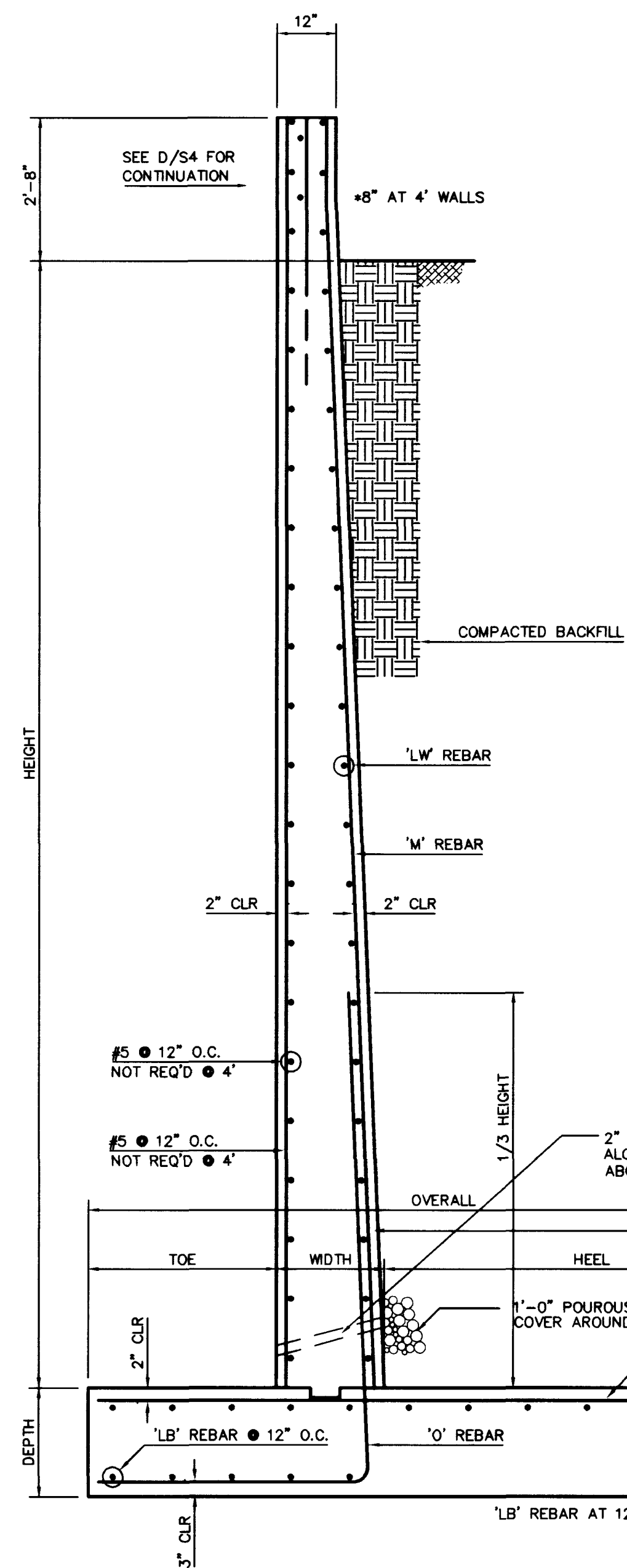
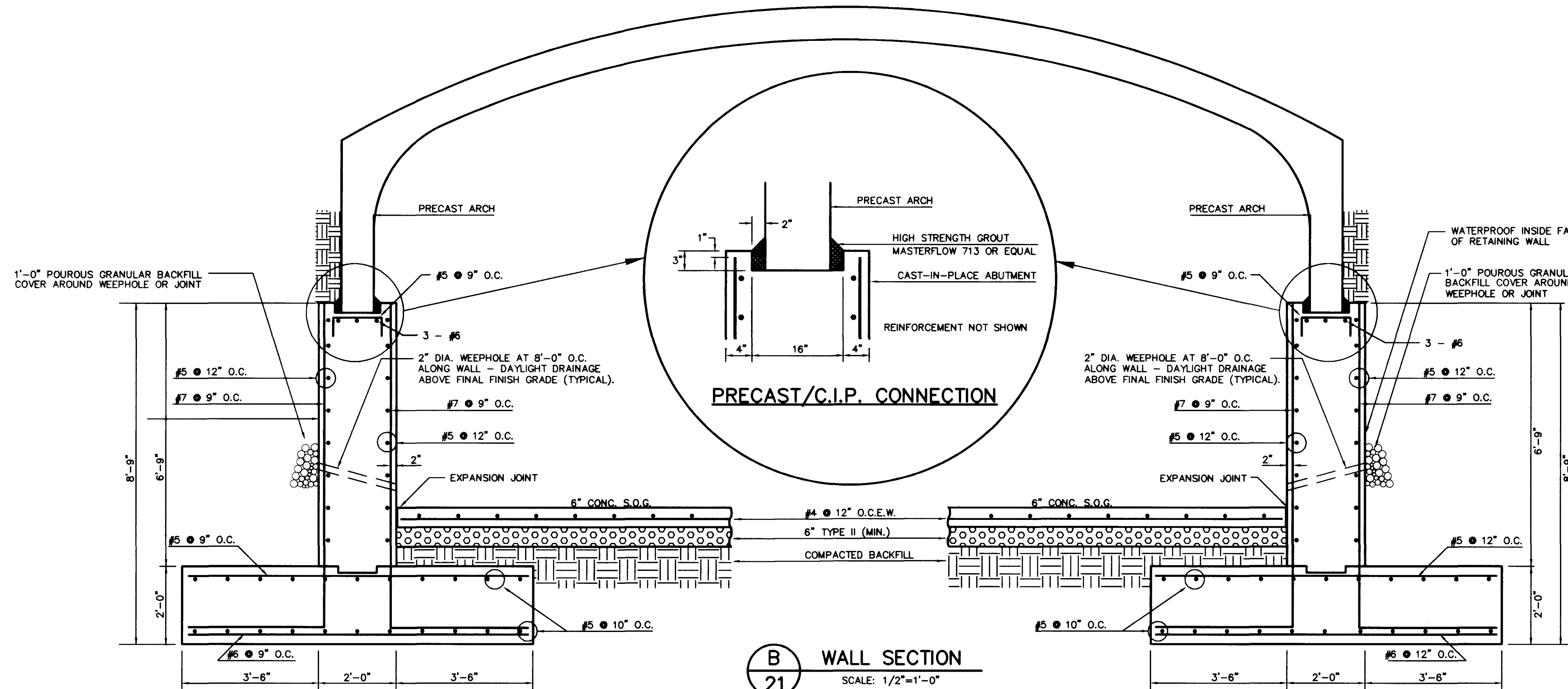




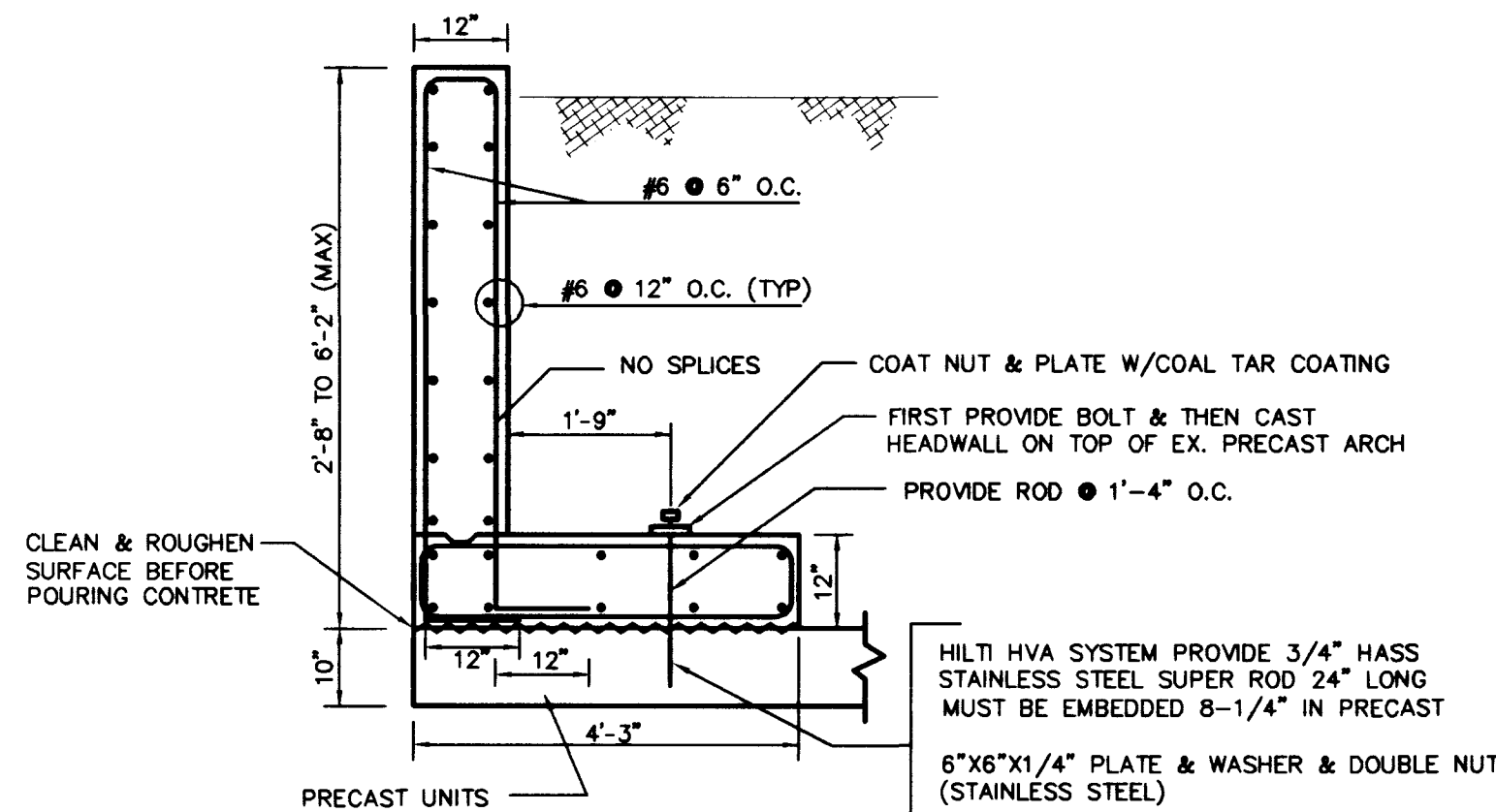
A
21

RETAINING WALL
SCALE: 1/2"=1'-0"



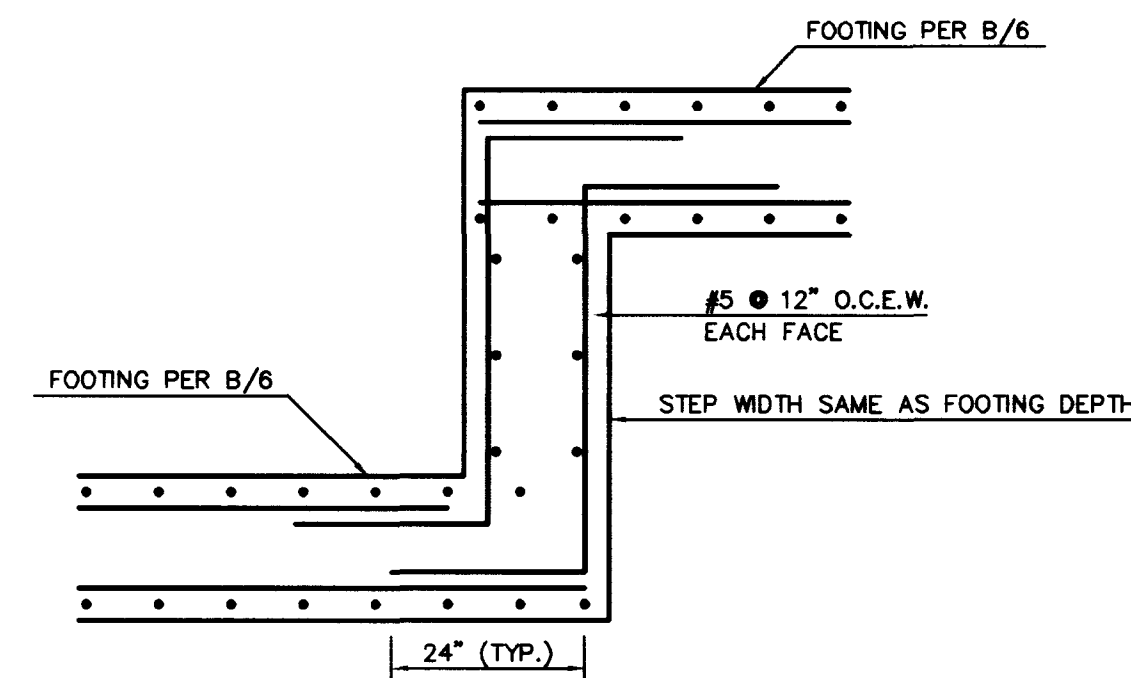
B
21

WALL SECTION
SCALE: 1/2"=1'-0"



D
21

HEADWALL DETAIL
SCALE: N.T.S.



E
21

FOOTING STEP
SCALE: 1/2"=1'-0"

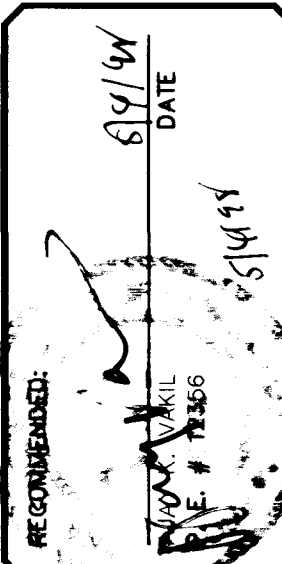
NOTE:
THIS REINFORCED CONCRETE ARCH CULVERT AND HEADWALLS DESIGN AND STRUCTURAL CALCULATIONS SHALL BE SIGNED AND STAMPED BY A LICENSED PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF NEVADA, WHOSE SERVICES SHALL BE RETAINED BY THE CONTRACTOR.

APPROVAL OF THESE DESIGN DRAWINGS DOES NOT CONSTITUTE APPROVAL OF THIS ARCH CULVERT. DETAILS ARE PROVIDED HERE ONLY FOR GRADING AND HYDRAULIC RELATIONSHIP.

HEIGHT	UP TO 20'	UP TO 16'	UP TO 12'	UP TO 8'	UP TO 4'
OVERALL	12'-0"	10'-0"	8'-0"	6'-0"	4'-0"
HEEL	7'-0"	6'-0"	5'-0"	3'-6"	2'-0"
TOE	3'-0"	2'-4"	1'-8"	1'-6"	1'-4"
WIDTH	2'-0"	1'-8"	1'-4"	1'-0"	0'-8"
DEPTH	24"	20"	16"	12"	12"
'M' REBAR	#8 @ 9"	#7 @ 9"	#6 @ 9"	#5 @ 12"	#4 @ 12"
'O' REBAR	#8 @ 9"	#8 @ 9"	#8 @ 9"	#5 @ 12"	#4 @ 12"
'LW' REBAR	#8 @ 12"	#7 @ 12"	#6 @ 12"	#5 @ 12"	#4 @ 12"
'P' REBAR	#8 @ 9"	#6 @ 9"	#5 @ 9"	#5 @ 12"	#4 @ 12"
'LB' REBAR	#8	#7	#6	#5	#5

- FOUNDATION NOTES**
- FOOTINGS
 - CONTRACTOR SHALL PROPERLY DEWATER EXCAVATIONS OF SURFACE WATER, GROUND WATER, AND SEEPAGE BEFORE CONTINUING WITH THE AFFECTED PORTION OF THE WORK.
 - FOOTINGS AND UTILITY TRENCHES WITHIN FIVE FEET OF THE STRUCTURE AREA WHICH ARE NOT UNDISTURBED GROUND SHALL BE MECHANICALLY COMPACTED DURING BACKFILL TO ACHIEVE 95% OF OPTIMUM DENSITY AS DETERMINED BY ASTM 1557.
 - ALL ABANDONED FOOTINGS AND UTILITIES THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
 - FORMWORK
 - ALL FORMWORK SHALL CONFORM TO THE LINES AND GRADES SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH LOCAL BUILDING CODES, THE UBC, ACI 301, AND ACI 318.
 - REINFORCEMENT
 - REINFORCING STEEL SHALL BE NEW DEFORMED BILLET STEEL CONFORMING WITH ASTM A615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM WITH ASTM A62 AND A185.
 - INSTALL REINFORCING STEEL IN ACCORDANCE WITH THE "ACI DETAILING MANUAL" (PUBLICATION SP-66), AND ACI 318.
 - PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING AND TO PROVIDE PROPER CLEARANCES IN ACCORDANCE WITH ACI 318, CHAPTER 7. SECURE ALL REINFORCING IN ITS DESIGNED LOCATION PRIOR TO PLACING CONCRETE. DO NOT PLACE REINFORCING DURING OR AFTER CONCRETE POURING OPERATIONS BEGIN.
 - NO WELDING OF REINFORCING SHALL BE PERMITTED UNLESS SPECIFICALLY CALLED FOR AND APPROVED BY THE ENGINEER.
 - PROVIDE MINIMUM PROTECTION OF REINFORCEMENT IN ACCORDANCE WITH ACI 318, CHAPTER 7.
 - CONCRETE MIX AND PLACEMENT
 - MINIMUM CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE AS FOLLOWS:
 - FOOTINGS: 3000 PSI
 - SLABS ON GRADE: 3000 PSI
 - CAST IN PLACE WALLS: 4000 PSI
 - CEMENT TO CONFORM WITH ASTM C150, TYPE V. MINIMUM CEMENT CONTENT SHALL BE 517 POUNDS/CUBIC YARD FOR 3000 PSI AND 3000 PSI CONCRETE, AND 564 POUNDS PER CUBIC YARD FOR 4000 PSI CONCRETE.
 - AGGREGATE SHALL BE 1-1/2" CONCRETE AGGREGATE CONFORMING TO THE SPECIFICATIONS OF ASTM C33.
 - WATER TO BE POTABLE.
 - CONCRETE MIXING AND PLACING SHALL CONFORM TO ACI 301, 304, & 318.
 - ALL REINFORCING STEEL, HOLDINGS, ANCHOR BOLTS, AND OTHER EMBEDMENTS SHALL BE SECURED PRIOR TO CONCRETE PLACEMENT.
 - NO ITEMS ARE TO BE SET DURING OR AFTER CONCRETE PLACEMENT. PROVIDE SLEEVES FOR CONDUIT AND PIPE OPENINGS IN CONCRETE PRIOR TO PLACEMENT OF CONCRETE. DO NOT MOVE REINFORCING BARS WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER.
 - SHRINKAGE OF CONCRETE SHALL NOT EXCEED 0.00040 IN./IN.
 - SLUMP SHALL BE 1" MINIMUM AND 4" MAXIMUM.
 - ENTRAINED AIR SHALL BE:
 - 4-1/2% TO 7-1/2% FOR EXTERIOR CONCRETE.
 - 0% TO 3% FOR INTERIOR CONCRETE.

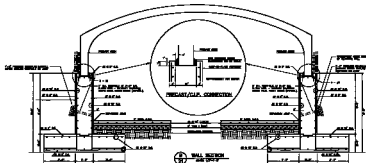
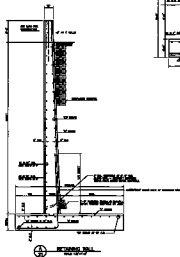
NO.	DESCRIPTION	DATE	APP'D.



DATE:	1/6/98
DRAWN BY:	
DESIGNED BY:	
CHECKED BY:	
JOB NO.:	0145.0027
SCALE:	AS SHOWN

PENTACORE
CIVIL ENGINEERING • LAND SURVEYING • PLANNING
CONSTRUCTION MANAGEMENT • ADA CONSULTING
6763 WEST CHARLESTON BOULEVARD
LAS VEGAS, NEVADA 89102 (702)258-0115

PECCOLE NEVADA CORP.
PECCOLE WEST - LOT 10
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- [illegible]