

CONSTRUCTION SPECIFICATIONS:

GENERAL:

1. CONTRACTOR SHALL PROVIDE AND PAY ALL NECESSARY FEES AND PERMITS WITH THE CITY OF SANTA ROSA.
2. NO GUARANTEE IS INTENDED THAT UNDERGROUND OBSTRUCTIONS NOT SHOWN ON THE PLANS MAY BE ENCOUNTERED. THOSE SHOWN ARE BASED ON THE BEST AVAILABLE INFORMATION. ECHELON POOLS ASSUMES NO RESPONSIBILITY FOR ANY OBSTRUCTIONS EITHER SHOWN OR NOT SHOWN ON THESE PLANS.
3. ALL TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY SANTA ROSA GIS. CONTRACTOR SHALL VERIFY CONDITIONS AND LOCATIONS OF ANY UTILITIES PRIOR TO CONSTRUCTION BY FOTHLING.
4. CALL UNDERGROUND SERVICE ALERT (USA) 48 HOURS PRIOR TO CONSTRUCTION AT 1-800-642-2444.
5. ALL COMPACTION AND FILL AREAS INSTALLED SHALL BE TESTED AND APPROVED BY GEOTECHNICAL ENGINEER. OWNER SHALL PAY FOR ENGINEERING SERVICES. ADDITIONAL TESTING FOR FAILED AREAS OF WORK SHALL BE PAID FOR BY THE CONTRACTOR.
6. PROVIDE CONCRETE, TILE, GROUT, AND STONE PAVING SAMPLES W/ PROPER FINISH TO OWNERS AND LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
7. STRIP ALL TOP SOIL FROM AREAS OF CONSTRUCTION AND STOCK PILE FOR LATER USE. (DO NOT OFF-HAUL, UNLESS NOTED OTHERWISE).

DEMOLITION NOTES:

1. THE CONTRACTOR SHALL PERFORM ALL CLEARING, DEMOLITION AND SITE PREPARATIONS NECESSARY FOR THE PROPER EXECUTION OF ALL WORK SHOWN IN THESE PLANS AND AS DESCRIBED IN THE SPECIFICATIONS AND GEOTECHNICAL REPORT.
2. STRIP SOIL AND STOCKPILE UPHILL OF LIMIT OF WORK FOR RE-USE IN LANDSCAPE AREAS, COVER BEFORE RAINS.
3. PROTECT (E) UTILITIES, SEPTIC SYSTEMS, EXPANSION AREAS AND PROPERTY FROM DAMAGE. CONTRACTOR SHALL REPAIR ALL DAMAGE TO EXISTING CONDITION, AT NO ADDITIONAL EXPENSE TO OWNERS.
4. THE BEST TRENCHING ROUTES SHALL BE SELECTED THAT HAVE THE LEAST IMPACT ON EXISTING TREES AND ROOT SYSTEMS.
5. ALL TREES, ROOTS VEGETATION AND ORGANIC SURFICIAL SOIL SHALL BE REMOVED FROM ALL STRUCTURAL AREAS UNLESS SPECIFIED OTHERWISE BY THE SOILS ENGINEER. THE DEPTH OF ORGANIC SURFICIAL SOIL TO BE REMOVED WILL BE RECOMMENDED IN THE FIELD BY THE SOILS ENGINEER OR REPRESENTATIVE, BUT IN GENERAL, WILL PROBABLY VARY FROM ABOUT 12" TO 18".
6. ALL SOIL, DEEMED SOFT OR UNSUITABLE BY THE GEOTECHNICAL ENGINEER OR REPRESENTATIVE SHALL BE REMOVED. ALL LOOSE FILLS AND SURFACE SOILS SHALL ALSO BE EXCAVATED OR REMOVED.
7. CONTRACTOR WILL BE RESPONSIBLE FOR IMPORT OR EXPORT OF MATERIAL TO OBTAIN FINISHED GRADES ON DRAWINGS.
8. ANY ABANDONED UNDERGROUND STRUCTURES SUCH AS OLD FOUNDATIONS, ABANDONED PIPELINES, ETC. SHALL BE REMOVED FROM THE SITE.
9. SAW CUT AND REMOVE ASPHALT OR CONCRETE AS REQ'D TO INSTALL NEW WORK AND UNDERGROUND UTILITIES.

DRAINAGE:

1. VERIFY ALL EXISTING AND PROPOSED DRAINS AND PIPES ARE CLEAR AND PROPERLY WORKING PRIOR TO BACKFILLING. NOTIFY PROJECT LANDSCAPE ARCHITECT IN WRITING OF ANY PROBLEMS PRIOR TO CONSTRUCTION.
2. ALL DRAIN PIPES AND DRAINAGE FACILITIES MUST BE TESTED & OBSERVED BY OWNER PRIOR TO BACKFILLING.
3. ALL DRAIN PIPES SHALL BE SDR 35 OR SCH. 40 PVC AND INSTALLED WITH A MINIMUM OF 5% SLOPE AND 18" OF COVER (SEE GRADING PLAN).
4. PROVIDE SANITARY SWEEPS WITH THREADED CAP AT ALL END RUNS OF SUB-DRAINS (NOT SHOWN ON PLAN) SEE DETAIL ON SHT. L5.0.
5. ALL HARD SURFACE PAVING SHALL SLOPE AT 1% MINIMUM AND SOIL SWALES SHALL SLOPE AT 15% MINIMUM. INSTALL ALL DRAIN INLETS PER DETAILS ON SHT. L5.0.
6. TIE ROOF DOWN-SPROUTS INTO SOLID DRAINAGE PIPE SYSTEMS. (NOT SHOWN ON PLAN) TIE ROOF DOWN-SPROUTS INTO SOLID DRAINAGE PIPE SYSTEMS (NOT SHOWN ON PLAN).

DRAINAGE SYSTEM MAINTENANCE:

1. THE DRAINAGE SYSTEM IS TO BE MAINTAINED BY THE OWNER.
2. INSPECTION OF THE DRAINAGE SYSTEM IS TO BE DONE DURING THE RAINY SEASON AND ONCE PRIOR TO THE RAINY SEASON (OCT).
3. ANY PROBLEMS TO THE SYSTEM MUST BE REPORTED TO THE LANDSCAPE ARCHITECT.

CONCRETE WORK:

1. FORMS & ELEVATIONS SHALL BE SET BY CONTRACTOR OR LICENSED SURVEYOR AND OBSERVED BY LANDSCAPE ARCHITECT PRIOR TO POURING CONCRETE. PROVIDE 48 HOURS NOTICE FOR SITE OBSERVATIONS.
2. ALL PAVED IN PLACE CONCRETE SHALL BE SIX SACK MIX COLORED W/ DAVIS COLOR "SANDSTONE" @ 3/4 LB/SAC. PROVIDE ACID ETCH FINISH, PROVIDE SAMPLE FOR APPROVAL PRIOR TO CONSTRUCTION.
3. CONCRETE EXPANSION JOINTS SHALL BE A MINIMUM OF 3/8" X 4" FELT W/ CAULKING TO MATCH MORTAR OR CONCRETE. PROVIDE SAMPLES FOR APPROVAL. LOCATE EXP. JOINTS BETWEEN CONCRETE FOUNDATIONS, POOL COPING, AND FLATWORK SLABS OR AS SHOWN ON PLANS. PROVIDE 1/8" X 1" DEEP CONTROL JOINTS AS SHOWN ON PLAN.
4. SEE GEO-TECHNICAL REPORT AND STRUCTURAL PLANS FOR FOOTING AND RETAINING WALL DETAILS, BY STRUCTURAL ENGINEER/ OWNER.
5. CAULKING COLOR FOR EXPANSION JOINTS TO MATCH MORTAR AND TOP WITH WASHED SAND WHEN USET (PROVIDE SAMPLE PRIOR TO INSTALLATION).

MASONRY:

1. PAVING:
 - A. ALL FLAT PAV. SHALL BE "FARMER'S GOLD" (FROM SBI MATERIALS, WINDSOR, CA. MICK WELLS 1071-925-0266). PAVING SHALL BE LAID IN A SQUARE PATTERN PER PLAN, AND BE A MINIMUM OF 1" THICK & 24" X 24" IN SIZE. 3/8"-1/2" GROUT JOINTS, GRAY COLOR, WITH RIVER SAND. MORTAR SET ALL STONE WITH THIN SET & MORTAR ADHESIVE, PER SUPPLIERS RECOMMENDATION.
 - B. ALL STEPS AND CAPS SHALL BE PIONEER STONE - NATURAL CLEFT TOPS & SIDES, W/ EASED SQ. EDGE. - SEE DETAILS FOR DIMENSIONS.
2. STEPS - SHALL BE 2" X 16" X 30" WALL CAP STONES - SHALL BE 2" X 18" X 30" FIRE PIT - SHALL BE 2" X 12" CURVED
2. POOL COPING:
 - A. ALL COPING PIONEER STONE FLAMED FINISH (TOP) & LONG SIDE (1) SQUARE NOSE W/ EASED EDGES (1) LONG SIDE. SEE DETAILS FOR DIMENSIONS. WIDENED BOND BEAM COPING - SHALL BE 2" X 30" X 30". ALL OTHER COPING INCLUDING POOL COVER - SHALL BE 2" X 24" X 30"
3. PRECAST PAVERS:
UNLOCK PAVERS 1-800-864-5625. REFER TO DETAILS ON SHEET L6.1, DETAIL G FOR MODEL NAME AND COLOR (PROVIDE SAMPLE PATTERN & LAYOUT W/ OWNER & LANDSCAPE ARCHITECT, PRIOR TO SETTING.)

EROSION CONTROL:

1. CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES PRIOR TO OCTOBER 15TH. WORK SHALL INCLUDE PLACEMENT OF SILT BARRIERS, FIBER ROLLS AND OTHER MEASURES TO CONTROL SEDIMENT FROM LEAVING SITE OR ENTERING WATERWAYS.

STUCCO FINISH:

1. COLOR OF STUCCO FINISH ON SEATWALLS, CURB, AND RAISED BOND BEAMS TO MATCH HOUSE COLOR.

METAL FABRICATION SPECIFICATIONS

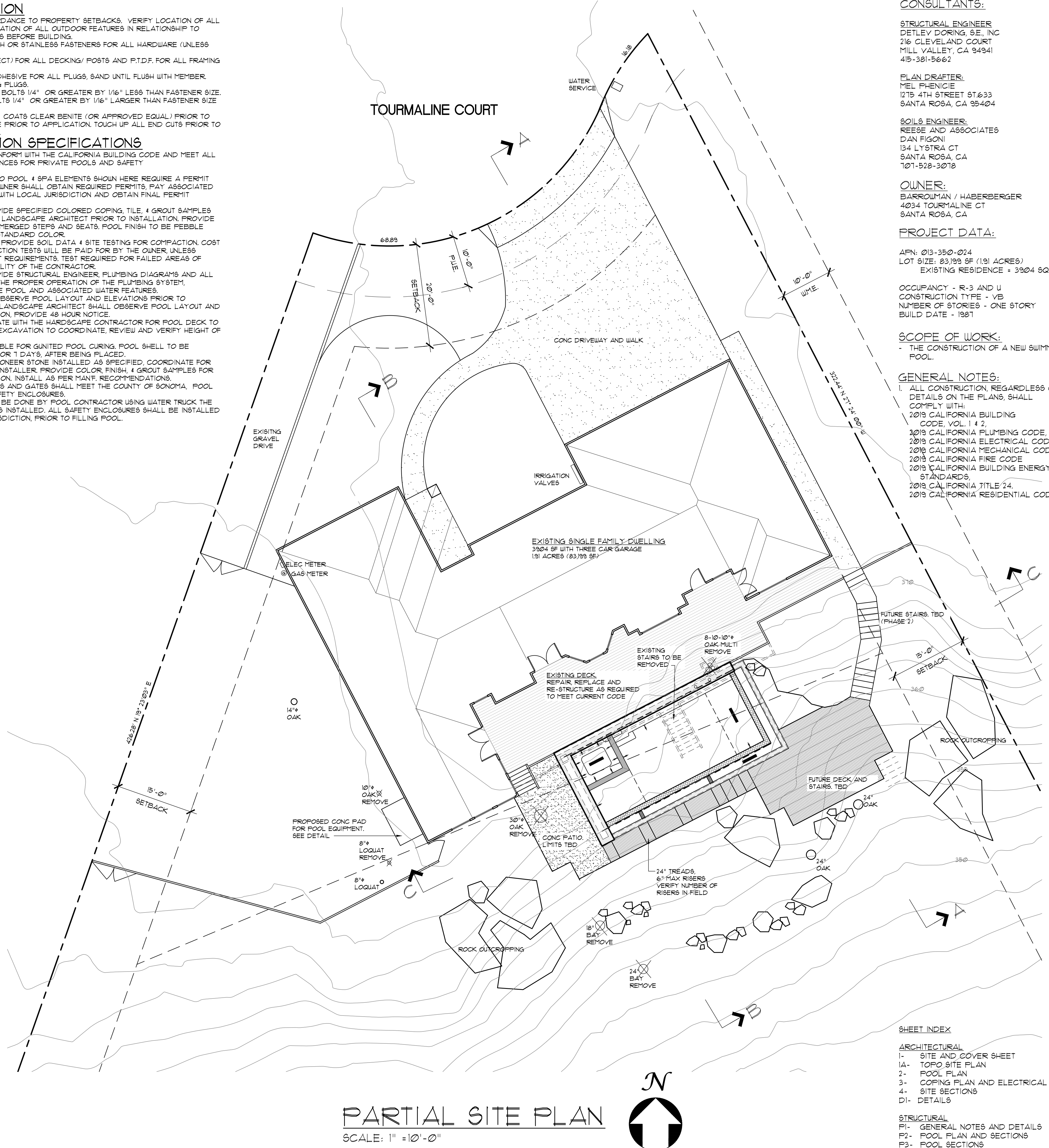
1. ALL STRUCTURAL WELDED STEEL MUST BE APPROVED BY A CERTIFIED WELDING INSPECTOR OR EQUAL PROFESSIONAL. CONTRACTOR SHALL PAY FOR & COORDINATE THESE INSPECTIONS & PERMITS.
2. SEE ALL STRUCTURAL CALCULATIONS, FOOTINGS & STEEL REINFORCING PROVIDED BY STRUCTURAL ENGINEER.
3. USE STAINLESS STEEL OR GALVANIZED STEEL FOR ALL HARDWARE AND STRUCTURAL POSTS. APPLY PRIMER AND (2) FINISH COATS OF PAINT.
4. PRE-DRILL & FIT ALL FASTENER PENETRATIONS AND WELDED CONNECTIONS PRIOR TO POWDER COATING.
5. CONTRACTOR SHALL COORDINATE LAYOUT OF ALL UTILITIES & ROUTES FOR ELECTRICAL THRU FOOTINGS & INSIDE POSTS TO FINAL DESTINATION.
6. FIELD VERIFY "AS-BUILT" DIMENSIONS AS REQUIRED. PROVIDE SHOP DRAWINGS FOR ANY CHANGES. PROVIDE SHOP DRAWINGS FOR ANY CHANGES OR CLARIFICATIONS FROM APPROVED DRAWINGS.
7. PREP & CLEAN, & APPLY PRIMER COAT TO ALL STEEL PRIOR TO DELIVERING TO SITE.
8. PAINT ARCHITECTURAL METAL BRONZE COLOR. PROVIDE SAMPLE PRIOR TO APPLICATION FOR OWNER/ ARCHITECT APPROVAL.

WOOD CONSTRUCTION

1. ALL DIMENSIONS VARY IN ACCORDANCE TO PROPERTY SETBACKS. VERIFY LOCATION OF ALL OUTDOOR FEATURES. VERIFY LOCATION OF ALL OUTDOOR FEATURES IN RELATIONSHIP TO BUILDING SETBACKS & EASEMENTS BEFORE BUILDING.
2. USE ALL HOT DIPPED GALV. FINISH OR STAINLESS FASTENERS FOR ALL HARDWARE (UNLESS NOTED OTHERWISE).
3. USE CON. HEART REDWOOD (SELECT) FOR ALL DECKING/ POSTS AND P.T.D.F. FOR ALL FRAMING MEMBERS.
4. USE EPOXY BASED EXTERIOR ADHESIVE FOR ALL PLUGS, SAND UNTIL FLUSH WITH MEMBER. ALIGN WOOD GRAIN WHEN SETTING PLUGS.
5. FIRE-DRILL ANY HOLES FOR LAG BOLTS 1/4" OR GREATER BY 1/16" LESS THAN FASTENER SIZE. FIRE-DRILL HOLES FOR THRU BOLTS 1/4" OR GREATER BY 1/16" LARGER THAN FASTENER SIZE TO REDUCE FUTURE CHECKING.
6. SEAL ALL WOOD MEMBERS WITH 2 COATS CLEAR BENITE (OR APPROVED EQUAL) PRIOR TO CONSTRUCTION. PROVIDE SAMPLE PRIOR TO APPLICATION. TOUCH UP ALL END CUTS PRIOR TO INSTALLING AND WHEN COMPLETE.

POOL CONSTRUCTION SPECIFICATIONS

1. ALL POOL CONSTRUCTION TO CONFORM WITH THE CALIFORNIA BUILDING CODE AND MEET ALL LOCAL, CITY OR COUNTY ORDINANCES FOR PRIVATE POOLS AND SAFETY ENCLOSURES/DEVICES.
2. THE SCOPE OF WORK RELATING TO POOL & SPA ELEMENTS SHOWN HERE REQUIRE A PERMIT FROM THE COUNTY OF SONOMA. OWNER SHALL OBTAIN REQUIRED PERMITS, PAY ASSOCIATED FEES, COORDINATE INSPECTIONS WITH LOCAL JURISDICTION AND OBTAIN FINAL PERMIT APPROVAL.
3. POOL CONTRACTOR SHALL PROVIDE SPECIFIED COLORED COPING, TILE, & GROUT SAMPLES TO OWNER & POOL CONTRACTOR. LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. PROVIDE ACCENT BAND TILES ON ALL SUBMERGED STEPS AND SEATS. POOL FINISH TO BE PEBBLE SHEEN (TAHOE BLUE) OR EQUAL STANDARD COLOR.
4. A GEOTECHNICAL ENGINEER WILL PROVIDE SOIL DATA & SITE TESTING FOR COMPACTION. COST FOR SOILS REPORT AND COMPACTION TESTS WILL BE PAID FOR BY THE OWNER, UNLESS COMPACTION TESTS FAIL TO MEET REQUIREMENTS. TEST REQUIRED FOR FAILED AREAS OF WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. POOL CONTRACTOR SHALL PROVIDE STRUCTURAL ENGINEER, PLUMBING DIAGRAMS AND ALL HYDRAULIC CALCULATIONS FOR THE PROPER OPERATION OF THE PLUMBING SYSTEM, FILTER/HEATING SYSTEMS FOR THE POOL AND ASSOCIATED WATER FEATURES.
6. LANDSCAPE ARCHITECT SHALL OBSERVE POOL LAYOUT AND ELEVATIONS PRIOR TO EXCAVATION. PROVIDE 48 HOUR LANDSCAPE ARCHITECT SHALL OBSERVE POOL LAYOUT AND ELEVATIONS PRIOR TO EXCAVATION. PROVIDE 48 HOUR NOTICE.
7. POOL BUILDER SHALL COORDINATE WITH THE LANDSCAPE CONTRACTOR FOR POOL DECK TO BE PRESENT THE DAY OF POOL EXCAVATION TO COORDINATE, REVIEW AND VERIFY HEIGHT OF POOL BOND BEAM ELEVATIONS.
8. POOL CONTRACTOR IS RESPONSIBLE FOR GUNITE POOL CURING. POOL SHELL TO BE MOISTENED 2-3 TIMES PER DAY FOR 1 DAYS, AFTER BEING PLACED.
9. CANTILEVERED COPING TO BE PIONEER STONE INSTALLED AS SPECIFIED. COORDINATE FOR POOL COVER & OVERHANGS WITH INSTALLER. PROVIDE COLOR FINISH & GROUT SAMPLES FOR APPROVAL PRIOR TO INSTALLATION. INSTALL AS PER MANF. RECOMMENDATIONS.
10. ALL POOL & SPA COVERS, FENCES AND GATES SHALL MEET THE COUNTY OF SONOMA. POOL AND SPA REQUIREMENTS FOR SAFETY ENCLOSURES.
11. FILLING POOL WITH WATER SHALL BE DONE BY POOL CONTRACTOR USING WATER TRUCK THE SAME DAY AS THE POOL FINISH IS INSTALLED. ALL SAFETY ENCLOSURES SHALL BE INSTALLED AND APPROVED BY LOCAL JURISDICTION, PRIOR TO FILLING POOL.



CONSULTANTS:

STRUCTURAL ENGINEER
DETLEV DORING, S.E., INC.
216 CLEVELAND COURT
MILL VALLEY, CA 94941
415-381-5662

PLAN DRAFTER:
MEL PHENICIE
1215 4TH STREET ST.633
SANTA ROSA, CA 95404

SOILS ENGINEER:
KEESE AND ASSOCIATES
DAN FIGONI
134 LYSTRA CT
SANTA ROSA, CA
707-528-3018

OWNER:
BARROUMAN / HABERBERGER
4034 TOURMALINE CT
SANTA ROSA, CA

PROJECT DATA:

APN: 013-350-024
LOT 61 SIZE: 83,995 SF (1.91 ACRES)
EXISTING RESIDENCE : 3904 SQ FT

OCCUPANCY - R-3 AND U
CONSTRUCTION TYPE - VB
NUMBER OF STORIES - ONE STORY
BUILD DATE - 1981

SCOPE OF WORK:

- THE CONSTRUCTION OF A NEW SWIMMING POOL.

GENERAL NOTES:

1. ALL CONSTRUCTION, REGARDLESS OF DETAILS ON THE PLANS, SHALL COMPLY WITH:
2019 CALIFORNIA BUILDING CODE, VOL. 1 & 2,
2019 CALIFORNIA PLUMBING CODE,
2019 CALIFORNIA ELECTRICAL CODE,
2019 CALIFORNIA MECHANICAL CODE,
2019 CALIFORNIA FIRE CODE
2019 CALIFORNIA BUILDING ENERGY STANDARDS,
2019 CALIFORNIA TITLE 24,
2019 CALIFORNIA RESIDENTIAL CODE

ECHELON POOLS

ECHELON POOLS INC.

707-486-0266
www.ECHELONPOOLSINC.com

MEL PHENICIE
PAUL SWANSON
Mel Phenicie

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Description	BUILDING DEPT SUBMITTAL								
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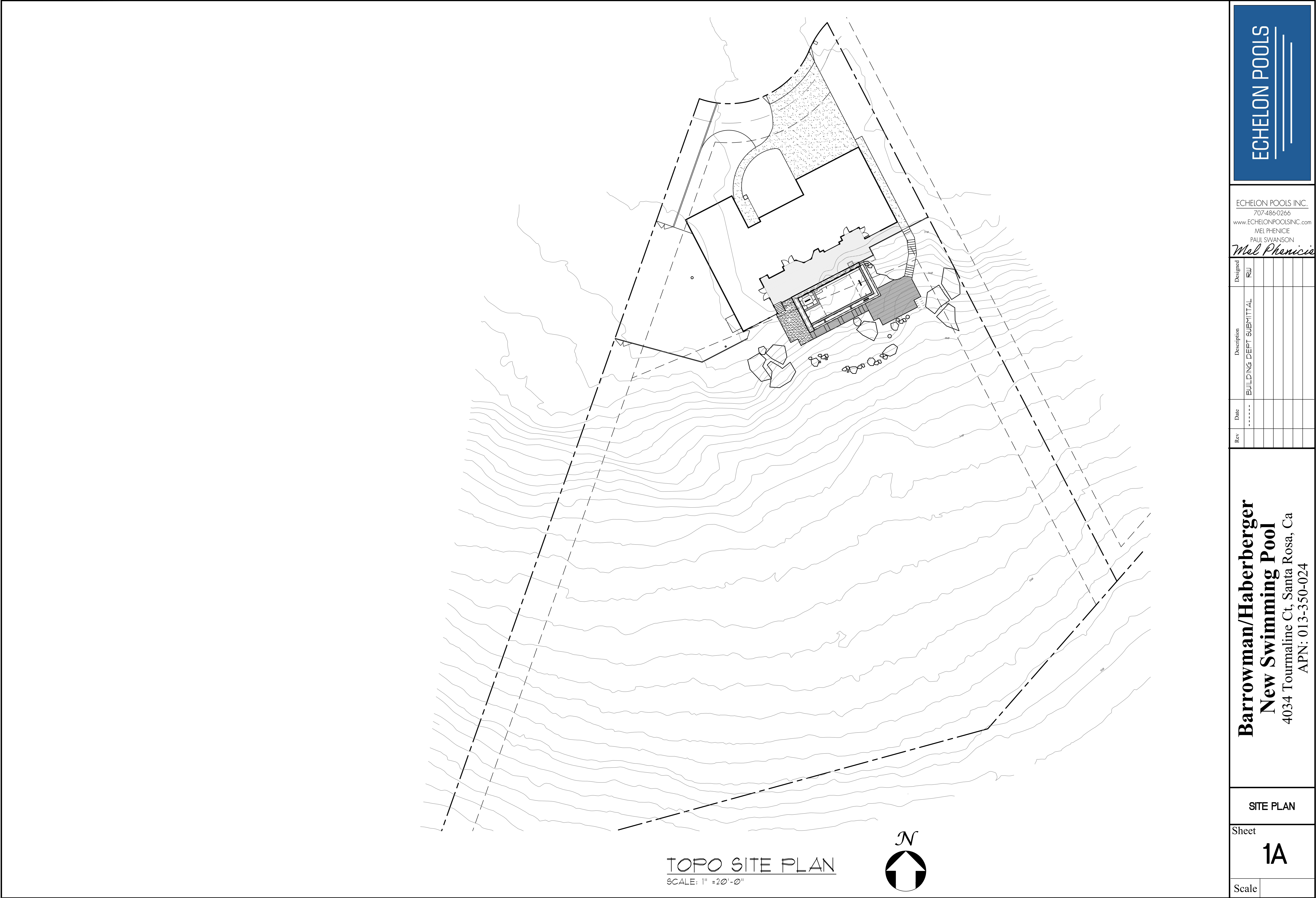
Barrowman/Haberberger
New Swimming Pool
4034 Tourmaline Ct, Santa Rosa, Ca
APN: 013-350-024

SITE PLAN

Sheet

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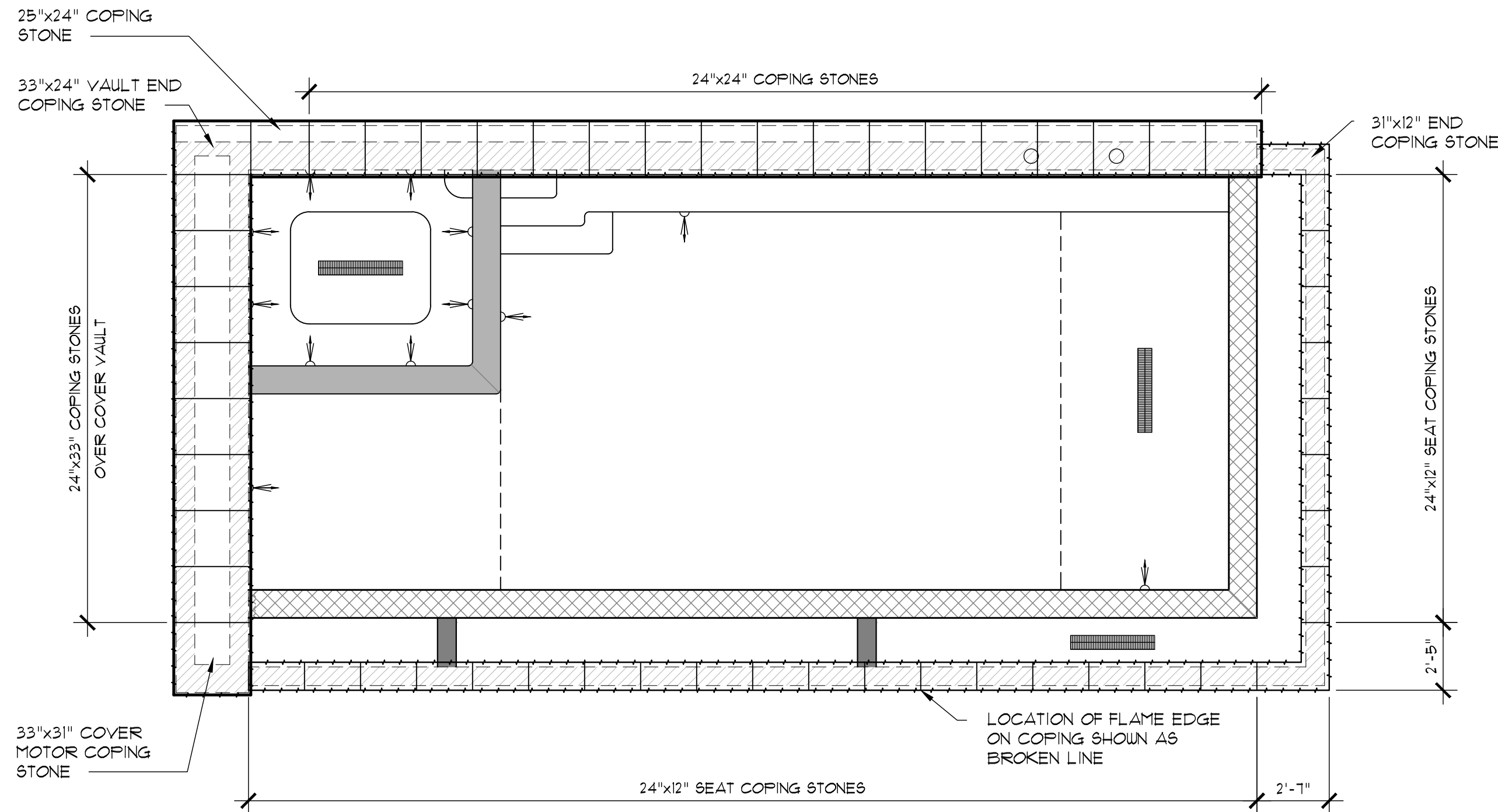
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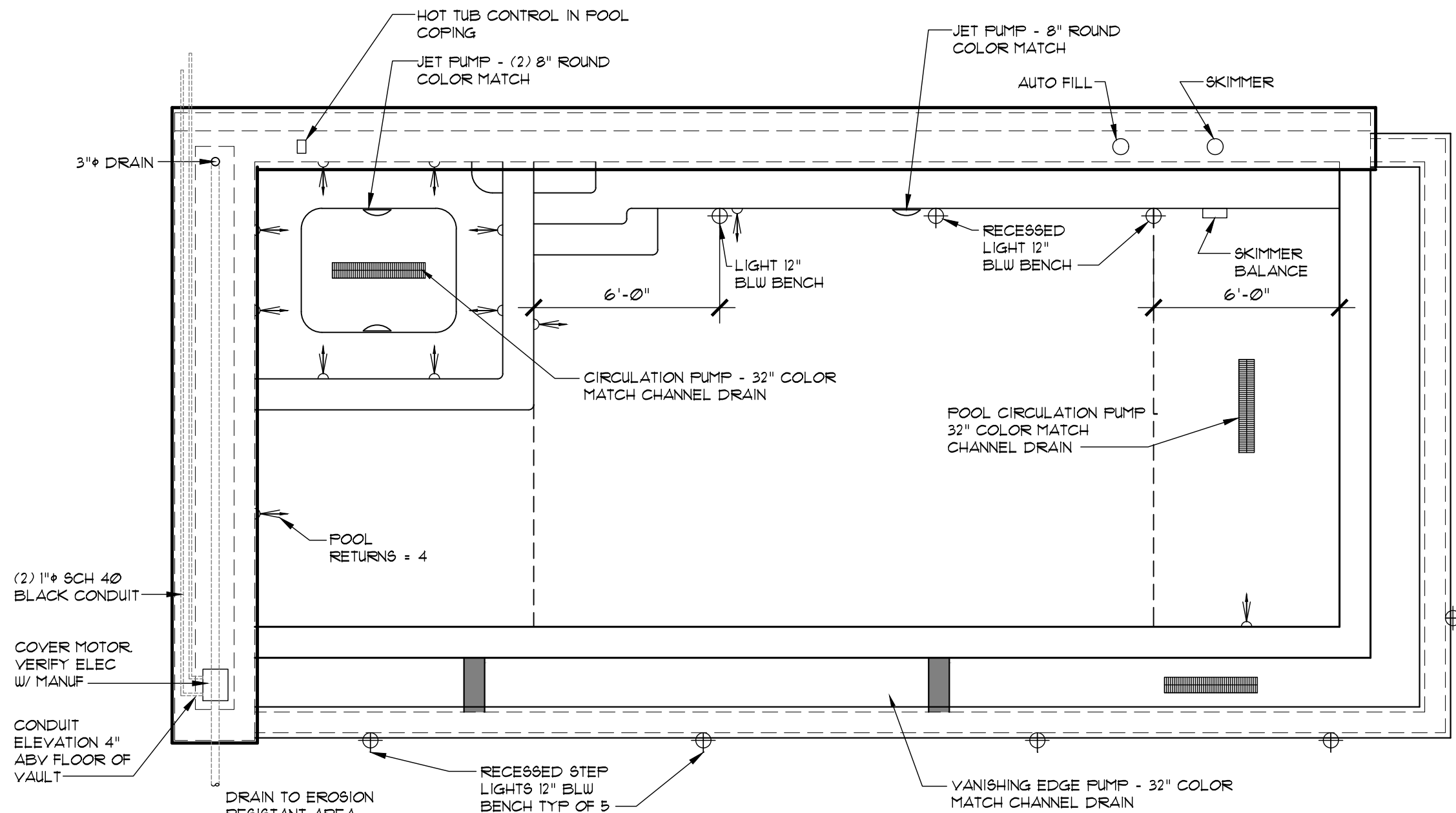
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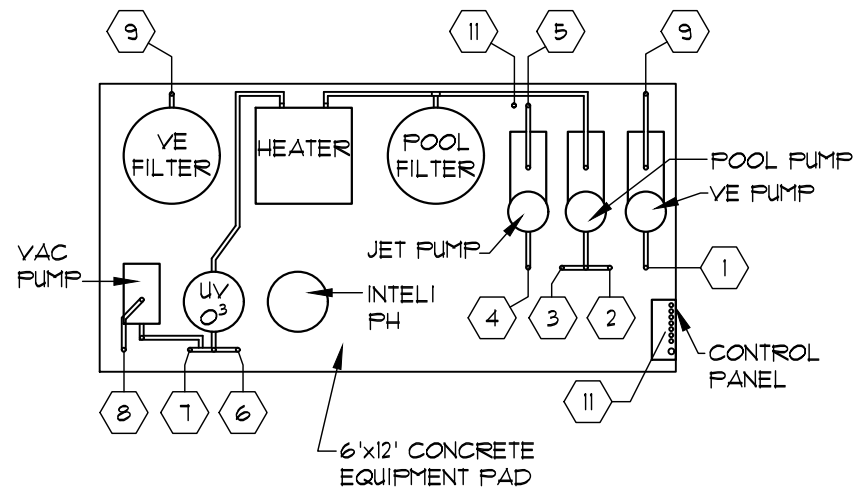


COPING PLAN
SCALE: 1/4" = 1'-0"



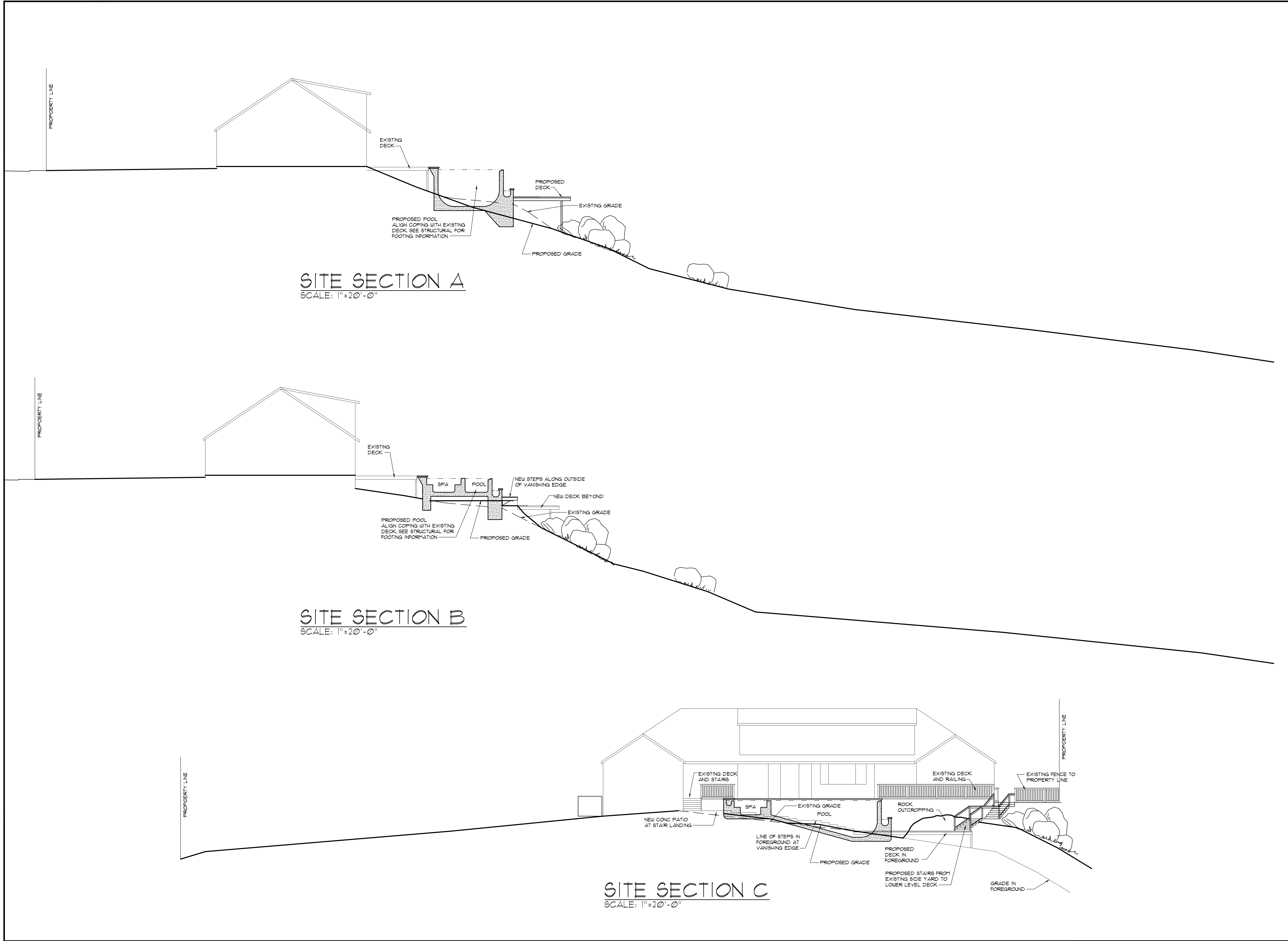
UTILITY PLAN
SCALE: 1/4" = 1'-0"

REQD	DESCRIPTION
2	JANDY 2.1 VSP
2	JANDY CV 340 FILTER
1	JANDY JX1 400 HEATER
1	JANDY 3 hp STEALTH PUMP
1	POLARIS FB40 PUMP
1	JANDY RS-FS 8 CONTROL
1	JANDY ONE TOUCH CONTROL
1	4 FUNCTION SPA CONTROL
1	IQ-20 WIFI ADAPTOR
1	HAYWARD UV-O3 SANITIZER
1	PENTAIR INTELI FH SYSTEM
4	JANDY PRO LED LIGHTS



POOL EQUIPMENT PAD
SCALE: 1/4" = 1'-0"

#	DESCRIPTION
1	VANISHING EDGE MAIN DRAIN
2	POOL MAIN DRAIN
3	SPA MAIN DRAIN
4	JET MAIN DRAIN
5	JET RETURN
6	SPA RETURN
7	POOL RETURN
8	VACUUM RETURN
9	VE RETURN "UNDER PAD"
10	JET AIR
11	CONDUITS



SITE SECTION A
SCALE: 1"=20'-0"

SITE SECTION B
SCALE: 1"=20'-0"

SITE SECTION C
SCALE: 1"=20'-0"

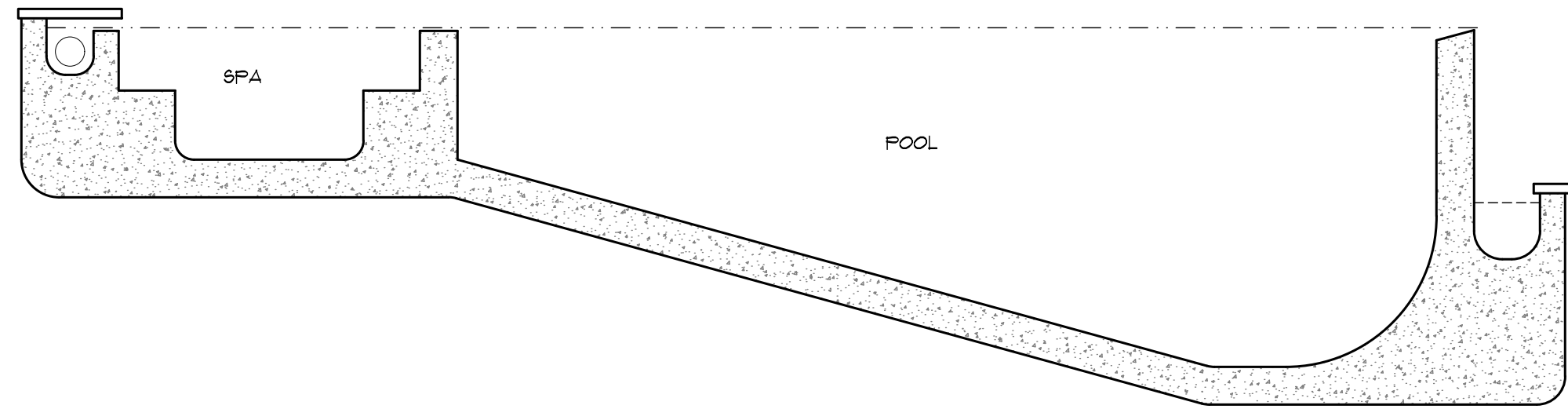


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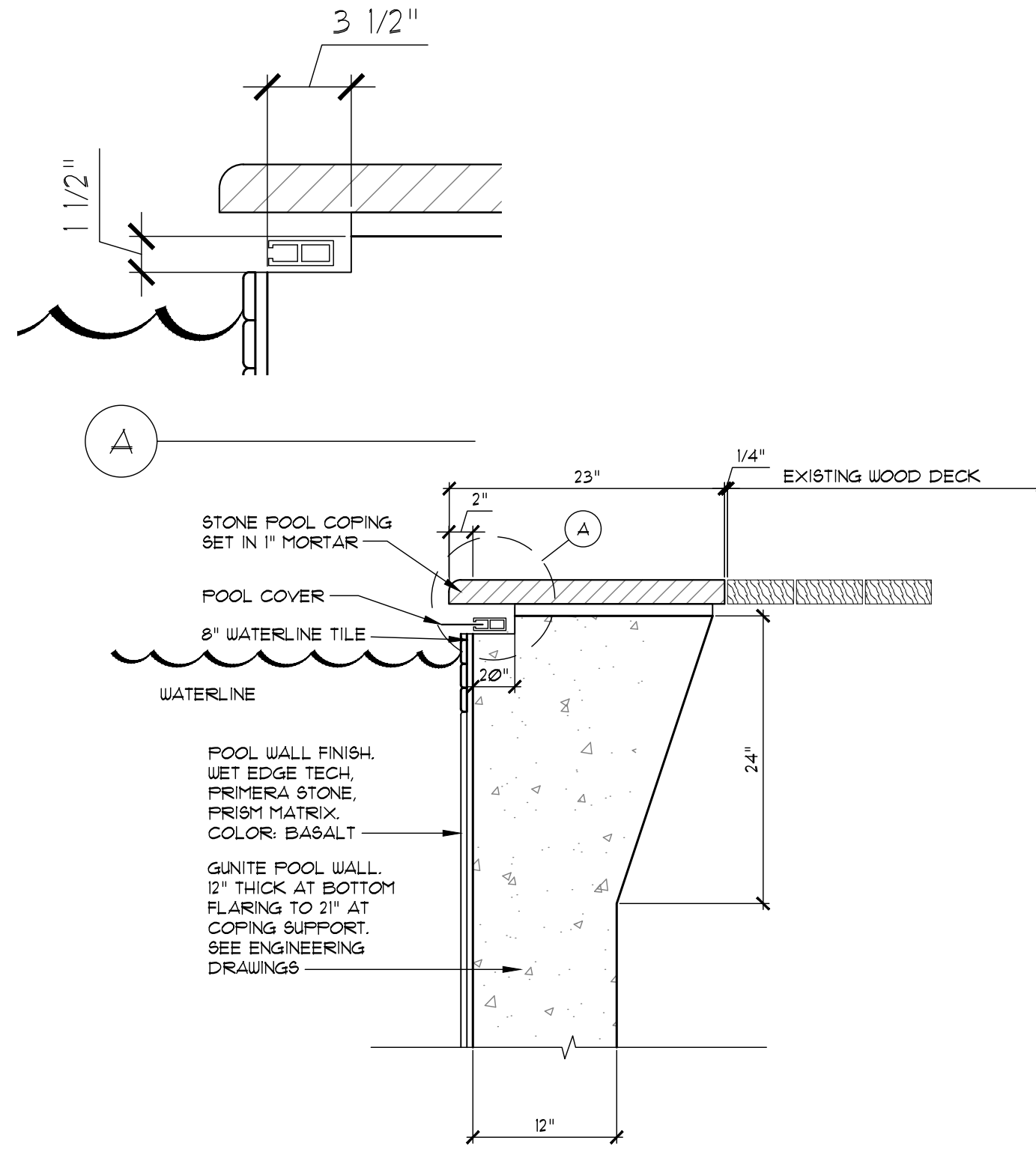
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Barrowman/Haberberger
New Swimming Pool
4034 Tourmaline Ct, Santa Rosa, Ca
APN: 013-350-024

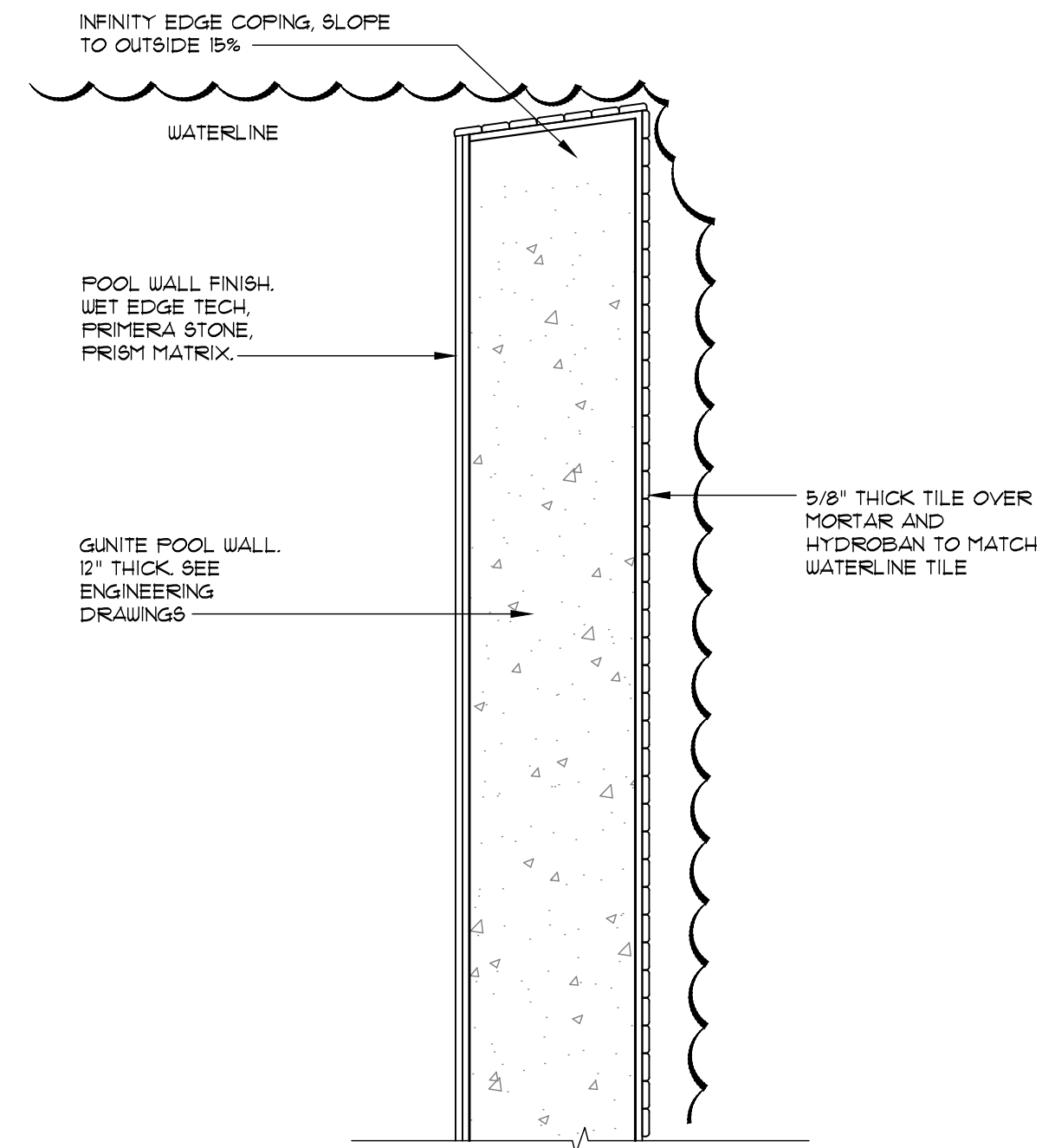
SITE SECTIONS	
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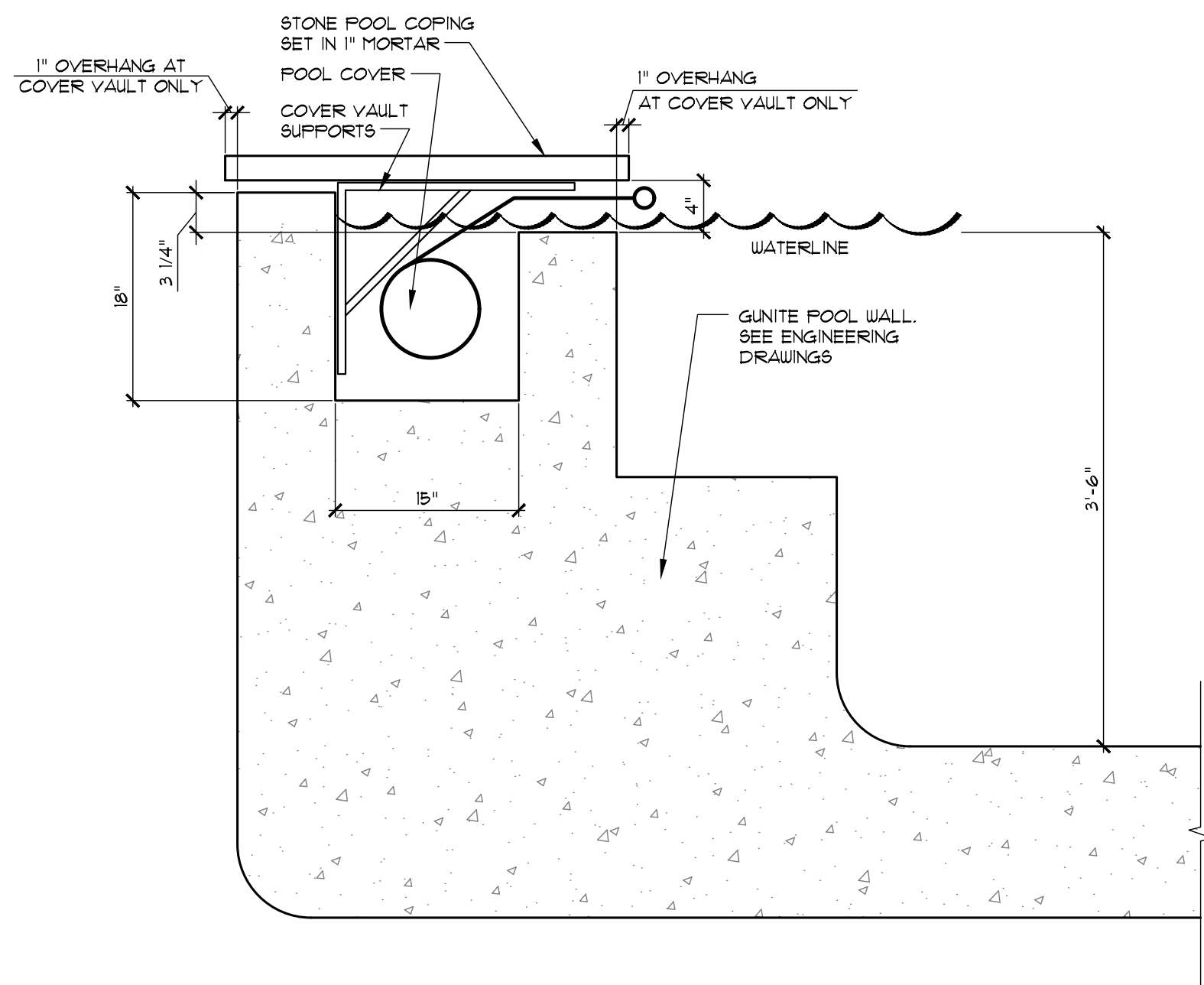
AA POOL SECTION
1/4"=1'-0"



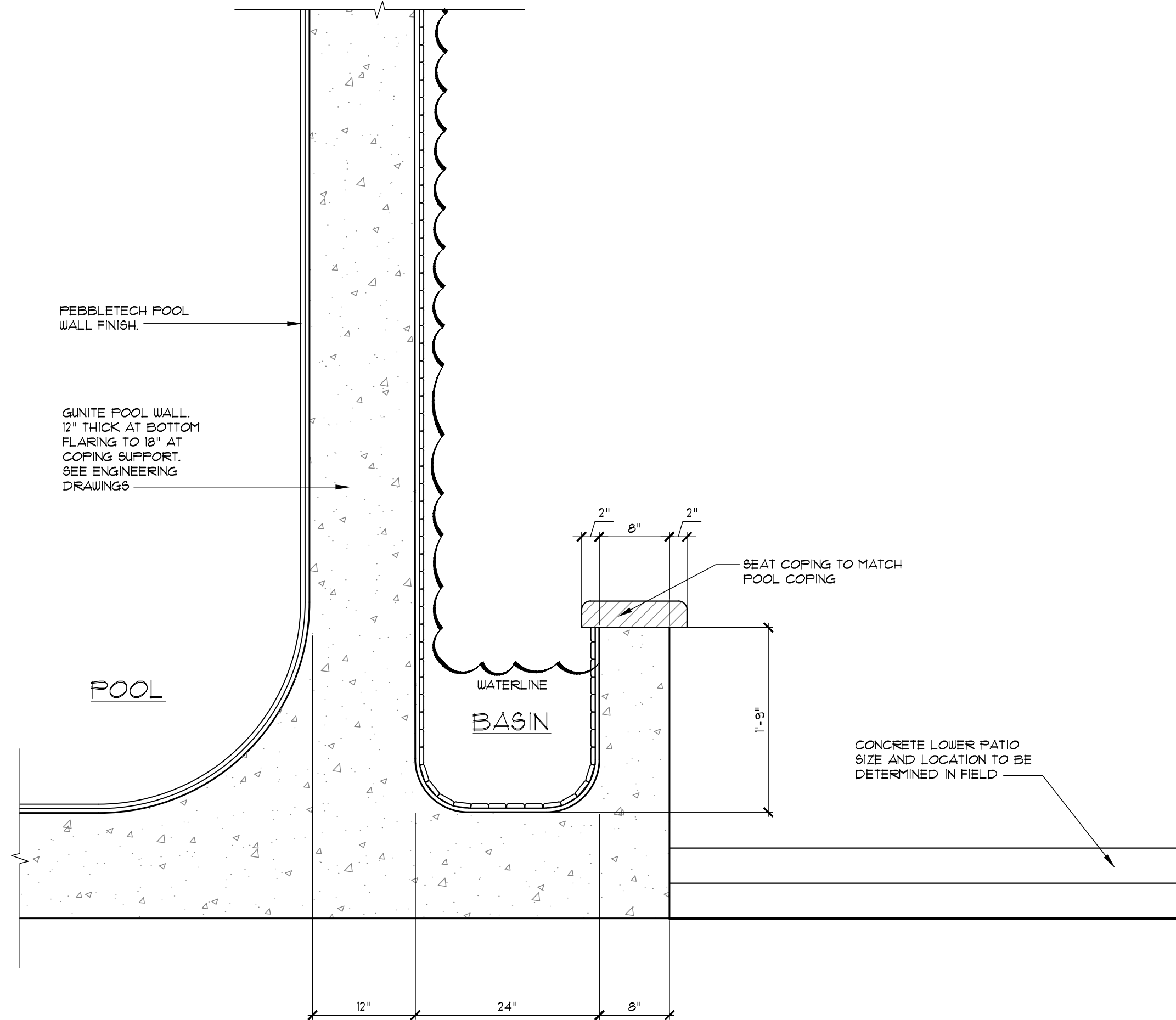
4 POOL COPING
1"=1'-0"



5 POOL INFINITY EDGE
1"=1'-0"



14 COVER VAULT
1"=1'-0"



15 INFINITY LOWER BASIN
1"=1'-0"

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MEL PHENICIE

PAUL SWANSON

Mel Phenicie

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POOL DETAILS

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Barrowman/Haberberger
New Swimming Pool
4034 Tourmaline Ct, Santa Rosa, Ca
APN: 013-350-024

GENERAL NOTES

1. DESIGN LOADS PER CBC 2019: LIVE LOAD: ROOF 20 #/SQ.FT.
FLOOR 40 #/SQ.FT.
GROUND SNOW LOAD Pg: 0 #/SQ.FT.
- GEOTECHNICAL DESIGN INFORMATION: BEARING PRESSURE 2000 #/SQ.FT.
- DESIGN DATA WIND: BASIC WIND SPEED $V_{ult} = 110$ MPH $V_{osd} = 85$ MPH
RISK CATEGORY II
EXPOSURE = B URBAN AND SUBURBAN
INTERNAL PRESSURE COEFF. = N.A.
COMPONENTS AND CLADDING = 10 #/SQ.FT.
- SEISMIC DESIGN DATA IMPORTANCE FACTOR $I_s = 1.0$
OCCUPANCY CATEGORY II
MAPPED SPECTRAL RESPONSE ACCELERATION $S_s = 2.447g$ $S_1 = 0.933g$
SITE CLASS C
SPECTRAL RESPONSE COEFFICIENTS $S_{os} = 1.958g$ $S_{o1} = 0.870g$
SEISMIC DESIGN CATEGORY E
LATITUDE = 38° 26' 57" LONGITUDE = 122° 39' 33"
- BASIC SEISMIC — FORCE — RESISTING SYSTEM
RIGID NON-BUILDING STRUCTURE
 $I_e = 1.0$
 $V = 0.3S_{os} \times W \times I_e = 0.587 \times W$

ALL WORK SHALL COMPLY WITH THE CODES AND REGULATIONS OF THE COUNTY OF SONOMA AND THE FOLLOWING STATE ADOPTED CODES:

- THE 2019 CALIFORNIA RESIDENTIAL CODE EXCEPT AS LIMITED BY SECTION R301.1.3
THE 2019 CALIFORNIA BUILDING CODE AND THE ADOPTED SECTIONS OF THE 2018 INTERNATIONAL BUILDING CODE
THE 2019 CALIFORNIA MECHANICAL CODE AND ADOPTED SECTIONS OF THE 2018 UNIFORM MECHANICAL CODE
THE 2019 CALIFORNIA PLUMBING CODE AND THE ADOPTED SECTIONS OF THE 2018 UNIFORM PLUMBING CODE
THE 2019 CALIFORNIA ELECTRICAL CODE AND THE ADOPTED SECTIONS OF THE 2017 NATIONAL ELECTRICAL CODE
THE 2019 CALIFORNIA FIRE CODE AND THE ADOPTED SECTIONS OF THE 2018 INTERNATIONAL FIRE CODE
THE 2019 CALIFORNIA ENERGY CODE
THE 2019 CALIFORNIA GREEN BUILDING STANDARDS
THE 2019 UNIFORM SWIMMING POOL, SPA AND HOT TUB CODE
2. BEFORE COMMENCING WORK CONTRACTOR SHALL VERIFY OR DETERMINE IN THE FIELD ALL PERTINENT DIMENSIONS AND DETAILS. ANY CONFLICT OR INTERFERENCE AFFECTING THE NEW OR EXISTING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION.
3. ALL WORKMANSHIP SHALL CONFORM TO THE BEST PRACTICE IN MODERN CONSTRUCTION

GEOTECHNICAL NOTES

1. THE CONTRACTOR SHALL FOLLOW ALL THE RECOMMENDATIONS SET FORTH IN THE JUNE 3, 2020 GEOTECHNICAL REPORT PROVIDED BY REESE & ASSOCIATES
1275 4TH STREET, SUITE 633
SANTA ROSA, CA 95404
PH. 707-528-3078
- INCLUDING BUT NOT LIMITED TO GRADING, BACKFILLING AND DRAINAGE.
2. THE GEOTECHNICAL ENGINEER SHALL PROVIDE THE FOLLOWING INSPECTIONS:
A. GRADING, EXCAVATION AND BACK FILLING
B. DRAINAGE
- A LETTER WET STAMPED AND SIGNED BY THE GEOTECHNICAL ENGINEER STATING THAT ALL WORK REQUIRING INSPECTIONS MEET THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT SHALL BE SENT TO THE ENGINEER OF RECORD AND THE BUILDING DEPARTMENT.

CONCRETE NOTES

1. ALL CONCRETE USED ON THIS PROJECT SHALL ATTAIN AN ULTIMATE COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
PLAN CHECKER NOTE: STRUCTURAL CALCULATIONS FOR ALL CONCRETE WERE BASED ON 2500 PSI CONCRETE AND THEREFORE NO SPECIAL INSPECTION REQUIREMENTS ARE NEEDED.
2. REINFORCING STEEL SHALL CONFORM TO ASTM 615 AND SHALL BE FABRICATED AND PLACED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN CONCRETE INSTITUTE AND THESE DRAWINGS. #4 GRADE 40, #5 AND LARGER GRADE 60.
3. REINFORCEMENT SHALL BE PLACED AS SHOWN ON THE DRAWINGS AND SHALL BE TIED AND SUPPORTED SO THAT IT WILL NOT BE DISPLACED FROM THE PROPER POSITION BY SUBSEQUENT CONSTRUCTION OPERATIONS.
4. CONCRETE SHALL BE PLACED AS CLOSELY AS POSSIBLE TO ITS FINAL LOCATION AND SHALL BE CONSOLIDATED BY THE USE OF MECHANICAL VIBRATORS.
5. CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE SHALL BE PLACED AT THE DISCRETION OF THE CONTRACTOR. SLAB REINFORCEMENT SHALL BE CONTINUOUS THROUGH THE JOINT. ALL HORIZONTAL CONSTRUCTION JOINTS SHALL BE CLEANED AND ROUGHENED TO EXPOSE AGGREGATE. EMBEDDED IN MORTAR MIXTURE BY CHIPPING AND SANDBLASTING 5 DAYS MINIMUM AFTER INITIAL PLACEMENT, OR BY HOSE WASHING BETWEEN 2 AND 4 HOURS AFTER CONCRETE PLACEMENT.
6. ALL FOUNDATION BOLTS (ANCHOR, HOLD DOWNS, ETC) SHALL BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE.

DEMOLITION AND SHORING

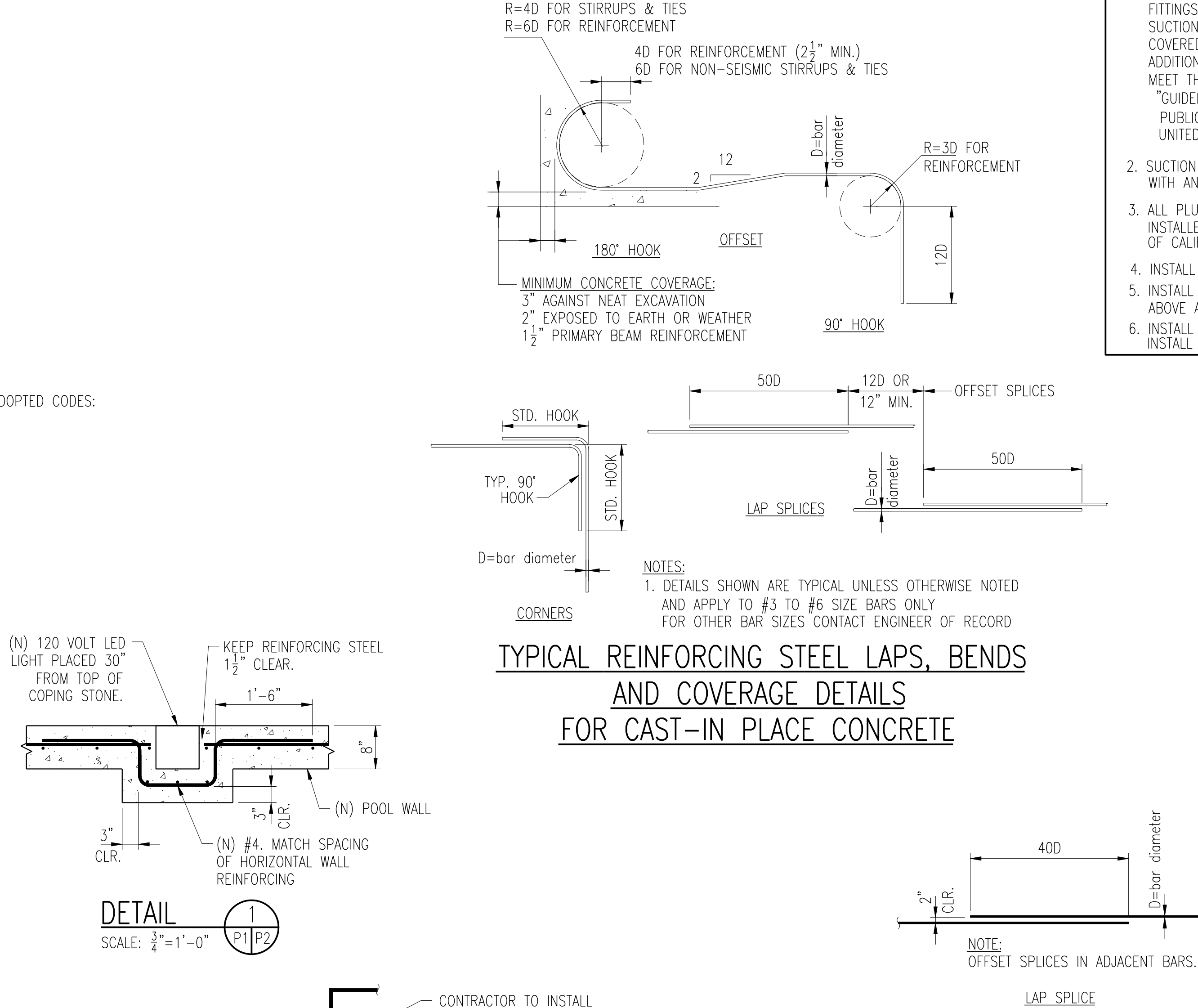
1. CONTRACTOR SHALL REMOVE FROM SITE ALL DEMOLISHED MATERIALS.
2. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING AND/OR EXCAVATIONS. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.

INSPECTIONS BY ENGINEER OF RECORD

1. PRIOR TO CALLING FOR INSPECTIONS BY THE LOCAL BUILDING INSPECTOR, THE CONTRACTOR SHALL IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE SECTION 1704.5 HAVE THE ENGINEER OF RECORD PROVIDE STRUCTURAL OBSERVATION AND INSPECTION FOR THE FOLLOWING ITEMS:
A. REINFORCING STEEL
- THE ENGINEER SHALL SUBMIT A STATEMENT, IN WRITING, TO THE BUILDING OFFICIAL STATING THAT THE REQUIRED SITE VISITS HAVE BEEN MADE AND WHETHER OR NOT ANY OBSERVED DEFICIENCIES HAVE BEEN CORRECTED TO CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS OR TO REVISED DETAILS APPROVED BY THE BUILDING OFFICIAL.
- STRUCTURAL OBSERVATION, WHEN REQUIRED, DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE SPECIAL INSPECTIONS OR OTHER INSPECTIONS REQUIRED BY CODE.

SPECIAL INSPECTIONS

1. SPECIAL INSPECTION AND TESTING BY AN INDEPENDENT TESTING LABORATORY IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE SECTION 1704 SHALL BE PAID FOR BY THE OWNER AND SCHEDULED BY THE CONTRACTOR FOR THE FOLLOWING ITEMS:
A. CONTINUOUS INSPECTION FOR PLACEMENT OF SHOTCRETE/GUNIT. (BY INDEPENDENT INSPECTOR)
B. PREPARATION OF TEST PANELS FOR SHOTCRETE/GUNIT AND PERFORM COMPRESSION TESTS. (BY INDEPENDENT INSPECTOR)
- A LETTER SIGNED BY THE SPECIAL INSPECTOR STATING THAT ALL WORK REQUIRING SPECIAL INSPECTION MEET THE REQUIREMENTS OF THE APPROVED SET OF PLANS AND SPECIFICATIONS SHALL BE SENT TO THE ENGINEER OF RECORD AND THE BUILDING DEPARTMENT.



POOL EQUIPMENT ROOM LAYOUT

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

NOTE: PLUMBING AND ELECTRICAL WORK FOR THE SWIMMING POOL SHALL BE INSTALLED BY A CONTRACTOR LICENSED IN THE STATE OF CALIFORNIA TO PERFORM THAT WORK. FOLLOW MANUFACTURER'S REQUIREMENTS AND THE APPLICABLE SECTIONS OF THE CALIFORNIA ELECTRICAL AND PLUMBING CODES.

PLUMBING NOTE:

1. SWIMMING POOL SHALL HAVE AT LEAST TWO CIRCULATION DRAINS PER PUMP. PUMPS SHALL BE HYDRAULICALLY BALANCED AND SYMMETRICALLY PLUMBED THROUGH ONE OR MORE "T" FITTINGS. DRAINS SHALL HAVE A MINIMUM 3 FT. SEPARATION BETWEEN THEM. SUCTION OUTLETS THAT ARE LESS THAN 12" IN DIAMETER ACROSS SHALL BE COVERED WITH ANTI-ENTRAPMENT DEVICES PER ASME/ANSI STANDARD A112.19.8. ADDITIONAL SAFETY DEVICES INSTALLED IN THE SWIMMING POOL OR SPA SHALL MEET THE STANDARDS AS PUBLISHED IN "GUIDELINES FOR ENTRAPMENT HAZARDS: MAKING POOLS AND SPAS SAFER", PUBLICATION DOCUMENT NO. 363, MARCH 2005, UNITED STATES CONSUMER PRODUCTS SAFETY COMMISSION. UNITED STATES CONSUMER PRODUCTS SAFETY COMMISSION. HEALTH & SAFETY CODE 115928 AND CBC 3109.4.48.
2. SUCTION OUTLETS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ANSI/APSP-7
3. ALL PLUMBING AND ELECTRICAL WORK ON THE SWIMMING POOL SHALL BE INSTALLED BY POOL CONTRACTOR AND ELECTRICIAN LICENSED IN THE STATE OF CALIFORNIA.
4. INSTALL AN APPROVED AIR GAP PER ASME A112.1.3 WITH THE CRITICAL LEVEL ABOVE THE FLOOR LEVEL RIM.
5. INSTALL A LISTED VACUUM BREAKER UPRIGHT WITH NO VALVE DOWSTREAM. MINIMUM 6" OR LISTED DISTANCE ABOVE ALL DOWSTREAM PIPING AND FLOOD-LEVEL RIM OF RECEPTOR.
6. INSTALL BACKFLOW PREVENTER SUITABLE TO ELIMINATE CONTAMINATION OF DOMESTIC WATER SUPPLY. INSTALL PER CPC TABLE 603.2.

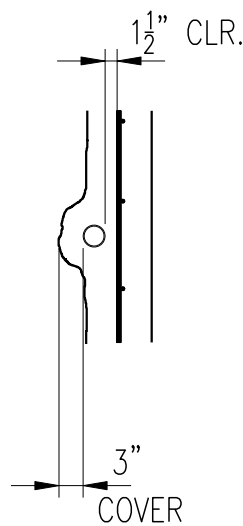
ELECTRICAL NOTE:

1. INSTALL A WATERPROOF GROUND FAULT CIRCUIT INTERRUPT PROTECTED RECEPTACLE 10 FT. MINIMUM AND 20 FT. MAXIMUM FROM THE POOL WATER 2'-0" ABOVE GRADE.
2. A MINIMUM OF ONE 125 VOLT 15 TO 20 AMP RECEPTACLE SHALL BE LOCATED NOT LESS THAN 6 FT. NOR MORE THAN 20 FT. FROM THE INSIDE OF THE POOL WALL AND NOT MORE THAN 6'-6" ABOVE THE FINISH SURFACE PER CALIFORNIA ELECTRICAL CODE SECTION 680.22 (A)
3. LUMINARIES, ELECTRICAL OUTLETS AND SUSPENDED FANS ABOVE THE POOL AREA OR WITHIN A HORIZONTAL DISTANCE OF LESS THAN 5 FT. FROM THE INSIDE OF THE POOL WALL SHALL BE A MINIMUM OF 12 FT. ABOVE THE WATER LEVEL OF THE POOL.
4. LUMINARIES, ELECTRICAL OUTLETS AND SUSPENDED FANS INSTALLED IN AN AREA EXTENDING BETWEEN 5 FT. AND 10 FT. FROM THE INSIDE OF THE POOL WALL SHALL BE GROUND FAULT INTERRUPT PROTECTED UNLESS INSTALLED NOT LESS THAN 5 FT. ABOVE THE MAXIMUM WATER LEVEL AND RIGIDLY ATTACHED TO THE STRUCTURE ADJACENT TO OR ENCLOSING THE POOL.
5. ALL POOL POOL REINFORCING, SLAB REINFORCING AND RETAINING WALL REINFORCING STEEL AND ALL OTHER FIXED METAL ITEMS SUCH AS HANDRAILS IN THE POOL AND WITHIN 5'-0" OF THE POOL WATER SHALL BE BONDED TOGETHER TO THE POOL REINFORCING GRID WITH A BARE COPPER WIRE 20 FT. LONG, NOT SMALLER THAN #8 AWG. AT A MINIMUM OF 4 POINTS UNIFORMLY SPACED AROUND THE POOL.

CONTRACTOR NOTES:

1. REMOVE ALL ROOTS AND STUMPS FROM THE SOIL TO A DEPTH OF AT LEAST 12 INCHES BELOW THE SURFACE OF THE GROUND IN THE AREA TO BE OCCUPIED BY THE BUILDING
2. CONCRETE FOR THE PIERS MUST BE PLACED BY PUMPING WITH CONCRETE NOT FALLING MORE THAN 12" TO AVOID SEPARATION OF AGGREGATE AND CEMENT MIXTURE.
3. CONCRETE FOR THE SWIMMING POOL SHALL BE SHOTCRETE.
4. SEE SHEET P-1 FOR INSPECTION REQUIREMENTS.
5. DRAINAGE DETAILS MAY BE SCHEMATIC AND INCOMPLETE, REFER TO THE TEXT AND DRAWINGS IN THE GEOTECHNICAL REPORT FOR ACTUAL MATERIALS AND INSTALLATION.

- SHOTCRETE NOTES:
1. COARSE AGGREGATE, IF USED, SHALL NOT EXCEED 3/4".
 2. SHOTCRETE SHALL CONFORM TO CBC SECTION 1924.
 3. SPECIAL INSPECTIONS PER CBC TABEL 1705.3 ITME 7 AND SECTION 1910.5 AND 1910.10 SHALL BE PROVIDED FOR SHOTCRETE. REPORTS SHALL BE SENT TO ENGINEER OF RECORD AND BUILDING OFFICIAL.



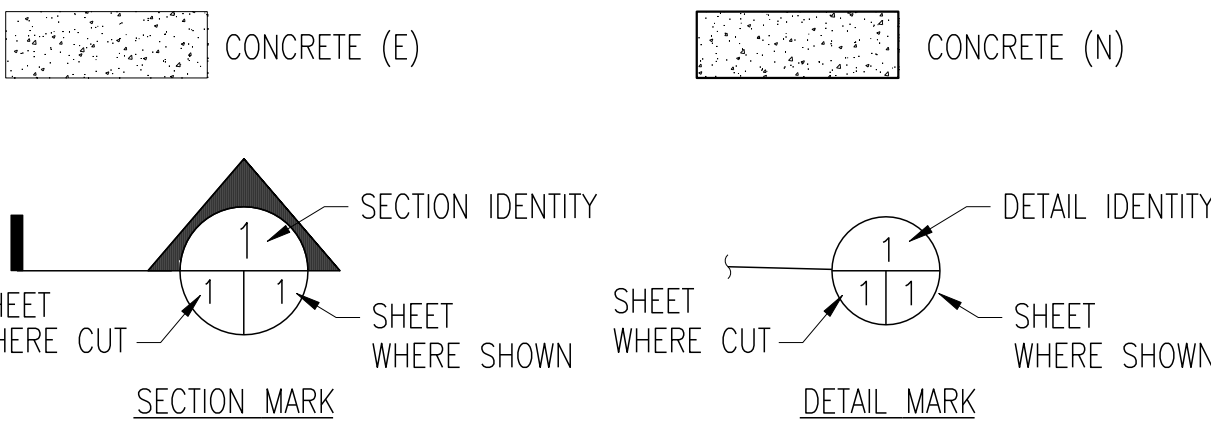
NOTE:

1. COORDINATE EXCAVATION AND POOL DRAINAGE REQUIREMENTS WITH GEOTECHNICAL ENGINEER OF RECORD.
2. CONTRACTOR TO COORDINATE INSTALLATION AND REQUIREMENTS FOR LIGHTING, POOL EQUIPMENT PLUMBING, ELECTRICAL AND ALL OTHER NON-STRUCTURAL ITEMS NOT SHOWN. PROVIDE A MINIMUM OF 1 1/2" CLEARANCE AROUND ALL PIPING.
3. COORDINATE DETAILS AND ELEVATIONS OF SITE WORK AND POOL WITH ARCHITECTS DRAWINGS.
4. SOIL PREPARATION FOR SITE IMPROVEMENTS SUPPORTED ON GRADE SHALL BE AS RECOMMENDED BY THE GEOTECHNICAL REPORT.

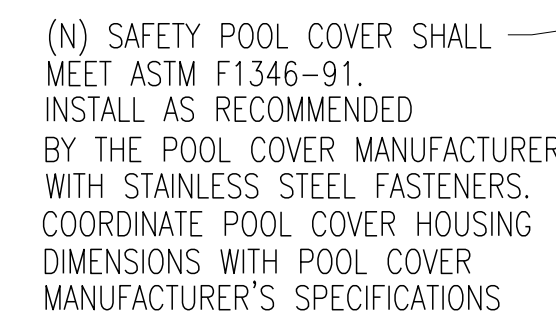
ABBREVIATIONS

@	AT	EA.	EACH	P.T.	PRESSURE TREATED
A.B.	ANCHOR BOLT	EMBED.	EMBEDMENT	REINF.	REINFORCEMENT
ARCH.	ARCHITECT	FTG.	FOOTING	REQ'D.	REQUIRED
BLKG.	BLOCKING	GA.	GAGE, GAUGE	SIM.	SIMILAR
C.W.A.	CONC. WEDGE ANCHOR	HD	HOLDOWN	SHTG.	SHEATHING
CONC.	CONCRETE	M.B.	MACHINE BOLT	STD.	STANDARD
CTRS.	CENTERS	MAX.	MAXIMUM	STIFF.	STIFFENER
DET.	DETAIL	MIN.	MINIMUM	THR'D.	THREADED
DWGS.	DRAWINGS	(N)	NEW	TYP.	TYPICAL
(E)	EXISTING	P.E.N.	PANEL EDGE NAILING	V.I.F.	VERIFY IN FIELD
		PLY.	PLYWOOD	W/	WITH

LEGEND

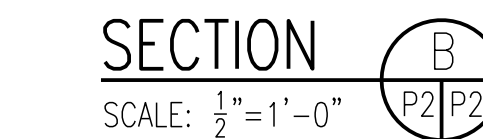


REVISIONS		
NO.	DATE	COMMENT
City of Santa Rosa Planning & Economic Development Department 11/18/2020 RECEIVED		
GENERAL NOTES AND TYPICAL DETAILS		
NEW SWIMMING POOL BARROWMAN / HABERBERGER RESIDENCE 4034 TOURMALINE CT. SANTA ROSA, CALIFORNIA		
A.P.N. 013-350-024		
DETLEV P. DORING, S.E., INC. STRUCTURAL ENGINEER 216 CLEVELAND COURT MILL VALLEY, CALIFORNIA PH. (415) 381-9562 CELL (415) 847-4814 EMAIL: DET@DPDORINGSE.COM		
NOV. 9, 2020		
DATE: NOV. 9, 2020		
SCALE: AS NOTED 1:48		
DRAWN: D.D.		
FILE: 42D.20		
SHEET: P-1		
1 OF 3		



SCALE: $\frac{1}{4}" = 1'-0"$

NOTE:
ALL POOL REINFORCING STEEL TO BE
#4 GRADE 60.



NOTE:
ALL POOL REINFORCING STEEL TO BE
#4 GRADE 60.

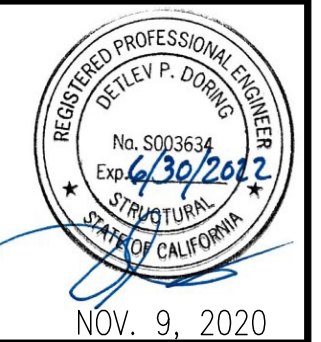


SCALE: $\frac{1}{2}" = 1'-0"$

WATER DEPTH	RADIUS "R" AT BOND BEAM
4'-0" OR LESS	6"
5'-0"	1'-6"
5'-6"	2'-0"
6'-0"	2'-6"
6'-6"	3'-0"
7'-0"	3'-0"
8'-0"	3'-0"
8'-6"	3'-3"
9'-0"	3'-6"

A.P.N. 013-350-024

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DATE: NOV. 9, 2020
SCALE: AS NOTED 1:48
RAWN: D.D.
FILE: 42D.20

SHEET: P-2

