

POOL: 14,355 sf 8 Lap Lanes

 Leisure:
 9,136 sf

 Zero Depth
 2,303 sf

 Teaching
 1,027 sf

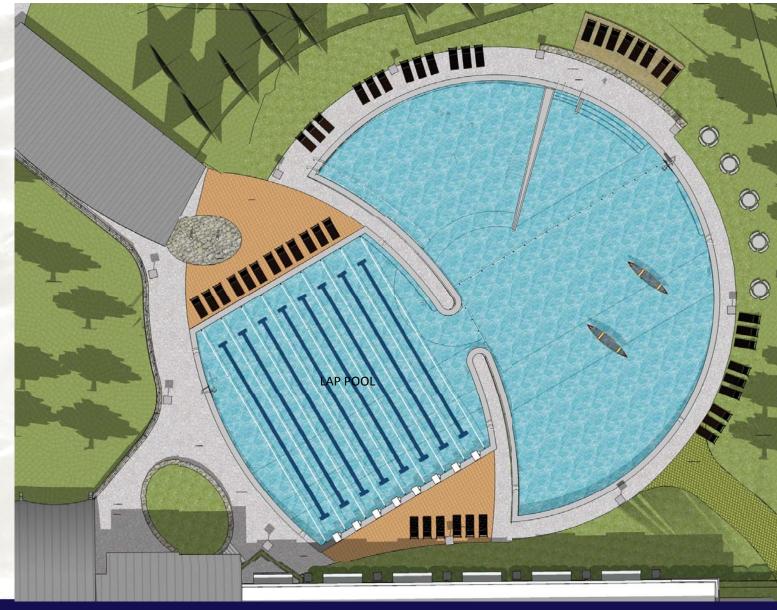
 Play
 2,580 sf

 Deep
 3,104 sf

 Ramp
 122 sf

Lap Lanes: 5,219 sf

POOL PLAN













TEACHING & ZERO DEPTH AREAS





















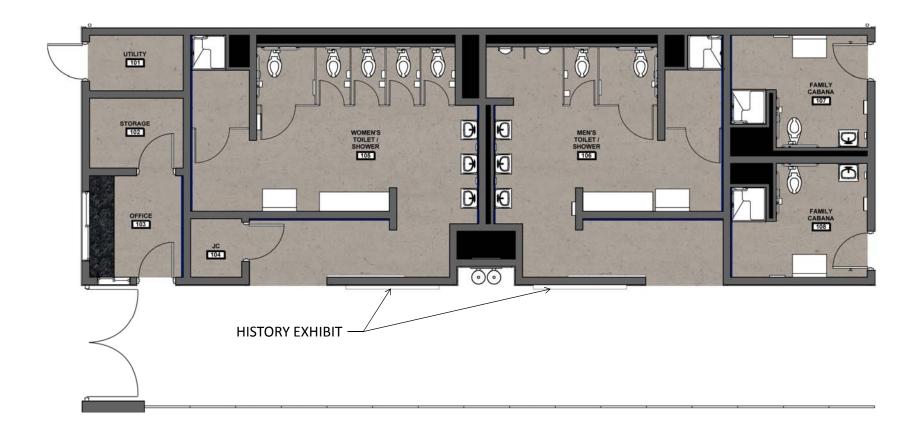
LAP POOL











BATHHOUSE FLOOR PLAN











BATHHOUSE PERSPECTIVE VIEW







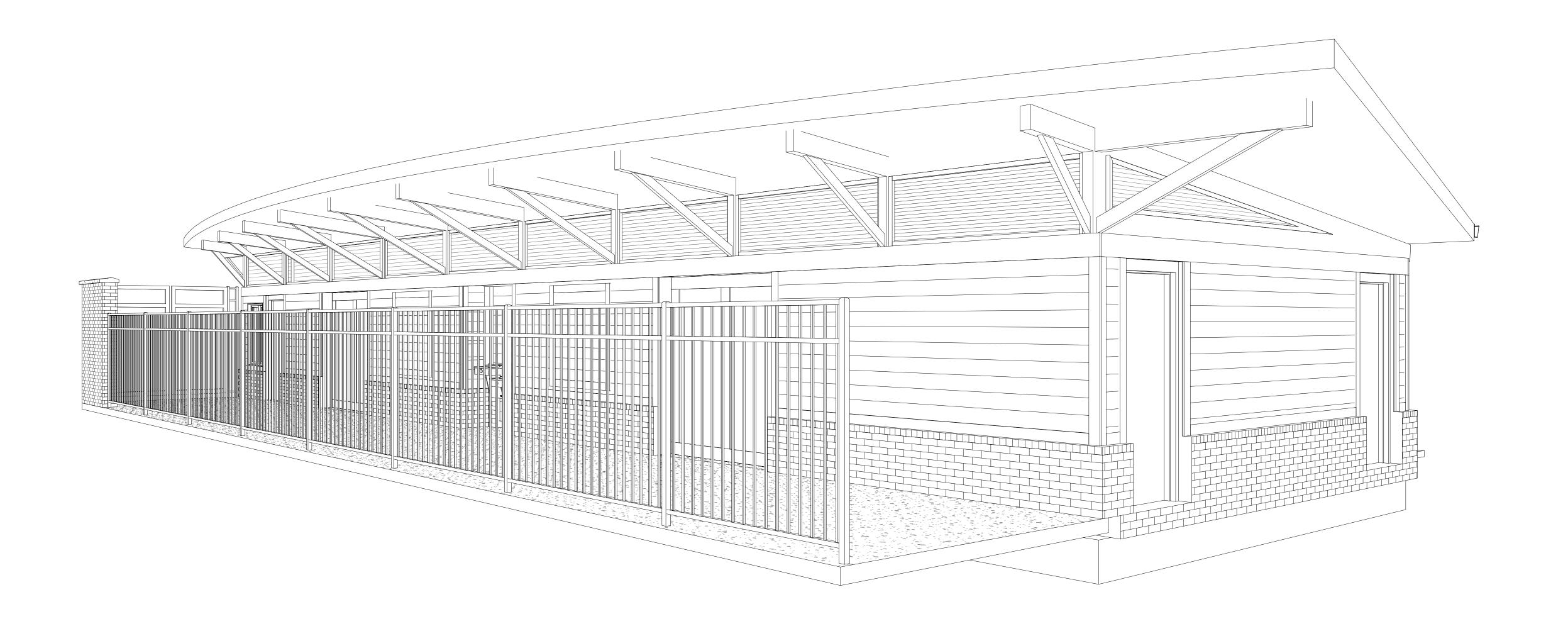


UNIVERSITY OF NEW HAMPSHIRE

HAMEL STUDENT RECREATION CENTER OUTDOOR POOL, BATH HOUSE & PUMP HOUSE

75% CD PROGRESS SET

JANUARY 16, 2015



UNIVERSITY ARCHITECT

UNIVERSITY OF NEW HAMPSHIRE 105 MAIN STREET DURHAM, NEW HAMPSHIRE 03824 TEL: 603-862-5052 CONTACT: DANA PETERSON, AIA

OWNER REPRESENTATIVE

HAMEL STUDENT RECREATION CENTER
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TEL: 603-862-2073
CONTACT: STACEY HALL

4

ARCHITECT

HUGHES GROUP ARCHITECTS 22630 DAVIS DRIVE, SUITE 175 STERLING, VIRGINIA 20164 TEL: 703-437-6600 CONTACT: J. LYNN REDA, AIA

3

STRUCTURAL - MEP - CIVIL - LANDSCAPE

OAK POINT ASSOCIATES
85 MIDDLE STREET
PORTSMOUTH, NEW HAMPSHIRE 03801
TEL: 603-431-1870
CONTACT: KENNETH WESTON

2

<u>AQUATICS</u>

WATER TECHNOLOGIES, INC. 100 PARK AVENUE BEAVER DAM, WISCONSIN 53916 TEL: 920-887-7375 CONTACT: SCOTT LeMONDS



JOOR POOL, BATH HOUSE &

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KEY PLAN

PROJECT NORTH

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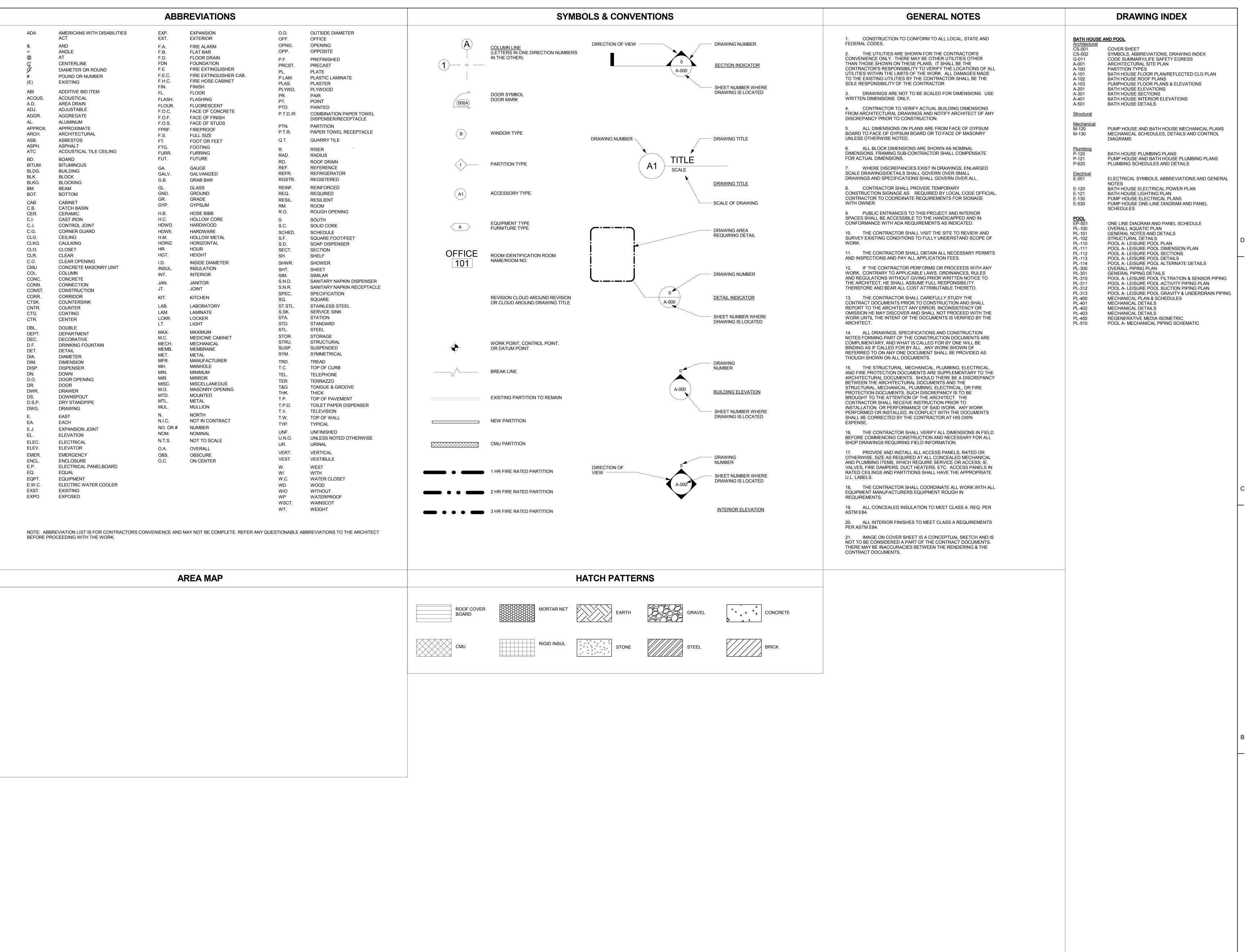
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DNH OUTDOOR POOL, BATH HOUSE & POMP HOUSE PUMP HOUSE PROJECT 128 MAIN ST. DURHAM. NH 03824

PROJECT NORTH

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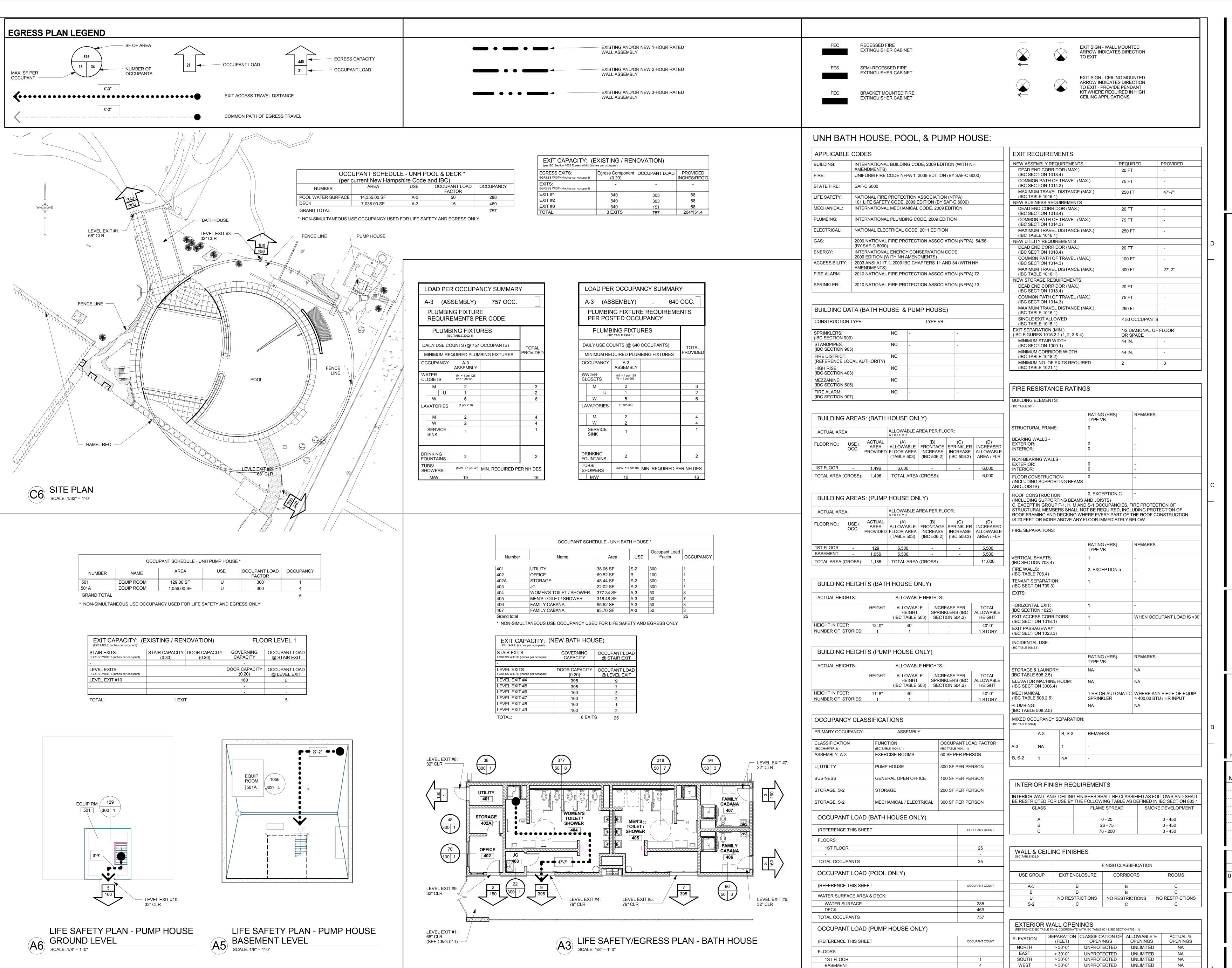
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DRAWING INDEX

CS-002

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1



1 3

4

TOTAL OCCUPANTS

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HUGHES GROUP

ARCHITECTS

22630 DAVIS DRIVE, SUITE 175

STERLING, VIRGINIA 20164
703.437.6600

UNH OUTDOOR POOL, BATH HOUSE 8

PUMP HOUSE

PROJECT 128 MAIN ST. DURHAM, NH 03824

BATH HOUSE

PROJECT NORTH

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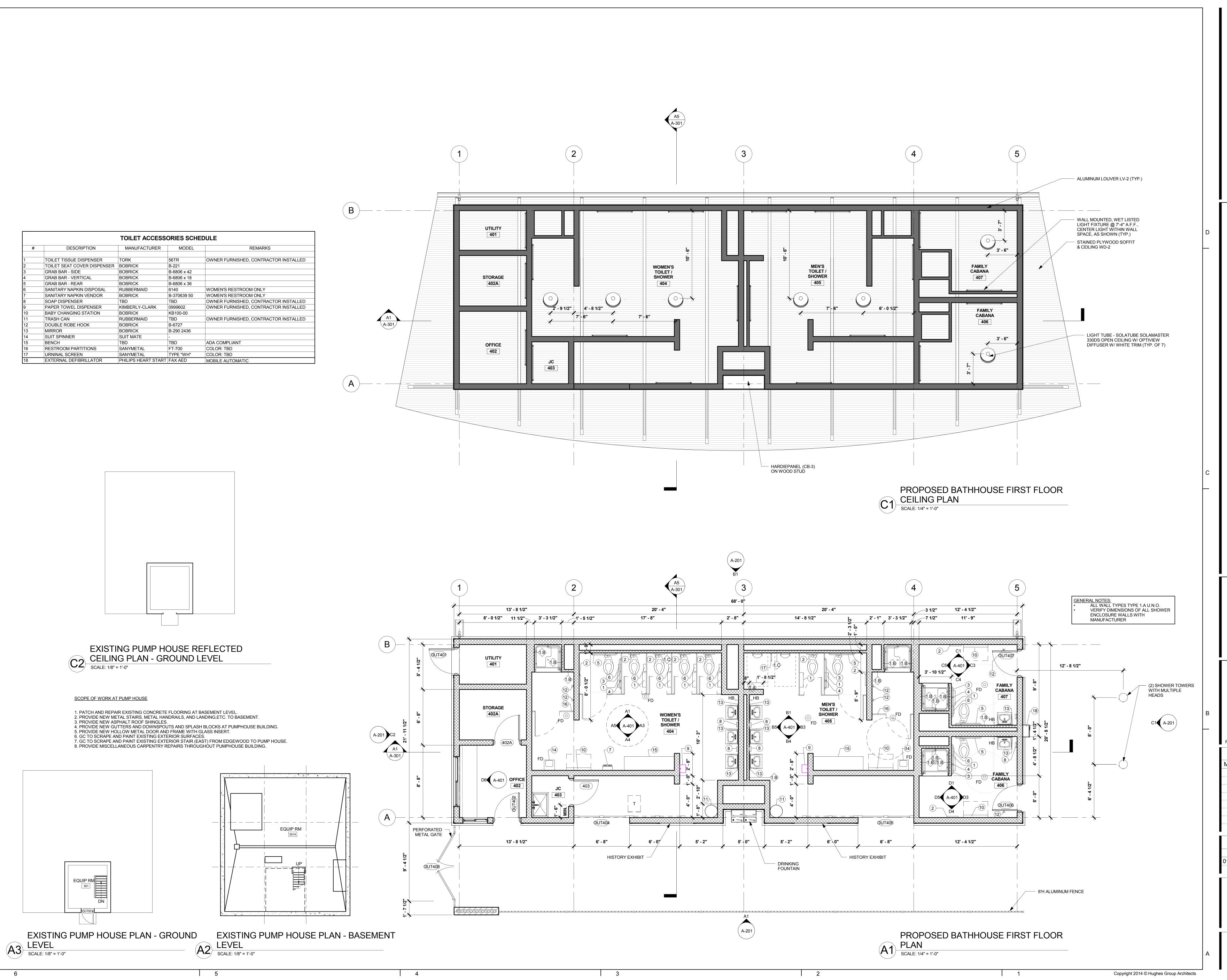
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CODE SUMMARY/LIFE SAFETY EGRESS

G-011

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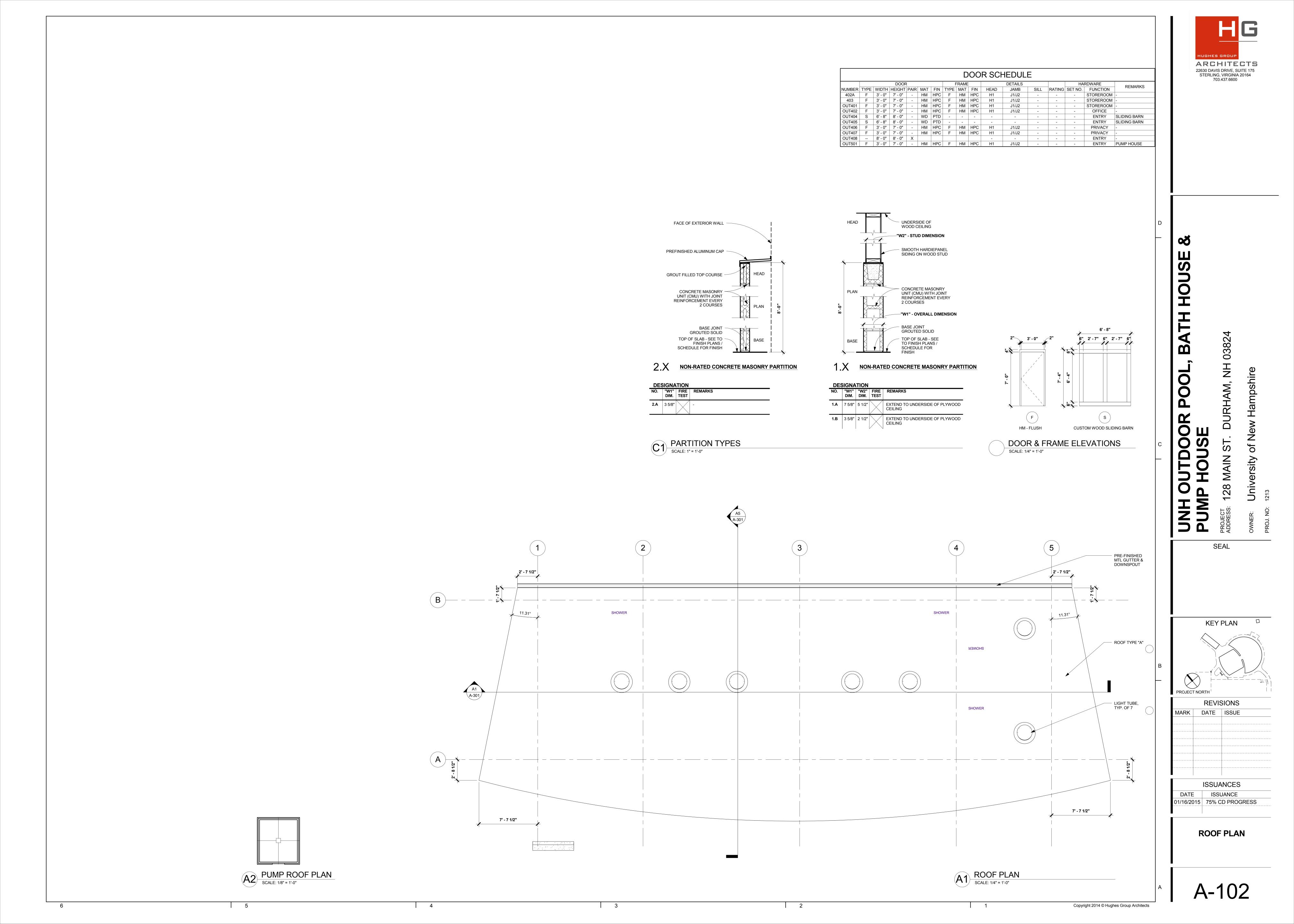
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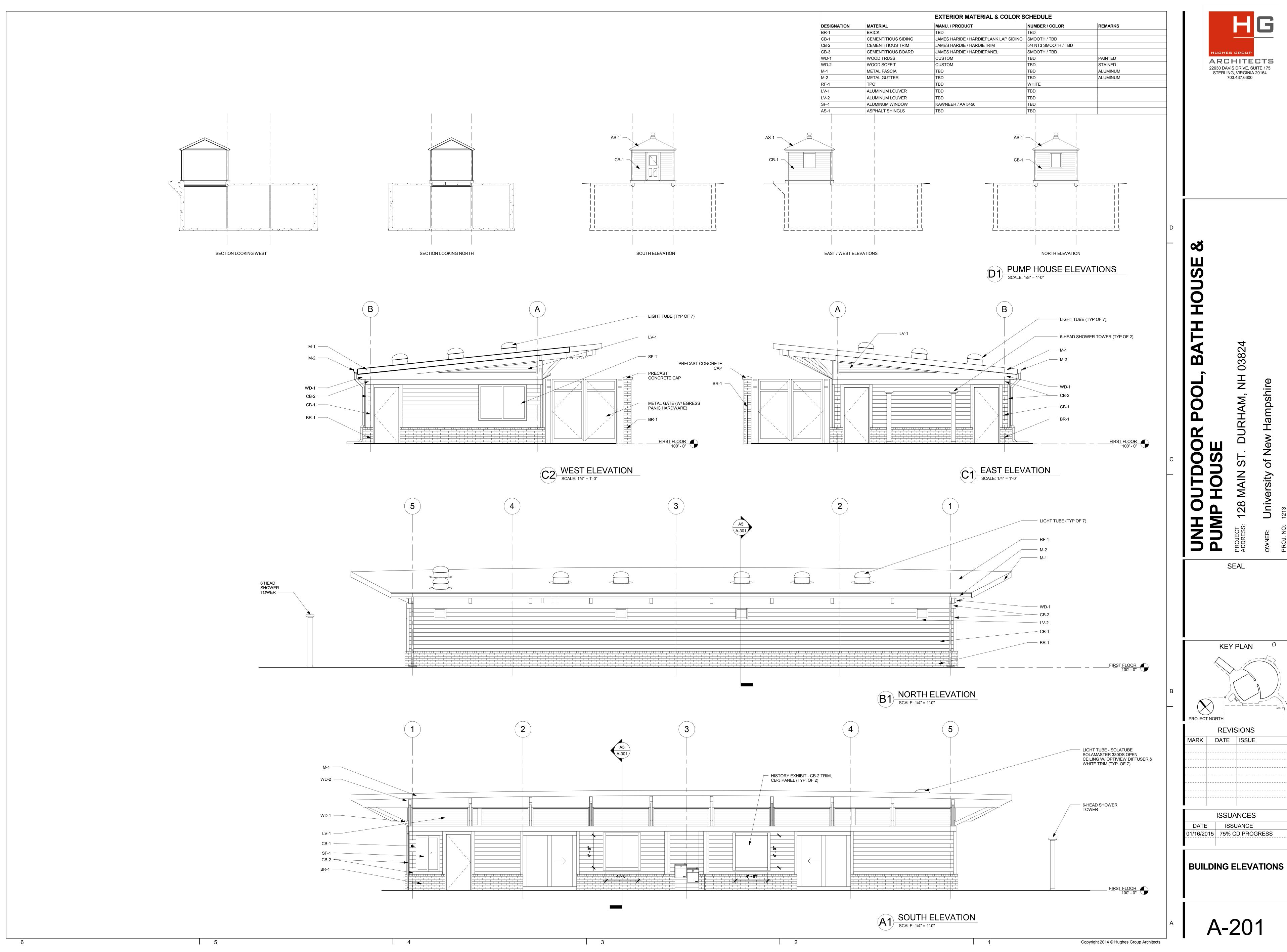
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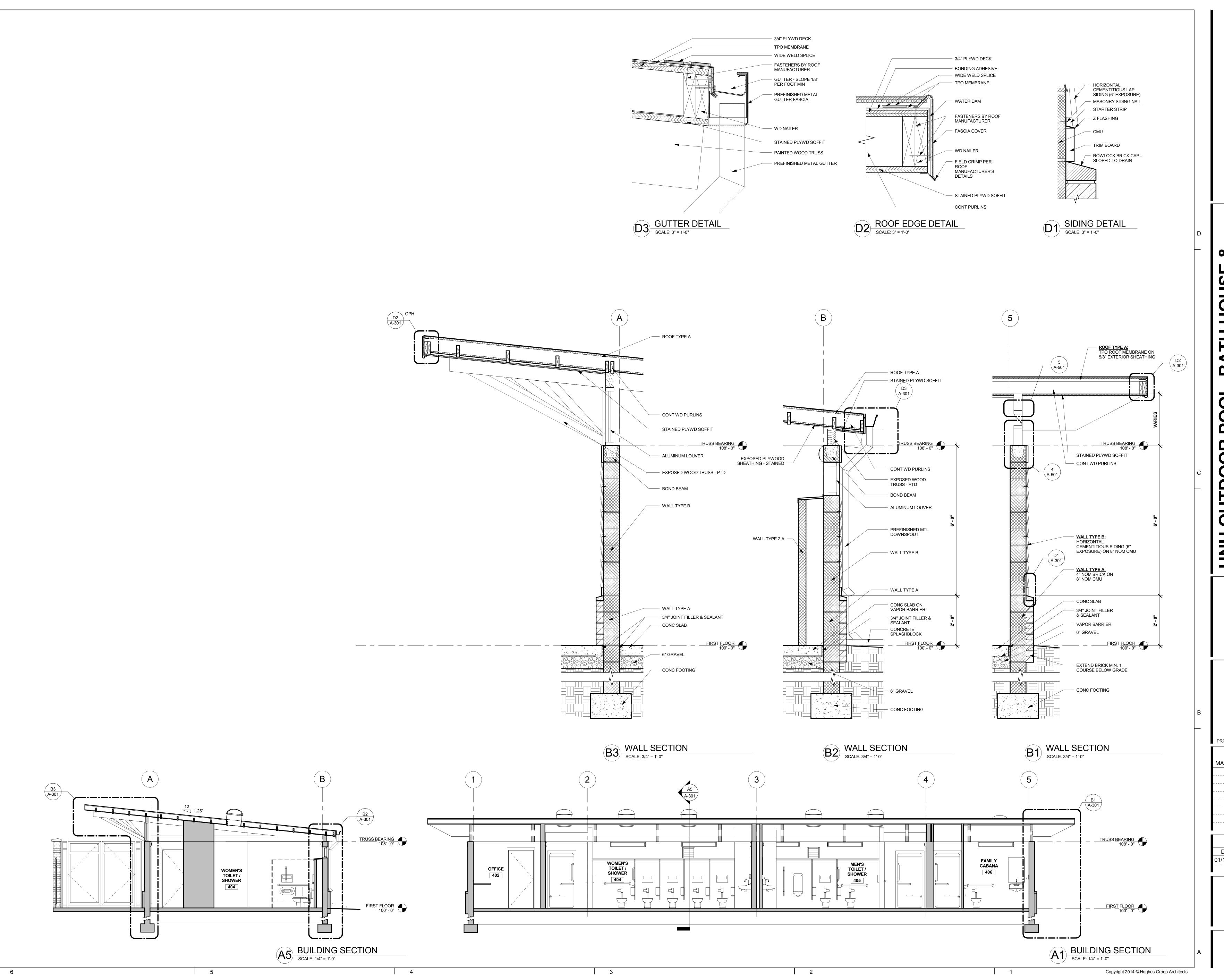
FLOOR PLAN / REFLECTED CEILING PLAN

4-101











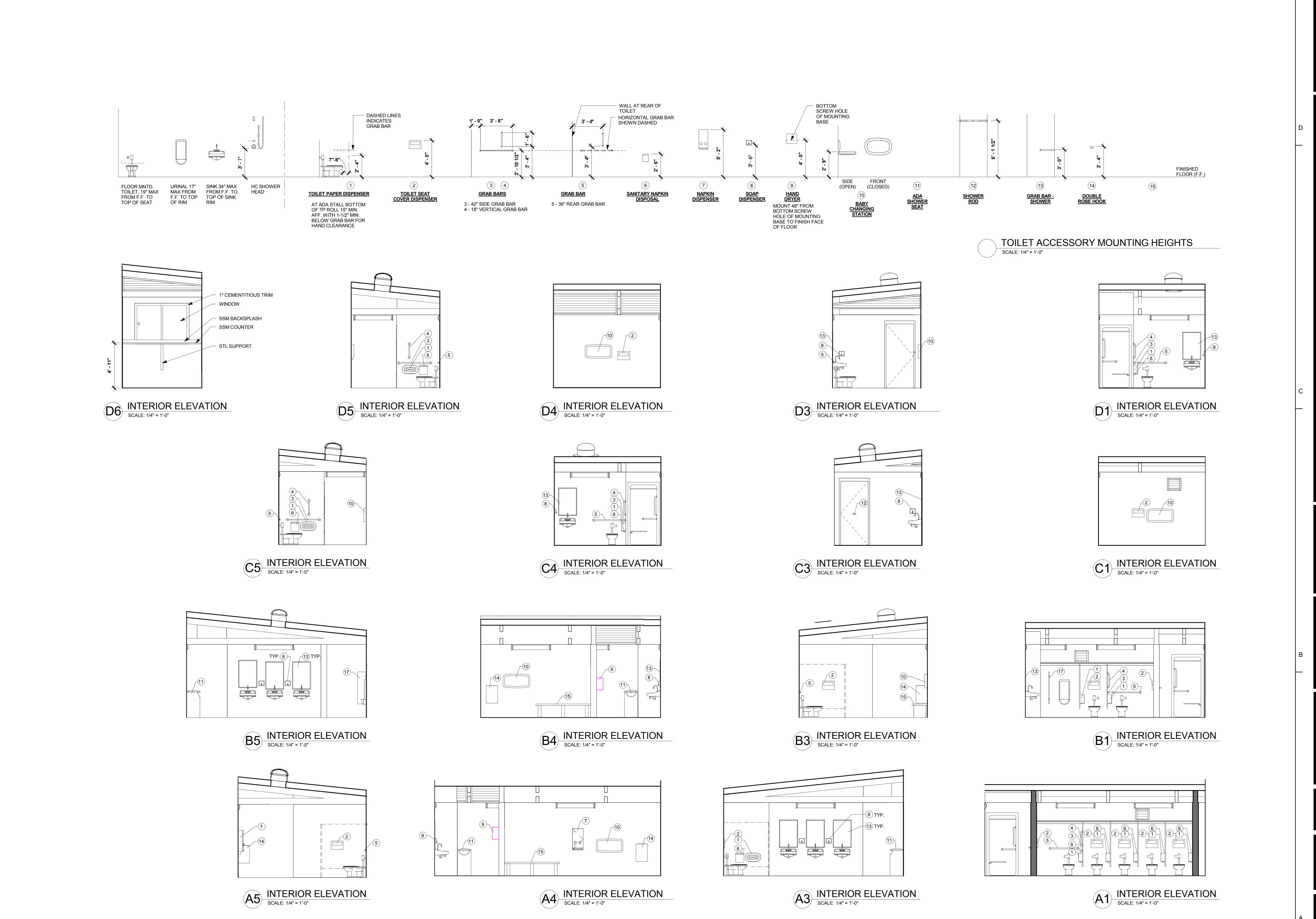
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KEY PLAN PROJECT NORTH **REVISIONS** MARK DATE ISSUE

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SECTIONS



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2



ATH HOUSE

SEAL

KEY PLAN

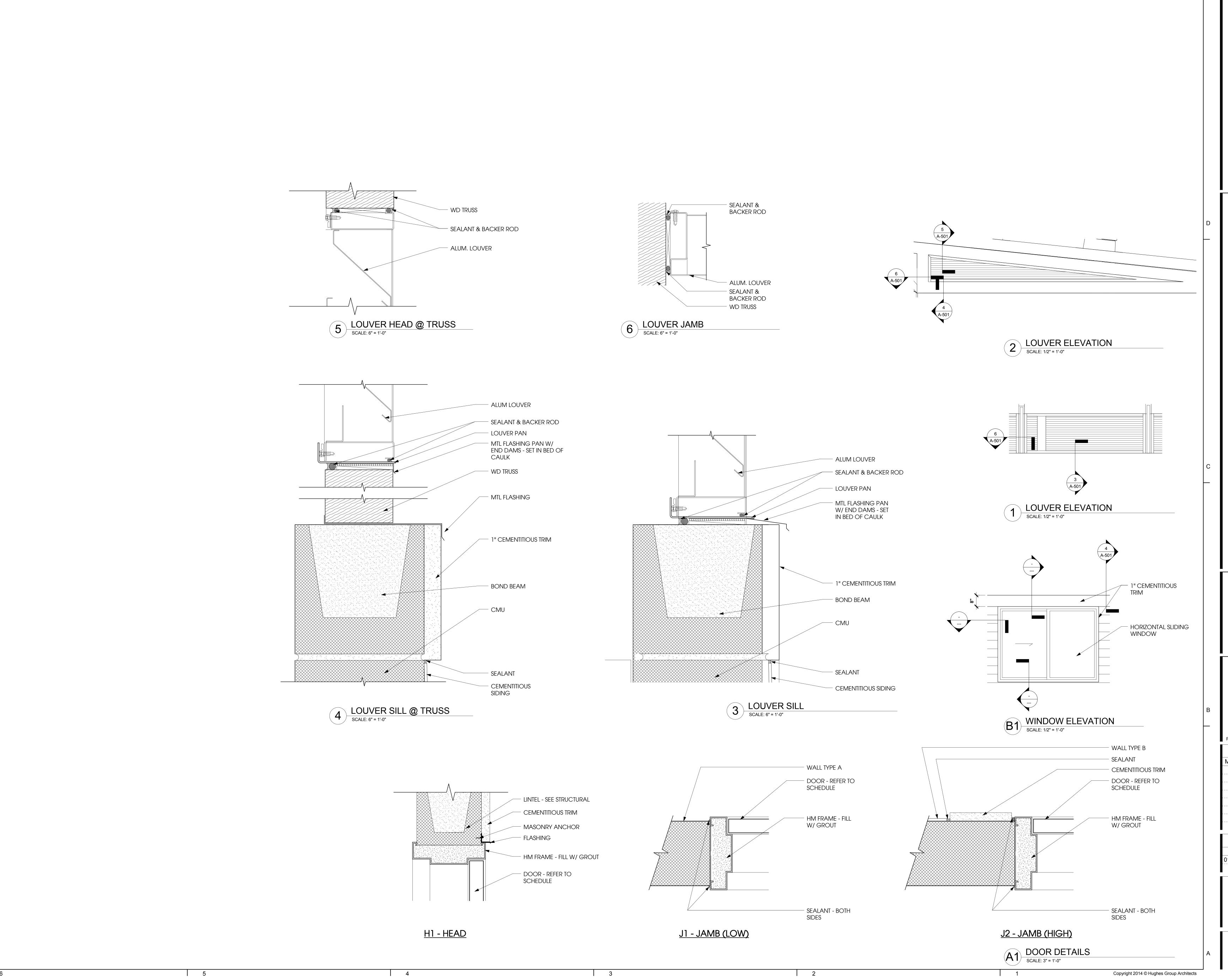
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INTERIOR ELEVATIONS

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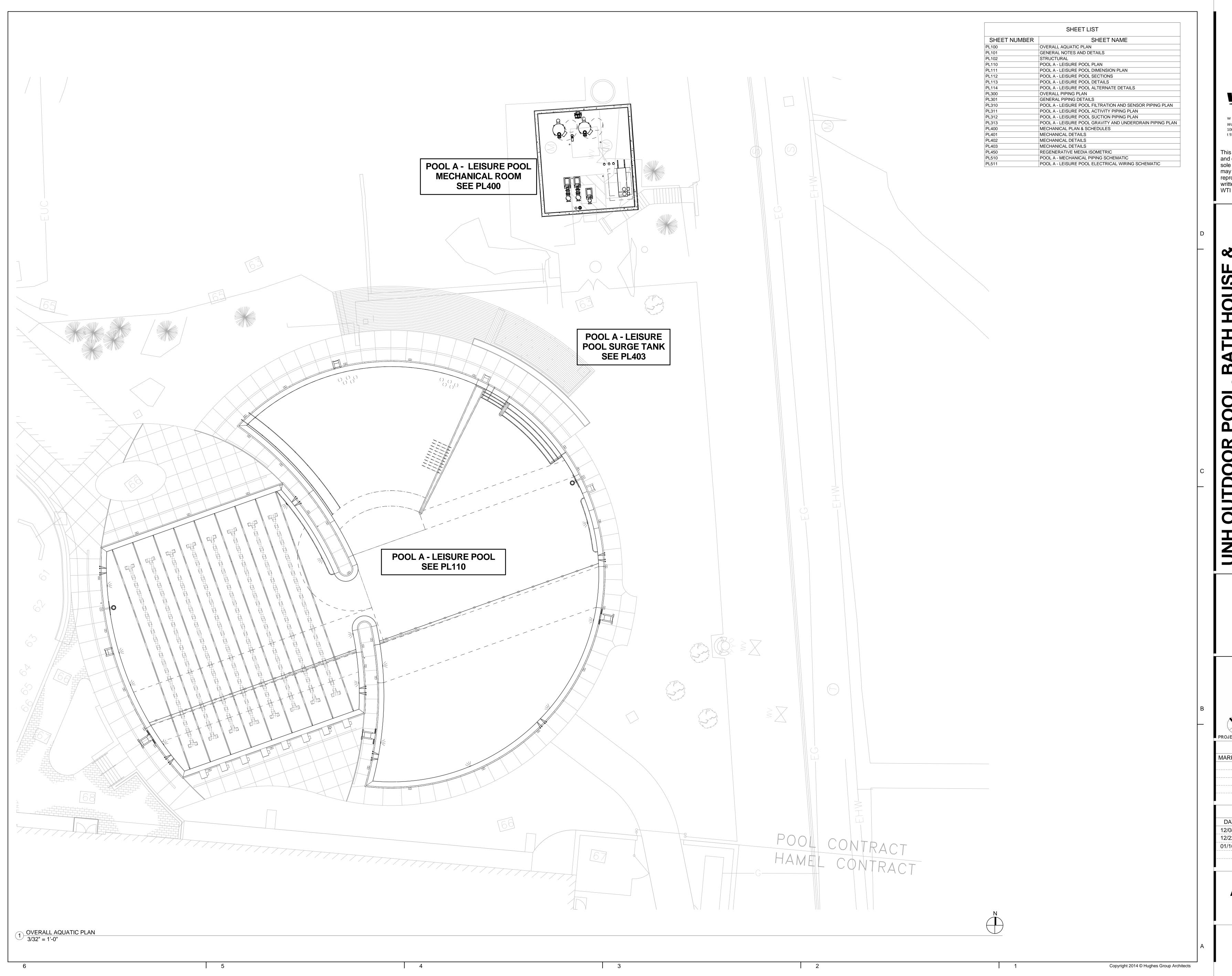
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DETAILS

A-501





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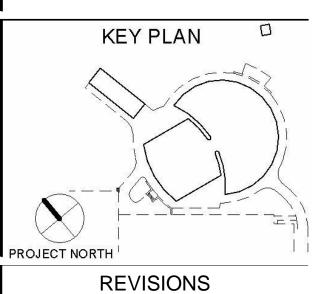
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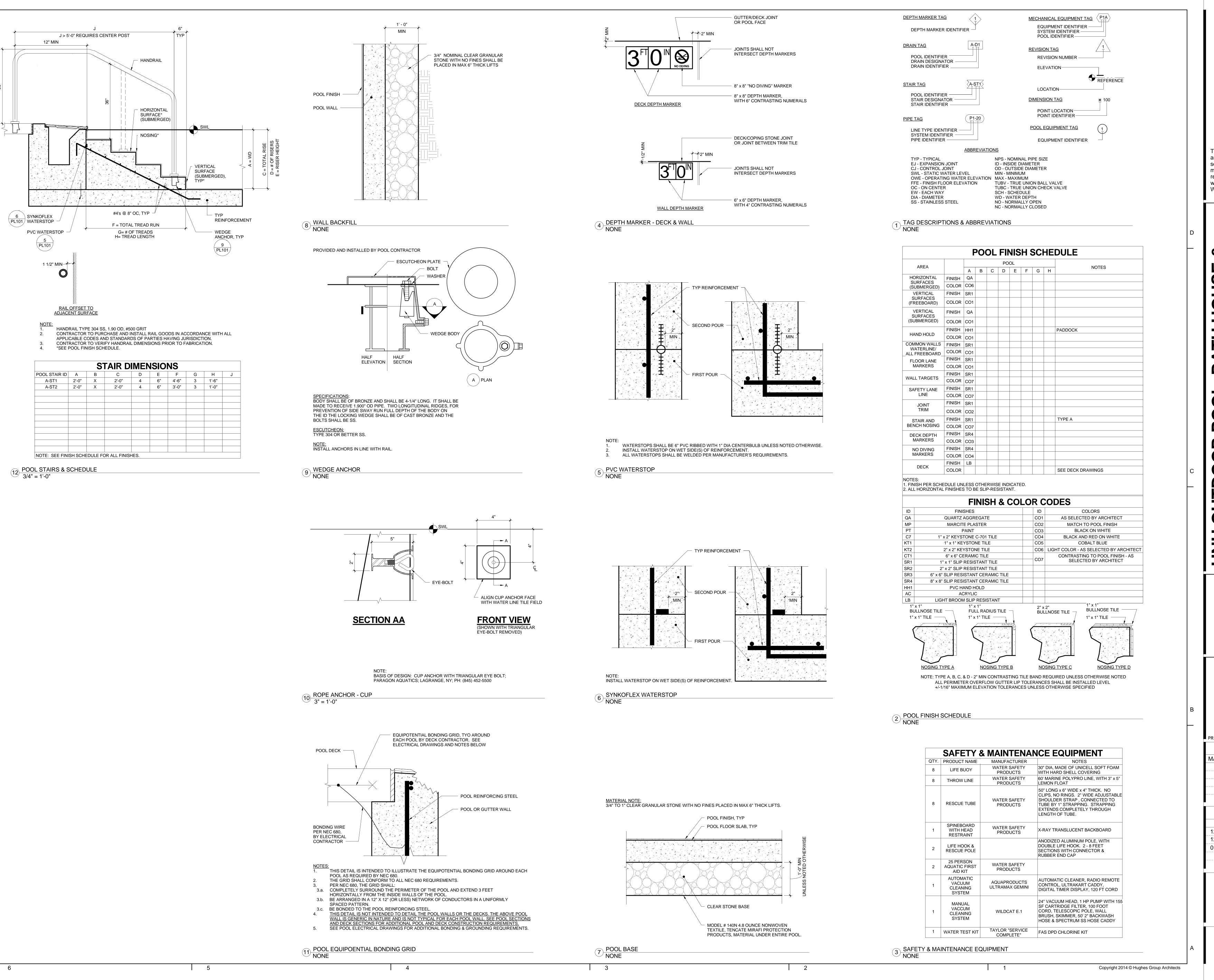
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OVERALL AQUATIC PLAN



HUGHES GROUP

ARCHITECTS

22630 DAVIS DRIVE, SUITE 175

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WATER TECHNOLOGY INC.

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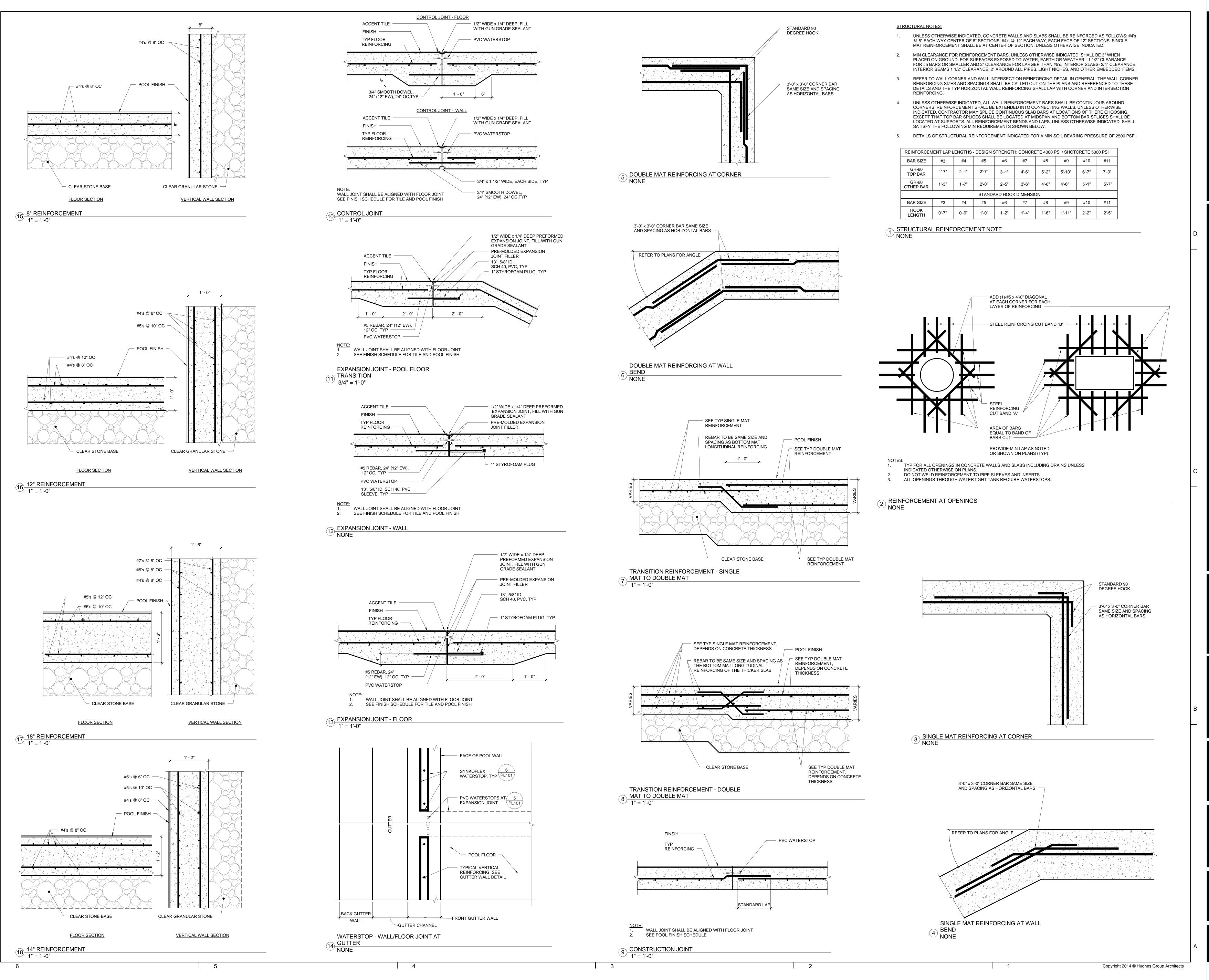
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AND DETAILS





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STRUCTURAL

	POOL PLAN NOTE 1 COVE WALL TO WALL, WALL TO FLOOR, AND FLOOR TO FLOOR -RADIUS AS INDICATED ON DETAILS. 2 DEPTH MARKERS SHALL NOT EXCEED 25'-0" IN DISTANCE FROM CENTER TO CENTER AROUND POOL PERIMETER. 3 DEPTH MARKERS INSIDE THE POOL SHALL CORRESPOND WITH DEPTH MARKER LOCATIONS ON THE DECK. 4 LOCATE LIFEGUARD CHAIRS AS REQUIRED PER STATE AND LOCAL CODES PER OWNER'S SAFETY CONSULTANT.
	FOOL A DATA DESCRIPTION QTY UNITS POOL PERIMETER 670 FEET WATER SURFACE AREA 14,355 SQUARE FEET
	POOL VOLUME 484,191 GALLONS SURGE CAPACITY 14,811 GALLONS SURGE FACTOR 1.0 GAL/SFT CIRCULATION RATE 2,087 GPM TURNOVER/VOLUME/FLOW 60 MIN. 46,841 GAL. 781 GPM TURNOVER/VOLUME/FLOW 240 MIN. 65,799 GAL. 274 GPM
1 AD1 AD2 AD6	TURNOVER/VOLUME/FLOW 360 MIN. 371,550 GAL. 1,032 GPM FILTRATION RATE 1.29 GPM/FT² PATRON LOAD 640 PERSONS POOL A FEATURES DESCRIPTION QTY (GPM/ea) (GPM)
AD1) GEYSER, TYP SURGE TANK, SEE PL403	GEYSERS 10 50.00 500.00 WALLSPRAYS 10 20.00 200.00 - - - - - - - -
A-ST1 PL101	POOL A - LEISURE POOL DATA AND POOL NOTES NONE EQUIPMENT SCHEDULE
RAMP RAILING 12 PL113 AD3 PL112 PL112 AD7	A01 STARTING PLATFORMS 8 MANUFACTURER BASIS OF DESIGN LEGACY SERIES, 24"x30" PLATFORM TILTED 9 DEGREES, SIDE STEP, MOUNT PLATFORM 29.5' ABOVE WATER LEVEL. INCLUDE "ROCK SOLID" ANCHOR WITH FLUSH CAP. STEEL POWDER COAT COLOR AND PLATFORM COLOR TO BE SELECTED BY OWNER/ARCHITECT, TO INCLUD LANE NUMBERS.
AD2 AD2 AD2 AD2 AD2 AD3 AD3 WALL SPRAY, TYP STEPS AT THIS LOCATION AD3 PL112 AD3 AD4 AD5 AD7	A02 LIFEGUARD CHAIRS BY OWNER 2 TAILWIND / SPECTRUM RECYCLED PLASTIC WITH 304L SS HARDWARE TO UNCLUDE SHADE UMBRELLAS. INCLUDE UMBRELLAS AND LIFE RING BRACKETS. COLOR BY OWNER/ARCHITECT 30" SEAT HEIGHT (OWNER'S SAFETY CONSULTANT TO SPECIFY LOCATION.)
10 PL101 AD6 A10 A10 A10 A10 A10 A10 A10 A10	A03 LIFEGUARD CHAIRS BY OWNER 3 TAILWIND /SPECTRUM RECYCLED PLASTIC WITH 304L SS HARDWARE TO INCLUDE SHADE UMBRELLAS. INCLUDE UMBRELLAS AND LIFE RING BRACKETS. COLO BY OWNER/ARCHITECT 64" SEAT HEIGHT - TLG530 (OWNER'S SAFETY CONSULTANT TO SPECIFY LOCATION.)
ADB AA10 A10 A10 A10 A10 PL112	A04 GRAB RAILS 14 PARAGON AQUATICS / SR SMITH PARAGON AQUATICS / SR SMITH CUSTOM FABRICATED LONG REACH, PRETZEL BEND 1.900" OD x .109 WALL, 304L SS. INCLUDE 4-1/4" LONG CAST BRONZE WEDGE ANCHORS AND ROUND STANDARD SS STAMPED ESCUTCHEON PLATES FINISH SHALL BE 500 GRIT FINISH MINIMUM. A05 IN-WALL STEPS 23 PARAGON AQUATICS / SR 17-1/2" x 6", INJECTION MOLDED PLASTIC, PEBE
A10 A10 A10 A10 AD7 AD7 AD7	A05 IN-WALL STEPS 23 PARAGON AQUATICS / SR SMITH TEXTURE, 1/4" WALL THICKNESS CUSTOM FABRICATED, 1.900" OD x.109 WALL, 304L SS. INCLUDE 4-1/4" LONG CAST BRONZE WEDGE ANCHORS WITH ROUND STANDARD SS STAMPED ESCUTCHEON PLATES FINISH SHALL BE 500 GRIT FINISH MINIMUM.
4" WIDE TILE BAND, CONTINUOUS ON POOL WALLS AND FLOOR. SEE POOL FINISH SCHEDULE	A07 RAMP RAILINGS 2 PARAGON AQUATICS / SR SMITH 2 PARAGON AQUATICS / SR STANCHIONS 4 PARAGON AQUATICS / SR STANCHIONS 4 PARAGON AQUATICS / SR 1.900" OD x .109 WALL, 304L SS. INCLUDE 4-1/4" LONG CAST BRONZE WEDGE ANCHORS AND ROUND STANDARD SS STAMPED ESCUTCHEON PLATES FINISH SHAL BE 500 GRIT FINISH MINIMUM. 4 PARAGON AQUATICS / SR 1.900" OD x .145 WALL x 8'-0", PROVIDE SLIDING
A11 BACKSTROKE FLAGLINE A03	STANCHIONS 4 SMITH COLLAR, WITH EYE BOLT STANCHION ANCHORS 4 PARAGON AQUATICS / SR SMITH 304L SS, WITH SLIP-FIT CAP AND REMOVAL TO PARAGON AQUATICS / SR 12" x 18" FLAGS WITH FLAG TO CHORD FASTENIERS COORDINATE COLORS WITH
ADD A10 A10 A10 A10 A10 A10 A10 A10	A10 CUP ANCHOR 20 PARAGON AQUATICS / SR SMITH 4" SQUARE 304L SS ANCHOR AND 304L SS EYE BOLT PARAGON AQUATICS / SR 3/4" POLYETHYLENE ROPE WITH 5" x 9" HANDLA OCK FLOATS VERIEVALENCT LIMITAL
A02 A08 A08 A13 A08 A08 A13 A08 A08 A13	A12 LANE DIVIDERS 9 COMPETITOR SWIM PRODUCTS 1 COMPETITOR, 6" RACING LANES, COLORS BY OWNER/ARCHITECT INTELLIBRITE, WHITE LED, 500W EQUIVALENCY 120V, WITH SS FACE RING, PROVIDE COMPLET WITH PENTAIR POOL PRODUCTS LARGE SS
8 PL112 AD6 BACKSTROKE BACKSTROKE	A13 LIGHT AND NICHES SEE ALTERNATES PENTAIR PENTAIR PENTAIR PENTAIR WITH PENTAIR POOL PRODUCTS LARGE SS NICHES WITH 1" REAR HUB. BASE BID : INCLUDES 14 LIGHTS IN TOTAI ALTERNATE B INCLUDES 24 LIGHTS IN TOTAI LANE STORAGE REELS PARAGON AQUATICS / SR SMITH LARGE CAPACITY, SS CONSTRUCTION, WITH SE CASTERS AND STORAGE COVER.
A10	RECALL ROPE 1 PARAGON AQUATICS / SR 2 DIAMETER MULTIPLE STRANDED PLASTIC ROPE ADJUSTABLE FLOOR INLET FITTING. MODEL NUMBER 8417-0000, 1-1/2" OR 2" IPS SOLVENT WELD, MOLDED ABS PLASTIC BODY WITH INTERNAL NPT THREADS AND ADJUSTING TOP PLATE WITH VANDAL PROOF LOCKING DEVICE, COLOR TO BE WHITE.
9 A08 A01 A01 A01 A03 A04 A04 A05 A05 A04 A06 A07 A08 A07 A08 A09 A04 A08 A07 A08 A09	WALL INLETS 2 STA-RITE 8429,0000, 1-1/2", MOLDED ABS, WHITE LAWSON AQUATICS 20" PERPENDICULAR PVC GRATING WITH HAND HOLD. ALL CORNERS TO PRE- FABRICATED. COLOR TO E SELECTED BY OWNER. REFER TO DETAIL.
All Grating Corners TO BE PREFABRICATED ADB ADB ADB ADB ADB AADB AADB AADB A	ALTERNATE: PADDOCK STAINLESS STEEL GUTTER SYSTEM WITH 1" THICK, HDPE GRATII AND INTEGRAL HAND HOLD AND ROPE CUP ANCHORS. ALL CORNERS AND RADIUSES TO B PRE- FABRICATED. COLOR TO E SELECTED BY OWNER. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING SIGNED AND SEALED SHOP DRAWINGS AND HYDRAULIC CALCULATIONS FOR REVIEW AND APPROVAL. CONTRACTOR I RESPONSIBLE FOR ALL ADDITIONAL COORDINATION, SUBMITTALS AND COSTS FOR
	DRAWING DEVIATIONS. SEE GENERAL DETAILS ON DRAWING PL114 SUBMERGED OUTLETS 4 LAWSON AQUATICS SEE DRAIN SCHEDULE
	POOL A - DEPTH MARKER SCHEDULE ID TAG DEPTH "NO DIVING" DECK MARKER
69	AD1 0'-0" X AD2 1'-0" X AD3 AD4 2'-6" X AD6 4'-0" X AD7 5'-0" X AD8 7'-0" AD9 9'-0"
3 POOL A - LEISURE POOL PLAN 1/8" = 1'-0"	NOTE: 1. *= WALL DEPTH MARKER ONLY AT LOCATION AS INDICATED ON PLAN. 2. EXCLUDE "NO DIVING" MARKER AT POOL WALL DEPTH MARKER LOCATIONS. 3. "X" INDICATES "NO DIVING" MARKER REQUIRED AT THIS LOCATION. POOL A - LEISURE POOL EQUIPMENT AND DEPTH MARKER SCHEDULE NONE
6 5 4	NONE 1 Copyright 2014 © Hughes Group Archit

POOL PLAN NOTE

- /E WALL TO WALL, WALL TO FLOOR, AND FLOOR TO FLOOR -RADIUS AS INDICATED ON DETAILS.
- TH MARKERS SHALL NOT EXCEED 25'-0" IN DISTANCE FROM CENTER TO CENTER AROUND POOL PERIMETER. TH MARKERS INSIDE THE POOL SHALL CORRESPOND WITH DEPTH MARKER LOCATIONS ON THE DECK.
- ANSION/CONTROL JOINTS IN WALLS AND GUTTER SHALL BE LOCATED IN LINE WITH ALL FLOOR JOINTS.

	POOL A DAT	ΓΑ			
DESCRIPTION	QTY	UNITS			
POOL PERIMETER	670	FEET			
WATER SURFACE AREA	14,355	SQUARE FEET			
POOL VOLUME	484,191	GALLONS			
SURGE CAPACITY	14,811	GALLONS			
SURGE FACTOR	1.0	GAL/SFT			
CIRCULATION RATE	2,087	GPM			
TURNOVER/VOLUME/FLOW	60 MIN.	46,841	GAL.	781	GPM
TURNOVER/VOLUME/FLOW	240 MIN.	65,799	GAL.	274	GPM
TURNOVER/VOLUME/FLOW	360 MIN.	371,550	GAL.	1,032	GPM
FILTRATION RATE	1.29	GPM/FT ²	•		
PATRON LOAD	640		PERSON	NS	
	POOL A FEATUR	ES			
DESCRIPTION	QTY	(GPM/ea)		(GPM)	
GEYSERS	10	50.00		500.00	
WALLSPRAYS	10	20.00		200.00	
	-	-		-	
	-	-		-	

ID TAO	DECODIDEION		JIPMENT SCHE	T
ID TAG	DESCRIPTION	QTY.	MANUFACTURER	BASIS OF DESIGN
A01	STARTING PLATFORMS	8	PARAGON AQUATICS / SR SMITH	LEGACY SERIES, 24"x30" PLATFORM TILTED 9 DEGREES, SIDE STEP, MOUNT PLATFORM 29.5' ABOVE WATER LEVEL. INCLUDE "ROCK SOLID" ANCHOR WITH FLUSH CAP. STEEL POWDER COAT COLOR AND PLATFORM COLOR TO BE SELECTED BY OWNER/ARCHITECT, TO INCLUD LANE NUMBERS.
A02	LIFEGUARD CHAIRS <u>BY OWNER</u>	2	TAILWIND / SPECTRUM	RECYCLED PLASTIC WITH 304L SS HARDWARE TO UNCLUDE SHADE UMBRELLAS. INCLUDE UMBRELLAS AND LIFE RING BRACKETS. COLOF BY OWNER/ARCHITECT 30" SEAT HEIGHT (OWNER'S SAFETY CONSULTANT TO SPECIFY LOCATION.)
A03	LIFEGUARD CHAIRS <u>BY OWNER</u>	3	TAILWIND /SPECTRUM	RECYCLED PLASTIC WITH 304L SS HARDWARE TO INCLUDE SHADE UMBRELLAS. INCLUDE UMBRELLAS AND LIFE RING BRACKETS. COLO BY OWNER/ARCHITECT 64" SEAT HEIGHT - TLG530 (OWNER'S SAFETY CONSULTANT TO SPECIFY LOCATION.)
A04	GRAB RAILS	14	PARAGON AQUATICS / SR SMITH	CUSTOM FABRICATED LONG REACH, PRETZEL BEND 1.900" OD x .109 WALL, 304L SS. INCLUDE 4-1/4" LONG CAST BRONZE WEDGE ANCHORS AND ROUND STANDARD SS STAMPED ESCUTCHEON PLATES FINISH SHALL BE 500 GRIT FINISH MINIMUM.
A05	IN-WALL STEPS	23	PARAGON AQUATICS / SR SMITH	17-1/2" x 6", INJECTION MOLDED PLASTIC, PEBE TEXTURE, 1/4" WALL THICKNESS
A06	STAIR HAND RAILS	3	PARAGON AQUATICS / SR SMITH	CUSTOM FABRICATED, 1.900" OD x .109 WALL, 304L SS. INCLUDE 4-1/4" LONG CAST BRONZE WEDGE ANCHORS WITH ROUND STANDARD SS STAMPED ESCUTCHEON PLATES FINISH SHAL BE 500 GRIT FINISH MINIMUM.
A07	RAMP RAILINGS	2	PARAGON AQUATICS / SR SMITH	CUSTOM FABRICATED, 1.900" OD x .109 WALL, 304L SS. INCLUDE 4-1/4" LONG CAST BRONZE WEDGE ANCHORS AND ROUND STANDARD SS STAMPED ESCUTCHEON PLATES FINISH SHAL BE 500 GRIT FINISH MINIMUM.
A08	STANCHIONS	4	PARAGON AQUATICS / SR SMITH	1.900" OD x .145 WALL x 8'-0", PROVIDE SLIDING COLLAR, WITH EYE BOLT
	STANCHION ANCHORS	4	PARAGON AQUATICS / SR SMITH	304L SS, WITH SLIP-FIT CAP AND REMOVAL TO
A09	BACKSTROKE FLAGLINES	2	PARAGON AQUATICS / SR SMITH	12" x 18" FLAGS WITH FLAG TO CHORD FASTENERS, COORDINATE COLORS WITH ARCHITECT/OWNER
A10	CUP ANCHOR	20	PARAGON AQUATICS / SR SMITH	4" SQUARE 304L SS ANCHOR AND 304L SS EYE BOLT
A11	SAFETY ROPE	1	PARAGON AQUATICS / SR SMITH	3/4" POLYETHYLENE ROPE WITH 5" x 9" HANDI-LOCK FLOATS, VERIFY LENGTH WITH PLANS. COLOR TO BE BLUE/WHITE.
A12	LANE DIVIDERS	9	COMPETITOR SWIM PRODUCTS	COMPETITOR, 6" RACING LANES, COLORS BY OWNER/ARCHITECT
A13	LIGHT AND NICHES <u>SEE</u> <u>ALTERNATES</u>		PENTAIR	INTELLIBRITE, WHITE LED, 500W EQUIVALENCE 120V, WITH SS FACE RING, PROVIDE COMPLET WITH PENTAIR POOL PRODUCTS LARGE SS NICHES WITH 1" REAR HUB. BASE BID: INCLUDES 14 LIGHTS IN TOTAL ALTERNATE B INCLUDES 24 LIGHTS IN TOTAL
	LANE STORAGE REELS	2	PARAGON AQUATICS / SR SMITH	LARGE CAPACITY, SS CONSTRUCTION, WITH S CASTERS AND STORAGE COVER.
	RECALL ROPE	1	PARAGON AQUATICS / SR SMITH	½" DIAMETER MULTIPLE STRANDED PLASTIC ROPE
	FLOOR INLETS	74	STA-RITE	ADJUSTABLE FLOOR INLET FITTING. MODEL NUMBER 8417-0000, 1-1/2" OR 2" IPS SOLVENT WELD, MOLDED ABS PLASTIC BODY WITH INTERNAL NPT THREADS AND ADJUSTING TOP PLATE WITH VANDAL PROOF LOCKING DEVICE COLOR TO BE WHITE.
	WALL INLETS	2	STA-RITE	8429,0000, 1-1/2", MOLDED ABS, WHITE
	PERIMETER GUTTER GRATING		LAWSON AQUATICS	LAWSON AQUATICS 20" PERPENDICULAR PVC GRATING WITH HAND HOLD. ALL CORNERS TO PRE- FABRICATED. COLOR TO E SELECTED BY OWNER. REFER TO DETAIL.
	PERIMETER GUTTER GRATING SYSTEM ALTERNATE BID		PADDOCK	ALTERNATE: PADDOCK STAINLESS STEEL GUTTER SYSTEM WITH 1" THICK, HDPE GRATII AND INTEGRAL HAND HOLD AND ROPE CUP ANCHORS. ALL CORNERS AND RADIUSES TO B PRE- FABRICATED. COLOR TO E SELECTED BY OWNER. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING SIGNED AND SEALED SHOP DRAWINGS AND HYDRAULIC CALCULATIONS FOR REVIEW AND APPROVAL. CONTRACTOR I RESPONSIBLE FOR ALL ADDITIONAL COORDINATION, SUBMITTALS AND COSTS FOR DRAWING DEVIATIONS. SEE GENERAL DETAILS
	OLIDAGE OF COMMEN		L AM/00M A 20117-122	ON DRAWING PL114
	SUBMERGED OUTLETS	4	LAWSON AQUATICS	SEE DRAIN SCHEDULE

POOL A - DEPTH MARKER SCHEDULE

ID TAG	DEPTH	"NO DIVING" DECK MARKER
AD1	0'-0"	X
AD2	1'-0"	X
AD3		
AD4	2'-6"	X
AD6	4'-0"	X
AD7	5'-0"	X
AD8	7'-0"	
AD9	9'-0"	

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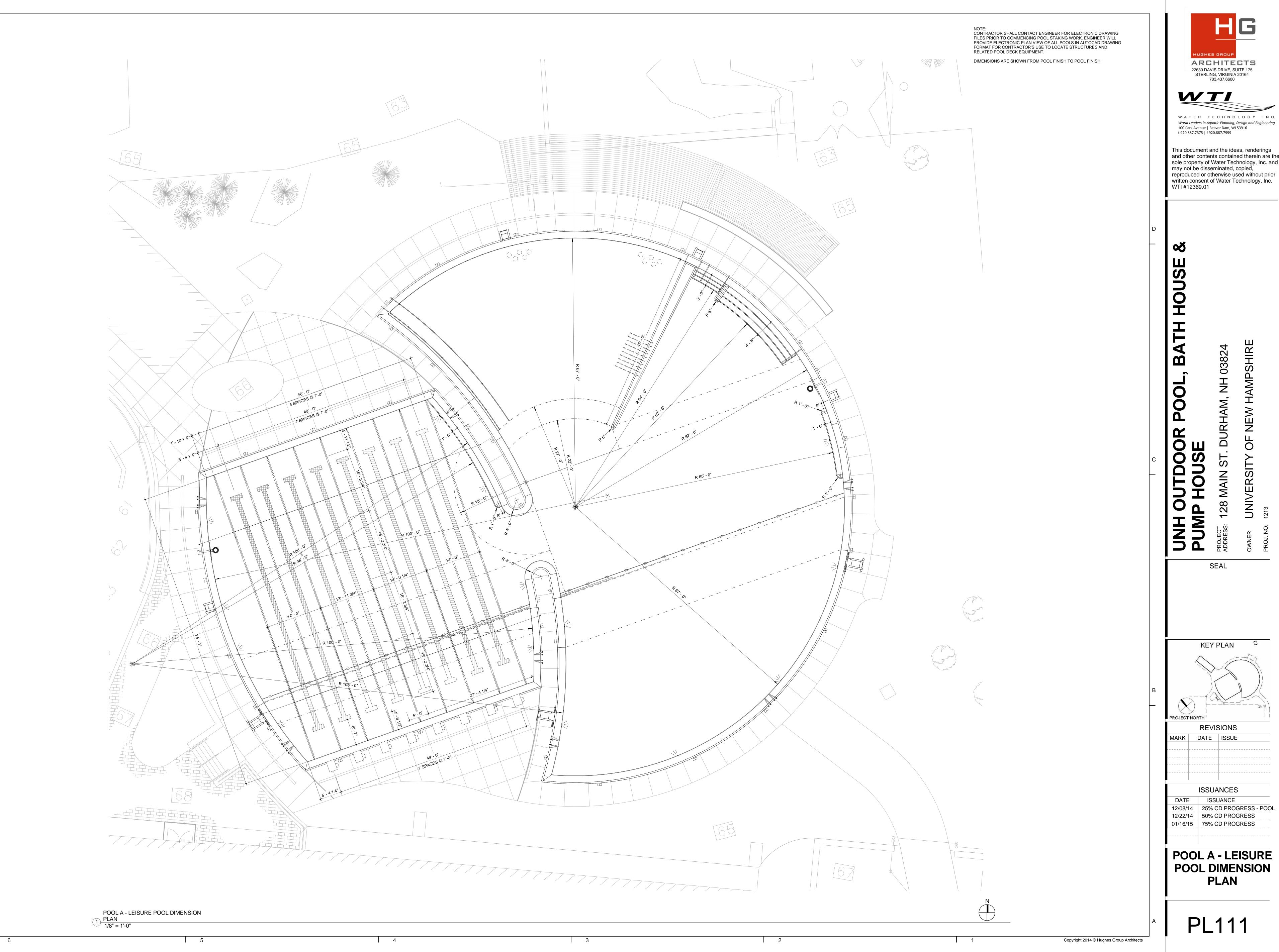
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POOL A - LEISURE POOL PLAN



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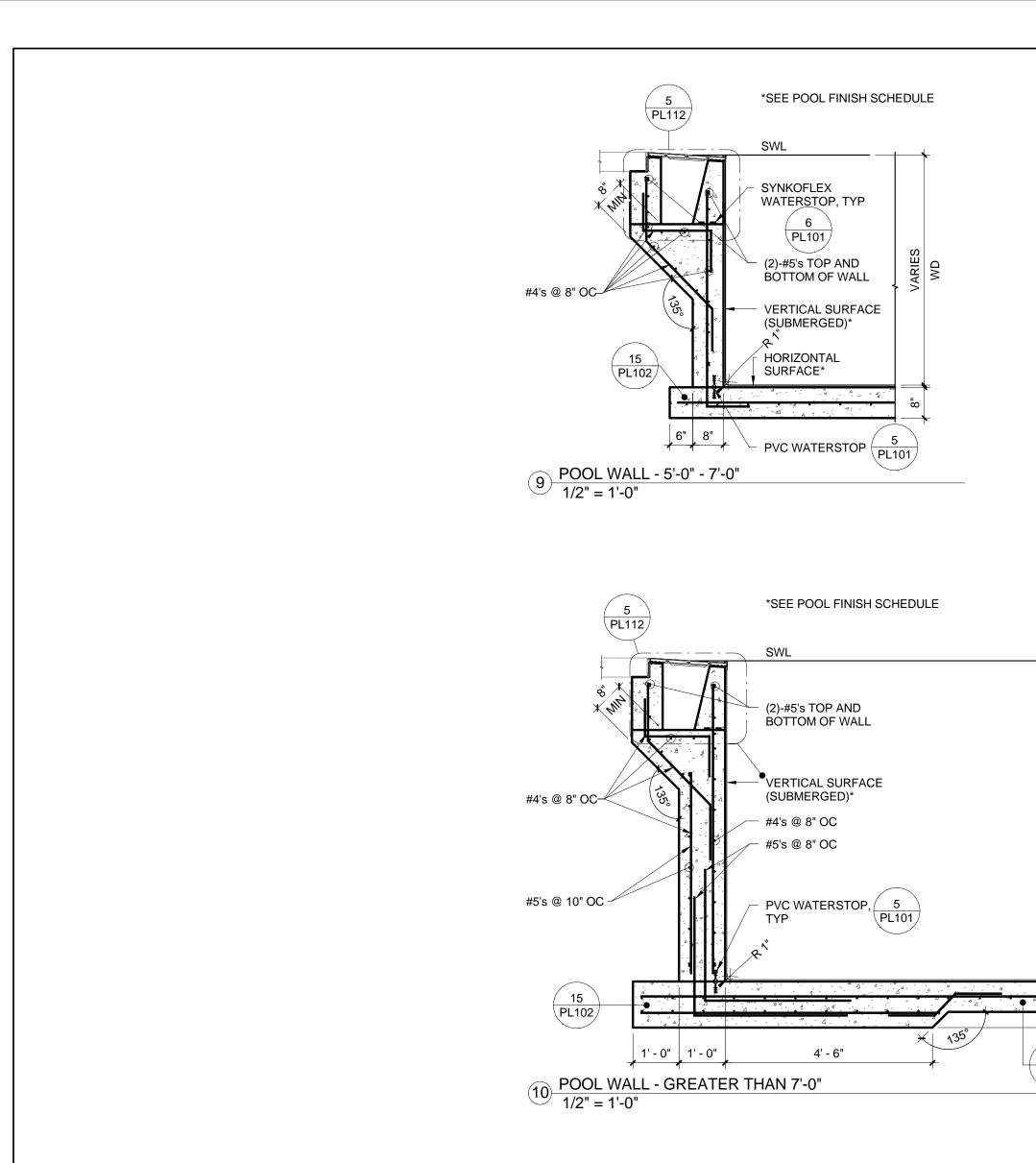
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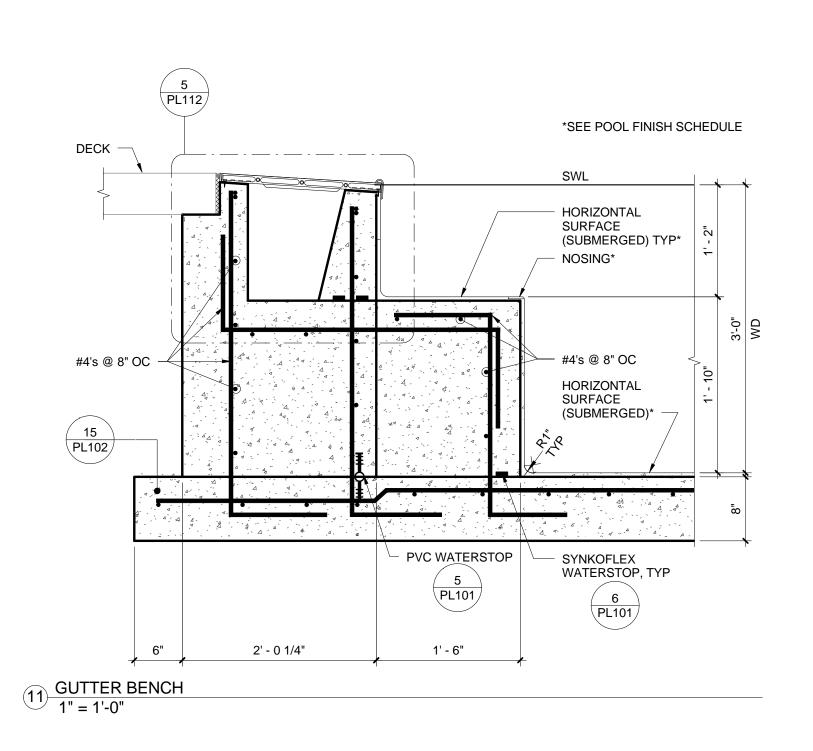
 DATE
 ISSUANCE

 12/08/14
 25% CD PROGRESS - POOL

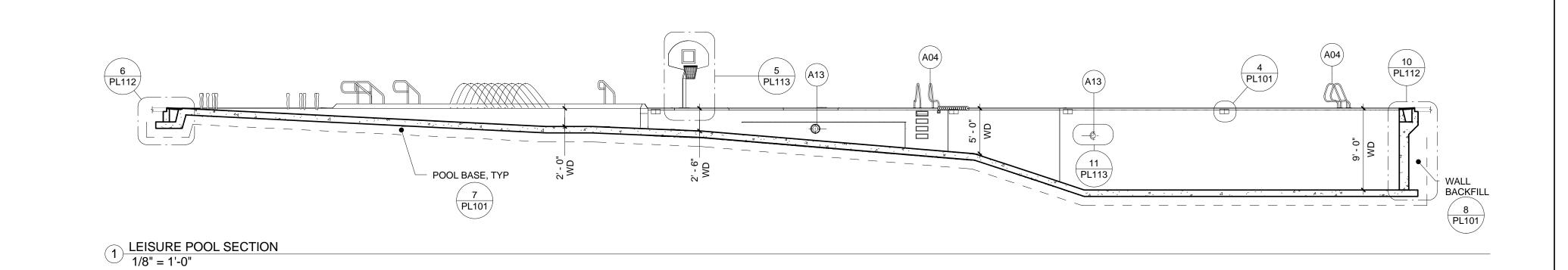
 12/22/14
 50% CD PROGRESS
 01/16/15 75% CD PROGRESS

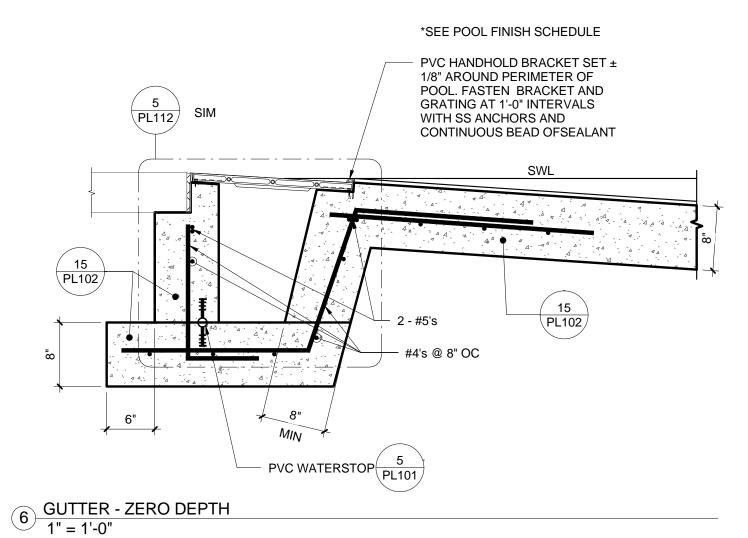
POOL A - LEISURE **POOL DIMENSION PLAN**

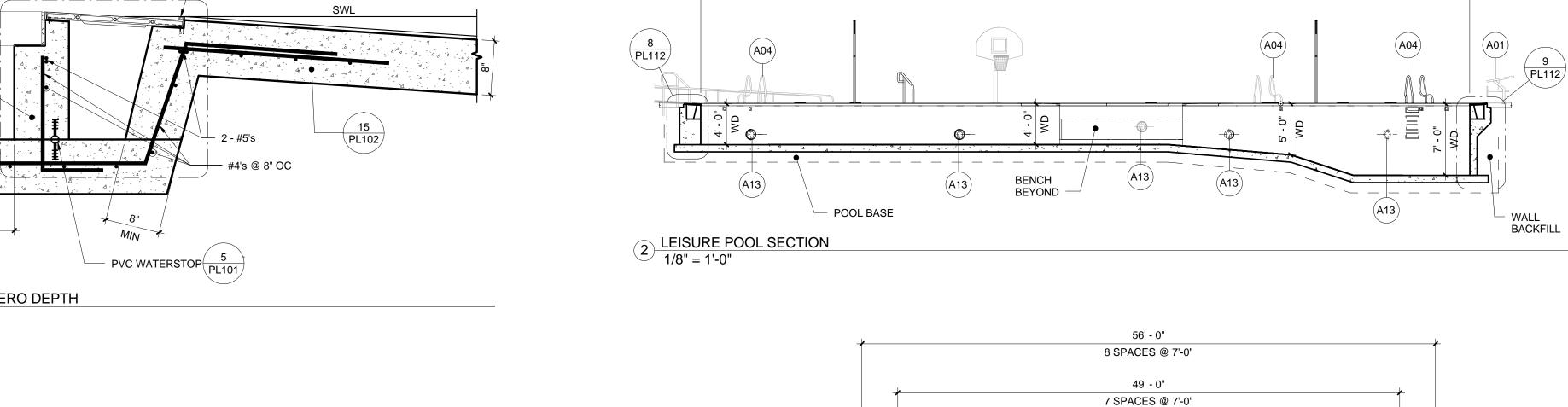




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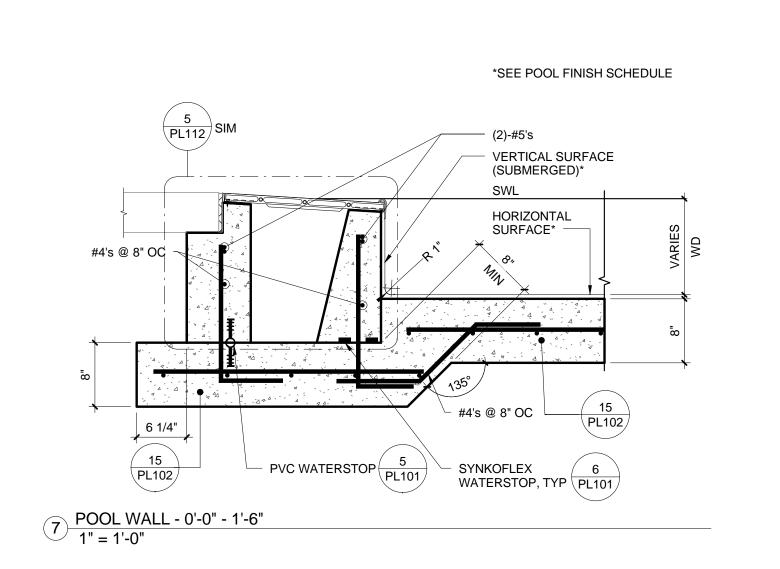


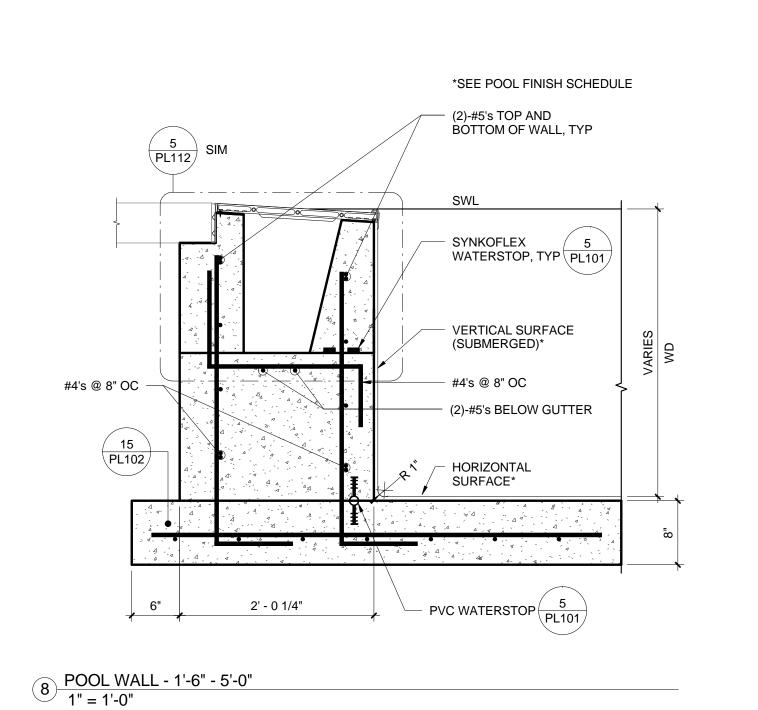




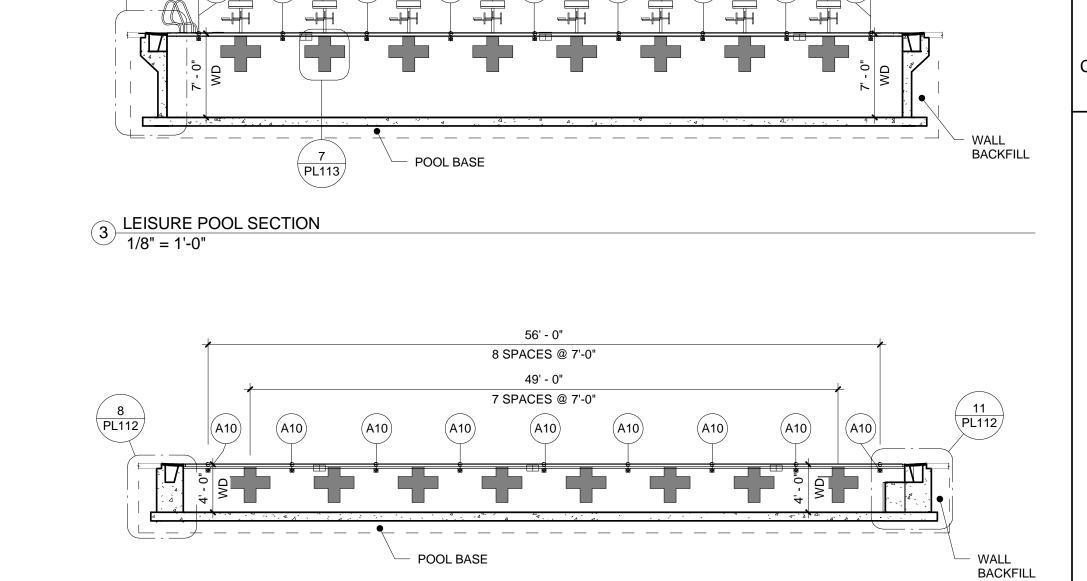
4 LEISURE POOL SECTION 1/8" = 1'-0"

2

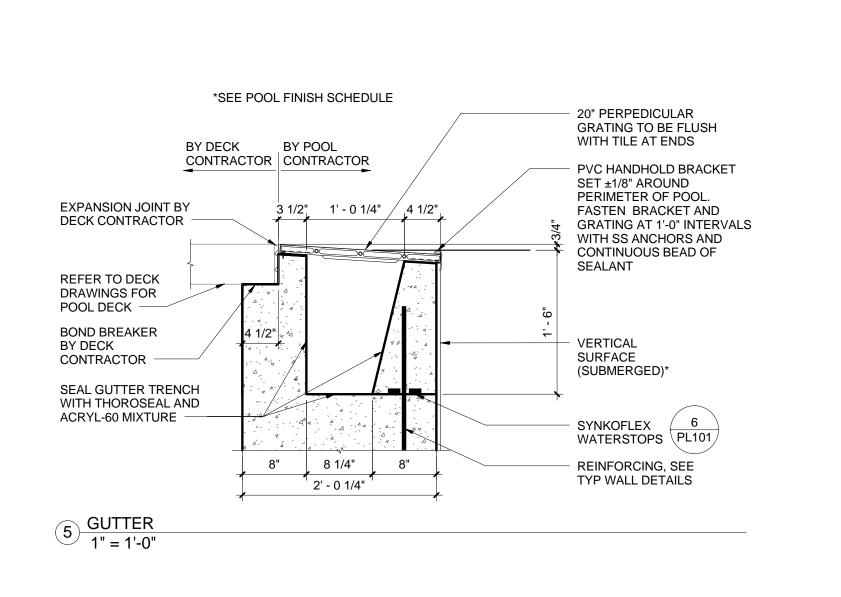




3



75' - 1"





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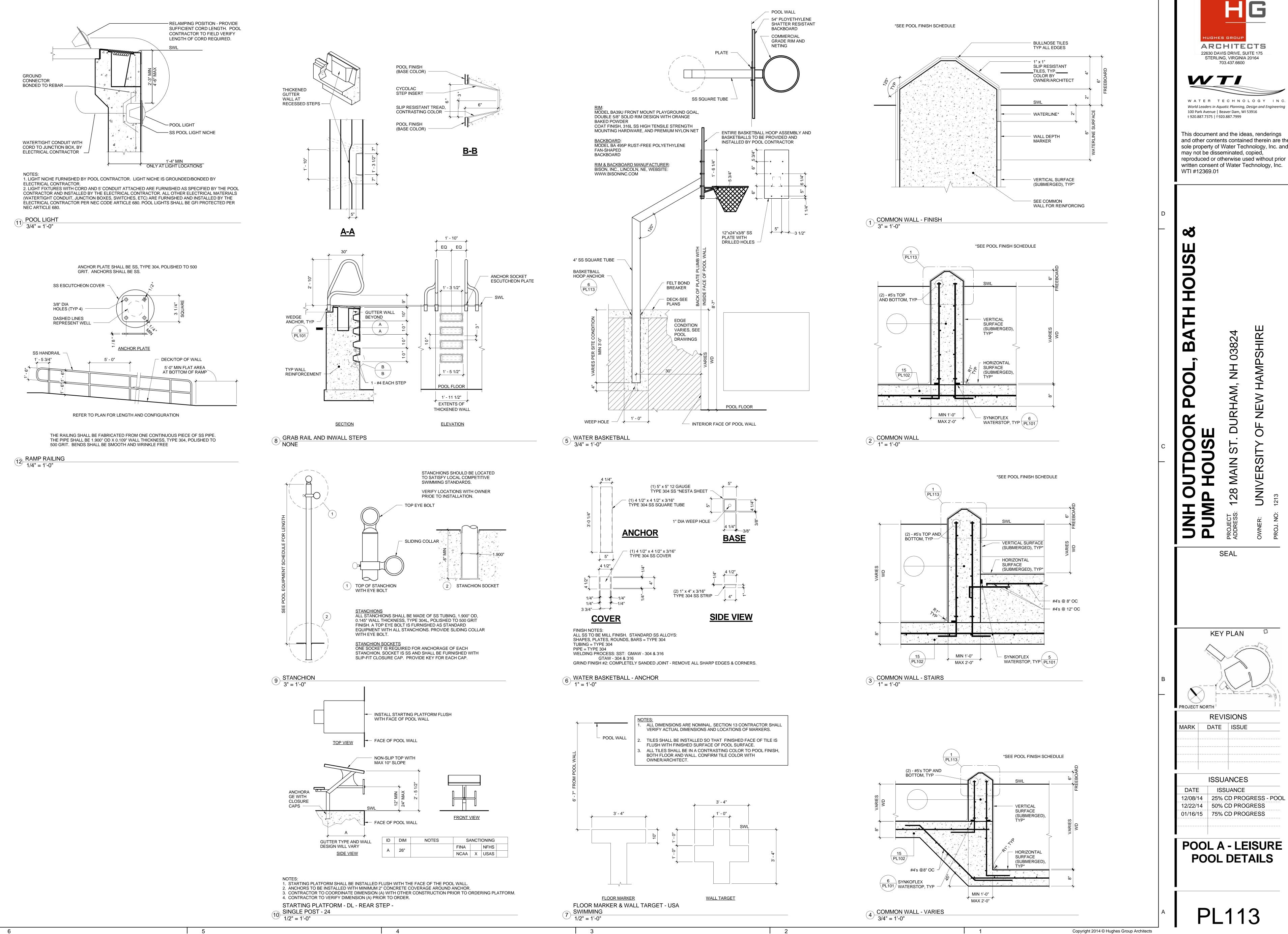
KEY PLAN ■ PROJECT NORTH **REVISIONS** MARK DATE ISSUE

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POOL A - LEISURE POOL SECTIONS

PL112

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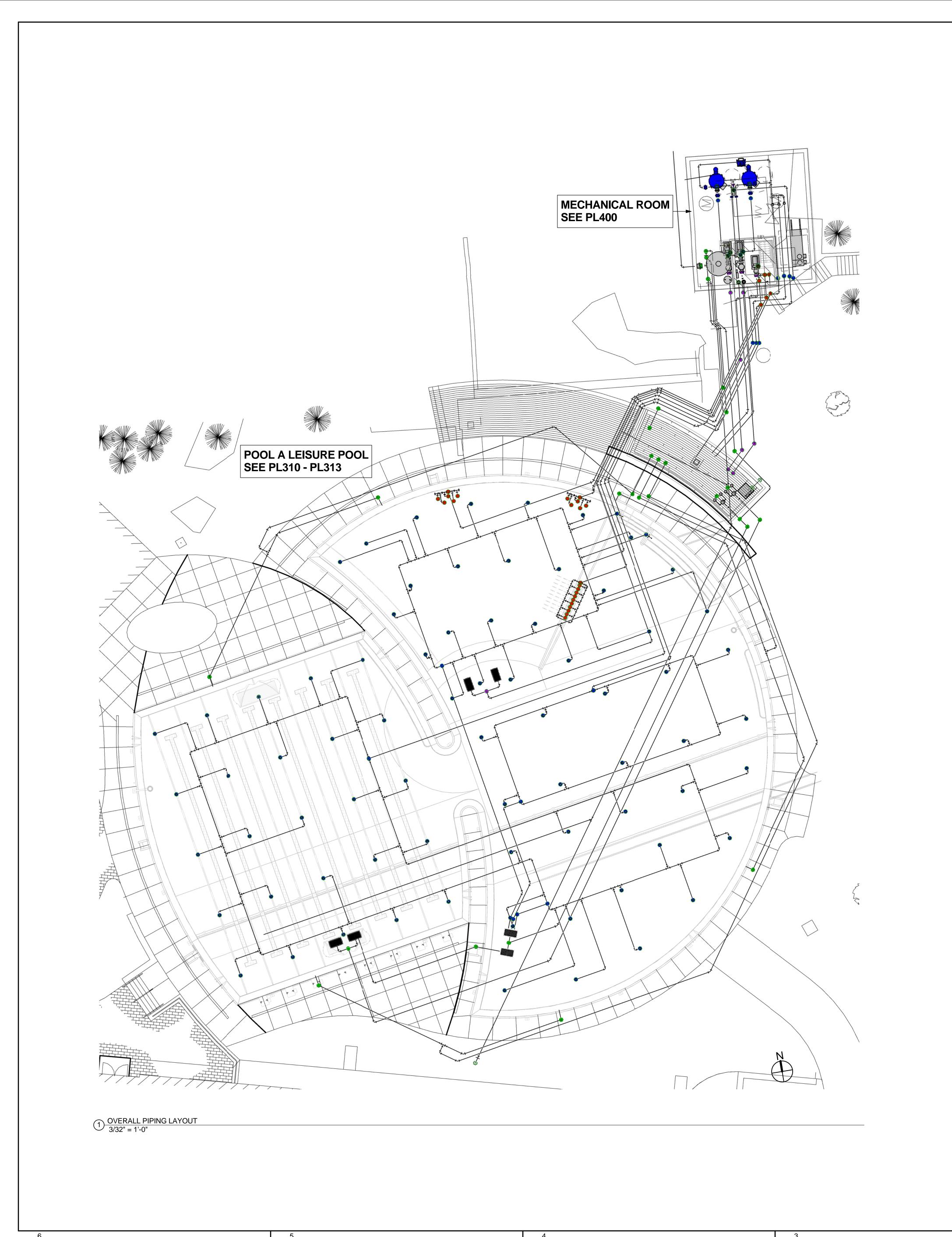
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POOL A - LEISURE POOL DETAILS



PIPING PLAN NOTE

DIVISION 13 CONTRACTOR NOTES:

- 1 THE FOLLOWING NOTES APPLY TO ALL PIPING PLANS.
- 2 COORDINATE ALL PIPING AND EMBEDMENTS WITH AFFECTED TRADES.
 3 REFER TO PL1.02-2 FOR REINFORCEMENT AT PIPE PENETRATIONS.
- 4 ALL CONNECTIONS AND HANGERS IN SURGE TANK TO BE STAINLESS STEEL.
- PROVIDE WINTERIZING/DRAINING INSTRUCTIONS AND SCHEMATICS TO OWNER. SEE CIVIL DRAWINGS FOR SITE PIPING.
- 6 PIPING IS SPREAD OUT FOR CLARITY.
- 7 CONTRACTOR CAN "STACK" PIPES IN THE TRENCH.
 8 ARROW DENOTES DIRECTION OF FLOW.
- 9 * DENOTES CHANGE IN ELEVATION REQUIRED AT THIS POINT.

10 THIS DRAWING IS FOR SCHEMATIC USE ONLY.

PIPING NOTES REFER TO SPECIFICATION SECTION 13150 FOR DETAILS

1. PIPING:

1a. ALL PIPING SHALL BE IN ACCORDANCE WITH THE NEW HAMPSHIRE STATE PLUMBING CODE AND NEW HAMPSHIRE DEPARTMENT OF PUBLIC HEALTH CODE. THE A.S.T.M. DESIGNATION NUMBER D-1785, AND THE NSF SEAL FOR POTABLE WATER.

- 1b. ALL PIPING DESIGNED FOR 5'/SECOND MAX SUCTION, 8'/SECOND MAX PRESSURE, AND 3'/SECOND MAX GRAVITY.
- 1c. MAIN DRAIN PIPING SHALL CARRY 100% OF RECIRCULATION RATE AT A VELOCITY NOT TO EXCEED 3'/SECOND.
- 1d. ALL ZERO DEPTH GUTTER, GUTTER AND INLET SUPPLY PIPING MUST BE LAID ON A GRADE SO IT WILL DRAIN TO THE SURGE TANK OR EQUIPMENT VAULT COMPLETELY BY GRAVITY. MAIN DRAIN LINE PIPING MUST BE LAID ON A
- GRADE SO;

 (A) ALL PIPING FROM BENEATH THE POOL TO THE ELEVATION CHANGE SHALL PITCH TO DRAIN TO THE POOL MAIN DRAIN SUMPS AND;
- (B) ALL PIPING FROM THE ELEVATION CHANGE TO THE SURGE TANK SHALL PITCH TO DRAIN TO THE SURGE TANK. IN ALL INSTANCES WHERE GRAVITY DRAINAGE IS NOT PROVIDED; THE CONTRACTOR SHALL INSTALL DRAIN VALVES SO THAT ALL LINES CAN BE DRAINED COMPLETELY TO SURGE TANK OR ANOTHER APPROVED LOCATION. DRAINAGE PLUGS SHALL BE PROVIDED IN THE PIPING SYSTEM TO ALLOW FOR DRAINING OF POOL PIPING. CONTRACTOR SHALL PROVIDE OPERATION AND DRAINING INSTRUCTIONS TO OWNER.
- 1e. ALL ELEVATIONS TO BE FIELD VERIFIED TO ALLOW FOR PROPER PITCH AND DRAINAGE. PITCH -APPROXIMATE 1"/10'-0". POOL CONTRACTOR SHALL MAKE EVERY EFFORT TO CURTAIL THE USE OF FITTINGS TO REDUCE
- 1f. ALL DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY!! FINAL LOCATIONS SHALL BE FIELD VERIFIED WITH ALL OTHER TRADES, BY CONTRACTOR.
- 1g. CONTRACTOR SHALL COORDINATE ALL WORK WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS.

2. DRAINS:

- 2a. ALL DRAIN FITTINGS TO CARRY 100% OF RECIRCULATION RATE AT A VELOCITY NOT TO EXCEED 1.5'/SECOND THROUGH THE CLEAR AREA OF THE GRATE.
- 2b. FILTER BACKWASH LINE, POOL DRAIN LINE, SURGE TANK DRAIN LINE, SURGE TANK OVERFLOW LINE AND POOL UNDERDRAIN LINE TO DISCHARGE TO SEWER WITH MIN 6" AIR GAP.
- 2c. ALL DRAINS AND OUTLETS SHALL CONFORM WITH ANSI/APSP-16 2011 OR ANY SUCCESSOR STANDARD.

3. PRESSURE GAUGES:

3a. PRESSURE GAUGES TO BE INSTALLED ON ALL PUMP SUCTION AND DISCHARGE LINES.

4. VALVES:

4a. PROVIDE BACKWATER VALVES AND GEAR OPERATED SUB-SURFACE BUTTERFLY VALVES WITH VALVE EXTENSIONS FOR ALL POOL AND SURGE TANK DRAIN LINES.

4b. EACH VALVE SHALL HAVE A PERMANENT IDENTIFYING LABEL OR TAG ATTACHED TO IT. THE SEQUENCE OF OPERATION, BRIEFLY STATED, SHALL BE PROMINENTLY DISPLAYED.

5. FLOWMETERS:

5a. FLOWMETER SHALL BE PROVIDED IN THE FILTRATION PUMP DISCHARGE LINE AND IN EACH INLET RETURN LINE AS INDICATED ON THE DRAWINGS. FLOWMETERS SHALL BE INSTALLED ON A STRAIGHT LENGTH OF PIPE WITHOUT ANY VALVE, ELBOW OR OTHER SOURCE OF TURBULENCE (UNINTERRUPTED FLOW). PROVIDE A MIN OF 10 PIPE DIA UPSTREAM AND 5 PIPE DIA DOWNSTREAM FROM THE FLOWMETER OF UNINTERRUPTED FLOW OR INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

5b. MAIN FLOWMETER SHALL BE USED TO MONITOR BACKWASH RATE.

6. FILTERS:

6a. FILTER SHALL BE PROVIDED WITH THE FOLLOWING APPROPRIATELY LOCATED ACCESSORIES: PRESSURE GAUGES, BACKWASH SIGHT GLASS ON WASTE DISCHARGE LINE, AN AIR RELIEF VALVE AT THE HIGH POINT OF THE FILTER AND A VALVED TANK DRAIN.

7. HEATERS:

7a. EQUIPPED WITH THERMOMETERS, 80-240 DEGREES F WITH 2 DEGREE GRADUATIONS; AUTOMATIC TEMPERATURE LIMITING DEVICE; FLOW SWITCH; HEAT EXCHANGER/HEATER BYPASS VALVE; ALL INFLUENT/EFFLUENT HEAT EXCHANGER/HEATER PIPING TO BE METALLIC; PRESSURE RELIEF VALVE TO BE PROVIDED AND PIPED TO WITHIN 6" OF FLOOR. THE AUTOMATIC TEMPERATURE SWITCH ON THE POOL HEAT EXCHANGER/HEATER SHALL BE

FOR A MAX OF 100 DEGREES. FURNISH AND INSTALL THERMOMETERS IN INLET AND OUTLET PIPING TO HEAT EXCHANGER/HEATER AND DOWNSTREAM IN THE BLENDED WATER SYSTEM.

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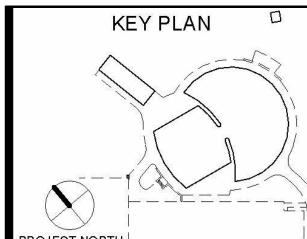
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ISSUANCES

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OVERALL PIPING PLAN

