

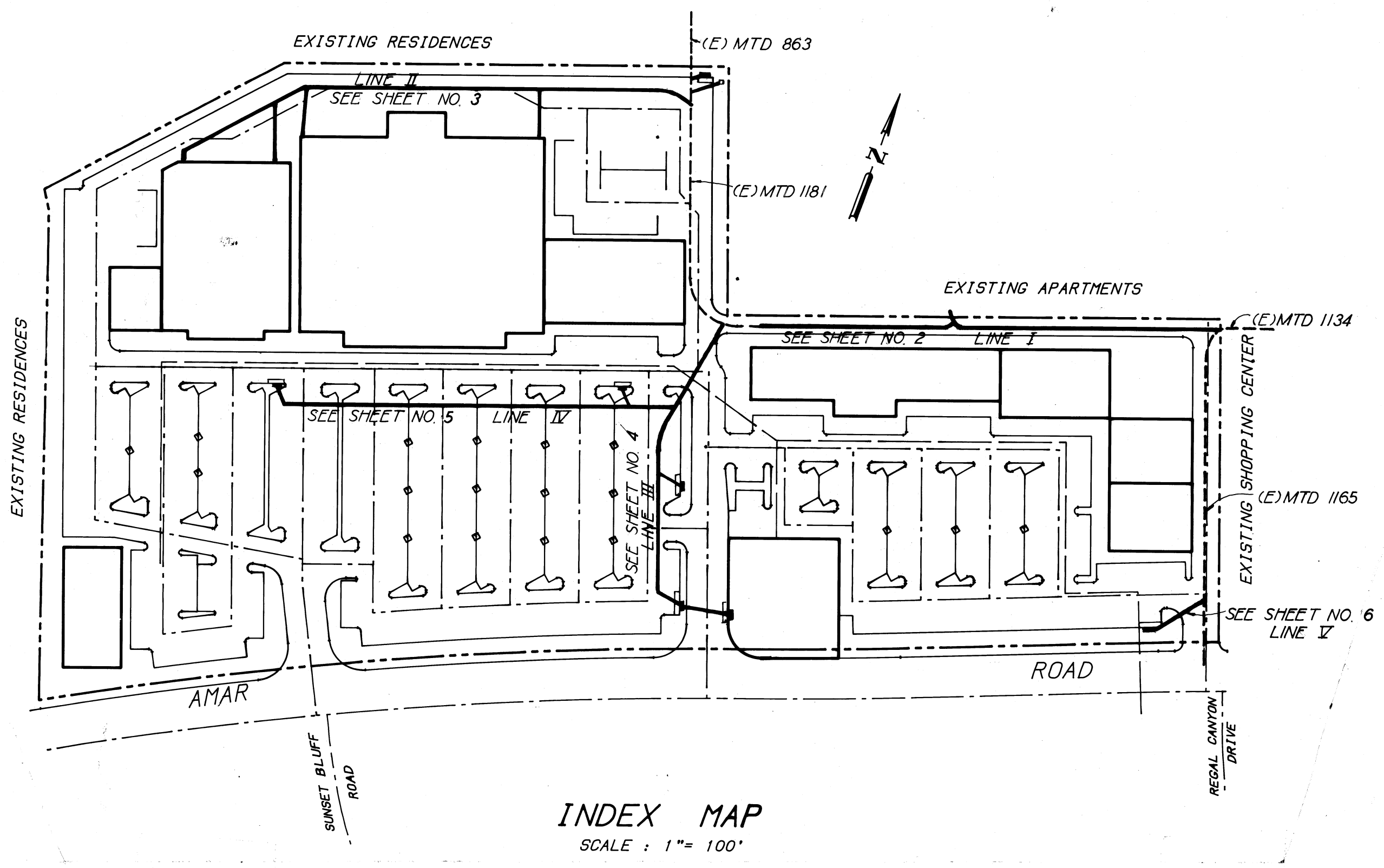
WALNUT HILLS VILLAGE SHOPPING CENTER

MTD 1461

MTD 1461

HYDRAULIC ELEMENT TABLE

STATIONS FROM	STATIONS TO	D INCHES	Q CFS	V FT/SEC	HGL ELEV
3 + 31.72	3 + 33.72	78	377.0	11.36	720.63
3 + 33.72	3 + 51.50	78	249.0	7.50	722.24
3 + 51.50	3 + 62.00	78	248.0	7.47	722.28
3 + 62.00	6 + 08.00	78	241.0	7.26	722.90
6 + 08.00	6 + 44.98	78	238.0	7.17	723.11
6 + 44.98	6 + 48.48	TS 1	238.0	5.37	723.65
6 + 48.48	6 + 62.32	TS 3	177.0	6.37	723.53
6 + 45.57	6 + 55.07	42	67	6.13	723.77
6 + 55.07	7 + 74.92	42	59	21.68 MAX.	730.46



- L. A. C. P. W. STANDARDS
1. 3020-0 - MANHOLE NO. 1 (PIPES 33" OR SMALLER)
 2. 3021-0 - MANHOLE NO. 2
 3. 3023-0 - MANHOLE NO. 4 (PIPES 36" OR LARGER)
 4. 3029-0 - STANDARD MANHOLE SHAFT
 5. 3031-0 - JUNCTION STRUCTURE NO. 2
 6. 3033-0 - JUNCTION STRUCTURE NO. 4
 7. 3035-0 - PIPE CONNECTION TO EXISTING STORM DRAIN
 8. 3040-0 - TRANSITION STRUCTURE NO. 1
 9. 3042-0 - TRANSITION STRUCTURE NO. 3

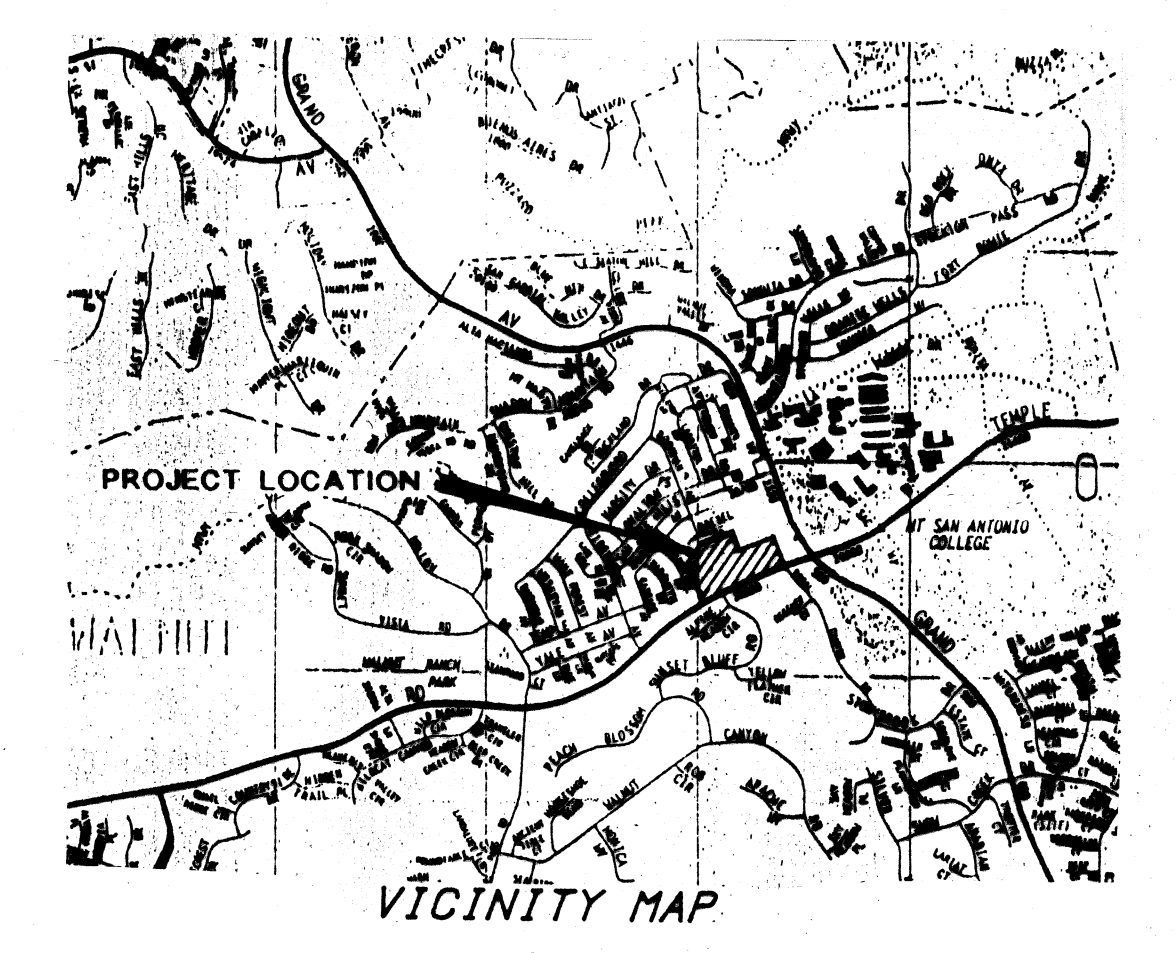
- A. P. W. A. STANDARDS
1. 200-0 PRECAST SEWER MANHOLE
 2. 224-0 SUPPORTS FOR CONDUITS ACROSS TRENCHES
 3. 300-1 CURB OPENING CATCH BASIN CONNECTION
 4. 308-0 MONOLITHIC CATCH BASIN CONNECTION
 5. 309-0 CATCH BASIN REINFORCEMENT
 6. 310-0 CATCH BASIN PLATE ASSEMBLY & PROTECTION BAR
 7. 312-0 CATCH BASIN MANHOLE FRAME & COVER
 8. 313-0 LOCAL DEPRESSIONS FOR CATCH BASINS
 9. 630-1 24-INCH MANHOLE FRAME AND COVER
 10. 635-1 STEEL STEP

1. A permit shall be obtained and all fees and deposits for construction inspections shall be paid to the Department of Public Works at the Permit Counter, 900 South Fremont Avenue, 8th floor, prior to starting work under this contract. Also, all other required permits such as City of Walnut Public Works Department Permits, must be obtained prior to starting work.
2. The Contractor shall contact the district office listed on the "Application for Storm Drain Construction Inspection Form 1", and the City of Walnut Public Works Department to arrange for an acceptable construction start date.
3. Approval of this plan by the County of Los Angeles and the City of Walnut does not constitute a representation to the accuracy of the location, or the existence or nonexistence of any underground utility, pipe or structure within the limits of this project. This note applies to all sheets.
4. All work shall be done in accordance with the "Standard Specifications for Public Works Construction Latest Edition," including supplements and shall be prosecuted only in the presence of the Engineer or his authorized representative.
5. The contractor's attention is directed to Section 7-10.41 of the Standard Specifications for Public Works Construction in regard to Safety Orders.
6. Elevations are in feet above U.S.C. & G.S. Mean Sea Level Datum of 1929, unless otherwise noted.
7. No concrete shall be placed until the forms and reinforcing steel have been placed, inspected and approved.
8. All structural concrete shall be portland cement concrete with an ultimate 28 day compressive strength of 3250 p.s.i. unless otherwise noted.
9. Transverse reinforcement and transverse joints shall be placed at right angles (or radial) to the conduit centerline except as otherwise shown on the drawings.
10. All steel adjacent to face of concrete shall have 2 1/2" clearance unless otherwise specified.
11. Reinforcement shall be deformed bars of intermediate grade steel, per A.S.T.M. A-615-Grade 60.
12. All bar bends and hooks shall conform to the American Concrete Institute "Manual of Standard Practice".
13. Dimensions from face of concrete to steel are to centerline of steel unless otherwise noted.
14. All steel that is to be continuous shall have a minimum lap of 30 bar diameters or 18" whichever is greater.
15. All construction joints in the footing of slabs and walls shall be in the same plan. No staggering of joints will be permitted.
16. All exposed edges shall be finished with 3/4" chamfer.
17. Unless otherwise shown, concrete dimensions shall be measured vertically or horizontally and parallel or at right angles (or radial) to the centerline of construction.
18. The inspector shall have the option to require concrete backfill during construction when pipe has less than one foot cover. The concrete backfill shall consist of 1:3:5 mix, portland cement concrete poured from wall to wall of trench and from bottom of trench to a minimum of 4 inches over the top of the pipe.
19. All pipes shall be placed in trench in natural ground and/or compacted fill. The ground level before trenching shall be at least 3 feet above the top of the pipe elevation, or at finish surface elevation, whichever is less.
20. All backfill and fills outside of street right of way shall be compacted to 90% of maximum density as determined by ASTM Soil Compaction Test D 1557-78 Method "D" unless otherwise specified. This shall be certified by a geotechnical engineer. This certification shall be submitted to the City Engineer prior to acceptance of the work by the County.
21. Pipe bedding shall be in accordance with Standard Plan 3080-0, Case III, except bell and spigot pipe which shall be Case II bedding, unless otherwise shown. "W" values shall be specified on Standard Plan 3080-0 for Case III bedding, Notes 3(a), 3(b) and 3(c). If the "W" value at the top of the pipe is exceeded, the bedding shall be modified, and/or pipe of additional strength shall be provided. This proposed modification shall be approved by the Department of Public Works.
22. Pipe shall be embedded 5 inches into all structures including inlet and headwalls, unless otherwise specified.
23. Existing utilities shall be maintained in place by the contractor, unless otherwise noted.
24. All openings resulting from cutting or partial removal of existing culverts, pipes, headwalls or similar structures shall be saw-cut clean to assure complete smooth connections and be sealed with 8" of brick and mortar or 6" of concrete, unless otherwise shown.
25. This storm drain will not be accepted for maintenance until the drive areas have been paved, manholes brought to grade and the system cleaned to the satisfaction of the Engineer and the City of Walnut Engineering Division.
26. All backfill and fills within street rights of way shall be compacted in accordance with City requirements unless otherwise noted and inspected by the City. The soil compaction shall be certified by a geotechnical engineer.
27. "Unless otherwise specified on the profile of these plans, the pipe shall be manufactured with a minimum concrete cover over the steel in the invert of 0.75 inches for RCP up to 96 inches in diameter and 1.25 inches for pipe greater than 96 inches in diameter."
28. The contractor shall provide to the satisfaction of the City Engineer and the Director of Public Works a drainage system for contributory flows to be operable at all times until this storm drain is accepted for maintenance. The design of the drainage system must be prepared under the direction of a Civil Engineer.
29. All references on this plan to the County Engineer, Road Department, or Flood Control District shall apply to the appropriate elements of the Department of Public Works.
30. Where the utilities are indicated on the Drawings to be supported, said supports shall be in accordance with Standard Plans for Public Works Construction No. 224 unless otherwise indicated.
31. Manholes No. 1, 2, 3, and 4, shall use the Standard Plans for Public Works Construction No. 630 for the "Frame and Cover" and No. 635 for the "Standard Drop Step".
32. A NPDES Permit from the Regional Water Quality Control Board is required before any discharge of non-storm water into the storm drain is allowed.
33. The latest revised standard plan or drawing shall be used unless otherwise noted.
34. The City Engineer's office shall be called for inspection at (909) 594-9702 at least 48 hours prior to the start of work.

PRIVATE ENGINEER'S NOTICE TO CONTRACTORS

The existence and location of any underground utility pipes or structures shown on these plans are obtained by a search of the available records. To the best of our knowledge there are no existing utilities except as shown on this map. The contractor is required to take due precautionary measures to protect the utility lines shown and any other lines not of record or not shown on this drawing.

Edward S. Fordan
EDWARD S. FORDAN RCE NO. 10616 DATE

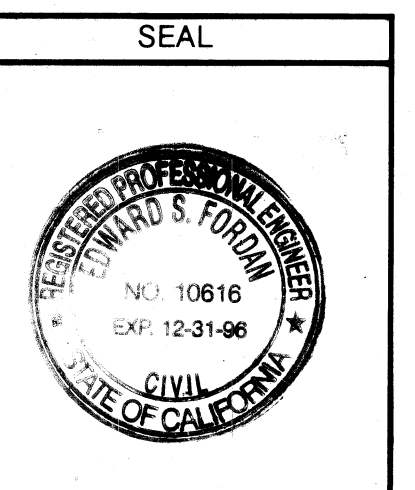


PROPERTY OWNER :

C H Q PACIFIC LTD.
1111 E KATELLA AVE.
SUITE 235
ORANGE, CA. 92667
(714) 538-9532

DEVELOPER:

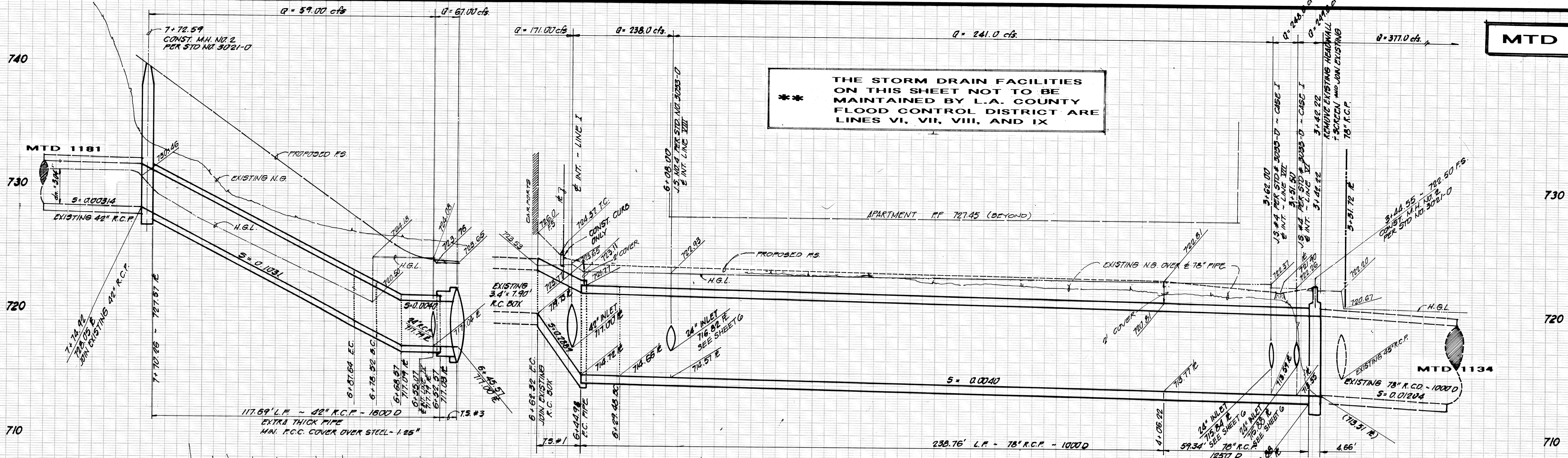
QUONG ENTERPRISES
1111 E KATELLA AVE.
SUITE 235
ORANGE, CA. 92667
(714) 538-9532



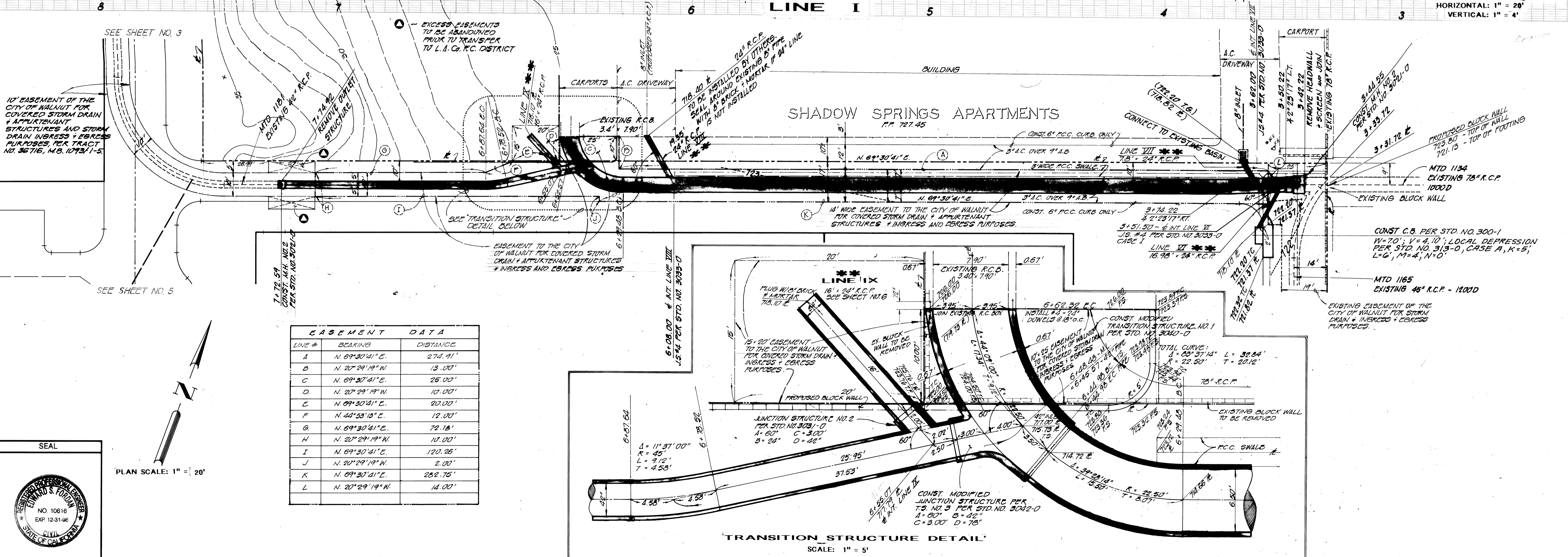
PREPARED BY ANDREASEN ENGINEERING, INC. Civil Engineering • Land Surveying • Land Acquisition 380 North Park Avenue, Pomona, California 91768 (909) 623-1595 FAX (909) 628-8616 <i>Edward S. Fordan</i> 10-4-93 EDWARD S. FORDAN RCE NO 10616 DATE	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <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> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>																	MADE BY DATE APPROVED BY DATE BENCH MARK DATA NOCG 3889 ELEV. 722.357 LOCATION: LOCATION RDBM TAG IN CB 80 FT S. & 40 W. C/L INT. GRAND AVE. & TEMPLE AVE.	REFERENCE DWGS UTILITIES TRAFFIC FIRE PLANNING	DATE DRAWN DESIGNED CHECKED RECOMMENDED	DATE REVIEWED BY CITY OF WALNUT <i>Jack G. Istik</i> JACK G. ISTIK R.C.E. 26958 DEPUTY CITY ENGINEER DATE 12/14/93	CITY OF WALNUT MTD 1461 STORM DRAIN PLANS C.U.P. 109 - 92	PROJECT NO. JN 2322 SHEET 1 OF 6 DRAWING NO.

#181A

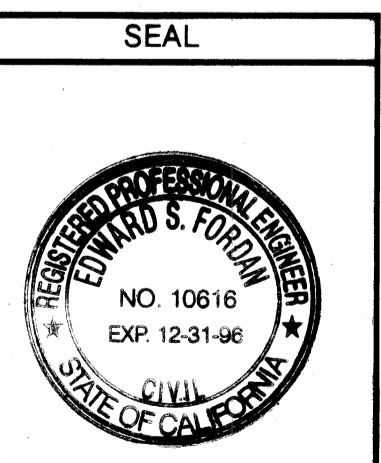
THE STORM DRAIN FACILITIES ON THIS SHEET NOT TO BE MAINTAINED BY L.A. COUNTY FLOOD CONTROL DISTRICT ARE LINES VI, VII, VIII, AND IX



PROFILE SCALES:
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 4'



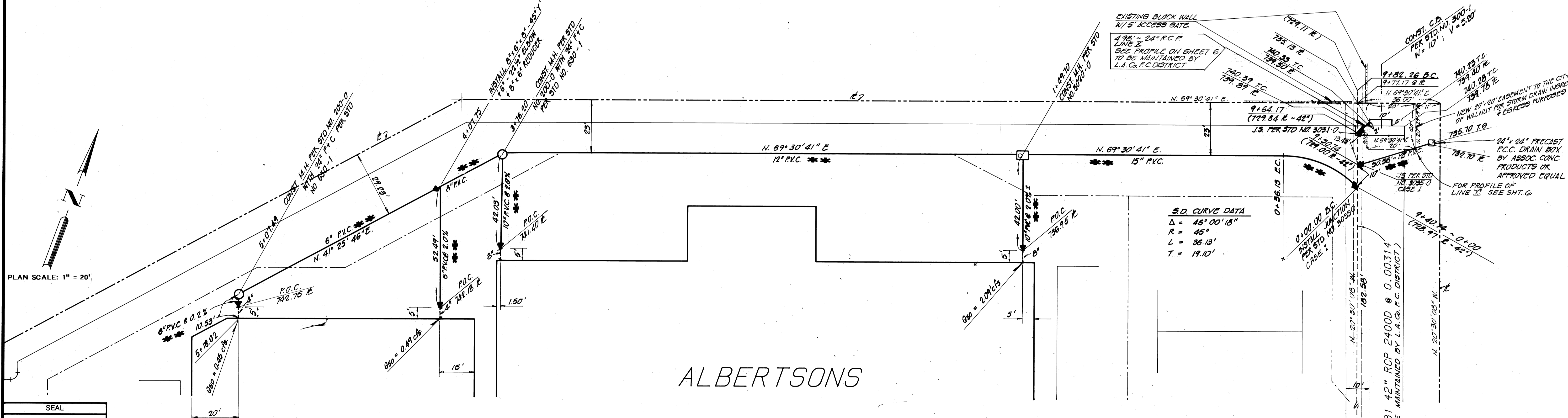
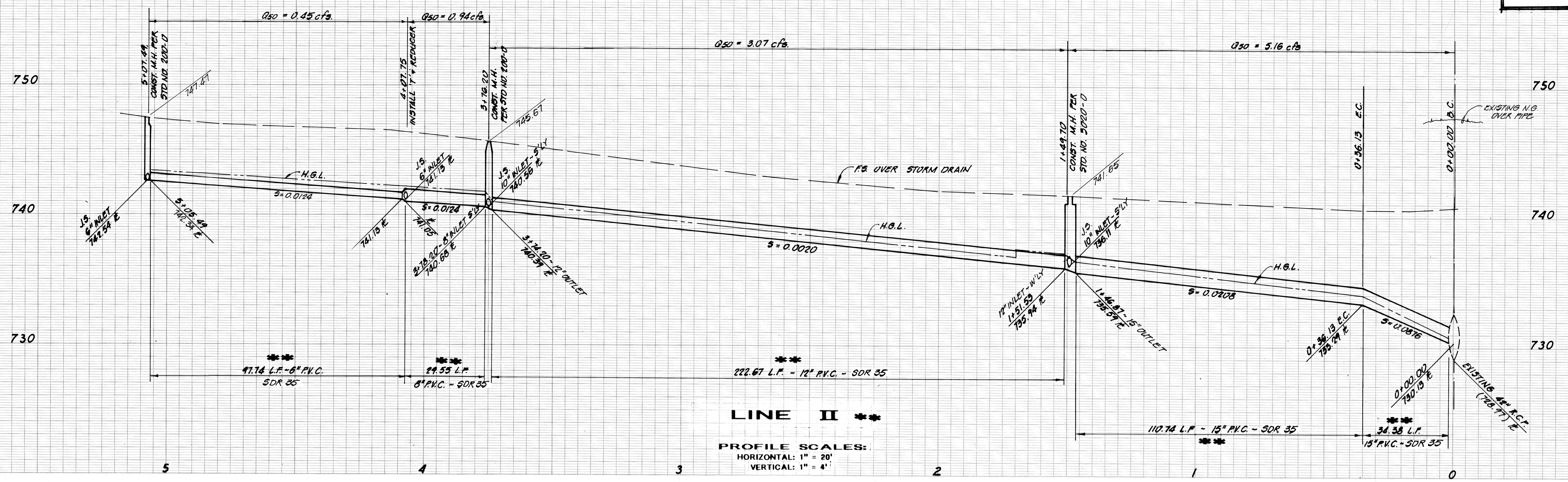
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LINE #	BEARING	DISTANCE
A	N. 69°30'41" E.	274.91'
B	N. 20°29'19" N.	13.00'
C	N. 69°30'41" E.	25.00'
D	N. 20°29'19" N.	10.00'
E	N. 69°30'41" E.	20.00'
F	N. 44°53'13" E.	12.00'
G	N. 69°30'41" E.	72.18'
H	N. 20°29'19" N.	10.00'
I	N. 69°30'41" E.	120.76'
J	N. 20°29'19" N.	2.00'
K	N. 69°30'41" E.	262.75'
L	N. 20°29'19" N.	14.00'



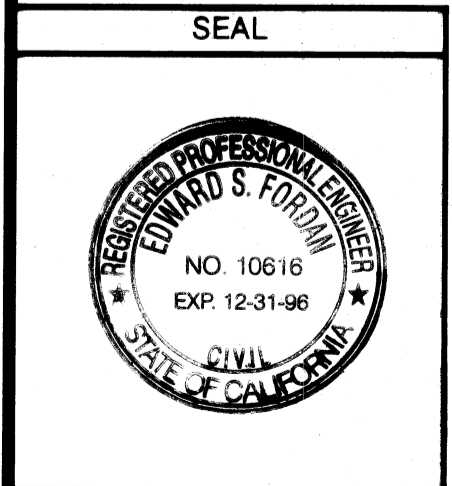
PLAN SCALE: 1" = 20'

PREPARED BY ANDREASEN ENGINEERING, INC. Civil Engineering & Land Surveying - Land Engineers 220 North Park Avenue, Pasadena, California 91106 (909) 623-1595 FAX (909) 628-2616 Edward S. Fordan EDWARD S. FORDAN RCE NO 10616 DATE 12-1-93	REVISIONS MADE BY DATE APPROVED BY DATE	BENCH MARK DATA NOGG 3393 ELEV. 722.35' LOCATION LOCATION RDBM TAG IN CB 60ft S. & 40 W. C/L INT. GRAND AVE. & TEMPLE AVE.	REFERENCE DWGS UTILITIES TRAFFIC FIRE PLANNING	DATE DRAWN DESIGNED CHECKED RECOMMENDED	DATE REVIEWED BY CITY OF WALNUT Jack G. Istik JACK G. ISTIK R.C.E. 28558 DEPUTY CITY ENGINEER DATE 12/14/93	PROJECT NO. JN 2322 CITY OF WALNUT MTD 1461 STORM DRAIN PLAN LINES I, VI, VII, VIII, & IX SHEET 2 OF 6 DRAWING NO.
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#181 B



ALL STORM DRAIN FACILITIES ON THIS SHEET ARE NOT TO BE MAINTAINED BY L.A. COUNTY FLOOD CONTROL DISTRICT EXCEPT LINE X



PREPARED BY
 ANDREASEN ENGINEERING, INC.
 560 North Park Avenue, Palmdale, California 91366
 (909) 623-1595
 FAX (909) 628-9016
 Edward S. Pordan RCE No. 10616 DATE 11-9-93

REVISIONS	MADE BY	DATE	APPROVED BY	DATE

BENCH MARK DATA
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 60 FT S. & 40 W. C/L INT.
 GRAND AVE. & TEMPLE AVE.

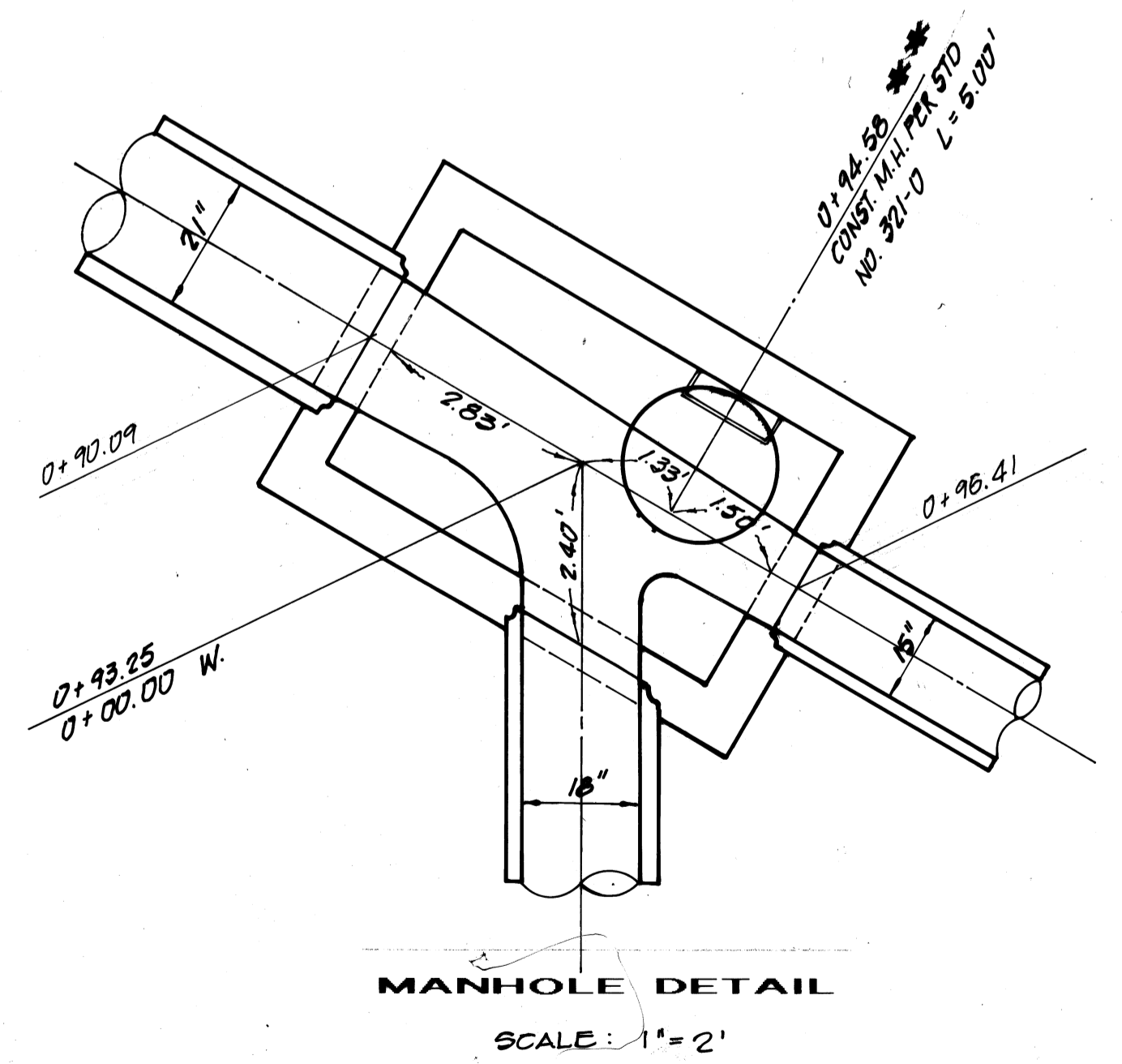
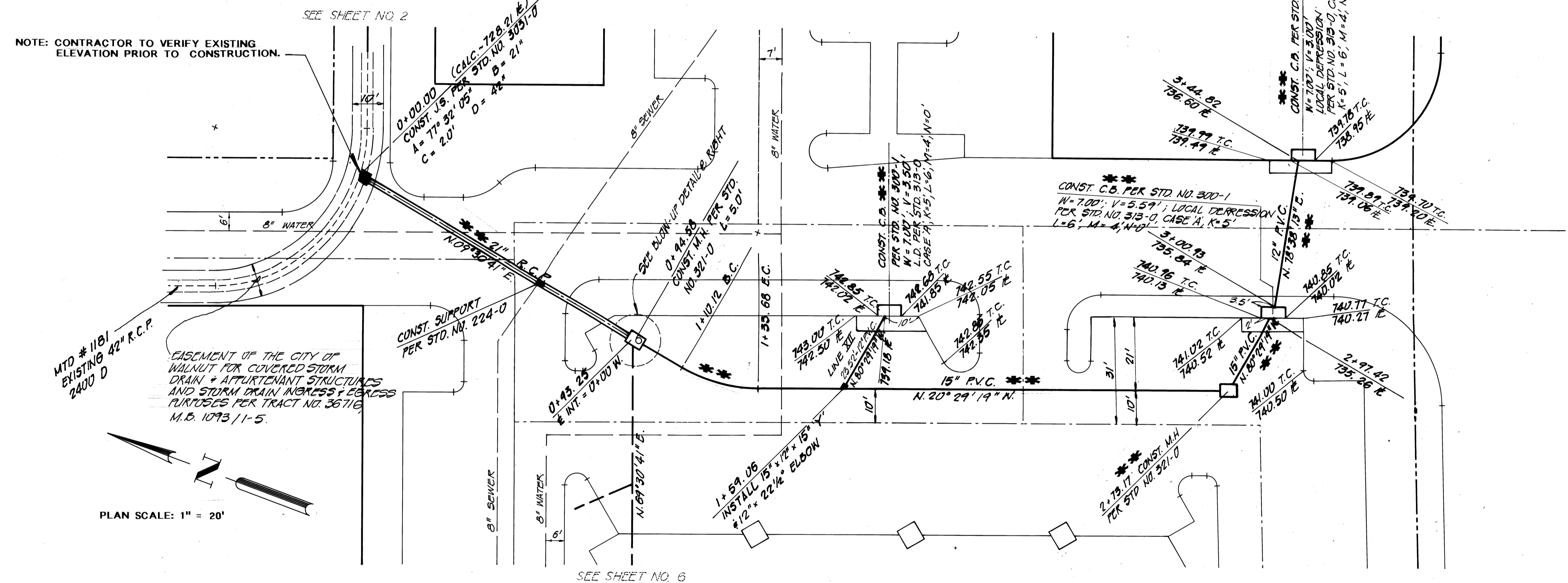
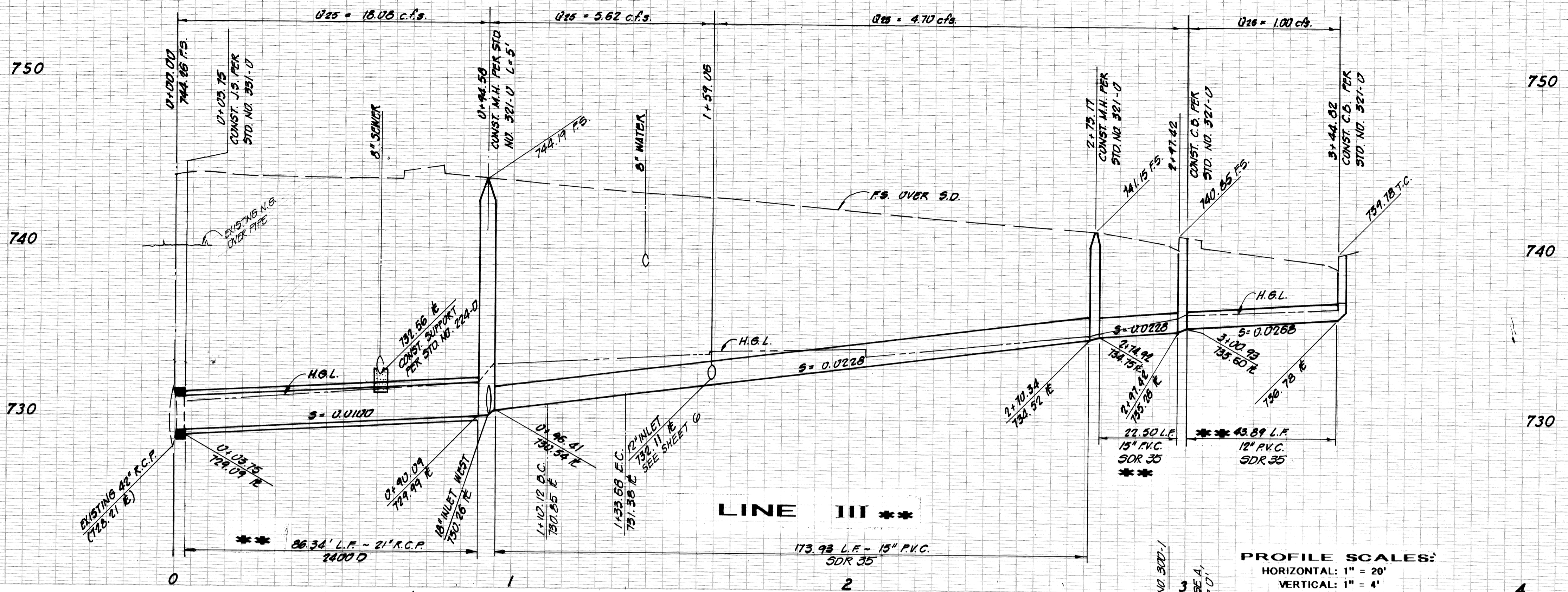
UTILITIES	DATE
TRAFFIC	
FIRE	
PLANNING	

REVIEWED BY CITY OF WALNUT
 Jack G. Istik R.C.E. 26568
 DEPUTY CITY ENGINEER
 DATE 12/14/93

CITY OF WALNUT
 MTD 1461
 STORM DRAIN PLAN
 LINE II, X, & XI

PROJECT NO.
 JUN 2322
 SHEET 3 OF 6
 DRAWING NO.

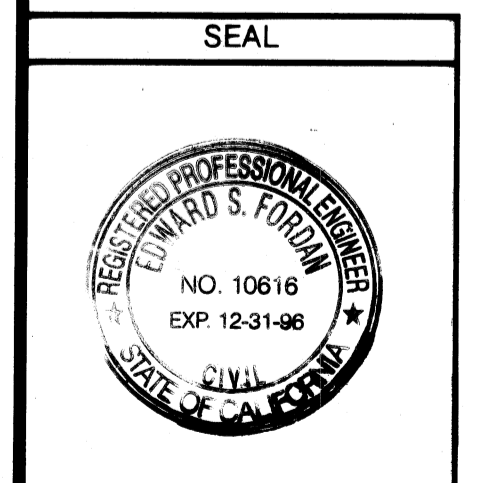
#1810



ALL STORM DRAIN FACILITIES ON THIS SHEET ARE NOT TO BE MAINTAINED BY L.A. COUNTY FLOOD CONTROL DISTRICT

S.D. CURVE DATA

A	= 30' 00" 00"
R	= 25'
L	= 23.56'
T	= 12.06'

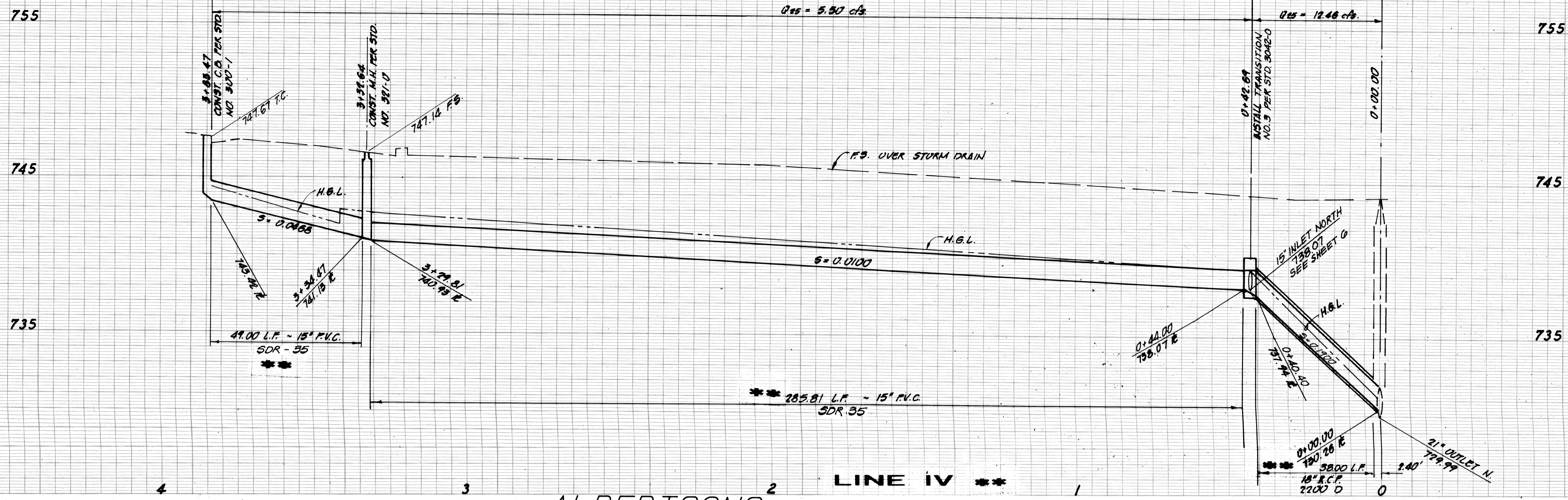


PREPARED BY
ANDREASEN ENGINEERING, INC.
Civil Engineering • Land Surveying • Land Acquisition
388 North Park Avenue, Pomona, California 91768
(909) 623-1595
FAX (909) 628-9016
Edward S. Fordan 10-4-93
EDWARD S. FORDAN R.C.E. NO 10616 DATE

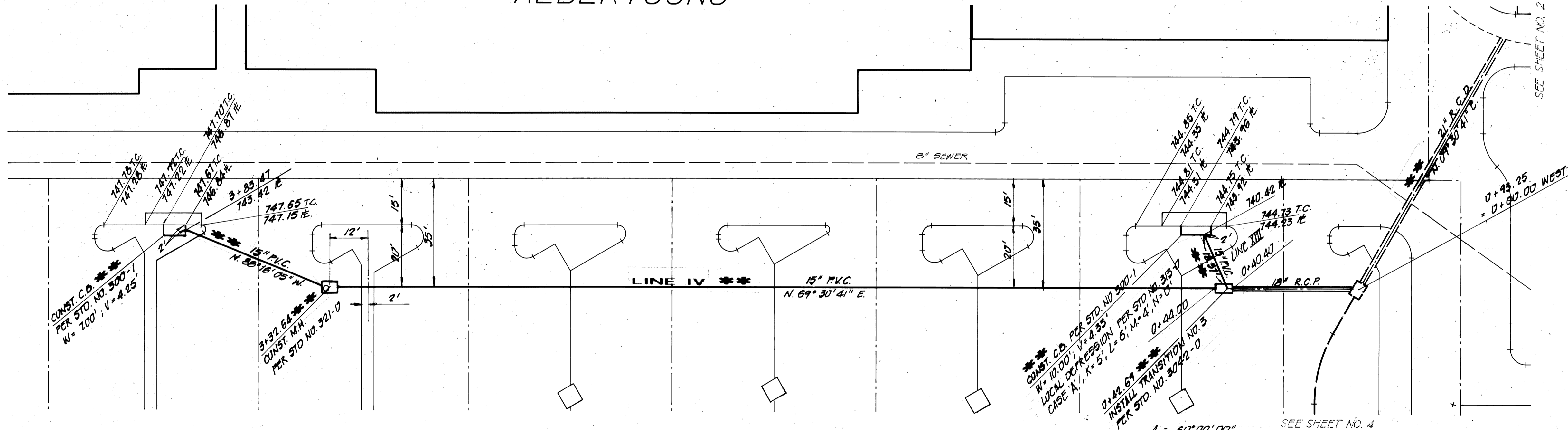
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								JACK G. ISTIK R.C.E. 26558 DEPUTY CITY ENGINEER DATE 12/14/93	

CITY OF WALNUT		PROJECT NO.
MTD 1461		JN 2322
STORM DRAIN PLAN		SHEET 4 OF 6
LINE III & LINE XII		DRAWING NO.

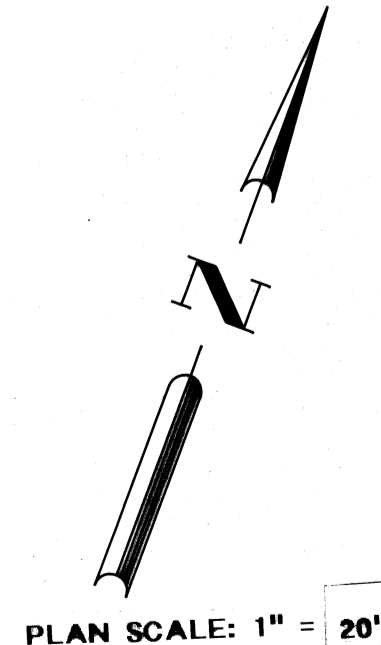
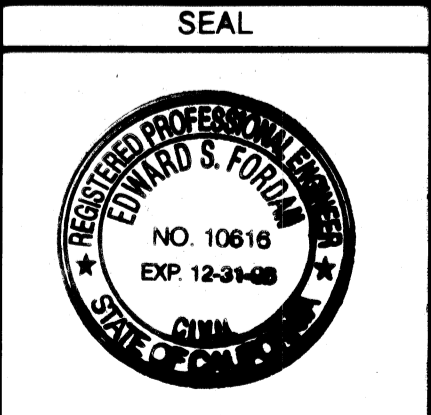
#181 D



ALBERTSONS



ALL STORM DRAIN FACILITIES ON THIS SHEET ARE NOT TO BE MAINTAINED BY L.A. COUNTY FLOOD CONTROL DISTRICT



PREPARED BY
ANDREASEN ENGINEERING, INC.
 Civil Engineering • Land Surveying • Land Acquisition
 100 Main Park Avenue, Pomona, California 91768
 (909) 623-1595
 FAX (909) 628-9116
 Edward S. Fordan
 EDWARD S. FORDAN R.C.E. NO. 10616

REVISIONS	MADE BY	DATE	APPROVED BY	DATE

BENCH MARK DATA
 NOCG 3319 ELEV. 722.357
 LOCATION:
 LOCATION RDBM TAG IN CB
 80ft S. & 40 W. C/L INT.
 GRAND AVE. & TEMPLE AVE.

REFERENCE DWGS	DATE

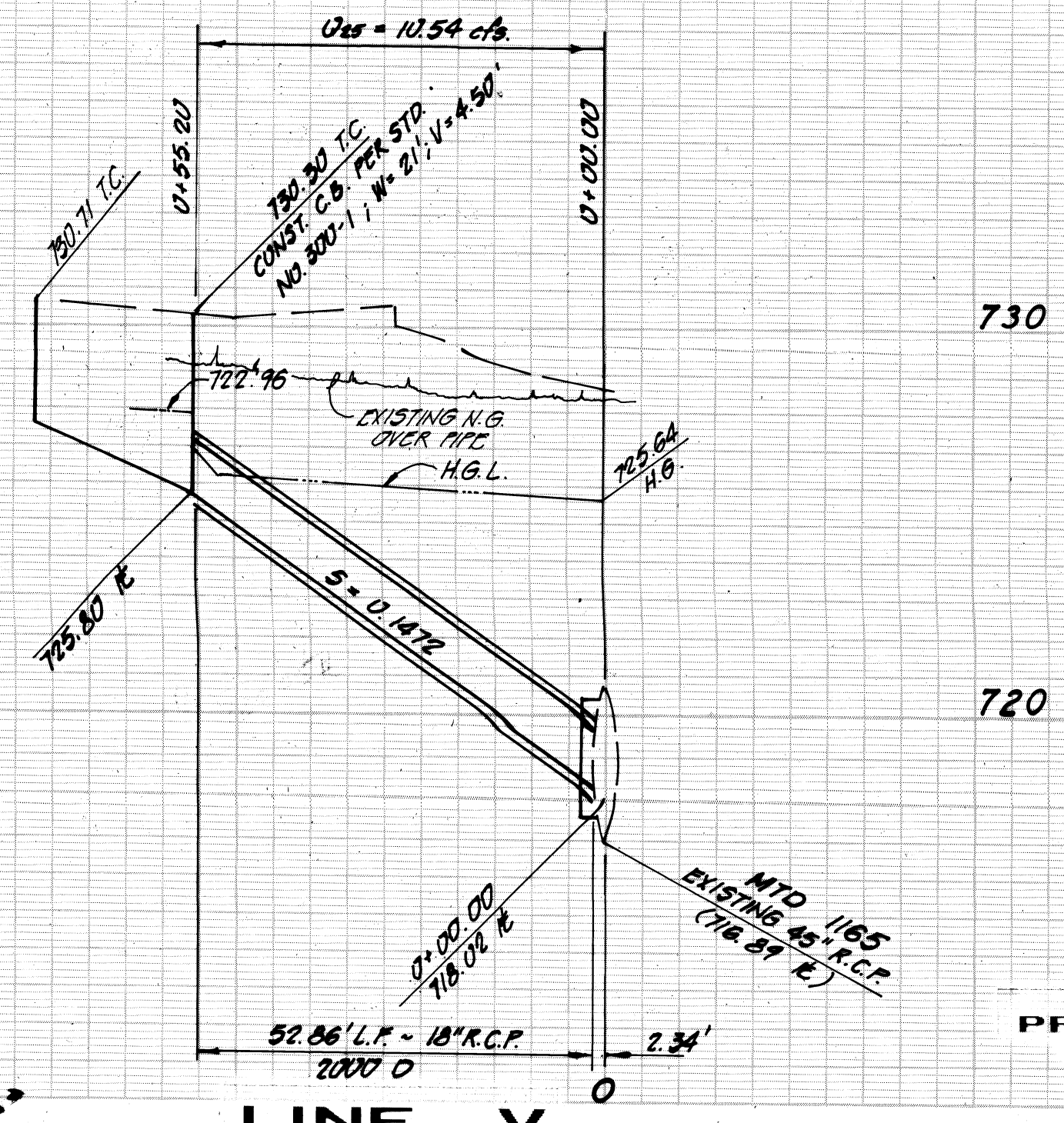
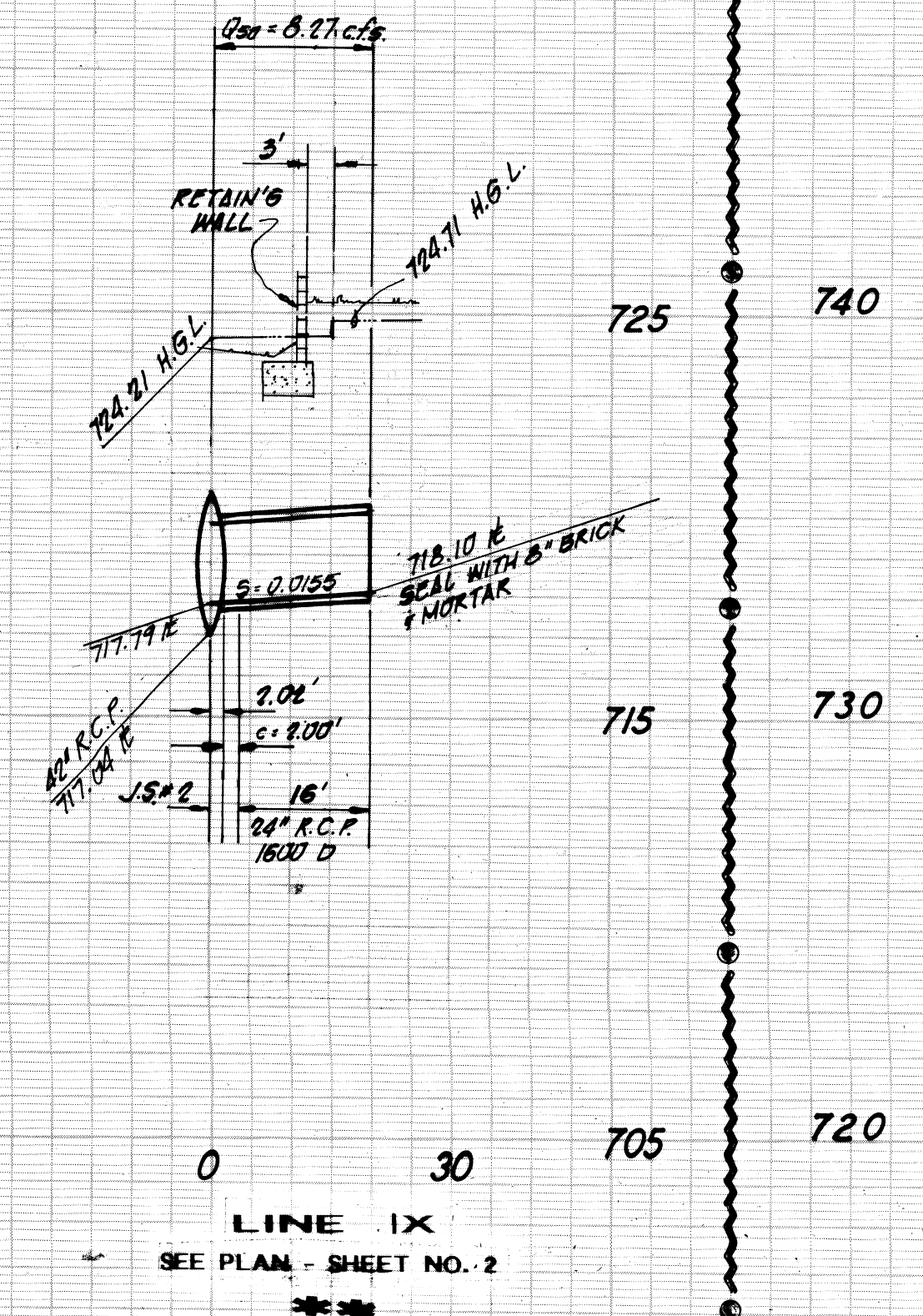
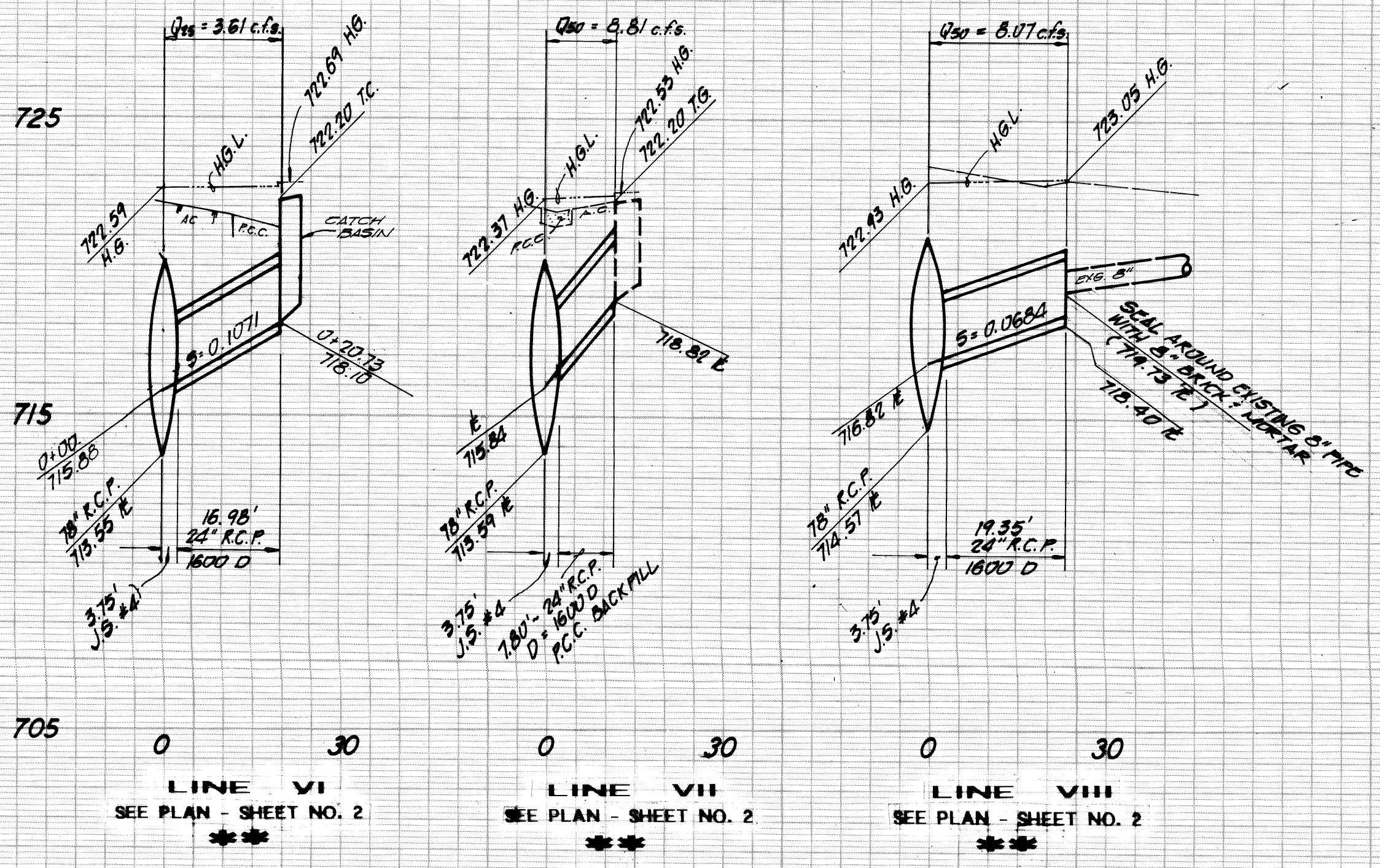
UTILITIES	DATE
TRAFFIC	
FIRE	
PLANNING	

REVIEWED BY CITY OF WALNUT
 JACK G. ISTIK R.C.E. 20558
 DEPUTY CITY ENGINEER
 DATE 12/14/93

CITY OF WALNUT
 MTD 1461
STORM DRAIN PLAN
 LINE IV

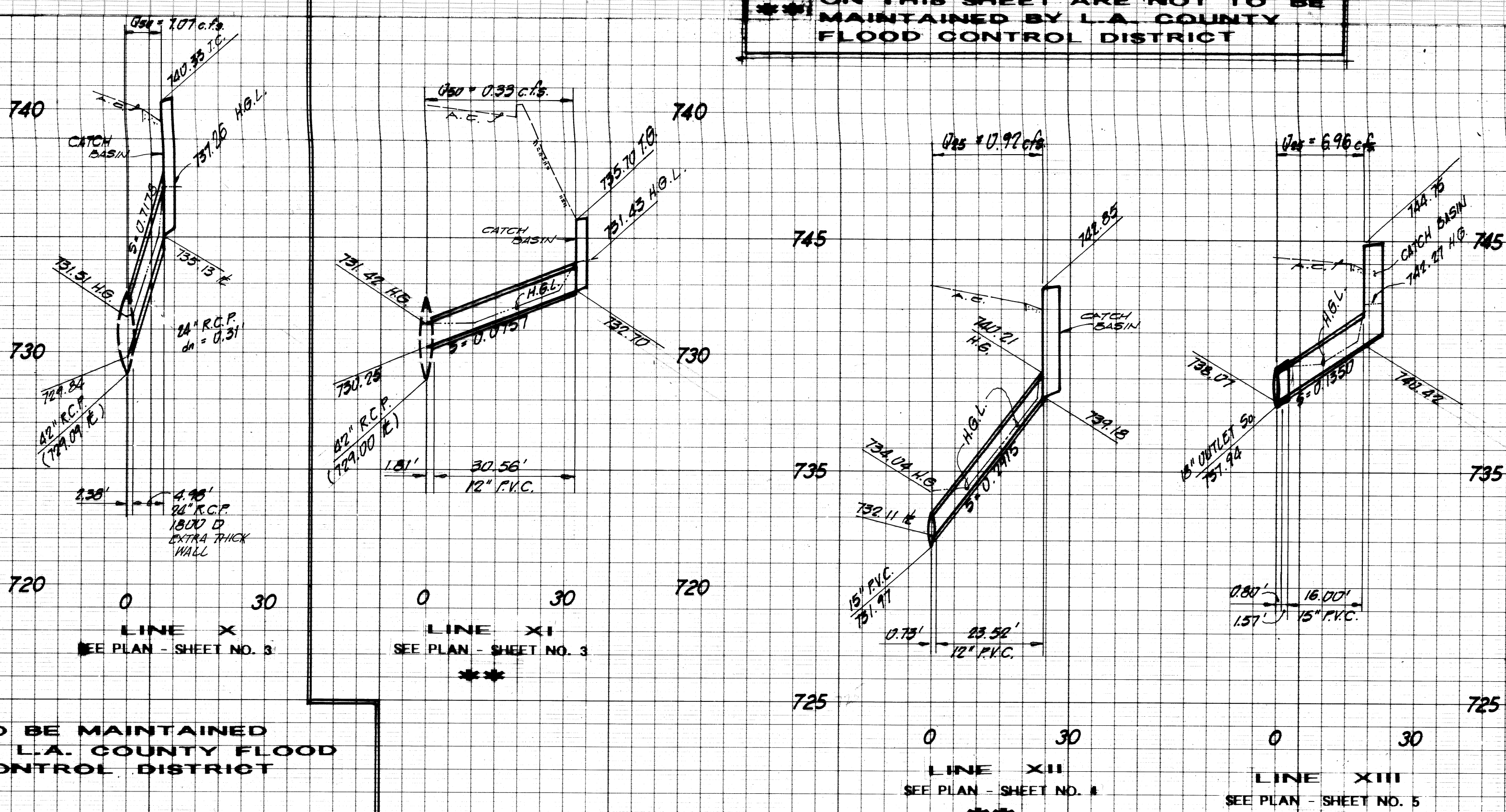
PROJECT NO.
JN 2322
 SHEET **5** OF **6**
 DRAWING NO.

#181F

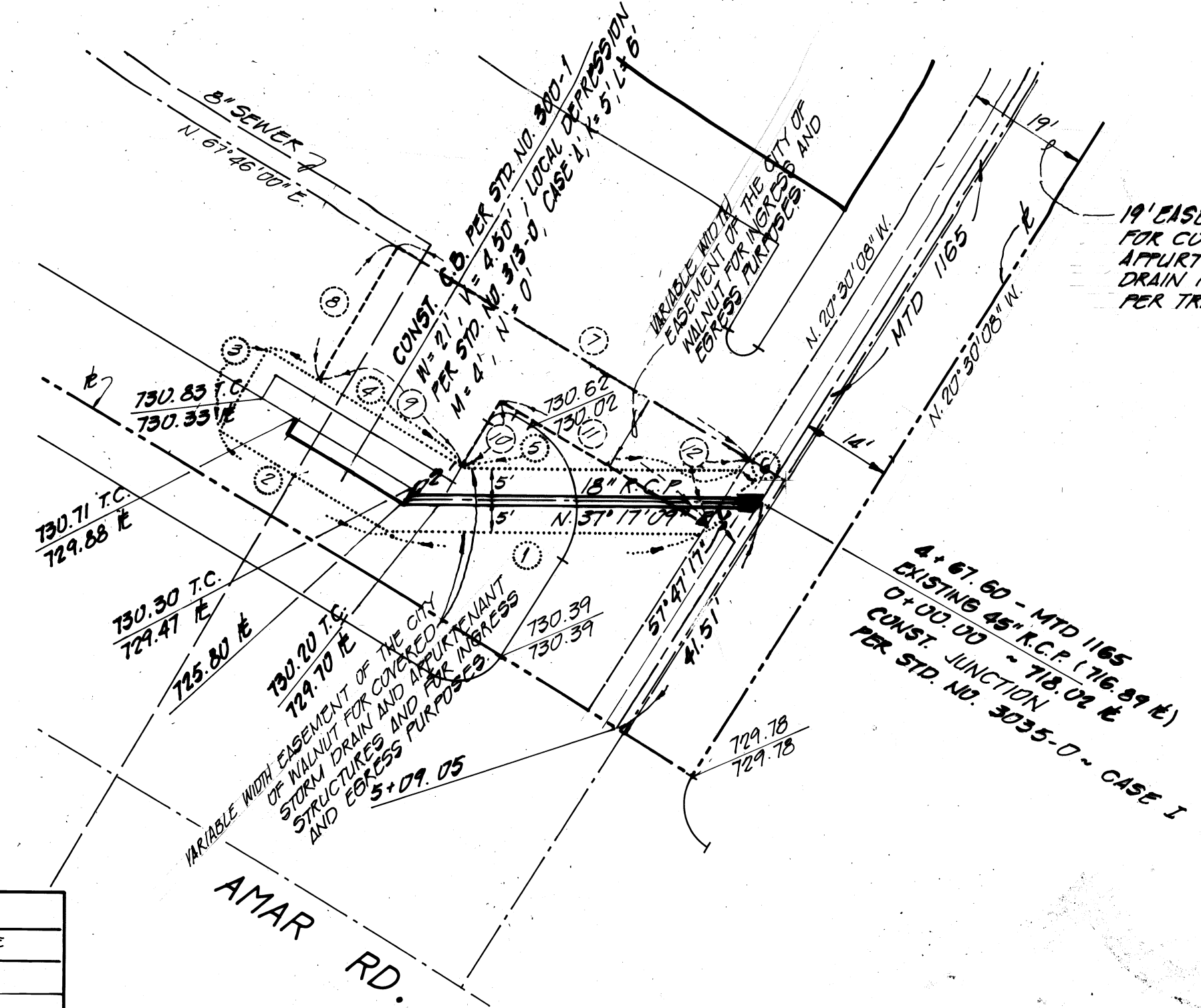


PROFILE SCALES
 HORIZONTAL: 1" = 20'
 VERTICAL: 1" = 4'

ALL STORM DRAIN FACILITIES
 ON THIS SHEET ARE NOT TO BE
 MAINTAINED BY L.A. COUNTY
 FLOOD CONTROL DISTRICT

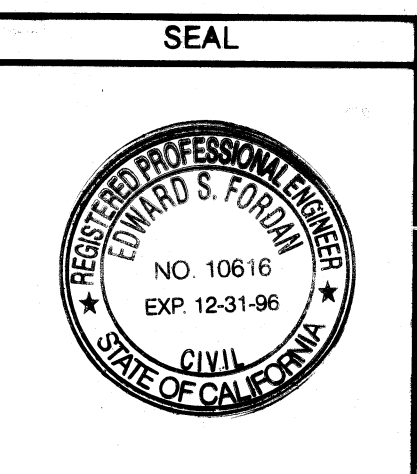


PLAN SCALE: 1" = 20'



LINE V + X
 TO BE MAINTAINED BY
 L.A. COUNTY FLOOD
 CONTROL DISTRICT

ALL STORM DRAIN FACILITIES
 ON THIS SHEET ARE NOT TO BE
 MAINTAINED BY L.A. COUNTY
 FLOOD CONTROL DISTRICT



PREPARED BY: **ANDREASEN ENGINEERING, INC.**
 NO. 10616
 EXP. 12-31-96
 CIVIL
 STATE OF CALIFORNIA

REVISIONS	MADE BY	DATE	APPROVED BY	DATE

BENCH MARK DATA
 NOCG 3399 ELEV. 722.357
 LOCATION:
 LOCATION RDBM TAG IN CB
 60ft S. & 40 W. C/L INT.
 GRAND AVE. & TEMPLE AVE.

UTILITIES	BY	DATE	REVIEWED BY CITY OF WALNUT	BY	DATE
TRAFFIC					
FIRE					
PLANNING					

DRAWN: [Signature]
 DESIGNED: [Signature]
 CHECKED: [Signature]
 RECOMMENDED: [Signature]

REVIEWED BY CITY OF WALNUT:
 JACK G. ISTIK, R.C.E. 26558
 DEPUTY CITY ENGINEER
 DATE 12/14/93

CITY OF WALNUT
 MTD 1461
STORM DRAIN PLAN
 LINES V, VI, VII, VIII, IX, X, XI, XII, & XIII

PROJECT NO. **JN 2322**
 SHEET **6 OF 6**
 DRAWING NO.

#180F