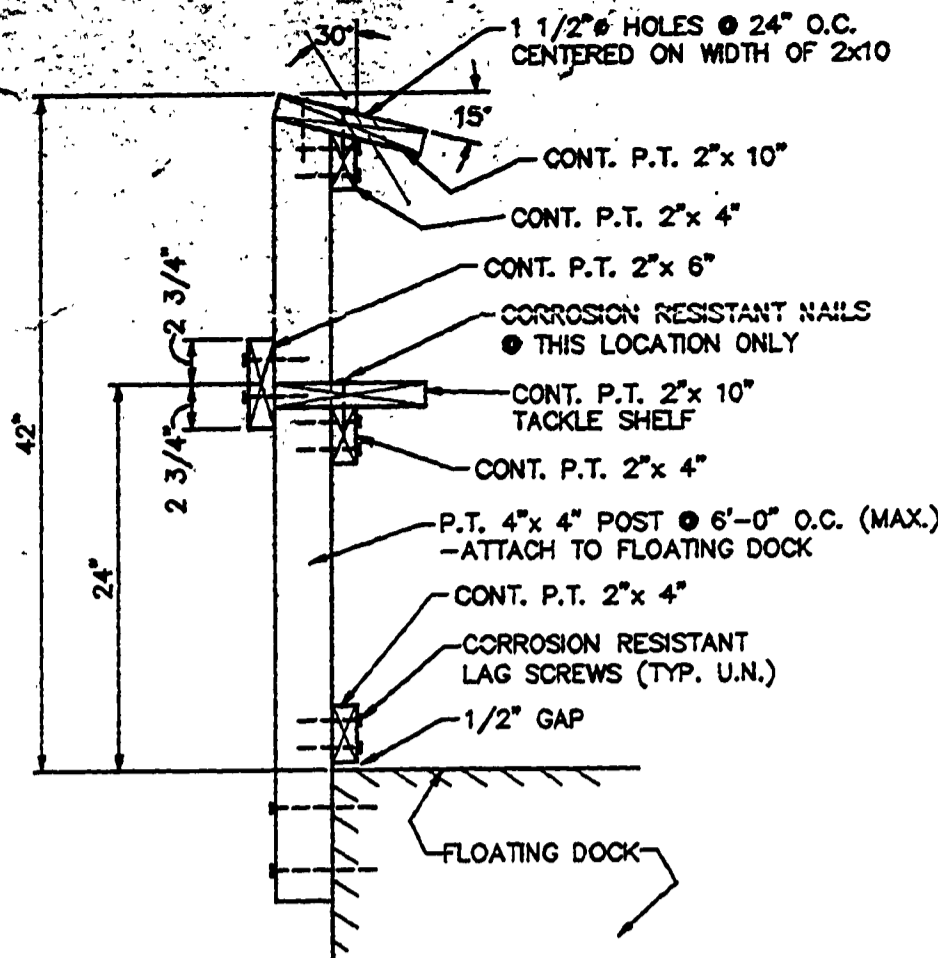
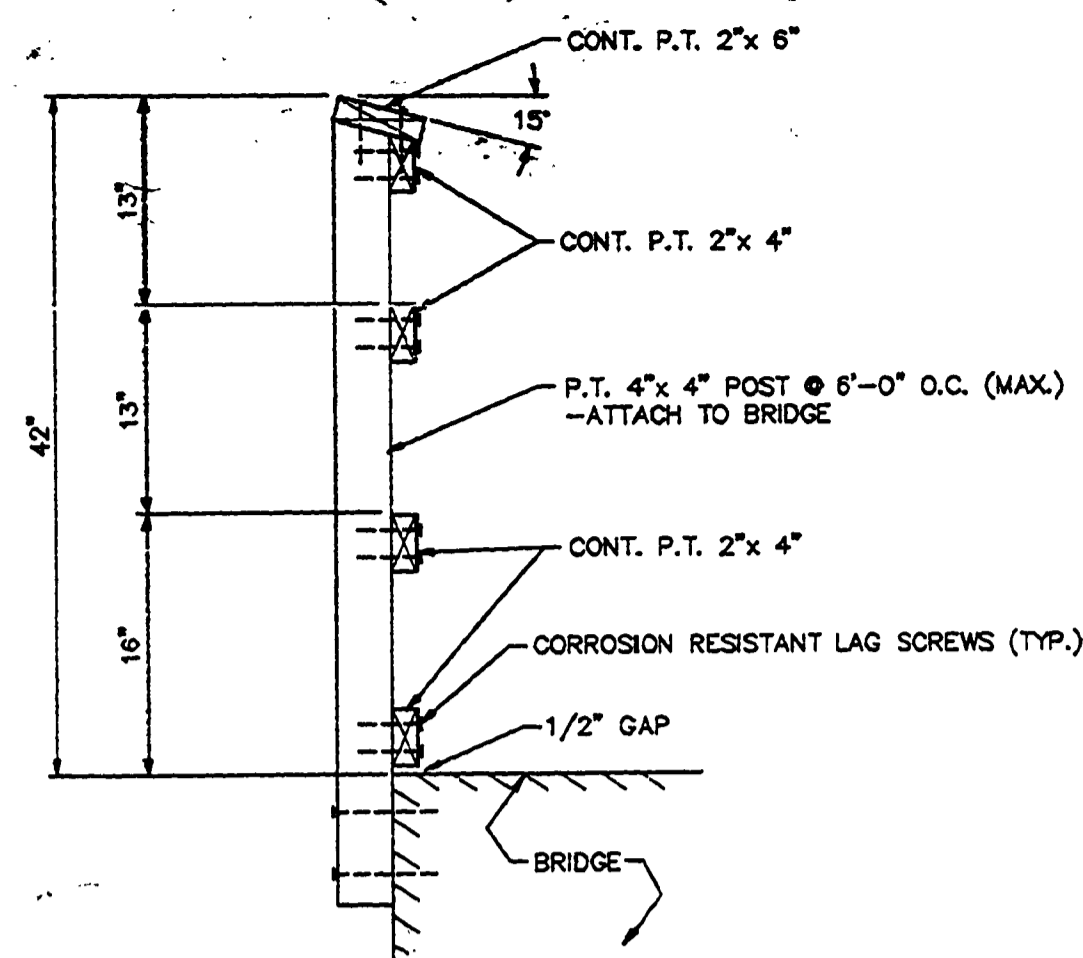


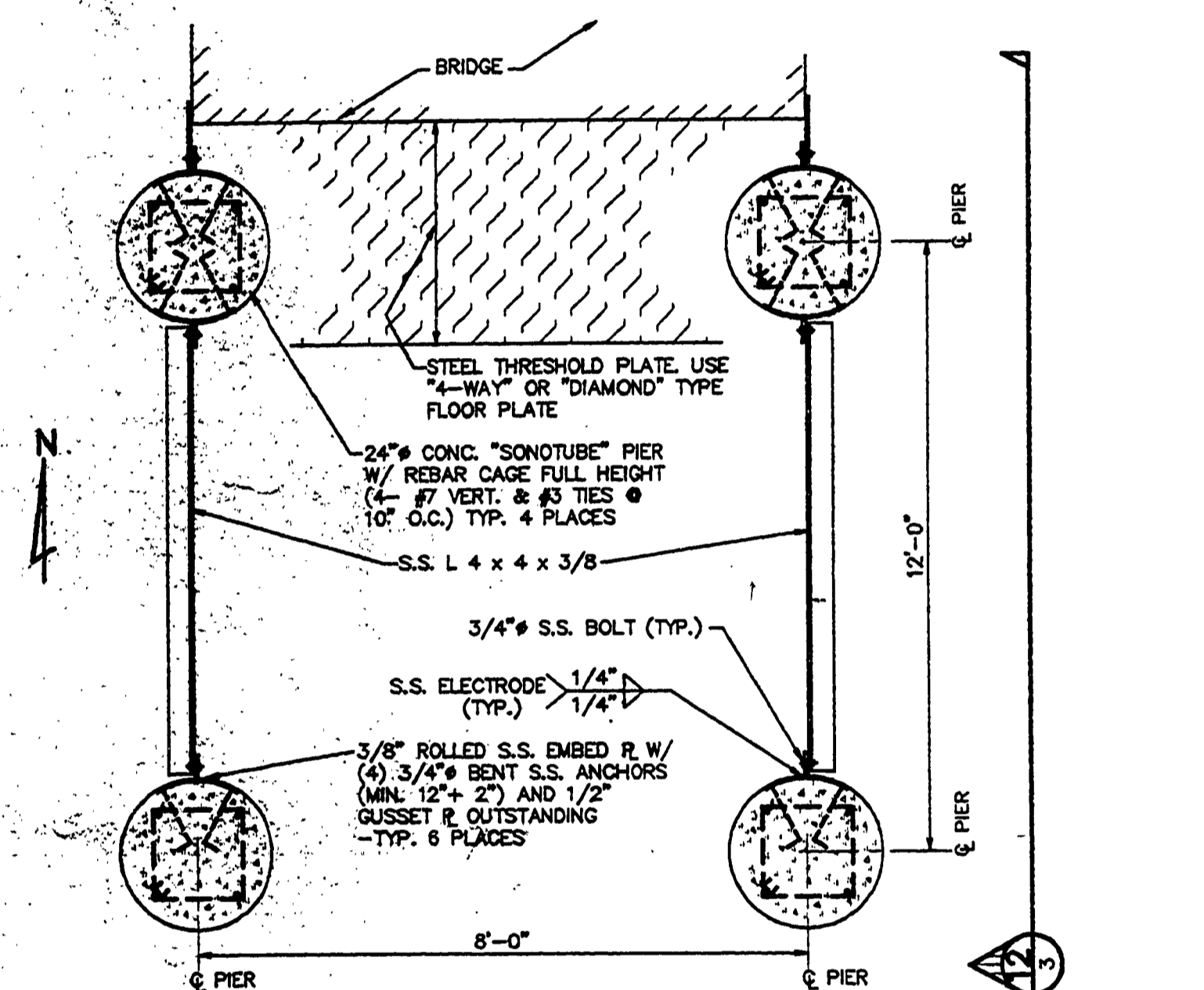
1 HANDICAP ACCESSIBLE HANDRAIL
NO SCALE



2 STANDARD HANDRAIL
NO SCALE

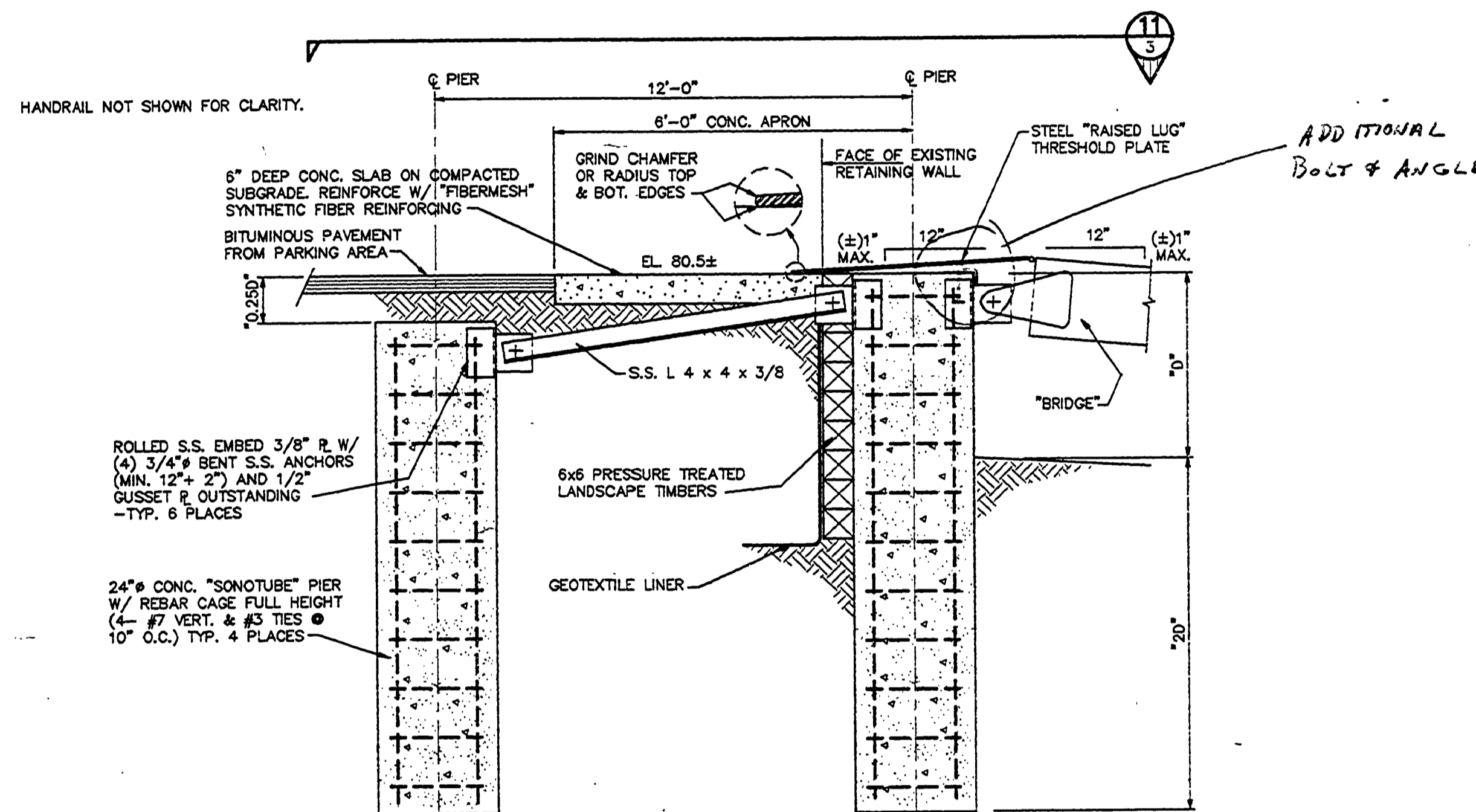


3 BRIDGE HANDRAIL
NO SCALE

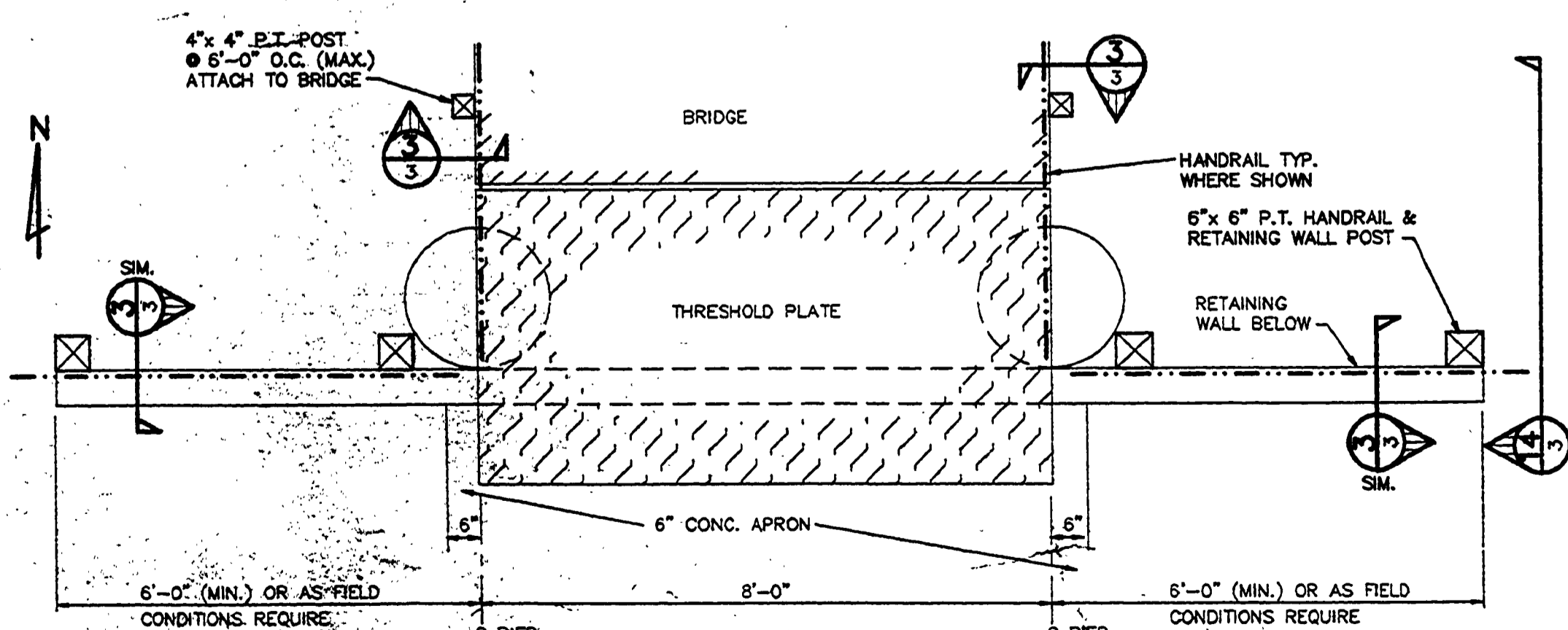


11 STRUCTURAL PLAN
SCALE: 1/2\"/>

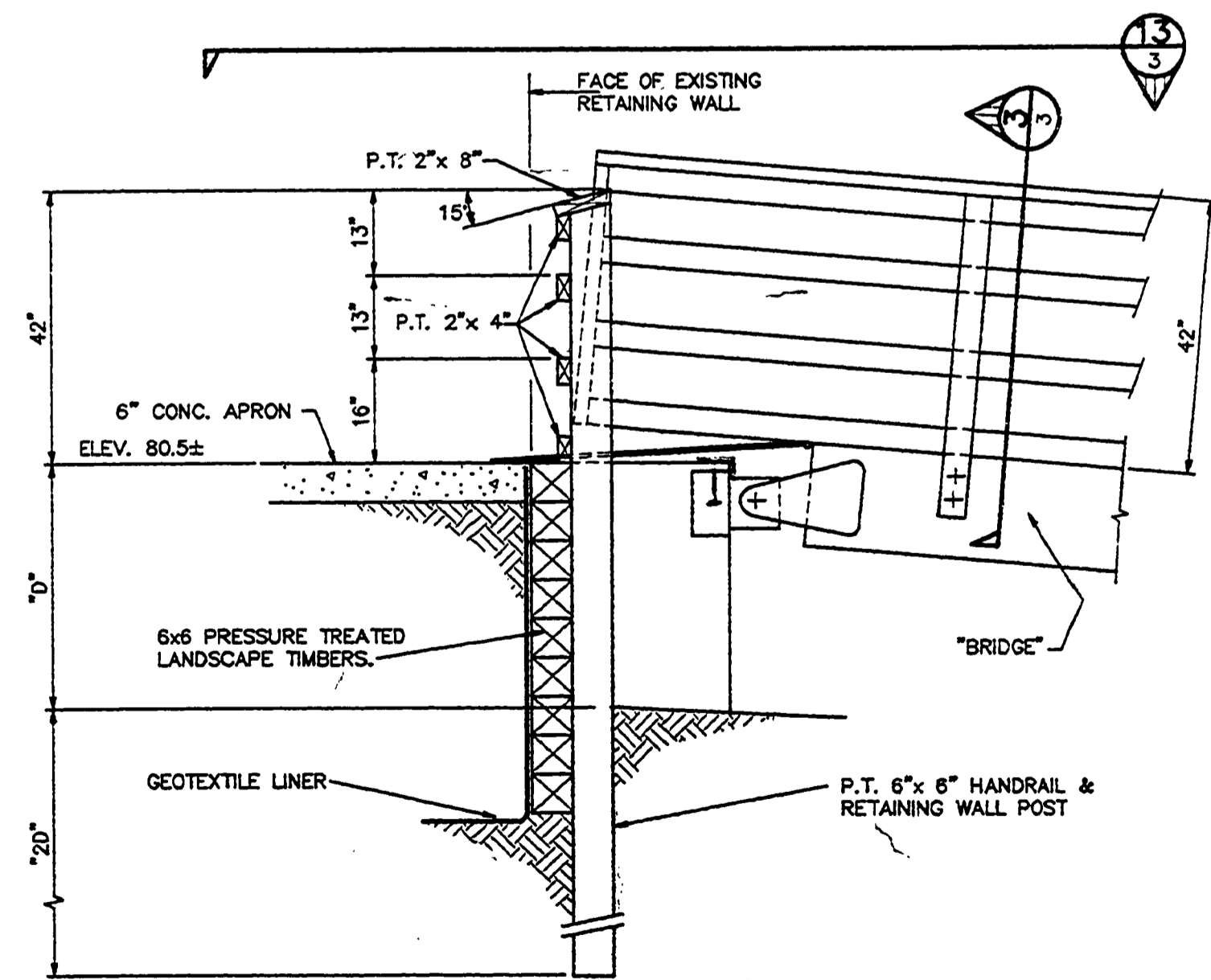
NOTE: HANDRAILING AND RETAINING WALL NOT SHOWN FOR CLARITY. SEE 14



12 PROFILE
SCALE: 1/2\"/>



13 HANDRAILING PLAN
SCALE: 1/2\"/>

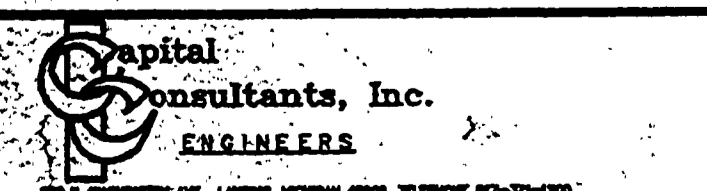


14 HANDRAILING PROFILE
SCALE: 1/2\"/>

GENERAL STRUCTURAL NOTES

- THE STRUCTURAL PLANS SHALL BE UTILIZED IN COORDINATION WITH THE PROJECT SPECIFICATIONS.
- SUPERIMPOSED LOADS USED IN THE DESIGN ARE NOTED IN THE PROJECT SPECIFICATIONS.
- CONCRETE:
 - ALL CONCRETE WORK TO BE PERFORMED IN CONFORMANCE WITH THE LATEST ACI 301 AND 318 CODE REQUIREMENTS AND DETAILING STANDARDS.
 - ALL CONCRETE SHALL BE MADE WITH STONE AGGREGATE AND SHALL DEVELOP 3500 PSI MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS. EXPOSED EXTERIOR CONCRETE SHALL BE AIR ENTRAINED.
 - ALL REINFORCING SHALL BE HIGH STRENGTH DEFORMED BARS, GRADE 60, ASTM A615, WITH 60,000 PSI MINIMUM YIELD STRENGTH; EXCEPT NO. 3 COLUMN TIES.
 - REINFORCEMENT PROTECTION: (U.N.O.)
 - CONCRETE POURED AGAINST EARTH..... 3"
 - CONCRETE POURED IN FORMS BUT EXPOSED TO WEATHER, EARTH OR LIQUID..... 2"
 - SLABS AND INTERIOR WALLS..... 1"
 - NO SPLICES OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAILED OR AS AUTHORIZED BY THE STRUCTURAL ENGINEER. LAP SPLICES, WHERE PERMITTED, SHALL BE A MINIMUM OF 40 BAR DIAMETERS UNLESS OTHERWISE NOTED.
 - DETAIL BARS IN ACCORDANCE WITH ACI DETAILING MANUAL AND ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE. PROVIDE CORNER BARS.
 - PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING AT POSITIONS SHOWN ON THE PLANS.
 - SLABS AND GRADE BEAMS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE. ANY STOP IN CONCRETE WORK MUST BE MADE AT CENTER OF SPAN WITH VERTICAL BULKHEADS UNLESS OTHERWISE SHOWN. ALL CONSTRUCTION JOINTS SHALL BE AS DETAILED OR AS APPROVED BY THE ENGINEER.
 - ALL EXPOSED CONCRETE, EXCEPT FLOATED SURFACES OF SLABS SHALL RECEIVE A RUBBED SURFACE FINISH. EXPOSED CORNERS SHALL BE CHAMFERED 3/4" U.N.O.
 - ALL EMBEDDED ITEMS SHALL BE PLACED IN THE FORMWORK PRIOR TO PLACING CONCRETE. DRILLING AND GROUTING IS ACCEPTABLE SUBJECT TO ENGINEER APPROVAL.
 - ALL SLABS ON GRADE SHALL REST ON A 6-INCH MINIMUM THICKNESS OF CLEAN ENGINEERED GRANULAR FILL COMPACTED TO 97% OR ITS MAXIMUM DRY DENSITY.
 - CONTRACTOR SHALL FIELD VERIFY ALL AFFECTED EXISTING STRUCTURES, ESPECIALLY BELOW GRADE COMPONENTS SUCH AS FOOTINGS. PRIOR TO COMMENCING WORK, CONTRACTOR SHALL MAKE ADJUSTMENTS IN PROPOSED WORK, SUBJECT TO ENGINEER'S APPROVAL, TO ACCOMMODATE ACTUAL FIELD CONDITIONS THAT MAY VARY WITH INFORMATION SHOWN ON PLANS.
 - FLOATING PIER HANDRAILS (STANDARD AND HANDICAP-SEE DETAILS 1 & 2 THIS SHEET) SHALL BE PART OF THE STRUCTURAL SUPPORT (SEE SPECIFICATIONS FOR "BRIDGE HANDRAIL" REQUIREMENTS AND DETAIL 3 THIS SHEET). ALL RAILS SHALL BE SMOOTH WITH NO SHARP CORNERS, BURRS, ETC. SO AS TO MAKE A SMOOTH MEMBER FOR HAND CONTACT. HANDRAIL AND HANDRAIL BRACKETS SHALL BE DESIGNED TO WITHSTAND A MINIMUM CONCENTRATED LOAD OF 200 POUNDS APPLIED FROM ANY DIRECTION AT ANY POINT ON THE HANDRAIL. FITTINGS SHALL BE GALVANIZED.
 - EXISTING SITE ELEVATIONS SHALL BE FIELD VERIFIED BY CONTRACTOR.
 - THE FOLLOWING ABBREVIATIONS ARE USED WITH DETAILS ON THIS SHEET:
 - S.S. = STAINLESS STEEL
 - "0" = DISTANCE FROM GRADE ELEV. @ ABUTMENT TO FINISH CONCRETE APRON

DATE:	
BY:	
CHECKED BY:	
APP'D BY:	



STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
Office of Facilities

QUALITY OF LIFE RECREATION BOND
MICHIGAN DEPARTMENT OF NATURAL RESOURCES
PARKS DIVISION - STATE ACCT. NO. 607-75-2450-400

BAY CITY STATE PARK
TOBICO LAAGOON FISHING PIER
DETAILS

SCALE: AS SHOWN
PROJ. NO.: 90135
SHEET 3 OF 3