

# STORM DRAIN IMPROVEMENT PLANS FOR TRACT 50867 CITY OF WALNUT

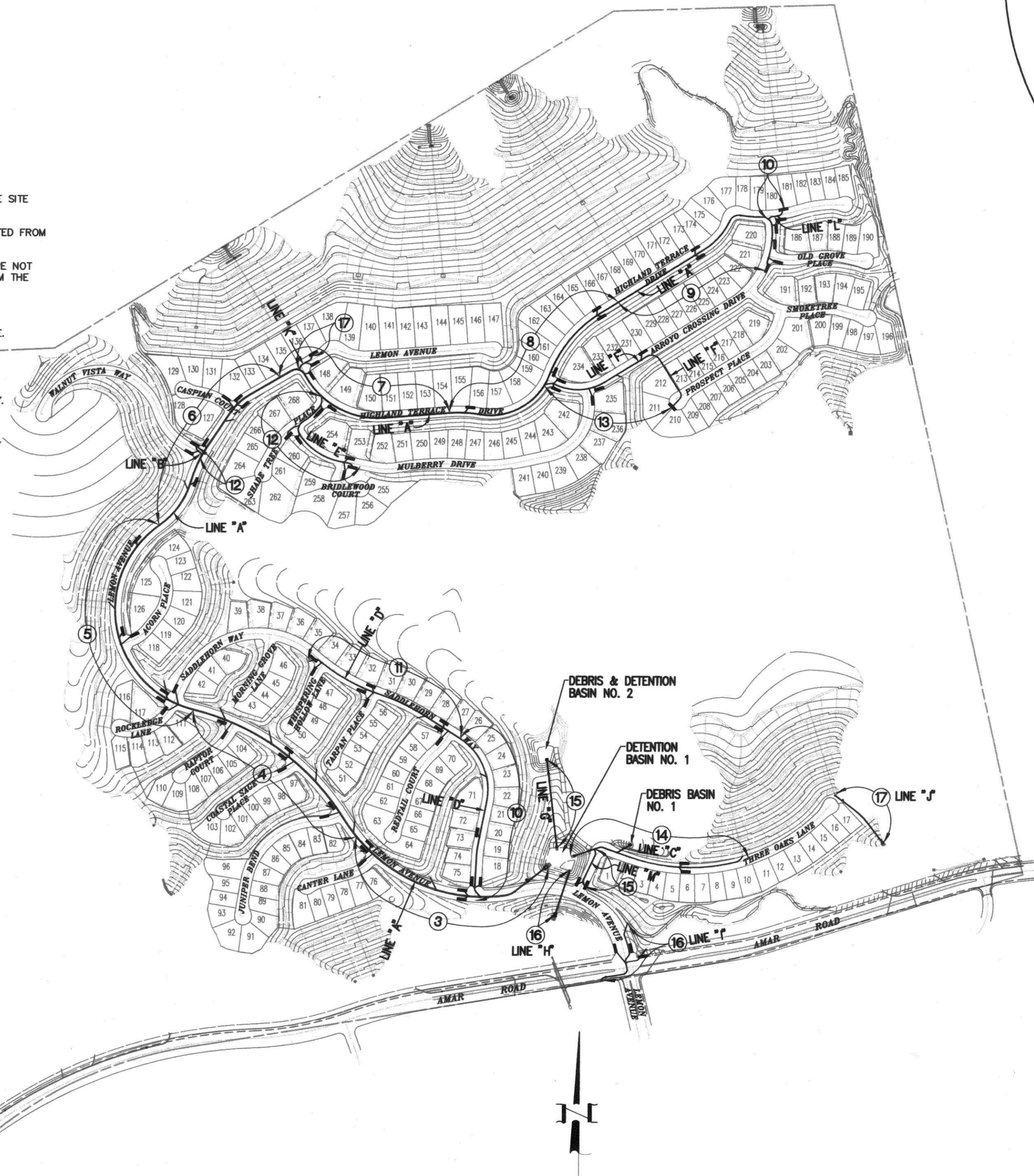
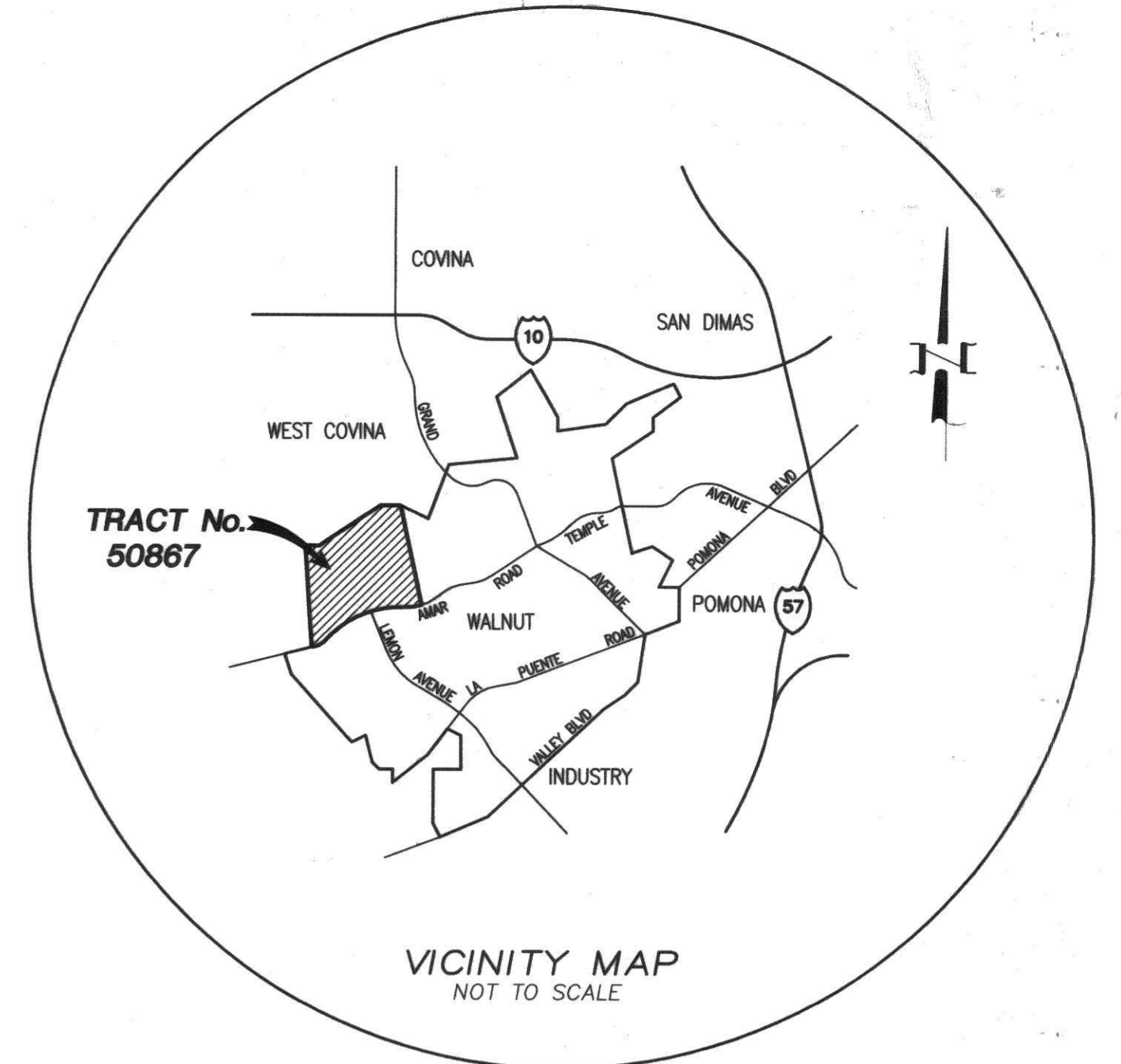
## GENERAL NOTES

- A PERMIT SHALL BE OBTAINED AND ALL FEES AND DEPOSITS FOR CONSTRUCTION INSPECTION SHALL BE PAID TO THE DEPARTMENT OF PUBLIC WORKS AT THE PERMIT COUNTER, 900 SOUTH FRENCH AVENUE, 8TH FLOOR, PRIOR TO STARTING WORK UNDER THIS CONTRACT. ALSO, ALL OTHER REQUIRED PERMITS, SUCH AS ROAD EXCAVATION PERMITS, MUST BE OBTAINED PRIOR TO STARTING WORK.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT OFFICE LISTED ON THE APPLICATION FOR STORM DRAIN CONSTRUCTION INSPECTION FORM "I" TO ARRANGE FOR AN ACCEPTABLE CONSTRUCTION START DATE.
- APPROVAL OF THIS PLAN BY THE COUNTY OF LOS ANGELES 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.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," INCLUDING SUPPLEMENTS, AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE DIRECTOR OF PUBLIC WORKS/CITY ENGINEER.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 7-10.4.1 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION IN REGARD TO SAFETY ORDERS.
- ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. MEAN SEA LEVEL DATUM OF 1929, UNLESS OTHERWISE INDICATED.
- NO CONCRETE SHALL BE PLACED UNTIL THE FORMS AND REINFORCING STEEL HAVE BEEN PLACED, INSPECTED AND APPROVED.
- ALL STRUCTURAL CONCRETE SHALL BE PORTLAND CEMENT CONCRETE WITH AN ULTIMATE 28 DAY COMPRESSIVE STRENGTH OF 3250 PSI UNLESS OTHERWISE NOTED.
- TRANSVERSE REINFORCEMENT AND TRANSVERSE JOINTS SHALL BE PLACED AT RIGHT ANGLES (OR RADIAL) TO THE CONDUIT CENTERLINE EXCEPT AS OTHERWISE SHOWN ON THE DRAWINGS.
- ALL STEEL ADJACENT TO FACE OF CONCRETE SHALL HAVE A 2-1/2-INCH CLEARANCE UNLESS OTHERWISE SPECIFIED.
- REINFORCEMENT SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE STEEL, PER ASTM A-615-GRADE 60.
- ALL BAR BENDS AND HOOKS SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE "MANUAL OF STANDARD PRACTICE."
- DIMENSIONS FROM FACE OF CONCRETE TO STEEL ARE TO CENTERLINE OF STEEL UNLESS OTHERWISE NOTED.
- ALL STEEL THAT IS TO BE CONTINUOUS SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS OR 18 INCHES, WHICHEVER IS GREATER.
- ALL CONSTRUCTION JOINTS IN THE FOOTING OR SLABS AND WALLS SHALL BE IN THE SAME PLANE. NO STAGGERING OF JOINTS WILL BE PERMITTED.
- ALL EXPOSED EDGES SHALL BE FINISHED WITH A 3/4-INCH CHAMFER.
- UNLESS OTHERWISE SHOWN, CONCRETE DIMENSIONS SHALL BE MEASURED VERTICALLY OR HORIZONTALLY AND PARALLEL OR AT RIGHT ANGLES (OR RADIAL) TO THE CENTER LINE OF CONSTRUCTION.
- CONCRETE BACKFILL IS REQUIRED WHEN THE PIPE HAS LESS THAN ONE FOOT OF 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.
- ALL PIPES SHALL BE PLACED IN TRENCH IN NATURAL GROUND AND/OR COMPACTED FILL. THE GROUND LEVEL BEFORE THE TRENCHING SHALL BE AT LEAST 3 FEET ABOVE THE TOP OF THE PIPE ELEVATION, OR AT FINISH SURFACE ELEVATION, WHICHEVER IS LESS.
- ALL BACKFILL AND FILLS OUTSIDE OF STREET RIGHT OF WAY SHALL BE COMPACTED TO 90 PERCENT 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 CITY.
- 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.
- PIPE BEDDING SHALL BE:
  - IN ACCORDANCE WITH LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS STANDARD PLAN NO. 3092 UNLESS OTHERWISE NOTED.
  - OR
  - ACCORDING TO STANDARD PLAN NO. 3080, CASE III, EXCEPT BELL AND SPIGOT PIPE WHICH SHALL BE CASE II BEDDING, UNLESS OTHERWISE SHOWN. "W" VALUES SHALL BE AS SPECIFIED ON STANDARD PLAN NO. 3080 FOR CASE III BEDDING, NOTES 3 (A), 3 (B), AND 3 (C). IF THE "W" VALUE AT THE TIP OF THE PIPE IS EXCEEDED, THE BEDDING SHALL BE MODIFIED, AND/OR PIPE OF ADDITIONAL STRENGTH SHALL BE PROVIDED. THE PROPOSED MODIFICATION SHALL BE APPROVED BY THE DEPARTMENT.
- PIPE SHALL BE EMBEDDED 5 INCHES INTO ALL STRUCTURES INCLUDING INLET AND HEAD WALLS, UNLESS OTHERWISE SPECIFIED.
- UNLESS OTHERWISE SPECIFIED IN THE PROFILE ON 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.
- ALL CATCH BASINS WITHIN THE DEDICATED STREET RIGHT OF WAY SHALL BE CONSTRUCTED PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION.
- 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 SYSTEM IS ACCEPTED FOR MAINTENANCE. THE DESIGN OF THE DRAINAGE SYSTEM MUST BE PREPARED UNDER THE DIRECTION OF A CIVIL ENGINEER.
- 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.
- EXISTING UTILITIES SHALL BE MAINTAINED IN PLACE BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.
- 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.
- ALL OPENINGS RESULTING FROM THE CUTTING OR PARTIAL REMOVAL OF EXISTING CULVERTS, PIPES OR SIMILAR STRUCTURES SHALL BE SEALED WITH 8 INCHES OF BRICK AND MORTAR OR 6 INCHES OF CONCRETE, UNLESS OTHERWISE SHOWN.
- MANHOLES NOS. 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."
- THIS STORM DRAIN WILL NOT BE FIELD ACCEPTED UNTIL THE STREETS HAVE BEEN PAVED, MANHOLES BROUGHT TO GRADE, AND THE SYSTEM CLEANED TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
- 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.
- THE LATEST REVISED STANDARD PLAN OR DRAWING SHALL BE USED UNLESS OTHERWISE NOTED.

## STORMWATER POLLUTION CONTROL REQUIREMENTS FOR STORM DRAIN CONSTRUCTION

- A. NOTES:
- ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
  - STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
  - FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
  - EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
  - TRASH AND CONSTRUCTION-RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
  - SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE SWEEPED DOWN BY RAIN OR OTHER MEANS.
  - ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
- B. THE FOLLOWING BMPs AS OUTLINED IN, BUT NOT LIMITED TO, THE BEST MANAGEMENT PRACTICE HANDBOOK, CALIFORNIA STORMWATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA 1993, OR THE LATEST REVISED EDITION, MAY APPLY DURING CONSTRUCTION (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY INSPECTOR):

- CA001 - DEWATERING OPERATIONS
- CA002 - PAVING OPERATIONS
- CA003 - STRUCTURE CONSTRUCTION AND PAINTING
- CA010 - MATERIAL DELIVERY AND STORAGE
- CA012 - SPILL PREVENTION AND CONTROL
- CA020 - SOLID WASTE MANAGEMENT
- CA021 - HAZARDOUS WASTE MANAGEMENT
- CA023 - CONCRETE WASTE MANAGEMENT
- CA030 - VEHICLE AND EQUIPMENT CLEANING
- CA031 - VEHICLE AND EQUIPMENT FUELING
- CA032 - VEHICLE AND EQUIPMENT MAINTENANCE
- CA040 - EMPLOYEE/SUBCONTRACTOR TRAINING
- ESC01 - SCHEDULING
- ESC02 - PRESERVATION OF EXISTING VEGETATION
- ESC10 - SEEDING AND PLANTING
- ESC11 - MULCHING
- ESC20 - GEOTEXTILES AND MATS
- ESC21 - DUST CONTROLS
- ESC22 - TEMPORARY STREAM CROSSING
- ESC23 - CONSTRUCTION ROAD STABILIZATION
- ESC24 - STABILIZED CONSTRUCTION ENTRANCE
- ESC30 - EARTH DIKE
- ESC31 - TEMPORARY DRAINS AND SWALES
- ESC32 - SLOPE DRAIN
- ESC40 - OUTLET PROTECTION
- ESC41 - CHECK DAMS
- ESC50 - SILT FENCE
- ESC51 - STRAW BALE BARRIERS
- ESC52 - SAND BAG BARRIER
- ESC53 - BRUSH OR ROCK FILTER
- ESC54 - STORM DRAIN INLET PROTECTION



INDEX MAP  
SCALE 1"=400'

**UNAUTHORIZED CHANGES AND USES**  
CAUTION: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS.

**NOTES**  
ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR, AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS".  
THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS' AND SUBCONTRACTORS' COMPLIANCE WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR OR WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS".  
THE LAND SURVEYORS ACT, SECTION 8771 OF THE BUSINESS & PROFESSIONAL CODE, AND SECTIONS 732.05, 1492-5, 1810-5 OF THE STREETS AND HIGHWAY CODE REQUIRE THAT SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED.

**PRIVATE ENGINEER'S NOTICE TO CONTRACTORS**  
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS ARE 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 DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS.  
CONTRACTOR FURTHER AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE LOCAL GOVERNMENT AGENCIES, THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

**STREET, SEWER, STORM DRAIN**  
CITY OF WALNUT  
21201 LA PUENTE ROAD  
WALNUT, CA 91789  
TEL: (909) 595-7543

**WATER**  
WALNUT VALLEY WATER DISTRICT  
271 S. BREA CANYON ROAD  
WALNUT, CA 91789-3002  
TEL: (909) 595-1268  
CONTACT: GINGER SARABIA

**TELEPHONE**  
VERIZON  
1400 E. PHILLIPS BOULEVARD  
POMONA, CA 91766-5432  
TEL: (909) 469-6338  
CONTACT: ROSE GONZALEZ

**ELECTRICITY**  
SOUTHERN CALIFORNIA EDISON CO.  
800 W. CIENEGA AVENUE  
SAN DIMAS, CA 91773  
TEL: (909) 820-5610  
CONTACT: DUANE DEEDS

**GAS**  
THE GAS COMPANY  
920 S. STIMSON  
INDUSTRY, CA 91745  
TEL: (626) 855-9561  
CONTACT: THOMAS BALLY

**CABLE TELEVISION**  
CHARTER COMMUNICATIONS  
2215 W. MISSION ROAD  
ALHAMBRA, CA 91802-1451  
TEL: (626) 430-3335  
CONTACT: GEORGE ALVAREZ

**LEGEND**  
③ STORM DRAIN IMPROVEMENT SHEET

AS-BUILT  
11/26/12

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS, QUANTITIES & DETAILS
3-20	STORM DRAIN PLAN AND PROFILE
21-24	CDS UNIT DETAILS

**NOTE:**  
SEE SEPARATE PLANS BY WALNUT VALLEY WATER DISTRICT FOR ALL WATER SYSTEM IMPROVEMENTS

**DIG ALERT**  
SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES A DIGALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIGALERT I.D. NUMBER CALL UNDERGROUND SERVICE ALERT TOLL FREE TWO WORKING DAYS BEFORE YOU DIG.  
1-800-422-4133  
CAUTION: REMEMBER THAT THE USA CENTER NOTIFIES ONLY THOSE UTILITIES BELONGING TO THE CENTER. THERE COULD BE OTHER UTILITIES PRESENT AT THE WORK SITE. THE CENTER WILL INFORM YOU OF WHOM THEY WILL NOTIFY.

**BENCHMARK**  
BENCHMARK NO. = CG 3733  
ELEVATION = 519.40 FT  
ROAD DEPARTMENT TAG IN WESTERLY CURB 5 FEET SOUTH OF BCR, 78 FEET NORTH AND 42 FEET WEST OF CENTERLINE INTERSECTION OF VALLEY BOULEVARD AND LEMON AVENUE.

DATE	DESCRIPTION	APP'D	DATE
6/24/08	REVISED PROFILES, SHEET 17		
5/10/07	RELOCATED CATCH BASIN #A-22, #A-23, #E AND #E-5-REVISED PROFILES (SHEETS 5, 12, 18 & 20)		
2/10/07	REVISED STORM DRAIN LINES & PROFILES, SHEETS 3-5, 10, 15, 16, 18		

CITY OF WALNUT  
APPROVED BY: *David Gilbertson* 10/20/06  
DAVID GILBERTSON  
CITY ENGINEER - RCE 46624  
DATE

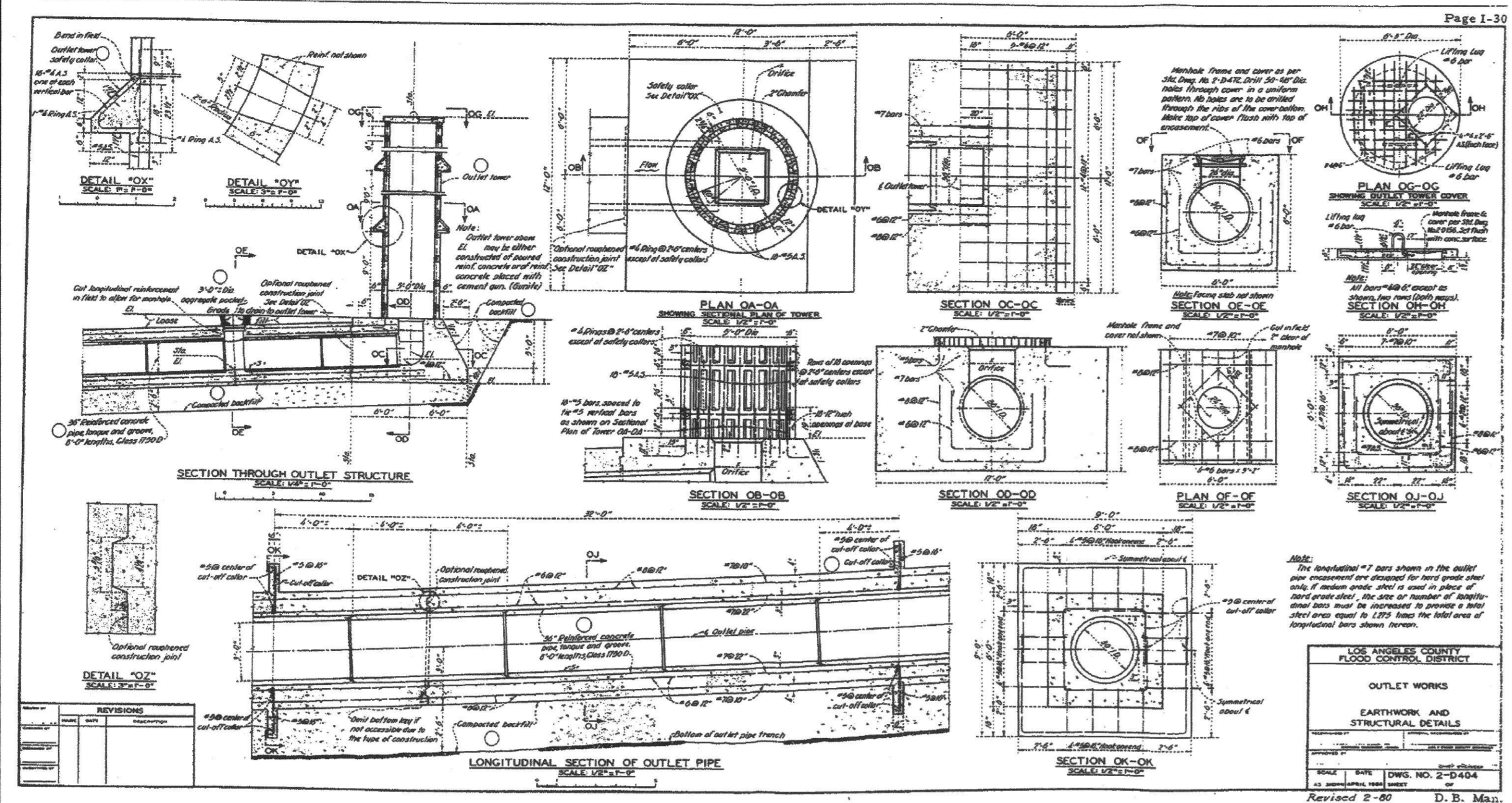
REGISTERED PROFESSIONAL ENGINEER  
HENRY R. JIMENEZ  
No. 42324  
Exp. 3-31-2008  
CIVIL  
STATE OF CALIFORNIA

PREPARED BY:  
MDS CONSULTING  
PLANNERS ENGINEERS SURVEYORS  
HENRY R. JIMENEZ R.C.E. 42324  
10-19-06  
DATE

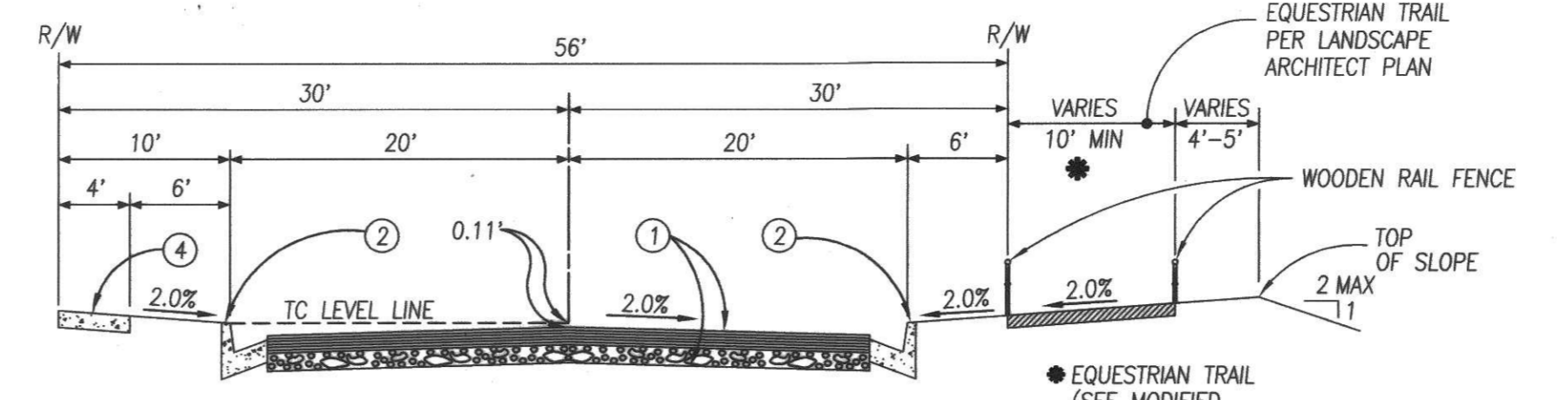
**STORM DRAIN PLANS**  
TITLE SHEET, INDEX MAP AND GENERAL NOTES  
TRACT No. 50867  
CITY OF WALNUT  
SHEET 1 OF 24 SHEETS  
187 A

**CONSTRUCTION NOTES & ESTIMATE OF QUANTITIES**

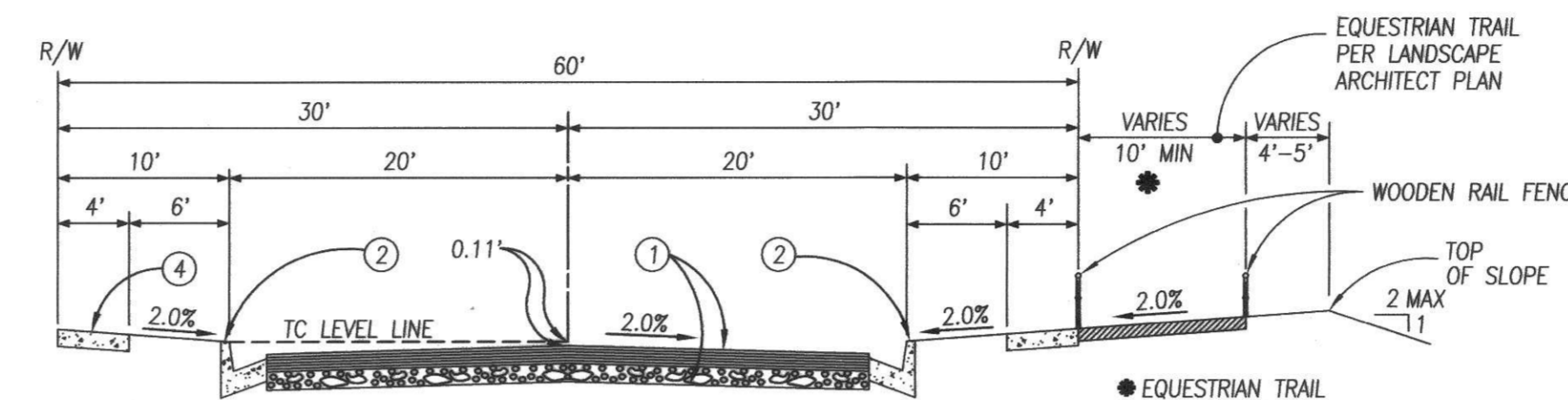
STORM DRAIN IMPROVEMENTS			UNIT	QUANTITY (TOTAL)
40	CONSTRUCT 18" RCP STORM DRAIN (D-LOAD PER PLAN)		LF	2,582
41	CONSTRUCT 24" RCP STORM DRAIN (D-LOAD PER PLAN)		LF	4,037
42	CONSTRUCT 30" RCP STORM DRAIN (D-LOAD PER PLAN)		LF	1,023
43	CONSTRUCT 36" RCP STORM DRAIN (D-LOAD PER PLAN)		LF	1,555
44	CONSTRUCT 42" RCP STORM DRAIN (D-LOAD PER PLAN)		LF	426
45	CONSTRUCT 48" RCP STORM DRAIN (D-LOAD PER PLAN)		LF	1,322
46	CONSTRUCT 54" RCP STORM DRAIN (D-LOAD PER PLAN)		LF	3,488
47	CONSTRUCT 60" RCP STORM DRAIN (D-LOAD PER PLAN)		LF	923
48	CONSTRUCT CATCH BASIN PER APWA STD. PLAN 300-2 (W PER PLAN)		EA	50
49	CONSTRUCT CATCH BASIN PER APWA STD. PLAN 301-2 (W PER PLAN)		EA	22
50	CONSTRUCT M.H. PIPE TO PIPE (MAIN LINE 33" OR SMALLER) PER APWA STD. PLAN 321-1		EA	22
51	CONSTRUCT M.H. PIPE TO PIPE (MAIN LINE 36" OR LARGER) PER APWA STD. PLAN 320-1		EA	17
52	CONSTRUCT M.H. PIPE TO PIPE (LARGER INLET) PER APWA STD. PLAN 322-1		EA	3
53	CONSTRUCT TRANSITION STRUCTURE PER APWA STD. PLAN 340-1		EA	5
54	CONSTRUCT JUNCTION STRUCTURE - PIPE TO PIPE PER APWA STD. PLAN 332-1 (INLET > 24" OR ID > 1/2 MAIN LINE ID)		EA	16
55	CONSTRUCT JUNCTION STRUCTURE - PIPE TO PIPE PER APWA STD. PLAN 331-2		EA	8
56	CONSTRUCT ENERGY DISSIPATOR-IMPACT BASIN PER APWA STD. PLAN 384-1		EA	5
57	NOT USED			
58	CONSTRUCT CATCH BASIN PER APWA STD. PLAN 300-2 (W=14'), MODIFIED B=2'-0"		EA	1
59	CONSTRUCT MANHOLE PIPE TO PIPE MAIN LINE PER APWA STD. PLAN 320-1, MODIFIED USING 60" CSP RISER IN LIEU OF MANHOLE SHAFT AND CONCRETE RINGS PER DETAIL ON SHT. 16		EA	1
60	CONSTRUCT RC OUTLET TOWER PER L.A.C.F.C.D. STD. PLAN 2-D404 (SIZE PER PLAN)		EA	2
61	CONSTRUCT CONCRETE COLLAR PER APWA STD. PLAN 380-2		EA	11
62	CONSTRUCT PIPE ANCHOR PER APWA STD. PLAN 221-1		EA	8
63	CONSTRUCT RIPRAP PER DETAIL HEREON (SIZE PER PLAN)		SF	1000
64	JOIN EXIST. STORM DRAIN & RECONSTRUCT CURB AS REQUIRED		EA	1
65	CONSTRUCT CDS UNIT MODEL PSW70-70 PER DETAIL ON SHT. 21		EA	1
66	CONSTRUCT CDS UNIT MODEL PMSU40-30 PER DETAIL ON SHT. 22		EA	1
67	CONSTRUCT CDS UNIT MODEL PMSU30-30 PER DETAIL ON SHT. 23		EA	1
68	CONSTRUCT CDS UNIT MODEL PMSU30-20 PER DETAIL ON SHT. 24		EA	1
69	CONSTRUCT CATCH BASIN PER APWA STD. PLAN 300-2 WITH MODIFIED OPENING (SIZE PER PLANS) PER DETAIL HEREON		EA	5
70	CONSTRUCT VELOCITY CONTROL RING PER APWA STD PLAN 383-1		EA	6
71	CONSTRUCT TRENCH PAVEMENT PER CITY OF WALNUT STD. PLAN WS-507		SF	3,441



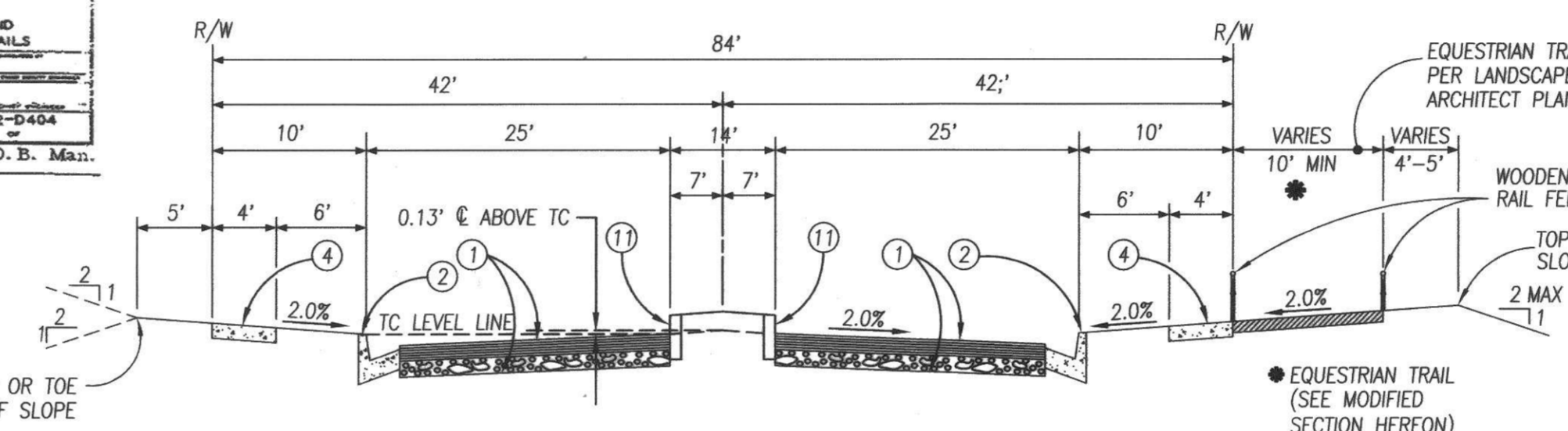
**RC OUTLET TOWER PER L.A.C.F.C.D. STD 2-D404** (60)  
N.T.S.



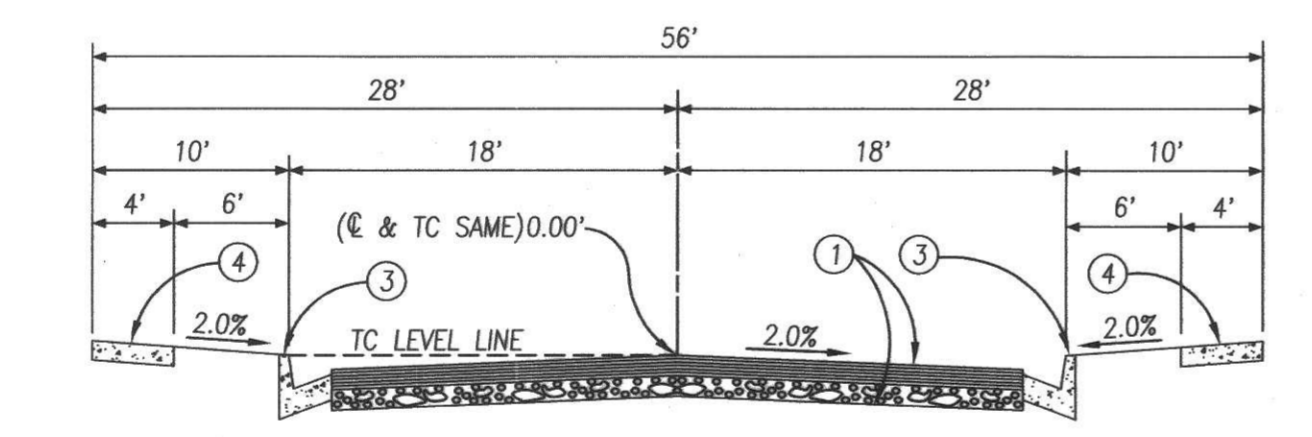
**LEMON AVENUE CASE II STREET 56' WIDE**  
STA. 19+60.75 TO STA. 52+65.92  
N.T.S.



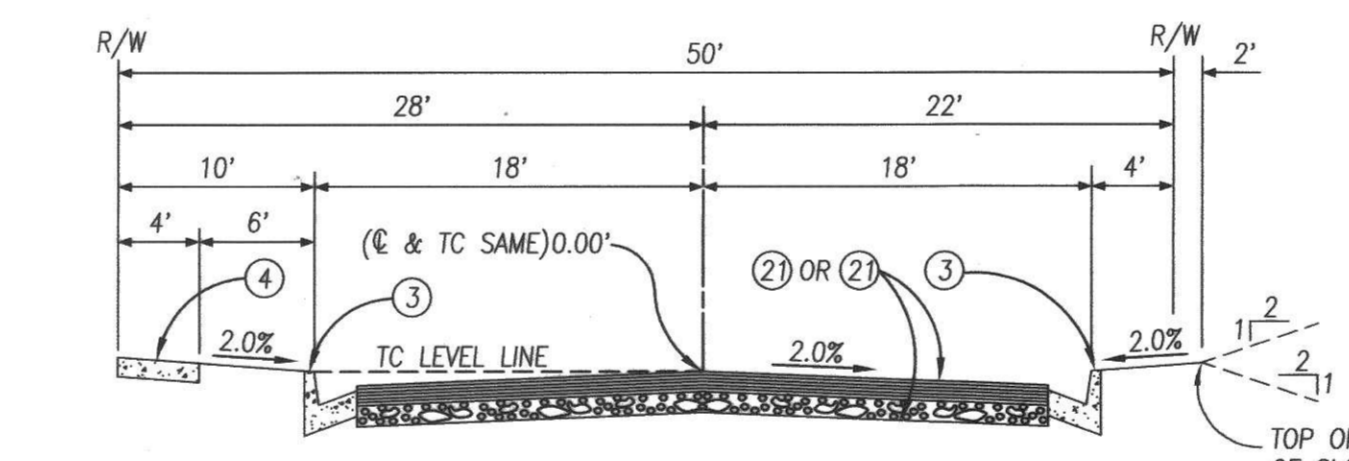
**LEMON AVENUE CASE I STREET 60' WIDE**  
STA. 14+91.65 TO STA. 19+60.75  
N.T.S.



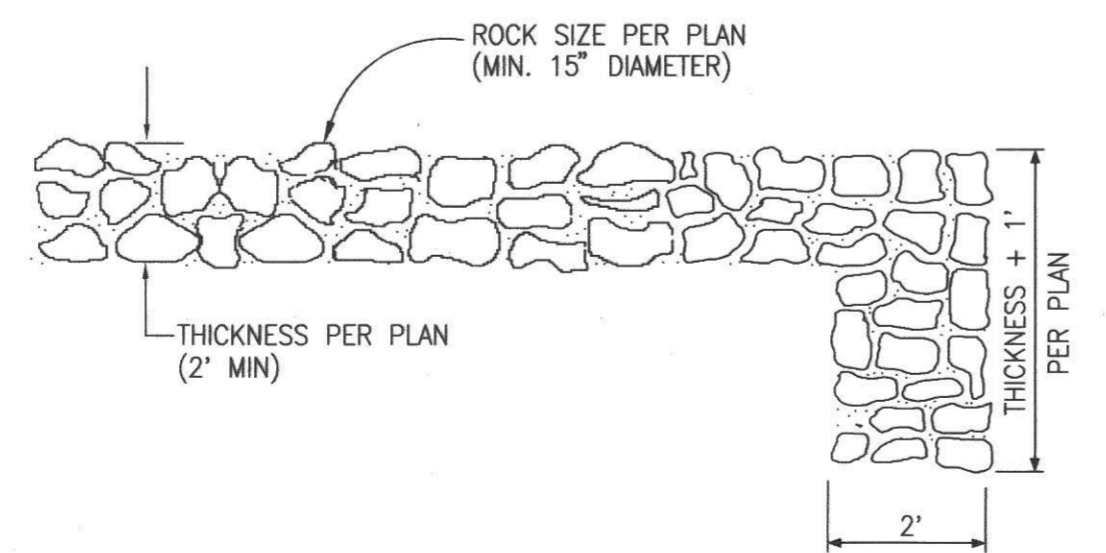
**LEMON AVENUE AT ENTRANCE**  
STA. 10+00.16 TO STA. 12+21.47  
(N.T.S.)



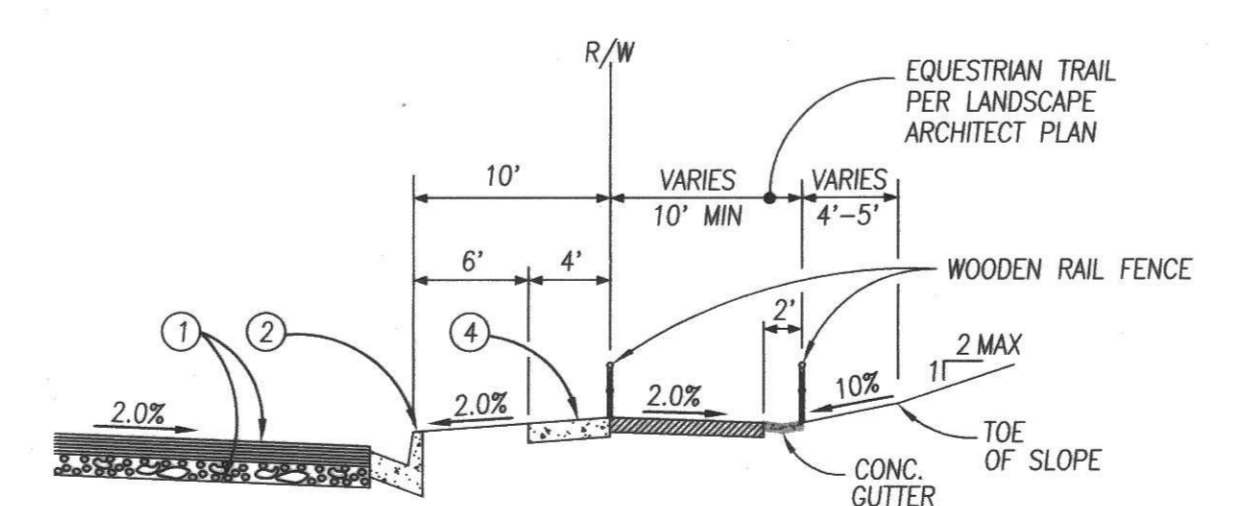
**SADDLEHORN WAY, REDTAIL COURT, JUNIPER BEND (15+17.27 TO 17+90.05), ROCKLEDGE LANE, ACORN PLACE, CASPIAN COURT, SHADE TREE PLACE, MULBERRY DRIVE (21+31.67 TO 27+44.50), SMOKETREE PLACE (11+90.69 TO 16+21.80), PROSPECT PLACE**  
CASE II STREET 56' WIDE  
N.T.S.



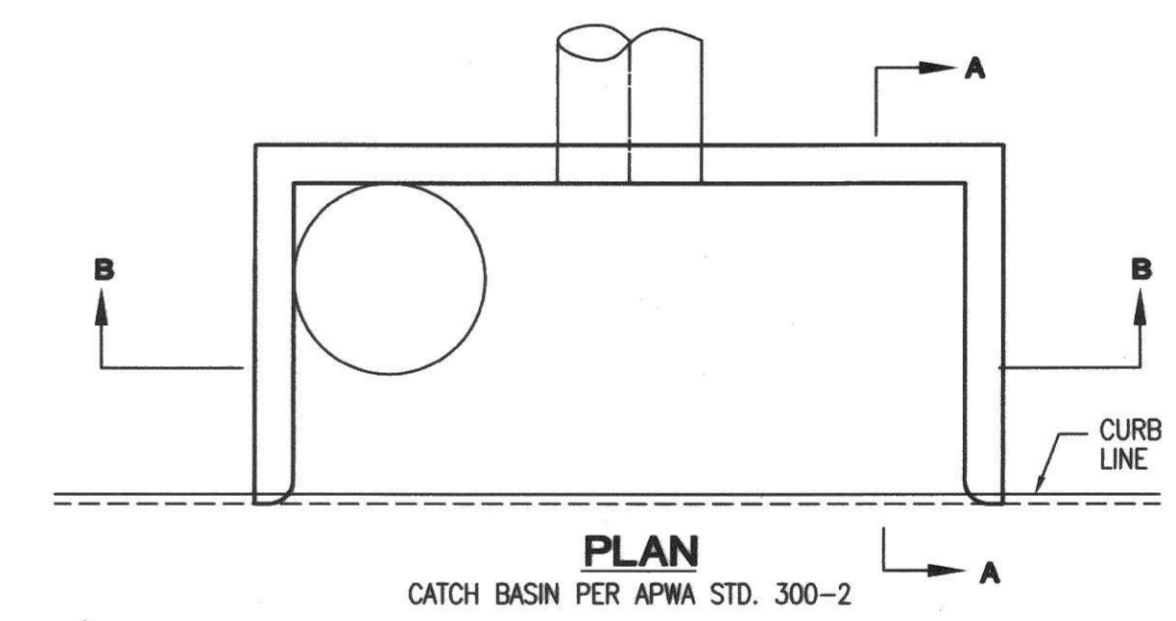
**LEMON AVENUE (52+65.92 TO 68+52.76), THREE OAKS LANE, TARPAN PLACE, WHISPERING HOLLOW COURT, MORNING GROVE LANE, CANTER LANE, JUNIPER BEND (10+00.00 TO 15+17.27), COASTAL SAGE PLACE, RAPTOR COURT, WALNUT VISTA WAY, HIGHLAND TERRACE DRIVE, MULBERRY DRIVE (10+00.00 TO 21+31.67), BRIDLEWOOD COURT, ARROYO CROSSING DRIVE, OLD GROVE PLACE, SMOKETREE PLACE (10+00.00 TO 11+90.69)**  
CASE II STREET 50' WIDE  
N.T.S.



**ROCK RIP-RAP AT STORM DRAIN OUTLET** (63)  
N.T.S.



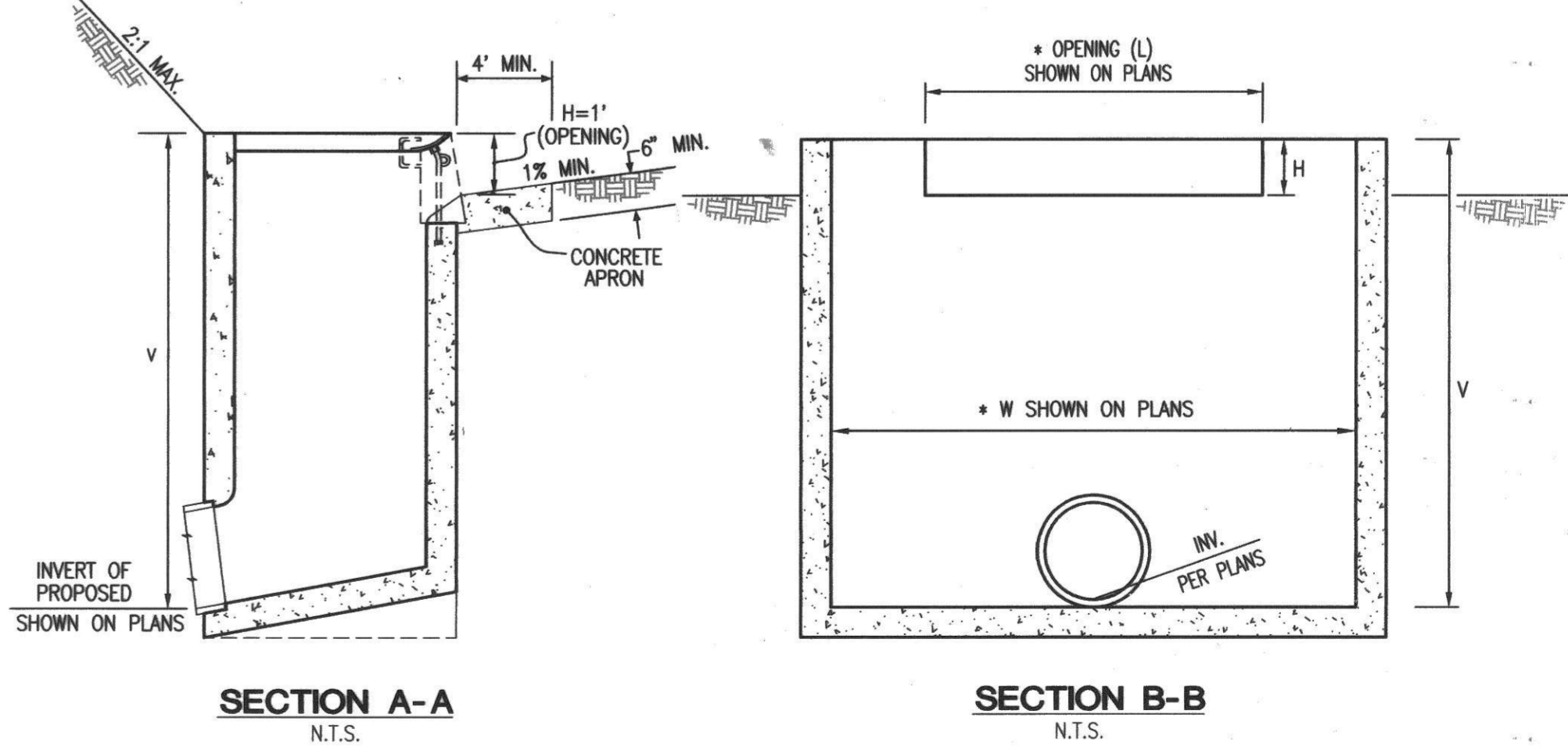
**MODIFIED EQUESTRIAN TRAIL SECTION WHERE EQUESTRIAN TRAIL INCLUDES PAVED GUTTER (SEE PLAN)** (N.T.S.)



**MODIFIED CB SIZE TABLE**

CB#	OPENING		W (WIDTH)	V (DEPTH)
	H	L		
G-1	1.0'	3.0'	5.0'	20.67'
G-2	1.0'	1.5'	5.0'	14.10'
H-1	1.0'	6.0'	6.0'	18.0'
H-2	1.0'	4.0'	6.0'	9.8'
C-1	1.0'	6.0'	10.0'	10.48'

\* W IS A WIDTH OF CATCH BASIN AND L IS A LENGTH OF OPENING.



**CATCH BASIN PER APWA STD. 300-2 WITH MODIFIED OPENING** (69)  
N.T.S.

AS-BUILT  
11/26/12

**DIG ALERT**  
SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES A DIGALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIGALERT I.D. NUMBER CALL UNDERGROUND SERVICE ALERT TOLL FREE TWO WORKING DAYS BEFORE YOU DIG.  
1-800-422-4133  
CAUTION: REMEMBER THAT THE USA CENTER NOTIFIES ONLY THOSE UTILITIES BELONGING TO THE CENTER. THERE COULD BE OTHER UTILITIES PRESENT AT THE WORK SITE. THE CENTER WILL INFORM YOU OF WHOM THEY WILL NOTIFY.

**BENCHMARK**  
BENCHMARK NO. = CG 3733  
ELEVATION = 519.40 FT  
ROAD DEPARTMENT TAG IN WESTERLY CURB 5 FEET SOUTH OF BCR, 78 FEET NORTH AND 42 FEET WEST OF CENTERLINE INTERSECTION OF VALLEY BOULEVARD AND LEMON AVENUE.

DATE	DESCRIPTION	APP'D	DATE
	REVISIONS		

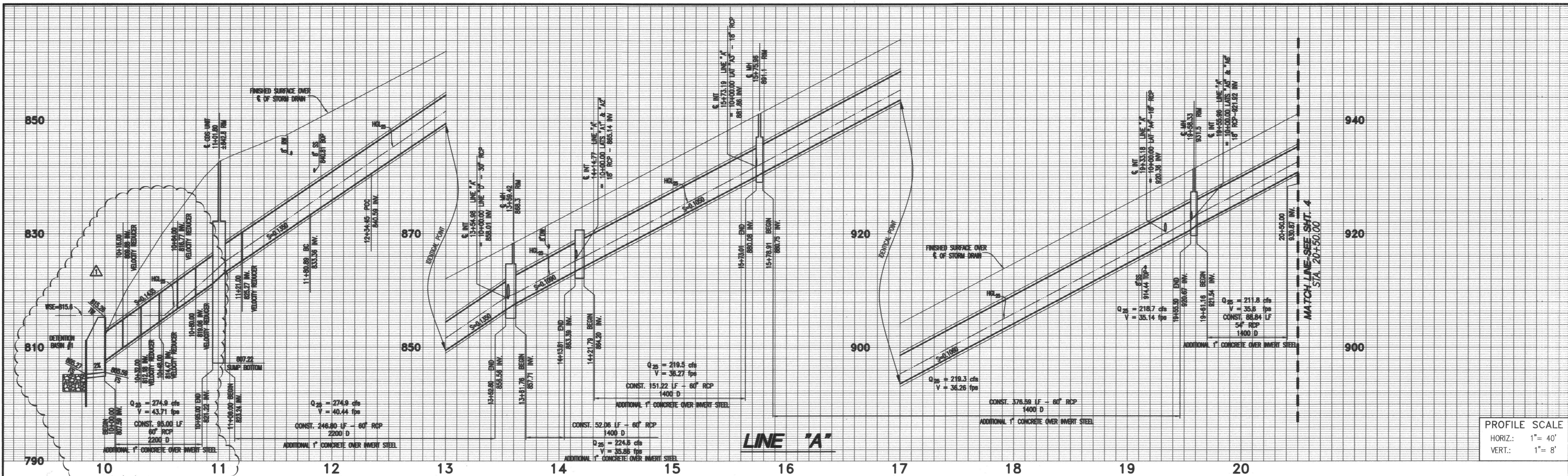
CITY OF WALNUT  
APPROVED BY: *David Gilbertson* 10/26/06  
DAVID GILBERTSON  
CITY ENGINEER - RCE 46624

REGISTERED PROFESSIONAL ENGINEER  
HENRY R. JIMENEZ  
No. 42324  
Exp. 3-31-2008  
CIVIL  
STATE OF CALIFORNIA

PREPARED BY:  
**MDS CONSULTING**  
HENRY R. JIMENEZ  
R.C.E. 42324  
10-19-06  
DATE

**STORM DRAIN PLANS**  
**CONSTRUCTION NOTES, QUANTITIES & DETAILS**  
TRACT No. 50867  
CITY OF WALNUT  
187B

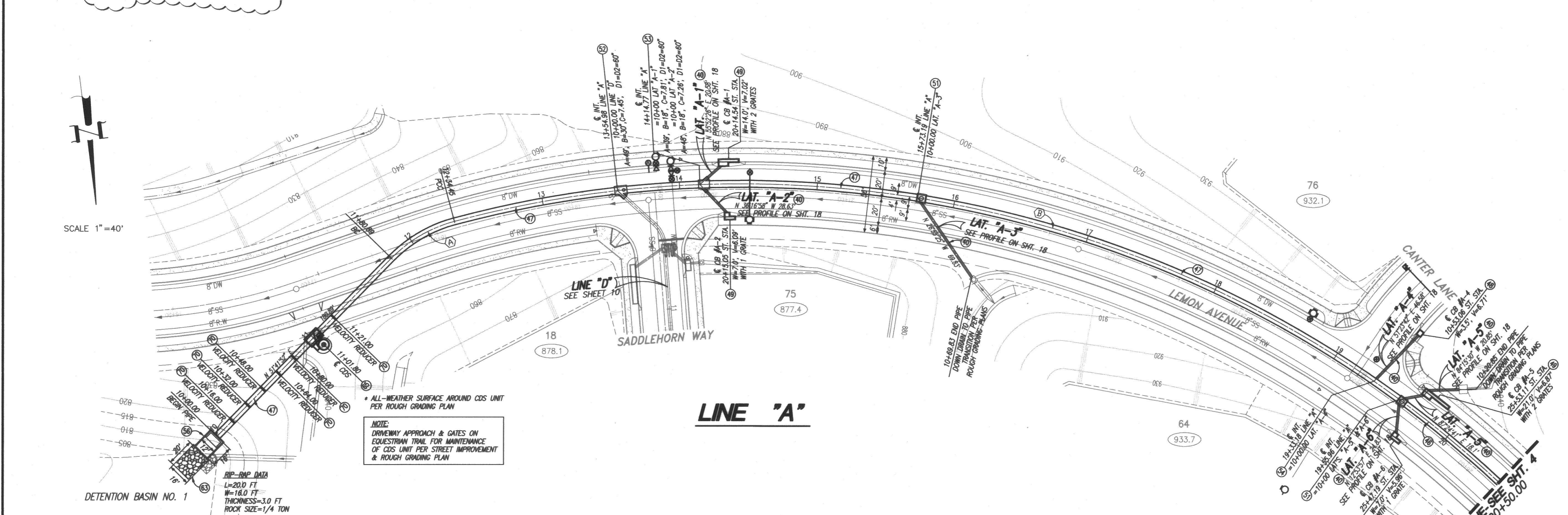
SHEET  
2  
OF  
24  
SHEETS



PROFILE SCALE  
 HORIZ.: 1" = 40'  
 VERT.: 1" = 8'

**CONSTRUCTION NOTES**

- 40 CONSTRUCT 18" RCP STORM DRAIN (D-LOAD PER PLAN)
- 41 CONSTRUCT 54" RCP STORM DRAIN (D-LOAD PER PLAN)
- 42 CONSTRUCT 60" RCP STORM DRAIN (D-LOAD PER PLAN)
- 43 CONSTRUCT CATCH BASIN PER APWA STD. PLAN 300-2 (W PER PLAN)
- 44 CONSTRUCT CATCH BASIN PER APWA STD. PLAN 301-2 (W PER PLAN)
- 45 CONSTRUCT M.H. PIPE TO PIPE (MAIN LINE 36" OR LARGER) PER APWA STD. PLAN 320-1
- 46 CONSTRUCT M.H. PIPE TO PIPE (LARGER INLET) PER APWA STD. PLAN 322-1
- 47 CONSTRUCT TRANSITION STRUCTURE PER APWA STD. PLAN 340-1
- 48 CONSTRUCT JUNCTION STRUCTURE - PIPE TO PIPE PER APWA STD. PLAN 332-1 (INLET > 24" OR ID > 1/2 MAIN LINE ID)
- 49 CONSTRUCT ENERGY DISSIPATOR - IMPACT BASIN PER APWA STD. PLAN 384-1
- 50 CONSTRUCT HEADWALL WING-TYPE PER DETAIL ON SHT. 2
- 51 CONSTRUCT PIPE ANCHOR PER APWA STD. PLAN 221-1
- 52 CONSTRUCT RIPRAP PER DETAIL ON SHT. 2 (SIZE PER PLAN)
- 53 CONSTRUCT CDS UNIT MODEL PSW70-70 PER DETAIL ON SHT. 21, WITH OIL SORBENT BOOMS PER CDS TECHNOLOGIES RECOMMENDATION
- 54 CONSTRUCT VELOCITY CONTROL RING PER APWA STD. PLAN 383-1



SCALE 1" = 40'

**CURVE TABLE**

#	Δ	R	L	T
(A)	30°41'08"	100'	53.56'	27.44'
(B)	65°43'59"	804'	922.4'	519.47'

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 ROAD DEPARTMENT TAG IN WESTERLY CURB 5 FEET SOUTH OF BCR, 78 FEET NORTH AND 42 FEET WEST OF CENTERLINE INTERSECTION OF VALLEY BOULEVARD AND LEMON AVENUE.

**REVISIONS**

NO.	DATE	DESCRIPTION	APP'D	DATE
2	08-07	REVISED STORM DRAIN LINE PROFILE FROM STA. 10+00.00 TO STA. 10+95.00	[Signature]	11/29/13

CITY OF WALNUT  
 APPROVED BY: [Signature]  
 DAVID GILBERTSON  
 CITY ENGINEER - RCE 46624

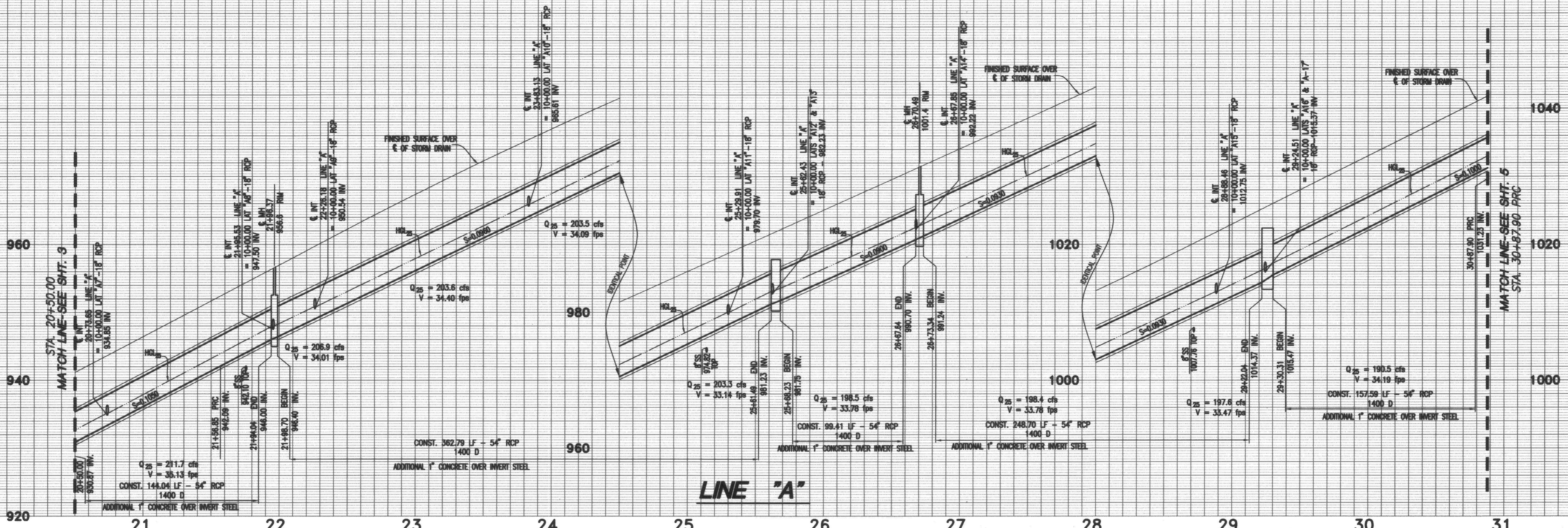


PREPARED BY:  
**MDS CONSULTING**  
 HENRY R. JIMENEZ  
 R.C.E. 42324  
 DATE: 11-22-12

**AS-BUILT**  
 11/26/12

**STORM DRAIN PLANS**  
 TRACT No. 50867  
**LINE "A"**  
 STA. 10+00.00 TO STA. 20+50.00  
 CITY OF WALNUT

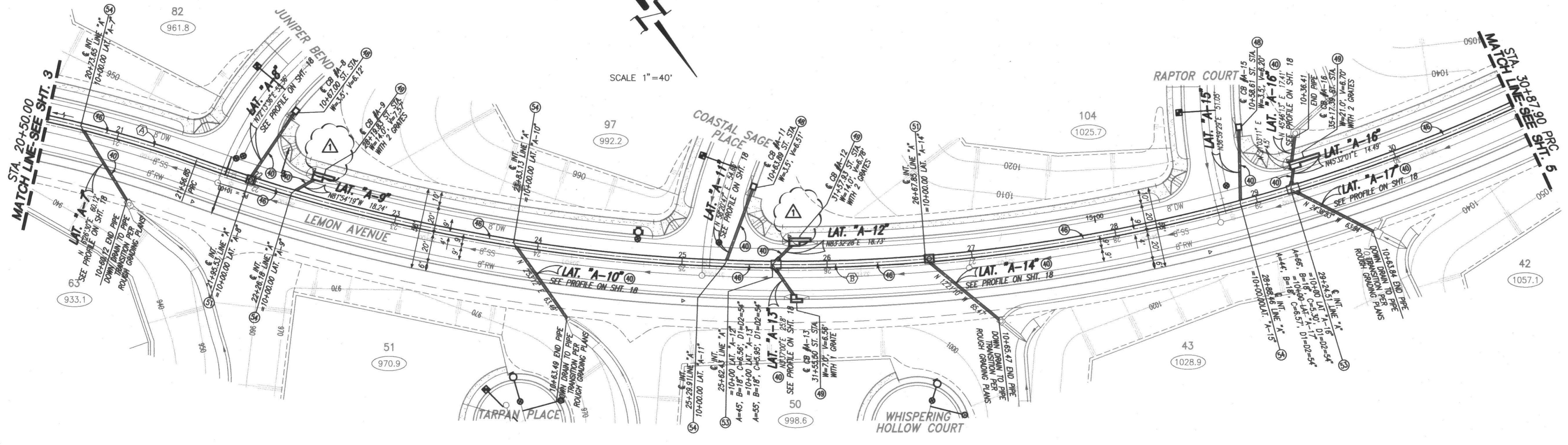
SHEET **3** OF **24** SHEETS  
 187C



PROFILE SCALE  
 HORIZ.: 1" = 40'  
 VERT.: 1" = 8'

**CONSTRUCTION NOTES**

- 40 CONSTRUCT 18" RCP STORM DRAIN (D-LOAD PER PLAN)
- 46 CONSTRUCT 54" RCP STORM DRAIN (D-LOAD PER PLAN)
- 48 CONSTRUCT CATCH BASIN PER APWA STD. PLAN 300-2 (W PER PLAN)
- 49 CONSTRUCT CATCH BASIN PER APWA STD. PLAN 301-2 (W PER PLAN)
- 50 CONSTRUCT M.H. PIPE TO PIPE (MAIN LINE 33" OR SMALLER) PER APWA STD. PLAN 321-1
- 51 CONSTRUCT M.H. PIPE TO PIPE (MAIN LINE 36" OR LARGER) PER APWA STD. PLAN 320-1
- 52 CONSTRUCT M.H. PIPE TO PIPE (LARGER INLET) PER APWA STD. PLAN 322-1
- 53 CONSTRUCT TRANSITION STRUCTURE PER APWA STD. PLAN 340-1
- 54 CONSTRUCT JUNCTION STRUCTURE - PIPE TO PIPE PER APWA STD. PLAN 332-1 (INLET > 24" OR ID > 1/2 MAIN LINE ID)



**CURVE TABLE**

Δ	R	L	T
65°43'59"	804'	922.4'	519.47'
44°36'11"	1196'	931.05'	490.55'

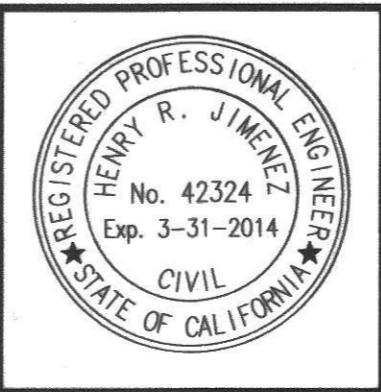
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**BENCHMARK**  
 BENCHMARK NO. = CG 3733  
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**REVISIONS**

DATE	DESCRIPTION	APP'D	DATE
2-08-07	ELIMINATED PIPE & CALL OUTS AT BACK OF CATCH BASIN #A-9 & #A-12	<i>[Signature]</i>	

CITY OF WALNUT  
 APPROVED BY: *[Signature]*  
 DAVID GILBERTSON  
 CITY ENGINEER - RCE 46624

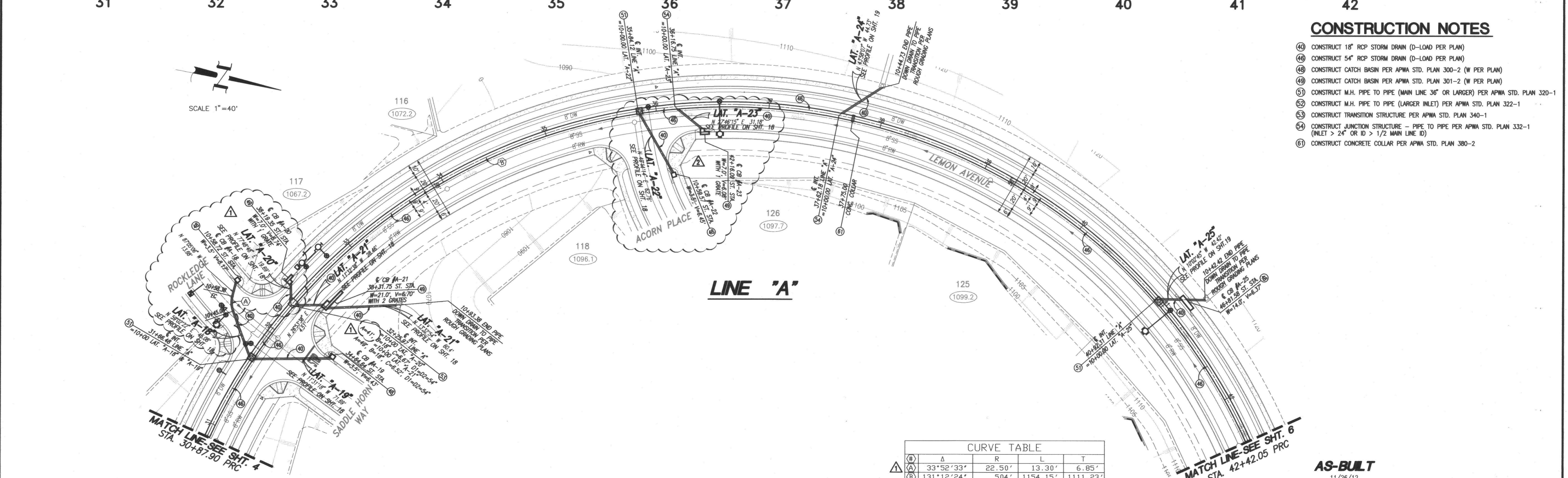
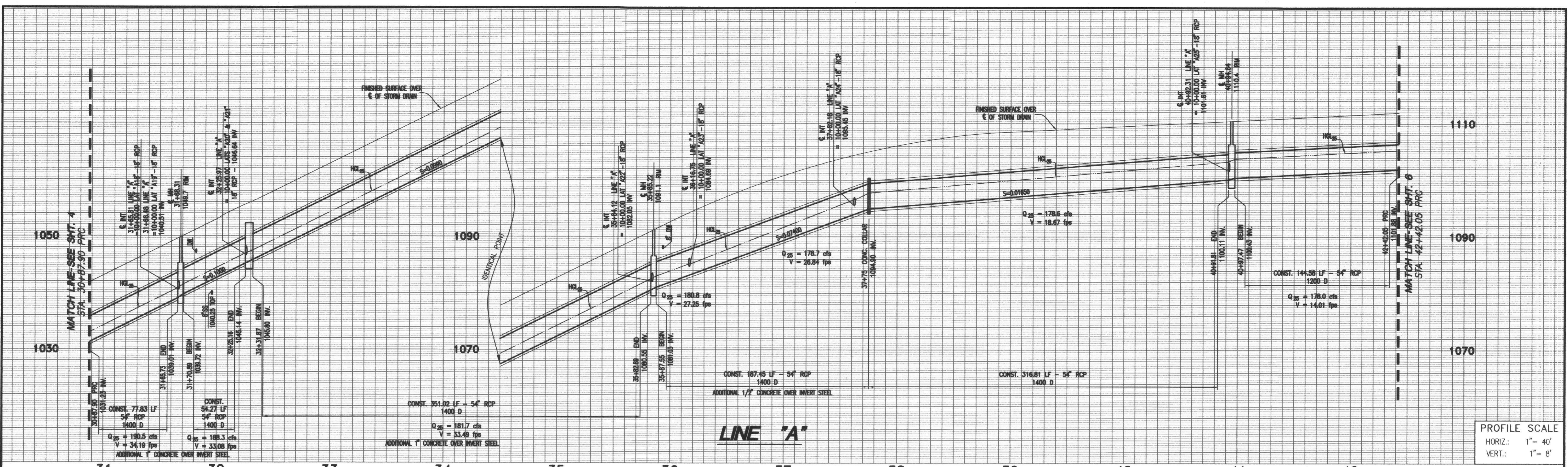


PREPARED BY:  
**MDS CONSULTING**  
 HENRY R. JIMENEZ  
 R.C.E. 42324  
 DATE: 11-28-12

**AS-BUILT**  
 11/26/12

**STORM DRAIN PLANS**  
 TRACT No. 50867  
**LINE "A"**  
 STA. 20+50.00 TO STA. 30+87.90  
 CITY OF WALNUT

SHEET **4** OF **24** SHEETS  
 187D



- ### CONSTRUCTION NOTES
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  - 46 CONSTRUCT 54" RCP STORM DRAIN (D-LOAD PER PLAN)
  - 48 CONSTRUCT CATCH BASIN PER APWA STD. PLAN 300-2 (W PER PLAN)
  - 49 CONSTRUCT CATCH BASIN PER APWA STD. PLAN 301-2 (W PER PLAN)
  - 51 CONSTRUCT M.H. PIPE TO PIPE (MAIN LINE 36" OR LARGER) PER APWA STD. PLAN 320-1
  - 52 CONSTRUCT M.H. PIPE TO PIPE (LARGER INLET) PER APWA STD. PLAN 322-1
  - 53 CONSTRUCT TRANSITION STRUCTURE PER APWA STD. PLAN 340-1
  - 54 CONSTRUCT JUNCTION STRUCTURE - PIPE TO PIPE PER APWA STD. PLAN 332-1 (INLET > 24" OR ID > 1/2 MAIN LINE ID)
  - 61 CONSTRUCT CONCRETE COLLAR PER APWA STD. PLAN 380-2

**CURVE TABLE**

#	Δ	R	L	T
A	33°52'33"	22.50'	13.30'	6.85'
B	131°12'24"	504'	1154.15'	1111.23'

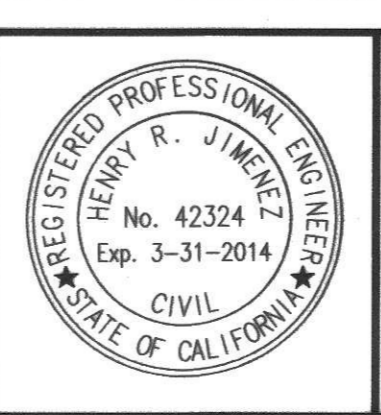
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**REVISIONS**

DATE	DESCRIPTION	APPD	DATE
5-10-07	RELOCATED CATCH BASIN #A-22 AND #A-23		1/20/13
2-08-07	REALIGNMENT LAT. "A-18" FROM STA. 10+58.38 TO STA. 10+72.06		1/24/13
	REALIGNMENT LAT. "A-20", RELOCATED CATCH BASIN #A-18, #A-20		1/24/13

**CITY OF WALNUT**  
 APPROVED BY: *D. J. [Signature]*  
 DAVID GILBERTSON  
 CITY ENGINEER - RCE 46624



**PREPARED BY:**  
**MDS CONSULTING**  
 HENRY R. JIMENEZ  
 R.C.E. 42324  
 DATE: 11-20-12

**STORM DRAIN PLANS**  
 TRACT No. 50867  
**LINE "A"**  
 STA. 30+87.90 TO STA. 42+42.05  
 CITY OF WALNUT  
 SHEET 5 OF 24 SHEETS  
 187E