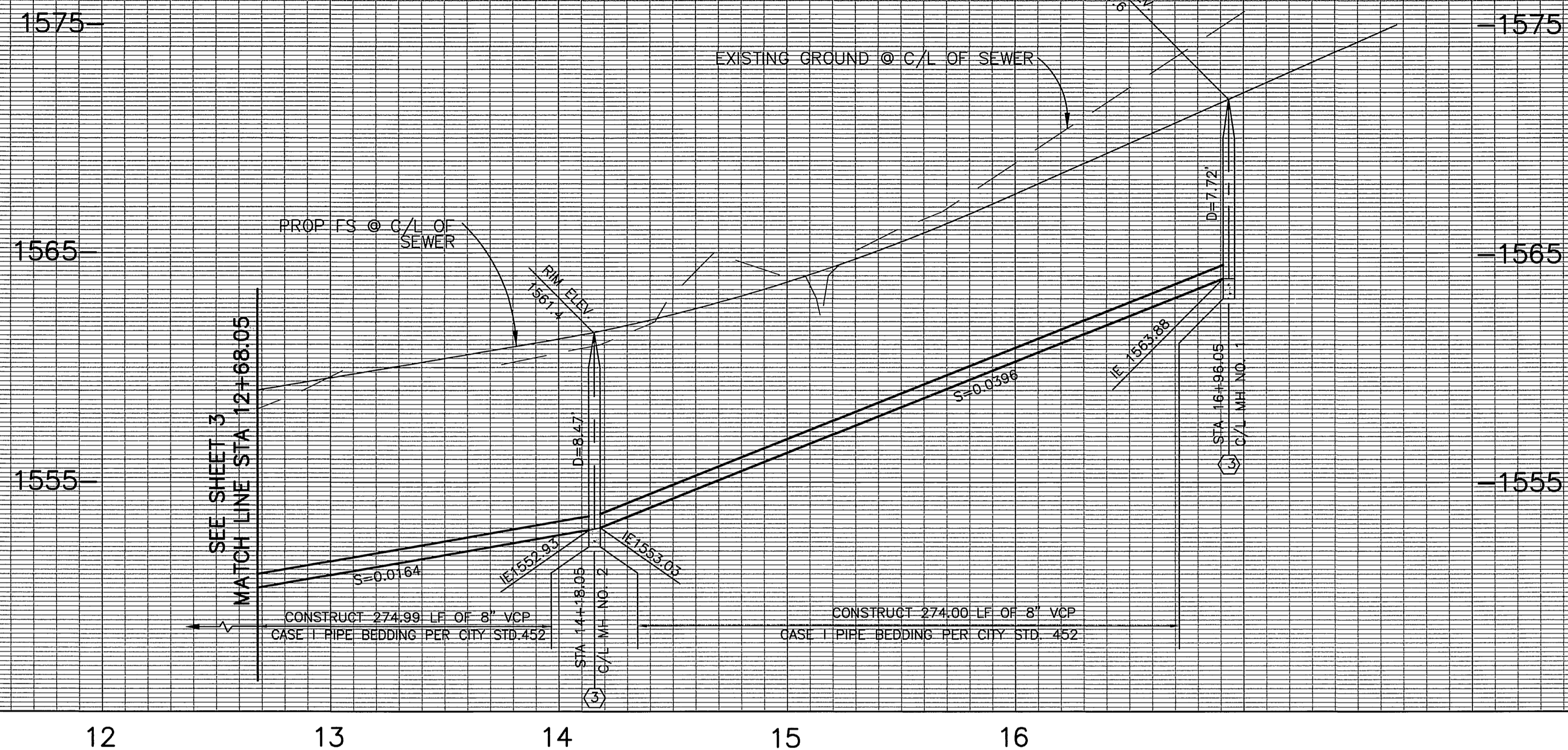
QUESTAR SOUTHERN TRAILS PIPELINE
Rubio Mendez 10/31/00
APPROVED BY DATE



CITY OF RIVERSIDE PUBLIC UTILITIES DEPT.-ELECTRIC OVERHEAD & UNDERGROUND	REVIEWED BY W.M.W.D. SHEETS 1 THROUGH 6 FOR NON-INTERFERENCE COMPLIANCE ONLY
<i>J.B.S.</i> 11/1/01 APPROVED BY: DATE:	<i>J.S.</i> 11/3/00 CIVIL ENGINEER RCE #46212 DATE:

Underground Service Alert Call: TOLL FREE 1 - 800 227 - 2600 TWO WORKING DAYS BEFORE YOU DIG	PRIVATE ENGINEERING NOTE <small>CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME FULL AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.</small>	PREPARED UNDER THE DIRECTION OF: <i>Teddlie</i> REGISTERED CIVIL ENGINEER NO. 50293 EXPIRATION DATE: 6-30-01 DATE: 10/13/00	CANTY ENGINEERING GROUP, INC. CIVIL ENGINEERING - PLANNING - SURVEYING 2020 IOWA AVENUE, SUITE 102, P.O. BOX 52050, RIVERSIDE, CA 92517 TEL (909) 883-5234 FAX (909) 883-5301 CITY OF RIV. BUSINESS TAX ACCT. NO. 69372 EXP. DATE 04-07-01	CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS APPROVED BY: <i>R. McSwath</i> 11/1/01 PRINCIPAL ENGR. DATE: 11/1/01 PARK DEPARTMENT TRAFFIC DIVISION DEPUTY P.W. DIRECTOR <i>W.D.P.</i> 12/14/00	TRACT No. 28828-1 SEWER IMPROVEMENT PLAN TITLE SHEET FOR: SHEFFIELD HOMES	PROJECT NO S-1739 SHEET 1 OF 6 FILE NO 1022-002
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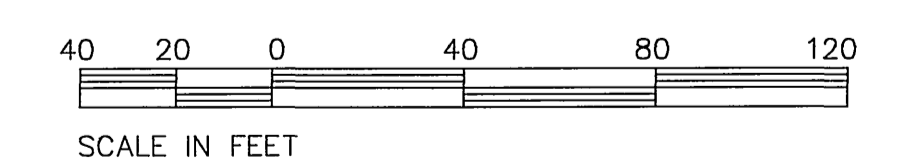
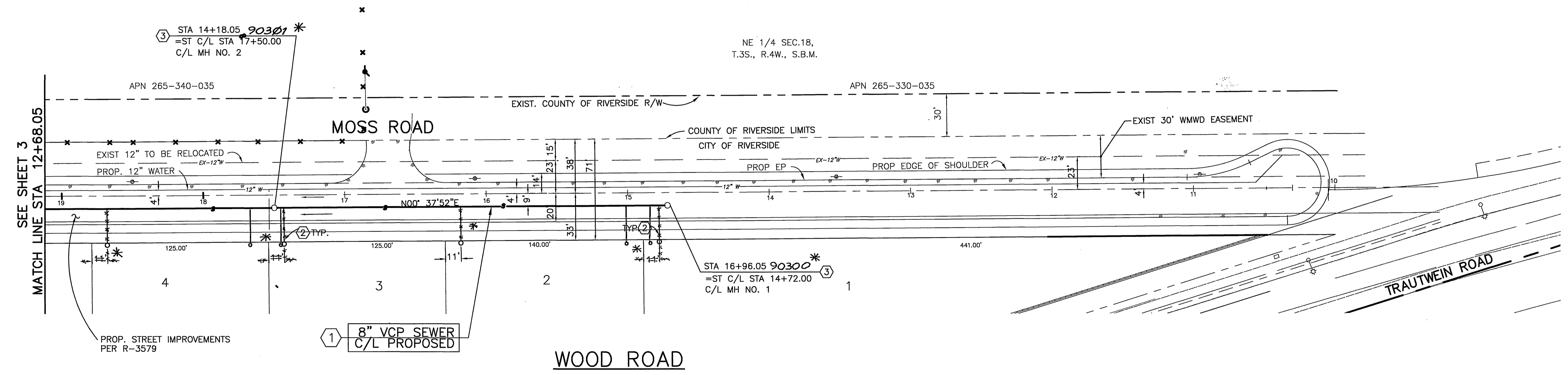
INDEXED 1-22-2001 *fh*



PROFILE
SCALES
1"=40' HORZ.
1"=4' VERT.

CONSTRUCTION NOTES

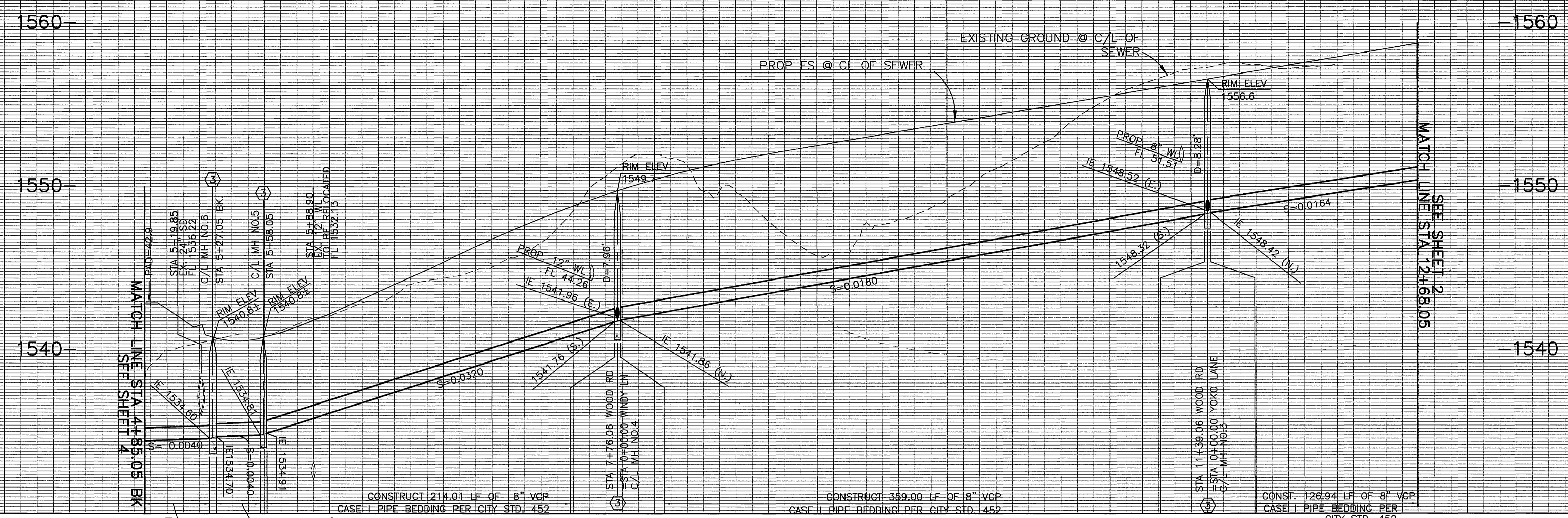
- ① CONSTRUCT 8" VCP SEWER MAIN WITH PIPE BEDDING PER CITY OF RIVERSIDE STD. 452 (CASE I, LOAD FACTOR 1.5)
- ② CONSTRUCT 4" VCP LATERAL PER. CITY OF RIVERSIDE STA. DWG. NO. 562A WITH CLEANOUT AT R/W.
- ③ CONSTRUCT SEWER MANHOLE PER CITY OF RIVERSIDE STD DWG No 500.



*AS-BUILT 5-27-03 LHM

<p>Underground Service Alert Call: TOLL FREE 1 - 800 227-2600 TWO WORKING DAYS BEFORE YOU DIG</p>	<p>PRIVATE ENGINEERING NOTE CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.</p>		<p>PREPARED UNDER THE DIRECTION OF: <i>Teck C. Loh</i> REGISTERED CIVIL ENGINEER NO. 50293 EXPIRATION DATE: 6-30-01 DATE: 10/19/00</p>	<p>CEG CANTY ENGINEERING GROUP, INC. CIVIL ENGINEERING - PLANNING - SURVEYING 2020 IOWA AVENUE, SUITE 102, P.O. BOX 52050, RIVERSIDE, CA 92517 TEL (909) 683 - 5234 FAX (909) 683 - 5301</p>	<p>SCALE: 1"=40' DATE: MARCH 2000</p>	<p>BENCH MARK CITY OF RIVERSIDE BENCH MARK: E8-A2 P.K. NAIL AND TAG IN TOP OF 35' X 50' X 20' GRANITE BOULDER, 100' WLY OF TRAUTWEIN ROAD AND 500 FEET NLY OF JESSE LANE. FB 735/V4 ELEV: 1588.453</p>	<p>CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>APPROVED BY</td> <td>BY</td> <td>DATE</td> <td>APPROVED BY</td> </tr> <tr> <td>PRINCIPAL ENGR.</td> <td><i>Se Verban</i></td> <td></td> <td><i>R. Mc Grath</i></td> </tr> <tr> <td>PARK DEPARTMENT</td> <td>-</td> <td></td> <td>DIRECTOR OF PUBLIC WORKS</td> </tr> <tr> <td>TRAFFIC DIVISION</td> <td>-</td> <td></td> <td></td> </tr> <tr> <td>DEPUTY P.W. DIRECTOR</td> <td><i>JTB</i></td> <td><i>1/6/01</i></td> <td>DATE: 1-11-2001</td> </tr> </table>	APPROVED BY	BY	DATE	APPROVED BY	PRINCIPAL ENGR.	<i>Se Verban</i>		<i>R. Mc Grath</i>	PARK DEPARTMENT	-		DIRECTOR OF PUBLIC WORKS	TRAFFIC DIVISION	-			DEPUTY P.W. DIRECTOR	<i>JTB</i>	<i>1/6/01</i>	DATE: 1-11-2001	<p>PROJECT NO. S-1739</p> <p>IN THE CITY OF RIVERSIDE TRACT No. 28828-1 SEWER IMPROVEMENT PLAN WOOD ROAD STA 12+68.05 TO 16+96.05 FOR: SHEFFIELD HOMES</p>	<p>SHEET <u>2</u> OF <u>6</u> FILE NO.: 1022-002</p>
APPROVED BY	BY	DATE	APPROVED BY																										
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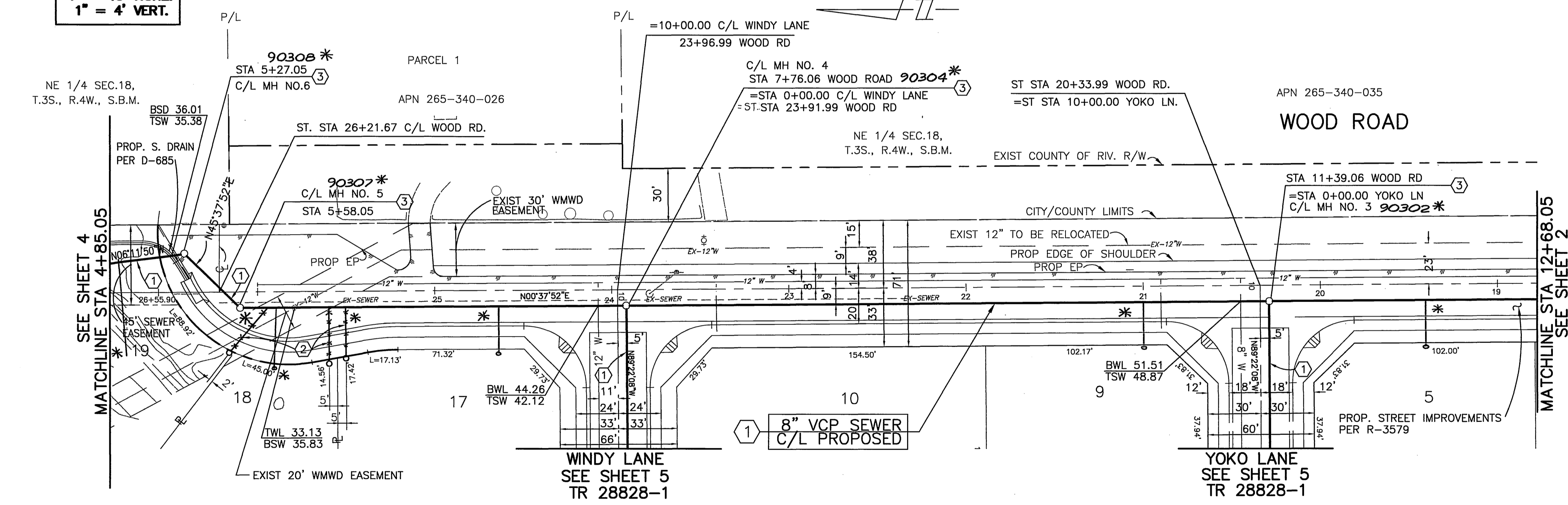
INDEXED 1-27-2001 LHM



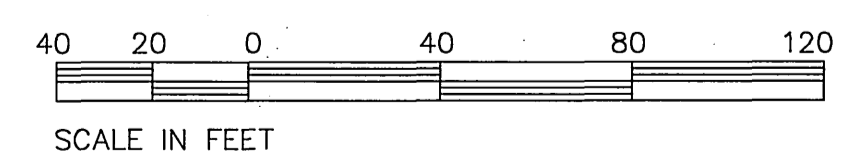
PROFILE SCALES
1" = 40' HORZ.
1" = 4' VERT.

4 CONST. 40.00 LF OF 8" VCP CASE I PIPE BEDDING PER CITY STD. 452
 5 CONST. 27 LF OF 8" VCP CASE I PIPE BEDDING PER CITY STD. 452
 6
 7
 8
 9 CONSTRUCT 359.00 LF OF 8" VCP CASE I PIPE BEDDING PER CITY STD. 452
 10
 11
 12 CONST. 126.94 LF OF 8" VCP CASE I PIPE BEDDING PER CITY STD. 452

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- CONSTRUCTION NOTES**
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 - ③ CONSTRUCT SEWER MANHOLE PER CITY OF RIVERSIDE STD DWG No 500.



* AS-BUILT 5-27-03 LFT

Underground Service Alert
Call: TOLL FREE
1 - 800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

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PREPARED UNDER THE DIRECTION OF:
Teck C. Loh
REGISTERED CIVIL ENGINEER NO. 50293
EXPIRATION DATE: 6-30-01 DATE: 10/17/00
CIVIL

CIC CANTY ENGINEERING GROUP, INC.
CIVIL ENGINEERING - PLANNING - SURVEYING
2020 IOWA AVENUE, SUITE 102, P.O. BOX 52050, RIVERSIDE, CA 92517
TEL (909) 683 - 5234 FAX (909) 683 - 5301
SCALE: 1"=40'
DATE: MARCH 2000
BENCH MARK CITY OF RIVERSIDE BENCH MARK: E8-A2 P.K. NAIL AND TAG IN TOP OF 35' X 50' X 20' GRANITE BOULDER, 100' WLY OF TRAUTWEN ROAD AND 500 FEET N'LY OF JESSE LANE. FB 735/74. ELEV: 1588.453

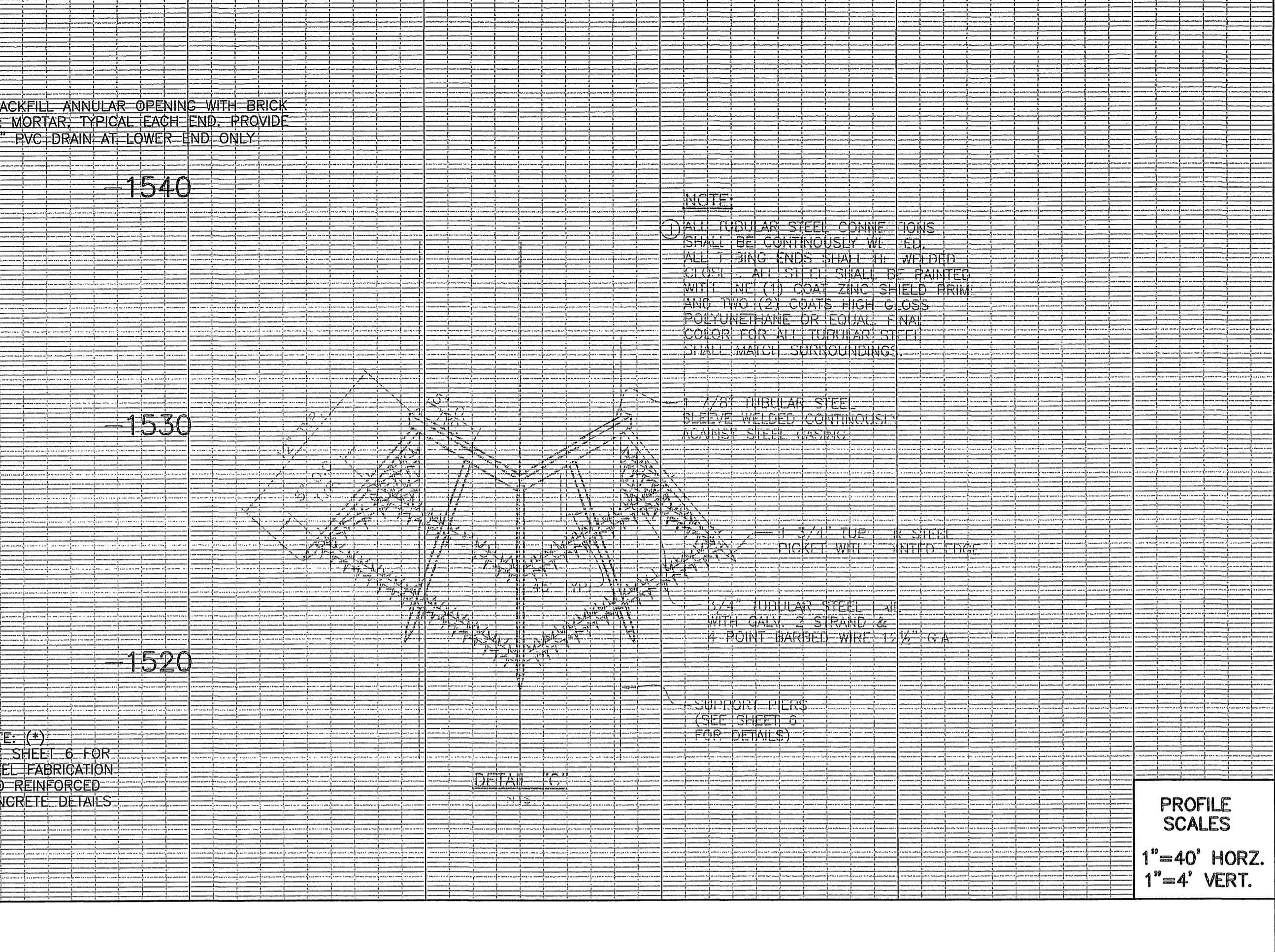
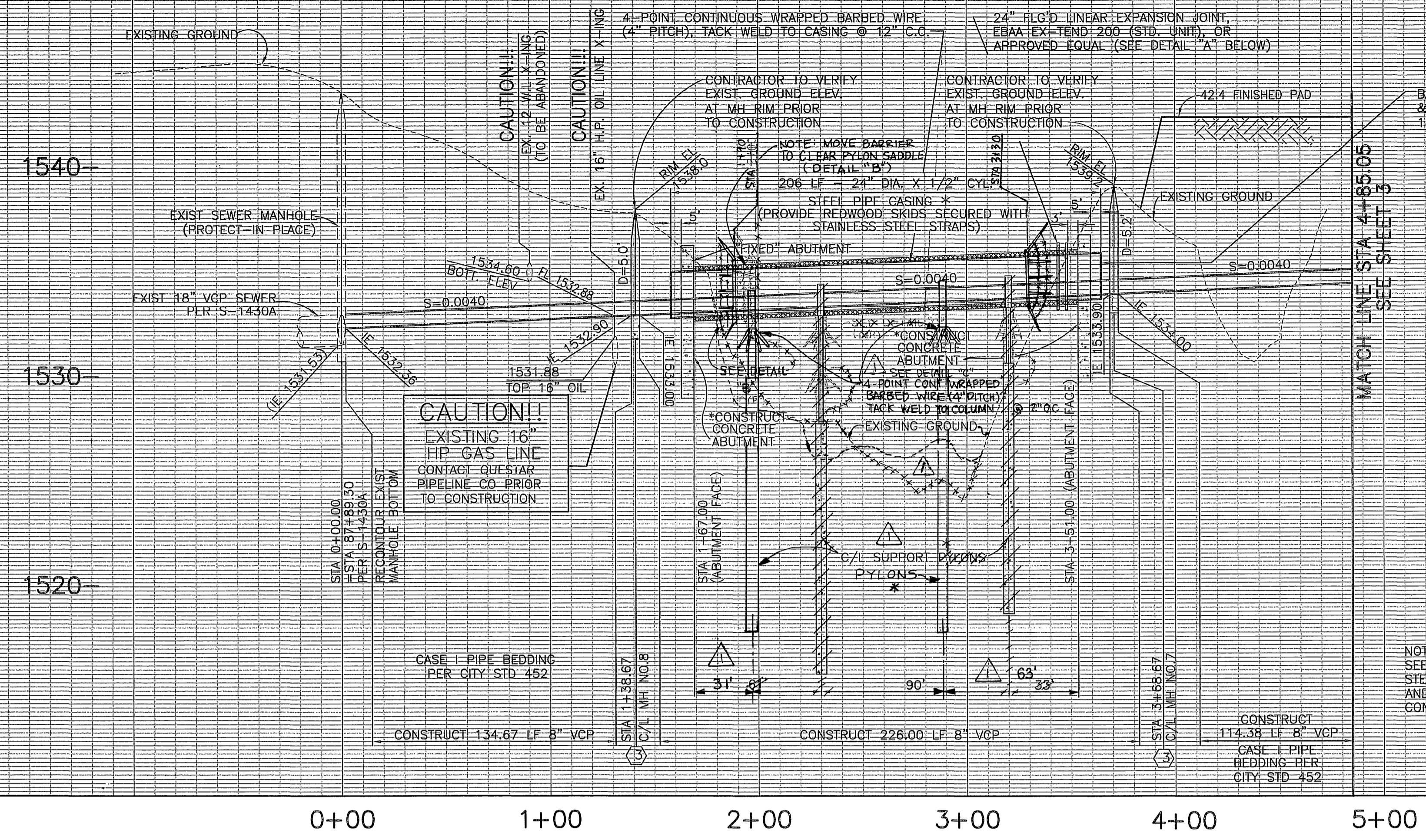
MARK	REVISIONS	APPR.	DATE
DESIGNED BY	TCL	DRAWN BY	HBR
CHECKED BY	ABI		

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: [Signature]
PRINCIPAL ENGR.
PARK DEPARTMENT
TRAFFIC DIVISION
DEPUTY P.W. DIRECTOR
DATE: 1-16-2001

IN THE CITY OF RIVERSIDE
TRACT No. 28828-1
SEWER IMPROVEMENT PLAN
WOOD ROAD
STA 4+85.05 TO STA 12+68.05
FOR: SHEFFIELD HOMES

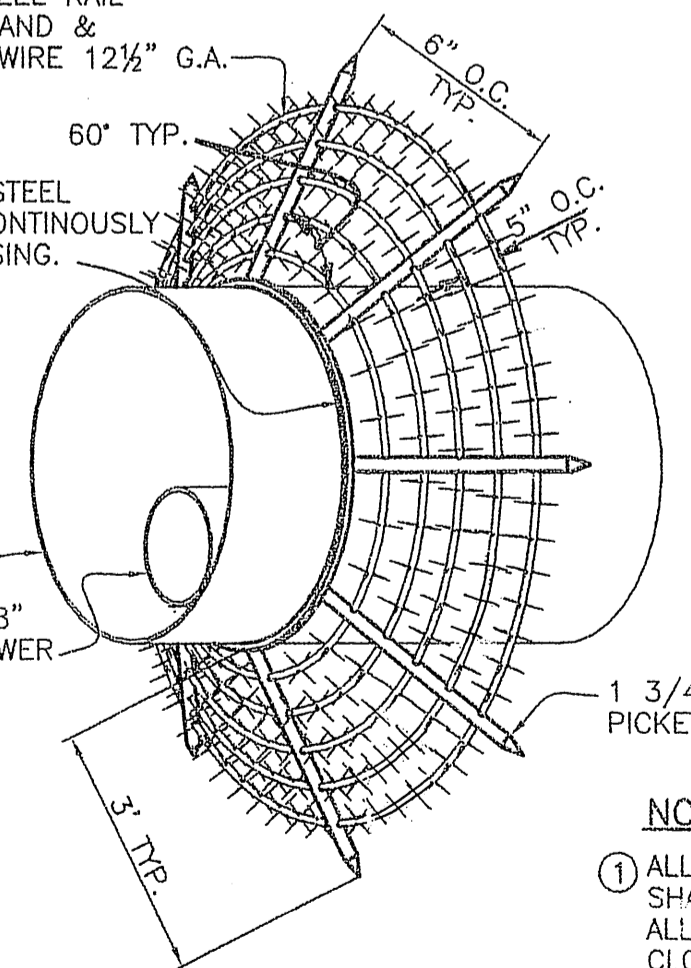
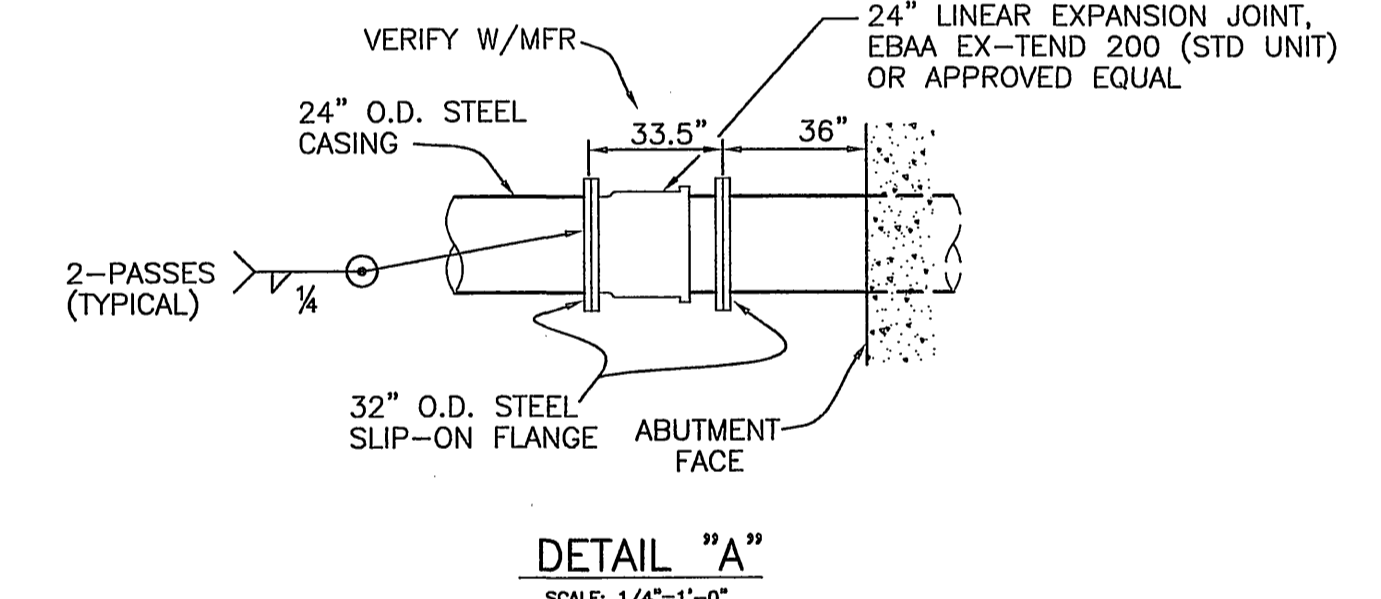
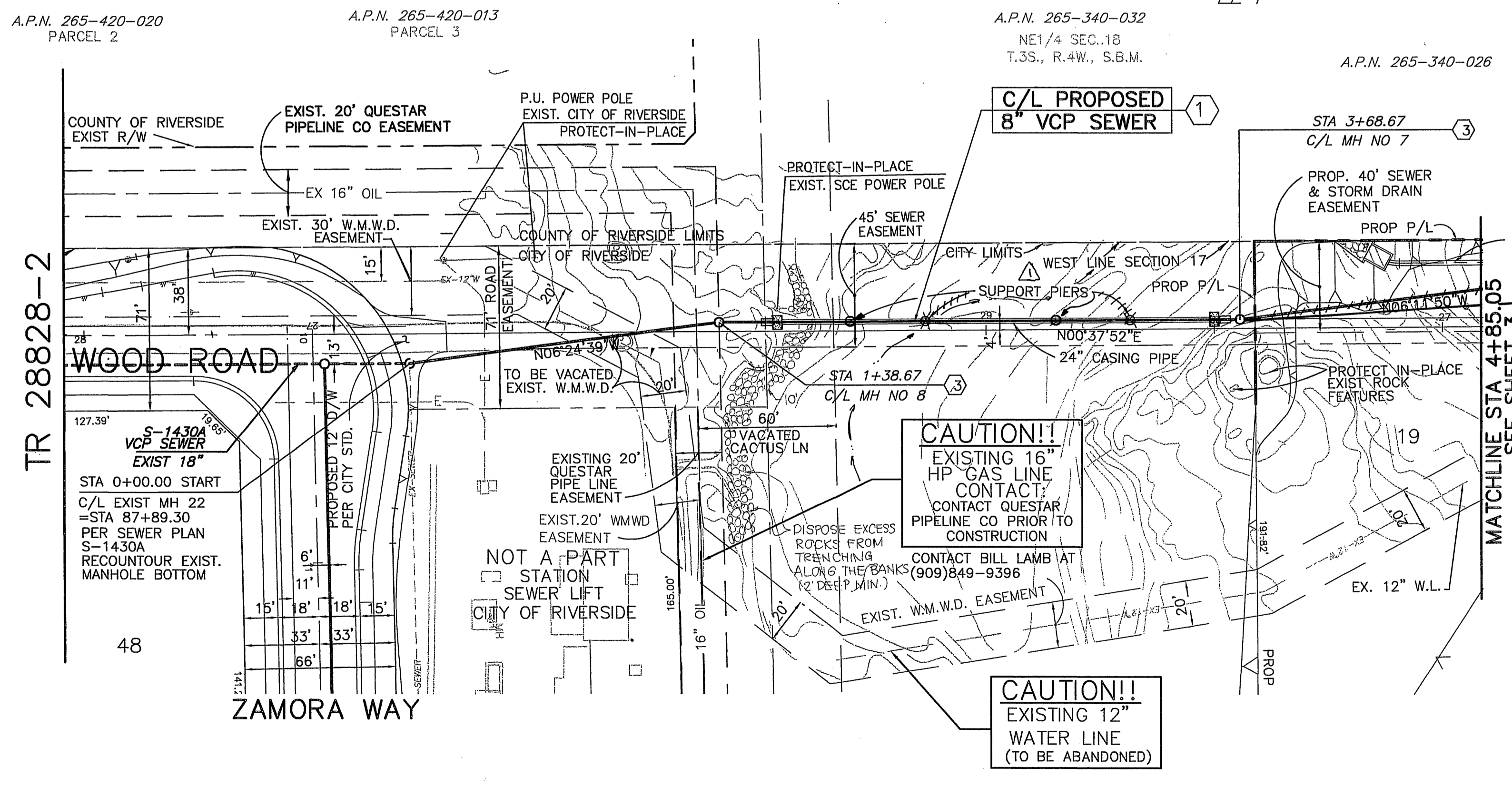
PROJECT NO.
S-1739
SHEET **3** OF **6**
FILE NO.: 1022-002

INDEXED 1-22-2001 LFT



NOTE:
 ① ALL TUBULAR STEEL CONNECTIONS SHALL BE CONTINUOUSLY WELDED. ALL TUBING ENDS SHALL BE WELDED CLOSED. ALL STEEL SHALL BE PAINTED WITH ONE (1) COAT ZINC-SHIELD PRIMER AND TWO (2) COATS HIGH GLOSS POLYURETHANE OR EQUAL. FINAL COLOR FOR ALL TUBULAR STEEL SHALL MATCH SURROUNDINGS.

PROFILE SCALES
 1"=40' HORIZ.
 1"=4' VERT.



CONSTRUCTION NOTES

- ① CONSTRUCT 8" VCP SEWER MAIN W/PIPE BEDDING PER CITY OF RIV. STD. 452. (CASE 1)
- ③ CONSTRUCT SEWER M.H. PER CITY OF RIV. STD. 500

PAINTING NOTE

UPON COMPLETION OF ALL FIELD WELDING OF 24" STEEL CASING AND STEEL PYLON SUPPORTS, APPLY 1-COAT OF OIL-BASED PRIMER. ALLOW 24-HOURS TO DRY AND APPLY 1-COAT OF OIL-BASED ENAMEL (GLIDDEN "PINE GROVE" GREEN, 90 GY 13/161) OR APPROVED EQUAL.

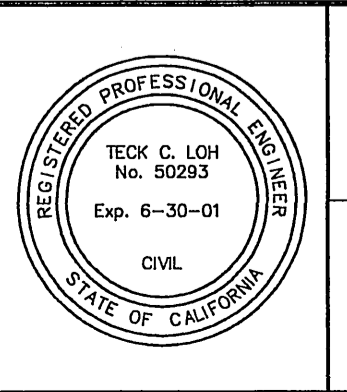
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QUESTAR SOUTHERN TRAILS PIPELINE
 APPROVED BY: *R. M. Smith* 10/31/00
 DATE



Underground Service Alert
 Call: TOLL FREE
 1-800-227-2600
 TWO WORKING DAYS BEFORE YOU DIG

PRIVATE ENGINEERING NOTE
 CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT INCLUDING SAFETY OF PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.



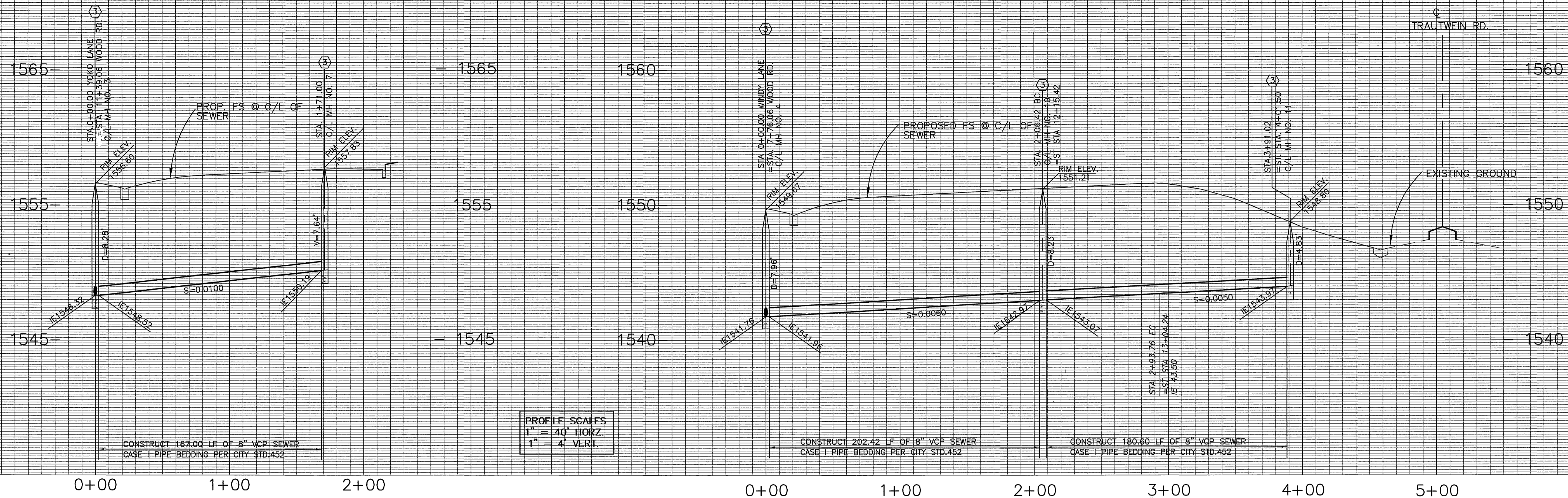
PREPARED UNDER THE DIRECTION OF:
 Teddie
 REGISTERED CIVIL ENGINEER NO. 50293
 EXPIRATION DATE: 6-30-01 DATE: 10/10/00

CEG CANTY ENGINEERING GROUP, INC.
 CIVIL ENGINEERING - PLANNING - SURVEYING
 2020 IOWA AVENUE, SUITE 102, P.O. BOX 52050, RIVERSIDE, CA 92517
 TEL (909) 683-5234 FAX (909) 683-5301
 CITY OF RIV. BUSINESS TAX ACCT. NO. 69372 EXP. DATE 04-07-01
 SCALE: 1"=40'
 DATE: MARCH 2000

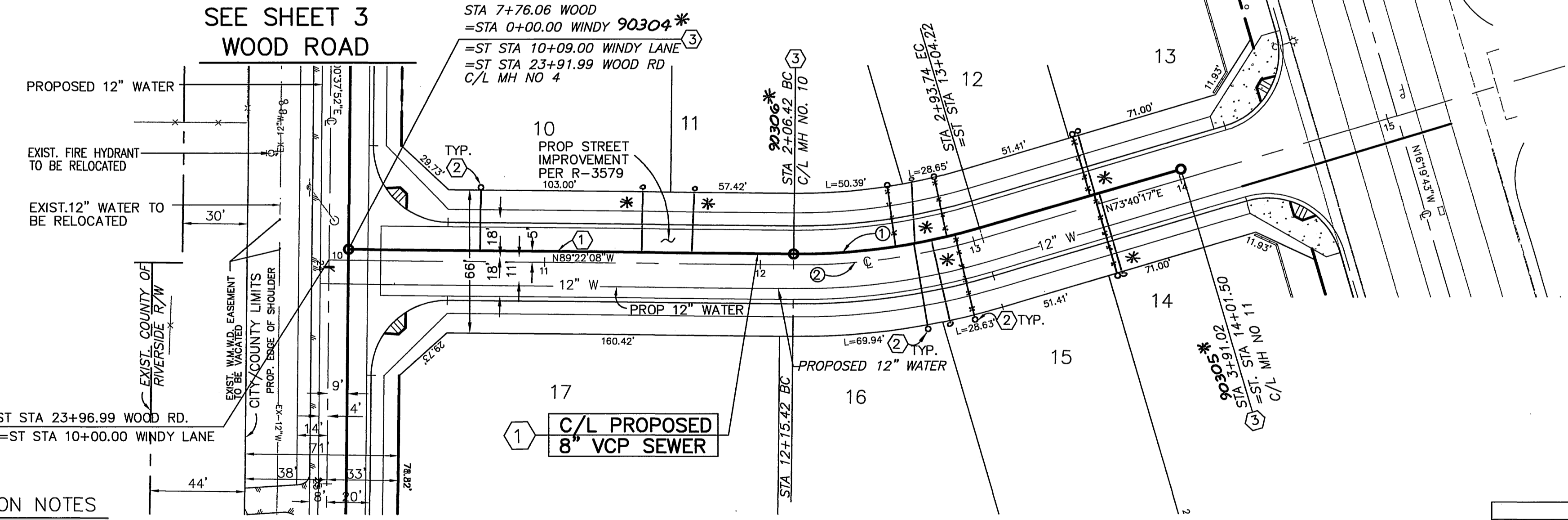
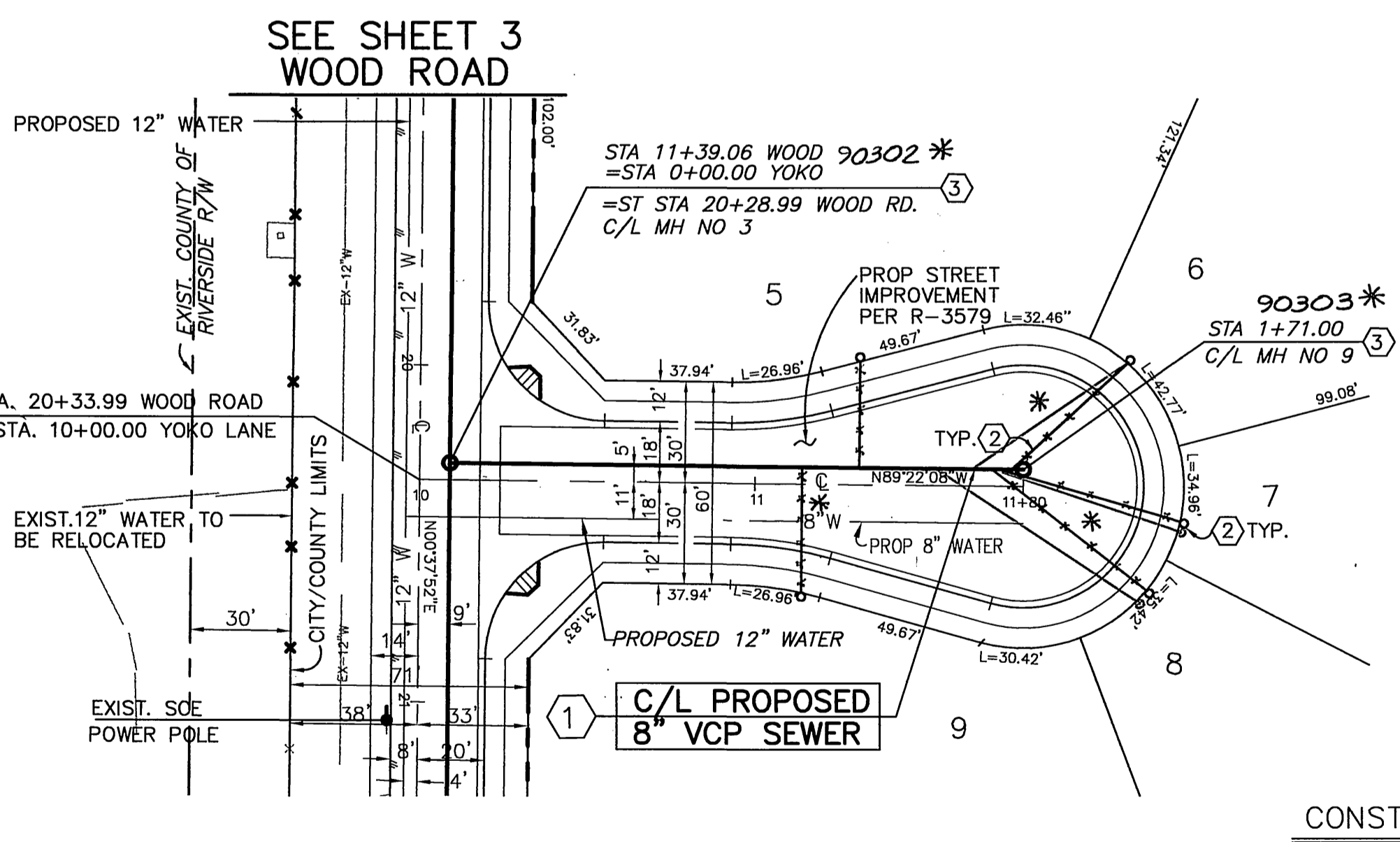
MARK	REVISIONS	APPR. DATE
▲	REVISE PYLON LOCATIONS	10/30/00
▲	TCL DRAWN BY: HBR CHECKED BY: ARI	

CITY OF RIVERSIDE, CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 APPROVED BY: *R. M. Smith*
 DIRECTOR OF PUBLIC WORKS
 DATE: 1-16-2001

IN THE CITY OF RIVERSIDE
TRACT No. 28828-1
SEWER IMPROVEMENT PLAN
WOOD ROAD
 STA 0+00.00 TO STA 4+85.05
 FOR: SHEFFIELD HOMES
 PROJECT NO. **S-1739**
 SHEET **4** of **6**
 FILE NO.: 1022-002

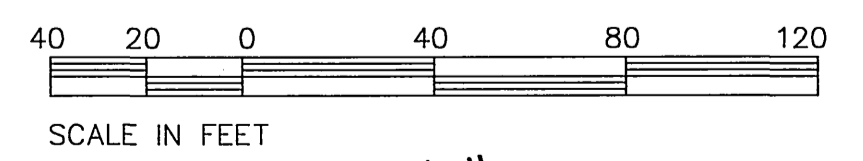


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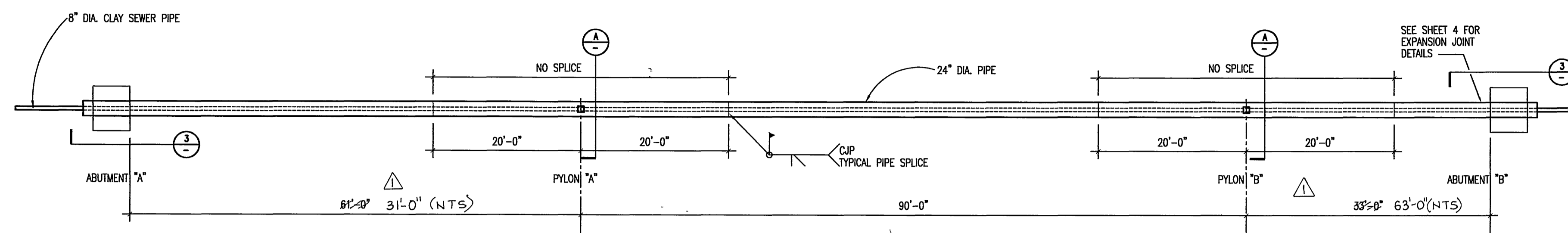


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 - CONSTRUCT SEWER M.H. PER CITY OF RIV. STD. 500

CURVE DATA (FT.)			
DELTA	RADIUS	LENGTH	TANGENT
1 116°57'35"	295.00	87.32	43.98
2 116°57'35"	300.00	88.80	44.73



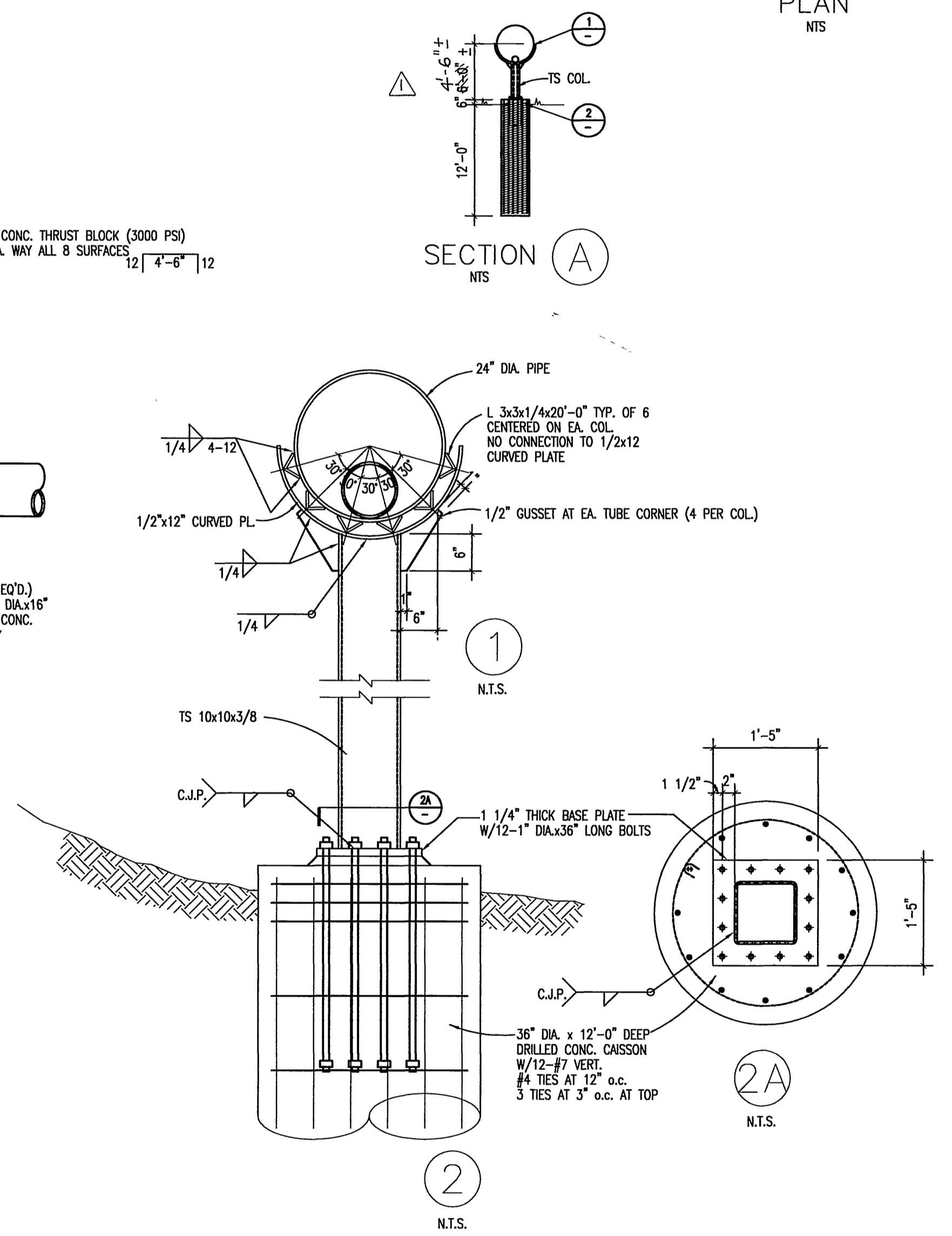
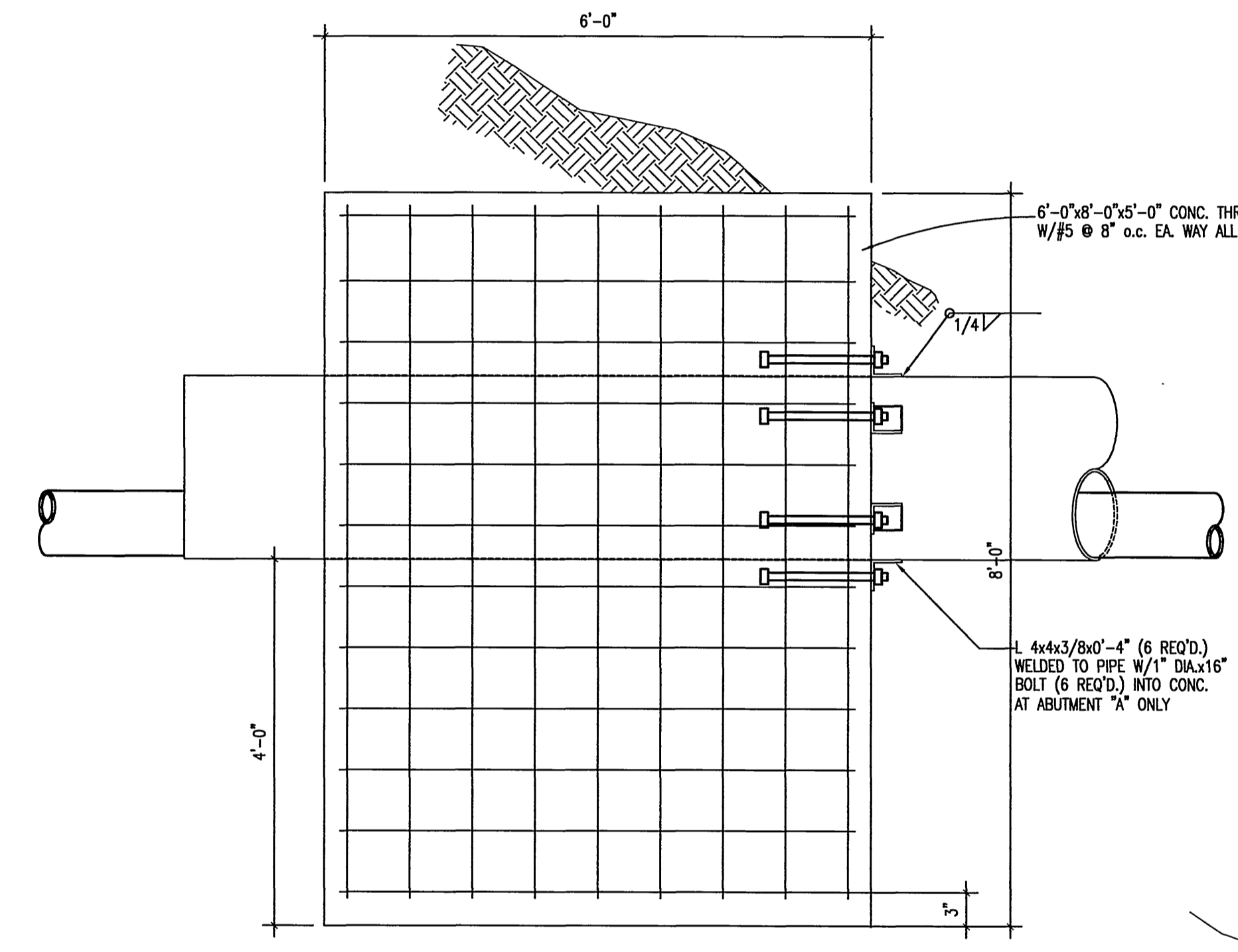
<p>Underground Service Alert</p> <p>Call: TOLL FREE 1-800-227-2600</p> <p>TWO WORKING DAYS BEFORE YOU DIG</p>	<p>PRIVATE ENGINEERING NOTE</p> <p>CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONSECUTIVELY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.</p>	<p>TEK C. LOW No. 50293 Exp. 6-30-01 CIVIL STATE OF CALIFORNIA</p>	<p>PREPARED UNDER THE DIRECTION OF:</p> <p><i>Toddl</i></p> <p>REGISTERED CIVIL ENGINEER NO. 50293</p> <p>EXPIRATION DATE: 6-30-01 DATE: 10/16/01</p>	<p>CEG CANTY ENGINEERING GROUP, INC. CIVIL ENGINEERING - PLANNING - SURVEYING 2020 IOWA AVENUE, SUITE 102, P.O. BOX 52050, RIVERSIDE, CA 92517 TEL (909) 683-5234 FAX (909) 683-5301</p>	<p>CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS</p> <p>APPROVED BY: <i>R. M. Swartz</i> DIRECTOR OF PUBLIC WORKS</p> <p>DATE: 1-16-2001</p>	<p>TRACT No. 28828-1 SEWER IMPROVEMENT PLAN YOKO LANE STA. 0+00.00 TO STA. 1+71.00 WINDY LANE STA. 0+00.00 TO STA. 3+91.00</p>	<p>PROJECT NO. S-1739</p> <p>SHEET 5 of 6</p> <p>FILE NO.: 1022-002</p>
			<p>SCALE: 1"=40'</p> <p>DATE: SEP. 1999</p>				



- GENERAL NOTES
- FRAMING CONDITIONS NOT SPECIFICALLY SHOWN SHALL BE FRAMED SIMILAR TO DETAILS SHOWN FOR THE RESPECTIVE MATERIALS.
 - ALL CONSTRUCTION SHALL CONFORM TO THE 1997 UNIFORM BUILDING CODE AND 1998 CBC.
 - CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE STARTING WORK. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES.
 - NOTWITHSTANDING ANY REFERENCE IN THE CONSTRUCTION DOCUMENTS TO ANY RULE OR REGULATION, THE STRUCTURAL ENGINEER IS NOT ASSUMING ANY DUTY TO PROVIDE SUPERVISION OF CONSTRUCTION METHODS OR PROCESSES.
 - CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CHANGE ORDER.

- CONCRETE:
- THE 28-DAY STRENGTH AND TYPE OF CONCRETE SHALL BE AS FOLLOWS:
FOOTINGS-----3000 P.S.I.-----150 P.C.F.
PILES-----3000 P.S.I.-----150 P.C.F.
 - REINFORCING:
A. REINFORCING STEEL-----A.S.T.M. A-615
TYPICAL REINFORCING-----GRADE 60
STIRRUPS, TIES, SLABS ON GRADE AND
NON-STRUCT. ITEMS-----GRADE 40
B. REINFORCING FABRIC-----A.S.T.M. A-165
C. LAP ALL BARS A MINIMUM OF 40-BAR DIAMETERS (2'-0"
MINIMUM) UNLESS OTHERWISE NOTED.
D. SPLICES OF ALL HORIZONTAL REINFORCING SHALL BE
STAGGERED.
E. COLUMN AND WALL DOWELS SHALL BE SAME SIZE AND
SPACING COLUMN OR WALL REINFORCING.
F. MINIMUM CONCRETE COVERAGE:
THE FOLLOWING MINIMUM COVERAGE SHALL BE MAINTAINED
UNLESS NOTED OTHERWISE:
SLABS ON GRADE-----CENTER OF SLAB
CAST AGAINST & EXPOSED TO EARTH-----3"
FORMED, EXPOSED TO EARTH AND WEATHER:
#6 AND LARGER-----2"
#5 AND SMALLER-----1 1/2"
NOT EXPOSED TO EARTH OR WEATHER:
SLABS, WALLS, JOISTS-----#14 & #18-----1 1/2"
#11 AND SMALLER-----3/4"
BEAMS, GIRDERS, COLUMNS-----1 1/2"
G. WELDING OF REINFORCING STEEL-----A.W.S. D-12-1 LOW
HYDROGEN
 - AGGREGATES: NATURAL SAND AND ROCK-----A.S.T.M. C-33
 - CEMENT: PORTLAND CEMENT, TYPE I OR II,
LOW ALKALI-----A.S.T.M. C-150
 - NO PIPE OR DUCTS SHALL BE PLACED IN CONCRETE UNLESS
SPECIFICALLY DETAILED.
 - ANCHOR BOLTS, DOWELS, INSERTS, ETC., SHALL BE SECURELY
TIED IN PLACE PRIOR TO POURING OF CONCRETE OR GROUT.

- STRUCTURAL STEEL:
- STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS OF:
STRUCTURAL SHAPES, PLATES-----A.S.T.M. A-36
PIPE COLUMNS-----A.S.T.M. A-53 GRADE "B"
STEEL TUBE-----A.S.T.M. A-500 GRADE "B"
BOLTS-----A.S.T.M. A-307
HIGH STRENGTH BOLTS-----A.S.T.M. A-325 (TYPE N)
(BEARING TYPE CONN. WITH THREADS INCLUDED IN THE SHEAR
PLANE.)
 - ALL FABRICATION AND ERECTION SHALL CONFORM TO THE
LATEST EDITION OF A.I.S.C.
 - NO STRUCTURAL STEEL SHALL BE FABRICATED OR ERECTED
UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED BY THE
STRUCTURAL ENGINEER.
 - WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER (S).
 - ALL SHOP WELDING SHALL BE DONE IN THE SHOP OF AN
APPROVED FABRICATOR.
 - NO FIELD CUTTING OR BURNING OF STRUCTURAL STEEL WILL BE
PERMITTED WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL
ENGINEER.
 - BOLTS WITH "UPSET" OR "ROLLED" THREADS ARE NOT ALLOWED.
BOLT DIAMETERS INDICATED ARE SHANK DIAMETERS



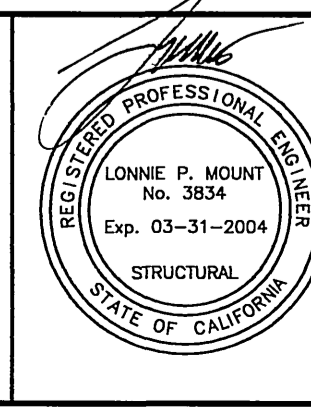
NOTE:
AT ABUTMENT "B" OMIT ANGLES AND BOLTS
ATTACHING PIPE ABUTMENT (NEED SLIP JOINT
FOR THERMAL EXPANSION)

3

N.T.S.

Underground Service Alert
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PRIVATE ENGINEERING NOTE
CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH
GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION
CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE
RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF
CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS
AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY
CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY
AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL
LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE
PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY
ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL



PREPARED UNDER THE DIRECTION OF:
JOHNSON AND NIELSEN ASSOCIATES
CONSULTING STRUCTURAL ENGINEERS
647 NORTH MAIN STREET, SUITE 4-B
RIVERSIDE, CALIFORNIA 92501
TEL (909) 686 - 5122, FAX (909) 686 - 6752
REGISTERED CIVIL ENGINEER NO: 3834
(STRUCTURAL)
EXPIRATION DATE: 3-31-04 DATE: _____

SCALE: 1"=40'
DATE: SEPT 2000
BENCH MARK CITY OF RIVERSIDE BENCH MARK: EB-A2
P.K. NAIL AND TAG IN TOP OF 35' X 50' X 20' GRANITE
BOULDER, 100' W'LY OF TRAUTWIEN ROAD AND 500 FEET N'LY
OF JESSE LANE. FB 735/74 ELEV: 1588.453

REVISIONS	APPR.	DATE
REVISE PYLON LOCATIONS	[Signature]	9/12/01
DESIGNED BY: JCL	DRAWN BY: HBR	CHECKED BY: ABI

APPROVED BY	BY	DATE	APPROVED BY	DATE
PRINCIPAL ENGR.	[Signature]		[Signature]	1-16-2001
PARK DEPARTMENT			DIRECTOR OF PUBLIC WORKS	
TRAFFIC DIVISION				
DEPUTY P.W. DIRECTOR	[Signature]			
SEWER SERVICES	[Signature]	12/14/01		

* AS-BUILT 5-27-03 Lfh
IN THE CITY OF RIVERSIDE
TRACT No. 28828-1
SEWER CASING, ABUTMENTS
AND PYLON SUPPORTS
STRUCTURAL DETAILS
FOR: SHEFFIELD HOMES

PROJECT NO.
S-1739
SHEET **6** OF **6**
FILE NO.: 1022-002
INDEXED 1-22-2001 Lfh