

B.M. CG 3911 ELEV. 895.556
 LET IN E END C B 44 FT 5 E
 76 FT W C/L INT GRAND AVE E
 DIAMOND BAR BLVD. (MND BM C-12)
 OTTERBEIN QUAD. 19 75

NO CONNECTION FOR THE DISPOSAL OF INDUSTRIAL WASTES SHALL BE MADE TO SEWERS SHOWN ON THESE DRAWINGS UNTIL A PERMIT FOR INDUSTRIAL WASTEWATER DISCHARGE HAS BEEN ISSUED BY THE SANITATION DISTRICTS FOR SAID CONNECTION.

BEFORE BREAKING INTO OR CONSTRUCTION ON A COUNTY SANITATION DISTRICT SEWER AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, SANITATION DISTRICT INSPECTOR SHALL BE NOTIFIED BY PHONE 818 - 962-8605 SO THAT REQUIRED INSPECTION CAN BE MADE.



REVISION NO. 2
 DELETED HILLS FOR FUTURE LOTS OF FUT. TO SHITTY & AND CHANGE PLATFORM CHANGE. RAGE 10 - REMOVED 10' GUTTERS AT PUMP STATION TO BRING (GRN) TOWARD STREET PER COUNTY.

APPROVED BY: *Samy G. Ibal* 2-14-84

PRIVATE ENGINEER'S NOTICE TO CONTRACTORS

The existence and location of any underground utility pipes or structures shown on these plans are shown only to the best of our knowledge. It is the contractor's responsibility to locate and mark these pipes. The contractor is required to take the precautionary measures to protect the utility lines shown and any other lines not of record or not shown on these plans.

J. H. ...
 Registered Professional Engineer R.C.E. 19233

LOS ANGELES COUNTY ENGINEER, FACILITIES CONSOLIDATED SEWER MAINTENANCE DISTRICT

REVIEWED BY: *[Signature]*
 DATE: 9-17-84

- CONSTRUCTION NOTES CONT'D.**
16. FULL COMPLIANCE WITH PART 12 OF THE SPECIAL PROVISIONS IS REQUIRED FOR THE INSTALLATION OF A B.S. COMPOSITE PIPE.
 17. MANHOLE WATER STOP HAS VETS & CLAMPS ARE REQUIRED FOR THE CONNECTION OF A B.S. COMPOSITE PIPE TO MANHOLE STRUCTURES.
 18. A B.S. SAND HALL PIPE MUST BE USED FOR PIPE AND HOUSE LATERAL CONNECTIONS TO B.S. COMPOSITE MAINLINE SEWER PIPE.
 19. A B.S. COMPOSITE PIPE SHALL BE BEDDED IN CONFORMANCE WITH THE TABLE IN SECTION 9.31 OF PART 12 OF THE SPECIAL PROVISIONS.
 20. TYPICAL DEFLECTION CURVES ARE PROVIDED FOR RADII OF CURVATURE LESS THAN 380 FEET WHEN USING 8" A.B.S.C.P.
 21. NO CONNECTIONS FOR THE DISPOSAL OF INDUSTRIAL WASTES IS ALLOWED IF A B.S. COMPOSITE PIPE IS USED.
 22. SEWER LINE CURVATURE SHALL NOT BE ACHIEVED BY PULLING OF JOINTS OR BELTING PIPE ENDS WHEN USING PLASTIC PIPE INCLUDING A B.S. COMPOSITE PIPE.

REVISION NO. 1
 PAGE 11 - REVISE MATERIAL SCHEDULE & NOTES TO REFLECT CHANGES OF RES. 12 & 13.
 PAGE 12 - REVISE WELLS, MANHOLE, DELETE SUMP PUMP, ADD SHINE RAILS, CHANGE VALVE PLUMBING.
 PAGE 13 - ADD ADDRESS ALARM SYSTEM, REVISE FOOTING.

APPROVED BY: *Samy G. Ibal* 11-16-88

ISSUE NO HOUSE CONNECTION PERMITS UNTIL P.C. 10155, 10164 & 10237A ARE ACCEPTED

- GENERAL NOTES:**
1. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. SEA LEVEL DATUM OF 1929.
 2. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE COUNTY ENGINEER.
 3. NO REPRESENTATIVE OF THE COUNTY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
 4. GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTER LINE OF STREETS OR CENTER LINE OF ALLEYS ARE SHOWN BY CIRCLES ON PROFILES. AT ALL POINTS BETWEEN DESIGNATED POINTS THE GRADE SHALL BE ESTABLISHED SO AS TO CONFORM TO A STRAIGHT LINE DRAWN BETWEEN SAID DESIGNATED POINTS.
 5. THE PRIVATE ENGINEER SHALL FURNISH THE COUNTY ENGINEER WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND 10" OR 12" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. ALL HOUSE LATERALS SHALL BE CONSTRUCTED IN A STRAIGHT ALIGNMENT AT RIGHT ANGLES FROM THE MAIN LINE SEWER EXCEPT AS SHOWN ON THE PLANS. HOUSE LATERALS FROM CHIMNEYS SHALL NOT HAVE AN ANGLE OF LESS THAN 45° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING BY THE PRIVATE ENGINEER.
 6. THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
 7. BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE L.A. COUNTY ROAD DEPT. DISTRICT OFFICE NO. ... AND PAY A FEE TO THE COUNTY ENGINEER, 300 S. VERMONT AVENUE, LOS ANGELES, CA 90005 TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
 8. IF WORK IS TO BE DONE IN A STATE HIGHWAY A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, DIVISION OF HIGHWAYS, 100 SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA.
 9. APPROVAL OF THIS PLAN BY THE COUNTY OF LOS ANGELES DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
 10. REFER TO SECTION 7.1041 OF THE STANDARD SPECIFICATIONS REGARDING SAFETY ORDERS.
 11. PRIOR TO THE ISSUANCE OF THE REQUIRED SEWER CONSTRUCTION PERMIT THE CONTRACTOR SHALL OBTAIN AND FILE WITH THE COUNTY ENGINEER COPIES OF A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE LOS ANGELES COUNTY ROAD DEPARTMENT, A PERMIT FOR EXCAVATIONS AND TRENCHES FROM THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY AND A CERTIFICATE OF WORKERS COMPENSATION INSURANCE WITH THE DEPARTMENT OF COUNTY ENGINEER, 300 SOUTH VERMONT, RM. 406, LOS ANGELES, CALIFORNIA 90005, HANDED AS THE CERTIFICATE HOLDER TO BE NOTIFIED 30 DAYS PRIOR TO CANCELLATION OF POLICY.

- CONSTRUCTION NOTES:**
1. WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1982 EDITION) WITH THE SUPPLEMENT AND COUNTY ENGINEER SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED SEPTEMBER 21, 1976 AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.
 2. THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGEMENT DIVISION BY TELEPHONE 738-2196 AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
 3. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE 4 FEET BELOW CURB GRADE EXCEPT AS NOTED.
 4. WYE OR TEE BRANCHES MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS EXCEPT AS NOTED.
 5. ALL STRUCTURES SHALL BE EITHER BRICK MANHOLES PER S-3 OR PRECAST CONCRETE MANHOLES PER S-36 EXCEPT AS NOTED.
 6. PROVIDE STAKES ON THE PROPERTY LINE OR IN PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
 7. MANHOLE TOPS IN UNIMPROVED RIGHTS OF WAY TO BE SIX INCHES ABOVE FINISHED GRADE.
 8. VITRIFIED CLAY PIPE JOINTS SHALL BE TYPE "D" OR "D" PER STANDARD SPECIFICATIONS SECTION 309.2.
 9. IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED PER S-23 CASE II TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
 10. IF DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF A MAIN LINE OR HOUSE LATERAL SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S-23 CASE II UNLESS OTHERWISE APPROVED BY THE COUNTY ENGINEER.
 11. ALL JOINTS BETWEEN CAST IRON PIPE AND VITRIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT TYPE "C" OR "D" WITH 1/2" BRUSHES IN BETWEEN SEWER AND A.B.S.C.P. SHALL BE MADE WITH APPROVED FITTINGS.
 12. SEWER PIPE TO BE TESTED FOR LEAKAGE PER SECTION 10.1 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
 13. RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET L.A. COUNTY ROAD DEPT. OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
 14. FULL COMPLIANCE WITH SECTION 306.133 OF THE SPECIAL PROVISIONS WILL BE REQUIRED FOR BACKFILL IN STREETS. CERTIFICATION OF BACKFILL CONSTRUCTION AND SAME EQUIVALENTS BY A QUALIFIED, REGISTERED TESTING LABORATORY SHALL BE PROVIDED BY THE PERMITTEE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF PARTIAL ACCEPTANCE.
 15. SPECIAL BACKFILL IN EASEMENT CONSTRUCTION (A) BACKFILL TRENCH AND REPLACE OTHER MATERIAL SO AS TO ACHIEVE THE NATURAL OR FINISHED GRADES AND SLOPES SHOWN ON THE GRADING PLAN APPROVED FOR THIS DEVELOPMENT BY THE BUILDING AND SAFETY DIVISION. (B) ALL BACKFILL AND EARTH REPAIRED SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY PER A.S.T.M. 570 METHOD OF TEST OR BY AS MODIFIED. ACCEPTABLE CERTIFICATION OF SUCH COMPACTION SHALL BE SUBMITTED TO THE PROJECT MANAGEMENT DIVISION.

PROFILE, ALIGNMENT AND GRADE OF
SANITARY SEWERS
 TO BE CONSTRUCTED IN

TRACT NO. 31850
 PRIVATE CONTRACT NO. 10237 & 10237A

W.S. 30-D-25
 9 SHEETS, 13 PAGES
 SCALE: HORIZ. 1"=40' VERT. 1"=4'
 FEBRUARY, 1984
 PREPARED IN THE OFFICES OF
 LIND B. HILLERD INC.
 2055 HUNTINGTON DRIVE
 SAN MARINO, CALIF. 91078
 REG. C.E. No. 19233
 JOHN N. SARRACINO

THE FOLLOWING LATEST REVISED STANDARD PLANS ON FILE IN THE OFFICE OF THE COUNTY ENGINEER SHALL APPLY IN THE CONSTRUCTION OF THIS PROJECT.

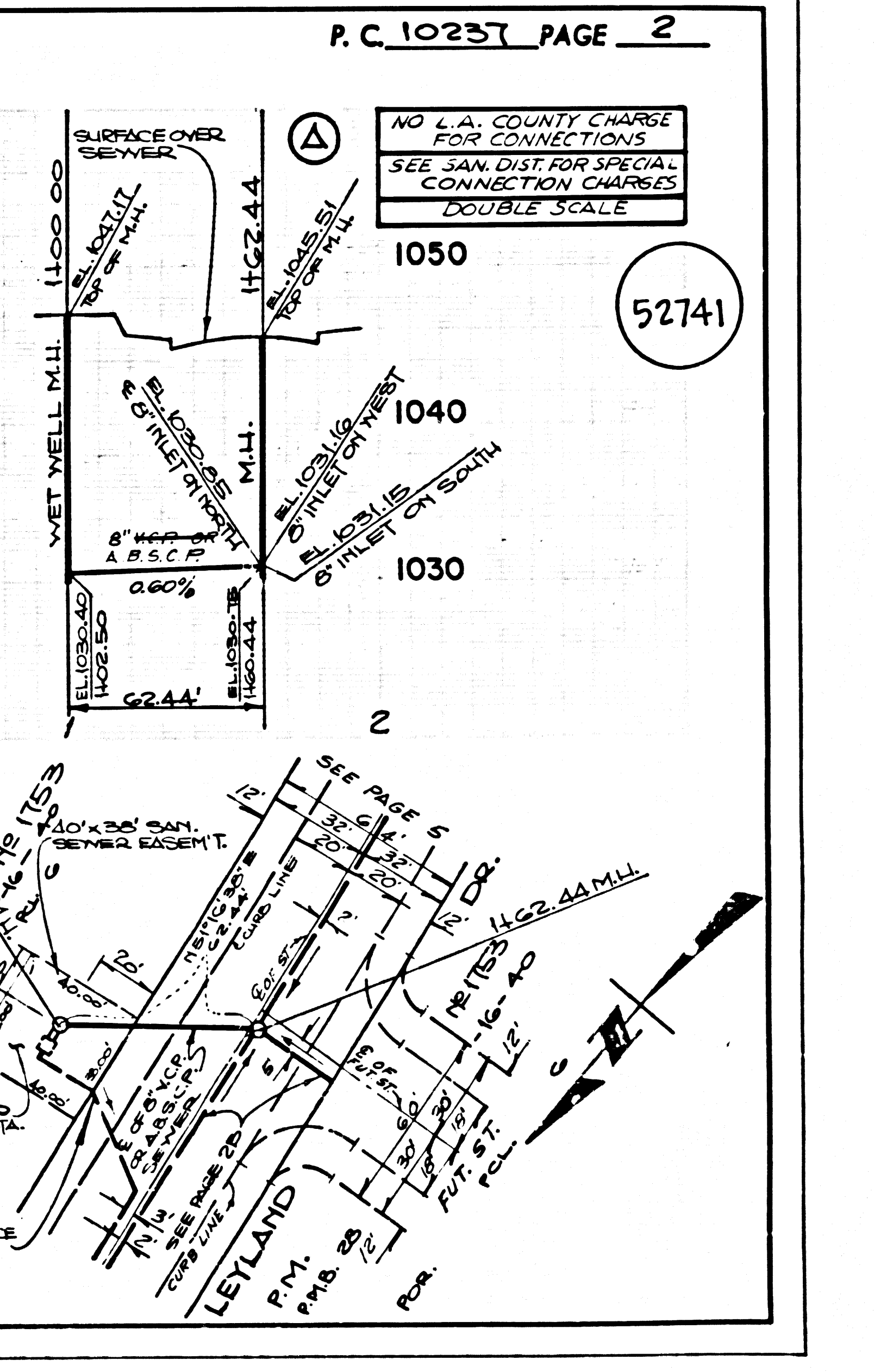
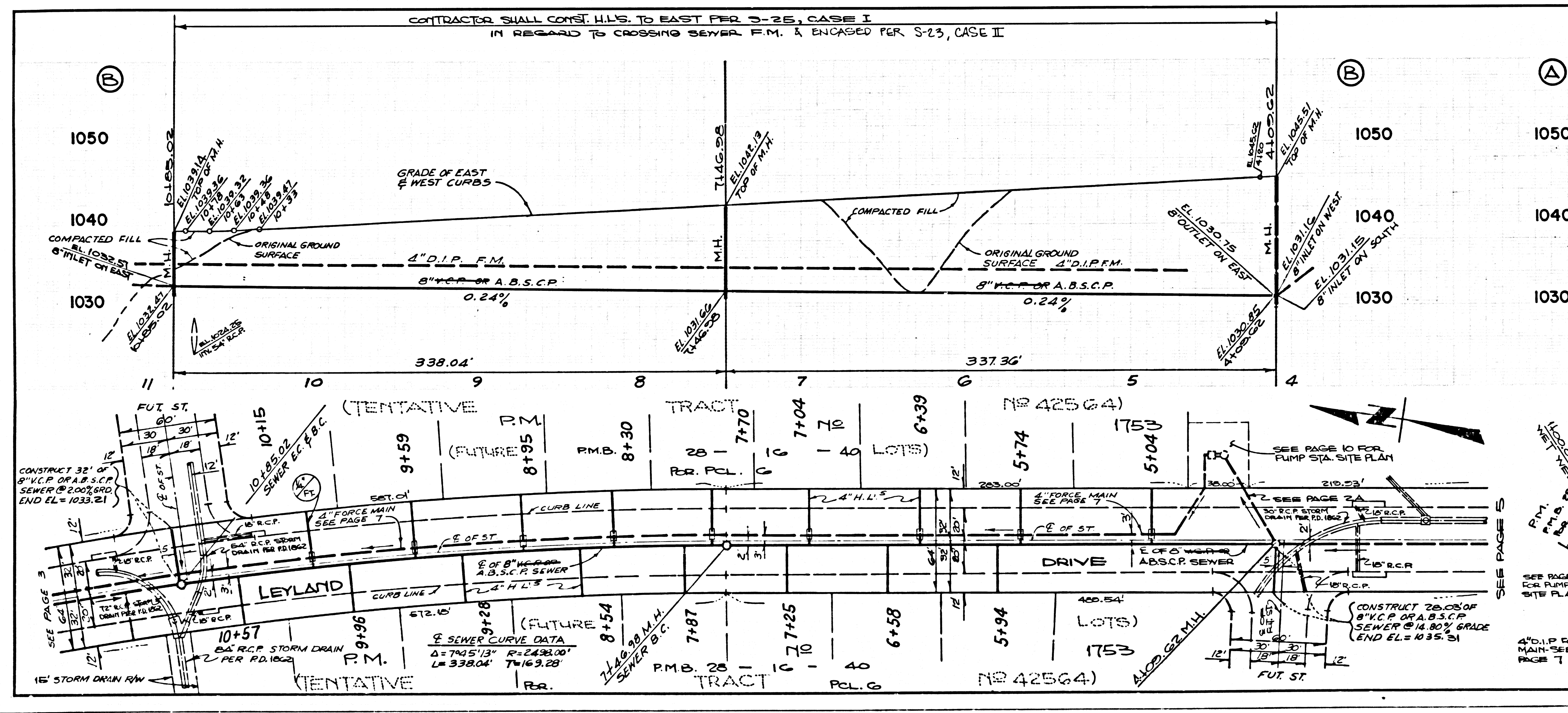
LEAKING MANHOLE PUBLIC SAFETY ROOMS/STAIRS	S-1
BRICK MANHOLE	S-2
STANDARD MANHOLE STD	S-3
MANHOLE FOR SEWER PIPE	S-4
CASTING AND ENCASMENT	S-5
WYE OR TEE SUPPORT	S-6
ALLOWABLE TRENCH WIDTHS	S-7
LOCKING MANHOLE FRAME AND COVER	S-8
NON-REINFORCED PRECAST CONCRETE MANHOLE	S-9
BEDDING REQUIREMENTS FOR PLASTIC PIPE	S-20A
PRECAST CONCRETE MANHOLE LATERALS PER S-36	S-21
CONCRETE TRENCH BLOCKS	S-22

COUNTY OF LOS ANGELES, CALIFORNIA
 STEPHEN J. KOONCE, COUNTY ENGINEER CHARLES W. CANNY, CHIEF ENGINEER

APPROVED: *[Signature]* 12/27/84
 SAN DIMAS REGIONAL ENGINEER

CHECKED: *[Signature]* 12/27/84
 REG. C.E. NO. 16841

SAN DIMAS BLDG. DIST. 10.00



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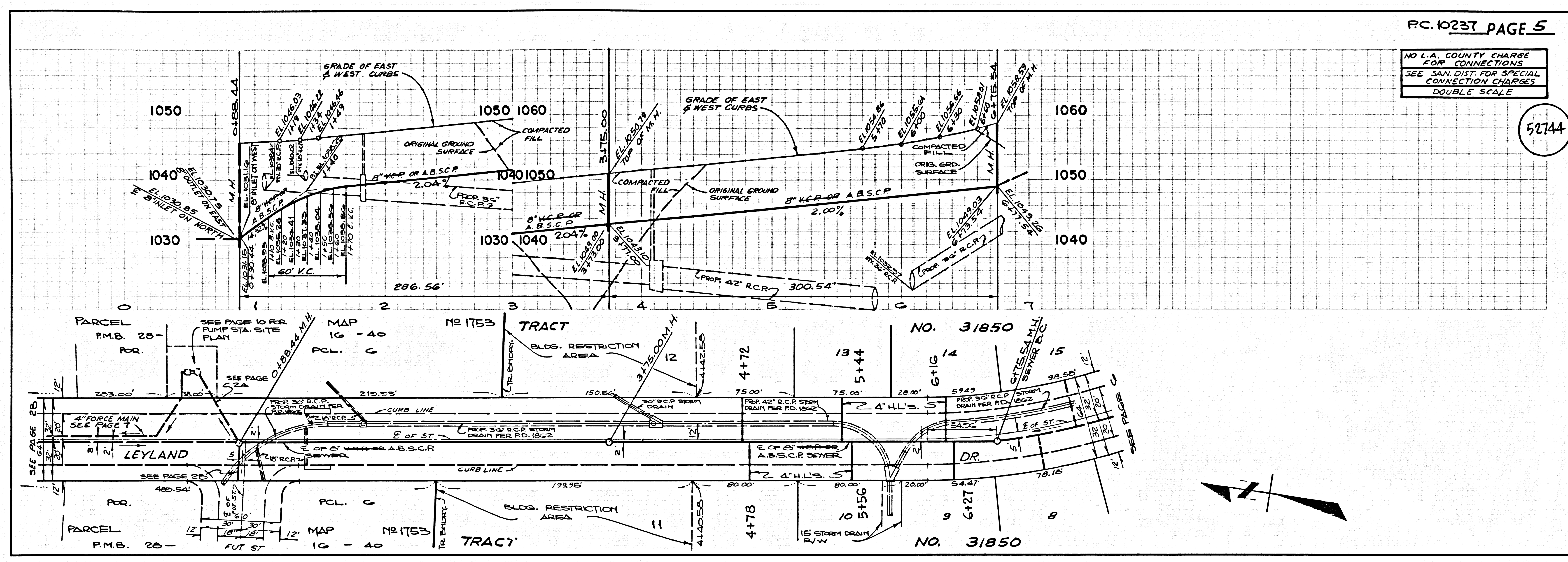
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PC. 10237 PAGE 5

NO L.A. COUNTY CHARGE FOR CONNECTIONS SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES DOUBLE SCALE

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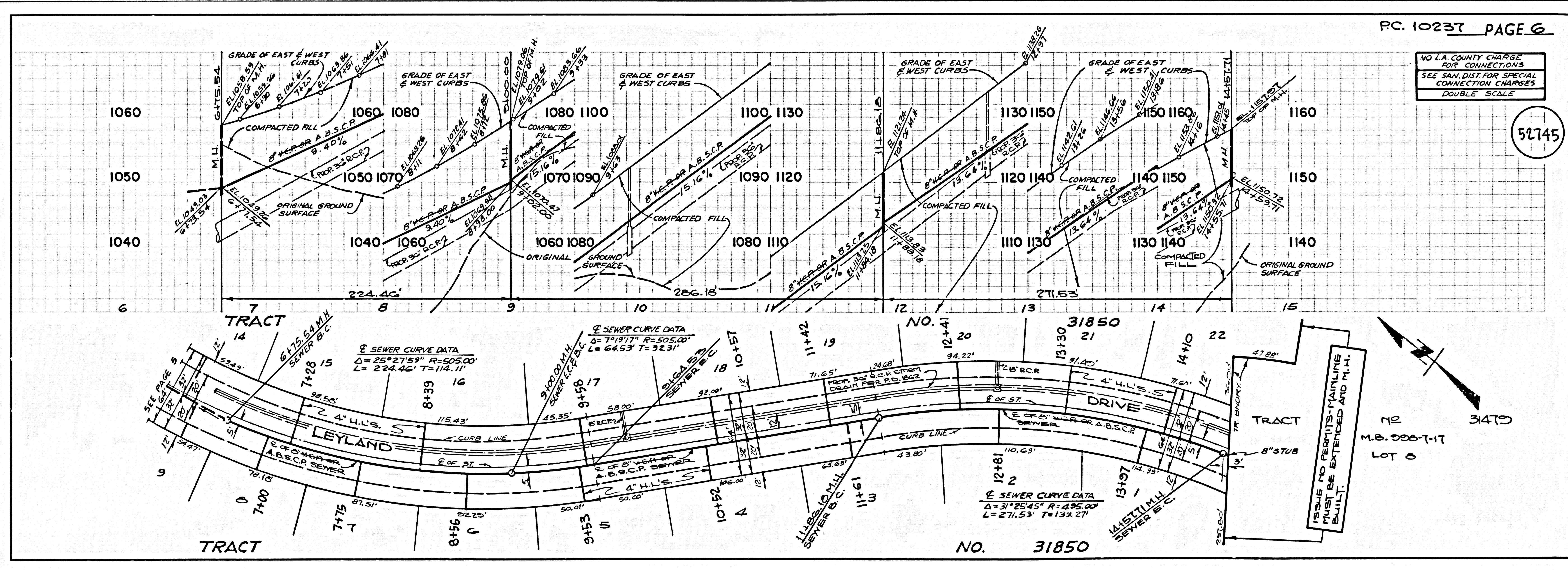


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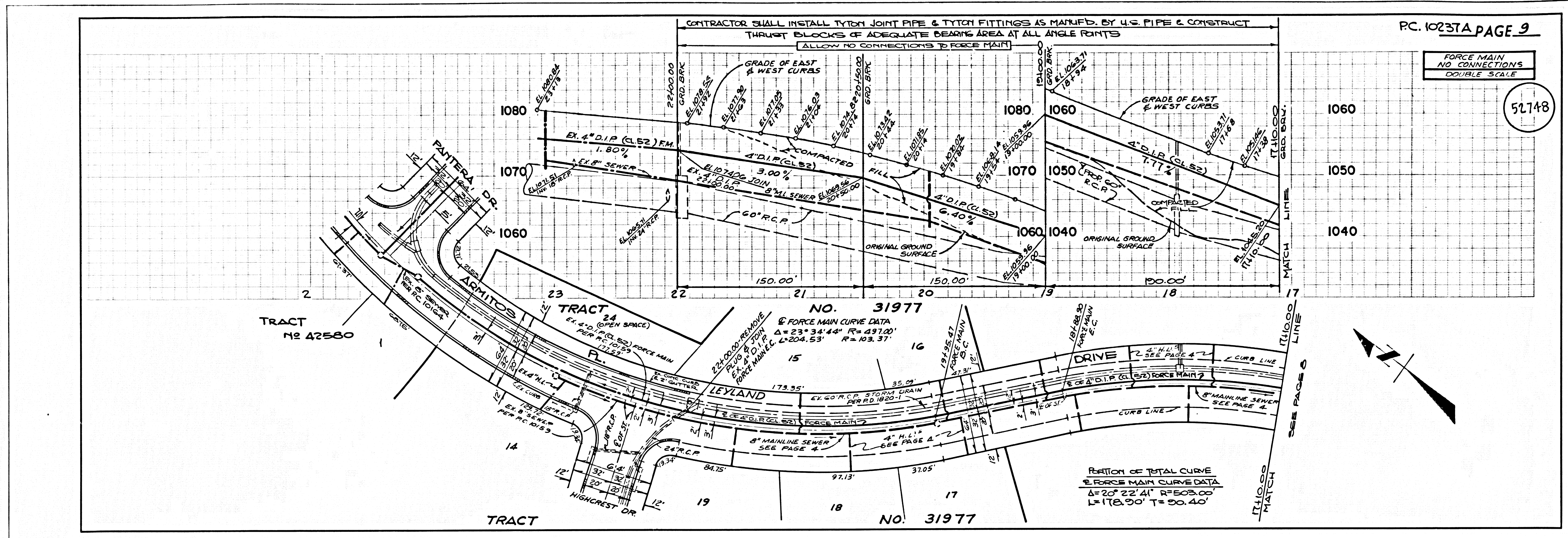
PC. 10237 PAGE 6

NO L.A. COUNTY CHARGE FOR CONNECTIONS SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES DOUBLE SCALE

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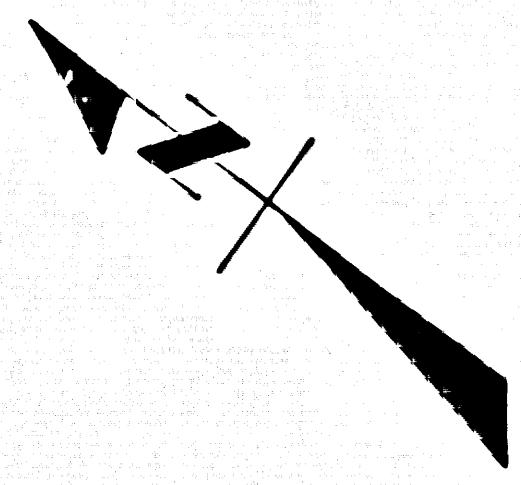


CONTRACTOR SHALL INSTALL TYTON JOINT PIPE & TYTON FITTINGS AS MANUFD. BY U.S. PIPE & CONSTRUCT
 THROUGH BLOCKS OF ADEQUATE BEARING AREA AT ALL ANGLE POINTS
 [ALLOW NO CONNECTIONS TO FORCE MAIN]

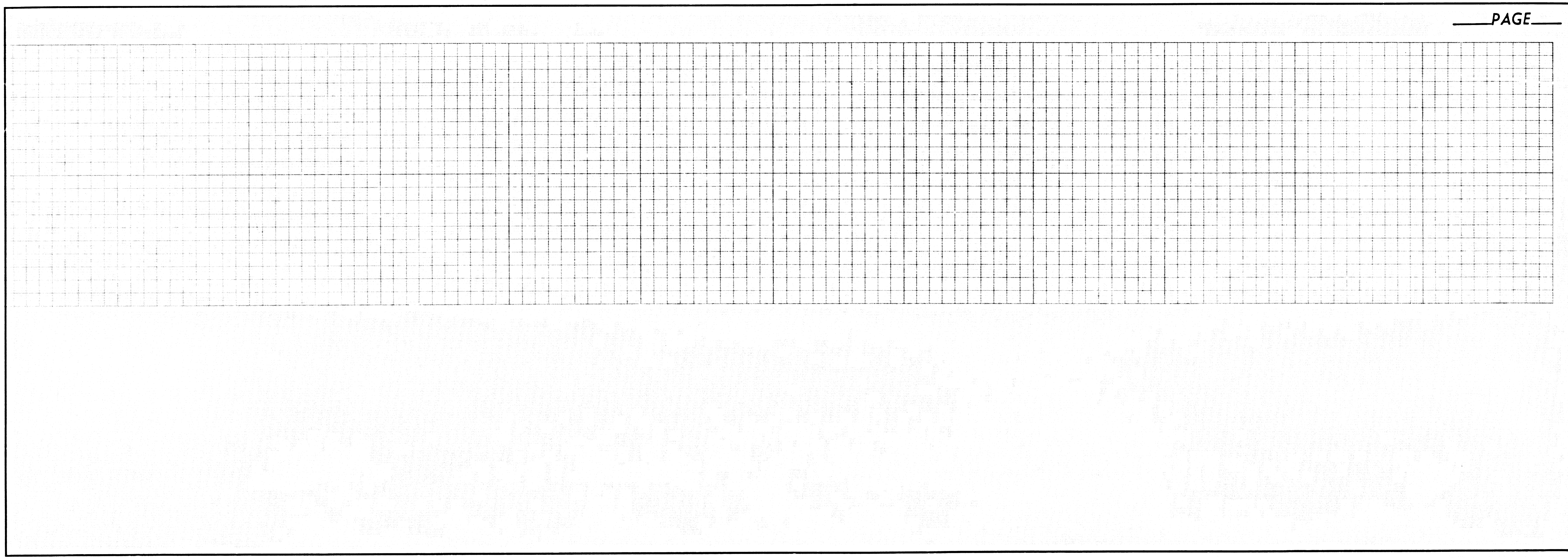
PC. 10237A PAGE 9

FORCE MAIN
 NO CONNECTIONS
 DOUBLE SCALE

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NO

TRACT

PLUMBING MATERIAL SCHEDULE & QUANTITIES		
NO.	DESCRIPTION OF ITEM	QUANTITY
1	ESSCO MODEL 4 - 12-TF SUBMERSIBLE PUMP AND MOTOR, TORQUE FLOW, NON-CLOG, 100% RECESSED IMPELLER, RELIANCE DOUBLE SEAL, OIL BUFFER ZONE, 1150 R. 1/2 H.P. MOTOR WITH WARNING DEVICE, RATED TO DELIVER 160 G.P.M. AGAINST 82 FT. T.D.M. AND MUST MEET OR EXCEED REQUIREMENTS OF L.A. CO. S.M.D. SPECIFICATIONS. PUMP AND MOTOR SHALL BE U.L. LISTED AS CLASS I, DIVISION I, GROUP D, EXPLOSION PROOF COMBINATION. FLOOR DRAIN AND TRAP WITH BACK WATER VALVE, MC MASTER-CARR 4" OUTLET SIZE, OR EQUAL.	2 EA.
2	60" DIA. WET WELL, ASSOCIATED CONCRETE PRODUCTS 60" I.D. PRECAST CONCRETE MAN-HOLE WITH CAST IN PLACE REINFORCED CONC. TOP SLAB & BASE OR EQUAL. COAT INTERIOR WITH ENGRD 465 BITUMASTIC EPOXY OR APPROVED EQUAL.	1 EA.
3	DOUBLE DOOR ACCESS FRAME & COVER, HALLIDAY PRODUCTS, DIMENSIONS 36"x54" CLR. OPENING W/ SPRING ASSISTED LIFT COVERS AND FRAME WITH LATCH AND LOCK KEYS TO L.A. CO. S.M.D. SHALL BE RATED TO H-20 LOADING.	1 EA.
4	DBL. DOOR ACCESS FRAME & COVER, HALLIDAY PRODUCTS, DIM. 48"x48" CLR. OPENING W/ SPRING ASSISTED LIFT COVERS & FRAME W/ LATCH & LOCK KEYS TO L.A. CO. S.M.D. & SHALL BE RATED TO H-20 LOADING.	1 EA.
5	STD. DUCTILE IRON GRATE AND FRAME	1 EA.
6	4" DIA. FLEXIBLE COUPLING, DRESSER MANUF., STYLE 38 (C-1-P.) OR APPROVED EQUAL.	2 EA.
7	4" CHECK VALVE (FLO'D.), APCO MOD. 104 P3 WITH STEEL REINFORCED RUBBER FLAPPER.	2 EA.
8	4" GATE VALVE (FLO'D.), CRANE NO. 461 OR APPROVED EQUAL. N.R.S., CLASS 125	2 EA.
9	4" D.1-P. 45' BEND (FLO'D.), CLASS 125.	2 EA.
10	4" D.1-P. TRUE WYE (FLO'D.), CLASS 125. DRILL AND TAP 1/2" NPT.	1 EA.
11	4" FLEXIBLE ADAPTER COUPLING, DRESSER MANUF., STYLE 127 (D-1-P.) OR EQUAL.	2 EA.
12	4" D.1-P. 90° LONG RADIUS ELBOW (FLO'D.), CLASS 125. DRILL AND TAP 1/2" NPT.	2 EA.
13	4" D.1-P. (P.E. x P.E.), CLASS 125.	LENGTH AS REQ'D.
14	4" D.1-P. (FLO'D. x P.E.), CLASS 125.	"
15	4" D.1-P. (FLG. x FLG.) DISCHARGE PIPES (LENGTH AS REQ'D)	2 EA.
16	FLANGE SUPPORT.	2 EA.
17	4" x 4" D.1-P. TEE (FLO'D.), CLASS 125. WITH 1/4" TAP AT MIDDLE OF TEE FOR PRESSURE GAUGE.	1 EA.
18	CLASS I, GROUP D, TYP. CAST FERALOT JUNCTION BOX, TO BE USED AS PULL BOX ONLY. AFTER INSTALLATION THE J BOX AND CONNECTORS SHALL BE SEALED WATER TIGHT AND GAS TIGHT. CRUISE HINDS GUB-0 POWER AND CONTROL LEADS SHALL BE CONTINUOUS WITH NO SPLICES FROM MOTOR TO CONTROL PANEL.	1 EA.
19	RECEPTACLE, 20 AMP G.F.I. LEVITON SUREGUARD # 3 STK. NO. 6398-1 125 A.C. 20 AMP 2 POLE 3 WIRE GROUNDED RECEPTACLE.	1 EA.
20	MANHOLE STEPS PER M. A. INDUSTRIES, INC. MODEL PS2-PF OR APPROVED EQUAL.	25 EA.
21	STAINLESS STEEL CABLE, 1/4" x 5/16" NYLON COVERED WITH 1/2" x 6" STAINLESS STEEL EYEBOLT AND HOOK.	LENGTH AS REQ'D.
22	BRASS REDUCER FITTING, 3/8" POLYFLOW x 1/4" MALE P.T. ADAPTER AND 1/4" FEMALE P.T. x 3/4" SLIP REDUCER.	2 EA.
23	4" DUCTILE IRON BLIND FLANGE (WITH STAINLESS STEEL BOLTS), CLASS 125.	1 EA.
24	1/4" COPPER TEE.	1 EA.
25	ROTOPLATS IN WET WELL, SET AT HIGH LEVEL ALARM ELEV. & AT LOW LEVEL ALARM ELEV. ONE FLOAT CABLE SHALL BE RUN WITH EACH MOTOR CABLE.	1 EA.
26	4" WATERMAN FLAP GATE MODEL NO. F-10 OR APPROVED EQUAL.	1 EA.
27	ADEMCO ALARM & MONITORING SYSTEM (SEE ELECTRICAL GENERAL NOTES NO. 7).	2 EA.
28	4" D.I.P. SPOOL (FLG. x FLG.) LENGTH AS REQUIRED	2 EA.
29	STABILIZING STAINLESS STEEL (1250 DIA) PIPE GUIDE RAILS, RAIL HOLDER & INTERMEDIATE HOLDER, NON SPARKING/NON-CORROSIVE W/ ATTACHMENT HARDWARE PER PUMP MANUFACTURERS REQ'TS.	AS REQ'D.
30	1/4" BRASS NEEDLE VALVE AND BRASS CASE PRESSURE GAUGE (0-30 P.S.I.).	1 EA.
31	1/4" CHECK VALVE.	2 EA.
32	1/4" AIR PRESSURE REGULATOR.	2 EA.
33	1/4" AIR FLOW METER.	1 EA.
34	1/4" GLOBE VALVE.	2 EA.
35	1/4" x 1/2" BRASS REDUCER ELBOW.	1 EA.
36	1/4" COPPER TUBING (LENGTH AS REQ'D.).	LENGTH AS REQ'D.
37	1/2" SCH. 80 P.V.C. PIPE (LENGTH AS REQ'D. TO ELECTRIC PANEL).	"
38	1" ELECTRICAL CONDUIT, RIGID STEEL (LENGTH AS REQ'D.).	"
39	3/8" POLYETHYLENE TUBING (LENGTH AS REQ'D.).	"
40	3/4" WATER PIPE, STD. WT., WRAPPED GALV. STEEL.	"
41	3/4" x 3" P.V.C. BELL REDUCER.	2 EA.
42	CONTROL PANEL, PREWIRED CONTROL PANEL AS MANUF'D. BY "ESSCO" AND DESIGNED TO L.A. CO. ENGINEER SPECIFICATIONS & U.L. LISTED AS INDUSTRIAL CONTROL PANEL. SEE PAGE 13	1 EA.
43	AIR COMPRESSOR, HYDROVANE ROTARY AIR COMPRESSOR MODEL 11 PUM OR APPROVED EQUAL WITH 3 H.P., 1750 R.P.M., 3 PHASE, 240 V. MOTOR, RATED TO DELIVER 12.8 CFM AT 100 P.S.I., INCLUDING ALL NECESSARY ELECTRIC WIRING AND PIPING AS REQ'D. BY L.A. CO. ENGINEER STD'S. MOUNT AS SPECIFIED WITH INTEGRAL SHUT-OFF VALVE.	1 EA.
44	"BECCO" (HERSEY PRODUCTS) MODEL FRP 3/4" BACKFLOW PREVENTER ASSEMBLY, INCLUDING ALL REQ'D. VALVES.	1 EA.
45	3/4" HOSE BIB, CHAMPION BRASS MFG., HB BRASS HOSE BIB MODEL HB-2F, OR EQUAL.	1 EA.
46	1/2" P.V.C. AERATOR JET.	1 EA.
47	2" UNDERGROUND ELECTRICAL CONDUIT, RIGID STEEL (LENGTH AS REQ'D.).	LENGTH AS REQ'D.
48	GROUNDING ROD 3/4" DIA., COPPER CLAD STEEL, 8' LONG.	1 EA.
49	HYDROVANE AIR REGULATOR.	1 EA.
50	HOFFMAN ENGR. CO. FAN PACKAGE MODEL A-PATO AXFN WITH VENT AND FILTER, SIZE 11-6" x 13" x 8", RATED AT 560 CFM, 115 V, 60 CYCLE AND 36 WATTS FURNISHED WITH POLARIZED PLUG AND RECEPTACLE. PROVIDE AND INSTALL 3 ADDITIONAL GRILLE AND FILTER KIT NO. AEXGR10, 11-6" x 13" HOFFMAN ENGR. CO. OR APPROVED EQUAL.	1 EA.
51	4" ROBBINS & MYERS MANUALLY OPERATED MOYNO PINCH VALVE OR APPROVED EQUAL.	2 EA.
52	EXHAUST BLOWER, DAYTON MODEL # 4C 204, 1/6 H.P., 1100/800 R.P.M., 2 SPEED, 1450 CFM. AIR DELIVERY, 14" FAN DIAMETER WITH 2 SPEED SWITCH & CIRCUIT BREAKER OR APPROVED EQUAL.	1 EA.

GENERAL NOTES :

- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- THE PUMPING EQUIPMENT MANUFACTURER'S REPRESENTATIVE SHALL SUPERVISE THE INSTALLATION, STARTING AND TESTING OF THE EQUIPMENT.
- ALL CONSTRUCTION JOINTS SHALL BE WATERPROOF. THERE SHALL BE NO TRACE OF WATER LEAKS INTO WET WELL UPON COMPLETION OF THE PROJECT.
- ALL WORK AND MATERIALS TO BE GUARANTEED FOR NOT LESS THAN ONE (1) YEAR.
- CONCRETE SHALL BE PORTLAND CEMENT CONCRETE AND SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I. AT 28 DAYS.
- BEDDING AND BACKFILL SHALL BE COMPACTED TO 90% RELATIVE DENSITY. BACKFILL SHALL NOT BE COMPACTED BY FLOODING, SLUICING, JETTING OR BY ANY OTHER HYDRAULIC METHOD WHICH WILL SATURATE THE SOIL.
- BACKFILL SHALL BE FROM THE MATERIAL EXCAVATED OR SHALL BE A GRANULAR MATERIAL APPROVED BY THE COUNTY ENGINEER.
- ALL PRACTICES AND PROCEDURES, MATERIALS AND PLACEMENT OF MATERIALS SHALL CONFORM IN EVERY RESPECT TO THE L.A. COUNTY BUILDING LAWS (198 EDITION) AND TO THE STD. SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1982 EDITION) AND ALL APPLICABLE SUPPLEMENTS.
- ESSCO PUMPS ARE DISTRIBUTED BY "ENGINEERS SALES SERVICE COMPANY", 4935 TELEGRAPH ROAD, L.A., CA 90022, (818) 261-2181.
- THE CONTRACTOR SHALL SUPPLY ALL MATERIALS AND EQUIPMENT UNLESS OTHERWISE NOTED.
- NOTCHES OR GROOVES AROUND OPENINGS IN CONCRETE SHALL BE PROVIDED AS REQUIRED TO RECEIVE MANHOLE FRAMES AND ACCESSORIES. DIMENSIONS AND POSITIONS WHERE NOT SPECIFIED FOR CONDUITS, FRAMES AND ACCESSORIES SHALL BE DETERMINED FROM THE DETAILS AND FROM MANUFACTURER'S SHOP DRAWINGS.
- NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT WRITTEN APPROVAL OF THE COUNTY ENGINEER OR AS DIRECTED BY THE L.A. CO. INSPECTOR.
- THE CONTRACTOR SHALL NOTIFY THE ENVIRONMENTAL DEVELOPMENT DIVISION BY TELEPHONE AT LEAST 24 HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
- RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET L.A. COUNTY ROAD DEPT. OR CALIF. STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
- ALL STATE AND LOCAL TRENCH SAFETY ORDERS TO BE STRICTLY ENFORCED.
- ALL LOCKS SHALL BE KEYS FOR C.E.F.. S.M. STANDARD SARGENT KEY # U 65714.

ELECTRICAL GENERAL NOTES :

- THE CONTRACTOR SHALL CONTACT & MAKE ARRANGEMENTS WITH THE SOUTHERN CALIFORNIA EDISON CO. FOR SERVICE & POWER.
- THE ELECTRICAL CONTRACTOR SHALL RUN A #4 BARE COPPER M.H.D. GROUND WIRE & ATTACH AS PER CODE TO ALL METAL PIPING, PUMP PLATES & STEPS.
- THE ELECTRICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE PROVISIONS OF THE NATIONAL ELECTRICAL CODE, STATE SAFETY ORDERS & ALL APPLICABLE CODES.
- CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY, EXACT LOCATION SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS.
- ALL ELECTRICAL EQUIPMENT IN THE WET WELL TO BE EXPLOSION PROOF PER CLASS I, DIVISION I OF STATE ELECTRICAL SAFETY ORDERS. SEAL CONDUITS INTO THIS AREA. ALL ELECTRICAL IN DRY WELLS (VAULT) SHALL BE VAPOR TIGHT SEALED CONDUITS.
- THE ELECTRICAL CONTROL PANEL SHALL BE AS MANUFACTURED BY ESSCO IN ACCORDANCE WITH L.A. COUNTY ENGINEER SPECIFICATIONS. ENGINEERS SALES-SERVICE CO. (ESSCO), 4935 TELEGRAPH ROAD, L.A., CA 90022, (213) 261-2181.
- ALL ITEMS FROM SECURITY HANDBOOK, ADEMCO CATALOGUE OF PRODUCTS, 1986. ALL COMPONENTS MUST BE COMPATIBLE WITH COUNTY OF L.A., DEPT. OF PUBLIC WORKS, B.A.T.S. MONITORING SYSTEM UTILIZING ADEMCO #673 DIGITAL RECEIVER.
 - CONTRACTOR SHALL FURNISH WORKING TOUCHSTONE TELEPHONE SERVICE & SINGLE INSTRUMENT WALL MOUNT TOUCHSTONE TELEPHONE. TELEPHONE LINE SHALL TERMINATE IN A DUPLEX FEMALE TELEPHONE JACK TO FACILITATE PLOUGGING OF TELEPHONE INSTRUMENT & ADEMCO DIALER SIMULTANEOUSLY IN THE SAME JACK. THE TELEPHONE INSTRUMENT & JACK SHALL BE INSTALLED IMMEDIATELY ADJACENT TO THE ADEMCO 678SP DIGITAL COMMUNICATOR.
 - THE PROGRAMMABLE CHIP, ADEMCO #691 SHALL BE PROGRAMMED TO SEWER MAINTENANCE DISTRICT'S SPECIFICATIONS.
 - IN ADDITION TO THE ABOVE ADEMCO ALARM SYSTEM A POWER FAILURE RELAY IS REQUIRED TO CALL IN POWER FAILURE AT THE PUMPING STATION.

- THE WATER LEVEL CONTROL SETTINGS SHOWN ON THE WET WELL ON PAGE 12 SHALL BE AS FOLLOWS:
 - L1 LOW WATER ALARM
 - L2 LEAD PUMP "OFF"
 - L3 LEAD PUMP "ON"
 - L4 LAG PUMP "ON"
 - L5 HIGHWATER ALARM CIRCUIT

CONTROL PANEL SHALL PROVIDE AUTOMATIC LEVEL CONTROL FOR PUMPS. LEAD PUMP SHALL START WHEN LIQUID RISES TO LEVEL L3 & STOP WHEN LIQUID RECESSES TO LEVEL L2. WHEN THE LIQUID RISES TO LEVEL L4, LAG PUMP SHALL START. WHEN THE LIQUID RISES TO LEVEL L5, THE HIGH WATER ALARM CIRCUIT SHALL BE ENERGIZED. THE HIGH WATER ALARM CIRCUIT SHALL AUTOMATICALLY BE DE-ENERGIZED WHEN THE LIQUID LEVEL RECESSES BELOW L5. WHEN THE LIQUID DROPS TO L1, THE LOW WATER ALARM CIRCUIT SHALL BE ENERGIZED, AND SHALL AUTOMATICALLY BE DE-ENERGIZED WHEN THE LIQUID LEVEL RISES ABOVE L1. THE ALTERNATOR SHALL AUTOMATICALLY SEQUENCE THE PUMPS AFTER EACH OPERATION.

ELECTRICAL COMPONENT LIST:

- COMPONENTS FOR THE ELECTRICAL SYSTEM SHALL BE AS, BUT NOT LIMITED TO THE FOLLOWING ITEMS IDENTIFIED BELOW. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE SUFFICIENT MATERIAL AS WELL AS A DETAILED LIST OF MATERIAL QUANTITIES AS PART OF THE SHOP DRAWING SUBMITTAL. THE FOLLOWING LIST IS GENERAL IN NATURE AND SHALL ONLY ACT AS A GUIDE.
- MAIN CIRCUIT BREAKER & METER SOCKET
 - CIRCUIT BREAKERS THERMAL MAGNETIC TYPE
 - CIRCUIT BREAKERS MOTOR CONTROL TYPE
 - MAGNETIC STARTERS W/ 3-d LEG RELAY ADDITION
 - H-O-A (HAND-OFF-AUTOMATIC) SELECTOR SWITCHES
 - INDICATOR LAMPS (COLORS AS SHOWN ON DRAWINGS)
 - CONTROL TRANSFORMER
 - ELECTRIC ALTERNATORS
 - RELAY PACKAGE W/ INDICATING LIGHTS & "TEST", "SILENCE" & "TEST" PUSH BUTTONS
 - INDUCTION TYPE RELAYS FOR MOTOR MOISTURE SENSING PROBES
 - PUSH TO TEST BUTTONS (AS INDICATED ON DRAWINGS)
 - CONTROL SYSTEM AIR BUBBLER
 - UNAUTHORIZED BUILDING ENTRY ALARM SYSTEM
 - RED EXTERIOR ALARM LIGHT W/ 100W BULB & ALUMINUM GUARD
- RECEPTACLES
 - RUNNING TIME METERS
 - ELECTRICAL PANEL 3Ø, 4W, 120/208 V
 - BACKFLOW PREVENTER
- AMMETERS
 - INTAKE & EXHAUST FANS

MATERIAL SCHEDULE & QUANTITIES CONT'D.		
NO.	DESCRIPTION OF ITEM	QUANTITY
57	SUPPLY BLOWER, MC MASTER-CARR NO. 2093K12, CAT. NO. 94, PG. 109, 1/3 H.P., 1725 R.P.M. SINGLE SPEED, 1065 C.F.M. AIR DELIVERY, EXPLOSION PROOF.	1 EA.
58	PLUG-IN LIMIT SWITCH NO. 802T-ASP SERIES F PER ALLEN-BRADLEY.	1 EA.
59	JOHNSON CONTROLS, INC., TYPE F62AA AIR FLOW CONTROL.	1 EA.
60	6" DIA. GALVANIZED STEEL PIPE.	LENGTH AS REQ'D.
61	6" DIA. P.V.C. (SCH. 80) AND FITTINGS.	LENGTH AS REQ'D.
62	6' x 8' UTILITY VAULT WITH 6" WALLS, BROOKS PRODUCTS, INC., WITH CAST IN PLACE REINFORCED CONC. TOP SLAB WITH DESIGN LOADING H-20. OPENING TO BE SET OVER VAULT STEPS.	1 EA.

COUNTY OF LOS ANGELES, CALIFORNIA

STEPHEN J. KOONCE COUNTY ENGINEER

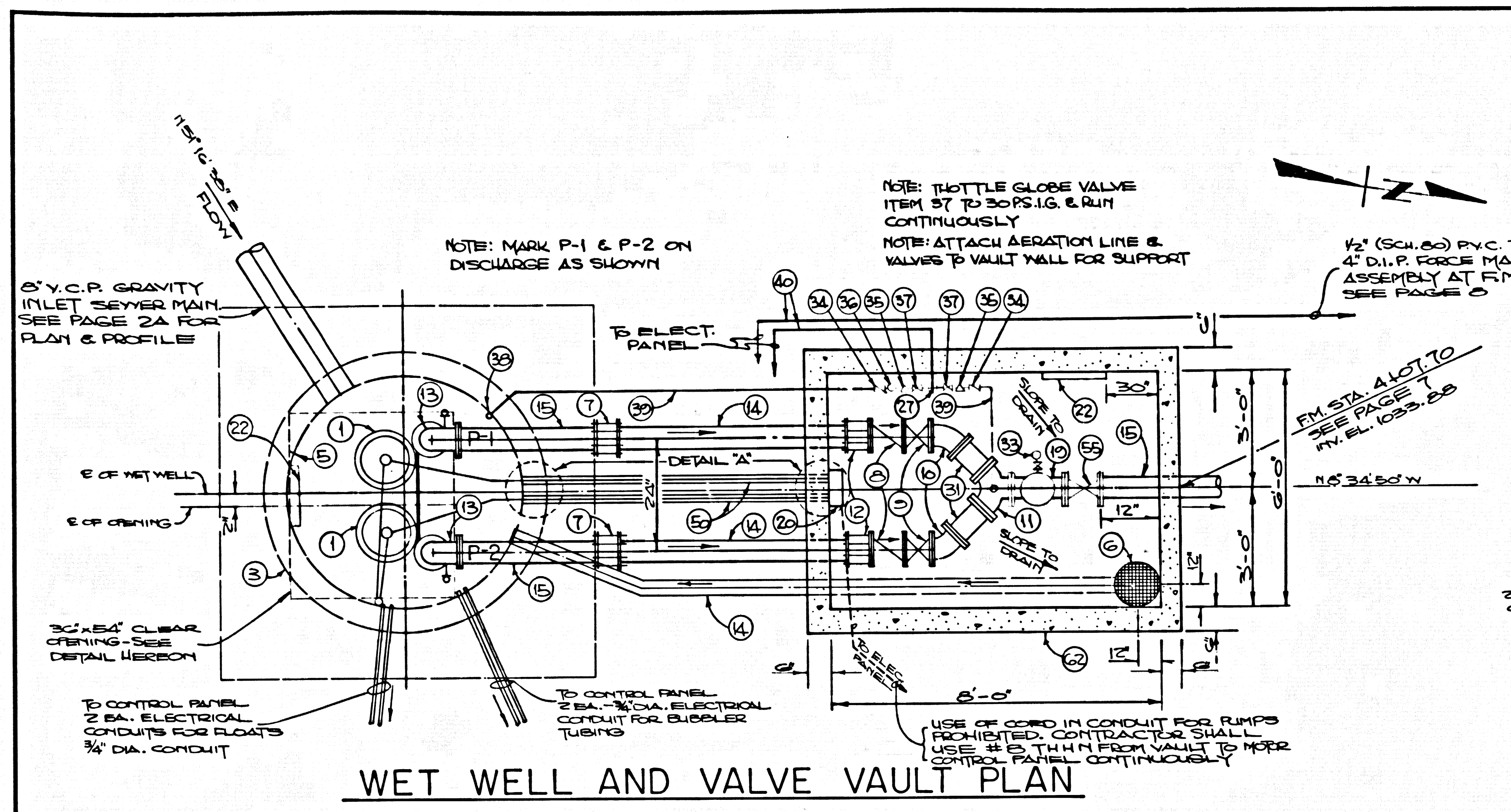
TRACT NO. 31850

P.C. NO. 10237A SEWAGE PUMP STATION

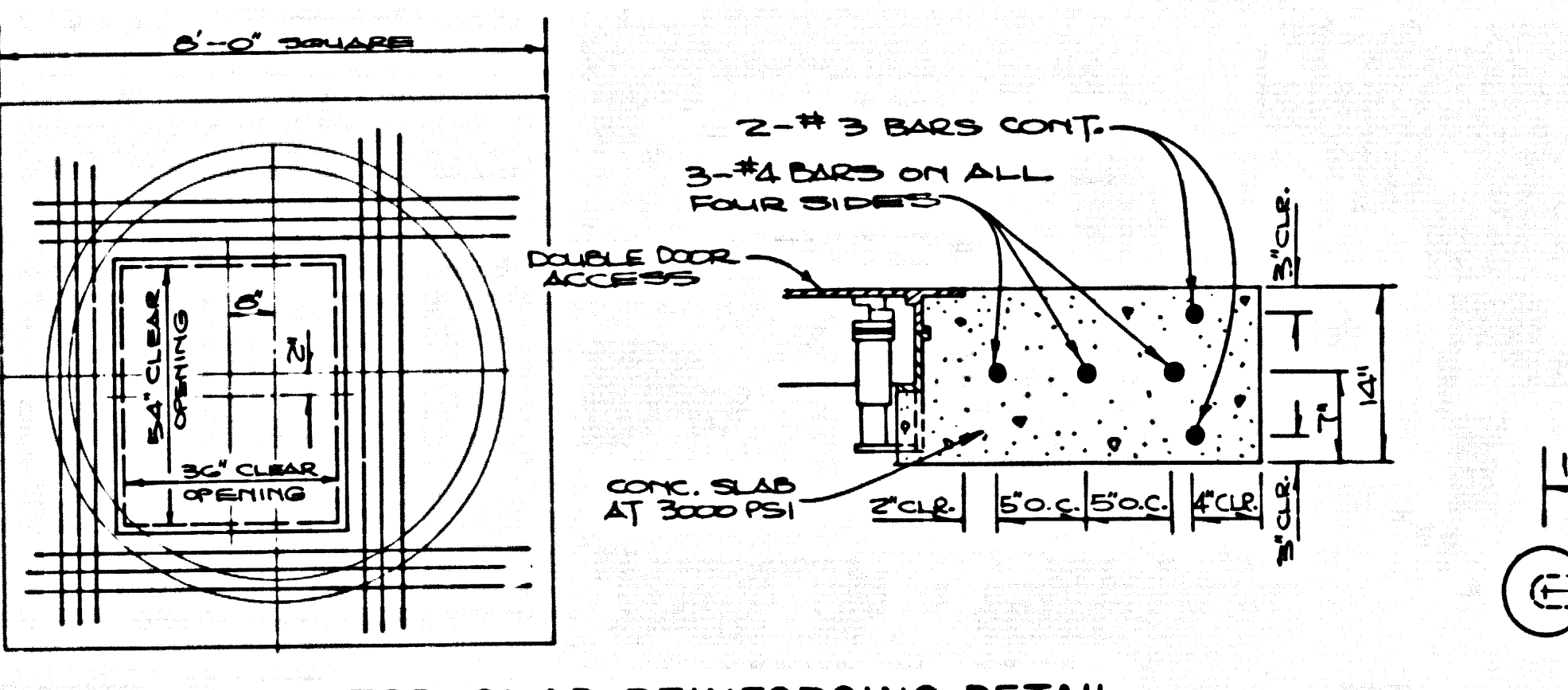
MATERIAL SCHEDULE & NOTES

ARCHITECT/ENGINEER DIVISION

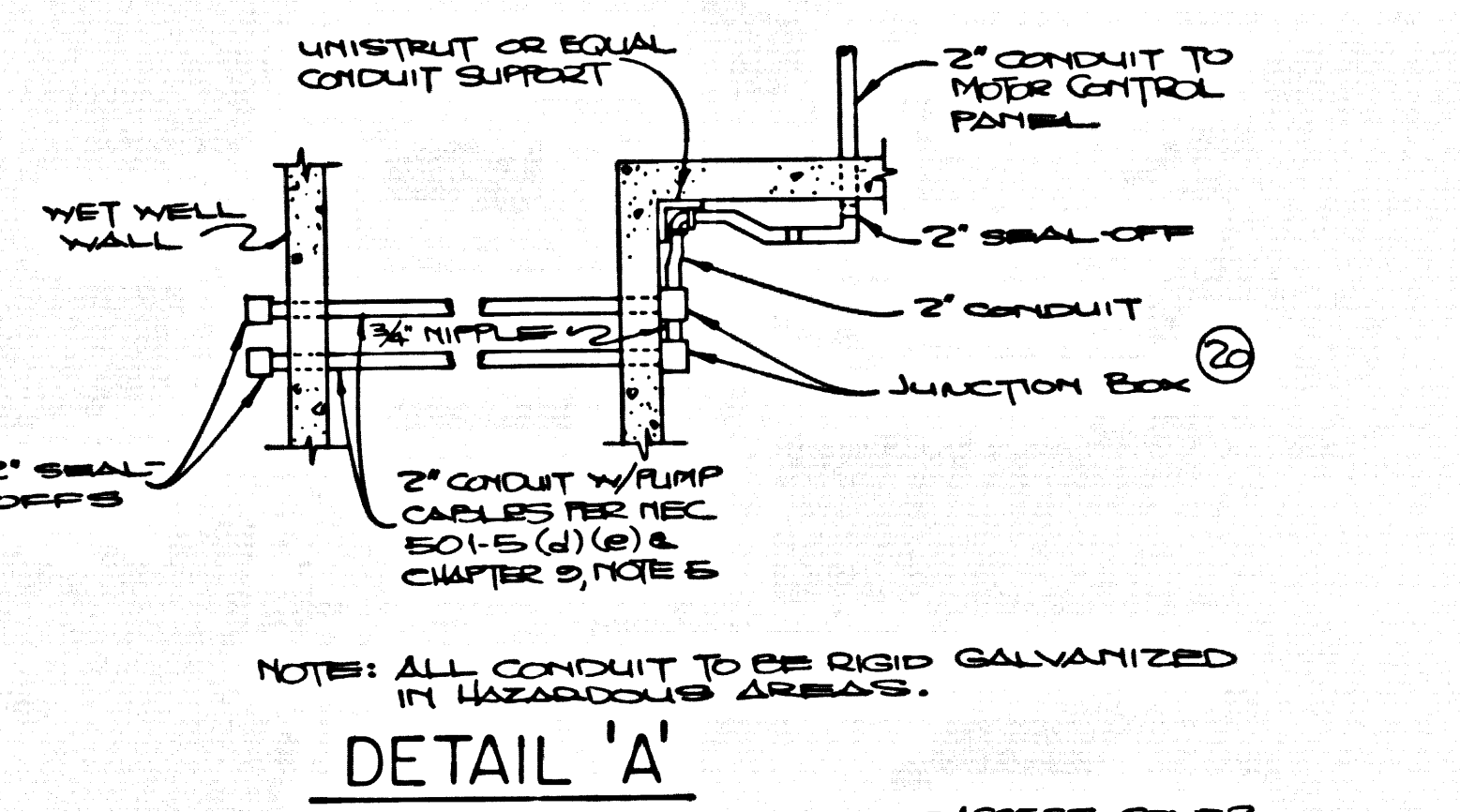
SCALE: NO SCALE DATE: JAN, 1984 PAGE 11 OF 13 PAGES



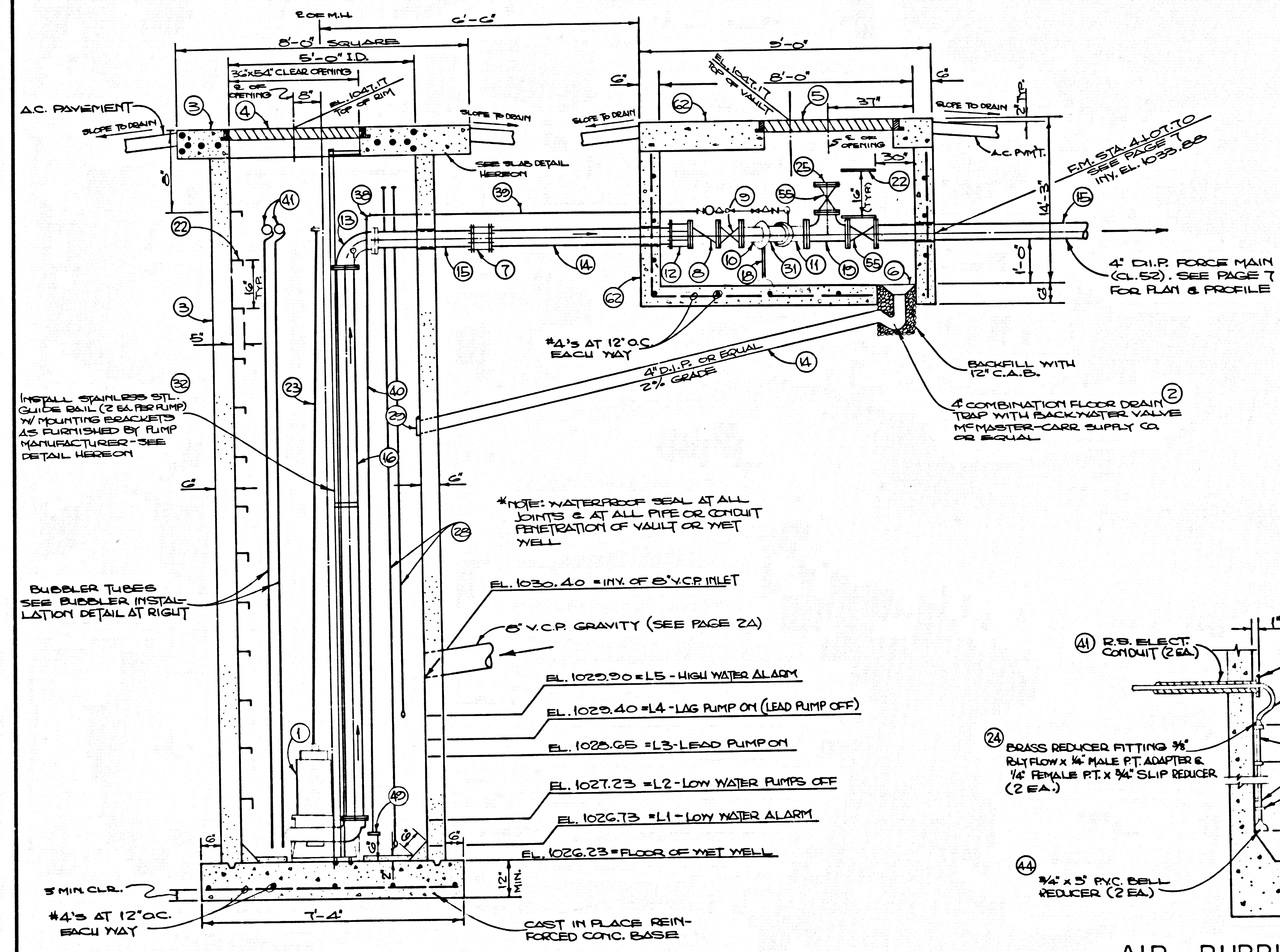
WET WELL AND VALVE VAULT PLAN



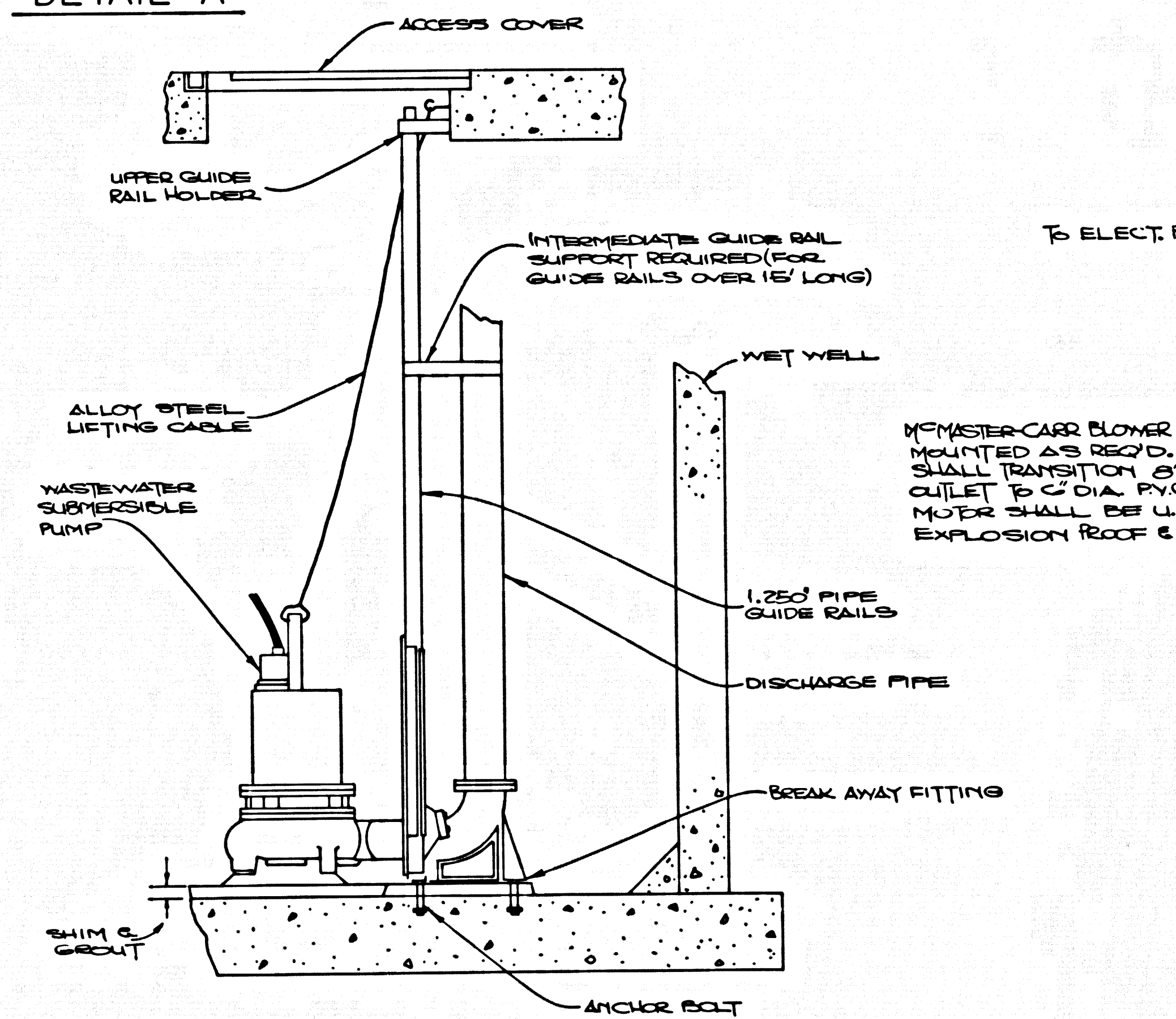
M.H. TOP SLAB REINFORCING DETAIL



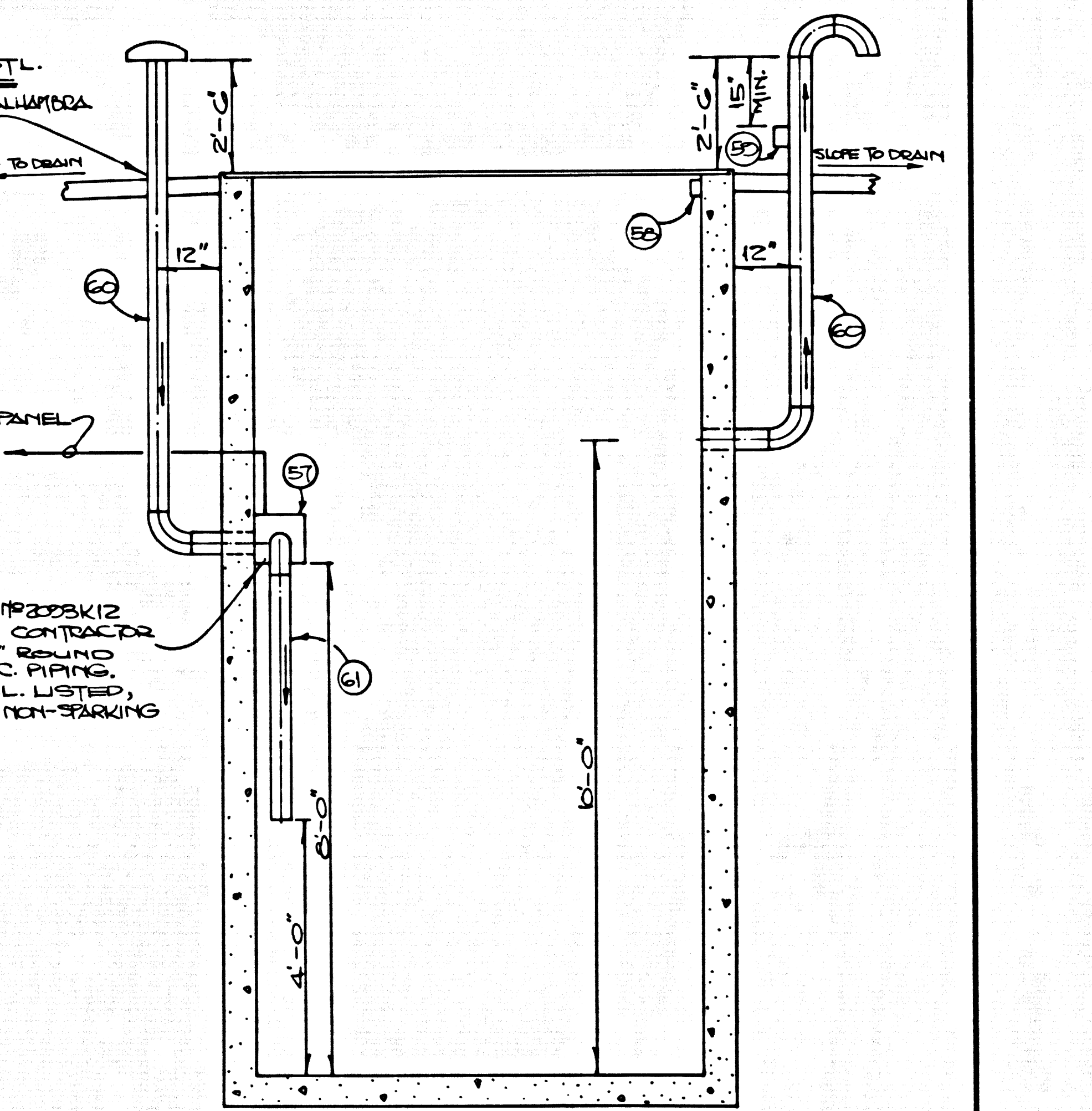
DETAIL 'A'



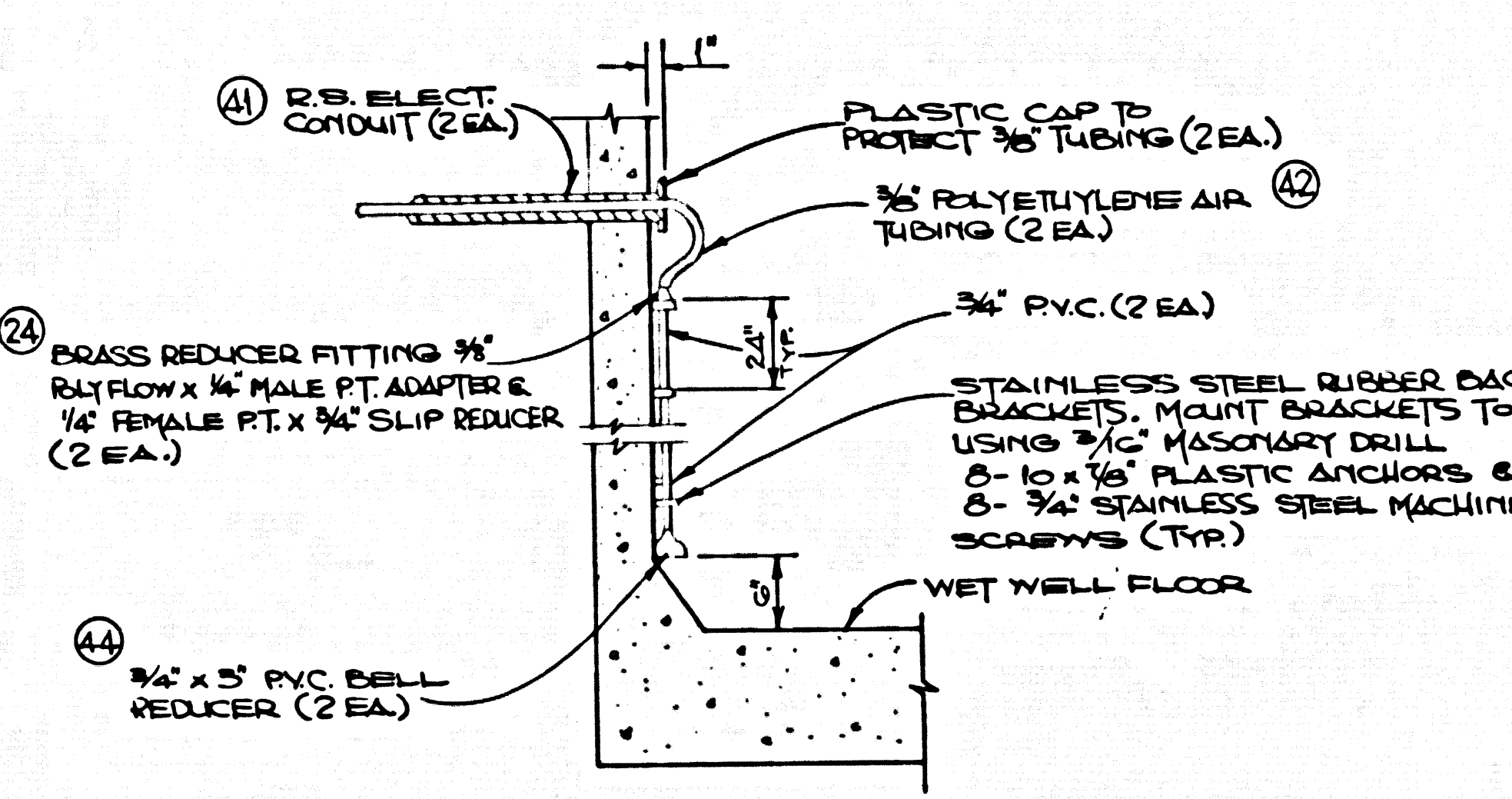
WET WELL & VALVE VAULT SECTION
DETAIL



GUIDE RAIL DETAIL



AIR SUPPLY BLOWER
LIMIT SWITCH & AIR FLOW SWITCH
DETAIL



AIR BUBBLER INSTALLATION
DETAIL

NOTE: SEE PAGE NO. 11 FOR MATERIAL SCHEDULE & GENERAL NOTES

COUNTY OF LOS ANGELES, CALIFORNIA	
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PUMP & DETAILS	
ARCHITECT/ENGINEER DIVISION	
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