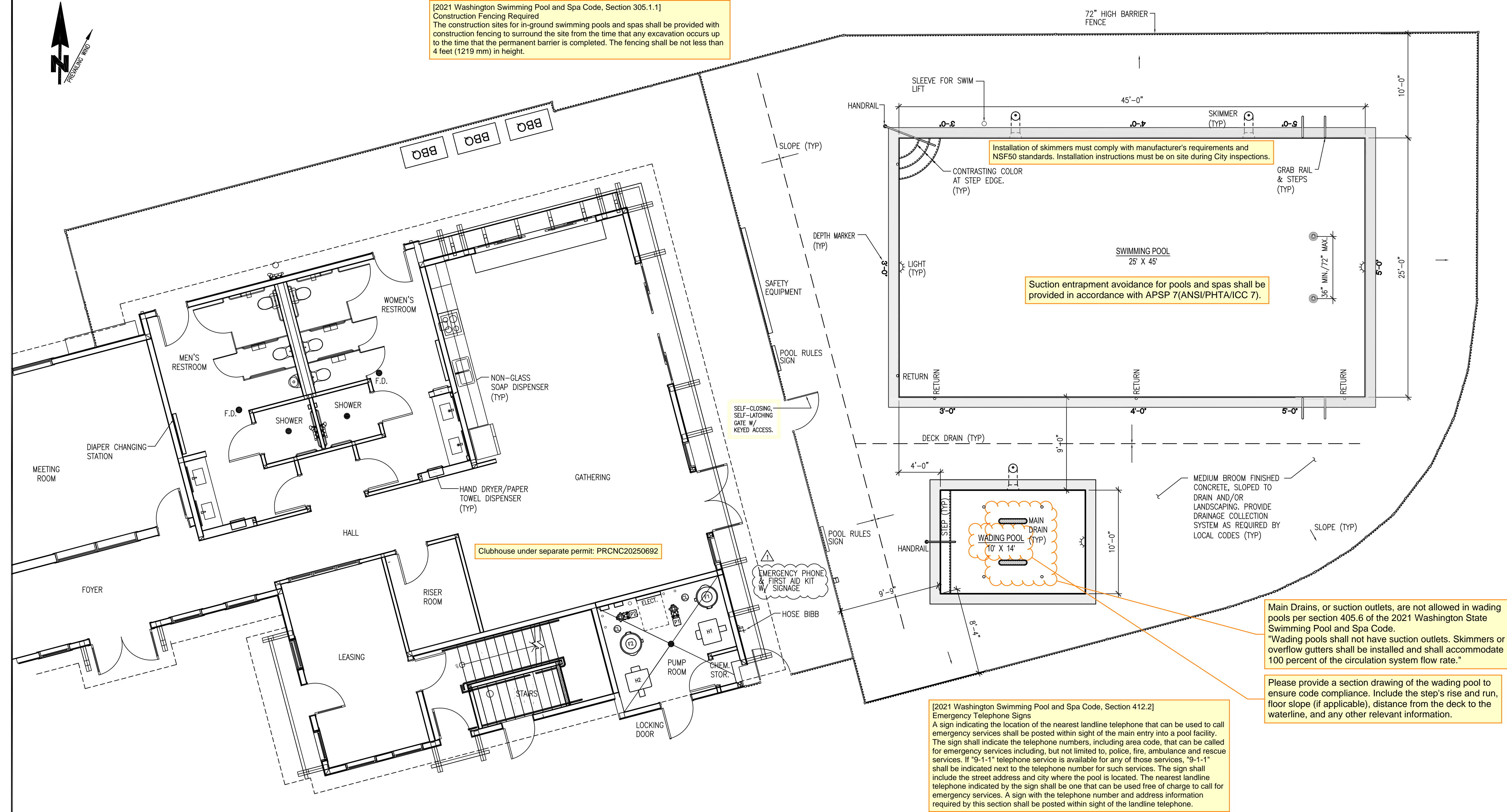


[2021 Washington Swimming Pool and Spa Code, Section 305.1.1]
Construction Fencing Required
The construction sites for in-ground swimming pools and spas shall be provided with construction fencing to surround the site from the time that any excavation occurs up to the time that the permanent barrier is completed. The fencing shall be not less than 4 feet (1219 mm) in height.



[2021 Washington Swimming Pool and Spa Code, Section 412.2]
Emergency Telephone Signs
A sign indicating the location of the nearest landline telephone that can be used to call emergency services shall be posted within sight of the main entry into a pool facility. The sign shall indicate the telephone numbers, including area code, that can be called for emergency services including, but not limited to, police, fire, ambulance and rescue services. If "9-1-1" telephone service is available for any of those services, "9-1-1" shall be indicated next to the telephone number for such services. The sign shall include the street address and city where the pool is located. The nearest landline telephone indicated by the sign shall be one that can be used free of charge to call for emergency services. A sign with the telephone number and address information required by this section shall be posted within sight of the landline telephone.

[2021 Washington Swimming Pool and Spa Code, Section 321.2]
Artificial Lighting Required
When a pool is open during periods of low natural illumination, artificial lighting (per sections 321.2.1 through 321.2.3) shall be provided so that all areas of the pool, including all suction outlets on the bottom of the pool, will be visible. Illumination shall be sufficient to enable a lifeguard or other persons standing on the deck or sitting on a lifeguard stand adjacent to the pool edge to determine if a pool user is lying on the bottom of the pool and that the pool water is transparent and free from cloudiness. These two conditions shall be met when all suction outlets are visible from the edge of the deck at all times when artificial lighting is illuminated and when an 8-inch-diameter (152 mm) black disk, placed at the bottom of the pool in the deepest point, is visible from the edge of the pool deck at all times when artificial lighting is illuminated.

[2021 Washington Swimming Pool and Spa Code, Section 321.3]
Emergency Illumination
Public pools and public pool areas that operate during periods of low illumination shall be provided with emergency lighting that will automatically turn on to permit evacuation of the pool and securing of the area in the event of power failure. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than 0.1 foot-candle (0.1 lumen per square foot) [1 lux] measured at any point on the water surface and at any point on the walking surface of the deck, and not less than an average of 1 foot-candle (1 lumen per square foot) [11 lux]. At the end of the emergency lighting time duration, the illumination level shall be not less than 0.06 foot-candle (0.06 lumen per square foot) [0.65 lux] measured at any point on the water surface and at any point on the walking surface of the deck, and not less than an average of 0.6 foot-candle (0.6 lumen per square foot) [6.46 lux]. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded.

MISCELLANEOUS EQUIPMENT	
ITEM	DESCRIPTION
RESCUE POLE (1)	ONE STRAIGHT POLE, 12" MIN. W/ LIFE HOOK
RESCUE POLE (1)	12' TO 15' TELESCOPIC
LIFE RING (1)	24"Ø RING W/ 50' ROPE
TEST KIT	DPD - TAYLOR
THERMOMETERS	1
SKIMMER, VACUUM & HOSE	1 EACH (30' X 1-1/2"Ø HOSE)
WALL BRUSH	ONE 18"
FIRST AID KIT	ONE 24-UNIT
SIGNS	WA STATE POOL AND WADING POOL RULES "EMERGENCY 911" "NO LIFEGUARD"
POOL COVER	MANUAL, VAPOR RETARDANT, FLOATING
ADA LIFT	AQUA CREEK PRODUCTS RANGER II
DISTANCE TO FURTHEST UNIT: > 1/4 MILE	
NUMBER OF FLOORS: 3	
FACILITY REQUIREMENTS: DIAPER STATIONS, SHOWERS, REST ROOMS	
SCOPE OF WORK:	
CONSTRUCT NEW OUTDOOR SWIMMING POOL AND WADER FOR NEW LIVING COMMUNITY.	

SWIMMING POOL CHARACTERISTICS	
DESCRIPTION	POOL
DESIGNATION	LIMITED USE
DIMENSIONS (feet)	25 X 45
DEPTH (feet)	3.0 TO 5.0
SURFACE AREA (sf):	
SHALLOW END	1,125
DEEP END	0
TOTAL	1,125
VOLUME (gallons)	33,000
TURNOVER (hours)	5.1 @ 110 GPM
FILTER AREA (sf)	580
FILTER RATE (gpm/sf)	0.19 @ 110 GPM
BATHER LOAD	50
POOL COLOR	ARTIC WHITE

SWIMMING POOL EQUIPMENT	
DESCRIPTION	POOL
FILTER (F1)	JANDY CL SERIES CL580 580 SF CARTRIDGE, NSF
PUMP (P1)	JANDY EPUMP VSSH270DV2AS, 2.7 HP 208/230V, 1.5/10.5A
HEATER (H1)	JANDY JX1400NK, NAT GAS 399K BTU, W/ 84% EFFICIENCY PER WSEC C404.10 120V/240V, 5/2.5A
CHEMICAL FEEDER	PENTAIR RAINBOW 300-29X SOLID CHLORINE TABLET FEEDER, NSF
CHEMICAL CONTROLLER	--
MAIN DRAINS (2)	AQUASTAR A10RCFR101, 10" ROUND W/ FIELD FABRICATED SUMP, 31.5 SQ. INCH OPENING AREA
SKIMMERS (2)	BERMUDA W/ WEIR & BASKET NO EQUALIZER LINE
INLETS (4)	WALL (DIRECTIONAL)
LIGHTS (2)	PENTAIR ARCHITECTURAL LED, 120 VOLT
FLOW METER (2)	FLOWIS FV-25 (2.5"Ø)
PRESSURE/VACUUM GAUGES	TWO PRESSURE/ONE VACUUM
HANDRAILS	ONE SET
GRAB RAILS & INSERT STEPS	TWO SETS
STEP INSERTS	TWO SETS
AUTO-FILL	MP INDUSTRIES OR EQUAL
SPARE PARTS	FILTER CARTRIDGES

WADING POOL CHARACTERISTICS	
DESCRIPTION	POOL
DESIGNATION	LIMITED USE
DIMENSIONS (feet)	10 X 14
DEPTH (feet)	1.0
SURFACE AREA (sf):	140
VOLUME (gallons)	1,000
TURNOVER (minutes)	16.7 @ 60 GPM
FILTER AREA (sf)	340
FILTER RATE (gpm/sf)	0.18 @ 60 GPM
BATHER LOAD	15
POOL COLOR	ARTIC WHITE

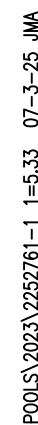
WADING POOL EQUIPMENT	
DESCRIPTION	POOL
FILTER (F2)	JANDY CL SERIES CL340 340 SF CARTRIDGE, NSF
PUMP (P2)	JANDY FLOPRO VSFHP185DV2AS, 1.85 HP 208/230V, 8.5/8.0A
HEATER (H2)	JANDY JX1200NK W/ 84% EFFICIENCY PER WSEC C404.10 120/240V, 5/2.5A
CHEMICAL FEEDER	PENTAIR RAINBOW 300 SOLID CHLORINE TABLET FEEDER, NSF
CHEMICAL CONTROLLER	--
MAIN DRAINS (2)	AQUASTAR 32CDFL101 W/ MANUFACTURED, 25.9 SQ. INCH OPENING AREA
SKIMMER	BERMUDA W/ WEIR & BASKET NO EQUALIZER
INLETS (4)	FLOOR
LIGHT	JANDY "NICHELESS" LED
FLOW METER	FLOWIS FV-2 (2"Ø)
PRESSURE/VACUUM GAUGES	TWO PRESSURE/ONE VACUUM
HANDRAILS	ONE SET
GRAB RAIL	NONE
STEP INSERTS	NONE
AUTO-FILL	MP INDUSTRIES OR EQUAL
SPARE PARTS	FILTER CARTRIDGES

DEPTH MARKER LEGEND			
MARK	DEPTH	LETTER SIZE	COLOR
A	1'-0"	4" MINIMUM	CONTRASTING
B	3'-0"	4" MINIMUM	CONTRASTING
C	4'-0"	4" MINIMUM	CONTRASTING
D	5'-0"	4" MINIMUM	CONTRASTING
-	-	-	-
-	-	-	-

NOTES:
1. PROVIDE DEPTH MARKERS IN ENGLISH UNITS.
2. PLACE NON-SLIP MARKERS ON THE DECK AND POOL SIDEWALL.
3. PLACE "NO DIVING" MARKERS ALONG DECK AND SIGNAGE ON WALLS.

REVISIONS
06-30-2025
PER COP REVIEW
PRPO20251217

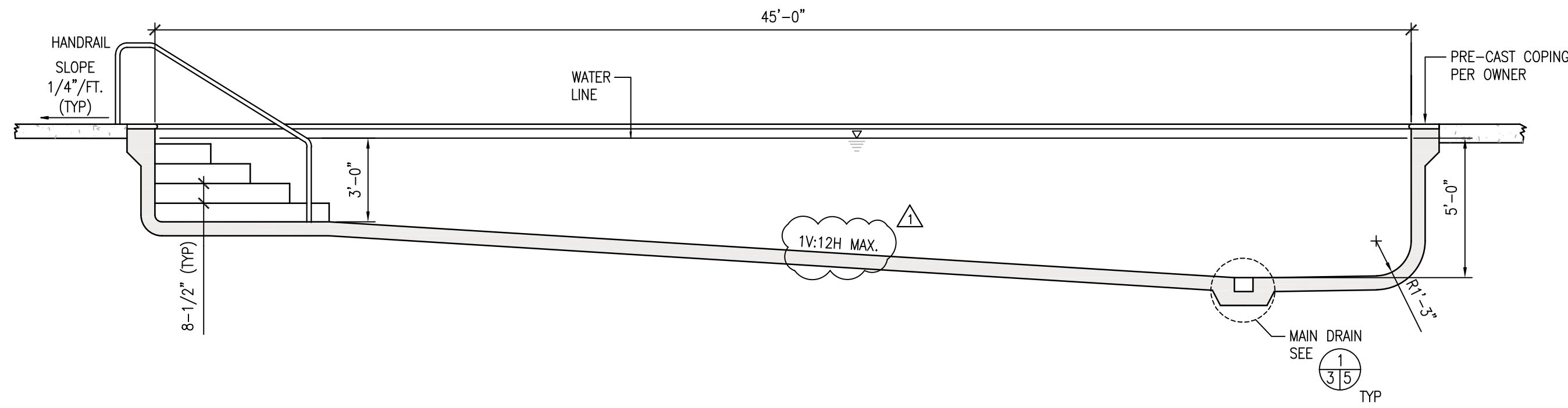
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ECONU
ENGINEERING CONSULTANTS NORTHWEST
03-26-25
PROFESSIONAL ENGINEER
PLEASURE POOLS AND SPAS
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PUYALLUP, WA 98101
(253) 840-9292
CLIENT
PROJECT
EAST TOWN CROSSING
PUYALLUP, WA
NEW SWIMMING POOL AND WADING POOL
DATE
03-26-25
DRAWN
J.M.A.
DESIGNED
J.J.D.
APPROVED
J.J.D.
PROJECT NO.
2252761
SHEET NO.
SP 1
1 Of 6 Sheets



Potable water supply systems shall be designed, installed and maintained so as to prevent contamination from nonpotable liquids, solids or gases being introduced into the potable water supply through cross-connections or other piping connections to the system. Means of protection against backflow in the potable water supply shall be provided through an air gap complying with ASME A112.1.2 or by a backflow prevention assembly in accordance with the 2021 Washington State Plumbing Code.

Please see the comment on sheet SP1 regarding main drains at the wading pool.

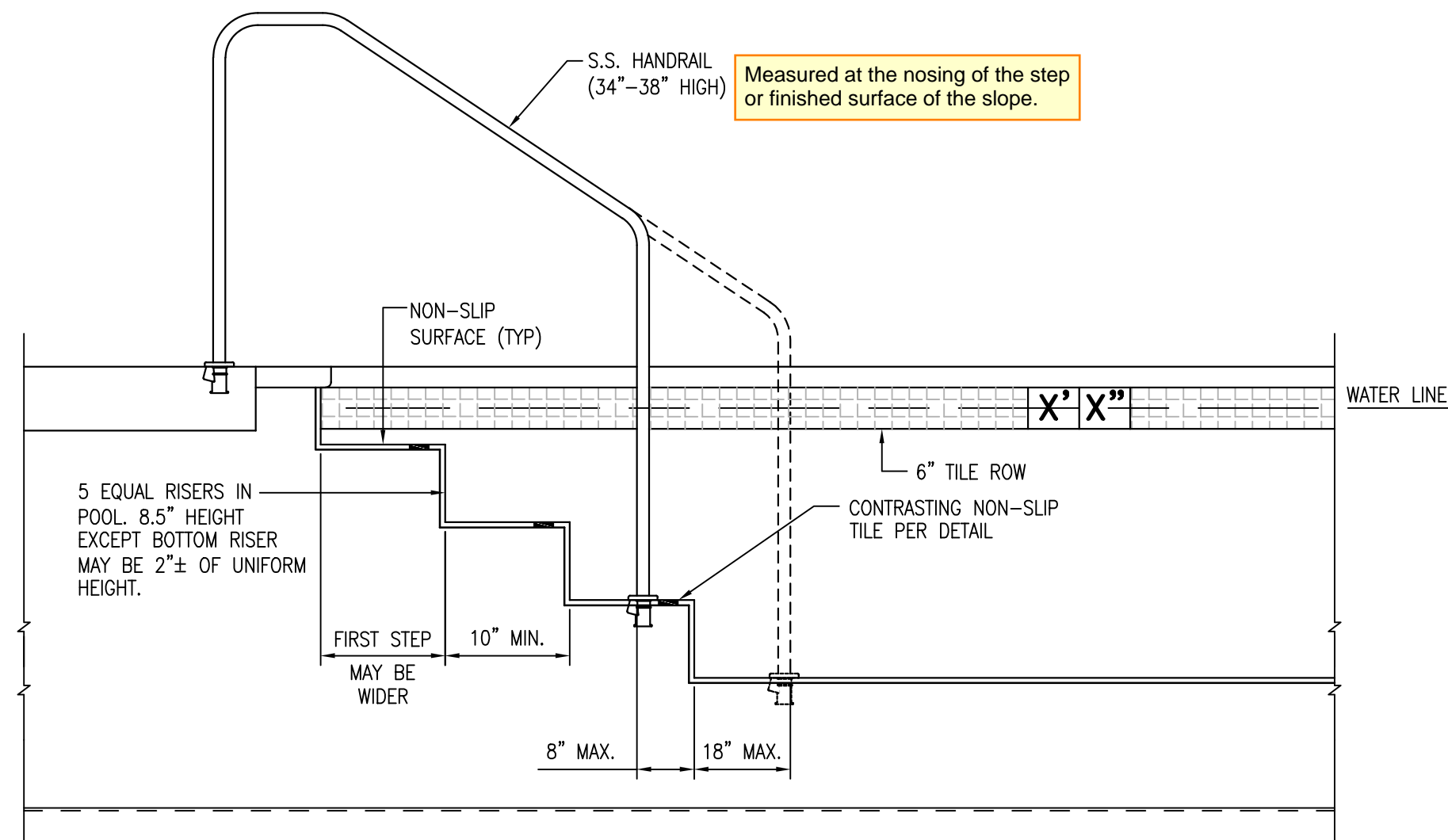
2 Of 6 Sheets



POOL SECTION

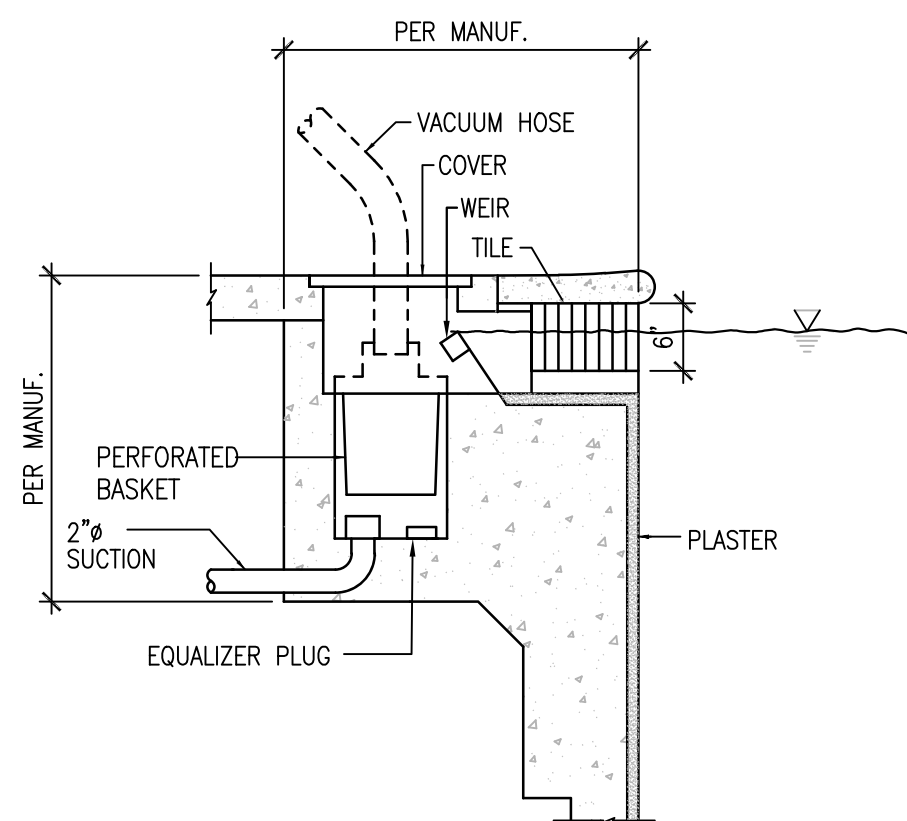
1/4" = 1'-0" A 1/3

The outside diameter or width of handrails shall be not less than 1-1/4 inches and not greater than 2 inches.



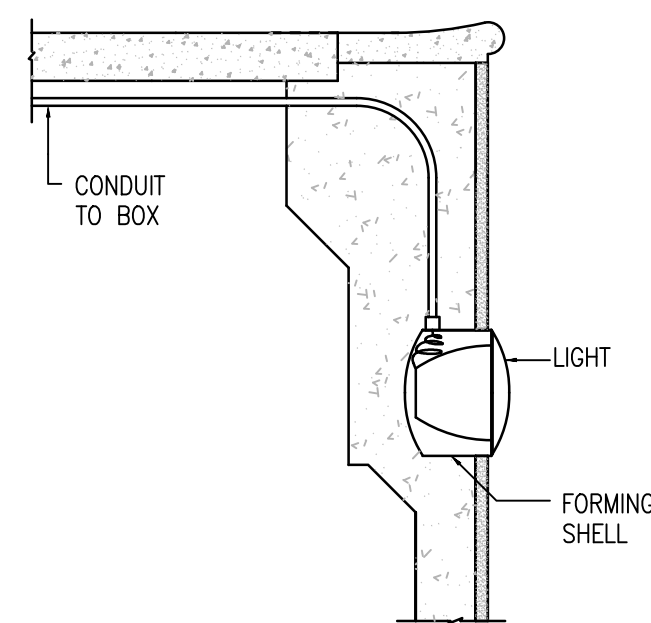
STEP/HANDRAIL DETAIL

NTS 2/3/3



SKIMMER DETAIL

NTS 4/3/3

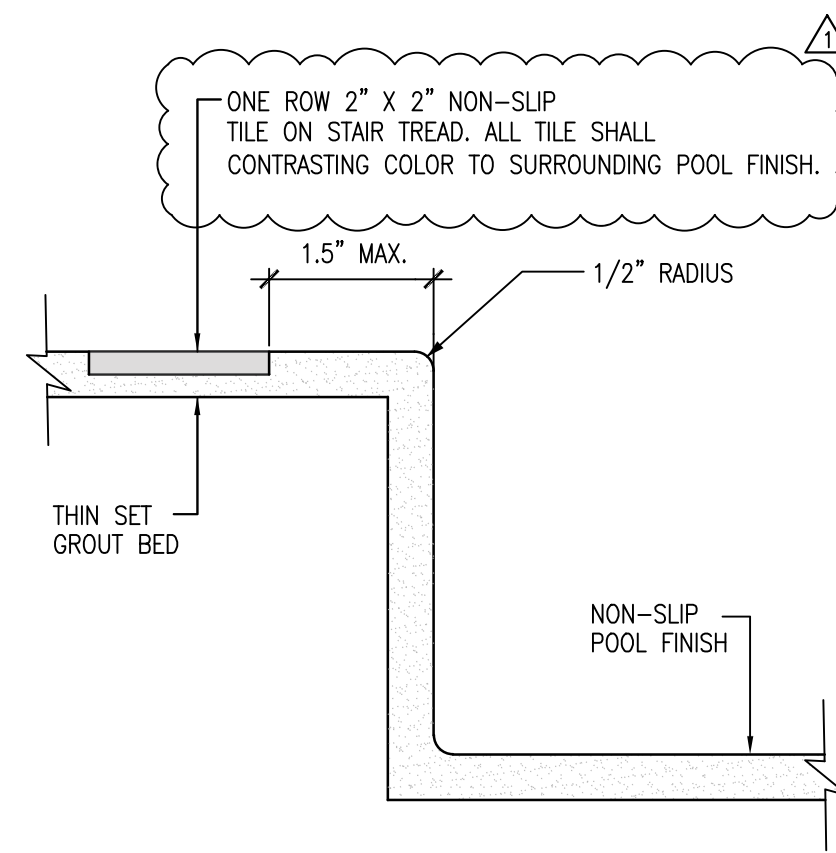


NOTE:
UNDERWATER LIGHTING SHALL BE BONDED AND GROUNDED IN CONFORMANCE WITH NFPA 70-2014 ELECTRICAL CODE SECTION 680.26(B)(4).

Separate Electrical Permit is required with the Washington State Department of Labor & Industries.
<https://lmi.wa.gov/licensing-permits/electrical/electrical-permits-fees-and-inspections>
or call for Licensing Information: 1-800-647-0982

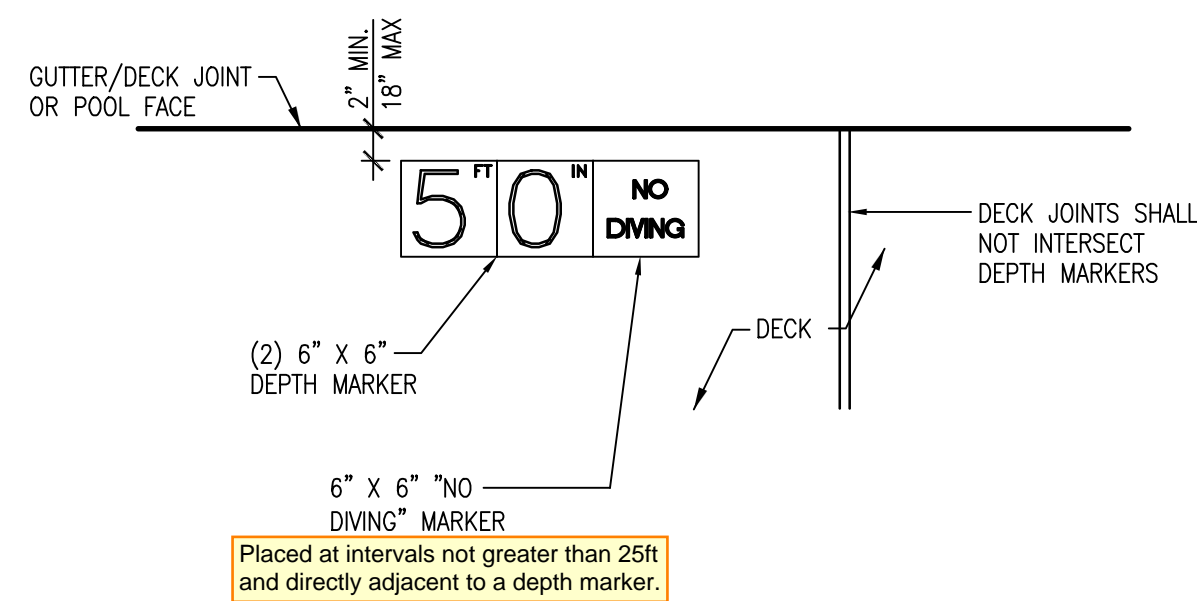
UNDERWATER LIGHT DETAIL

NTS 5/3/3



STEP EDGE DETAIL

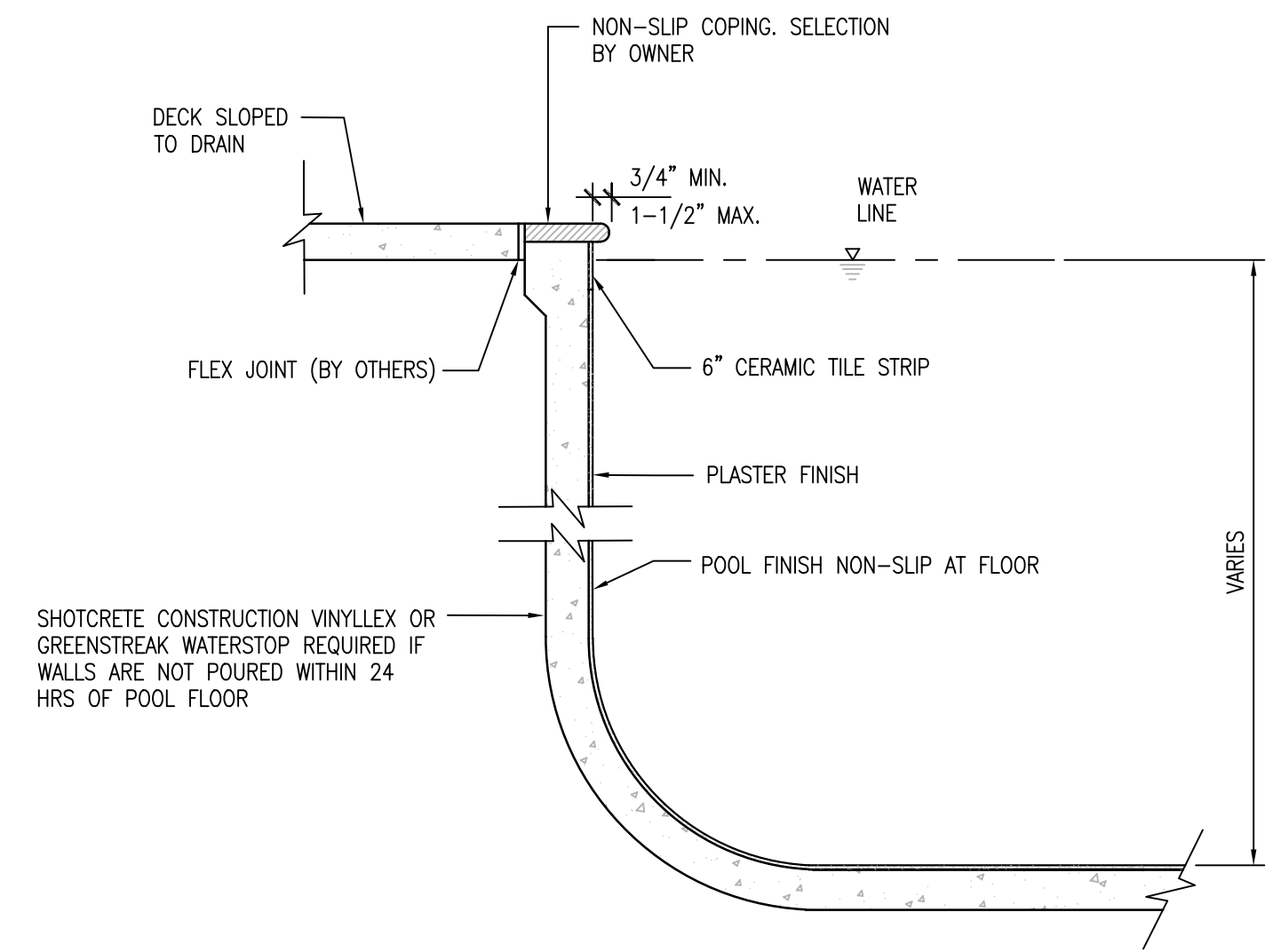
NTS 3/3/3



- NOTES:
- DEPTH SHALL BE VERIFIED BY CONTRACTOR AND MARKERS SHALL BE INSTALLED TO TO INDICATE ACTUAL DEPTH OF WATER.
 - DEPTH MARKERS SHALL BE SPACED AT NOT MORE THAN 25'-0" INTERVALS MEASURED PERIPHERALLY. REFER TO PLAN FOR APPROXIMATE LOCATION.
 - TILES SHALL BE RECESSED SO THAT THE FACE OF THE TILE IS FLUSH WITH THE FINISHED SURFACE.
 - DEPTH AND "NO DIVING" MARKERS SHALL BE 6" X 6", WHITE, NON-SLIP TILE WITH 4" HIGH BLACK NUMERALS OR RED INTERNATIONAL "NO DIVING" SYMBOL.
 - DIMENSION OF TILE DEPTH MARK ON GUTTER/DECK JOINT OR POOL FACE TO BE SAME, 6" X 6".

DEPTH MARKER DETAIL

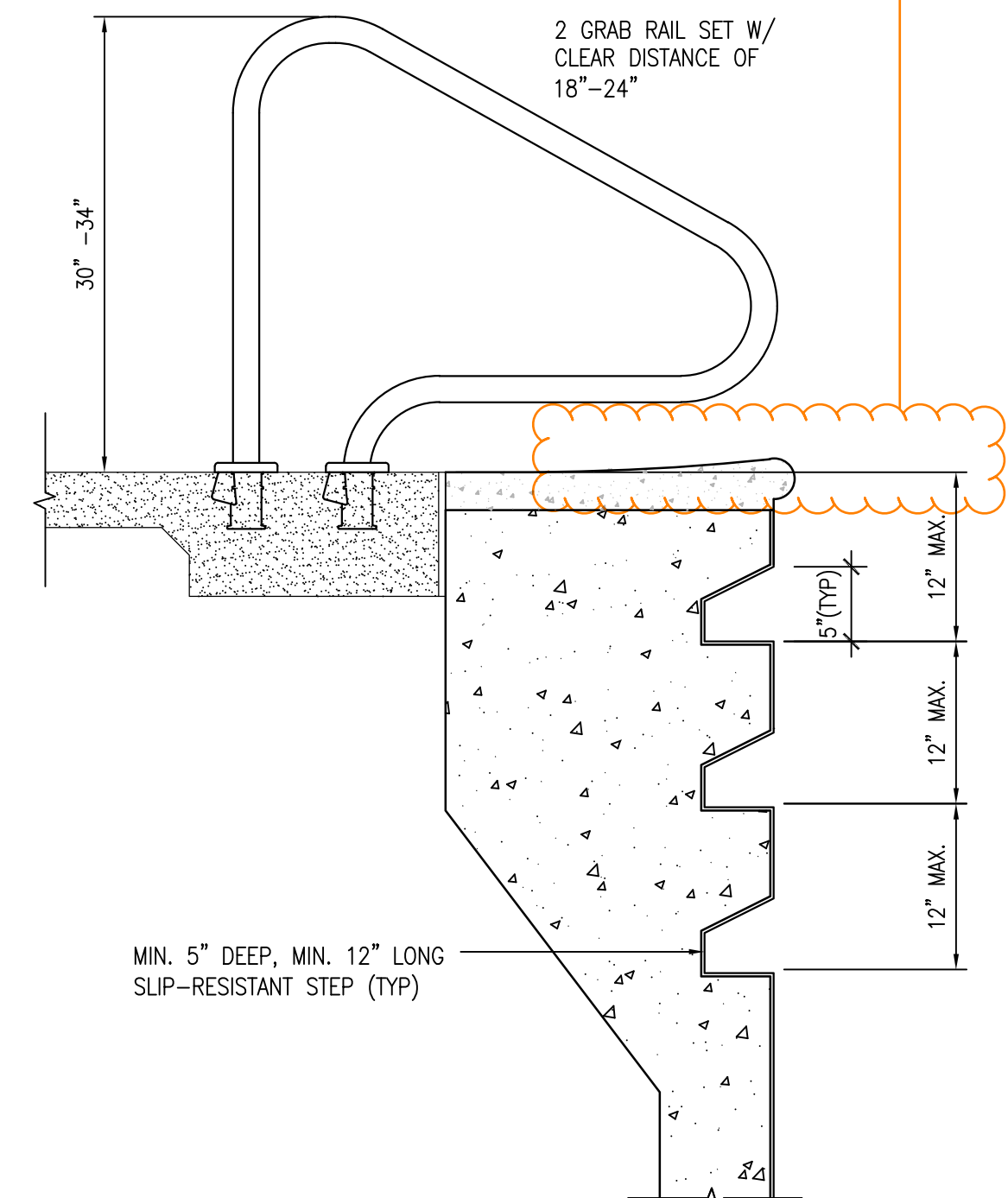
1/4" = 1'-0" 6/3/3



POOL EDGE DETAIL

NTS 1/3/3

The vertical distance between the pool coping edge, deck, or step surface and the uppermost recessed tread shall be not greater than 12 inches. This detail shows the coping curving upwards; therefore the 12" maximum dimension to the first step should be from the highest point of the coping edge.



GRAB RAIL AND STEPS

NTS 7/3/3

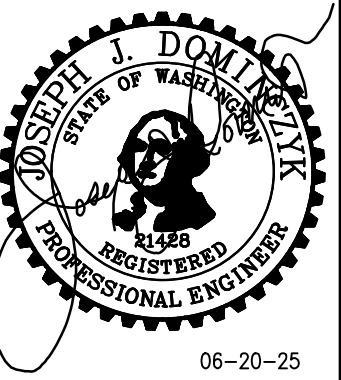
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06-20-25

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(253) 840-9292

CLIENT

ROYAL VALLEY
BREMERTON, WA
POOL DETAILS

PROJECT

DATE 06-20-25

DRAWN J.M.A.

DESIGNED J.J.D.

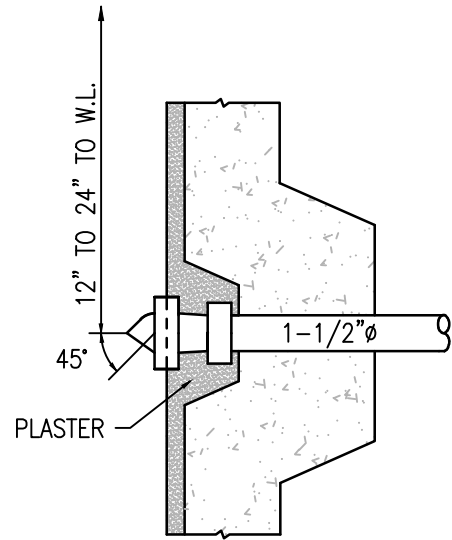
APPROVED J.J.D.

PROJECT NO. 2252800

SHEET NO.

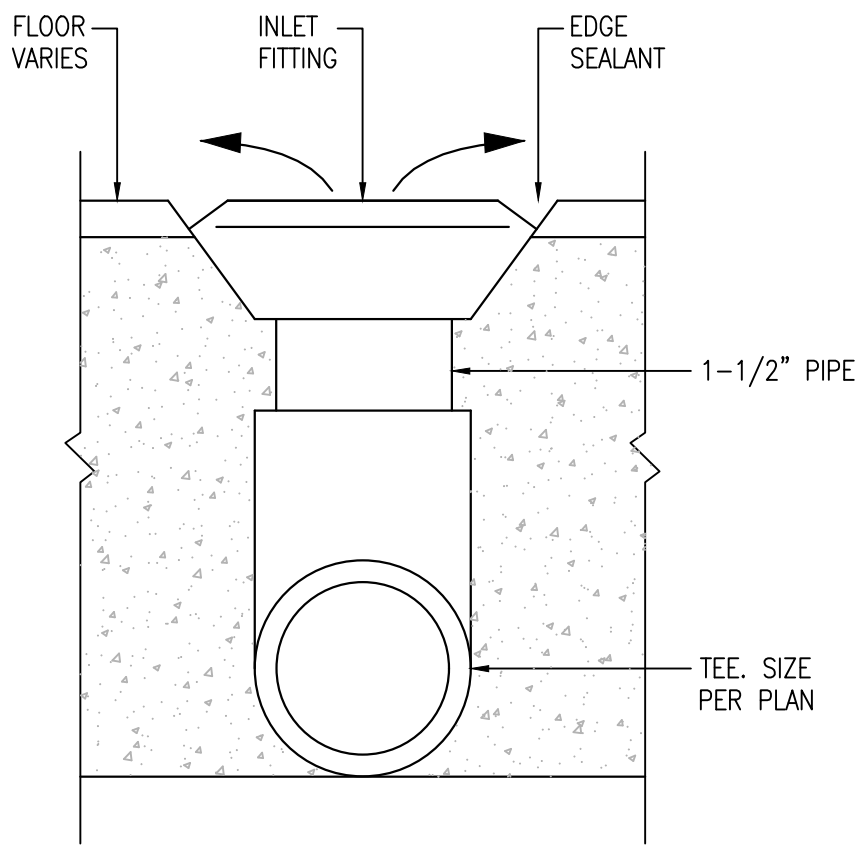
SP3

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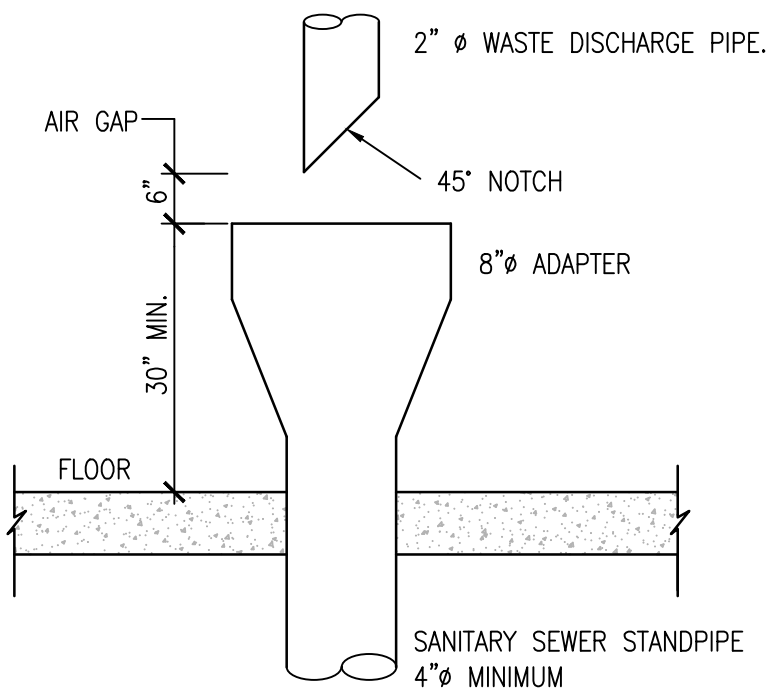
WALL INLET DETAIL

NTS 1/4 4



FLOOR INLET DETAIL

NTS 2/4 4



NOTE:

1. INCLUDE P-TRAP ON SEWER STANDPIPE.
2. POOL WATER TO BE DECHLORINATED TO A CONCENTRATION OF 0.1 PARTS PER MILLION OR LESS AND pH-ADJUST WATER IF NECESSARY PRIOR TO DISCHARGE TO SANITARY SEWER. MAXIMUM DISCHARGE RATE APPROXIMATELY 10 GPM.

WASTE DISCHARGE

NTS 3/4 4

POOL RULES

WHEN LIFEGUARDS OR ATTENDANTS ARE NOT PRESENT:

- CHILDREN AGE 12 AND UNDER NEED TO BE ACCOMPANIED BY A RESPONSIBLE ADULT (AGE 18 & OVER) AT ALL TIMES THE CHILD IS AT THE POOL
- BATHERS AGE 13-17 MUST NOT USE POOL ALONE
- EVERYONE MUST TAKE A CLEANSING SHOWER BEFORE USING POOL
- BATHERS WEARING DIAPERS NEED TO HAVE TIGHT FITTING PROTECTIVE COVERINGS
- DIAPERS MUST BE CHANGED IN DESIGNATED DIAPER CHANGING AREA OR RESTROOMS
- IF YOU HAVE A COMMUNICABLE DISEASE THAT CAN BE TRANSMITTED BY WATER OR HAVE BEEN ILL WITH DIARRHEA OR VOMITING IN THE LAST TWO WEEKS, DO NOT USE THE POOL
- BATHERS WITH SEIZURE, HEART OR CIRCULATORY PROBLEMS ARE ADVISED TO SWIM WITH A BUDDY
- DO NOT USE POOL WHEN UNDER THE INFLUENCE OF ALCOHOL OR DRUGS
- NO RUNNING ON DECK OR HORSEPLAY IN THE POOL
- NO FOOD OR DRINKS ARE ALLOWED IN THE POOL WATER
- PERSONS FAILING TO FOLLOW RULES ARE SUBJECT TO REMOVAL FROM THE PREMISES

MAXIMUM BATHER CAPACITY: _____

IN AN EMERGENCY CALL 911

CLOSEST PHONE FOR EMERGENCY USE IS LOCATED AT: _____

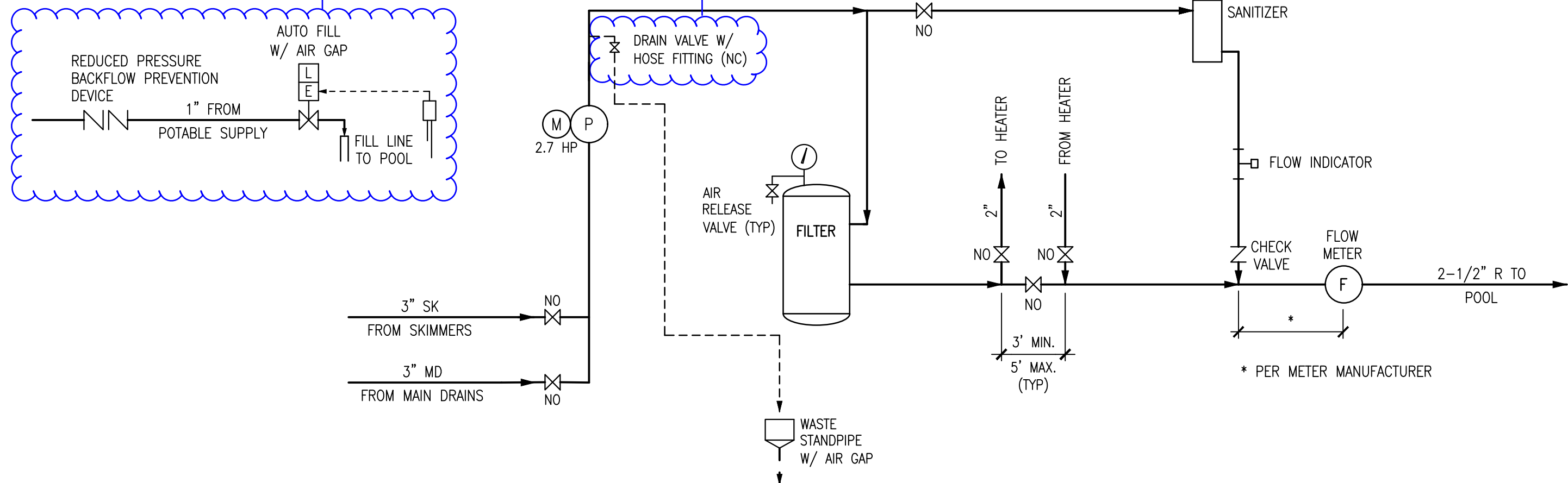
FIRST AID KIT LOCATED AT: _____

POOL RULES

NTS 6/4 4

Correlate supply piping to existing utilities installed under East Town Crossing Phase 2 civil plans. Consider adding the water meter to the diagram and indicate whether the proposed RPBA has been installed by others or going to be installed with this proposal.

Draining of the pool shall comply with applicable county health department requirements. Moreover, pool water shall be dechlorinated and have a neutral PH prior to entering a storm sewer system. Indicate how the pool water will be dechlorinated and neutralized prior to discharging to the sanitary sewer system.



POOL PIPING SCHEMATIC

NTS 4/4 4

LEGEND	
(P)	PUMP
(M)	ELECTRIC MOTOR
(F)	FLOW METER
(X)	MANUAL VALVE (NO = NORMALLY OPEN) (NC = NORMALLY CLOSED)
(E)	ELECTRICALLY OPERATED VALVE
(S)	SENSOR
(T)	THERMOMETER
(L)	LEVEL CONTROLLED
(I)	PRESSURE GAUGE
(Z)	CHECK VALVE

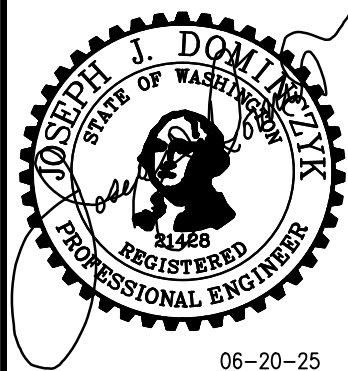
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ROYAL VALLEY
BREMERTON, WA

POOL DETAILS

DATE	06-20-25
DRAWN	J.M.A.
DESIGNED	J.J.D.
APPROVED	J.J.D.
PROJECT NO.	2252800
SHEET NO.	

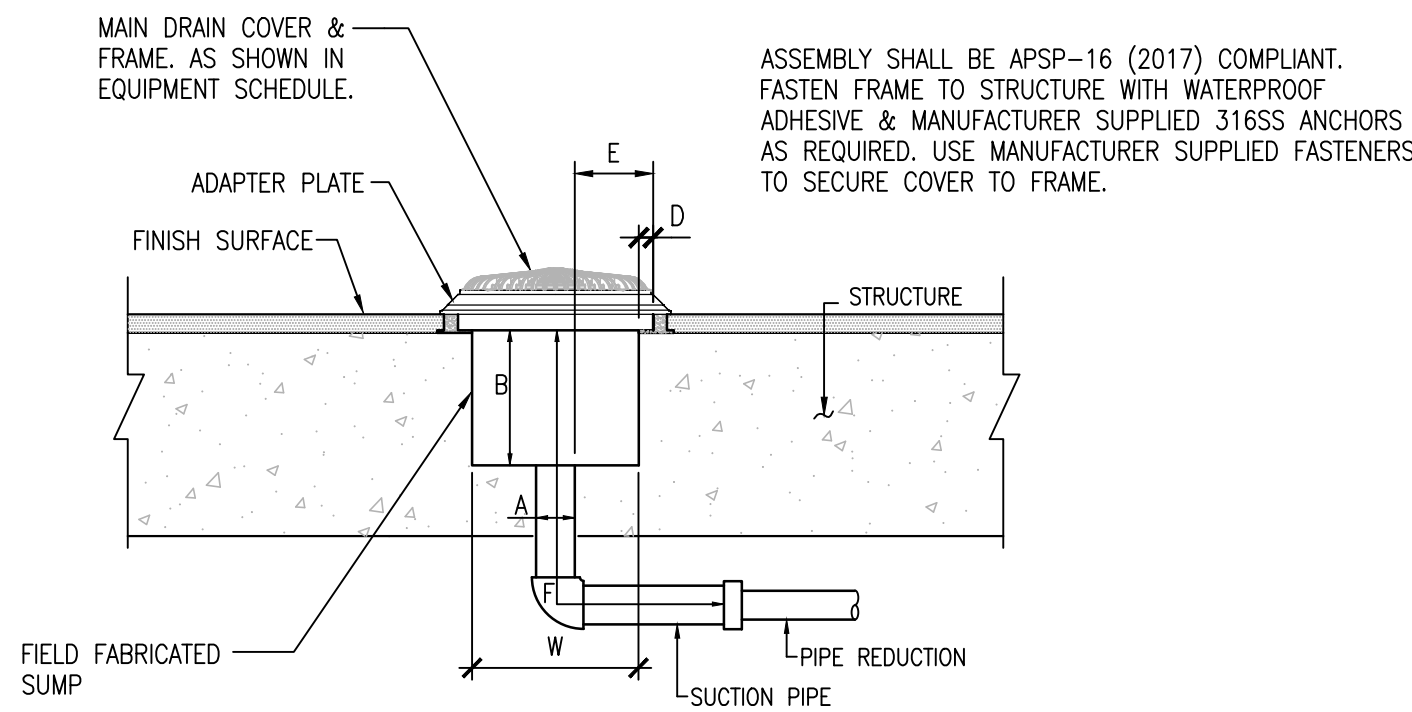
SP4

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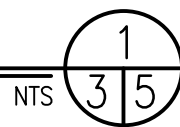
PARAMETER	POOL RECIRCULATION
A - MANIFOLD PIPE DIAMETER (INCHES)	3
B - SUMP DEPTH (INCHES)	2 MIN. (4.5 PREFERRED)
E - MINIMUM PIPE OFFSET (INCHES)	2.5
F - LENGTH BEFORE PIPE REDUCTION (INCHES)	16 MIN.
W - SUMP OPENING (INCHES)	8-3/4 ROUND
SUMP TYPE	FIELD FABRICATED
SUCTION COVER	PARAMOUNT SDX2
COVER OPEN AREA (SQ. INCHES)	43.2
NUMBER OF COVERS	2 FLOOR
TOTAL COVER OPEN AREA (SQ. INCHES)	86.4
CERTIFIED MAXIMUM FLOW CAPACITY (GPM) BASED ON PIPE ORIENTATION IN SUMP	178
DESIGN FLOW (GPM) (100% PER COVER)	110
APSP-7 DESIGN FLOW (100% PER COVER) (GPM)	110
VELOCITY AT APSP-7 FLOW THROUGH COVER (FPS)	0.82
MANIFOLD VELOCITY AT APSP-7 FLOW (FPS)	4.8

NOTES:

1. MAIN DRAIN LOCATED AT LOWEST POINT IN POOL.
2. MANIFOLD EXTENDS FROM COVER CONNECTION TO COVER CONNECTION INCLUDING THE TEE FITTING.
3. CONTRACTOR TO CONFIRM PUMP FLOWS AFTER COMPLETION OF WORK TO VERIFY VALUES ABOVE ARE NOT EXCEEDED.



POOL L MAIN DRAIN DETAIL



CONFORMANCE

All material and construction methods shall conform to Chapter 246-260 WAC, "Water Recreation Facilities" published by the Washington State Department of Health, 2021 International Building Code, International Electrical Code and International Building Code, International Mechanical Code, 2017 ICC A117.1, 2010 ASCE 7-10, 2021 Washington State Energy Code, latest editions, as modified by the local agency having jurisdiction. Comply with IBC Sections 1910.4.3, 1910.5, 1910.9 and 1910.10.

CONCRETE

Shotcrete: 1 part cement, 4-1/2 parts sand, based on dry and loose volume; 4,000 psi @ 28 days. Portland Cement Type I or II, ASTM C-150, seven sack mix.

REINFORCEMENT

Reinforcing steel, deformed intermediate grade, fy = 40,000 psi. ASTM A-15, Lap splices 40 diameters; support on concrete blocks and tie with 16 gage annealed wire; 2" minimum cover between earth and steel. Non-contact splices - minimum 2 inch clear between bars. Contact splices must be constructed with the bars aligned so that a line through the center of the two spliced bars is perpendicular to the surface of the surface of the surface of the shotcrete work.

CONSTRUCTION

Maximum length of pool without control joint is 60'-0". Shotcrete is to be placed monolithic and pneumatically.

BARRIERS

- Barrier protection shall be provided to prevent unauthorized access to pool facilities including:
1. Owners shall provide barriers to prevent unauthorized persons from gaining access to pools. Spray pool facilities without standing water are exempt from barrier requirements of this section.
 2. Barriers at limited use pools must be at least sixty inches high.
 3. Barriers at general use pools must be at least seventy-two inches high.
 4. Barriers, including windows, may not:
 - a. Have spaces between vertical members greater than a width of one and three-quarter inches if the distance between the tops of horizontal members are spaced less than forty-five inches apart.
 5. Solid barriers may not have indentations or protrusions, other than normal construction tolerances and masonry joints.
 6. Barriers must have self-closing, self-latching gates or doors that provide either:
 - a. A mechanism that uses a continuously locked latch, coded lock or
 - b. other equivalent access control system that always requires a key or code to enter pool area. If the latch is less than sixty inches from the ground, the barrier must have an eighteen-inch radius of solid material around the latch to preclude a child on the outside of the barrier from reaching through the gate or barrier and opening the latch and entering the pool; or a latch height of sixty inches or more from the ground.
 7. Restricted area service entrances are exempt from door or gate requirements provided that no public access is available.
 8. Lifeguarded pools are not required to have a self-closing, self-latching gate during the period a pool is in use. Facility gates shall be closed and locked during nonuse periods. Barrier heights are measured on the side outside the pool enclosure area.
 9. Owners shall ensure that surrounding ground levels, structures, or landscaping do not reduce the effective height of the barrier.

STEPS

Edge of pool steps shall be of contrasting color from body of pool. Steps shall be of non-slip tread finish. Steps shall have a minimum ten inch unobstructed, horizontal tread depth and a minimum two-hundred forty square inch surface area. Pool risers shall have an uniform height between 7.5 inches (preferred) and 10 inches, except for the bottom riser which may be plus or minus 2 inches of the uniform height. Spa risers shall be similar to those for the pools, except for the bottom riser which may be less than uniform height. See Pool/Spa Section or Step Detail for step requirements.

BONDING

All metallic components of the pool shall be bonded and grounded in conformance to the National Fire Protection Association Electrical Code section 680.26(B).

OPERATION OF POOL

It is the owner's responsibility to operate in compliance with rules and regulations of the Washington State Department of Health.

DISABILITY ACCESS

Provide "person with disability" access per applicable regulations.

DRINKING FOUNTAINS

Provide drinking fountains per Architectural Plans. (By Others) Note: See Architectural Plans for Building, Fence, Electrical, Ventilation and Mechanical Details.

BACKFLOW PREVENTION

Provide non-atmospheric backflow prevention devices on plumbing fixtures connected to the potable water system which serve the pool related facilities.

INSULATION

Provide insulation on exposed recirculation system within the contained space per WSEC Section 403.2.9 for pools and spas heated to greater 95° F. Pool design temperature = 83°F.

ENERGY CODE

Provide pool/spa equipment, covers, piping insulation, motors, etc. in accordance with the applicable portions of WSEC Sections C404.11.1 through C404.11.4

C404.10.1 Heaters. Heat pump pool heaters shall have a minimum COP of 4.0 determined in accordance with ASHRAE Standard 146. Other pool heating equipment shall comply with the applicable efficiencies in Section C404.2. The electric power to all heaters shall be controlled by a readily accessible on-off switch that is an integral part of the heater, or external to and within 3 feet of the heater. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater. Gas fired heaters shall not be equipped with constant burning pilot lights.

C404.10.2 Time Switches. Time switches or other control method that can automatically turn off and on heaters and pump motors according to a preset schedule shall be installed for heaters and pump motors. Heaters and pump motors that have built in time switches shall be in compliance with this section.

Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Pumps that are required to operate solar-and-waste-heat-recovery pool heating systems.

C404.10.3 Covers. Heated pools and in-ground permanent spas shall Pools heated to more than 90°F shall have a pool cover with a minimum insulation value of R-12, and the sides and bottom of the pool shall also have a minimum insulation value of R-12.

C404.10.4 Heat Recovery. Heated indoor swimming pools, spas or hot tubs with water surface area greater than 200 square feet shall provide for energy conservation by an exhaust air heat recovery system that heats ventilation air, pool water or domestic hot water. The heat recovery system shall be configured to decrease the exhaust air temperature at design heating conditions (80°F indoor) by 36°F (10°C).

Exception: Pools, spas or hot tubs that include system(s) that provide equivalent recovered energy on an annual basis through one of the following methods:

1. Renewable energy;
2. Dehumidification heat recovery;
3. Waste heat recovery; or
4. A combination of these system sources capable of and configured to provide at least 70 percent of the heating energy required over an operating season.

C404.13 Service water-heating system commissioning and completion requirements. Service water-heating systems, swimming pool water-heating systems, spa water-heating systems and the controls for those systems shall be commissioned and completed in accordance with Section C408.

PIPING

Plastic, 1-1/2" minimum diameter unless otherwise noted; Type 1 PVC Schedule 40, solvent weld. All piping must be bedded and backfilled per the manufacturer's recommendations.

HOSE BIBBS

Provide bibbs with vacuum breakers adjacent to walks. (By Others)

WASTE WATER

To be disposed of through air gap. The air gap shall be a minimum of two times the filter waste pipe diameter.

FLOOR DRAIN

Provide floor drain or equal with trap. Provide drain for backwash/waste line to terminate above grate, as noted above.

MAKE-UP WATER

If not otherwise provided for in the drawings, make-up water shall be provided by hose bibb located in pool deck area by Owner. Vacuum breaker protection shall be provided. Provide water supply to equipment room protected with state approved reduced pressure backflow prevention device.

LIGHTING

Provide not less than 30 foot-candles intensity measured at the surface of indoor pools and spas; 10 foot-candles for outdoor facilities; 10 foot-candles for pool deck; 20 foot-candles for locker rooms, equipment rooms and restrooms. Provide protective shielding. Indoor pools shall have emergency lighting per UL 924. (By Others)

VENTILATION/HEATING/COOLING (As Applicable)

Provide ventilation conforming to the ASHRAE pool facility standards for indoor facilities. Provide heating and cooling per state energy code and other agencies. (By Others - See Mechanical Plans)

SHOWER FACILITY

Provide means to prevent maximum temperature from exceeding 110° F. (By Others)

EMERGENCY EQUIPMENT

During the period the facility is open for use, the following is required:

1. Telephone within one minute access.
2. Standard 16 unit first-aid kit and blanket reserved for emergency use.
3. Provision of a clearly marked emergency shut off switch for turning off all pumps. Switch shall be equipped with an audible alarm to alert others at the area of the facility. The switch shall be accessible to the public and located within 15 feet of the spa.

SIGNAGE AND TESTING EQUIPMENT

Provide signage and testing equipment in conformance with applicable regulations.

EQUIPMENT

Proper housing to protect equipment shall be provided. Provide combustion air and venting of combustion gasses per manufacturer's requirement and codes (By Others - See Mechanical Plans).

CHEMICAL STORAGE

Store chemicals in accordance with the manufacturer's requirements to minimize health and safety risks. Ensure proper hazard placards are posted on the exterior door to the chemical storage area. Provide separate room from pool equipment room when feasible.

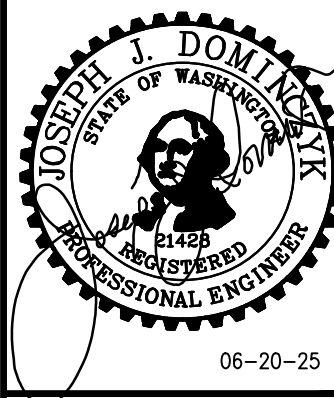
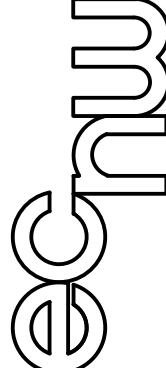
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CLIENT

ROYAL VALLEY
BREMERTON, WA

POOL DETAILS AND NOTES

PROJECT

DATE

06-20-25

DRAWN

J.M.A.

DESIGNED

J.J.D.

APPROVED

J.J.D.

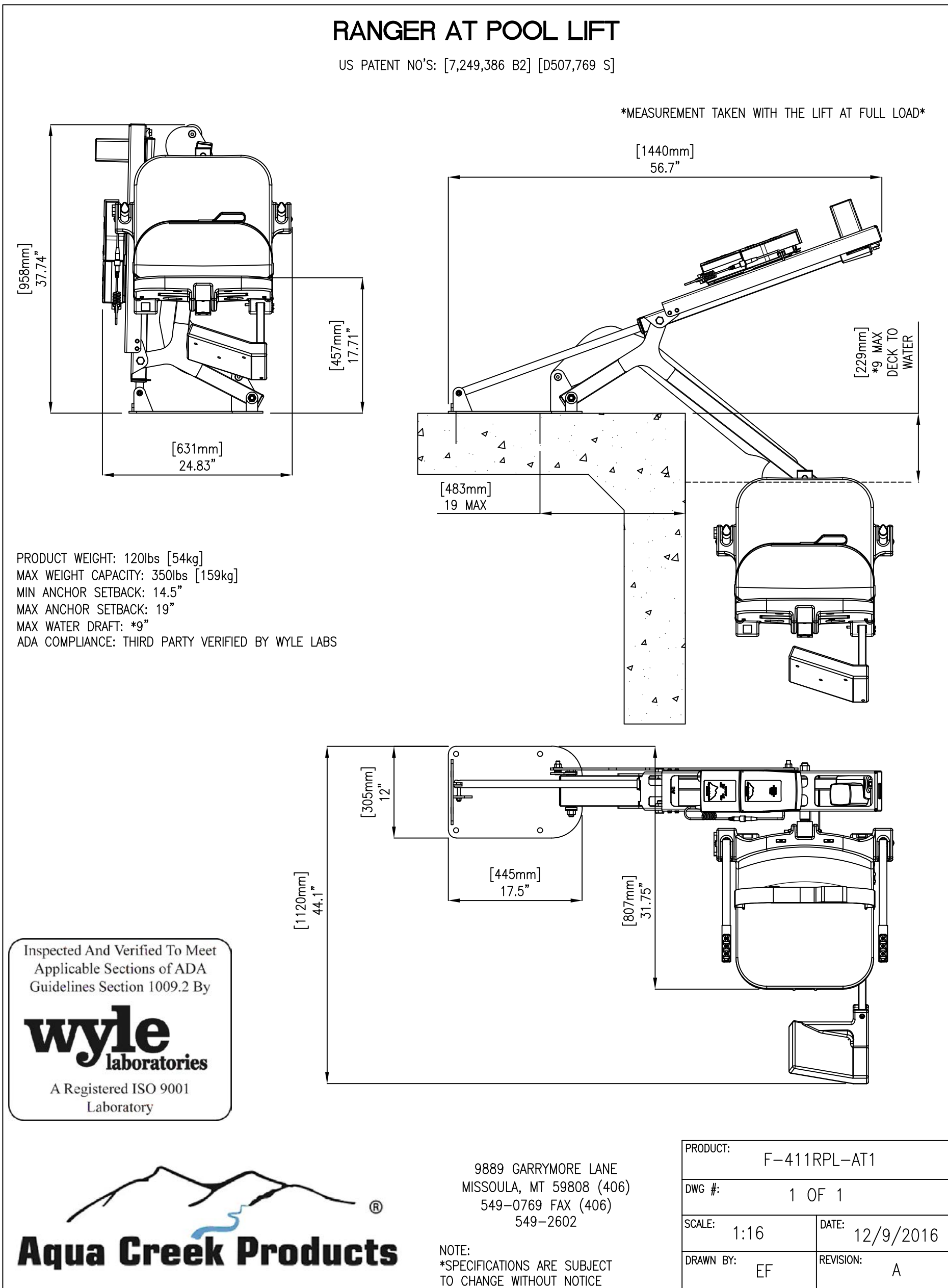
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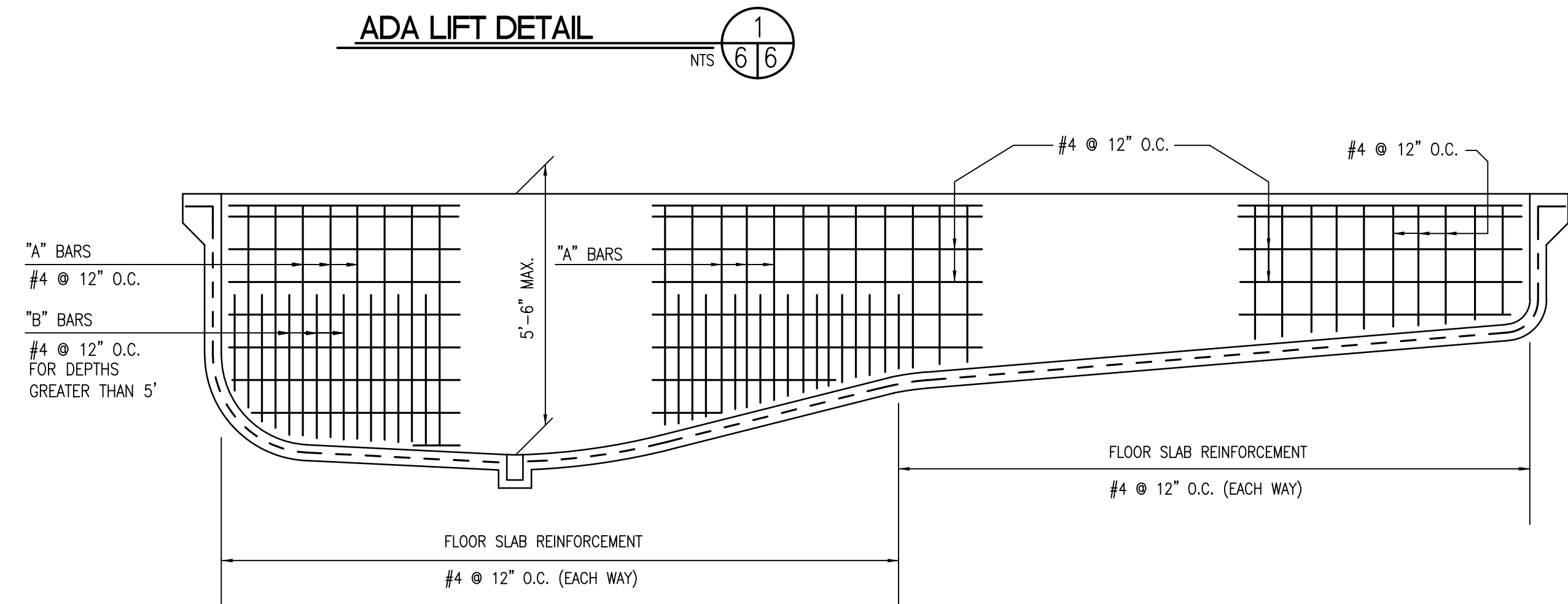
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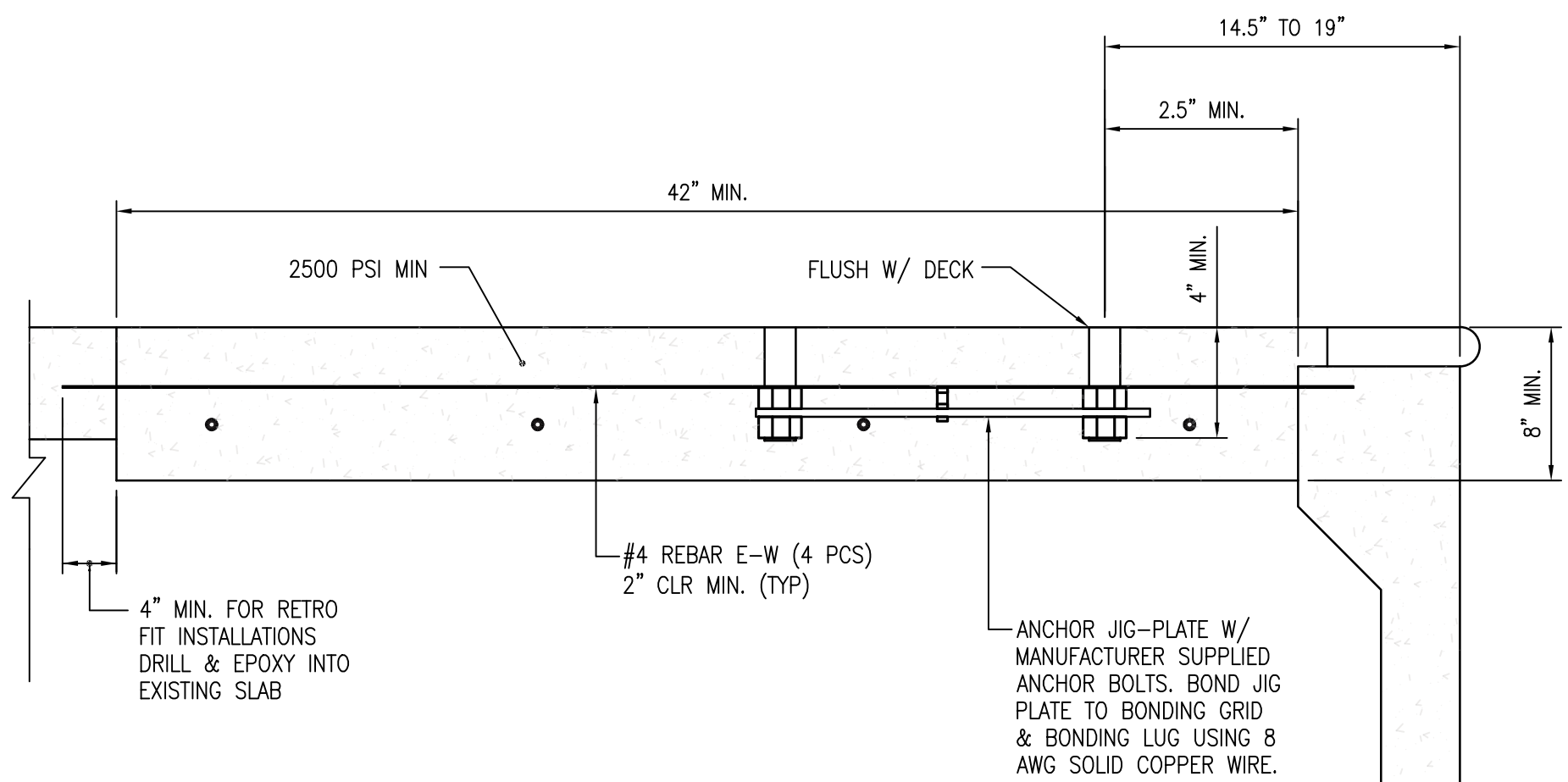


Pool and spa lifts providing an accessible means of entry into the water shall be listed and labeled in accordance with UL 60335-2-1000 and be installed in accordance with ICC A117.1 and NFPA 70.



STRUCTURAL SECTION

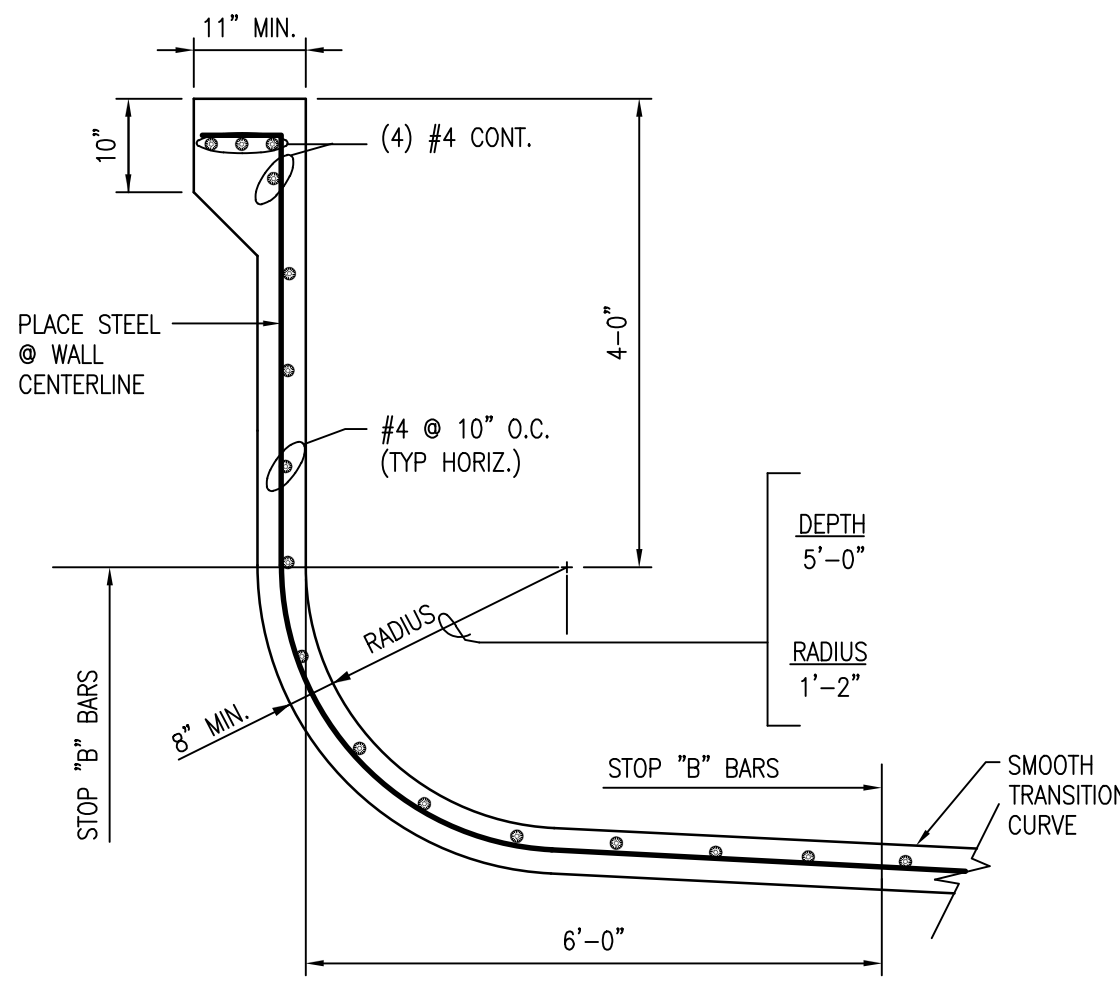
NTS 3/6/6



ADA LIFT SUPPORT

NTS 2/6/6

SPECIAL INSPECTION REQUIREMENTS			
OPERATION	CONTINUOUS	PERIODIC	REMARKS
INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT		X	
INSPECT CONCRETE & SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X		
NOTE: ALL ITEMS MARKED SHALL BE INSPECTED IN ACCORDANCE WITH IBC CHAPTER 17. THE ENGINEER AND BUILDING OFFICIAL SHALL BE FURNISHED WITH COPIES OF ALL RESULTS. ANY INSPECTION FAILING TO MEET THE PROJECT SPECIFICATIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DESIGN TEAM.			



POOL WALL SECTION

NTS A/6/6

GENERAL NOTES

CONFORMANCE

All material and construction methods shall conform to Chapter 246-260 WAC, "Water Recreation Facilities" published by the Washington State Department of Health, 2021 International Building Code, International Electrical Code and International Building Code, International Mechanical Code, 2017 ICC A117.1, 2010 ASCE 7-10, 2021 Washington State Energy Code, latest editions, as modified by the local agency having jurisdiction. Comply with IBC Sections 1910.4.3, 1910.5, 1910.9 and 1910.10.

CONCRETE

Shotcrete: 1 part cement, 4-1/2 parts sand, based on dry and loose volume; 4,000 psi @ 28 days. Portland Cement Type I or II, ASTM C-150, seven sack mix.

REINFORCEMENT

Reinforcing steel, deformed intermediate grade, fy = 40,000 psi, ASTM A-15. Lap splices 40 diameters; support on concrete blocks and tie with 16 gage annealed wire; 2" minimum cover between earth and steel. Non-contact splices - minimum 2 inch clear between bars. Contact splices must be constructed with the bars aligned so that a line through the center of the two spliced bars is perpendicular to the surface of the surface of the surface of the shotcrete work.

CONSTRUCTION

Maximum length of pool without control joint is 60'-0". Shotcrete is to be placed monolithic and pneumatically.

BARRIERS

Barrier protection shall be provided to prevent unauthorized access to pool facilities including:

- Owners shall provide barriers to prevent unauthorized persons from gaining access to pools. Spray pool facilities without standing water are exempt from barrier requirements of this section.
- Barriers at limited use pools must be at least sixty inches high.
- Barriers at general use pools must be at least seventy-two inches high.
- Barriers, including windows, may not:
 - Have spaces between vertical members greater than a width of one and three-quarter inches if the distance between the tops of horizontal members are spaced less than forty-five inches apart.
- Solid barriers may not have indentations or protrusions, other than normal construction tolerances and masonry joints.
- Barriers must have self-closing, self-latching gates or doors that provide either:
 - A mechanism that uses a continuously locked latch, coded lock or
 - other equivalent access control system that always requires a key or code to enter pool area. If the latch is less than sixty inches from the ground, the barrier must have an eighteen-inch radius of solid material around the latch to preclude a child on the outside of the barrier from reaching through the gate or barrier and opening the latch and entering the pool; or a latch height of sixty inches or more from the ground.
- Restricted area service entrances are exempt from door or gate requirements provided that no public access is available.
- Lifeguarded pools are not required to have a self-closing, self-latching gate during the period a pool is in use. Facility gates shall be closed and locked during nonuse periods. Barrier heights are measured on the side outside the pool enclosure area.
- Owners shall ensure that surrounding ground levels, structures, or landscaping do not reduce the effective height of the barrier.

BONDING

All metallic components of the pool shall be bonded and grounded in conformance to the National Fire Protection Association Electrical Code section 680.26(B).

DISABILITY ACCESS

Provide "person with disability" access per applicable regulations.

BACKFLOW PREVENTION

Provide non-atmospheric backflow prevention devices on plumbing fixtures connected to the potable water system which serve the pool related facilities.

INSULATION

Provide insulation on exposed recirculation system within the contained space per WSEC Section 403.2.9 for pools and spas heated to greater 95° F. Pool design temperature = 83°F.

ENERGY CODE

Provide pool/spa equipment, covers, piping insulation, motors, etc. in accordance with the applicable portions of WSEC Sections C404.11.1 through C404.11.4.

C404.10.1 Heaters. Heat pump pool heaters shall have a minimum COP of 4.0 determined in accordance with ASHRAE Standard 146. Other pool heating equipment shall comply with the applicable efficiencies in Section C404.2. The electric power to all heaters shall be controlled by a readily accessible on-off switch that is an integral part of the heater, or external to and within 3 feet of the heater. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater. Gas fired heaters shall not be equipped with constant burning pilot lights.

C404.10.2 Time Switches. Time switches or other control method that can automatically turn off and on heaters and pump motors according to a preset schedule shall be installed for heaters and pump motors. Heaters and pump motors that have built in time switches shall be in compliance with this section.

Exceptions:

- Where public health standards require 24-hour pump operation.
- Pumps that are required to operate solar-and-waste-heat-recovery pool heating systems.

C404.10.3 Covers.

Heated pools and in-ground permanent spas shall Pools heated to more than 90°F shall have a pool cover with a minimum insulation value of R-12, and the sides and bottom of the pool shall also have a minimum insulation value of R-12.

C404.10.4 Heat Recovery.

Heated indoor swimming pools, spas or hot tubs with water surface area greater than 200 square feet shall provide for energy conservation by an exhaust air heat recovery system that heats ventilation air, pool water or domestic hot water. The heat recovery system shall be configured to decrease the exhaust air temperature at design heating conditions (80°F indoor) by 36°F (10°C).

Exception: Pools, spas or hot tubs that include system(s) that provide equivalent recovered energy on an annual basis through one of the following methods:

- Renewable energy;
- Dehumidification heat recovery;
- Waste heat recovery; or
- A combination of these system sources capable of and configured to provide at least 70 percent of the heating energy required over an operating season.

C404.13 Service water-heating system commissioning and completion requirements.

Service water-heating systems, swimming pool water-heating systems, spa water-heating systems and the controls for those systems shall be commissioned and completed in accordance with Section C408.

WASTE WATER

To be disposed of through air gap. The air gap shall be a minimum of two times the filter waste pipe diameter.

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SYSTEM COMMISSIONING			
DESCRIPTION	EQUIPMENT/FEATURE	TEST	BY
POOL RECIRCULATION PUMP	POOL RECIRCULATION PUMP	CONTINUOUS OPERATION DESIGN FLOW RANGE	POOL CONTRACTOR
WADER RECIRCULATION PUMP	WADER RECIRCULATION PUMP	CONTINUOUS OPERATION DESIGN FLOW RANGE	POOL CONTRACTOR
POOL HEATER	POOL HEATER	PILOT & SWITCH OPERATOR ACCESSIBLE SET POINT TEMP = 83°F CONTROLS INACCESSIBLE TO BATHERS	POOL CONTRACTOR
WADER HEATER	WADER HEATER	PILOT & SWITCH OPERATOR ACCESSIBLE SET POINT TEMP = 80°F CONTROLS INACCESSIBLE TO BATHERS	POOL CONTRACTOR
NOTE: REFERENCE WSEC SECTION 408 FOR COMMISSIONING.			

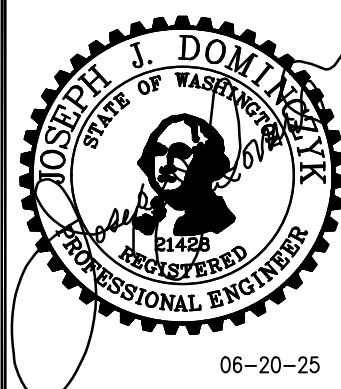
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SP6

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