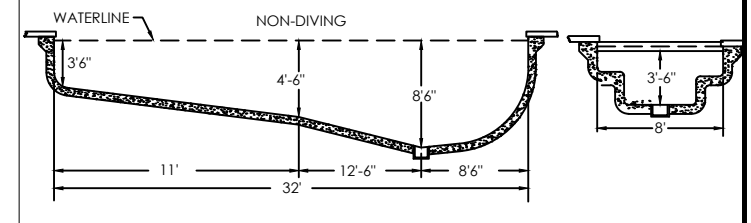
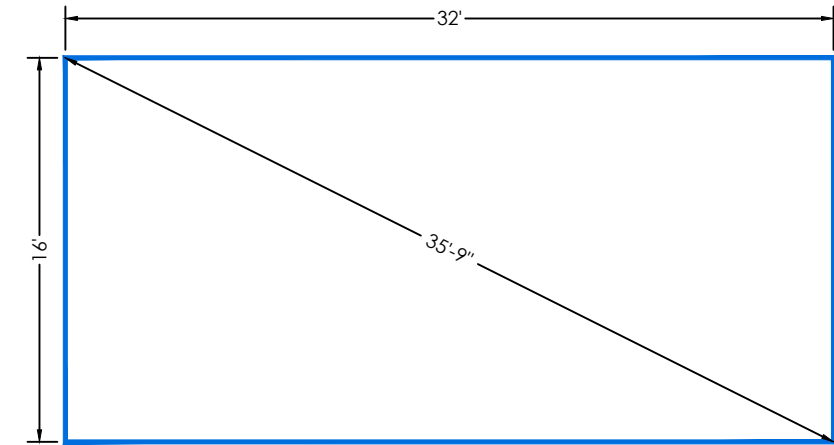
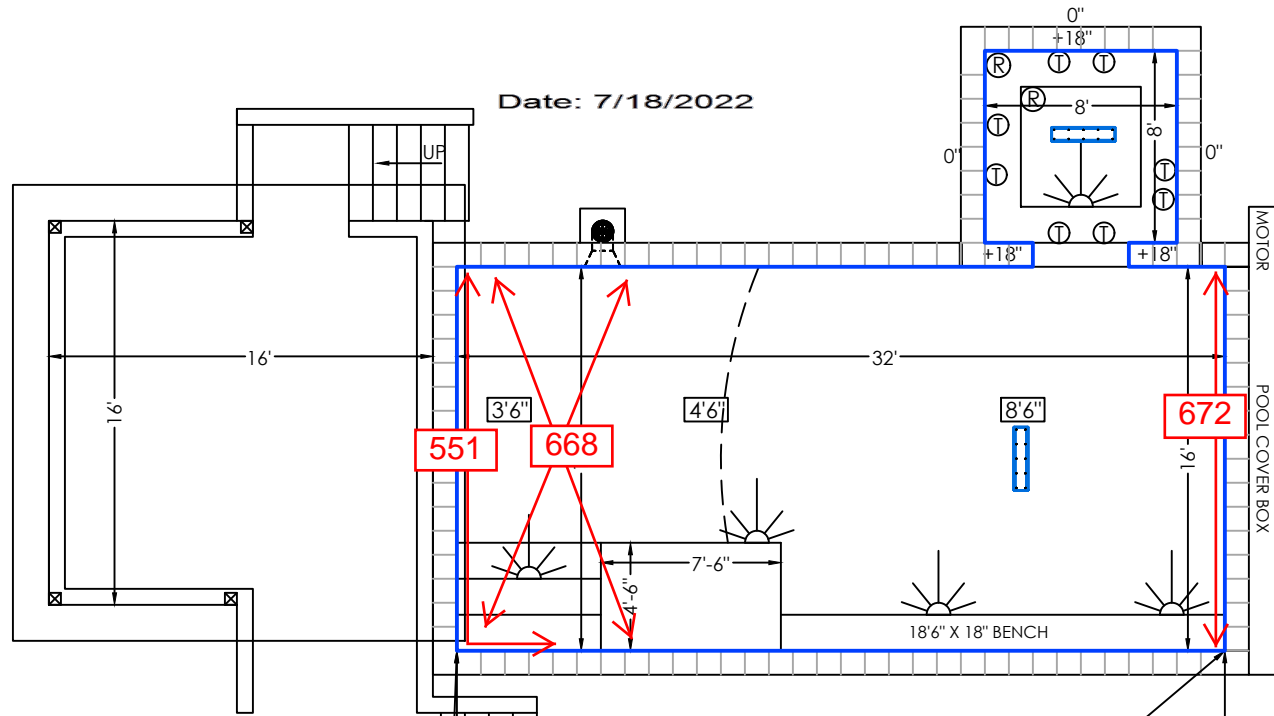


1/8" SCALE: 1/8" = 1'-0"

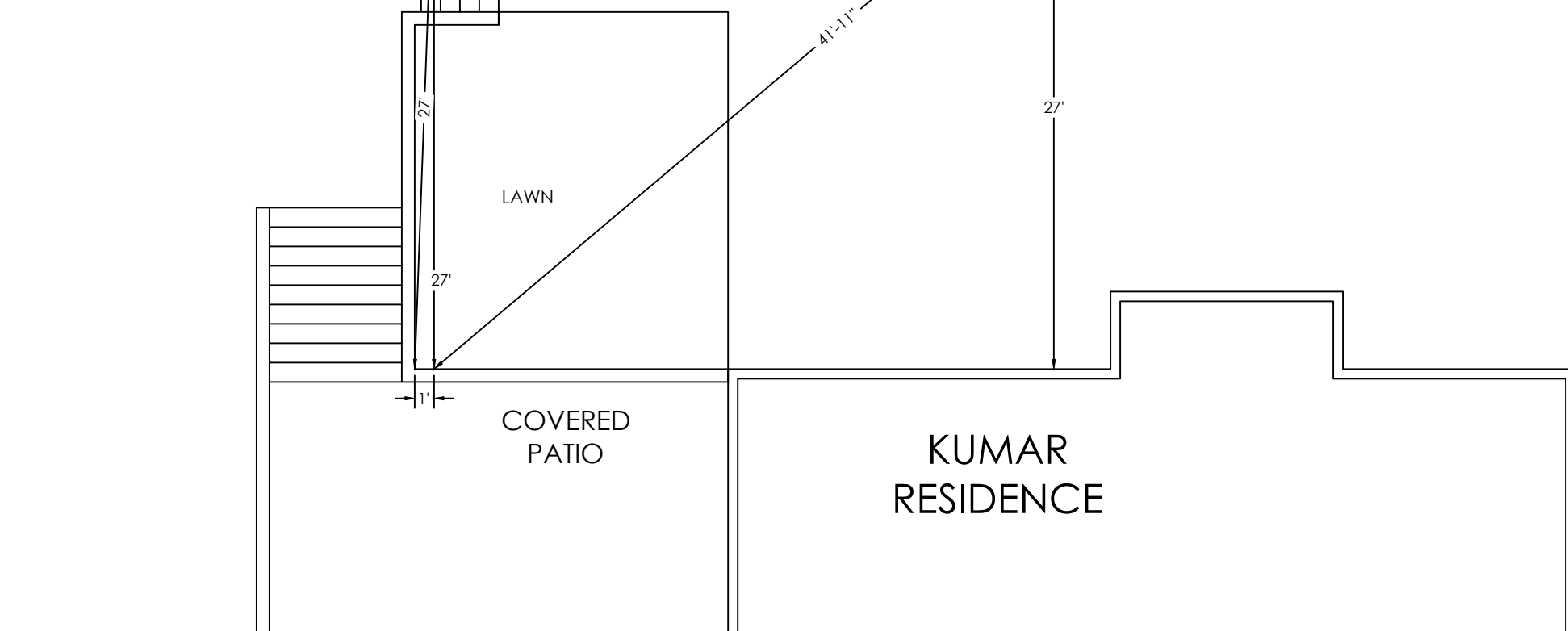
*CORRECT INTERPRETATION OF THE PLAN IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY QUESTIONS, CONTACT POOL BUILDER FOR CLARIFICATION.



Date: 7/18/2022



“Retaining Wall Footing Shall Not Bear Against Or Extend Under Spa Or Pool”



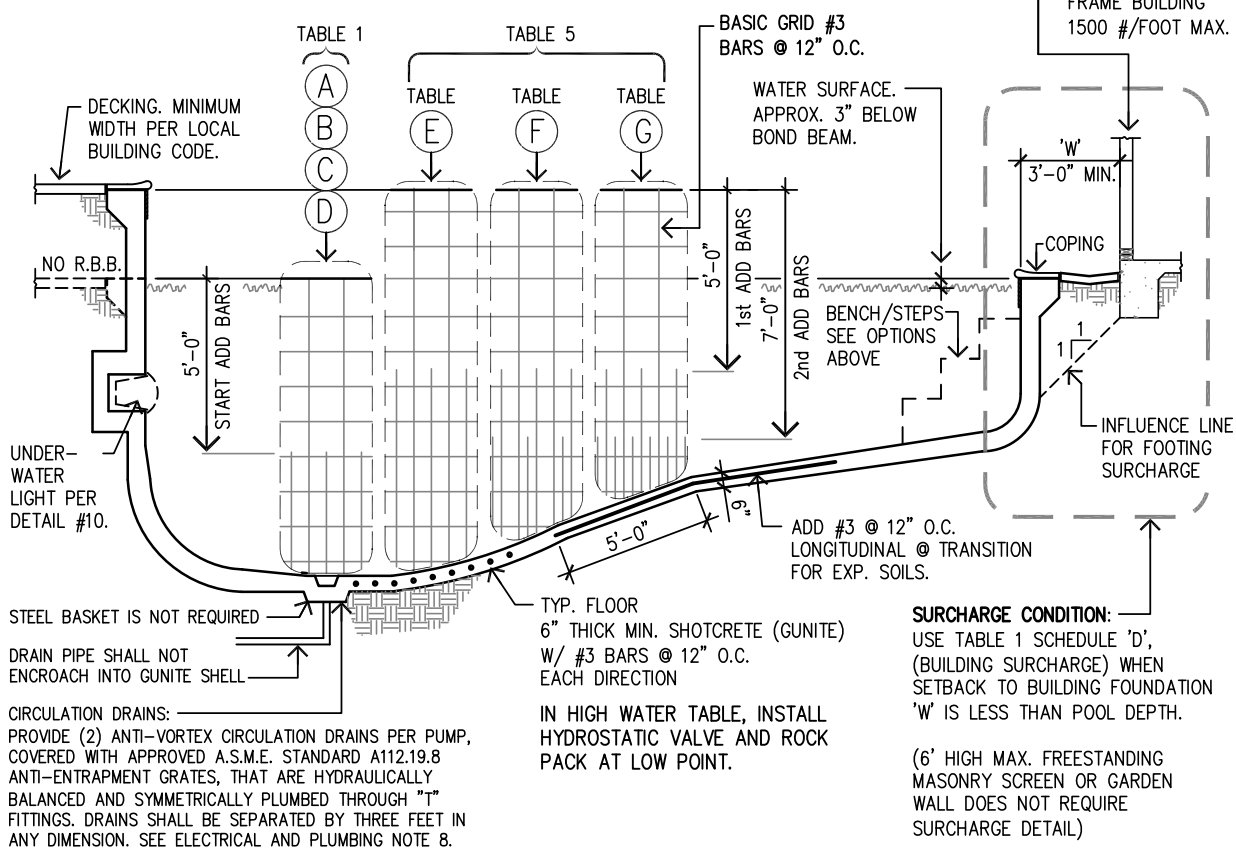
NAME: KUMAR RESIDENCE	
ADDRESS: 4034 85TH AVE. SE	GATE CODE:
CITY: MERCER ISLAND	STATE: WA. ZIP: 98040
DESIGNER: S. POWERS	ALT:

★ ★ ★ ★ ★
ALL STAR POOL AND SPA INC.
 P.O. BOX 2039- EVERETTE WA. 98213
 PHONE: (425)252-5673 FAX: (425) 252-8939
 WEBSITE: WWW.ALLSTARPOOLANDSPA.COM
 EMAIL: SHAWNIP@ALLSTARPOOLANDSPA.COM

ORIGINAL DRAFT : 7.07.22
REV. #1 :
REV. #2 :
REV. #3 :
REV. #4 :
DRAFTED BY: NT DESIGN GROUP

BENCH AND STEP OPTIONS:

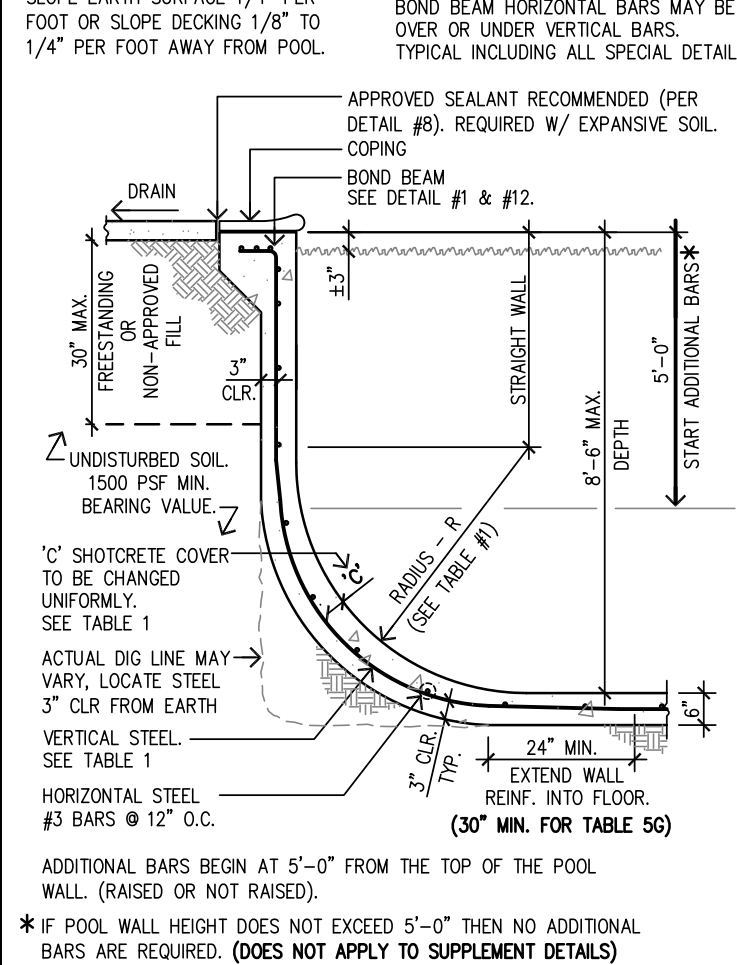
- UNDISTURBED EARTH MAY BE LEFT IN PLACE TO FORM THE STEPS OR BENCHES. REINFORCING STEEL SHOULD BE PLACED AROUND THE STEP OR BENCH SHAPED EARTH (3" CLEAR FROM EARTH).
- THE EARTH MAY BE REMOVED AND BENCHES AND STEPS MAY BE FORMED OF SHOTCRETE (GUNITE) WITHIN THE STRUCTURAL POOL SHELL. REINFORCING AT THE SURFACE OF THE BENCHES AND STEPS IS OPTIONAL.



TYPICAL LONGITUDINAL SECTION

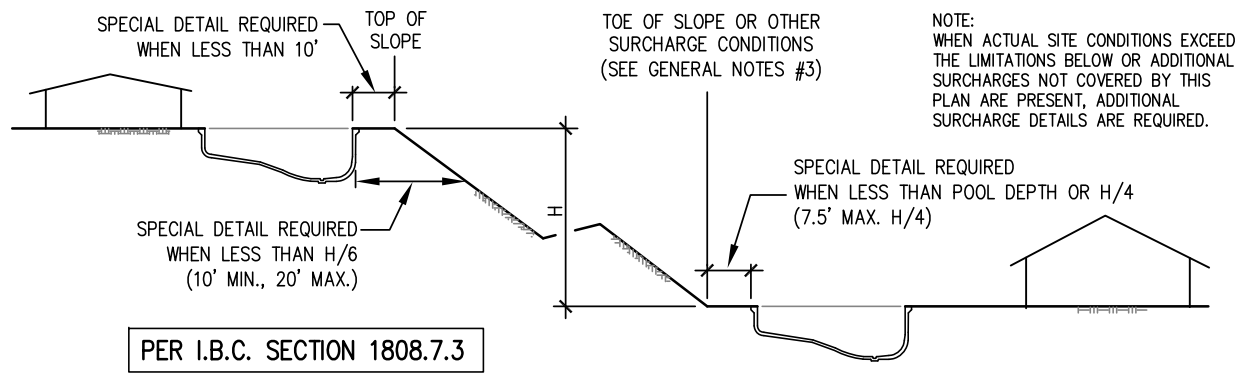
N.T.S.

SLOPE EARTH SURFACE 1/4" PER FOOT OR SLOPE DECKING 1/8" TO 1/4" PER FOOT AWAY FROM POOL.

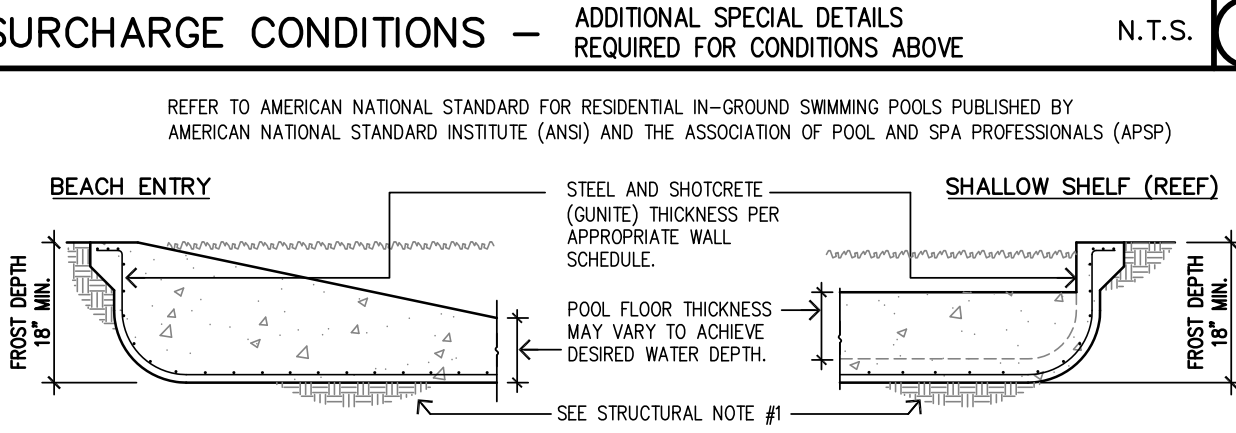


STANDARD WALL SECTION

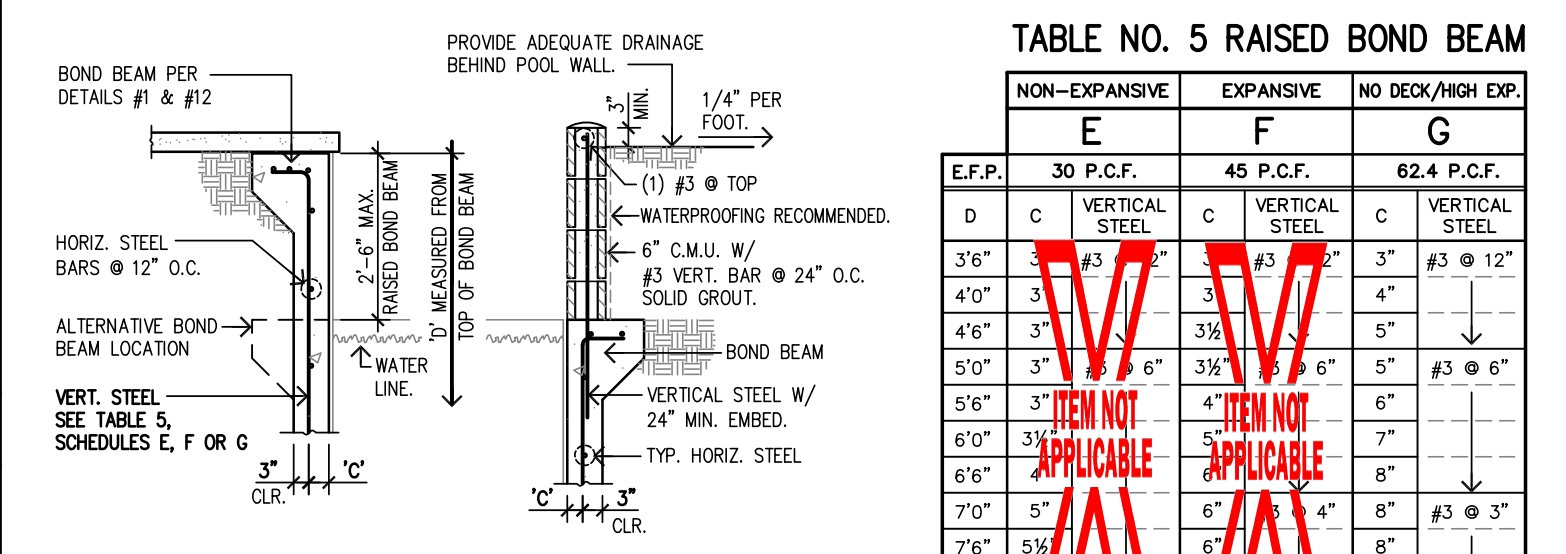
N.T.S.



N.T.S.



N.T.S.



RAISED BOND BEAM

N.T.S.

GENERAL NOTES

- THIS STANDARD POOL STRUCTURAL PLAN MUST BE ACCOMPANIED BY A CLEAR PLOT PLAN SHOWING POOL & OR SPA SHAPE, DEPTH AND DISTANCE TO PROPERTY LINE, SLOPES AND STRUCTURES.
- REPRESENTATIVES OF POOL ENGINEERING INC. HAVE NOT INSPECTED THE SITE & ARE RELYING ON INFORMATION PROVIDED BY THE CONTRACTOR OR OWNER TO DETERMINE THE ADEQUACY OF THIS STANDARD POOL STRUCTURE FOR THE ACTUAL SITE CONDITIONS. SHOULD SITE CONDITIONS VARY FROM THAT COVERED BY THIS STANDARD POOL STRUCTURAL PLAN, IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR OWNER TO NOTIFY POOL ENGINEERING INC. AND OBTAIN APPLICABLE SPECIAL ENGINEERING DETAILS PRIOR TO CONSTRUCTION. EXPANSIVE SOIL DETAILS ARE VALID ONLY FOR THE EQUIVALENT FLUID PRESSURES AND POOL ENGINEERING INC. RECOMMENDS THAT THE OWNER OR CONTRACTOR OBTAIN A SOIL REPORT.
- THIS PLAN IS NOT VALID WITHOUT ADDITIONAL SURCHARGE DETAILS WHEN THE CONDITIONS AS SHOWN BELOW IN FIGURE 18 APPLY (PER 2012/2015/2018 IBC SEC. 1808.7.3).
- THE STANDARD POOL STRUCTURE PLAN IS NOT INTENDED TO BE APPLICABLE TO NON-STRUCTURAL ITEMS INCLUDING BUT NOT LIMITED TO PLUMBING, ELECTRICAL, FENCING, CONCRETE DECKING AND POOL GEOMETRICS.
- DECKING CONSTRUCTION IS SHOWN AS RECOMMENDED MINIMUM CONSTRUCTION AND DOES NOT GENERATE A SYSTEM THAT WILL RESIST HEAVING DUE TO SOIL EXPANSION.
- ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE INTERNATIONAL BUILDING CODE AND LOCAL ORDINANCES.
- POOLS WITH DIVING BOARDS SHALL MEET DIVING BOARD MANUFACTURER'S POOL GEOMETRIC STANDARDS AND/OR LOCAL CODES.
- SIGN & SAFETY EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES.
- PUBLIC POOLS REQUIRE COUNTY HEALTH DEPARTMENT APPROVAL AND PROVISIONS FOR ASSISTIVE DEVICES FOR THE DISABLED.
- CONTRACTOR/OWNER SHALL VERIFY ALL FIELD CONDITIONS & DIMENSIONS AT JOB SITE.
- POOL LENGTH, GRADE BREAK LOCATIONS & DEPTH DIMENSIONS AS NOTED ON THE PLOT PLAN SHALL COMPLY WITH ASP SUGGESTED MINIMUM STANDARDS FOR RESIDENTIAL POOLS OR APPLICABLE STATE AND LOCAL HEALTH DEPARTMENT REGULATIONS AND MANUFACTURER'S RECOMMENDATIONS.
- IN ACCORDANCE WITH IBC, A SITE SPECIFIC SOILS INVESTIGATION MAY BE REQUIRED FOR PROJECTS LOCATED IN SEISMIC DESIGN CATEGORIES D, E, OR F.
- WHERE FREEZING TEMPERATURES OCCUR, THE POOL SHALL BE WINTERIZED TO PREVENT DAMAGE TO THE POOL STRUCTURE, PLUMBING, AND POOL EQUIPMENT. CONTACT LOCAL PROFESSIONAL FOR PROPER WINTERIZATION PROCEDURES.

STRUCTURAL NOTES

- SOIL SHALL HAVE A MINIMUM BEARING VALUE OF 1500 PSF. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL OR SOILS ENGINEER APPROVED 90% COMPACT FILL. THIS PLAN IS NOT SUITABLE WHERE POTENTIAL RISKS FOR DIFFERENTIAL MOVEMENT FROM DISSIMILAR SOIL CONDITIONS UNDER POOL, SUCH AS CUT-FILL TRANSITIONS.
- ALL REINFORCING STEEL SHALL BE DEFORMED BARS & CONFORM TO ASTM A615 GRADE 40 FOR #3 BARS AND #4 BARS. SPICES TO BE LAPPED A MINIMUM OF 24". MINIMUM CLEARANCE BETWEEN PARALLEL BARS IS 2" / 2".
- (1) #4 BAR IS EQUIVALENT TO AND MAY BE USED IN PLACE OF (2) #3 BARS, WITH THE EXCEPTION THAT IF #4 BARS ARE USED FOR THE BASIC GRID, THE MAXIMUM SPACING IS #4 BARS AT 18" O.C.
- THE PLAN TABLES SPECIFY THE MINIMUM REQUIRED REINFORCEMENT. FOR CONVENIENCE OF THE INSTALLER, THERE MAY BE MORE REINFORCEMENT THAN SPECIFIED AT ANY GIVEN POINT IN THE POOL STRUCTURE.
- GROUNDING/BONDING (PER THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE) OF THE STRUCTURAL REINFORCING MUST BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE.
- SHOTCRETE (GUNITE) TO BE IN CONFORMANCE WITH 2018 IBC SECTION 1908 (2015 IBC SECTION 1908, 2012 IBC SECTION 1910, 2009 IBC SECTION 1913) & SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS.
- WHERE APPLICABLE, SHOTCRETE (GUNITE) TO BE IN CONFORMANCE WITH ACI 318 CHAPTER 4, DURABILITY REQUIREMENTS. CONCRETE THAT WILL BE EXPOSED TO FREEZING AND THAWING, DEICING CHEMICALS OR OTHER EXPOSURE CONDITIONS SHALL COMPLY WITH ACI 318 TABLES 4.2.1 AND 4.3.1. CONCRETE EXPOSED TO FREEZING AND THAWING OR DEICING CHEMICALS SHALL BE AIR ENTRAINED IN ACCORDANCE WITH ACI 318 TABLE 4.4.1. CONCRETE THAT WILL BE SUBJECT TO THE FOLLOWING EXPOSURES SHALL CONFORM TO THE CORRESPONDING MAXIMUM WATER-CEMENTITIOUS MATERIALS RATIOS AND MINIMUM SPECIFIED CONCRETE COMPRESSIVE STRENGTH REQUIREMENTS OF ACI 318, SECTION 4.2; CONCRETE INTENDED TO HAVE LOW PERMEABILITY WHERE EXPOSED TO WATER, CONCRETE EXPOSED TO FREEZING AND THAWING IN A MOST CONDITION OR DEICER CHEMICALS, OR CONCRETE WITH REINFORCEMENT WHERE THE CONCRETE IS EXPOSED TO CHLORIDES FROM DEICING CHEMICALS, SALT WATER, BACKWASH WATER, SEAWATER OR SPRAY FROM THESE SOURCES.
- CEMENT SHALL CONFORM TO IBC SECTION 1903.1, ACI 318 SECTION 3.2, & ASTM C 150.
- SHOTCRETE/GUNITE IN CONTACT WITH SOIL SHALL BE IN ACCORDANCE WITH ACI 318 SECTION 4.2.1 FOR CONCRETE EXPOSURE TO SULFATE AND AS DIRECTED BY LOCAL BUILDING OFFICIAL.
- KEEP CONCRETE DAMP CONTINUOUSLY FOR 14 DAYS.
- ALL INTERIOR SURFACES OF POOL/SPA SHALL BE COATED WITH A WATER-PROOF SURFACE.
- FLOOR TO WALL TRANSITION RADIUS MAY VARY DEPENDING ON CONTRACTOR OR OWNER DESIGN INTENT. RADIUS SHALL NOT BE LESS THAN 1'-0" AND SHALL NOT EXCEED 5'-0".
- IN AREAS WITH SOIL CONDITIONS SUBJECT TO FROST-HEAVE, THE FOLLOWING REQUIREMENTS APPLY:
 - IN ACCORDANCE WITH IBC SECTION 1809.5, THE ENTIRE BOTTOM OF POOL STRUCTURE AND PLUMBING MUST EXTEND BELOW THE FROST LINE OF THE LOCALITY.
 - ALTERNATIVELY, WHERE DAMAGE TO THE POOL STRUCTURES, PLUMBING, ADJACENT STRUCTURES AND SURFACE IMPROVEMENTS IS A CONCERN, SELF-DRAINING GRANULAR BACKFILL MAY BE EXTENDED BELOW THE FROST-LINE WITH A MEANS TO PRECLUDE BUILD-UP OF WATER.

NOTES

OWNER

- KEEP SHOTCRETE (GUNITE) DAMP CONTINUOUSLY FOR 14 DAYS AFTER INSTALLATION.
- DO NOT TURN ON LIGHT WHEN POOL IS EMPTY.
- 3.00 NOT USE BLACK RUBBER HOSE WHEN FILLING POOL (IT MARKS THE PASTER).

GLAZING IN HAZARDOUS LOCATIONS

- GLAZING SHALL COMPLY WITH 2018/2015/2012 IBC SECTION 2406.4.5 INCLUDING LOCALLY ADOPTED AMENDMENTS.
- GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS AND SPAS WHERE ALL OF THE FOLLOWING CONDITIONS ARE PRESENT:
 - THE BOTTOM EDGE OF THE GLAZING ON THE POOL OR SPA SIDE IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE ON THE POOL OR SPA SIDE OF THE GLAZING.
 - THE GLAZING IS WITHIN 60 INCHES HORIZONTALLY OF THE WATER'S EDGE OF A SWIMMING POOL OR SPA.

ENCLOSURES AND SAFETY DEVICES

- PRIOR TO FILLING, THE POOL AND OR SPA SHALL BE COMPLETELY ENCLOSED BY 4" MIN. HIGH FENCING WITH GATES WITH NO OPENINGS GREATER THAN 4" MIN. AND SELF-CLOSING & SELF-LATCHING WITH LATCH A MIN. OF 4" HIGH. WHERE THIS VARIES FROM LOCAL CODES, THE LOCAL CODES SHALL PREVAIL.
- WHEN REQUIRED BY THE BUILDING OFFICIAL, BARRIERS SHALL COMPLY WITH IBC SECTION 3109 INCLUDING LOCALLY ADOPTED AMENDMENTS.
- ENTRAPMENT AVOIDANCE SHALL COMPLY WITH THE INTERNATIONAL SWIMMING POOL AND SPA CODE AND ANSI/APSP-7.

SUCTION OUTLETS SHALL BE DESIGNED TO PRODUCE CIRCULATION THROUGHOUT THE POOL OR SPA. SINGLE-OUTLET SYSTEMS, SUCH AS AUTOMATIC VACUUM CLEANER SYSTEMS, OR OTHER SUCH MULTIPLE SUCTION OUTLETS WHETHER ISOLATED BY VALVES OR OTHERWISE SHALL BE PROTECTED AGAINST USER ENTRAPMENT. ALL POOL AND SPA SUCTION OUTLETS SHALL BE PROVIDED WITH A COVER THAT CONFORMS TO ASME A112.19.8M.

IN ADDITION, ALL POOL AND SPA CIRCULATION SYSTEMS SHALL BE EQUIPPED WITH AN ATMOSPHERIC VACUUM RELIEF SHOULD GRATE COVERS LOCATED THEREIN BECOME MISSING OR BROKEN. SUCH VACUUM RELIEF SYSTEMS SHALL INCLUDE AT LEAST ONE APPROVED OR ENGINEERED METHOD OF THE TYPE SPECIFIED HEREIN, AS FOLLOWS: 1. SAFETY VACUUM RELEASE SYSTEMS CONFORMING TO ASME A112.19.15; OR 2. APPROVED GRAVITY DRAINAGE SYSTEM.

IN ADDITION, SINGLE- OR MULTIPLE-PUMP CIRCULATION SYSTEMS SHALL BE PROVIDED WITH A MINIMUM OF TWO SUCTION OUTLETS OF THE APPROVED TYPE. A MINIMUM HORIZONTAL OR VERTICAL DISTANCE OF 3 FEET SHALL SEPARATE SUCH SUCTION OUTLETS. THESE SUCTION OUTLETS SHALL BE PIPED SO THAT WATER IS DRAWN THROUGH THEM SIMULTANEOUSLY THROUGH A VACUUM-RELIEF-PROTECTED LINE TO THE PUMP OR PUMPS.

IN ADDITION, WHERE PROVIDED, VACUUM OR PRESSURE CLEANER FITTING(S) SHALL BE LOCATED IN AN ACCESSIBLE POSITION(S) AT LEAST 6 INCHES AND NOT GREATER THAN 12 INCHES BELOW THE MINIMUM OPERATIONAL WATER LEVEL OR AS AN ATTACHMENT TO THE SKIMMER(S).

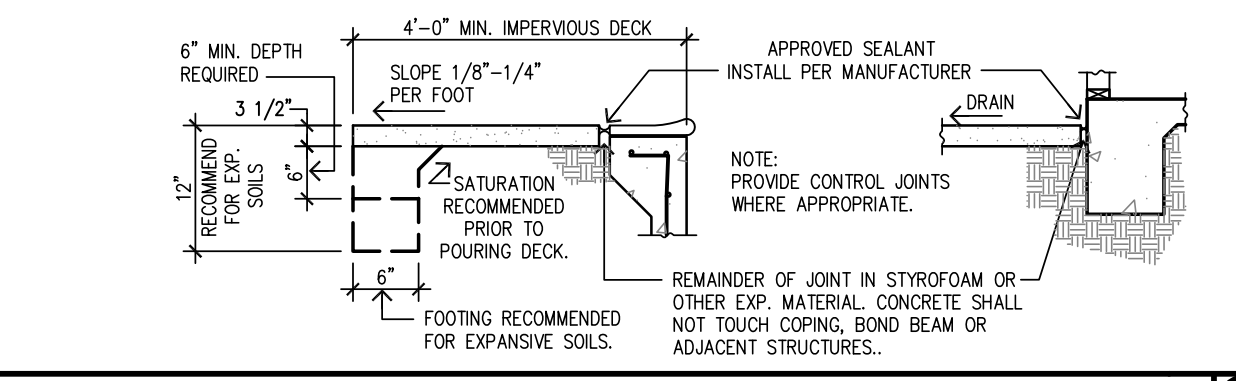
GEOTECHNICAL NOTES:

POOL ENGINEERING INC. (PEI) STRONGLY SUGGESTS THAT THE PROPERTY OWNER AND/OR POOL CONTRACTOR CONSULT WITH A GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST TO OBTAIN A SOILS AND/OR GEOTECHNICAL ENGINEERING REPORT FOR THE PROPERTY ON WHICH THE POOL IS TO BE CONSTRUCTED. IF A GEOTECHNICAL ENGINEERING REPORT WAS PROVIDED TO PEI, THE DETAIL SHEETS PROVIDED BY PEI ARE BASED ON THE REPORT. IF A SOIL REPORT HAS NOT BEEN PROVIDED TO PEI, THE PLANS AND DETAILS PROVIDED BY PEI ARE BASED ON INFORMATION PROVIDED BY THE OWNER/CONTRACTOR AS WELL AS THE ALLOWABLE PRESUMPTIVE SOIL PARAMETERS PROVIDED IN THE REFERENCED BUILDING CODE.

IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR POOL CONTRACTOR TO CAUSE THE GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST TO CONFIRM THAT THE PLANS AND THE DETAILS PROVIDED BY PEI MEET THE REQUIREMENTS OF THE PROJECT SITE AND THE GEOTECHNICAL ENGINEERING REPORT.

SPA DETAILS — SPA DETAILS MAY BE USED FOR SPAS WITHOUT POOLS.

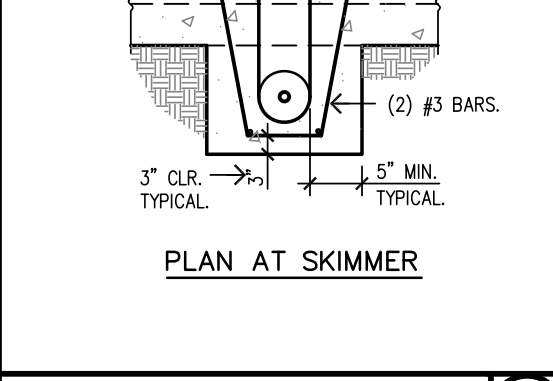
N.T.S.



EXPANSIVE SOIL DETAILS

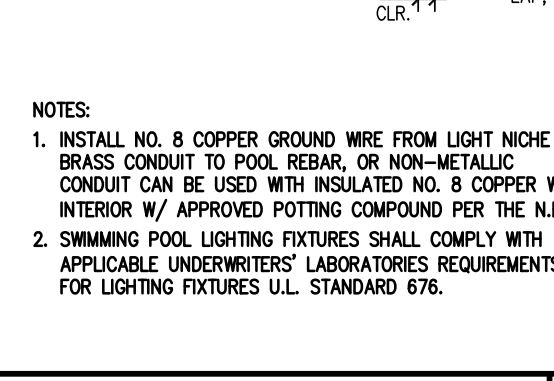
N.T.S.

SKIMMER DETAIL



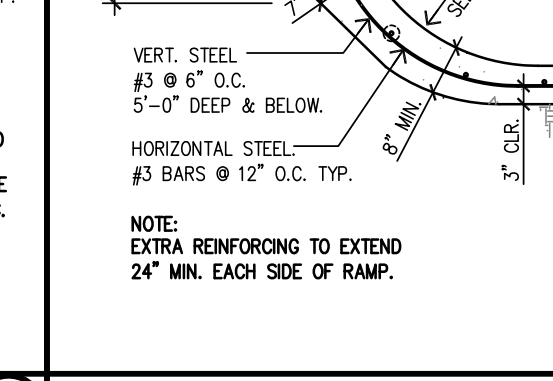
SECTION AT LIGHT

SECTION AT LIGHT



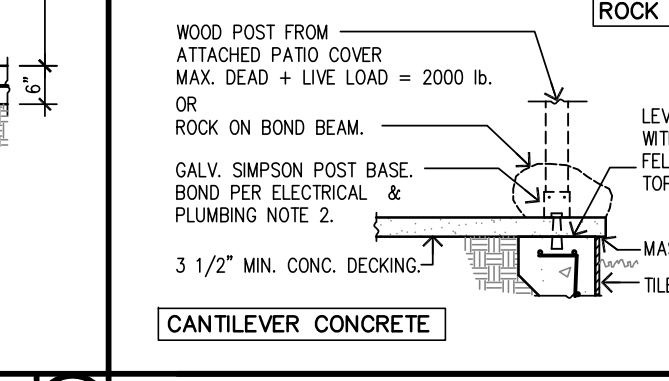
FREESTANDING POOL WALL

BOND BEAM DETAILS



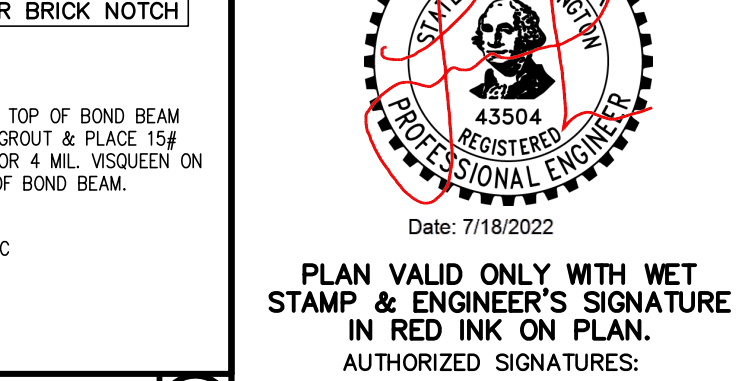
BOND BEAM DETAILS

NOTES



BOND BEAM DETAILS

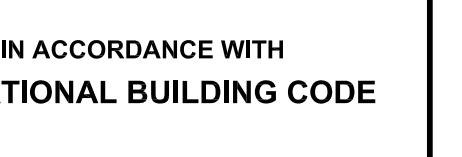
NOTES



BOND BEAM DETAILS

STANDARD POOL STRUCTURAL PLAN

PREPARED IN ACCORDANCE WITH 2018 INTERNATIONAL BUILDING CODE



1201 N. Tustin Ave. Anaheim, California 92807 Fax: (714) 630-6114 Phone: (714) 630-6100 www.pooleng.com

100

DATE: 7/18/2022

PLAN VALID ONLY WITH WET STAMP & ENGINEER'S SIGNATURE IN RED INK OR PLAN. AUTHORIZED SIGNATURES: TODD L. LACHER, P.E. CHRIS BIEDENBACH, P.E.

CALCULATIONS

METHODOLOGY:

γ = EQUIVALENT FLUID PRESSURE

CASE I
 $OTM = 1/6 \gamma H^3$ WHERE $\gamma = 60$ pcf
 NET MOM = OTM - RESISTING MOMENT

CASE II
 $OTM = 1/6 \gamma H^3$ WHERE $\gamma = 62.4$ pcf
 NET MOM = OTM + RESISTING MOMENT

$$f_s = \frac{M(12 \text{ in/ft})}{A_s j d} = \frac{M_t (12)}{A_s (0.887) d}$$

$$f_c = \frac{M(2) 12 \text{ in/ft}}{j k b d^2} = \frac{M_t (2)(12)}{(0.887)(0.339)(12) d^2} < 1125 \text{ psi}$$

$$v_c = \frac{(1/2) \gamma H^2}{(12 \text{ in/ft}) j d} = \frac{\gamma H^2}{(2)(12)(0.887) d} < 55 \text{ psi}$$

$f'_c = 2,500$ psi

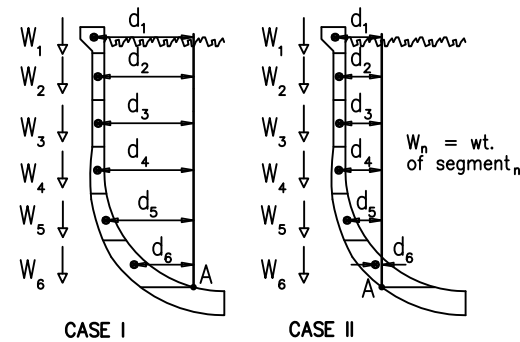
$F_s = 20,000$ psi

$f_c = 0.45 f'_c = 1125$ psi

$V_c = 1.1 \sqrt{f'_c} = 55$ psi

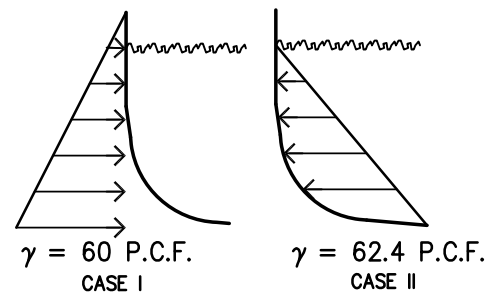
RESISTING MOMENT:

RESISTING MOMENT ABOUT POINT A
 $RM = W_1 d_1 + W_2 d_2 + \dots + W_n d_n$



LOADING DIAGRAM:

THIS DETAIL IS DESIGNED FOR EACH OF THE LOAD CASES DEFINED BELOW.



CALCULATION RESULTS:

FREESTANDING WALL
 EQUIVALENT FLUID PRESSURE = 60 P.C.F.
 RESULTS FOR NO RAISED BOND BEAM

DEPTH 'D'	SOIL OTM ft-#	WATER OTM ft-#	SOIL RM ft-#	WATER RM ft-#	NET Mom	CASE I d1 SOIL	CASE II d2 WATER	VERTICAL STEEL	f_s p.s.i.	f_c p.s.i.	v_c p.s.i.
3'-6"	429	446	106	-53	393	3"	3"	#3 @ 12"	15354	427	10.6
4'-0"	640	666	124	-55	611	3"	3"	#3 @ 6"	12275	508	13.9
5'-0"	1250	1300	230	-57	1020	3 1/2"	4 1/2"	"	17454	660	17.9
6'-0"	2160	2246	497	-2	1663	4"	5 1/2"	add 3 #4	8283	580	22.5
7'-0"	3430	3567	1046	315	3882	4"	5 1/2"	"	13807	832	30.6
8'-0"	5120	5325	2259	971	6296	4"	6 1/2"	"	18781	998	40.0
8'-6"	6141	6387	4820	888	7275	4"	7 1/2"	"	18671	889	45.2

RESULTS FOR 2'-6" MAX. RAISED BOND BEAM

HEIGHT 'H'	SOIL OTM ft-#	WATER OTM ft-#	SOIL RM ft-#	WATER RM ft-#	NET Mom	CASE I d1 SOIL	CASE II d2 WATER	VERTICAL STEEL	f_s p.s.i.	f_c p.s.i.	v_c p.s.i.
3'-6"	429	10	106	-53	323	3"	3"	#3 @ 12"	12607	351	10.2
4'-0"	640	35	116	-63	524	3"	3"	#3 @ 6"	10537	436	13.3
5'-0"	1250	163	135	-99	1115	3 1/2"	3"	"	19071	722	17.9
6'-0"	2160	446	163	-165	1997	4 1/2"	3"	#3 @ 3"	13563	666	20.0
7'-0"	3430	948	251	-163	3179	5"	3"	"	19325	891	24.5
8'-0"	5120	1730	508	-82	4612	6"	3"	add 3 #4	14965	938	26.7
9'-0"	7290	2856	1031	195	6259	6 1/2"	4"	"	18669	1064	31.2
10'-0"	10000	4388	2082	611	7918	8"	5 1/2"	"	18993	1021	31.3
11'-0"	13310	6387	6678	291	6678	8 1/2"	6 1/2"	"	19921	1034	35.6

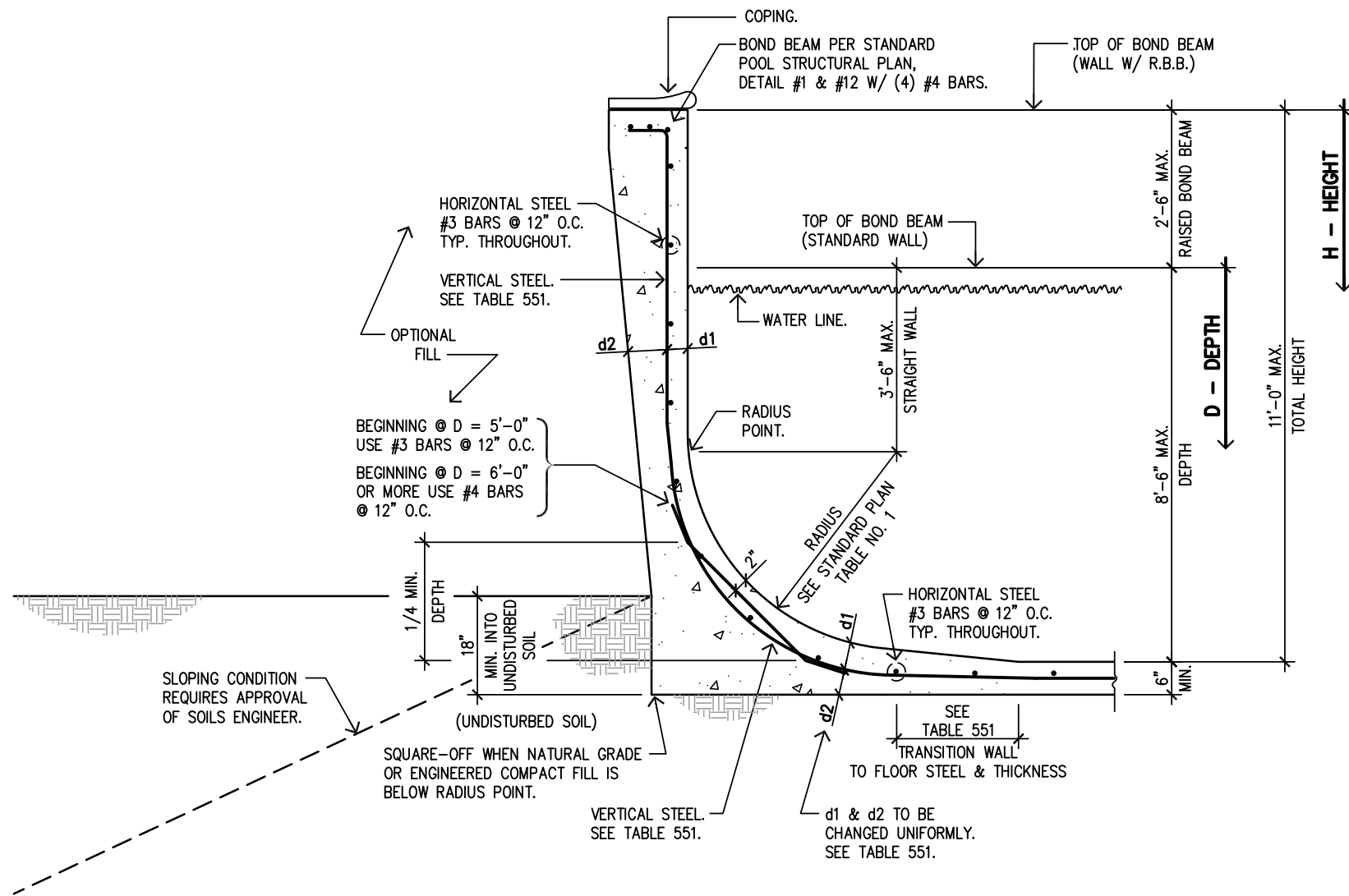


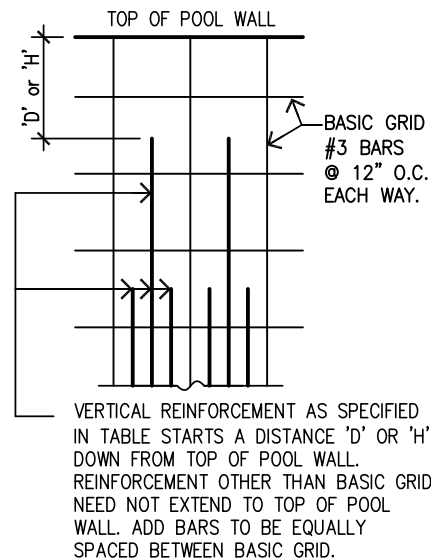
TABLE 551

'D' OR 'H' IS DISTANCE FROM TOP OF POOL WALL DOWNWARD. BEGIN SPECIFIED STEEL & GUNITE THICKNESS AT INDICATED 'D' OR 'H' DEPTH. (SEE STANDARD STRUCTURAL PLAN, DETAIL #2)

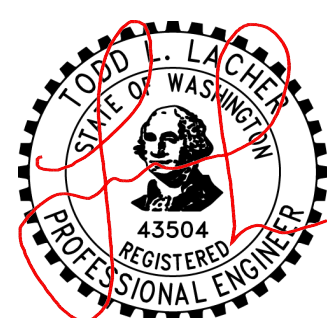
POOL DEPTH	NO RAISED BOND BEAM			REQ'D TRANS.
	D	d1	d2	
0 to 3'6"	3"	3"	#3 @ 12"	2'-0"
4'-0"	3"	3"	#3 @ 6"	2'-0"
4'-6"	3"	3 1/2"	"	2'-0"
5'-0"	3 1/2"	4 1/2"	"	2'-0"
5'-6"	4"	5 1/2"	"	2'-0"
6'-0"	4"	5 1/2"	add 3 #4	2'-0"
6'-6"	4"	5 1/2"	"	2'-0"
7'-0"	4"	5 1/2"	"	2'-0"
7'-6"	4"	5 1/2"	"	2'-0"
8'-0"	4"	6 1/2"	"	2'-0"
8'-6"	4"	7 1/2"	"	2'-0"

TOTAL HEIGHT	2'-6" MAX. RAISED BOND BEAM			REQ'D TRANS.
	H	d1	d2	
0 to 3'6"	3"	3"	#3 @ 12"	2'-0"
4'-0"	3"	3"	#3 @ 6"	2'-0"
4'-6"	3"	3"	"	2'-0"
5'-0"	3 1/2"	3"	"	2'-0"
5'-6"	4 1/2"	3"	"	2'-0"
6'-0"	4 1/2"	3"	#3 @ 3"	2'-0"
6'-6"	4 1/2"	3"	"	2'-0"
7'-0"	5"	3"	"	2'-8"
7'-6"	6"	3"	"	2'-8"
8'-0"	6"	3"	add 3 #4	2'-10"
8'-6"	6"	3 1/2"	"	2'-11"
9'-0"	6 1/2"	4"	"	3'-0"
9'-6"	7"	5"	"	3'-2"
10'-0"	8"	5 1/2"	"	3'-2"
10'-6"	8 1/2"	6 1/2"	"	3'-2"
11'-0"	8 1/2"	6 1/2"	"	3'-2"

TYPICAL ADD BAR REINFORCING DIAGRAM



FOR USE ONLY AT
 4034 85th Ave Se
 Mercer Island WA 98040



Date: 7/18/2022

22-10263

FREESTANDING WALL
 EQUIVALENT FLUID PRESSURE = 60 P.C.F.

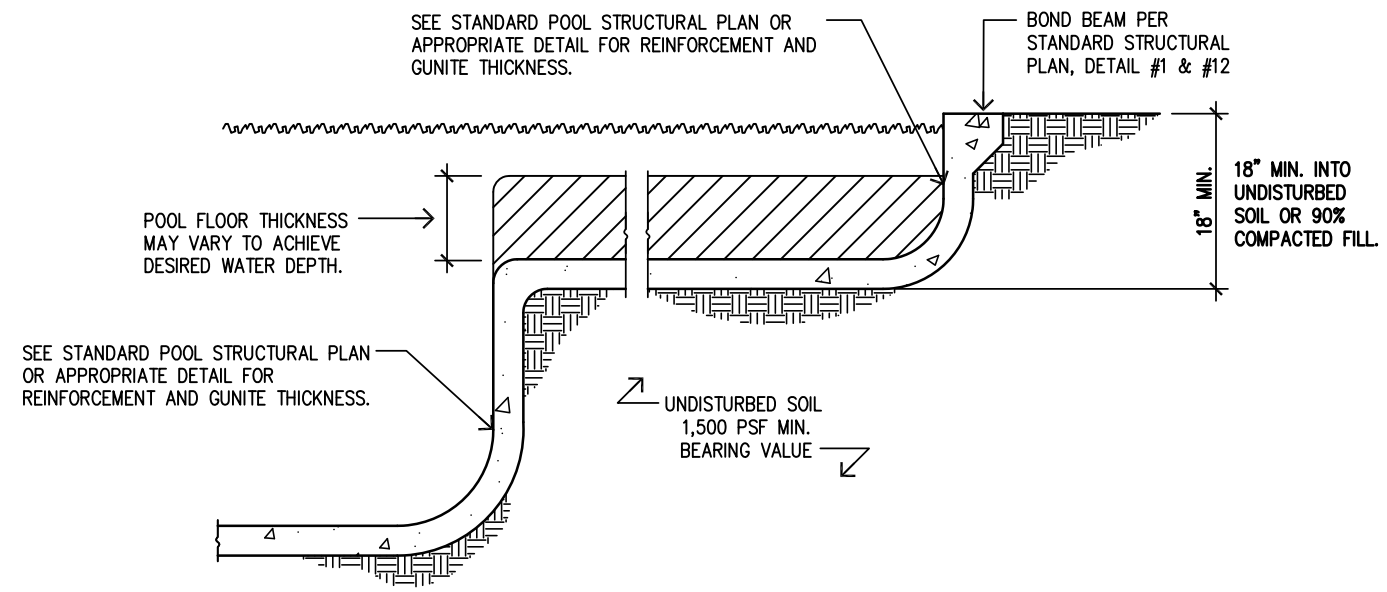
DETAIL #551

Ron Lacher, R.C.E.
 1201 N. Tustin Ave.
 Anaheim, CA 92807
 Fax: (714) 630-6114
 Phone: (714) 630-6100

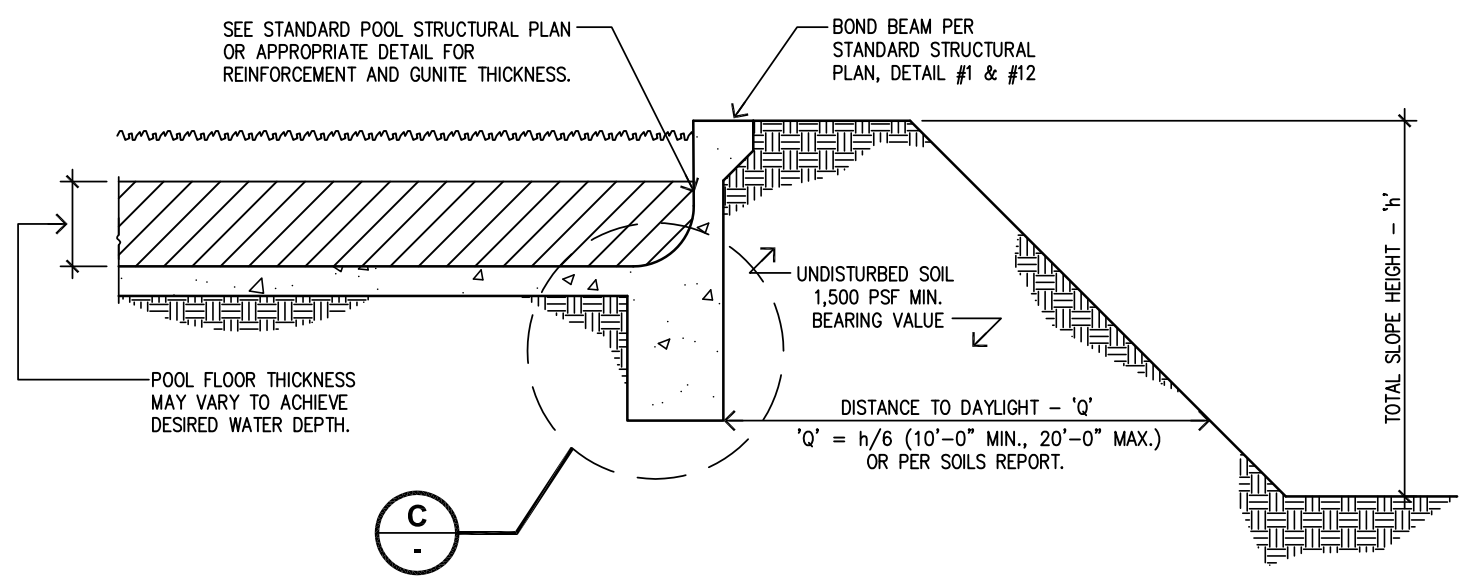
pool engineering inc.

PLAN VALID ONLY WITH ENGINEER'S SIGNATURE IN RED INK ON PLAN.
 THIS DETAIL TO BE USED IN CONJUNCTION WITH STANDARD POOL STRUCTURAL PLAN

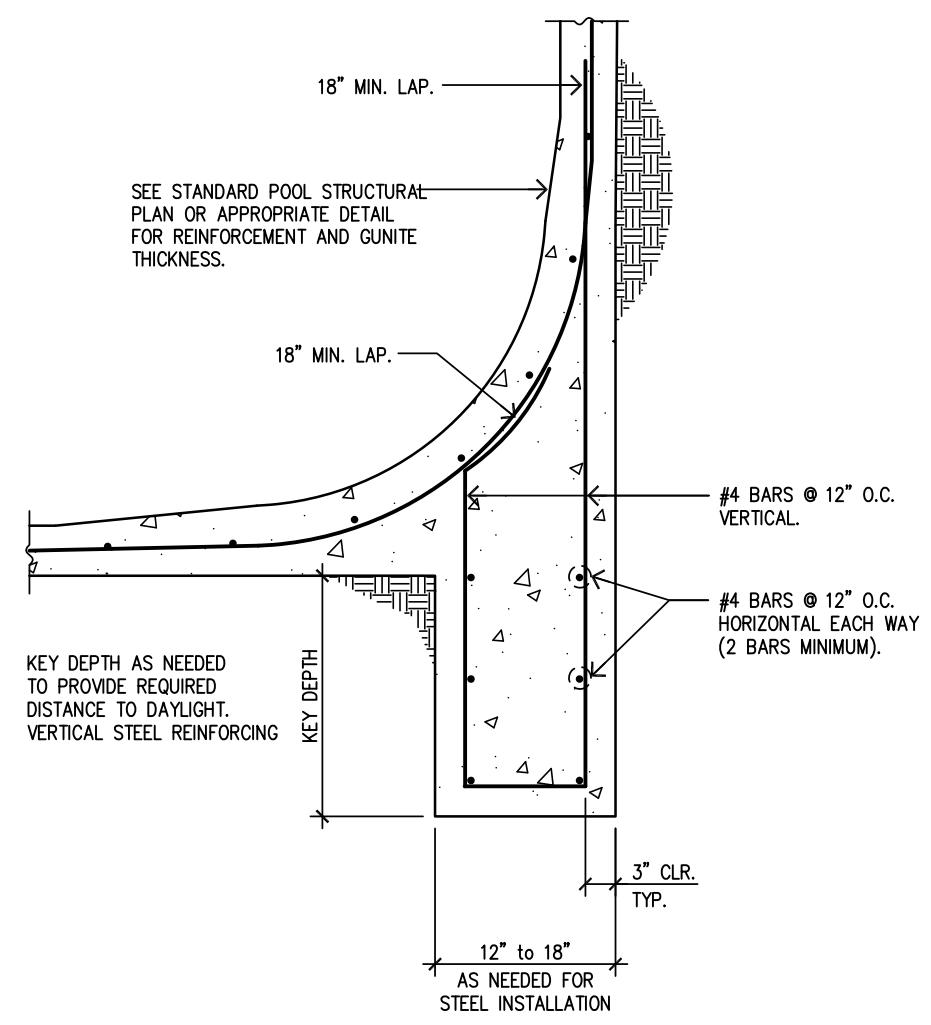




SHALLOW POOL, SHELF OR FOUNTAIN
NO SCALE **A**



SHALLOW POOL, SHELF OR FOUNTAIN NEAR DOWNSLOPE
NO SCALE **B**



KEY SPECIFICATION
NEAR DOWNSLOPE **C**

STANDARD POOL STRUCTURAL PLAN, STRUCTURAL NOTE #1 IS REPEATED HERE FOR EMPHASIS:
1. SOIL SHALL HAVE A MINIMUM BEARING VALUE OF 1,500 P.S.F. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL OR BUILDING DEPARTMENT APPROVED 90% COMPACT FILL. THIS PLAN IS NOT SUITABLE WHERE POTENTIAL EXISTS FOR DIFFERENTIAL MOVEMENT FROM DISSIMILAR SOIL CONDITIONS UNDER POOL, SUCH AS CUT-FILL TRANSITIONS.

FOR USE ONLY AT
4034 85th Ave Se
Mercer Island WA 98040



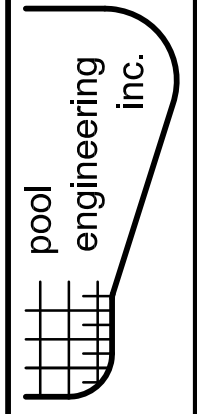
Date: 7/18/2022

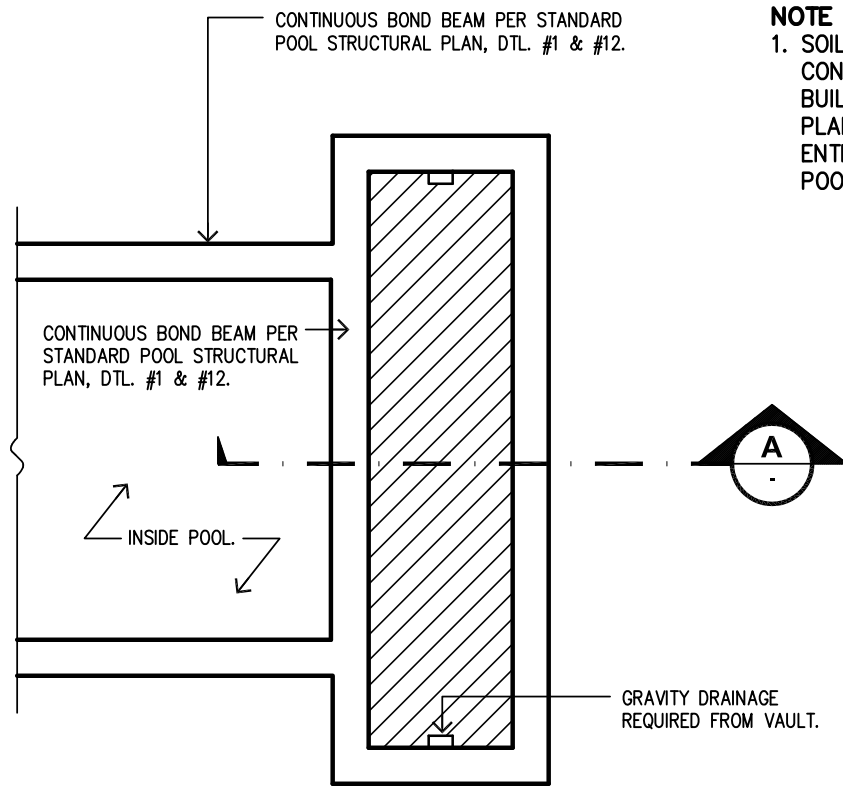
22-10263

SHALLOW POOL, SHELF OR FOUNTAIN
LEVEL GRADE & DOWNSLOPE CONDITION

DETAIL #668

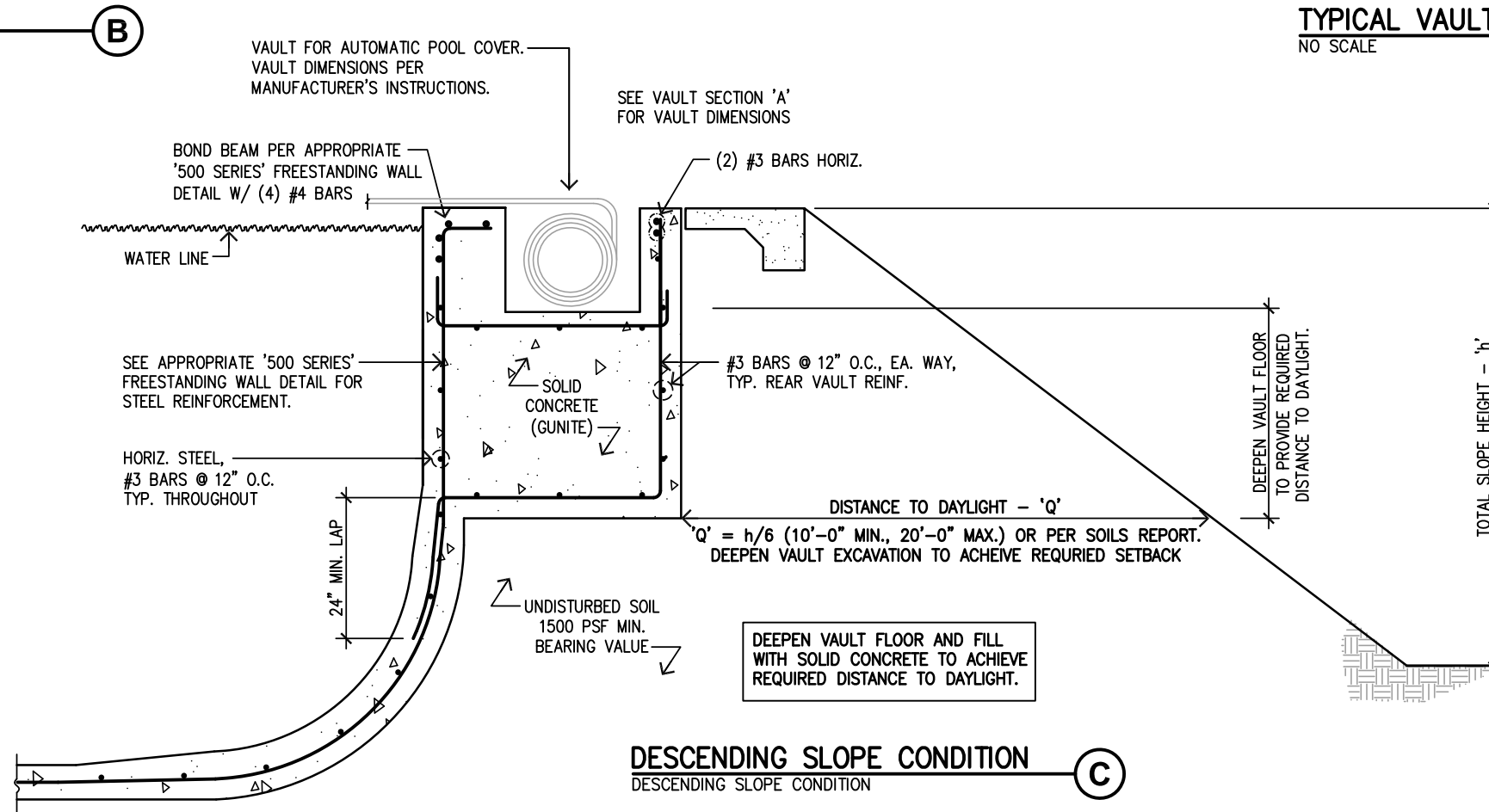
Ron Lacher, R.C.E.
1201 N. Tustin Ave.
Anaheim, CA 92807
(714) 630-6100
info@pooleng.com





VAULT DIMENSIONS PER MANUFACTURER'S INSTRUCTIONS.

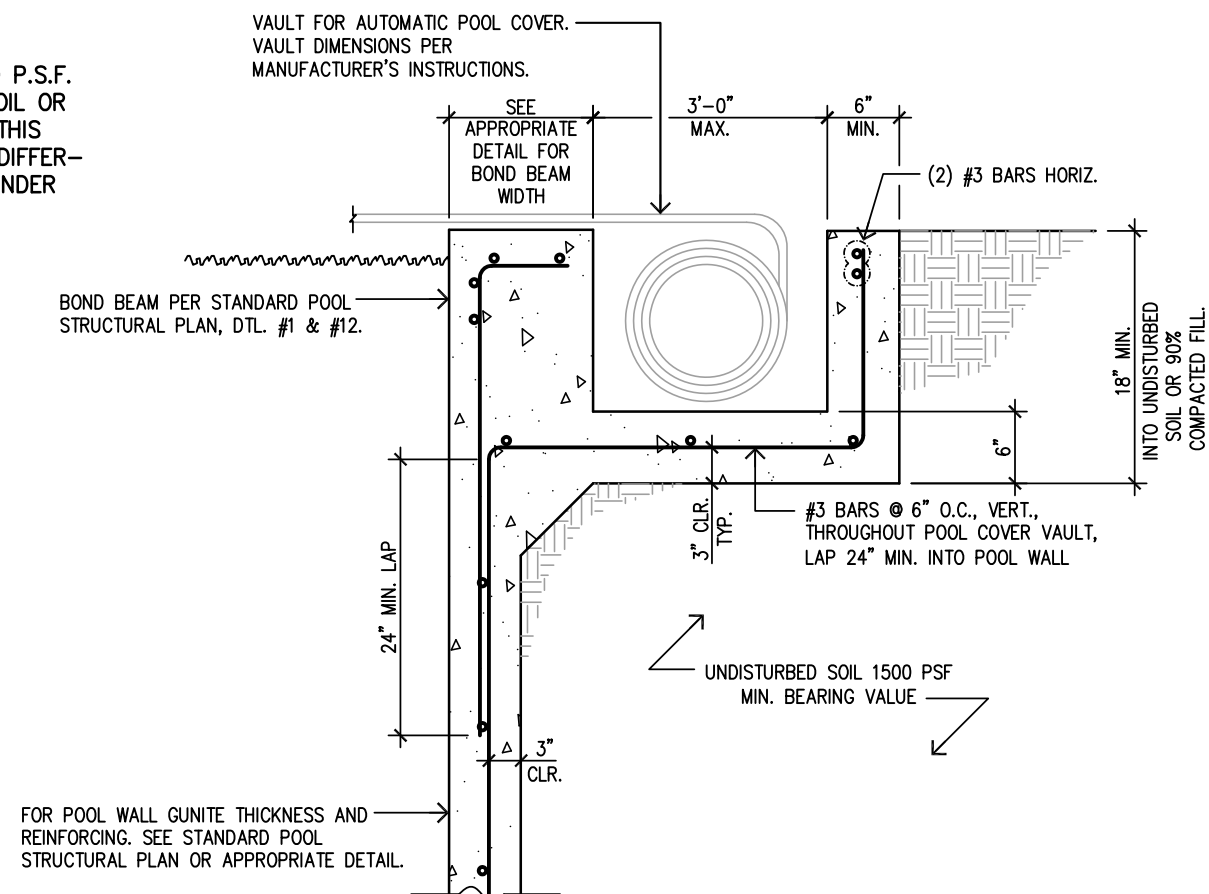
VAULT PLAN VIEW
NO SCALE



DESCENDING SLOPE CONDITION
DESCENDING SLOPE CONDITION

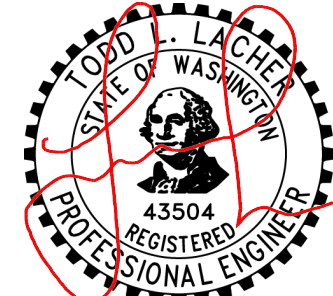
STANDARD POOL STRUCTURAL PLAN, STRUCTURAL NOTE #1 IS REPEATED HERE FOR EMPHASIS:

1. SOIL SHALL HAVE A MINIMUM BEARING VALUE OF 1,500 P.S.F. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL OR BUILDING DEPARTMENT APPROVED 90% COMPACT FILL. THIS PLAN IS NOT SUITABLE WHERE POTENTIAL EXISTS FOR DIFFERENTIAL MOVEMENT FROM DISSIMILAR SOIL CONDITIONS UNDER POOL, SUCH AS CUT-FILL TRANSITIONS.



TYPICAL VAULT SECTION
NO SCALE

FOR USE ONLY AT
4034 85th Ave Se
Mercer Island WA 98040



Date: 7/18/2022

22-10263

AUTOMATIC POOL COVER
VAULT DETAIL

DETAIL #672

Ron Lacher, R.C.E.
1201 N. Tustin Ave.
Anaheim, CA 92807
Phone: (714) 630-6100
EMAIL: pooleng.com

pool
engineering
inc.

PLAN VALID ONLY WITH ENGINEER'S
SIGNATURE IN RED INK ON PLAN.
THIS DETAIL TO BE USED IN CONJUNCTION
WITH STANDARD POOL STRUCTURAL PLAN

18/2 MAY 3, 2021

