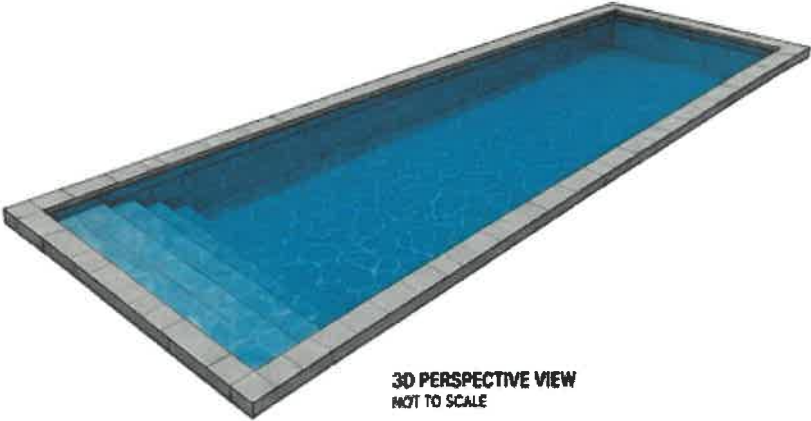


PROJECT INFORMATION

PROJECT NAME: 709 MAIN STREET POOL
ADDRESS: 709 MAIN STREET
CITY / STATE / ZIP: HINGHAM, MA 02043
DATE: JUNE 9, 2026
PREPARED FOR: MICHAEL AHERN
PHONE: 617-590-4535
EMAIL: maherngc@aherncm.com
PREPARED BY: LIANG CHENG P.E.



3D PERSPECTIVE VIEW
NOT TO SCALE

PROJECT SUMMARY

- 35'-0" Long x 15'-4" Wide Lap Pool
- Cast-In-Place Reinforced Concrete Construction
- Walk-In Stairs at Shallow End
- Shallow End: 3'-6" Water Depth
- Deep End: 8'-0" Water Depth
- Porcelain Tile Finish - Floor and Walls
- Synthetic Limestone Coping and Deck
- Automatic Recessed Under Coping Cover
- Salt Water Chlorination System
- 4,500 Gallons (Estimated)

SHEET INDEX

- A0.0 COVER SHEET & PROJECT DATA
- A1.0 POOL PLAN, DIMENSIONS & DETAILS
- A2.0 SECTIONS & ELEVATIONS
- A3.0 STAIR DETAILS
- A4.0 CONSTRUCTION DETAILS
- A5.0 REINFORCING CONCEPTS
- A6.0 PLUMBING PLAN
- A7.0 HYDRAULIC SCHEMATIC
- A8.0 EQUIPMENT PAD PLAN
- A9.0 ELECTRICAL & BONDING PLAN
- A10.0 FINISH SCHEDULE & NOTES
- A11.0 GENERAL NOTES

PROJECT:

RESIDENTIAL
LAP POOL
PROJECT

ADDRESS:

709 MAIN STREET
HINGHAM, MA 02043

CLIENT:

MICHAEL AHERN

DESIGNER / PREPARER:

LIANG CHENG P.E.

AGILE ENGINEERING

188 SOUTH STREET
QUINCY, MA 02169

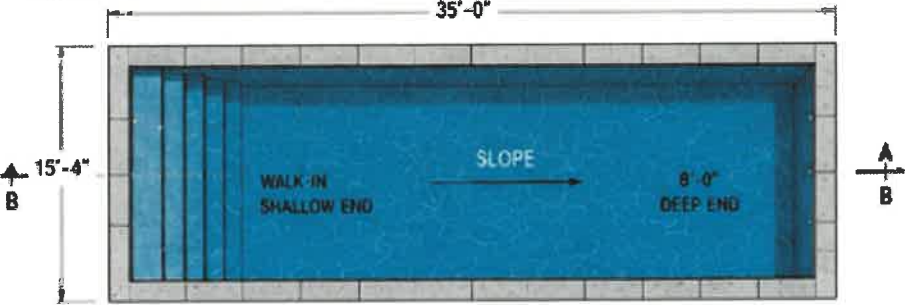
SEAL:



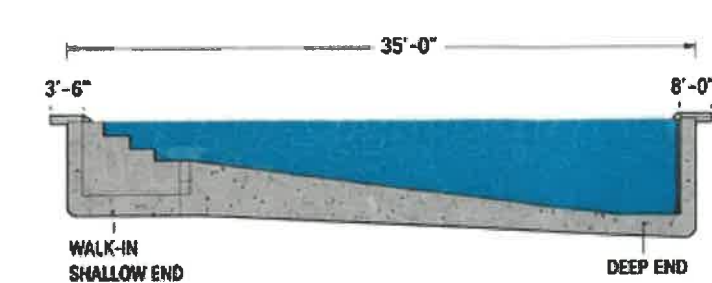
REVISION SCHEDULE

NO.	DESCRIPTION	DATE

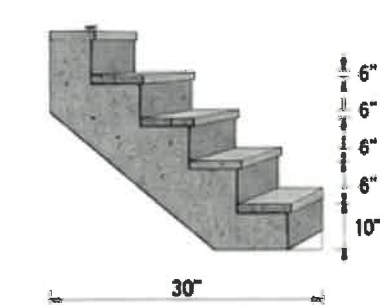
1 POOL PLAN (TOP DOWN)
SCALE: 1/4" = 1'-0"



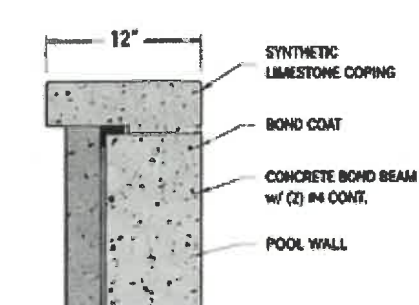
2 DEPTH PROFILE (SIDE VIEW)
SCALE: 1/4" = 1'-0"



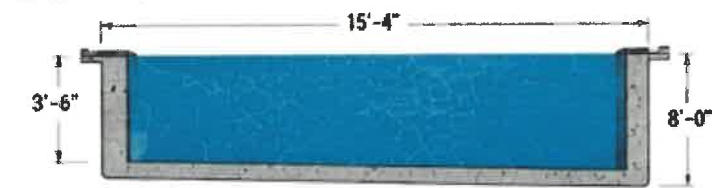
3 STAIR DETAIL
SCALE: 1/2" = 1'-0"



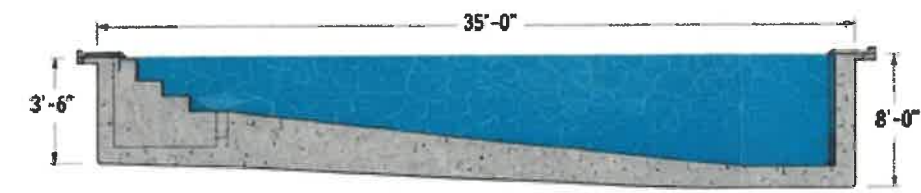
4 TYPICAL COPING DETAIL
SCALE: 3" = 1'-0"



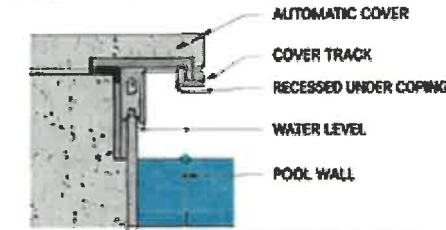
5 CROSS SECTION A-A (WIDTH)
SCALE: 1/4" = 1'-0"



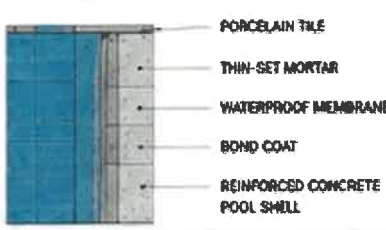
6 LONGITUDINAL SECTION B-B (LENGTH)
SCALE: 1/4" = 1'-0"



7 AUTOMATIC COVER (RECESSED)
SCALE: 3" = 1'-0"



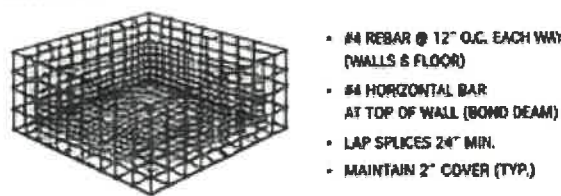
8 TILE FINISH SYSTEM (TYP.)
NOT TO SCALE



9 FORMWORK CONCEPT (TYP.)
NOT TO SCALE



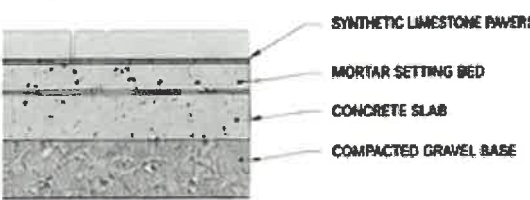
10 REINFORCING CONCEPT (TYP.)
NOT TO SCALE



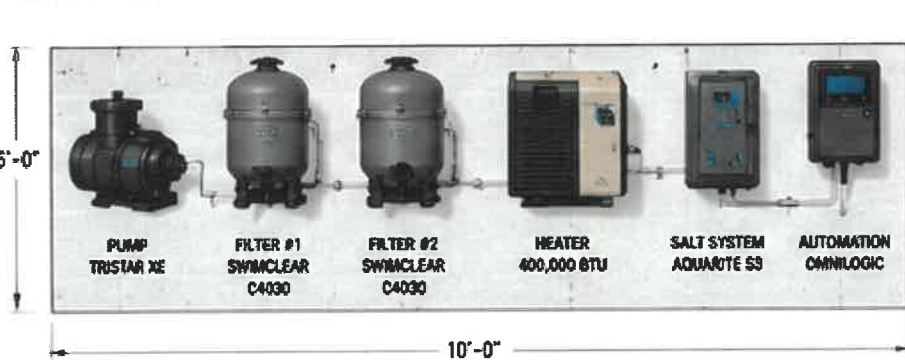
11 CONCRETE PLACEMENT (TYP.)
NOT TO SCALE



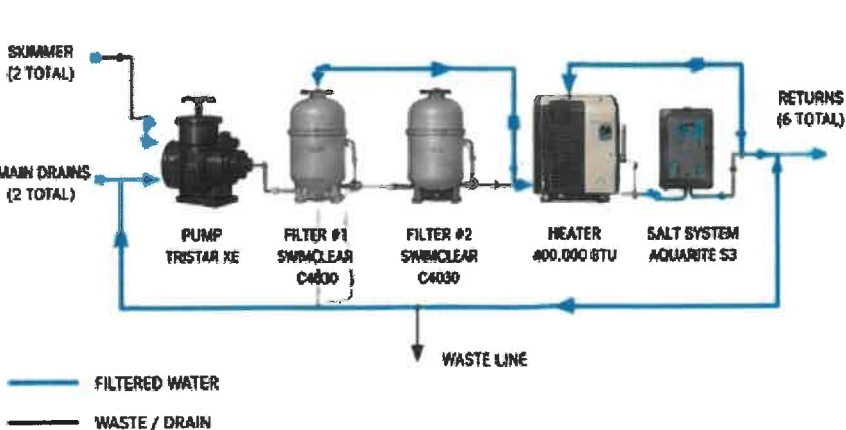
12 TYPICAL DECK SECTION
SCALE: 3" = 1'-0"



13 EQUIPMENT PAD LAYOUT
SCALE: 1/2" = 1'-0"



14 HYDRAULIC SCHEMATIC
NOT TO SCALE



15 POOL DATA

POOL SIZE:	35'-0" x 15'-4"
SHALLOW END:	3'-6"
DEEP END:	8'-0"
VOLUME (EST.):	4,500 GALLONS
SURFACE AREA:	538 SQ FT
PERIMETER:	101'-0"
WATER TEMP. (DESIGN):	78° - 82°F
DESIGN FLOW:	90 - 110 GPM
TURNOVER RATE:	8 HOURS

16 EQUIPMENT SCHEDULE

PUMP:	Hayward Tristar XE Variable Speed
FILTERS:	(2) Hayward SwimClear Cartridge C4030
HEATER:	400,000 BTU Gas Heater
SALT SYSTEM:	Hayward AquaRite S3
AUTOMATION:	Hayward OmniLogic
LIGHTS:	(4) LED Color (Landy)
CIRCULATION:	6 Returns, 2 Skimmers, 2 Main Drains (VGB)

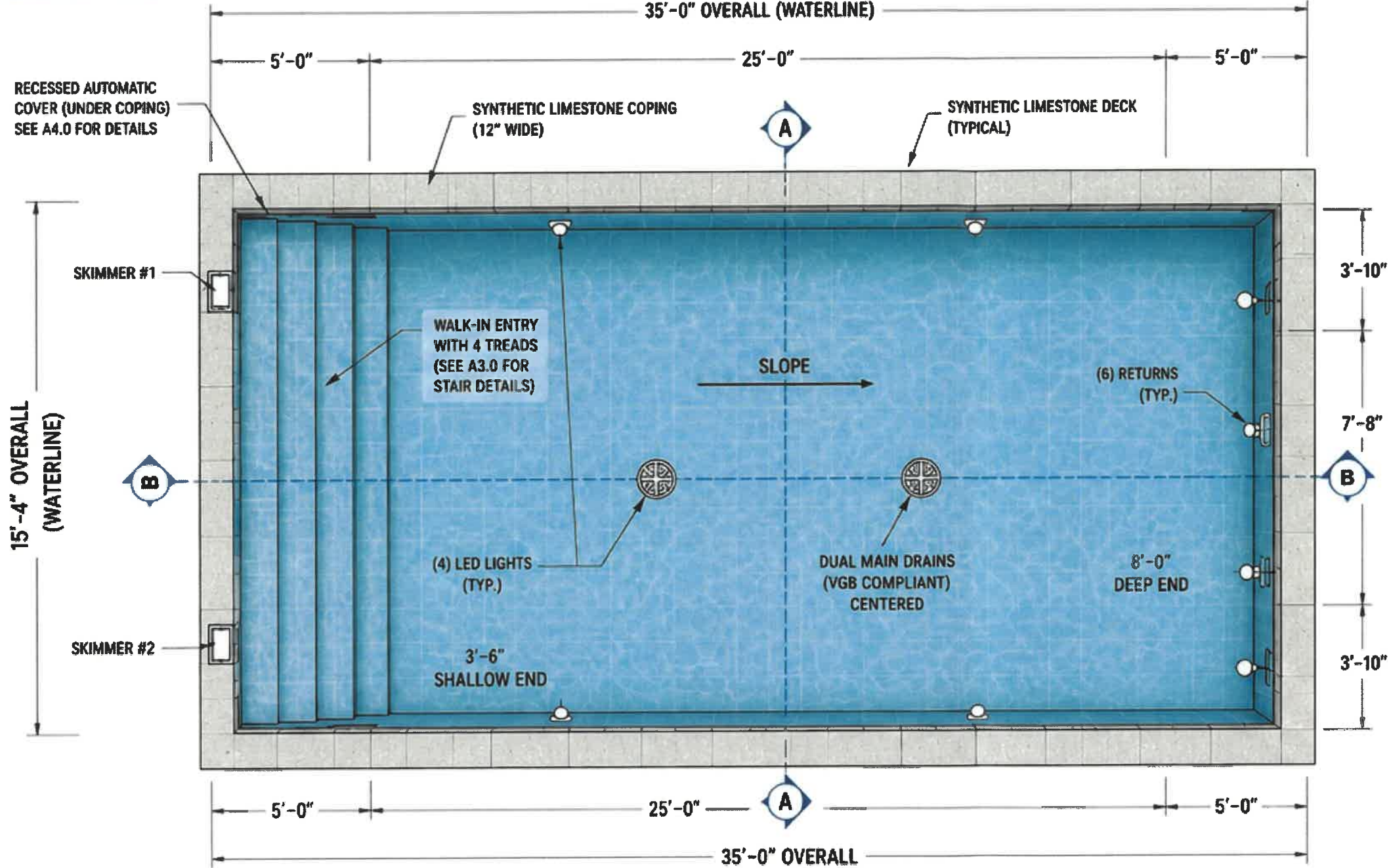
17 GENERAL NOTES

- All work to comply with local codes and ordinances.
- Contractor to verify all dimensions in the field.
- Reinforcing and structural design to be verified by Engineer of Record.
- Provide proper drainage away from pool structure.
- All plumbing to be pressure tested prior to backfill.
- Refer to equipment manufacturers for installation requirements.

A0.0
COVER SHEET &
PROJECT DATA

A1.0 POOL PLAN, DIMENSIONS & LAYOUT

SCALE: 1/4" = 1'-0"



LEGEND

- SKIMMER (2 TOTAL)
- MAIN DRAIN (2 TOTAL)
- RETURN (6 TOTAL)
- LED LIGHT (4 TOTAL)
- SECTION LINE
- SLOPE DIRECTION

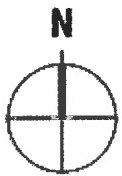
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PERIMETER: 101'-0"
WATER TEMP. (DESIGN): 78° - 82° F
DESIGN FLOW: 90 - 110 GPM
TURNOVER RATE: 8 HOURS

FINISH SCHEDULE

INTERIOR FINISH: PORCELAIN TILE
COPING: SYNTHETIC LIMESTONE
DECKING: SYNTHETIC LIMESTONE
COVER: AUTOMATIC RECESSED

NORTH



GRAPHIC SCALE



SCALE: 1/4" = 1'-0"

PROJECT

PROPOSED REINFORCED
CONCRETE SWIMMING POOL
PRELIMINARY DESIGN PACKAGE
FOR ENGINEER REVIEW AND
COORDINATION

PROJECT ADDRESS

709 MAIN STREET
HINGHAM, MA 02043

PREPARED FOR

AHERN CONSTRUCTION
MANAGEMENT

PREPARED BY

LIANG CHENG P.E.
AGILE ENGINEERING

REVISION SCHEDULE

NO.	DESCRIPTION	DATE

A1.0

POOL PLAN,
DIMENSIONS & LAYOUT

PLAN KEY NOTES

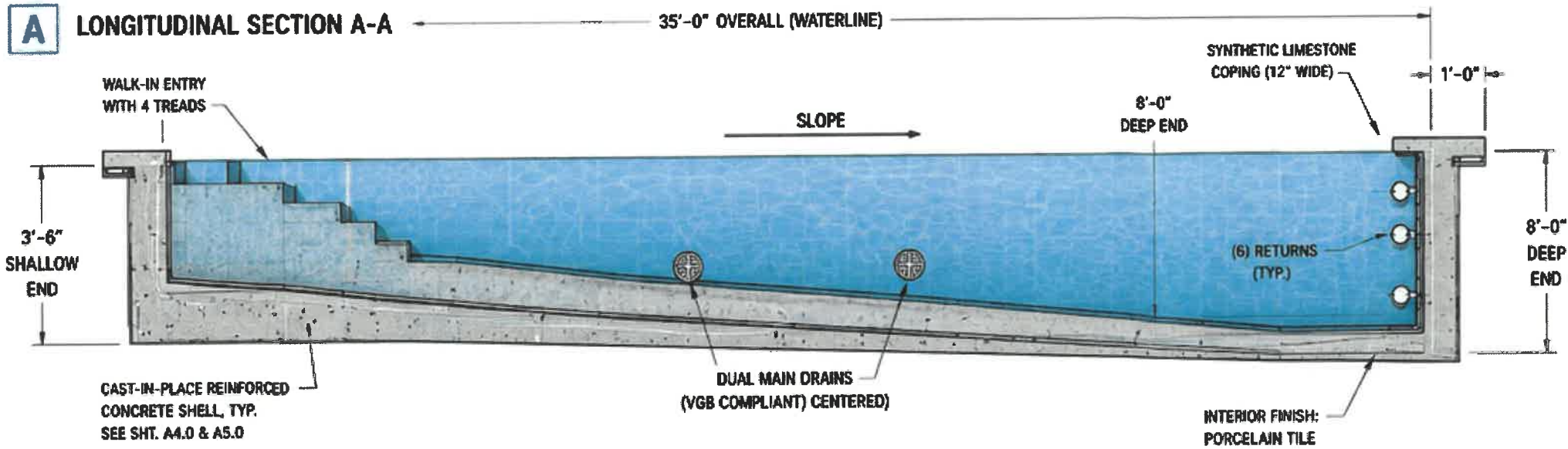
- WALK-IN STAIRS: 4 TREADS WITH UNIFORM RISER HEIGHT. SEE A3.0 FOR DETAILS.
- SKIMMERS: (2) SURFACE SKIMMERS LOCATED FOR OPTIMAL SURFACE CLEANING.
- MAIN DRAINS: (2) VGB-COMPLIANT DRAINS CENTERED ON FLOOR.
- RETURNS: (6) TOTAL RETURNS EVENLY SPACED FOR UNIFORM CIRCULATION.
- LIGHTS: (4) LED NICHELESS LIGHTS, TYPICAL. SEE E1.0.
- SLOPE: FLOOR SLOPES CONTINUOUSLY FROM 3'-6" TO 8'-0" DEEP END.

GENERAL NOTES

- VERIFY ALL DIMENSIONS AT JOB SITE PRIOR TO CONSTRUCTION.
- ALL STRUCTURAL, REINFORCING, AND MATERIALS TO BE PER ENGINEER.
- SEE SHEET A0.0 FOR PROJECT DATA, SCOPE, AND FINISHES.
- SEE SHEET M1.0 FOR PLUMBING PLAN.
- SEE SHEET E1.0 FOR ELECTRICAL AND BONDING INFORMATION.
- SEE SHEET A4.0 FOR COPING, DECK, AND COVER DETAILS.

A2.0 LONGITUDINAL & CROSS SECTIONS

SCALE: 1/4" = 1'-0"



- SECTION NOTES**
1. ALL DIMENSIONS ARE TO WATERLINE UNLESS NOTED OTHERWISE.
 2. SEE SHEET A1.0 FOR PLAN DIMENSIONS AND EQUIPMENT LOCATIONS.
 3. POOL SHELL AND REINFORCING CONCEPTS SHOWN ON SHEETS A4.0 & A5.0.
 4. SEE SHEET A6.0 FOR COPING, TILE, AND DECK DETAILS.
 5. AUTOMATIC COVER SYSTEM RECESSED INTO COPING. SEE SHEET A6.0.

- FINISH LEGEND**
- | | |
|------------------|---------------------|
| INTERIOR FINISH: | PORCELAIN TILE |
| WATERLINE TILE: | PORCELAIN TILE |
| COPING: | SYNTHETIC LIMESTONE |
| DECK: | SYNTHETIC LIMESTONE |

PROJECT

PROPOSED REINFORCED
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PRELIMINARY DESIGN PACKAGE
FOR ENGINEER REVIEW AND
COORDINATION

PROJECT ADDRESS

709 MAIN STREET
HINGHAM, MA 02043

PREPARED FOR

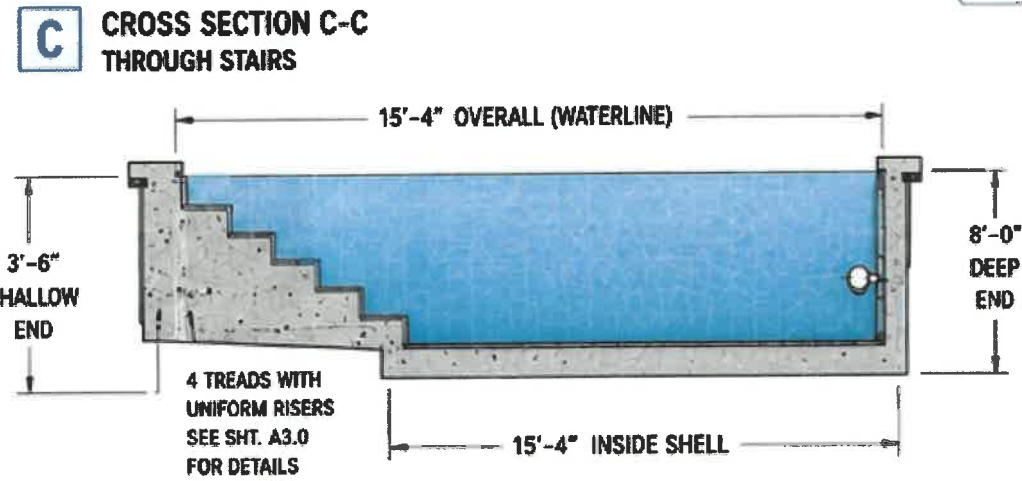
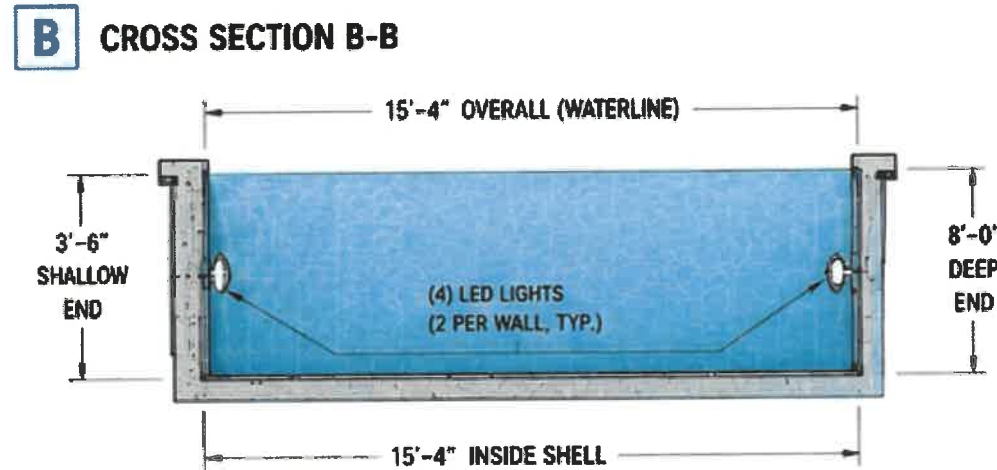
AHERN CONSTRUCTION
MANAGEMENT

PREPARED BY

LIANG CHENG P.E.
AGILE ENGINEERING

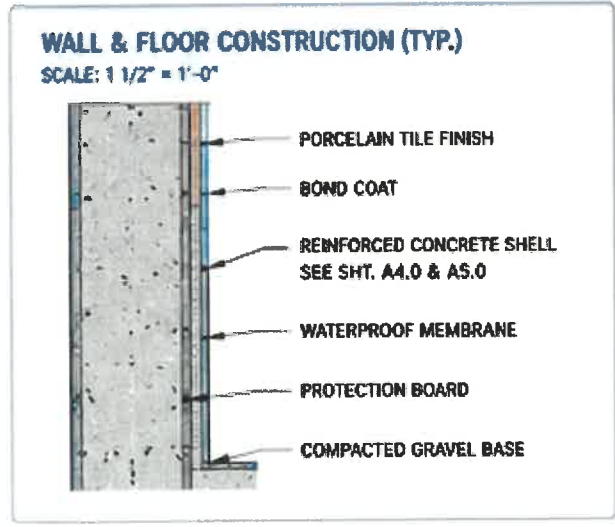
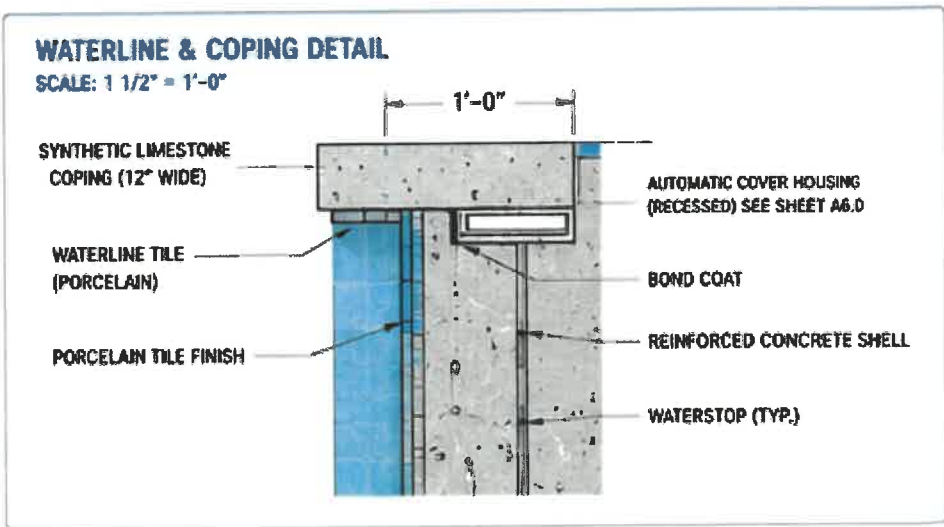
REVISION SCHEDULE

NO.	DESCRIPTION	DATE



ELEVATION DATA

TOP OF COPING (AT DECK)	100.00'
WATERLINE (NORMAL)	99.00'
SHALLOW END FLOOR	95.50'
DEEP END FLOOR	92.00'
POOL DEPTH (MAX)	8'-0"
POOL SLOPE	3'-6" TO 8'-0"



- SECTION KEY NOTES**
- 1 WALK-IN ENTRY WITH 4 TREADS. SEE SHEET A3.0 FOR DETAILS.
 - 2 DUAL MAIN DRAINS CENTERED ON FLOOR (VGB COMPLIANT).
 - 3 (6) RETURNS LOCATED EVENLY ON SIDE WALLS.
 - 4 (4) LED LIGHTS - 2 PER LONG WALL.
 - 5 POOL SLOPE CONTINUOUS FROM 3'-6" TO 8'-0".
 - 6 AUTOMATIC COVER SYSTEM RECESSED IN COPING. SEE SHEET A6.0.

A2.0

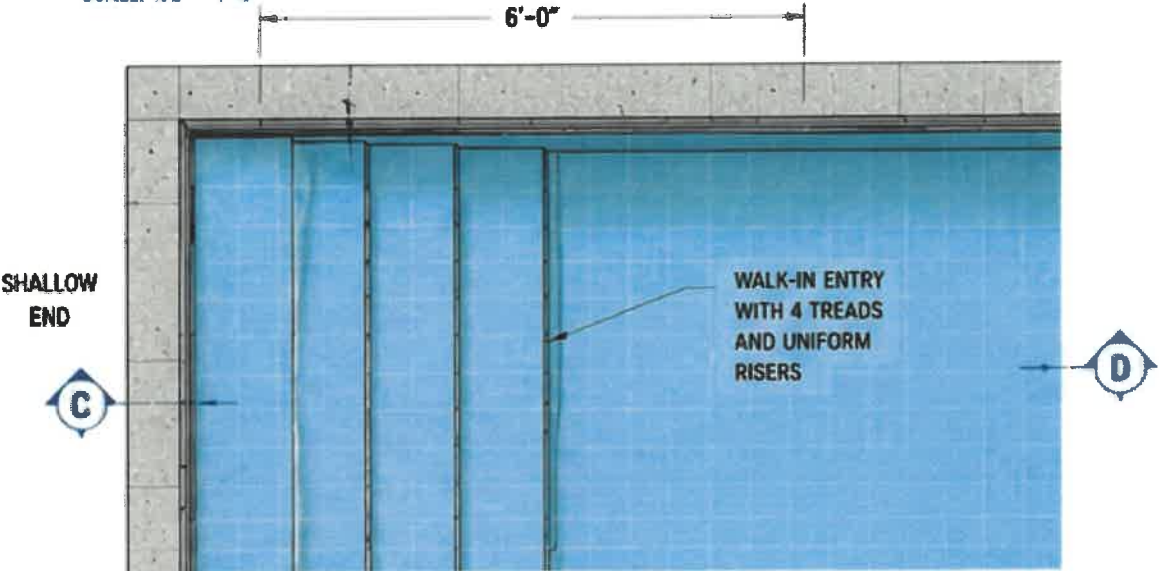
LONGITUDINAL &
CROSS SECTIONS

A3.0 STAIR DETAILS & ENLARGED VIEWS

SCALE: 1/2" = 1'-0"

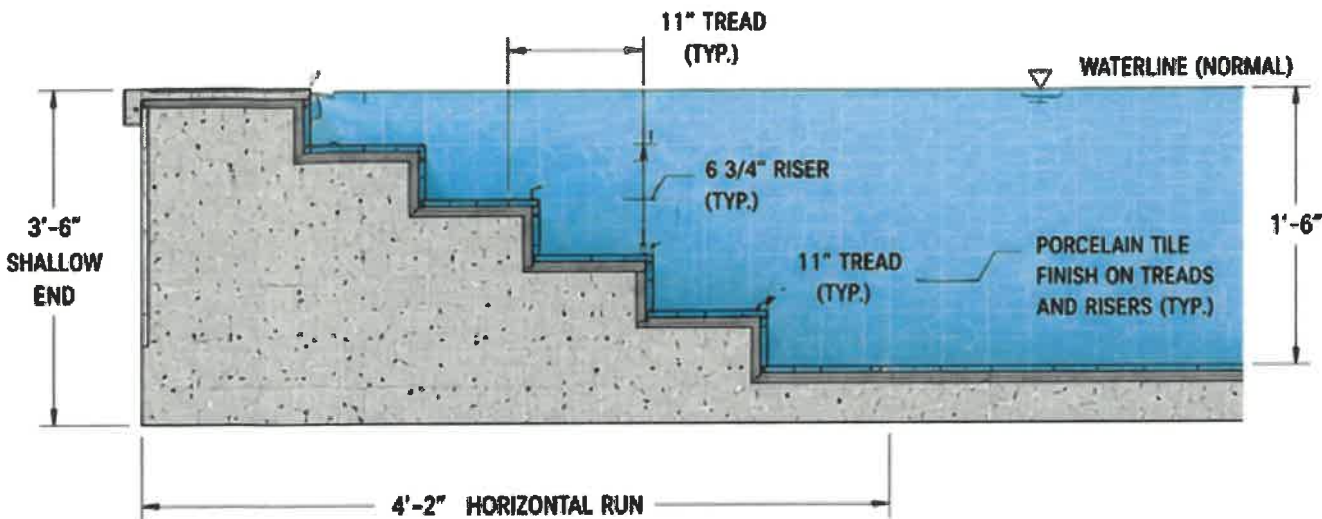
A STAIR PLAN (TOP VIEW)

SCALE: 1/2" = 1'-0"



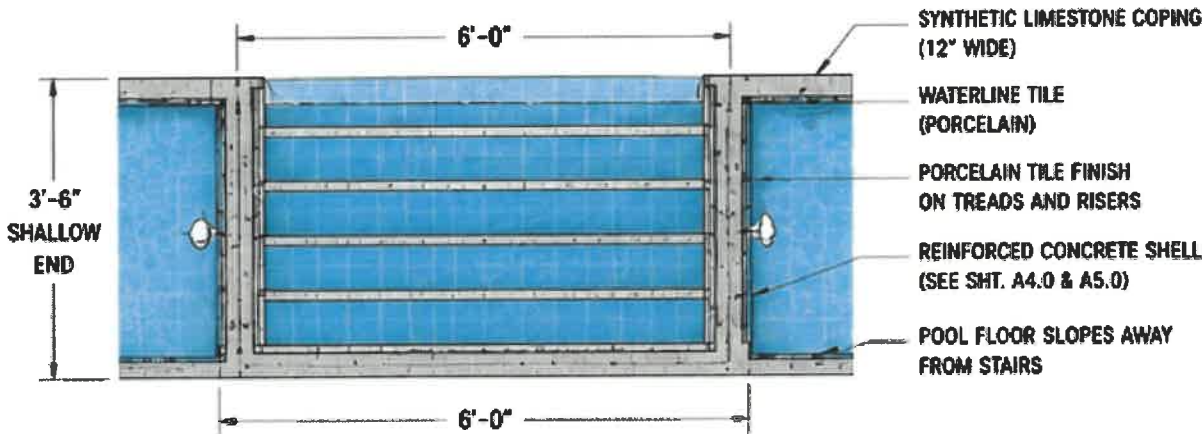
B STAIR PROFILE (SECTION C-C)

SCALE: 1/2" = 1'-0"



C STAIR SECTION (THROUGH STAIRS)

SCALE: 1/2" = 1'-0"



D STAIR DIMENSIONS & GEOMETRY

NUMBER OF TREADS:	4
RISER HEIGHT (UNIFORM):	6 3/4"
TREAD DEPTH (UNIFORM):	11"
STAIR WIDTH (CLEAR):	6'-0"
STAIR RUN (HORIZONTAL):	4'-2"
TOTAL RISE:	3'-6"
STAIR LOCATION:	SHALLOW END
ENTRY TYPE:	WALK-IN ENTRY

E STAIR FINISH PERSPECTIVE

N.T.S.

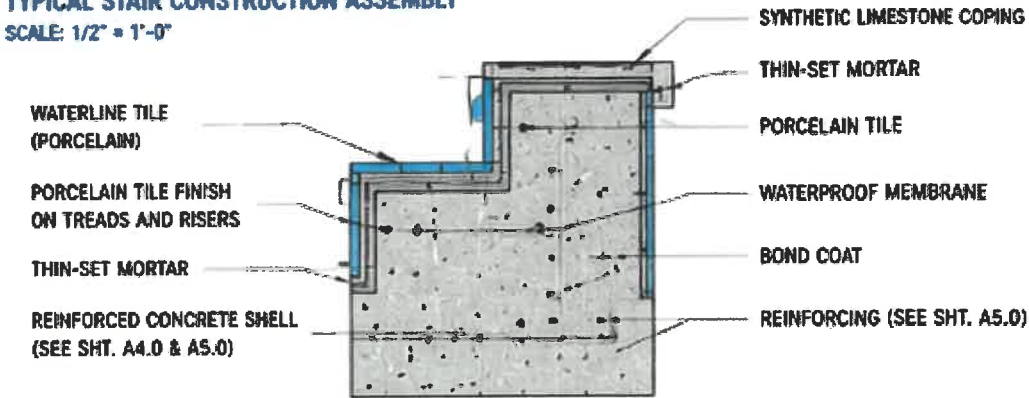


STAIR NOTES

- STAIRS TO HAVE UNIFORM RISER HEIGHT AND TREAD DEPTH AS SHOWN.
- ALL TILES TO BE PORCELAIN FOR DURABILITY AND LOW WATER ABSORPTION.
- PROVIDE SLIP-RESISTANT TILE FINISH ON TREADS.
- ALL DIMENSIONS ARE NOMINAL. VERIFY IN FIELD.
- SEE SHEET A6.0 FOR TILE AND COPING DETAILS.
- SEE SHEET A4.0 & A5.0 FOR STRUCTURAL DETAILS AND REINFORCING CONCEPTS.

TYPICAL STAIR CONSTRUCTION ASSEMBLY

SCALE: 1/2" = 1'-0"



STAIR CODE & SAFETY REQUIREMENTS

- MAXIMUM RISER HEIGHT: 7" (PROVIDED: 6 3/4")
- MINIMUM TREAD DEPTH: 10" (PROVIDED: 11")
- TREADS AND SURFACES TO BE SLIP RESISTANT.
- STAIRS SHALL BE IN ACCORDANCE WITH:
 - 780 CMR (MA STATE BOARD OF BUILDING REGULATIONS)
 - ICC/ANSI A117.1 ACCESSIBILITY GUIDELINES (AS APPLICABLE)
- ALL EDGES SHALL BE SMOOTH AND FREE OF SHARP EDGES.
- HANDRAILS ARE NOT REQUIRED FOR RESIDENTIAL POOLS WITH FOUR (4) OR FEWER RISERS.

PROJECT

PROPOSED REINFORCED
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PRELIMINARY DESIGN PACKAGE
FOR ENGINEER REVIEW AND
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PROJECT ADDRESS

709 MAIN STREET
HINGHAM, MA 02043

PREPARED FOR

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MANAGEMENT

PREPARED BY

LIANG CHENG P.E.
AGILE ENGINEERING

REVISION SCHEDULE

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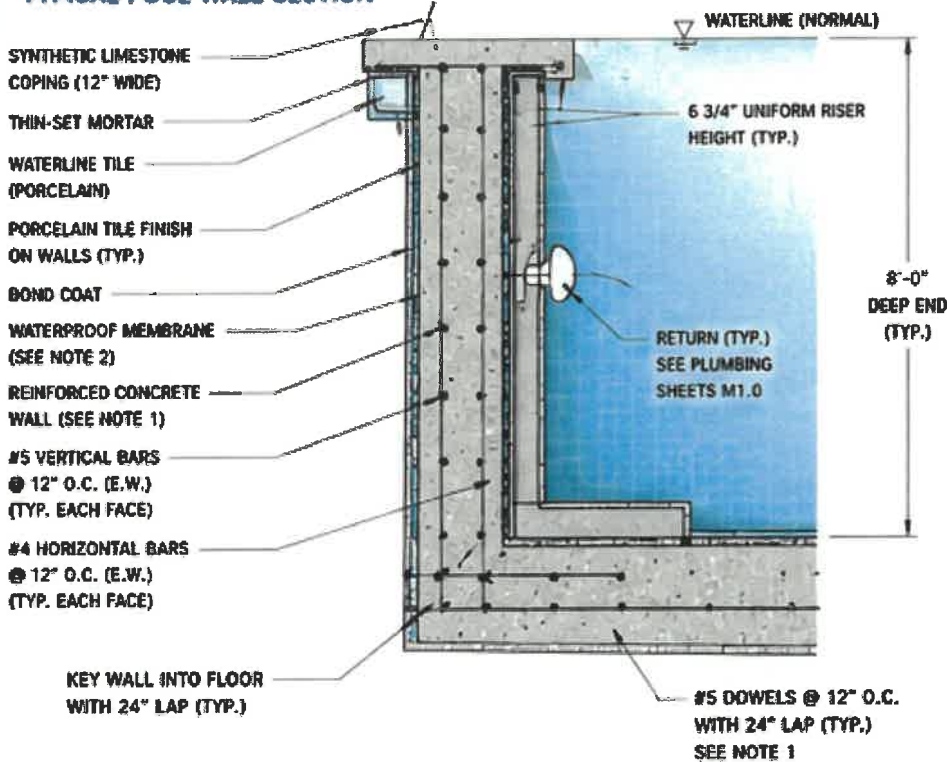
A3.0

STAIR DETAILS &
ENLARGED VIEWS

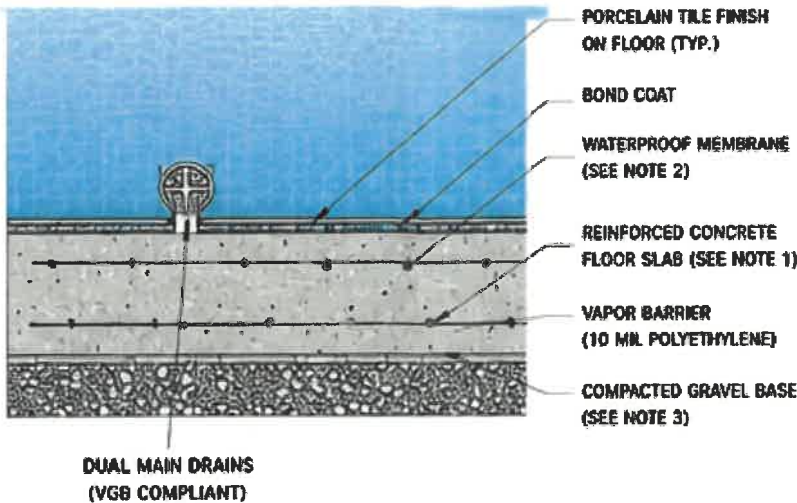
A4.0 TYPICAL CAST-IN-PLACE CONCRETE CONSTRUCTION DETAILS

SCALE: 1/2" = 1'-0"

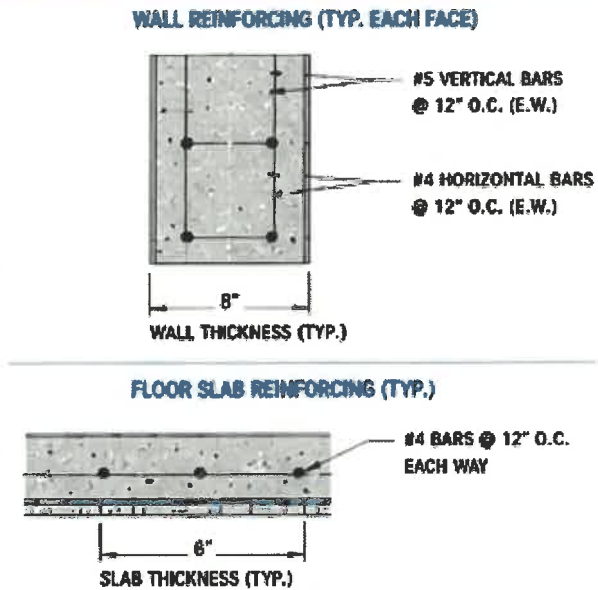
A TYPICAL POOL WALL SECTION



B TYPICAL POOL FLOOR (SLAB) SECTION

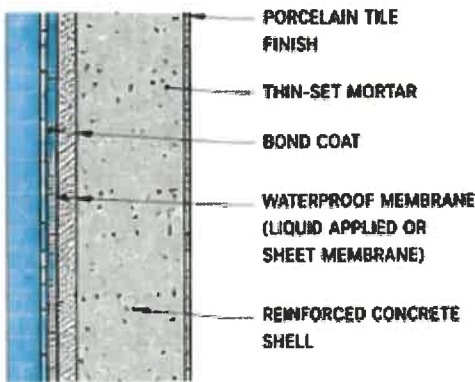


C TYPICAL REINFORCING CONCEPTS (FOR ENGINEER REVIEW)



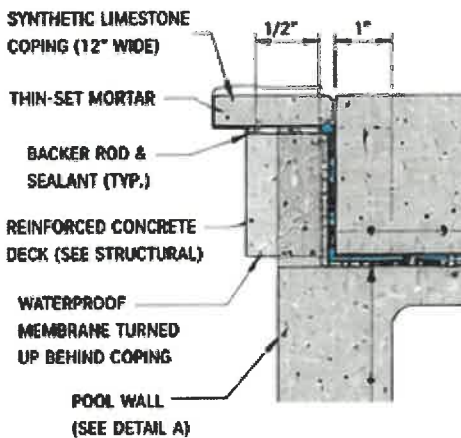
NOTE: REINFORCING SHOWN IS REPRESENTATIVE ONLY. FINAL DESIGN BY STRUCTURAL ENGINEER.

D WALL & FLOOR TILE / WATERPROOFING ASSEMBLY (TYPICAL)

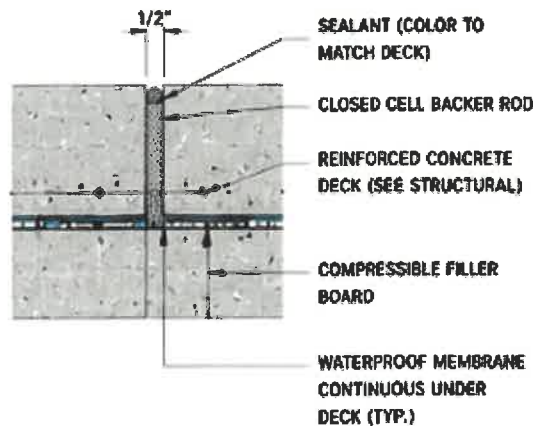


NOTE: SEE NOTES 2 AND 4

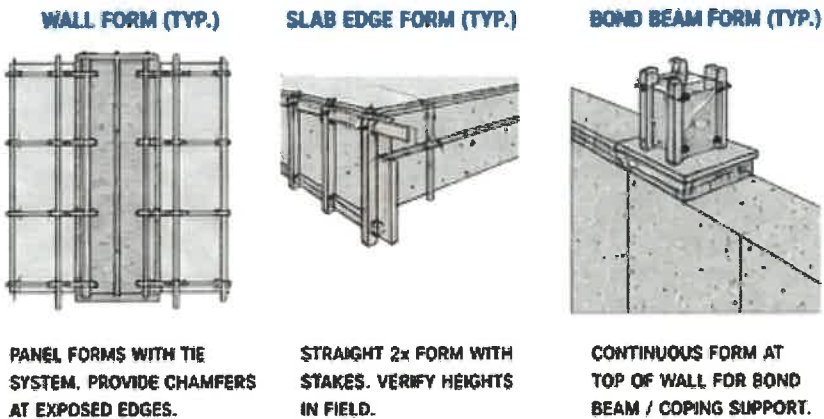
E COPING / DECK INTERFACE DETAIL (TYPICAL)



F EXPANSION JOINT DETAIL (TYPICAL AT DECK)



G TYPICAL FORMWORK CONCEPTS (FOR REFERENCE)



CONCRETE & CONSTRUCTION NOTES

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318 AND ACI 350 REQUIREMENTS.
2. WATERPROOFING SYSTEM SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND WARRANTIES.
3. PROVIDE POSITIVE DRAINAGE ON SITE. DO NOT ALLOW HYDROSTATIC PRESSURE BELOW POOL SHELL.
4. ALL PENETRATIONS THROUGH CONCRETE SHALL BE WATERSTOPPED AND SEALED.
5. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4" (TYP.) UNLESS NOTED.
6. VERIFY ALL DIMENSIONS AND ELEVATIONS IN FIELD PRIOR TO CONSTRUCTION.

CONSTRUCTION SEQUENCE (TYPICAL)

1. EXCAVATION TO LINES AND GRADES.
2. PROOF ROLL AND COMPACT SUBGRADE.
3. PLACE AND COMPACT GRAVEL BASE.
4. INSTALL VAPOR BARRIER (MIN. 10 MIL POLY).
5. PLACE AND TIE REINFORCING STEEL.
6. ERECT FORMWORK AND INSTALL EMBEDDED ITEMS.
7. CONCRETE PLACEMENT (WALLS AND FLOOR).
8. CURE CONCRETE PER ACI REQUIREMENTS.
9. REMOVE FORMS. APPLY WATERPROOFING & TILE FINISH.

CONCRETE PLACEMENT & CURING NOTES

- USE VIBRATION TO ENSURE PROPER CONSOLIDATION.
- PROTECT FRESH CONCRETE FROM RAPID DRYING.
- MAINTAIN CONCRETE TEMPERATURE PER ACI 306.
- KEEP CONCRETE CONTINUOUS AT WALL / FLOOR INTERSECTION.
- MINIMUM 7 DAYS WET CURING RECOMMENDED WHERE PRACTICAL.

GENERAL NOTES

- ALL DETAILS SHOWN ARE TYPICAL AND FOR DESIGN INTENT ONLY.
- STRUCTURAL DESIGN, REINFORCING, AND SIZES BY LICENSED STRUCTURAL ENGINEER.
- SEE STRUCTURAL SHEETS S1.0 - S3.0 FOR ADDITIONAL INFORMATION.

PROJECT

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PRELIMINARY DESIGN PACKAGE
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AGILE ENGINEERING

REVISION SCHEDULE

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A4.0

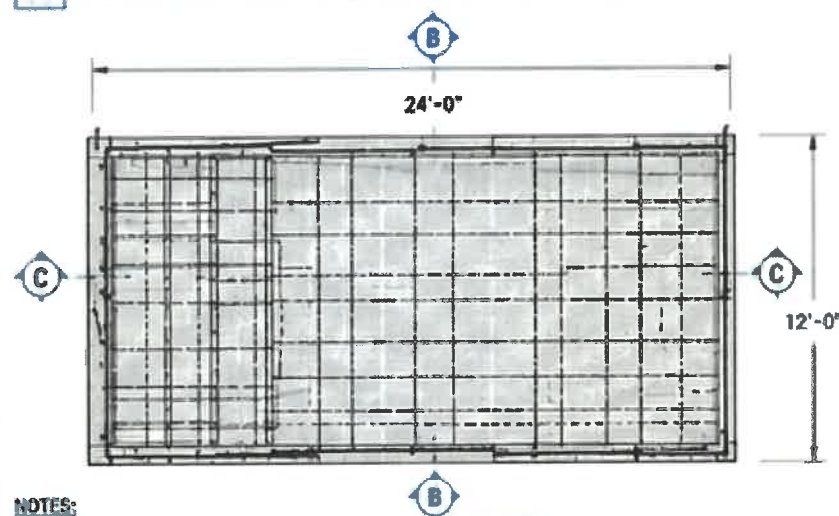
TYPICAL CAST-IN-PLACE
CONCRETE
CONSTRUCTION DETAILS

A5.0 REINFORCING CONCEPTS & TYPICAL REBAR LAYOUTS

SCALE: 1/2" = 1'-0"

NOTE: REINFORCING SHOWN IS REPRESENTATIVE ONLY. FINAL DESIGN, SIZES, SPACING, AND LAP SPLICES BY STRUCTURAL ENGINEER.

A POOL PLAN - REINFORCING LAYOUT (AT FLOOR)



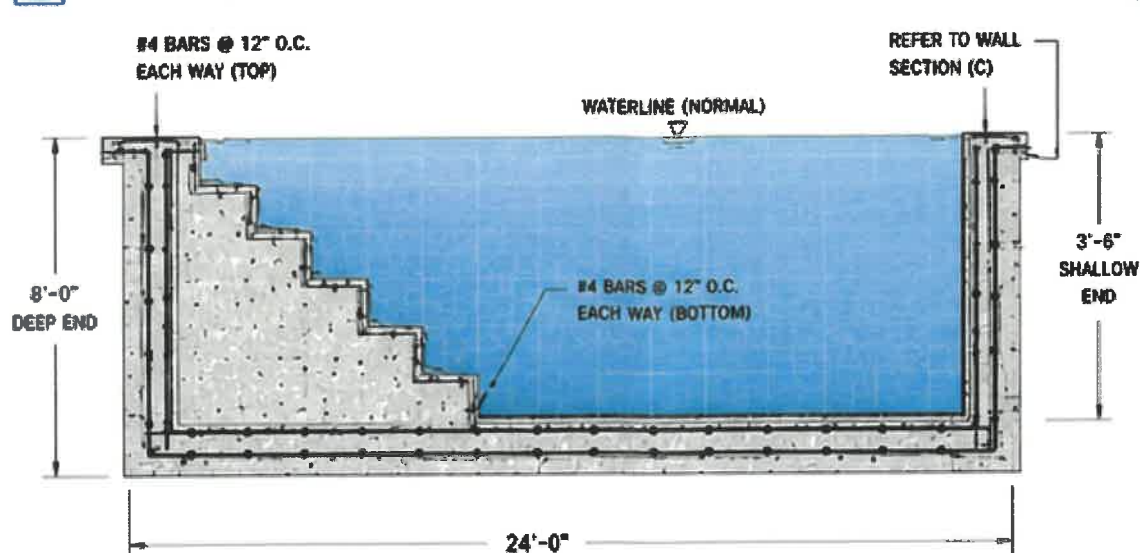
NOTES:

1. ALL REINFORCING STEEL TO BE NEW GRADE 60 ($F_y = 60,000$ PSI) U.N.O.
2. MAINTAIN 2" MIN. CLEAR COVER TO WATER SIDE SURFACES (TYP.)

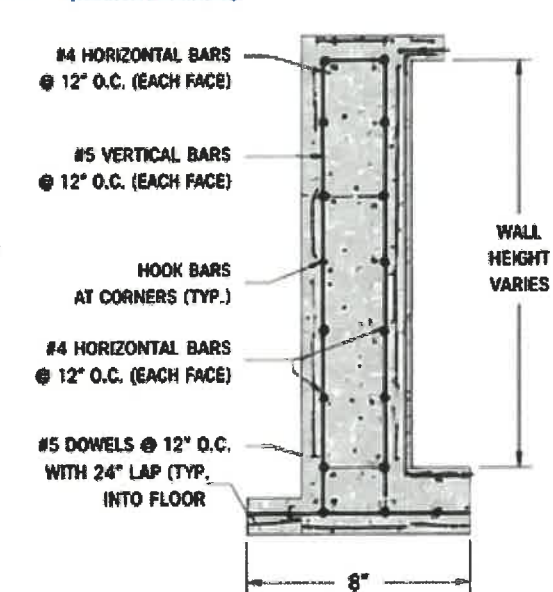
LEGEND:

- = BOTTOM BARS (EW)
- - - = BOTTOM BARS (NS)
- = TOP BARS (AS SHOWN)
- L = HOOK (TYP.)

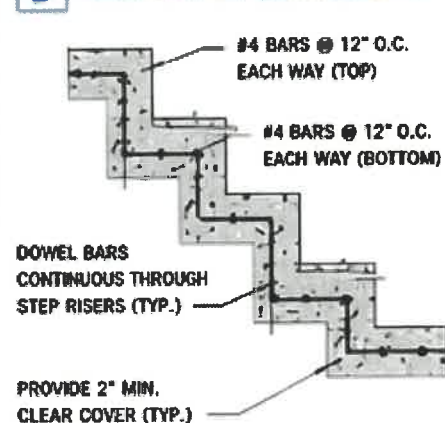
B LONGITUDINAL SECTION (THROUGH CENTER)



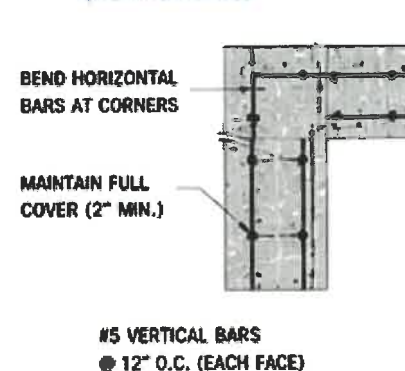
C TYPICAL POOL WALL SECTION (REINFORCING)



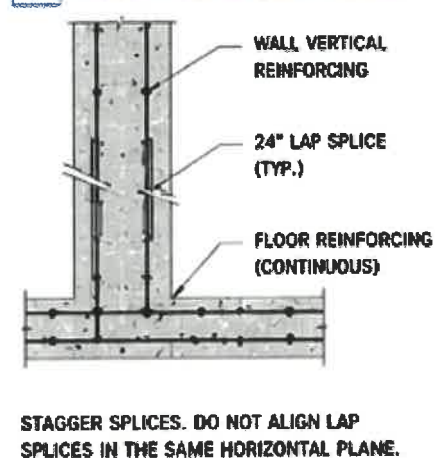
D STEP SECTION (REINFORCING)



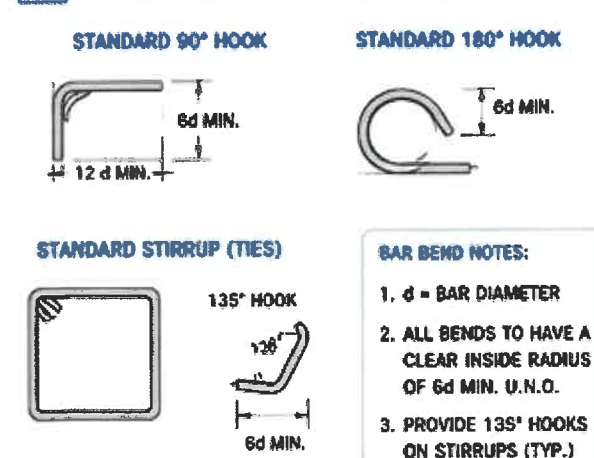
E TYPICAL CORNER DETAIL (REINFORCING)



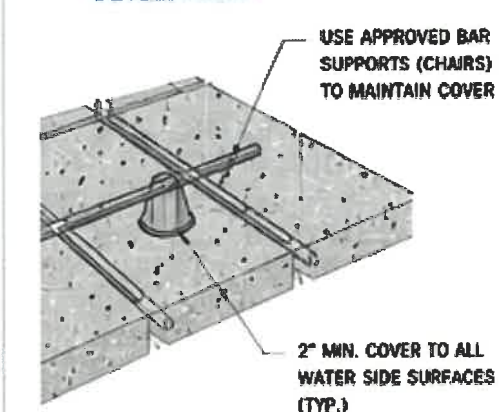
F DOWEL / LAP SPICE DETAIL



G TYPICAL REBAR BENDING DETAILS



H TYPICAL BAR SUPPORTS & DEVELOPMENT



GENERAL REINFORCING NOTES

1. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
2. ALL DIMENSIONS ARE TO CENTERLINE OF BARS U.N.O.
3. PROVIDE 2" MINIMUM CLEAR COVER TO ALL WATER SIDE SURFACES.
4. MAINTAIN 3" CLEAR COVER TO ALL NON-WATER SIDE SURFACES UNLESS NOTED.
5. STAGGER ALL LAP SPLICES. DO NOT ALIGN SPLICES IN THE SAME HORIZONTAL PLANE.
6. ALL REINFORCING SHALL BE SECURED IN POSITION PRIOR TO CONCRETE PLACEMENT.
7. PROVIDE ADDITIONAL BARS AT OPENINGS AND PENETRATIONS AS REQUIRED.
8. CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS IN FIELD PRIOR TO FABRICATION AND PLACEMENT.

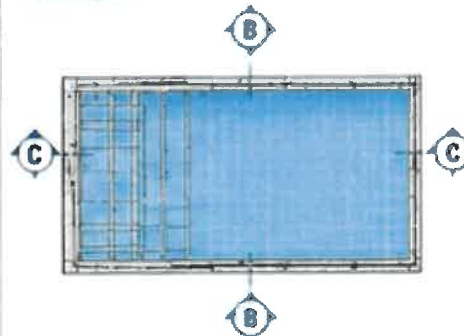
REINFORCING SCHEDULE (REPRESENTATIVE)

MARK	LOCATION	SIZE	SPACING	LENGTH	REMARKS
F1	FLOOR - BOTTOM (EW)	#4	12" O.C.	CONT.	EACH WAY
F2	FLOOR - BOTTOM (NS)	#4	12" O.C.	CONT.	EACH WAY
F3	FLOOR - TOP	#4	12" O.C.	CONT.	EACH WAY
W1	WALL - VERTICAL	#5	12" O.C.	CONT.	EACH FACE
W2	WALL - HORIZONTAL	#4	12" O.C.	CONT.	EACH FACE
DW	DOWELS @ WALL BASE	#5	12" O.C.	2'-0"	24" LAP

CONSTRUCTION NOTES - REINFORCING

1. PLACE ALL REINFORCING IN ACCORDANCE WITH ACI 318.
2. MAINTAIN REINFORCING COVERS AND SPACING DURING CONCRETE PLACEMENT.
3. DO NOT WALK ON OR DISPLACE REINFORCING AFTER INSPECTION.
4. ALL REINFORCING DETAILS SHOWN ARE CONCEPTUAL AND SUBJECT TO CHANGE BY STRUCTURAL ENGINEER.
5. CONTRACTOR TO SUBMIT REBAR SHOP DRAWINGS FOR ENGINEER REVIEW.

KEY PLAN



PROJECT

PROPOSED REINFORCED
CONCRETE SWIMMING POOL
PRELIMINARY DESIGN PACKAGE
FOR ENGINEER REVIEW AND
COORDINATION

PROJECT ADDRESS

709 MAIN STREET
HINGHAM, MA 02043

PREPARED FOR

AHERN CONSTRUCTION
MANAGEMENT

PREPARED BY

LIANG CHENG P.E.
AGILE ENGINEERING

REVISION SCHEDULE

NO.	DESCRIPTION	DATE

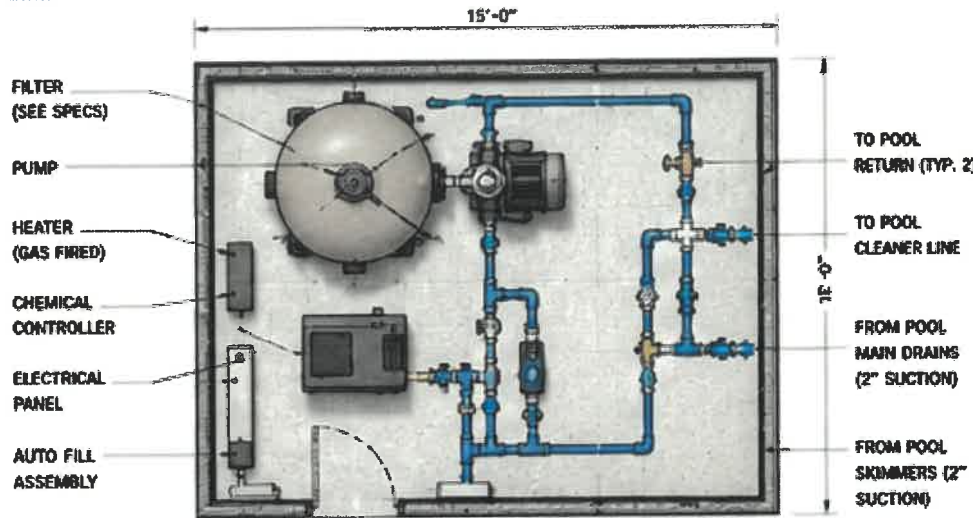
A5.0

REINFORCING CONCEPTS
& TYPICAL REBAR LAYOUTS

A6.0 MECHANICAL SYSTEMS & FILTRATION PLAN

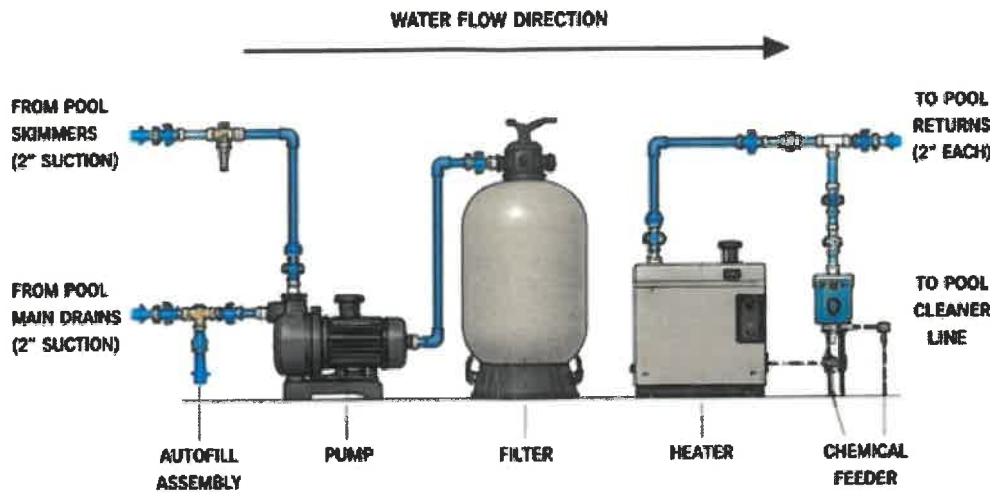
SCALE: 1/2" = 1'-0"

A EQUIPMENT PLAN (ENLARGED)



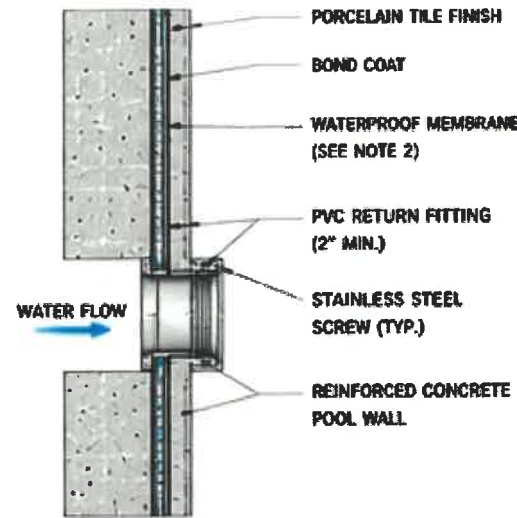
EQUIPMENT ROOM PLAN
(NOT TO SCALE)

B SCHEMATIC DIAGRAM



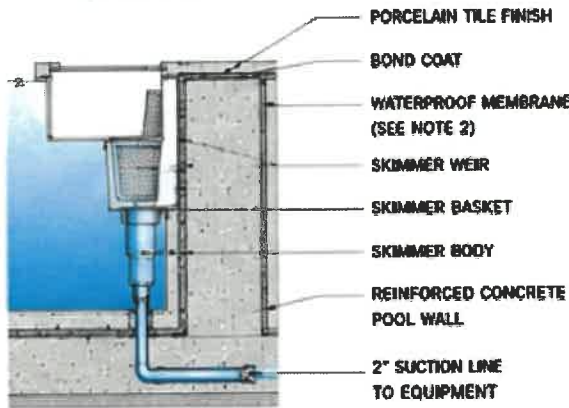
NOTE: PIPING DIAMETERS SHOWN ARE MINIMUM RECOMMENDED. FINAL SIZING PER ENGINEER / POOL CONSULTANT.

C RETURN INLET DETAIL



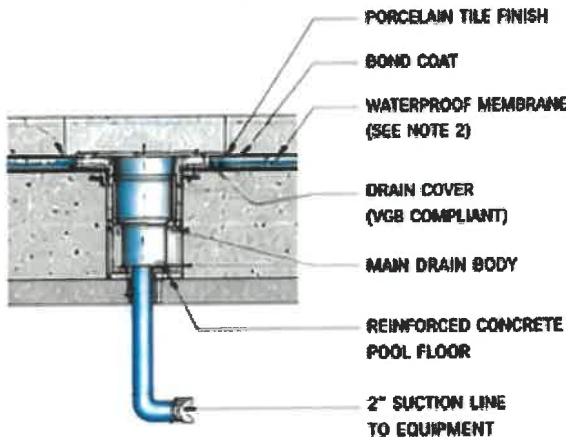
NOTE: RETURNS TO BE HYDRAULICALLY BALANCED AND AIMED TO PROMOTE CIRCULATION.

D TYPICAL SUCTION OUTLET DETAIL (SKIMMER)



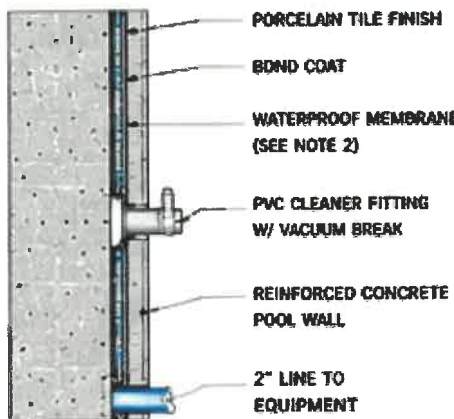
NOTE: SUCTION OUTLETS TO COMPLY WITH VGB 2008 SAFETY STANDARDS.

D1 TYPICAL MAIN DRAIN DETAIL (SUMP TYPE)



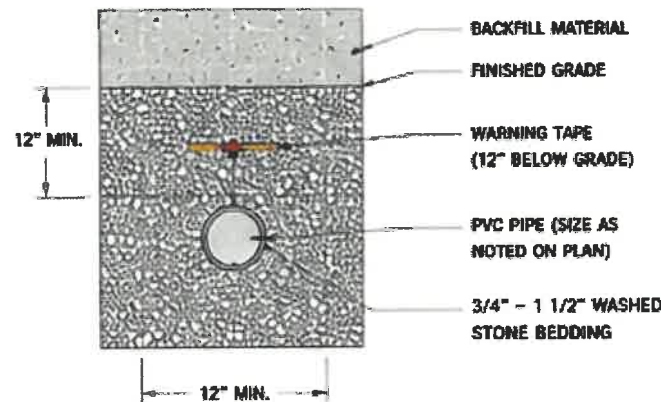
NOTE: MINIMUM TWO (2) MAIN DRAINS ON SEPARATE LINES PER VGB REQUIREMENTS.

E CLEANER LINE DETAIL



NOTE: PROVIDE VACUUM RELIEF / BREAK PER PIPE RUN AS REQUIRED.

F TYPICAL PIPE TRENCH DETAIL



NOTES:
1. ALL BURIED PIPING TO BE SCHEDULE 40 PVC (MIN.).
2. PROVIDE UNIONS AT EQUIPMENT CONNECTIONS.

MECHANICAL SYSTEM NOTES

- ALL WORK TO COMPLY WITH LOCAL CODES, MA STATE PLUMBING CODE, AND HEALTH DEPARTMENT REQUIREMENTS.
- EQUIPMENT SIZES ARE REPRESENTATIVE. FINAL SELECTION BY POOL CONSULTANT / ENGINEER.
- PROVIDE UNIONS AT PUMP, FILTER, HEATER, AND ALL EQUIPMENT CONNECTIONS.
- ALL PIPING AND EQUIPMENT SHALL BE ACCESSIBLE FOR SERVICE.
- INSTALLATION TO FOLLOW MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
- PROVIDE DRAIN PLUGS AT LOW POINTS OF SYSTEM PIPING.
- ALL ELECTRICAL WORK BY LICENSED ELECTRICIAN.
- EQUIPMENT ROOM TO BE VENTILATED AND PROTECTED FROM FREEZING.

EQUIPMENT SCHEDULE (REPRESENTATIVE)

ITEM	DESCRIPTION / SPECIFICATION (TYP.)
PUMP	VARIABLE SPEED PUMP, 2-3 HP, 230V
FILTER	SAND FILTER, 24" DIAMETER, 100 GPM
HEATER	NATURAL GAS HEATER, 400,000 BTU
CHEMICAL FEEDER	AUTOMATIC CHLORINE FEEDER
AUTO FILL ASSEMBLY	W/ BACKFLOW PREVENTER & PRESSURE REGULATOR
ELECTRICAL PANEL	DEDICATED 240V PANEL WITH GFCI PROTECTION

DESIGN CRITERIA

- DESIGN FLOW RATE: 80 - 100 GPM (MIN.) (BASED ON TOTAL POOL VOLUME)
- TURNOVER RATE: 6 HOURS (MAX.)
- SUCTION LINES: 2" MINIMUM
- RETURN LINES: 2" MINIMUM
- CLEANER LINE: 2"
- ALL PIPING: SCHEDULE 40 PVC (MIN.)

GENERAL NOTES

- POOL WATER TEMPERATURE RANGE: 78° - 82°F (HEATER BY OWNER)
- CHEMICAL SYSTEM BY OTHERS (OWNER) UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR TO COORDINATE ALL EQUIPMENT REQUIREMENTS WITH POOL CONSULTANT.
- SHOP DRAWINGS / EQUIPMENT SUBMITTALS REQUIRED PRIOR TO INSTALLATION.

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PREPARED FOR

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PREPARED BY

LAWRENCE V. ROY P.E.
LVR ENGINEERING

REVISION SCHEDULE

NO.	DESCRIPTION	DATE



A6.0

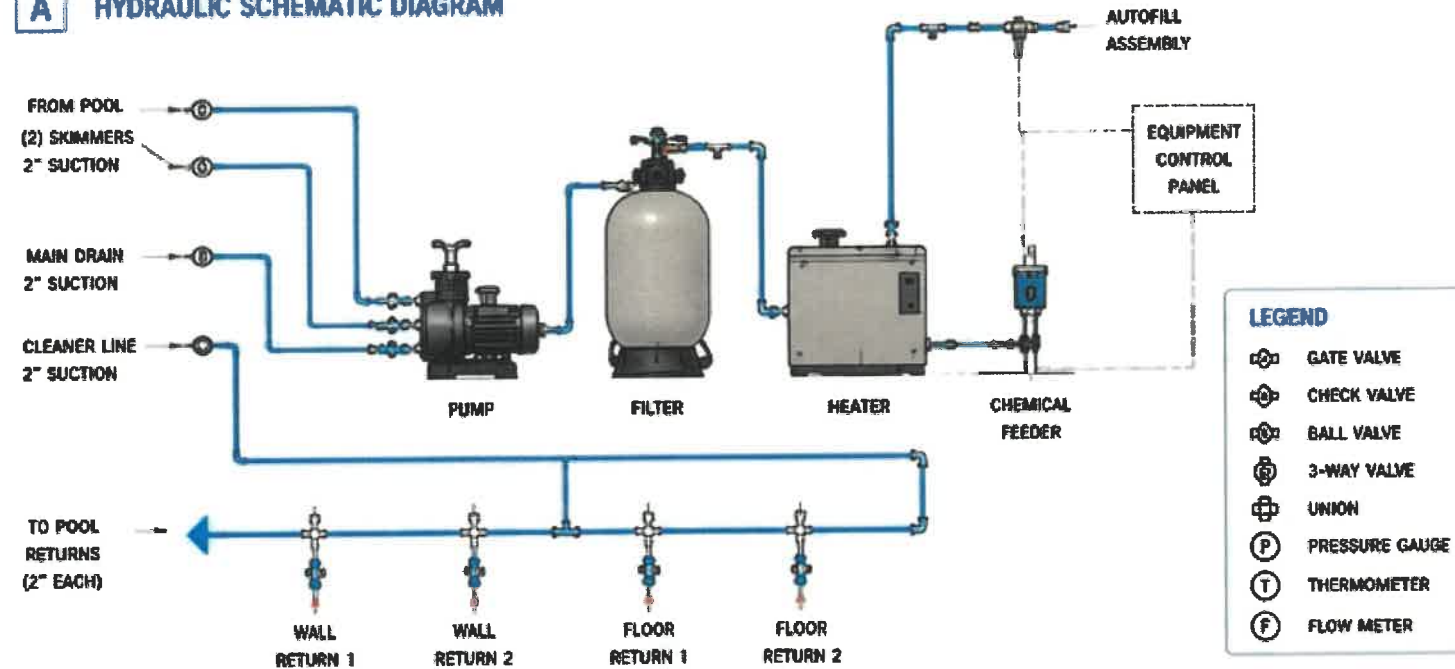
MECHANICAL SYSTEMS
& FILTRATION PLAN

A7.0 HYDRAULIC SCHEMATIC & PLUMBING DISTRIBUTION

SCALE: 1/2" = 1'-0"

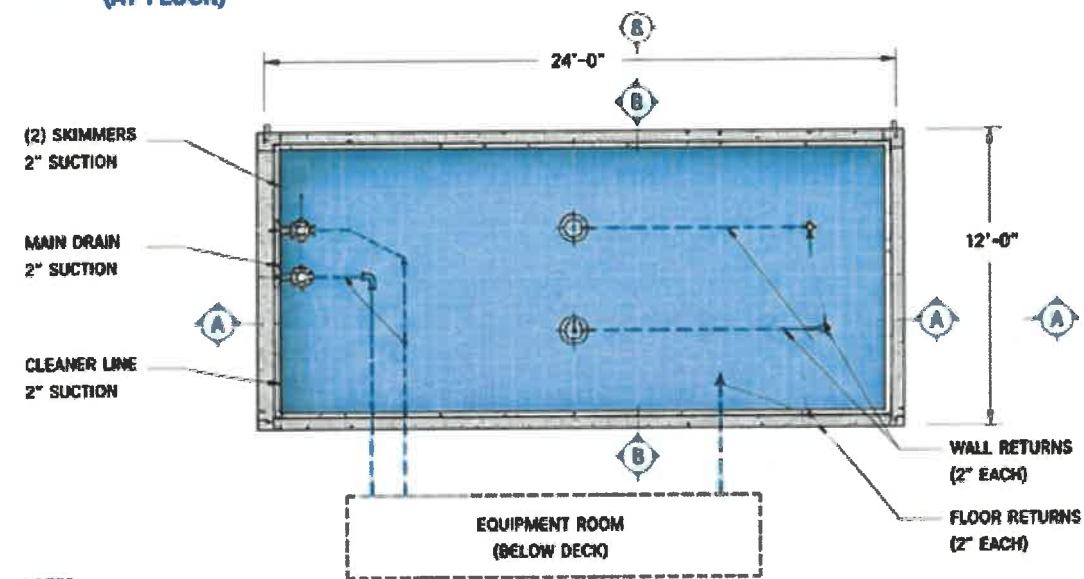
NOTE: SCHEMATIC IS DIAGRAMMATIC. FINAL SIZING, ROUTING, AND VALVE SELECTION BY POOL CONSULTANT.

A HYDRAULIC SCHEMATIC DIAGRAM



NOTE: ALL SUCTION LINES TO BE 2" MINIMUM. ALL RETURNS TO BE 2" MINIMUM UNLESS NOTED OTHERWISE.

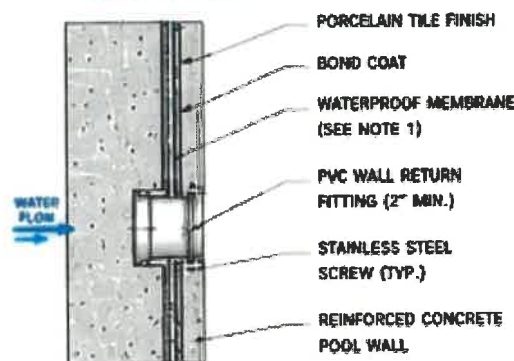
B PLUMBING PLAN (DISTRIBUTION LAYOUT) (AT FLOOR)



NOTES:

- ALL SUCTION OUTLETS TO BE HYDRAULICALLY BALANCED.
- RETURNS TO BE AIMED TO PROMOTE CIRCULATION AND PREVENT DEAD ZONES.
- PIPE ROUTING SHOWN DIAGRAMMATICALLY. COORDINATE FINAL ROUTING IN FIELD.

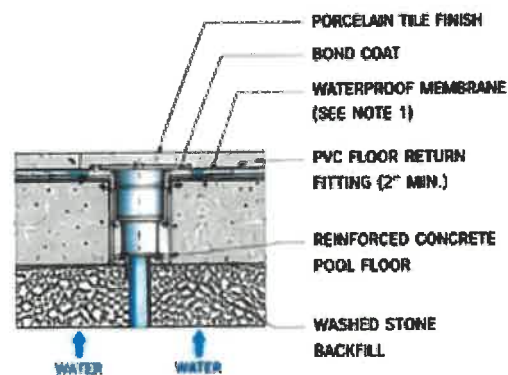
C TYPICAL RETURN LINE DETAIL (WALL RETURN)



NOTE:

- INSTALL WATERPROOFING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

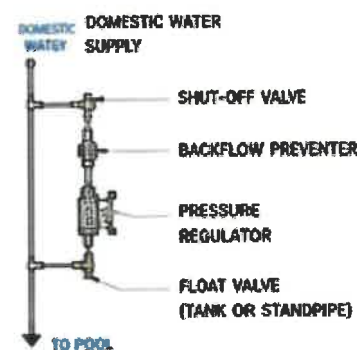
D TYPICAL FLOOR RETURN DETAIL



NOTE:

- INSTALL WATERPROOFING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

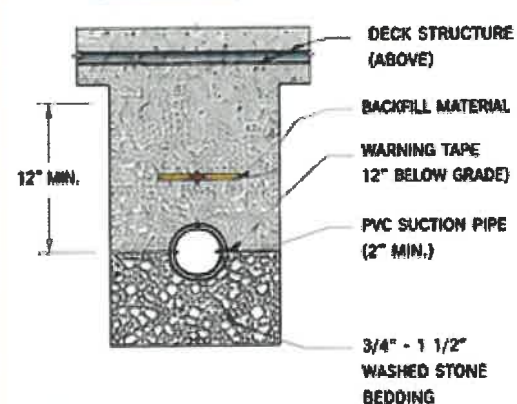
E AUTOFILL ASSEMBLY DETAIL



NOTE:

- INSTALL IN ACCORDANCE WITH LOCAL PLUMBING CODE.

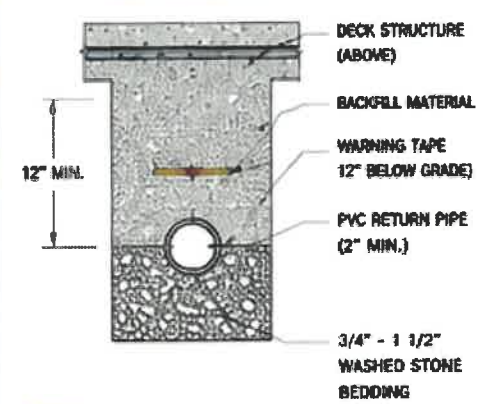
F TYPICAL SUCTION LINE SECTION (UNDER DECK)



NOTES:

- ALL SUCTION PIPING TO BE SCHEDULE 40 PVC.
- MAINTAIN MINIMUM 12" COVER TO TOP OF PIPE.

G TYPICAL RETURN LINE SECTION (UNDER DECK)



NOTES:

- ALL RETURN PIPING TO BE SCHEDULE 40 PVC.
- MAINTAIN MINIMUM 12" COVER TO TOP OF PIPE.

HYDRAULIC NOTES

- DESIGN FLOW RATE: 80 - 100 GPM (MIN.) (BASED ON TOTAL POOL VOLUME).
- TURNOVER RATE: 6 HOURS (MAX.).
- ALL SUCTION LINES TO BE 2" MINIMUM.
- ALL RETURN LINES TO BE 2" MINIMUM.
- USE SWEEP 90° ELBOWS ON ALL SUCTION LINES.
- PROVIDE UNIONS AT ALL EQUIPMENT CONNECTIONS.
- PROVIDE DRAINS IN LOW POINTS OF PIPING SYSTEM.
- ALL PIPING AND EQUIPMENT TO BE ACCESSIBLE FOR SERVICE.

VALVE SCHEDULE

TAG	DESCRIPTION	TYPE	SIZE	LOCATION
V1	SKIMMER SUCTION	GATE VALVE	2"	EQUIPMENT ROOM
V2	MAIN DRAIN SUCTION	GATE VALVE	2"	EQUIPMENT ROOM
V3	CLEANER LINE	BALL VALVE	2"	EQUIPMENT ROOM
V4	PUMP DISCHARGE	BALL VALVE	2"	EQUIPMENT ROOM
V5	RETURN MANIFOLD	GATE VALVE (TYP.)	2"	EQUIPMENT ROOM
V6	AUTOFILL SUPPLY	BALL VALVE	1/2"	EQUIPMENT ROOM

PIPE SCHEDULE (MINIMUM)

SYSTEM	PIPE	MATERIAL	NOTES
SUCTION	2" MIN.	PVC SCH 40	BELOW DECK
RETURN	2" MIN.	PVC SCH 40	BELOW DECK
CLEANER LINE	2" MIN.	PVC SCH 40	BELOW DECK
WASTE / DRAIN	1 1/2" MIN.	PVC SCH 40	TO DRAIN

GENERAL NOTES

- ALL WORK TO COMPLY WITH LOCAL CODES AND AUTHORITY HAVING JURISDICTION.
- DO NOT SCALE DRAWINGS.
- VERIFY ALL DIMENSIONS AND ELEVATIONS IN FIELD.
- COORDINATE WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS.
- PROVIDE SUPPORTS FOR ALL PIPING AS REQUIRED.

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PROJECT ADDRESS

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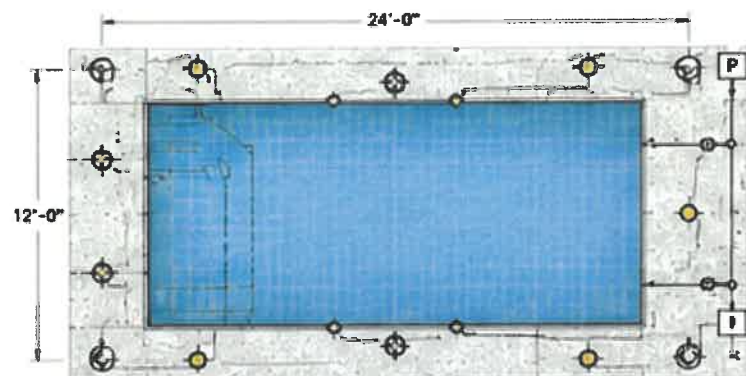
A7.0

HYDRAULIC SCHEMATIC
& PLUMBING
DISTRIBUTION

A8.0 ELECTRICAL & LIGHTING PLAN

SCALE: 1/2" = 1'-0" NOTE: FINAL LAYOUT, CIRCUITING, AND PANEL LOADS BY LICENSED ELECTRICAL ENGINEER.

A SITE LIGHTING PLAN (ENLARGED)



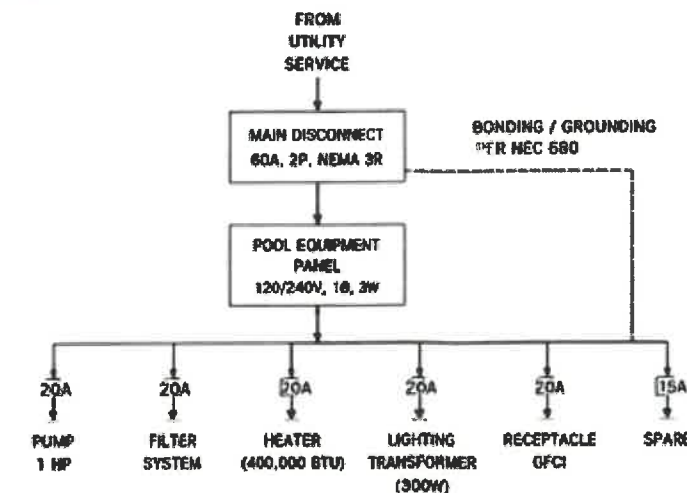
LEGEND

- L1 POOL LIGHT (LED, NICHE MOUNTED)
- L2 DECK / STEP LIGHT (LOW VOLTAGE)
- L3 PATH / AREA LIGHT (LOW VOLTAGE)
- J JUNCTION BOX (WEATHERPROOF)
- T TRANSFORMER (LOW VOLTAGE)
- P POWER PANEL (SEE ONE-LINE)

NOTES:

- ALL LOW VOLTAGE LIGHTING TO BE 12V.
- ALL TRANSFORMERS TO BE LISTED FOR WET LOCATIONS.
- COORDINATE FINAL FIXTURE SELECTIONS WITH OWNER.
- LIGHTING CONTROL BY TIME CLOCK / ASTRONOMICAL CONTROL.

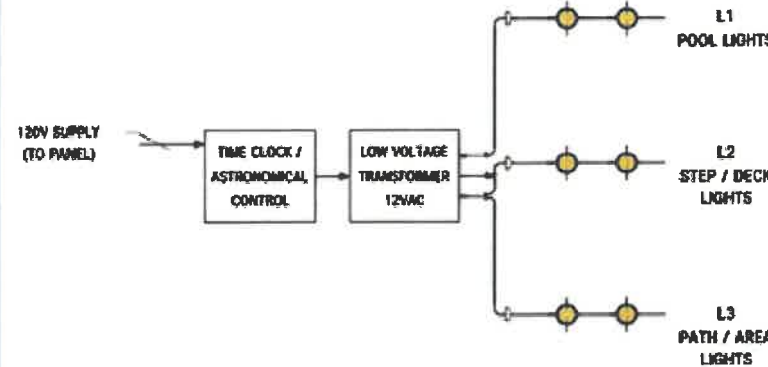
B ONE-LINE DIAGRAM (EQUIPMENT ROOM)



NOTES:

- ALL EQUIPMENT TO BE BY OWNER. FINAL SIZING BY ELECTRICAL ENGINEER.
- PROVIDE GFCI PROTECTION AS REQUIRED BY NEC.
- PROVIDE EQUIPMENT NAMEPLATES AT PANEL.

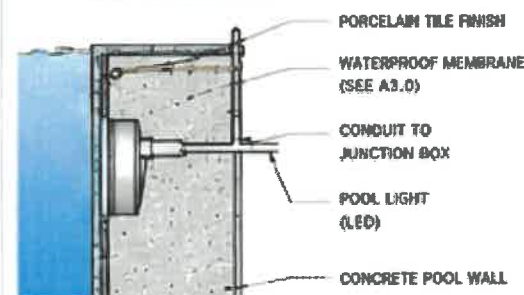
C LIGHTING CIRCUIT SCHEMATIC (TYPICAL 12V LOW VOLTAGE SYSTEM)



NOTES:

- TRANSFORMER(S) LOCATED IN EQUIPMENT ROOM.
- MAXIMUM VOLTAGE DROP SHALL NOT EXCEED 3%.
- FOLLOW MANUFACTURER'S INSTALLATION REQUIREMENTS.

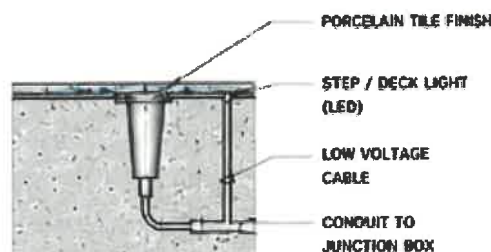
D TYPICAL POOL LIGHT DETAIL (NICHE MOUNTED)



NOTES:

- NICHE AND LIGHTING SYSTEM BY MANUFACTURER.
- PROVIDE ADEQUATE SLACK IN CONDUIT FOR SERVICE.

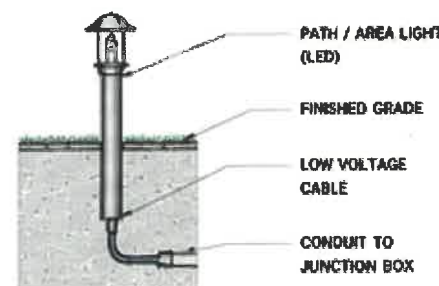
E TYPICAL STEP / DECK LIGHT DETAIL (LOW VOLTAGE)



NOTES:

- INSTALL LIGHTS FLUSH WITH FINISH SURFACE.
- SEAL ALL PENETRATIONS WATERTIGHT.

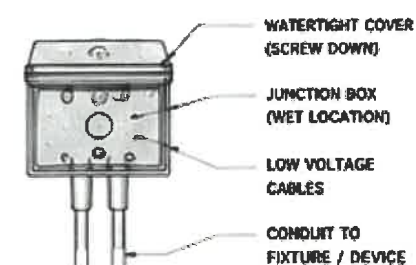
F TYPICAL PATH / AREA LIGHT DETAIL (LOW VOLTAGE)



NOTES:

- FIXTURE HEIGHT AND STYLE BY OWNER.
- PROVIDE STABLE CONCRETE OR COMPACTED BASE AS REQUIRED.

G TYPICAL JUNCTION BOX DETAIL (WATERTIGHT)



NOTES:

- LOCATE JUNCTION BOXES OUT OF SIGHT WHERE POSSIBLE.
- PROVIDE DRAIN HOLES AS REQUIRED.

H BONDING & GROUNDING DETAIL (POOL BONDING GRID)



NOTES:

- BONDING AND GROUNDING PER NEC 680.
- ALL METAL PARTS SHALL BE BONDED.
- POOL WATER MUST BE BONDED.

I LIGHT FIXTURE SCHEDULE (REPRESENTATIVE)

TYPE	DESCRIPTION	MANUFACTURER / MODEL (OR EQUAL)	WATTAGE	QUANTITY	REMARKS
L1	POOL LIGHT (LED)	JANDY PRO SERIES 12V LED	30W	2	NICHE MOUNTED COLOR: WHITE
L2	STEP / DECK LIGHT (LED)	FX LUMINAIRE LSAT (1LED)	1.6W	6	STAINLESS STEEL LOW PROFILE
L3	PATH / AREA LIGHT (LED)	HUNZA PURE MINI	2.2W	6	BRONZE FINISH 12V
TR	LOW VOLTAGE TRANSFORMER	KICHLER 15724 (300W)	300W	1	120V TO 12V
TC	TIME CLOCK / CONTROL	INTERMATIC ET110SC	—	1	ASTRONOMICAL

J PANEL SCHEDULE (POOL EQUIPMENT PANEL)

PANEL: PP VOLTAGE: 120/240V PHASE: 1Ø WIRE: 3 MOUNTING: SURFACE AIC RATING: 10KA

CKT	DESCRIPTION	BREAKER	LOAD (VA)	REMARKS
1	PUMP	20A 2P	1500	1 HP
2	FILTER SYSTEM (CONTROLS)	20A 1P	300	—
3	HEATER (400,000 BTU)	20A 2P	1800	GAS FIRED
4	LIGHTING TRANSFORMER	20A 1P	300	300W TRANSFORMER
5	RECEPTACLE (GFCI)	20A 1P	180	WEATHERPROOF
6	SPARE	15A 1P	—	FUTURE USE

CONNECTED LOAD (VA): 4,080 DEMAND LOAD (VA): 3,458 TOTAL AMPS @ 240V: 14.5A

HYDRAULIC / ELECTRICAL COORDINATION NOTES

- COORDINATE ALL CONDUITS WITH PLUMBING LINES.
- ALL UNDERGROUND CONDUITS TO BE SCH 40 PVC.
- MINIMUM 18" COVER FOR ALL UNDERGROUND CONDUITS.
- PROVIDE PULL STRING IN ALL CONDUITS.
- ALL EQUIPMENT TO HAVE DISCONNECT WITHIN SIGHT.
- EQUIPMENT ROOM TO BE VENTILATED AND DRY.
- VERIFY ALL LOADS AND CIRCUITS IN FIELD.
- FINAL DESIGN BY LICENSED ELECTRICAL ENGINEER.

GENERAL NOTES

- ALL WORK TO COMPLY WITH NEC, LOCAL CODES AND AUTHORITIES HAVING JURISDICTION.
- PROVIDE GFCI PROTECTION PER NEC 680.22.
- ALL RECEPTACLES TO BE WEATHER RESISTANT.
- DO NOT SCALE DRAWINGS.
- VERIFY ALL DIMENSIONS AND LOCATIONS IN FIELD.
- SHOP DRAWINGS / SUBMITTALS REQUIRED PRIOR TO INSTALLATION.

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LVR ENGINEERING

REVISION SCHEDULE

NO.	DESCRIPTION	DATE



A8.0

ELECTRICAL &
LIGHTING PLAN

A9.0

SCALE: 1/2" = 1'-0"

FINISH SCHEDULE, COPING, WATERPROOFING & PORCELAIN TILE DETAILS

NOTE: ALL FINISHES AND PRODUCTS BY OWNER UNLESS NOTED OTHERWISE.

A FINISH SCHEDULE

PORCELAIN TILE - POOL INTERIOR



MANUFACTURER: PORCELANOSA
SERIES: OCEAN BLUE
FINISH: GLOSS
SIZE: 12" x 24"
COLOR: OCEAN BLUE

DECKING



STONE: TRAVERTINE
FINISH: HONED
SIZE: 24" x 48"
COLOR: IVORY

NOTE: PROVIDE SAMPLES AND SHOP DRAWINGS OF ALL FINISHES PRIOR TO INSTALLATION.

POOL COPING



STONE: BLUESTONE
FINISH: SAWN & HONED
SIZE: 24" x 36"
EDGE: 3/4" EASED BULLNOSE

WALL CLADDING (OPTIONAL)



STONE: LEDGESTONE
FINISH: NATURAL SPLIT
COLOR: SILVER MIST

TILE WATERLINE



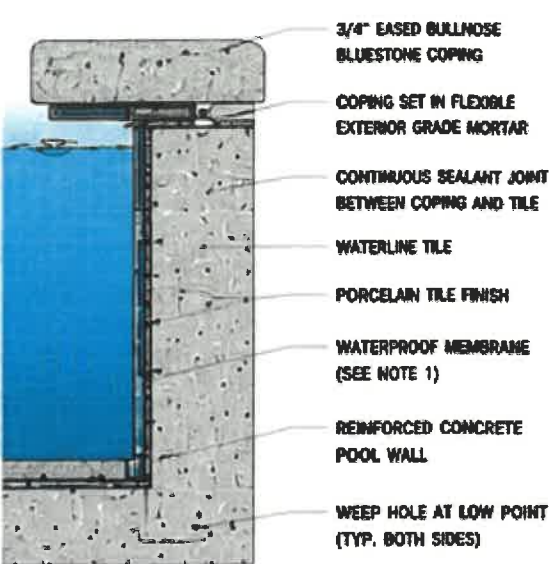
MANUFACTURER: PORCELANOSA
SERIES: BALI BLUE
SIZE: 2" x 8"
FINISH: GLOSS

GROUT



TYPE: EPOXY GROUT
COLOR: PEARL GRAY

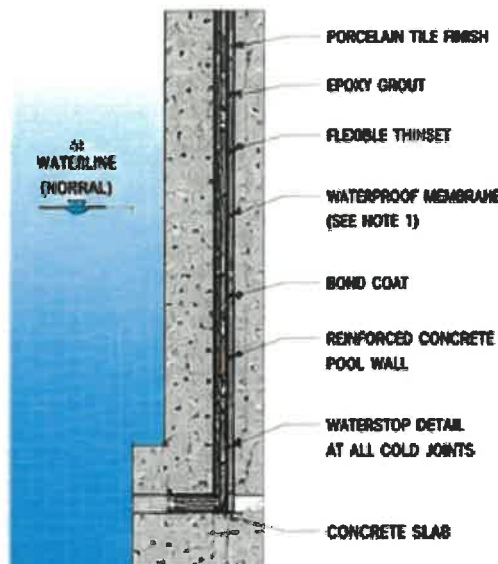
B TYPICAL COPING DETAIL



NOTES:

1. APPLY WATERPROOF MEMBRANE TO ALL INTERIOR SURFACES.
2. PROVIDE DRIP EDGE AT COPING WHERE REQUIRED.

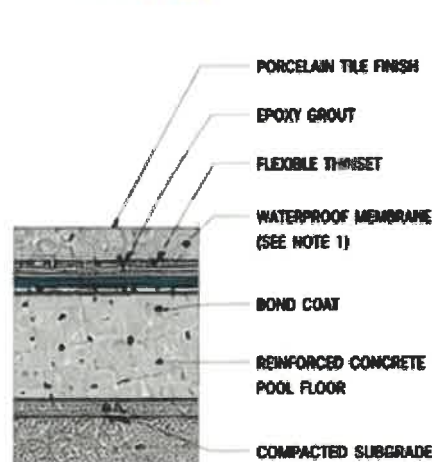
C TYPICAL PORCELAIN TILE - WALL SECTION



NOTES:

1. MEMBRANE SYSTEM SHALL BE COMPATIBLE WITH TILE AND SUNKEN INSTALLATION.

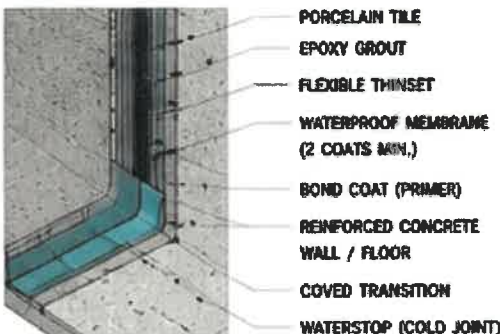
D TYPICAL PORCELAIN TILE FLOOR SECTION



NOTE:

1. PROVIDE CONTINUOUS MEMBRANE OVER FULL FLOOR AREA.

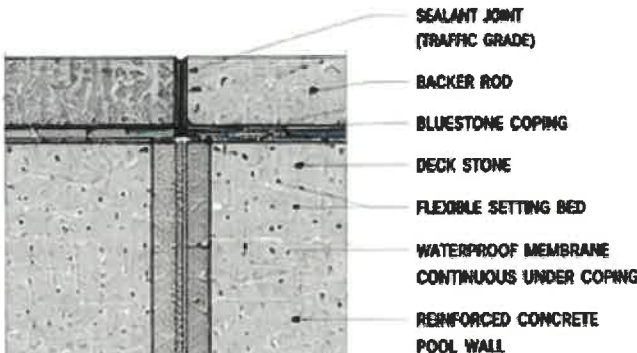
E WATERPROOFING SYSTEM



NOTES:

1. MEMBRANE SYSTEM: LATICRETE HYDRO BAN® OR EQUAL.
2. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

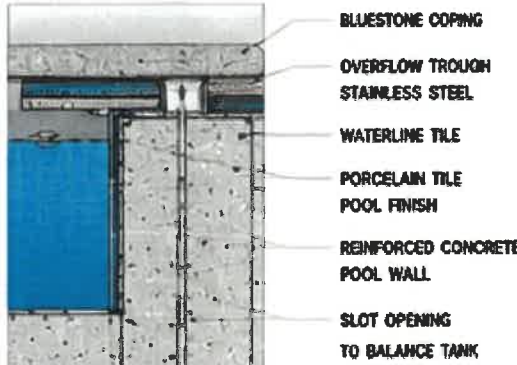
F EXPANSION JOINT DETAIL (DECK TO COPING)



NOTES:

1. PLACE EXPANSION JOINTS AT 20'-0" O.C. MAX.
2. SEALANT: DON CONSTRUCTION SEALANT OR EQUAL.

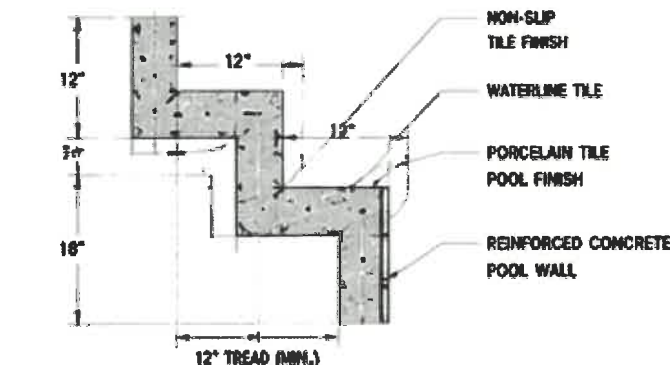
G OVERFLOW TROUGH DETAIL



NOTE:

TROUGH SIZE AND LOCATION PER ENGINEER / MANUFACTURER.

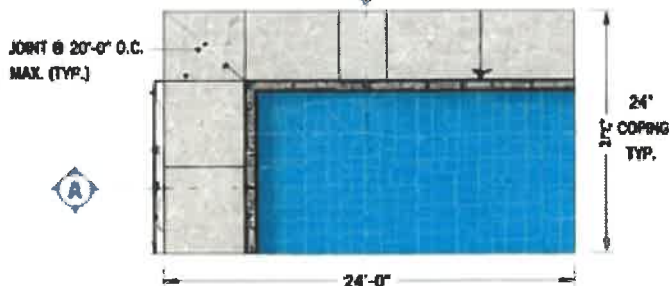
H WALL STEP DETAIL (TYP.)



NOTE:

STEPS SHALL HAVE CONSISTENT RISER HEIGHTS.

I COPING PLAN (ENLARGED)



J WATERPROOFING NOTES

1. PROVIDE CONTINUOUS WATERPROOF MEMBRANE TO ALL WALLS AND FLOORS.
2. ALL PENETRATIONS TO BE SEALED AND WATERSTOPPED.
3. PROVIDE COVES AT ALL INTERIOR WALL / FLOOR TRANSITIONS.
4. TEST MEMBRANE SYSTEM PRIOR TO TILE INSTALLATION.
5. PROVIDE SAMPLES AND PRODUCT DATA TO OWNER FOR APPROVAL.

K TILE & GROUT NOTES

1. SET TILE PLUMB AND LEVEL. MAINTAIN UNIFORM JOINTS.
2. USE EPOXY GROUT PER MANUFACTURER'S INSTRUCTIONS.
3. CLEAN ALL SURFACES IMMEDIATELY AFTER GROUTING.
4. COLOR AND PATTERN LAYOUT TO BE APPROVED PRIOR TO INSTALLATION.
5. PROVIDE SPARE TILES AND GROUT AS REQUESTED BY OWNER.

L MOVEMENT JOINT SCHEDULE

LOCATION	MAX. SPACING
DECK EXPANSION JOINTS	20'-0" O.C.
POOL COPING JOINTS	20'-0" O.C.
CONTROL JOINTS (DECK)	10'-0" O.C.
COLD JOINTS (STRUCTURAL)	PER STRUCTURAL

M POOL FINISH NOTES

1. FINAL FINISH AND PRODUCT SELECTIONS BY OWNER.
2. PROVIDE MOCK-UP AREA FOR APPROVAL.
3. ALL MATERIALS TO BE EXTERIOR / WATERPROOF RATED.
4. ALL FINISH WORK TO COMPLY WITH MANUFACTURER'S REQUIREMENTS.
5. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.

PROJECT

PROPOSED REINFORCED
CONCRETE SWIMMING POOL

PRELIMINARY DESIGN PACKAGE
FOR ENGINEER REVIEW AND
COORDINATION

PROJECT ADDRESS

709 MAIN STREET
HINGHAM, MA 02043

PREPARED FOR

AHERN CONSTRUCTION
MANAGEMENT

PREPARED BY

LIANG CHENG P.E.
AGILE ENGINEERING

REVISION SCHEDULE

NO.	DESCRIPTION	DATE

A9.0

FINISH SCHEDULE,
COPING, WATERPROOFING
& PORCELAIN TILE DETAILS

A10.0 GENERAL NOTES, SPECIFICATIONS & CONSTRUCTION SEQUENCE

NOTE: ALL WORK TO CONFORM TO LOCAL CODES, AUTHORITIES HAVING JURISDICTION, AND MANUFACTURER'S REQUIREMENTS.

A GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE 2021 INTERNATIONAL BUILDING CODE (IBC), 2021 INTERNATIONAL RESIDENTIAL CODE (IRC), 2020 NFPA 70 (NEC), AND ALL LOCAL CODES.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE DESIGN TEAM.
- DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE.
- ALL STRUCTURAL WORK TO BE PERFORMED IN ACCORDANCE WITH STRUCTURAL DRAWINGS BY OTHERS.
- ALL UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO EXCAVATION. CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO DIGGING.
- PROVIDE TEMPORARY DEWATERING AS REQUIRED TO MAINTAIN A DRY WORKING AREA.
- ALL MATERIALS SHALL BE NEW, OF FIRST QUALITY, AND APPROVED FOR POOL USE.
- CONTRACTOR TO PROVIDE SHOP DRAWINGS, SUBMITTALS, AND PRODUCT DATA FOR REVIEW PRIOR TO ORDERING.
- MAINTAIN POSITIVE DRAINAGE AWAY FROM POOL STRUCTURE AT ALL TIMES.
- CLEAN WORK AREA DAILY. PROTECT FINISHES AND INSTALLED WORK FROM DAMAGE.

B STRUCTURAL NOTES

- POOL SHELL: REINFORCED CONCRETE PER STRUCTURAL DRAWINGS. MINIMUM 4,000 PSI CONCRETE.
- REINFORCING STEEL: GRADE 60. COVER PER STRUCTURAL DRAWINGS (TYP. 2" COVER).
- ALL EMBEDDED ITEMS TO BE SECURELY FASTENED PRIOR TO CONCRETE PLACEMENT.
- CONTROL / CONSTRUCTION JOINTS PER STRUCTURAL DRAWINGS.
- PROVIDE WATERSTOPS AT ALL COLD JOINTS AND PENETRATIONS PER DETAILS.
- DO NOT BACKFILL UNTIL CONCRETE HAS ATTAINED MINIMUM 28 DAY STRENGTH AND IS APPROVED.

C WATERPROOFING NOTES

- APPLY WATERPROOFING MEMBRANE SYSTEM TO ALL INTERIOR WALLS AND FLOORS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- ALL PENETRATIONS, JOINTS, AND CHANGES IN PLANE TO BE TREATED PER MEMBRANE DETAILS.
- PROTECT MEMBRANE DURING CONSTRUCTION.
- PERFORM FLOOD TEST PRIOR TO TILE INSTALLATION.

D POOL SYSTEM NOTES

- ALL SUCTION OUTLETS TO BE HYDRAULICALLY BALANCED IN ACCORDANCE WITH VGB 2008.
- ALL PIPING TO BE PVC SCHEDULE 40 UNLESS OTHERWISE NOTED. SOLVENT WELD ALL JOINTS.
- PROVIDE UNIONS AT ALL EQUIPMENT CONNECTIONS.
- PROVIDE ISOLATION VALVES AS SHOWN ON PLANS.
- SYSTEM TO BE PRESSURE TESTED PER CODE PRIOR TO CONCRETE BACKFILL AND FINISH INSTALLATION.
- ALL EQUIPMENT TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
- PROVIDE CLEAR ACCESS TO ALL EQUIPMENT FOR OPERATION AND SERVICE.

E ELECTRICAL NOTES

- ALL ELECTRICAL WORK TO CONFORM TO NEC AND LOCAL CODES.
- PROVIDE GFCI PROTECTION FOR ALL RECEPTACLES WITHIN 20'-0" OF POOL WATER.
- ALL METALLIC PARTS WITHIN 5'-0" OF POOL SHALL BE BONDED PER NEC 680.
- LOW VOLTAGE LIGHTING SYSTEM TO BE ISOLATED FROM OTHER CIRCUITS.
- COORDINATE FIXTURE LOCATIONS WITH LANDSCAPE AND SITE ELEMENTS.

F SPECIFICATIONS (ABBREVIATED)

CONCRETE	4,000 PSI MIN. @ 28 DAYS, AIR ENTRAINED PER STRUCTURAL DRAWINGS
REINFORCING STEEL	GRADE 60
WATERPROOFING	LATICRETE HYDRO BAN® OR APPROVED EQUAL CEMENTITIOUS WATERPROOFING SYSTEM
TILE (INTERIOR)	PORCELAIN TILE PER FINISH SCHEDULE (A9.0)
GROUT	EPOXY GROUT - LATICRETE SPECTRALOCK® PRO PREMIUM OR APPROVED EQUAL
COPING	NATURAL STONE - BLUESTONE THERMAL FINISH (PER A9.0)
DECKING	NATURAL STONE PER FINISH SCHEDULE (A9.0)
FILTRATION SYSTEM	PER EQUIPMENT SCHEDULE (A6.0)
HEATER	GAS HEATER (400,000 BTU) PER SCHEDULE
CHEMICAL / SALT SYSTEM	AUTOMATED SALT CHLORINE GENERATOR PER SCHEDULE
LIGHTING	12V LED SYSTEM PER A8.0
ELECTRICAL	LOW VOLTAGE LIGHTING, GFCI PROTECTION, BONDING PER NEC 680
BACKFILL	CLEAN GRANULAR BACKFILL, COMPACTED IN 12" LIFTS (95% PROCTOR)
DRAINAGE	PERIMETER DRAIN (AS REQ'D) TO DAYLIGHT OR APPROVED OUTLET

G CONSTRUCTION SEQUENCE

1 PRE-CONSTRUCTION & LAYOUT



- VERIFY LAYOUT, ELEVATIONS, AND ACCESS.
- ESTABLISH BENCHMARKS.
- OBTAIN PERMITS.
- MARK OUT EXCAVATION LIMITS.

2 EXCAVATION & SHORING



- EXCAVATE TO REQUIRED DEPTH AND DIMENSIONS.
- INSTALL SHORING AS REQUIRED.
- PROTECT ADJACENT STRUCTURES.

3 BASE PREP & UNDERDRAIN (IF REQ'D)



- GRADE SUBGRADE.
- INSTALL UNDERDRAIN AND PERIMETER DRAIN (IF REQUIRED).
- COMPACT AND PLACE 4"-6" OF CRUSHED STONE.

4 PLUMBING ROUGH-IN & STEEL



- INSTALL SUCTION, RETURN, DRAIN, AND CONDUIT LINES.
- SET ALL EMBEDDED ITEMS.
- TIE REINFORCING STEEL PER STRUCTURAL DRAWINGS.

5 GUNITE / SHOTCRETE SHELL



- APPLY SHOTCRETE PER STRUCTURAL DETAILS.
- FINISH SURFACE.
- CURE CONCRETE PER CODE.

6 PLUMBING TEST & BACKFILL



- PRESSURE TEST ALL PIPING.
- INSPECT AND APPROVE.
- BACKFILL AND COMPACT IN 12" LIFTS.

7 WATERPROOFING & PREP



- APPLY WATERPROOFING MEMBRANE.
- TREAT ALL JOINTS AND PENETRATIONS.
- FLOOD TEST POOL.

8 TILE INSTALLATION & COPING



- SET TILE PER A9.0 DETAILS.
- GROUT AND CLEAN.
- INSTALL COPING AND SEALANT JOINT.

10 EQUIPMENT INSTALL & START-UP



- SET AND PLUMB EQUIPMENT.
- WIRE ELECTRICAL SYSTEM.
- BALANCE SYSTEM.
- START-UP AND TEST.

H INSPECTIONS & TESTING

- STRUCTURAL INSPECTION - REINFORCING STEEL.
- PLUMBING PRESSURE TEST - 40 PSI AIR / 1 HR MIN.
- ELECTRICAL INSPECTION - ROUGH AND FINAL.
- WATERPROOFING FLOOD TEST - 24 HR MIN.
- FINAL INSPECTION AND PUNCH LIST.

I CLOSEOUT & WARRANTY

- PROVIDE AS-BUILT DRAWINGS AND EQUIPMENT MANUALS.
- PROVIDE WARRANTY INFORMATION FOR MATERIALS AND EQUIPMENT.
- POOL STRUCTURE WARRANTY: 1 YEAR (TYP.)
- EQUIPMENT WARRANTY: PER MANUFACTURER.
- TILE & FINISHES WARRANTY: PER MANUFACTURER.

J ABBREVIATIONS

ATS	AUTOMATIC TRANSFER SWITCH	MIN	MINIMUM
BTU	BRITISH THERMAL UNIT	O.C.	ON CENTER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TYP.	TYPICAL
LED	LIGHT EMITTING DIODE	VGB	VIRGINIA GRAEME BAKER
MAX	MAXIMUM	WP	WATERPROOF

K DRAWING INDEX

A1.0	SITE PLAN & GENERAL INFORMATION
A2.0	POOL PLAN & DIMENSIONS
A3.0	SECTIONS & ELEVATIONS
A4.0	STRUCTURAL PLAN & DETAILS
A5.0	GRADING, DRAINAGE & SITE DETAILS
A6.0	MECHANICAL SYSTEMS & FILTRATION PLAN
A7.0	HYDRAULIC SCHEMATIC & PLUMBING DISTRIBUTION
A8.0	ELECTRICAL & LIGHTING PLAN
A9.0	FINISH SCHEDULE, COPING, WATERPROOFING & TILE DETAILS
A10.0	GENERAL NOTES, SPECIFICATIONS & CONSTRUCTION SEQUENCE

PROJECT

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A11.0 3D VIEWS, MATERIALS & PROJECT SUMMARY

NOTE: IMAGES ARE CONCEPTUAL REPRESENTATIONS ONLY. FINAL COLORS, FINISHES & SELECTIONS BY OWNER.

A 3D PERSPECTIVE VIEWS

1 OVERALL PERSPECTIVE - DAY

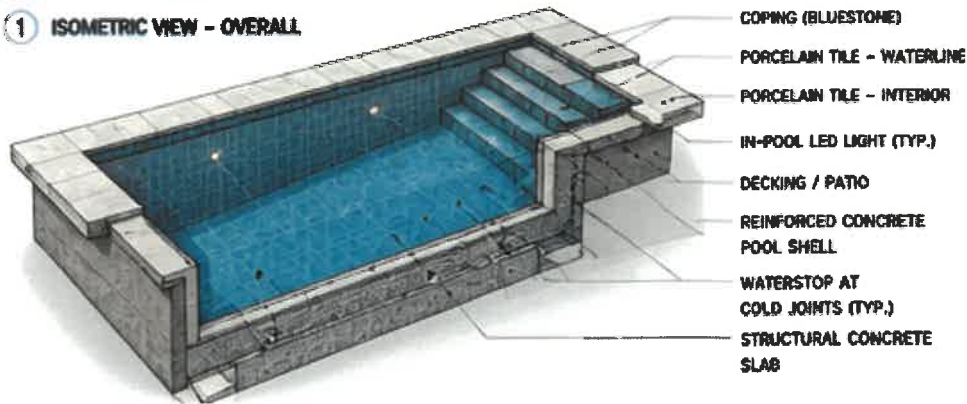


2 OVERALL PERSPECTIVE - NIGHT

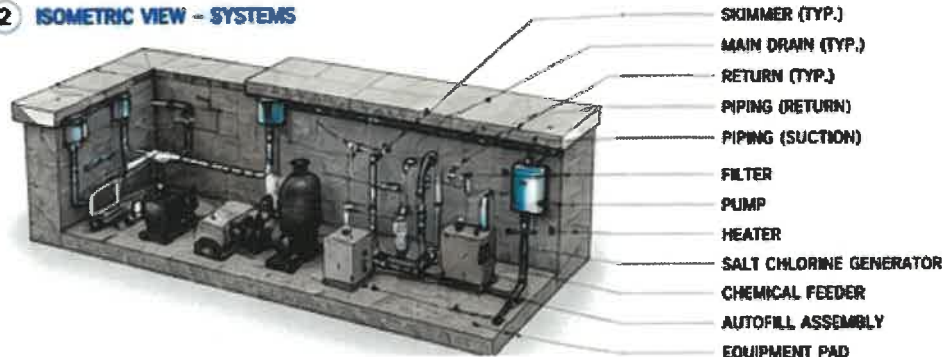


B 3D ISOMETRIC VIEWS

1 ISOMETRIC VIEW - OVERALL



2 ISOMETRIC VIEW - SYSTEMS



C MATERIALS BOARD (REPRESENTATIVE)



POOL INTERIOR TILE
PORCELANOSA SERIES: OCEAN BLUE
12" x 24" | GLOSS



DECKING / PATIO
NATURAL STONE PAVERS
BLUESTONE | SAWN & HONED



GROUT
EPOXY GROUT
PEARL GRAY



COPING
BLUESTONE | 3/4" THICK
EASED BULLNOSE EDGE



WALL CLADDING (OPTIONAL)
LEDGESTONE VENEER
NATURAL SPLIT FACE



WATERLINE TILE
PORCELANOSA SERIES: BALI BLUE
2" x 8" | GLOSS

NOTE: PROVIDE SAMPLES OF ALL FINISHES PRIOR TO INSTALLATION.

D PROJECT DATA

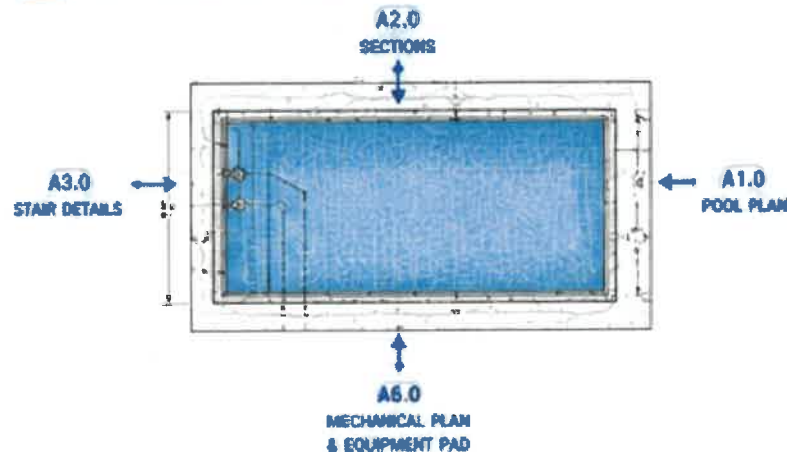
PROJECT NAME:	PROPOSED REINFORCED CONCRETE SWIMMING POOL
PROJECT ADDRESS:	709 MAIN STREET, HINGHAM, MA 02043
POOL TYPE:	IN-GROUND, CAST-IN-PLACE CONCRETE
POOL SIZE:	24'-0" (L) x 12'-0" (W)
POOL AREA:	288 SQ. FT.
WATER DEPTH:	3'-6" AT SHALLOW END 5'-6" AT DEEP END
VOLUME (APPROX.):	10,400 GALLONS
FILTRATION SYSTEM:	1 HP PUMP, SAND FILTER, HEATER, SALT CHLORINE GENERATOR
LIGHTING SYSTEM:	12V LED POOL LIGHTS (3), STEP / DECK LIGHTS, PATH LIGHTS
ELECTRICAL SERVICE:	120/240V, 1Ø, 60Hz
DESIGN CRITERIA:	• 2021 INTERNATIONAL BUILDING CODE (IBC) • 2021 INTERNATIONAL RESIDENTIAL CODE (IRC) • 2023 NEC (NFPA 70) • ANSI/APSP/ICC-5 2011

E COLOR & FINISH CONCEPT (EXTERIOR)



NOTE: LANDSCAPE AND SITE ELEMENTS SHOWN ARE FOR CONCEPT ONLY.

F KEY PLAN (SHEET INDEX REFERENCE)



G PROJECT SUMMARY

PROJECT OVERVIEW

THE PROJECT INCLUDES THE CONSTRUCTION OF A NEW IN-GROUND, CAST-IN-PLACE REINFORCED CONCRETE SWIMMING POOL WITH INTEGRAL ENTRY STEPS, TILE INTERIOR FINISH, BLUESTONE COPING, AND ASSOCIATED MECHANICAL, PLUMBING, ELECTRICAL, DRAINAGE, AND SITE WORK.

SCOPE OF WORK

- EXCAVATION AND SITE PREPARATION
- CAST-IN-PLACE CONCRETE POOL SHELL
- INTERIOR TILE FINISH AND WATERLINE TILE
- COPING AND SURROUNDING DECK / PATIO
- MECHANICAL SYSTEMS AND EQUIPMENT
- PLUMBING, HYDRAULICS & CHEMICAL SYSTEMS
- ELECTRICAL, LIGHTING & BONDING
- TESTING, START-UP & OWNER ORIENTATION

PROJECT TEAM

OWNER:	
ARCHITECT / DESIGNER:	
STRUCTURAL ENGINEER:	
MEP ENGINEER:	
LANDSCAPE ARCHITECT:	
POOL CONTRACTOR:	
CIVIL ENGINEER:	

PERMITTING & APPROVALS

- BUILDING PERMIT
- ELECTRICAL PERMIT
- PLUMBING PERMIT (IF REQUIRED)
- CONSERVATION / SETBACK APPROVALS (AS APPLICABLE)
- HEALTH DEPARTMENT APPROVAL (IF REQUIRED)

MAINTENANCE CONSIDERATIONS

- MAINTAIN PROPER WATER CHEMISTRY
- CLEAN FILTER REGULARLY
- INSPECT AND CLEAN SKIMMERS AND DRAINS
- WINTERIZE PER MANUFACTURER'S INSTRUCTIONS
- KEEP DECK AND COPING CLEAN AND SEALED AS RECOMMENDED

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