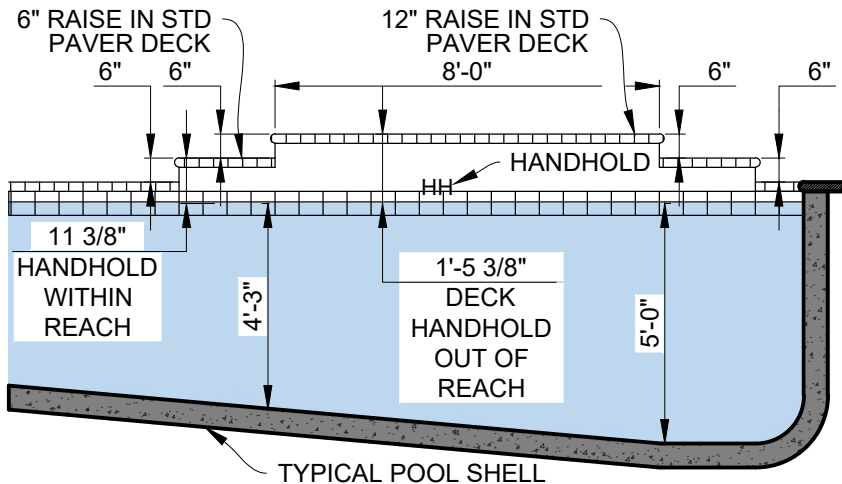


RESIDENTIAL POOL AND SPA PLAN REVIEW CHECKLIST FOR CRITICAL SAFETY CODE REQMTS

HANDHOLDS REQUIRED

HANDHOLD(S) PROVIDED WHEN REQUIRED AT RAISED DECK AREAS MORE THAN 12 INCH FROM WATER LINE AND WATER DEPTH MORE THAN 4 FEET FOR LENGTH OF 8 FEET. [2011 ANSI/APSP-5, 17.1]



ON PAVER COPING A 6" RISE STILL HAS HANDHOLD

ON CONCRETE OVER POUR MORE THAN 5" RISE IS OUT OF REACH FOR HANDHOLD.

WHEN POOL WATER CLOSER THAN 5 FT

WINDOWS, DOORS OR OTHER GLASS WITHIN 5 FT OF WATER'S EDGE: MUST HAVE MANUFACTURER'S DESIGNATION OF SAFETY GLAZING AND BE VISIBLY MARKED

ALL FIXED METAL PARTS WITHIN 5 FT HORIZONTAL OR 12 FT VERTICAL- DOOR AND WINDOW FRAMES, CAGE AND FENCE STRUCTURES, STATIONARY EQUIPMENT, METAL AWNINGS- SHALL BE BONDED UNLESS PERMANENT BARRIER

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ENERGY CODE REQUIREMENTS RESTATED:

- 1. GAS HEATER ELECTRICAL FEED SHALL BE THROUGH GFCI.
- 2. 4X PIPE DIAMETER STRAIGHT PIPE REQUIRED STRAIGHT INTO PUMP, 8" FOR 2" FITTING, 10" FOR 2.5" FITTING.
- 3. MIN 18" STRAIGHT PIPE REQUIRED AFTER FILTER AND BEFORE HEATER, IF HEATER PROVIDED.

Review for Code Compliance Universal Engineering Science



Examiner-License No.

PX2707

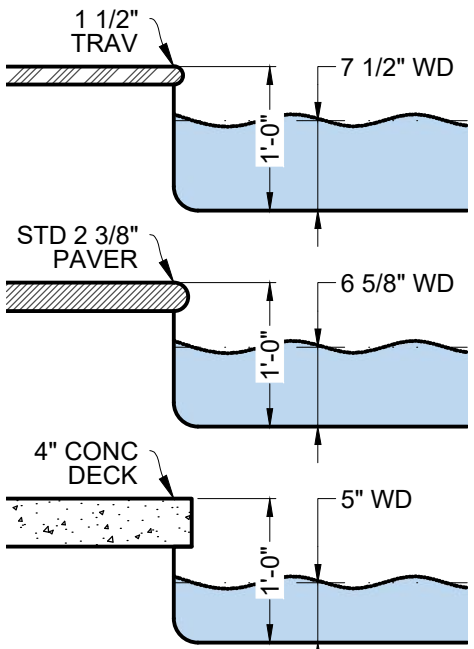
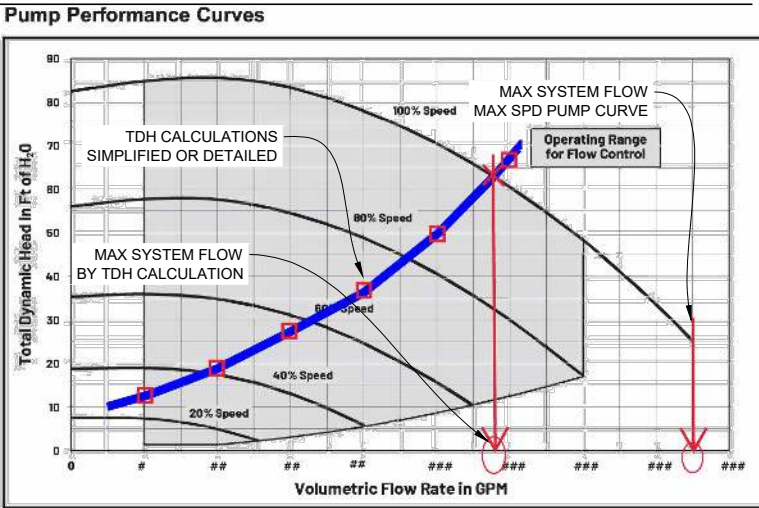
09/27/2024

SUN SHELF AS FIRST STEP MAXIMUM 12" DECK TO SUN SHELF AS 1ST STEP, LIMITS WATER DEPTH UNLESS ADDED STEP ON SHELF. [2011 ANSI/APSP-5, 6.2.2]

ANSI 7 SUCTION ENTRAPMENT SAFETY PLAN REVIEWER AND INSPECTOR MUST VERIFY SUCTION OUTLET COVER RATED FLOW GREATER THAN DETAILED TDH CALCULATION AT MAXIMUM PUMP SPEED OR AT LEAST EXCEEDS MAXIMUM FLOW OF PUMP CURVE AND PARTICULARLY VERIFY SIDEWALL SUCTIONS AND RATED "WALL" FLOWS

IF TDH USED TO SHOW SOFA COMPLIANCE, FLOW VERIFICATION REQUIRED AT FINAL.

EXAMPLE SIMPLE OR DETAILED TDH

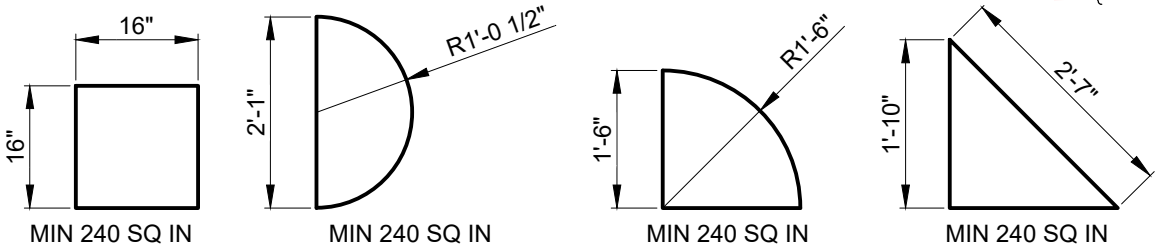


1 HANDHOLDS REQUIRED

SCALE: N.T.S.

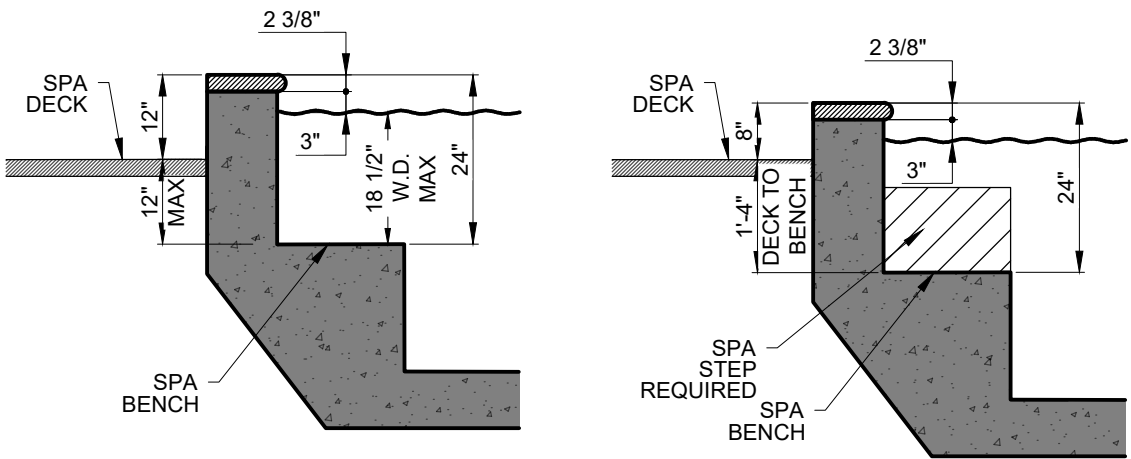
SPA STEP REQUIRED

UNLESS A SPA IS RAISED 12" OR MORE FROM DECK, A SPA STEP IS REQUIRED ON THE BENCH FOR THE MAXIMUM 12" FROM DECK TO ENTRY. [2014 ANSI/APSP-3, 5.6.1]



2 EXAMPLE 240 SQ IN STEP DIMENSIONS

SCALE: N.T.S.



3 12" RAISED SPA NO STEP

SCALE: N.T.S.

4 8" RAISED SPA STEP REQD.

SCALE: N.T.S.

5 SUN SHELF AS 1ST STEP

SCALE: N.T.S.

COMPLIES WITH 2023 8TH ED. FBC, ALL VOLUMES

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REV. DATE DESCRIPTION PROJ. NO.: DWG BY: CKD BY: JKK VERSION: 01-Jan-24 01-Jan-24 2023 FBC

330 SW UTAH ST GATOR POOL BUILDERS

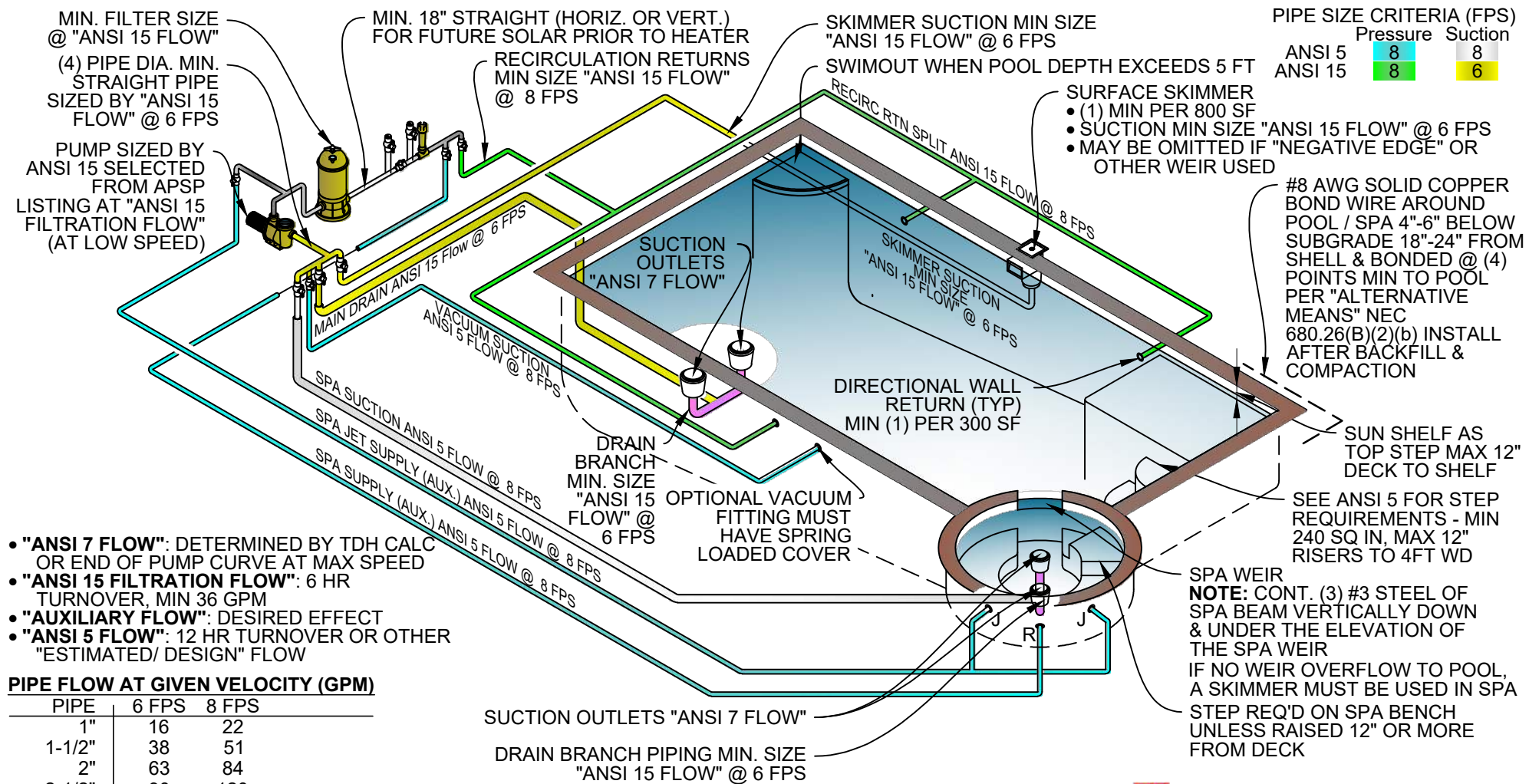
TYPICAL PLAN & SECTIONS FOR RESIDENTIAL POOL/SPA

SHEET

S1

SHEET 1 OF 3

\\KIMESSR\VD-Drive\COMPANY SHARED TWO\00 MASTER RESIDENTIAL PROJECT TOOLS\2023 FBC Frequently used CADs\2023 FBC KE S1 S2 S3 r2.dwg



- "ANSI 7 FLOW": DETERMINED BY TDH CALC OR END OF PUMP CURVE AT MAX SPEED
- "ANSI 15 FILTRATION FLOW": 6 HR TURNOVER, MIN 36 GPM
- "AUXILIARY FLOW": DESIRED EFFECT
- "ANSI 5 FLOW": 12 HR TURNOVER OR OTHER "ESTIMATED/ DESIGN" FLOW

PIPE FLOW AT GIVEN VELOCITY (GPM)

PIPE	6 FPS	8 FPS
1"	16	22
1-1/2"	38	51
2"	63	84
2-1/2"	90	120
3"	138	185
4"	238	318
6"	541	721



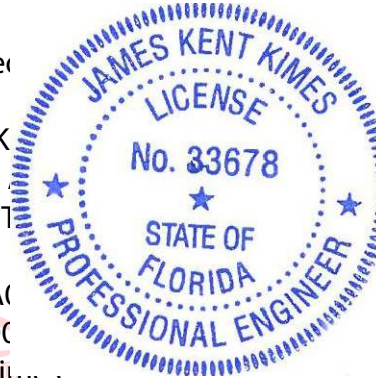
Review for Code Compliance
Universal Engineering Science

Lawrence Pennell
Examiner-License No.

PX2707

09/27/2024

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DN: c=US, o=K
ENGINEERING
MANAGEMENT
INC,
dnQualifier=A
877C95694C0C
cn=James K Kimes
Date: 2024.09.16 11:58:23
-04'00'



NOTES:

- THIS PLAN IS SCHEMATIC & PIPING SHALL BE CONNECTED TO PROVIDE A FUNCTIONING SYSTEM.
- POOL PIPING SHALL HOLD STATIC WATER OR AIR PRESSURE NOT LESS THAN 35 PSI FOR 15 MINUTES, PER R4501.12.1
- POOLS SHALL HAVE FILTRATION PUMPS SELECTED TO PROVIDE MINIMUM 12 HR. TURNOVER & MAXIMUM 6 HOUR TURNOVER.
- DETERMINE PIPE SIZING FROM ATTACHED ANSI WORK SHEETS.
- SPA PIPING DETERMINED FROM ATTACHED WORK SHEETS.
- DUAL MAIN DRAINS SHALL HAVE A MINIMUM SEPARATION OF 3 FT, UNLESS ONE IS LOCATED ON A VERTICAL WALL OR A SINGLE UNBLOCKABLE DRAIN IS USED.
- ALL SUCTION COVERS SHALL MEET ANSI/APSP/ICC-16 2017
- ALL PIPING SHALL BE NSF-PW APPROVED & MEET THE REQUIREMENTS OF 8TH ED. (2023) FBC.
- ELECTRICAL EQUIPMENT, WIRING, & INSTALLATION SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE 2020 EDITION.
- BONDING OF POOL STEEL & LIGHT TO FOOTING STEEL SHALL BE CONTINUED TO & INCLUDE ALL PUMPS & HEATERS.
- TEMPORARY FENCING SHALL BE INSTALLED & MAINTAINED UNTIL PERMANENT CHILD SAFETY FEATURES ARE INSTALLED.
- THERE SHALL BE A PASSING ELECTRICAL & CHILD SAFETY FINAL INSPECTION PRIOR TO FILLING THE POOL OR SPA WITH WATER.
- POOL SHALL MEET THE APPLICABLE CRITERIA IN ANSI/APSP 3,4,5,6, 7 & 15 STANDARDS ADOPTED IN 8TH ED. (2023) FBC
- REGARDLESS OF THE CRITERIA HERE, THE PROJECT SHALL COMPLY WITH ALL SECTIONS OF THE 8TH ED. (2023) FBC - RESIDENTIAL, BUILDING, MECHANICAL, PLUMBING & GAS CODES, AS APPLICABLE RESPECTIVELY & AMENDED.

SEE INFORMATION ATTACHED TO THIS PERMIT PACKAGE FOR SITE SPECIFIC DETAILS SHOWING ANSI 7 & 15 AND FBC COMPLIANCE

COMPLIES WITH
2023 8TH ED. FBC,
ALL VOLUMES

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REV. DATE DESCRIPTION
PROJ. NO.: DWG BY: CKD BY: JWK
2023 FBC
VERSION: 01-Jan-24
DRAWING: 01-Jan-24

330 SW UTAH ST
GATOR POOL BUILDERS

TYPICAL PLAN & SECTIONS
FOR RESIDENTIAL POOL/SPA

SHEET

S2

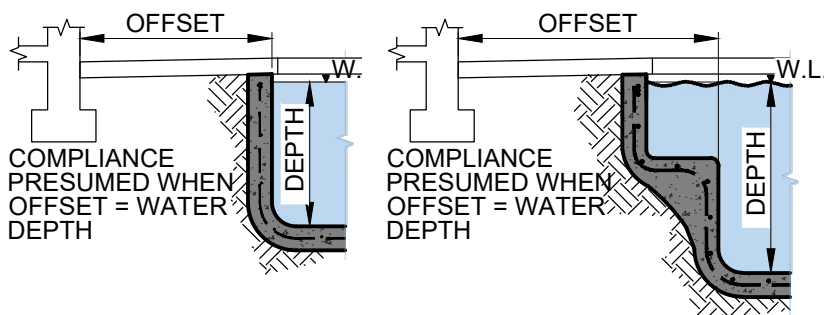
SHEET 2 OF 3

ORIG. DWG: 17"x11" (ANSI B)

1 TYPICAL RESIDENTIAL POOL / SPA SCHEMATIC PLAN

SCALE: N.T.S.

FBC NO LONGER REQUIRES EXCAVATIONS OUT OF THE "ANGLE OF REPOSE PLUS 1 FT". THE CURRENT REQUIREMENT IN 8TH ED (2023) FBC, SECTION 1804.1 STATES THAT "EXCAVATIONS SHALL NOT REMOVE VERTICAL OR LATERAL SUPPORT FROM ANY FOUNDATION." THEREFORE THE FOLLOWING IS REQUIRED:



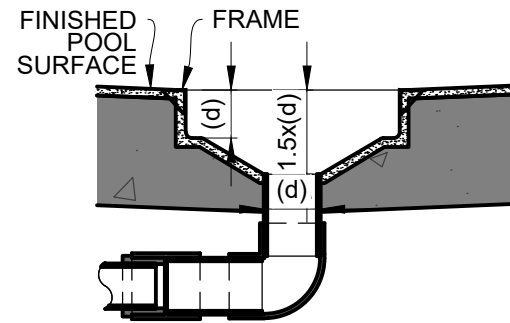
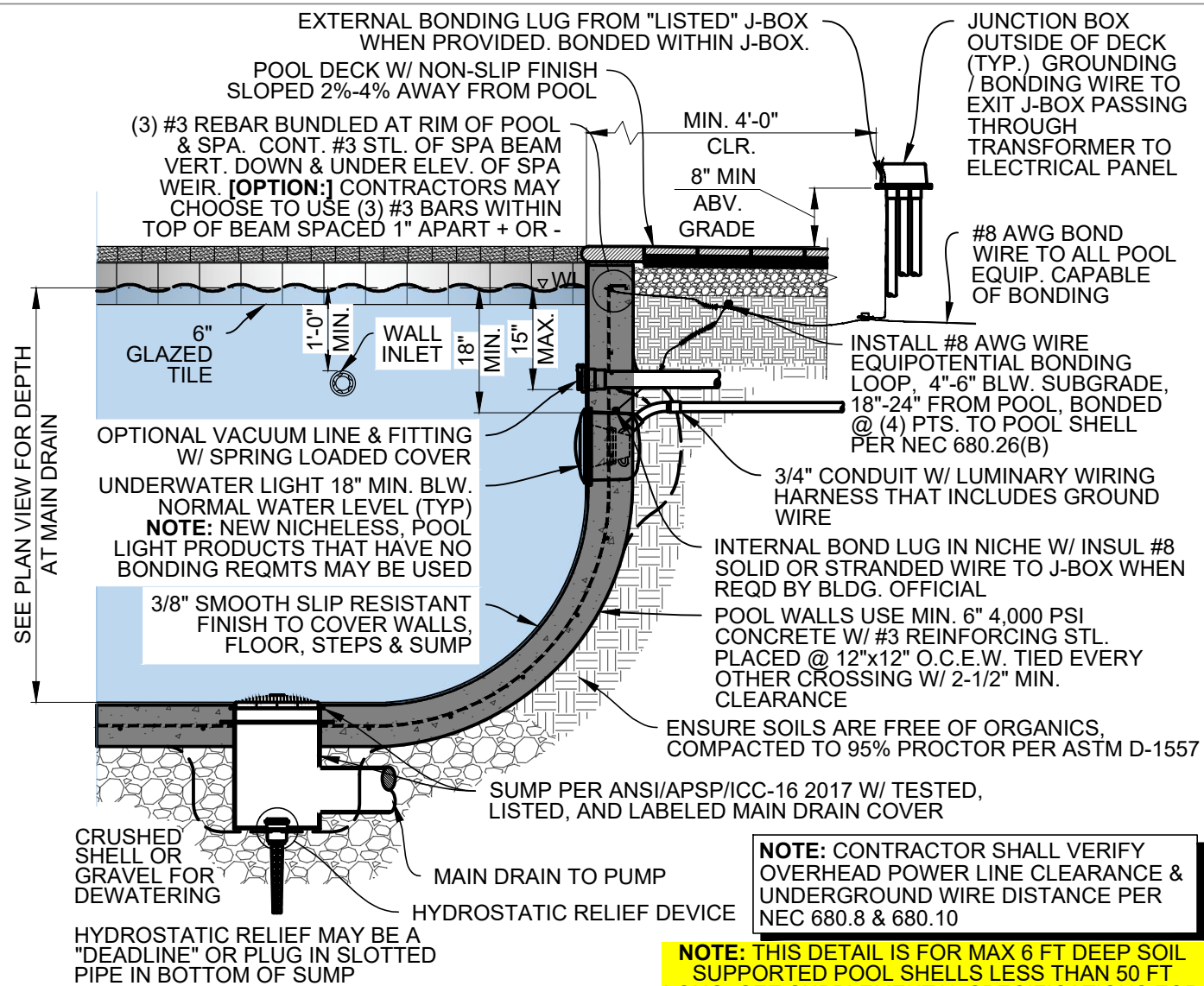
"ANGLE OF REPOSE"
OR SEE CONTRACTOR PLAN

2 PROXIMITY TO STRUCTURE

SCALE: N.T.S.

1. WHEN THE POOL DECK DISTANCE IS EQUAL TO OR GREATER THAN WATER DEPTH, NO MITIGATION OF THE SHELL STRUCTURE IS REQUIRED, AND NO SHORING OR FOUNDATION SUPPORT INITIALLY REQUIRED.
2. WHEN THE POOL DECK DISTANCE IS LESS THAN THE WATER DEPTH, THE ENGINEER SHALL PROVIDE A MITIGATION SPECIFICATION, EITHER TO PROTECT THE FOUNDATION DURING EXCAVATION OR STRENGTHEN THE SHELL FROM STRUCTURE LOADS.
3. IF DURING EXCAVATION, SOIL CONDITIONS APPEAR TO LEAD TO LOSS OF FOUNDATION SUPPORT, THE CONTRACTOR SHALL CEASE EXCAVATION AND CONTACT THE ENGINEER FOR MITIGATION SPECIFICATIONS.
4. IF AFTER EXCAVATION THE CONTRACTOR OR INSPECTOR FIND A LOSS OR THREATENED LOSS OF SOIL SUPPORT AT THE FOUNDATION, CONTACT THE ENGINEER FOR A MITIGATION SPECIFICATION.

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SPECIFIED PVC PIPE SIZE (d)
MIN. SUMP DEPTH 1.5x(d)
MIN. LEDGE DEPTH (d)
- OR -
FOR FIELD BUILT SUMPS SEE PRODUCT INSTALLATION INSTRUCTIONS

DRAIN COVERS & SUMPS a.k.a. SUCTION OUTLET FITTING ASSEMBLIES (SOFA) ANSI/APSP/ICC-16 2017

- FOLLOW THE PRODUCT SPECIFICATIONS AND/OR INSTALLATION INSTRUCTIONS FOR MIN./MAX. SUMP DIMENSIONS, DRAIN COVER/GRATE, AND FRAME FASTENING MEETING MFG'S SOFA CERTIFICATION.
- DO NOT USE POWER TOOLS TO INSTALL FASTENERS**
- FIELD MODIFICATIONS TO ANY SOFA NOT AUTHORIZED BY MFG'S INSTALLATION INSTRUCTIONS SHALL VOID THE SOFA CERTIFICATION
- HAND CHECK COVER/GRATE SNUGNESS TO SUMP/FRAME AFTER INSTALLATION
- SOFA COMPONENTS HELD IN PLACE BY INTERIOR FINISH OF THE POOL SHALL BE FREE OF DETERIORATION AND VOIDS

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NOTES:

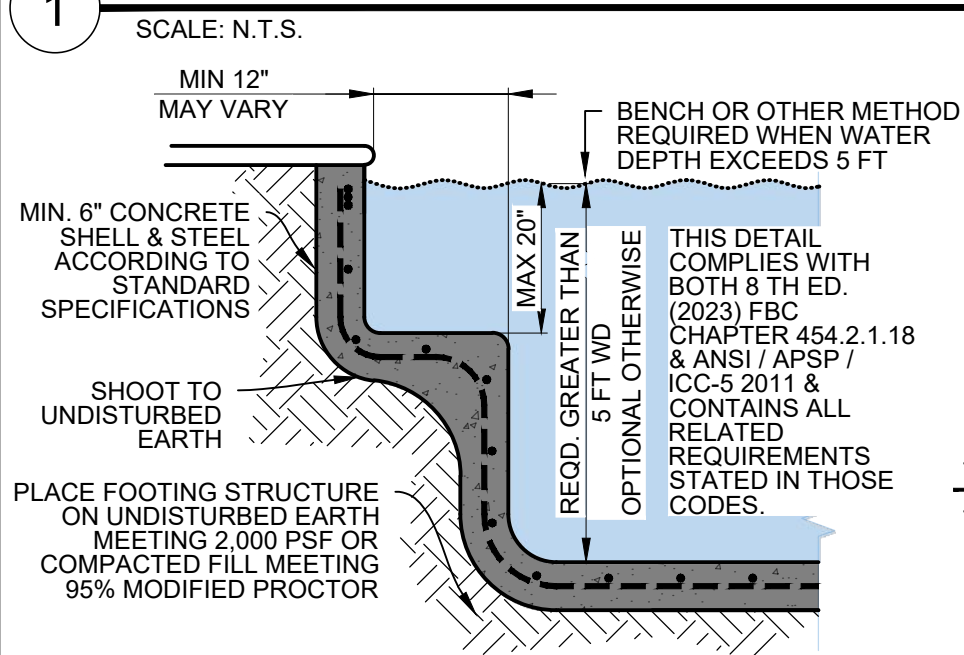
- APPROVED PRODUCT SPECIFICATION MAY DIFFER FROM FIELD BUILT SUMPS SHOWN ON THIS PAGE

ADDITIONAL STRUCTURAL NOTES:

- USE MINIMUM ASTM A615 GRADE 40 STEEL
- LAP #3 BARS MINIMUM 15"
- LAP #5 BARS MINIMUM 25"
- 6" SHELL THICKNESS AND 2-1/2" CONCRETE COVERAGE ARE MINIMUMS
- USE 4,000 PSI CONCRETE
- CONTRACTOR / OWNER REQUIRED TO:
 - CONTACT ENGINEER IF POOL NOT PLACED ON UNDISTURBED AND DE-WATERED EARTH THAT CAN MEET 2,000 PSF BEARING CAPACITY.
 - WHEN BURIED DEBRIS IS ENCOUNTERED OR QUESTIONABLE CONDITIONS ARE INDICATED AT THE WORK SITE PRIOR / DURING CONSTRUCTION, A SUBSURFACE CONSULTANT SHALL CONDUCT BORING(S) IN THE AREA OF THE POOL TO CONFIRM SOIL BEARING CAPACITY, CLEAR OF BURIED DEBRIS, & VERIFYING GROUND WATER LEVEL
- ALL MODIFIED SOILS & EARTH FILL UNDER PERSPECTIVE POOL AREA SHALL MEET A SOIL DENSITY AND COMPACTION MINIMUM OF 95% MODIFIED PROCTOR WITHOUT SETTLEMENT.

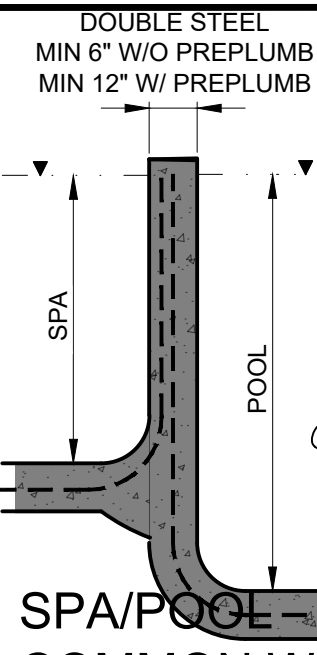
1 POOL DEEP END SECTION

SCALE: N.T.S.



3 BENCH SECTION

SCALE: N.T.S.

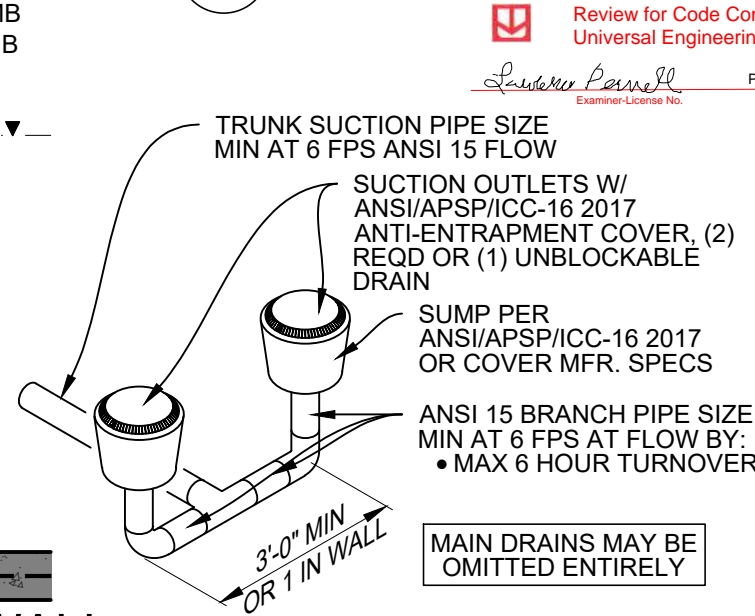


6 SPA/POOL COMMON WALL

SCALE: N.T.S.

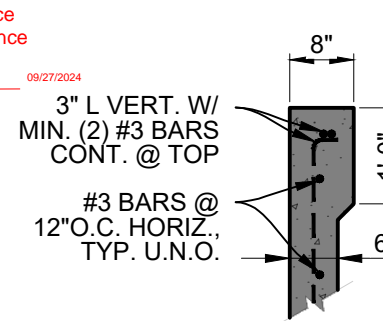
2 FIELD BUILT SUMP

SCALE: N.T.S.



4 BRANCH PIPING

SCALE: N.T.S.



5 POOL BEAM 8"x12" OPTION

SCALE: N.T.S.

COMPLIES WITH 2023 8TH ED. FBC, ALL VOLUMES

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REV. DATE DESCRIPTION
PROJ. NO.: DWG BY: CKD BY: JJK
2023 FBC 01-Jan-24 01-Jan-24

330 SW UTAH ST
GATOR POOL BUILDERS

TYPICAL SECTIONS
FOR RESIDENTIAL POOL/SPA

SHEET
S3

SHEET 3 OF 3