

B.M. S-77 ELEV. 19.514, F.B. 2961, pg. 192
 Ctr. of ADMIRALTY WAY and 0.3 mile
 W'ly from BALI WAY
 Bl. spk in SE cor. conc. base of
 st. light pole.

NOTES

1. Cooperation between contractors on this site is imperative for this project.
2. All landscaping removed or damaged in this project shall be replaced in kind and size.
3. Prior to beginning excavation the contractor shall request the utility companies noted hereon, and the Department of Small Craft Harbors to mark all underground obstructions or utility lines.
4. The contractor shall verify locations of utility lines, and other underground structures, prior to bid submittal. Refer to the following drawings and maps on file at the Marina's Administration Office:
 1. Underground Utility System, Spec. E.B.'S DD of 1961.
 2. Marina Del Rey Water Distribution System, Spec. C.I.S. 165 of 1961.
 3. Street Lighting L.A. Co. Road Dept. Project No. 5 of 1962.
 4. Marina Del Rey Parcel U, Parking Lot, Spec. 2443 01B, of 1963.
 5. L.A. County Road Dept. Substructure Map, Marina Del Rey.
5. If, during construction any water line is found to interfere with the construction of the force main, the contractor shall notify the L.A. County Waterworks Div. for relocation of the water line by others. Water service shall not be interrupted.

GENERAL NOTES

REFER TO SECTION 718.41 OF STANDARD SPECIFICATIONS REGARDING SAFETY ORDERS
 ALL MANHOLES SHALL BE 24" DIA. UNLESS OTHERWISE NOTED
 1" DIA. MANHOLES MAY BE USED FOR CONNECTION TO MAIN LINE SEWER, EXCEPT AS NOTED
 18" DIA. MANHOLES SHALL BE USED FOR CONNECTION TO 12" DIA. SEWER
 ALL CONNECTIONS BETWEEN CURB AND MAIN LINE SEWER SHALL BE MADE WITH A RIGIDLY SUPPORTED, TYPE "C" OR "D" WITH BUSHING IF NECESSARY PER SECTION 306.2 OF STANDARD SPECIFICATIONS
 SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 306.2.3.7 OF STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS
 IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED PER 3.21 CASE II, TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
 CONTRACTOR SHALL VERIFY WITH INVERT AT PRODUCT LINE 6 FEET BELOW CURB GRADE, OR GRADE OF CENTER LINE OF STREET, EXCEPT AS NOTED
 INDICATED DEPTH BELOW CURB GRADE, OR GRADE OF CENTER LINE OF STREET
 INDICATED INVERSE LATERAL SHALL BE CONSTRUCTION WITHIN 12" TO 18" FROM PRODUCT LINE TO PRODUCT LINE
 INDICATED "P" OR "T" SHALL BE LAMP HOISTING AND HOUSE LIFTING SHALL BE CONSTRUCTION WITHIN 12" TO 18" FROM PRODUCT LINE TO PRODUCT LINE
 ALL HOUSE ENTRANCES SHALL BE CONSTRUCTED IN A SUFFICIENT ALIGNMENT AT JOINTS TO ALLOW ROOM FOR MAIN LINE SEWER TO BE OPENED ON THE HOUSE LATERAL FROM CURB GRADE TO HOUSE ENTRANCE
 ALL CONCRETE CURBS, GUTTERS, CURBS, GUTTERS, PAYMENTS, AND DRIVEWAYS SHALL BE TURNED OR JACKED PER LOS ANGELES COUNTY ROAD DEPARTMENT REQUIREMENTS.
STREET RESURFACING:
 STREET RESURFACING METHODS SHALL BE IN ACCORDANCE WITH SECTION 306.1.1.2 OF THE SPECIAL PROVISIONS.
 THE RESURFACED AREA SHALL BE SEALED WITH RS-1 EMULSION AND 1/2" CRUSHED ROCK.
 RESURFACE TRENCHES WITHIN PAVED AREAS WITH TYPE I ASPHALTIC CONCRETE, 3" INCHES IN THICKNESS ON 8" INCHES OF AGGREGATE BASE MATERIALS.

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

LEGEND	81	CRADING AND EMBLEMMENT	833
MINIMUM PUBLIC SAFETY REQUIREMENTS	82	PROHIBITORY SIGN OF THE HARBOR	836
MANHOLES	84	ALLOWABLE FRENCH WIDTHS	838
MANHOLES - 24"	84F	EMULSION MARKING STRIP AND COVER	839
SECTIONS FOR SEWER PIPE	85	NON-STRUCTURED PRECAST CONCRETE MANHOLE	836
SPECIAL SUPPORT AND PROTECTION	832	STOPWORK	830

- THE CONTRACTOR SHALL OBTAIN THE FOLLOWING PERMITS PRIOR TO CONSTRUCTION:
1. LOS ANGELES COUNTY ROAD DEPARTMENT (SEE ITEM 1)
 - 2.
- THE UNDERGROUND UTILITY COMPANIES WITHIN THE LIMITS OF THIS PROJECT ARE AS FOLLOWS:
- (1) L.A. COUNTY WATERWORKS (W)
 - (2) SOUTHERN CALIF. EDISON CO. (E)
 - (3) SOUTHERN COUNTRIES GAS CO. (G)
 - (4) GENERAL TELEPHONE CO. (T)

CASH CONTRACT NO. 8499
FORCE MAIN
 TO BE CONSTRUCTED IN
ADMIRALTY WAY

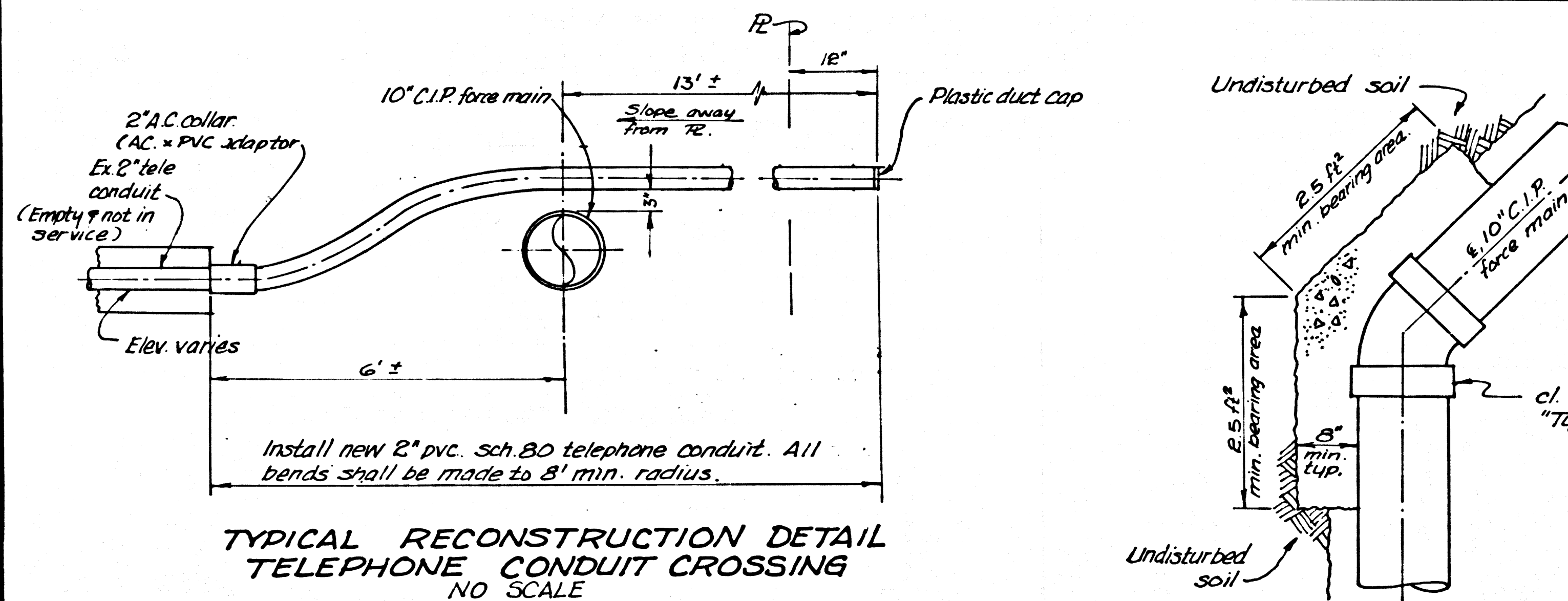
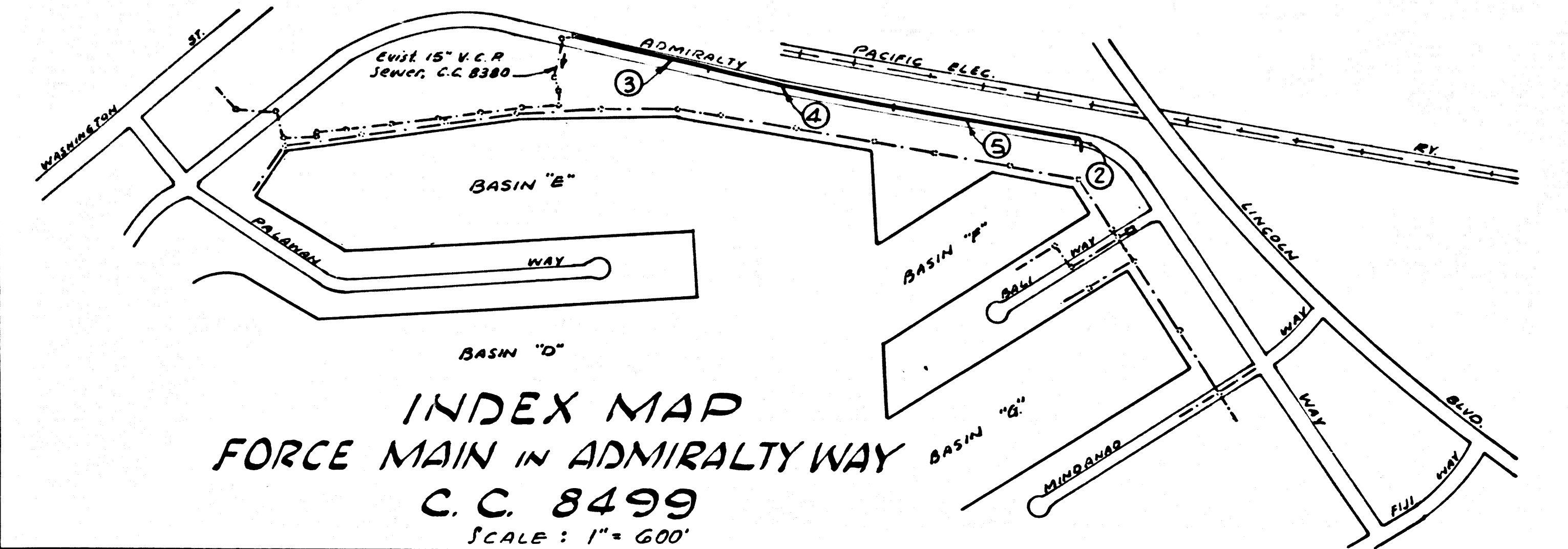
3 SHEETS; 5 PAGES
 SCALE: VERT. 1" = 4'
 HORIZ. 1" = 40'
 NOV. 1970

COUNTY OF LOS ANGELES, CALIFORNIA
 JOHN A. LAMBE COUNTY ENGINEER

APPROVED: *R.M. Con* 11-13-70
 PLAK. DIVISION ENGINEER (DATE)

DESIGNED: *F. J. Kelly* 11-13-70
 S.P.C. NO. 10443 (DATE)

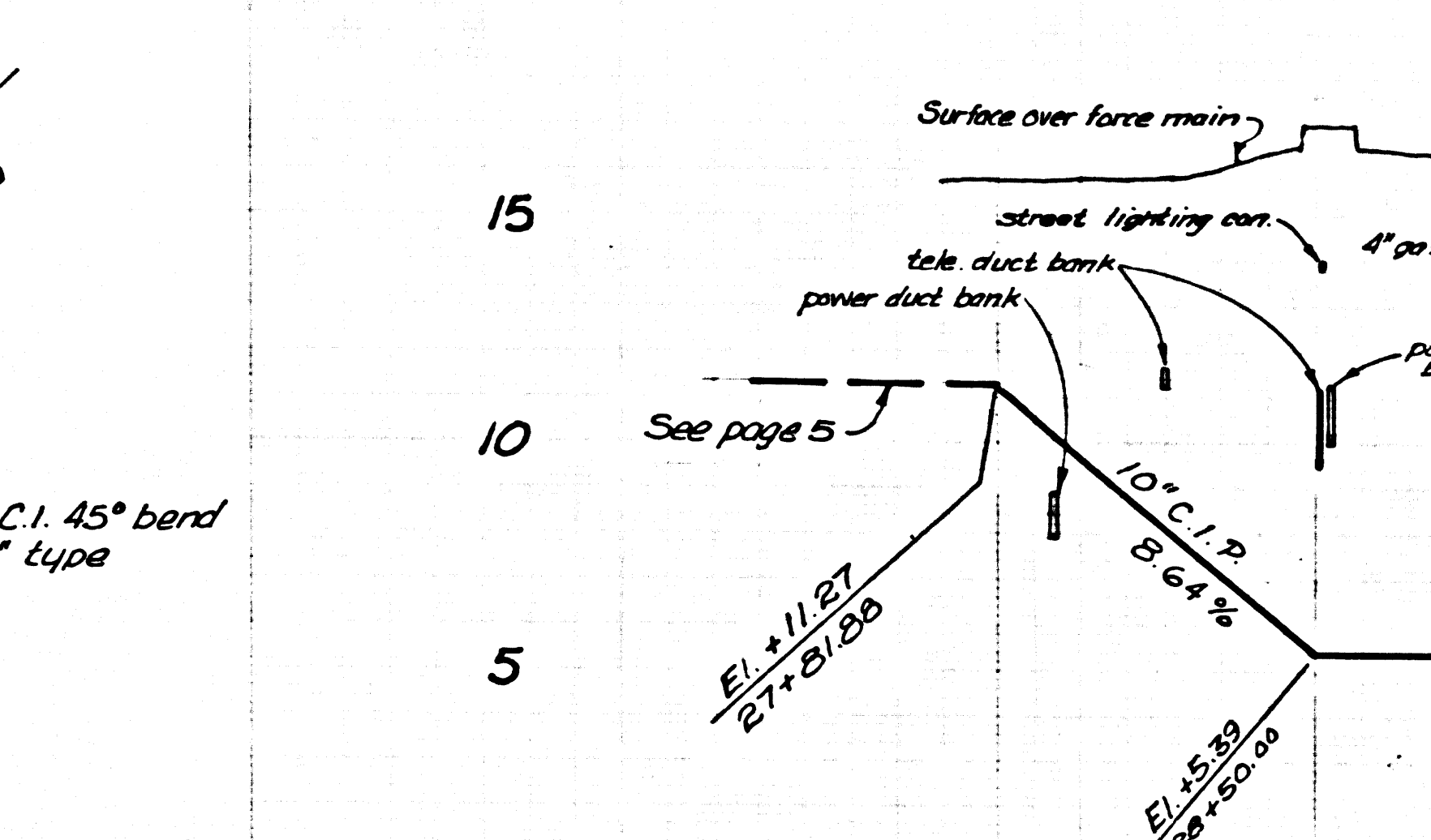
FOR: ARTHUR G. HILL, DIRECTOR
 DEPARTMENT OF PUBLIC WORKS
 APPROVED: *A. G. Hill* 11-16-70 (DATE)



TYPICAL RECONSTRUCTION DETAIL TELEPHONE CONDUIT CROSSING
 NO SCALE

NOTES:

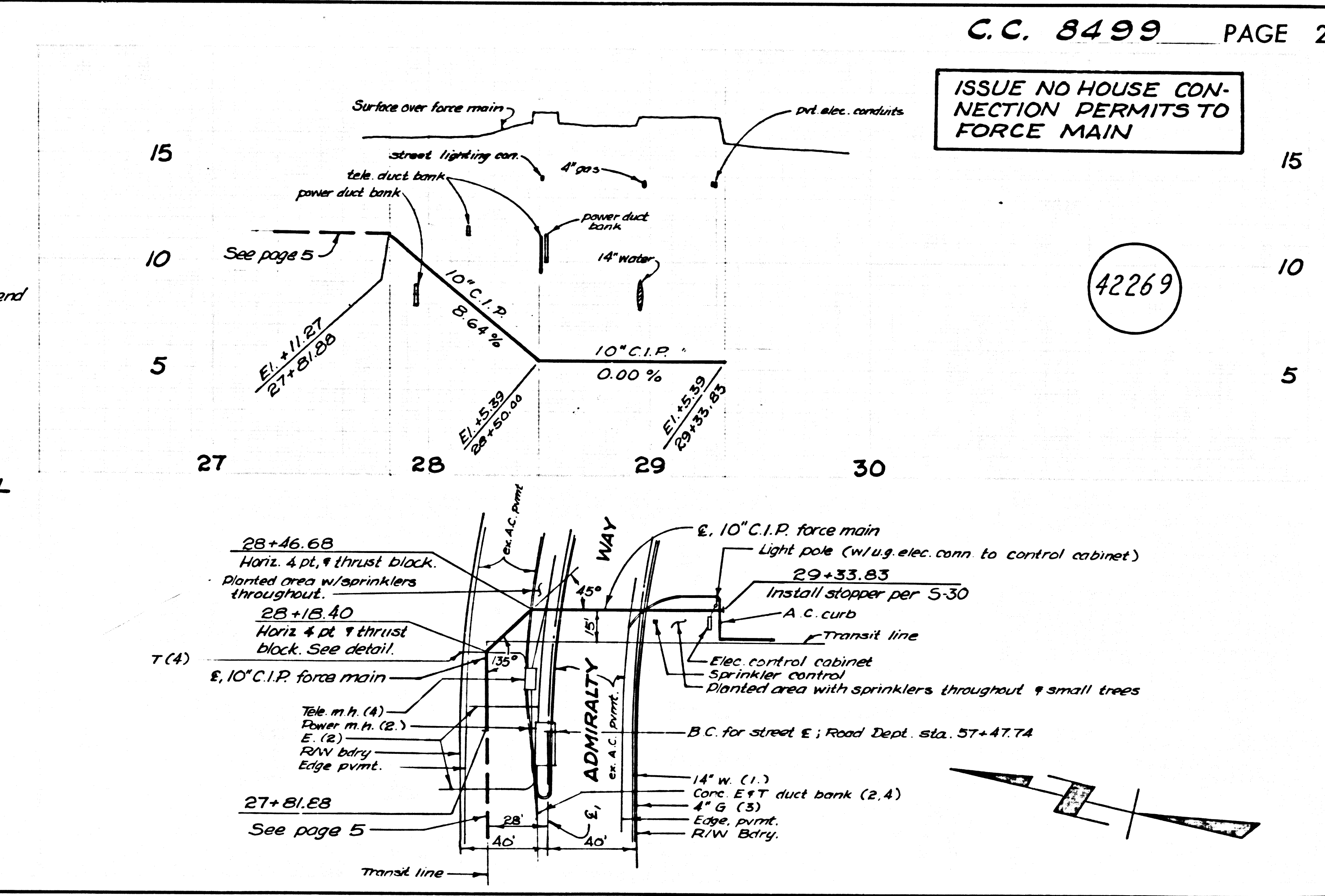
1. This telephone conduit reconstruction may possibly be required at 4 places in this project, as the depth of the existing conduit is unknown.
2. The engineer shall decide if such reconstruction is required. Where such reconstruction is ordered, the contractor shall install it at a stipulated unit price as designated in the proposal.
3. The contractor will obtain the approval of the General Telephone Co. and the Department of Small Craft Harbors before breaking any conduit, and shall verify that there are no wires in service in the conduit.



TYPICAL THRUST BLOCK DETAIL
 NO SCALE

NOTES:

1. All concrete must have a minimum 7-day compressive strength of 2500 psi



ISSUE NO HOUSE CONNECTION PERMITS TO FORCE MAIN

42269

28+46.68
 Horiz. 4 pt. thrust block
 Planted area w/ sprinklers throughout.

28+18.40
 Horiz. 4 pt. thrust block. See detail.

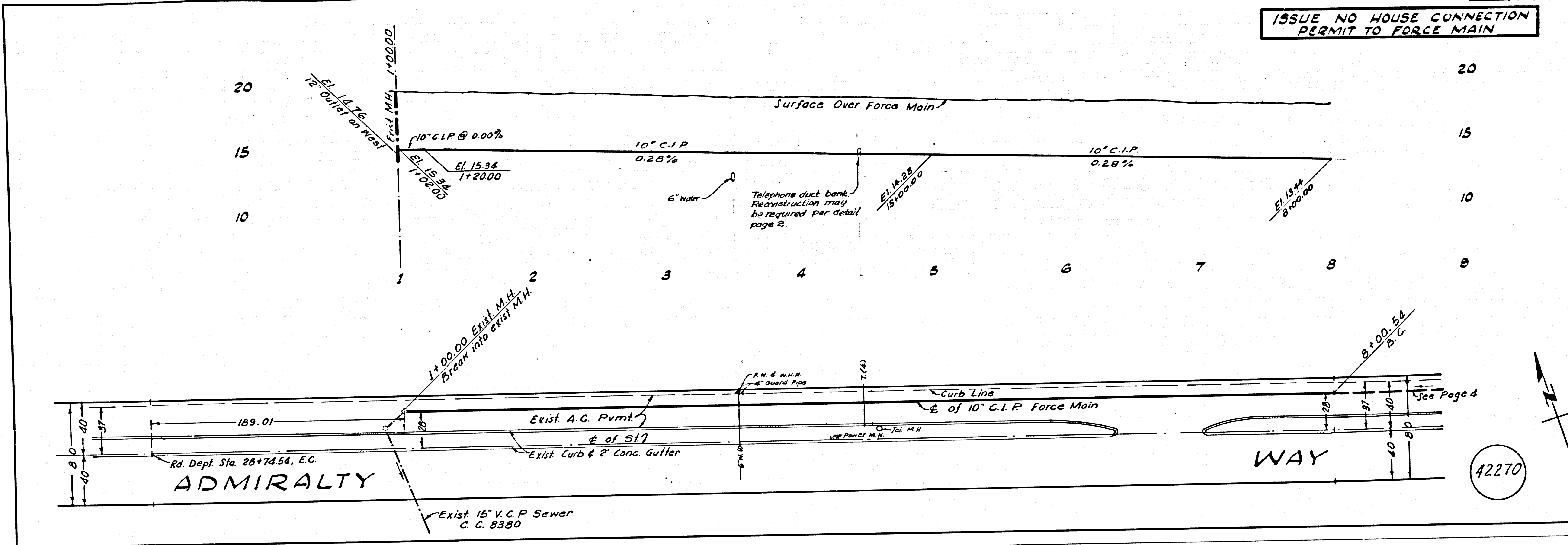
27+81.28
 See page 5

10" C.I.P. force main
 Light pole (w/ug elec. conn to control cabinet)
 29+33.83
 Install stopper per S-30
 A.C. curb
 Transit line
 Elec. control cabinet
 Sprinkler control
 Planted area with sprinklers throughout & small trees

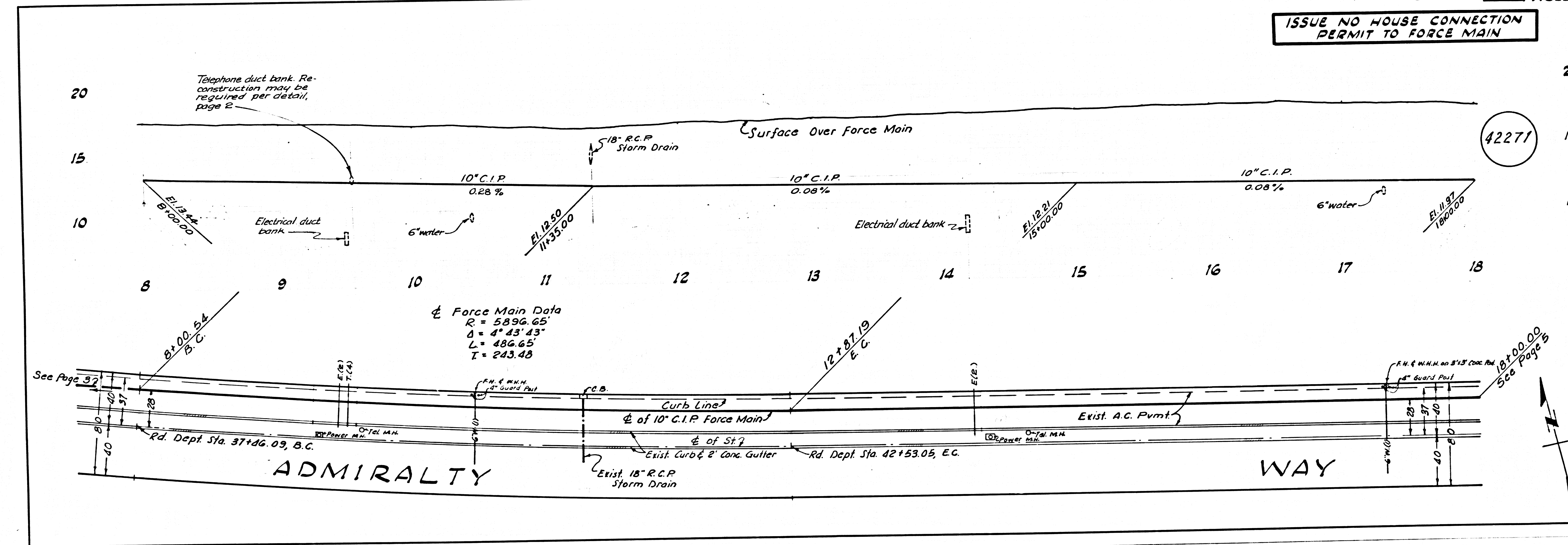
B.C. for street E; Road Dept. sta. 27+47.74

14" w (1)
 Conc. E+T duct bank (2,4)
 4" G (3)
 Edge, pvt. R/W Btry.

ISSUE NO HOUSE CONNECTION PERMIT TO FORCE MAIN

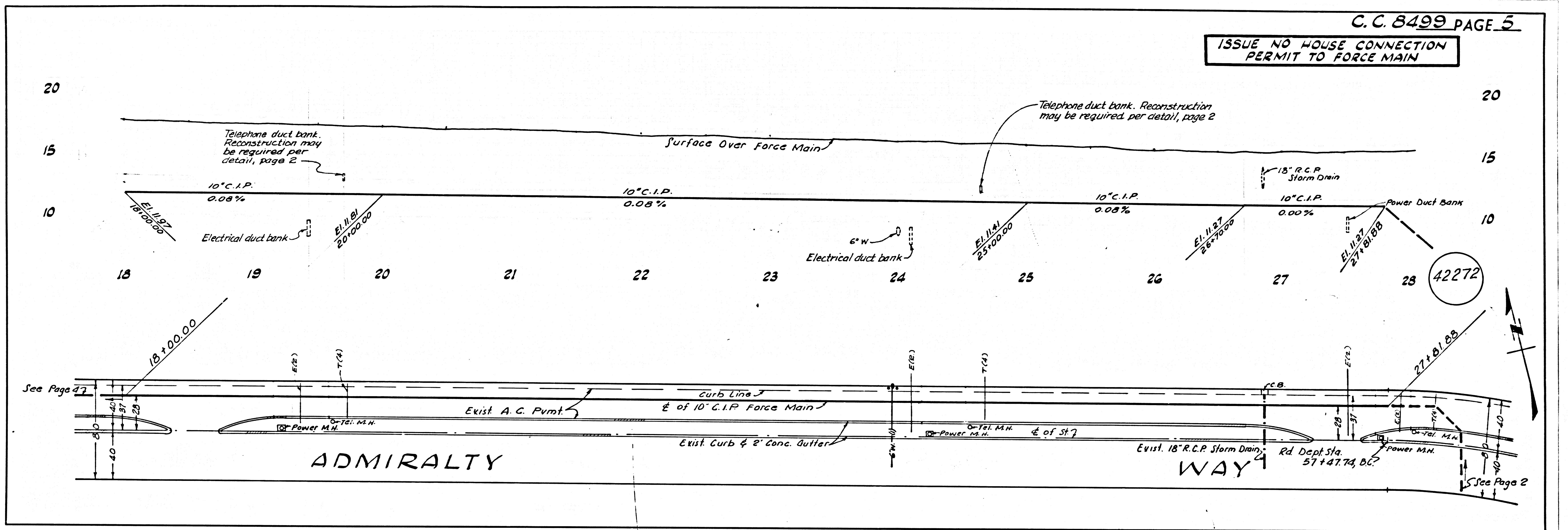


ISSUE NO HOUSE CONNECTION PERMIT TO FORCE MAIN



Force Main Data
 $R = 5896.65'$
 $\Delta = 4^\circ 43' 43''$
 $L = 486.65'$
 $T = 243.48'$

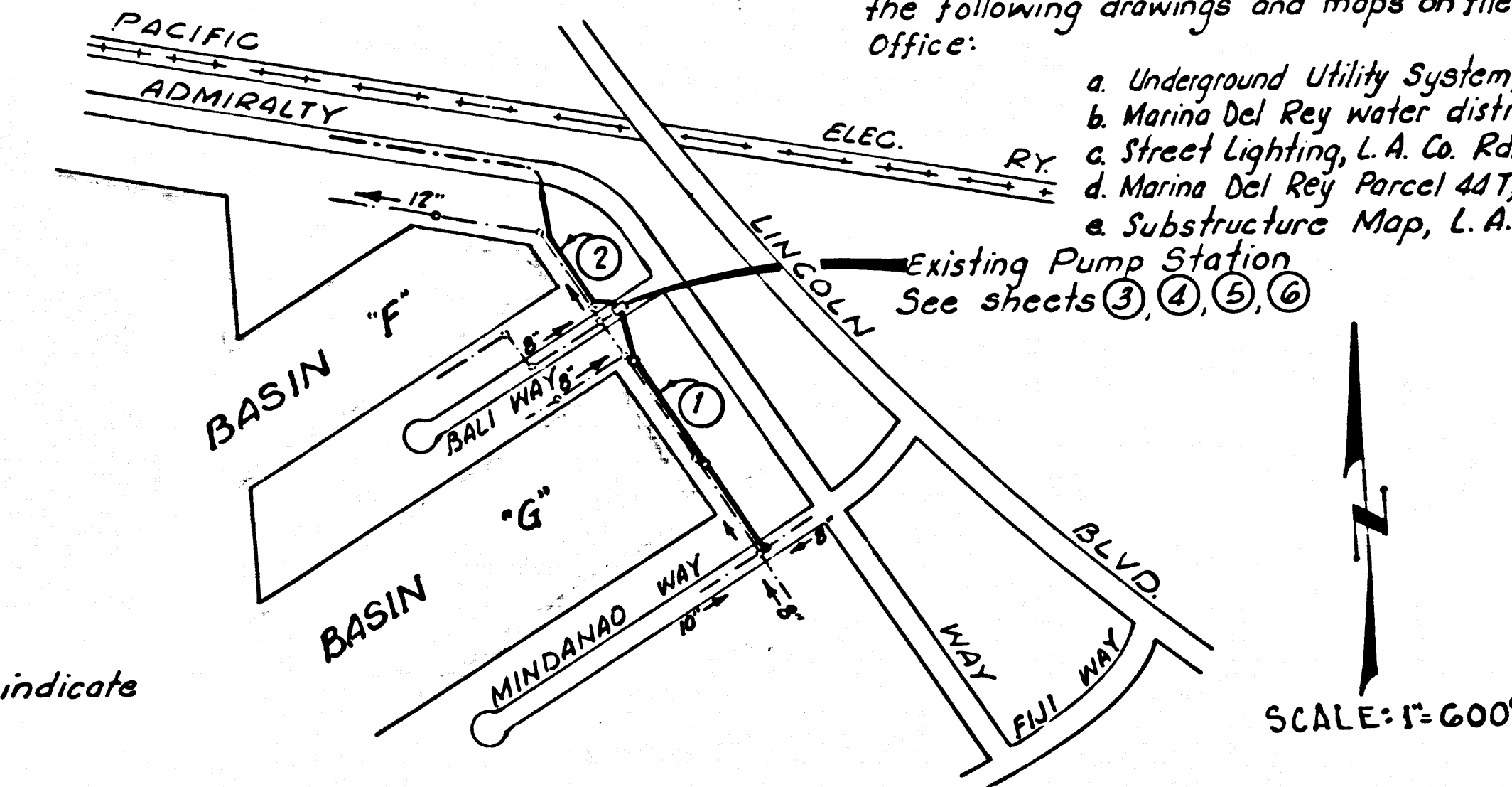
ISSUE NO HOUSE CONNECTION PERMIT TO FORCE MAIN



B.M. S-80 ELEV. 17.102
 235' W'ly from ADMIRALTY Way & N. side of island cb. on BALI Way
 Bt. spk. in cb. near sewer vent pipe.

G. Construction methods for laying sewer pipes: The sewer trench shall be tight sheeted along its entire length, and the Contractor shall take all other precautions required to prevent any damage to adjacent grounds, utilities, or the bulkheads. Not more than 100 feet of trench shall be open at any time. The Contractor shall submit a construction method proposal and schedule to the County Engineer for approval prior to beginning construction.

- NOTES (cont)**
- Cooperation between Contractors on this site is imperative for this project.
 - All landscaping removed or damaged in this project shall be replaced in kind and size.
 - Prior to beginning excavation, the Contractor shall request the utility companies noted herein and the Department of Small Craft Harbors to mark all underground obstructions or utility lines.
 - If, during construction any water line is found to interfere with the construction of this project, the Contractor shall notify the L.A. County Waterworks Div. for relocation of the waterline by others. Water service shall not be interrupted. See addendum #1, C.C. 8499-B.
 - The Contractor shall verify locations of utility and other underground structures prior to bid submittal. Refer to the following drawings and maps on file at the Marina Administration Office:
 - Underground Utility System, Spec. 2215 DD of 1961.
 - Marina Del Rey water distribution system, Spec. C.I.S. 165 of 1961.
 - Street Lighting, L.A. Co. Rd. Dept. Proj. No. 5 of 1962.
 - Marina Del Rey Parcel 44T, Tel. & Elec. conduits.
 - Substructure Map, L.A. Co. Rd. Dept., Marina Del Rey.



INDEX MAP
 SANITARY SEWERS, FORCE MAIN, & PUMP STA. ALTERATIONS
 C. C. 8499-B
 MARINA DEL REY

Note: Figure in circles indicates sheet numbers.

J. N. 0739.80 SHEET 1

CASH CONTRACT NO 8499-B

SANITARY SEWERS,
 FORCE MAIN, AND

PUMP STATION ALTERATIONS
 MARINA DEL REY
 SHEET 1 OF 7 SHEETS

SCALE: AS SHOWN JUNE, 1971

COUNTY OF LOS ANGELES, CALIFORNIA
 HARVEY T. BRANDT COUNTY ENGINEER

APPROVED: *Richard M. Con*
 ASST. DIVISION ENGINEER (DATE) 10-26-71
 DESIGNED: *Victor Adorian*
 REG. C. E. NO. 10442 (DATE) 10-26-71

VICTOR ADORIAN, DIRECTOR
 SEPT. SMALL CRAFT HARBOURS
 APPROVED: *Victor Adorian*
 DATE: 10-26-71

NOTES:
 WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1970 EDITION WITH 1971 SUPPLEMENTS AND COUNTY ENGINEER SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED APRIL 7, 1970 AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.
 THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE 629-4747, EXT. 8151 AT LEAST 24 HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
 GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURB, CENTER LINE OF STREET OR CENTER LINE OF ALLEY ARE SHOWN IN 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.
 ELEVATIONS ARE IN FEET ABOVE DATUM BASED ON MEAN LOWER LOW WATER.
 THIS DRAWING AND THE DATA HEREON ARE HEREBY MADE A PART OF THE SPECIFICATIONS.

LAYOUT	SCANLON, HONDA	JUNE, 1971	CHECKED	ANDERSON	JULY, 1971
TRACED	SCANLON, HONDA	JUNE, 1971	MAINTENANCE	A. B.	W. S. ZS
F. B. 2961			LENNOX		BUILDING DISTRICT NO. 7

GENERAL NOTES:
 REFER TO SECTION 7-10.41 OF STANDARD SPECIFICATIONS REGARDING SAFETY ORDERS.
 ALL MANHOLES SHALL BE EITHER BRICK PER S-3 OR PRECAST CONCRETE PER S-36, EXCEPT AS NOTED.
 "T" OR "T" BRANCHES MAY BE USED FOR CONNECTIONS TO MAIN LINE SEWER, EXCEPT AS NOTED.
 VITRIFIED CLAY PIPE JOINTS SHALL BE TYPE "F", "F", OR "G" PER SECTION 206.2 OF STANDARD SPECIFICATIONS.
 ALL JOINTS BETWEEN CAST IRON PIPE AND VITRIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE "C" OR "D" (WITH BUSHING IF NECESSARY) PER SECTION 206.2 OF STANDARD SPECIFICATIONS.
 SEWER TRENCHES SHALL BE TESTED FOR LEAKAGE PER SECTION 206.3.7 OF STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
 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.
 HOUSE LATERALS SHALL BE CONSTRUCTED WITHIN 12' OF PROPERTY LINE & 6' FROM CURB GRADE OR GRADE OF CENTER LINE OF STREET, EXCEPT AS NOTED.
 INDICATED DEPTH-BELOW-CURB GRADE, OR GRADE OF CENTER LINE OF STREET.
 INDICATED HOUSE LATERAL SHALL BE CONSTRUCTED WITHIN 12' OF HOUSE FRONT-TO-PROPERTY LINE.
 INDICATED "DE" SHALL BE Laid HORIZONTAL AND HOUSE LATERAL SHALL BE CONSTRUCTED WITHIN 12' OF PER FOOT TO PROPERTY LINE.
 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 DEGREES WITH THE MAIN LINE SEWER.
 ALL CONCRETE CROSS GUTTERS, CURBS, GUTTERS, PAYMENTS, AND DRIVEWAYS SHALL BE TUNNELED OR JACKED PER LOS ANGELES COUNTY ROAD DEPARTMENT REQUIREMENTS.

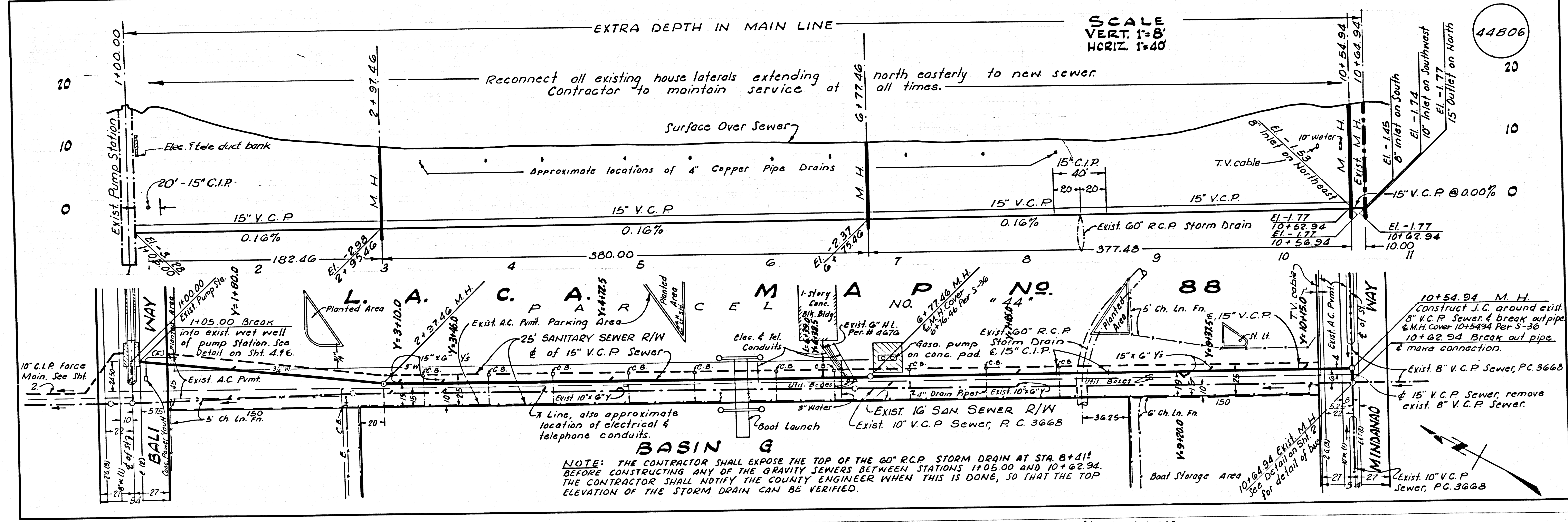
STREET RESURFACING:
 STREET RESURFACING METHODS SHALL BE IN ACCORDANCE WITH SECTION 206.1.12 OF THE SPECIAL PROVISIONS.
 FINAL STREET RESURFACING IN ANY LOCATION SHALL BE COMPLETED WITHIN 10 DAYS AFTER COMPLETION OF TRENCH BACKFILL.
 THE RESURFACING AREA SHALL BE SEALED WITH 1/2" EMULSION AND 1/2" HIGH CHESSED ROCK.
 RESURFACING SCHEDULE RESURFACE TRENCH WITHIN PAVED AREA WITH TYPE 1 ASPHALTIC CONCRETE 3 INCHES IN THICKNESS ON 6 INCHES OF AGGREGATE BASE MATERIALS, EXCEPT AS NOTED BELOW.

SHEET NO.	STREET	STATION LIMITS	TYPE OF RESURFACING
1.	R/W thru parcel 4A	1+30 10+27.94	2" A.C. on 3" agg base
2.	R/W thru parcel U	1+00 5+83	2" A.C. on 3" agg base

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

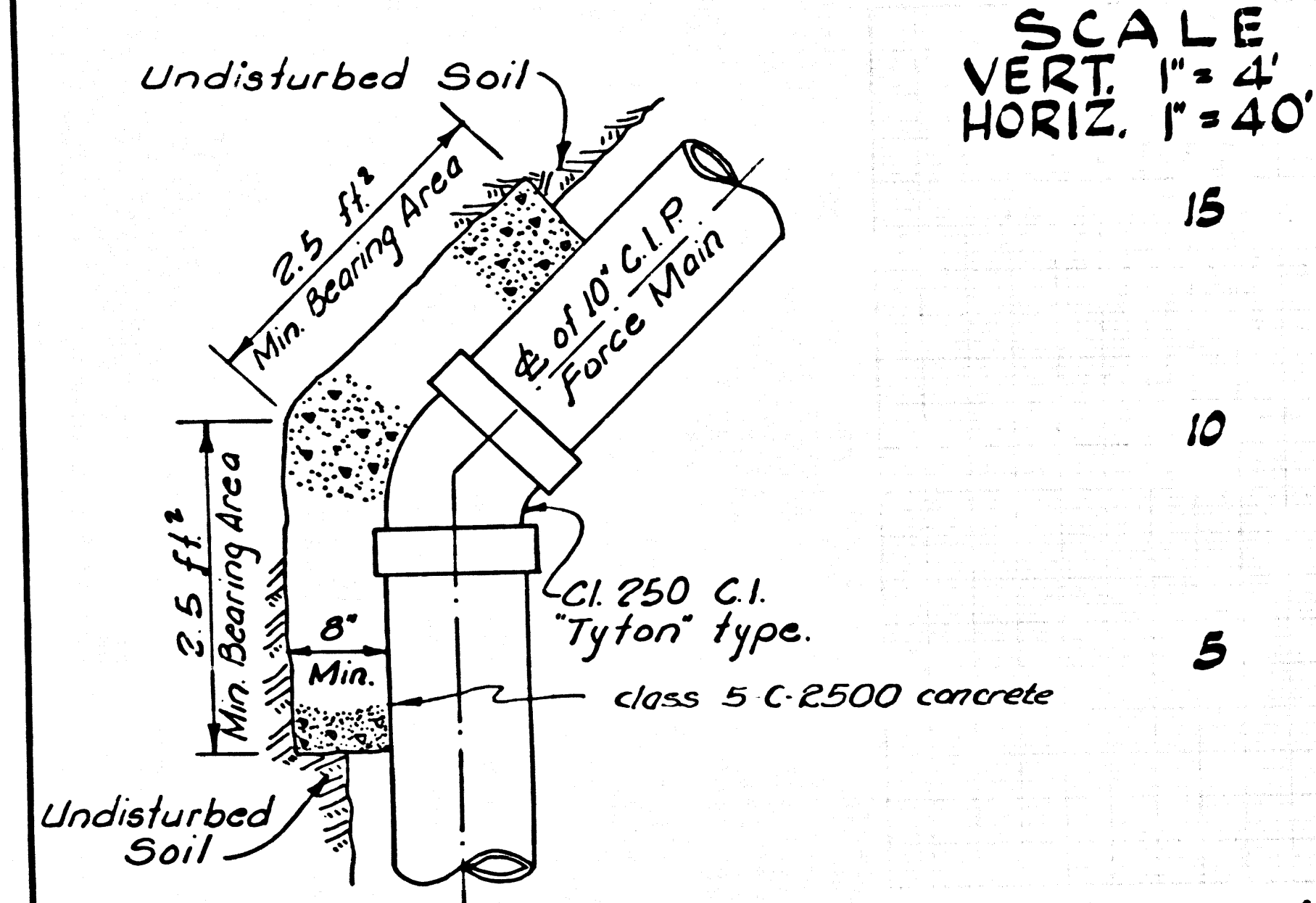
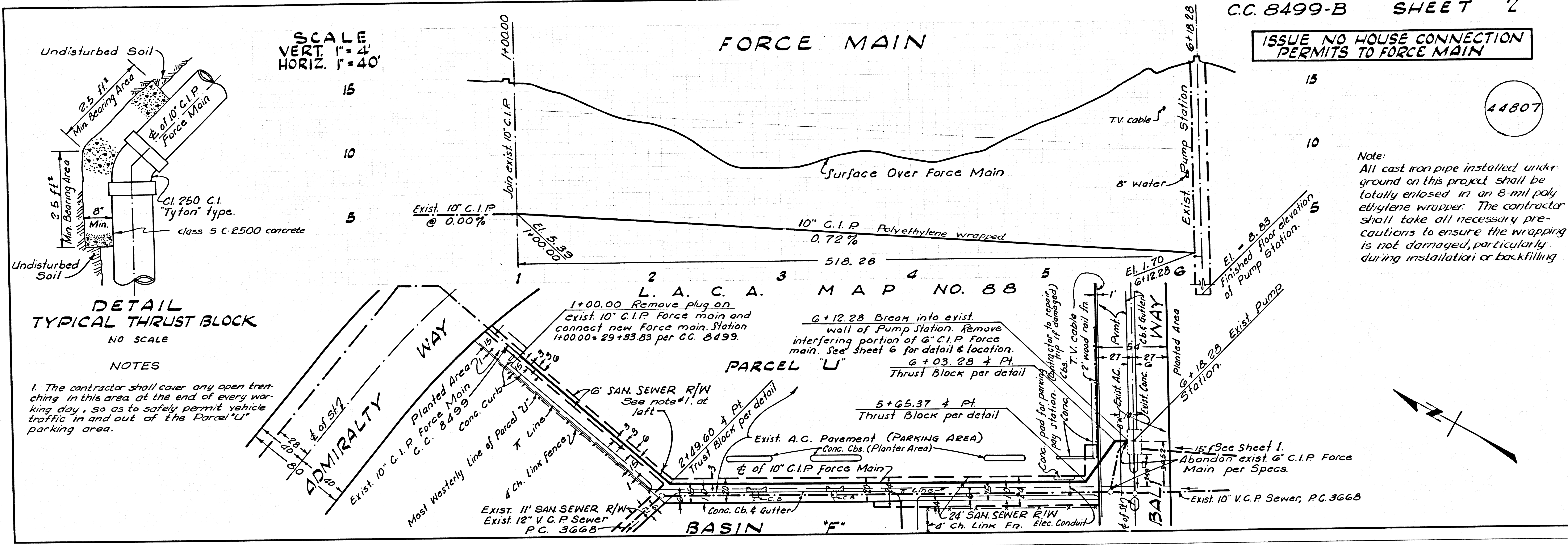
LEGEND	S-1	CRACKING AND ENCASEMENT	S-32
MINIMUM PUBLIC SAFETY REQUIREMENTS	S-2	STANDARD WIRE ON TREE SUPPORT	S-36
BRICK MANHOLE	S-3	ALLOWABLE TRENCH WIDTHS	S-38
MANHOLE STEP	S-17	LOCKING MANHOLE FRAME AND COVER	S-35
BEDDING FOR SEWER PIPE	S-21	NON REINFORCED PRECAST CONCRETE MANHOLE	S-36
SPECIAL SUPPORT AND PROTECTION	S-22		

- THE CONTRACTOR SHALL OBTAIN THE FOLLOWING PERMITS PRIOR TO CONSTRUCTION:
- LOS ANGELES COUNTY ROAD DEPARTMENT (SEE EXEMPT)
- THE UNDERGROUND UTILITY COMPANIES WITHIN THE LIMITS OF THIS PROJECT ARE AS FOLLOWS:
- L.A. COUNTY WATERWORKS (W)
 - SOUTHERN CALIF. EDISON CO. (E)
 - SOUTHERN COUNTIES GAS CO. (G)
 - GENERAL TELEPHONE CO. (T)



NOTE: THE CONTRACTOR SHALL EXPOSE THE TOP OF THE 60" R.C.P. STORM DRAIN AT STA 8+41 BEFORE CONSTRUCTING ANY OF THE GRAVITY SEWERS BETWEEN STATIONS 1+05.00 AND 10+62.94. THE CONTRACTOR SHALL NOTIFY THE COUNTY ENGINEER WHEN THIS IS DONE, SO THAT THE TOP ELEVATION OF THE STORM DRAIN CAN BE VERIFIED.

F. B. 2961 (S - Pgs. 201, 205)
 (T - Pgs. 222-226)
 (X - Sect. Pgs. 260-264)



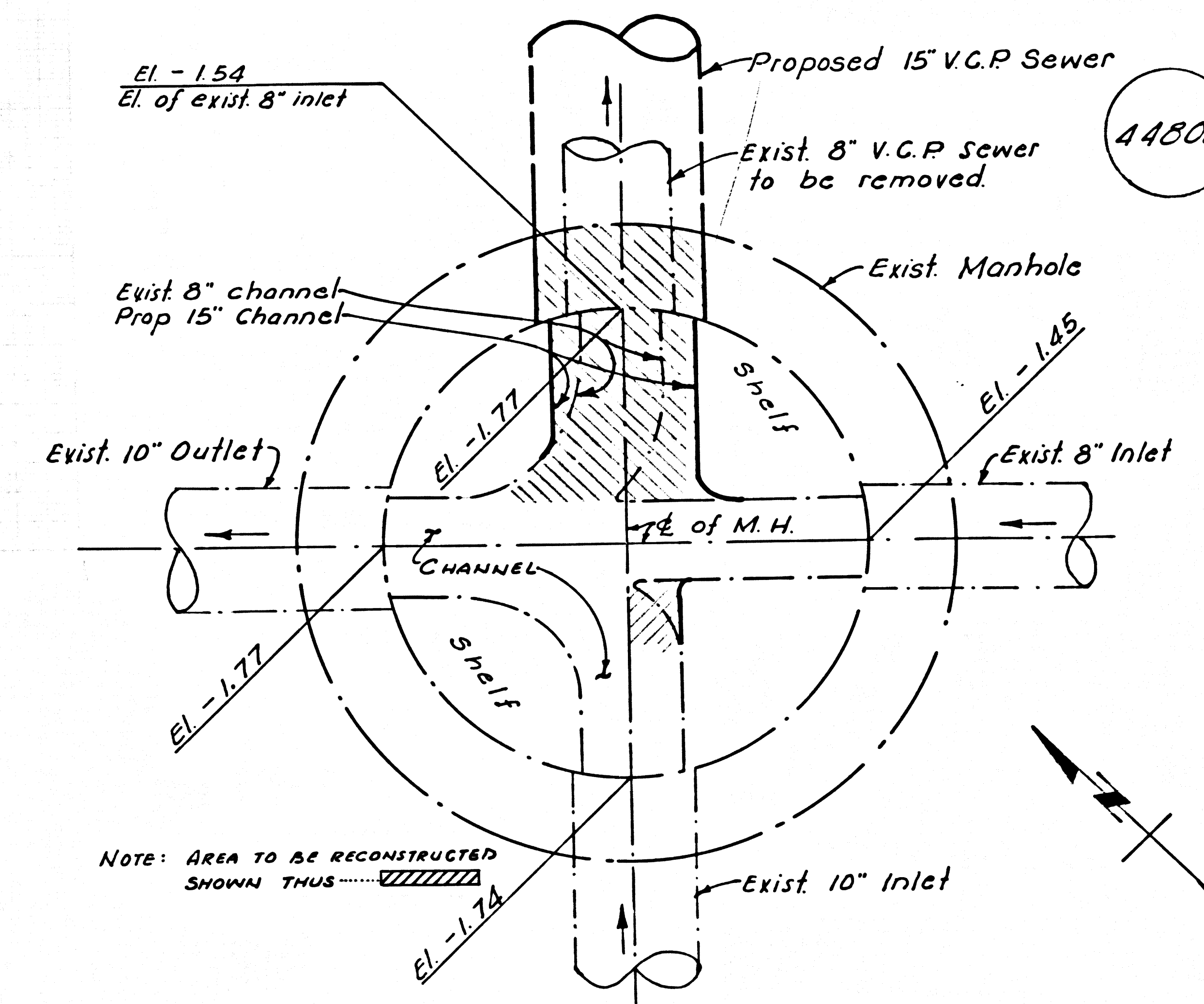
DETAIL TYPICAL THRUST BLOCK
NO SCALE

NOTES
1. The contractor shall cover any open trenching in this area at the end of every working day, so as to safely permit vehicle traffic in and out of the Parcel 'U' parking area.

ISSUE NO HOUSE CONNECTION PERMITS TO FORCE MAIN

44807

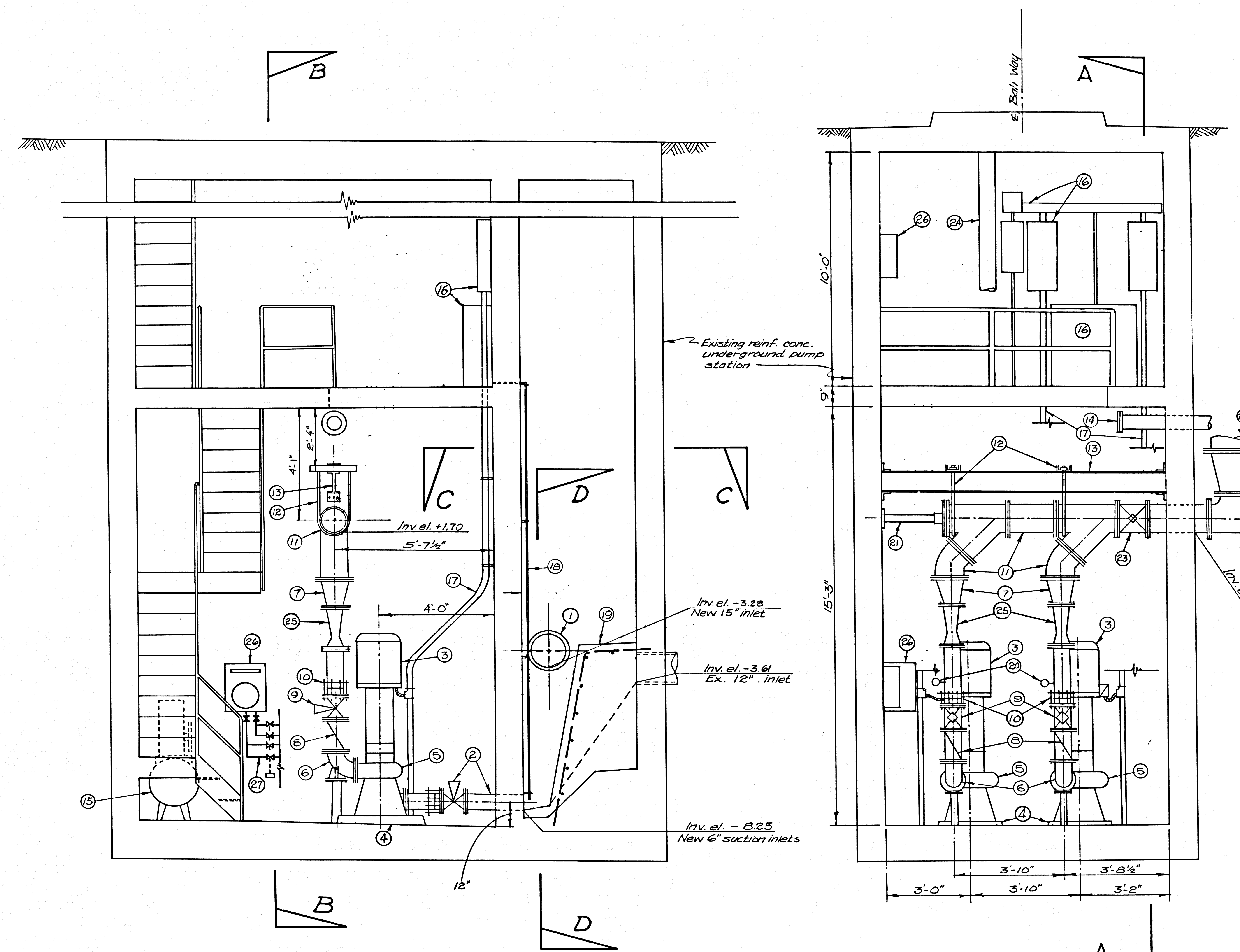
Note:
All cast iron pipe installed underground on this project shall be totally enclosed in an 8-mil polyethylene wrapper. The contractor shall take all necessary precautions to ensure the wrapping is not damaged, particularly during installation or backfilling.



DETAIL OF M. H. BASE AT STA. 10+64.94
SCALE: 1" = 1'-0"

NOTE: AREA TO BE RECONSTRUCTED SHOWN THUS [hatched pattern]

44808



NOTES

- "Ex." = Existing
1. Construct new 15" C.I.P. inlet. See detail, sheet 4
 2. Remove ex. 4" suction piping, valves, shafting, etc., & install 6" fig. 1532 Ballcentric valves, & stule 127 Dresser adapter couplings. Form new pipe opening per detail, sheet 4, and seal ex. opening with grout.
 3. Remove ex. motors & intermediate shafting & install new 30 hp, 1750 RPM motors.
 4. Construct mounting pad; height as required.
 5. Remove ex. 4" pump and install 6x11M Wemco EVP pump, rated at 960 GPM / 46' TDH. See tech. prov.
 6. Remove ex. 4" elbow & install 6" base elbow w/ 3" sch. 80 galv. stl. pipe support. See mounting detail, sheet 4.
 7. Install 6x10" c.i. conc. reducer
 8. Replace ex. 4" check valve w/ 6" c.i. swing check w/ outside lever & weight.
 9. Replace ex. 4" valve with 6" fig. 1532 Ballcentric valves.
 10. Install 6" stule 127, Dresser coupling, locking type.
 11. Install 10" c.i. 45° elbows, wye, and force main, as shown.
 12. Install pipe supports. Fabricate from 3/4" sch. 40 galv. stl. bar, per detail, sheet 4.
 13. Relocate ex. 8" x 5 1/2" (17" dia) WF. Mount per detail, sheet 4.
 14. Install blind flange & abandon remaining downstream force main. Remove all upstream portions of 4" force main header, risers, fittings, etc. (not shown here).
 15. Install 5 hp / 20 cfm / 30 psi compressor. See technical provisions. Install under stairway.
 16. Install electrical & liquid level control panel. See "Electrical and Control Alterations", sheet 5.
 17. Install new 1 1/2" electrical conduit. (Galv. iron).
 18. Install new 1/2" sch. 80 p.v.c. bubble tube (for lig. level control system). Mount w/ galv. steel brackets, 5' o.c. & at bottom.
 19. Form new wet wall channel - see sheet 4.
 20. Install pressure gauge, 0-150 psi.
 21. Construct force main thrust support, see det., sheet 4.
 22. Air chamber, see details, sheet 5
 23. Install 10" fig. 1532 Ballcentric valve.
 24. Existing 6" transite air vent.
 25. Install 6" C.I. flanged "Universal" design Venturi tube, B.I.F. Co. Series 180 with static inlet tap, or approved equal.
 26. Install indicating-recording flow meter, see details, sheet 7.
 27. Install solenoid valves and metering lines, etc. see schematic & details, sheet 7.

SECTION A-A
Scale: 1/2" = 1'-0"

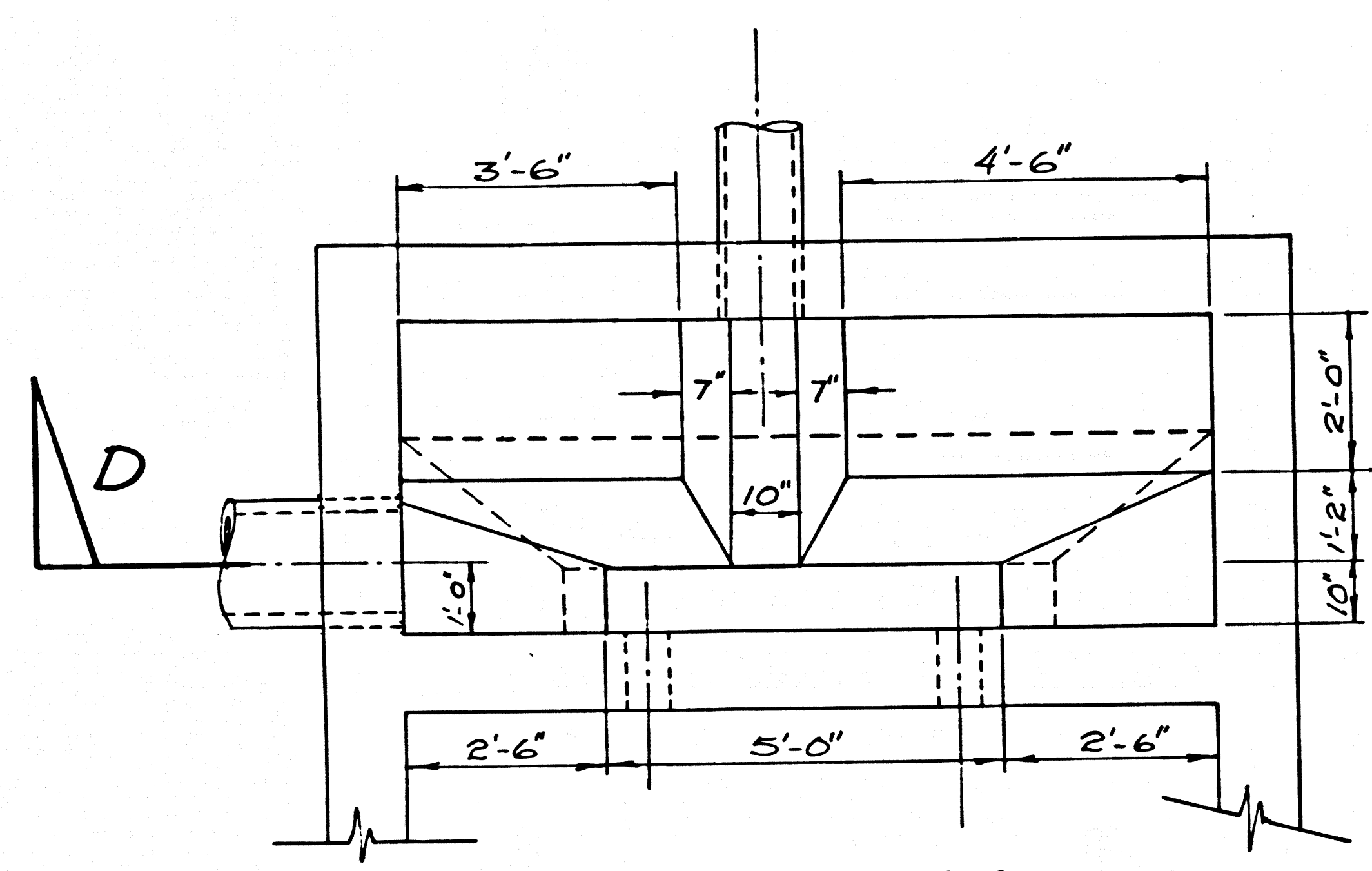
SECTION B-B
Scale: 1/2" = 1'-0"

GENERAL NOTES

1. All dry well piping and fittings shall be flanged, cast iron, with class 150 pipe & class 125 flanges.
2. Connect new pumps to existing pump vent lines
3. Compressed air supply lines: See schematic & details, sheet 5. Exact location of piping runs to be determined in field.
4. Refer to PC 5846, Marina Del Rey Sewage Pump Station, plans for existing mechanical layout & equipment details.
5. **Temporary Service:** The contractor must maintain at all times the flow of sewage past this station in a manner acceptable to the County Engineer. The existing bypass line may be used for this purpose. The contractor shall furnish and operate all pumps and other equipment needed to provide this service. **PUMPING IS REQUIRED.** Letting the manhole fill up and overflow by gravity is not acceptable.
6. Dewatering of excavations will be necessary.

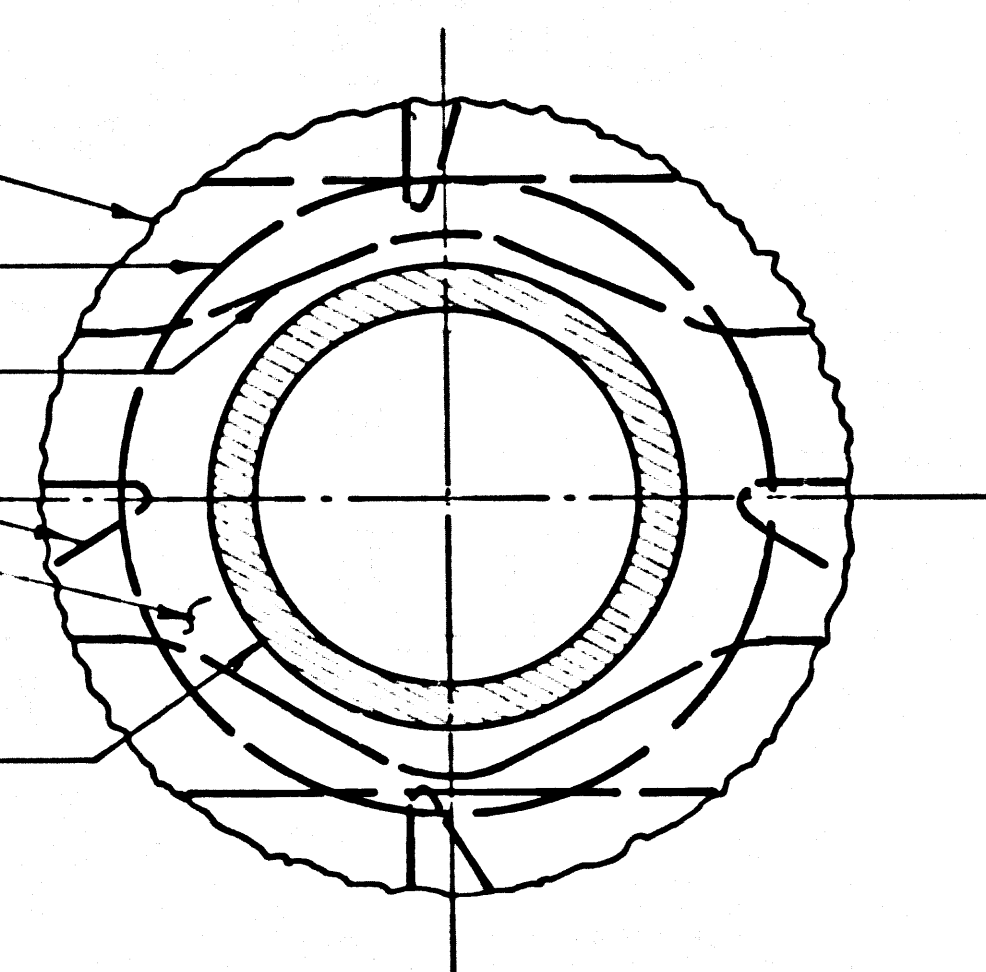
44809

ALTERATIONS TO PUMP STATION, C.C. 8499-B		
MARINA DEL REY		
MECHANICAL ALTERATIONS		
DESIGNED: <i>[Signature]</i>	DRAWN: Scanlon	CHECKED: Anderson
DATE: 10-26-71 FILE # 10443	SCALE: As noted above	SHEET 3 OF 7 SHEETS

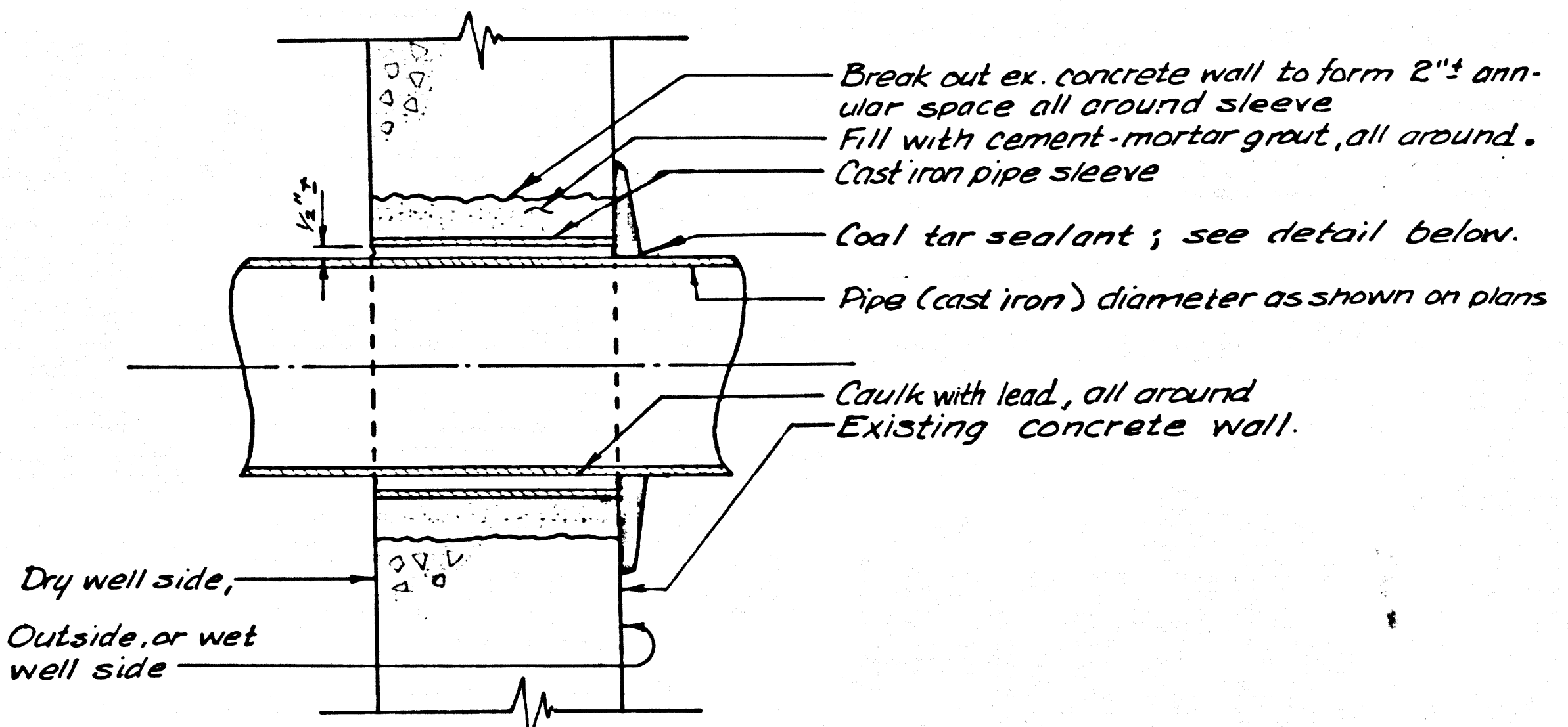


SECTION C-C

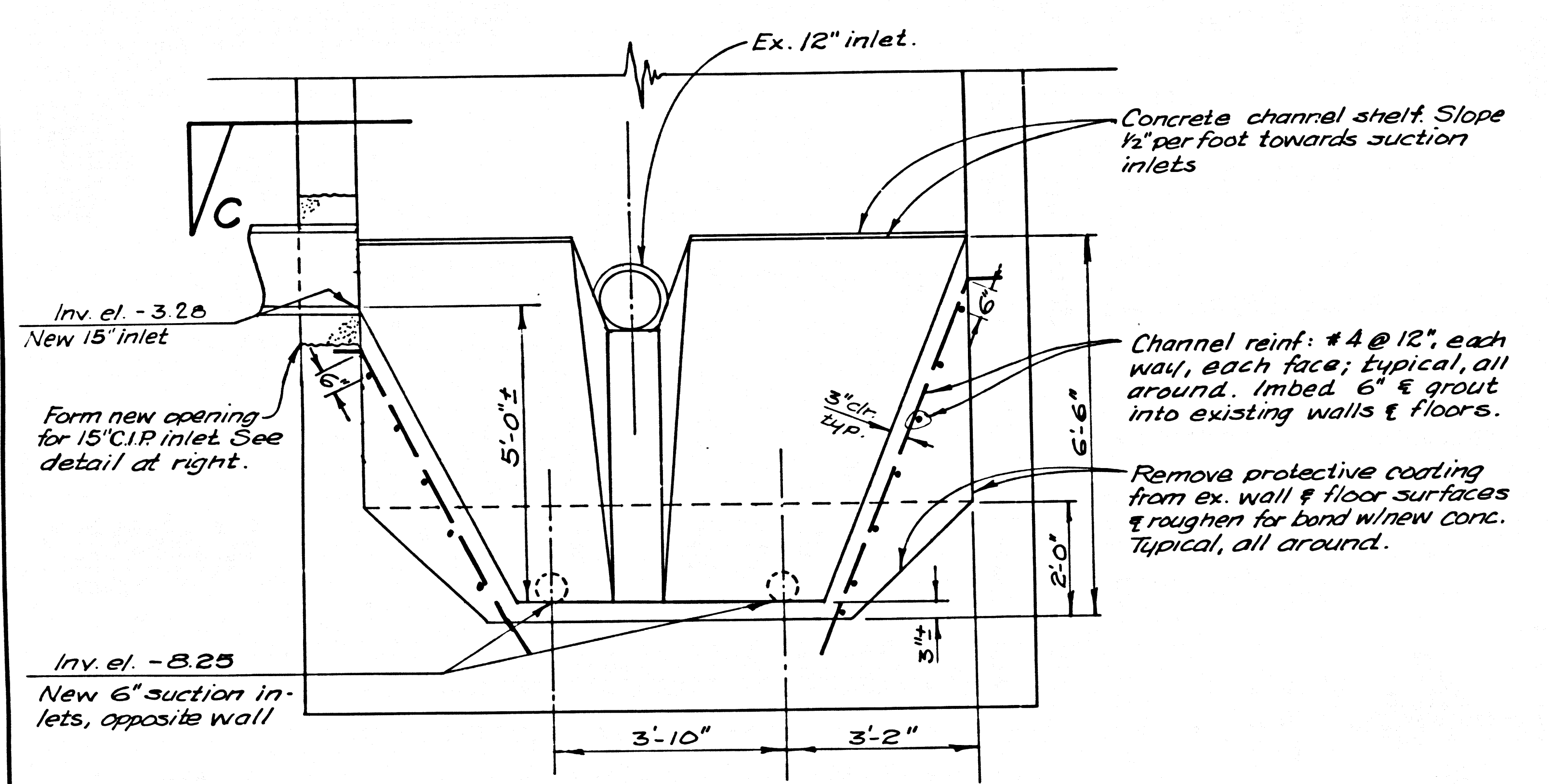
Break out ex. concrete wall to form 8" annular area around pipe.
 Install continuous #7 hoops, 1 ea. face.
 Bend ex. steel to go around pipe.
 Steel that cannot be bent around pipe to be cut & bent around hoop.
 Fill with cement-mortar grout.
 Ex. reinf. steel:
 Horiz.: #7 @ 12", ea. face
 Vert.: #4 @ 12", ea. face
 15" C.I.P. inlet



15" VCP INLET CONN. DETAIL
 No Scale



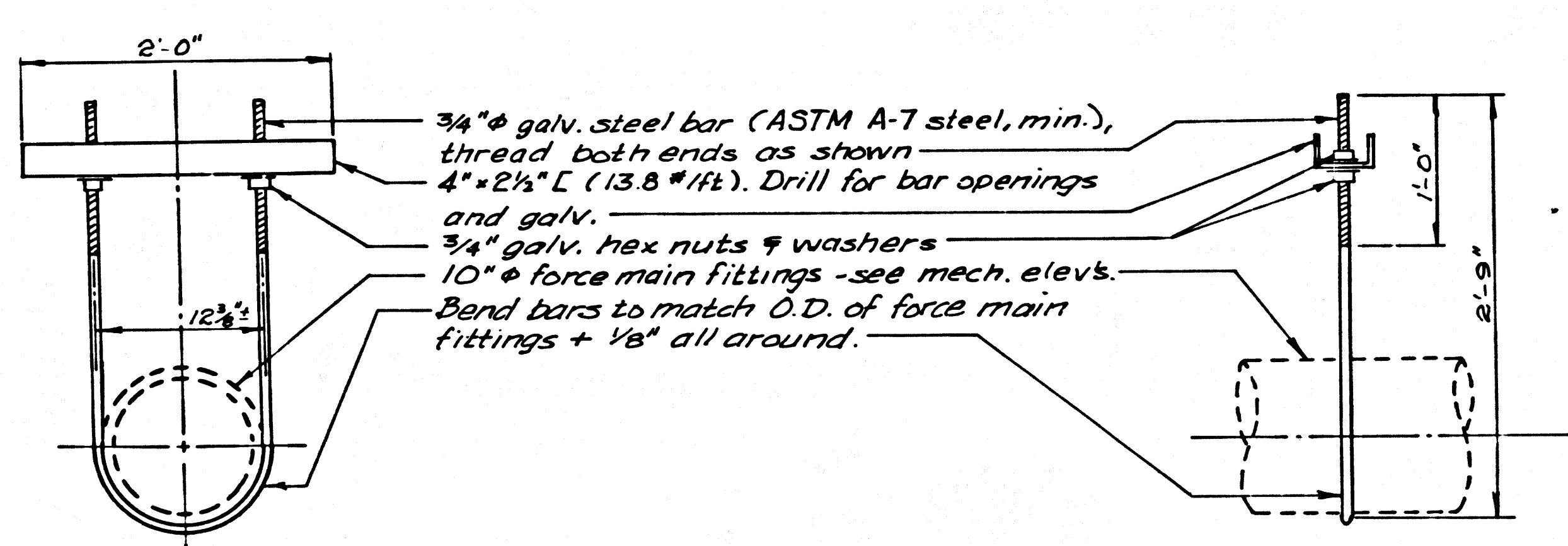
TYPICAL PIPE SLEEVE DETAIL THRU WALL
 Use for pump suction pipes & force main outlet. (No scale.)



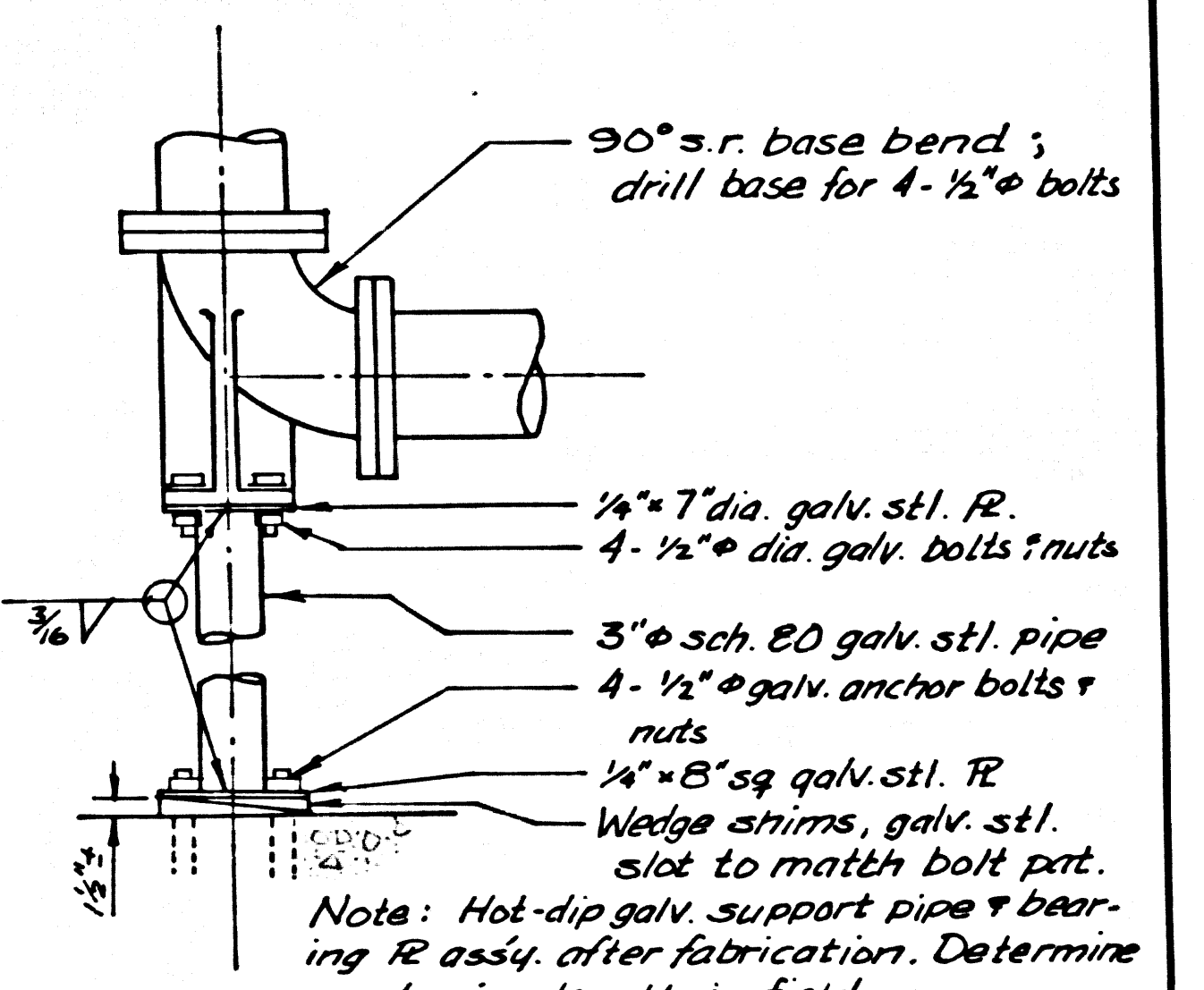
SECTIONAL VIEWS, WET WELL CHANNELS
 Scale: 1/2" = 1'-0"

NOTES:

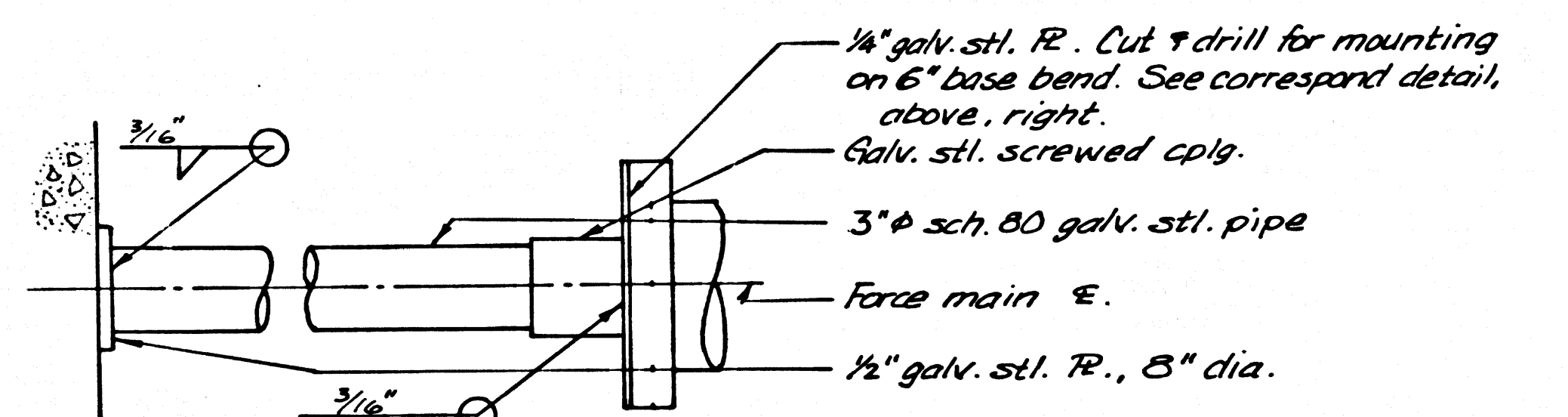
- All concrete used on this job shall have a minimum 28-day strength of 3000 psi. Reinforcing steel shall be intermediate grade deformed bars.
- All concrete surfaces within the wet well shall be coated with a prime coat and two finish coats of the Kopper's Bitumastic No. 300-M coal tar epoxy system. All work to be in strict conformance to manufacturers recommendations and applicable sections of the Technical Provisions. The prime coat shall be a 2:1 mixture of 300-M and Koppers thinner #2000 applied at 200 sq ft/gal. The first finish coat shall be applied within 24 hrs. of the prime coat. Each finish coat shall be undiluted Bitumastic #300-M at 100 sq ft/gal. Where Bitumastic No. 50 is to be applied to concrete surface directly, apply first a prime coat of Bitumastic concrete penetrant. New concrete surfaces on outside of structure, or those whose waterproofing coating is removed or damaged during construction, shall receive the same protective coating as above.
- Before painting wet well surfaces, all loose or damaged surface concrete shall be removed, and all pits deeper than 3/4" filled with an approved epoxy grout. Refer to Technical Provisions. The grout shall be "Inertol Pit-Fill" or an approved equal.



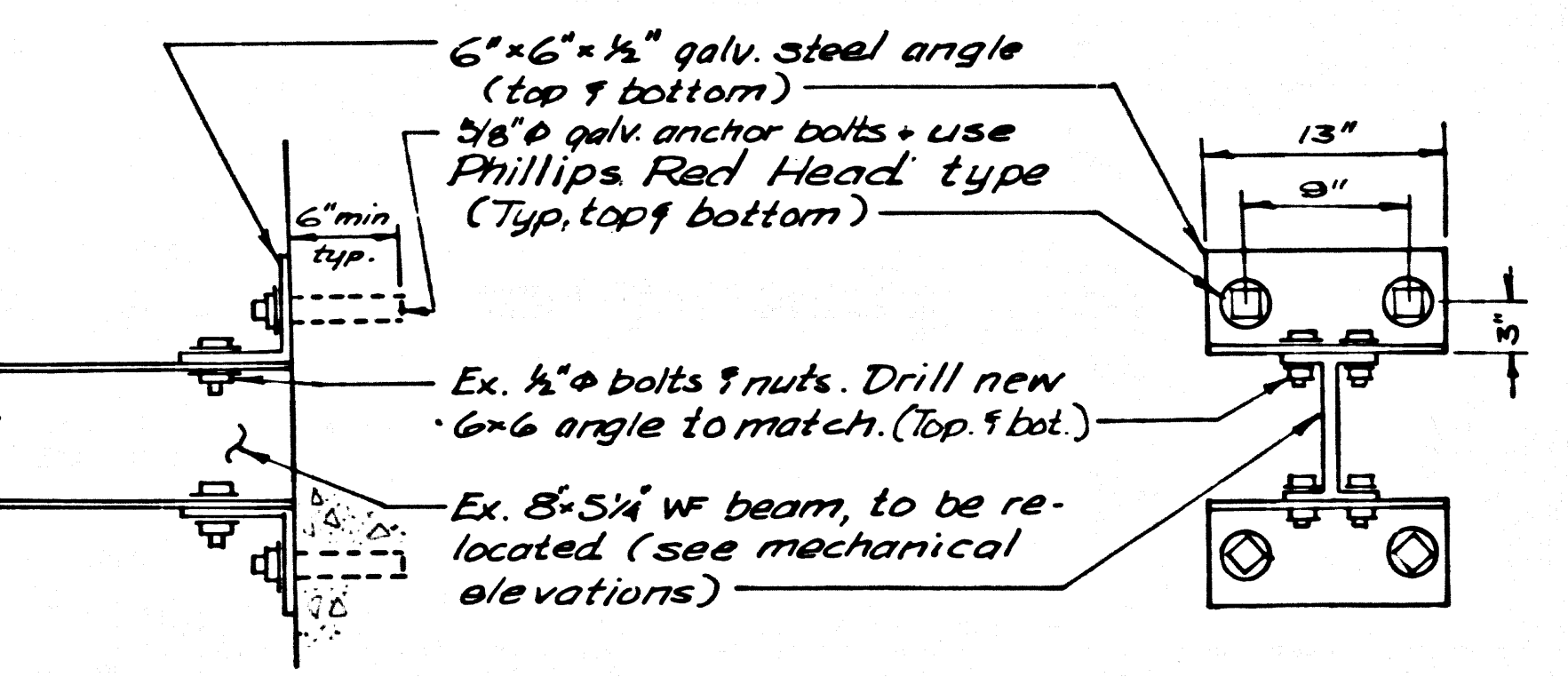
TYPICAL FORCE MAIN PIPE SUPPORT DETAIL (2 REQ'D)
 Scale: 1" = 1'-0"



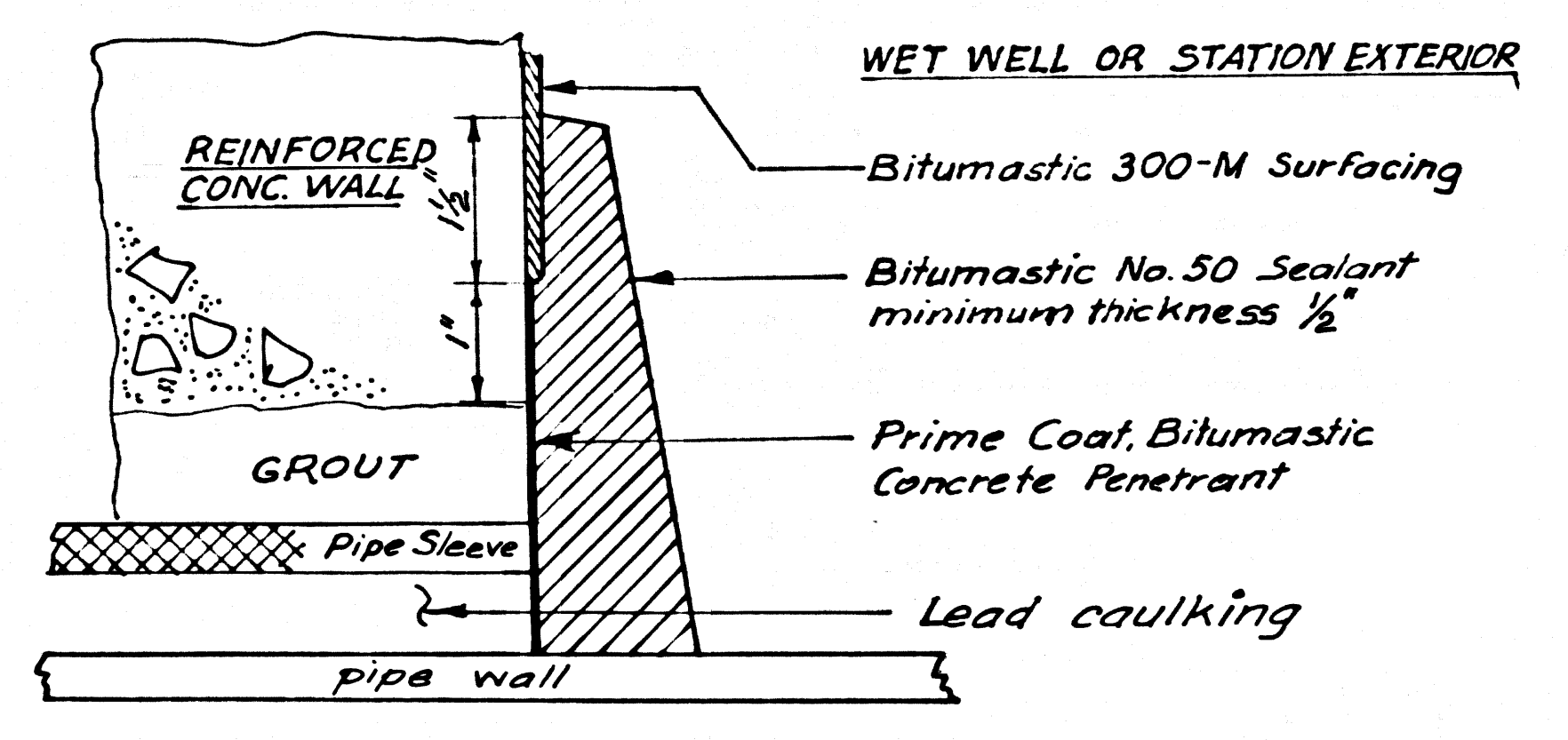
TYPICAL BASE BEND SUPPORT DETAIL (2 REQ'D)
 No Scale



FORCE MAIN THRUST SUPPORT DETAIL
 No Scale



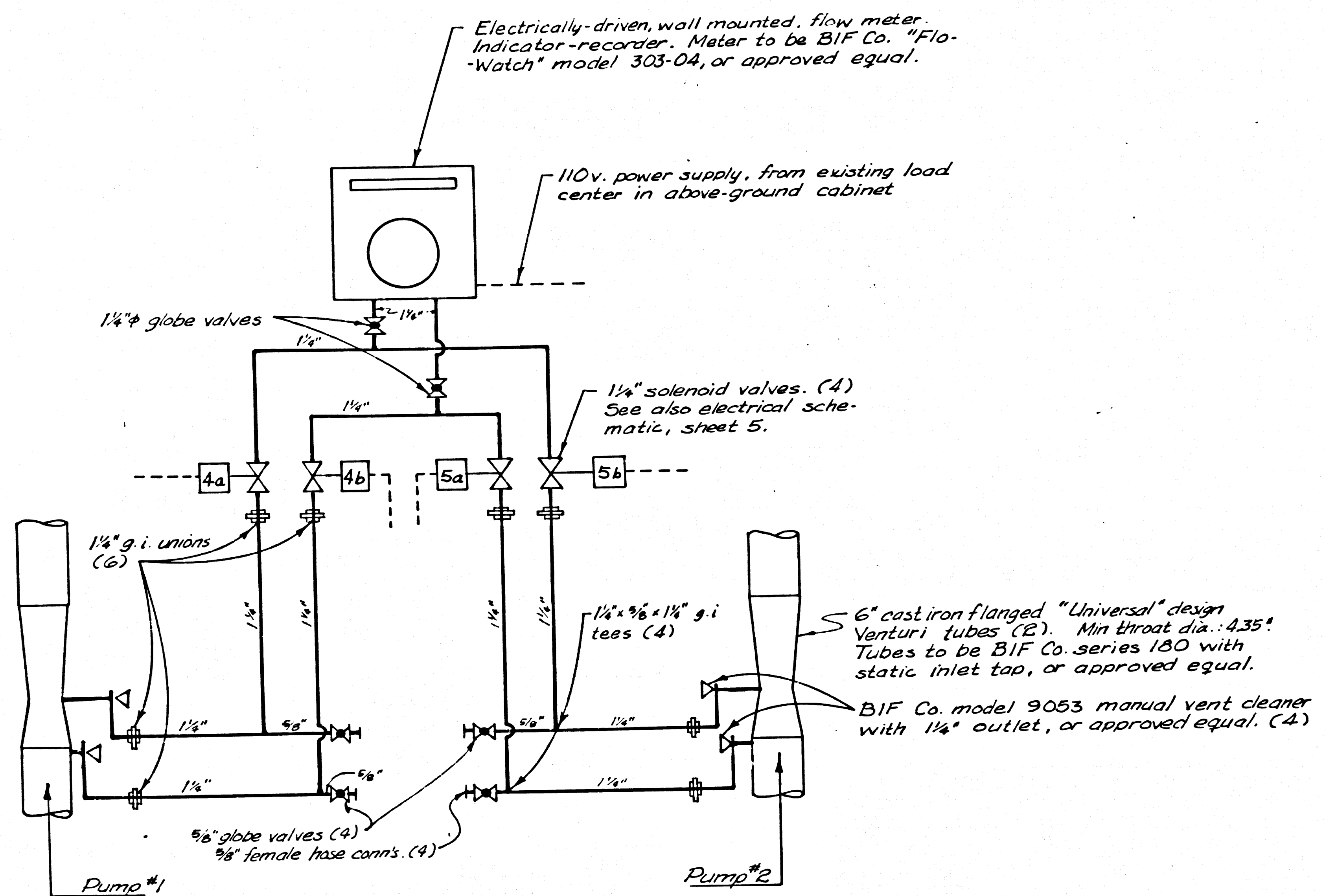
PIPE SUPPORT BEAM END CONNECTION
 TYPICAL - BOTH ENDS
 No Scale



TYPICAL PIPE SEALING DETAIL
 Apply all around exterior of Pipe
 No Scale

ALTERATIONS TO PUMP STATION, C.C. 8499-B MARINA DEL REY WET WELL CHANNELS, MISC'L. DETAILS		
DESIGNED: <i>[Signature]</i>	DRAWN: Scanlan	CHECKED: ANDERSON
DATE: 10-26-77 RRE#10443	SCALE: As noted above	SHEET 4 OF 7 SHEETS

44810



FLOW METERING SYSTEM SCHEMATIC

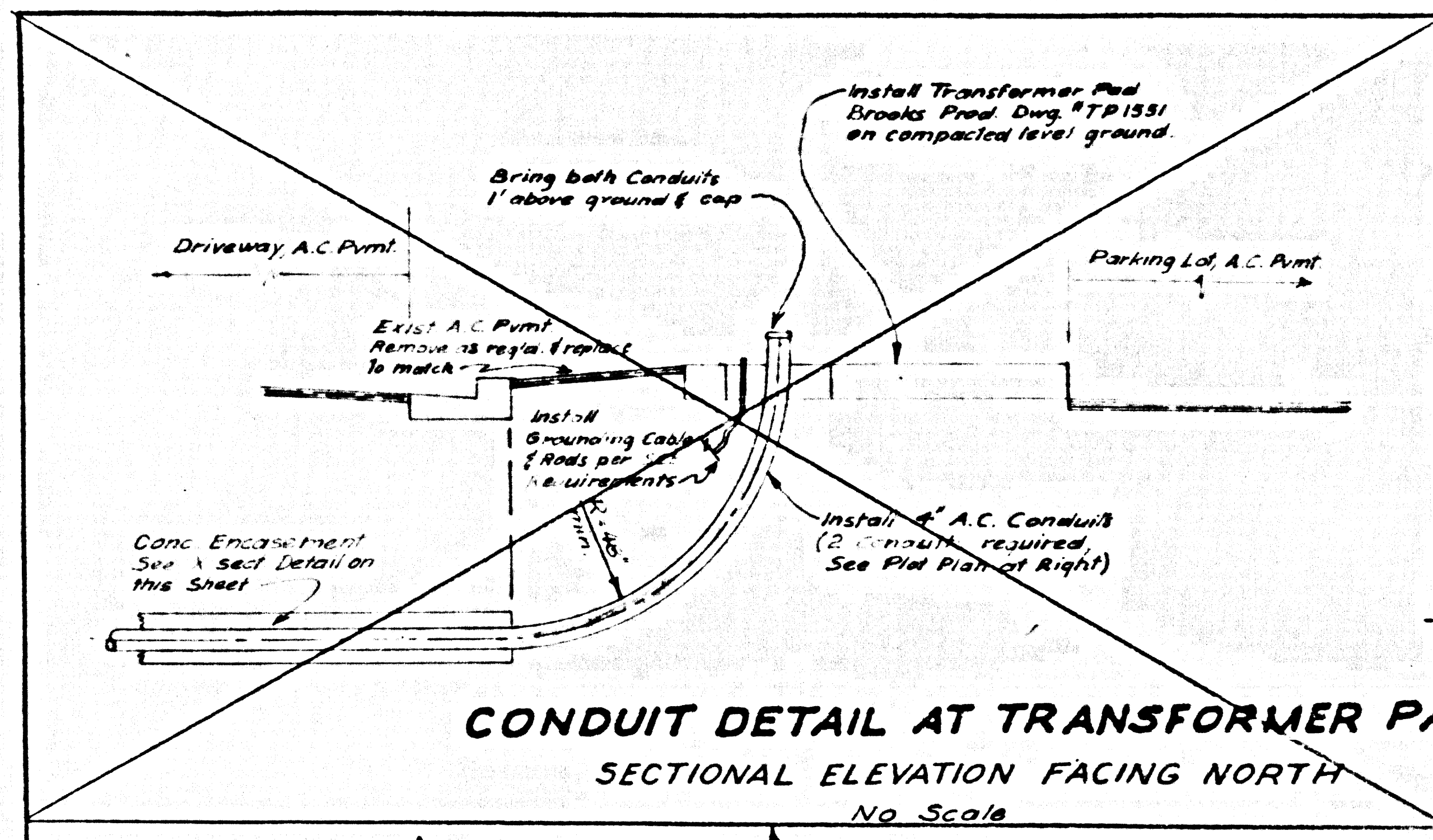
Not to scale
See also "Technical Provisions"

NOTES

1. Operation: The solenoid valves shall be installed & wired so that when pump #1 is on, valves 4a & 4b shall be open, and valves 5a & 5b closed. When pump #2 is on, valves 5a & 5b shall be open, and valves 4a & 4b closed.
2. The meter piping and valves shown schematically above shall be installed so that all of it is below the level of the Venturi tubes. Exact location of all meter piping & valves shall be determined in the field, subject to the approval of the County Engineer.
3. The contractor shall furnish 2-6" C.I. flanged spools of the same length as the Venturi tubes.
4. All meter system piping shall be galvanized, and of the diameters indicated above.

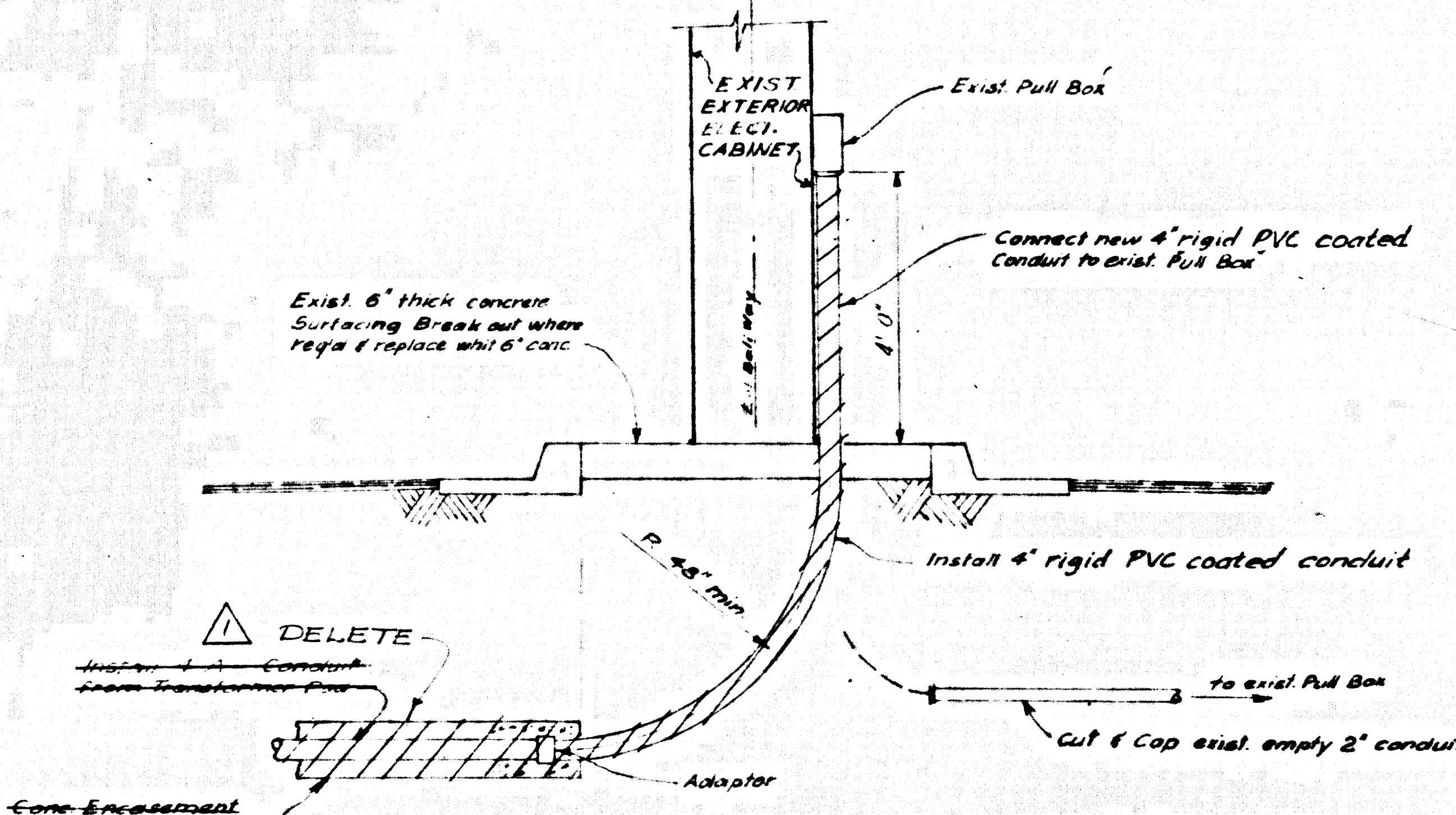
44813

ALTERATIONS TO PUMP STATION, C.C.8499-B		
MARINA DEL REY		
FLOW METERING		
DESIGNED:	DRAWN: SCANLON	CHECKED: ANDERSON
DATE: 10-26-77 RCS #10448	SCALE: As noted	SHEET 7 OF 7 SHEETS

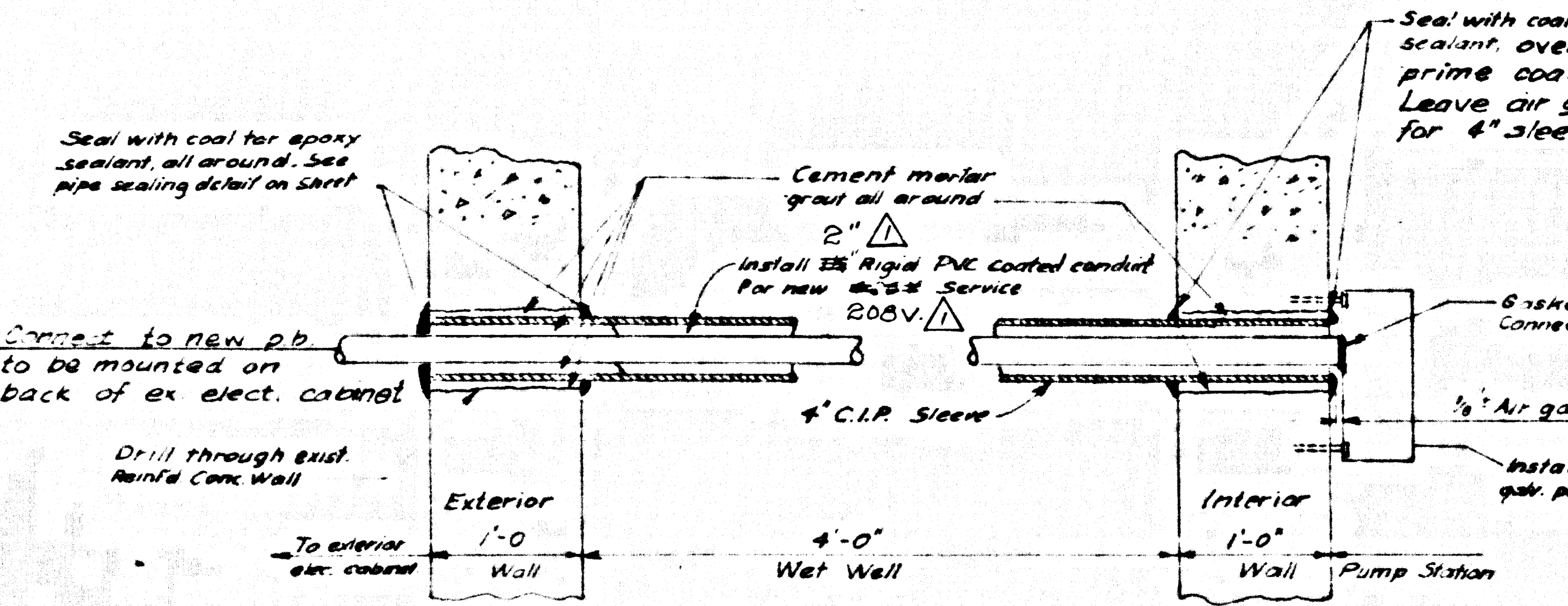


CONDUIT DETAIL AT TRANSFORMER PAD
SECTIONAL ELEVATION FACING NORTH
No Scale

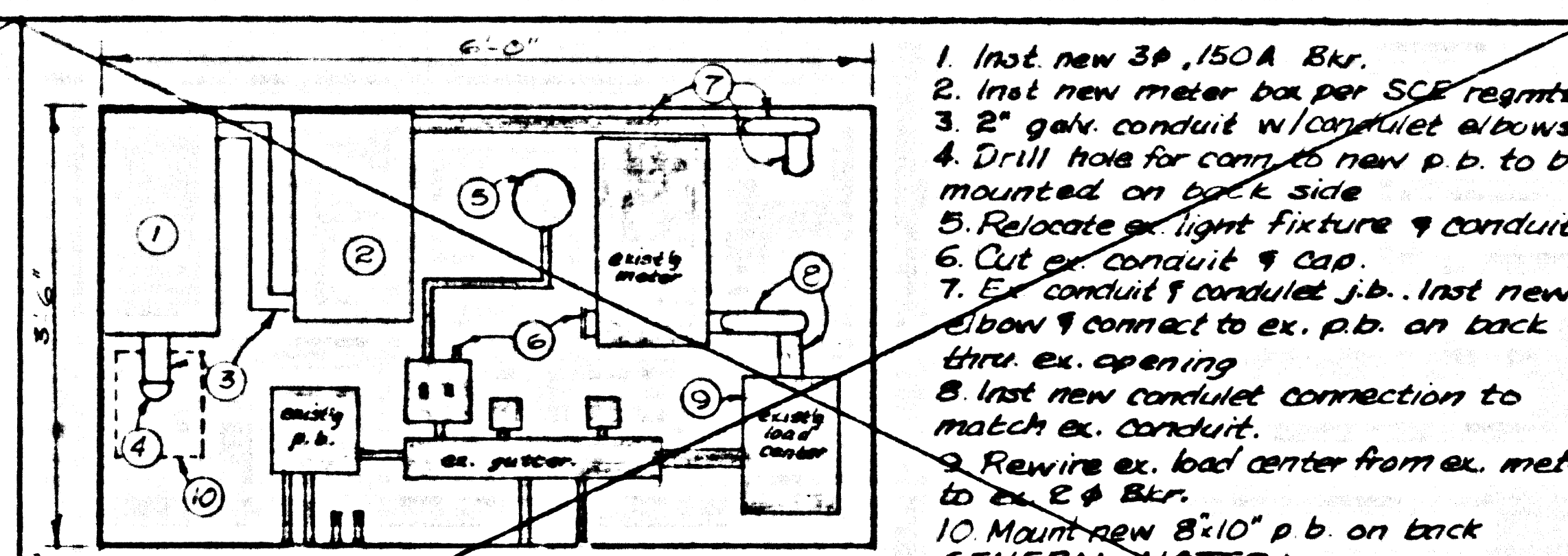
△ DELETE



SECONDARY CONDUIT CONNECTION DETAIL
SECTIONAL ELEVATION FACING EAST
No Scale



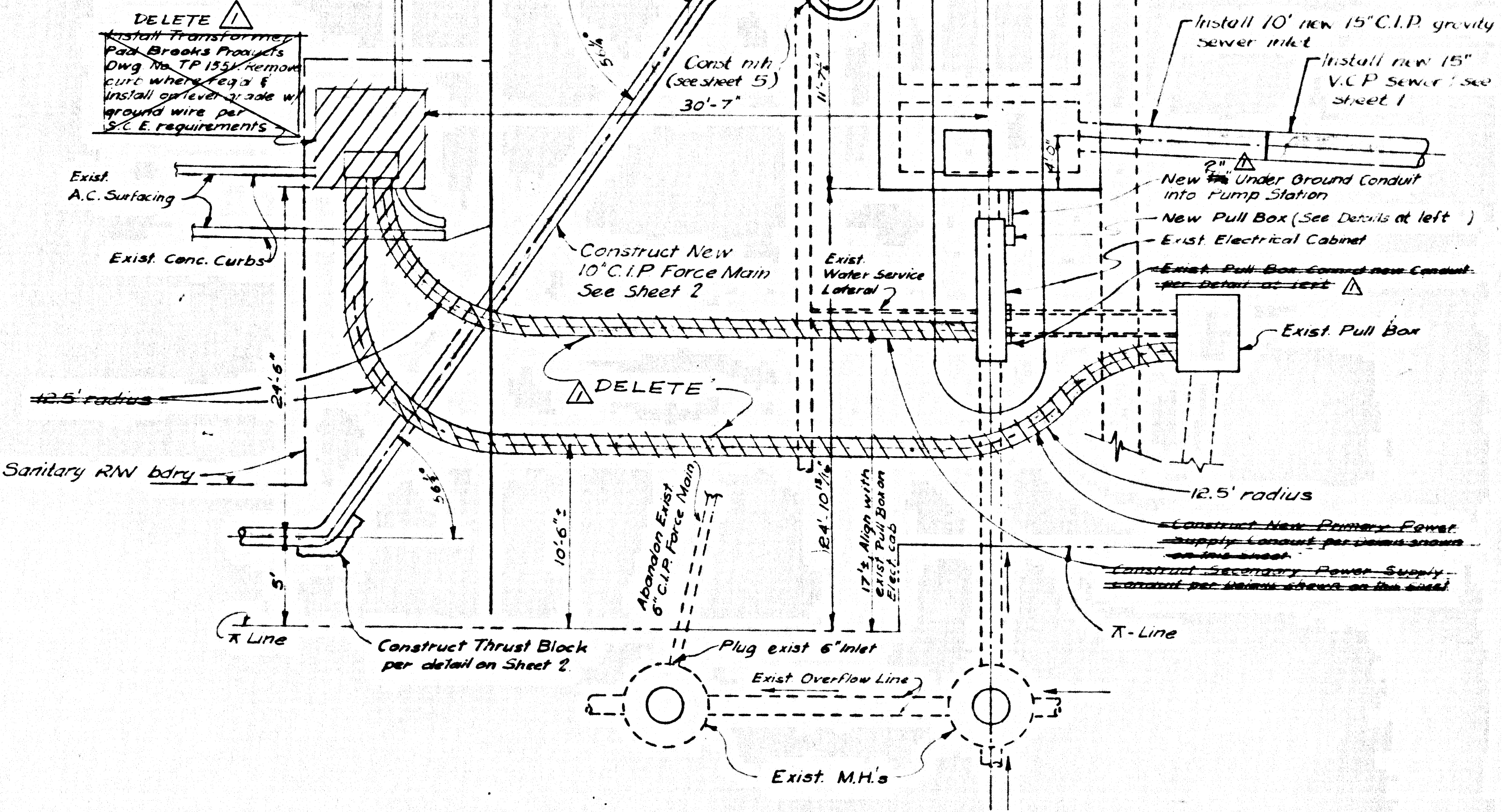
CONDUIT SLEEVE THROUGH WET WELL DETAIL
No Scale



MAIN BREAKER & METER INSTALLATION FOR NEW 480 V. SERVICE IN EXISTING ELECTRICAL CABINET
Scale: 3/4" = 1'-0"

△ REVISED ~ SEE SHEET X-1

1. Inst. new 3P, 150A Brk.
 2. Inst. new meter box per SCE regmts.
 3. 2" galv. conduit w/ conduit elbows
 4. Drill hole for conn. to new p.b. to be mounted on back side
 5. Relocate ex. light fixture & conduit
 6. Cut ex. conduit @ Cap.
 7. Ex. conduit & conduit j.b. Inst. new elbow & connect to ex. p.b. on back thru. ex. opening
 8. Inst. new conduit connection to match ex. conduit.
 9. Rewire ex. load center from ex. meter to ex. 2# Brk.
 10. Mount new 8" x 10" p.b. on back
- GENERAL NOTES:**
 a. Contractor to verify all dimensions
 b. Ex. equipment shown as ~~shown~~
 shall remain in cabinet. Contractor shall remove all other equipment and dispose of it as specified.

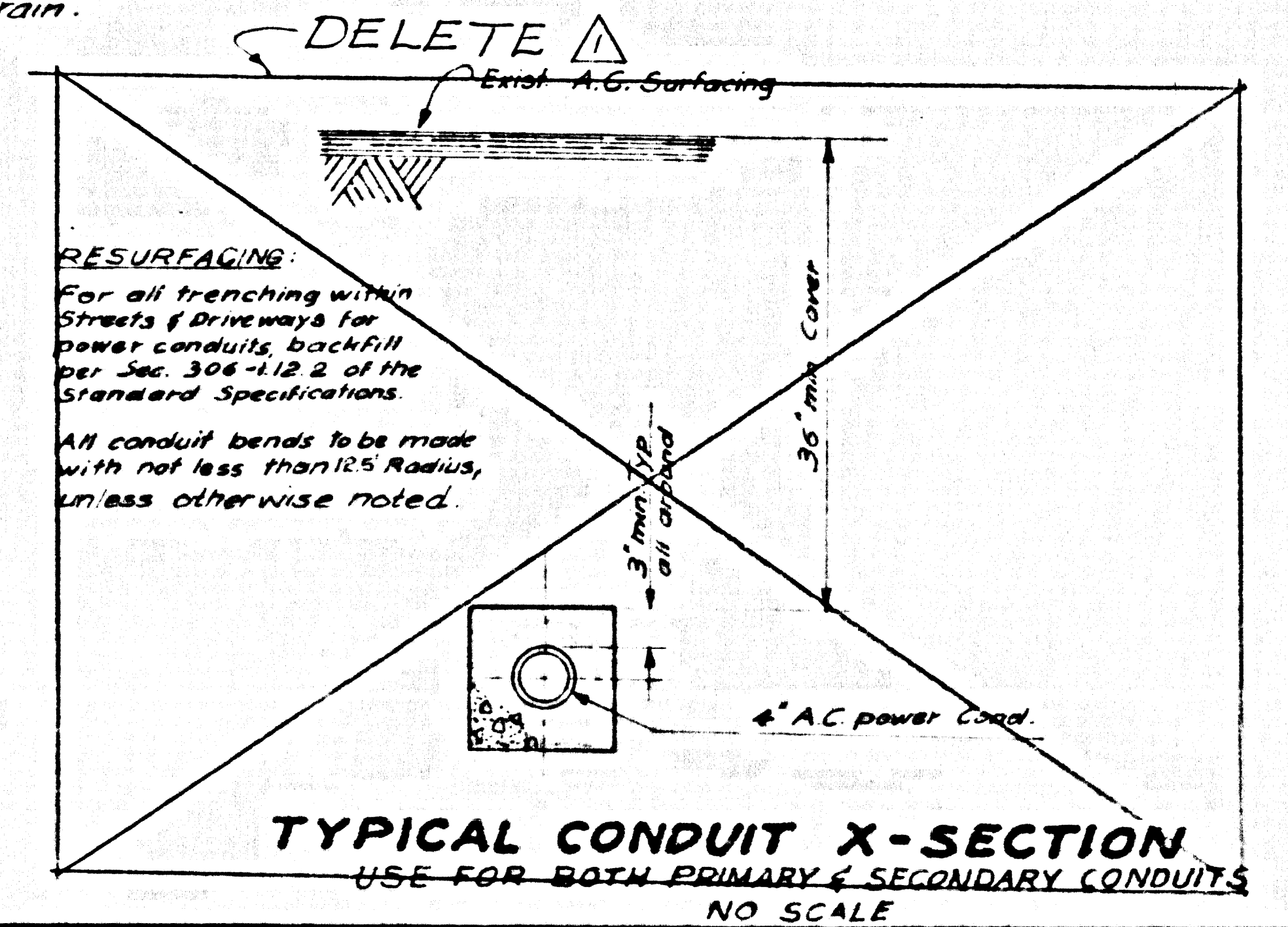


PLOT PLAN
Scale 3/16" = 1'-0"

44814

- NOTES:**
1. For 56 1/4° X points, use 1-45° bend & 1-11 1/4° bend
 2. All new under-ground construction is shown as ~~shown~~
 3. The contractor shall maintain service by bypassing the sewage through the existing overflow line, shown above. PUMPING IS REQUIRED. See Technical Provisions.

REVISIONS
 △ ELECTRICAL REVISIONS 4-20-72 B.E.



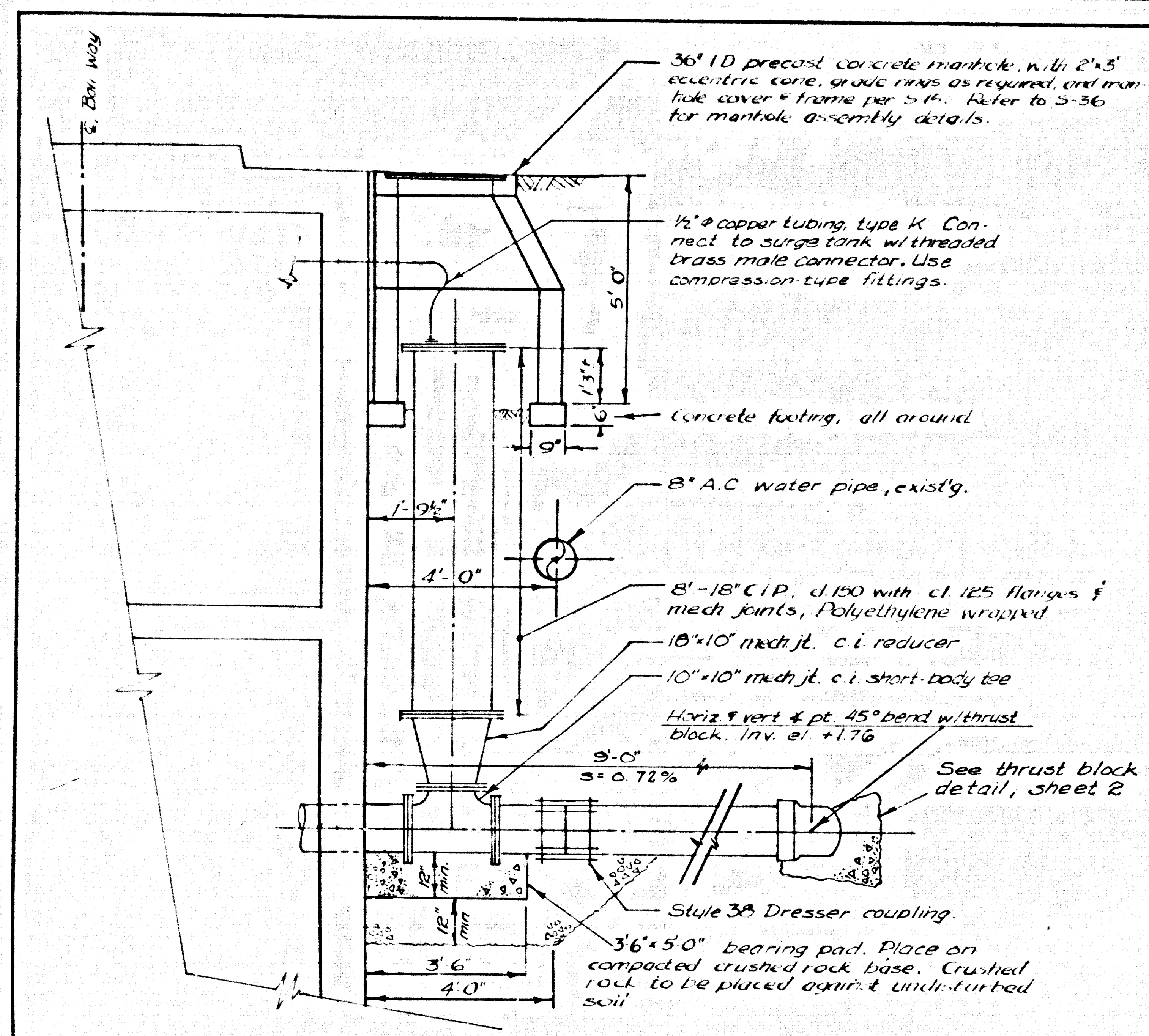
TYPICAL CONDUIT X-SECTION
USE FOR BOTH PRIMARY & SECONDARY CONDUITS
NO SCALE

REVISIONS
 △ ELECTRICAL REVISIONS 4-20-72 B.E.

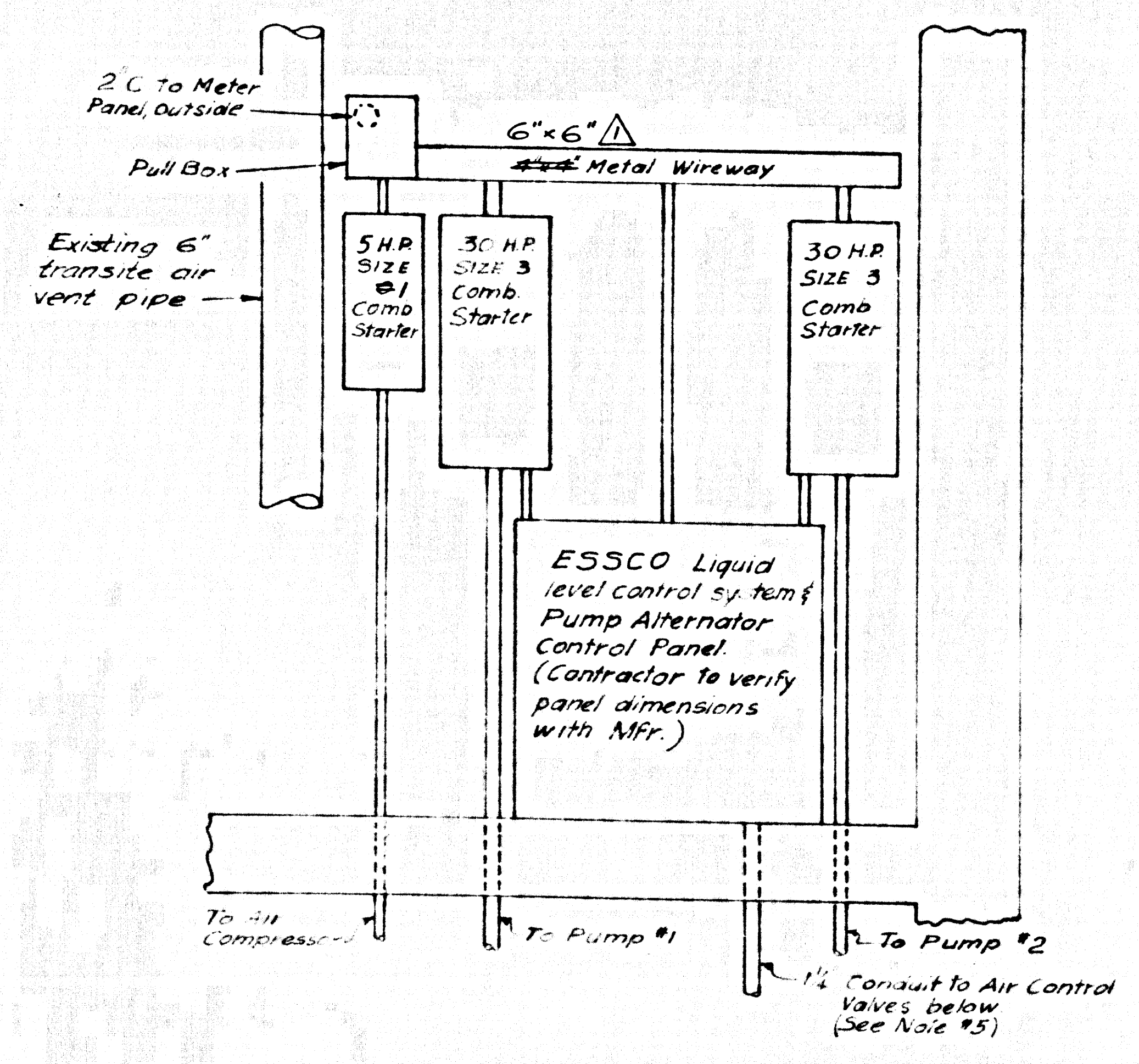
REVISIONS
 △ ELECTRICAL REVISIONS 4-20-72 B.E.

ALTERATIONS TO PUMP STATION, C.C. 8499-B MARINA DEL REY PLOT PLAN & MISC. DETAILS

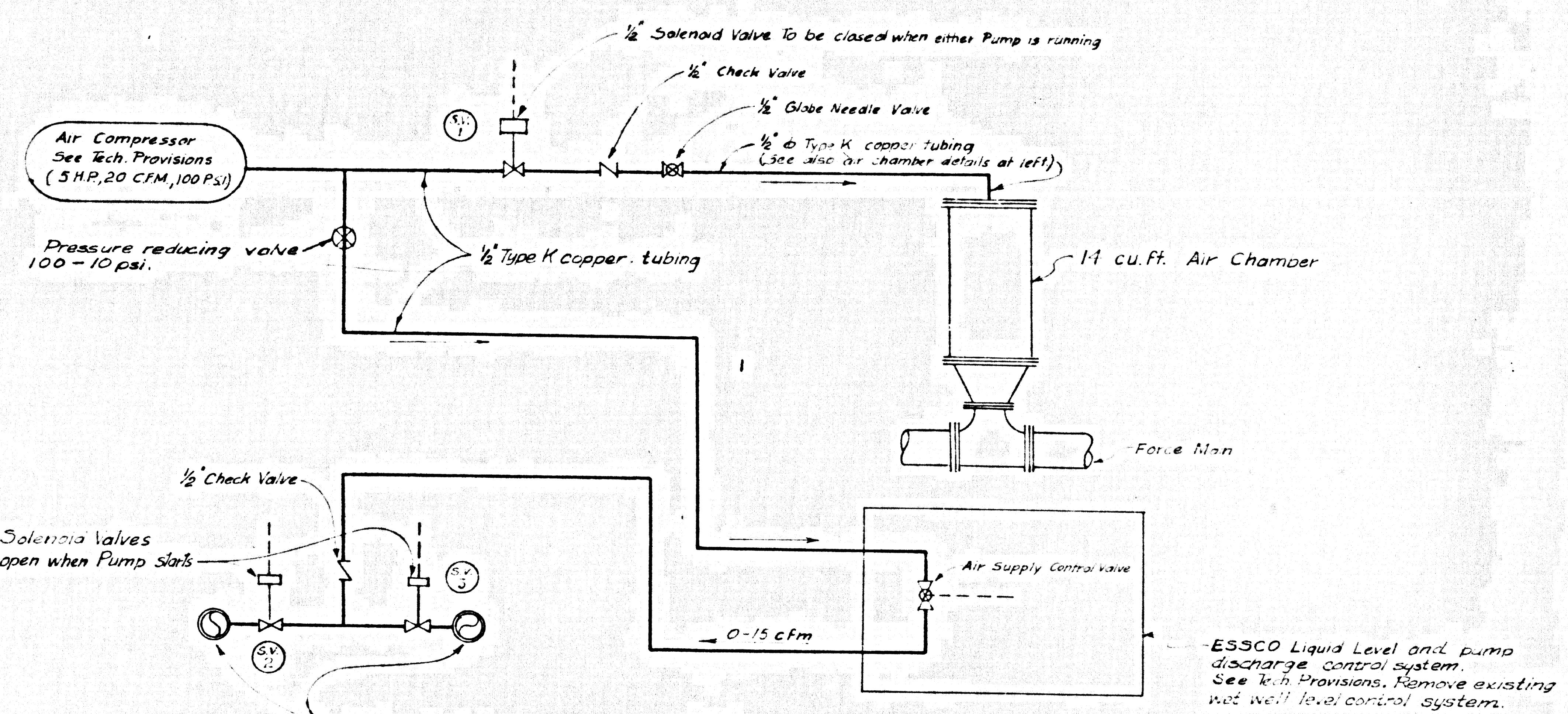
DESIGNED: ...	DRAWN: Scanlon	CHECKED: ANDERSON
DATE: 12-22-71 PCE #10443	SCALE: As noted	SHEET 5 OF 7 SHEETS



SECTION B-B: AIR CHAMBER DETAILS
Scale: 1/2" = 1'-0"



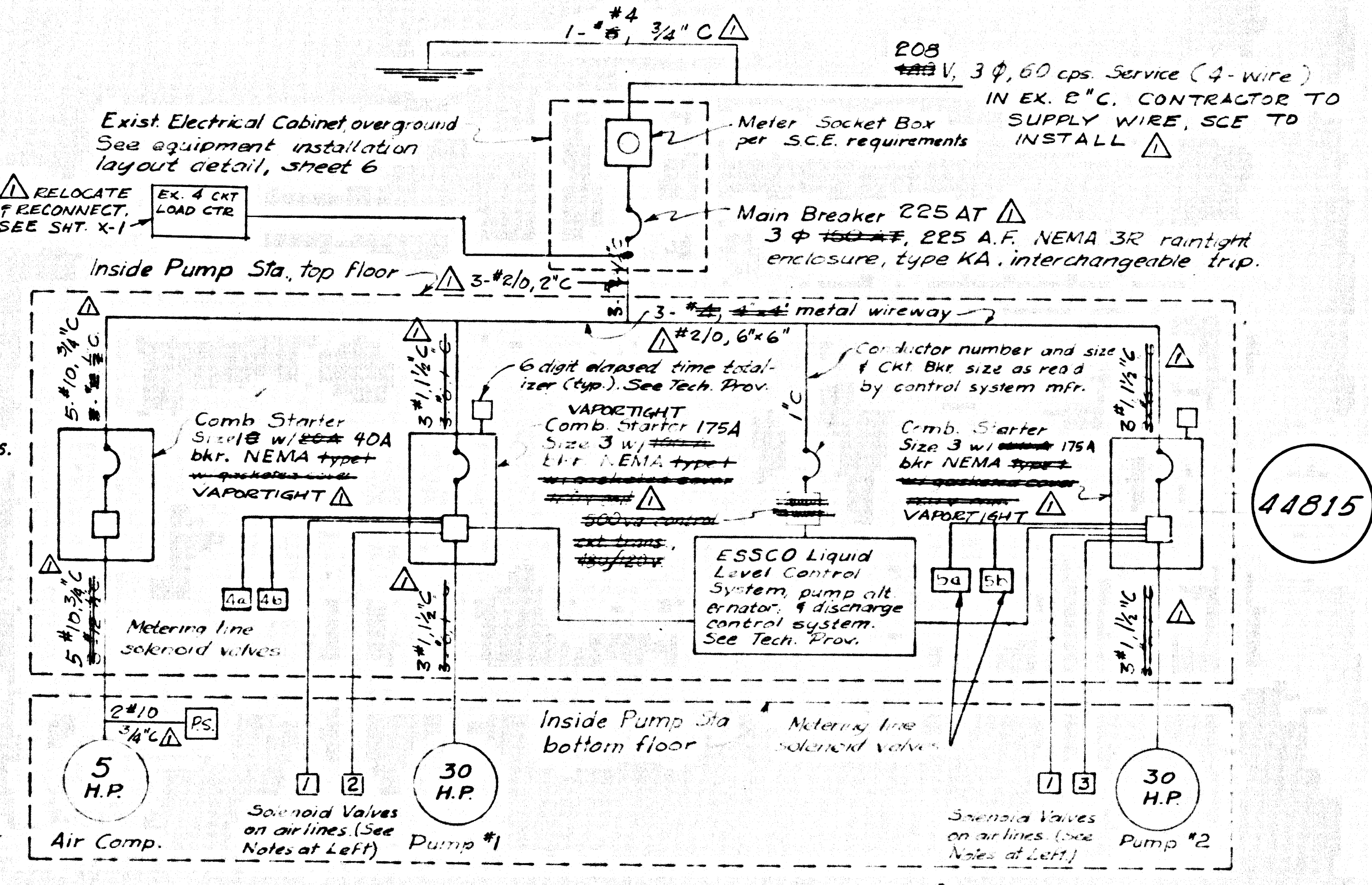
MOTOR CONTROL PANEL LAYOUT
Scale: 3/4" = 1'-0"



COMPRESSED AIR SCHEMATIC
No Scale

ELECTRICAL AND COMPRESSED AIR SYSTEM NOTES.

1. Solenoid valve control wiring shall be installed so that when either Pump is running, SV-1 will close. SV-2 shall be open when Pump #1 is running and closed when the Pump is off. SV-3 shall be open when Pump #2 is running and closed when the Pump is off.
2. All materials and installation shall conform to State and County Electrical Codes.
3. Pump control wiring shall be as required by control system Mfr. for Pump operation scheme as described in the Technical Provisions.
4. Shop drawings are required for all electrical and compressed air system work.
5. Individual conduit runs to each control valve shall be made with 1/2" conduit.
6. Unless located hereon, all conduit runs shall be located in field, subject to approval by the County Engineer. All conduit connections to be made with an approved type junction box.
7. The contractor shall not alter, nor damage, the existing 120v. service to the lighting, sump pump, blower, and convenience outlets, except as shown on these drawings.
8. All equipment, pipes, and the stairs shall be grounded on a common grounding system. The provisions of Article 7 of the California Electrical Safety Orders shall apply.
9. For solenoid valves 4a, 4b, 5a, 5b on metering lines, see notes & schematic on sheet 7.
10. Use ~~RHW~~ conductors.

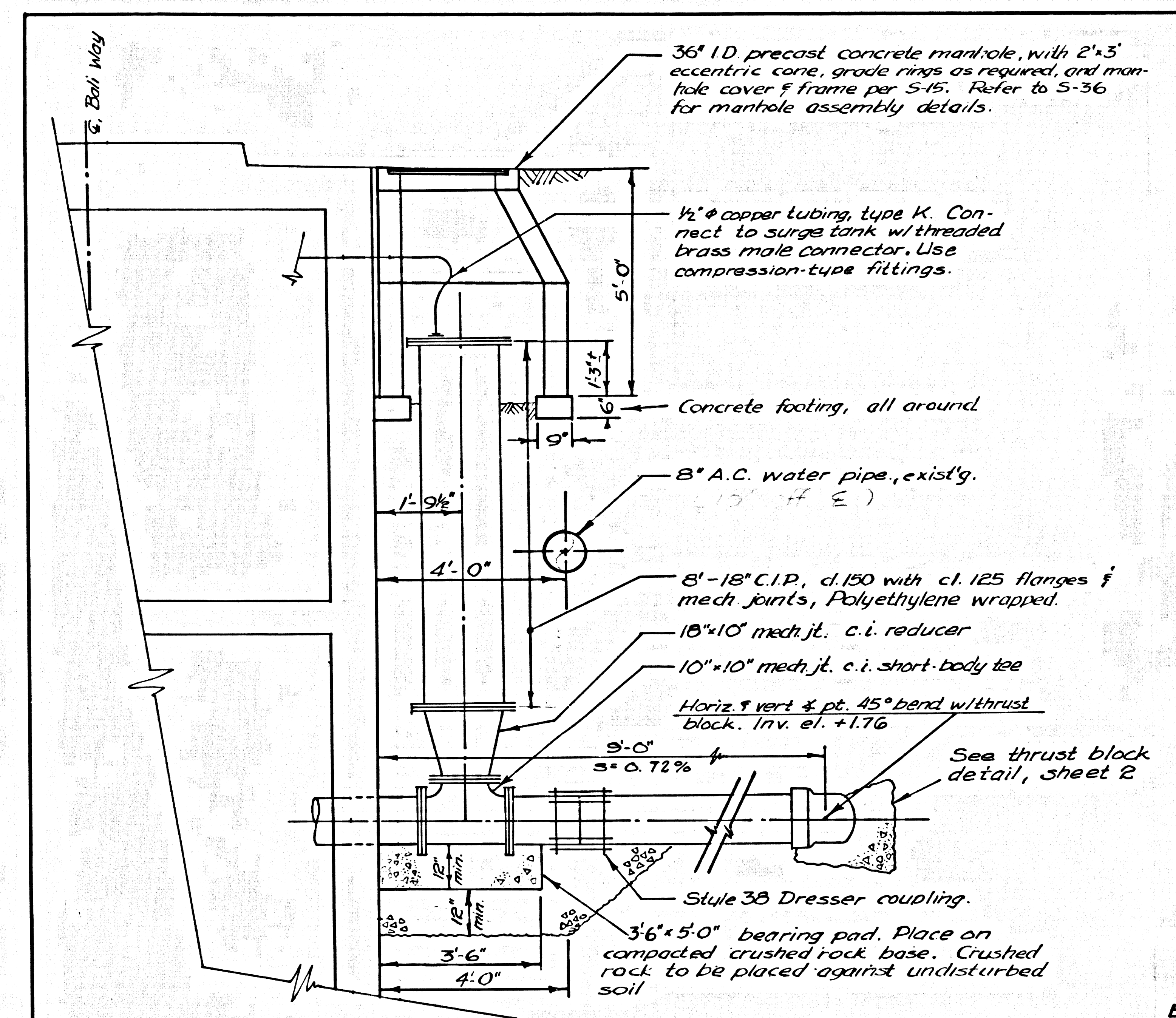


ELECTRICAL SINGLE LINE DIAGRAM
No Scale

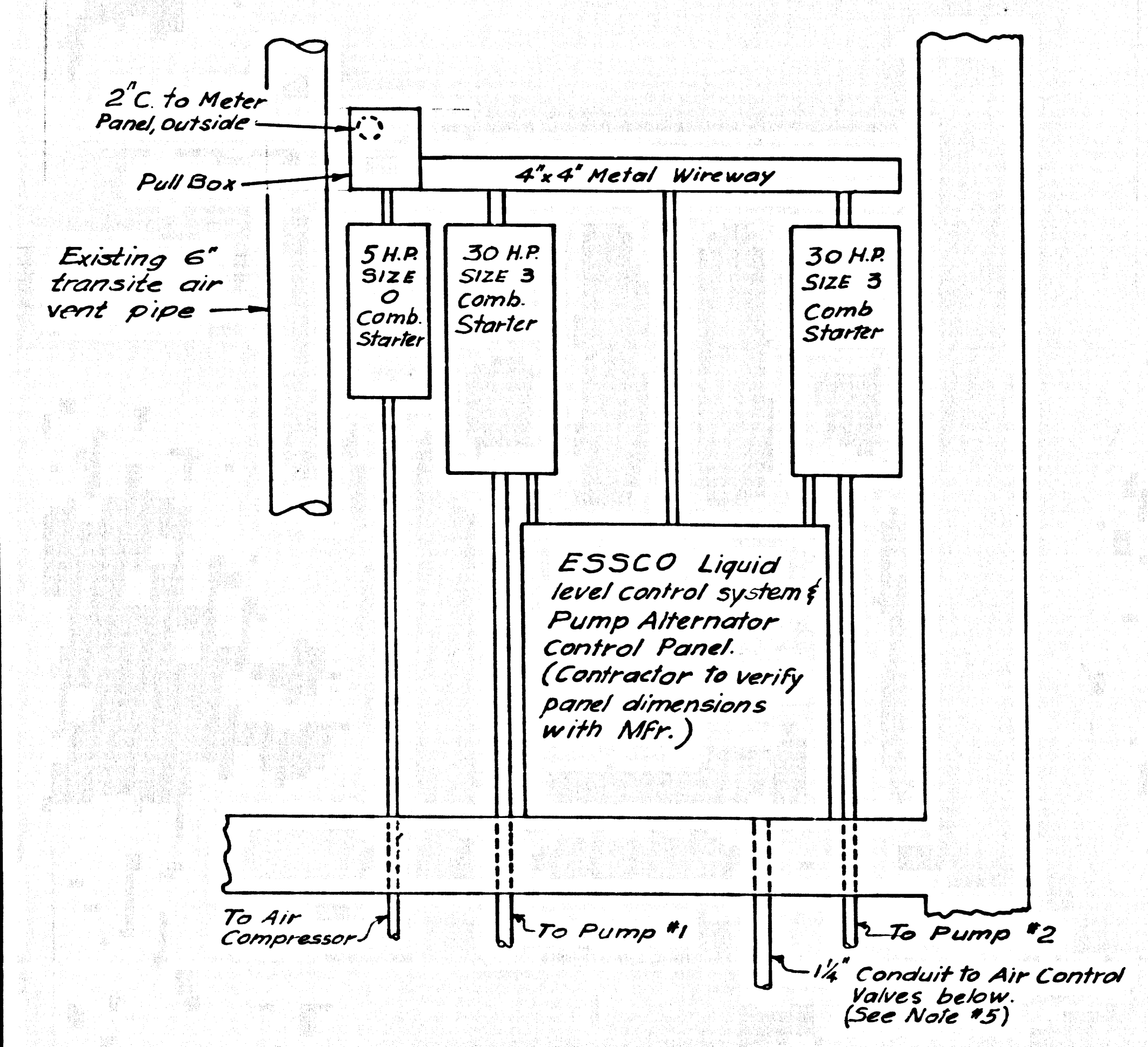
REVISED SHEET X-2

ALTERATIONS TO PUMP STATION, C.C. 8499-B MARINA DEL REY ELECTRICAL & COMPRESSED AIR SYSTEM		
DESIGNED	DRAWN Scanlon	CHECKED: ANDERSON
DATE 10-26-74 FILE #10443	SCALE: As noted	SHEET 2 OF 7 SHEETS

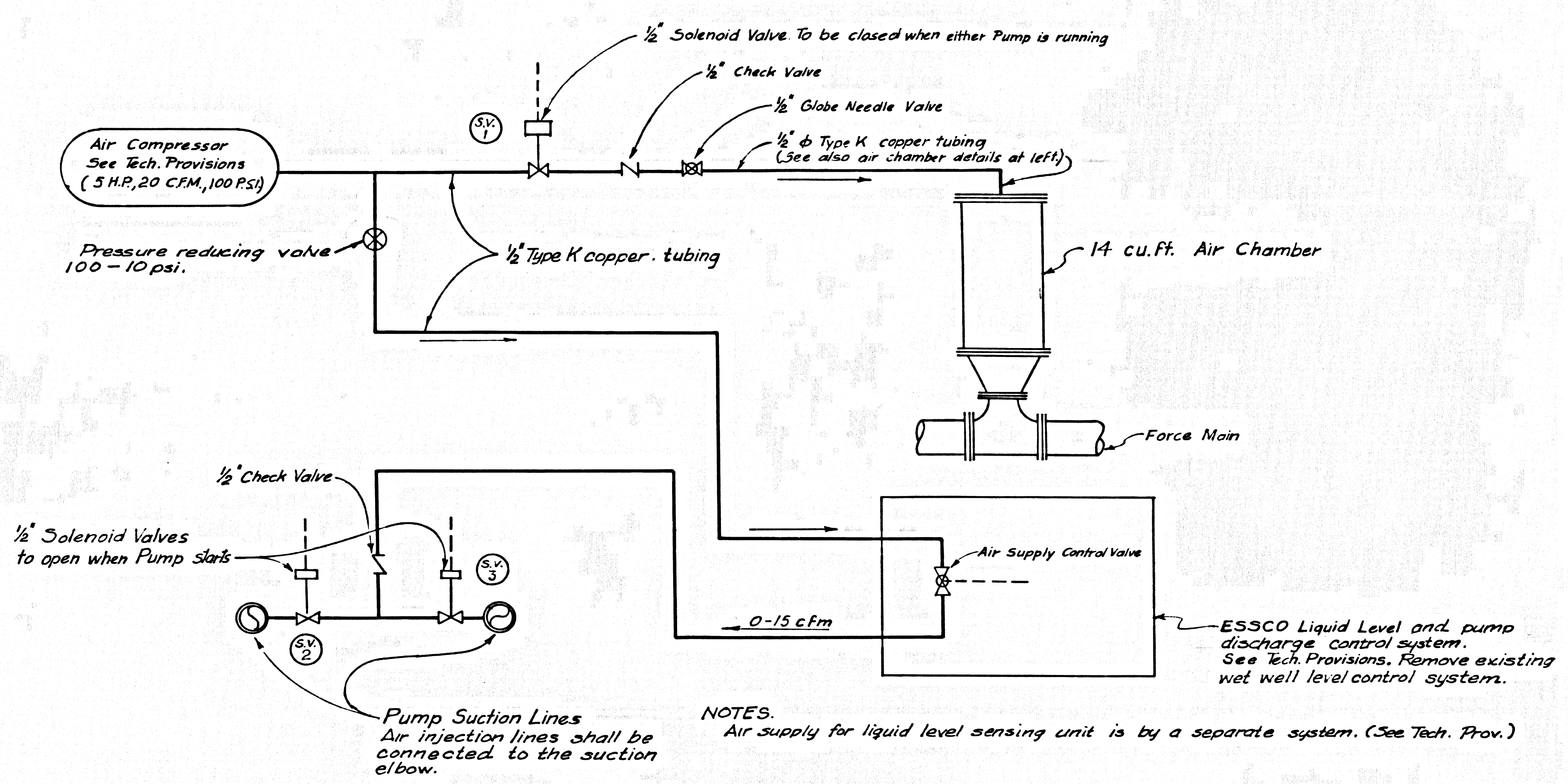
REVISIONS
Δ ELECTRICAL REVISIONS 4-20-72 B.E.S.



SECTION B-B ; AIR CHAMBER DETAILS
Scale: 1/2" = 1'-0"



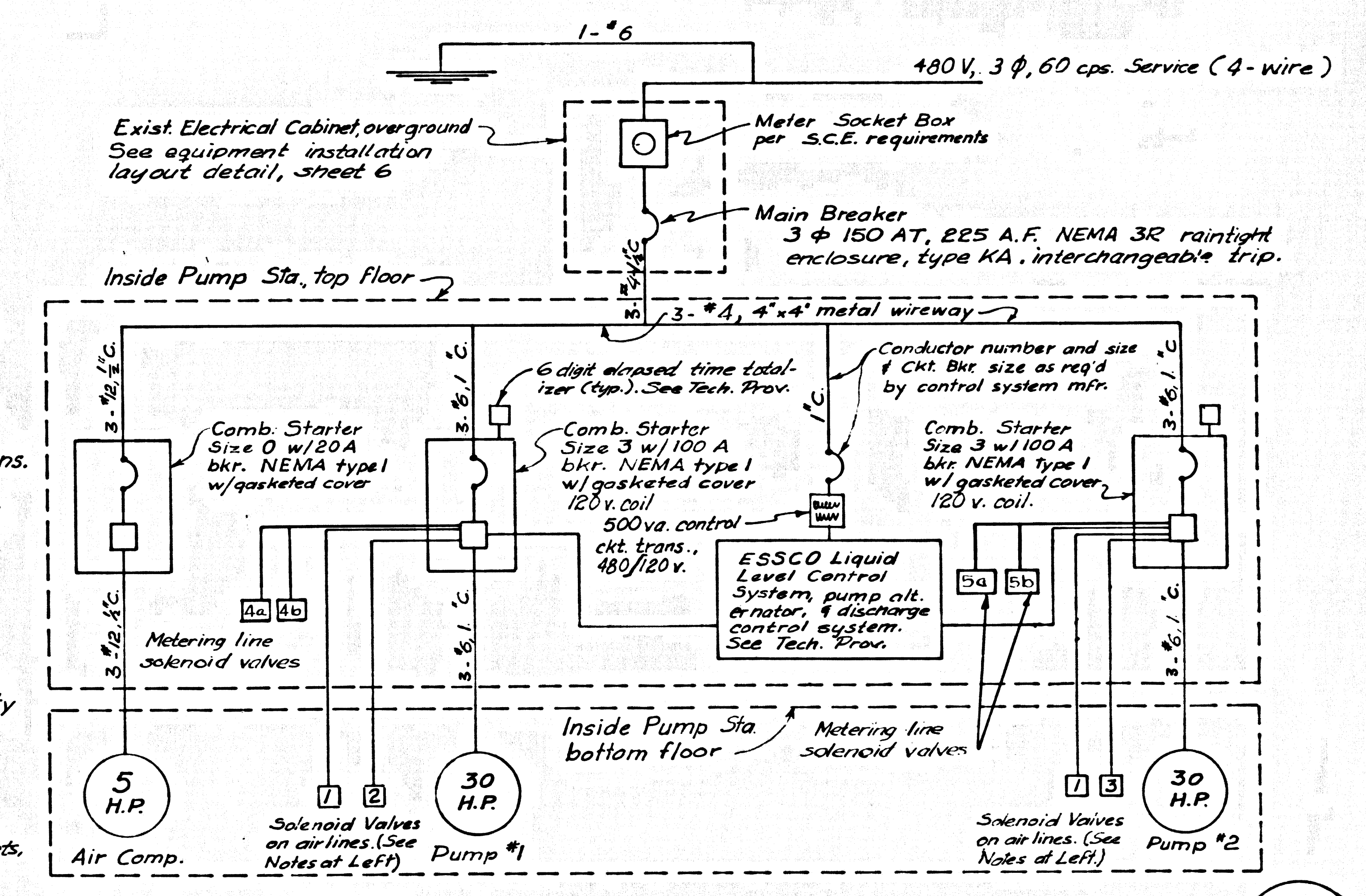
MOTOR CONTROL PANEL LAYOUT
Scale 3/4" = 1'-0"



COMPRESSED AIR SCHEMATIC
No Scale

ELECTRICAL AND COMPRESSED AIR SYSTEM NOTES.

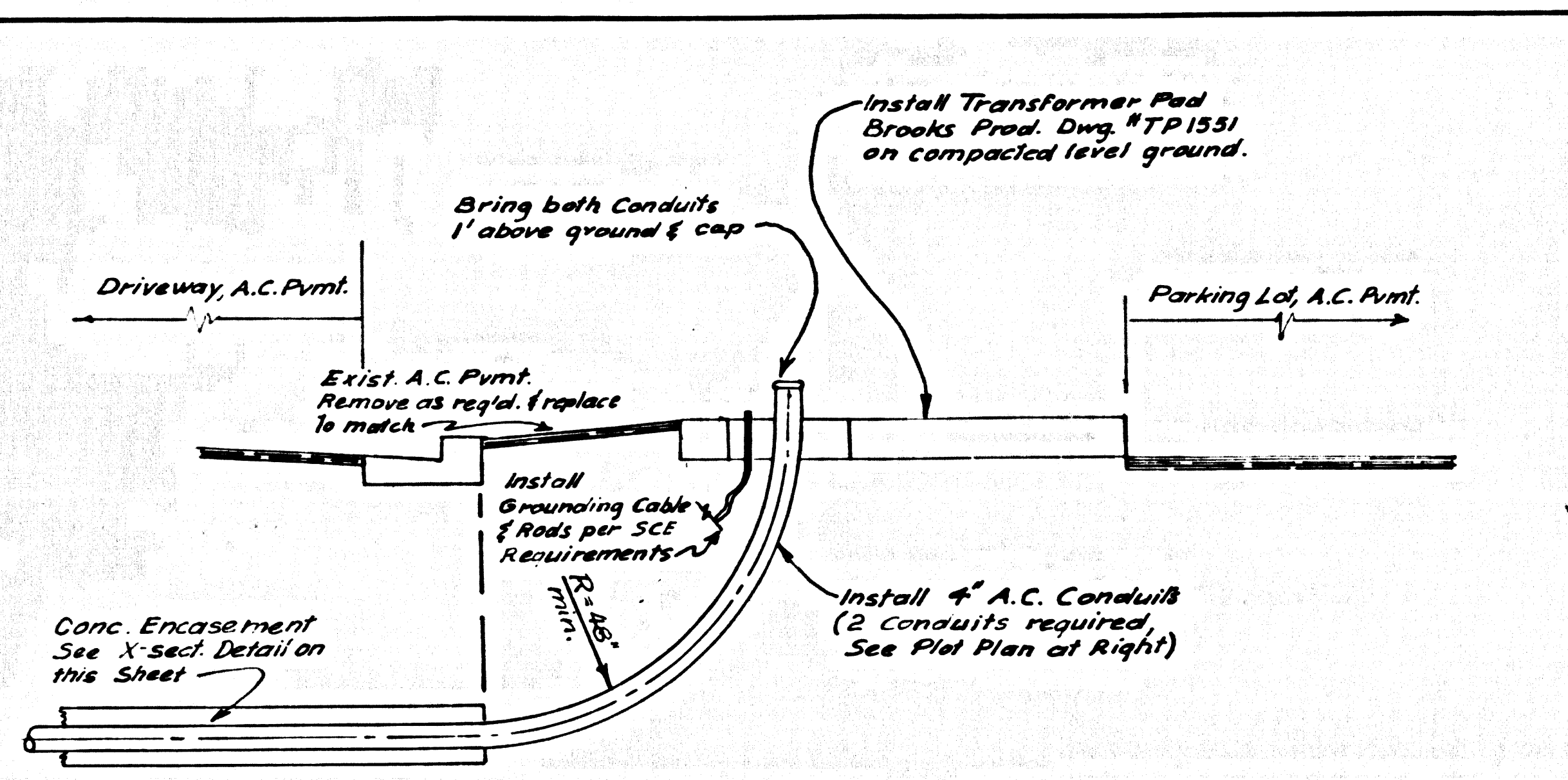
1. Solenoid valve control wiring shall be installed so that when either Pump is running, SV-1 will close. SV-2 shall be open when Pump #1 is running and closed when the Pump is off. SV-3 shall be open when Pump #2 is running and closed when the Pump is off.
2. All materials and installation shall conform to State and County Electrical Codes.
3. Pump control wiring shall be as required by control system Mfr. for Pump operation scheme as described in the Technical Provisions.
4. Shop drawings are required for all electrical and compressed air system work.
5. Individual conduit runs to each control valve shall be made with 1/2" conduit.
6. Unless located herein, all conduit runs shall be located in field, subject to approval by the County Engineer. All conduit connections to be made with an approved type junction box.
7. The contractor shall not alter nor damage the existing 120v. services to the lighting, sump pump, blower, and convenience outlets, except as shown on these drawings.
8. All equipment, pipes, and the stairs shall be grounded on a common grounding system. The provisions of Article 7 of the California Electrical Safety Orders shall apply.
9. For solenoid valves 4a, 4b, 5a, 5b on metering lines, see notes & schematic on sheet 7



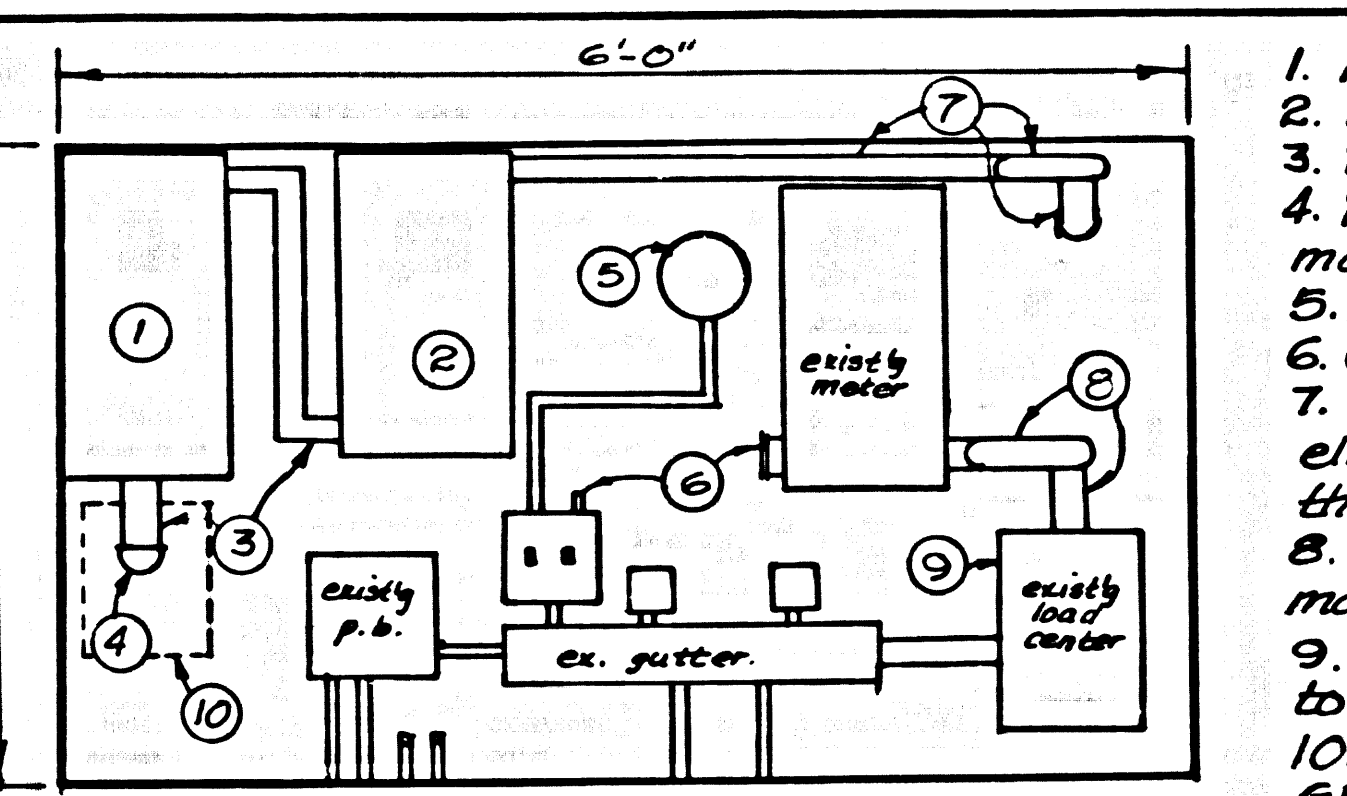
ELECTRICAL SINGLE LINE DIAGRAM
No Scale

ALTERATIONS TO PUMP STATION, C.C. 8499-B		
MARINA DEL REY		
ELECTRICAL & COMPRESSED AIR SYSTEM		
DESIGNED	DRAWN: Scanlon	CHECKED: ANDERSON
DATE: 10-26-74 FILE #10443	SCALE: As noted	SHEET 5 OF 7 SHEETS

44811

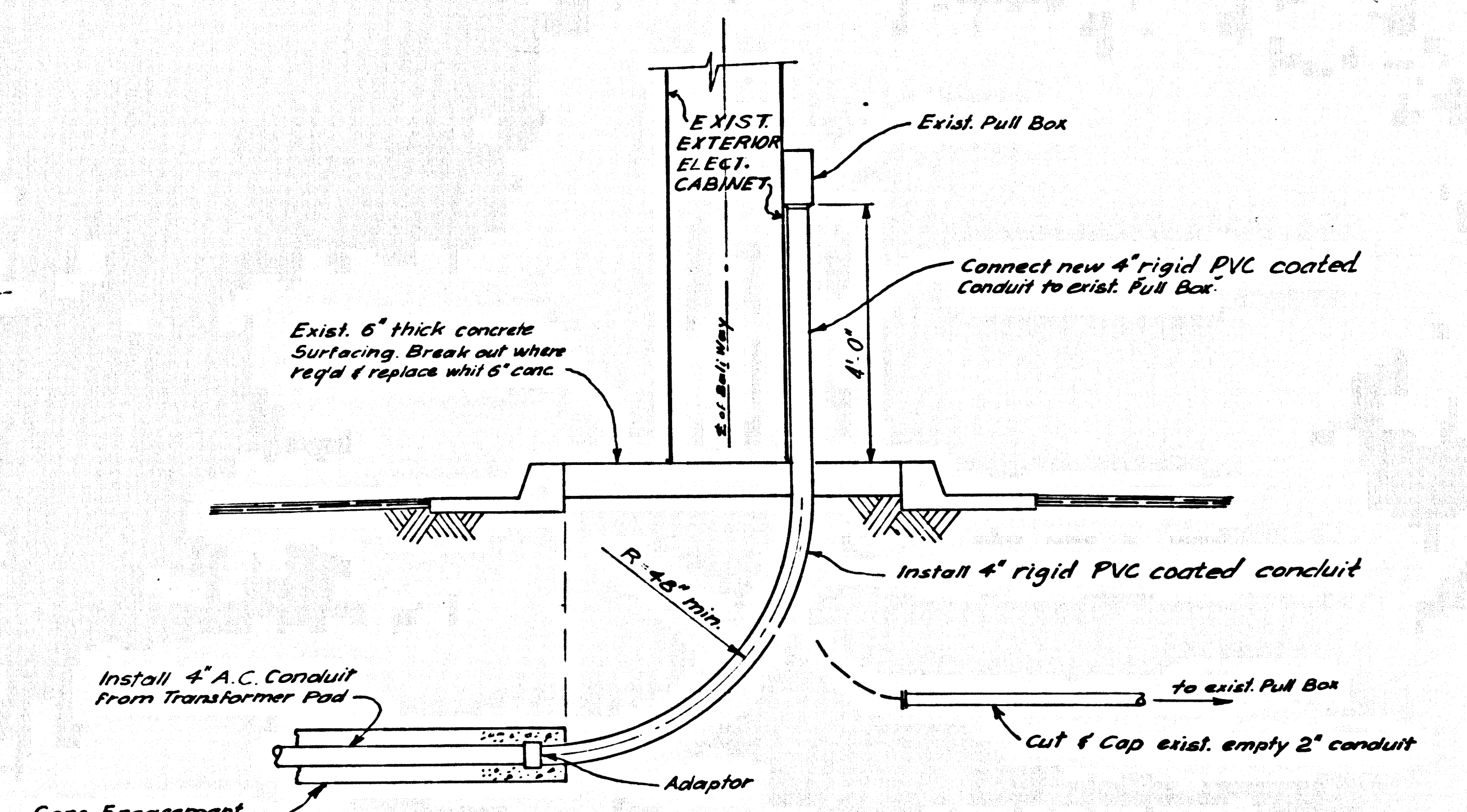


CONDUIT DETAIL AT TRANSFORMER PAD
SECTIONAL ELEVATION FACING NORTH
No Scale

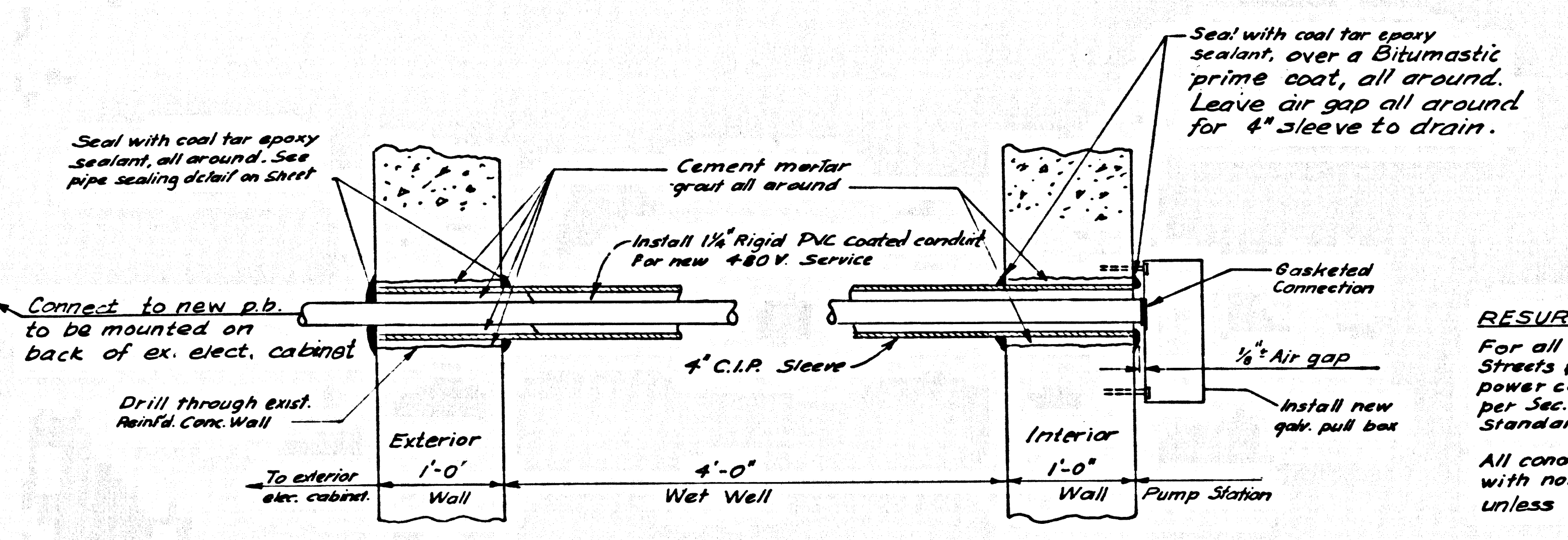


MAIN BREAKER & METER INSTALLATION FOR NEW 480 V. SERVICE IN EXISTING ELECTRICAL CABINET
Scale: 3/4" = 1'-0"

1. Inst. new 3 ϕ , 150A Brk.
 2. Inst. new meter box per SCE reqmts.
 3. 2" galv. conduit w/ conduit elbows
 4. Drill hole for conn. to new p.b. to be mounted on back side
 5. Relocate ex. light fixture & conduit
 6. Cut ex. conduit & cap.
 7. Ex. conduit & conduit j.b. Inst. new elbow & connect to ex. p.b. on back thru. ex. opening
 8. Inst. new conduit connection to match ex. conduit.
 9. Rewire ex. load center from ex. meter to ex. E & Bkr.
 10. Mount new 8" x 10" p.b. on back
- GENERAL NOTES:**
a. Contractor to verify all dimensions
b. Ex. equipment shown as shall remain in cabinet. Contractor shall remove all other equipment and dispose of it as specified.

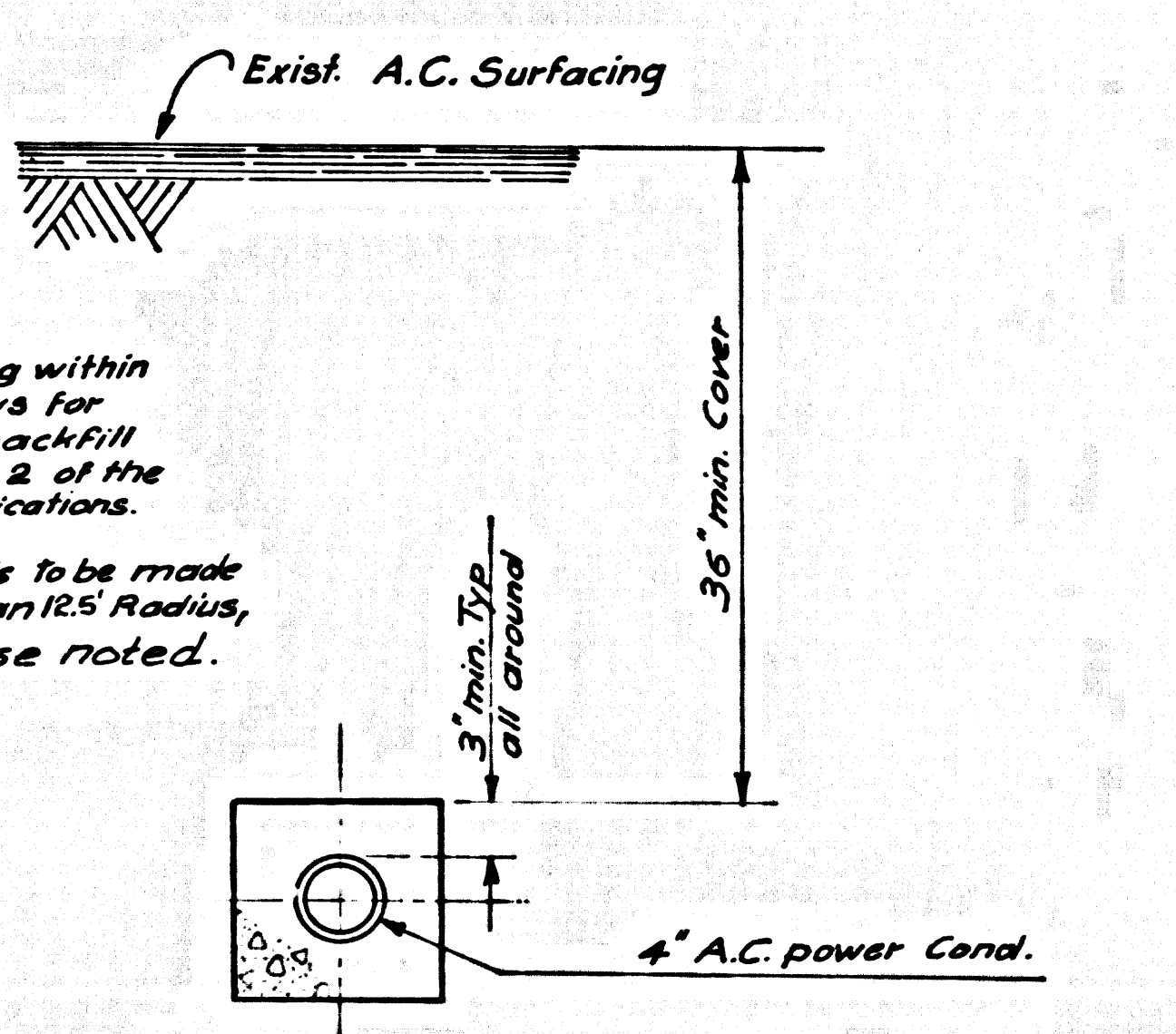


SECONDARY CONDUIT CONNECTION DETAIL
SECTIONAL ELEVATION FACING EAST
No Scale

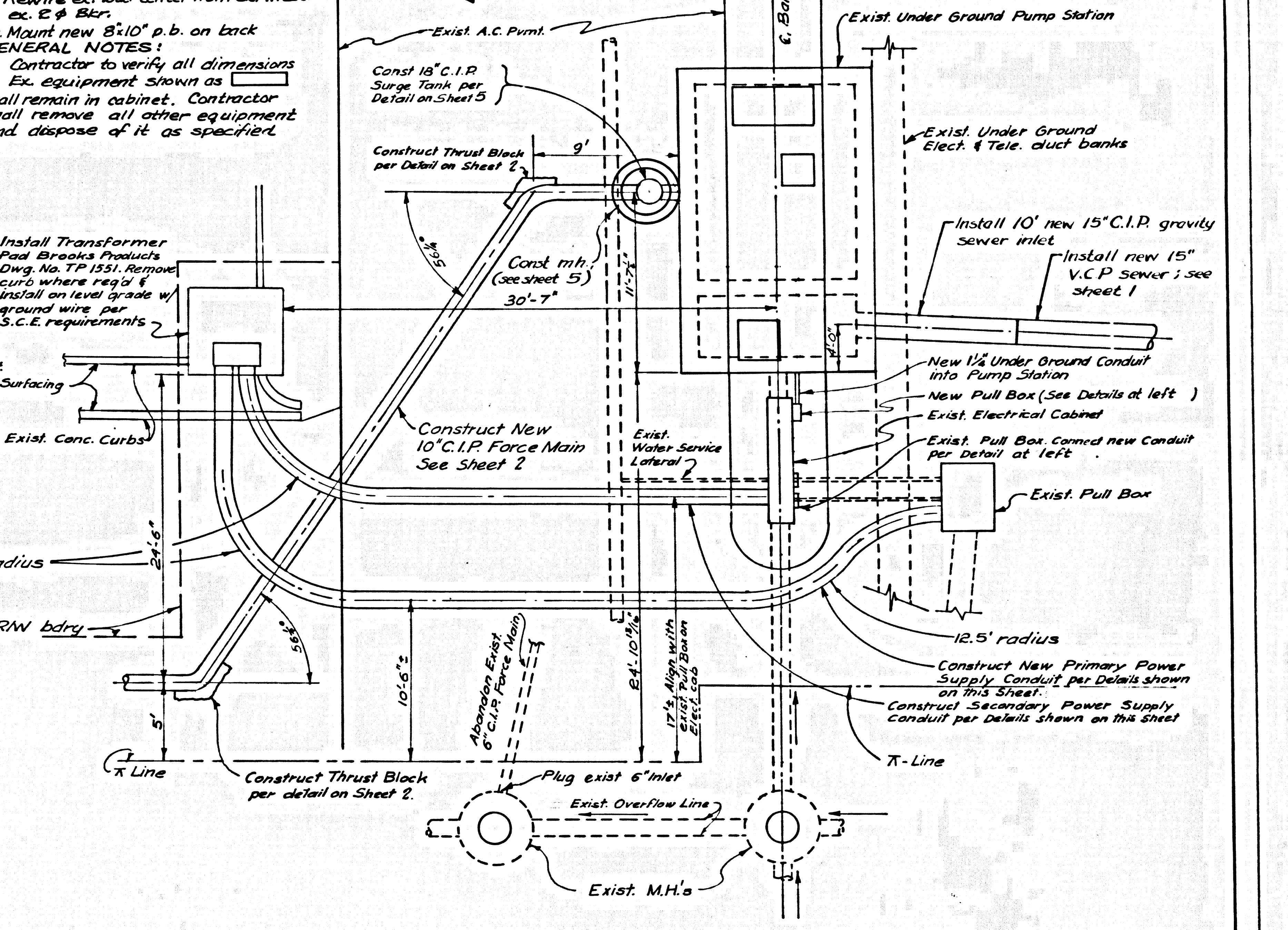


CONDUIT SLEEVE THROUGH WET WELL DETAIL
No Scale

RESURFACING:
For all trenching within Streets & Driveways for power conduits, backfill per Sec. 304-112.2 of the Standard Specifications.
All conduit bends to be made with not less than 125' Radius, unless otherwise noted.



TYPICAL CONDUIT X-SECTION
USE FOR BOTH PRIMARY & SECONDARY CONDUITS
NO SCALE



PLOT PLAN
Scale 3/16" = 1'-0"

- NOTES:**
1. For 55 1/2° \angle points, use 1-45° bend & 1-11 1/4° bend.
 2. All new under-ground construction is shown as .
 3. The contractor shall maintain service by bypassing the sewage through the existing overflow line, shown above. PUMPING IS REQUIRED. See Technical Provisions.

44812

ALTERATIONS TO PUMP STATION, C.C. 8499-B		
MARINA DEL REY		
PLOT PLAN & MISC. DETAILS		
DESIGNED: DATE: 10-26-77 RCE #10443	DRAWN: Scanlon	CHECKED: Anderson
SCALE: As noted		SHEET 6 OF 7 SHEETS