

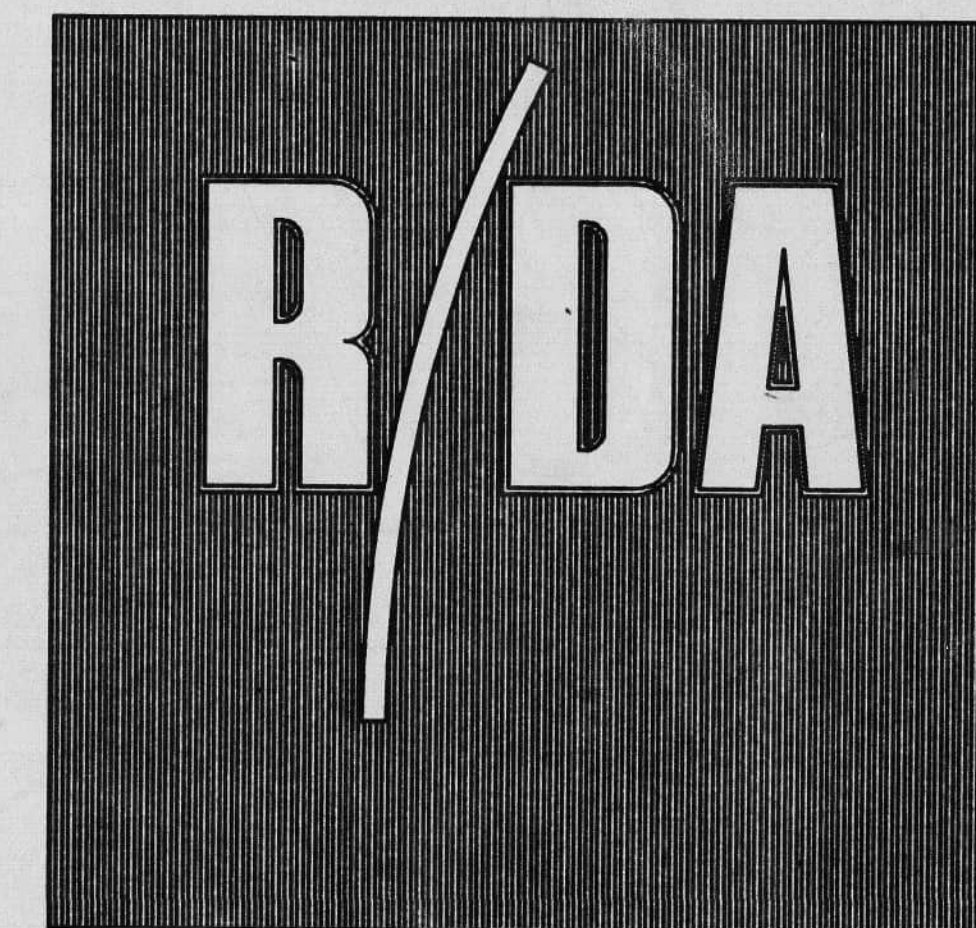


LAKE HAVASU CITY POLICE HEADQUARTERS

LAKE HAVASU CITY, ARIZONA

Chuck Langerveld – Mayor
Victor M. Wilkins – Chief of Police

Mike Dagon – Vice Mayor
Linda Binder – Council Member
Conard O. Blevins – Council Member
Jack F. Crews – Council Member
Mary Laity – Council Member
Melanie Grinstead-Hanak – Council Member



ROBERTS/DINSMORE
ASSOCIATES

ONE GATEWAY
426 NORTH 44th STREET
SUITE 100
PHOENIX, ARIZONA 85008
TELEPHONE (602)275-6830

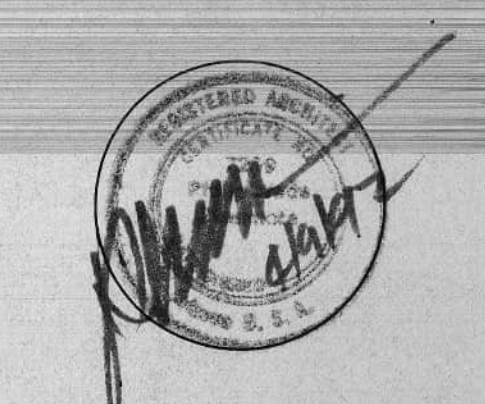
PROJECT MANAGMENT
Capital Improvement Associates, Inc.

CIVIL
Norman Engineering Group

STRUCTURAL
Alagia Engineering Group

MECHANICAL, ELECTRICAL,
& PLUMBING
Tesco, Inc.

KITCHEN CONSULTANT
Dave Keaggy & Assoc.



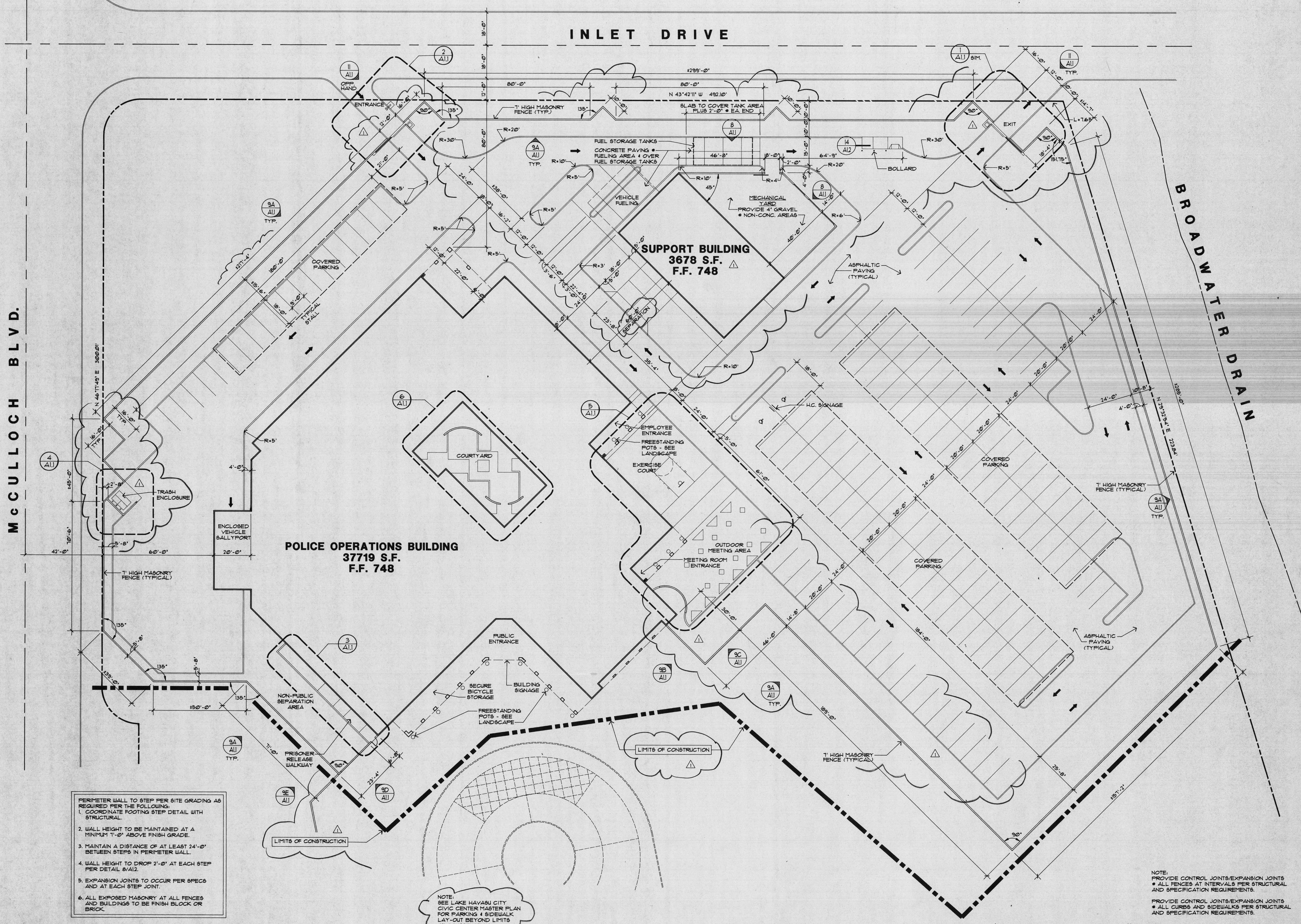
PROJECT NAME

**LAKE HAVASU CITY
 POLICE HEADQUARTERS**
 LAKE HAVASU CITY, ARIZONA

DATE 10/18/91
 ISSUED FOR DATE
 CITY COMMENTS 3-31-92

SHEET TITLE
SITE PLAN

SHEET NO.
A1.0
 R/DA PROJECT NO.
 91006

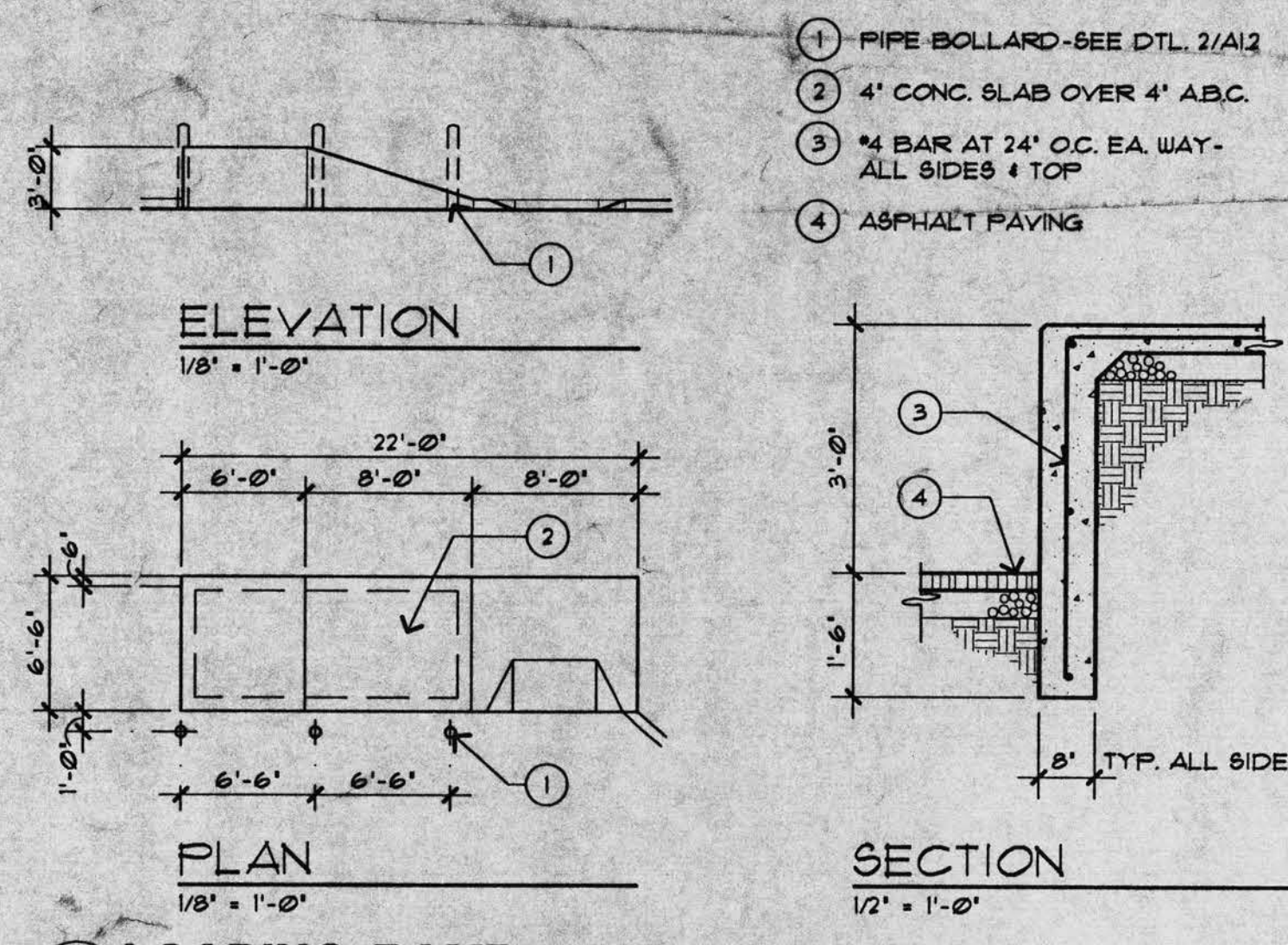


- PERIMETER WALL TO STEP PER SITE GRADING AS REQUIRED FOR THE FOLLOWING:
- COORDINATE FOOTING STEP DETAIL WITH STRUCTURAL.
 - WALL HEIGHT TO BE MAINTAINED AT A MINIMUM 1'-0" ABOVE FINISH GRADE.
 - MAINTAIN A DISTANCE OF AT LEAST 24'-0" BETWEEN STEPS IN PERIMETER WALL.
 - WALL HEIGHT TO DROP 2'-0" AT EACH STEP PER DETAIL 8/A12.
 - EXPANSION JOINTS TO OCCUR PER SPECS AND AT EACH STEP JOINT.
 - ALL EXPOSED MASONRY AT ALL FENCES AND BUILDINGS TO BE FINISH BLOCK OR BRICK.

NOTE:
 SEE LAKE HAVASU CITY CIVIC CENTER MASTER PLAN FOR PARKING & SIDEWALK LAY-OUT BEYOND LIMITS OF CONSTRUCTION

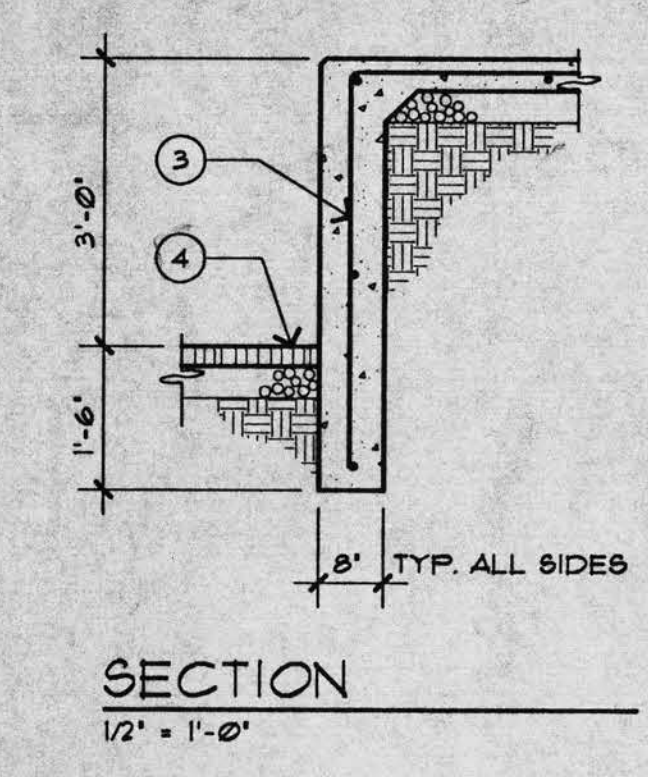
NOTE:
 PROVIDE CONTROL JOINTS/EXPANSION JOINTS
 • ALL FENCES AT INTERVALS PER STRUCTURAL AND SPECIFICATION REQUIREMENTS.
 PROVIDE CONTROL JOINTS/EXPANSION JOINTS
 • ALL CURBS AND SIDEWALKS PER STRUCTURAL AND SPECIFICATION REQUIREMENTS.

SITE PLAN
 SCALE : 1" = 20'-0"

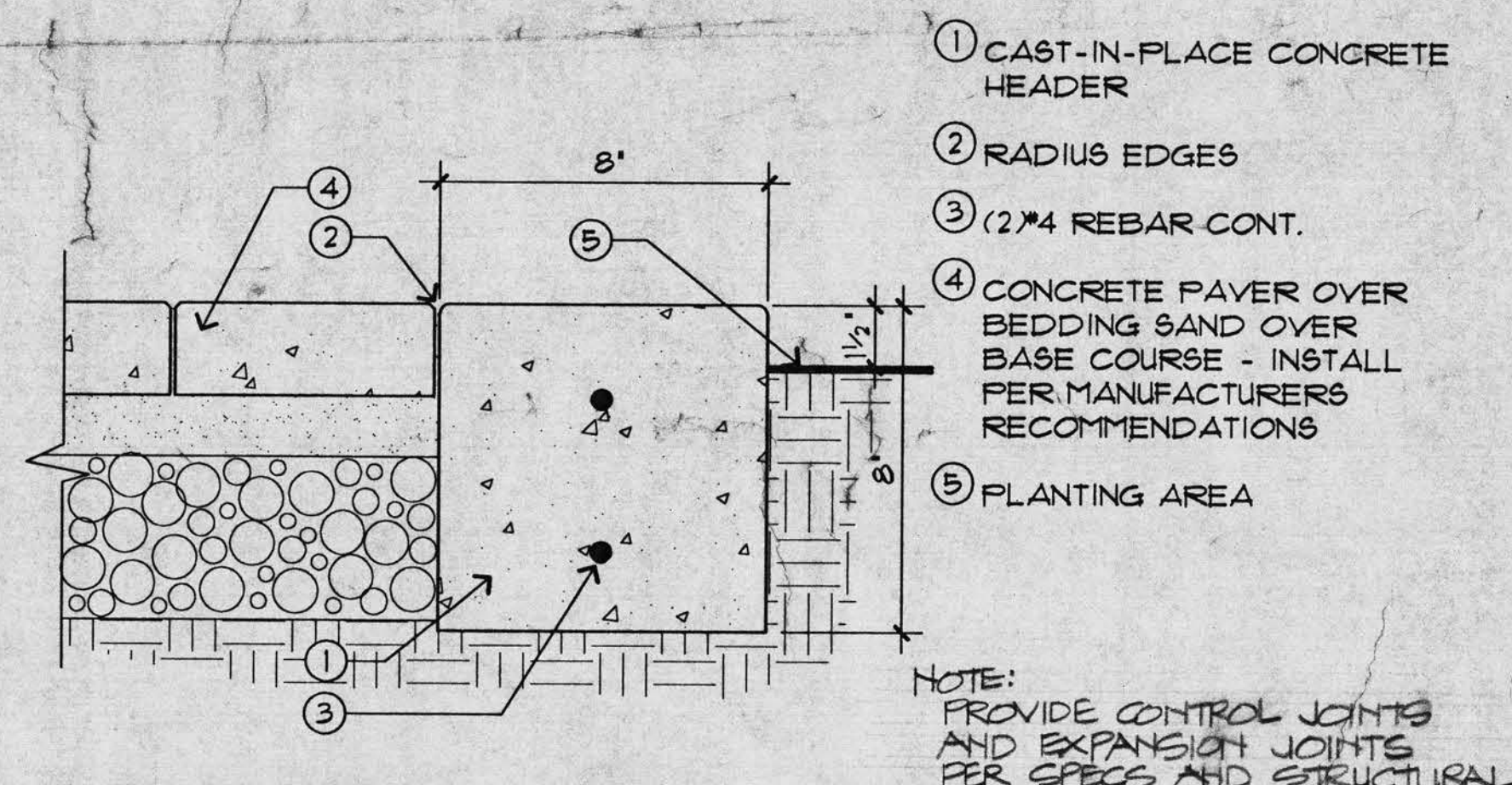


14 LOADING RAMP
SCALE: VARIES

- 1 PIPE BOLLARD-SEE DTL. 2/A12
- 2 4" CONG. SLAB OVER 4" A.B.C.
- 3 #4 BAR AT 24" O.C. EA. WAY- ALL SIDES + TOP
- 4 ASPHALT PAVING



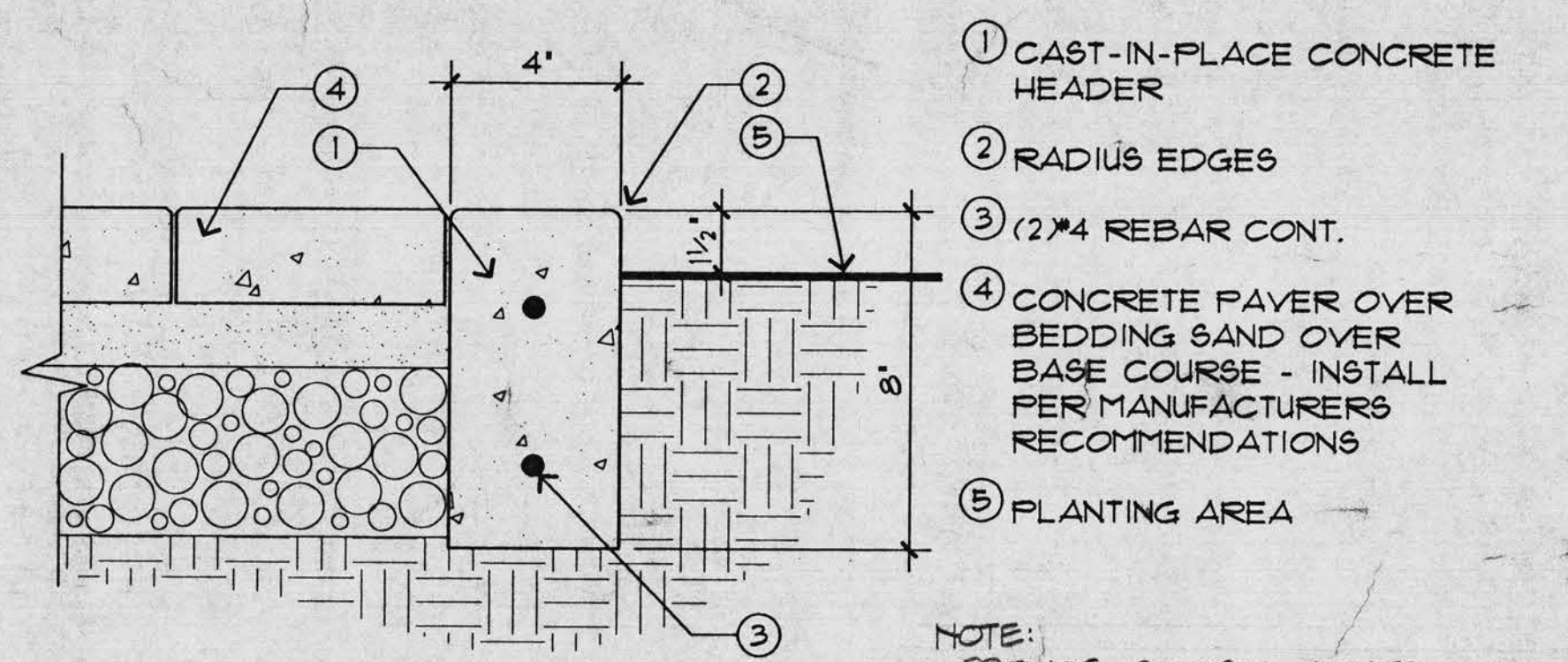
10 8' CONCRETE HEADER
SCALE: 3/4"=1'-0"



- 1 CAST-IN-PLACE CONCRETE HEADER
- 2 RADIUS EDGES
- 3 (2) #4 REBAR CONT.
- 4 CONCRETE PAVER OVER BEDDING SAND OVER BASE COURSE - INSTALL PER MANUFACTURERS RECOMMENDATIONS
- 5 PLANTING AREA

NOTE: PROVIDE CONTROL JOINTS AND EXPANSION JOINTS PER SPECS AND STRUCTURAL NOTES

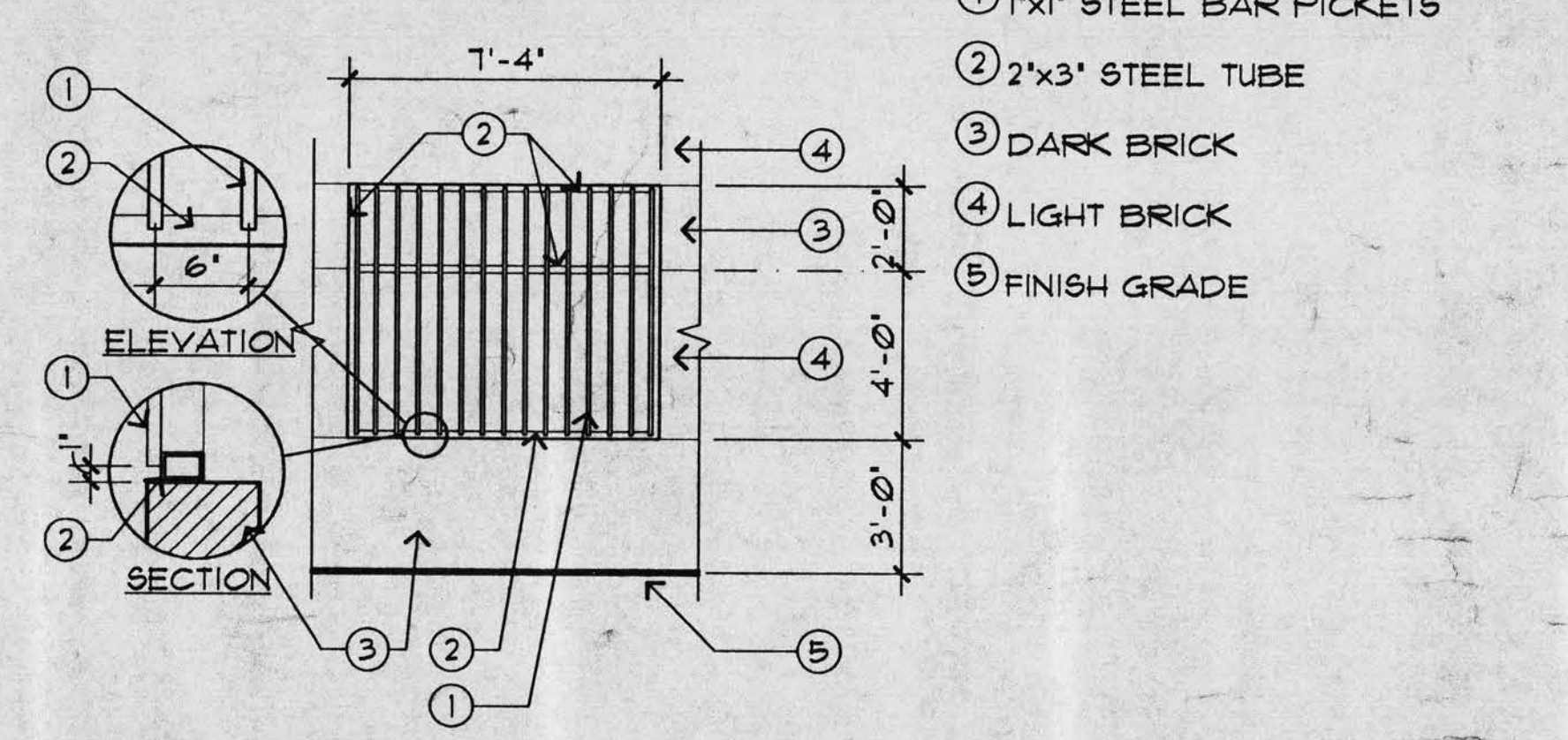
11 4' CONCRETE HEADER
SCALE: 3/4"=1'-0"



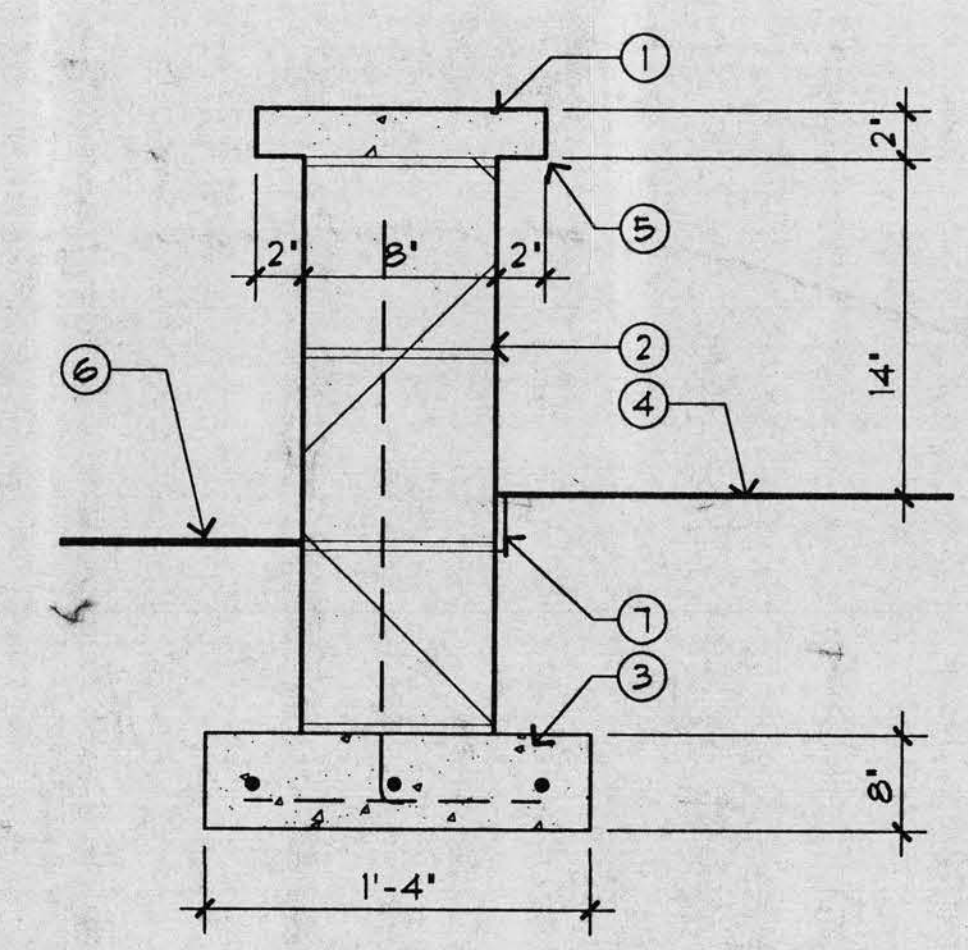
- 1 CAST-IN-PLACE CONCRETE HEADER
- 2 RADIUS EDGES
- 3 (2) #4 REBAR CONT.
- 4 CONCRETE PAVER OVER BEDDING SAND OVER BASE COURSE - INSTALL PER MANUFACTURERS RECOMMENDATIONS
- 5 PLANTING AREA

NOTE: PROVIDE CONTROL JOINTS AND EXP. JOINTS PER SPECS AND STRUCTURAL NOTES

12 GRILLWORK @ BIKE ENCLOSURE
SCALE: 1/2"=1'-0"



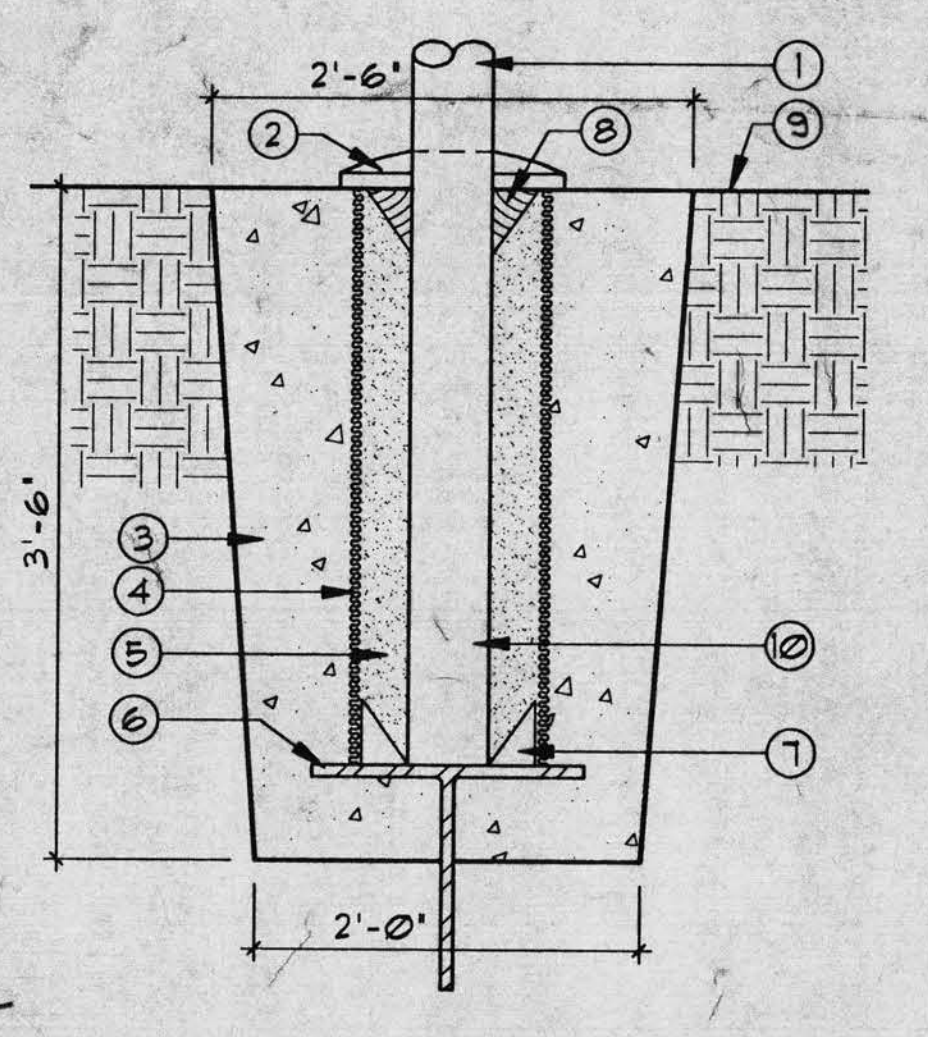
- 1 1"x1" STEEL BAR PICKETS
- 2 2"x3" STEEL TUBE
- 3 DARK BRICK
- 4 LIGHT BRICK
- 5 FINISH GRADE



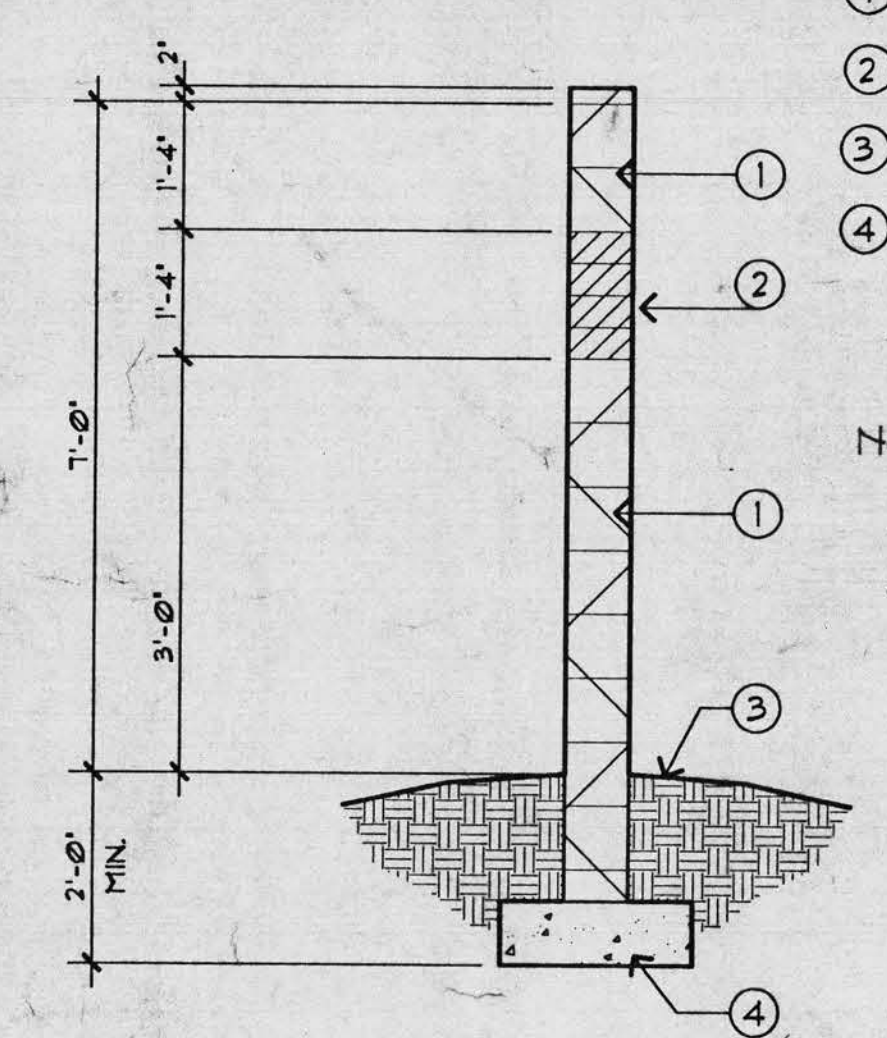
13 SEAT WALL
SCALE: 1/2"=1'-0"

- 1 PRE-CAST CONCRETE SEAT 14'-4" R @ 6" @ COURTYARD 11'-5" R @ 6" @ MEETING AREA
- 2 8x8x16 CMU SCORED BOTH SIDES
- 3 CONCRETE FOOTING W/ (3) #4 REBAR CONT. & VERTICAL DOUCEL @ 24" O.C. W/ ALTERNATING BENDS - GROUT CELLS SOLID
- 4 PAVED SURFACE
- 5 ROUND ALL SEAT EDGES
- 6 PLANTING AREA
- 7 1/2" FIBROUS EXPANSION MATERIAL

6 FLAGPOLE BASE
SCALE: 1"=1'-0"



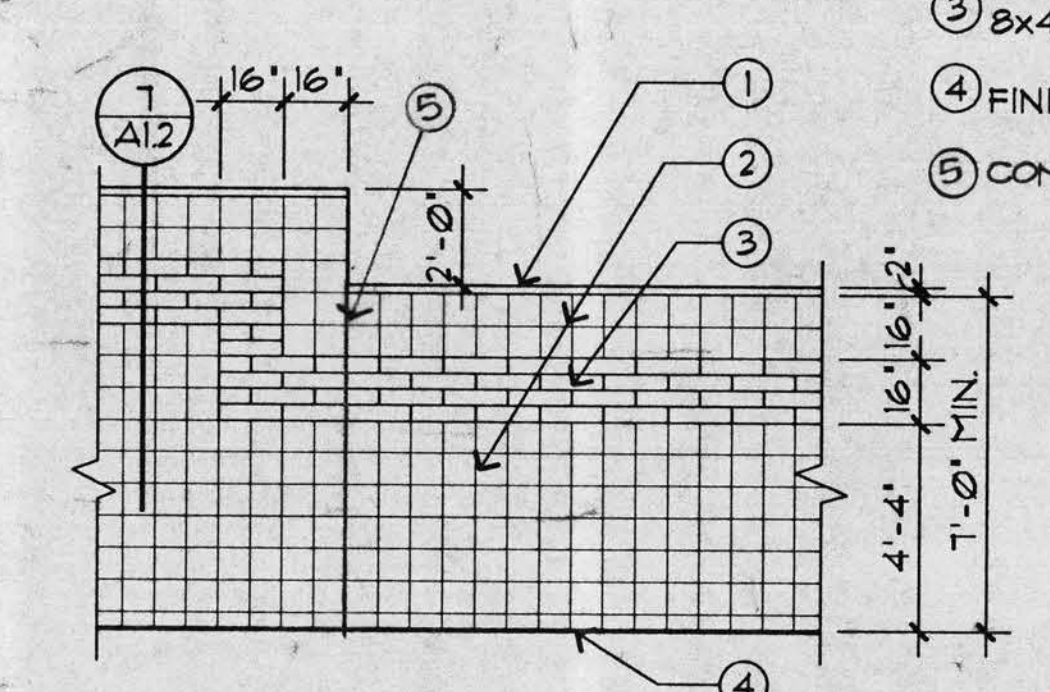
- 1 ALUMINUM FLAGPOLE
- 2 ALUMINUM FLASH COLLAR
- 3 3000 PSI CONCRETE
- 4 GALVANIZED STEEL FOUNDATION SLEEVE
- 5 DRY SAND TIGHTLY TAMPED AFTER ALIGNING POLE
- 6 STEEL BASE PLATE WITH GROUND SPIKE
- 7 STEEL CENTERING WEDGES
- 8 HARDWOOD WEDGES (REMOVE AFTER TAMPING SAND)
- 9 FINISH GRADE
- 10 BLACK ASPHALTUM PAINT ON POLE SURFACE BELOW GRADE



7 MASONRY FENCE
SCALE: 1/2"=1'-0"

- 1 8x8x16 CMU - SCORED
- 2 8x4x16 BRICK
- 3 FINISH GRADE
- 4 CONG. FOOTING - SEE STRUCTURAL

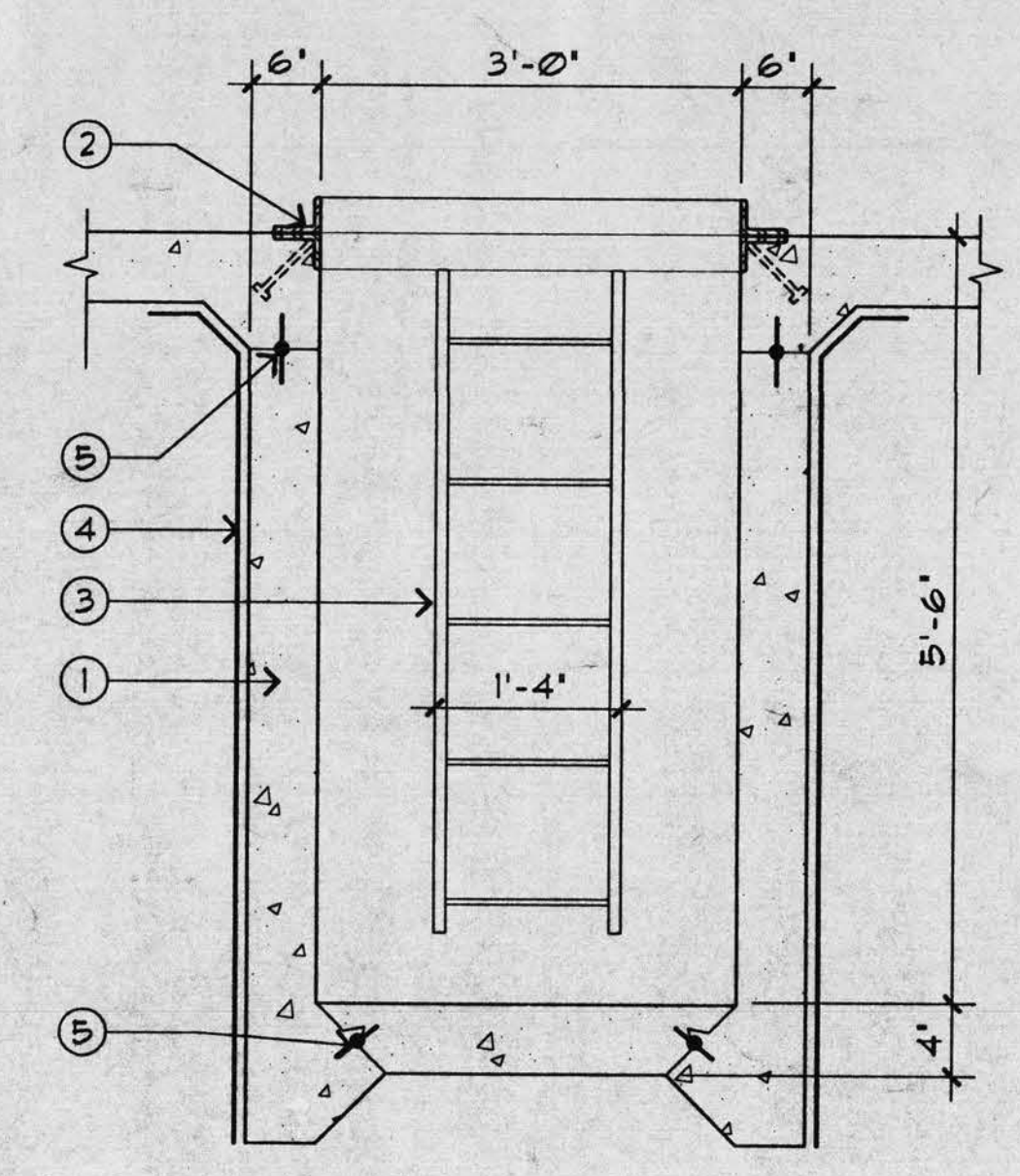
NOTE: PROVIDE CONTROL JOINTS AND EXPANSION JOINTS AS REQ'D PER SPECS AND STRUCTURAL NOTES



8 STEPPING DETAIL @ PERIMETER WALL
SCALE: 1/4"=1'-0"

- 1 2' CAP BLOCK TYP.
- 2 8x8x16 SCORED CMU BLOCK
- 3 8x4x16 BRICK
- 4 FINISH GRADE
- 5 CONTROL JOINT

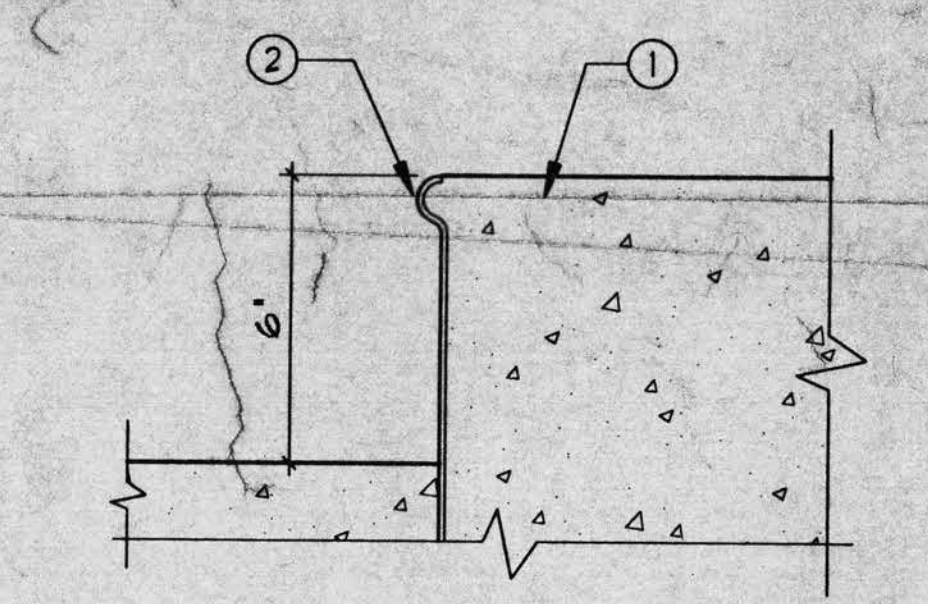
NOTE: SEE NOTE ON SITE PLAN FOR MORE INFORMATION ABOUT WALL STEPPING.



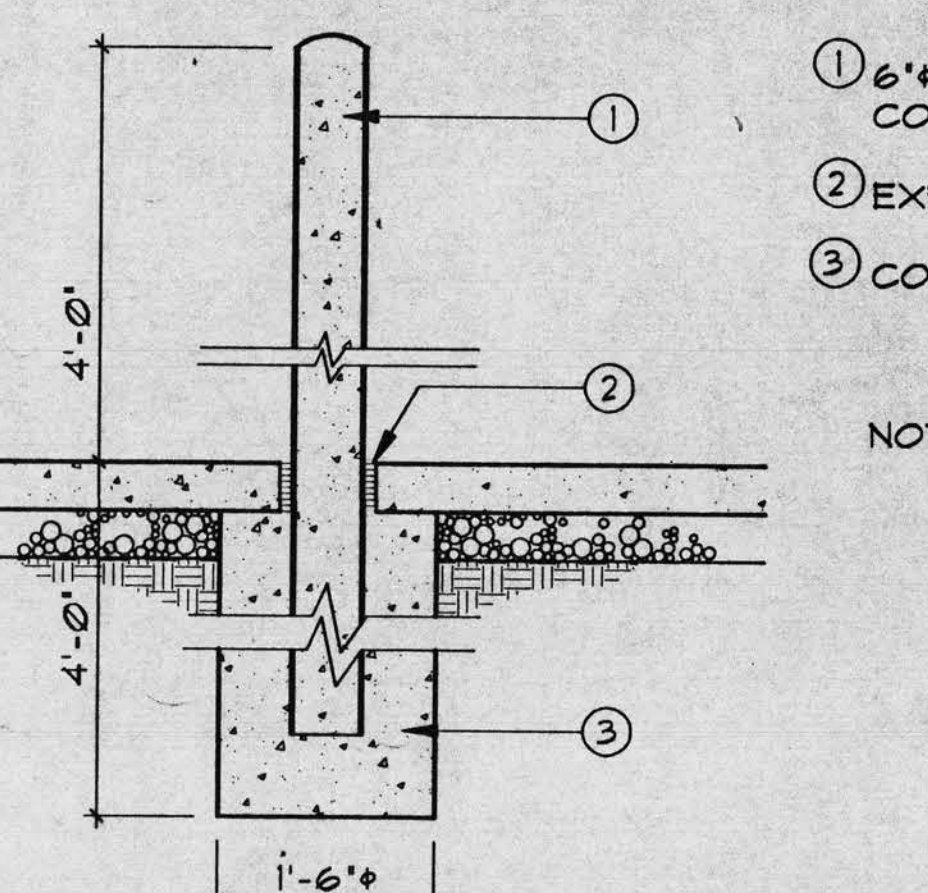
9 PIT @ H109 VEHICLE EVIDENCE
SCALE: 1/2"=1'-0"

- 1 CAST-IN-PLACE CONCRETE
- 2 (2) 3"x4" STEEL ANGLES WELDED W/ 1/2" EMBED - PAINTED OSHA YELLOW ALL AROUND OPENING
- 3 LADDER CENTERED @ END OF PIT
- 4 WATER-PROOFING
- 5 WATER-STOP CONT.

1 CURB DETAIL
SCALE: 3/4"=1'-0"



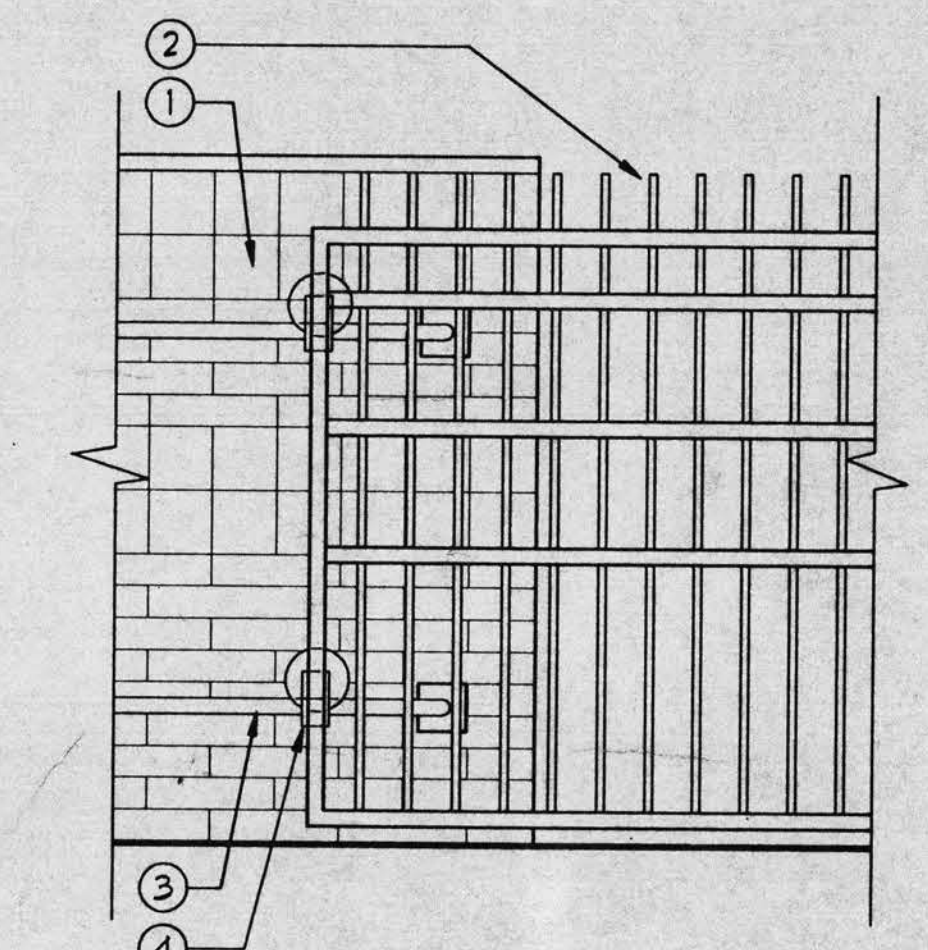
- 1 CONCRETE ISLAND
- 2 METAL CURB EDGE



2 BOLLARD DETAIL
SCALE: 3/4"=1'-0"

- 1 6" STL. PIPE BOLLARD- CONG. FILLED
- 2 EXPANSION MATERIAL
- 3 CONG. FOOTING

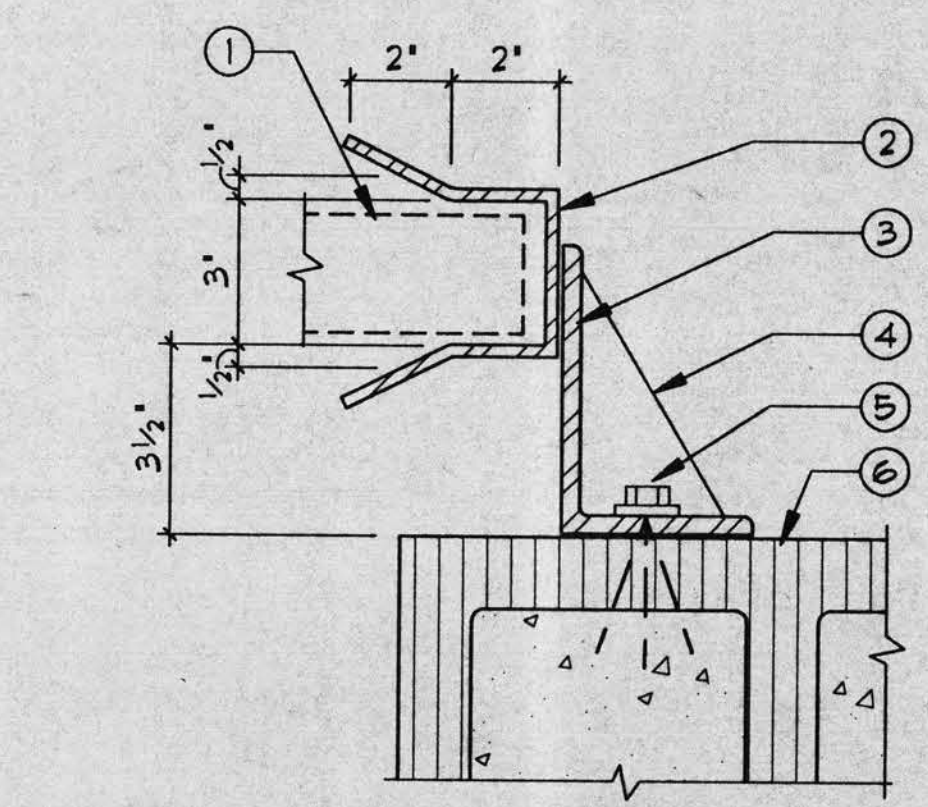
NOTE: PAINT ALL BOLLARDS BUILDING SPECIFIED BLUE



3 GUIDES @ GATE
SCALE: 3/4"=1'-0"

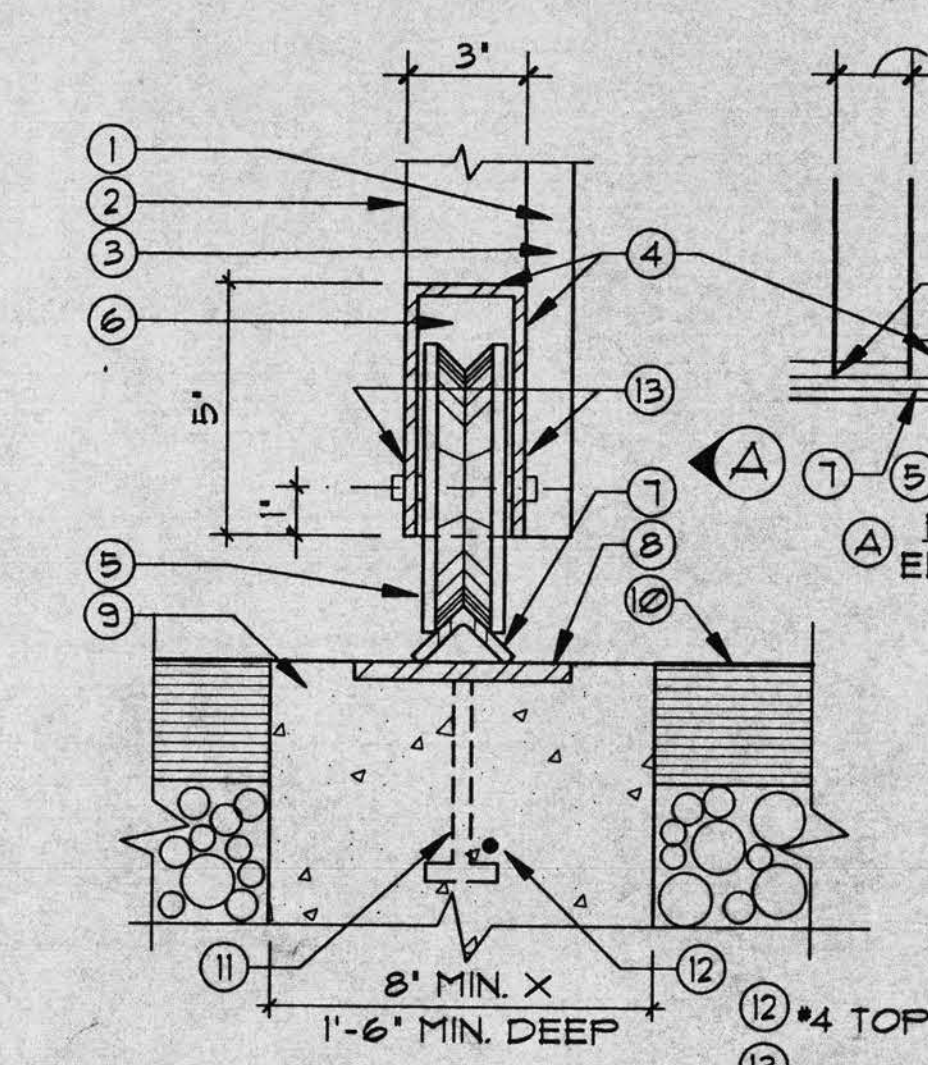
- 1 MASONRY WALL
- 2 TUBE STEEL GATE
- 3 HEAVY DUTY PIPE ROLLER TRACK - SEAMLESS & WELDED TO MOUNTING PLATE
- 4 EXTRA HEAVY DUTY BALL BEARING REAR ROLLERS - 6" MIN. W/ GREASE FITTINGS AND TRACK KEEPERS

NOTE: ALL MOUNTING LOCATIONS & ANCHORS TO BE PER GATE FABRICATOR



4 GATE RECEIVER
SCALE: 3/4"=1'-0"

- 1 SLIDING GATE
- 2 CONT. 1/4" PLATE YOKE
- 3 CONT. 6"x4"x3/8" ANGLE
- 4 1/4" STIFFENER PLATE @ 24" O.C.
- 5 1/2" EXP. BOLT @ 24" O.C.
- 6 CMU WALL

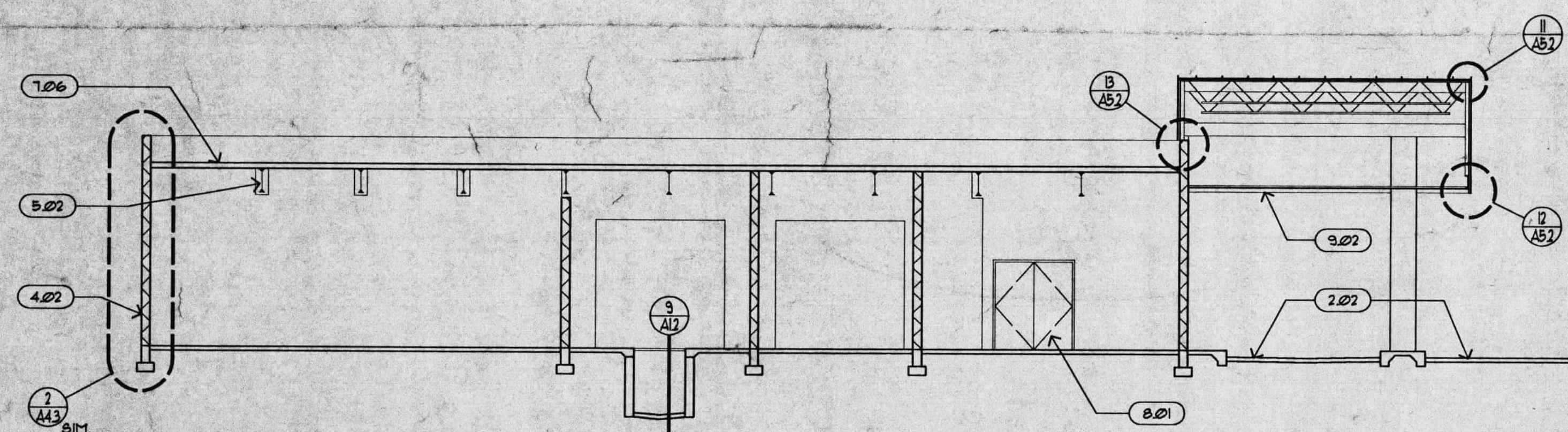


5 GATE WHEEL & TRACK
SCALE: 3/4"=1'-0"

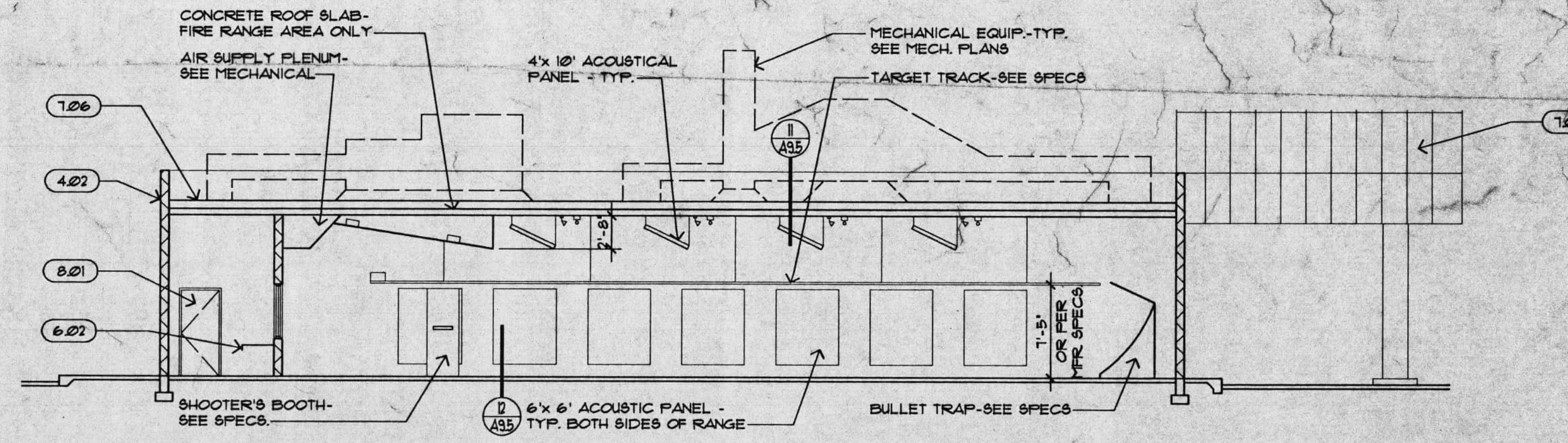
- 1 PICKET ON STREET SIDE
- 2 TO 2"x3"x3/16" FRAME
- 3 1"x1" STEEL BAR - WELD TO FRAME
- 4 1/4" STL. PLATE-GRIND ALL WELDS SMOOTH
- 5 EXTRA HEAVY DUTY 6" V-GROOVE WHEEL W/ GREASABLE BEARINGS
- 6 1/4" STIFFENER PLATE EA. SIDE OF WHEEL
- 7 CONT. 1 1/2"x1 1/2"x1/2" ANGLE-WELD TO PLATE
- 8 CONT. 4"x1/2" PLATE
- 9 CONG. FOUNDATION STRIP
- 10 FLUSH PAVING
- 11 1/2"x4" STUD @ 24" O.C.
- 12 #4 TOP & BOTTOM
- 13 ACCESS HOLES FOR GREASE FITTINGS



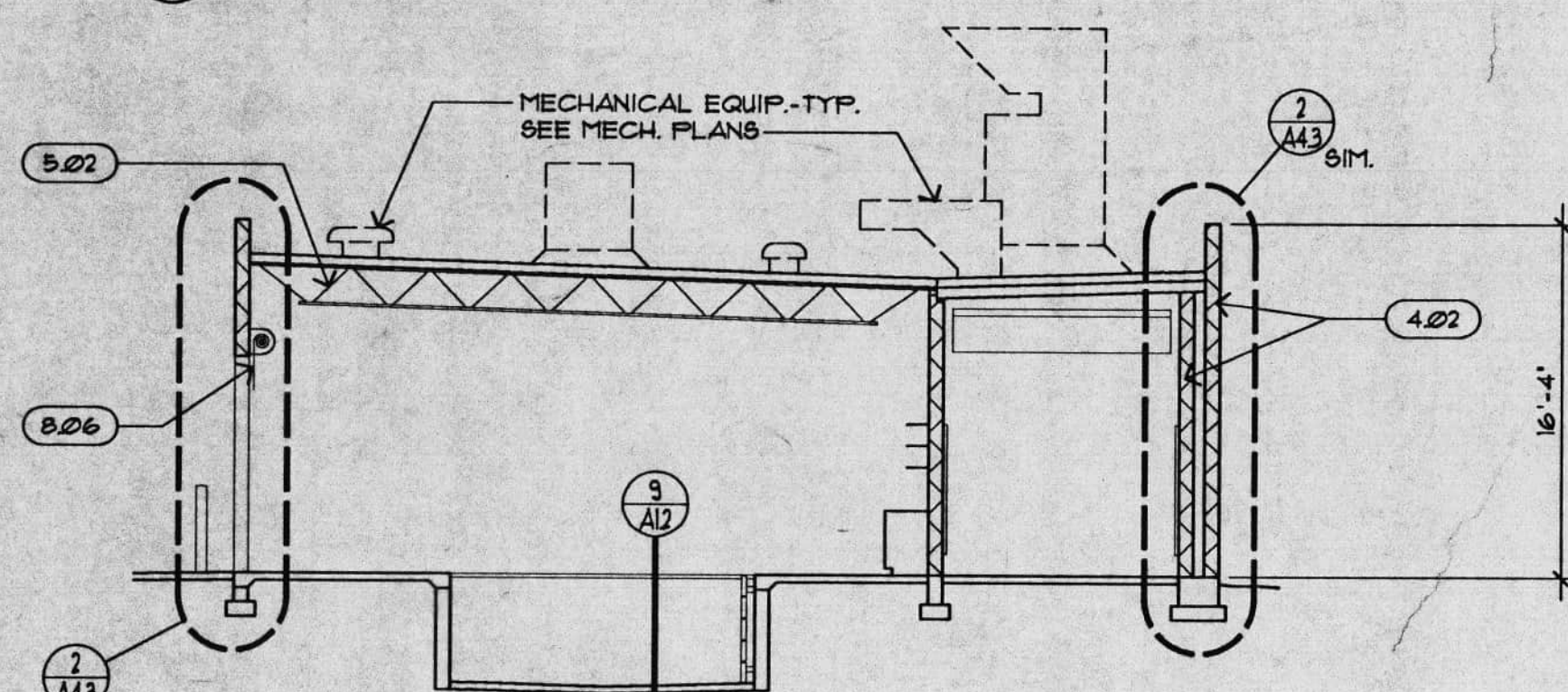
DATE 12/18/91	DATE
ISSUED FOR	DATE
SHEET TITLE	



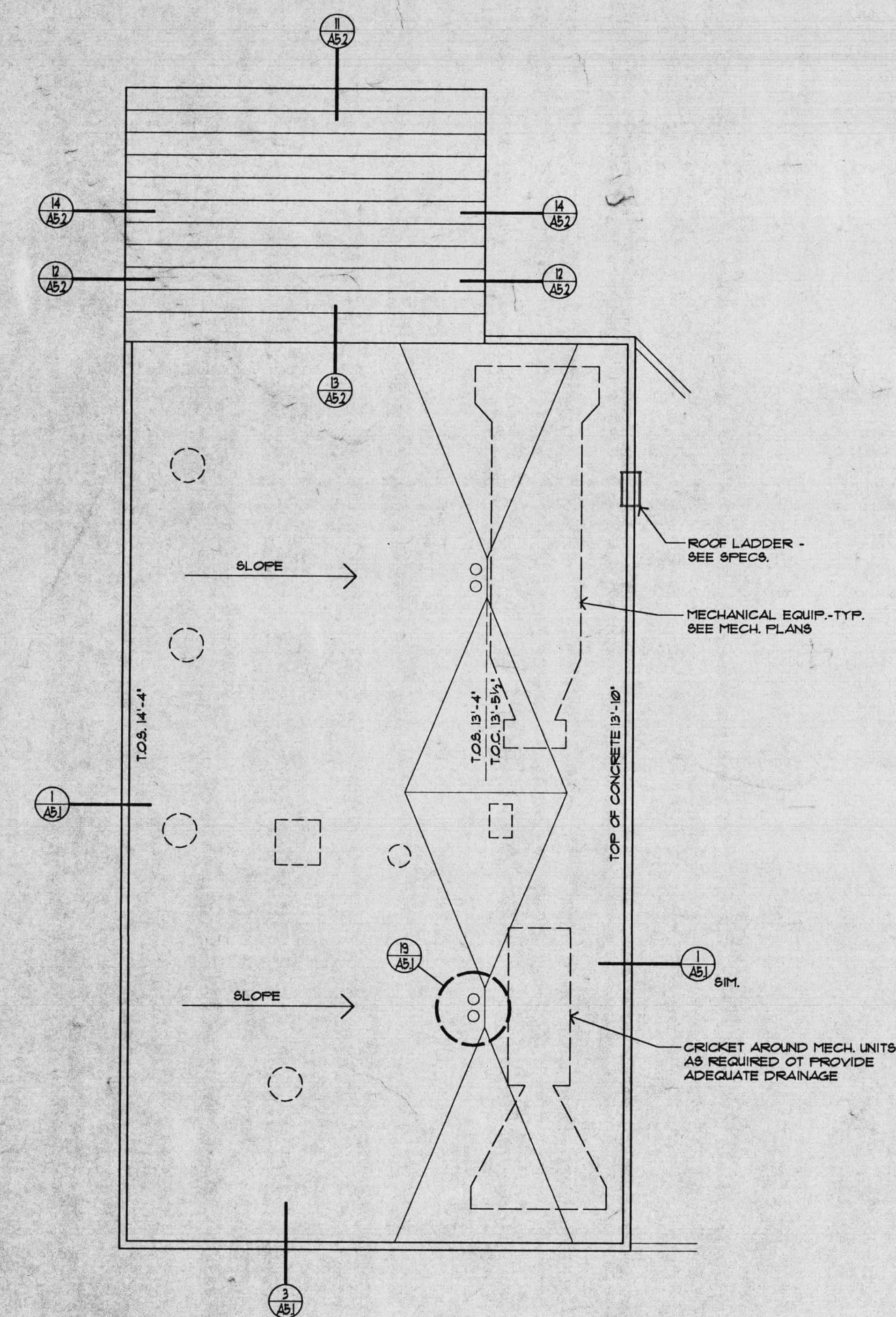
A BUILDING SECTION
SCALE : 1/8" = 1'-0"



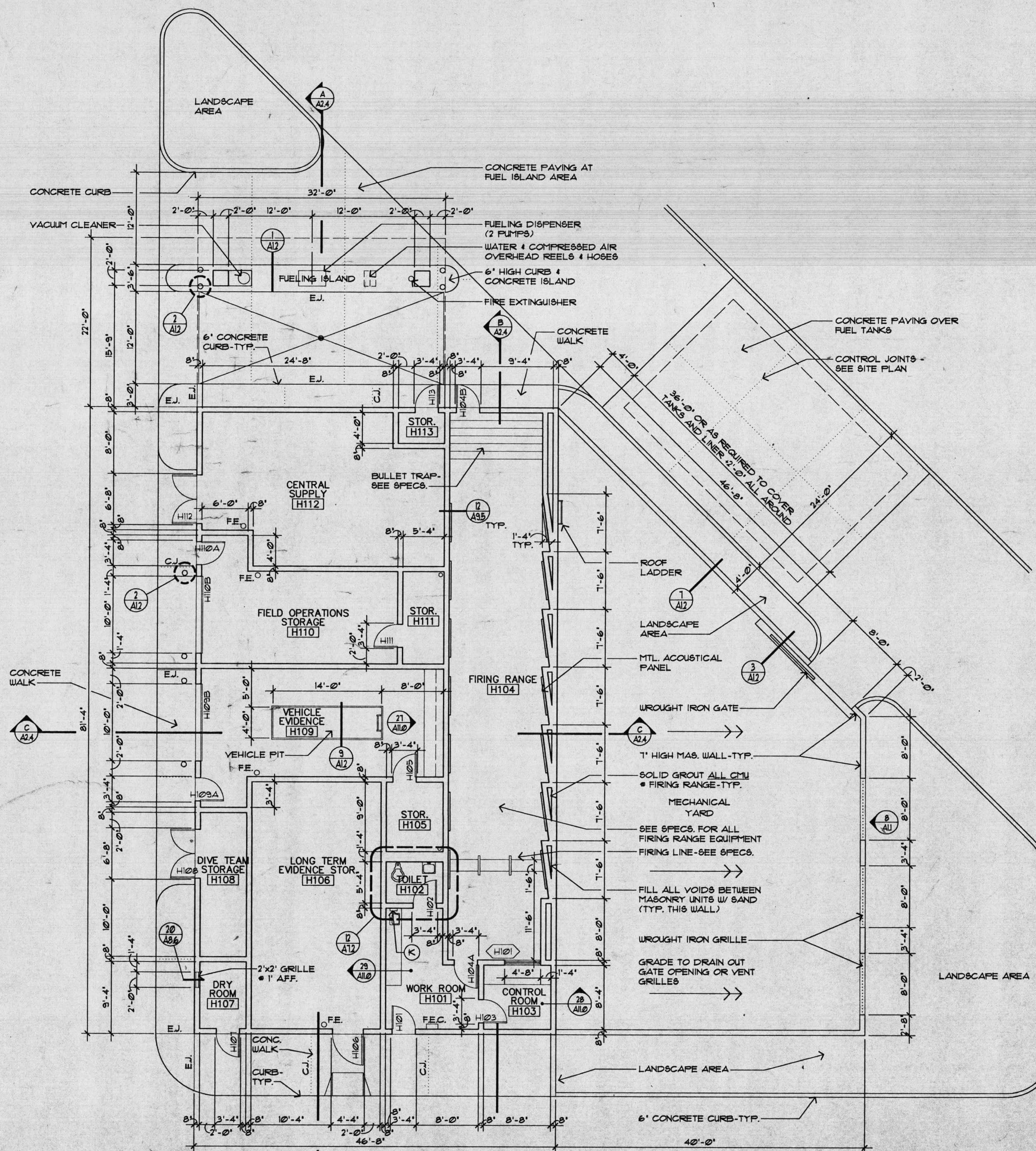
B BUILDING SECTION
SCALE : 1/8" = 1'-0"



C BUILDING SECTION
SCALE : 1/8" = 1'-0"



SUPPORT BUILDING ROOF PLAN
SCALE : 1/8" = 1'-0"



SUPPORT BUILDING FLOOR PLAN
SCALE : 1/8" = 1'-0"



PROJECT NAME

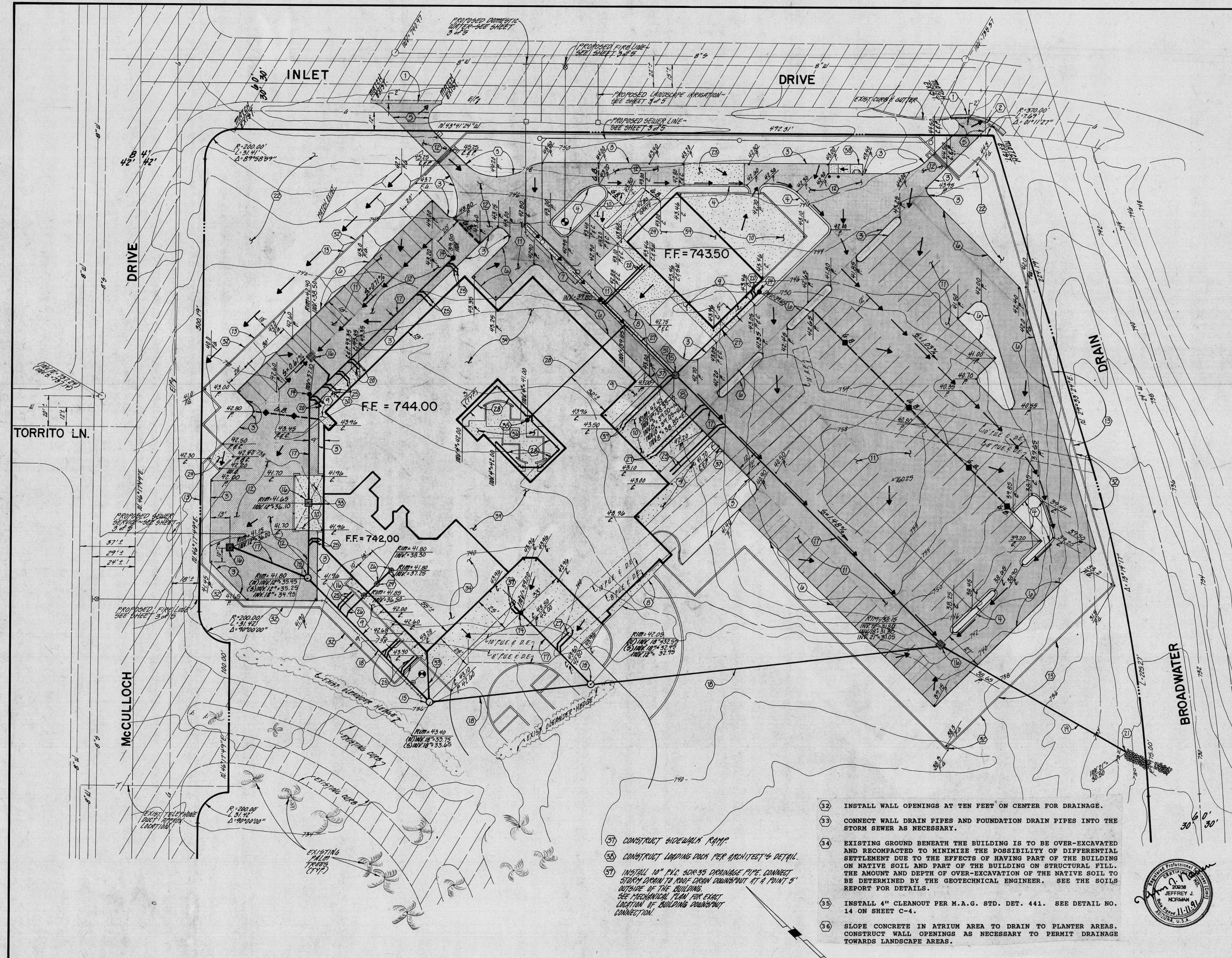
**LAKE HAVASU CITY
POLICE HEADQUARTERS**
LAKE HAVASU CITY, ARIZONA

DATE 12/18/91
ISSUED FOR

NO.	DATE	BY

SHEET TITLE
SUPPORT BUILDING
FLR. PLAN -
ROOF PLAN

SHEET NO.
A2.4
R/DA PROJECT NO.
91006

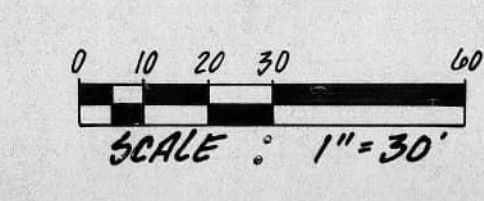


GRADING CONSTRUCTION NOTES

- 1 SAWCUT TO A SMOOTH EDGE AND REMOVE 2 FOOT MINIMUM OF EXISTING PAVEMENT.
- 2 SAWCUT AND REMOVE EXISTING CURB.
- 3 CONSTRUCT 6" SINGLE CURB PER M.A.G. STD. DET. 222, TYPE "A" WHERE SHOWN. SEE DETAIL NO. 4 ON SHEET C-4.
- 4 CONSTRUCT 6" VERTICAL CURB AND GUTTER PER M.A.G. STD. DET. 220, TYPE "A" WHERE SHOWN. SEE DETAIL NO. 3 ON SHEET C-4.
- 5 CONSTRUCT THICKENED EDGE OF PAVEMENT PER M.A.G. STD DET. 201 TYPE "A" WITHIN THE RIGHT-OF-WAY. SEE DETAIL NO. 2 ON SHEET C-4.
- 6 CONSTRUCT 6" EXTRUDED CURB WHERE SHOWN. SEE DETAIL NO. 15 ON SHEET C-4.
- 7 CONSTRUCT 3 FOOT WIDE VALLEY GUTTER PER M.A.G. STD. DET. 240. SEE DETAIL NO. 5 ON SHEET C-4.
- 8 CONSTRUCT CONCRETE TURNDOWN. SEE DETAIL NO. 20 ON SHEET C-4.
- 9 CONSTRUCT SIDEWALK PER MAG STD. DET. 230. SEE DETAIL NO. 6 ON SHEET C-4.
- 10 CONSTRUCT 6" THICK CONCRETE PAVING. SEE STRUCTURAL PLANS FOR JOINT AND REINFORCEMENT REQUIREMENTS.
- 11 CONSTRUCT 2" AC/6" ABC PAVEMENT WHERE INDICATED PER THE SPECIFICATIONS IN THE GEOTECHNICAL REPORT.
- 12 CONSTRUCT 3" AC/6" ABC HEAVY DUTY PAVEMENT WHERE INDICATED PER THE SPECIFICATIONS IN THE GEOTECHNICAL REPORT.
- 13 CONSTRUCT RETAINING WALL. SEE STRUCTURAL PLANS FOR DETAILS.
- 14 INSTALL PRESSURE CLEANOUT PER DETAIL NO. 22 ON SHEET C-5.
- 15 INSTALL STORM DRAIN MANHOLE PER M.A.G. STD DET. 520. SEE DETAIL NO. 18 ON SHEET C-5.
- 16 INSTALL CATCH BASIN PER M.A.G. STD. DET. 535, TYPE "M". SEE DETAIL NO. 19 ON SHEET C-5.
- 17 INSTALL 12" PVC SDR-35 DRAINAGE PIPE TO THE INVERT ELEVATIONS SHOWN.
- 18 INSTALL 18" PVC SDR-35 DRAINAGE PIPE TO THE INVERT ELEVATIONS SHOWN.
- 19 INSTALL 21" PVC SDR-35 DRAINAGE PIPE TO THE INVERT ELEVATIONS SHOWN.
- 20 INSTALL 6" PVC SDR-35 DRAINAGE PIPE. CONNECT STORM DRAIN TO ROOF DRAIN DOWNSPOUT AT A POINT 5 FEET OUTSIDE OF THE BUILDING. SEE MECHANICAL PLAN FOR EXACT LOCATION OF BUILDING DOWNSPOUT CONNECTION.
- 21 CONSTRUCT HEADWALL PER M.A.G. STD. DET. 501, "STRAIGHT TYPE". PLACE GROUDED RIVER ROCK $d_{50} = 6"$ FROM HEADWALL TO FLOW LINE OF EXISTING BROADWATER DRAIN. SEE DETAIL NO. 16 AND 17 ON SHEET C-5.
- 22 GRADE LANDSCAPE ARE TO FINISHED ELEVATIONS AS SHOWN.
- 23 CONSTRUCT CONCRETE PAVING MINIMUM 6" THICK OVER UNDERGROUND STORAGE TANK. PROVIDE MINIMUM 2.5 FEET OF EARTH COVER FROM THE BOTTOM OF THE CONCRETE SLAB TO THE TOP WALL OF THE TANK. SEE THE STRUCTURAL PLANS FOR REINFORCING AND JOINTING REQUIREMENTS.
- 24 CONSTRUCT TRASH ENCLOSURE. SEE ARCHITECT'S PLAN FOR DETAILS.
- 25 INSTALL 4" PVC SDR-35 DRAINAGE PIPE. CONNECT STORM DRAIN TO ROOF DRAIN DOWNSPOUT AT A POINT 5 FEET OUTSIDE OF THE BUILDING. SEE MECHANICAL PLAN FOR EXACT LOCATION OF BUILDING DOWNSPOUT CONNECTION.
- 26 INSTALL 6" PVC SDR-35 DRAINAGE PIPE INTO THE BUILDING WHERE SHOWN. PIPE IS CONNECTED TO THE TWO (2) AREA FLOOR DRAINS INSTALLED IN THE EXERCISE AREA. THE EXERCISE FLOOR IS TO BE SLOPED AT A MINIMUM OF 1/8" PER FOOT TOWARDS THE TWO AREA DRAINS. CONSTRUCT A GRADE BREAK HALFWAY BETWEEN THE TWO AREA DRAINS TO SPLIT THE DRAINAGE AREA ON THE FLOOR EQUALLY BETWEEN THE TWO DRAINS. INSTALL VANDAL PROOF GRATES ON THE AREA DRAINS. CONNECT THE 6" PVC PIPE TO THE DRAINS AT THE INVERT ELEVATIONS SHOWN.
- 27 INSTALL 8" PVC SDR-35 DRAINAGE PIPE. CONNECT STORM DRAIN TO ROOF DRAIN DOWNSPOUT AT A POINT 5 FEET OUTSIDE OF THE BUILDING. SEE MECHANICAL PLAN FOR EXACT LOCATION OF BUILDING DOWNSPOUT CONNECTION.
- 28 INSTALL 4" DRAIN PIPE TO THE INVERT ELEVATIONS SHOWN. 4" PIPE IS TO BE SOLID-WALLED IN THE AREAS BENEATH THE FLOOR SLAB, PAVEMENT, AND SIDEWALK AREAS. 4" PIPE IN THE LANDSCAPED AREAS IS TO BE PERFORATED PIPE BEDDED WITH PER GRAVEL COMPACTED AT 95% OPTIMUM DENSITY. SEE DETAIL NO. 21 ON SHEET C-4 FOR PERFORATED PIPE BEDDING DETAIL. CONTRACTOR TO VERIFY 4" LINE BENEATH THE FLOOR SLAB WILL NOT CONFLICT WITH OTHER BUILDING PLUMBING LINES PRIOR TO CONSTRUCTION.
- 29 4" AREA DRAIN. SEE MECHANICAL PLUMBING PLANS FOR DRAIN DETAILS.
- 30 INSTALL SIDEWALK RAMPS WHERE SHOWN. SEE DETAIL NO. 25 ON SHEET C-5.
- 31 INSTALL SLOTTED FRAME AND COVER ON STORM DRAIN MANHOLE FOR DRAINAGE. FRAME AND COVER SELECTED MUST WITHSTAND NORMAL H-20 LOADING.

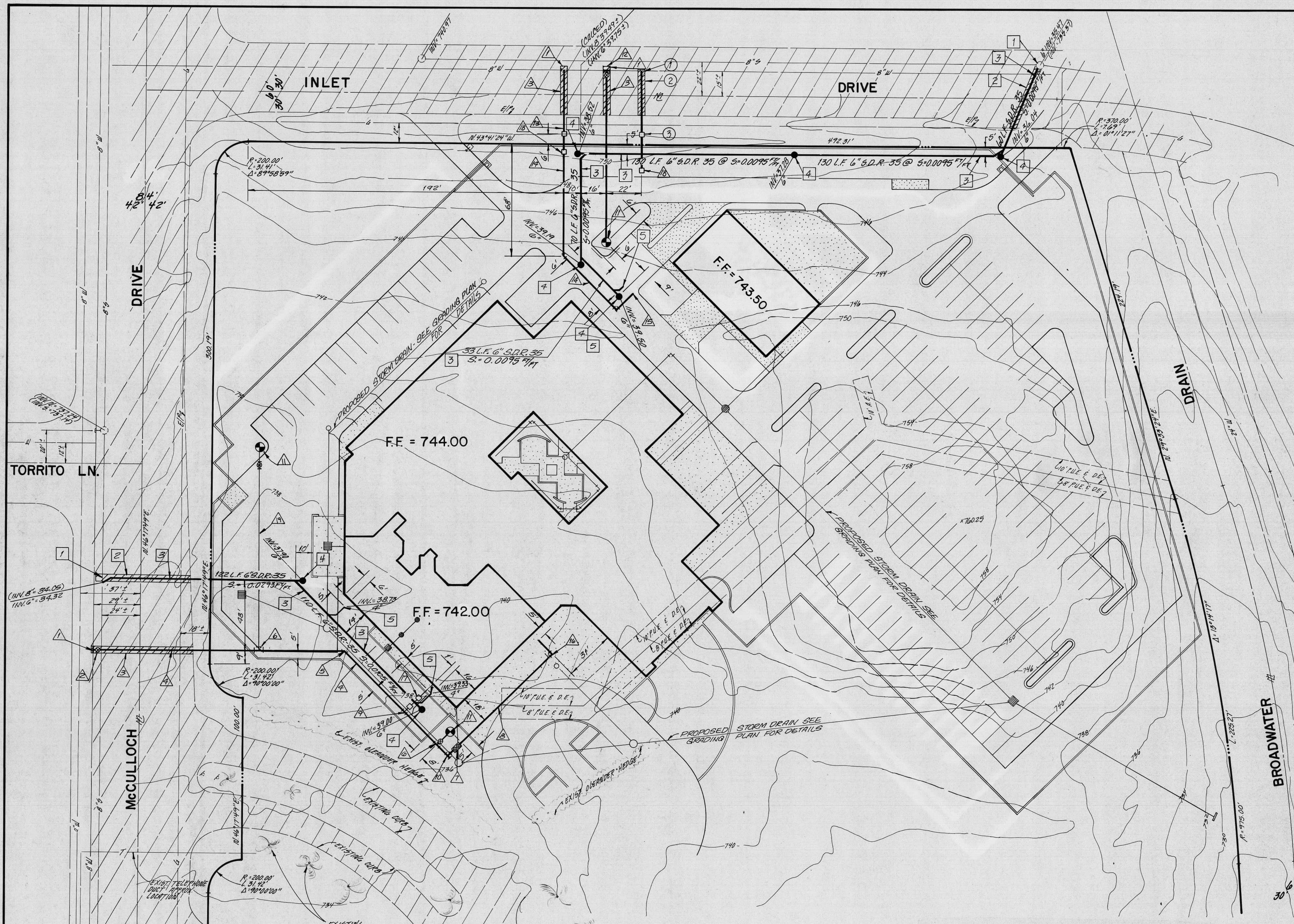
- 32 INSTALL WALL OPENINGS AT TEN FEET ON CENTER FOR DRAINAGE.
- 33 CONNECT WALL DRAIN PIPES AND FOUNDATION DRAIN PIPES INTO THE STORM SEWER AS NECESSARY.
- 34 EXISTING GROUND BENEATH THE BUILDING IS TO BE OVER-EXCAVATED AND RECOMPACTED TO MINIMIZE THE POSSIBILITY OF DIFFERENTIAL SETTLEMENT DUE TO THE EFFECTS OF HAVING PART OF THE BUILDING ON NATIVE SOIL AND PART OF THE BUILDING ON STRUCTURAL FILL. THE AMOUNT AND DEPTH OF OVER-EXCAVATION OF THE NATIVE SOIL TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER. SEE THE SOILS REPORT FOR DETAILS.
- 35 INSTALL 4" CLEANOUT PER M.A.G. STD. DET. 441. SEE DETAIL NO. 14 ON SHEET C-4.
- 36 SLOPE CONCRETE IN ATRIUM AREA TO DRAIN TO PLANTER AREAS. CONSTRUCT WALL OPENINGS AS NECESSARY TO PERMIT DRAINAGE TOWARDS LANDSCAPE AREAS.
- 37 CONSTRUCT SIDEWALK RAMP
- 38 CONSTRUCT LANDING POOL PER ARCHITECT'S DETAIL.
- 39 INSTALL 18" PVC SDR-35 DRAINAGE PIPE. CONNECT STORM DRAIN TO ROOF DRAIN DOWNSPOUT AT A POINT 5' OUTSIDE OF THE BUILDING. SEE MECHANICAL PLAN FOR EXACT LOCATION OF BUILDING DOWNSPOUT CONNECTION.

NOTE :
 CONTRACTOR TO VERIFY WHAT AREAS ARE CONCRETE SIDEWALKS AND WHAT AREAS ARE DECORATIVE BRICK PRIOR TO CONSTRUCTION. SEE SHEET A1.1 FOR BRICK DETAILS.



C-2

CALL TWO WORKING DAYS BEFORE YOU DO 263-1100 1-800-STRAKE-IT <small>PHOENIX, ARIZONA</small>	NORMAN ENGINEERING GROUP, INC. <small>7330 N. 16th Street C-201 Consulting Civil Engineers Phoenix, Arizona 85020 Fax: (602) 961-3473</small>	GRADING AND DRAINAGE PLAN	
		LAKE HAVASU POLICE DEPARTMENT HEADQUARTERS	DESIGN K. Z. DRNWKD J. H. SCALE 1"=30' DATE 10/91 JOBNO. 1090 SHEET 2 OF 5



SEWER NOTES

- 1 CONTRACTOR TO VERIFY EXACT LOCATION, SIZE, TYPE, AND DEPTH OF EXISTING SEWER LINE PRIOR TO CONSTRUCTION.
- 2 SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT PER M.A.G. STD. DET. 200, TYPE "A". SEE DETAIL NO. 1 ON SHEET C-4.
- 3 INSTALL 6" PVC SDR-35 SEWER PIPE TO INVERT ELEVATIONS SHOWN. USE CLASS "B" BEDDING.
- 4 INSTALL 6" SEWER CLEANOUT PER M.A.G. STD. DET. 441. SEE DETAIL NO. 14 ON SHEET C-4.
- 5 INSTALL 4" BUILDING CONNECTION PER M.A.G. STD. DET. 440, TYPE "A", MODIFIED TO USE PVC SDR-35 PIPE. SEE SHEET DETAIL NO. 13 ON SHEET C-4. CONTRACTOR TO VERIFY BUILDING SEWER CONNECTION LOCATION WITH PLUMBING PLANS PRIOR TO CONSTRUCTION.

NOTE:
 ENCASE WATER & SEWER LINES IF NECESSARY TO MAINTAIN MINIMUM VERTICAL CLEARANCE BETWEEN WATER & SEWER LINES. ENCASE PER M.A.G. STD. DETAIL NO. 14, TYPE "A" WITH 6" OF CONCRETE FOR AT LEAST 10 FEET BEYOND CROSSING. SEE DETAIL 12 ON SHEET C-4.

DOMESTIC WATER AND FIRELINE NOTES

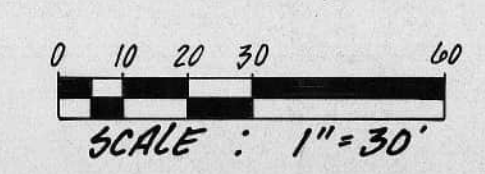
- 1 CONTRACTOR TO VERIFY EXACT LOCATION, DEPTH, SIZE, AND TYPE OF EXISTING WATER LINE PRIOR TO CONSTRUCTION.
- 2 INSTALL 8" X 8" TAPPING SLEEVE, VALVE BOX, AND COVER PER M.A.G. STD. DET. 340 AND 391-1, TYPE "A". SEE DETAIL NO. 7, NO. 10, AND NO. 11 ON SHEET C-4.
- 3 SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT PER M.A.G. STD. DET. 200, TYPE "A". CONSTRUCT THICKENED EDGE OF PAVEMENT PER M.A.G. STD. DET. 201, TYPE "A". SEE DETAIL NO. 1 AND NO. 2 ON SHEET C-4.
- 4 INSTALL 8" DUCTILE IRON PIPE, CEMENT MORTAR LINED, CLASS 52. DUCTILE IRON PIPE TO BE WRAPPED IN POLYETHYLENE PER THE MANUFACTURER'S RECOMMENDATIONS.
- 5 INSTALL 8" 45° BEND. INSTALL THRUST BLOCKS PER M.A.G. STD. DET. 380. SEE SHEET DETAIL NO. 24 ON SHEET C-5 DETAILS.
- 6 INSTALL 8" X 6" TEE. INSTALL THRUST BLOCKS PER M.A.G. STD. DET. 380. SEE SHEET DETAIL NO. 24 ON SHEET C-5 DETAILS.
- 7 INSTALL 6" DOUBLE CHECK VALVE ASSEMBLY BACKFLOW PREVENTION DEVICE. PER M.A.G. R18-4-211.
- 8 INSTALL 6" C-90 CLASS 200 PVC PIPE. CONTRACTOR TO VERIFY EXACT LOCATION AND SIZE OF PIPE USER WITH THE FIRE DEPARTMENT PRIOR TO CONSTRUCTION.
- 9 INSTALL 3" WATER SERVICE AND METER. CONTRACTOR TO VERIFY EXACT LOCATION AND SIZE OF THE DOMESTIC WATER BUILDING CONNECTION WITH THE PLUMBING PLANS PRIOR TO CONSTRUCTION.
- 10 INSTALL 8" X 6" TEE. 8" END TO BE CAPPED PER M.A.G. STD. DET. 390, TYPE "A". INSTALL THRUST BLOCKS PER M.A.G. STD. DET. 380. SEE DETAIL NO. 9 ON SHEET C-4 AND DETAIL NO. 26 ON SHEET C-5.
- 11 INSTALL FIRE HYDRANT COMPLETE PER M.A.G. STD. DET. 360 AND 391-1, TYPE "B". CONTRACTOR TO VERIFY FIRE HYDRANT SELECTED MEETS THE REQUIREMENTS OF THE LAKE HAVASU CITY FIRE DEPARTMENT PRIOR TO CONSTRUCTION. SEE DETAIL NO. 8, NO. 10, AND NO. 11 ON SHEET C-4.
- 12 INSTALL 8" X 6" TAPPING SLEEVE BOX AND COVER PER M.A.G. STD. DET. 340 AND 391-1, TYPE "A". SEE DETAIL NO. 7, NO. 10, AND NO. 11 ON SHEET C-4.
- 13 INSTALL 2" WATER SERVICE AND METER.
- 14 INSTALL 2" PVC WATER LINE PER IAMPO STANDARDS.
- 15 CONTRACTOR TO VERIFY EXACT LOCATION OF DOMESTIC WATER BUILDING CONNECTION WITH PLUMBING PLANS PRIOR TO CONSTRUCTION.
- 16 INSTALL 6" 90° BEND. INSTALL THRUST BLOCKS PER M.A.G. STD. DET. 380. SEE DETAIL NO. 26 ON SHEET C-5.
- 17 INSTALL 3" PRESSURE REDUCING VALVE WITH A VALVE POSITION INDICATOR. PRV VALVE SHALL BE INSTALLED IN A WATER METER BOX FOR ACCESS. CONTRACTOR TO VERIFY THAT THE EXISTING INLET WATER PRESSURE IS 130 PSI. OUTLET PRESSURE TO BE SET AT 15 PSI. PRESSURE REDUCING VALVE SHALL BE A CLA-VAL MODEL 900-01AS CLASS 125 WITH SCREENED CONNECTION OR APPROVED EQUAL. CONTRACTOR TO ISOLATE PRV VALVE USING UNIONS TO ALLOW FOR FUTURE MAINTENANCE.
- 18 INSTALL 2" PRESSURE REDUCING VALVE WITH A VALVE POSITION INDICATOR. PRV VALVE SHALL BE INSTALLED IN A WATER METER BOX FOR ACCESS. CONTRACTOR TO VERIFY THAT THE EXISTING INLET WATER PRESSURE IS 130 PSI. OUTLET PRESSURE TO BE SET AT 15 PSI. PRESSURE REDUCING VALVE SHALL BE A CLA-VAL MODEL 900-01AS CLASS 125 WITH SCREENED CONNECTION OR APPROVED EQUAL. CONTRACTOR TO ISOLATE PRV VALVE USING UNIONS TO ALLOW FOR FUTURE MAINTENANCE. PER M.A.G. R18-4-211.
- 19 INSTALL 6" DUCTILE IRON PIPE, CEMENT MORTAR LINED, CLASS 52. DUCTILE IRON PIPE TO BE WRAPPED IN POLYETHYLENE PER THE MANUFACTURER'S RECOMMENDATIONS.

WATER LINE FOR LANDSCAPE IRRIGATION NOTES

- 1 CONTRACTOR TO VERIFY EXACT LOCATION, DEPTH, SIZE, AND TYPE OF EXISTING WATER LINE PRIOR TO CONSTRUCTION.
- 2 SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT PER M.A.G. STD. DET. 200, TYPE "A". CONSTRUCT THICKENED EDGE OF PAVEMENT PER M.A.G. STD. DET. 201, TYPE "A". SEE DETAIL NO. 1 AND NO. 2 ON SHEET C-4.
- 3 INSTALL 2" WATER SERVICE AND METER.

NOTE:
 ALL VALVE BOXES, MANHOLES, CLEANOUTS, AND WATER METER BOXES ARE TO BE ADJUSTED TO FINISHED ELEVATIONS PRIOR TO THE ACCEPTANCE OF THE WORK BY THE OWNER.

NOTE:
 A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATIONS OF ALL EXISTING UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OBSTRUCTIONS AND UTILITY LINES ENCOUNTERED DURING CONSTRUCTION AND SHALL DETERMINE THE EXACT LOCATION OF ALL THE EXISTING UTILITIES PRIOR TO CONSTRUCTION.



C-3

<p>NORMAN ENGINEERING GROUP, INC.</p> <p>263-1100 1-800-STAKE-IT OUTSIDE MARICOPA COUNTY</p>	<p>7330 N. 16th Street C-201 Consulting Civil Engineers Phoenix, Arizona 85020 Fax (602) 861-3473 (602) 371-0397</p>	<p>LAKE HAVASU POLICE DEPARTMENT HEADQUARTERS</p>	<p>DESIGN K. Z. DRN.WW004.J.N. SCALE 1" = 30'</p>
	<p>DATE 10 / 91 JOB NO. 1090</p>	<p>3 OF 5</p>	

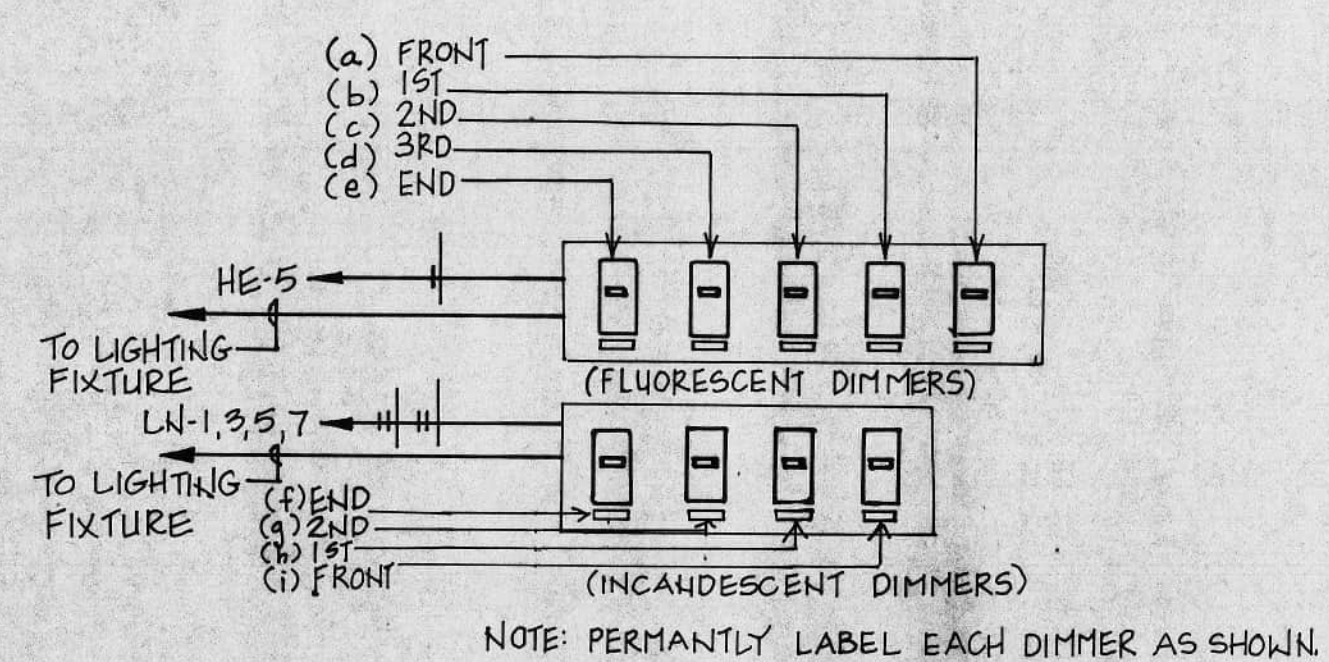
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PROJECT NAME
**LAKE HAVASU CITY
 POLICE HEADQUARTERS**
 LAKE HAVASU CITY, ARIZONA

DATE	12/15/91
ISSUED FOR	DATE
PER CITY COMMENTS	4-8-92

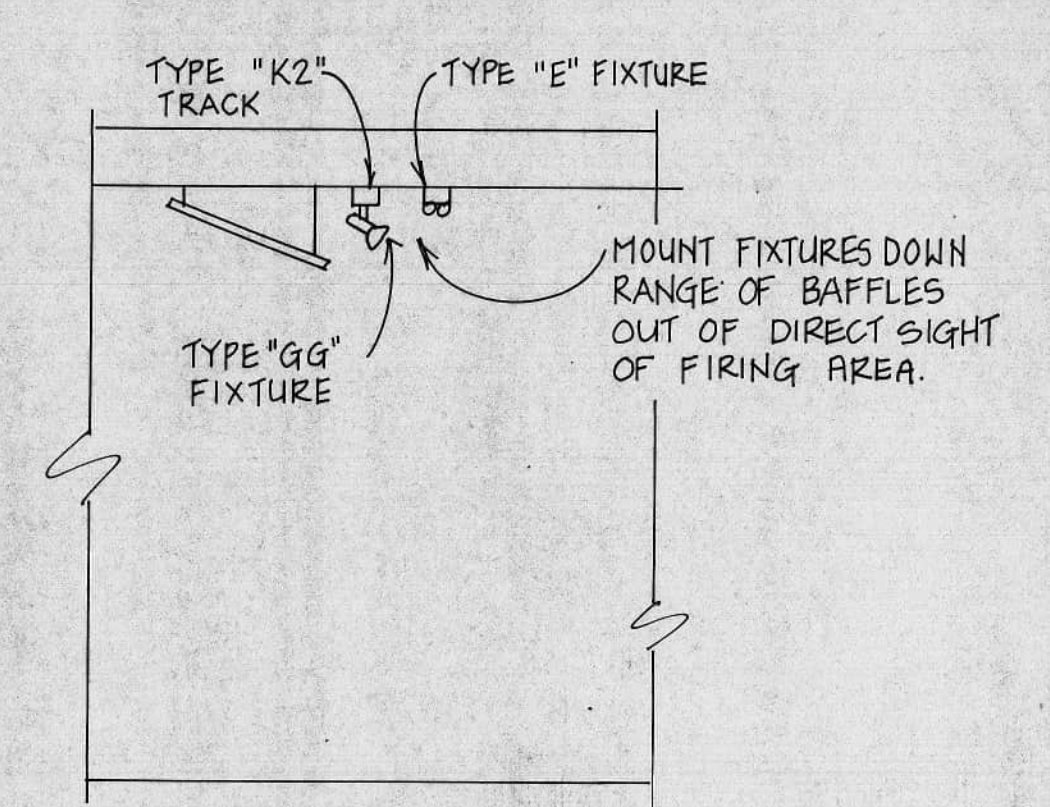
SHEET TITLE
ELECTRICAL LIGHTING PLAN - SUPPORT BUILDING
 SHEET NO.
E-7
 R/DA PROJECT NO.
91006



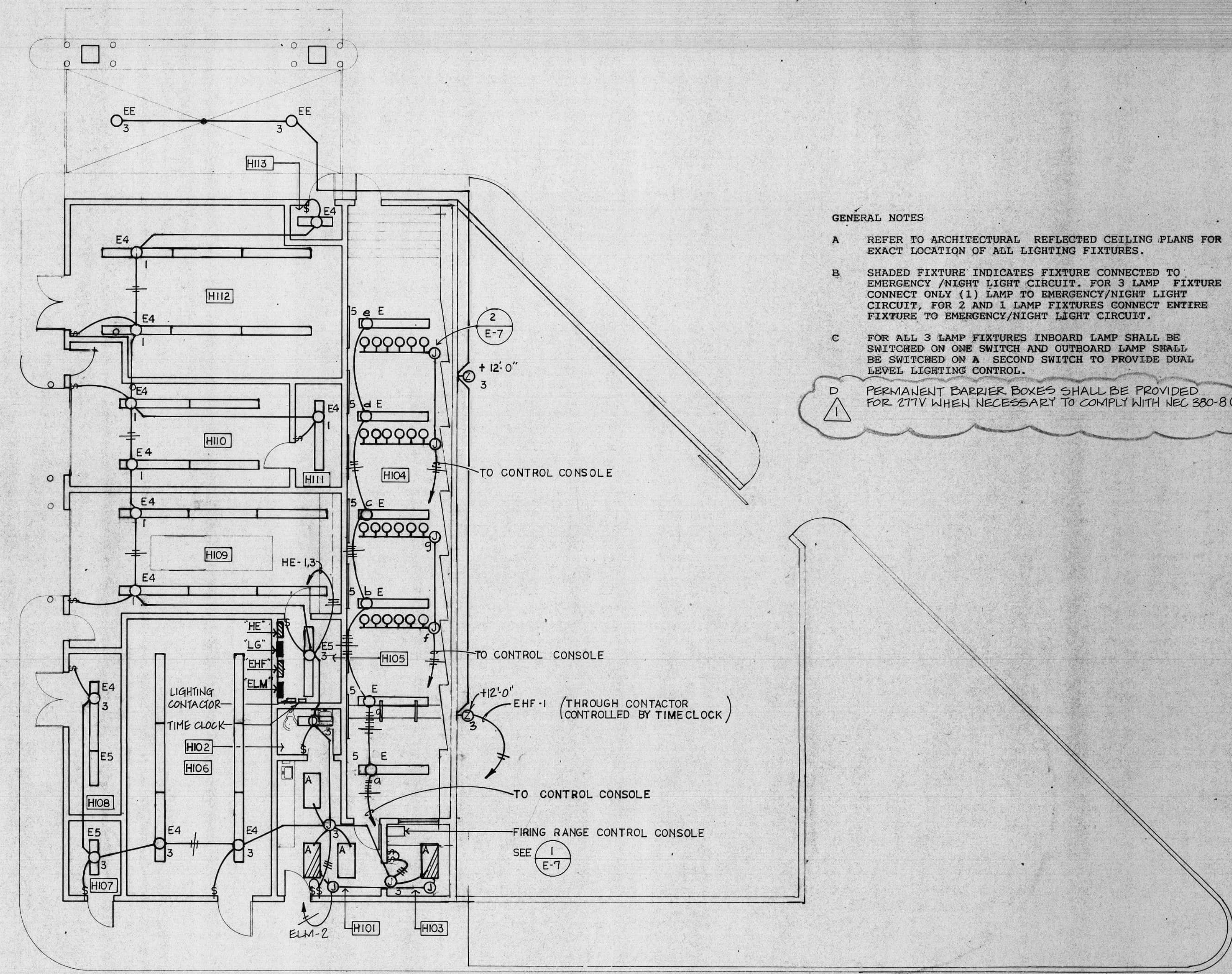
1 FIRING RANGE CONTROL CONSOLE DETAIL N.T.S.

- 1. FLUORESCENT DIMMERS: LUTRON #NTHF-10
 HI-LUME DIMMER CONTROL WITH FIXTURE
 PACK #4843/2172
- 2. INCANDESCENT DIMMERS: LUTRON #NY-1000

NOTE: PERMANENTLY LABEL EACH DIMMER AS SHOWN



2 FIRING RANGE FIXTURE MOUNTING DETAIL N.T.S.



- GENERAL NOTES**
- A REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
 - B SHADED FIXTURE INDICATES FIXTURE CONNECTED TO EMERGENCY/NIGHT LIGHT CIRCUIT. FOR 3 LAMP FIXTURE CONNECT ONLY (1) LAMP TO EMERGENCY/NIGHT LIGHT CIRCUIT, FOR 2 AND 1 LAMP FIXTURES CONNECT ENTIRE FIXTURE TO EMERGENCY/NIGHT LIGHT CIRCUIT.
 - C FOR ALL 3 LAMP FIXTURES INBOARD LAMP SHALL BE SWITCHED ON ONE SWITCH AND OUTBOARD LAMP SHALL BE SWITCHED ON A SECOND SWITCH TO PROVIDE DUAL LEVEL LIGHTING CONTROL.
 - D PERMANENT BARRIER BOXES SHALL BE PROVIDED FOR 277V WHEN NECESSARY TO COMPLY WITH NEC 300-8 (4).

NOTE:
 SEE ELECTRICAL SPECIFICATION SECTION FOR LIGHT FIXTURE SCHEDULE, PANEL SCHEDULE, MECHANICAL CONNECTION SCHEDULE AND ELECTRICAL CONNECTION SCHEDULE.

ELECTRICAL LIGHTING PLAN - SUPPORT BUILDING
 SCALE: 1/8" = 1'-0"

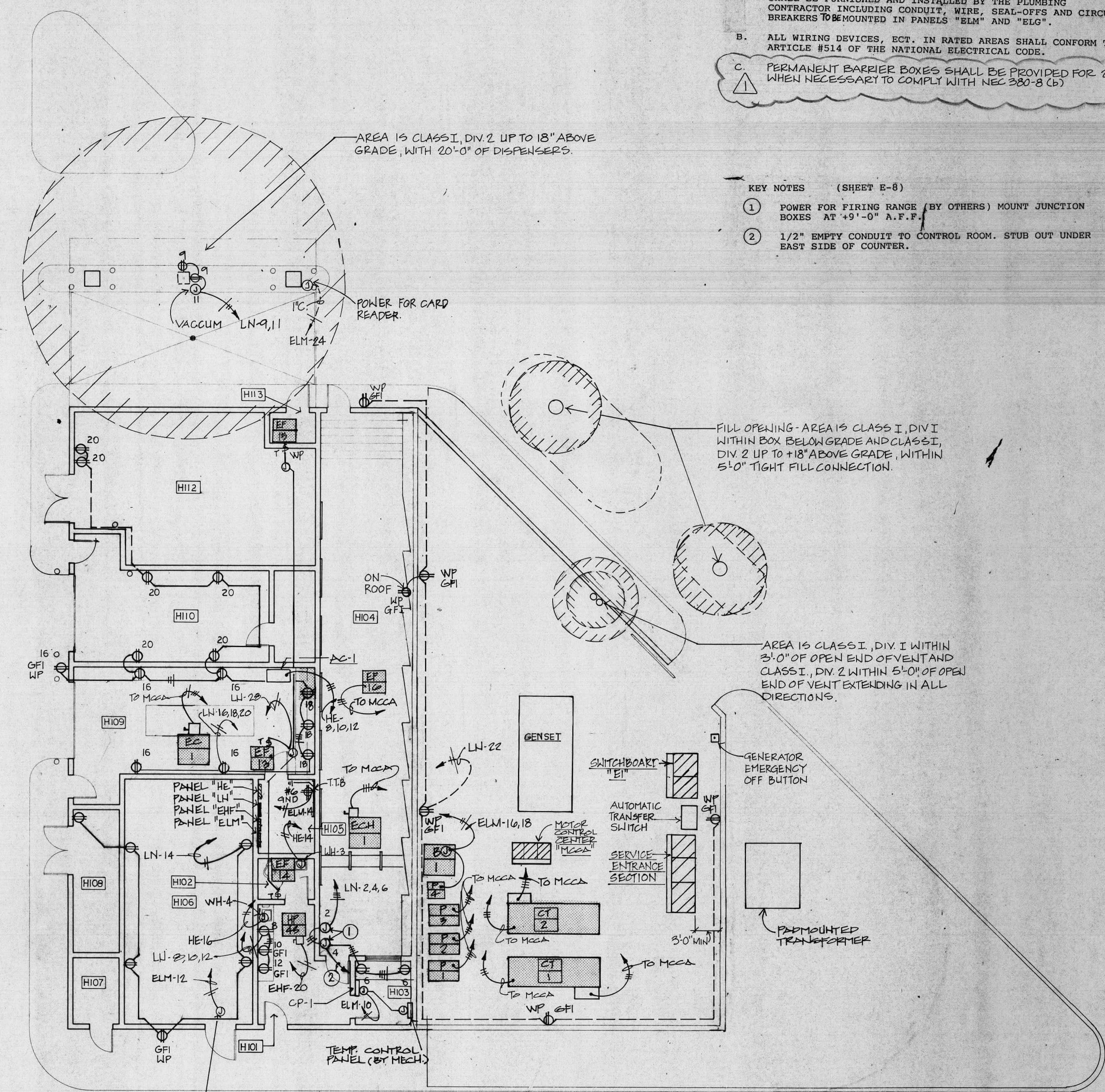
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GENERAL NOTES:

- A. THE FUEL DISPENSING SYSTEM INCLUDING POWER TO SUBMERGIBLE PUMPS, DISPENSERS, FUEL DETECTION AND CONTROL EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR INCLUDING CONDUIT, WIRE, SEAL-OFFS AND CIRCUIT BREAKERS TO BE MOUNTED IN PANELS "ELM" AND "ELG".
- B. ALL WIRING DEVICES, ECT. IN RATED AREAS SHALL CONFORM TO ARTICLE #514 OF THE NATIONAL ELECTRICAL CODE.
- C. PERMANENT BARRIER BOXES SHALL BE PROVIDED FOR 277V WHEN NECESSARY TO COMPLY WITH NEC 380-8 (b)

KEY NOTES (SHEET E-8)

- ① POWER FOR FIRING RANGE (BY OTHERS) MOUNT JUNCTION BOXES AT +9'-0" A.F.F.
- ② 1/2" EMPTY CONDUIT TO CONTROL ROOM. STUB OUT UNDER EAST SIDE OF COUNTER.



JUNCTION BOX MOUNTED ABOVE SECURED DOOR REFER TO SECURITY SYSTEM DWG'S FOR EXACT LOCATION.

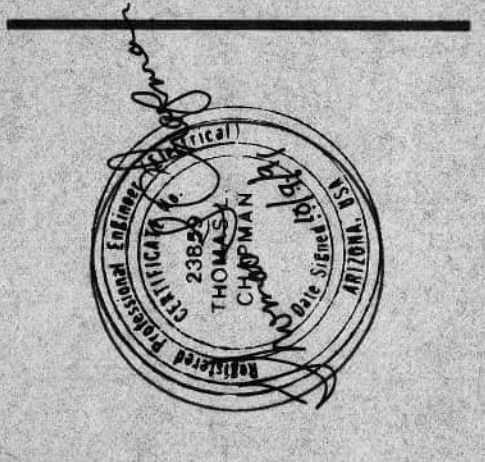
NOTE:
 SEE ELECTRICAL SPECIFICATION SECTION FOR LIGHT FIXTURE SCHEDULE, PANEL SCHEDULE, MECHANICAL CONNECTION SCHEDULE AND ELECTRICAL CONNECTION SCHEDULE.

PROJECT NAME

LAKE HAVASU CITY POLICE HEADQUARTERS
 LAKE HAVASU CITY, ARIZONA

DATE 12/18/91
 ISSUED FOR DATE
 PER CITY COMMENTS 4-8-92

SHEET TITLE
 ELECTRICAL POWER PLAN - SUPPORT BUILDING



PROJECT NAME

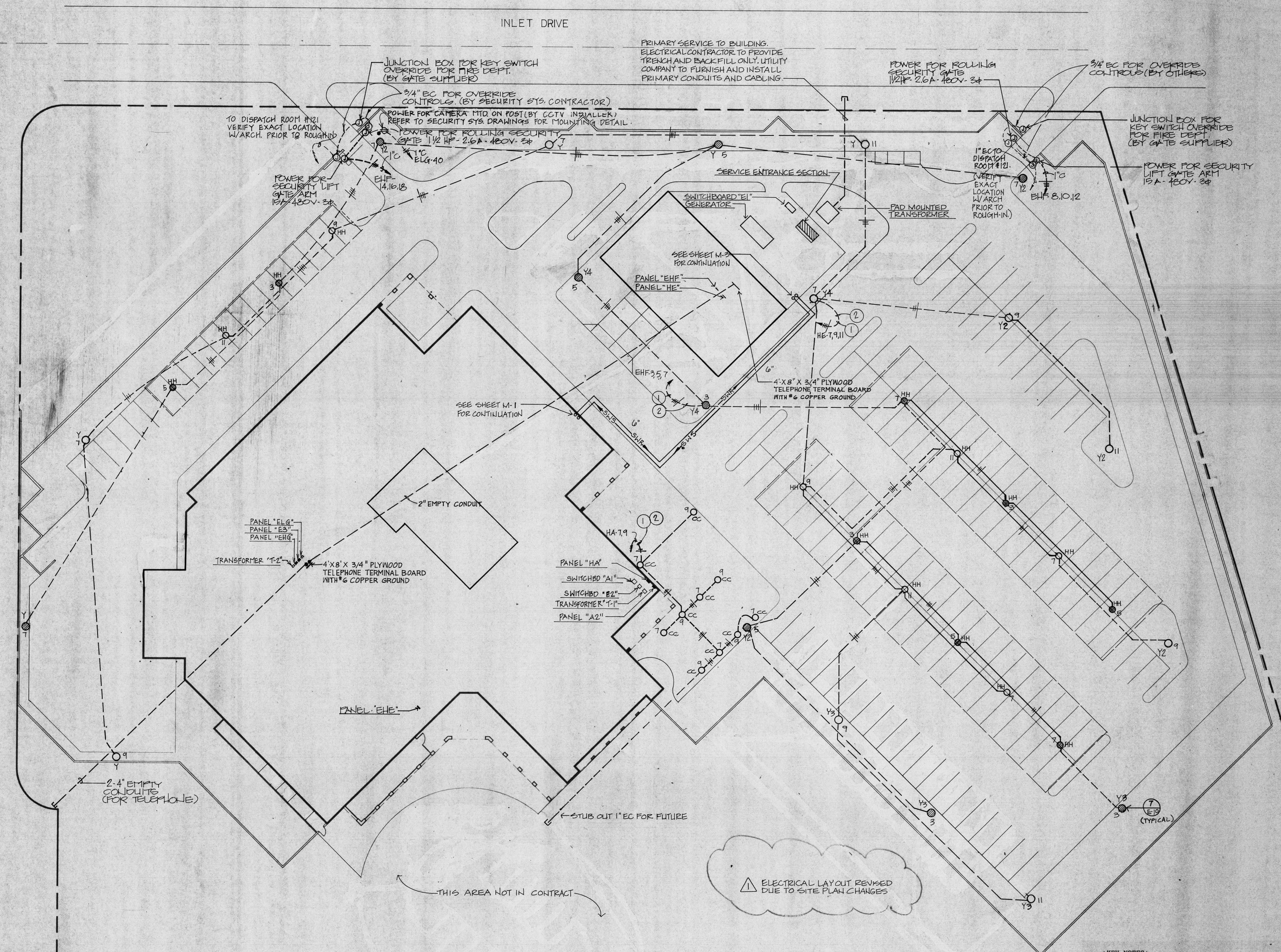
**LAKE HAVASU CITY
 POLICE HEADQUARTERS**
 LAKE HAVASU CITY, ARIZONA

DATE	12/18/91
ISSUED FOR	DATE
PER CITY COMMENTS	4-8-92

SHEET TITLE
 ELECTRICAL/MECHANICAL
 SITE PLAN

SHEET NO.
EM-0

R/DA PROJECT NO.
 91006



⚠ ELECTRICAL LAYOUT REVISED
 DUE TO SITE PLAN CHANGES

THIS AREA NOT IN CONTRACT

NOTE:
 SEE ELECTRICAL SPECIFICATION SECTION FOR LIGHT FIXTURE
 SCHEDULE, PANEL SCHEDULE, MECHANICAL CONNECTION SCHEDULE AND
 ELECTRICAL CONNECTION SCHEDULE.

- KEY NOTES:
- 1 THROUGH LIGHTING CONTACTOR CONTROLLED BY TIME CLOCK.
 - 2 #10 WIRE FULL LENGTH, 1" C.

ELECTRICAL / MECHANICAL SITE PLAN
 SCALE: 1" = 20' - 0"



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PROJECT NAME

**LAKE HAVASU CITY
POLICE HEADQUARTERS**
LAKE HAVASU CITY, ARIZONA

DATE 10/18/91

ISSUED FOR DATE

SHEET TITLE
IRRIGATION PLAN

SHEET NO.

L-3

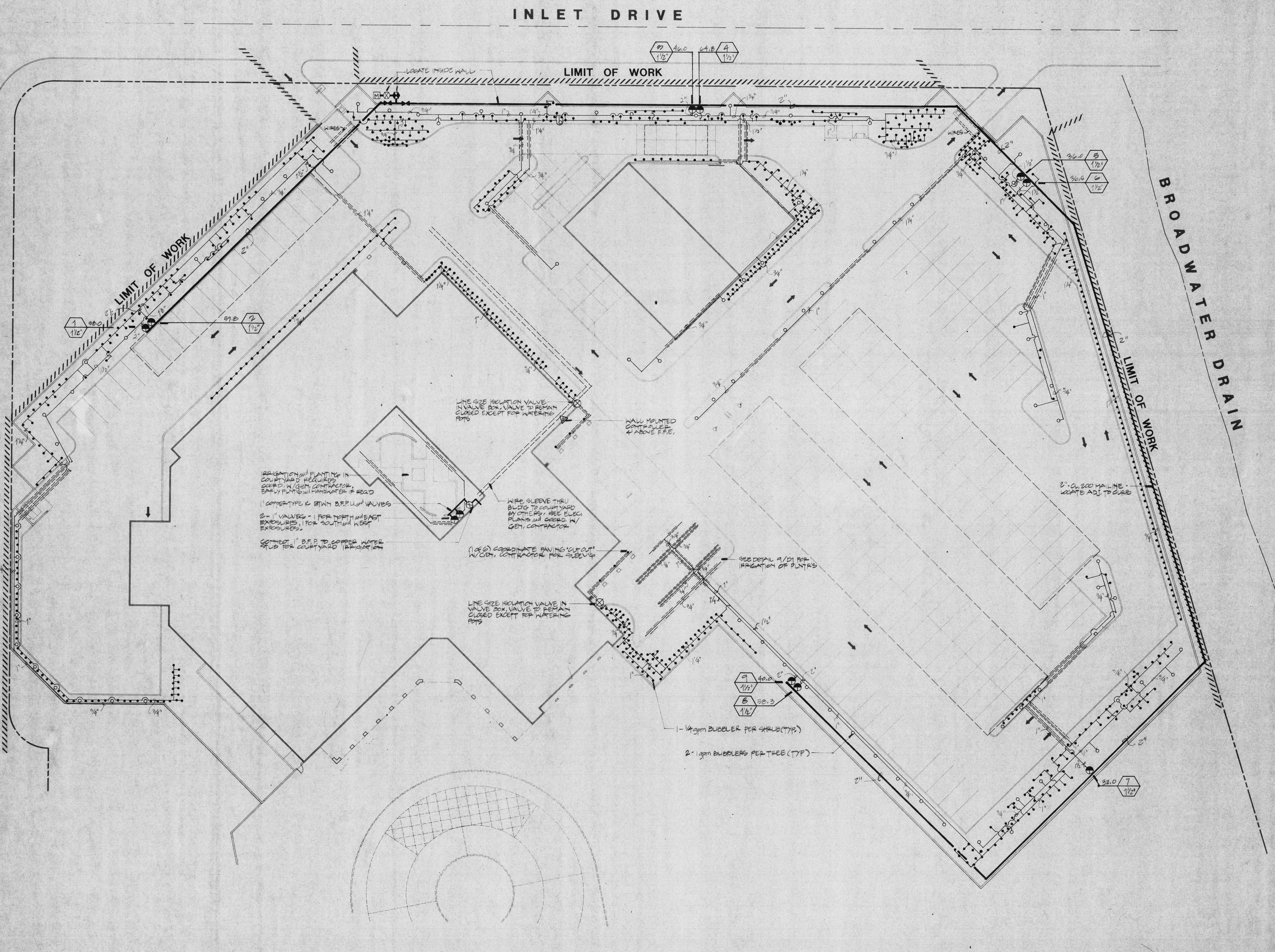
R/DA PROJECT NO.
91006

- LEGEND**
- 2" Water meter for irrigation (see civil). Provide 2" copper to R.F.F.U.
 - Motorola MIR 5005-F-2647-26 controller
 - Flow meter, data industrial #220 B. Install per controller manufacturer's specifications.
 - Pressure switch, mercoid switch #DAW 33, install on backflow prevention assembly in 6" X 6" X 4" nema enclosure.
 - Master valve, CLA-VAL #156-01 2" elec. solenoid control valve.
 - FEBCO #525YD-4" reduced pressure backflow preventer.
 - Mainline gate valve, AWWA 4", bronze 2-1/2" and smaller (size same as pipe).
 - Hammood 1/2" brass gate valve as isolation valve in locking plastic valve box.
 - Mainline pipe, PVC CL. 200 pipe, S.W., 2-1/2" and smaller (see plan).
 - Lateral pipe, PVC CL. 200 pipe, S.W., 2-1/2" and smaller.
 - Shoring PVC SCH. 40 pipe. Piping sleeve size two sizes larger than pipe size. Wire sleeve size 2".
 - Controller and station number.
 - Valve size.
 - Rainbird Pressure Compensating Bubblers
1404 (two per plant)
1401 (one per each shrub)
- Note: Also see bubbler schedule

BUBBLER SCHEDULE

Plant Type	Plant Size	Bubblers Per Plant	GPM Per Bubbler	Total GPM Per Plant
Trees	72"	6	1	6
Trees	60"	3	1	3
Trees	54"	3	1	3
Trees	48"	4	1	4
Trees	36"	3	1	3
Trees	24"	3	1	3
Palms	3"	1	1	1
Shrubs	1 and 5 gal.	1 per plant	1/4	1/4
Groundcover	1 gal.	1 per 3 plants	1/2	1/2 (per 3 plants)

- GENERAL NOTES**
1. This irrigation system requires a minimum of 100 PSI at water source.
 2. The contractor shall visit site prior to bidding on project to verify installation conditions.
 3. Prior to commencement of any work, the contractor shall contact blue stake to verify locations and depths of underground utilities that may be effected by his work, and he shall be responsible for damages to such utilities caused as a result of his irrigation installation.
 4. The contractor shall be responsible for compensating the owner and/or the owner's representative for any design changes made as a result of deviation by the contractor from the plans and specifications or due to errors, faulty material or faulty workmanship.
 5. Install all mainlines with a minimum of 20" of cover.
 6. Install all laterals with a minimum of 12" of cover.
 7. All pipe to be installed per the manufacturer's specifications and ASTM standard D 2774.
 8. All threaded joints to be coated with teflon tape unless otherwise specified by the manufacturer. Use of liquid teflon on metal pipe threads only.
 9. Flushing of all lines prior to installation of sprinklers and emitters is required.
 10. Install all sprinkler, emitter, and related material per irrigation system specifications and details.
 11. Install all electrical joints with 3-M waterproof connectors.
 12. All electrical connections shall be made at the remote control valve box, controller enclosure and valve boxes specifically for electrical connections.
 13. The contractor shall be responsible for installing all wiring from the circuit breaker at the 120 volt source location to automatic controller.
 14. All 120 volt - 450 volt power wire to be installed per local code.
 15. Install all valve wiring in mainline trench as detailed.
 16. Install all remote control valves at height indicated on details, as high as possible but allowing clearance between valve box lid and flow control handle on remote control valve.
 17. Install all mainline ball valves in a round plastic valve box per details.
 18. All PVC solvent weld fittings shall be Lasco or approved equal.
 19. The mainline and lateral pipe valves are shown schematically and shall be installed within the landscape area, adjacent to sidewalk.
 20. Supply the following material to the owner.
 - A. Two wrenches for disassembly and adjusting of each type of sprinkler head and valve supplied.
 - B. Two keys for each of the controllers.
 - C. Two completers with matching hose bibbs and shut-off valve.
 - D. Two valve box keys.
 21. Contractor to coordinate installation of Motorola controller with the City to insure proper installation.



IRRIGATION PLAN
SCALE: 1" = 20'-0"





PROJECT NAME

LAKE HAVASU CITY
POLICE HEADQUARTERS
LAKE HAVASU CITY, ARIZONA

DATE - 12/18/91
ISSUED FOR DATE
COMMENTS 4-3-92

SHEET TITLE
PLUMBING FLOOR PLAN
SUPPORT BUILDING
DETAILS

SHEET NO.
P-3

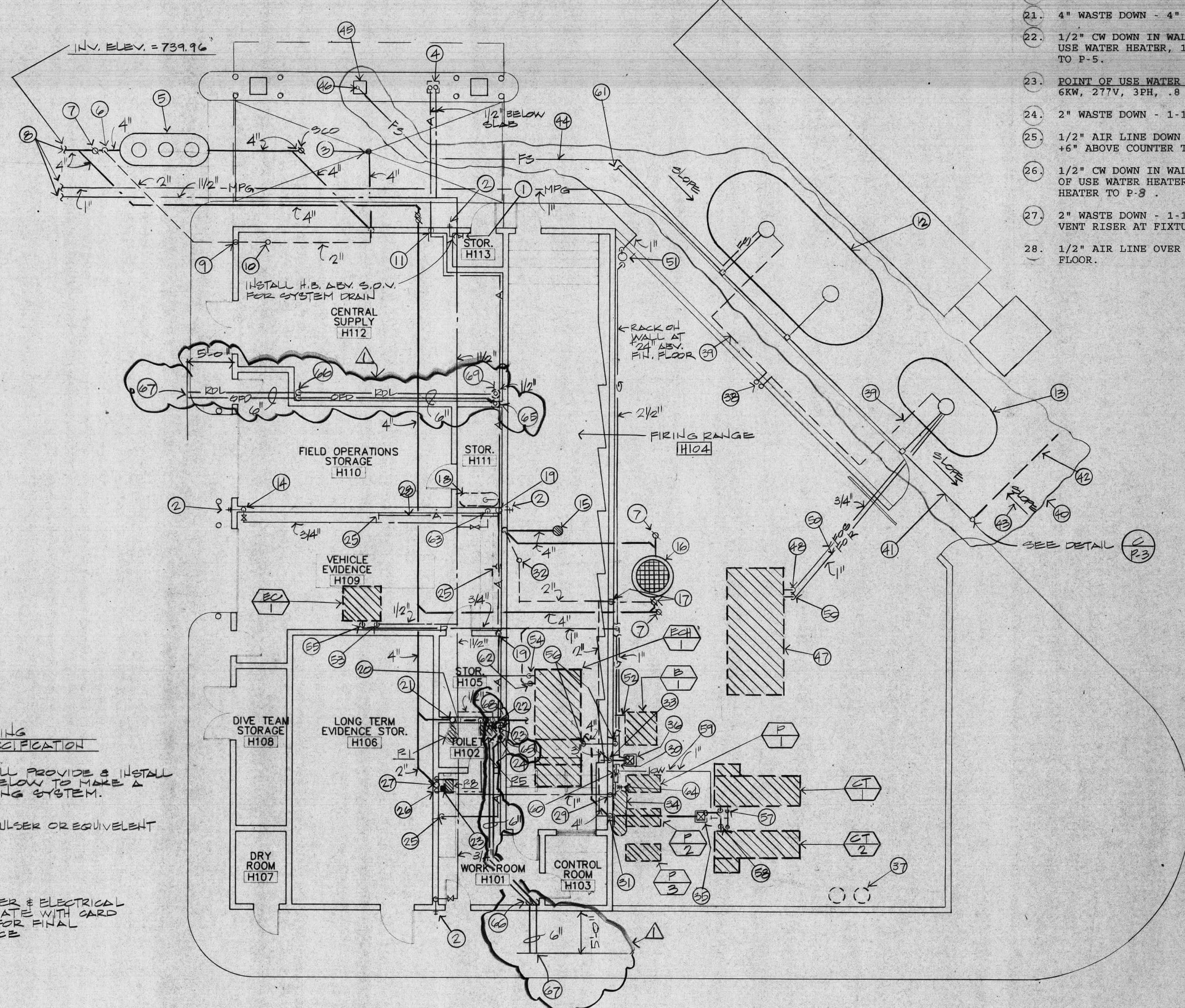
R/DA PROJECT NO.
91006

KEYED NOTES (SUPPORT BUILDING)

1. 1-1/2" CW BUILDING S.O.V. AT +12" ABOVE FINISHED FLOOR.
2. 3/4" CW H.B. IN RECESSED BOX WITH LOCKABLE DOOR.
3. 4" AREA DRAIN WITH SEDIMENT BUCKET.
4. ROSE REEL: SPECIFIED IN OTHER SECTION OF SPECIFICATIONS. 2250 GALLON DIESEL FUEL TANK. PROVIDE TRAFFIC RING AND COVER AT +2" ABOVE FINISHED GRADE. RINGS & COVER TO BE HEAVY DUTY TYPE.
5. INDUSTRIAL WASTE INTERCEPTOR: "SMITH PRECAST" MODEL 750 GALLON INTERCEPTOR WITH TRAFFIC RING AND COVER SET 1" ABOVE FINISHED GRADE. RINGS & COVER TO BE HEAVY DUTY TYPE.
6. 2" VENT LINE UP OFF TOP OF LINE AT 45° OVER BELOW GRADE AS SHOWN.
7. 4" SCV.
8. SEE CIVIL DRAWINGS FOR CONTINUATION OF 4" WASTE, 1-1/2" CW & 1" MECHANICAL PRESSURE GAS MAIN.
9. 2" VENT LINE UP IN WALL FROM BELOW SLAB TO ABOVE CEILING & OVER AS SHOWN.
10. 2" VENT THROUGH ROOF.
11. 1/2" AIR LINE DOWN IN WALL TO BELOW GRADE & OVER TO HOSE REEL.
12. 12,000 GALLON UNDERGROUND FUEL STORAGE TANK: SEE SPECIFICATION THIS SHEET.
13. 2,500 GALLON UNDERGROUND DIESEL FUEL STORAGE TANK: SEE SPECIFICATIONS THIS SHEET.
14. 3/4" CW DOWN IN WALL AND OUT TO 3/4" CW H.B. AT +18" ABOVE FINISHED GRADE. TYPICAL WHERE SHOWN.
15. 4" F.D. WITH SEDIMENT BUCKET.
16. OIL INTERCEPTOR: "J.R. SMITH" MODEL SPGT-350 INTERCEPTOR. PROVIDE TRAFFIC RING AND COVER AT +2" ABOVE FINISHED GRADE. PROVIDE RISER RINGS IF NECESSARY.
17. 4" SCV WITH 2" VENT LINE EXTENDED OVER BELOW GRADE UP IN WALL TO BELOW ROOF, RUN VENT LINE AS HIGH AS POSSIBLE.
18. AIR COMPRESSOR: "CHAMPION" MODEL R-10C, UNIT MODEL HRI-3, 30 GALLON TANK CAP, 1-1/2" H.P., 542 RPM, 480V 3PH, 10.5 CFM FREE AIR AT 125 PSI. INSTALL ON FLOOR.
19. 1/2" AIR LINE UP IN WALL TO BELOW ROOF, RUN AS HIGH AS POSSIBLE.
20. 1" CW DOWN IN WALL TO P-1.
21. 4" WASTE DOWN - 4" VENT UP WITH WCO - 4" VTR.
22. 1/2" CW DOWN IN WALL, 1/2" CW TO P-5, 1/2" CW TO POINT OF USE WATER HEATER, 1/2" HW FROM POINT OF USE WATER HEATER TO P-5.
23. POINT OF USE WATER HEATER: "ITS" MODEL MDT-6000-208, 6KW, 277V, 3PH, .8 GPM AT 50° RISE.
24. 2" WASTE DOWN - 1-1/2" VENT OVER IN WALL.
25. 1/2" AIR LINE DOWN NEXT TO WALL TO QUICK DISCONNECT AT +6" ABOVE COUNTER TOP.
26. 1/2" CW DOWN IN WALL, 1/2" CW TO P-8, 1/2" CW TO POINT OF USE WATER HEATER, 1/2" HW FROM POINT OF USE WATER HEATER TO P-8.
27. 2" WASTE DOWN - 1-1/2" VENT UP, OVER ABOVE CEILING TO VENT RISER AT FIXTURE P-1.
28. 1/2" AIR LINE OVER ALONG WALL AT +36" ABOVE FINISHED FLOOR.

29. 1" CW DOWN IN WALL AND OUT TO BACKFLOW PREVENTOR.
30. REDUCED PRESSURE BACKFLOW PREVENTOR: "WATTS" MODEL #900 REDUCED PRESSURE BACKFLOW PREVENTOR, 3/4" SIZE, RUN VENT DRAIN LINE TO NEAREST FLOOR SINK, AND INSTALL AT +48" A.F.F. OF EQUIPMENT YARD.
31. 4" WASTE DOWN, 2" VENT UP WITH WCO, AND 2" VENT OVER ABOVE CEILING AS SHOWN.
32. 2" VTR.
33. 3" WASTE DOWN, 1-1/2" VENT UP WITH WCO, AND 1-1/2" VENT OVER ABOVE CEILING AS SHOWN.
34. MECHANICAL EXPANSION TANK: SEE MECHANICAL DRAWINGS.
35. 4" FLOOR SINK, INSTALL IN CONCRETE PAD SET AT +2" ABOVE FINISHED FLOOR OF EQUIPMENT YARD.
36. 3" FLOOR SINK, INSTALL IN CONCRETE PAD SET AT +2" ABOVE FINISHED FLOOR OF EQUIPMENT YARD.
37. CHEMICAL TREATMENT: SEE MECHANICAL DRAWINGS.
38. (2) 2" VENTS UP FROM BELOW GRADE TO +12" ABOVE TOP OF WALL WITH #23 OPV VENT CAPS.
39. 2" VENT LINES EXTENDED OVER BELOW GRADE.
40. INDICATES TERTIARY LINER.
41. LEAK DETECTION CABLE IN CONDUIT.
42. 4" DIAMETER PERFORATED FIBERGLASS PIPE WITH 1/4" HOLES ON BOTTOM 180° FOR LEAK DETECTION.
43. SLOPE LINER TOWARDS PERFORATED PIPE (TYPICAL).
44. 2" DOUBLE CONTAINMENT FUEL SUPPLY LINE OVER BELOW GRADE.
45. FUEL DISPENSER: SEE SPECIFICATIONS.
46. 2" FUEL SUPPLY LINE UP FROM BELOW GRADE TO FUEL DISPENSER.
47. EMERGENCY GENERATOR: SEE ELECTRICAL DRAWINGS FOR EXACT LOCATION.
48. 3/4" DIESEL OIL SUPPLY LINE UP FROM BELOW SLAB TO EMERGENCY GENERATOR WITH S.O.V.
49. 3/4" FOS & F.O.R. LINES TO & FROM GENERATOR DAY TANK - VERIFY EXACT LOCATION IN FIELD.
50. F.O.S. & F.O.R. LINES BELOW GRADE.

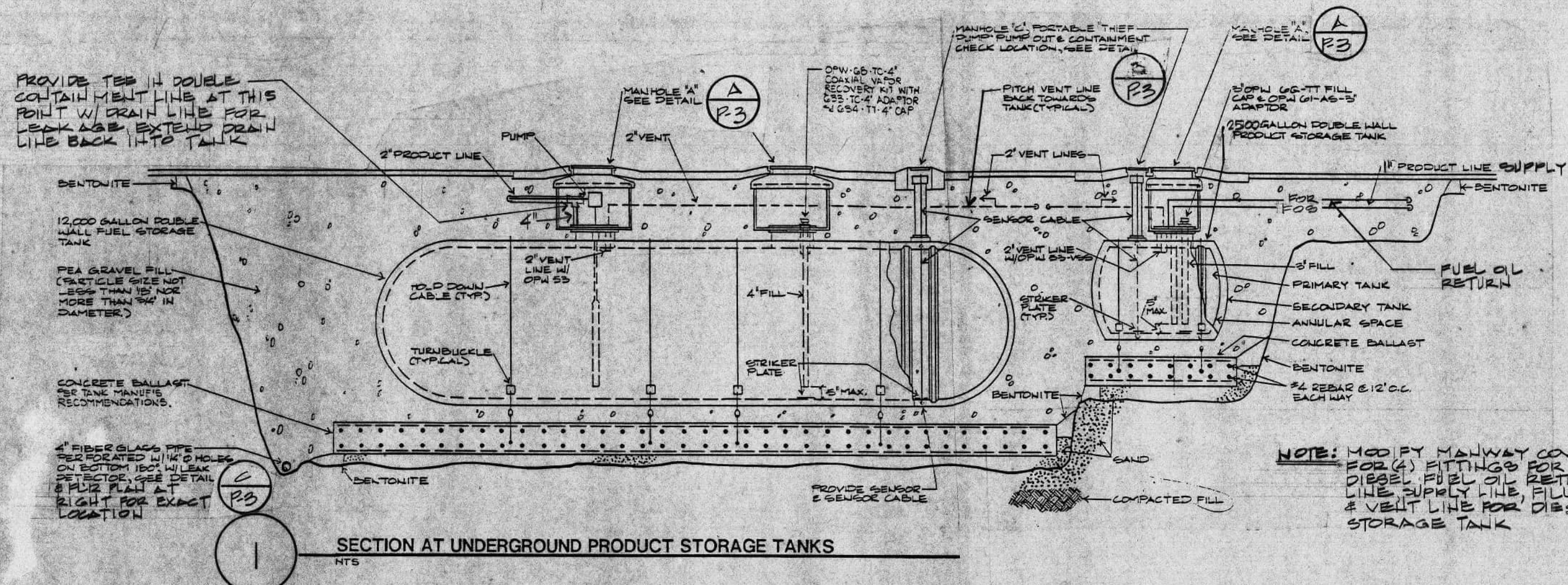
51. GAS PRESSURE REGULATOR: "FISHER" MODEL S100 OR S200, REGULATOR SIZED FOR 5 PSI INLET PRESSURE AND 7" W.C. OUTLET PRESSURE, REGULATOR SIZED FOR 1050 CFH.
52. 2" GAS LINE TO BOILER WITH LUBRICATED PLUG VALVE - (1050 CFH).
53. 1/2" CW UP TO EVAPORATIVE COOLER ON ROOF WITH S.O.V. FLASH LINE WATERTIGHT THROUGH ROOF.
54. 1/2" CW UP TO ECH #1 ON ROOF WITH S.O.V., FLASH LINE WATERTIGHT THROUGH ROOF.
55. 3/4" DRAIN LINE UP TO EVAPORATIVE COOLER ON ROOF, EXTEND OVER ABOVE CEILING DOWN ON EXTERIOR WALL AS SHOWN ON EQUIPMENT YARD, RACK ON WALL WITH GAS LINE, EXTEND OVER AND SPILL INTO F.S. AS SHOWN. FLASH LINE WATERTIGHT THROUGH ROOF.
56. 2" GAS UP BLOW WALL TO NEW CEILING SPACE INSIDE BELOW COVER & UP TO ECH ON ROOF W/ LUBRICATED PLUG VALVE, LOCK.
57. 1/2" CW UP FROM BELOW GRADE W/S.O.V. FOR MECHANICAL MAKE-UP WATER FOR COOLING TOWER - TYP. FOR 2.
58. 2" DRAIN & 3" OVERFLOW LINES FROM COOLING TOWER COLLECTED TOGETHER W/ 3" DRAIN LINE ON ROOF TO 2" SPILL INTO F.S. - TYPICAL FOR BOTH TOWERS.
59. 1" CW LINE BELOW GRADE.
60. 1" CW DN NEXT TO WALL TO BELOW GRADE & OVER AS SHOWN.
61. EXTEND CONDUIT W/ LEAK DETECTION CABLE BACK TO LEAK DETECTION ALARM PANEL IN DISPATCH RADIO RM. AREA VERIFY EXACT LOCATION IN FIELD WITH ARCHITECT PRIOR TO INSTALLATION.
62. 1" DRAIN LINE UP TO ECH#1 ON ROOF, FLASH LINE WATERTIGHT THRU ROOF.
63. 3/4" CW DN IN WALL & OUT TO 3/4" CW H.B. AT 12" AOV. FINISHED FLOOR.
64. 3/4" CW DN NEXT TO WALL TO 3/4" CW H.B. AT 18" AOV. FINISHED GRADE.
65. 4" O.P.D.
66. 4" RDL & OPD LEADERS ON NEXT TO WALL & OUT AS SHOWN BELOW GRADE.
67. SEE CIVIL DRAWINGS FOR CONT.
68. 4" R.D. (1760#)
69. 4" R.D. (1804#)



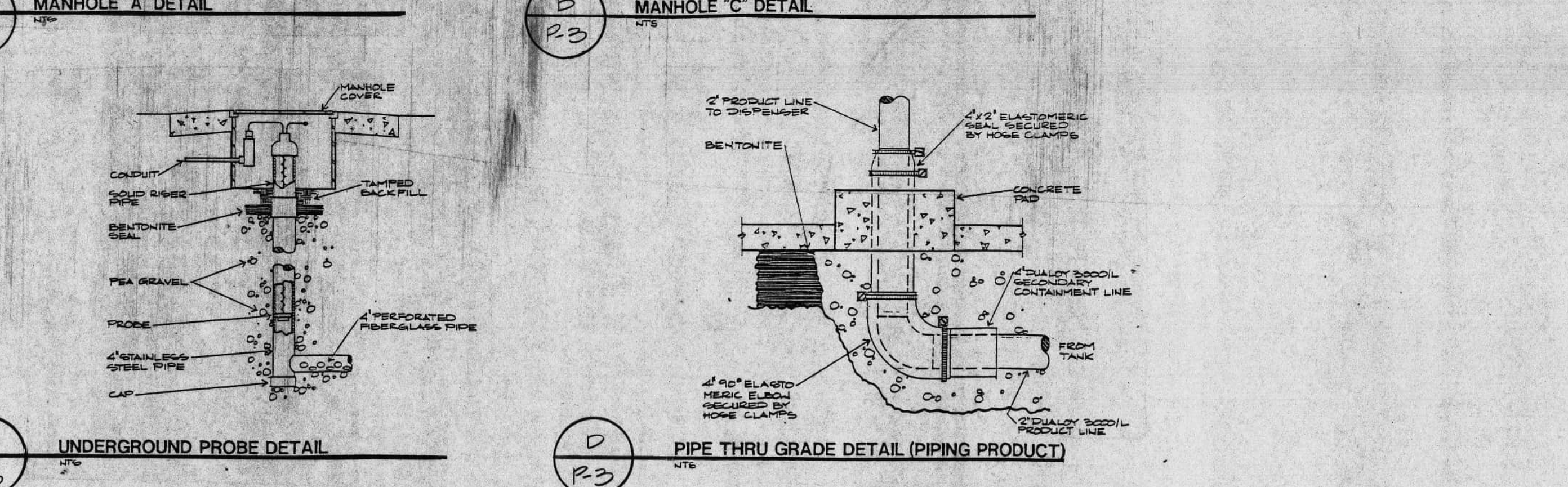
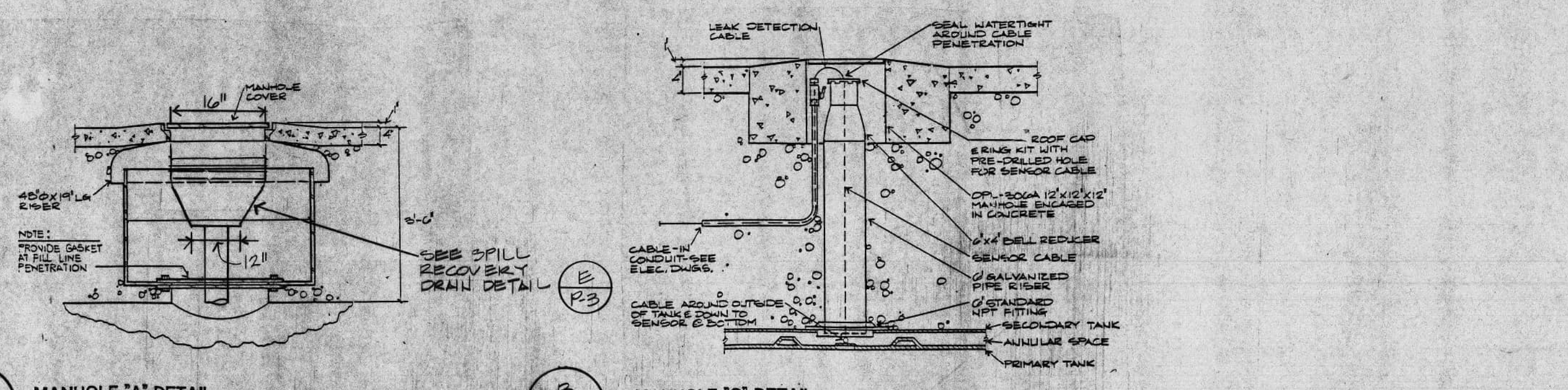
PLUMBING FLOOR PLAN - SUPPORT BUILDING
SCALE 1/8"=1'-0"

SPECIFICATION: (UNDERGROUND STORAGE TANKS)

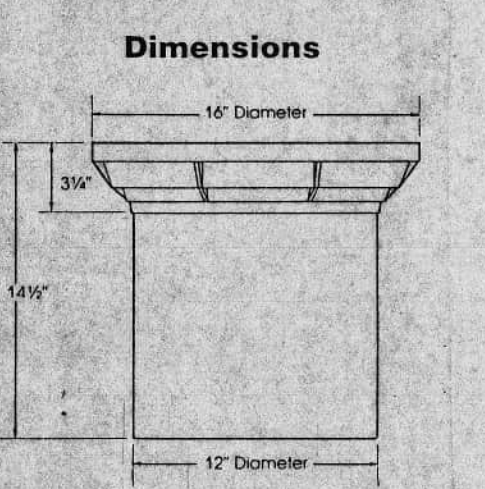
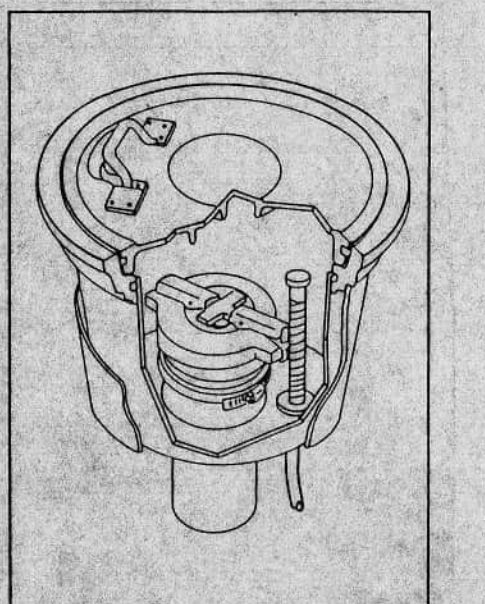
1. 12,000 GALLON UNLEADED FUEL TANK: PROVIDE & INSTALL RECESSED DIESEL FUEL STORAGE TANK, 24-3/4" DIA. X 105" H. PROVIDE 2" FIBERGLASS REINFORCED PLASTIC WITH ALL FITTINGS LISTED. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS. SEE DETAIL THIS SHEET.
2. 2,500 GALLON DIESEL FUEL TANK: PROVIDE & INSTALL RECESSED DIESEL STORAGE TANK, 13-10" X 6'-4 1/2" H. PROVIDE 2" FIBERGLASS REINFORCED PLASTIC WITH ALL FITTINGS LISTED. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS. SEE DETAIL THIS SHEET.



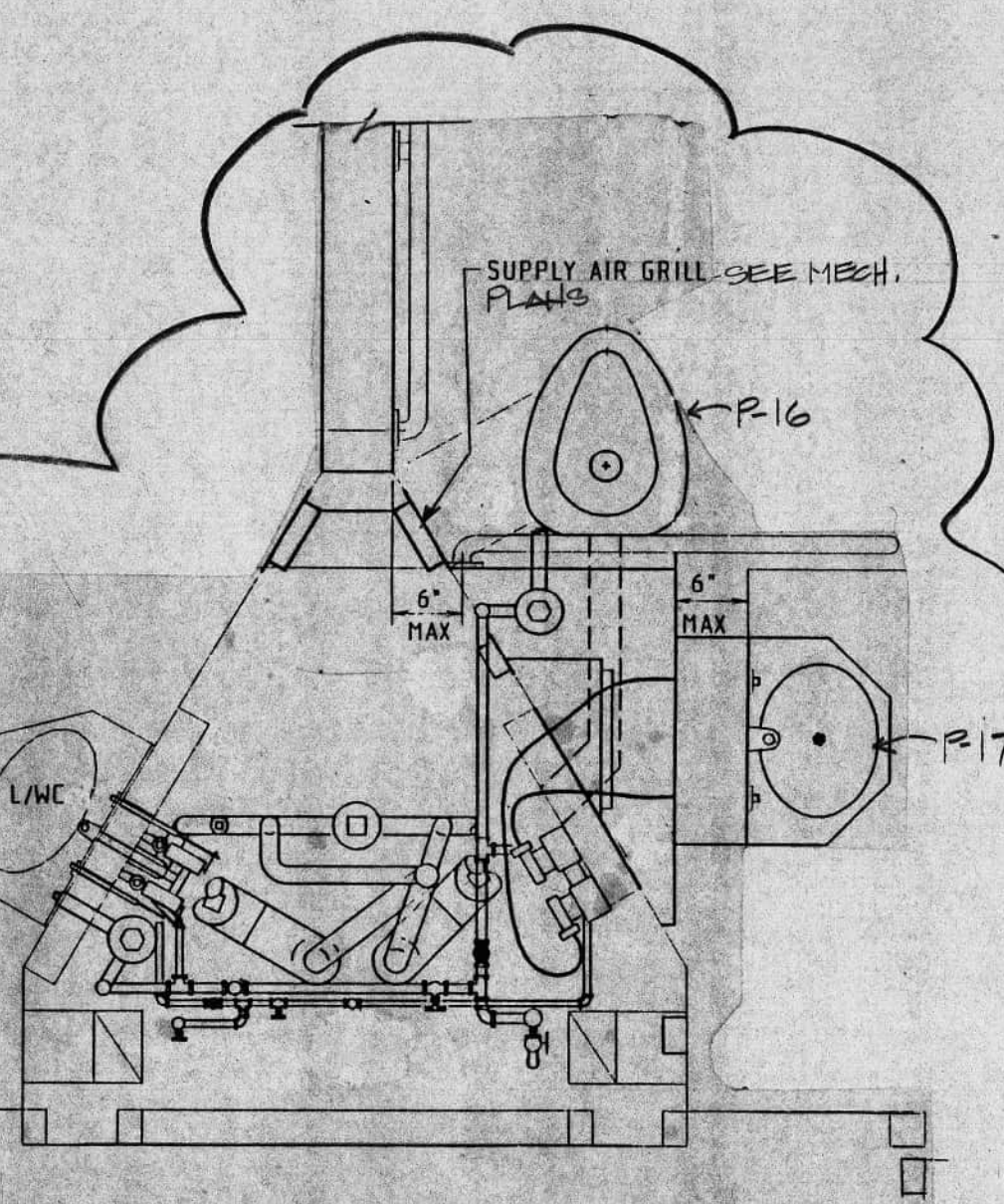
NOTE: PROVIDE & INSTALL "XERXES" MODEL "D-3" TYPE 36" Ø MANHOLE COVER WITH INLINE FITTINGS



OPW 84 D with Drain Valve
The OPW 84 D is a hand-operated valve with an integral drain. The valve is designed to quickly and completely shut off fuel flow to the engine. The valve is a high flow design for rapid draining, and includes a built-in fuel filter to prevent any debris from entering the engine. The valve is made of high strength, high density polyethylene. The valve is designed to be used in a variety of applications. The OPW 84 D is a hand-operated valve with an integral drain. The valve is designed to quickly and completely shut off fuel flow to the engine. The valve is a high flow design for rapid draining, and includes a built-in fuel filter to prevent any debris from entering the engine. The valve is made of high strength, high density polyethylene. The valve is designed to be used in a variety of applications.



SPILL RECOVERY DRAIN DETAIL



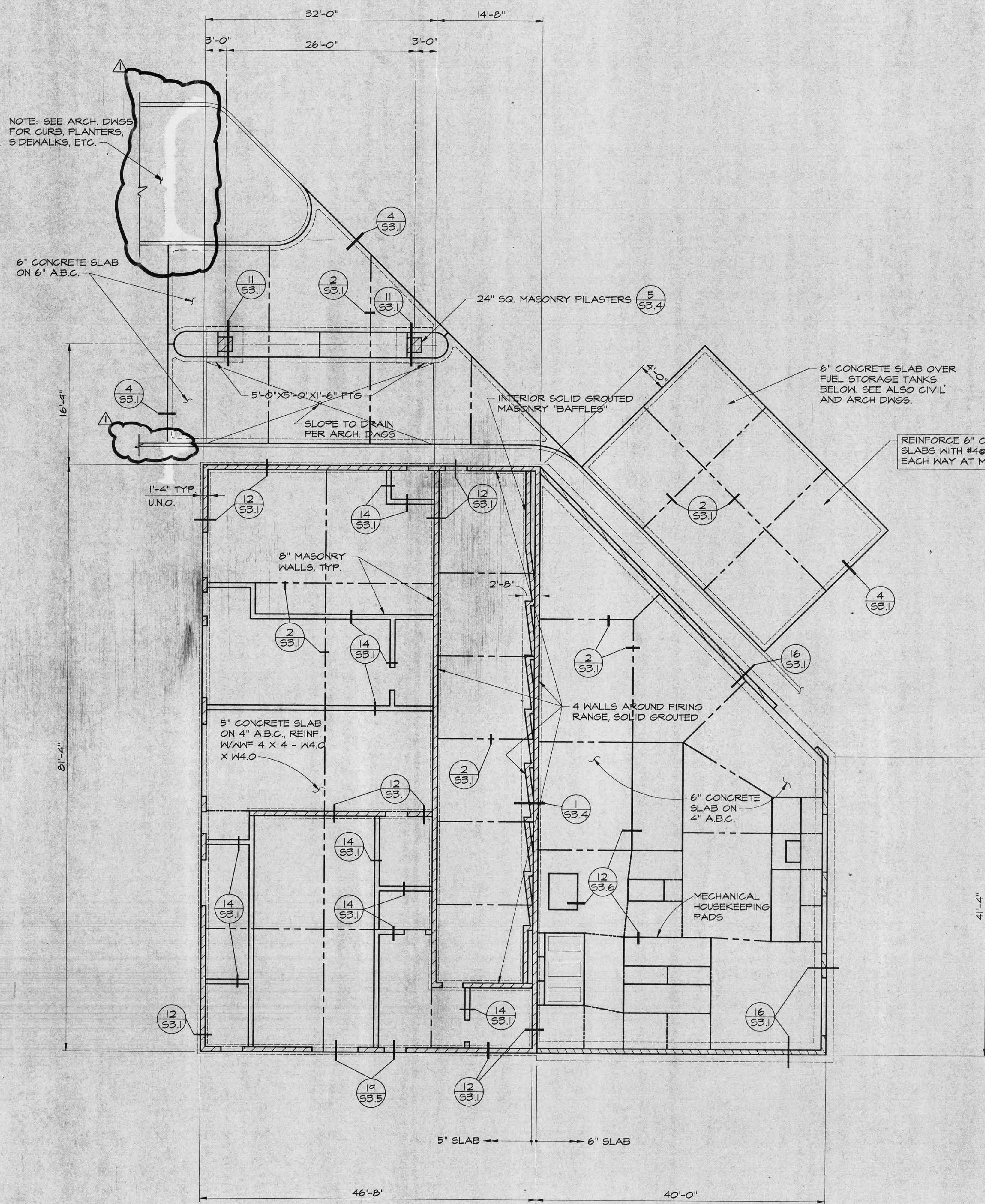
GROUND FLOOR HANDICAPPED CELL PLAN - PLUMBING
NO SCALE

NOTE: THIS AREA IS TYPICAL FOR CELLS #A-111 & #A-108, SEE SHEET P-1 FOR LOCATION

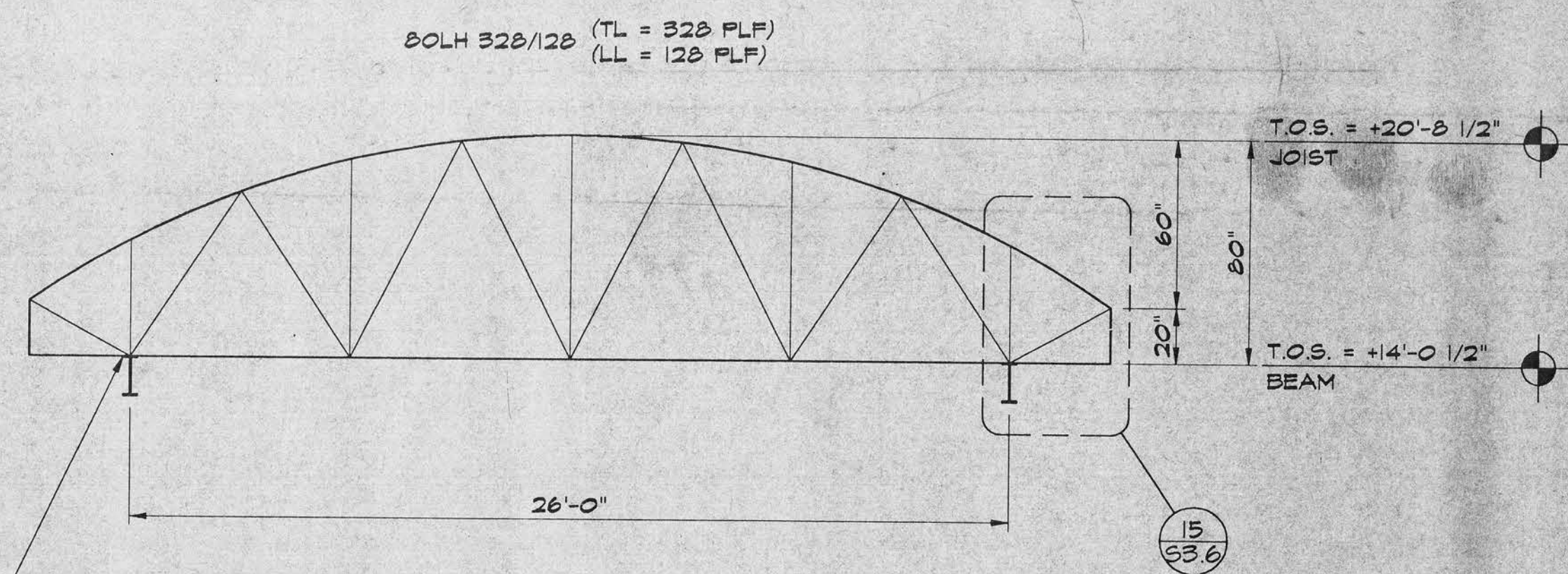
PLUMBING CONTRACTOR SHALL COORDINATE PLUMBING PIPING WITH MECHANICAL & ELECT. CONTRACTORS PRIOR TO INSTALLING ANY PIPING IN PLUMBING CHASE



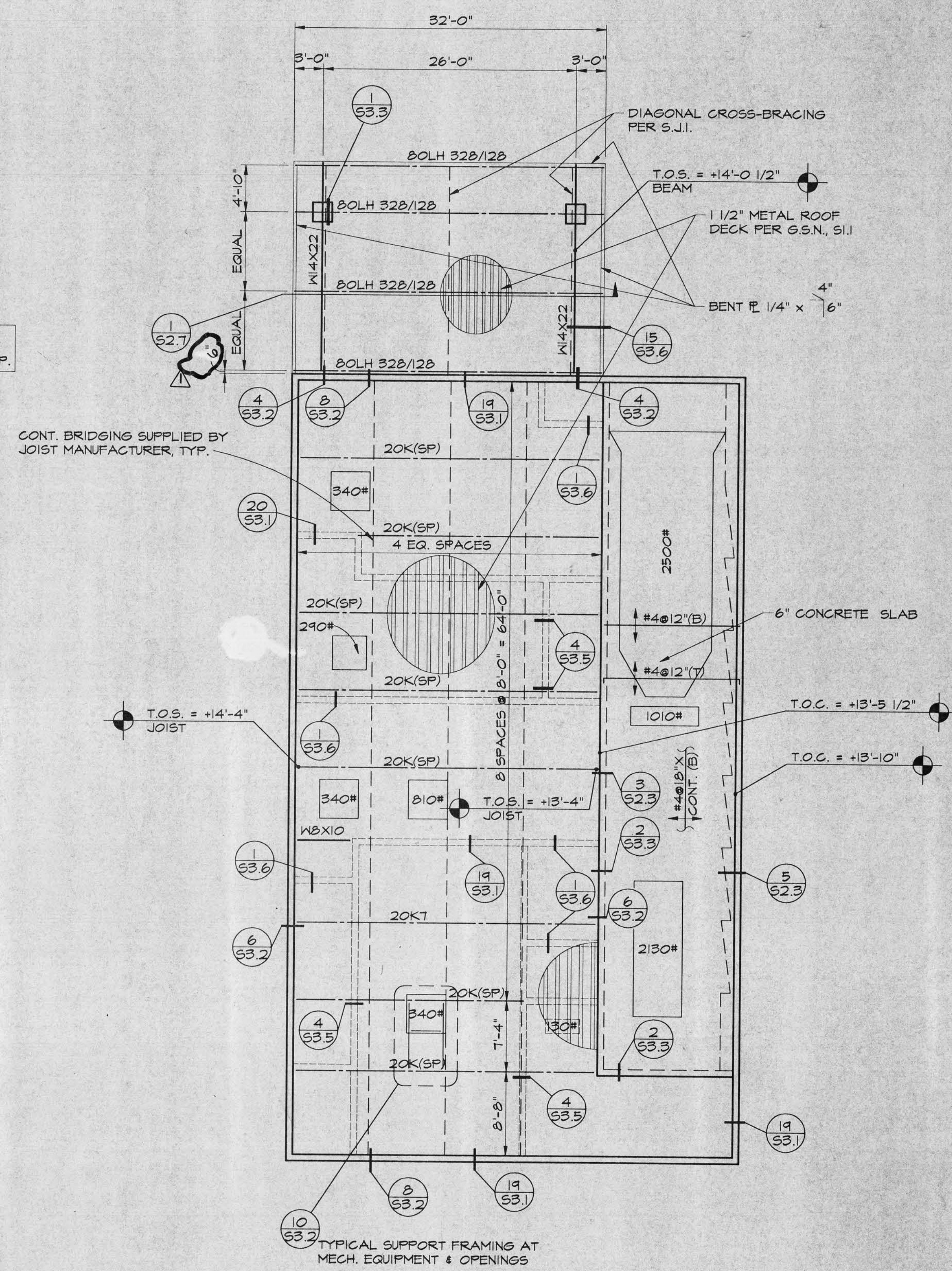
T-90138



SUPPORT BUILDING FOUNDATION PLAN



JOIST ELEVATION



SUPPORT BUILDING ROOF FRAMING PLAN

R/DA

ROBERTS/DINSMORE ASSOCIATES

ONE GATEWAY
426 NORTH 44th STREET
SUITE 100
PHOENIX, ARIZONA 85008
TELEPHONE (602)275-6800

CONSULTANTS

CIVIL
Norman Engineering Group
7330 North 16th Street
Suite C201
Phoenix, Arizona 85020
(602) 371-0397

STRUCTURAL
Alagia Engineering Group
1010 East Missouri Avenue
Phoenix, Arizona 85014
(602) 264-1010

MECHANICAL, ELECTRICAL
& PLUMBING
Tesco
2122 West Indian School Road
Phoenix, Arizona 85015
(602) 264-3070

KITCHEN CONSULTANT
Dove Keagy & Assoc.
2935 East Clarendon Avenue
Phoenix, Arizona 85016
(602) 224-5571



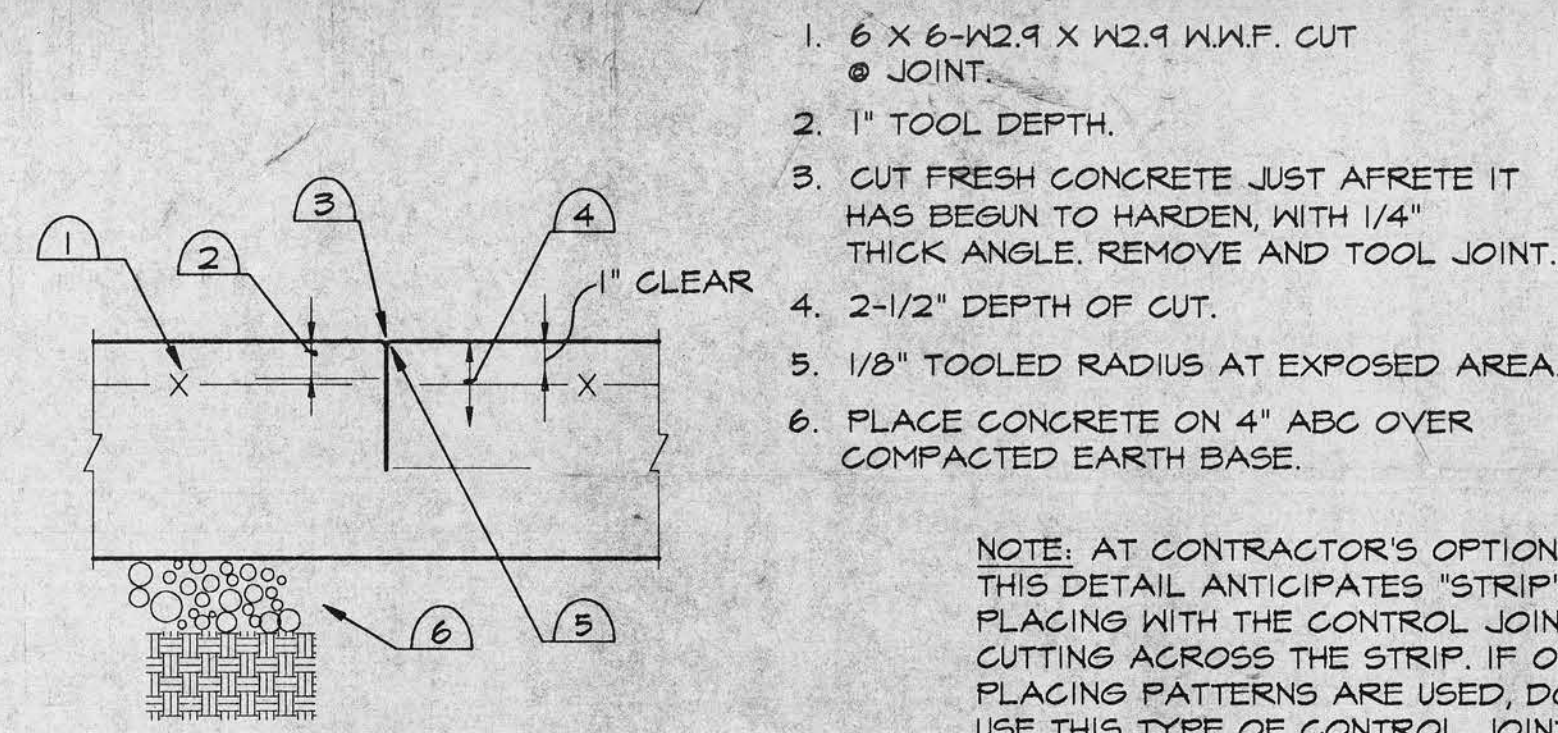
PROJECT NAME

LAKE HAVASU CITY
POLICE HEADQUARTERS
LAKE HAVASU CITY, ARIZONA

DATE	1-7-92
ISSUED FOR	DATE
CITY PLAN CHECK	4-3-92

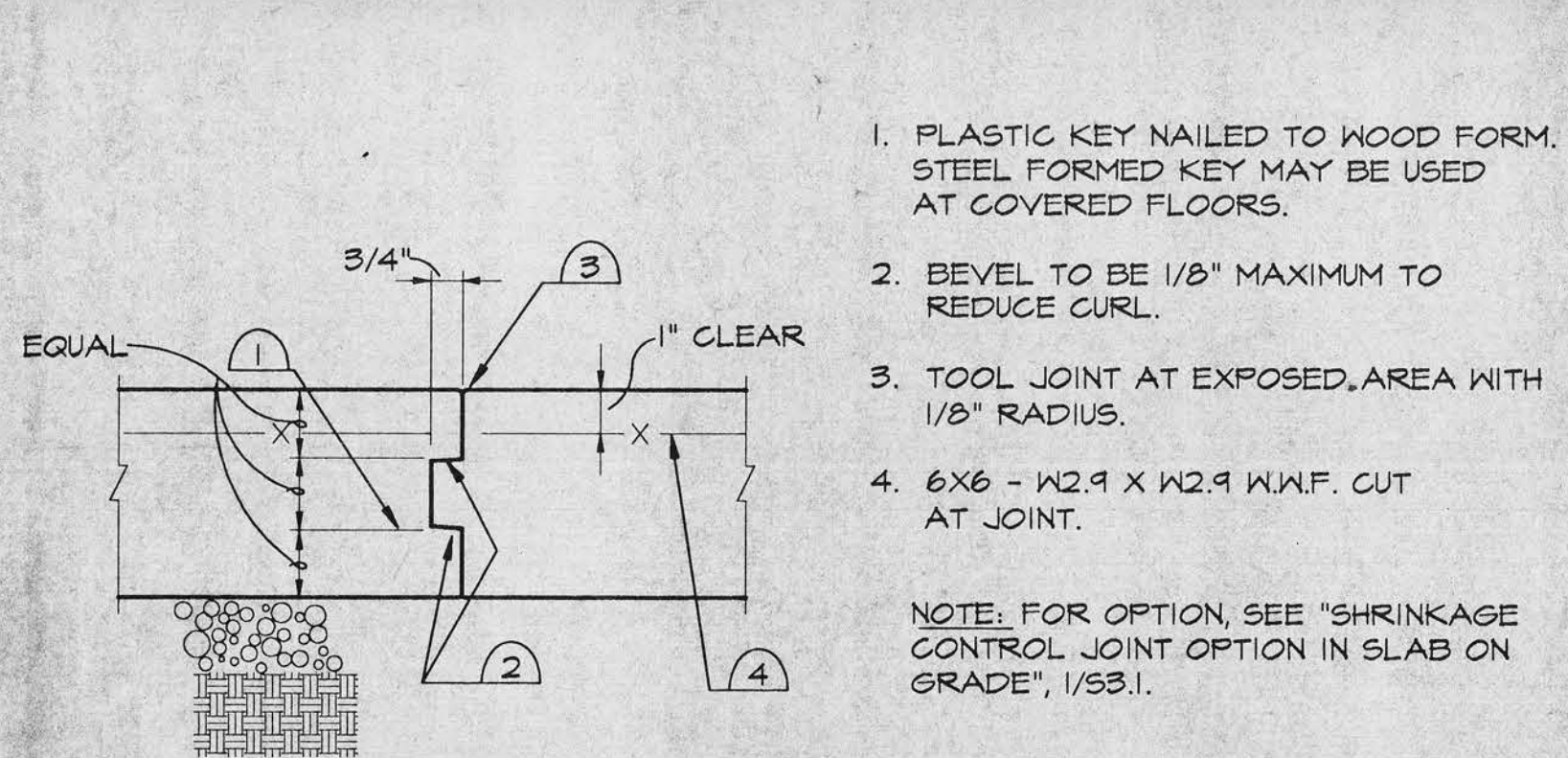
SHEET TITLE
SUPPORT BUILDING FOUNDATION & FRAMING PLANS

SHEET NO.
S2.7
R/DA PROJECT NO.
91006



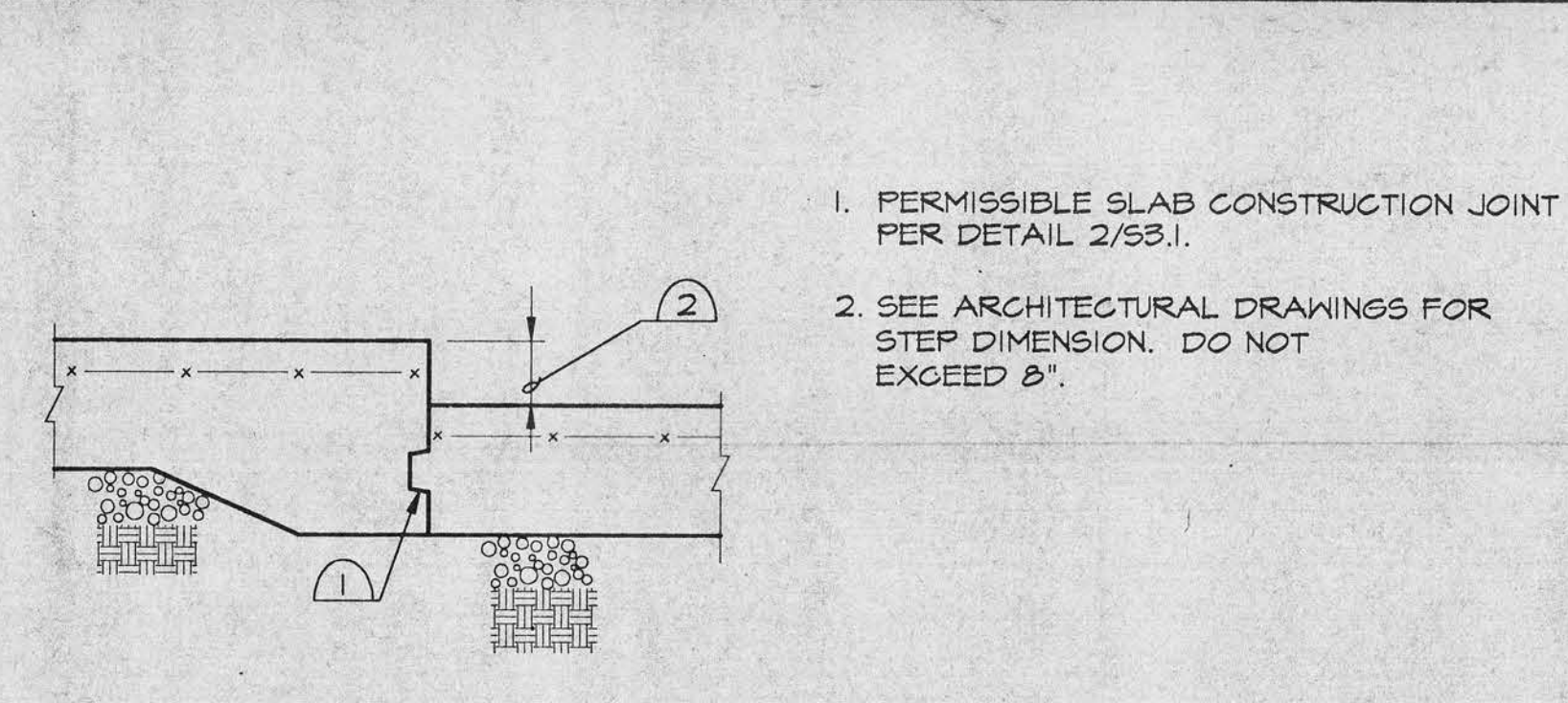
1 SHRINKAGE CONTROL JOINT OPTION (S.J.) IN SLAB ON GRADE

NOTE: AT CONTRACTOR'S OPTION THIS DETAIL ANTICIPATES "STRIP" PLACING WITH THE CONTROL JOINTS CUTTING ACROSS THE STRIP. IF OTHER PLACING PATTERNS ARE USED, DO NOT USE THIS TYPE OF CONTROL JOINT. AT COVERED FLOORS, "ZIP STRIP" AND 1-1/2" DEEP SANKCUTTING ARE ACCEPTABLE AS A CONTROL JOINT. SANK CUTTING SHALL BE MADE AS SOON AS POSSIBLE SO THAT IT IS DONE PRIOR TO THE SHRINKAGE CRACKING.

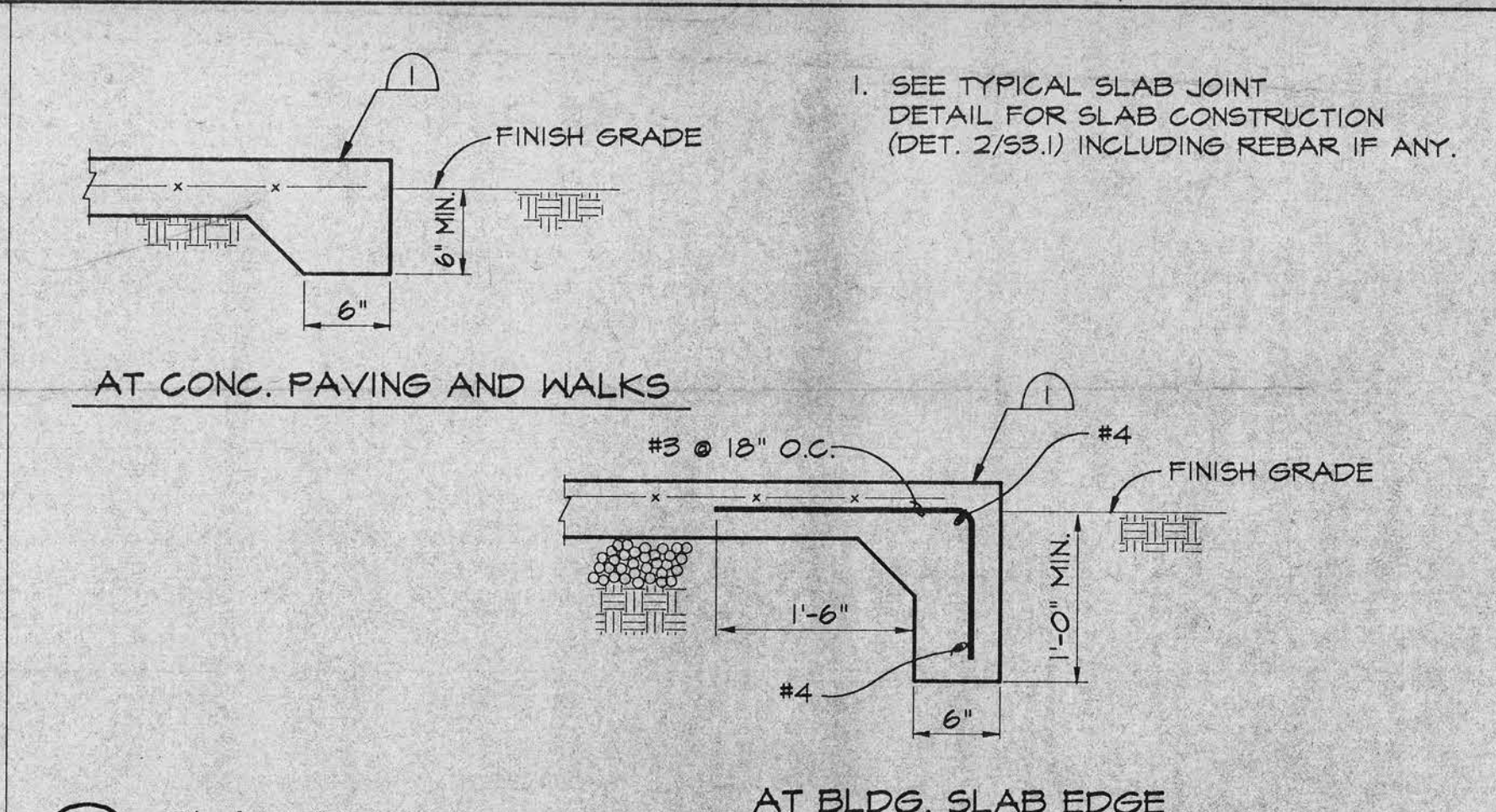


2 CONSTRUCTION JOINT (C.J.) AND SHRINKAGE CONTROL JOINT (S.J.) IN SLAB ON GRADE

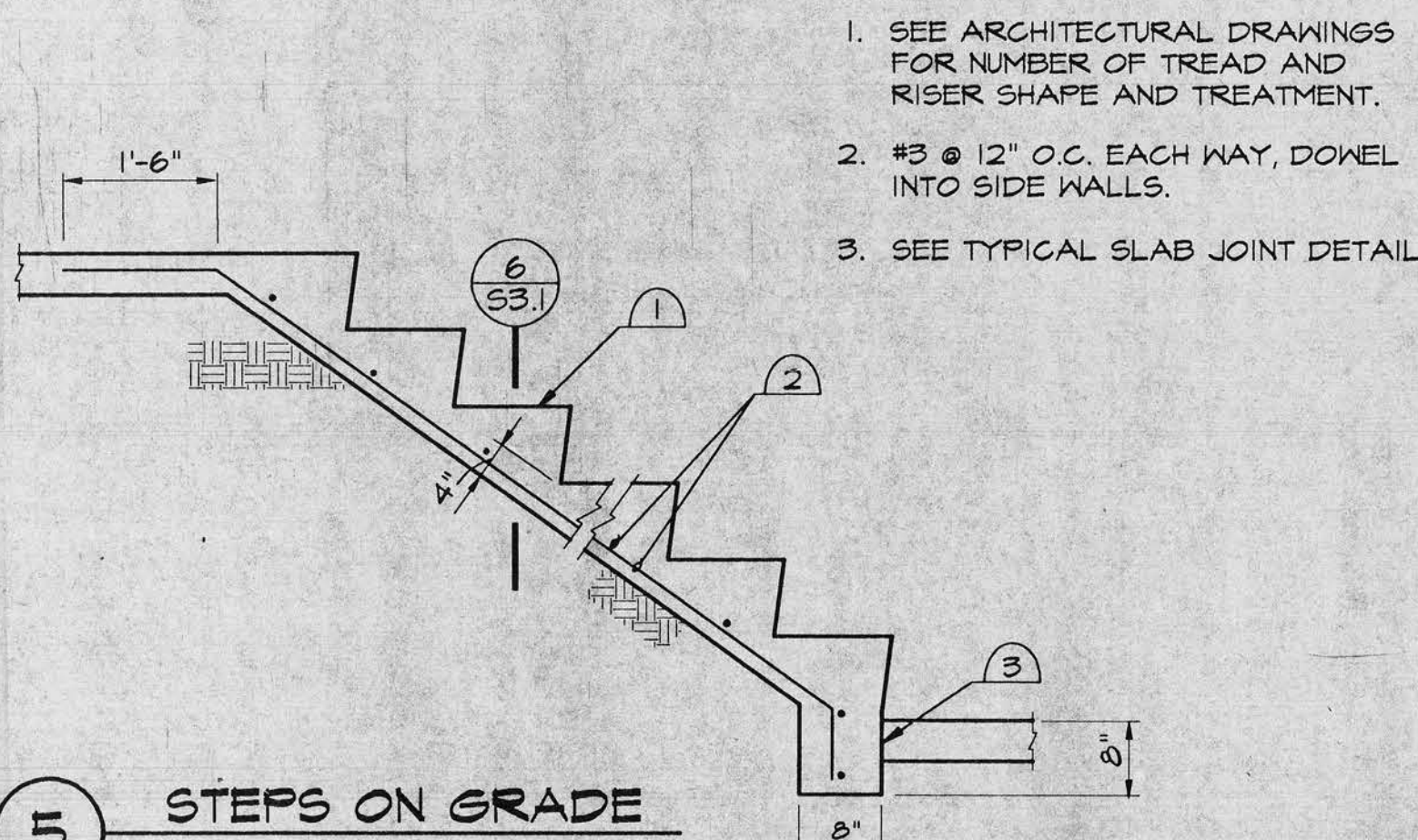
NOTE: FOR OPTION SEE "SHRINKAGE CONTROL JOINT OPTION IN SLAB ON GRADE", 1/53.1.



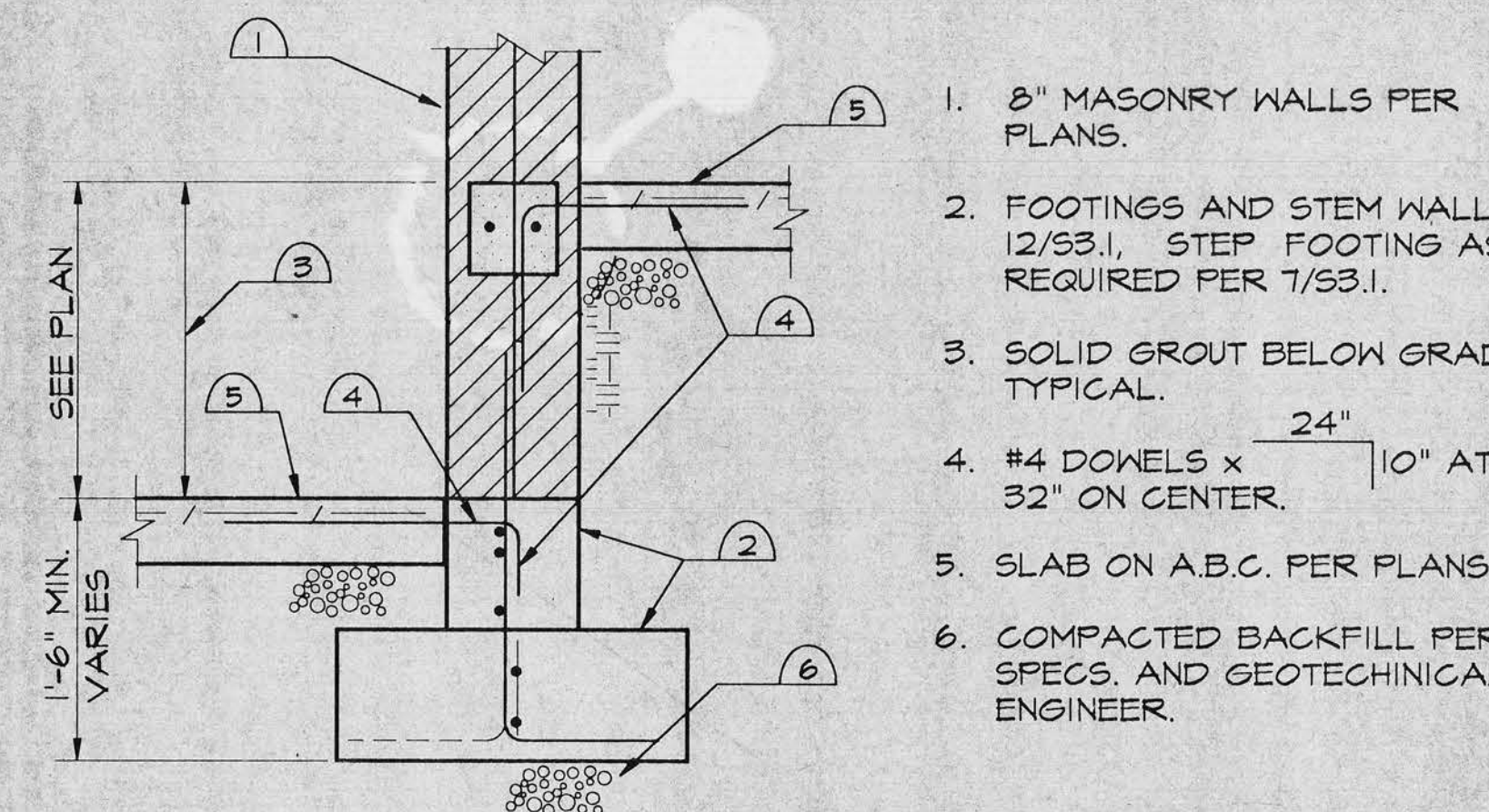
3 SMALL STEP IN SLAB ON GRADE



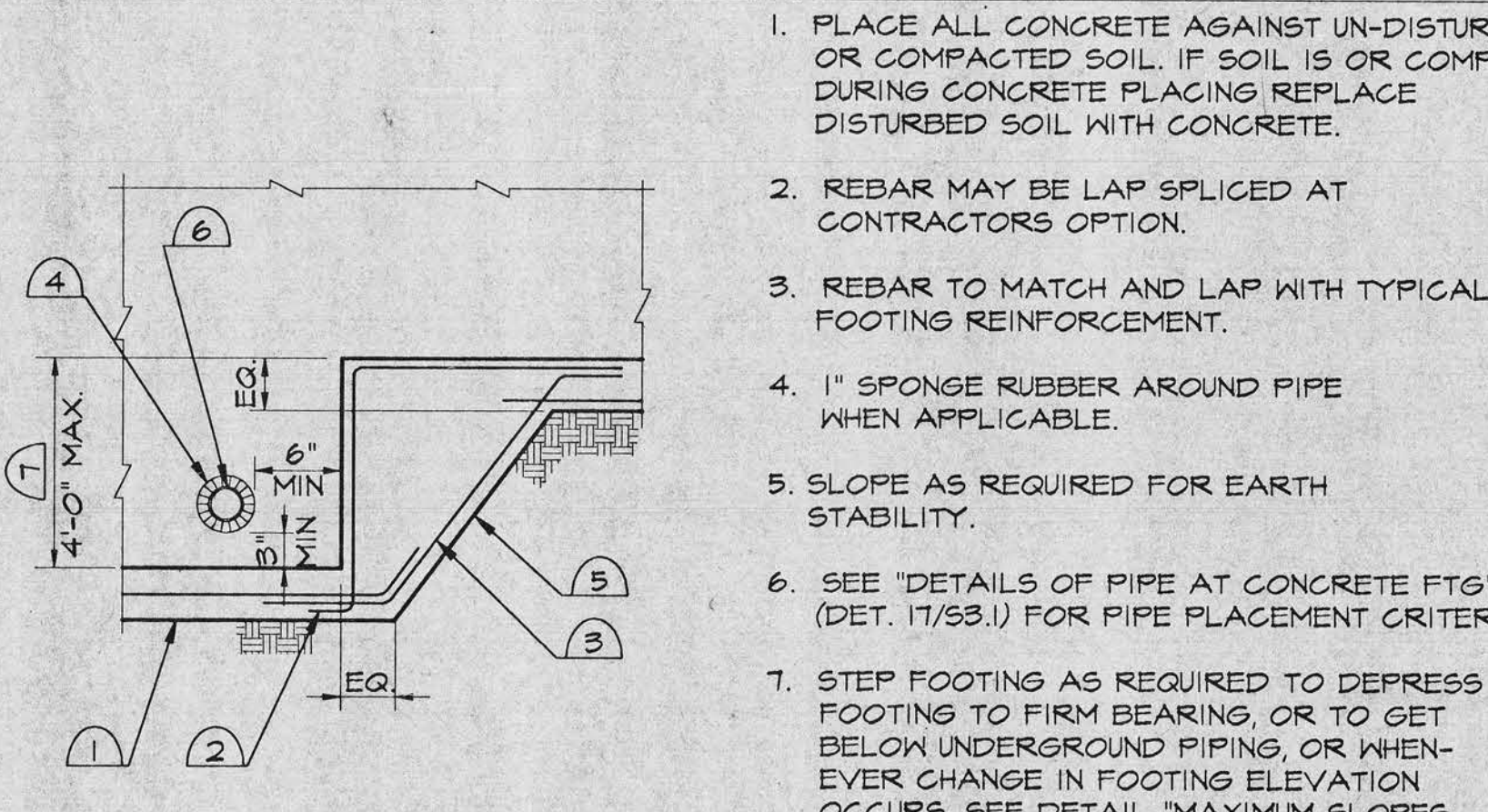
4 SLAB EDGES AT CONG. PAVING AND WALKS AT BLDG. SLAB EDGE



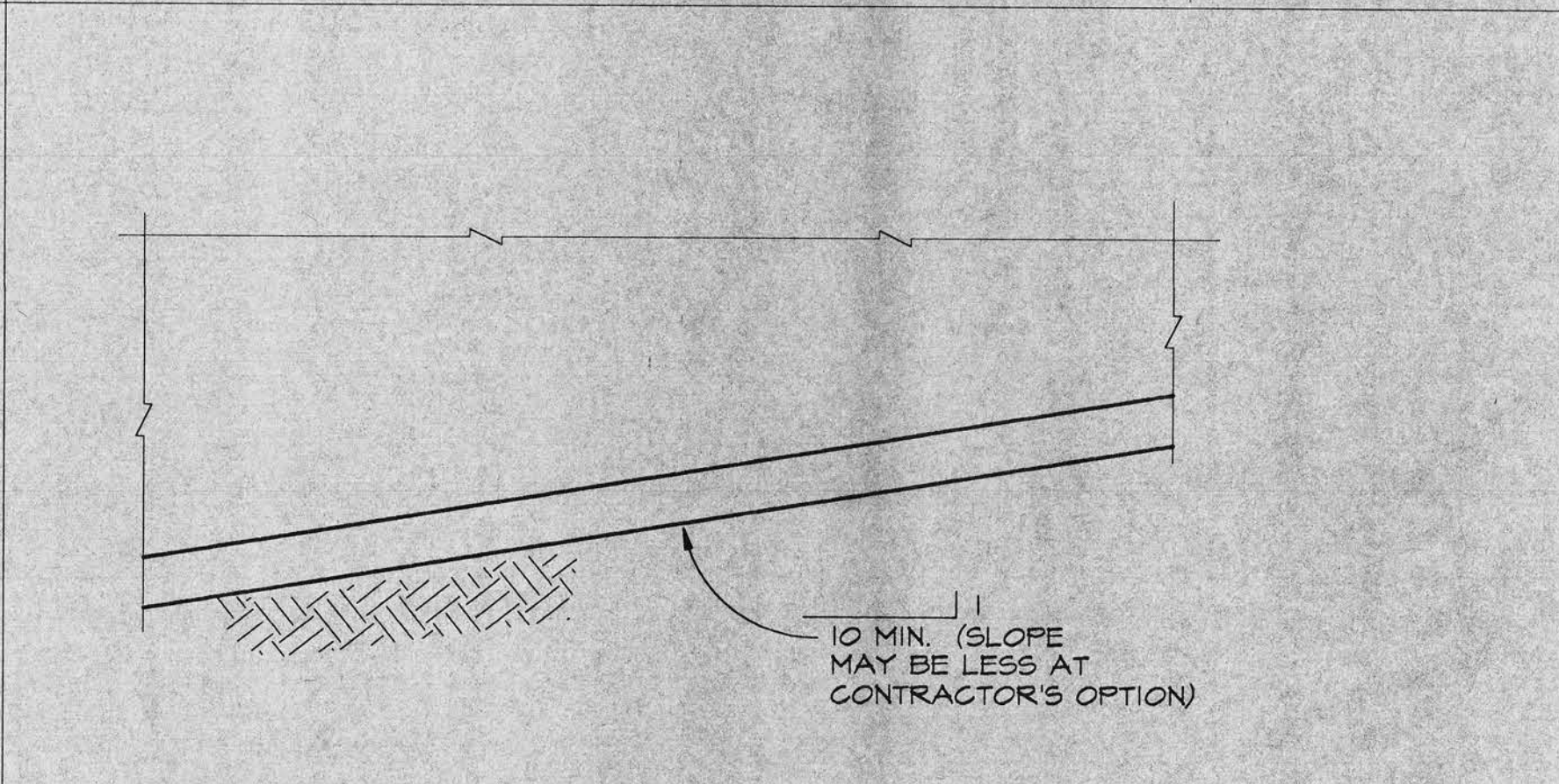
5 STEPS ON GRADE



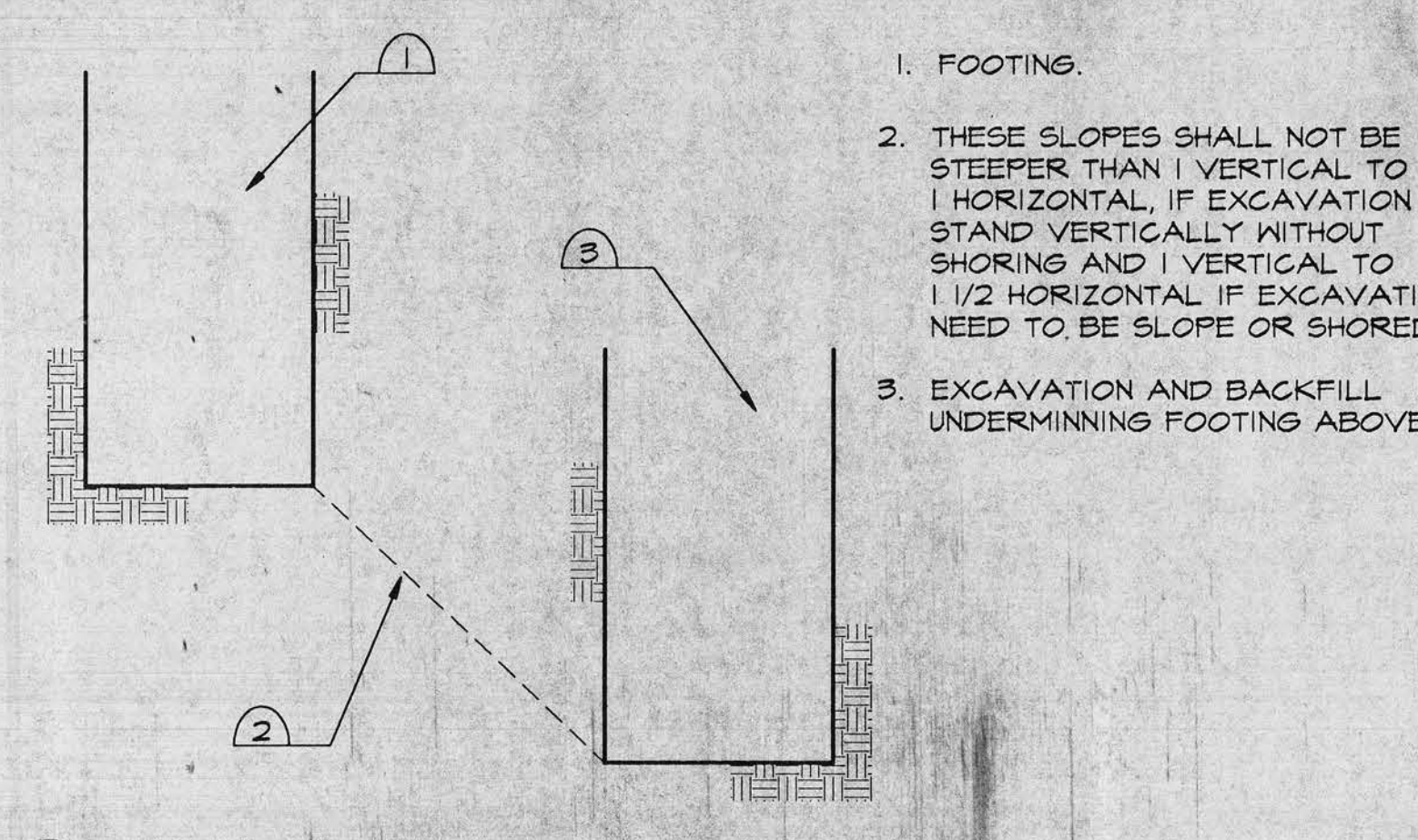
6 CHANGE IN SLAB ELEVATION AT MASONRY WALL



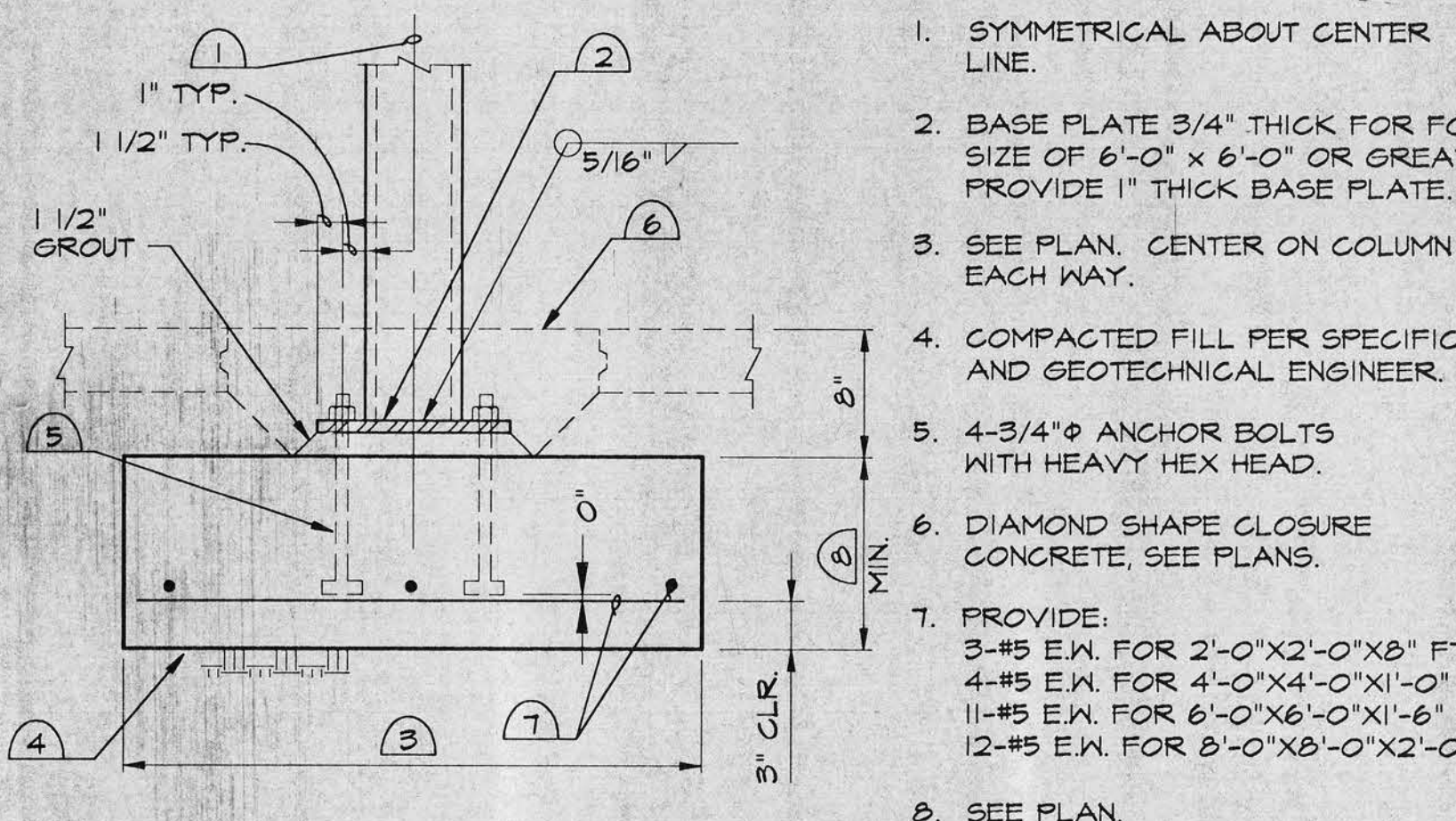
7 STEP IN FOOTING



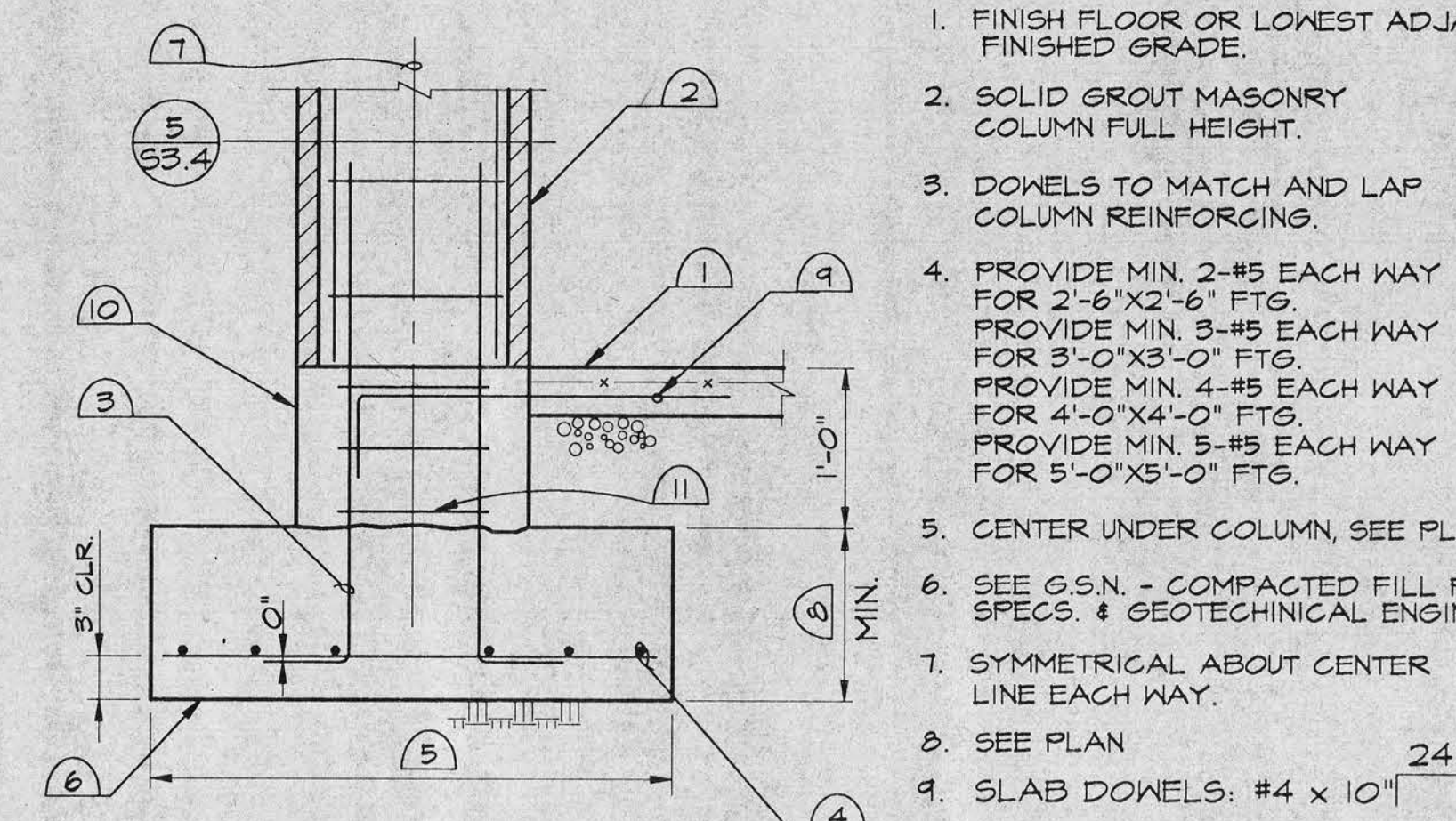
8 SLOPING FOOTING



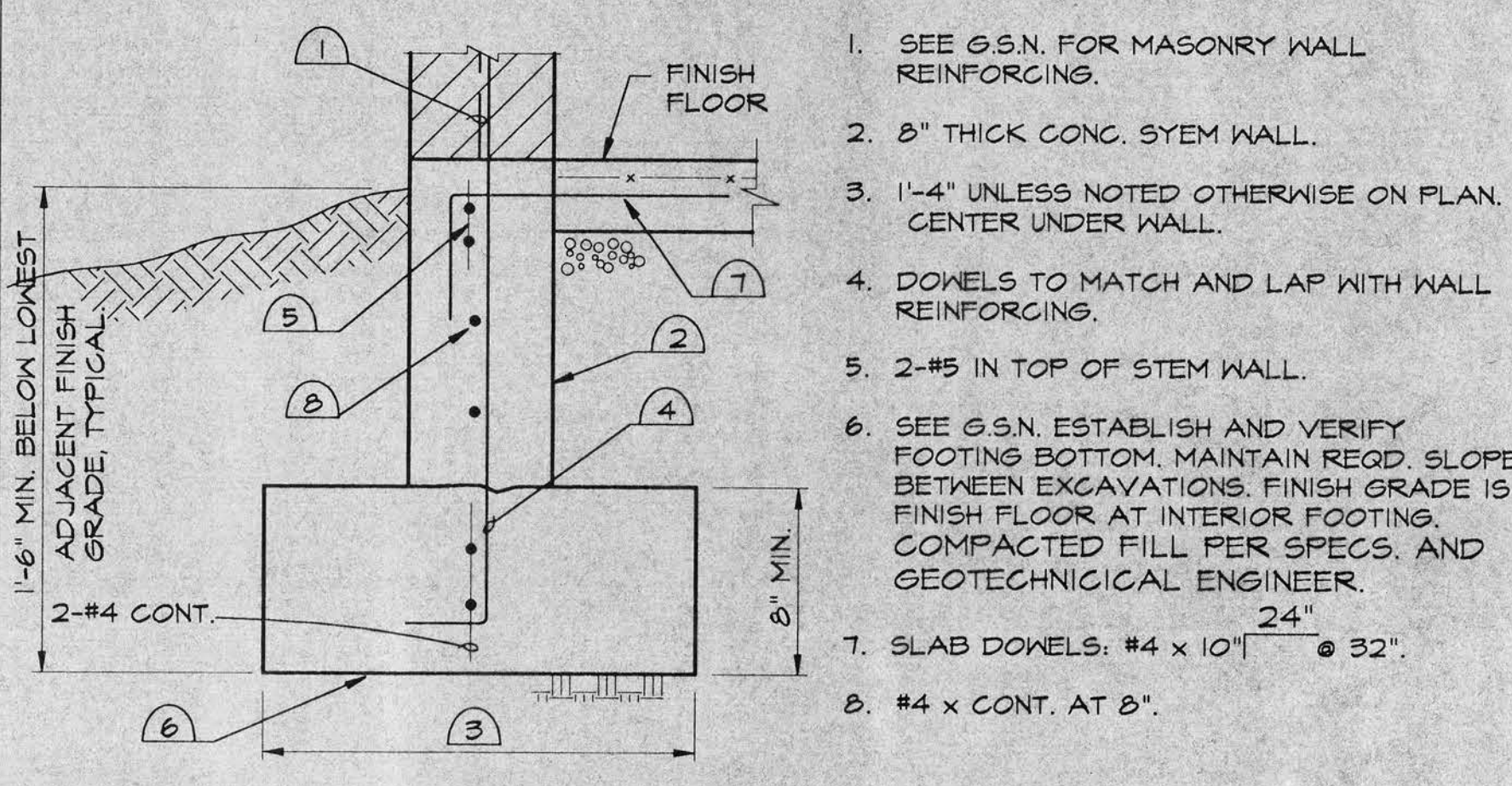
9 MAXIMUM SLOPES BETWEEN ADJACENT EXCAVATIONS



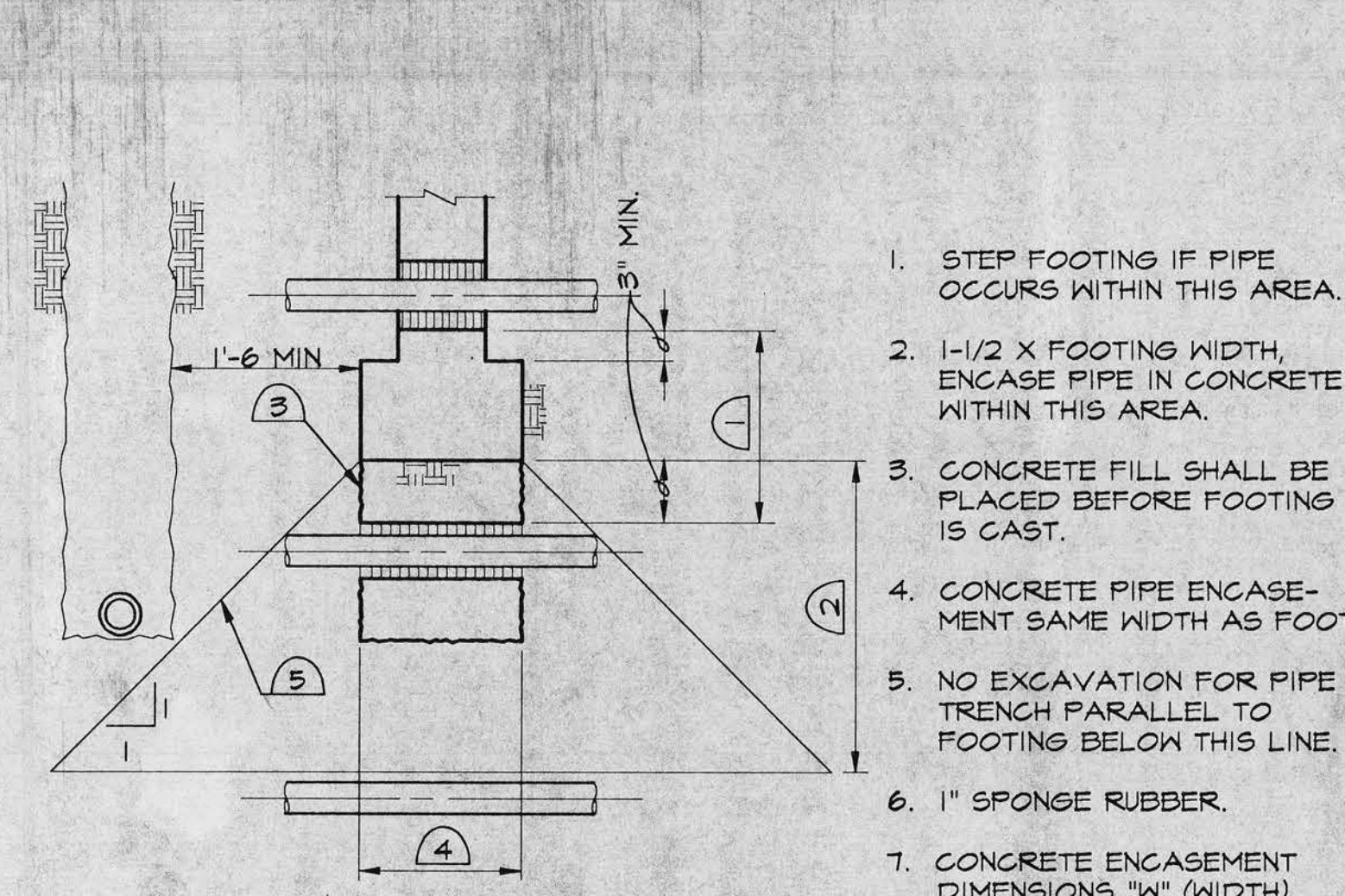
10 SHALLOW FOOTING FOR STEEL COLUMN



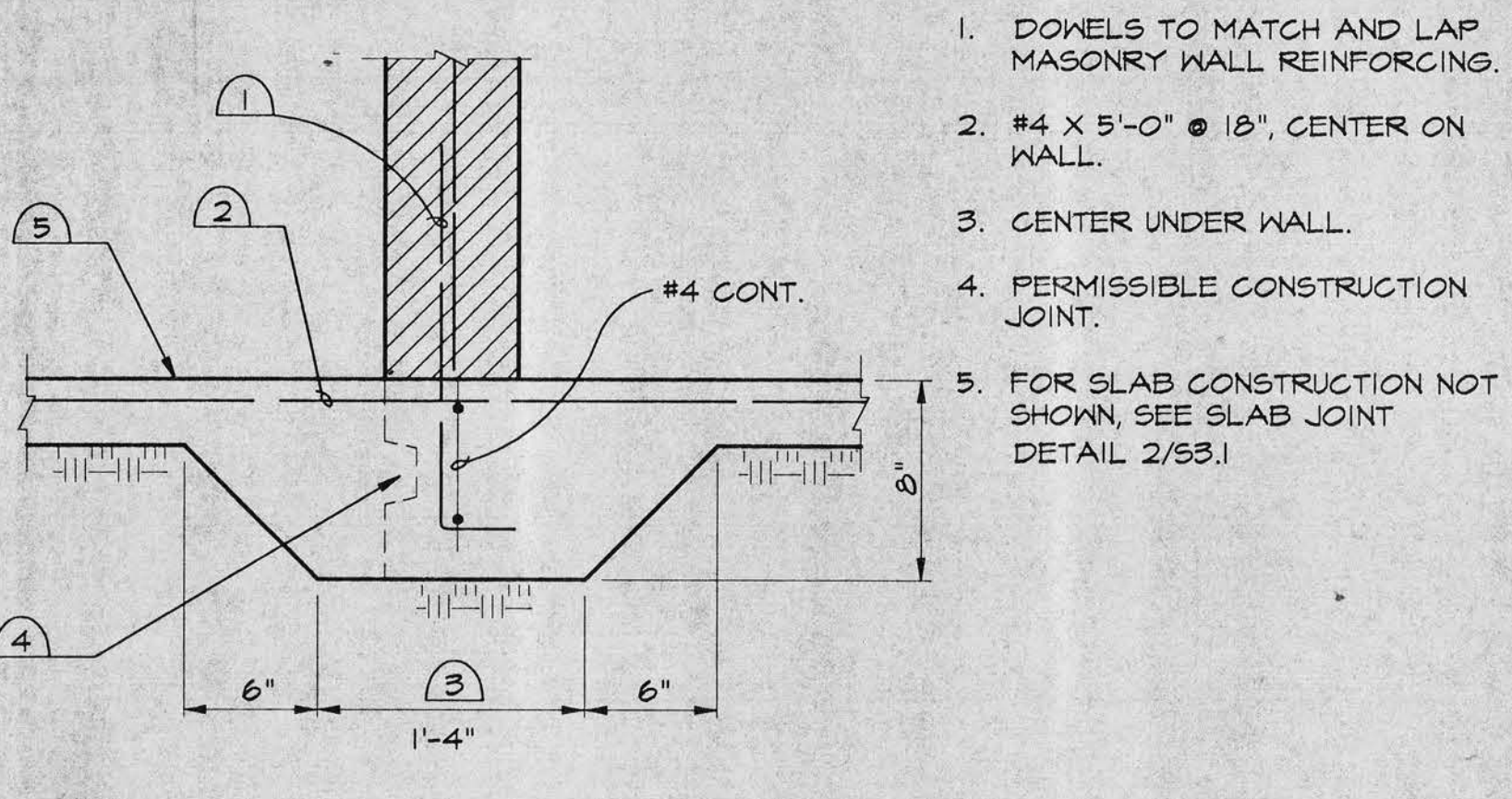
11 SHALLOW FOOTING FOR MASONRY COLUMN



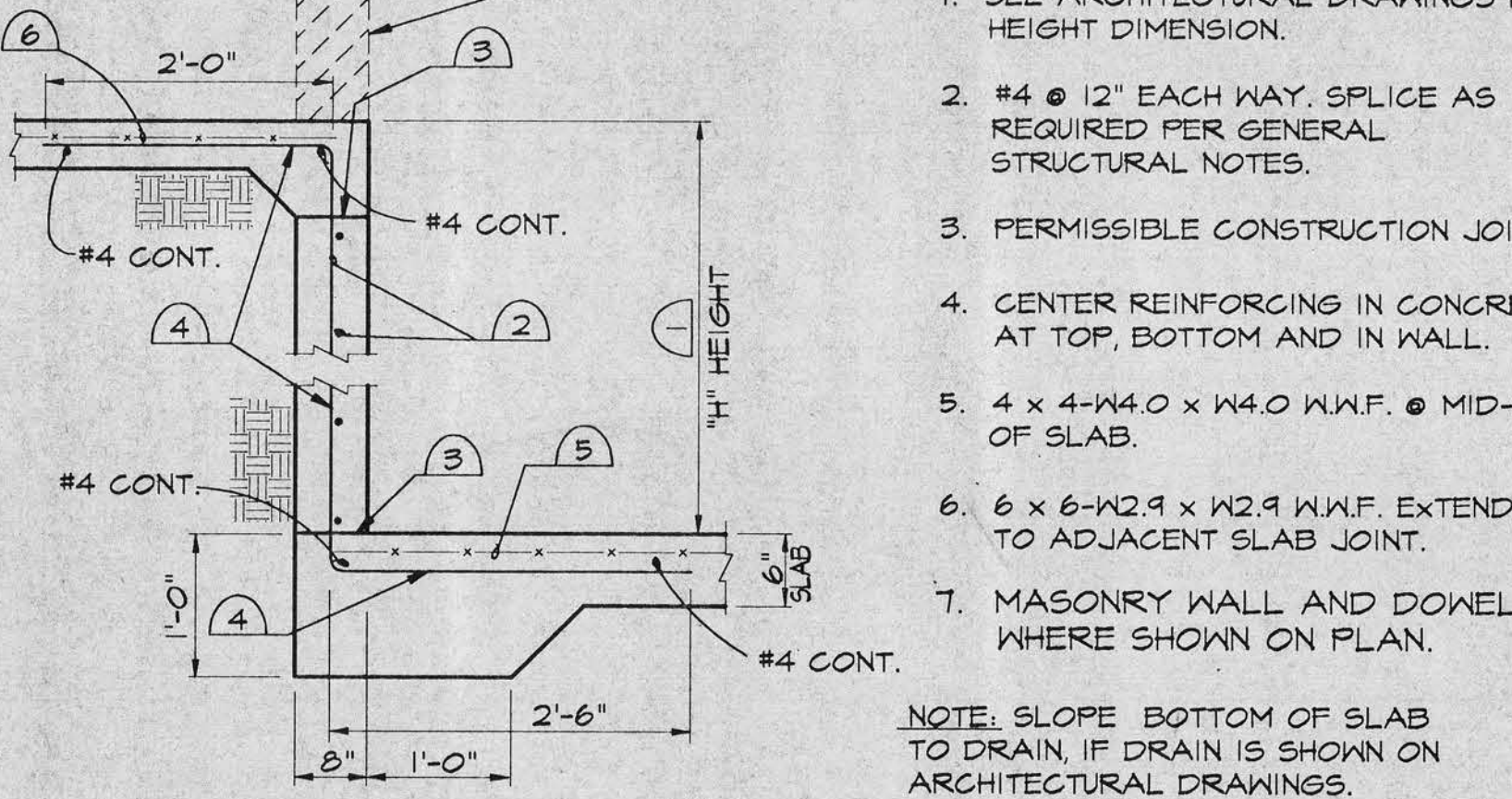
12 FOOTING FOR MASONRY



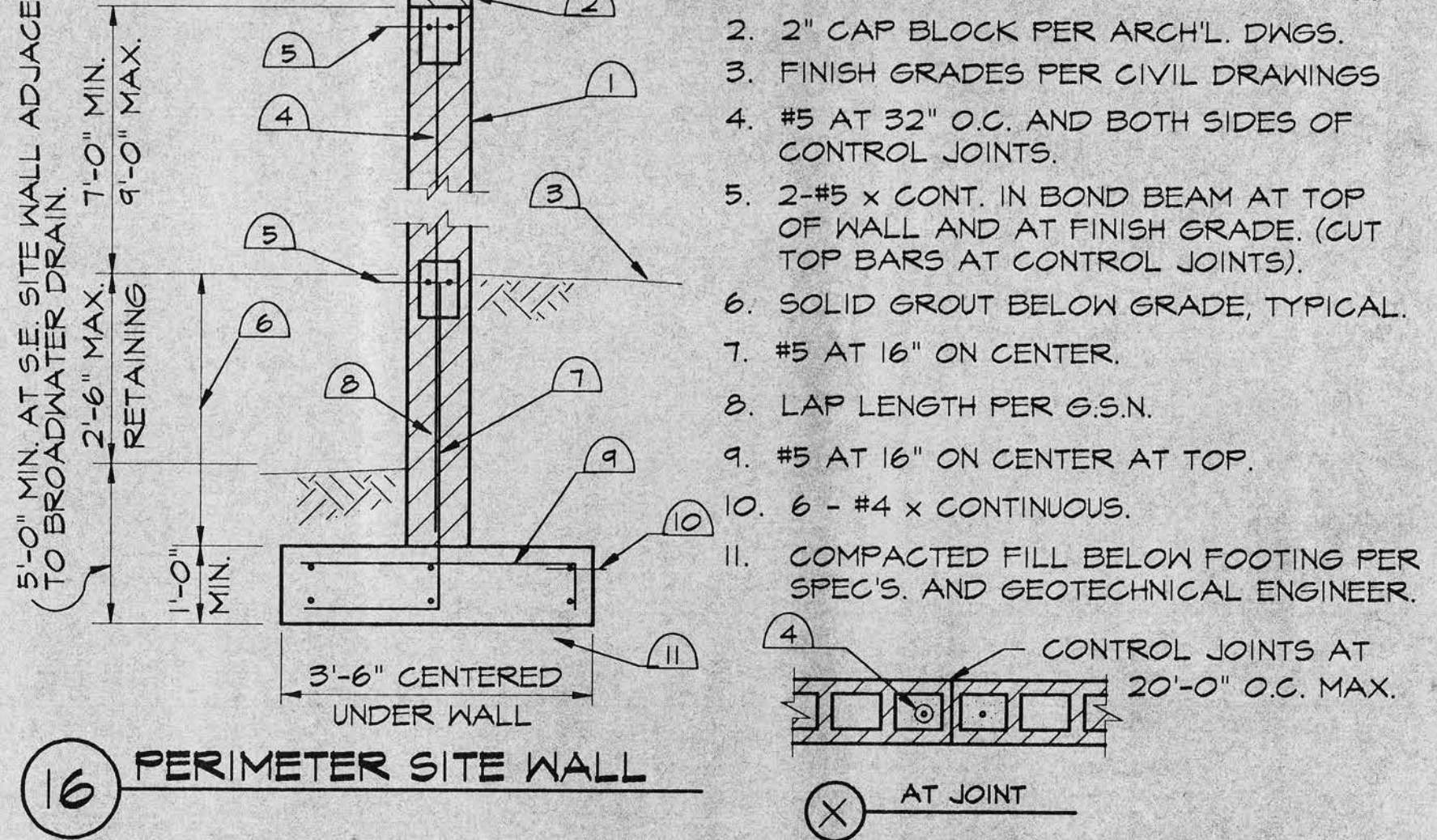
17 DETAILS OF PIPE AT CONCRETE FOOTING



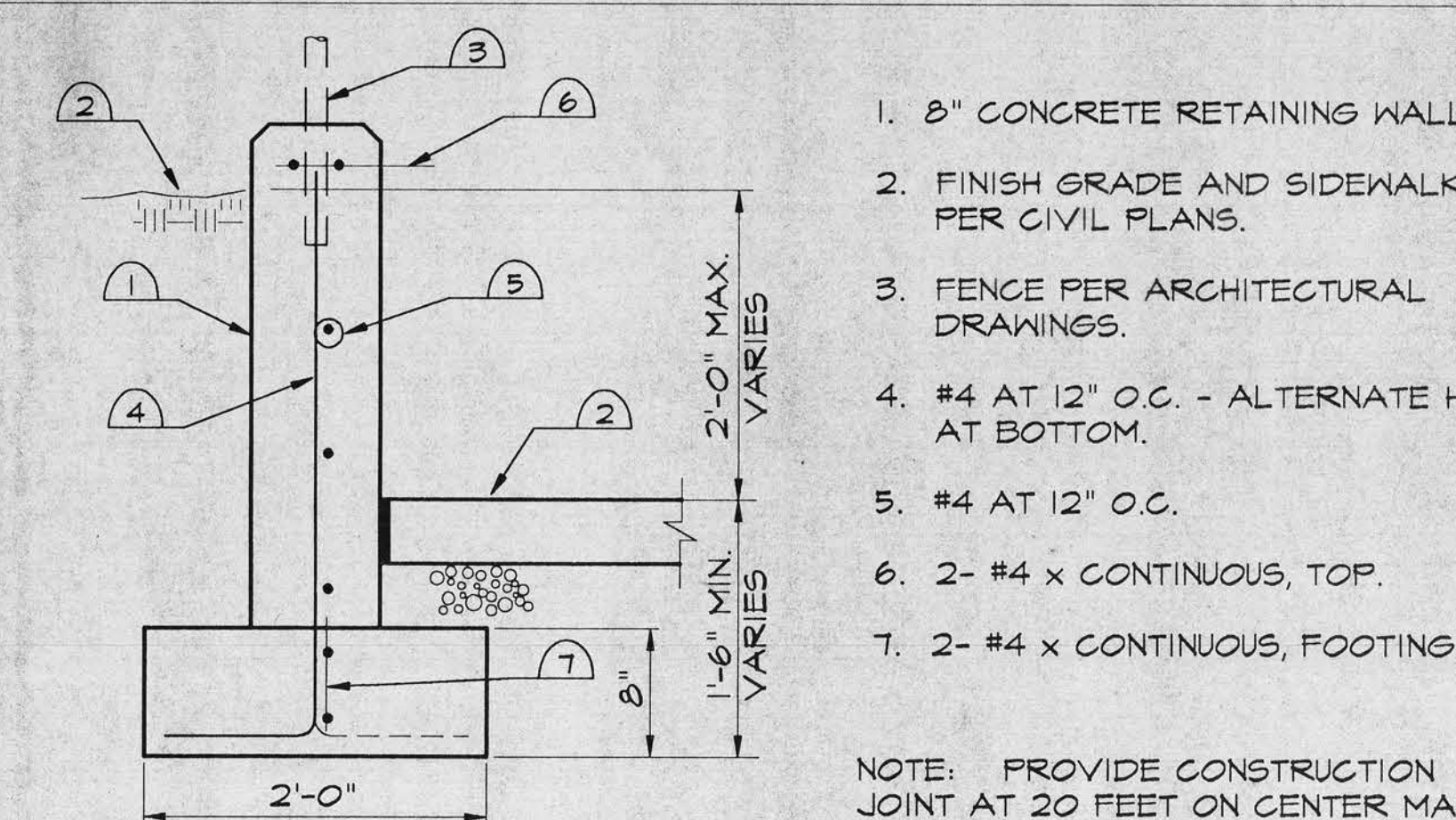
14 MASONRY NON-BEARING WALL AT SLAB ON GRADE



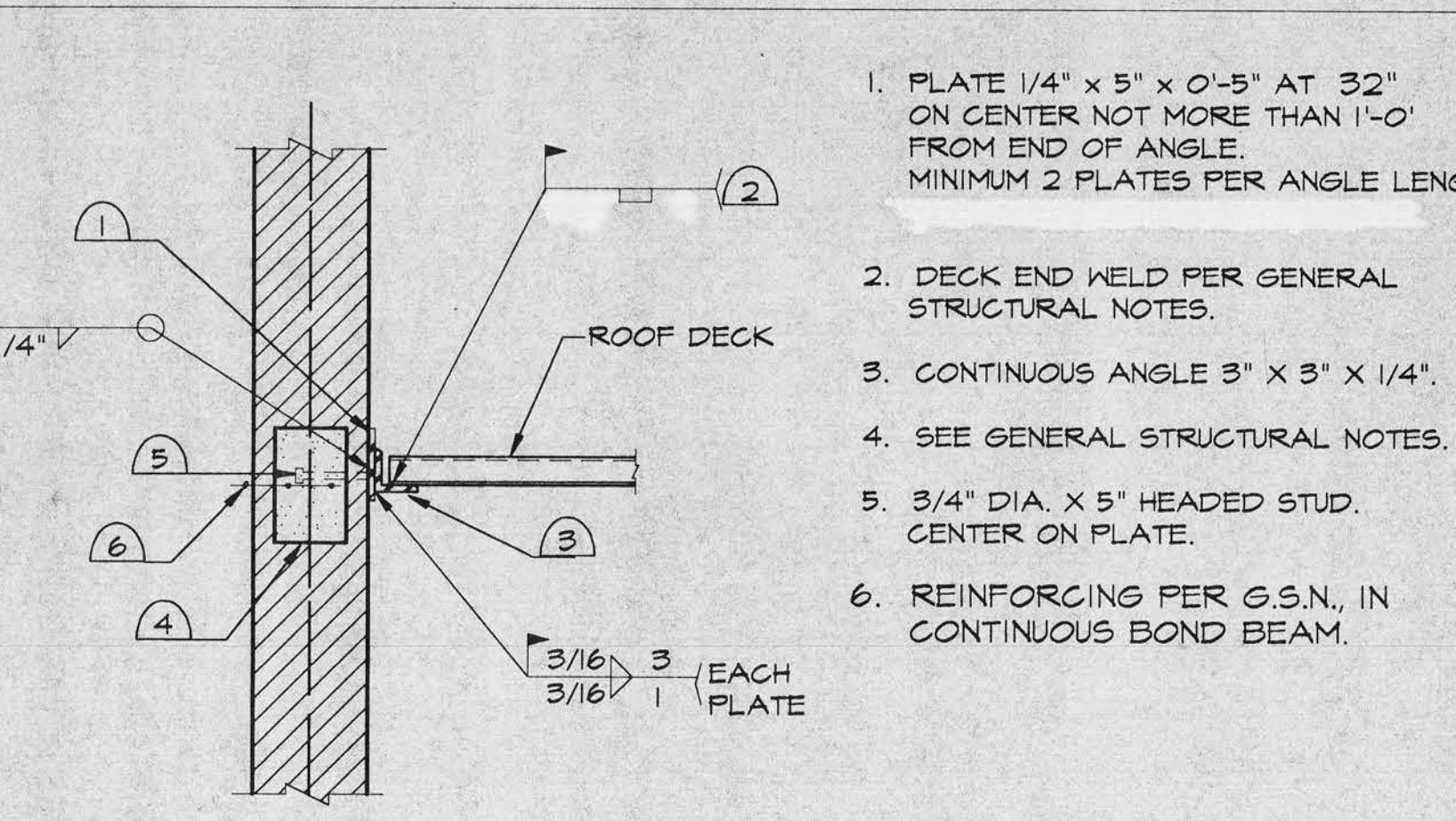
15 INTERIOR RETAINING WALL AND SLAB



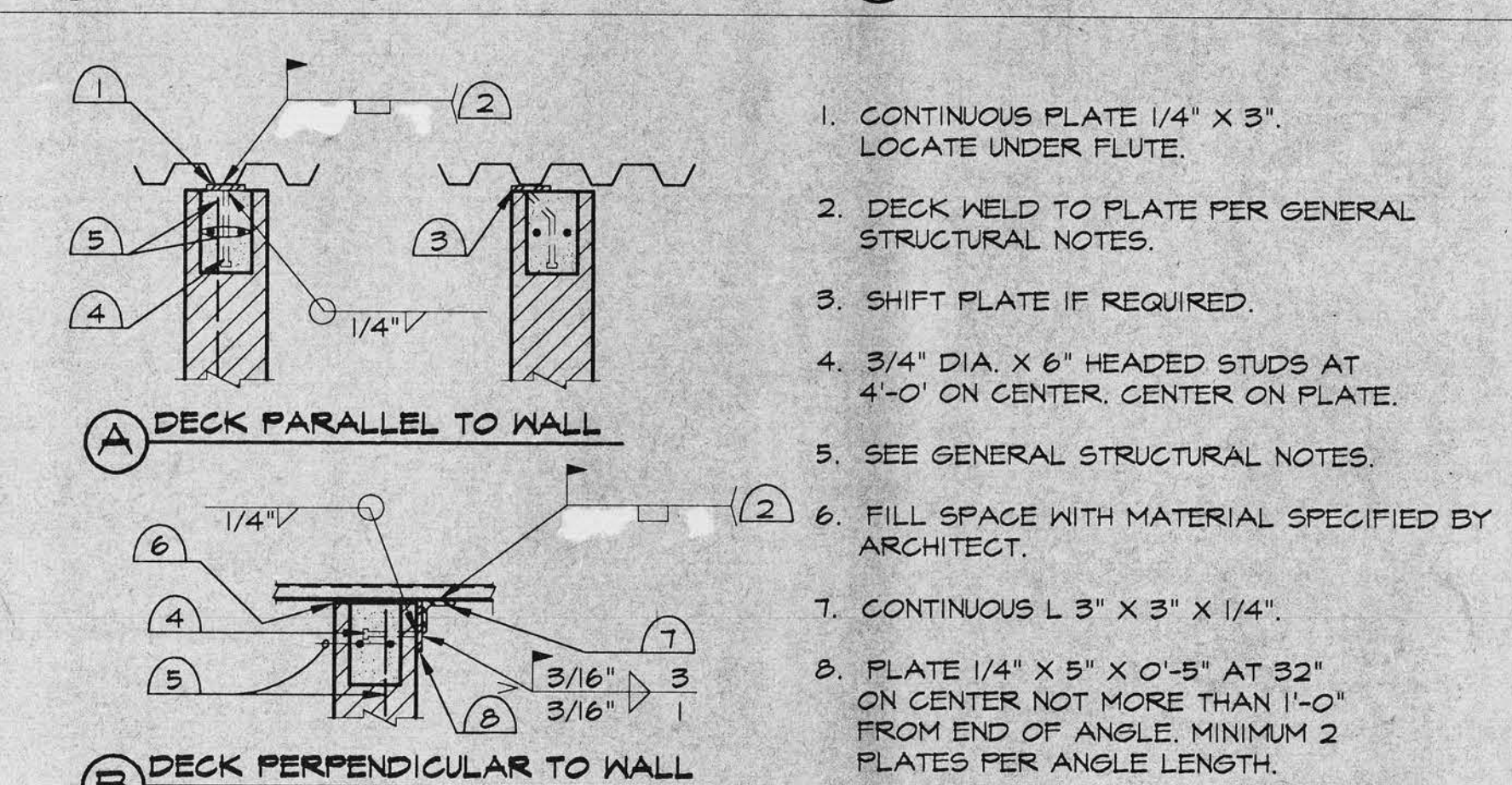
16 PERIMETER SITE WALL



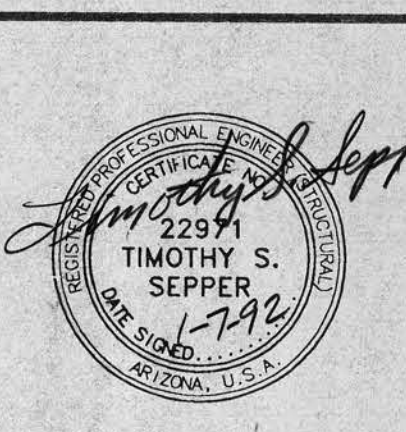
18 LOW RETAINING WALL



19 ROOF DECK CONNECTION AT MASONRY WALL



20 ROOF DECK OVER MASONRY WALL



PROJECT NAME

DATE 1-7-92

ISSUED FOR	DATE

SHEET TITLE

STRUCTURAL DETAILS

SHEET NO.