

GENERAL NOTES

- 1- ALL FLOORS AND WALLS OF POOL TO BE CONCRETE SHALL BE MINIMUM 4" THICK (100MM) OR REQUIRED SETBACK AREA. PLAT PLANS NOT PREPARED FROM LEGAL SURVEYS OF THE EXISTING LOT AND RESIDENCE ARE SO INDICATED. POOL CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND ESTABLISH LOT LINES IF NECESSARY. CONTRACTOR AND / OR OWNER SHALL VERIFY LAYOUT SHOWN AND ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- 2- ALL REINFORCING STEEL TO CONFORM TO ASTM A615 GRADE 60.
- 3- ALL POOL PIPING TO BE SCHEDULE 40 PVC BEARING NSF APPROVAL WITH LOGO PRINTED. PLASTIC PIPE SUBJECT TO A PERIOD OF FROLONGED SUNLIGHT EXPOSURE SHALL BE COATED TO PROTECT IT FROM ULTRAVIOLET LIGHT DEGRADATION - 2023 FBC 8th EDITION R4501.6.5
- 4- FILTER BACKWASH SHALL COMPLY WITH CHAPTER R4501.12 OF THE 2023 FBC 8th EDITION.
- 5- NO POOL OR SPA DECK SHALL BEAR ON ANY TYPE OF SOILS EXCEPT CLEAN SANDS OR ROCK WHICH SHALL BE COMPACTED TO PROVIDE A SAFE BEARING CAPACITY OF 2,000 PSF. ANY ORGANICS, MARLS, OR OTHER TYPES OF DELTERIOUS MATERIALS ENCOUNTERED ON EXCAVATION SHALL BE REMOVED (DEWICKED) IN THEIR ENTIRETY AND THE AREA SHALL BE BACKFILLED WITH ACCEPTABLE SOIL AND COMPACTED IN 12" THICK LAYERS. WHERE THE CONTRACTOR CAN NOT REMOVE THE ORGANICS DUE TO WHATEVER CAUSED, THE POOL SHALL BE REDESIGN FOR FILLING.
- 6- IN ALL CASES THE POOL CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PROTECT EXISTING STRUCTURES FROM FAILURE BY SHORING, UNDERPINNING OR ANY OTHER METHOD IF REQUIRED, THE DESIGN ENGINEER ASSUMES NO RESPONSIBILITY FOR THE SAFETY OF EXISTING STRUCTURE.
- 7- THE DESIGN ENGINEER ASSUMES NO RESPONSIBILITY FOR POOL CONSTRUCTION IN EASEMENTS OR REQUIRED SETBACK AREAS. PLAT PLANS NOT PREPARED FROM LEGAL SURVEYS OF THE EXISTING LOT AND RESIDENCE ARE SO INDICATED. POOL CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND ESTABLISH LOT LINES IF NECESSARY. CONTRACTOR AND / OR OWNER SHALL VERIFY LAYOUT SHOWN AND ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- 8- CONTRACTOR SHALL ESTABLISH LOCATIONS OF UTILITIES AT THE SITE. MINIMUM CLEARANCE DIMENSIONS SHALL BE HELD AND SHALL BE AS REQUIRED BY THE LOCAL REGULATORY AGENCY IN GENERAL, HOLD A DISTANCE OF 10 FEET FROM OVERHEAD ELECTRIC LINES TO OPEN POOL WATER EDGE AND 5 FEET FROM UNDERGROUND ELECTRIC LINES.
- 9- POOL SLIDES TO BE INSTALLED IN ACCORDANCE WITH LATEST EDITION OF CONSUMER PRODUCTS SAFETY COMMISSION.
- 10- MINIMUM 4'-0" HIGH IS FENCE RECOMMENDED AROUND ALL POOLS IN UNSCREENED AREAS. COMPLY WITH CHAPTER R4501.11 OF THE 2023 FBC 8th EDITION.
- 11- WHERE POOLS ABUT OR ARE PLACED NEARBY SEAWALLS OR BULKHEADS SPECIAL CARE SHALL BE EMPLOYED. THE WALLS SHALL BE IN GOOD CONDITIONS NOT PERMITTING ANY SHIFTING OR REMOVAL OR LOOSENING OF THE SUPPORTING SOIL AWAY FROM THE POOL. IF THE WALLS DO NOT FULLY CONTAIN THE SOILS BEHIND THEM, THEY SHALL BE REPLACED OR REPAIRED. CONTINUAL MAINTENANCE OF THE WALLS IS REQUIRED OF THE PROPERTY OWNER WHEN EXCAVATING FOR THE POOL. THE SEAWALL TIEBACKS SHALL NOT BE CUT. WHERE CONCRETE DEAD-EN FALL WITHIN THE EXCAVATION, NOTIFY THE ENGINEER FOR INSTRUCTIONS.
- 12- THE CONTRACTOR SHALL BACKFILL THE POOL SHELL WITH CAUTION. THE PLUMBING SHALL NOT BE DISTURBED. BACKFILL SHALL BE ACCOMPISHED WITH CLEAN SANDS FREE OF ORGANIC MATERIALS AND SHALL BE PLACED IN 12" THICK LAYERS. EACH LAYER SHALL BE COMPACTED TO 90% OF THE SOILS MAXIMUM DENSITY BY TAMPING SOLIDLY. SOILS BELOW THE PATIO SHALL BE PLACED IN A SIMILAR MANNER.
- 13- WHERE PATIOS ARE INDICATED BY OTHERS, THE PATIO DESIGN NOTES SHOWN ON THE TYPICAL WALL SECTION DO NOT APPLY. PATIO DESIGN SHALL BE BY OTHERS.
- 14- WARNING: TO EMPTY POOL AFTER CONSTRUCTION FOR REPAIRS OR ANY OTHER REASON, THE HYDROSTATIC UPLIFT PRESSURES BEHIND THE POOL MUST BE ELIMINATED TO PREVENT THE POOL FROM FLOATING UPWARD. THE OWNER MUST CONSULT AND POOL REPAIR CONTRACTOR EXPERIENCED IN ELIMINATING UPLIFT PRESSURES.
- 15- THIS PLANS REMAINS THE PROPERTY OF THE DESIGN ENGINEER. IT IS NOT TRANSFERABLE FROM THE CONTRACTOR TO ANOTHER WITHOUT THE WRITTEN PERMISSION OF THE DESIGN ENGINEER AND TO THE BEST OF OUR PROFESSIONAL KNOWLEDGE AND BELIEF, THEY HAVE BEEN PREPARED IN COMPLIANCE WITH THE ANSI-NSPI-5-2003, 2023 FBC 8th EDITION AND ALL APPLICABLE LOCAL CODES AND REGULATIONS.
- 16- CONCRETE POOL DECK SHALL BE PROVIDED W/ 1/4" WIDE SAUCUT CRACK CONTROL JOINTS SPACED AT 5'-0" O.C. OR FOR AN EFFECTIVE CONCRETE AREA OF 180 SQ. FT. CRACK CONTROL JOINTS SHALL BE SAUCUT AT A DEPTH OF 1/3 THE SLAB THICKNESS.
- 17- SHORING MAYBE REQUIRED WHEN SOIL CONDITIONS EXHIBIT UNSTABLE ROCK FORMATION WHEN POOLS ARE LESS THAN 5' FROM STRUCTURE. IF UNSTABLE SOIL IS FOUND IT AT TIME OF EXCAVATION NOTIFY ENGINEER FOR POOL SHORING DETAIL.
- 18- THIS SET OF PLANS ARE IN COMPLIANCE WITH ANSI / NSPI-5 2001, IN REFERENCE TO FLOOR SLOPES, WALL PLUMB, ENTRAPMENTS, ENTRY/EXIT, DECK, AND CIRCULATION SYSTEM OF PROPOSED POOL.

BACKFILL AND GRADING NOTES:

- 2023 BUILDING FBC 8th EDITION
- 1804.3 Placement of backfill.
- The excavation outside the foundation shall be backfilled with soil that is free of organic material, construction debris, cobbles and boulders or with a controlled low-strength material (CLSM). The backfill shall be placed in lifts and compacted in a manner that does not damage the foundation or the waterproofing or damp proofing material.
- Exception: CLSM need not be compacted.
- 1804.4 Site grading.
- The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than one unit vertical in 20 units horizontal (5-percent slope) for a minimum distance of 10 feet (3048 mm) measured perpendicular to the face of the wall. If physical obstructions or lot lines prohibit 10 feet (3048 mm) of horizontal distance, a 5-percent slope shall be provided to an approved alternative method of diverting water away from the foundation. Swales used for this purpose shall be sloped a minimum of 2 percent where located within 10 feet (3048 mm) of the building foundation. Impervious surfaces within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 2 percent away from the building, except as otherwise permitted in section 1801.5, 1802.3 or 1802.6.1.
- Exception: Where climatic or soil conditions warrant, the slope of the ground away from the building foundation shall be permitted to be reduced to not less than one unit vertical in 48 units horizontal (2-percent slope).

FENCE REQUIREMENTS:

- 2023 FBC 8th EDITION
- R4501.1 Residential swimming barrier requirement.
- Residential swimming pools shall comply with Sections R4501.1 through R4501.13.
- Exception: A swimming pool with an approved safety pool cover complying with ASTM F346, R4501.1 Outdoor swimming pools.
- Outdoor swimming pools shall be provided with a barrier complying with R4501.1.1 through R4501.1.14.
- R4501.1.1 The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade the barrier may be at ground level or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
- R4501.1.2 The barrier may not have any gaps, openings, indentations, protrusions, or structural components that could allow a young child to crawl under, squeeze through, or climb over the barrier as herein described below. One end of a removable child barrier shall not be removable without the aid of tools. Openings in any barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.
- R4501.1.3 Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooling masonry joints.
- R4501.1.4 Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1/4 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1/4 inches (44 mm) in width.
- R4501.1.5 Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1/4 inches (44 mm) in width.
- R4501.1.6 Maximum mesh size for chain link fences shall be a 2 1/4-inch square (57 mm) unless the fence is provided with slats fastened at the top or bottom which reduce the openings to no more than 1 3/4 inches (44 mm).
- R4501.1.7 Where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be no more than 1 3/4 inches (44 mm).
- R4501.1.8 Access gates, when provided, shall be self-closing and shall comply with the requirements of Sections R4501.1.1 through R4501.1.1.1 and shall be equipped with a self-latching locking device located on the pool side of the gate. Where the device release is located no less than 54 inches (1372 mm) from the bottom of the gate, the device release mechanism may be located on either side of the gate and so placed that it cannot be reached by a young child over the top or through any opening or gap from the outside. Gates that provide access to the swimming pool must open outward away from the pool. The gates and barrier shall have no opening greater than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

STRUCTURAL NOTES:

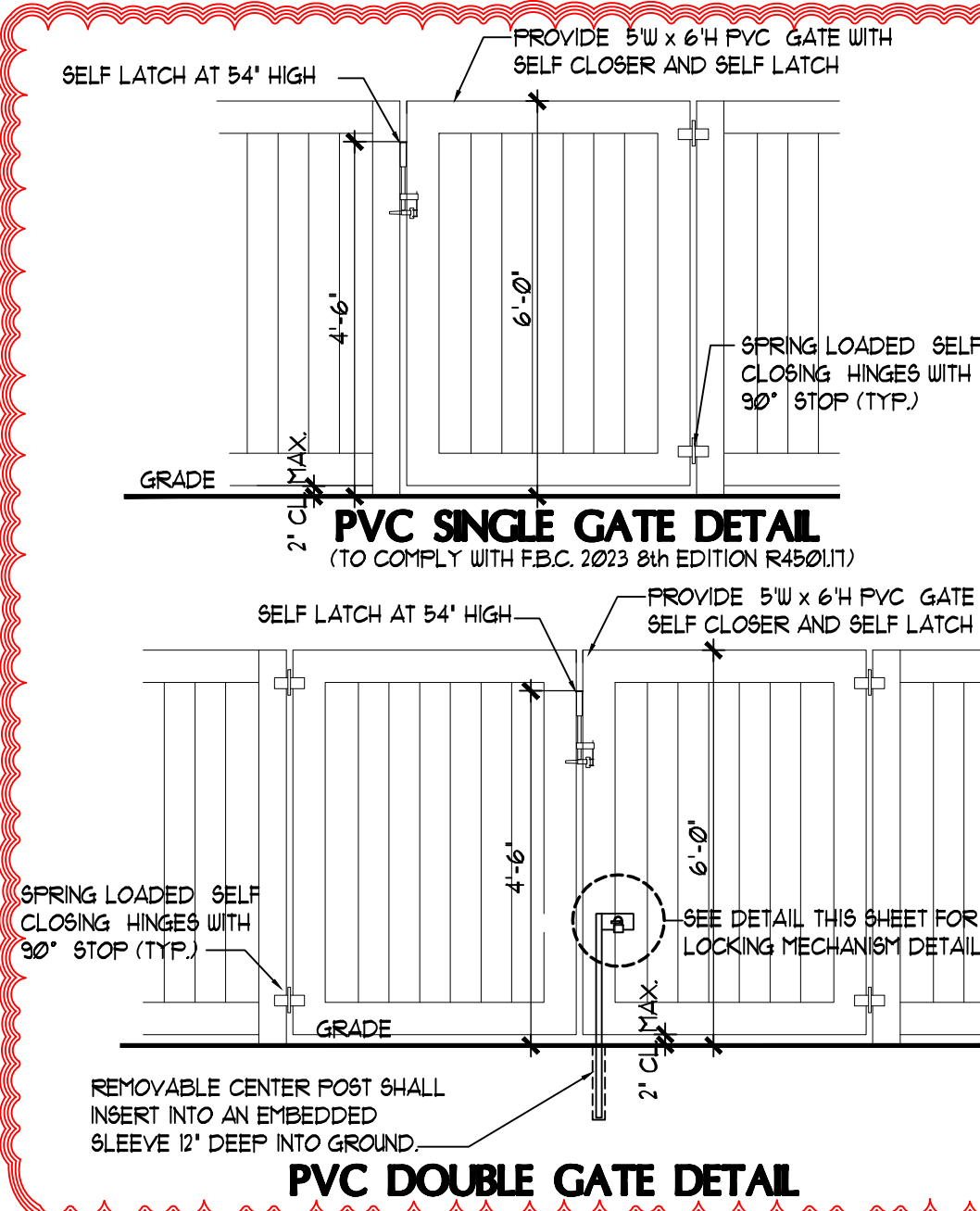
1. ALL POOL CONCRETE SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF $f'_{c}=4,000$ PSI.
2. ALL CONCRETE SHALL BE IN CONFORMANCE WITH 2023 FBC 8th EDITION AND ACI 308, 301, 341, 2019 EDITION AND ASTM C94-184 AND PROPORTIONED FOR STRENGTH AND QUALITY REQUIREMENTS IN ACCORDANCE WITH ACI 318, SECTION 4.3 "PROPORTIONING ON THE BASIS OF FIELD EXPERIENCE"
3. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF $F_y=60,000$ PSI.
4. ALL DECK CONCRETE (WHEN INSTALLED UNDER THESE PLANS) SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF $f'_{c}=2500$ PSI.
5. THE DESIGN OF THIS PROJECT HAS INCORPORATED A RATIONAL DESIGN APPROACH BASED ON ACCEPTED ENGINEERING PRINCIPLES.
6. ALL REINFORCING SPICES SHALL BE 18" IN LENGTH UNLESS OTHERWISE INDICATED ON THESE PLANS.

SOIL STATEMENT

SOIL CONDITION AT SITE BY VISUAL INSPECTION INDICATES AN ALLOWABLE BEARING CAPACITY OF 2,000 P.S.F. (UNDISTURBED SAND AND/OR ROCK.) UPON EXCAVATION OF POOL, PRIOR TO THE INSTALLATION OF POOL FOUNDATION SYSTEM THE BUILDING OFFICIAL SHALL BE PROVIDED WITH A STATEMENT FROM AN ARCHITECT OR ENGINEER TO CERTIFY THE PRESUMPTIVE SOIL BEARING CAPACITY.

BARRIER SCHEDULE

COMPLYING WITH	
2023 F.B.C. 8th EDITION R4501.1 Residential swimming barrier requirement.	
BARRIER	DESCRIPTION
FENCE	SEE SITE PLAN FOR FENCE INFORMATION
ALARM	ALL DOORS & WINDOWS PROVIDING DIRECT ACCESS TO POOL FROM DWELLING SHALL BE EQUIPPED W/ EXIT ALARM COMPLYING W/ UL 2011 W/ A MINIMUM SOUND PRESSURE RATING OF 85 DB AT 10 FEET, OR SHALL BE EQUIPPED W/ SELF-CLOSING, SELF-LATCHING DEVICE INSTALLED MIN. 54" ABOVE FLOOR PER R4501.1.13
GATE	ALARM MANUFACTURER - TECHKO MODEL- 918TD / ETL APPROVED UNDER UL 2011 STANDARDS. 9V BATTERY OPERATION. WATER/WEATHER RESISTANT, AUDIBLE ALARM- 110-115 db @ 10 FT. UNIT SHALL BE INSTALL AT A MINIMUM HEIGHT OF 54", HIGH ENOUGH TO BE OUT OF REACH OF CHILDREN



FLOOR AND WALL THICKNESS SCHEDULE

WALL THICKNESS	TOP	BOTTOM
PLACED CONCRETE	6"	6"
FLOOR THICKNESS	BOTTOM	
PLACED CONCRETE	6"	

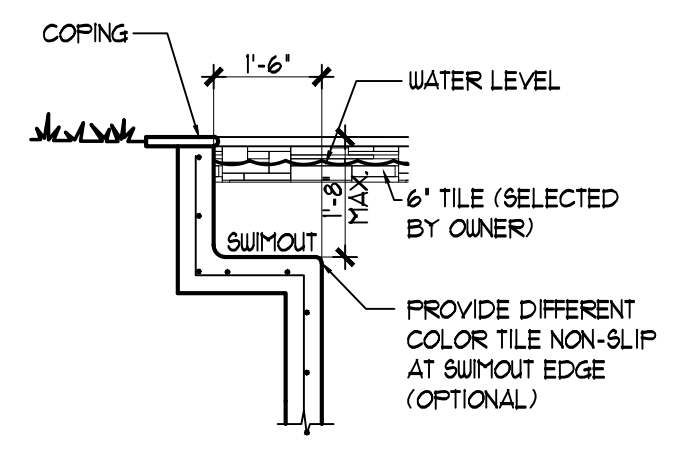
FLOTATION ANALYSIS

WATER LEVEL ELEVATION (TOP OF WALL)	12.49'
POOL DEPTH (bottom of pool slab)	5.6'
LOW POINT POOL LEVEL	6.89'
BASE FLOOD ZONE "AH"	7.5'
B.F. DEPTH LEVEL	0.61'
LESS HYDROVERTICAL (1/4" VALVE)	-2.0'
HYDROSTATIC UPLIFT	-1.39'

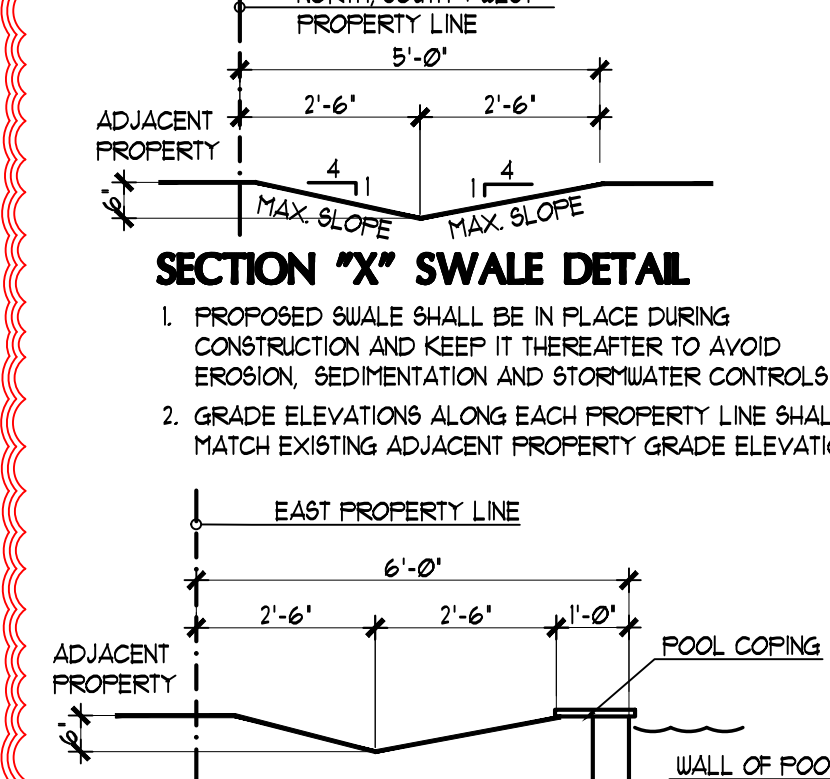
NEGATIVE UPLIFT THEREFORE USE A MINIMUM OF 6" CONCRETE SLAB

As min. = $0.002 \times 1 \text{ (Slab thickness)} \times b \text{ (column of water)}$
 As min. = $0.002 \times 6 \times 12 = 0.144$
 Spacing = $\frac{\text{Bar} \times \pi}{4} = \frac{3 \times (0.144)}{4} = 0.108 \times 9'$
 As min. = 0.144

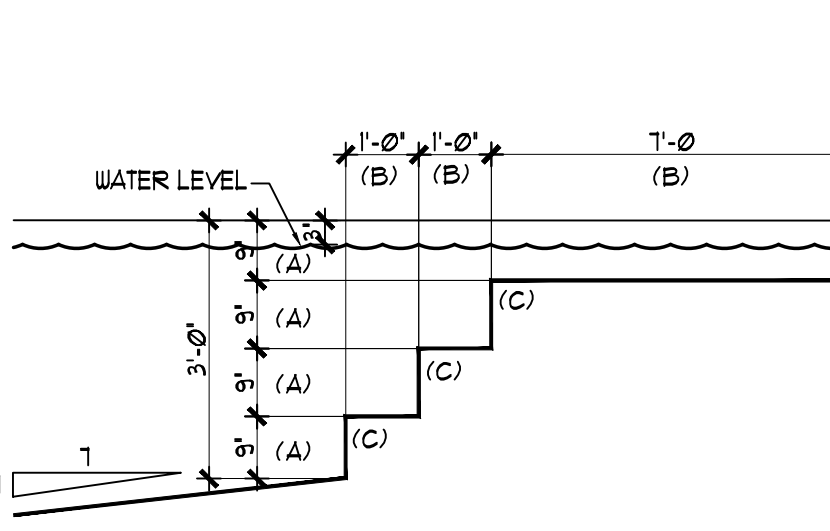
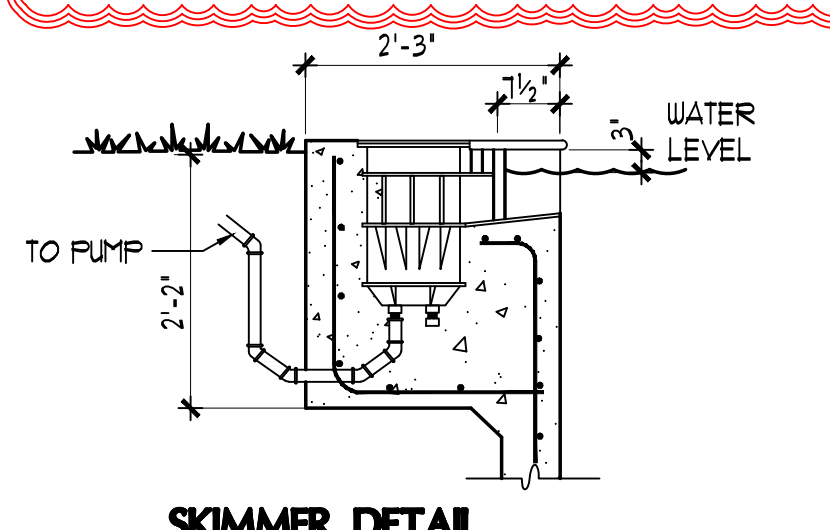
THEREFORE USE 6" CONCRETE SLAB WITH 3 # 9" O.C. EACH WAY



SWIMOUT DETAIL



SECTION 'Y' SWALE DETAIL

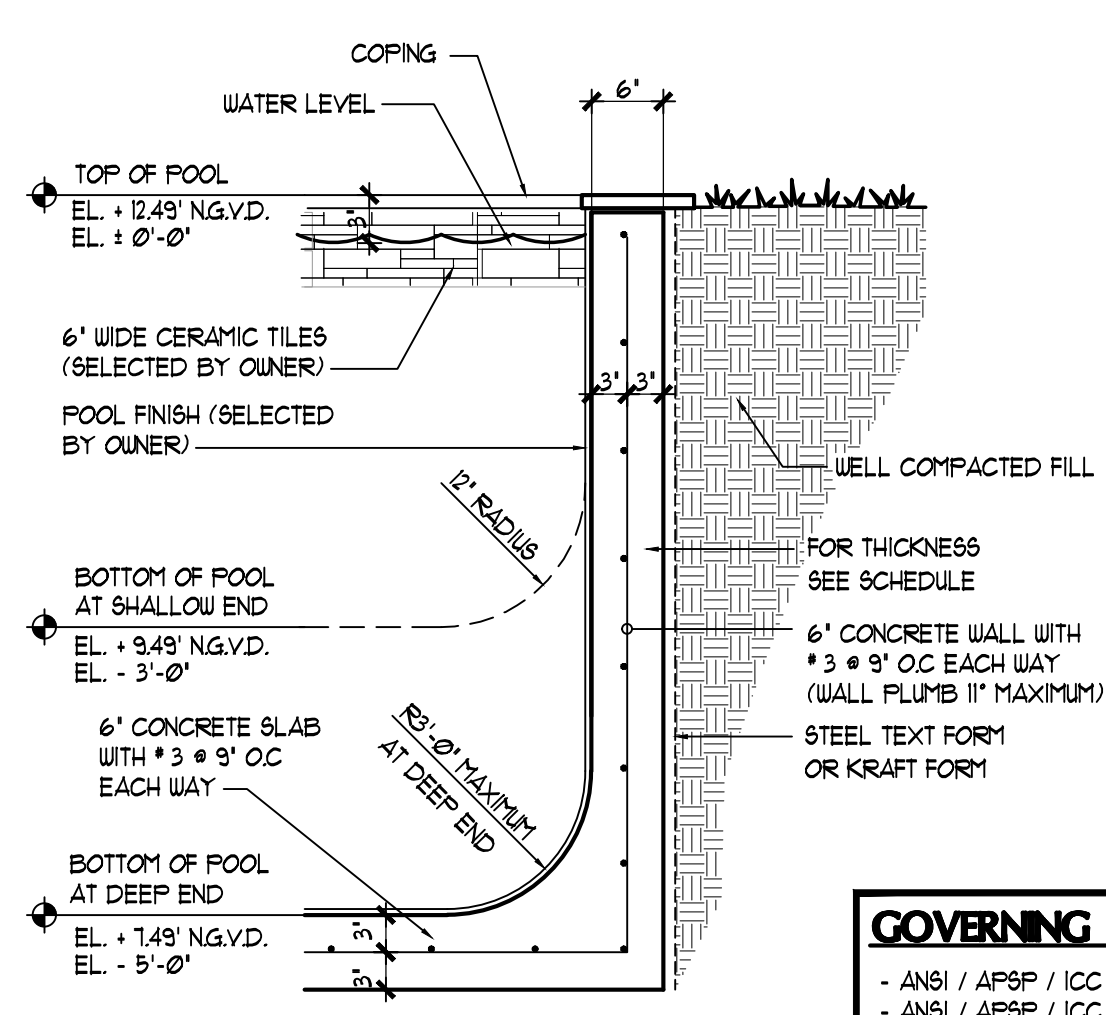


(A) RISER HEIGHT MUST BE UNIFORM (12" MAX.) except top and bottom riser which may vary in height but shall not exceed 12"

(B) TREAD LENGTH 18" MINIMUM

(C) CONTRASTING TILE AT EDGE (OPTIONAL)

TREADS SHALL HAVE SLIP-RESISTANT SURFACES- ANSI/APSP-ICC-5 6.15.



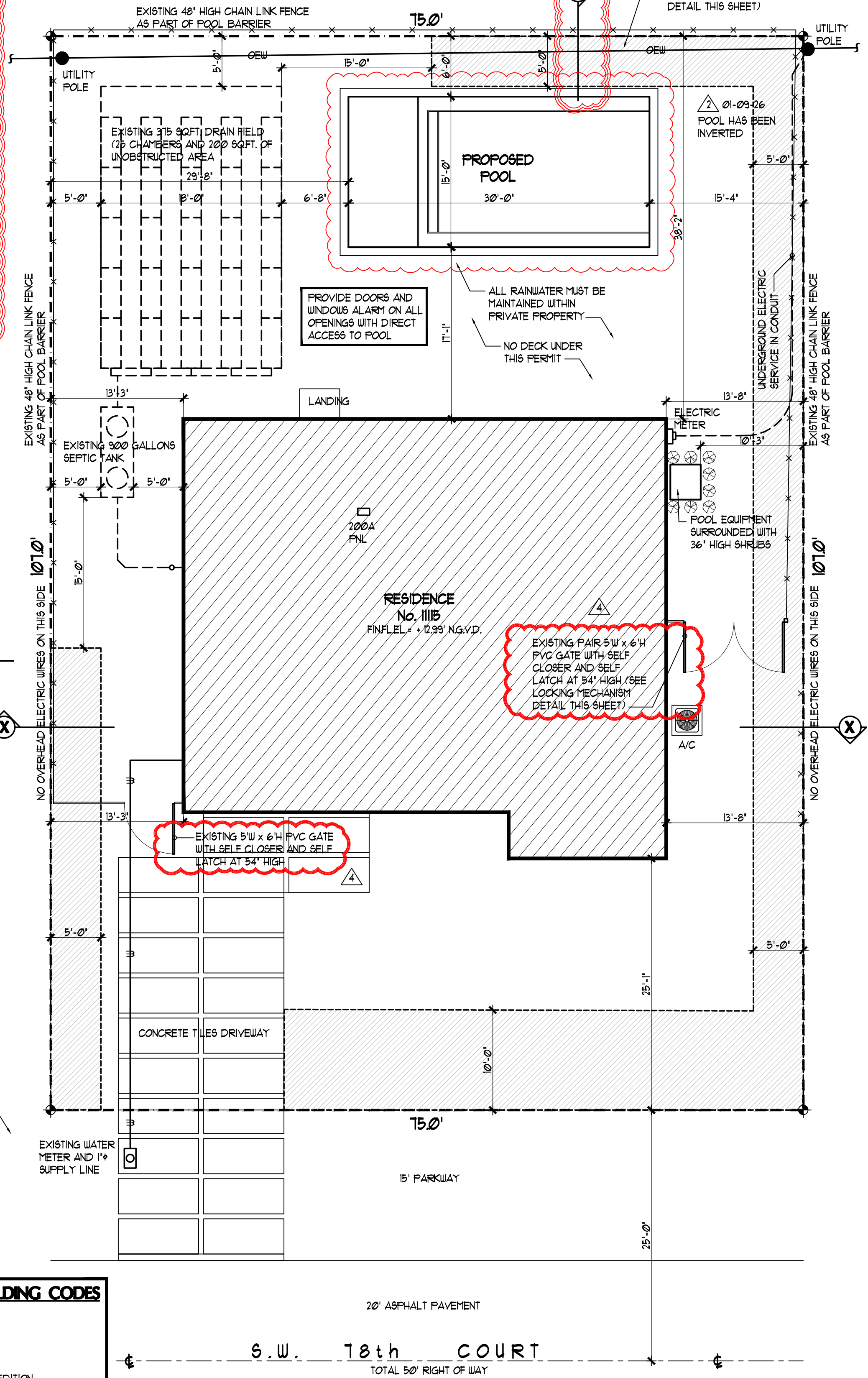
TYPICAL WALL SECTION

GOVERNING BUILDING CODES

- ANSI / APSP / ICC 3-14
- ANSI / APSP / ICC 4-12
- ANSI / APSP / ICC 5-11
- ANSI / APSP / ICC 6-13
- ANSI / APSP / ICC 7-15
- 2023 FBC BUILDING 8th EDITION
- 2023 FBC EXISTING BUILDING 8th EDITION
- 2023 FBC ACCESSIBILITY 8th EDITION
- 2023 FBC RESIDENTIAL 8th EDITION
- 68026 N.E.C. 2020 EDITION

STATEMENT:

THE PROPOSED LOCATION OF SWIMMING POOL SHALL COMPLY WITH ALL OVERHEAD CONDUCTORS (POWER LINES, SERVICE DROP, AND LOW VOLTAGE LINES) PER N.E.C. - 680-3 (A) (B) (C) Overhead Conductor Clearances



SITE PLAN

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

LOT WATER RETAINED CALCULATIONS

LOT AREA x (1) x (C)
 $8,025 \text{ SQ.FT.} \times 125 \times 0.8 = 669 \text{ CU.FT.}$

12
 GREEN AREA = 4,988.41 SQ.FT. = 62.16%
 SWALE AREA = 139.81 SQ.FT.
 WATER RETAINED AREA = SWALE AREA x (SWALE DEPTH)
 WATER RETAINED AREA = 139.81 SQ.FT. x 0.5 FT.
 WATER RETAINED AREA = 69.90 SQ.FT.
 $669 \text{ CU.FT.} < 699 \text{ SQ.FT.}$

LEGAL DESCRIPTION

Follow: 20-5010-005-0031
 Lot 6 of "DIAGLES Subdivision", according to the plat thereof, as recorded in Plat Book 41, at Page 16, of the Public Record of Miami-Dade County, Florida.

PERVIOUS & IMPERVIOUS AREA

Lot Size = 8,025 Sq.Ft.
 MINIMUM PERVIOUS AREA REQUIRED = 8,025 SQ.FT. x 25% = 2,006.25 SQ.FT.

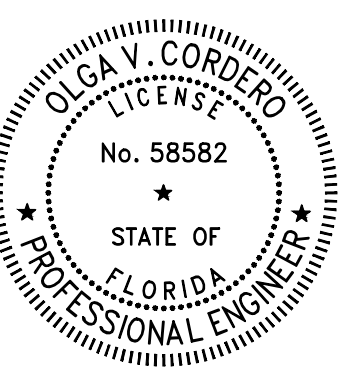
RESIDENCE
 POOL & COFFING
 DRIVEWAY & WALKWAY
 CONCRETE LANDING
 A/C & POOL EQUIPMENT SLAB

1981.74 SQ.FT.
 511.71 SQ.FT.
 510.00 SQ.FT.
 21 SQ.FT.

TOTAL IMPERVIOUS AREA = 3,026.59 SQ.FT. = 37.84%
 TOTAL PERVIOUS AREA = 4,988.41 SQ.FT. = 62.16%

REVISIONS	BY
1. 01-09-26	RM.
2. 01-26-26	RM.
3. 03-09-26	RM.

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PROPOSED POOL PLAN FOR:
Michael Anthony Villanueva
 LOCATED AT:
 1115 SW 18th Court, Village of Pinecrest, FL 33156

DRAWN: RMG.
CHECKED: O.V.C.
DATE: July '25
SCALE: SHOWN
JOB NO: 25-101

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY OLGA V. CORDERO P.E. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED IN ANY ELECTRONIC COPIES.