

**Sheet Notes:** 

- A. REFER CLOSELY TO BUILDING LAYOUT DRAWINGS IN RELATION TO SITE LAYOUT ITEMS. CONTRACTOR TO VERIFY LISTED DIMENSIONS PRIOR TO CONSTRUCTION.
- B. ALL DIMENSIONS ARE TO FACE OF CURB, EDGE OF WALK, EDGE OF PAVEMENT, EDGE OF FOUNDATION, EDGE OF WALLS OR CENTER OF POST.
- C. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS DISTANCES AND GRADES IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S
- D. PROVIDE JOINTS AS SHOWN ON PLANS. JOINTS ARE AN INTEGRAL PART OF THE DESIGN AND SHALL NOT VARY FROM PATTERNS AND LOCATIONS SHOWN. CONTRACTOR SHALL REMOVE ANY FLATWORK THAT DOES NOT CONFORM TO THE DESIGN.

REPRESENTATIVE FOR A DECISION PRIOR TO COMMENCING WITH THE WORK.

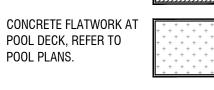
- E. CONCRETE JOINT SPACING IN HEAVY DUTY CONCRETE FLATWORK AND STANDARD CONCRETE FLATWORK - PARKING AREAS SHALL NOT EXCEED 14'. PANELS SHALL BE KEPT AS SQUARE AS POSSIBLE. MAXIMUM LENGTH: WIDTH RATIO SHALL NOTE EXCEED 1.5:1.
- F. ALL WALKS AND FLATWORK SHALL BE ESTABLISHED IN THE FIELD FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL LAYOUT THE AREA OR FORM WORK FOR REVIEW BY THE OWNER'S REPRESENTATIVE. AFTER REVIEW AND NECESSARY MODIFICATIONS AS DIRECTED BY THE OWNER'S REPRESENTATIVE, THE CONTRACTOR SHALL PROCEED WITH CONSTRUCTION. IF APPROVAL IS NOT OBTAINED, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ANY UNAUTHORIZED FIELD ADJUSTMENTS.
- G. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.
- H. CONTRACTOR SHALL REFER TO SPECIFICATIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS.
- I. COORDINATE INSTALLATION OF ELECTRICAL CONDUITS AND IRRIGATION SLEEVES WITH RESPECTIVE DRAWINGS AND CONTRACTORS.
- J. WHEREVER CONCRETE FLATWORK ABUTS BUILDINGS, COLUMNS, SITE WALLS, ETC. IT SHALL HAVE A SEALED ISOLATION JOINT.

#### **Material Legend:**

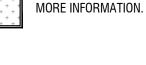
FLATWORK PER ISPWC SD-709.

POOL PLANS.











INSTALL CURB & GUTTER TYPE I PER ISPWC SD-703.

INSTALL CATCH CURB & GUTTER PER DETAIL 3/C2.50.

# CALLOUT NUMBERS COORDINATED TO NUMBERED NOTES BELOW.

EXISTING TREE, REFER TO LANDSCAPE PLANS FOR MORE INFORMATION. SPECIFICATION SECTION 323113, CONTRATOR SHALL FURNISH AND INSTALL GATE POSTS, LINE POSTS, TERMINAL POSTS, POST BRACE ASSEMBLY, SWING GATES, AND ROLLING GATES. OWNER SHALL INSTALL BRACE RAILS, TOP/BOTTOM RAILS, TENSION WIRE, TIE WIRE, FABRIC, AND ACCESSORIES PER SPECIFICATOIN SECTION



- POLE. RETAIN AND PROTECT PER DEMOLITION PLAN SHEET C1.00
- SHADE SAIL. REFER TO POOL DRAWINGS FOR MORE INFORMATION. MOVABLE POOL DECK FURNITURE - FOR REFERENCE ONLY, BY OWNER.
- MOVABLE BLEACHERS FOR REFERENCE ONLY, BY OWNER. STORAGE CUBBIES MOUNTED TO BUILDING. REFER TO ARCHITECTURAL FOR MORE
- DRAINAGE/UTILITY STRUCTURE, REFER TO UTILITY PLANS FOR MORE INFORMATION.
- IRRIGATION VALVE, REFER TO LANDSCAPE PLANS FOR MORE INFORMATION.
- 10. SITE LIGHTING, REFER TO ELECTRICAL PLANS.
- 11. INSTALL CURB & GUTTER TYPE I PER ISPWC SD-703.

#### **Bid Alternate Keynotes:**

1. BID ALTERNATE - CONCRETE RIBBON CURB & CHAIN LINK IN TURF. BASE BID: OMIT ALL MATERIAL AND LABOR FOR CONCRETE RIBBON CURB AND FENCE POSTS AS SHOWN IN DETAIL 2/C2.50. FENCE TO BE INSTALLED

BID ALTERNATE: PROVIDE ALL LABOR AND MATERIAL TO INSTALL CONCRETE RIBBON CURB 2/C2.50 AND INSTALL AND 8' CHAIN LINK GATE POSTS, LINE POSTS, TERMINAL POSTS, POST BRACE ASSEMBLY, AND SWING GATES PER SPECIFICATION SECTION 323113. FABRIC, RAILS, WIRES, AND ACCESSORIES TO BE INSTALLED BY OWNER.

1.1. 8' WIDE DOUBLE SWING GATE PER SPECIFICATION SECTION 323113

2. BID ALTERNATE - CHAIN LINK FENCE UPGRADE. BASE BID: PROVIDE ALL LABOR AND MATERIAL TO INSTALL GALVANIZED CHAIN LINK FENCE POSTS. CHAIN LINK FABRIC TO BE INSTALLED BY OWNER. BID ALTERNATE: PROVIDE ALL LABOR AND MATERIAL TO INSTALL BLACK POWDER COATED CHAIN LINK FENCE POSTS. BLACK VINYL COATED CHAIN LINK FABRIC AND ACCESSORIES TO BE INSTALLED BY OWNER.

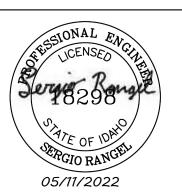
3. BID ALTERNATE - SHADE STRUCTURE.

BASE BID: OMIT ALL LABOR AND MATERIAL TO INSTALL SHADE STRUCTURE. BID ALTERNATE: PROVIDE ALL LABOR AND MATERIAL TO INSTALL 10' X 21' PREFABRICATED SHADE STRUCTURE - MSE: MONOSLOPE (1'OVERHANG) BY POLIGON STRUCUTRE OR EQUAL. PROVIDE STANDARD MANUFACTURER COLORS FOR SELECTION. COORDINATE WITH POOL DECK DRAWINGS FOR CONCRETE DECKING DETAILS. INSTALL FOOTINGS AND STRUCTURE PER MANUFACTURER'S SPECIFICATOINS. MAKE ELECTRICAL CONNECTIONS AS REQUIRED.



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BIDDERS ARE INSTRUCTED TO CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS AND THE SITE CONDITIONS. INFORMATION REGARDING THE COMPLETE WORK OF SPECIFIC TRADES IS DISPERSED THROUGHOUT THE ENTIRE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED BY REFERENCE TO OTHER THAN COMPLETE

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PROJECT INFORMATION



#### **Mountain Home Aquatic Facility**

980 McKENNA DR, MOUNTAIN HOME,ID

**KEY PLAN** 

**ISSUES** ISSUE FOR BID SET PHASE DATE APRIL 1, 2022 JOB NUMBER 20-031

DESCRIPTION

ADDENDUM 01

SHEET NAME

MARK DATE

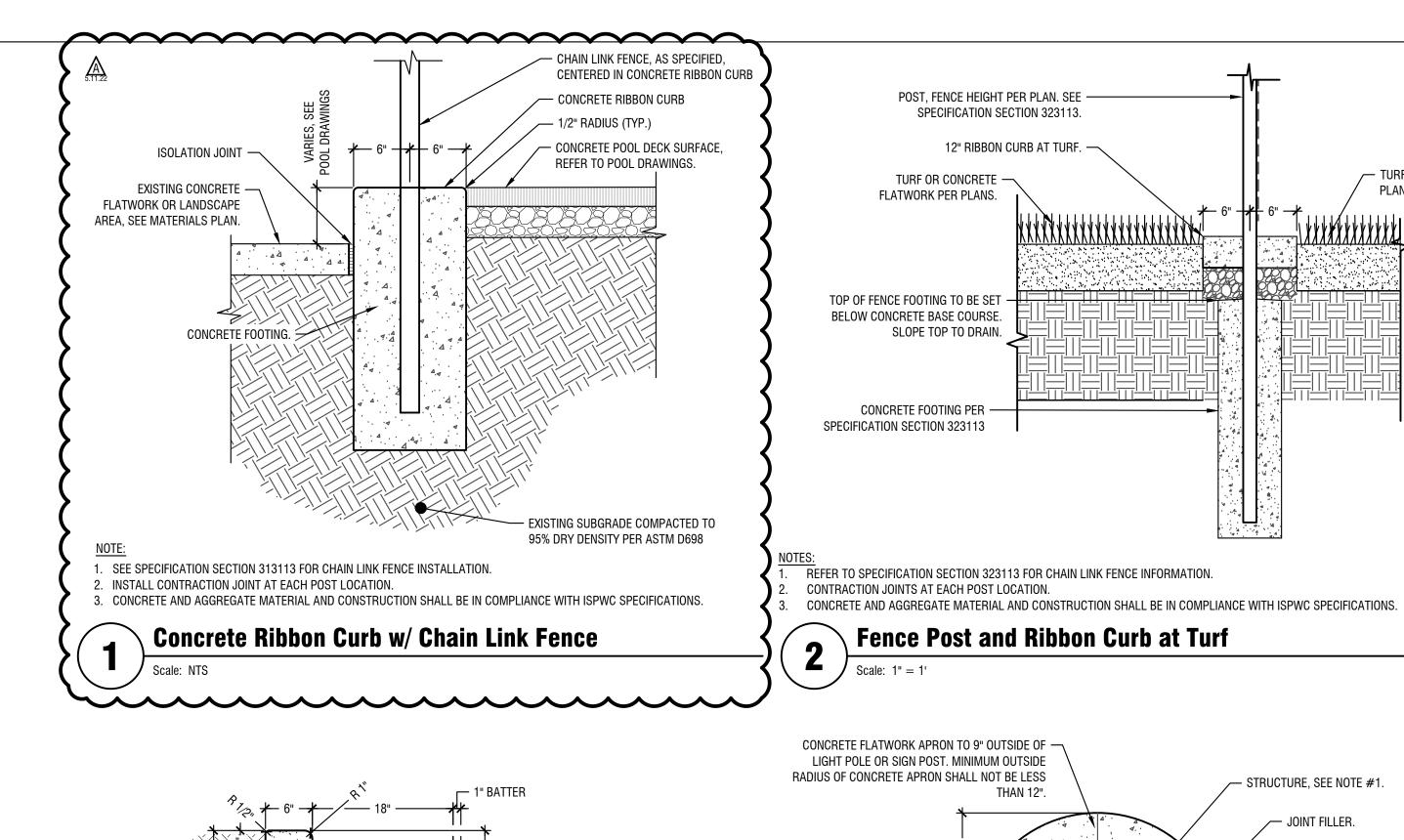
A 5.11.22

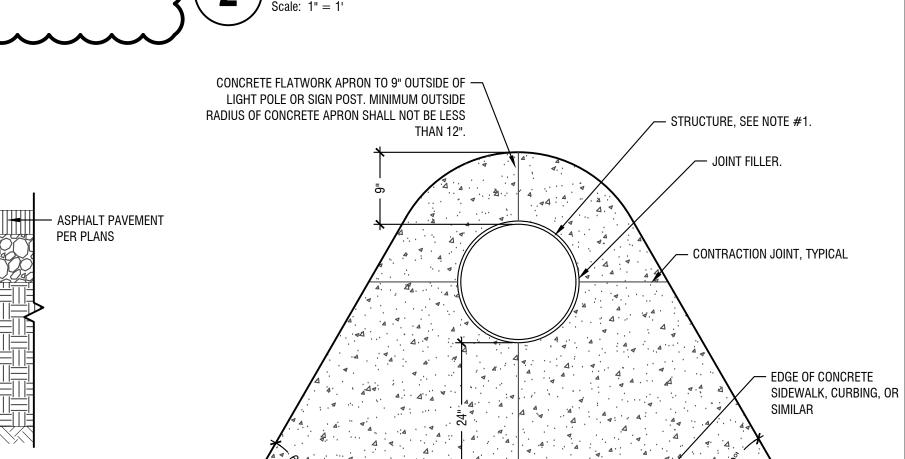
SITE MATERIAL &

LAYOUT PLAN **SHEET NUMBER** 

C2.00

Site-Material & Layout Plan





Fence Post and Ribbon Curb at Turf

POST, FENCE HEIGHT PER PLAN. SEE -

TURF OR CONCRETE -

SLOPE TOP TO DRAIN.

FLATWORK PER PLANS.

TOP OF FENCE FOOTING TO BE SET BELOW CONCRETE BASE COURSE.

CONCRETE FOOTING PER —

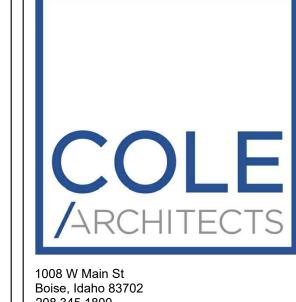
SPECIFICATION SECTION 323113.

12" RIBBON CURB AT TURF.

CONCRETE APRONS SHALL BE LOCATED AT ALL SIGNS, UTILITY STRUCTURES (HYDRANTS, FDC'S, ETC), BOLLARDS, AND LIGHT POLES LOCATED IN TURF AREAS.

CONCRETE SECTION SHALL BE AS PER CONCRETE FLATWORK DETAIL. WHERE APRON IS LOCATED WITHIN 24" OF A HARDSCAPE, CONTRACTOR SHALL EXTEND APRON TO EDGE OF THE IMPROVEMENT. IF APRON IS LOCATED FURTHER THAN 24" FROM HARDSCAPE THEN A CONTINUOUS 9" OFFSET RADIUS SHALL BE HELD FOR ENTIRE

CIRCUMFERENCE OF OBJECT. Concrete Apron



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**STAMP** 

— TURF PER

PLANS



BIDDERS ARE INSTRUCTED TO CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS AND THE SITE CONDITIONS. INFORMATION REGARDING THE COMPLETE WORK OF SPECIFIC TRADES IS DISPERSED THROUGHOUT THE ENTIRE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED BY REFERENCE TO OTHER THAN COMPLETE DOCUMENT SET.

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PROJECT INFORMATION



### **Mountain Home Aquatic Facility**

980 McKENNA DR, MOUNTAIN HOME,ID

**KEY PLAN** 

ISSUES

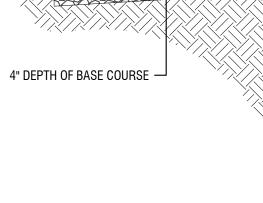
PHASE		ISSUE FOR BID SET
DATE		APRIL 1, 202
JOB NU	JMBER	20-03
MARK	DATE	DESCRIPTION
Α	5.11.22	ADDENDUM 01
Α	5.11.22	ADDENDUM 01

SHEET NAME

SITE **DETAILS** 

SHEET NUMBER

C2.50



CONTRACTION JOINTS AT 10' INTERVALS MAXIMUM (OR CONSISTENT WITH 2X SIDEWALK WIDTH FOR CONTRACTION JOINTS). 2. 2. CONCRETE AND AGGREGATE MATERIAL AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH ISPWC SPECIFICATIONS.

 $\setminus$  Catch Curb and Gutter

# MOUNTAIN HOME AQUATICS FACILITY

# SWIMMING POOL DESIGN 160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

				ABB	REVIATION LEGEND				
@	AT	CER	CERAMIC	FF	FINISHED FLOOR	LONG	LONGITUDINAL	REQ'D	REQUIRED
DIA.	DIAMETER	CI	CAST IRON	FLR	FLOOR	LVR	LOUVER	REV	REVISION
CL	CENTER LINE	CIP	CAST IN PLACE	FN	FIELD NAILING	LWC	LIGHT WEIGHT CONCRETE	RFL	REFLECT
A/C	AIR CONDITIONING	CJ	CONTROL JOINT	FOC	FACE OF CONCRETE	MAS	MASONRY	RM	ROOM
AB	ANCHOR BOLT	CLG	CEILING	FOM	FACE OF MASONRY	MAX	MAXIMUM	RO	ROUGH OPENING
ABC	AGGREGATE BASE COURSE	CLR	CLEARANCE	FOS	FACE OF STUDS	MECH	MECHANICAL	RR	ROOF RAFTER
ABV	ABOVE	CNTR	CENTER	FP	FIRE PROOF	MED	MEDIUM	S.A.D.	SEE ARCHITECTURAL DETAILS
ACC	ACCOUSTICAL	COL	COLUMN	FTG	FOOTING	MET	METAL	SCH	SCHEDULE
ACP	ASPHALT CONCRETE PAVING	СОМВ	COMBINATION	GA	GAUGE	MFG	MANUFACTURER	SD	STORM DRAIN
ADA	ACCESSIBLE	CONC	CONCRETE	GAL	GALVANIZED	МН	MANHOLE	SHT	SHEET
ADH	ADHESIVE	CONST	CONSTRUCTION	GD	GRADE	MIN	MINIMUM	SIM	SIMILAR
ADJ	ADJACENT	CONT	CONTINUOUS	GL	GLASS	MISC	MISCELLANEOUS	SQ	SQUARE
AFF	ABOVE FINISH FLOOR	CORR	CORRUGATED	GPM	GALLONS PER MINUTE	MTD	MOUNT	SS	STAINLESS STEEL
AG	ABOVE GRADE	СРТ	CARPET	НВ	HOSE BIB	N	NEW	ST	STEEL
AGG	AGGREGATE	СТ	CERAMIC TILE	HBD	HARDBOARD	NIC	NOT IN CONTRACT	STD	STANDARD
AL	ALUMINUM	DEMO	DEMOLISH	НС	HOLLOW CORE	NOM	NOMINAL	STR	STRUCTURAL
ALT	ALTERNATE	DF	DRINKING FOUNTAIN	HD	HEAVY DUTY	NTS	NOT TO SCALE	SUS	SUSPENDED
ANOD	ANODIZED	DIM	DIMENSION	HDR	HEADER	O.C.	ON CENTER	SYM	SYMMETRICAL
AP	ACCESS PANEL	DWG	DRAWING	HDW	HARDWARE	O.C.E.W.	ON CENTER EACH WAY	T&B	TOP AND BOTTOM
ASPH	ASPHALT	E	EXISTING	HORIZ	HORIZONTAL	ОН	OVERHEAD	T&G	TONGUE AND GROOVE
AUTO	AUTOMATIC	E.F.	EACH FACE	HT	HEIGHT	OPG	OPENING	TEL	TELEPHONE
BD	BOARD	E.W.	EACH WAY	HVAC	HEATING, VENTILATION, & AIR CONDITIONING	PAR	PARALLEL	тнк	THICKNESS
BEL	BELOW	EJ	EXPANSION JOINT	HWD	HARDWOOD	РВ	PANIC BAR	THR	THRESHOLD
BET	BETWEEN	ELEC	ELECTRICAL	HWH	HOT WATER HEATER	PCC	PRECAST CONCRETE	тос	TOP OF CONCRETE
BLDG	BUILDING	ELEV	ELEVATION	INCL	INCLUDE	PERF	PERFORATED	ТОМ	TOP OF MASONRY
BLKG	BLOCKING	EMBED	EMBEDMENT	INSUL	INSULATED	PLY	PLYWOOD	TOW	TOP OF WALL
вм	BENCH MARK	ENC	ENCLOSURE	INT	INTERIOR	PNL	PANEL	TRANS	TRANSVERSE
BN	BOUNDARY NAILING	EQ	EQUAL	JB	JUNCTION BOX	POC	POINT OF CONNECTION	TYP	TYPICAL
BOG	BOTTOM OF GUTTER	EQPT	EQUIPMENT	LAD	LADDER	PSF	POUNDS PER SQUARE FEET	U.N.O.	UNLESS NOTED OTHERWISE
ВОТ	воттом	EST	ESTIMATE	LAM	LAMINATE	PSI	POUNDS PER SQUARE INCHES	VERT	VERTICAL
BRZ	BRONZE	EXT	EXTERIOR	LAV	LAVATORY	PVC	POLYVINYL CHLORIDE	W/	WITH
BWL	BELOW WATER LEVEL	FA	FIRE ALARM	LB	LAG BOLT	R	RADIUS	W/O	WITHOUT
САВ	CABINET	FD	FLOOR DRAIN	LG	LIFEGUARD	RD	ROOF DRAIN	WD	WOOD
СВ	CATCH BASIN	FDN	FOUNDATION	LGT	LIGHT	REF	REFERENCE	WH	WATER HEATER
CEM	CEMENT	FE	FIRE EXTINGUISHER	LL	LIVE LOAD	REINF	REINFORCEMENT	WP	WATERPROOFING

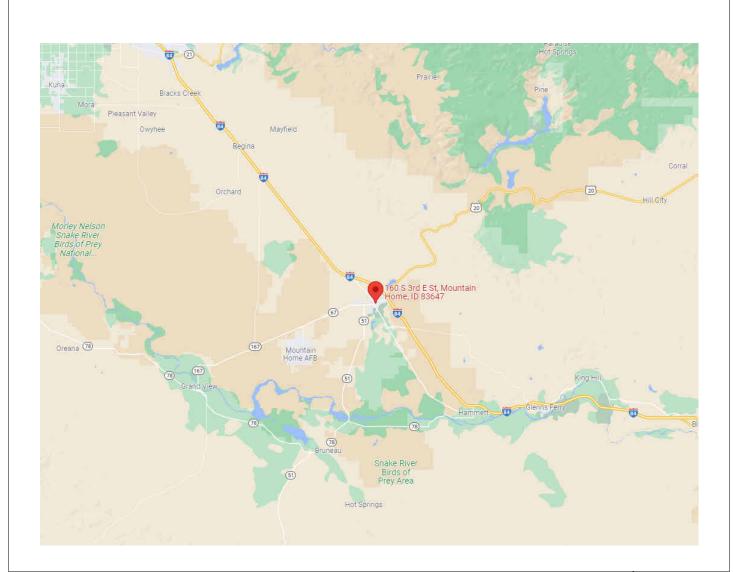
OVERALL SIZE (LENGTH BY WIDTH):	112 FT - 79 FT
DEPTH PROFILE:	BEACH ENRTY 0 FT 0 IN - 11 FT 6 IN
SURFACE AREA:	6,210 SF
PERIMETER:	465 FT
VOLUME:	232,022 GAL
AAAV BATUED I GAD	COC DATUEDO
MAX BATHER LOAD:	696 BATHERS
SWIMMING POOL DESIGN SYS	
SWIMMING POOL DESIGN SYS	TEM DESIGN DATA
SWIMMING POOL DESIGN SYSTEM TURNOVER RATE:	TEM DESIGN DATA 5.11 HRS

**SWIMMING POOL DESIGN DATA** 

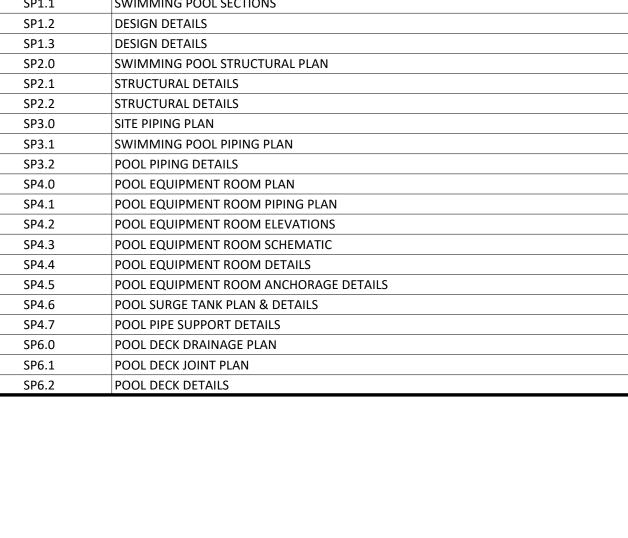
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SWIMMING POOL SU	CTION OUTLET DATA
MAIN DRAIN MAX APPROVED FLOW RATE:	1,734 GPM
SUCTION PIPE VELOCITY @ DESIGN FLOW RATE:	4.79 FPS

BACKWASH FLOW RATE:

SHEET INDEX		
Sheet Number	Sheet Name	
SP0.0	COVER SHEET, DESIGN DATA & SHEET INDEX	
SP0.1	POOL SITE PLAN	
SP0.2	SWIMMING POOL DIMENSION PLAN	
SP1.0	SWIMMING POOL LAYOUT PLAN	
SP1.1	SWIMMING POOL SECTIONS	
SP1.2	DESIGN DETAILS	
SP1.3	DESIGN DETAILS	
SP2.0	SWIMMING POOL STRUCTURAL PLAN	
SP2.1	STRUCTURAL DETAILS	
SP2.2	STRUCTURAL DETAILS	
SP3.0	SITE PIPING PLAN	
SP3.1	SWIMMING POOL PIPING PLAN	
SP3.2	POOL PIPING DETAILS	
SP4.0	POOL EQUIPMENT ROOM PLAN	
SP4.1	POOL EQUIPMENT ROOM PIPING PLAN	
SP4.2	POOL EQUIPMENT ROOM ELEVATIONS	
SP4.3	POOL EQUIPMENT ROOM SCHEMATIC	
SP4.4	POOL EQUIPMENT ROOM DETAILS	
SP4.5	POOL EQUIPMENT ROOM ANCHORAGE DETAILS	
SP4.6	POOL SURGE TANK PLAN & DETAILS	
SP4.7	POOL PIPE SUPPORT DETAILS	
SP6.0	POOL DECK DRAINAGE PLAN	
SP6.1	POOL DECK JOINT PLAN	
SP6.2	POOL DECK DETAILS	







SHEET NAME

JOB NUMBER

MARK DATE DESCRIPTION

1 05/11/2 ADDENDUM #1
022

Boise, Idaho 83702

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**PROJECT INFORMATION** 

MOUNTAIN HOME

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

**KEY PLAN** 

**AQUATICS FACILITY** 

BID SET

MARCH 31, 2022

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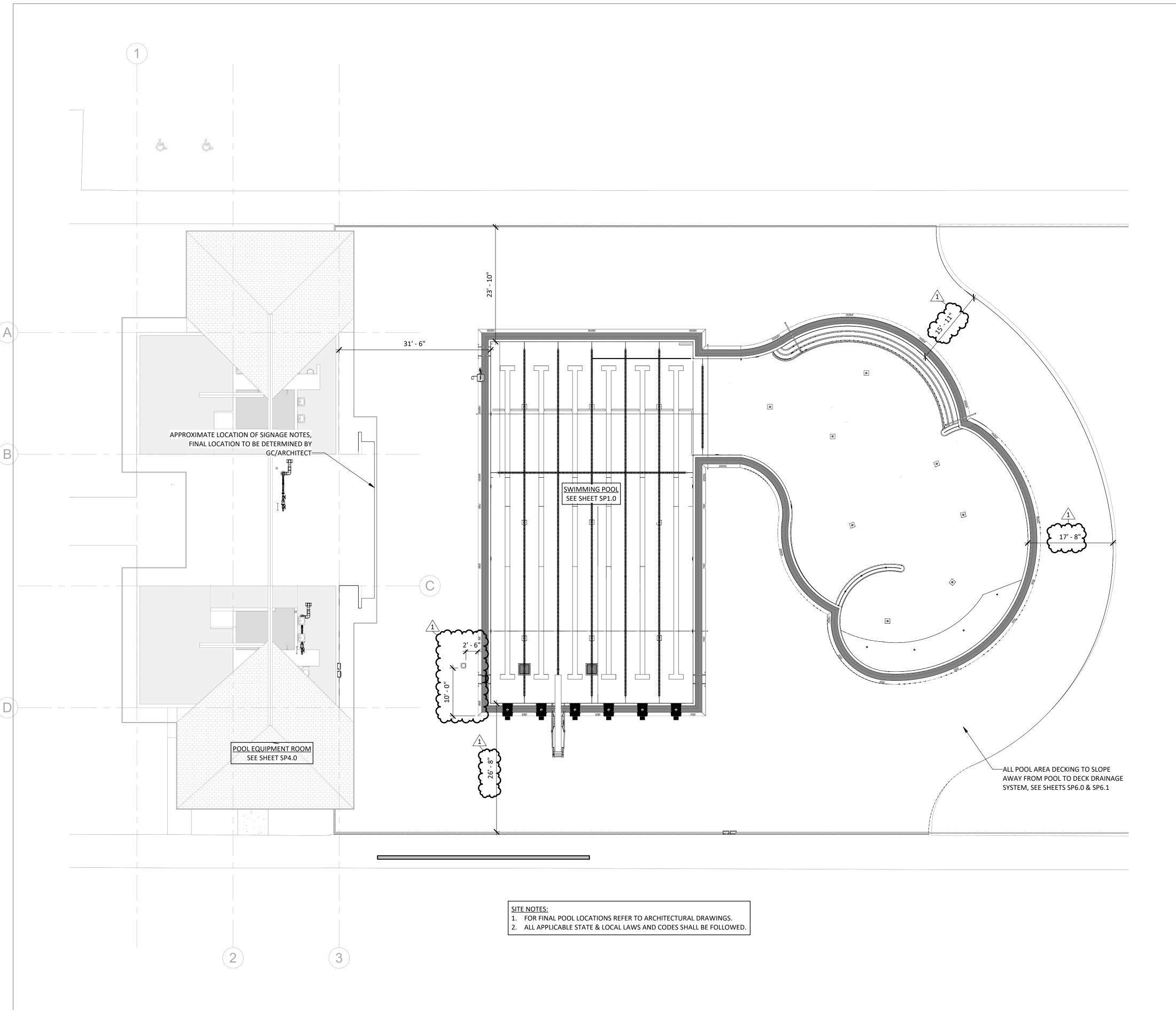
**STAMP** 

COVER SHEET, DESIGN DATA & SHEET INDEX

SHEET NUMBER

**SP0.0** 

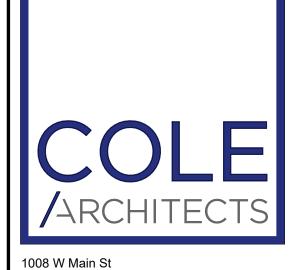
VICINITY MAP



- 1. FOR FINAL POOL SITE LOCATIONS REFER TO ARCHITECTURAL DRAWINGS.
  - 2. SITE PLAN IS TO BE USED IN CONJUNCTION WITH POOL PLANS (SP1.0-SP1.3), STRUCTURAL PLANS (SP2.0-SP2.2), AND PIPING PLANS (SP3.0-SP3.2). REFER TO THOSE PLANS FOR INFORMATION NOT SHOWN.
  - 3. POOL DECKING TO BE SLIP RESISTANT AND SLOPE AWAY FROM POOLS AT NO LESS THAN 1% AND NO
  - GREATER THAN 2% SLOPE TO DECK DRAINAGE SYSTEM, REFER TO ARCHITECTURAL PLANS. 4. FOR POOL DECK DRAINAGE SYSTEM LOCATIONS REFER TO POOL DECK DRAINAGE DRAWINGS.
  - 5. LIFEGUARD EQUIPMENT SHALL BE PROVIDED AS REQUIRED BY GOVERNING AGENCY. 6. HOSE BIBBS SHALL BE PROVIDED SO THAT ALL PORTIONS OF THE POOL DECK AREA MAY BE REACHED WITH
  - A 75 FOOT LENGTH HOSE. HOSE BIBS TO BE PROVIDED WITH ATMOSPHERIC VACUUM BREAKERS. FOR LOCATIONS REFER TO PROJECT LANDSCAPE & CIVIL DRAWINGS.
  - 7. AT LEAST ONE 125-VOLT 15 OR 20 AMP GFCI PROTECTED RECEPTACLE ON A GENERAL PURPOSE BRANCH CIRCUIT SHALL BE LOCATED NOT LESS THAN 6 FEET AND NOT MORE THAN 20 FEET FROM THE INSIDE WALL OF THE POOL. FOR LOCATIONS REFER TO ELECTRICAL DRAWINGS.
  - 8. OCCUPANT LOAD SIGN SHALL BE POSTED IN CONSPICUOUS PLACE NEAR THE MAIN POOL ENTRANCE/EXIT
  - 9. ALL APPLICABLE STATE & LOCAL LAWS AND CODES SHALL BE FOLLOWED.

#### **SWIMMING POOL SIGNAGE:**

- 1. ALL SIGNS SHALL HAVE CLEARLY LEGIBLE LETTERS OR NUMBERS AFFIXED TO A WALL, POLE, GATE, OR
- SIMILAR PERMANENT STRUCTURE IN A LOCATION VISIBLE TO ALL USERS. 2. THE POOL USER CAPACITY SHALL BE BASED ON ONE USER FOR EVERY 20 SQUARE FEET OF WATER SURFACE AREA. POOL USER CAPACITY SIGN SHALL BE POSTED WITH MINIMUM 4 INCH LETTERS THAT READS:
- "MAXIMUM BATHER CAPACITY: 696 PERSONS" (SEE POOL DESIGN DATA FOR NUMBER OF BATHERS) 3. THE EMERGENCY TELEPHONE NUMBER SHALL BE POSTED WITH MINIMUM 4 INCH LETTERS THAT READS: "9-1-1". THE NUMBER OF THE NEAREST EMERGENCY SERVICES AND THE NAME AND STREET ADDRESS OF
- THE POOL FACILITY SHALL BE POSTED WITH MINIMUM 1 INCH LETTERS. 4. AN ILLUSTRATED DIAGRAM SHALL BE POSTED WITH MINIMUM 1/4 INCH LETTERS OF ARTIFICIAL
- RESPIRATION AND CPR PROCEDURES.
- 5. WHERE NO LIFEGUARD SERVICE IS PROVIDED, A WARNING SIGN SHALL BE POSTED WITH MINIMUM 4 INCH LETTERS THAT READS: "WARNING: NO LIFEGUARD ON DUTY" ADDITIONALLY THE SIGN SHALL STATE IN LETTERS AT LEAST 1 INCH IN HEIGHT: "CHILDREN UNDER THE AGE OF 14 SHALL NOT USE POOL WITHOUT A PARENT OR ADULT GUARDIAN IN ATTENDANCE"
- **6.** EXTERIOR SIDE OF GATES AND DOORS LEADING INTO THE POOL ENCLOSURE AREA SHALL HAVE A SIGN POSTED WITH MINIMUM 4 INCH LETTERS THAT READS: "KEEP CLOSED" ADDITIONALLY WHERE POOLS ARE CONSTRUCTED FOR WHICH LIGHTING IS NOT REQUIRED, THE SIGN SHALL HAVE MINIMUM 1 INCH LETTERS THAT READS: "NO USE OF POOL ALLOWED AFTER DARK"
- 7. A SIGN IN LETTERS AT LEAST 1 INCH HIGH AND IN A LANGUAGE OR DIAGRAM THAT IS CLEARLY STATED SHALL BE POSTED AT THE ENTRANCE AREA THAT READS: "PERSONS HAVING CURRENTLY ACTIVE DIARRHEA OR WHO HAVE HAD ACTIVE DIARRHEA WITHIN THE PREVIOUS 14 DAYS SHALL NOT BE ALLOWED TO ENTER THE POOL."



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PROJECT INFORMATION

#### MOUNTAIN HOME **AQUATICS FACILITY**

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

**KEY PLAN** 

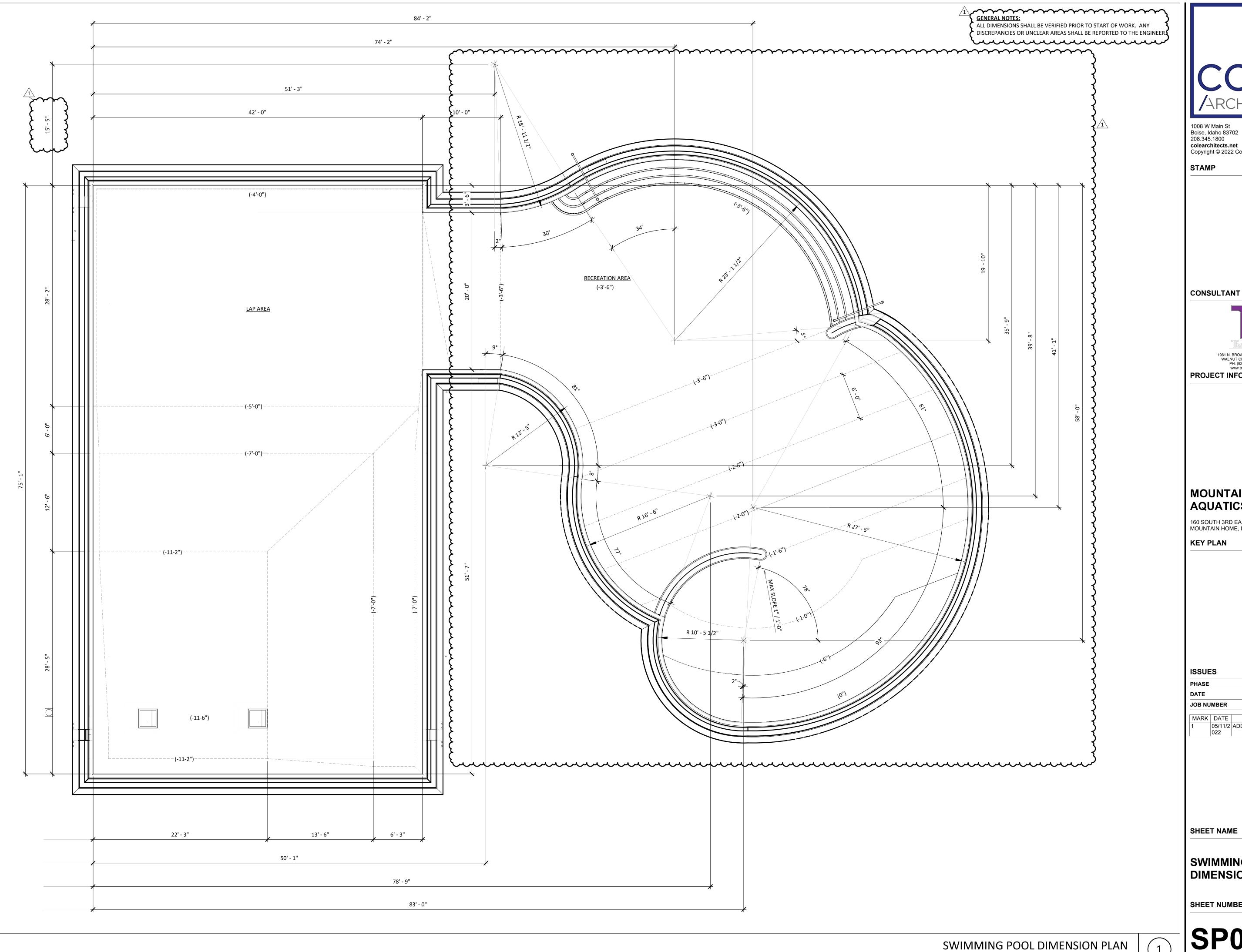
**ISSUES** 

PHASE		BID SE
DATE		MARCH 31, 202
JOB NU	MBER	BE20600
MARK	DATE	DESCRIPTION
1	05/11/2	ADDENDUM #1

SHEET NAME

POOL SITE PLAN

SHEET NUMBER



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1981 N. BROADWAY, SUITE 385 WALNUT CREEK, CA 94596 PH. (925) 217-6620 www.terracon.com

PROJECT INFORMATION

#### MOUNTAIN HOME **AQUATICS FACILITY**

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

KEY PLAN

ISSUES

BID SET MARCH 31, 2022 JOB NUMBER

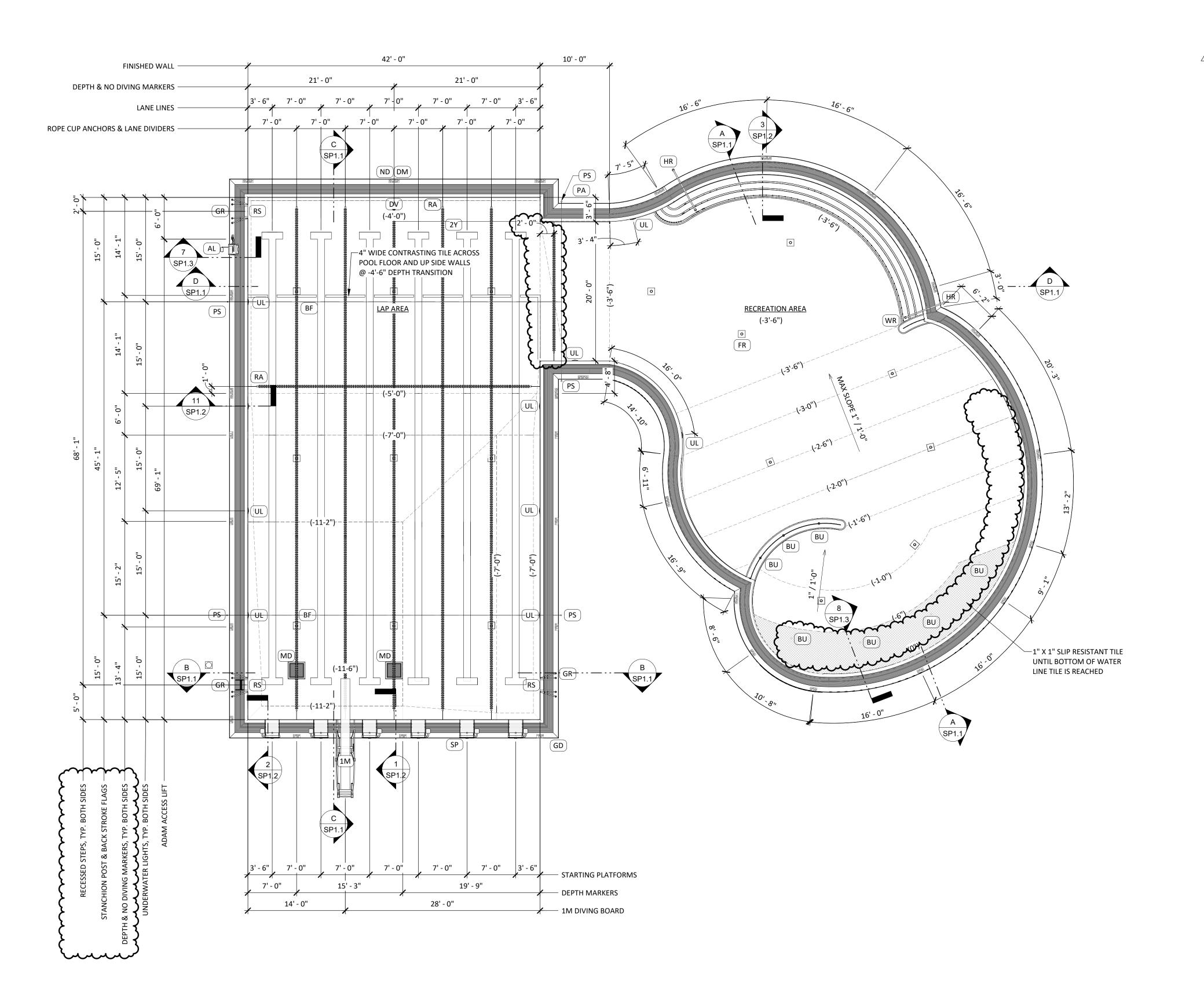
MARK DATE DESCRIPTION

1 05/11/2 ADDENDUM #1
022

SWIMMING POOL DIMENSION PLAN

SHEET NUMBER

**SP0.2** 



#### **POOL LAYOUT PLAN GENERAL NOTES:**

1. POOL FINISH PER FINISH SCHEDULE.

- 2. PLAN IS TO BE USED IN CONJUNCTION WITH THE POOL STRUCTURAL PLANS, POOL PIPING PLAN AND POOL ELECTRICAL PLANS. REFER TO THOSE DRAWINGS & DETAILS FOR INFORMATION NOT SHOWN ON THIS PLAN.
- 3. ALL DIMENSIONS SHALL BE VERIFIED PRIOR TO START OF WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER.
- 4. OVERALL DIMENSIONS SHOWN ARE FROM INSIDE FINISH OF WALLS & FLOORS.
- 5. FEATURES OR EQUIPMENT DIMENSIONS SHOWN ARE FROM CENTER TO CENTER.
- 6. DEPTH MARKERS AND WARNING SIGNS ARE SHOWN IN APPROXIMATE LOCATIONS. DEPTH MARKERS AND WARNING SIGNS MAY NOT EXCEED 25'-0" APART PER LOCAL CODE. NO DIVING WARNING SIGNAGE ONLY REQUIRED WHEN POOL DEPTH IS LESS THAN 6 FEET.

mmmmmmmmmm

- 7. LIFEGUARD EQUIPMENT SHALL BE PROVIDED AS REQUIRED AS NOTED ON THE DRAWINGS.
- 8. ALL METAL COMPONENTS TO BE BONDED & GROUNDED PER N.E.C.

9. ALL APPLICABLE STATE AND LOCAL LAWS AND CODES SHALL BE FOLLOWED.

10. ALL INTERIOR FINISH DIMENSIONS SHALL BE CONSTRUCTED TO A TOLERANCE OF £ 1/2".

11. CONSTRUCT THE INTERIOR FACE OF THE 25 YARD COMPETITION POOL WALL TO A MINIMUM DIMENSION OF 75'-1" A MAXIMUM SHALL BE 75'-1 3/4".

12. INSTALL GUTTER TILE LEVEL AROUND POOL WITH A MAXIMUM TOLERANCE OF 1/16"

SWIMMING POOL FINISH SCHEDULE			
4'-6" DEPTH TRANSITION TILE	2" X 2" MOSAIC UNGLAZED TILE BY DAL-TILE OR APPROVED EQUAL. COLOR D621 NAUTICAL BLUE. 1		
FLOOR INLET TRIM TILE	1" X 1" MOSAIGUNGLAZED TILE MANUFACTURERED BY DAL-TILE OR APPROVED EQUAL. COLOR WHITE		
HANDHOLD TILE	C701 TILE DY DAL-TILE OR APPROVED EQUAL. COLOR D621 NAUTICAL BLUE.		
LANE LINE MARKER TILE	1" X 1" MOSAIC UNGLAZED TILE MANUFACTURERED BY DAL-TILE OR APPROVED EQUAL. COLOR D621 NAUTICAL BLUE. 1		
MAIN DRAIN TRIM TILE	2" X 2" MOSAIC UNGLAZED TILE MANUFACTURERED BY DAL-TILE OR APPROVED EQUAL. COLOR WHITE		
PLASTER FINISH	1/2" WHITE MARBLE DUST PLASTER.		
STEP TRIM TILE	1" X 1" MOSAIC UNGLAZED TILE MANUFACTURERED BY DAL-TILE OR APPROVED EQUAL. COLOR D621 NAUTICAL BLUE. 1		
WALL TARGE TILE	1" X 1" MOSAIC UNGLAZED TILE MANUFACTURERED BY DAL-TILE OR APPROVED EQUAL. COLOR D621 NAUTICAL BLUE. 1		
WATER LINE TILE	6" X 6" GLAZED CERAMIC TILE BY DAL-TILE OR APPROVED EQUAL. COLOR AQUA GLOW		

CALL OUT	EQUIPMENT	MODEL/DESCRIPTION
1M	1 METER DIVING PLATFORM	1 METER REAR ACCESS DIVING STAND WITH HANDRAILS AND 16 FOOT SLIP RESISTANT SPRINGBOARD BY DURAFLEX.
2Y	25Y LANE LINE DIVIDERS	4" DISKS - 3' ALTERNATING COLOR, 5M SOLID COLOR AT EACH END, WITH 15M RESURFACING MARKERS BY COMPETITIOR, ANTI-WAVE, OR APPROVED EQUAL. COLOR BY ARCHITECT OR POOL DESIGNER.
AL	ADA ACCESS LIFT	TRAVELLER LONG REACH BP350 LIFT BY SPECTRUM. LIFT SHALL INCLUDE ALL REQUIRED ACCESSORIES.
BF	BACKSTROKE FLAGS	PRE-STRUNG 11" BY 14.5" NYLON BACKSTROKE FLAGS AND ALL NECESSARY HARDWARE BY KIEFER, COMPETITOR, ANTI-WAVE, OR APPROVED EQUAL. COLORS BY ARCHITECT OR AQUATIC DESIGNER. FLAGS SHALL INCLUDE CUSTOM LOGO APPROVED BY OWNER.
DM	DEPTH MARKERS	1" X 1" NON SLIP CERAMIC TILE BY DAL-TILE OR APPROVED EQUAL. COLOR CONTRASTING TO MESSAGE FEILD.
DV	VERTICAL DEPTH MARKERS	6" X 6" GLAZED CERAMIC TILE BY DAL-TILE OR APPROVED EQUAL. COLOR D331 BLACK LETTERS ON D317 BISCUT BACKGROUND.
GR	GRAB RAILS	PRETZEL BEND 304L STAINLESS STEEL1.90 OD 0.145" WALL THICKNESS GRAB RAILS, ESCUTCHEONS AND BRONZE ANCHORS BY S.R. SMITH, SPECTRUM, OR APPROVED EQUAL.
HR	HANDRAILS	CUSTOM 304L STAINLESS STEEL 1.90 OD 0.145" WALL THICKNESS RAILS, ESCUTCHEONS AND BRONZE ANCHORS BY S.R. SMITH OR APPROVED EQUAL.
ND	NO DIVING MARKER	6"X6" SLIP RESISTANT CERAMIC TILE
PA	STANCHION POST ANCHORS	CAST BRONZE STANCHION ANCHOR SOCKET #23638 W/ MINIMUM 6 INCH EMBEDMENT, 1.90" DIAMETER
PS	STANCHION POSTS	8 FT STAINLESS STEEL POST, 1.90" OD 304L, WITH BRONZE STANCHION SOCKET AND SLIP FIT COVER, 0.145" MINIMUM WALL THICKNESS
RA	ROPE CUP ANCHORS	SPECTRUM STAINLESS STEEL COMMERCIAL CUP ANCHOR #35214 WITH INTEGRAL ANCHOR, MINIMUM 4" EMBEDMENT
RS	RECESSED STEPS	FLUSH TO POOL WALL BUILT-IN INJECTION MOLDED (3 STEPS PER SET)
SP	STARTING PLATEFORMS	RECORD BREAKER SINGLE POST W/ SIDE STEP BY SPECTRUM OR APPROVED EQUAL
UL	UNDERWATER LIGHTS	J & J ELECTRONICS UNDERWATER POOL LIGHT, 500 W EQUIVALENT

SWIMMING POOL RECIRCULATION EQUIPMENT SCHEDULE				
CALL	FOUIPMENT MODEL/DESCRIPTION			
BU	BUBBLER	WATER ODYSSEY SIMPLE SPRAY II, 2-40 GPM		
FR	FLOOR RETURN INLET	ADJUSTABLE CYCOLAC W/ ANTI-HAIR ENTRAPMENT		
GD	GUTTER DROP BOX	FIELD BUILT DROPOUT		
MD	MAIN DRAIN	DALDORADO DAL-MAX SUMP AND GRATE 24 X 24 X 30" DEPTH, 1734 GPM CAPACITY		
WR	WALL RETURN INLET	ADJUSTABLE CYCOLAC W/ ANTI-HAIR ENTRAPMENT		



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PROJECT INFORMATION

## MOUNTAIN HOME AQUATICS FACILITY

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

KEY PLAN

ISSUES

PHASE BID SET

DATE MARCH 31, 2022

JOB NUMBER BE206003

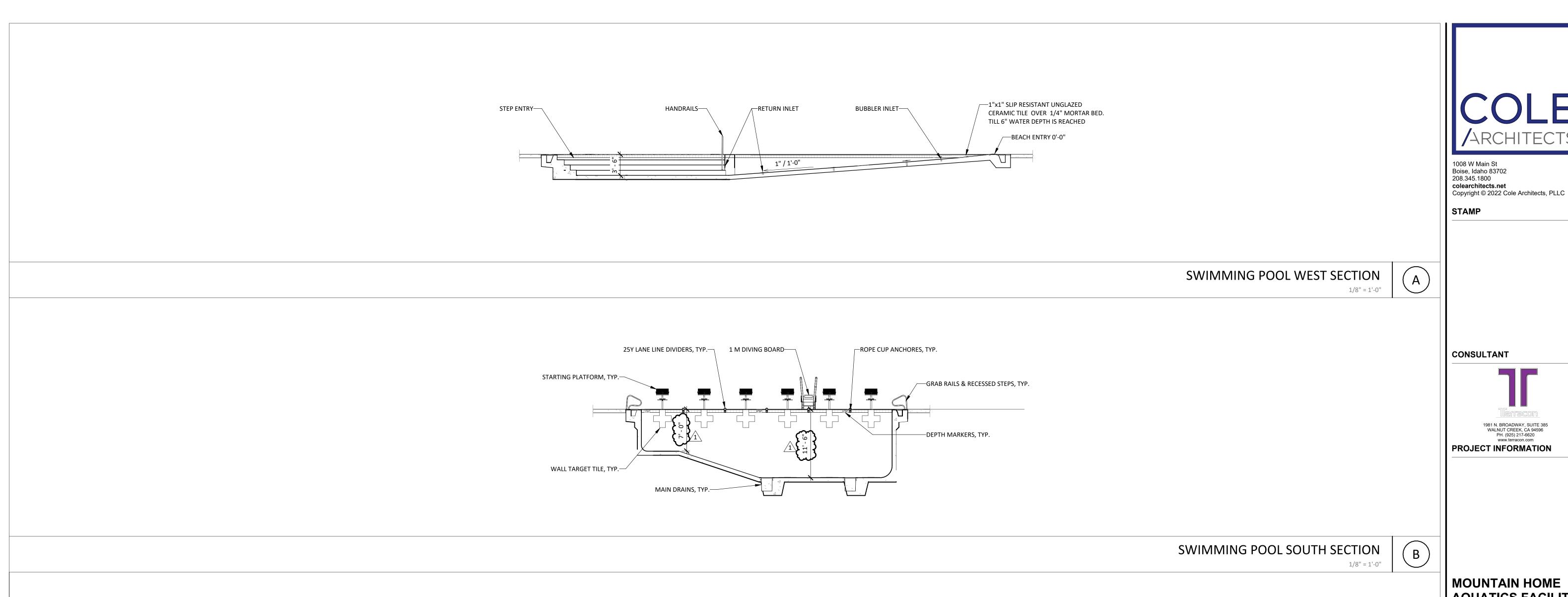
MARK DATE DESCRIPTION
1 05/11/2 ADDENDUM #1
022

SHEET NAME

SWIMMING POOL LAYOUT PLAN

SHEET NUMBER

SP1.0



POST STANCHION, TYP.

**GRAB RAILS &** 

RECESSED STEPS—

STARTING PLATFORM —1 M DIVING BOARD

LANE LINE MARKER TILE, TYP.

HANDRAIL, TYP.— POST STANCHION, TYP.— 25Y LANE LINE DIVIDERS, TYP.— UNDERWATER LIGHTS, TYP.—

25Y LANE LINE DIVIDERS, TYP.

ROPE CUP ANCHORES, TYP.—

WALL TARGET TILE, TYP.—

LANE LINE MARKER TILE, TYP.

ADA ACCESS LIFT

ROPE CUP ANCHORES, TYP.—

DEPTH MARKERS, TYP.—

UNDERWATER LIGHT/



1981 N. BROADWAY, SUITE 385 WALNUT CREEK, CA 94596 PH. (925) 217-6620 www.terracon.com

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

KEY PLAN

ISSUES PHASE BID SET DATE MARCH 31, 2022 JOB NUMBER BE206003

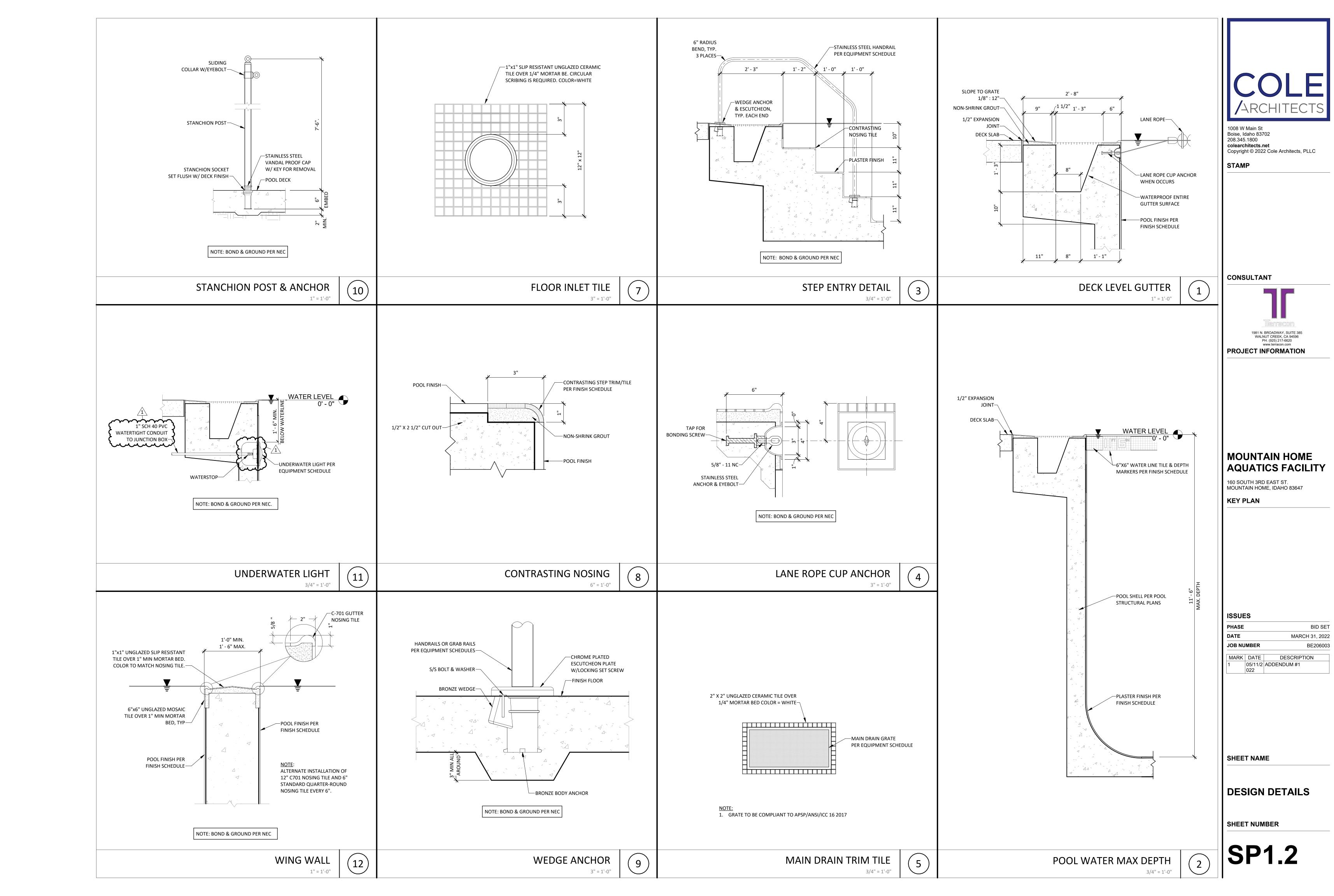
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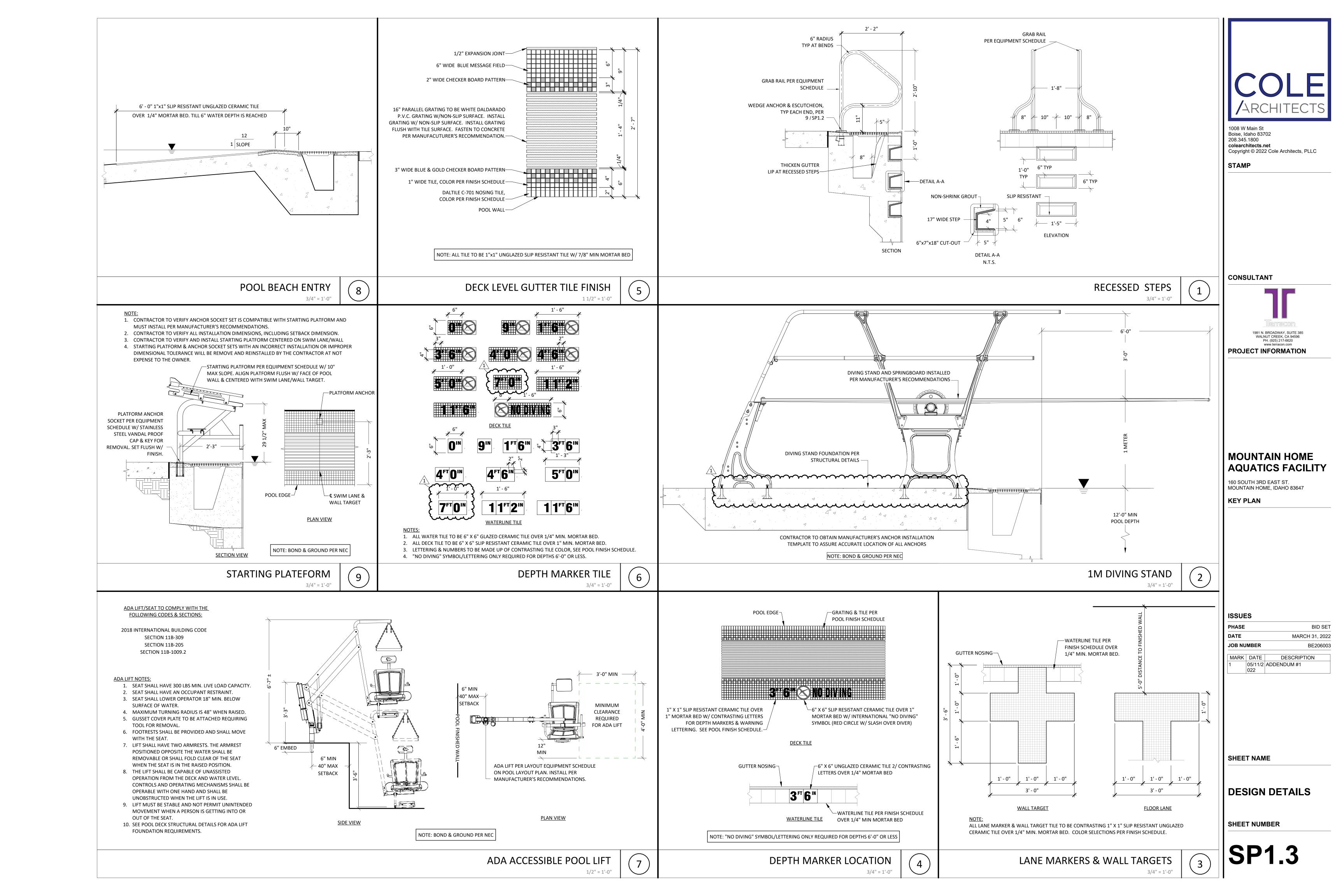
SWIMMING POOL SECTIONS

SHEET NUMBER

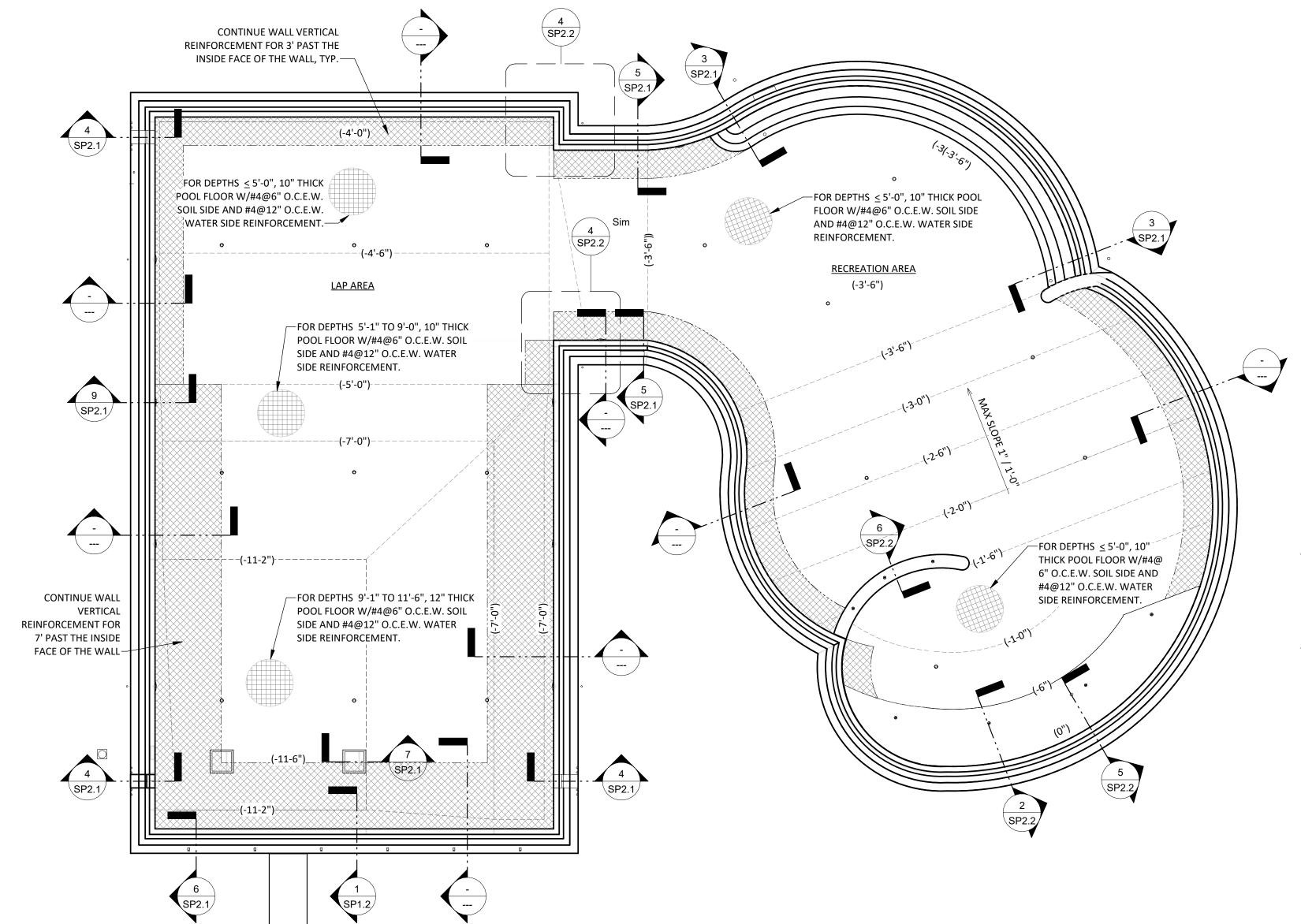
SWIMMING POOL EAST SECTION



5/11/2022 12:13:05 PM



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#### PRE-CONSTRUCTION SHOTCRETE TESTING:

(MAY BE WAIVED UPON APPROVAL OF THE BUILDING OFFICIAL):

- 1. SHOTCRETE NOZZLEMAN: NOZZLEMAN SHALL BE A QUALIFIED INSTALLER EMPLOYING NOZZLE OPERATORS WHO POSSESSES ACI NOZZLEMEN CERTIFICATION AND ATTAIN MEAN CORE GRADES NOT EXCEEDING 2.5, ACCORDING TO ACI 506.2, ON PRE-CONSTRUCTION TESTS.
- 2. PRE-CONSTRUCTION TESTING SERVICE: OWNER SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AGENCY TO PERFORM PRE-CONSTRUCTION TESTING AND INSPECTIONS INDICATED BELOW.
  - A. A TEST PANEL SHALL BE SHOT, CURED, CORED OR SAWN, EXAMINED AND TESTED AT LEAST 2 WEEKS PRIOR TO COMMENCEMENT OF THE PROJECT. THE SAMPLE PANEL SHALL BE REPRESENTATIVE OF THE PROJECT AND SIMULATE JOB CONDITIONS AS CLOSELY AS POSSIBLE. THE PANEL SHALL HAVE MINIMUM DIMENSIONS OF 48 INCHES BY 48 INCHES IN OUTER DIMENSION. THE PANEL THICKNESS AND REINFORCEMENT SHALL REPRODUCE THE THICKEST AND MOST CONGESTED AREA SPECIFIED IN THE STRUCTURAL DESIGN. IT SHALL BE SHOT AT THE SAME ANGLE, USING THE SAME NOZZLEMAN AND WITH THE SAME SHOTCRETE MIX DESIGN THAT WILL BE USED ON THE PROJECT. THE EQUIPMENT USED IN PRECONSTRUCTION TESTING SHALL BE THE SAME EQUIPMENT USED IN THE WORK REQUIRING SUCH TESTING, UNLESS SUBSTITUTE EQUIPMENT IS APPROVED BY THE BUILDING OFFICIAL.
  - B. PRE-CONSTRUCTION TEST PANELS MAY BE CONSTRUCTED AT THE PROJECT SITE OR AT THE SHOTCRETE SUPPLIER CONSTRUCTION YARD LOCATION. TEST PANEL FORMWORK, ALL REINFORCEMENT, AND SHOTCRETE SHALL BE SUPPLIED BY THE CONTRACTOR. DISPOSAL OF THE TEST PANEL AFTER TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
  - C. TEST PANELS SHALL BE FIELD CURED IN ACCORDANCE WITH ASTM C1140 AND FIELD CORED. TEST PANEL SHALL FIELD CURE FOR 7 DAYS PRIOR TO TESTING. CORES SHALL BE TAKEN FROM THE PORTION OF THE PANEL SPECIFIED IN ASTM C1140. FROM EACH TEST PANEL, TESTING AGENCY WILL OBTAIN SIX TEST SPECIMENS: ONE SET OF THREE SPECIMENS UNREINFORCED AND ONE SET OF THREE SPECIMENS REINFORCED. AGENCY WILL PERFORM THE FOLLOWING:
  - a. TEST EACH SET OF UN-REINFORCED SPECIMENS FOR COMPRESSIVE STRENGTH ACCORDING TO ASTM C42. THE AVERAGE COMPRESSIVE STRENGTH OF THE FIELD CURED CORES SHALL BE AT LEAST 0.6 f'c WITH NO SINGLE CORE LESS THAN 0.53  $f_c$ .
  - b. VISUALLY INSPECT EACH SET OF REINFORCED SHOTCRETE CORES TAKEN FROM TEST PANELS ACCORDING TO ACI 506. REINFORCED CORES SHALL BE CUT THROUGH TWO ORTHAGONAL PIECES OF REINFORCEMENT. CORE SPECIMENS SHALL HAVE NO MORE THAN TWO LAMINATIONS OR SANDY AREAS WITH DIMENSIONS NOT TO EXEED 1/8 INCHES THICK BY 1 INCH LONG. THE HEIGHT, WIDTH, AND DEPTH OF VOIDS SHALL NOT EXCEED 3/8 INCHES. POROUS AREAS BEHIND REINFORCING STEEL SHALL NOT EXCEED 1/2 INCH IN ANY DIRECTION EXCEPT ALONG THE LENGTH OF THE REINFORCING STEEL. THE SURFACE AGAINST THE FORM OR BOND PLANE SHALL BE SOUND, WITHOUT A SANDY TEXTURE OR VOIDS.

D. THE EQUIPMENT USED IN PRE-CONSTRUCTION TESTING SHALL BE THE SAME EQUIPMENT USED IN THE WORK UNLESS SUBSTITUTE EQUIPMENT IS APPROVED. SHOTCRETE SHALL BE SHOT AT THE SAME ANGLE, USING THE SAME NOZZLEMAN, AND WITH THE SAME SHOTCRETE MIX DESIGN THAT WILL BE USED ON THE PROJECT.

#### **REQUIRED SPECIAL INSPECTIONS:**

- EXCAVATION INSPECTION.
- 2. REINFORCEMENT PLACEMENT INSPECTION. 3. SHOTCRETE PLACEMENT INSPECTION.
- 4. CONCRETE PLACEMENT INPSECTION.
- 5. COMPACTION TESTING OF ALL EARTH WORK.

### **REQUIRED TESTING:**

- 1. SHOTCRETE PRODUCTION TEST PANELS 2. 1 PANEL / 50 YDS
- 3. 1 PANEL / DAY
- 4. 1 PANEL / 2,000 SQ FT OF SURFACE AREA FOR SLABS OR WALLS 5. ADDITIONAL SAMPLES FOR 7-DAY COMPRESSIVE STRENGTH TESTS SHALL BE TAKEN FOR EACH CLASS OF SHOTCRETE AT THE BEGINNING OF THE SHOTCRETE WORK OR WHENEVER THE MIX OR AGGREGATE IS CHANGED.
- 6. CONCRETE COMPRESSION TEST FOR  $f'_c > 3,000$  PSI (EVERY 50 CU YDS)

#### **STRUCTURAL GENERAL NOTES:**

- 1. THE POOL SHALL BE EXCAVATED INTO FIRM SOIL SUITABLE TO SUPPORT THE SWIMMING POOL AS DETERMINED BY THE PROJECT GEOTECHNICAL ENGINEER.
  - 2. ALL PLAN DIMENSIONS ARE TO POOL FINISH AND SHALL BE VERIFIED PRIOR TO START OF WORK IN ACCORDANCE WITH ARCHITECT DRAWINGS.
- 3. ANY CHANGES OR UNCLEAR PORTIONS OF THIS PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.
- 4. ALL APPLICABLE STATE AND LOCAL LAWS AND CODES SHALL BE FOLLOWED.
- 5. ANY CONDITION NOT SPECIFICALLY COVERED IN THIS PLAN OR UNUSUAL CONDITIONS ENCOUNTERED DURING EXCAVATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING. 6. ALL SITE GRADING SHALL BE PERFORMED IN CONFORMANCE WITH THE PROJECT SOILS REPORT. SOILS
- BELOW EXTERIOR FLAT WORK SHALL BE PREPARED IN ACCORDANCE WITH PROJECT SOILS REPORT. 7. FOR AREAS WHERE A RAMP HAS BEEN EXCAVATED AND BACKFILL IS NOT COMPACTED TO A MIN. 90% MAXIMUM DRY DENSITY OF THE ASTM D1557 COMPACTION TEST, REINFORCEMENT SHALL BE SPACED NO LESS THAN 6 INCH CENTERS EACH WAY. THE EXTRA HORIZONTAL REINFORCEMENT SHALL EXTEND 3 FEET PAST THE EDGE OF THE RAMP EXCAVATION ON EITHER SIDE. SHOTCRETE COVER OVER THE
- REINFORCEMENT ON THE OUTSIDE OF THE POOL SHALL BE INCREASED FROM 3 TO 4 INCHES. 8. EXPANSIVE SOILS SHALL BE MAINTAINED AT AN ELEVATED MOISTURE CONTENT DURING
- CONSTRUCTION AND IMMEDIATELY PRIOR TO SHOTCRETE/CONCRETE PLACEMENT. 9. SEE SHEET SP1.0 FOR POOL DIMENSIONAL PLAN.

#### <u>DESIGN BASIS:</u>

1. 2018 INTERNATIONAL BUILDING CODE (IBC)

2. GEOTECHNICAL INVESTIGATION BY ATLAS TECHNICAL CONSULTANTS, PROJECT NO. 201962G DATED JANUARY 7, 2021.

#### **DESIGN PARAMETERS:**

- 1. LATERAL EARTH PRESSURE: 44 PCF (SWIMMING POOL)
- 2. ALLOWABLE BEARING CAPACITY: 3,000 PSF
- 3. SEISMIC:  $S_{DS} = 0.283g S_{D1} = 0.156g$

- 1. CONCRETE: THE SPECIFIED CONCRETE IS FOR USE IN THE SWIMMING POOL FLOORS.
  - A. NORMAL WEIGHT CONCRETE SHALL BE MIXED AND PROPORTIONED IN ACCORDANCE WITH ACI 301. CEMENT TO AGGREGATE, IN DRY WEIGHT, SHALL NOT BE LESS THAN ONE
  - B. MINIMUM COMPRESSIVE STRENGTH,  $f_c$ , SHALL BE 4,500 PSI @ 28 DAYS
  - C. SLUMP: 3" ± 1" D. AGGREGATE: 1 INCH MAX
  - E. CEMENT CONTENT: 600 LBS/YDS MIN.
  - F. W/C RATIO: 0.45 MAX
  - G. TYPE II/V CEMENT SHALL BE USED
  - H. SHRINKAGE AT 28 DAYS (PER ASTM C-157) SHALL NOT EXCEED 0.055% FOR DRY CURING. I. CONCRETE SHALL BE PLACED ON OR AGAINST FIRM UNDISTURBED SOIL.
  - J. CEMENT USED SHALL BE ASTM C150, TYPE II/V CEMENT. FLY ASH MAY BE USED PROVIDED THE FLY ASH CONTENT DOES NOT EXCEED 15% OF THE CEMENTITIOUS MATERIAL CONTENT. FLY ASH SHALL BE ASTM C618, CLASS C OR F.
- 2. SHOTCRETE: THE SPECIFIED SHOTCRETE IS FOR USE IN THE SWIMMING POOL.
  - A. SHOTCRETE (WET PROCESS ONLY, NO DRY PROCESS "GUNITE" PLACEMENT) SHALL BE PLACED AND PROPORTIONED ACCORDING TO IBC SECTION 1908 AND ACI 506R. CEMENT
  - TO AGGREGATE, IN DRY WEIGHT, SHALL NOT BE LESS THAN ONE TO FIVE. B. MINIMUM COMPRESSIVE STRENGTH, f'c, SHALL BE 4,500 PSI @ 28 DAYS
  - C. SLUMP: 2" ± 0.5"
  - D. AGGREGATE SHALL BE NORMAL WEIGHT AGGREGATES MEETING ASTMC33, FROM A SINGLE SOURCE, AND AS FOLLOWS:
  - E. AGGREGATE GRADATION: ACI 506R-05, GRADATION NO. 1 WITH 100 PERCENT PASSING 3/8 INCH (10mm) SIEVE.
  - F. COARSE AGGREGATE CLASS: 5S
  - G. CEMENT USED SHALL BE ASTM C150, TYPE II/V CEMENT. FLY ASH MAY BE USED PROVIDED THE FLY ASH CONTENT DOES NOT EXCEED 15% OF THE CEMENTITIOUS MATERIAL CONTENT. FLY ASH SHALL BE ASTM C618, CLASS C OR F.
  - H. W/C RATIO: 0.45 MAX. WATER SHALL BE POTABLE, COMPLYING WITH ASTM C94/C94M, FREE FROM DELETERIOUS MATERIALS THAT MAY AFFECT COLOR STABILITY, SETTING, OR STRENGTH OF SHOTCRETE.
  - I. SHRINKAGE AT 28 DAYS (PER ASTM C-157) SHALL NOT EXCEED 0.055% FOR DRY CURING. J. SHOTCRETE REBOUND SHALL BE REMOVED AND DISCARDED. REBOUND SHALL NOT BE
  - K. SHOTCRETE SHALL BE PLACED ON OR AGAINST FIRM UNDISTURBED SOIL OR FILL COMPACTED PER THE PROJECT SOILS REPORT.
  - L. ALL ELECTRICAL SHALL BE SECURELY GROUNDED BEFORE SHOTCRETE IS PLACED. M. CONSTRUCTION JOINTS WILL BE REQUIRED DUE TO SHOTCRETE PLACEMENT OVER
  - MULTIPLE DAYS, JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 506R-11. HORIZONTAL CONSTRUCTION JOINTS SHALL BE AVOIDED IN WALLS UNLESS APPROVED BY THE PROJECT ENGINEER.

#### 3. REINFORCEMENT:

- A. USE ACI 318 AND IBC SECTION 1908 AS GUIDELINE.
- B. REINFORCEMENT SHALL BE ASTM- A615 GRADE 60. C. LAP SPLICES SHALL BE 60 BAR DIAMETERS.
- D. NON-CONTACT LAP SPLICING SHALL BE UTILIZED IN ACCORDANCE WITH IBC FOR SHOTCRETE CONSTRUCTION. MAINTAIN MINIMUM 2" CLEAR SPACING BETWEEN REINFORCEMENT.
- E. 3" MIN COVER FOR REINFORCEMENT TO SOIL.
- F. UP TO 2 INCH DIAMETER PIPES MAY BE PLACED IN THE LOWER OUTSIDE CORNER OF THE BOND BEAM. A 1.5 INCH CLEARANCE SHALL BE MAINTAINED BETWEEN PIPING AND ANY PARALLEL REINFORCEMENT. IF METAL PIPING IS USED AND IS PLACED IN SHOTCRETE, IT SHALL BE WRAPPED IN VISQUEEN OR HEAVY BROWN PAPER, EXCEPT WHERE IT PASSES PERPENDICULARLY THROUGH THE SHOTCRETE.
- G. DECK DOWELS BETWEEN THE BOND BEAM AND ADJACENT DECKING SHALL NOT BE USED. H. WHERE SPECIFIED, GALVANIZED REINFORCEMENT SHALL BE CUT AND COATED TO LENGTH OFFSITE. BARS SHALL NOT BE CUT ONSITE AND FIELD COATED.

#### 4. GRAVEL UNDERDRAIN:

- A. A 6" GRAVEL UNDERDRAIN SHALL BE INSTALLED BELOW THE POOL FLOOR. GRAVEL SHALL CONSIST OF 3/4" CLEAN CRUSHED GRAVEL. THE BASE OF THE DRAINAGE LAYER SHALL BE SLOPED AT LEAST 2 PERCENT TOWARDS A LOW POINT NEAR THE CENTER OF THE EXCAVATION, WHICH SHALL CONTAIN A SHALLOW TRENCH FOR A SUBDRAIN. AN IMPERVIOUS MEMBRANE SHOULD BE PROVIDED BELOW THE BOTTOM OF THE PERMEABLE GRAVEL.
- B. A 4" DIAMETER PERFORATED SDR 35 OR EQUIVALENT. PIPE SHALL BE INSTALLED IN THE GRAVEL AT THE BASE OF THE SUBDRAIN TRENCH AND SHALL SLOPE AT 1% MIN. SLOPE TO AN APPROPRIATE DISCHARGE POINT THAT CAN BE PERIODICALLY OBSERVED FOR LEAKAGE. PIPE SHOULD BE PLACED WITH PERFORATIONS DOWN WITH ALL JOINTS GLUED. PIPE SHALL BE SOLID PAST THE EXTENTS OF THE GRAVEL BLANKET.
- C. A RELIEF VALVE SHOULD BE INSTALLED AT THE BOTTOM OF THE POOL TO REDUCE THE RISK OF HYDROSTATIC UPLIFT OF THE POOL WHEN EMPTY PER THE PROJECT SOILS ENGINEER.

#### BOND BREAK:

A. BOND BREAK SHALL CONSIST OF 10 MIL SHEET VINYL OR 20 LB ROOFING FELT.

#### **CRACK REPAIR:**

1. SHRINKAGE CRACK TOLERANCE: 0.02". CRACKS TO BE REPAIRED SHALL BE V-NOTCHED TO A MINIMUM

DEPTH OF 3/4" AND FILLED WITH PATCHING MORTAR PRIOR TO PLASTER.

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PROJECT INFORMATION

#### MOUNTAIN HOME **AQUATICS FACILITY**

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

**KEY PLAN** 

ISSUES

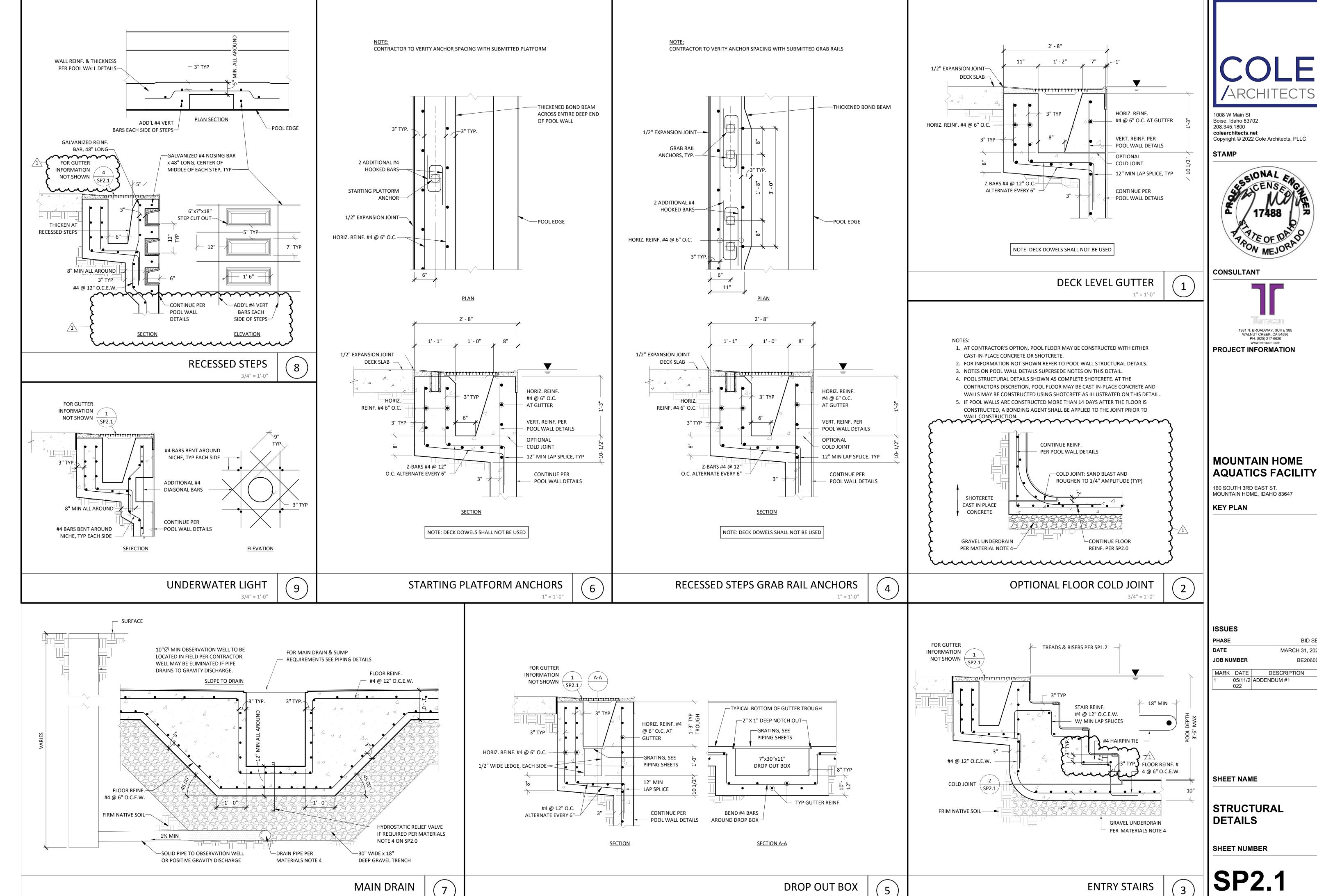
BID SET PHASE DATE MARCH 31, 2022 **JOB NUMBER** BE206003 MARK DATE DESCRIPTION 05/11/2 ADDENDUM #1

SHEET NAME

022

SWIMMING POOL STRUCTURAL PLAN

**SHEET NUMBER** 



3/4" = 1'-0"

3/4" = 1'-0"

1981 N. BROADWAY, SUITE 385 WALNUT CREEK, CA 94596 PH. (925) 217-6620

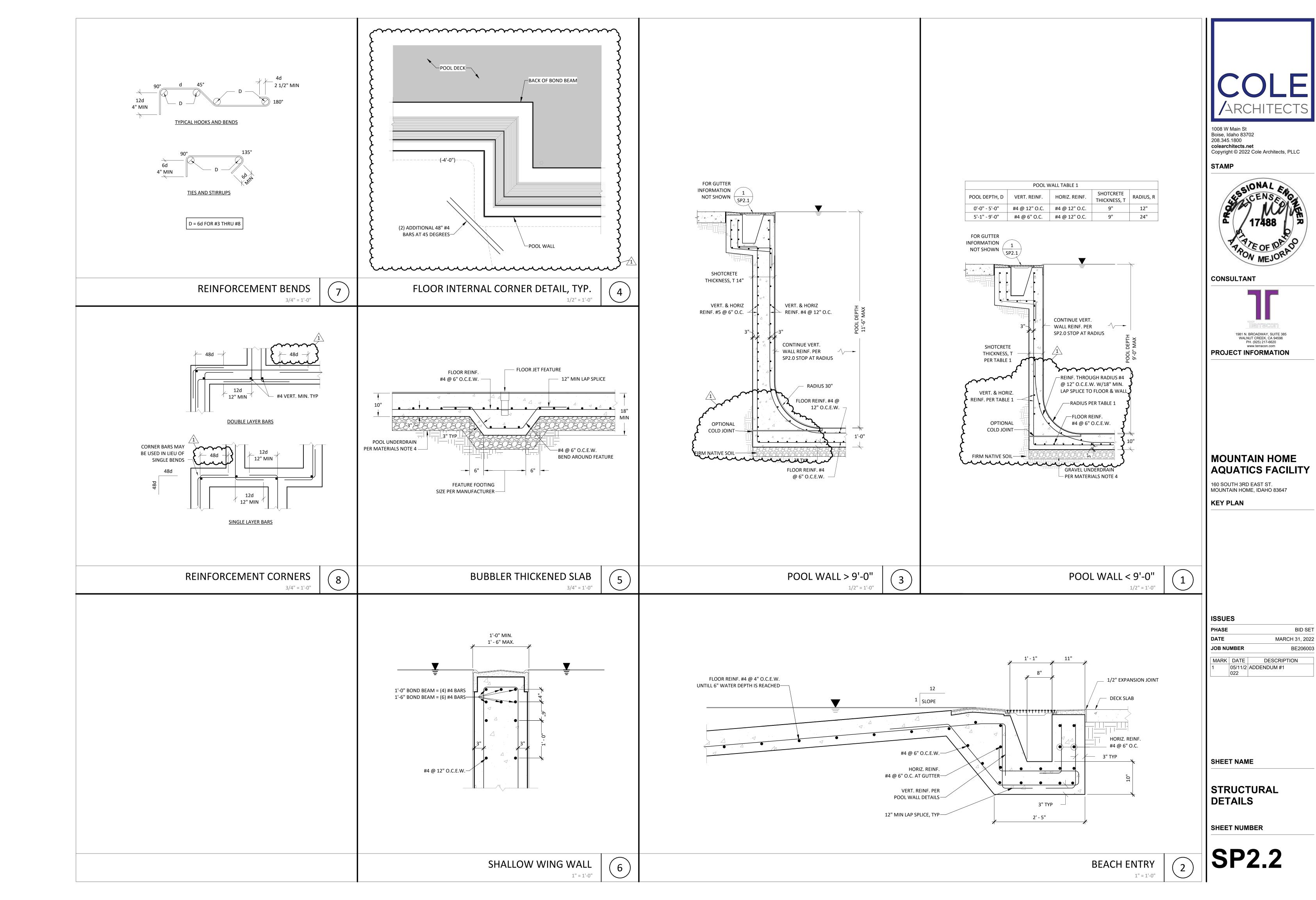
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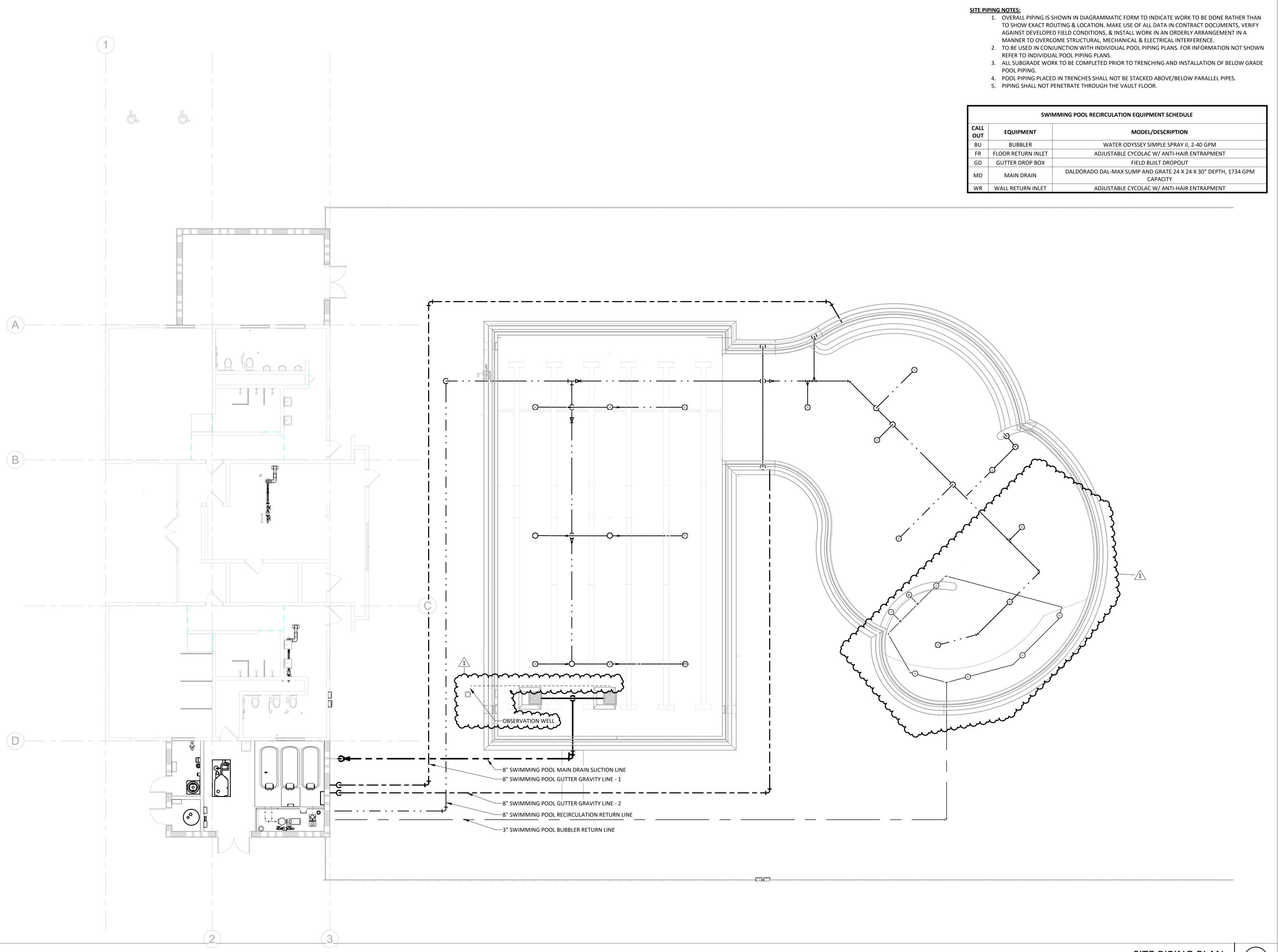
MARCH 31, 2022

DESCRIPTION



BID SET

BE206003



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PROJECT INFORMATION

## MOUNTAIN HOME AQUATICS FACILITY

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

**KEY PLAN** 

ISSUES

PHASE	BID SE
DATE	MARCH 31, 202
JOB NUMBER	BE20600

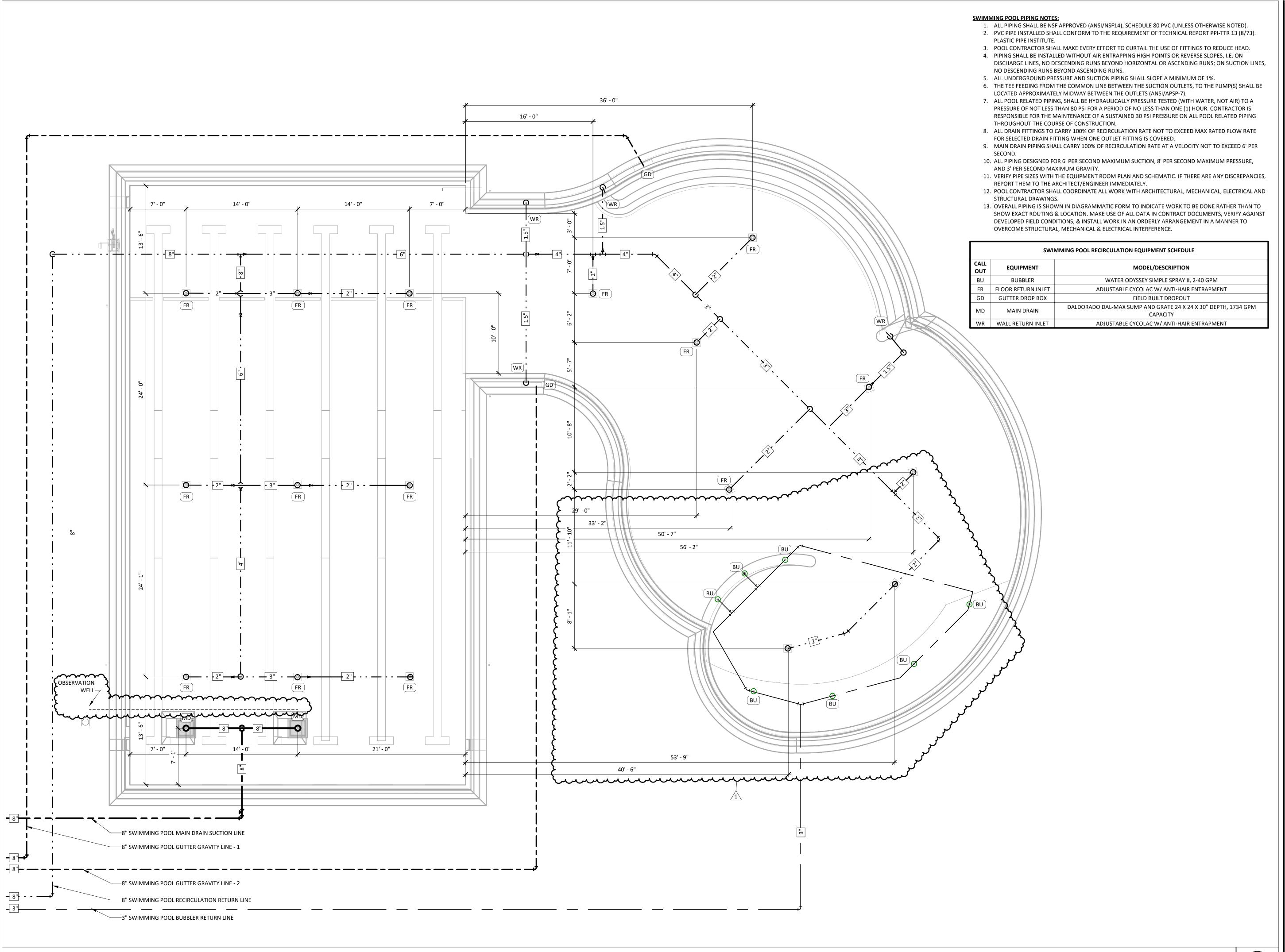
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022

SHEET NAME

SITE PIPING PLAN

SHEET NUMBER

SP3.0



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PROJECT INFORMATION

## MOUNTAIN HOME AQUATICS FACILITY

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

KEY PLAN

ISSUES

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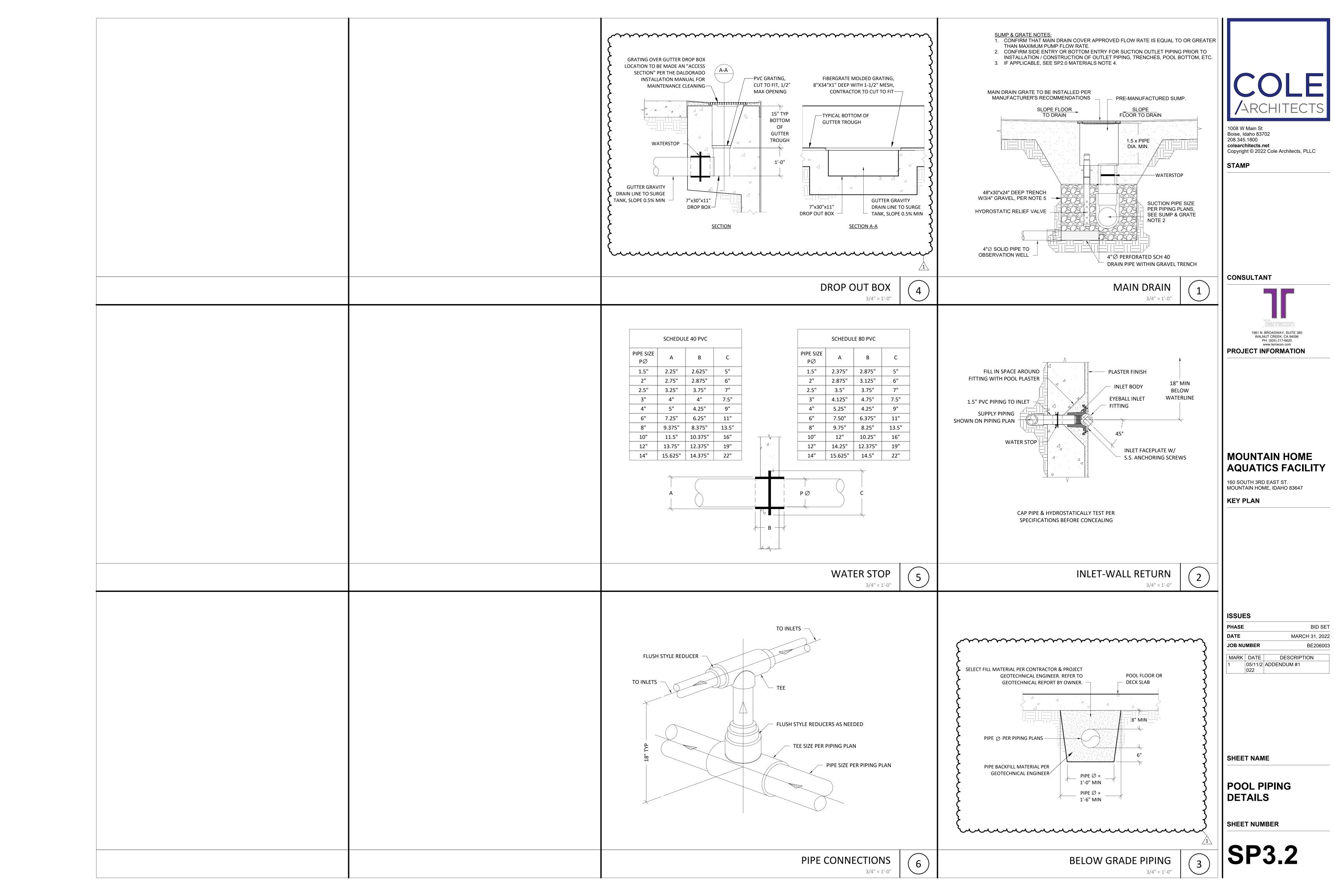
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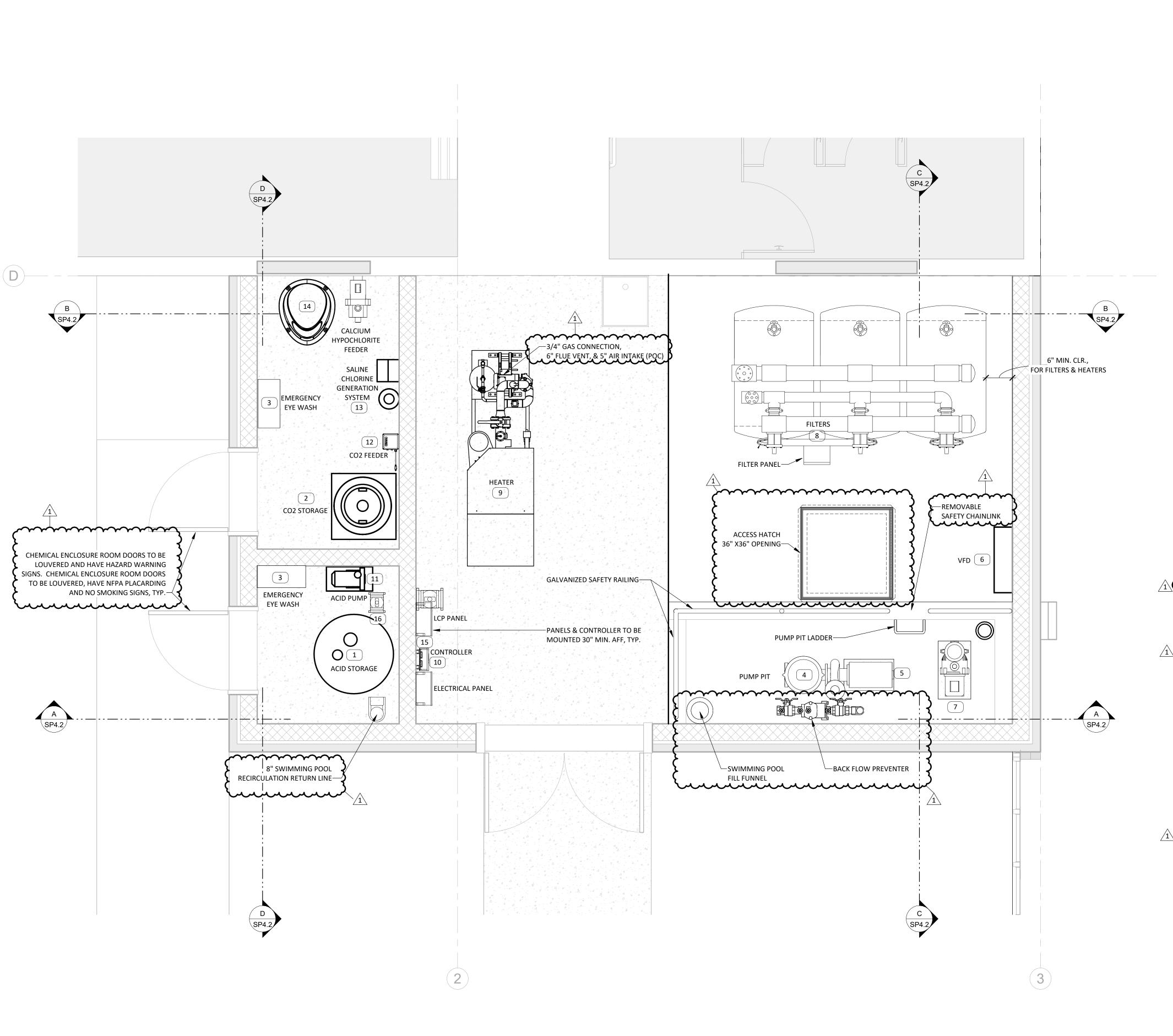
SWIMMING POOL PIPING PLAN

SHEET NUMBER

**SP3.1** 



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**EQUIPMENT ROOM NOTES:** 

 ALL PIPING TO BE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE.
 SEE PIPING PLANS TO VERIFY PIPE SIZES AND FOR CONTINUATION OF PIPING. REPORT DISCREPANCIES IMMEDIATELY TO THE ARCHITECT / ENGINEER.

3. POOL CONTRACTOR SHALL IDENTIFY ALL PIPING AND VALVES BY COLOR CODING OR LABELS AND DIRECTION OF FLOW ARROWS IN ACCORDANCE WITH LOCAL HEALTH CODE.

4. PIPING AT HEATER TO BE CPVC UNLESS NOTED OTHERWISE.
5. REDUCER/INCREASER FITTINGS SHALL BE USED WHERE PIPE SIZES CHANGE.
6. NO COMMON PIPING OR FITTING ON THE SUCTION SIDE OF THE PUMP IS TO BE SMALLER THAN THE LARGEST

SINGLE ELEMENT CONNECTED. DOWNSIZING AND UPSIZING IS TO BE DONE AT THE THROATS OF THE PUMP

7. ALL VALVES SHALL HAVE A MINIMUM PRESSURE RATING OF 125 PSI.

8. ALL TRADES SHALL KEEP SPACE ABOVE THE FILTRATION AND CHEMICAL EQUIPMENT CLEAR FOR SERVICING. 9. HAIR AND LINT STRAINER OPENINGS SHALL BE NO MORE THAN 1/8". THE HAIR AND UNIT STRAINER MUST PROVIDE A FREE FLOW CAPACITY OF AT LEAST FOUR TIMES THE AREA OF THE PUMP SUCTION LINE.

10. FILTRATION AND CHEMICAL EQUIPMENT SHALL BE NATIONAL SANITATION FOUNDATION (NSF) APPROVED. 11. FILTER SHALL BE PROVIDED WITH THE FOLLOWING APPROPRIATELY LOCATED ACCESSORIES: INFLUENT AND EFFLUENT PRESSURE GAUGES, BACKWASH SIGHT GLASS ON WASTED DISCHARGE LINE, FILTER BACKWASH VALVE, AIR RELIEF VALVE AT THE HIGH POINT OF THE FILTER SYSTEM, AND A VALVED TANK DRAIN. RELIEF VALVES SHALL BE INSTALLED.

12. FLOWMETER SHALL BE PROVIDED IN THE INLET RETURN LINE AFTER FILTER AND BEFORE CHEMICAL INJECTION. INSTALL ON A STRAIGHT LENGTH OF PIPE AT A DISTANCE OF AT LEAST 10 PIPE DIAMETERS DOWNSTREAM AND 4 PIPE DIAMETERS UPSTREAM FROM ANY VALVE, ELBOW OR OTHER SOURCE OF TURBULENCE OR PER MANUFACTURER'S SPECIFICATIONS. PROVIDE CHECK VALVE IN RETURN LINE UPSTREAM OF CHEMICAL INJECTION TO PROTECT HEATER, FILTER, PUMP AND OTHER EQUIPMENT.

13. PROVIDE A COMBINATION VACUUM/PRESSURE GAUGE ON THE SUCTION SIDE OF THE CIRCULATION PUMP AND A CHECK VALVE ON THE DISCHARGE SIDE OF THE PUMP.

14. INSTALL INTERLOCK BETWEEN CIRCULATION PUMP(S) AND HEATER(S); FLOW SWITCHES; AND BYPASS LOOPS AS

REQUIRED BY HEATER MANUFACTURER.

15. INSTALL AIR COMBUSTION INTAKE AND VENT PIPING PER HEATER MANUFACTURER'S RECOMMENDATIONS.

16. PROVIDE FLOW SWITCH FOR ALL HEATERS AND INSTALL PER MANUFACTURER'S INSTRUCTIONS. 17. ALL PIPING TO BE SUPPORTED AS REQUIRED WITH EITHER HANGERS (ALONG CEILINGS), ANCHORS (ALONG WALLS), OR SUPPORTS (ALONG FLOOR) PER CONTRACTOR. MIN 6'-8" CLEARANCE TO UNDERSIDE OF ANY

OVERHEAD PLUMBING LINES. 18. ANY WALL-MOUNTED EQUIPMENT AND CONTROL PANELS SHALL BE MOUNTED A MINIMUM 46" ABOVE

19. HOUSEKEEPING PADS: ALL CIRCULATION PUMPS, HEATERS, AND FILTERS TO BE ANCHORED PER

MANUFACTURER'S RECOMMENDATIONS ON A HOUSEKEEPING PAD THAT IS 4" MINIMUM ABOVE FINISHED

20. ALL MECHANICAL ROOM FLOORS SHALL SLOPE A MINIMUM OF  $\frac{1}{4}$ " TO  $\frac{1}{2}$ " TO FLOOR DRAINS.

21. MECHANICAL ROOM FLOOR DRAINS BY OTHERS. 22. HOSE BIBS TO BE INSTALLED FOR HOUSE CLEANING PURPOSES. HOSE BIBS TO BE PROVIDED WITH ATMOSPHERIC

23. INTERIOR OF SURGE TANK SURFACES TO BE WATERPRROOFED.

24. THE FOLLOWING INFORMATION SHALL BE LAMINATED AND POSTED IN THE POOL MECHANICAL ROOM:

BACKWASH PROCEDURES, POOL FILLING AND DRAINING, VALVE REFERENCE CHART, EQUIPMENT ROOM PLAN, POOL PIPING SCHEMATICS, AND POOL SYSTEMS SCHEMATICS.

25. PIPING NOT SHOWN TO SCALE, SHOWN TO INDICATE WORK TO BE DONE AND SUGGESTED ROUTING RATHER THAN EXACT ROUTING & LOCATION. MAKE USE OF ALL DATA IN CONTRACT DOCUMENTS, VERIFY AGAINST DEVELOPED FIELD CONDITIONS, & INSTALL WORK IN AN ORDERLY ARRANGEMENT IN A MANNER TO OVERCOME STRUCTURAL, MECHANICAL & ELECTRICAL INTERFERENCE.

26. PIPING VALVES NOT SHOWN, SEE CIRCULATION SCHEMATICS FOR VALVES REQUIRED, LOCATIONS, AND SPECIFICATIONS.

27. PUMP SHALL INTERLOCK WITH HEATING CONTROL SYSTEM. DISRUPTION OF POWER TO CIRCULATION PUMP SHALL SHUT OFF HEATING.

28. PUMP SHALL INTERLOCK WITH CHEMICAL CONTROLLER. DISRUPTION OF POWER TO CIRCULATION PUMP SHALL SHUT OFF CHEMICAL FEED SYSTEMS VIA CHEMICAL CONTROLLER.

SWIMMING POOL EQUIPMENT SCHEDULE					
CALL	EQUIPMENT	MODEL/DESCRIPTION			
1	ACID STORAGE	CHEMTAINER 1C3939DC, DOUBLE WALLED BULK STORAGE TANK, 100 GALLON CAPACITY, 35" DIAMETER, 36" HEIGHT W/PROMINENT ACID FUME SCRUBBER			
2	CO2 STORAGE	TAYLOR WHARTON NOVO-750, CO2 CRYOGENIC STORAGE TANK, 750 LB CAPACITY, 26" DIAMETER, EPOXY COATED, W/ REMOTE FILL STATION			
3	EMERGENCY EYE WASH	(2) HAWS PORTABLE EYEWASH, 9 GALLON, MODEL 7501 WITH HAWS 9082  EYEWASH PRESERVATIVE			
4	STRAINER	MERMADE FO SERIES FIBERGLASS PUMP STRAINER, 8" X 5" ECCENTRIC REDUCER W/2 STRAINER BASKETS			
5	CIRCULATION PUMP	PACO 40957 LC, HORIZONTAL MOUNTED END SUCTION, 15 HP, 3 PHASE, TEFC, 1760 RPM, 750 GPM @ 60' TDH, 5" SUCTION, 4" DISCHARGE, IMPELLER RATED 9.07" DIAMETER, 81% EFFICIENCY, 60 HZ, 230/240V 3-PHASE. NEMA PREMIUM EFFICIENTY MOTOR			
6	VARIABLE FREQUENCY DRIVE	SMART PUMP CONTROL SYSTEM (SPCS) SPCS015-2, 15 HP, 200-230/460V, WITH 36"X30"X10" CABINET			
7	BUBBLER PUMP	PENTAIR INTELLIFLO VSF SERIES, 3 HP, 1 PHASE 2" SUCTION, 2" DISCHARGE, 230V			
8	FILTRATION	EPD S306, 62.5" H X 114" L X 77.5" W, 16.5 SQ FT FILTER AREA, 6" BACKWASH VALVE, 248 GPM BACKWASH FLOW RATE PER TANK, W/ PRESSURE AMPLIFICATION SYSTEM			
9	HEATING	LOCHINVAR AQUAS APN01750N, 1,750,000 BTUH INPUT, 3" POOL CONNECTION, 1.5" GAS CONNECTION, 8" AIR INTAKE, 8" FLUE VENT, 0.5" CW W/TOTALIZING METER 96% EFFICIENCY @ SEA LEVEL			
10	CHEMICAL CONTROLLER	BECSYS BECS7, AUTOMATIC BACKWASH CONTROL			
11	ACID METERING PUMP SYSTEM	STENNER 45M5, SINGLE HEAD, ADJUSTABLE OUTPUT, 25 PSI, MAXIMUM 50  GALLONS ACID PER DAY			
12	CO2 FEEDER	EKO3 CO2 CONTROLLER			
13	SALINE CHLORINE GENERATION	(E) CHLORKING CHLOR 10SM, MAX 10 LBS EQUIVALENT CHLORINE PER DAY			
14	CALCIUM HYPOCHLORITE FEEDER	PULSAR PRECISION CALCIUM HYPOCHLORITE FEEDER, 5-192 LBS AVCL CAPACITY, W/ PULSAR BOOSTER PUMP AND VENTURI			
15	WATER LEVEL CONTROL	BECSYS SLS INTEGRATED WATER LEVEL CONTROL			
16	FLOW METER	BLUE-WHITE INDUSTRIES F-1000 SERIES DIGITAL PADDLEWHEEL FLOW METER, F-1000RB, RATE ONLY, SCHEDULE 80, 8" PIPE SIZE			



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www.terracon.com **PROJECT INFORMATION** 

### MOUNTAIN HOME **AQUATICS FACILITY**

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

**KEY PLAN** 

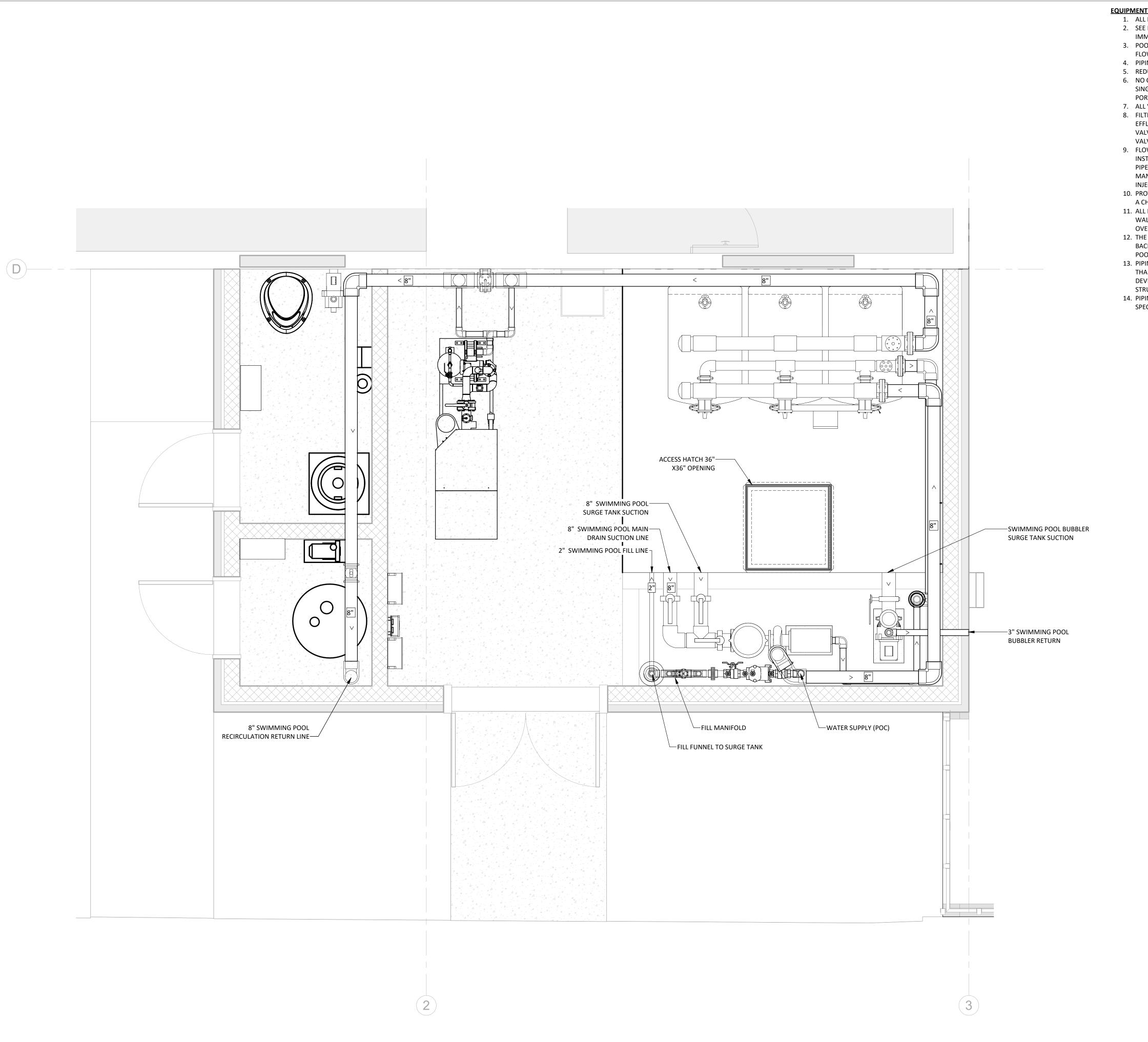
**ISSUES** 

**BID SET** MARCH 31, 2022 **JOB NUMBER** MARK DATE DESCRIPTION 05/11/2 ADDENDUM #1

SHEET NAME

**POOL EQUIPMENT ROOM PLAN** 

**SHEET NUMBER** 



#### **EQUIPMENT ROOM PIPING NOTES:**

- 1. ALL PIPING TO BE SCHEDULE 80 PVC UNLESS NOTED OTHERWISE.
- 2. SEE PIPING PLANS TO VERIFY PIPE SIZES AND FOR CONTINUATION OF PIPING. REPORT DISCREPANCIES
- IMMEDIATELY TO THE ARCHITECT / ENGINEER. 3. POOL CONTRACTOR SHALL IDENTIFY ALL PIPING AND VALVES BY COLOR CODING OR LABELS AND DIRECTION OF
- FLOW ARROWS IN ACCORDANCE WITH LOCAL HEALTH CODE.
- 4. PIPING AT HEATER TO BE CPVC UNLESS NOTED OTHERWISE.
- 5. REDUCER FITTINGS SHALL BE USED WHERE PIPE SIZES CHANGE.
- 6. NO COMMON PIPING OR FITTING ON THE SUCTION SIDE OF THE PUMP IS TO BE SMALLER THAN THE LARGEST SINGLE ELEMENT CONNECTED. DOWNSIZING AND UPSIZING IS TO BE DONE AT THE THROATS OF THE PUMP
- 7. ALL VALVES SHALL HAVE A MINIMUM PRESSURE RATING OF 125 PSI.
- 8. FILTER SHALL BE PROVIDED WITH THE FOLLOWING APPROPRIATELY LOCATED ACCESSORIES: INFLUENT AND EFFLUENT PRESSURE GAUGES, BACKWASH SIGHT GLASS ON WASTED DISCHARGE LINE, FILTER BACKWASH VALVE, AIR RELIEF VALVE AT THE HIGH POINT OF THE FILTER SYSTEM, AND A VALVED TANK DRAIN. RELIEF VALVES SHALL BE INSTALLED.
- 9. FLOWMETER SHALL BE PROVIDED IN THE INLET RETURN LINE AFTER FILTER AND BEFORE CHEMICAL INJECTION. INSTALL ON A STRAIGHT LENGTH OF PIPE AT A DISTANCE OF AT LEAST 10 PIPE DIAMETERS DOWNSTREAM AND 4 PIPE DIAMETERS UPSTREAM FROM ANY VALVE, ELBOW OR OTHER SOURCE OF TURBULENCE OR PER MANUFACTURER'S SPECIFICATIONS. PROVIDE CHECK VALVE IN RETURN LINE UPSTREAM OF CHEMICAL INJECTION TO PROTECT HEATER, FILTER, PUMP AND OTHER EQUIPMENT.
- 10. PROVIDE A COMBINATION VACUUM/PRESSURE GAUGE ON THE SUCTION SIDE OF THE CIRCULATION PUMP AND A CHECK VALVE ON THE DISCHARGE SIDE OF THE PUMP.
- 11. ALL PIPING TO BE SUPPORTED AS REQUIRED WITH EITHER HANGERS (ALONG CEILINGS), ANCHORS (ALONG WALLS), OR SUPPORTS (ALONG FLOOR) PER CONTRACTOR. MIN 6'-8" CLEARANCE TO UNDERSIDE OF ANY OVERHEAD PLUMBING LINES.
- 12. THE FOLLOWING INFORMATION SHALL BE LAMINATED AND POSTED IN THE POOL MECHANICAL ROOM: BACKWASH PROCEDURES, POOL FILLING AND DRAINING, VALVE REFERENCE CHART, EQUIPMENT ROOM PLAN, POOL PIPING SCHEMATICS, AND POOL SYSTEMS SCHEMATICS.
- 13. PIPING NOT SHOWN TO SCALE, SHOWN TO INDICATE WORK TO BE DONE AND SUGGESTED ROUTING RATHER THAN EXACT ROUTING & LOCATION. MAKE USE OF ALL DATA IN CONTRACT DOCUMENTS, VERIFY AGAINST DEVELOPED FIELD CONDITIONS, & INSTALL WORK IN AN ORDERLY ARRANGEMENT IN A MANNER TO OVERCOME STRUCTURAL, MECHANICAL & ELECTRICAL INTERFERENCE.
- 14. PIPING VALVES NOT SHOWN, SEE CIRCULATION SCHEMATICS FOR VALVES REQUIRED, LOCATIONS, AND SPECIFICATIONS.



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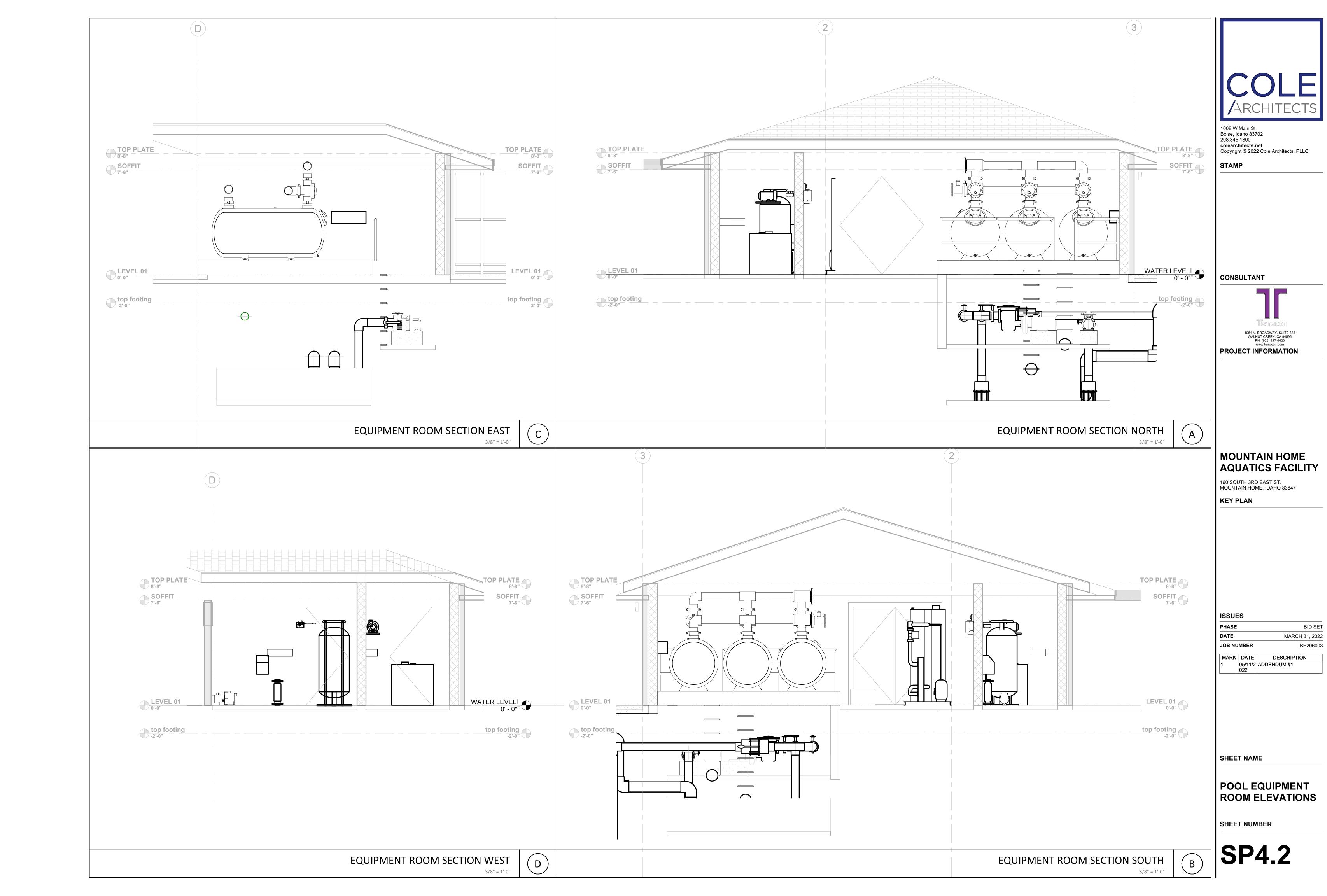
ISSUES

BID SET MARCH 31, 2022 **JOB NUMBER** 

DESCRIPTION MARK DATE 05/11/2 ADDENDUM #1 022

SHEET NAME

**POOL EQUIPMENT** ROOM PIPING PLAN



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EQUIPMENT VALVES SCHEDULE		
CHECK VALVES	CENTERLINE, TECHNO, OR EQUIVALENT	
2 & 3 PORT VALVES	HAYWARD, ASAHI, OR EQUIVALENT	
FILTER VALVES	HAYWARD, ASAHI, OR EQUIVALENT	
BUTTERFLY VALVES, **TYP	3" OR SMALLER - SPEARS, ASAHI, OR EQUIVALENT; 4" OR LARGER - DEZURIK OR EQUIVALENT	

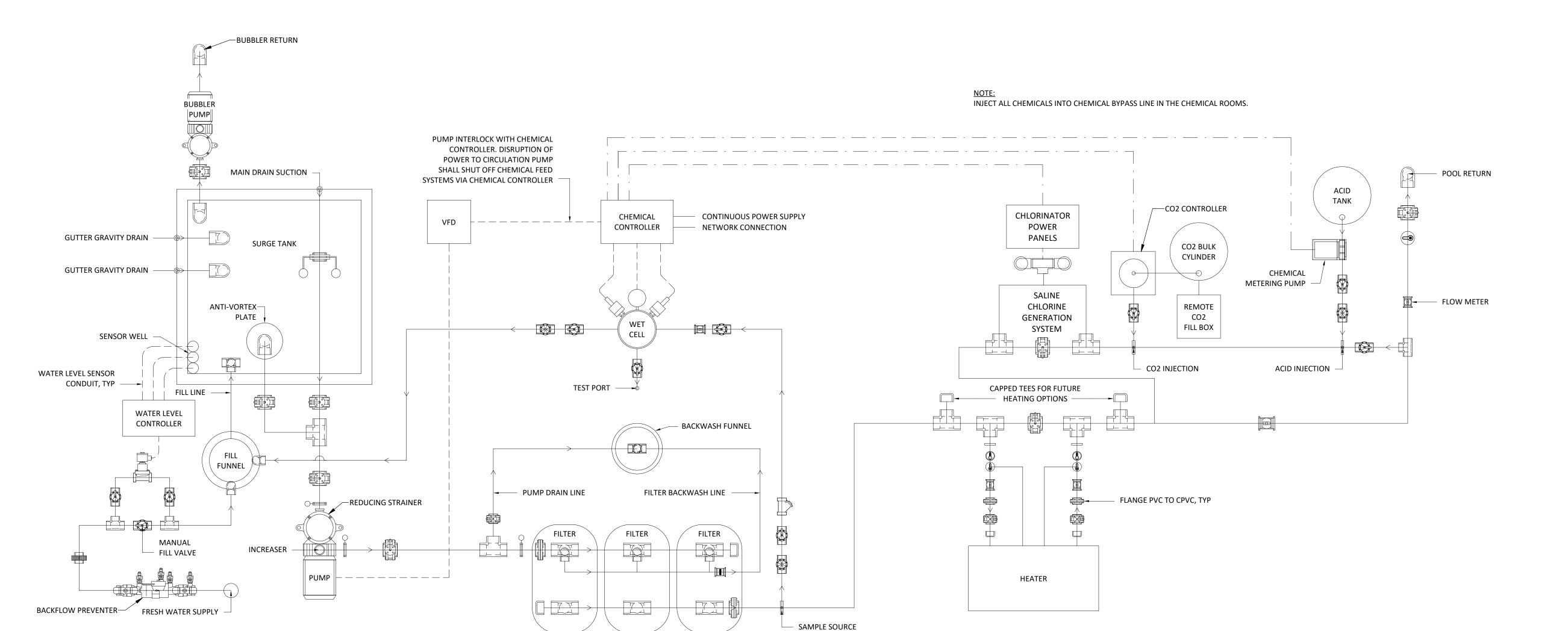
\*\*FOR LINE SIZES OF 2.5" OR SMALLER, 2-PORT VALVES MAY BE USED IN LIEU OF BUTTERFLY VALVES. HAYWARD, PENTAIR

EQUAL.

SCHEMATIC LEGEND			
BUTTERFLY VALVE		UNION	
BALL VALVE		FLANGE BREAK	
CHECK VALVE		FLOWMETER	
MULTI-PORT VALVE		IMPACT FLOWMETER	
MODULATING FLOAT VALVE		TEMP SENSOR	
EXTENSION VALVE	8	THERMOMETER	
SOLENOID VALVE		WATER LINE	
PRESSURE GAUGE & COCK		VOLTAGE CONTROL WIRING	
Y STRAINER		POWER LINE	

CIRCULATION SYSTEM LEGEND

3/4" = 1'-0"





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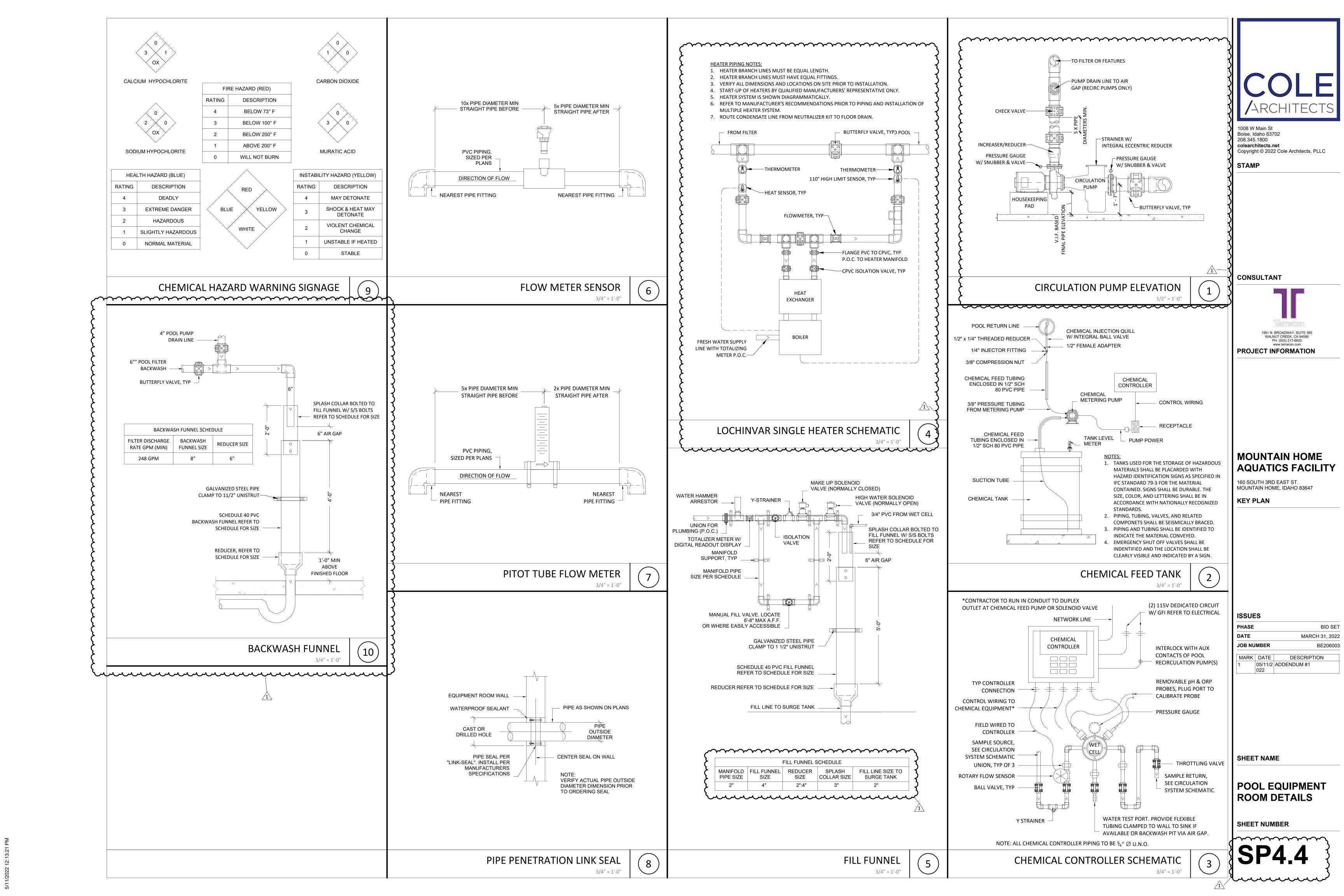
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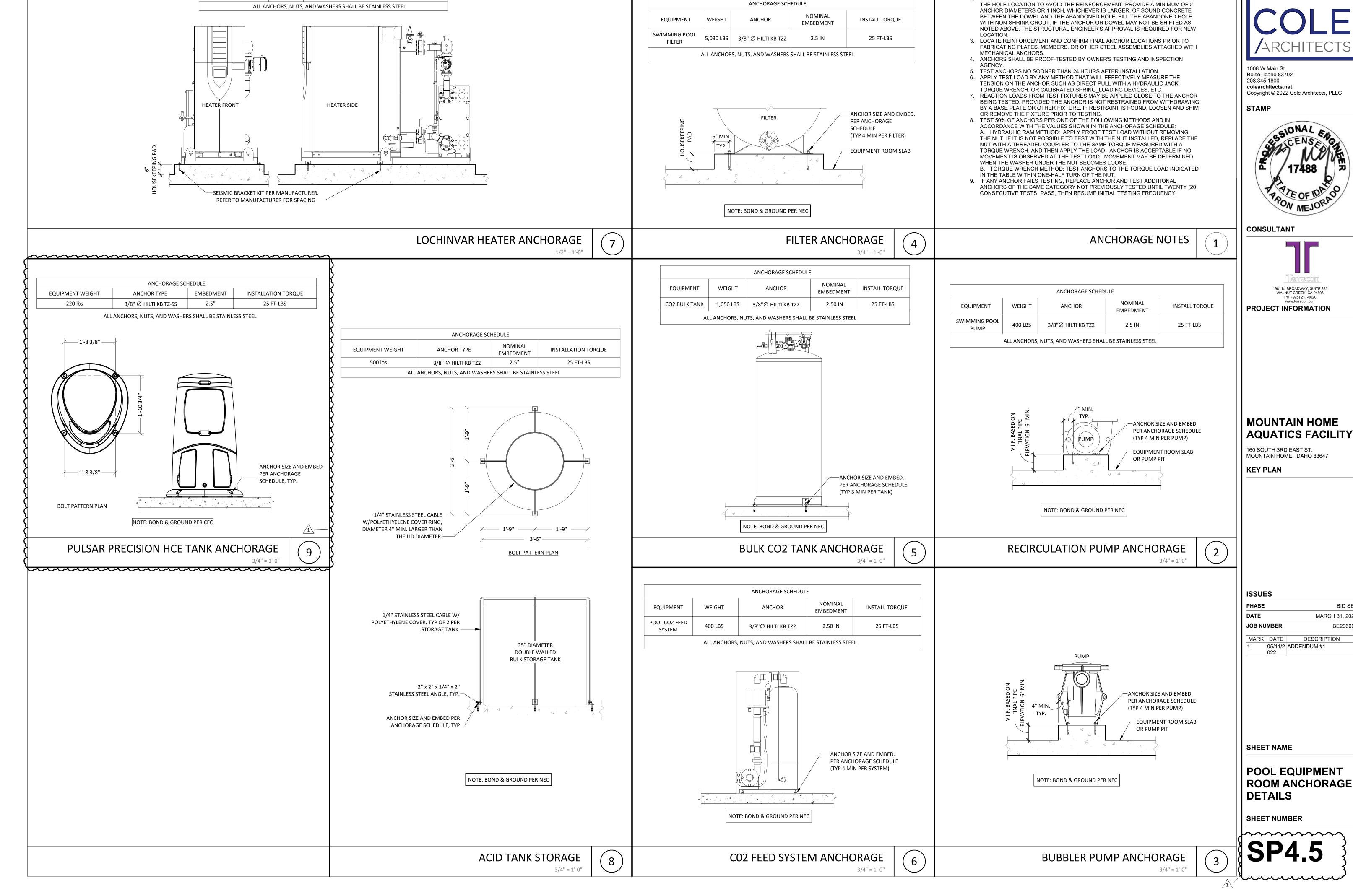
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DATE		MARCH 31, 20
JOB NU	MBER	BE2060
MARK	DATE	DESCRIPTION
1	05/11/2	ADDENDUM #1
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SHEET NAME

POOL EQUIPMENT ROOM SCHEMATIC

SHEET NUMBER





ANCHORAGE SCHEDULE

ANCHOR

WEIGHT

SWIMMING POOL HEATER | 3,500 LBS | 3/8"Ø HILTI KB TZ2

**EQUIPMENT** 

NOMINAL

**EMBEDMENT** 

2.50 IN

**INSTALL TORQUE** 

25 FT-LBS

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**MECHANICAL ANCHORS** 

LOCATIONS, UNLESS OTHERWISE NOTED.

1. FASTENERS SHALL BE STAINLESS STEEL FOR EXTERIOR USE OR WHEN EXPOSED

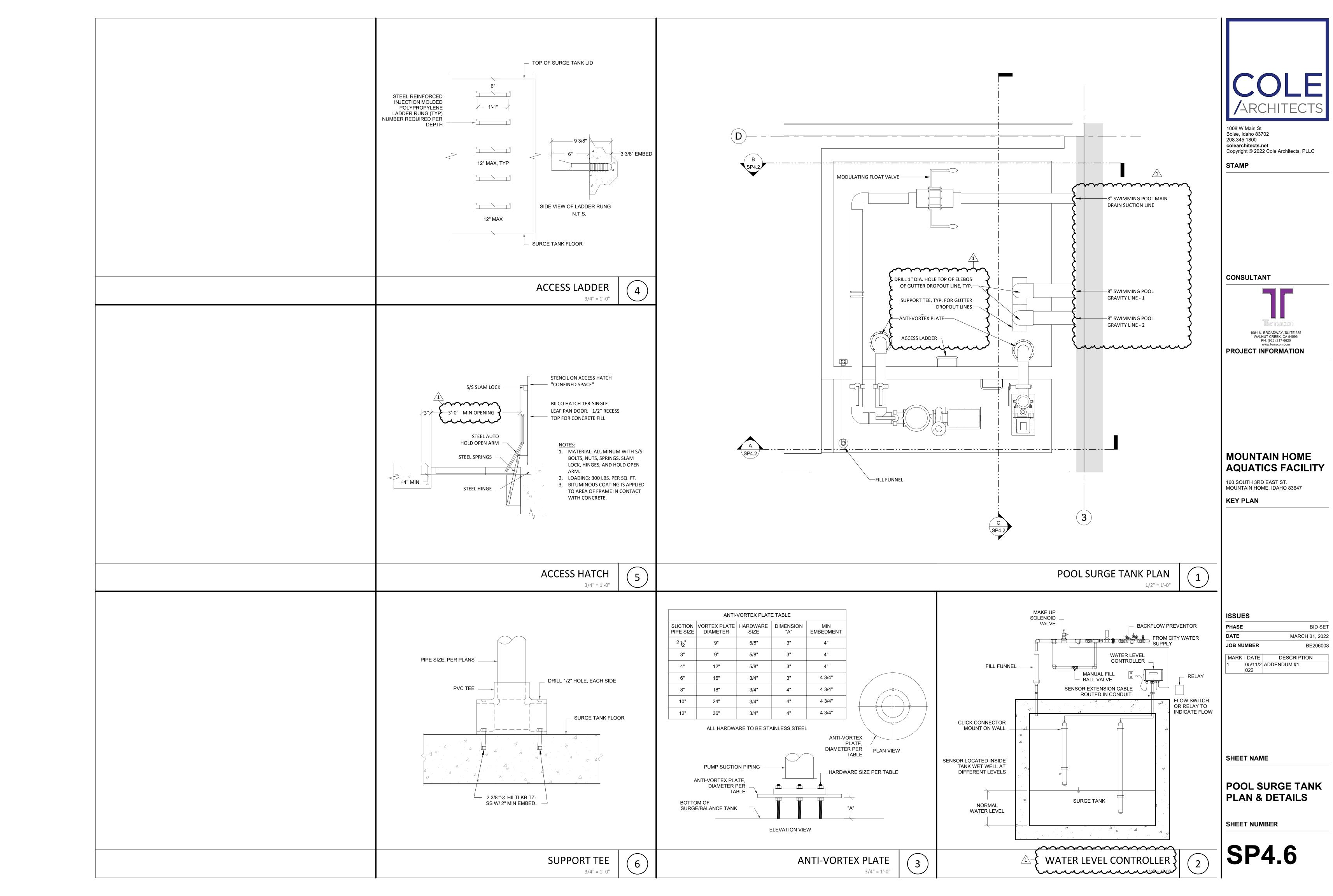
TO WEATHER. PROVIDE GALVANIZED CARBON STEEL ANCHORS AT OTHER

2. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT

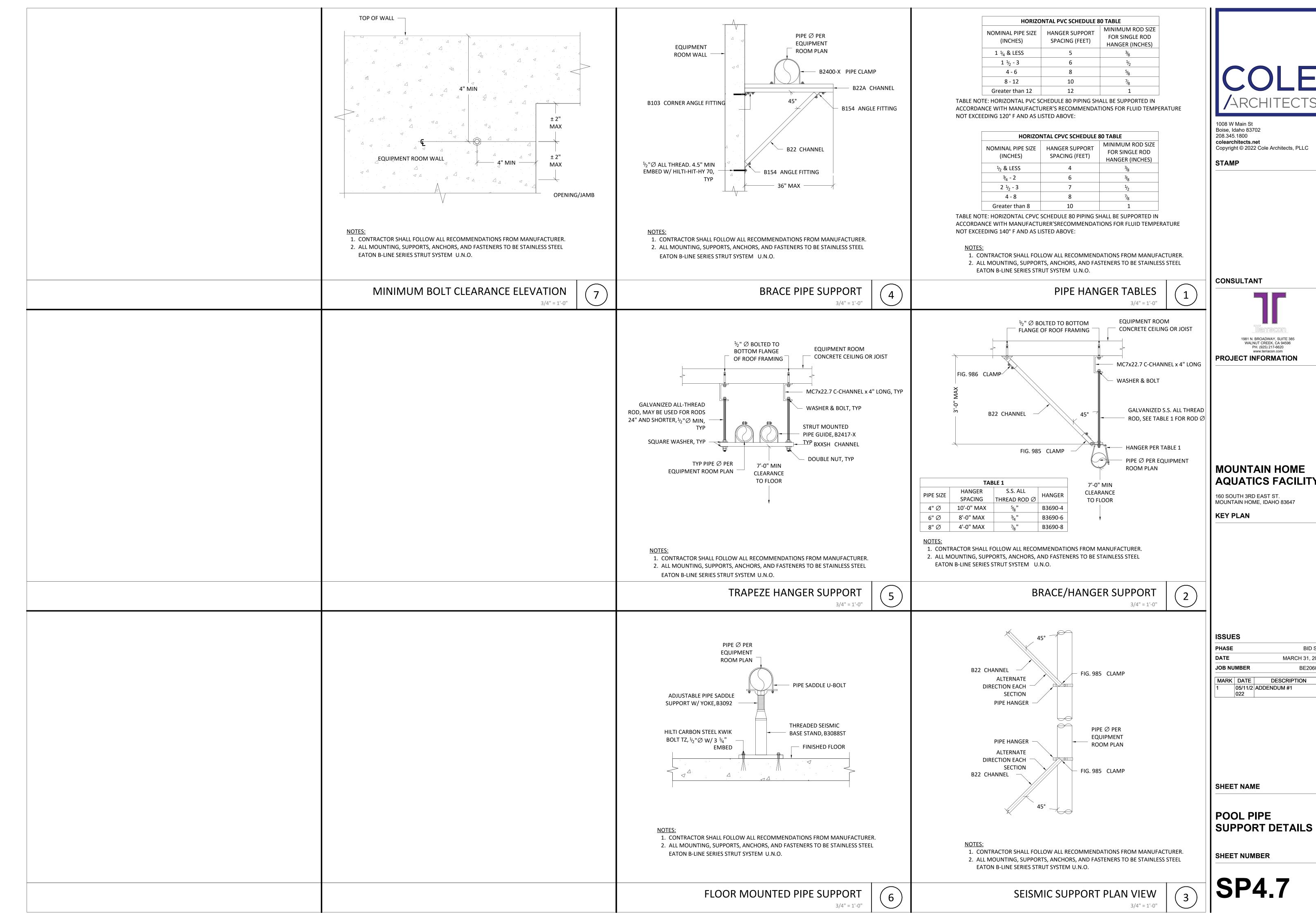


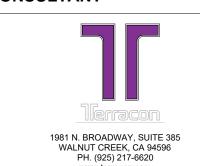
**BID SET** MARCH 31, 2022 BE206003 DESCRIPTION

POOL EQUIPMENT **ROOM ANCHORAGE** 



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**AQUATICS FACILITY** 

ISSUES	
PHASE	BID SE
DATE	MARCH 31, 202
JOB NUMBER	BE20600
MARK DATE	DESCRIPTION

**ELECTRICAL SPECIFICATIONS:** A. CODES: ALL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), ALL STATE AND LOCAL BUILDING CODES, ALL ADOPTED ORDINANCES, AND ALL REQUIREMENTS OF THE UTILITY COMPANY. B. RACEWAY: 1. INDOOR: a. EMT (ELECTRICAL METALLIC TUBING) b. IMC (INTERMEDIATE METALLIC CONDUIT) 2.OUTDOOR: a. ABOVE GROUND: GRC (GALVANIZED RIGID CONDUIT) b. FLEXIBLE: LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL BE USED IN ALL APPLICATIONS WHERE FLEXIBILITY IS REQUIRED. MAXIMUM 6 FEET IN LENGTH. FLEXIBLE METAL CONDUIT IS NOT ACCEPTABLE UNLESS IT IS A PART OF A PRE-WIRED ASSEMBLY. FLEXIBLE NONMETALLIC CONDUIT SHALL NOT BE USED. c. CONDUIT RUNS INSIDE BUILDING SHALL BE CONCEALED WHERE POSSIBLE. CONDUIT BELOW FLOOR SLAB SHALL BE INSTALLED WITHIN OR BELOW SLAB AND INSTALLED PRIOR TO POUR. RUNS TO BE AS STRAIGHT AS POSSIBLE FROM POINT OF OUTLET TO POINT OF OUTLET. 3. FURNISH 3/4" CONDUIT FOR ALL TEMPERATURE SENSORS FROM SENSOR TO APPROPRIATE MECHANICAL EQUIPMENT. PROVIDE 4" SQUARE JUNCTION BOX AT 48" AFF. 4. SUPPORTING DEVICES: a. CHANNEL AND ANGLE SUPPORT SYSTEMS, HANGERS, ANCHORS, PRIOR BRACKETS, FABRICATED ITEMS, AND FASTENERS SHALL PROVIDE SECURE SUPPORT FROM THE BUILDING STRUCTURE FOR ELECTRICAL COMPONENTS. ALL SUPPORTS SHALL CONFORM TO SEISMIC ZONE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION. LIGHT FIXTURES SHALL BE SUPPORTED IN ACCORDANCE WITH NEC. b. MATERIAL: ALL STEEL, PROTECTED FROM CORROSION WITH ZINC COATING (GALVANIZED) OR TREATMENT OF EQUIVALENT CORROSION-RESISTANT ALTERNATIVE FINISH. 5. FIRESTOPPING: APPLY TO CABLE AND RACEWAY PENETRATIONS OF FIRE-RATED FLOOR AND WALL ASSEMBLIES. PERFORM FIRESTOPPING TO RE-ESTABLISH THE ORIGINAL FIRE-RESISTANCE RATING OF THE ASSEMBLY AT THE 6. INSTALL RACEWAYS LEVEL AND SQUARE AND AT PROPER ELEVATIONS. PROVIDE ADEQUATE HEADROOM. USE TEMPORARY CLOSURES TO PREVENT FOREIGN MATTER FROM ENTERING RACEWAY. KEEP RACEWAYS AT LEAST 6" AWAY FROM PARALLEL RUNS OF FLUES AND HOT WATER PIPES. INSTALL HORIZONTAL RACEWAY RUNS ABOVE WATER PIPING. 7. MINIMUM CONDUIT SIZE: 3/4" BELOW GRADE, 3/4" ABOVE GRADE C.WIRE (50 TO 600 VOLTS): ALL WIRE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS: 1. INSULATING RATING: a. VOLTAGE: 600 VOLTS b. TEMPERATURE: 90° (THHN OR THWN) 2.STRANDED COPPER WITH THE FOLLOWING EXCEPTION(S): SOLID WIRE (SIZES #12 AND #10) MAY BE USED FOR OUTLETS AND LIGHTING. #8 SOLID BARE FOR GROUNDING AND BONDING OF NON-ELECTRIFIED METAL COMPONENTS ONLY. 3. MINIMUM SIZE: a. POWER WIRING - #12 AWG b. CONTROL WIRING - #14 AWG 4. WIRING INSTALLATION a. ALL FEEDERS, BRANCH CIRCUITS AND VOLTAGE DROP REQUIREMENTS SHALL CONFORM TO NEC 210 AND b. ALL WIRING SHALL BE INSTALLED IN AN APPROVED RACEWAY SYSTEM IN ACCORDANCE WITH NEC AND LOCAL ORDINANCES. D. ENCLOSURES: 1. FOR STARTERS, DISCONNECTS AND PANELBOARDS: a. INDOOR: NEMA 4X b. OUTDOOR: NEMA 3R 2. CONTROL PANELS (FULL PIANO HINGED): a. INDOOR: NEMA 4X

b. OUTDOOR: NEMA 3R

a. INDOOR AND OUTDOOR: NEMA 4 OILTIGHT

a. MOUNT TOP OF PANELS AND SWITCHES 66" AFF.

b. MOUNT TOP OF RECEPTACLE BOXES 15" AFF UON

4. REFER TO NEC IN AREAS WHERE CERTAIN CONDITIONS MUST BE MET.

c. OUTLET MOUNTING HEIGHTS FOR RECEPTACLES, SWITCHES, SYSTEM INITIATING DEVICES, AND

INDICATING DEVICES SHALL COMPLY WITH REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT

WITH A GROUND WIRE AS INDICATED. ALL BONDING SHALL BE PERFORMED IN ACCORDANCE WITH NEC.

C. POOL CONTRACTOR SHALL PROVIDE AND INSTALL (PER 2010 NEC) AN EMERGENCY SHUT-OFF SWITCH.

D. ELECTRICAL WIRING OR CONDUCTORS SHALL NOT BE ROUTED UNDERGROUND BENEATH THE POOL SHELL

LIGHTING CIRCUITS, MOTORS, EQUIPMENT, OUTLETS, AND ELECTRICAL CIRCUITS IN THE POOL AREA.

G. PROVIDE FLOW SWITCH WITH HEATER(S) TO INTERLOCK THE CIRCULATION PUMP WITH THE CHEMICAL FEEDERS AND WITH THE HEATER.

H. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT FROM J-BOX TO LIGHT NICHE AND PROVIDE JUNCTION BOX AND HOOK UP.

EQUIPMENT ROOM

3. CONTROL STATIONS:

5. MOUNTING HEIGHTS:

E. GROUNDING: 1. ALL GROUNDING SHALL BE INSTALLED PER THE NEC AS SHOWN IN THE CONTRACT DRAWINGS AND SPECIFICATIONS. PERMANENTLY, AND EFFECTIVELY GROUNDED AND GROUND CONNECTIONS SHALL BE MADE TO THE

2. ALL METALLIC STRUCTURES, METALLIC ENCLOSURES, AND ELECTRICAL EQUIPMENT SHALL BE BUILDING GROUND. SIZE GROUND WIRE PER NEC 250.

F. GROUNDING/BONDING VERIFICATION

1. BONDING SYSTEM INSPECTION

a. CONTRACTOR TO PERFORM A REVIEW OF THE POOL BONDING SYSTEM AND NOTE ALL EQUIPMENT THAT NEEDS TO BE TESTED TO ENSURE THAT IT'S PROPERLY BONDED. 1. VERIFY THAT ALL METAL PARTS ARE BONDED TO THE SERVICE NEUTRAL.

b. CONTRACTOR TO MEASURE THE RESISTANCE BETWEEN THE METER SOCKET ENCLOSURE, SERVICE EQUIPMENT, OR GROUNDING ELECTRODE CONDUCTOR TO ALL METAL PARTS OF THE ELECTRICAL SYSTEM AND POOL THAT ARE REQUIRED TO BE BONDED. THE RESISTANCE THAT IS MEASURED SHOULD BE NO MORE THAN ONE OHM (AFTER THE METER HAS BEEN RECALIBRATING TO ACCOUNT FOR THE RESISTANCE OF WIRE USED FOR THE MEASUREMENTS). IF THE RESISTANCE FROM THE SERVICE NEUTRAL TO ANY METAL PART IS NOT LESS THAN ONE OHM, INVESTIGATE WHY AND CORRECT.

1. VERIFY THAT A POOL SHELL IS BONDED TO THE SERVICE NEUTRAL. c. CONTRACTOR TO DETERMINE THE NEUTRAL-TO-EARTH VOLTAGE BY PLACING ONE LEAD OF THE VOLT METER TO THE METER SOCKET ENCLOSURE, SERVICE EQUIPMENT, OR GROUNDING ELECTRODE CONDUCTOR, AND THE OTHER LEAD TO A POINT IN THE EARTH THAT IS AT LEAST 15 FT FROM ANY METAL PARTS IN THE EARTH. THIS VOLTAGE READING SHOULD BE LESS THAN 3 VOLTS. THEN MEASURE THE VOLTAGE BETWEEN THE METER SOCKET ENCLOSURE, SERVICE EQUIPMENT, OR GROUNDING ELECTRODE CONDUCTOR TO THE WATER IN THE POOL AT FOUR DIFFERENT LOCATIONS. IF THE VOLTAGE IS ZERO AT ALL LOCATIONS, THEN THE POOL SHELL BONDING IS ACCEPTABLE. IF VOLT READING IS NOT ZERO, CORRECT.

1. VERIFY THAT THE PERIMETER DECKING AROUND THE POOL IS BONDED TO THE SERVICE NEUTRAL. d. CONTRACTOR TO DETERMINE THE NEUTRAL-TO-EARTH VOLTAGE BY PLACING ONE LEAD OF THE VOLT METER TO THE METER SOCKET ENCLOSURE, SERVICE EQUIPMENT, OR GROUNDING ELECTRODE CONDUCTOR, AND THE OTHER LEAD TO A POINT IN THE EARTH THAT IS AT LEAST 15 FT FROM ANY METAL PARTS IN THE EARTH. THE VOLTAGE READING SHOULD BE LESS THAN 3 VOLTS. MEASURE THE VOLTAGE BETWEEN THE METER SOCKET ENCLOSURE, SERVICE EQUIPMENT, OR GROUNDING ELECTRODE CONDUCTOR TO THE PERIMETER DECKING TO AT LEAST SIX POINTS (6, 12, 18, 24, 30, AND 36 INCHES FROM THE POOL WATER) AT TWO LOCATIONS AROUND THE POOL. IF VOLT READING IS NOT ZERO, CORRECT.

G. WIRING DEVICES AND COMPONENTS:

1. STARTERS AND CONTACTORS: TO BE NEMA OR IEC RATED (NO GENERAL PURPOSE). 2. ALL PANELS SHALL BE OF COPPER BUS CONSTRUCTION INCLUDING COPPER BUS AND NEUTRAL BARS. 3. ALL RECEPTACLES AND SWITCHES SHALL BE COMMERCIAL GRADE WITH 20A RATING.

4. ALL RECEPTACLE AND SWITCH COVERS SHALL BE WHITE AND STANDARD COMMERCIAL GRADE. 5. EQUIPMENT STARTERS AND RELATED CONTROL AND WIRING SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. OVERLOAD HEATERS SHALL BE INSTALLED IN ACCORDANCE WITH NAMEPLATE DATA ON EQUIPMENT. STARTERS SHALL BE INSTALLED AS DIRECTED BY THE POOL CONTRACTOR.

6. ALL DISCONNECT SWITCHES SHALL BE HEAVY-DUTY WITH DUAL ELEMENT TIME DELAY FUSES AS NOTED ON THE ONE-LINE DIAGRAM. FUSE SIZE TO BE AS SHOWN OR AS REQUIRED TO MATCH LOAD CONDITIONS. H. MISCELLANEOUS AND GENERAL

1. NO SPLICES SHALL BE ALLOWED UNLESS EXEMPTED PER NEC. CONFIRM WITH ENGINEER. 2. THE ELECTRICAL DRAWINGS ARE NOT TO BE USED FOR ROOM DIMENSIONS AND EQUIPMENT PLACEMENT. REFERENCE THE APPROPRIATE ARCHITECTURAL, STRUCTURAL OR MECHANICAL PLANS, DRAWINGS OR SCHEMATIC. VERIFY ALL LOCATIONS WITH ENGINEER BEFORE INSTALLING CONDUIT, EQUIPMENT, ETC.

3. IT IS THE RESPONSIBILITY OF THE POOL CONSTRUCTION AND ELECTRICAL CONTRACTOR TO FAMILIARIZE HIMSELF WITH THE INSTALLATION AND TO ENSURE IT IS PROPER FOR ANY GIVEN SITUATION WHICH MAY VARY FROM THE DETAILS OR THE DRAWINGS. CONTRACTORS ARE ADVISED TO COMPLETELY SURVEY THE WORK AREA TO IDENTIFY ANY UPCOMING PROBLEMS.

4. COORDINATE MOUNTING HEIGHT OF ALL EXTERIOR LIGHTING FIXTURES WITH ARCHITECTURAL ELEVATION DRAWINGS.

5. ELECTRICAL CONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS WHEN THEY BECOME DUE AND SHALL NOT COVER ANY WORK UNTIL APPROVED BY THE INSPECTION AUTHORITY.

6. ANY AND ALL FEES ASSOCIATED WITH THE ELECTRICAL WORK INCLUDING CONSTRUCTION AND INSPECTIONS SHALL BE PAID FOR BY THE ELECTRICAL CONTRACTOR IN ORDER TO DELIVER AND COMPLETE

THE FINISHED BUILDING, READY FOR OCCUPANCY AND 100% USAGE. 7. ANY COSTS DUE TO THE LACK OF COOPERATION AMONG TRADES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

8. REFER TO THE LATEST ARCHITECTURAL DRAWINGS FOR EXACT WALL LOCATIONS, DIMENSIONS, AND CONFIGURATIONS: DOOR SWINGS FOR SWITCH LOCATION, REFLECTED CEILING PLANS FOR LIGHT FIXTURE LOCATIONS.

9. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL ELECTRICAL EQUIPMENT LOADS PRIOR TO ROUGH-IN AND SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST.

10. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY ALTERATIONS REQUIRED BY THE OWNER, ARCHITECT, OR FIELD CONDITIONS. 11. ALL EQUIPMENT SHALL BE NEW AND SHALL HAVE APPROPRIATE UNDERWRITERS LABORATORIES (UL) LABEL

AND SHALL CONFORM TO THE LATEST INDUSTRY STANDARDS. 12. ELECTRICAL CONTRACTOR SHALL MAINTAIN ALL WORKING CLEARANCES FOR ALL ELECTRICAL EQUIPMENT PER

NEC REQUIREMENTS. 13. AT THE COMPLETION OF WORK, THE ELECTRICAL CONTRACTOR SHALL PROVIDE COMPLETE, ACCURATE, TYPED

PANELBOARD DIRECTORIES, AND AS-BUILT DRAWINGS. 14. ANY DEVIATION FROM PLANS WITHOUT PRIOR APPROVAL OF THE ARCHITECT/ENGINEER SHALL BE CAUSE FOR REJECTION OF MATERIALS AND/OR METHODS AND ANY COSTS INCURRED TO CORRECT SUCH DEVIATION TO

THE SATISFACTION OF THE ARCHITECT/ENGINEER SHALL BE THE CONTRACTOR'S RESPONSIBILITY. 15. COST TO INSTALL TEMPORARY POWER AND LIGHTING PER OSHA STANDARDS AND TEMPORARY POWER TO

CONSTRUCTION TRAILER SHALL BE INCLUDED IN ELECTRICAL CONTRACTOR'S BID. 16. ALL DIMENSIONS ARE FROM FINISHED FLOOR OR FACE OF STUD TO CENTER OF DEVICE UNLESS OTHERWISE

17. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION OF THERMOSTATS AND OTHER SPECIAL EQUIPMENT OR CONTROLS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ALL CONDUITS, JUNCTION BOXES, WIRING, AND DISCONNECT SWITCHES AND THERMOSTAT JUNCTION BOXES.

**SELECTRICAL GENERAL NOTES:** 

**DETAIL NOTES:** 

1. FOR RENOVATION PROJECTS UTILIZING AND/OR MODIFYING EXISTING PANELBOARD CIRCUITS, PRIOR TO ANY DEMOLITION OR NEW WORK, CONTRACTOR TO CONFIRM EXISTING PANELBOARD INDEX CIRCUITING UTILIZING ELECTRIC CIRCUIT TRACERS AND REPORT RESULTS TO ENGINEER FOR COMPARISON TO EXISTING CONDITIONS SHOWN ON THESE DRAWINGS.

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2. COORDINATE ALL WORK WITH OTHER ENGINEERS AND CONTRACTORS ON-SITE THAT ARE OUTSIDE BUT AFFECTED BY THIS SCOPE AS REQUIRED.

3. ALL METAL PARTS IN SWIMMING POOL AREAS AND EQUIPMENT ROOM SHALL BE BONDED WITH #8 SOLID BARE COPPER INCLUDING BUT NOT LIMITED TO ALL PUMPS, HEATERS, POOL AND LIGHTS, LADDERS, HAND RAILS, AND REBAR PER REQUIREMENTS OF NEC 680.6 AND 680.26.

4. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY LOCATION OF SWIMMING POOL LIGHT TOGGLE SWITCHES AND MAINTAIN CLEARANCES PER REQUIREMENTS OF NEC 680.22 AND EMERGENCY OFF TOGGLE SWITCH

5. ELECTRICAL CONTACTORS WITH 120V COILS AND STARTERS WITH 120V COILS SHALL BE SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.

6. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY LOCATION OF POOL WATER LEVEL SENSORS WITH POOL CONTRACTOR. LOW VOLTAGE CONTROL WIRING SHALL BE PROVIDED BY THE POOL CONSTRUCTION

7. POOL LIGHT FIXTURES SHALL BE INSTALLED PER REQUIREMENTS OF NEC 680.23 FOR UNDERWATER LIGHTING FIXTURES.

8. BONDING OF ALL POOL EQUIPMENT AND CONSTRUCTION SHALL BE INSTALLED PER REQUIREMENTS OF NEC 680.6 AND 680.26.

9. WHERE CONNECTING CONDUCTORS TO MOTOR TERMINALS, USE LIQUIDTITE CONDUIT (3' MAXIMUM) FROM THE RIGID CONDUIT TO THE MOTOR J-BOX. 10. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY LOCATION OF TIMER AND EMERGENCY STOP

PUSHBUTTON AND MAINTAIN CLEARANCE PER REQUIREMENTS OF NEC 680.41.

11. ELECTRICAL CONTRACTOR SHALL PERFORM ALL FINAL POWER AND CONTROL WIRING, INCLUDING LOW VOLTAGE, TERMINATIONS AT POOL CONTROL PANEL, CONTROL J-BOX, PCP STARTER, EMERGENCY STOP PUSHBUTTON, TIMER AND WATER LEVEL SENSORS AS REQUIRED FOR PROPER NORMAL AND EMERGENCY SHUTDOWN OPERATION OF ALL PUMPS.

12. ELECTRICAL INSPECTOR SHALL APPROVE BONDING OF REINFORCING POOL FITTINGS AND CONDUIT PRIOR TO THE APPROVAL OF REINFORCING STEEL FOR POURING OF CONCRETE OR GUNITE.

13. VENTILATE POOL CHEMICAL STORAGE AREAS PER LOCAL, STATE, AND INTERNATIONAL MECHANICAL CODE MINIMUMS. REFER TO MECHANICAL.

14. ELECTRICAL WIRING OR CONDUCTORS SHALL NOT BE ROUTED UNDERGROUND BENEATH THE POOL

15. NO OUTLETS SHALL BE LOCATED WITHIN 10 FT OF POOL. ALL OUTLETS 10 FT TO 20 FT FROM POOL TO BE GFCI PROTECTED. GFCI PROTECTION MUST BE PROVIDED PER NEC AND IN COMPLIANCE WITH LOCAL CODES FOR ALL LIGHTING CIRCUITS, MOTORS, EQUIPMENT, OUTLETS, AND ELECTRICAL CIRCUITS IN THE POOL AREA.

16. PROVIDE FLOW SWITCH WITH HEATER(S) TO INTERLOCK THE CIRCULATION PUMP WITH THE CHEMICAL FEEDERS AND WITH THE HEATER.

17. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT FROM J-BOX TO LIGHT NICHE AND PROVIDE JUNCTION BOX AND HOOK UP.

18. ELECTRICAL CONTRACTOR SHALL PROVIDE LIGHT SWITCHES FOR UNDERWATER LIGHTS IN A LOCATION WHERE THEY ARE NOT ACCESSIBLE BY BATHERS. (SWITCH LOCATION DETERMINED BY OWNER / ARCHITECT).

1. RUN 1" DIAMETER SCHEDULE 40 PVC CONDUIT FROM LIGHT TO JUNCTION BOX AT DECK

2. BOND NICHE TO JUNCTION BOX WITH #8 INSULATED COPPER WIRE WITHIN CONDUIT

3. BOND NICHE TO REBAR WITH #8 CONTINUOUS SOLID COPPER WIRE PER N.E.C. SECTION

5. PROVIDE WIDE SWEEPS ON BENDS WITH A TOTAL OF NO MORE THAN 270 DEGREES. ALL

6. CORD WRAP TO FACILITATE BULB CHANGE OUT ON DECK. CORD MUST BE LONG

7. U.L. APPROVED WET NICHE UNDERWATER LIGHT WITH 1" HUB CONNECTION AND DRAINAGE HOLES IN FACE OF RING OF LIGHT. INSTALLED IN ACCORDANCE WITH NEC

8. USE 3M SCOTCHCAST POTTING KIT 2135 IN THE FORMING SHELL AND JUNCTION BOX.

6'-0" MIN

THREADED

WATERPROOF

CONNECTION

9. PROVIDE A STRAIN RELIEF AT JUNCTION BOX FOR UNDERWATER LIGHT FIXTURE CORD.

ENOUGH SO LIGHT CAN BE PLACED ON DECK 2 FEET FROM EDGE.

**ELECTRICAL JUNCTION BOX** 

THEN TO BLANK FACE G.F.I. DEVICE WHEN SHOWN.

PER N.E.C. SECTION 680.

ART. 680 - 23.

12" MIN ABOVE

WATER LEVEL

WATERTIGHT

CONDUIT

4. LIGHT CORD LENGTH 150'-0" (MAXIMUM).

BENDS SHALL HAVE A MINIMUM 36" RADIUS.

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#### MOUNTAIN HOME **AQUATICS FACILITY**

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

**KEY PLAN** 

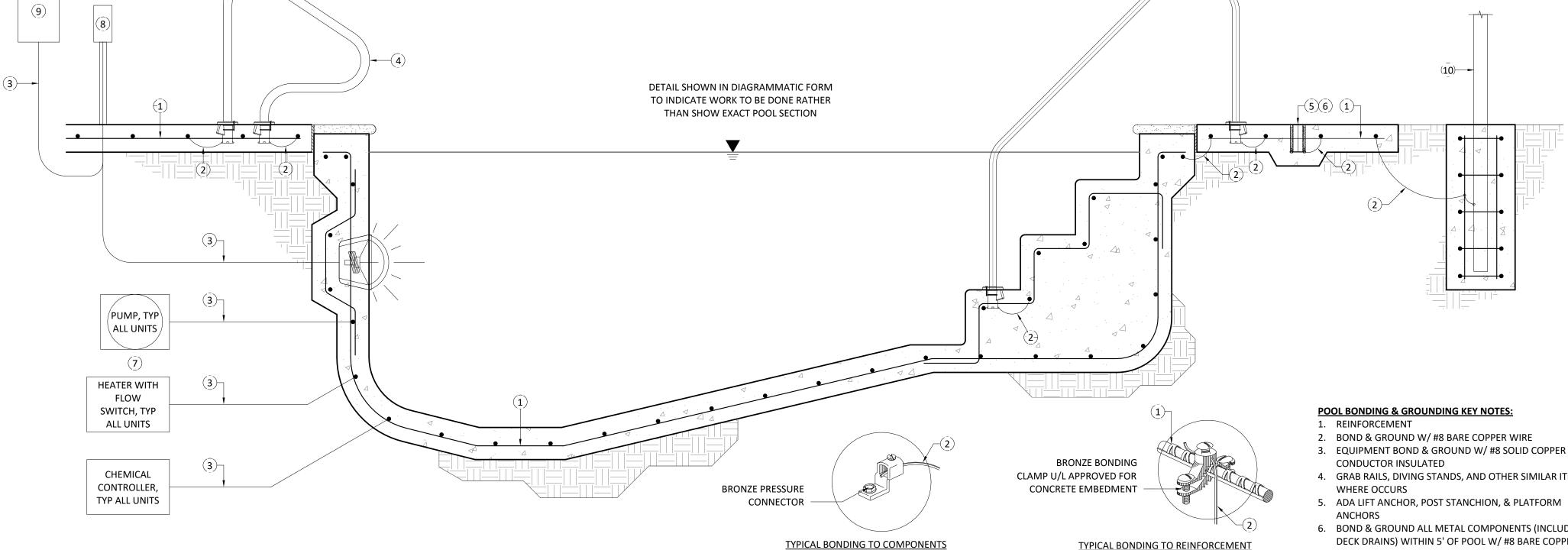
ISSUES BID SET PHASE DATE MARCH 31, 2022 **JOB NUMBER** BE206003

DESCRIPTION MARK DATE 05/11/2 ADDENDUM #1 022

**POOL ELECTRICAL** NOTES & DETAILS

SHEET NUMBER

SHEET NAME



A. POOL CONTRACTOR SHALL BE RESPONSIBLE FOR BONDING AND GROUNDING ALL EQUIPMENT AND METAL ITEMS IN OR NEAR THE POOL, INCLUDING: LIGHTS, NICHES, RAILINGS, ADA LIFT ANCHORS, REINFORCING STEEL, ETC.

E. NO OUTLETS SHALL BE LOCATED WITHIN 10 FT OF POOL. ALL OUTLETS 10 FT TO 20 FT FROM POOL TO BE GFCI PROTECTED. GFCI PROTECTION MUST BE PROVIDED PER NEC AND IN COMPLIANCE WITH LOCAL CODES FOR ALL

F. ELECTRICAL CONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE AND CONNECTIONS TO ALL PUMP MOTORS, CIRCUIT BREAKERS, DISCONNECTS, PANELS, RELAYS, CONTROLLERS, HEATERS, OR OTHER POOL EQUIPMENT IN

I. ELECTRICAL CONTRACTOR SHALL PROVIDE LIGHT SWITCHES FOR UNDERWATER LIGHTS IN A LOCATION WHERE THEY ARE NOT ACCESSIBLE BY BATHERS. (SWITCH LOCATION DETERMINED BY OWNER / ARCHITECT).

B. POOL CONTRACTOR SHALL PROVIDE CONDUIT AND SUFFICIENT LENGTH OF CORD FROM EACH UNDERWATER LIGHT TO ITS J-BOX AND TO ALLOW FOR LIGHT TO REACH DECK FOR RE-LAMPING

3. EQUIPMENT BOND & GROUND W/ #8 SOLID COPPER

4. GRAB RAILS, DIVING STANDS, AND OTHER SIMILAR ITEMS

6. BOND & GROUND ALL METAL COMPONENTS (INCLUDING DECK DRAINS) WITHIN 5' OF POOL W/ #8 BARE COPPER

7. ANY METAL PARTS OF ELECTRICAL EQUIPMENT (PUMPS, HEATERS, CHEMICAL CONTROLLERS, AND EQUIPMENT ANCHORS) IN CONTACT WITH POOL WATER CIRCULATION SHALL BE BOND & GROUNDED TO POOL SHELL

8. GROUND BUS IN POOL J-BOX, TYP ALL UNITS

9. GROUND BUSS IN POOL PANEL 10. FENCE POST

TYPICAL POOL BONDING & GROUNDING - NEC

ELECTRICAL UNDERWATER LIGHT RIMING DETAIL

STAINLESS STEEL

UNDERWATER

NO LEAK FLANGE

LIGHT NICHE WITH

AND TIE WIRE HOLES

TYPICAL BONDING TO REINFORCEMENT

#### **GENERAL NOTES:**

GENERAL: REFER ALSO TO GENERAL POOL ELECTRICAL NOTES.

- A. ALL RECEPTACLES TO BE WATERPROOF AND GFCI. PROVIDE STANDS SECURED TO FLOOR SLAB FOR EXTERIOR INSTALLATIONS WITHOUT
- B. CORE DRILL FOR WALL-PENETRATIONS AS REQUIRED.
- C. ALL CONDUIT TO HAVE THREE COATS OF PAINT: PRIMER AND TWO FINAL EPOXY COATS.
- D. PROVIDE LABELS FOR ALL EQUIPMENT POWERED BY RECEPTACLES.

#### KEY NOTES (ELECTRICAL PLANS):

GENERAL: REFER ALSO TO GENERAL POOL ELECTRICAL NOTES.

- 1. PROVIDE PENTAIR INTELLIBRITE WHITE LED DRY-NICHE UNDERWATER LIGHT FIXTURE WITH THREADED ENTRIES PER POOL EQUIPMENT DRAWINGS. BRANCH TO BE 2#12 THWN-2 CU AND #8G CU INSULATED IN 1" C. ALL CONDUIT ELECTRICAL CONNECTIONS TO LIGHT FIXTURES SHALL BE WATERTIGHT. CONDUIT SHALL BE NON-METALLIC PVC OR SEAL-TYPE WITH THREADED ENDS. PROVIDE TRANSFORMER FOR EACH SET OF THREE LIGHTS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 2. MAXIMUM THREE LIGHTS PER JUNCTION BOX. PROVIDE GROUNDED BUS IN POOL JUNCTION BOX. MINIMUM 12" AFF AND 5'-0" FROM POOL. ROUTE TO GROUND BUS BAR JUNCTION BOX. PROVIDE GROUND BUS BAR IN NEMA-4X 12" x 12" x 12" x 12" ENCLOSURE. PROVIDE #8 INSULATED CU CONNECTION TO PANEL. BOXES NOT TO SCALE ON DRAWING. LOCATIONS ARE APPROXIMATE.
- 3. ROUTE TO POOL LIGHTING CONTROLLER SWITCH AND CONNECT AS REQUIRED FOR BYPASS LIGHTING CONTROL. PROVIDE ENGRAVED SWITCH PLATE "UNDERWATER POOL LIGHTING BYPASS". PROVIDE LIGHTING CONTROL PANEL (LCP) IN EQUIPMENT ROOM, EATON FIFTHLIGHT TECHNOLOGY RELAY PANEL FLT RPA 24R AND LOW VOLTAGE WALL SWITCHES WITH INDICATOR LIGHTS FOR MANUAL ON/OFF CONTROL OF THE UNDERWATER LIGHTS FOR EACH BODY OF WATER OR APPROVED EQUAL/ACUITYCONTROL BLUE BOX GR1416 LT ENC SM NE4 ENCLOSURE AND GR1416 LT INT 16NCL DTC DV D14 INTERIOR OR APPROVED EQUAL. PROVIDE INDIVIDUAL CONTROL SWITCHES FOR EACH POOL/SPA AS APPLICABLE.



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PROJECT INFORMATION

## MOUNTAIN HOME AQUATICS FACILITY

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

KEY PLAN

ISSUES

PHASE		BID SE
DATE		MARCH 31, 202
JOB NUMBER		BE20600
MARK	DATE	DESCRIPTION

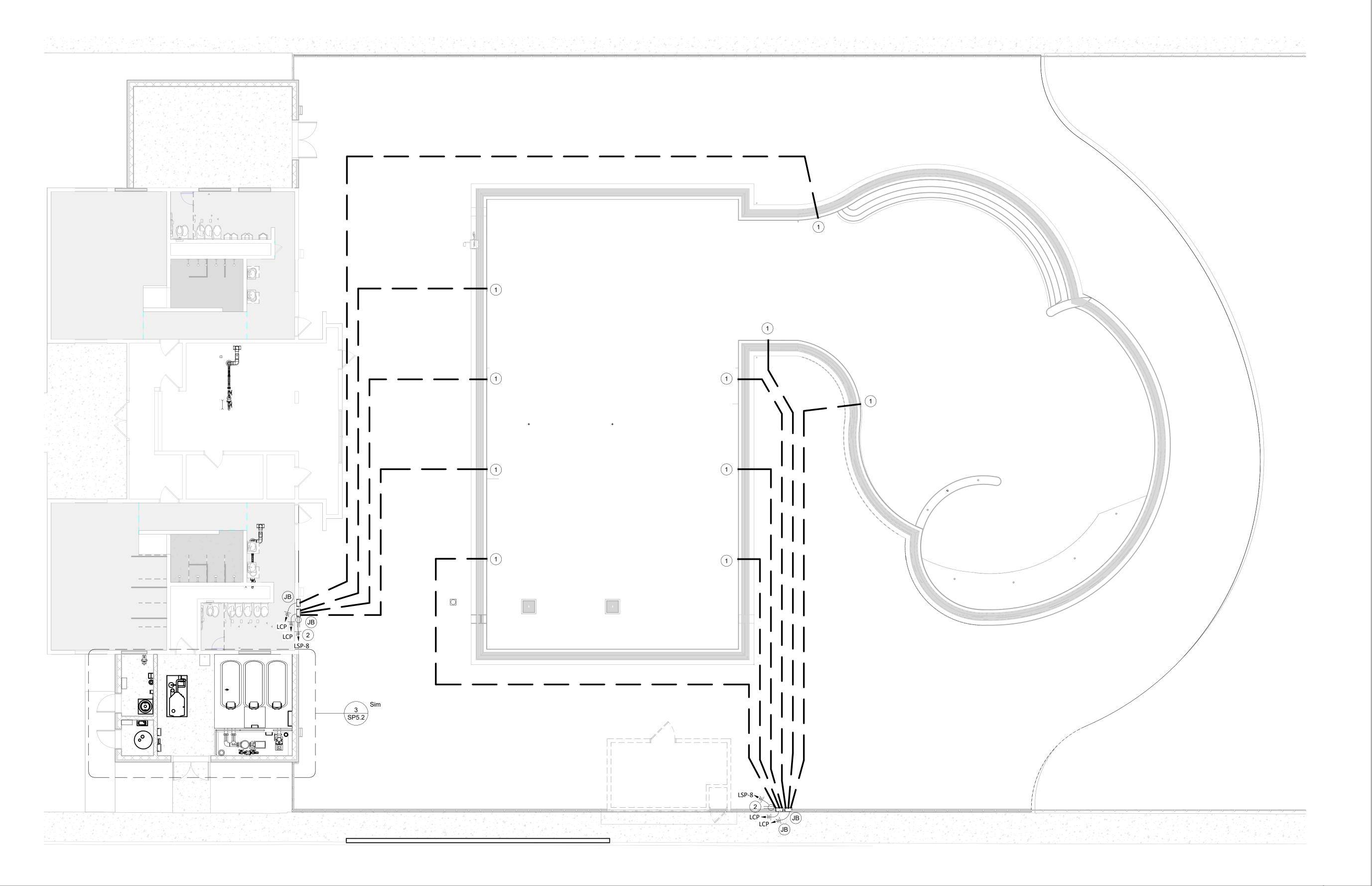
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05/11/2 ADDENDUM #1
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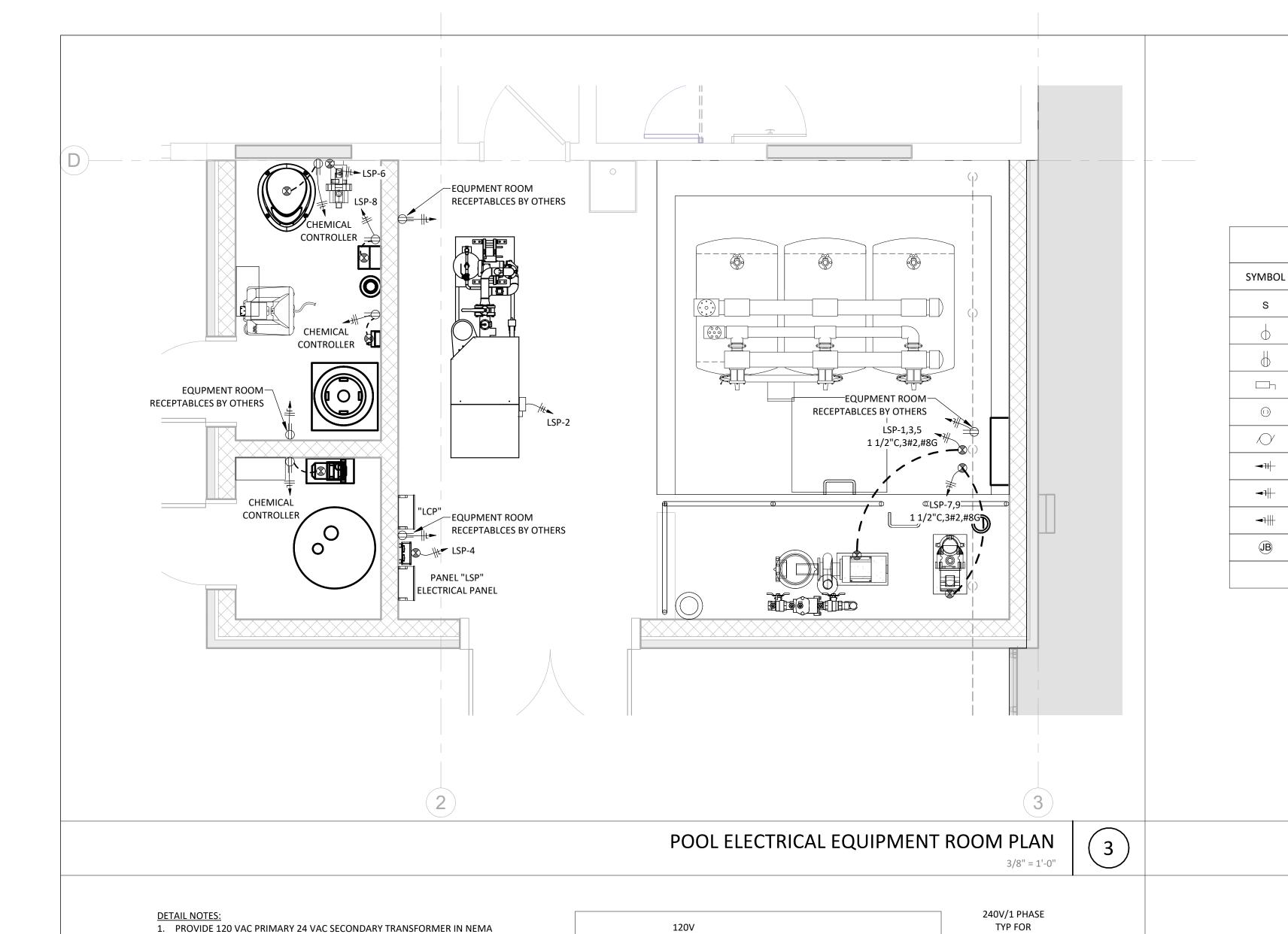
SHEET NAME

POOL SITE ELECTRICAL PLAN

SHEET NUMBER

SP5.1





**AUXILIARY MIC** 

(CR)

UL LISTED GENERAL PURPOSE

POWER FOR RELAYS. CONTROL

WIRING IN CONDUIT, TYP.

RELAY IN NEMA ENCLOSURE. TYP.

Z Z

— ( CR )

HAND-OFF-AUTO - SWITCH, TYP.

24VAC

TYP EACH

HEATER

ENCLOSURE WITH PRIMARY FUSE PROTECTION.

3. THE CHEMICAL FEEDERS SHALL DERIVE THEIR POWER DIRECTLY FROM THE

120V N

120V

CHLORINE GENERATOR

CONTACTS TO BE RATED AT 20A FOR

CONTINUOUS OPERATION. TYP.

( CR )

4-20ma 2-WIRE

SHIELDED CABLE

120V 120V

ACID

METERING

PUMP

( CR )

CONTROLLER

-( cr )

120V 120V

CHLORINE

FEED

METERING

PUMP

2. PROVIDE ONE CONTROL SYSTEM PER POOL/SPA.

CHEMICAL CONTROLLER.

120V

WATER LEVEL

CONTROLLER

**GENERAL NOTES:** 

GENERAL: REFER ALSO TO GENERAL POOL ELECTRICAL NOTES.

- A. ELECTRICAL SERVICE TO PANEL BY OTHERS. CONTRACTOR TO CONFIRM AND COORDINATE THE ELECTRICAL SERVICE VOLTAGE/PHASE SERVING THE POOL EQUIPMENT ROOM PANEL(S) AND EQUIPMENT BEFORE ORDERING ANY NEW PANEL(S) OR POOL ELECTRICAL EQUIPMENT. CONSULT ENGINEER IF THERE IS A DISCREPANCY BETWEEN THE ELECTRICAL SERVICE AND POOL ELECTRICAL PANEL(S) AND POOL EQUIPMENT VOLTAGE/PHASE.
- B. ALL POWER CONDUCTORS TO BE 3/4"C, 2#12 OR 3#12 (1-OR 3-PHASE),#12G UNLESS OTHERWISE NOTED.
- C. PROVIDE ALL REQUIRED LOW VOLTAGE CONTROL WIRING MIN 3/4"C,2#4,#14G FOR, BUT NOT LIMITED TO, FLOW METERS, CHEMICAL CONTROL RELAY CIRCUITS, ETC. FOLLOW EQUIPMENT MANUFACTURERS' WRITTEN INSTRUCTIONS.
- D. ALL RECEPTACLES TO BE WATERPROOF AND GFCI. PROVIDE STANDS SECURED TO FLOOR SLAB FOR EXTERIOR INSTALLATIONS WITHOUT WALLS.
- E. CORE DRILL FOR WALL-PENETRATIONS AS REQUIRED.
- F. ALL CONDUIT TO HAVE THREE COATS OF PAINT: PRIMER AND TWO FINAL EPOXY COATS.
- G. PROVIDE LABELS FOR ALL EQUIPMENT POWERED BY RECEPTACLES.
- H. LABEL PANELS, CABINETS, DEVICES, CONTRACTORS, AND OTHER SPECIFICALLY DESIGNATED EQUIPMENT TO CLEARLY INDICATE THE FEEDING PANEL AND CIRCUIT NUMBER. FOR FEEDERS LABEL CONDUIT DESIGNATIONS ON BOTH VISIBLE ENDS OF CONDUIT RUNS WHERE CONDUITS TERMINATE AT DESIGNED ENCLOSURES OR EQUIPMENT, INCLUDING PULL AND SPLICE BOXES.
- I. PROVIDE JUNCTION BOX AND WIRING FOR FLOW METERS PER MANUFACTURER'S LITERATURE. J. STARTS, DISCONNECTS, PANELBOARDS, AND CONTROL PANELS INSIDE POOL EQUIPMENT ROOMS INCLUDING CHEMICAL

REPORT RESULTS TO ENGINEER FOR COMPARISON TO EXISTING CONDITIONS SHOWN ON THESE DRAWINGS.

STORAGE ROOMS TO BE NEMA 4X. ALL OUTDOOR OF SUCH TO BE NEMA 3R. K. FOR RENOVATION PROJECTS UTILIZING AND/OR MODIFYING EXISTING PANELBOARD CIRCUITS, PRIOR TO ANY DEMOLITION OR NEW WORK, CONTRACTOR TO CONFIRM EXISTING PANELBOARD INDEX CIRCUITING UTILIZING ELECTRIC CIRCUIT TRACERS AND

#### **KEY NOTES (ELECTRICAL PLANS):**

GENERAL: REFER ALSO TO GENERAL POOL ELECTRICAL NOTES.

1. ROUTE TO POOL LIGHTING CONTROLLER SWITCH AND CONNECT AS REQUIRED FOR BYPASS LIGHTING CONTROL. PROVIDE ENGRAVED SWITCH PLATE "UNDERWATER POOL LIGHTING BYPASS". PROVIDE LIGHTING CONTROL PANEL (LCP) IN EQUIPMENT ROOM, EATON FIFTHLIGHT TECHNOLOGY RELAY PANEL FLT RPA 24R AND LOW VOLTAGE WALL SWITCHES WITH INDICATOR LIGHTS FOR MANUAL ON/OFF CONTROL OF THE UNDERWATER LIGHTS FOR EACH BODY OF WATER OR APPROVED EQUAL/ACUITYCONTROL BLUE BOX GR1416 LT ENC SM NE4 ENCLOSURE AND GR1416 LT INT 16NCL DTC DV D14 INTERIOR OR APPROVED EQUAL. PROVIDE INDIVIDUAL CONTROL SWITCHES FOR EACH POOL/SPA AS APPLICABLE.

- 2. EQUIPMENT ROOM LIGHTING BY OTHERS.
- 3. ELECTRICAL SERVICE TO PANEL BY OTHERS. PANELBOARD IS TO BE A EATON MODEL POW-R-LINE 4X PANELBOARD OR AQUATICS ELECTRICAL ENGINEER APPROVED EQUIVALENT. COORDINATE PANEL REQUIREMENT WITH ANY BUILDING ELECTRICAL ENGINEERS/CONTRACTORS AS APPLICABLE.
- 4. PROVIDE EMERGENCY STOP BUTTONS FOR SPA. SWITCH TO BE MUSHROOM TYPE WITH KEYED RESET. COORDINATE LOCATION WITH OWNER AND ARCHITECT. PROVIDE 3/4" CONDUIT AND CONTROL WIRING TO EQUIPMENT ROOM. SEE CONTROL WIRING DETAIL.

**ELECTRICAL NOTES & SYMBOLS LEGEND** 

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MOUNTAIN HOME **AQUATICS FACILITY** 

> 160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

**KEY PLAN** 

5 HEAT

6 A/C

7 KITCH

8 ELEV

9 125%

14

16

18

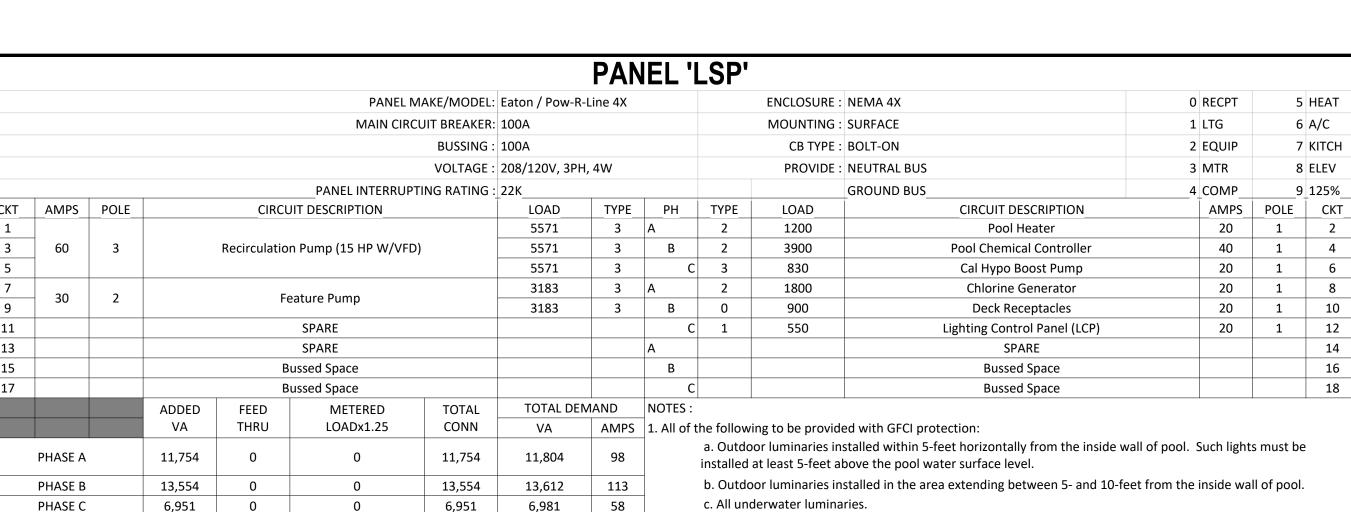
ISSUES **BID SET** PHASE DATE MARCH 31, 2022 **JOB NUMBER** BE206003

MARK DATE DESCRIPTION 05/11/2 ADDENDUM #1 022

SHEET NAME

POOL ELECTRICAL **EQUIPMENT PLAN** 

**SHEET NUMBER** 



CKT AMPS POLE 6,951 6,951 6,981 PHASE C 2. Conductors on the load side of a ground-fault circuit interrupter are permitted to occupy raceways, boxes, or

ELECTRICAL SYMBOLS LEGEND

SINGLE POLE MOTOR RATED SWITCH, 48" HEIGHT

SINGLE RECEPTACLE,  $20A/240V/1\emptyset$ , 18" A.F.F.

DUPLEX RECEPTACLE,  $20A/120V/1\emptyset$ , 18" A.F.F.

MOTOR BY OTHERS, CONTRACTOR CONNECTS

HOMERUN W/ GROUND, NEUTRAL, HOT

HOMERUN W/ GROUND, 2 HOTS

HOMERUN W/ GROUND, 3 HOTS

ALL SYMBOLS MAY NOT APPEAR ON PLANS

JUNCTION BOX

DESCRIPTION

DISCONNECT SWITCH

**EQUIPMENT CONNECTION** 

TOTAL 32,259 32,259 90

3. Grounding conductors are permitted in the same raceway, box or enclosure. 4. Conductors that supply pool equipment, such as pool pump motors that do not have GFCI protection, shall not be

enclosures containing only conductors protected by ground-fault circuit interrupters.

nstalled in the same conduits and junction and pull boxes with conductors having GFCI protection that supply underwater 5. Electrical service to panel by others. Contractor to confirm and coordinate the electrical service voltage/phase serving

the pool equipment room panel(s) and equipment before ordering any new panel(s) or pool electrical equipment. Consult engineer if there is a discrepancy between the electrical service and pool electrical panel(s) and pool equipment voltage/phase.

CONTROL WIRING DIAGRAM

EACH PUMP

PUMP

 $\sim\sim\sim\sim\sim\sim\sim\sim$ 

VFD OR PUMP

CONTROLLER

4

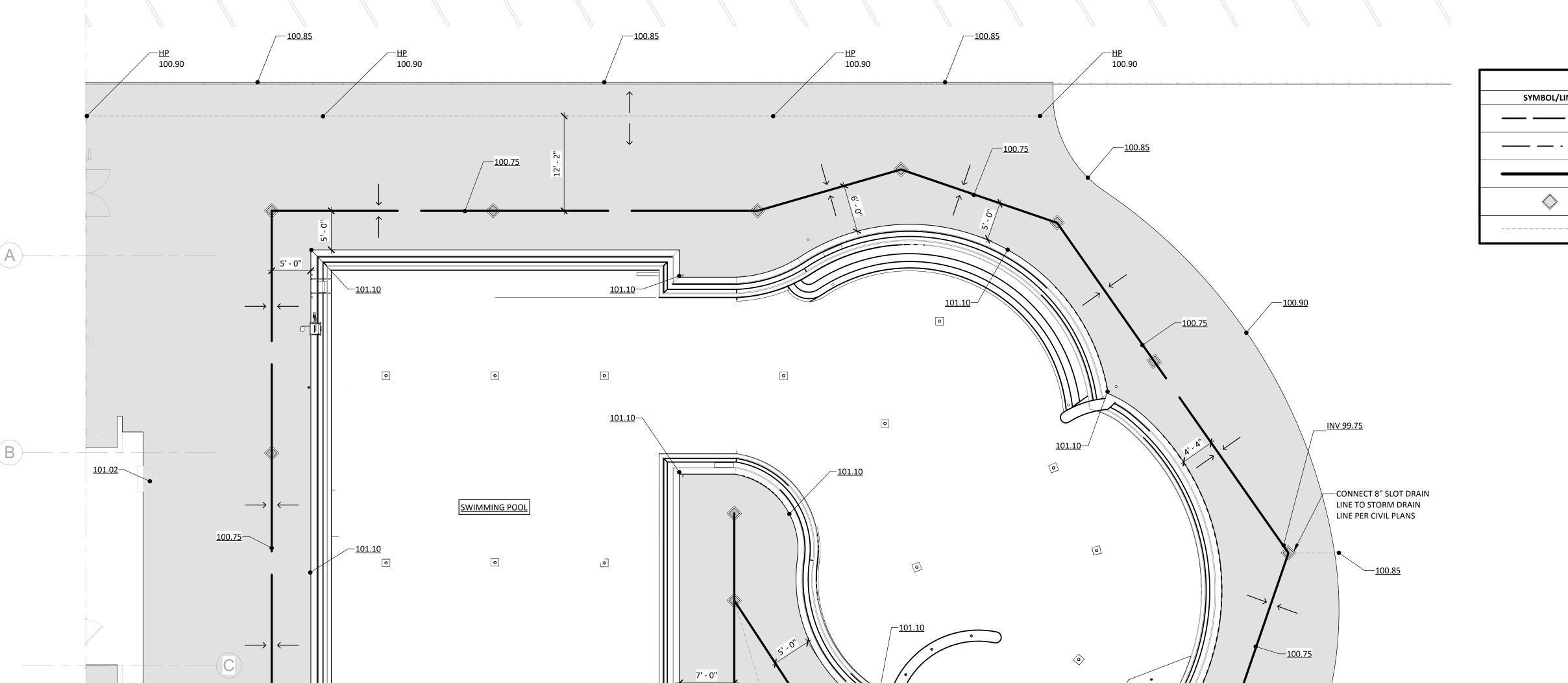
PANEL 'LSP' SCHEDULE

#### **POOL DECK GENERAL NOTES:**

- 1. POOL DECK TO SLOPE NO LESS THAN 1% FROM POOL EDGE TO SLOT DRAIN.
- 2. FOR POOL DECK AREA DRAINAGE WASTE CONNECTION REFER TO EXISTING AS-BUILT DRAWINGS. 3. ALL APPLICABLE STATE AND LOCAL LAWS AND CODES SHALL BE FOLLOWED.
- 4. ANY CONDITION NOT SPECIFICALLY COVERED IN THIS PLAN OR UNUSUAL CONDITIONS
- ENCOUNTERED DURING EXCAVATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER
- 5. POOL DECK TO HAVE A MEDIUM BROOM FINISH. CONTRACTOR TO PROVIDE TEST AREA FOR OWNER AND ENGINEER APPROVAL OF FINISH PRIOR TO CONCRETE PLACEMENT.

#### **DESIGN BASIS:**

1. 2018 INTERNATIONAL BUILDING CODE (I.B.C.)



100.75

100.75

<u>HP</u> 100.9

<u>HP</u> 100.89

<u> 100.75</u>

<u> 100.90</u>

<u>101.10</u>—

<u>100.75</u>

HP 100.9

POOL DECK PLAN LEGEND		
SYMBOL/LINE	DESCRIPTION	
	EXPANSION JOINT	
	CONTROL JOINT	
	SLOT DRAIN	
	SLOT DRAIN CATCH BASIN	
	HIGH POINT	



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#### MOUNTAIN HOME **AQUATICS FACILITY**

160 SOUTH 3RD EAST ST. MOUNTAIN HOME, IDAHO 83647

**KEY PLAN** 

ISSUES

PHASE		BID SE	
DATE		MARCH 31, 202	
JOB NUMBER		BE20600	
MARK	MARK DATE DESCRIPTION		
4	05/44/0	ADDENDUM #4	

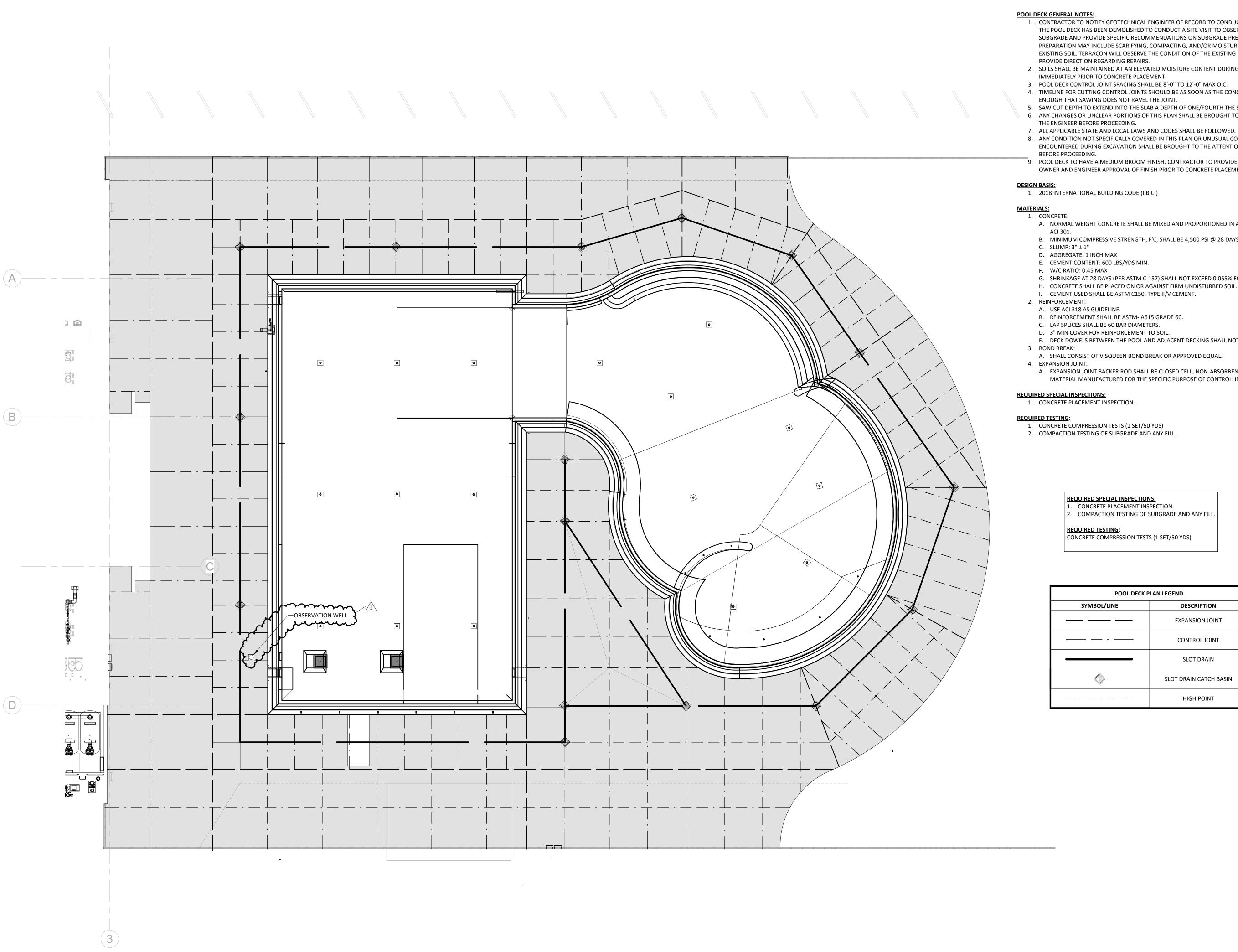
05/11/2 ADDENDUM #1 022

SHEET NAME

POOL DECK DRAINAGE PLAN

SHEET NUMBER

**SP6.0** 



- 1. CONTRACTOR TO NOTIFY GEOTECHNICAL ENGINEER OF RECORD TO CONDUCT A SITE VISIT ONCE THE POOL DECK HAS BEEN DEMOLISHED TO CONDUCT A SITE VISIT TO OBSERVE THE EXISTING SUBGRADE AND PROVIDE SPECIFIC RECOMMENDATIONS ON SUBGRADE PREPARATION. SUBGRADE PREPARATION MAY INCLUDE SCARIFYING, COMPACTING, AND/OR MOISTURE TREATING THE EXISTING SOIL. TERRACON WILL OBSERVE THE CONDITION OF THE EXISTING CONDUITS AND
- 2. SOILS SHALL BE MAINTAINED AT AN ELEVATED MOISTURE CONTENT DURING CONSTRUCTION AND IMMEDIATELY PRIOR TO CONCRETE PLACEMENT.
- 3. POOL DECK CONTROL JOINT SPACING SHALL BE 8'-0" TO 12'-0" MAX O.C.
- 4. TIMELINE FOR CUTTING CONTROL JOINTS SHOULD BE AS SOON AS THE CONCRETE IS HARD
- ENOUGH THAT SAWING DOES NOT RAVEL THE JOINT. 5. SAW CUT DEPTH TO EXTEND INTO THE SLAB A DEPTH OF ONE/FOURTH THE SLAB THICKNESS.
- 6. ANY CHANGES OR UNCLEAR PORTIONS OF THIS PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.
- 8. ANY CONDITION NOT SPECIFICALLY COVERED IN THIS PLAN OR UNUSUAL CONDITIONS ENCOUNTERED DURING EXCAVATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER
- 9. POOL DECK TO HAVE A MEDIUM BROOM FINISH. CONTRACTOR TO PROVIDE TEST AREA FOR OWNER AND ENGINEER APPROVAL OF FINISH PRIOR TO CONCRETE PLACEMENT.

1. 2018 INTERNATIONAL BUILDING CODE (I.B.C.)

- A. NORMAL WEIGHT CONCRETE SHALL BE MIXED AND PROPORTIONED IN ACCORDANCE WITH
- B. MINIMUM COMPRESSIVE STRENGTH, F'C, SHALL BE 4,500 PSI @ 28 DAYS

- E. CEMENT CONTENT: 600 LBS/YDS MIN.
- G. SHRINKAGE AT 28 DAYS (PER ASTM C-157) SHALL NOT EXCEED 0.055% FOR DRY CURING.
- H. CONCRETE SHALL BE PLACED ON OR AGAINST FIRM UNDISTURBED SOIL. I. CEMENT USED SHALL BE ASTM C150, TYPE II/V CEMENT.
- A. USE ACI 318 AS GUIDELINE.
- B. REINFORCEMENT SHALL BE ASTM- A615 GRADE 60.
- C. LAP SPLICES SHALL BE 60 BAR DIAMETERS.
- D. 3" MIN COVER FOR REINFORCEMENT TO SOIL.
- E. DECK DOWELS BETWEEN THE POOL AND ADJACENT DECKING SHALL NOT BE USED.
- A. SHALL CONSIST OF VISQUEEN BOND BREAK OR APPROVED EQUAL.
- A. EXPANSION JOINT BACKER ROD SHALL BE CLOSED CELL, NON-ABSORBENT COMPRESSIBLE MATERIAL MANUFACTURED FOR THE SPECIFIC PURPOSE OF CONTROLLING SEALANT DEPTH.

#### **REQUIRED SPECIAL INSPECTIONS:**

1. CONCRETE PLACEMENT INSPECTION.

- 1. CONCRETE COMPRESSION TESTS (1 SET/50 YDS)
- 2. COMPACTION TESTING OF SUBGRADE AND ANY FILL.

#### **REQUIRED SPECIAL INSPECTIONS:**

. CONCRETE PLACEMENT INSPECTION. 2. COMPACTION TESTING OF SUBGRADE AND ANY FILL.

#### REQUIRED TESTING:

CONCRETE COMPRESSION TESTS (1 SET/50 YDS)

POOL DECK PLAN LEGEND			
SYMBOL/LINE	DESCRIPTION		
	EXPANSION JOINT		
—————	CONTROL JOINT		
	SLOT DRAIN		
	SLOT DRAIN CATCH BASIN		
	HIGH POINT		



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**KEY PLAN** 

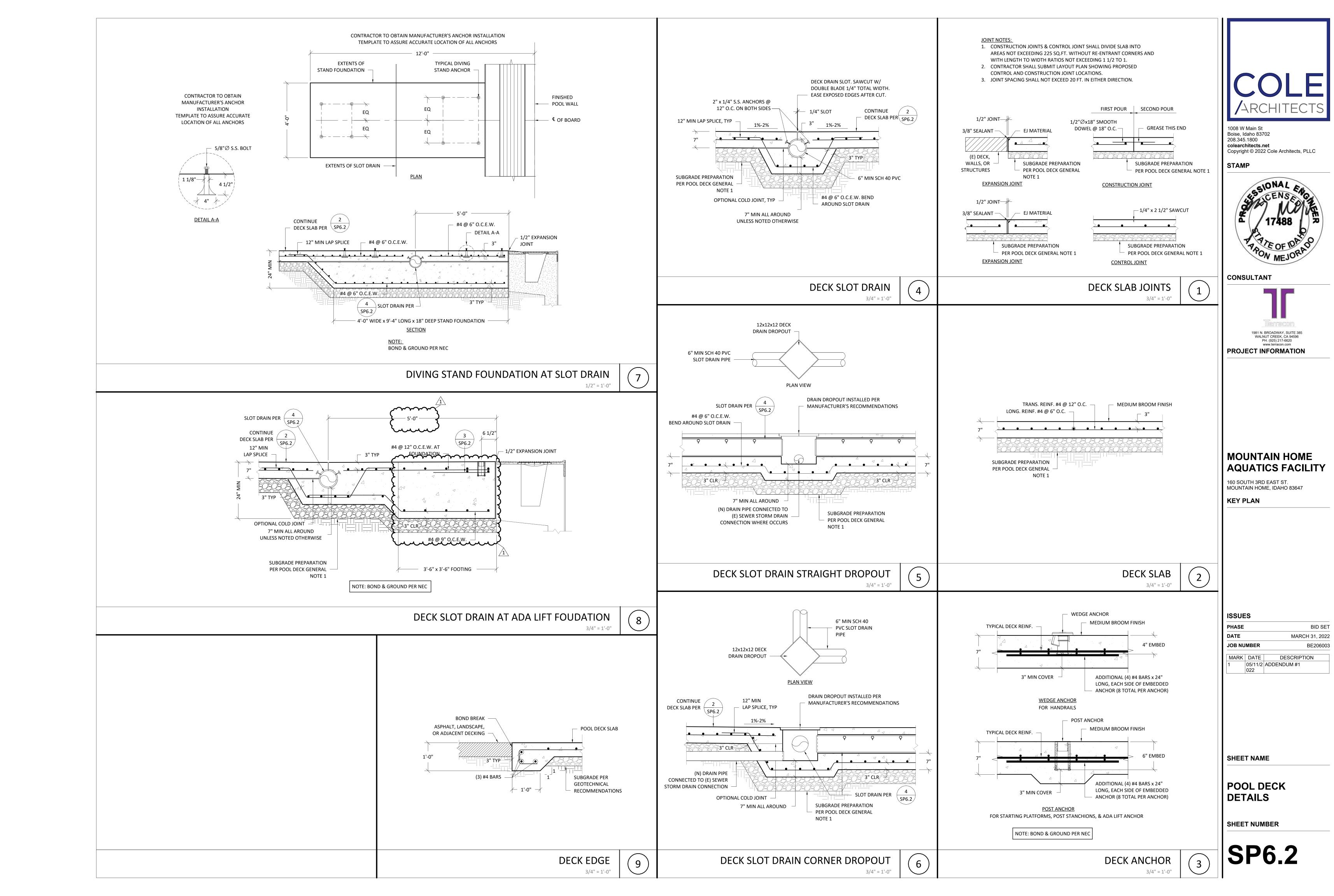
**ISSUES** 

PHASE BID SET MARCH 31, 2022 DATE **JOB NUMBER** BE206003 DESCRIPTION MARK DATE 05/11/2 ADDENDUM #1 022

SHEET NAME

POOL DECK JOINT PLAN

**SHEET NUMBER** 



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