

THESE DRAWINGS AND SPECIFICATIONS ARE INTENDED EXCLUSIVELY FOR THE POOL CONSTRUCTION LOCATED AT THE ADDRESS PROVIDED IN THE TITLE BAR AND FOR THE CONTRACTOR BY WHICH THESE PLANS WERE PURCHASED. USE OF THESE PLANS AND SPECIFICATIONS FOR POOL CONSTRUCTION OTHER THAN THE SPECIFIED LOCATION AND/OR CONTRACTOR IS NOT PERMITTED AND RENDERS THESE PLANS INVALID.

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MUNSON ENGINEERS, INC.
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DATE: 7/21/2023 SCALE: ACAD FILE: 23184Base.DWG
DRAWN: AH CHKD: BC PLOT:

KRISCO POOLS
HOUTCHEN RESIDENCE
6024 NE 22ND ST, MERCER ISLAND, WA 98040
SWIMMING POOL & SPA FACILITY SECTIONS AND DETAILS

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APPLICABLE SWIMMING POOL CODES, RULES, AND REGULATIONS:

- SWIMMING POOL, BARRIERS AND EQUIPMENT SHALL BE CONSTRUCTED IN COMPLIANCE WITH KING COUNTY CODE, 2015 ISPSC SECTION 305, STATE OF WASHINGTON CODE (WAC 246-260-03), DESIGN AND CONSTRUCTION REQUIREMENTS FOR SWIMMING POOLS IN WAC 246-260-041, FOR SPA POOLS IN WAC 246-260-051 AND 246-260-061, AND INTERNATIONAL SWIMMING POOL CODE APPENDIX G. IF IN CONFLICT WITH EACH OTHER THE MORE STRINGENT CODE SHALL APPLY.
- SWIMMING POOL SHALL ALSO COMPLY WITH THE LATEST EDITION OF THE INTERNATIONAL SWIMMING POOL CODE APPENDIX G (AG 101 THROUGH AG 108).
- THE PROVISIONS OF THIS SECTION SHALL APPLY TO THE DESIGN OF BARRIERS FOR POOLS AND SPAS. THESE DESIGN CONTROLS ARE INTENDED TO PROVIDE PROTECTION AGAINST THE POTENTIAL DROWNING AND NEAR DROWNING BY RESTRICTING ACCESS TO SUCH POOLS OR SPAS. THESE REQUIREMENTS PROVIDE AN INTEGRATED LEVEL OF PROTECTION AGAINST POTENTIAL DROWNING USING PHYSICAL BARRIERS AND WARNING DEVICES.

- EXCEPTIONS INCLUDE THE FOLLOWING:
- SPAS AND HOT TUBS WITH A LOCKABLE SAFETY COVER THAT COMPLIES WITH ASTM F 1346.
 - SWIMMING POOLS WITH A POWERED SAFETY COVER THAT COMPLIES WITH ASTM F 1346.

BARRIERS AND COVERS:

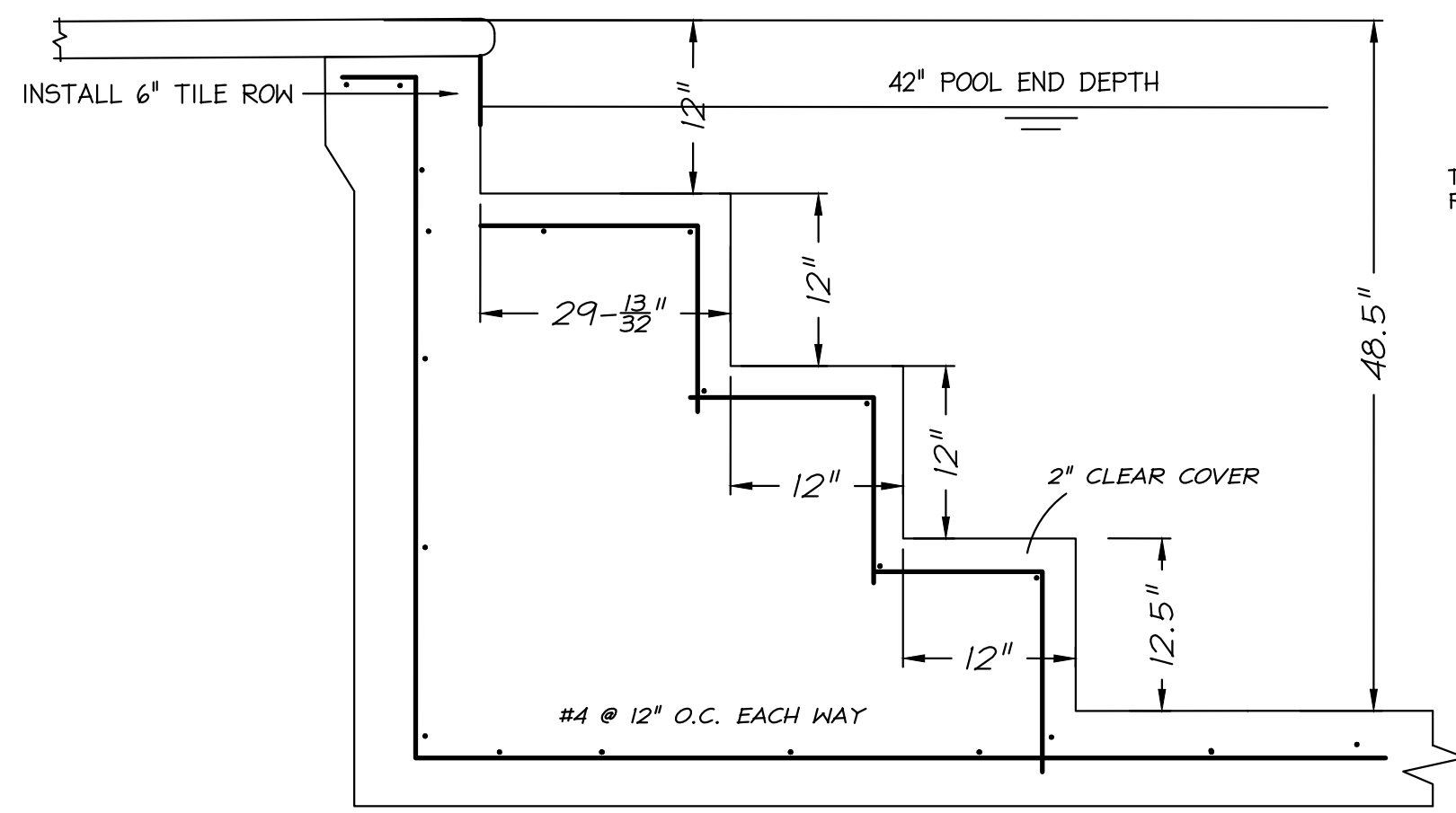
- POOL COVER SHALL MEET ALL REQUIREMENTS OF ASTM SPECIFICATION F1346.
- THE STATIC LOAD TEST FOR WEIGHT SUPPORT. THE COVER SHOULD BE ABLE TO HOLD A WEIGHT OF AT LEAST 485 LBS (THE ESTIMATED AVERAGE HEIGHT OF 2 ADULTS AND ONE CHILD) TO PERMIT RESCUE OPERATION.
- PERIMETER DEFLECTION TESTS FOR ENTRY OR ENTRAPMENT BETWEEN THE COVER AND THE SIDE OF THE POOL. THE COVER MUST DEMONSTRATE THAT ANY OPENING IS SUFFICIENTLY SMALL AND STRONG ENOUGH TO PREVENT THE TEST OBJECT BEING PASSED THROUGH.
- THE SURFACE DRAINAGE TEST THAT SAFEGUARDS AGAINST A DANGEROUS AMOUNT OF WATER COLLECTING ON THE COVER'S SURFACE.
- LABELING REQUIREMENTS MUST INCLUDE BASIC CONSUMER INFORMATION SUCH AS THE WARRANTY INFORMATION, THE APPROPRIATE WARNINGS AS DESCRIBED IN THE STANDARD AND ACKNOWLEDGE THE PRODUCT AS A SAFETY COVER.
- A DWELLING UNIT PROVIDES ALL OR PART OF THE BARRIER AND SHALL BE PROVIDED AS FOLLOWS:
DOORS IN A WALL THAT PROVIDE DIRECT ACCESS TO THE POOL SHALL BE EQUIPPED WITH AN ALARM AND SHALL BE LISTED IN ACCORDANCE WITH UL 2017. THE AUDIBLE ALARM SHALL ACTIVATE WITHIN 7 SECONDS AND SOUND CONTINUOUSLY FOR A MINIMUM OF 30 SECONDS AFTER THE DOOR AND/OR ITS SCREEN, IF PRESENT, IS OPENED AND SHALL BE CAPABLE OF BEING HEARD THROUGHOUT THE HOUSE DURING NORMAL HOUSEHOLD ACTIVITIES. THE ALARM SHALL AUTOMATICALLY RESET UNDER ALL CONDITIONS. THE ALARM SYSTEM SHALL BE EQUIPPED WITH A MANUAL MEANS SUCH AS A TOUCHPAD OR SWITCH TO TEMPORARILY DEACTIVATE THE ALARM FOR A SINGLE OPENING. SUCH DEACTIVATION SHALL LAST NOT MORE THAN 15 SECONDS. THE DEACTIVATION SWITCH OR SWITCHES SHALL BE LOCATED AT LEAST 54 INCHES ABOVE THE THRESHOLD OF THE DOOR.
- THE POOL SHALL BE EQUIPPED WITH A POWER SAFETY COVER IN COMPLIANCE WITH ASTM F1346

GENERAL NOTES:

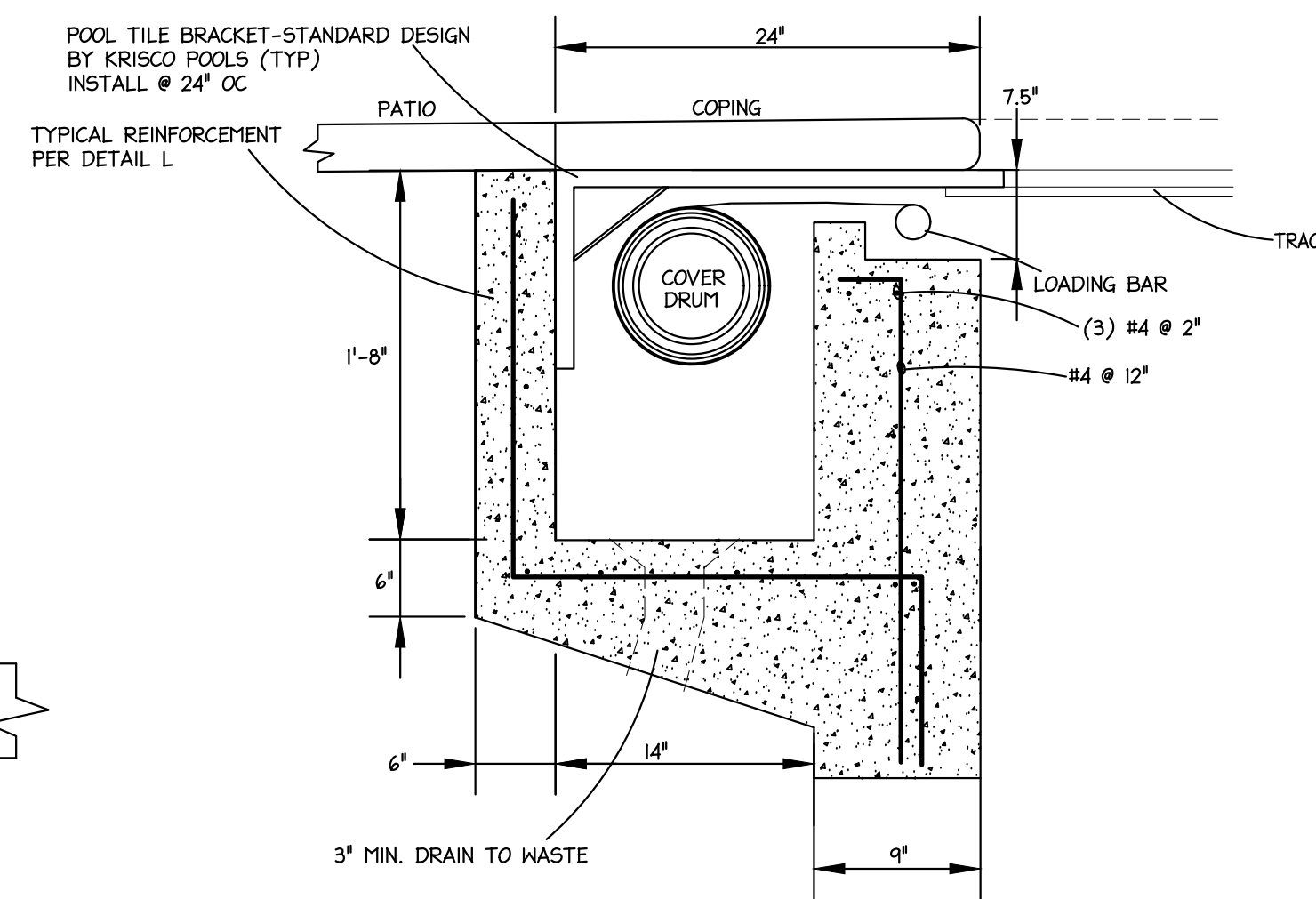
- THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS TO DESCRIBE AND PROVIDE FOR THE FURNISHING, INSTALLING, TESTING AND PLACING IN SATISFACTORY AND FULLY OPERATIONAL CONDITION ALL EQUIPMENT, MATERIALS, DEVICES AND NECESSARY APPURTENANCES TO PROVIDE A COMPLETE PROJECT, TOGETHER WITH SUCH OTHER MISCELLANEOUS INSTALLATIONS AND EQUIPMENT SPECIFIED AND/OR SHOWN ON THE DRAWINGS. THE WORK SHALL INCLUDE ALL MATERIALS, APPLIANCES AND APPARATUS NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON THE DRAWINGS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETELY FULLY OPERATIONAL INSTALLATION OF ALL SYSTEMS SHOWN ON THE DRAWINGS OR DESCRIBED HEREIN.
- CONSTRUCTION SHALL BE IN COMPLIANCE WITH ALL CODES AND REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENTS OF HEALTH, ECOLOGY, AND LABOR AND INDUSTRIES.
- IF ANY CONFLICT OCCURS BETWEEN GOVERNMENT ADOPTED CODE RULES AND THESE SPECIFICATIONS, THE CODES SHALL GOVERN. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE CONSTRUED TO PERMIT WORK IN NONCONFORMANCE WITH THE GOVERNING CODES. THIS SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR FROM COMPLYING WITH ANY REQUIREMENTS IN EXCESS OF THE REQUIREMENTS OF THE HEREIN BEFORE MENTIONED GOVERNING CODES.
- THE CONTRACTOR SHALL CONDUCT WORK IN A SAFE MANNER IN COMPLIANCE WITH ALL APPLICABLE SAFETY REQUIREMENTS OF THE APPROPRIATE AGENCIES.
- CONSTRUCTION OF IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE STATE BOARD OF HEALTH FOR SWIMMING POOL AND SPA FACILITIES WAC 246-260.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY, LOCATE AND PROTECT ALL UTILITIES WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR REPAIRING ANY UTILITIES DAMAGED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LICENSES, PERMITS AND INSPECTIONS REQUIRED BY LAWS, ORDINANCES AND RULES GOVERNING WORK SPECIFIED HEREIN. THE CONTRACTOR SHALL ARRANGE FOR INSPECTION FOR WORK BY INSPECTORS AND SHALL GIVE THE INSPECTORS ALL NECESSARY ASSISTANCE IN THEIR WORK.
- THE CONTRACTOR SHALL CLEAN-UP ALL MATERIALS FROM THE PROJECT SITE TO THE SATISFACTION OF THE OWNER AND DISPOSE OF SUCH MATERIALS AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL GUARANTEE ALL WORK INSTALLED UNDER THESE DRAWINGS AND SPECIFICATIONS. HE SHALL MAKE GOOD, REPAIR OR REPLACE, AT HIS OWN EXPENSE, ANY DEFECTIVE WORK, MATERIALS OR PARTS WHICH MAY SHOW THEMSELVES WITHIN ONE YEAR AFTER FINAL ACCEPTANCE, IF IN THE OPINION OF THE ENGINEER SAID DEFECT IS DUE TO IMPERFECTION IN MATERIAL, DESIGN OR WORKMANSHIP.

STRUCTURAL GENERAL NOTES:

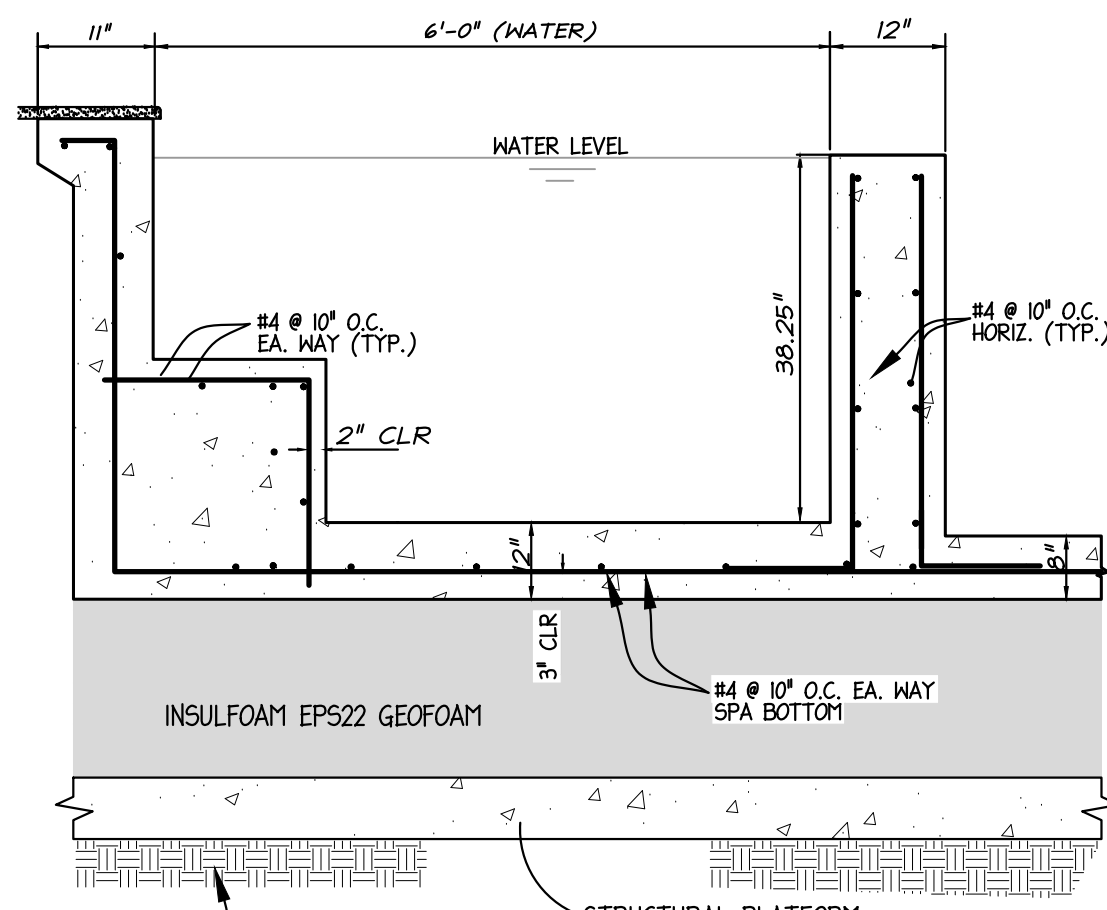
- THE POOL/SPA DECK AND YARD AREA AROUND THE POOL/SPA SHALL SLOPE AWAY FROM THE POOL/SPA.
- DRAINAGE SHALL BE PROVIDED AROUND THE POOL/SPA IF WATER IS ENCOUNTERED. NO GROUND WATER IS PERMITTED ABOVE THE LEVEL OF THE BOTTOM OF THE POOL. THE POOL IS NOT DESIGNED TO ACCEPT HYDROSTATIC PRESSURE AGAINST EXTERIOR (EARTH) SURFACE.
- WHERE THE FROST DEPTH OF THE AREA EXCEEDS THE DEPTH OF WATER AT ANY SECTION, THE POOL/SPA SHALL BE OVER-EXCAVATED AND BACKFILLED WITH GRAVEL OR OTHER ENGINEER APPROVED NON FROST SUSCEPTIBLE (NFS) MATERIAL, SUCH THAT THE BOTTOM OF THE NFS MATERIAL IS BELOW THE MAXIMUM FROST PENETRATION DEPTH EXPERIENCED IN THE AREA.
- THE LOCAL BUILDING DEPARTMENT MUST BE CONTACTED FOR INSPECTION OF PLACEMENT OF STEEL REINFORCING BARS PRIOR TO PLACING CONCRETE.
- THE POOL WAS DESIGNED FOR MAXIMUM SOIL EQUIVALENT FLUID PRESSURE (EFP) OF 40 POUNDS PER CUBIC FOOT. NOTIFY THE ENGINEER IF LOCAL CONDITIONS EXCEED THIS. IT IS RECOMMENDED THAT A LOCAL GEOTECHNICAL ENGINEER BE CONSULTED PRIOR TO EXCAVATION FOR DETERMINATION OF EFP AND RECOMMENDATIONS ON SAFE EXCAVATION PROCEDURES. VERIFICATION OF SOIL EFP AND EXCAVATION SAFETY IS THE RESPONSIBILITY OF THE OWNER AND HIS CONTRACTOR.
- IT IS NECESSARY TO INSTALL THE SURROUNDING SIDEWALK AND 90 LB. FELT MEMBRANE WITH ALL JOINTS SEALED WITH BLACK LONG ASBESTOS GOLD APPLICATION MASTIC. ALL DECK EXPANSION JOINTS BETWEEN THE POOL COPING AND DECK SHALL BE SEALED WITH THIKOL® SEALER. PLACE CONCRETE AGAINST APPROVED, ENGINEERED COMPACTED STRUCTURAL FILL, OR DENSE, UNDISTURBED NATIVE EARTH OF MINIMUM SAFE BEARING CAPACITY OF 1000 PSF.
- NO FUTURE SURCHARGE, SUCH AS RETAINING WALLS, TERRACES, ROCKERIES, FOOTINGS, MAY OCCUR ABOUT THE PERIMETER OF THE POOL WITHIN THE 33 DEGREE SURCHARGE AREA AS SHOWN ON THE LONGITUDINAL POOL SECTION.
- MATERIALS: CEMENT: PORTLAND CEMENT SHALL BE TYPE I CONFORMING TO ASTM SPECIFICATION C150-71. FINE AGGREGATE SHALL CONSIST OF NATURAL SAND HAVING HARD AND DURABLE PARTICLES CONTAINING NO MORE THAN 1% CONTAMINATION. WATER SHALL BE CLEAN AND FIT TO DRINK. REINFORCING STEEL BARS SHALL BE HIGH BOND DEFORMED BARS CONFORMING TO ASTM SPECIFICATION A-615, WITH LATEST AMENDMENTS, GRADE 60 (Fy=60,000 PSI).
- GUNNITE MIX SHALL ATTAIN AN ULTIMATE 28 DAY STRENGTH OF 4000 PSI. SUGGESTED GUNNITE MIX: (BY VOLUME) 4 1/2 CUBIC FEET OF DRY SAND TO EACH 90 LB SACK OF CEMENT. MAXIMUM WATER CONTENT SHALL BE 3 1/2 GALLONS PER SACK OF CEMENT.
- AIR PLACED CONCRETE MIX ULTIMATE 28 DAY STRENGTH SHALL BE A MINIMUM OF 4000 PSI. MIX SHALL BE 60% SAND, 40% PEA GRAVEL, 7 1/2 SACKS REDI-MIX CONCRETE. USE 3 1/2 GALLONS OF WATER PER SACK OF CEMENT, MAXIMUM, INCLUDING WATER IN THE AGGREGATE.
- DO NOT USE CALCIUM CHLORIDE IN THE CONCRETE. NON CALCIUM ACCELERATORS MAY BE USED WITH APPROVAL OF THE ENGINEER. AIR ENTRAIN THE CONCRETE 4-6% BY VOLUME.
- REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH "ACI MANUAL OF STANDARD PRACTICES OF DETAILING REINFORCED CONCRETE STRUCTURES". REINFORCING STEEL SHALL BE PLACED ACCORDING TO THE PLANS, CAREFULLY AND FIRMLY WIRE INTO PLACE. STEEL SHALL BE BLOCKED WITH SOLID CONCRETE BLOCKS TO MAINTAIN THE SPACING FROM THE EXCAVATION. BARS SHALL BE LAPPED 30 DIAMETERS AT SPLICES AND 2'-0" AT ALL CORNERS. STEEL COVER SHALL BE PER RELEVANT SECTIONS WITH A MAXIMUM TOLERANCE OF 1/4 INCH. NO DEVIATION IN CONCRETE COVER WILL BE PERMITTED WITHOUT PRIOR APPROVAL FROM THE ENGINEER. BARS SHALL BE CLEAN AND FREE OF RUST, EXCEPT TIGHT MILL SCALE.
- CONCRETE SHALL BE PLACED ON FIRN, NATURAL UNDISTURBED OR COMPACTED ENGINEERED FILL TO THE THICKNESS SHOWN. ANY DEPOSITS OF LOOSE SAND OR REBOUND SHALL BE CAREFULLY REMOVED FROM THE SURFACES BEFORE PLACEMENT OF CONCRETE. DO NOT PLACE CONCRETE ON STANDING WATER OR MUD. SLOUGHING AND OTHER DEFECTS SHALL BE CUT OUT AND REPLACED. REBOUND SHALL NOT BE REUSED.
- THE CONCRETE SHALL BE DAMP CURED FOR A PERIOD OF TEN DAYS. PROTECT THE CONCRETE FROM FREEZING DURING THIS TIME. NOTIFY THE ENGINEER IF THE CONCRETE IS TO BE PLACED IN POSSIBLE FREEZING CONDITIONS. DURING THE CURING PERIOD, THE PLASTER FINISH MAY BE APPLIED AND THE FINISHED POOL FILLED WITH WATER, AFTER 72 HOURS FROM PLACEMENT.
- SWIMMING POOL ELECTRICAL GROUNDING TO REINFORCING, TO PLUMBING AND TO CONDUIT IS REQUIRED PRIOR TO BUILDING INSPECTOR'S APPROVAL OF REINFORCING FOR GUNNITE.
- CONTRACTOR OR CLIENT RESPONSIBLE FOR SPECIFYING POOL TILE BRACKET AND BRACKET FASTENER CONFIGURATION. TYPICAL BRACKET SPECIFIED BY CLIENT.
- DO NOT TURN ON LIGHT WHEN SWIMMING POOL IS NOT FILLED WITH WATER.
- DO NOT USE BLACK RUBBER HOSE WHEN FILLING POOL; IT MARKS THE PLASTER.



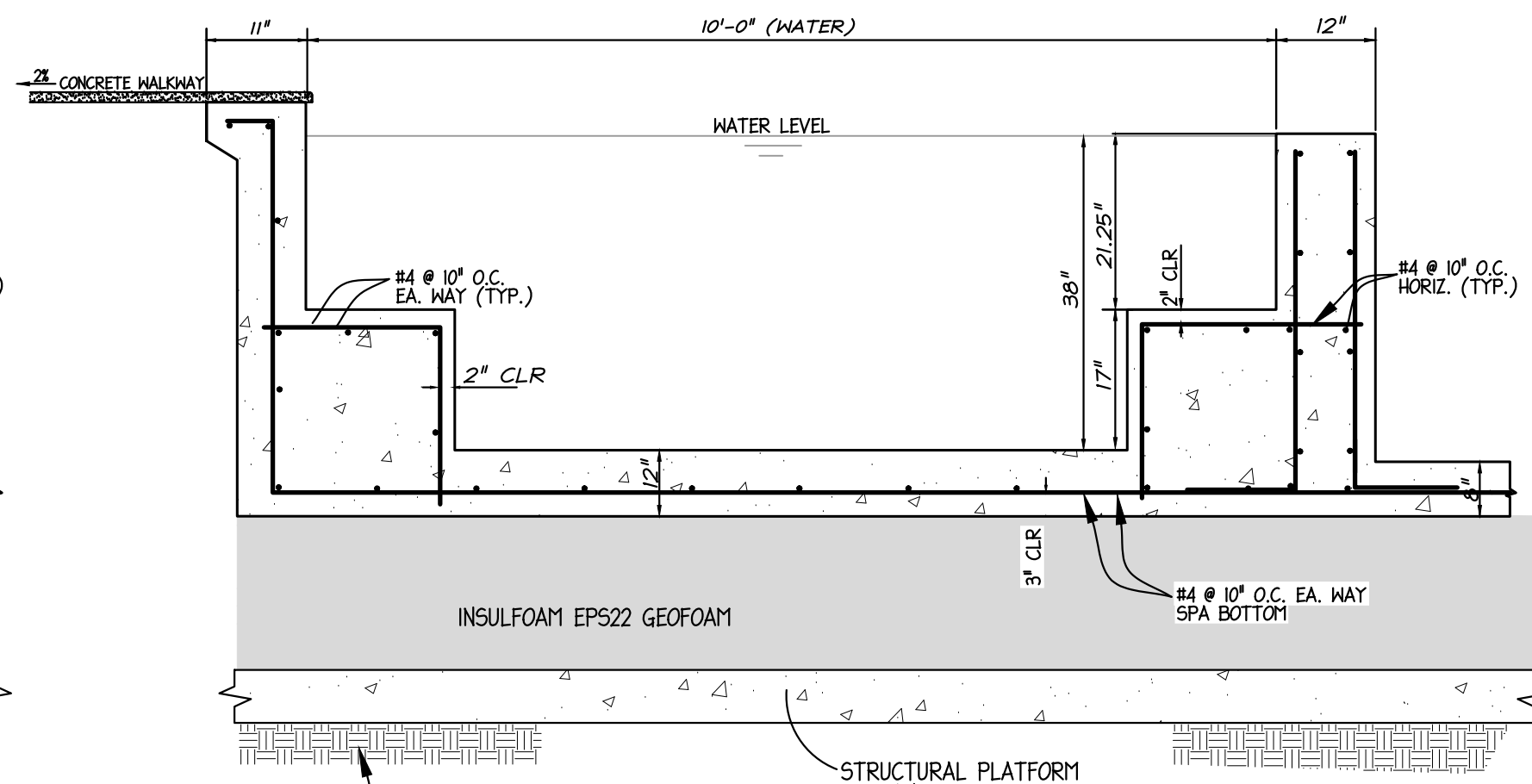
POOL STEP DETAIL
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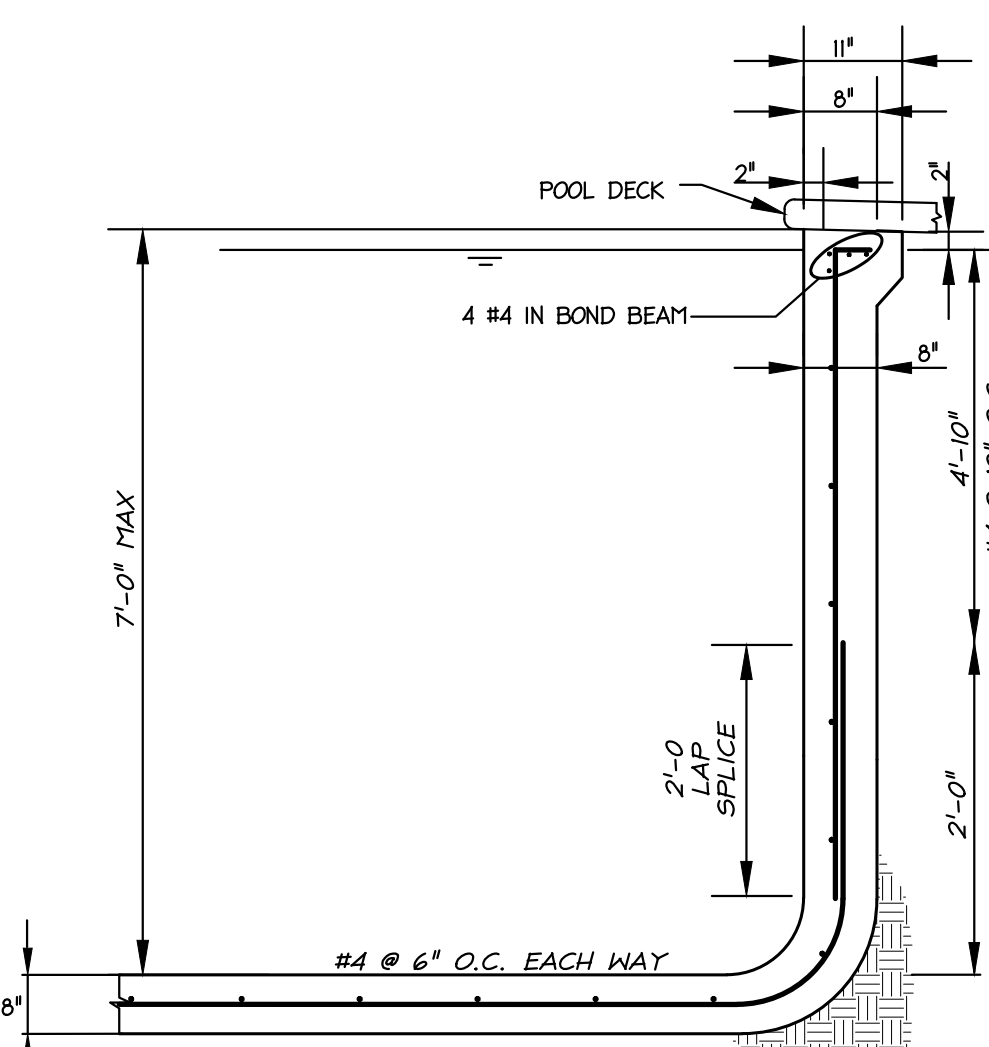
AUTO-COVER DETAIL
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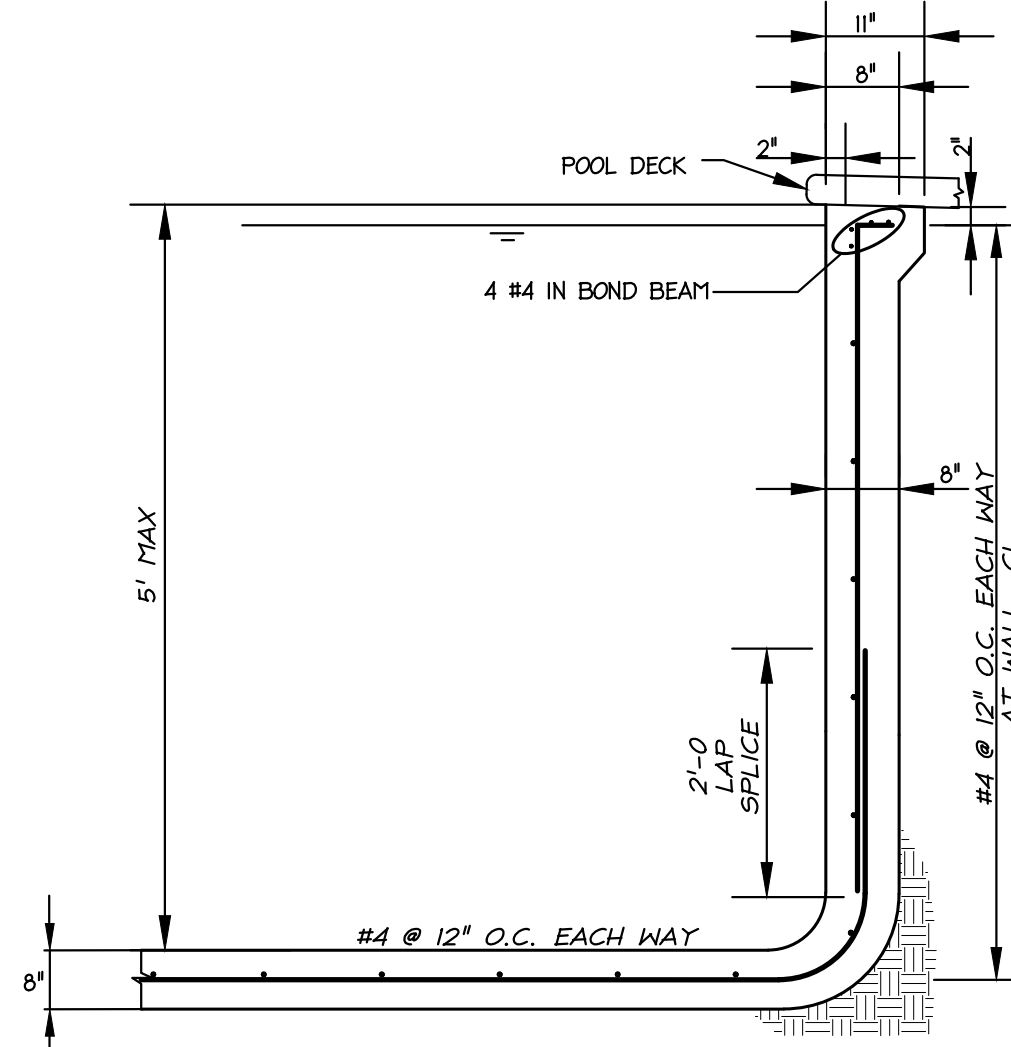
TYPICAL SPA SECTION A
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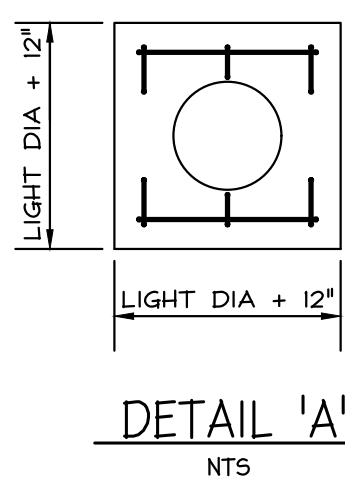
TYPICAL SPA SECTION B
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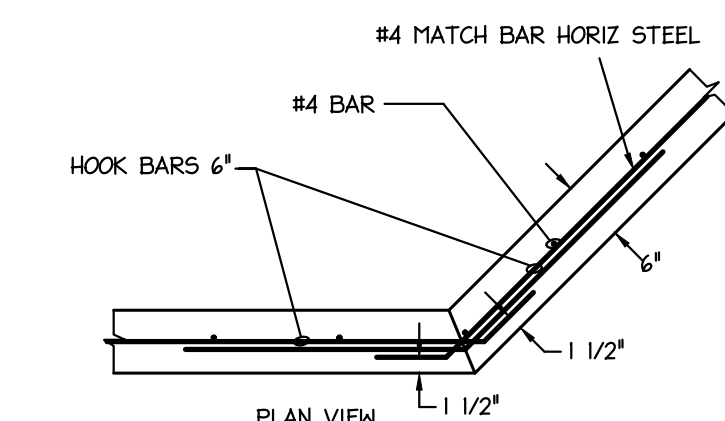
END DETAIL TO 7'-0" MAX.
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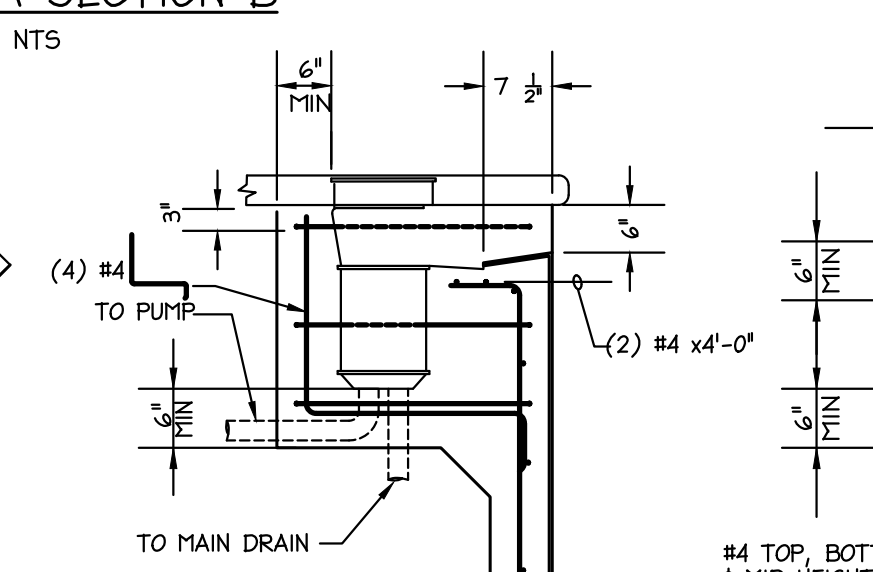
END DETAIL TO 5'-0" MAX.
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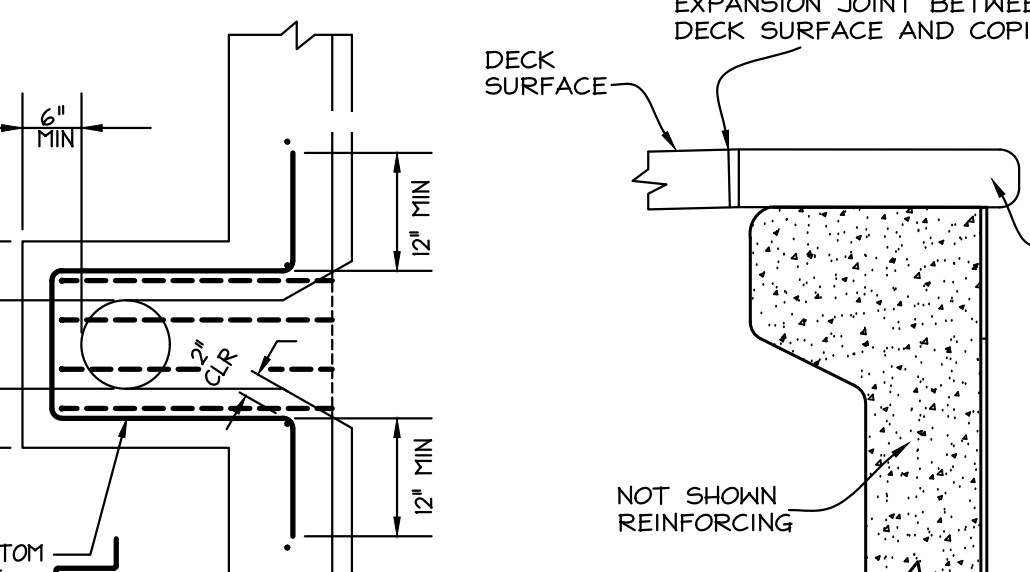
DETAIL 'A'
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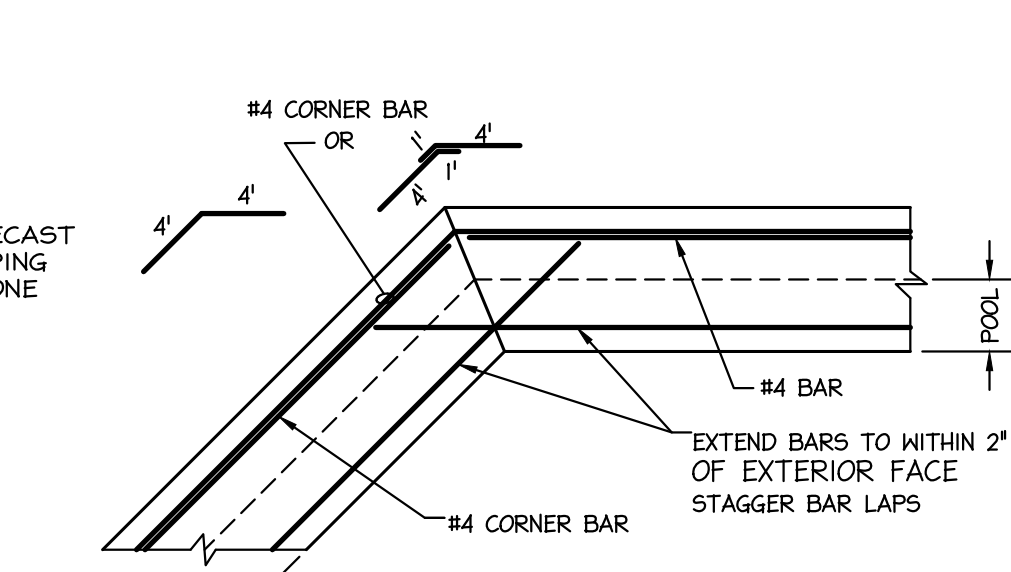
POOL WALL DETAIL
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SKIMMER NICHE
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COPING DETAIL
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CORBEL CORNER DETAIL
NTS

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