

Repair Swimming Pool

Missouri School for the Blind

St. Louis, Missouri



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Collinsville St. Louis Belleville St. Charles
MISSOURI DESIGN FIRM LICENSE NO.: 001166

OWNER: STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

DEPARTMENT OF
ELEMENTARY & SECONDARY
EDUCATION

**PROJECT
MANAGEMENT:** OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN &
CONSTRUCTION

DESIGNER: OATES ASSOCIATES

PROJECT NUMBER: E2107-01

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OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

DEPARTMENT OF
ELEMENTARY &
SECONDARY EDUCATION

REPAIR SWIMMING POOL

MISSOURI SCHOOL FOR
THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E2107-01
SITE# 2011
FACILITY # 5012011005

REVISION: _____
DATE: _____
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CAD DWG FILE: G-002 _____
DRAWN BY: SLP _____
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SHEET TITLE:

SHEET INDEX

SHEET NUMBER:

G-002

INDEX OF SHEETS	
Sheet Number	Sheet Name
G-001	COVER SHEET
G-002	SHEET INDEX
G-003	LOCATION MAPS & KEY PLAN
A-001	ARCHITECTURAL GENERAL NOTES
A-002	OVERALL REFERENCE PLAN
A-003	ACCESSIBILITY LEGEND - RESTROOMS
A-100	REFERENCE PLAN
A-200	ENLARGED PLANS - POOL
A-201	ENLARGED PLANS-LOCKER RMS
A-202	ELEVATIONS - POOL & LOCKER RMS
A-203	PLUMBING ACCESSORIES
A-401	REFLECTED CEILING PLANS
A-500	FINISH LEGEND & SCHEDULE
A-501	FINISH PLANS - POOL
A-502	FINISH PLANS - LOCKER RMS
A-901	DOOR SCHED/DOOR, FRAME TYPES
A-902	PARTITION TYPES
A-903	DETAILS
AQ-000	POOL REFERENCE PLAN
AQ-001	POOL DEMOLITION & RENOVATION PLAN
AQ-100	POOL PLAN & SECTIONS
AQ-101	POOL DETAILS
AQ-200	POOL PIPING PLANS
AQ-300	POOL MECH. ROOM PLAN & SECTIONS
AQ-301	POOL MECHANICAL DETAILS
AQ-302	POOL MECHANICAL DETAILS
AQ-303	POOL MECHANICAL DETAILS
AQ-400	POOL SYSTEMS SCHEMATIC
S-001	GENERAL NOTES
S-002	GENERAL NOTES & DETAILS
S-100	DEMO PLAN
S-101	POOL PLAN
M-001	LEGEND & NOTES - MECHANICAL
M-100	OVERALL PLAN - MECHANICAL
M-200	ENLARGED POOL PLANS - MECHANICAL
M-201	BOY'S LOCKER ROOM PLANS - MECHANICAL
M-202	GIRL'S LOCKER ROOM PLANS - MECHANICAL
M-500	DETAILS AND SCHEDULES - MECHANICAL
M-501	DETAILS AND SCHEDULES - MECHANICAL
E-001	LEGEND, SYMBOLS, & NOTES - ELEC.
E-100	OVERALL PLAN - BASEMENT
E-200	ENLARGED POOL PLANS - ELECTRICAL
E-201	LOCKER ROOM PLANS - ELECTRICAL
E-600	ELECTRICAL SCHEDULES
E-601	PANELBOARD SCHEDULES

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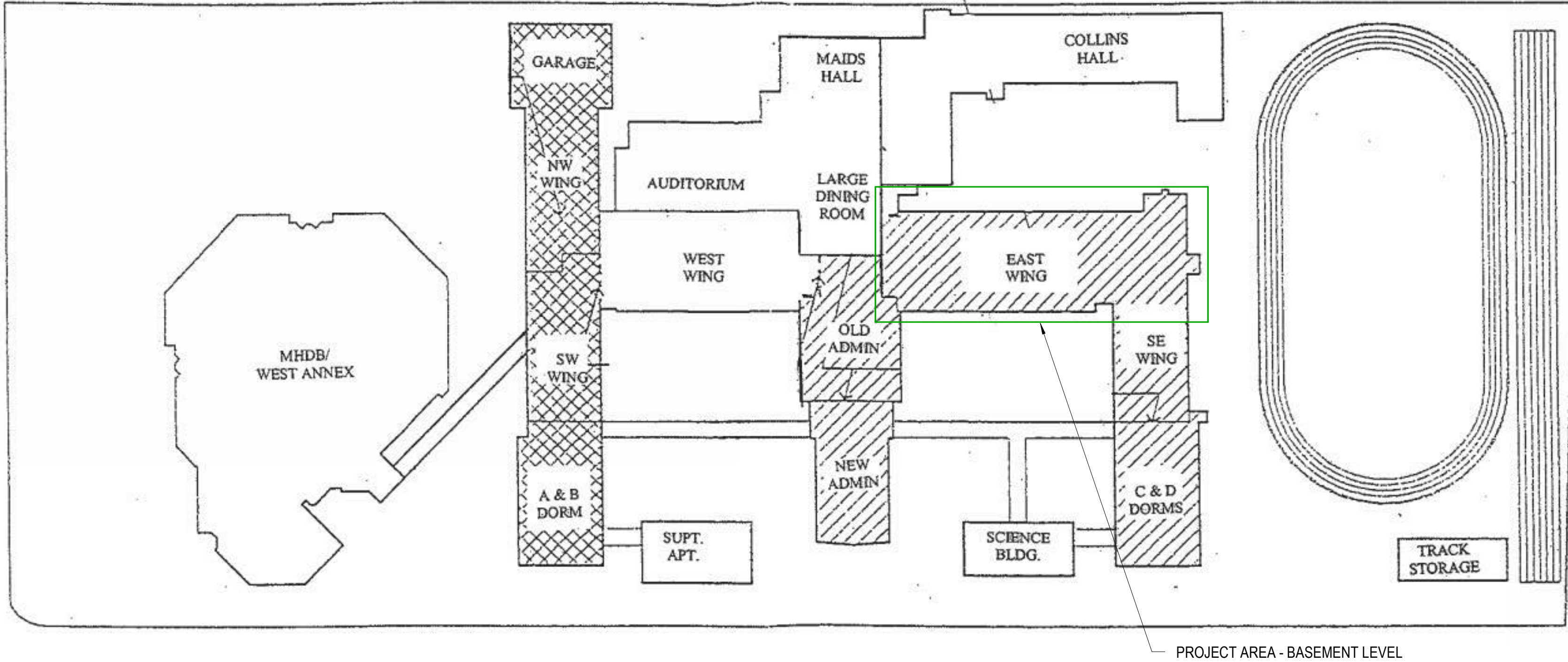
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SHEET TITLE:

LOCATION
MAPS & KEY
PLAN

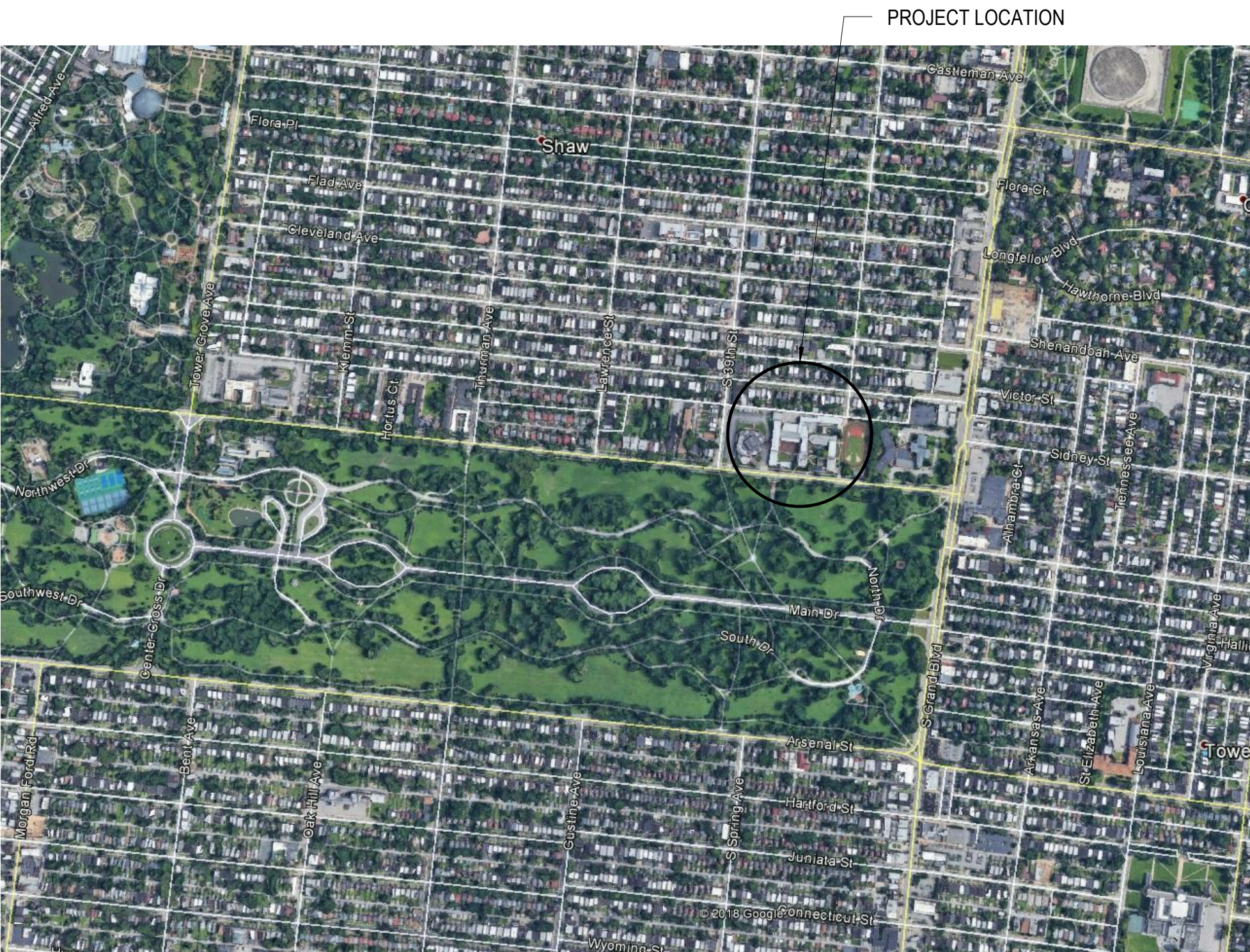
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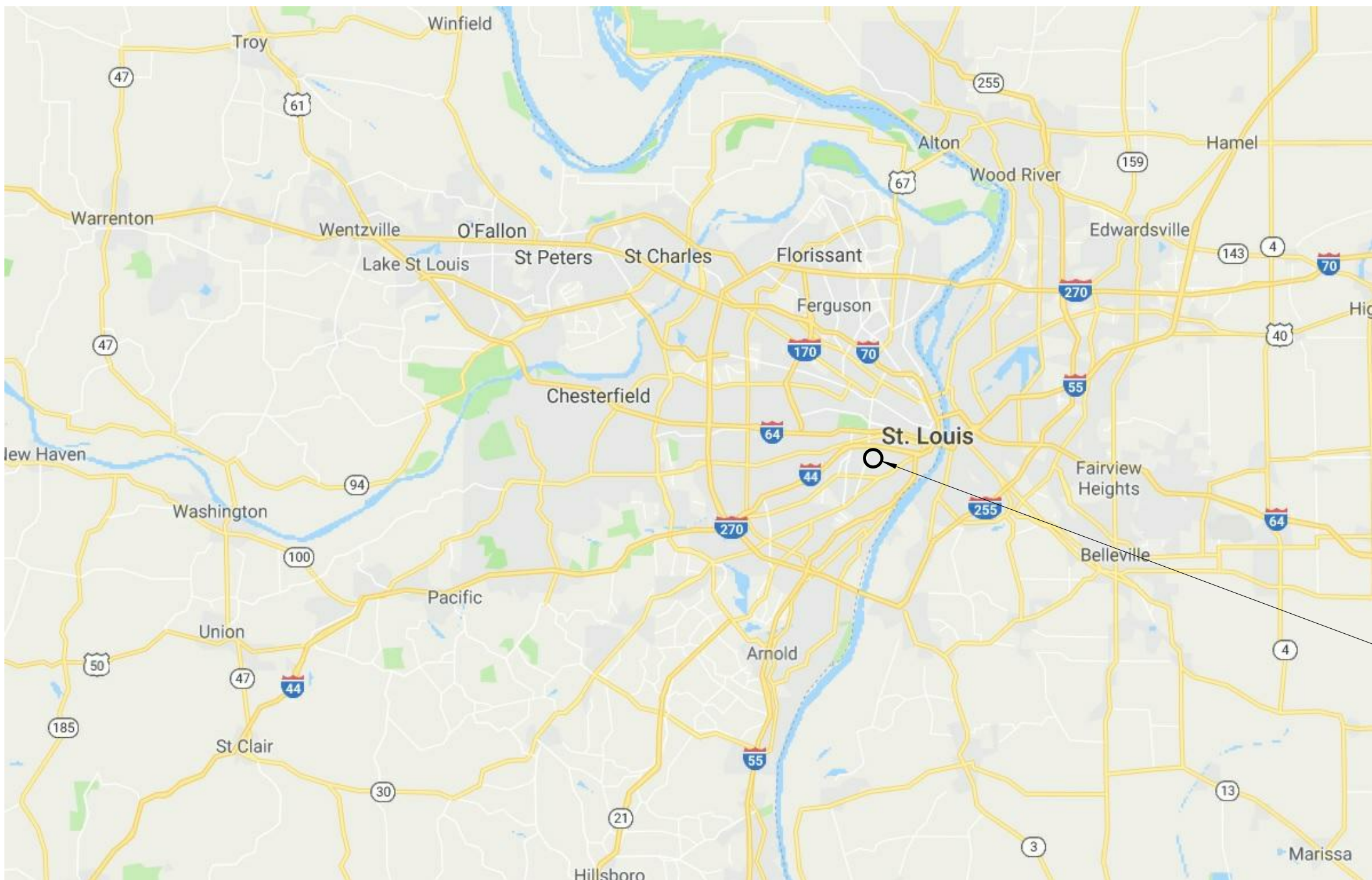


1 OVERALL SITE PLAN
G-003 SCALE: 1/8" = 1'-0"

LOCATION MAP:



VICINITY MAP:



GENERAL DRAWING SYMBOLS LEGEND:

1

A

GRID LINES

1

A-201

VIEW TITLE

SCALE

NORTH

NORTH ARROW

1

A-201

REF TO INFORMATION

ENLARGED ELSEWHERE

1

SIM

1

A101

SECTION REF

INTERIOR

EXTERIOR

1

A101

1

A101

INTERIOR

EXTERIOR

ELEVATION - SINGLE REF

1

A101

1

A101

INTERIOR

EXTERIOR

ELEVATION - MULTIPLE REF

1

SIM

1

A101

SECTION/PLAN DETAIL REF

101

ROOM NUMBER

FLOOR NUMBER

ROOM NUMBER TAG

909B

SUFFIX AS REQ'D

ROOM NUMBER

FLOOR NUMBER

DOOR NUMBER TAG

9E

SUB-TYPE

TYPE DESIGNATION

PARTITION TYPE TAG

1

KEYNOTE TAG

XXXX

FINISH TAG

1i

LOUVER TAG

REVISION CLOUD AND

DELTA

ARCHITECTURAL SYMBOLS LEGEND:

EXISTING PARTITION TO REMAIN

EXISTING PARTITION TO BE REMOVED

NEW PARTITION

EXISTING WINDOW FRAMING SYSTEM TO REMAIN

EXISTING DOOR, FRAME, AND HARDWARE TO REMAIN

EXISTING DOOR, FRAME, AND HARDWARE TO BE REMOVED

NEW OR RELOCATED DOOR, FRAME, AND HARDWARE

REFLECTED CEILING SYMBOLS LEGEND:

EXISTING/NEW SUSPENDED CEILING GRID SYSTEM

EXISTING SUSPENDED CEILING GRID SYSTEM TO BE REMOVED

EXISTING/NEW GYPSUM BOARD CEILING

EXISTING GYPSUM BOARD CEILING TO BE REMOVED

EXISTING PLASTER CEILING

EXISTING PLASTER CEILING TO BE REMOVED

E

EXISTING 2'x4' LIGHT FIXTURE

EXISTING 2'x4' LIGHT FIXTURE TO BE REMOVED OR REUSED

R

REUSED 2'x4' LIGHT FIXTURE

NEW 2'x4' LIGHT FIXTURE

E

EXISTING 2'x2' LIGHT FIXTURE

EXISTING 2'x2' LIGHT FIXTURE TO BE REMOVED OR REUSED

R

REUSED 2'x2' LIGHT FIXTURE

NEW 2'x2' LIGHT FIXTURE

EXISTING SURFACE MOUNTED LIGHT FIXTURE TO REMAIN

EXISTING SURFACE MOUNTED LIGHT FIXTURE TO BE REMOVED

NEW SURFACE MOUNTED LIGHT FIXTURE

GENERAL NOTES: ARCHITECTURAL

1. WHERE WORK OR EQUIPMENT IS INDICATED AS 'NOT IN CONTRACT (NIC)' IN THE DOCUMENTS, SUCH WORK OR EQUIPMENT SHALL BE PROVIDED OUTSIDE THE CONTRACT SCOPE REPRESENTED IN THESE DOCUMENT. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH NIC ITEMS AND COOPERATE TO AFFECT THE IMPLEMENTATION OF SUCH WORK OR INSTALLATION.
2. DETAILS NOT SHOWN ARE TO BE SIMILAR IN CHARACTER TO THOSE DRAWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED THE CONTRACTOR IS TO OBTAIN CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
3. DO NOT SCALE DRAWINGS. DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE.
4. WHERE EXISTING WALLS, PARTITIONS, COLUMNS, FLOORS, BULKHEADS, SURFACES, OR FINISHES ARE REMOVED OR PARTIALLY DEMOLISHED, EACH TRADE IS RESPONSIBLE FOR PATCHING OR REFINISHING OF EXISTING CONSTRUCTION REQUIRED BY THAT TRADE'S WORK ON THE PROJECT. THIS WORK MUST BE DONE IN A MANNER WHICH WILL ACCEPT NEW FINISHES.
5. ALL NEW, EXISTING, AND MODIFIED PARTITIONS TO RECEIVE A LEVEL FOUR (4) DRYWALL FINISH PRIOR TO APPLICATION OF PAINT TO SURFACE TO AVOID PAINT FLASHING. WALL FINISH LEVEL BASED ON GA-214-17 "RECOMMENDED LEVELS OF GYPSUM BOARD FINISH." REFER TO PARTITION TYPES FOR ADDITIONAL INFORMATION.
6. PARTITIONS ARE DIMENSIONED TO FACE OF PARTITION UNLESS NOTED OTHERWISE.
7. ALL MATERIALS USED IN FIRE-RATED ASSEMBLIES SHALL BE APPROVED BY UL OTHER RECOGNIZED STANDARD FOR USE IN SUCH ASSEMBLIES.

GENERAL NOTES: ARCHITECTURAL (CONT)

9. ALL FIRESTOP SYSTEMS TO MEET UL TESTED SYSTEMS. SYSTEMS MUST BE SUBMITTED TO AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION. GC IS TO KEEP A COPY OF ALL APPROVED SYSTEMS ON SITE FOR DURATION OF PROJECT. ALL INSTALLED SYSTEMS MUST BE LABELED AND DOCUMENTED. DOCUMENTATION IS TO BE SUBMITTED TO OWNER AND ARCHITECT UPON COMPLETION OF THE PROJECT.
10. PROVIDE THROUGH PENETRATION FIRESTOP SYSTEMS FOR ALL ITEMS PENETRATING FIRE-RATED ASSEMBLIES. PENETRATIONS TO BE DESIGNED, TESTED, AND FIRE-RESISTANCE RATED TO RESIST FOR A PRESCRIBED PERIOD OF TIME THE SPREAD OF FIRE THROUGH PENETRATIONS. PROVIDE UL-LISTED ASSEMBLIES AS REQUIRED.
11. PROVIDE AND INSTALL ADA COMPLIANT BUILDING STANDARD FIRE EXTINGUISHERS AS REQUIRED BY AND IN ACCORDANCE WITH NFPA LIFE SAFETY CODE AND LOCAL BUILDING FIRE SAFETY CODE AND REGULATIONS. CONFIRM QUANTITY AND LOCATION WITH ARCHITECT.
12. PREPARE EXISTING FLOOR SLABS FOR INSTALLATION OF SPECIFIED FLOOR FINISHES. PREPARE EXISTING FLOOR SLABS TO BE SMOOTH AND LEVEL BEFORE INSTALLATION OF FINISH FLOOR MATERIALS, WITH MAXIMUM DEVIATION OF 1/4" IN 10'-0". NO FLOOR PREPARATION ALLOWANCES WILL BE ACCEPTED. GC AND SUBCONTRACTORS TO VISUALLY INSPECT EXISTING FLOOR SLAB CONDITIONS TO ENSURE PROPER FLOOR PREPARATION IS INCLUDED IN PROPOSAL.
13. ALL BUILDING ACCESSIBILITY IS DESIGNED AND SHALL BE IN ACCORDANCE WITH IBC, ANSI 117.1 AND ADAAG, WHICHEVER STANDARD PROVIDES THE GREATEST DEGREE OF ACCESSIBILITY FOR ANY GIVEN BUILDING ELEMENT.

ABBREVIATIONS

A

ACT

ACOUSTICAL CEILING TILE

ADA

AMERICANS WITH DISABILITIES ACT

ADJ

ADJUSTABLE

AFF

ABOVE FINISHED FLOOR

ALT

ALTERNATE

ALUM

ALUMINUM

APPROX

APPROXIMATE(LY)

ARCH

ARCHITECT(URAL)

B

BD

BOARD

BLDG

BUILDING

BLKG

BLOCKING

C

C/L

CENTERLINE

C/CI

CONTRACTOR FURNISHED CONTRACTOR INSTALLED

CHAR

CHARACTOR

CJ

CONTROL JOINT

CLG

CEILING

CLR

CLEAR

CONC

CONCRETE

CONT

CONTINUE, CONTINUOUS

CORR

CORRIDOR

CPU

COMPUTER

CT

CERAMIC TILE

D

DIA

DIAMETER

DIM

DIMENSION(S)

DIST

DISTANCE

DVI

DIGITAL VISUAL INTERFACE

E

EA

EACH

EJ

EXPANSION JOINT

ELEC

ELECTRIC(AL)

ELEV

ELEVATION

EQ

EQUAL

EQUIP

EQUIPMENT

ETC

ET CETERA (AND SO FORTH)

EXIST

EXISTING

EXP

EXPANSION

EXT

EXTERIOR

F

FD

FLOOR DRAIN

FE

FIRE EXTINGUISHER

FEC

FIRE EXTINGUISHER CABINET

FIN

FINISH(ED)

FIN FLR

FINISHED FLOOR

FLR

FLOOR

FLUOR

FLUORESCENT

FOF

FACE OF FINISH

FRT

FIRE-RETARDANT TREATED

G

GA

GAUGE

GALV

GALVANIZED

GC

GENERAL CONTRACTOR

GYP BD

GYPSUM BOARD

H

HC

HOLLOW CORE

HCP

HANDICAP(PED)

HDMI

HIGH-DEFINITION MULTIMEDIA INTERFACE

HDW

HARDWARE

HM

HOLLOW METAL

HOR

HORIZONTAL

HR

HOUR

HT

HEIGHT

I

IBC

INTERNATIONAL BUILDING CODE

INCL

INCLUDE(D)

INSUL

INSULATION

INT

INTERIOR

J

JT

JOINT

L

LAM

LAMINATE

LBS

POUNDS

LF

LINEAR FOOT (FEET)

M

MANUF

MANUFACTURER

MAX

MAXIMUM

MECH

MECHANICAL

MEP

MECHANICAL, ELECTRICAL, AND PLUMBING

MEPPF

MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION

MIN

MINIMUM

MISC

MISCELLANEOUS

MTL

METAL

N

NIC

NOT IN CONTRACT

NTS

NOT TO SCALE

O

OC

ON CENTER

O/CI

OWNER FURNISHED, CONTRACTOR INSTALLED

O/CI

OWNER FURNISHED, OWNER INSTALLED

OH

OPPOSITE HAND

OPG

OPENING

OPP

OPPOSITE

P

PLAM

PLASTIC LAMINATE

PSF

POUNDS PER SQUARE FOOT (FEET)

PT

PAINT(ED)

PTN

PARTITION

PWD

PLYWOOD

Q

QTY

QUANTITY

R

RB

RESILIENT BASE

REF

REFERENCE

REINF

REINFORCE(D)

REQ

REQUIRED

REV

REVISION

S

SC

SOLID CORE

SCHED

SCHEDULE

SF

SQUARE FOOT (FEET)

SIM

SMILAR

SPEC

SPECIFICATION

SQ

SQUARE

SQ FT

SQUARE FOOT (FEET)

STL

STEEL

SUSP

SUSPEND(ED)

SYM

SYMMETRICAL

T

TEMP

TEMPERED

T/CI

TENANT(CLIENT) FURNISHED, CONTRACTOR INSTALLED

T/CI

TENANT(CLIENT) FURNISHED, TENANT (CLIENT) INSTALLED

TOS

TOP OF STRUCTURE

TOW

TOP OF WALL

TYP

TYPICAL

U

UL

UNDERWRITERS LABORATORIES, INC UNLESS NOTED OTHERWISE

V

VERT

VERTICAL

VIF

VERIFY IN FIELD

VWC

VINYL WALL COVERING

W

W/

WITH

W/O

WITHOUT

WC

WATER CLOSET

WD

WOOD

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

MISSOURI STATE CERTIFICATE OF AUTHORITY #00246198

MICHAEL J. RATLIFF, MO #6855

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501201104

REVISION: _____
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CHECKED BY: MR
DESIGNED BY: WD

SHEET TITLE:

ARCHITECTURAL
GENERAL
NOTES

SHEET NUMBER:

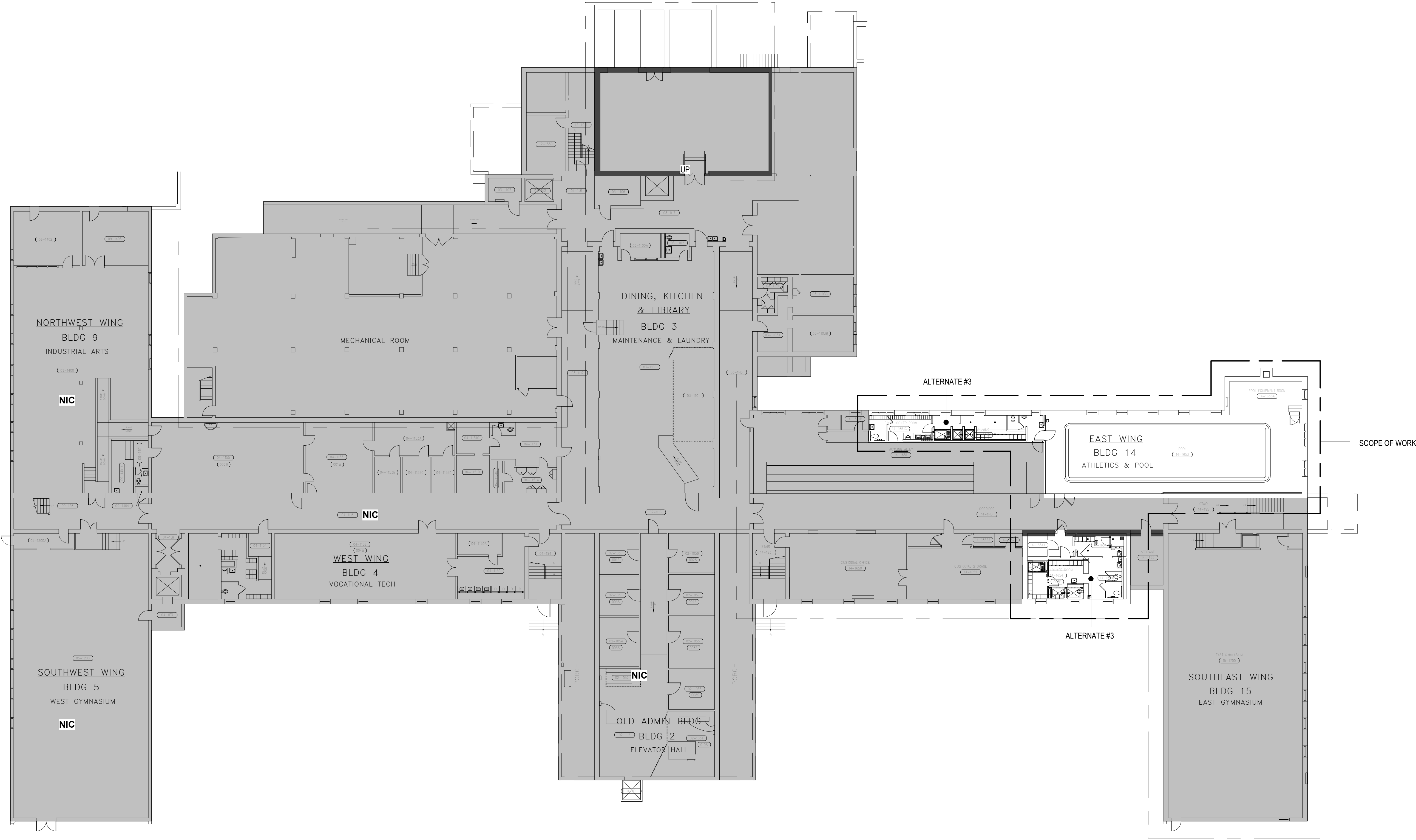
A-001

4 OF 45 SHEETS
07/06/22

ARCTURIS
design collaborative

ALTERNATES

1. REMOVE AND REPLACE TILE WITHIN POOL VOLUME
2. REMOVE EXISTING WALL TILE THROUGHOUT POOL ROOM & PROVIDE NEW.
3. LOCKER ROOM RENOVATION
4. PROVIDE EPOXY FLOORING AT POOL DECK IN LIEU OF CONCRETE SEALER.



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SHEET TITLE:

OVERALL
REFERENCE
PLAN

SHEET NUMBER:

A-002

5 OF 45 SHEETS
07/06/22



23 OVERALL BASEMENT REFERENCE PLAN
A-002 1/16" = 1'-0"

ARCTURIS
design collaborative

NOTES:

TOILET AND BATHING ROOMS

- REQUIRED CLEAR FLOOR SPACES, CLEARANCE AT FIXTURES, AND TURNING SPACE SHALL BE PERMITTED TO OVERLAP.
- DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE. DOORS SHALL BE PERMITTED TO SWING INTO THE REQUIRED TURNING SPACE. EXCEPTIONS: 1. DOORS TO A TOILET ROOM OR BATHING ROOM FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON USE OR PUBLIC USE SHALL BE PERMITTED TO SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE PROVIDED THE SWING OF THE DOOR CAN BE REVERSED. 2. WHERE THE TOILET ROOM OR BATHING ROOM IS FOR INDIVIDUAL USE AND A CLEAR FLOOR SPACE OF 30"x48" IS PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING, DOORS SHALL BE PERMITTED TO SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE.
- MIRRORS LOCATED ABOVE LAVATORIES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 40" MAX ABOVE THE FINISH FLOOR OR GROUND. MIRRORS NOT LOCATED ABOVE LAVATORIES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 35" MAX ABOVE THE FINISH FLOOR OR GROUND.
- COAT HOOKS & SHELVES SHALL BE LOCATED 40" MIN AND 48" MAX ABOVE THE FINISH FLOOR.
- WHERE 6 OR MORE STALLS ARE PROVIDED, 1 SHALL BE SIDE TRANSFER STALL AS SHOWN, AND 1 SHALL BE A 36" WIDE SEMI-AMBULATORY STALL.

WATER CLOSETS AND TOILET COMPARTMENTS

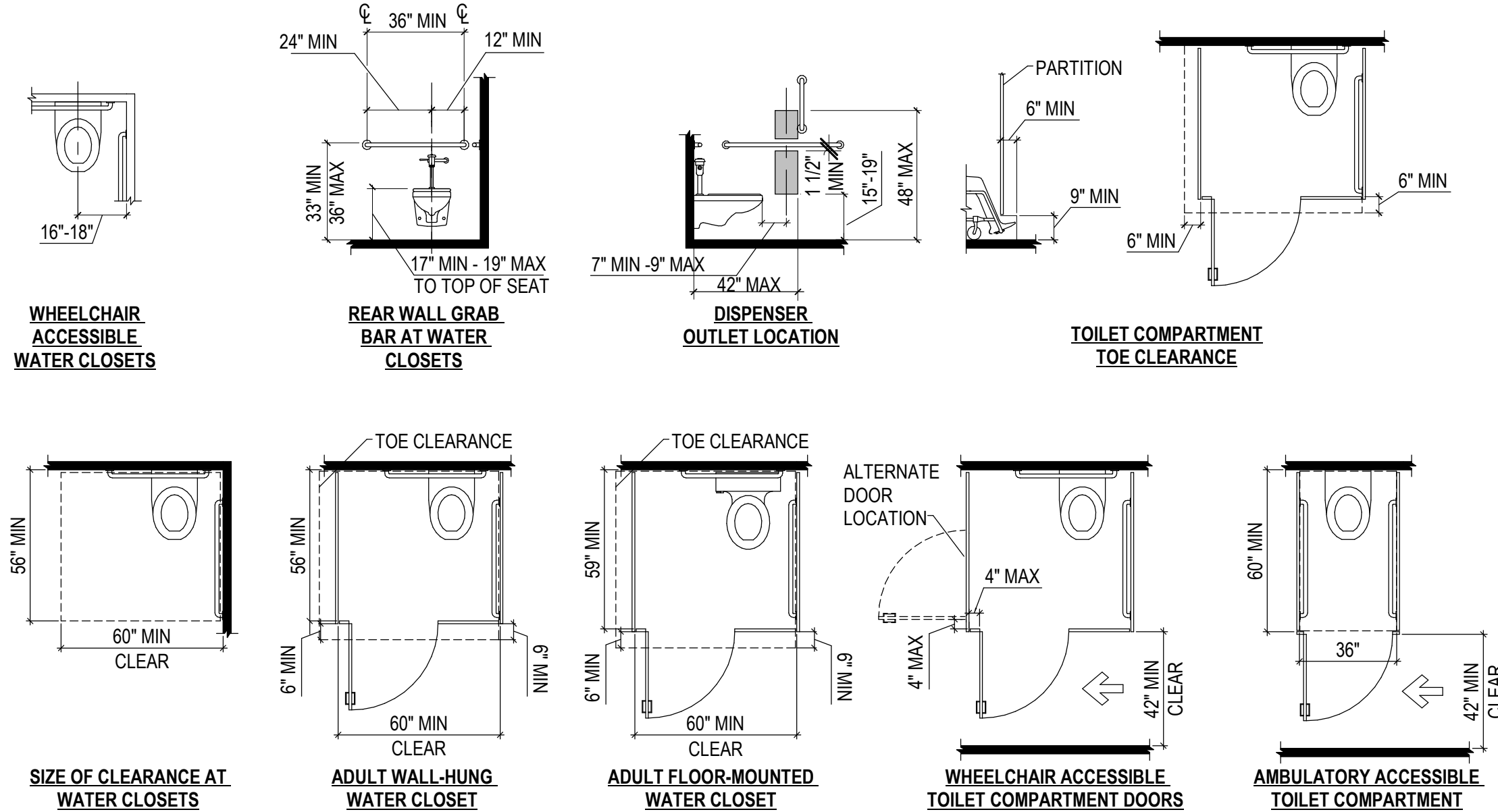
- THE REQUIRED CLEARANCE AROUND THE WATER CLOSET SHALL BE PERMITTED TO OVERLAP THE WATER CLOSET, ASSOCIATED GRAB BARS, DISPENSERS, SANITARY NAPKIN DISPOSAL UNITS, COAT HOOKS, SHELVES, ACCESSIBLE ROUTES, CLEAR FLOOR SPACE AND CLEARANCES REQUIRED AT OTHER FIXTURES, AND THE TURNING SPACE. NO OTHER FIXTURES OR OBSTRUCTIONS SHALL BE LOCATED WITHIN THE REQUIRED WATER CLOSET CLEARANCE.

FLUSH VALVES

- FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH REACH RANGES AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 LBS MAX.
- WHERE AN ADMINISTRATIVE AUTHORITY REQUIRES FLUSH CONTROLS FOR FLUSH VALVES TO BE LOCATED IN A POSITION THAT CONFLICTS WITH THE LOCATION OF THE REAR GRAB BAR, THEN THE REAR GRAB BAR SHALL BE PERMITTED TO BE SPLIT OR SHIFTED TO THE OPEN SIDE OF THE TOILET AREA.

DISPENSERS

- TOILET TISSUE DISPENSERS SHALL BE LOCATED 7" MIN & 9" MAX FROM FRONT OF WATER CLOSET TO CENTERLINE OF DISPENSER. OUTLET OF DISPENSER SHALL BE 15" MIN & 48" MAX ABOVE FINISH FLOOR AND SHALL NOT BE LOCATED BEHIND GRAB BARS.

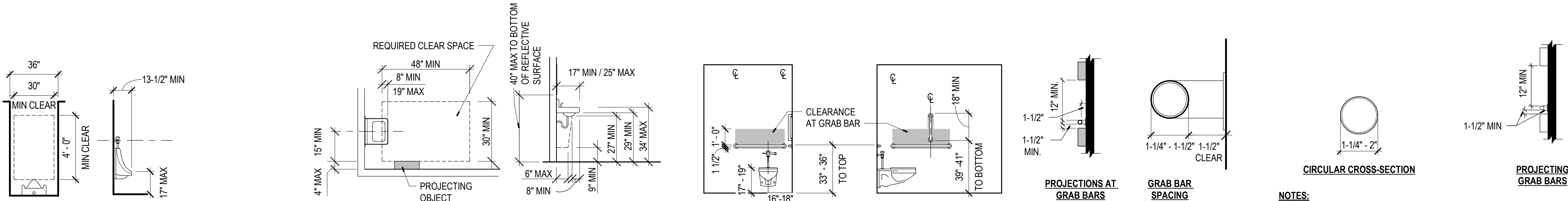


HANDICAPPED COMPARTMENT DOOR:

- CLEAR WIDTH OF OPENING SHALL BE 32".
- DOOR SHALL BE SELF-CLOSING.
- DOOR PULL SHALL BE LOCATED ON BOTH SIDES OF DOOR. OPERABLE PARTS OF HARDWARE SHALL BE 34" MIN AND 48" MAX AFF.
- TOILET COMPARTMENT DOORS SHALL NOT SWING INTO THE REQUIRED MIN AREA OF THE COMPARTMENT.

20 ACCESSIBILITY - TOILET ROOM NOTES
A-003 NOT TO SCALE

1 603; 604: TOILET COMPARTMENTS
A-003 NOT TO SCALE



URINALS:

- PROVIDE STALL-TYPE OR WALL-HUNG URINALS WITH AN ELONGATED RIM AT 17" MAX AFF. FLUSH CONTROLS TO COMPLY WITH REACH RANGE REQUIREMENTS PER 2010 ADA SECTIONS 308 & 309 - TO BE 44" MAX AFF.
- WHERE URINALS ARE PROVIDED AT LEAST ONE SHALL HAVE A 30"x48" MIN CLEAR SPACE IN FRONT OF URINAL.
- 36" CLEAR WIDTH REQUIRED WHERE ALCOVE DEPTH IS GREATER THAN 24".

LAVATORIES:

- PROVIDE A CLEAR SPACE 30"x48" IN FRONT OF THE LAVATORY. THE CLEAR SPACE MAY EXTEND A MAX OF 19" INTO KNEE AND TOE SPACE UNDER LAVATORY.
- INSULATE OR CONFIGURE HOT WATER SUPPLY AND DRAIN PIPING UNDER LAVATORIES TO PREVENT CONTACT.
- FAUCET CONTROLS AND OPERATING MECHANISMS ARE REQUIRED TO BE OPERABLE WITH ONE HAND AND CANNOT REQUIRE GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS IS NOT TO EXCEED 5 LBF.

NOTES:

- GRAB BARS SHALL BE INSTALLED IN A HORIZONTAL POSITION, 33" MIN AND 36" MAX AFF MEASURED TO THE TOP OF THE GRIPPING SURFACE.
- GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
- ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHEN A VERTICAL OR HORIZONTAL FORCE OF 250 LBS IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE.
- IF GRAB BARS ARE MOUNTED ADJACENT TO WALL, THE SPACE BETWEEN WALL AND BAR IS TO BE 1-1/2".
- PROVIDE MIN CLEARANCE 1-1/2" BELOW AND 12" ABOVE WALL MOUNTED GRAB BARS.
- VERTICAL GRAB BAR IS REQUIRED PER 2009 ANSI A117.1, SECTION 609.4

NOTES:

- GRAB BARS IN TOILET FACILITIES AND BATHING FACILITIES SHALL COMPLY.
- GRAB BARS SHALL BE INSTALLED IN A HORIZONTAL POSITION, 33" MIN AND 36" MAX AFF MEASURED TO THE TOP OF THE GRIPPING SURFACE.
- GRAB BARS AND ANY WALL OR OTHER SURFACES ADJACENT TO GRAB BARS SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS AND SHALL HAVE ROUNDED EDGES.
- GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
- GRAB BARS SHALL BE INSTALLED IN ANY MANNER THAT PROVIDES A GRIPPING SURFACE AT THE SPECIFIED LOCATIONS AND THAT DOES NOT OBSTRUCT THE REQUIRED CLEAR FLOOR SPACE.
- ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHEN A VERTICAL OR HORIZONTAL FORCE OF 250 LBS IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE.

3 605: URINALS
A-003 NOT TO SCALE

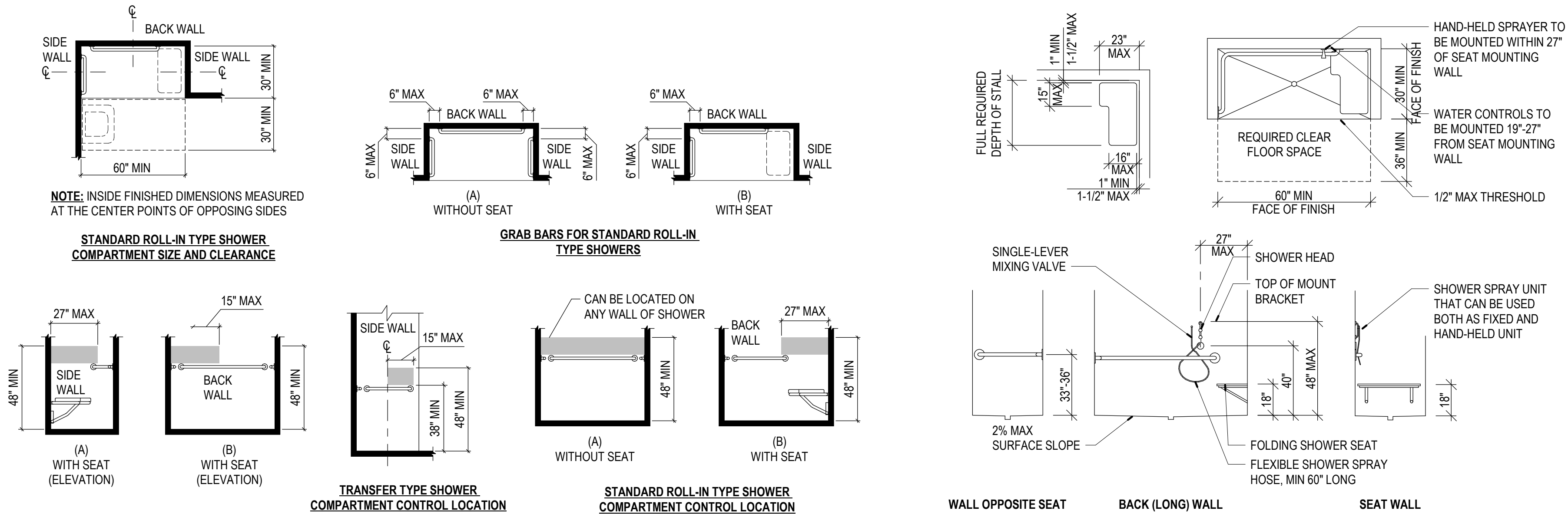
4 606: LAVATORIES
A-003 NOT TO SCALE

5 604.5; 609: TOILET COMPARTMENT GRAB BARS
A-003 NOT TO SCALE

6 609: ACCESSIBLE GRAB BARS
A-003 NOT TO SCALE

NOTES:

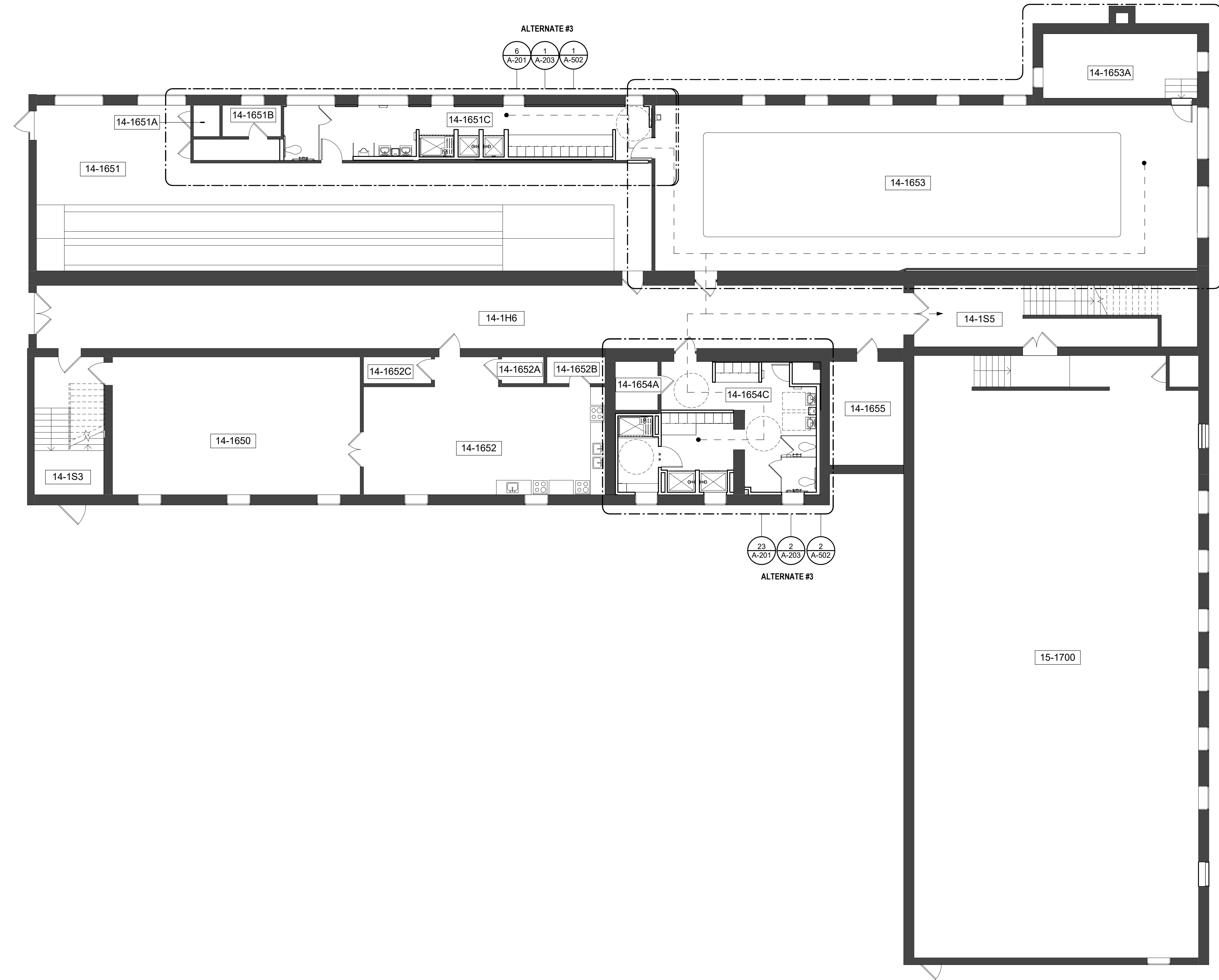
- WHERE MULTIPLE GRAB BARS ARE USED, REQUIRED HORIZONTAL GRAB BARS SHALL BE INSTALLED AT THE SAME HEIGHT ABOVE THE FINISH FLOOR.
- A FOLDING OR NON-FOLDING SEAT SHALL BE PROVIDED IN TRANSFER TYPE SHOWER COMPARTMENTS. A FOLDING SEAT SHALL BE PROVIDED IN ROLL-IN TYPE SHOWERS REQUIRED IN TRANSIENT LODGING GUEST ROOMS.
- IN STANDARD ROLL-IN TYPE SHOWERS WITHOUT SEATS, THE SHOWER HEAD AND OPERABLE PARTS CAN BE LOCATED ON ANY OF THE THREE WALLS OF THE SHOWER WITHOUT ADVERSELY AFFECTING ACCESSIBILITY.
- A SHOWER SPRAY UNIT WITH A HOSE 59" LONG MIN THAT CAN BE USED BOTH AS A FIXED-POSITION SHOWER HEAD AND AS A HAND-HELD SHOWER SHALL BE PROVIDED. THE SHOWER SPRAY UNIT SHALL HAVE AN ON/OFF CONTROL WITH A NON-POSITIVE SHUT-OFF. IF AN ADJUSTABLE-HEIGHT SHOWER HEAD ON A VERTICAL BAR IS USED, THE BAR SHALL BE INSTALLED SO AS NOT TO OBSTRUCT THE USE OF GRAB BARS.
- A FIXED SHOWER HEAD LOCATED AT 48" MAX ABOVE THE SHOWER FINISH FLOOR SHALL BE PERMITTED INSTEAD OF A HAND-HELD SPRAY UNIT IN FACILITIES THAT ARE NOT MEDICAL CARE OR LONG-TERM CARE FACILITIES, TRANSIENT LODGING GUEST ROOMS, OR RESIDENTIAL DWELLING UNITS.
- THRESHOLDS IN ROLL-IN TYPE SHOWER COMPARTMENTS SHALL BE 1/2" HIGH MAX IN ACCORDANCE WITH 303. IN TRANSFER TYPE SHOWER COMPARTMENTS, THRESHOLDS 1/2" HIGH MAX SHALL BE BEVELED, ROUNDED OR VERTICAL.
- A THRESHOLD 2" HIGH MAX SHALL BE PERMITTED IN TRANSFER TYPE SHOWER COMPARTMENTS IN EXISTING FACILITIES WHERE PROVISION OF A 1/2" HIGH THRESHOLD WOULD DISTURB THE STRUCTURAL REINFORCEMENT OF THE FLOOR SLAB.
- ENCLOSURES FOR SHOWER COMPARTMENTS SHALL NOT OBSTRUCT CONTROLS, FAUCETS, AND SHOWER SPRAY UNITS OR OBSTRUCT TRANSFER FROM WHEELCHAIRS ONTO SHOWER SEATS.



7 608: SHOWER COMPARTMENTS
A-003 NOT TO SCALE

2 608: ACCESSIBILITY DETAIL - SHOWER
A-003 NOT TO SCALE





BUILDING INFORMATION

USE GROUPS:
I-4 (ASSUMED)
B (ASSUMED)
INSTITUTIONAL, DAY-CARE FACILITY
BUSINESS

EXISTING INFO:
3 STORIES
FULLY SPRINKLERED

SCOPE OF WORK:

EAST WING (BUILDING 14):
BASEMENT: 9,240 GSF
FIRST FLOOR: 9,490 GSF
SECOND FLOOR: 9,290 GSF
28,020 SF

SOUTHEAST WING (BUILDING 15):
BASEMENT: 3,900 GSF
FIRST FLOOR: 3,645 GSF
SECOND FLOOR: 3,900 GSF
11,445 SF

TOTALS (3 FLOORS): 39,465 SF

CODE INFORMATION

AUTHORITIES HAVING JURISDICTION: STATE OF MISSOURI

BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE

ACCESSIBILITY: AMERICANS WITH DISABILITIES ACT
ICC/ANSI A117.1, REFERENCED BY BUILDING CODE

EXISTING BUILDING CODE: 2018 INTERNATIONAL EXISTING BUILDING CODE

FIRE PREVENTION: 2018 INTERNATIONAL FIRE CODE

MECHANICAL: 2018 INTERNATIONAL MECHANICAL CODE

ELECTRICAL: 2017 NATIONAL ELECTRICAL CODE

PLUMBING: 2009 UNIFORM PLUMBING CODE

PROPERTY MAINTENANCE: 2018 INTERNATIONAL PROPERTY MAINTENANCE CODE

ENERGY: 2018 INTERNATIONAL ENERGY CONSERVATION CODE

GAS: 2018 INTERNATIONAL FUEL GAS CODE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



MICHAEL J. RATLIFF, MO #6855

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ST. LOUIS, MO

PROJECT # E2107-01
SITE# 2011
FACILITY # 5012011003,
501201104

REVISION: _____
DATE: _____
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REVISION: _____
DATE: _____
ISSUE DATE: 07/06/22

CAD DWG FILE: A-100
DRAWN BY: AR
CHECKED BY: MR
DESIGNED BY: WD

SHEET TITLE:

**REFERENCE
PLAN**

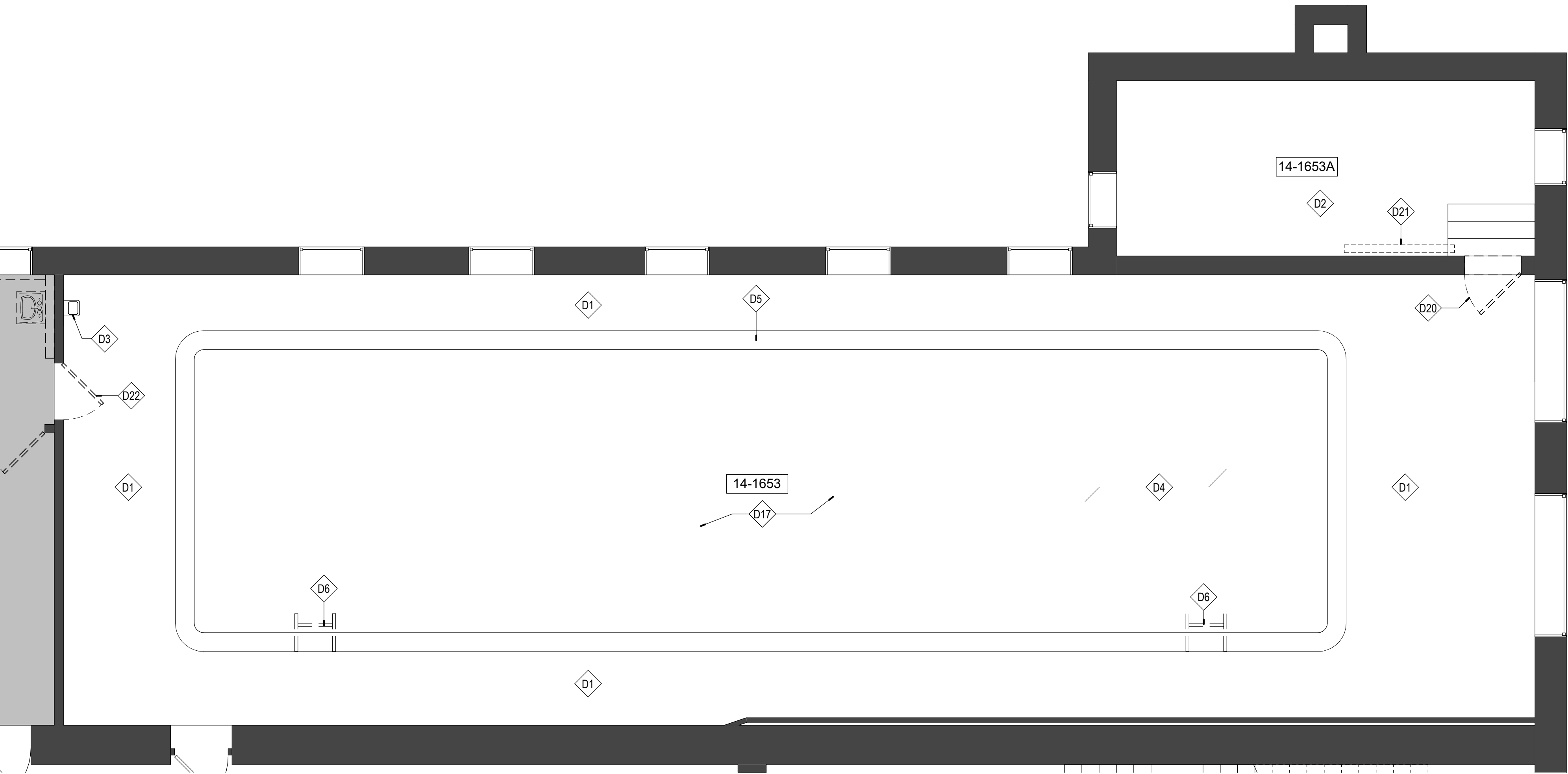
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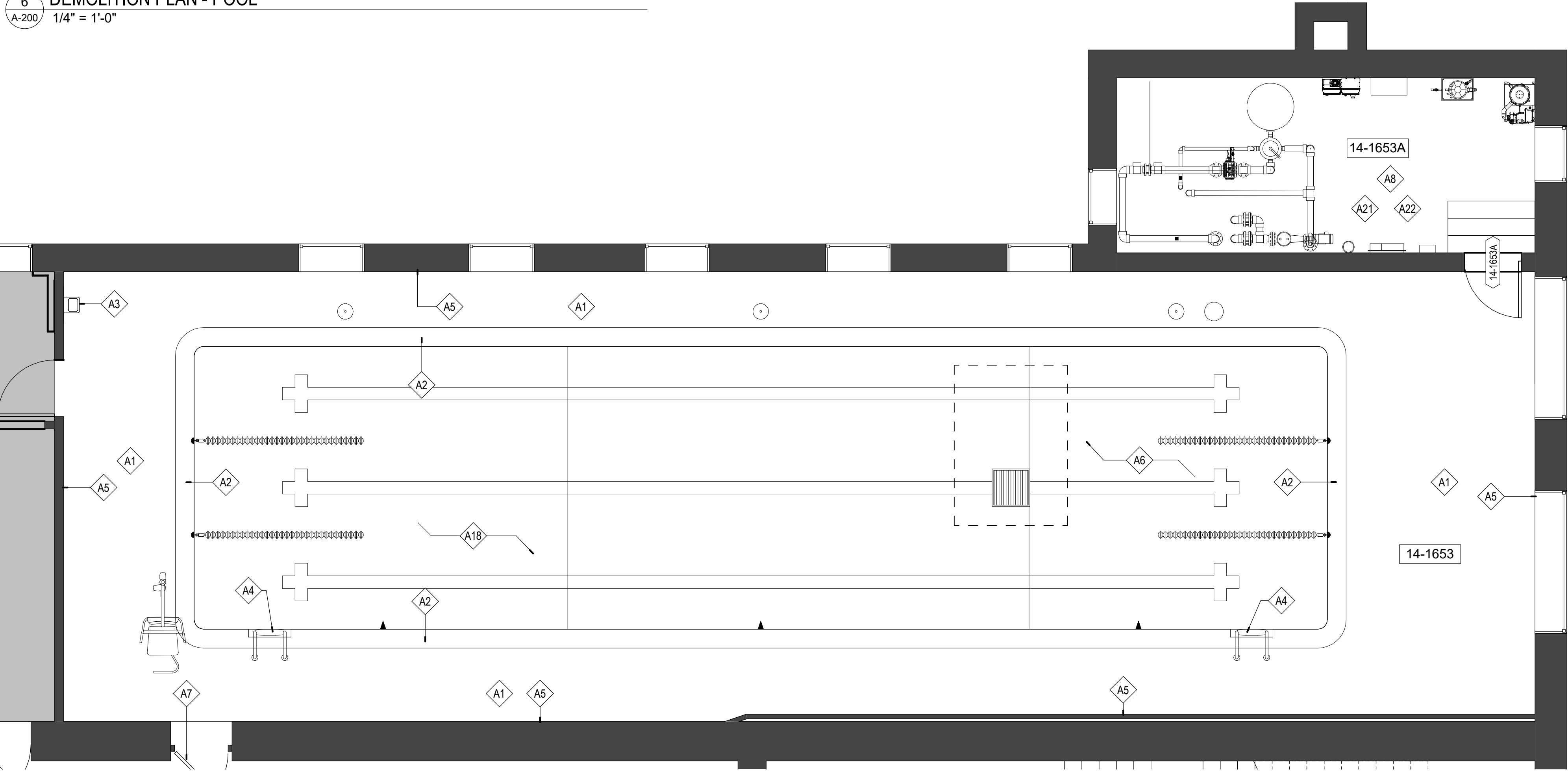
7 OF 45 SHEETS
07/06/22

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21
A-100
REFERENCE PLAN - BASEMENT
1/8" = 1'-0"



6 DEMOLITION PLAN - POOL
A-200 1/4" = 1'-0"



21 FLOOR PLAN - POOL
A-200 1/4" = 1'-0"

GENERAL NOTES: DEMOLITION

1. PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED TO PROTECT OWNER'S AND CLIENT'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE DEMOLITION WORK.
2. ERECT AND MAINTAIN DUST-PROOF PARTITIONS AND CLOSURES AS REQUIRED TO PREVENT SPREAD OF DUST OR FUMES TO OCCUPIED PORTIONS OF THE BUILDING. PROTECT MECHANICAL SYSTEM AS REQUIRED.
3. CONDUCT SELECTIVE DEMOLITION OPERATIONS AND DEBRIS REMOVAL IN A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES.
4. PROVIDE BYPASS CONNECTIONS AS NECESSARY TO MAINTAIN CONTINUITY OF SERVICE TO OCCUPIED AREAS OF THE BUILDING.
5. REVIEW/COORDINATE SCHEDULE OF WORK TO BE DEMOLISHED WITH BUILDING MANAGEMENT TO LIMIT INTERRUPTIONS OF OWNER-OCCUPIED SPACES.
6. MAINTAIN FIRE PROTECTION SERVICES DURING SELECTIVE DEMOLITION.
7. COVER AND PROTECT EQUIPMENT AND FIXTURES INDICATED "TO REMAIN" FROM SOILAGE OR DAMAGE.
8. LOCATE, IDENTIFY, STUB OFF, AND DISCONNECT UTILITY SERVICES THAT ARE NOT INDICATED TO REMAIN.
9. PERFORM SELECTIVE DEMOLITION WORK IN A SYSTEMATIC MANNER.
10. UNO ALL EXISTING PARTITIONS, FIRE EXTINGUISHERS AND CABINETS, MILLWORK, DOORS, HARDWARE, SIDELITES, CLERESTORIES, ETC. TO REMAIN.
11. REMOVE ALL HEADERS AT DOOR LOCATIONS WHERE DOORS ARE INDICATED TO BE REMOVED.
12. WHERE WALLS OR PARTITIONS ARE TO BE REMOVED, REMOVE OR RELOCATE ALL EXISTING ELECTRICAL WIRING, DATA CABLING, TELEPHONE LINES, CABLE LINES, SATELLITE LINES, CONDUIT, WIRE MOLD, RECEPTACLES AND SWITCH BOXES, ETC. LOCATED WITHIN DEMOLISHED PORTIONS.
13. SALVAGE AND STORE ALL DOORS AND SIDELITES FOR POSSIBLE REUSE. OWNER HAS FIRST RIGHT OF REFUSAL ON ALL REMOVED ITEMS AND CONTRACTOR IS RESPONSIBLE FOR DISPOSAL IF OWNER DOES NOT WANT ITEMS.
14. PATCH ALL PENETRATIONS FROM MEP DEMO (CONDUIT, PIPING, ETC. REMOVAL) TO MATCH EXISTING ADJACENT CONSTRUCTION.
15. SEE PLUMBING DRAWINGS FOR FLOOR DRAIN LOCATIONS.

DEMOLITION NOTES: POOL

1. REMOVE & STORE PORTABLE LIFT.
2. REMOVE & ABANDON EXISTING DIVING STAND SUPPORT.
3. REMOVE & SALVAGE POOL LADDERS.

ARCH/FINISH NOTES: POOL

1. INSTALL DECK ANCHOR AND KIT FOR FIXED LIFT TO COMPLY WITH ADA REGULATIONS.
2. ADD NEW DEPTH MARKINGS AND WARNING SIGNS AT POOL DECK.
3. CLEAN TILE GROUT AND PATCH REPAIR AS REQUIRED.
4. EXISTING ACT CEILING AND LIGHTING TO REMAIN.
5. CEILING & LIGHTING NOT INCLUDED IN PROJECT SCOPE. COORDINATE WITH WORK PERFORMED UNDER SEPERATE SCOPE

KEYED NOTES - DEMOLITION

- D1 BASE BID: DEMO / REMOVE POOL DECK & SUBSTRUCTURE TO PERIMETER WALLS. REMOVE PERIMETER WALL TILE BASE FINISH AS REQUIRED TO REMOVE & REPLACE POOL DECK.
- D2 BASE BID: DEMO / REMOVE EXISTING POOL EQUIPMENT. SEE ENGINEERING DWGS
- D3 BASE BID: DEMO / REMOVE WATER FOUNTAIN
- D4 BASE BID: TRENCH POOL FLOOR TO PROVIDE ACCESS TO PIPING SYSTEMS - WORK NOTED ON STRUCTURAL, MEP AND POOL DOCUMENTS.
- D5 BASE BID: DEMO / REMOVE EXISTING POOL GUTTER & DECK DRAINING
- D6 BASE BID: DEMO / REMOVE EXISTING LADDER & ACCESSORIES
- D17 ALTERNATE 1: REMOVE ALL TILE WITHIN POOL VOLUME (BOTTOM AND SIDES)
- D20 BASE BID: DEMO/REMOVE EXISTING DOOR AND FRAME
- D21 DEMO/REMOVE EXISTING SLIDING FIRE DOOR
- D22 ALTERNATE 3: DEMO/REMOVE DOOR AND FRAME

KEYED NOTES - ARCHITECTURAL

- A1 BASE BID: NEW CONCRETE POOL DECK W/BRUSHED FINISH INSTALL SEALER. SLOPE TO NEW DECK DRAINS. SEE STRUCTURAL DRAWINGS
- A2 BASE BID: NEW COPING W/INWALL SKIMMERS. SEE ENGINEERING DWGS
- A3 BASE BID: NEW WATER FOUNTAIN W/BOTTLE FILLER. ELKAY #E2S8WSLIC OR EQUAL.
- A4 BASE BID: NEW POOL LADDER & ACCESSORIES. SEE ENGINEERING DRAWINGS.
- A5 BASE BID: NEW COVE TLE BASE. EXISTING WALL TILE TO REMAIN
- A6 BASE BID: NEW CONCRETE SLAB INFILL PER STRUCTURAL.. INSTALL NEW TIL-6 AT BOTTOM, TIL-5 AT LANE MARKERS WHERE OCNCRETE SLAB OCCURS.
- A7 BASE BID: PAINT EXISTING DOOR & FRAME
- A8 BASE BID: NEW POOL EQUIPMENT, SEE ENGINEERING DWGS.
- A18 ALTERNATE 1: PROVIDE NEW WALL TILE (TIL-1). ENTIRE POOL VOLUME (BOTTOM AND SIDES). TIL-3 (LANE MARKERS), TIL-5 (FIELD)
- A21 BASE BID: PROVIDE NEW EPOXY FLOOR AND INTEGRAL BASE
- A22 BASE BID: PAINT EXISTING WALLS THROUGHOUT

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

MISSOURI STATE CERTIFICATE OF AUTHORITY #00246198



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DATE: _____
ISSUE DATE: 07/06/22

CAD DWG FILE: A-200
DRAWN BY: AR
CHECKED BY: MR
DESIGNED BY: WD

SHEET TITLE:

ENLARGED
PLANS - POOL

SHEET NUMBER:

A-200

8 OF 45 SHEETS
07/06/22

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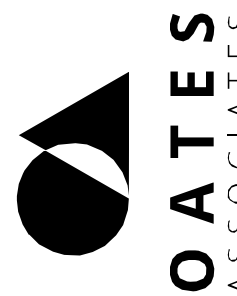


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CAD DWG FILE: A-203
DRAWN BY: AR
CHECKED BY: MR
DESIGNED BY: WD

SHEET TITLE:

PLUMBING
ACCESSORIES

SHEET NUMBER:

A-203

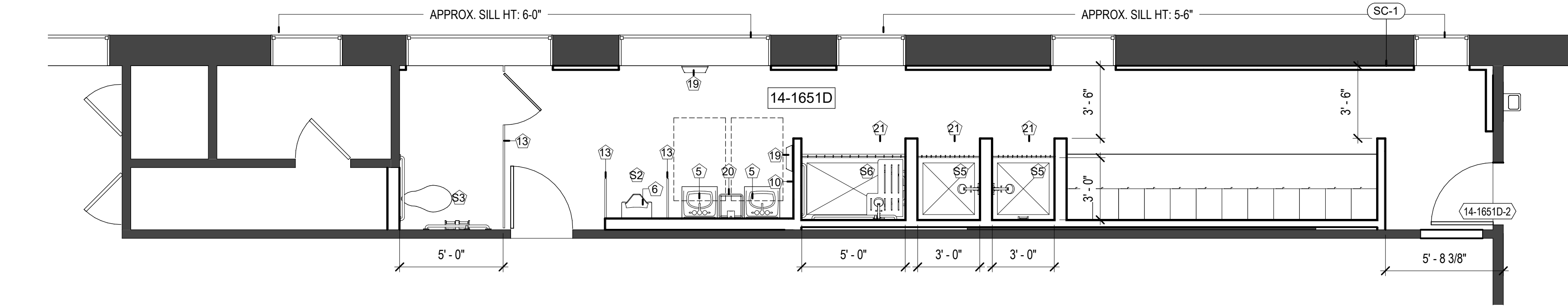
(ALTERNATE 3)

11 OF 45 SHEETS
07/06/22

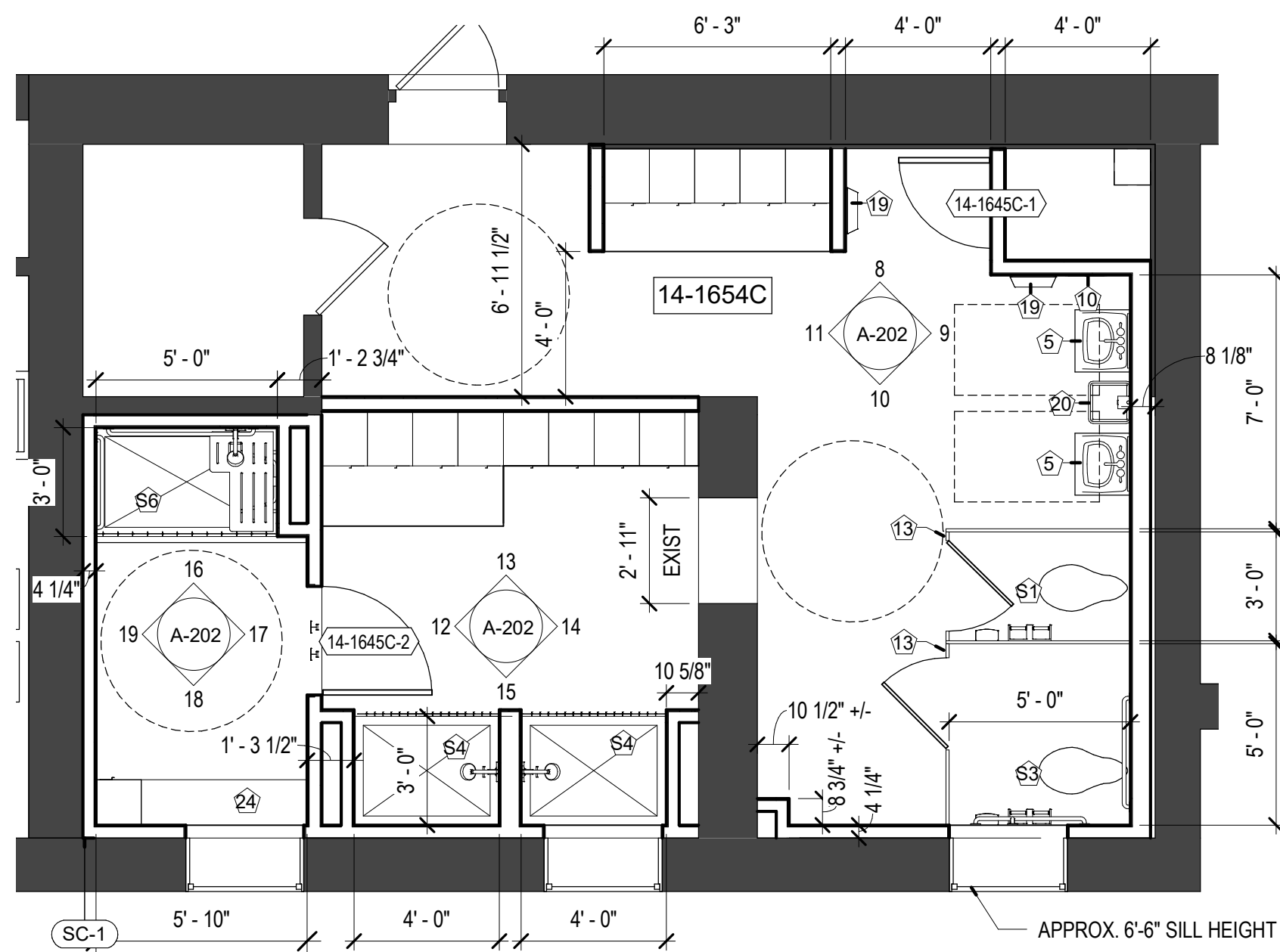
PLUMBING FIXTURES AND ACCESSORIES LEGEND:

ALL FIXTURES, ACCESSORIES, AND INSTALLATIONS TO BE ACCESSIBLE AND IN FULL COMPLIANCE WITH ICC/ANSI 117.1. NUMBERS IN BRACKETS REFER TO ICC/ANSI 117.1 SECTION.

- BOBRICK B6806 X 36" HORIZONTAL GRAB BAR WITH CONCEALED MOUNTING, SATIN FINISH - STAINLESS STEEL; PROVIDE BLOCKING AS REQUIRED
- BOBRICK B-6806 48" HORIZONTAL GRAB BAR WITH CONCEALED MOUNTING, SATIN FINISH - STAINLESS STEEL; PROVIDE BLOCKING AS REQUIRED
- BOBRICK B6806 18" VERTICAL GRAB BAR WITH CONCEALED MOUNTING, SATIN FINISH - STAINLESS STEEL; PROVIDE BLOCKING AS REQUIRED
- BOBRICK B-27460 SURFACE-MOUNTED TOILET TISSUE DISPENSER FOR TWO ROLLS; BRUSHED STAINLESS
- LAVATORY, WALL HUNG, REFERENCE PLUMBING DRAWINGS
- URINAL, REFERENCE PLUMBING DRAWINGS
- WATER CLOSET, WALL HUNG, AUTOMATIC FLUSH - REFERENCE PLUMBING DRAWINGS
- NOT USED
- BOBRICK B-270 SURFACE MOUNTED SANITARY NAPKIN DISPOSAL
- BOBRICK B-36016 SURFACE MOUNTED SHARPS DISPOSAL
- NOT USED
- NOT USED
- TOILET PARTITIONS, FLOOR AND CEILING ANCHORED, SOLID POLYMER, COLOR: TBD, SEE SPEC FOR ADDITIONAL INFORMATION
- NOT USED
- NOT USED
- NOT USED
- NOT USED
- BOBRICK B-750 AIRCRAFT ADA RECESSED HAND DRYER
- BOBRICK B-2280 FLOOR-STANDING WASTE RECEPTACLE WITH OPENTOP
- BOBRICK B-204-3 SHOWER CURTAIN AND ROD
- BOBRICK B-5181 FOLDING SHOWER SEAT
- SOLID SURFACE SHOWER WALL PANELS (4 SIDES)
- INCLUDE TALL CORNER SHOWER CADDY
MANUF.: CORIAN
COLOR: DEEP CLOUD & SILVER GRAY, SMOOTH FINISH
- BENCH - SAME VENDOR AS LOCKERS



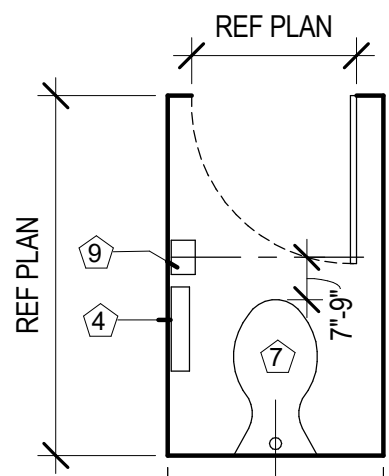
1 FLOOR PLAN - BOYS' LOCKER ROOM
1/4" = 1'-0"



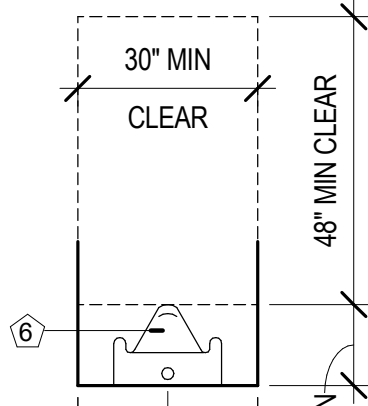
2 FLOOR PLAN - GIRLS' LOCKER ROOM
1/4" = 1'-0"

NOTE:
DIMENSIONS ARE TO BE CLEAR AND ARE FROM FINISHED FACE OF
WALL WHERE WALL BASE EXTENDS PAST FACE OF WALL TILE.

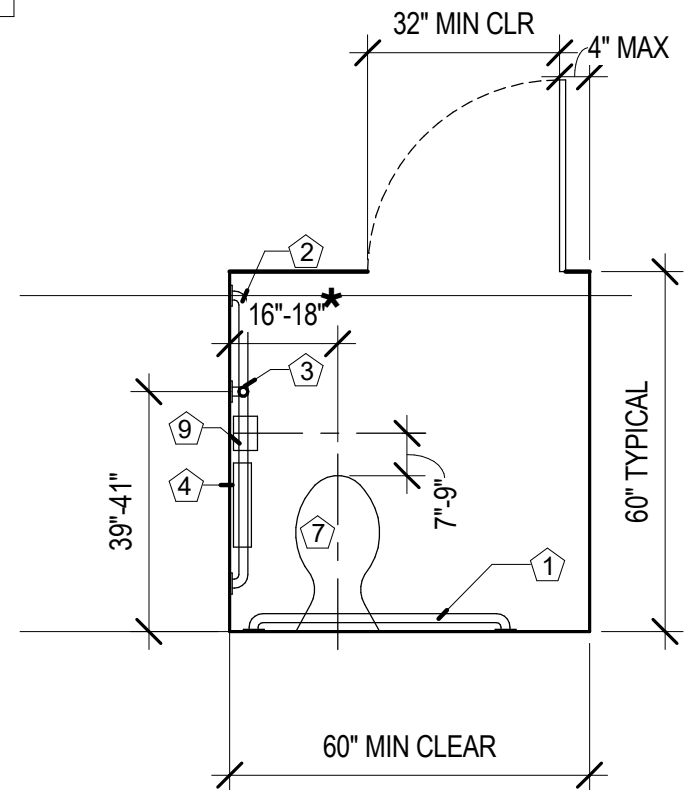
★ INSTALL FIXTURE @ 17" TO CENTERLINE



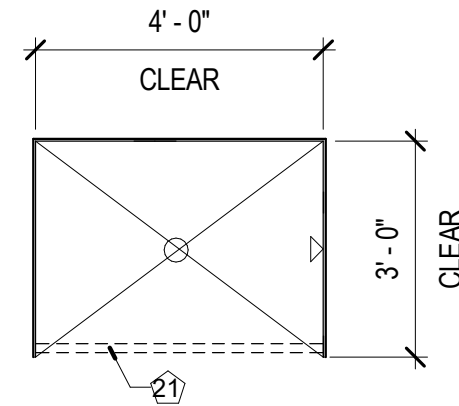
1 STANDARD STALL



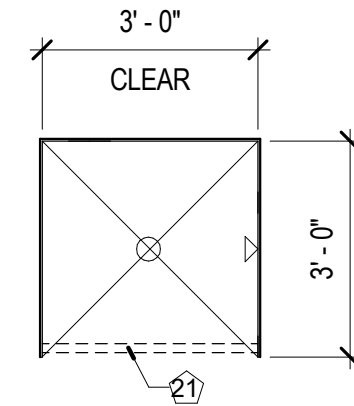
2 URINAL



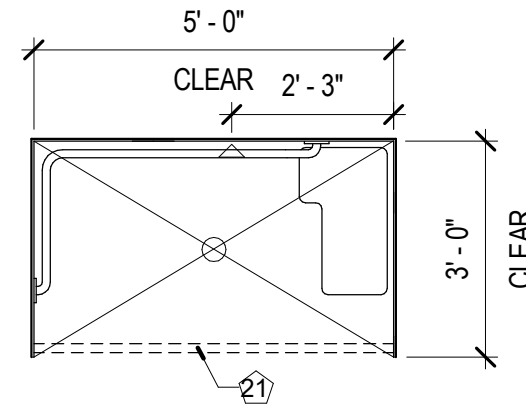
3 ACCESSIBLE STALL



4 SHOWER STALL

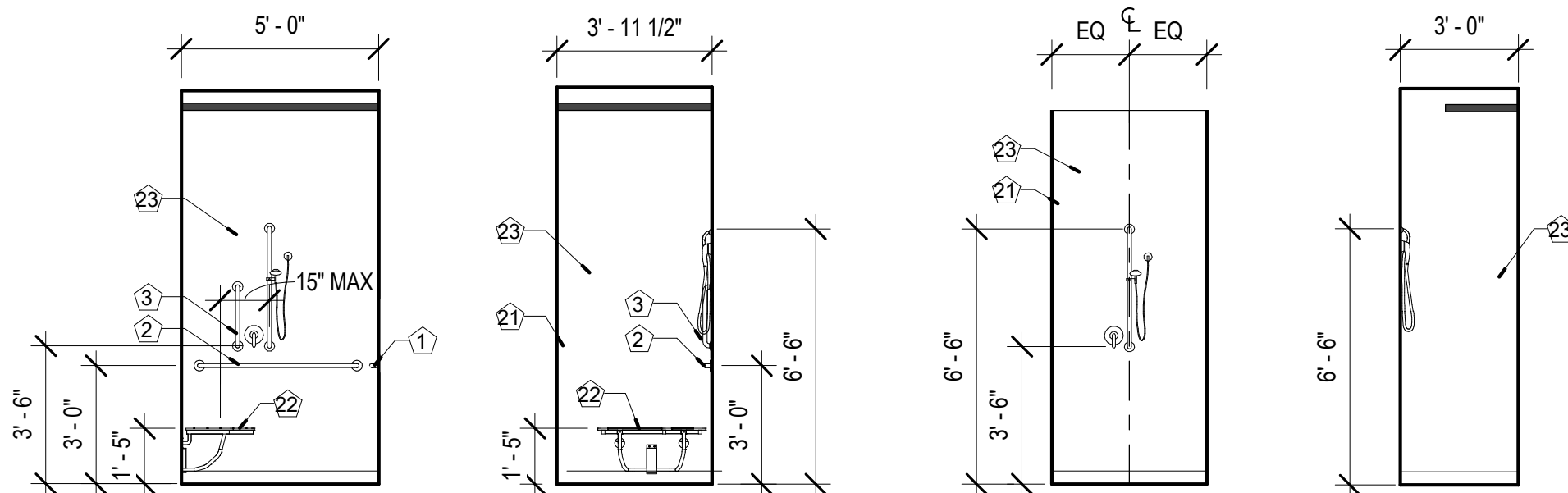


5 SHOWER STALL

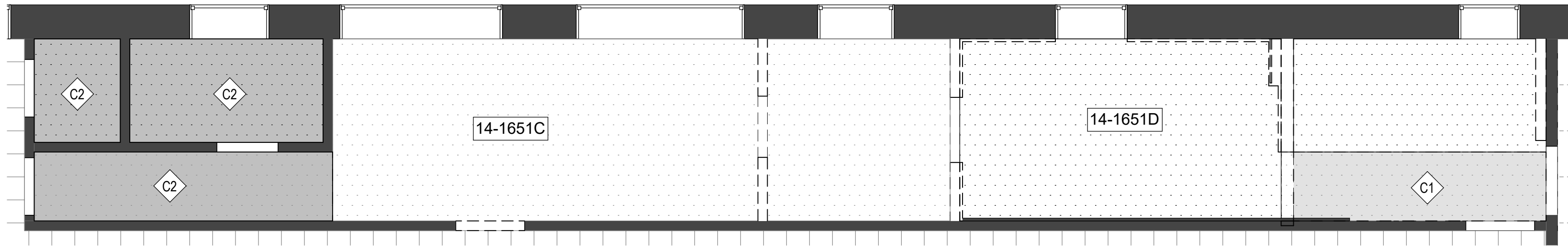


6 ADA SHOWER STALL

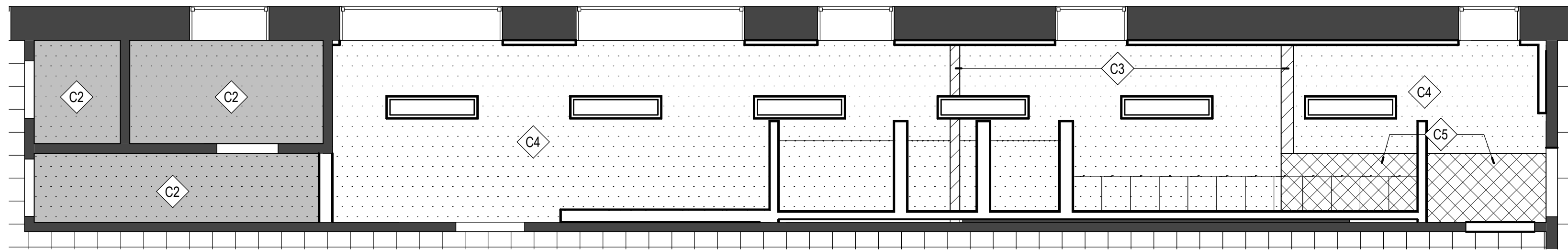
3 PLUMBING FIXTURES/ACCESSORIES
3/8" = 1'-0"



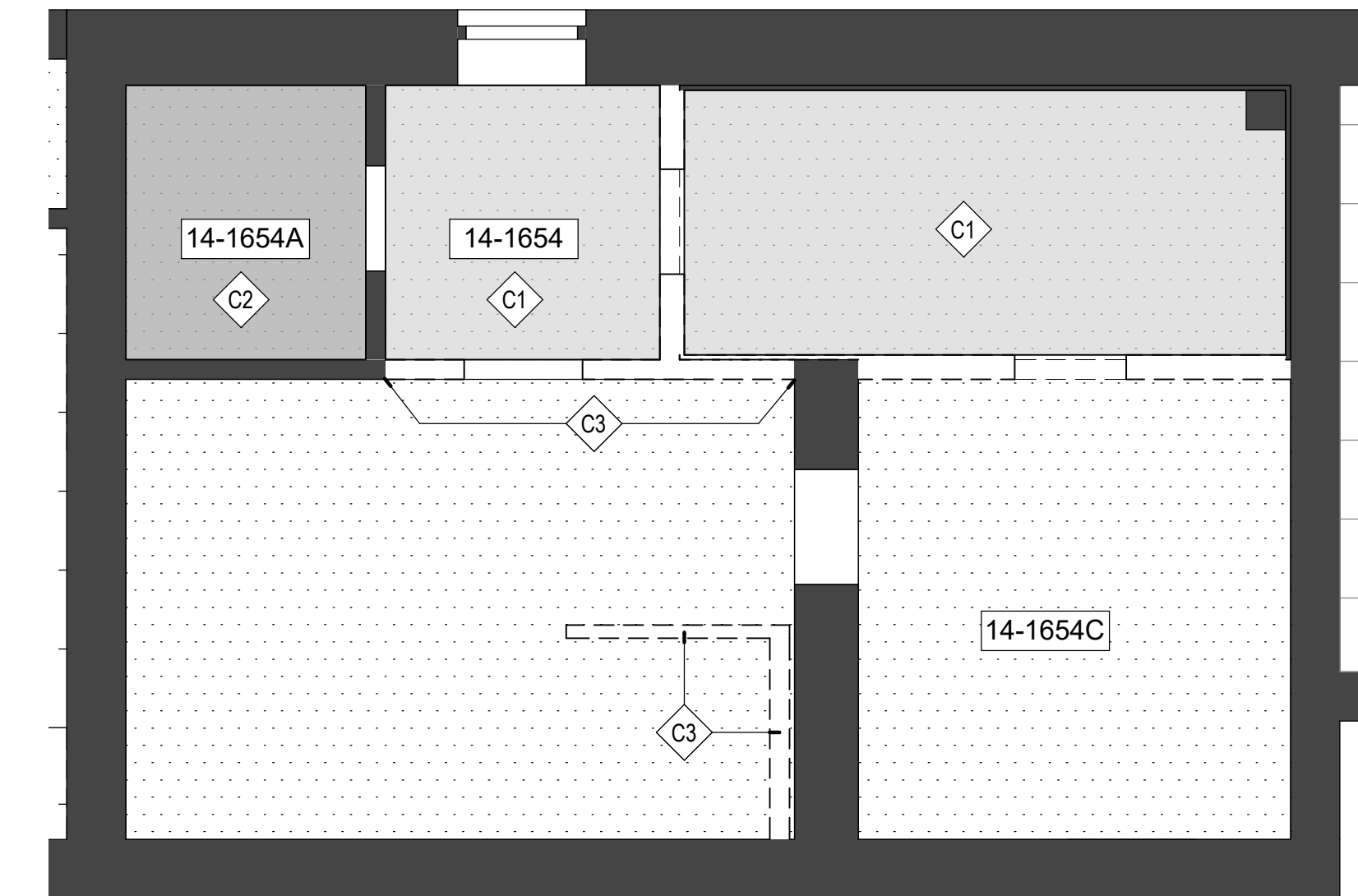
4 PLB. FIXT. & ACC. MOUNTING HEIGHTS
1/4" = 1'-0"



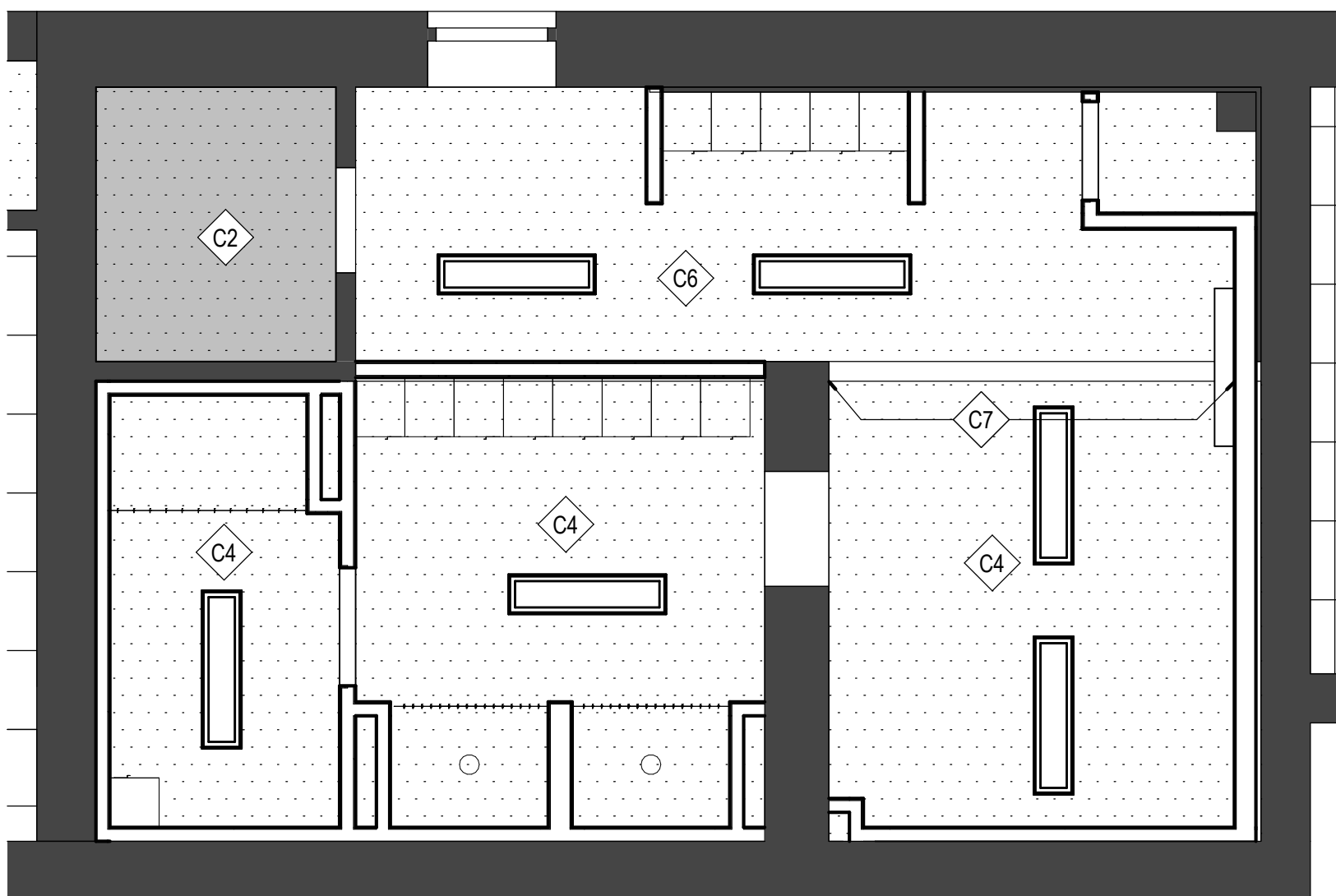
1 DEMO RCP - BOYS LOCKER RM
A-401 1/4" = 1'-0"



2 RCP - BOYS LOCKER RM
A-401 1/4" = 1'-0"



3 DEMO RCP - GIRLS LOCKER RM
A-401 1/4" = 1'-0"



4 00 - RCP - GIRLS LOCKER RM
A-401 1/4" = 1'-0"

KEYED NOTES - CEILING

- C1 DEMO/PLASTER CEILING/SOFFIT(7'-6"x4'-1")
C2 EXISTING PLASTER CEILING - NO WORK
C3 EXISTING PLASTER CEILING - PATCH/REPAIR WHERE WALLS WERE DEMOD
C4 EXISTING PLASTER CEILING - PAINT
C5 NEW GYP BD SOFFIT - MATCH EXISTING HEIGHT
C6 NEW SUSPENDED GYP BD CEILING. FEILD VERIFY TO INSTALL @ MAX HEIGHT. MIN HEIGHT - (7'-1") - PAINT
C7 NEW GYP BD BULKHEAD, PAINT (7'-1")

GENERAL NOTES: CEILING

- COORDINATE CEILING WORK WITH SEPERATE HVAC PROJECT.
- SEE ELECTRICAL DRAWINGS FOR LIGHTING.
- EXISTING INFORMATION GATHERED FROM CASUAL FIELD OBSERVATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.
- CONTRACTOR SHALL PROVIDE ALL CUTTING & PATCHING AS REQUIRED FOR EXECUTION OF THE WORK. INCLUDE WORK REQUIRED DUE TO MEP RELATED ITEMS, ITEMS NOT SHOWN ON PLANS.

STATE OF MISSOURI
MICHAEL L. PARSON,
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MISSOURI STATE CERTIFICATE OF AUTHORITY #00246198



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ISSUE DATE: 07/06/22

CAD DWG FILE: A-401
DRAWN BY: AR
CHECKED BY: MR
DESIGNED BY: WD

SHEET TITLE:

REFLECTED
CEILING
PLANS

SHEET NUMBER:

A-401

12 OF 45 SHEETS
07/06/22

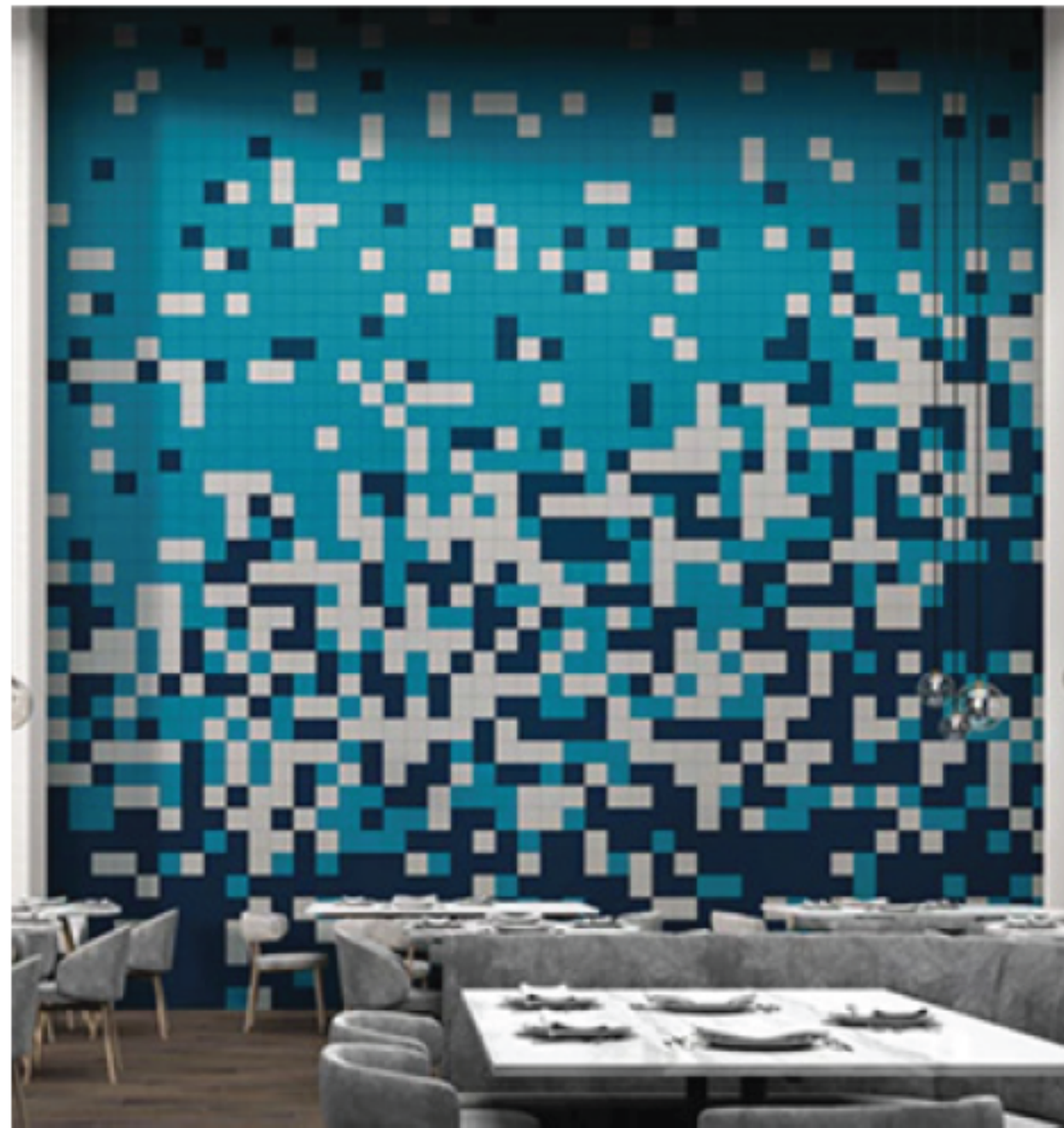
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FINISH LEGEND					
FINISH TAG	MANUFACTURER/DISTRIBUTOR	DESCRIPTION	LOCATION	CONTACT	NOTES
CONCRETE					
CON-1	TNEMEC	SEALED CONCRETE	POOL DECK	MIKE CERUTTI, mcerutti@tnemec.com	BASE BID
FLOORING					
EPX-1	TNEMEC EPOXY FLOORING & BASE	GREY TONE EPOXY W/MULTI COLOR FLEX AND SLIP RESISTANT TEXTURE	BOYS & GIRL'S LOCKER ROOM	MIKE CERUTTI, mcerutti@tnemec.com	ALTERNATE #3 & BASE BID EQUIPMENT ROOM
EPX-2	TNEMEC EPOXY FLOORING & BASE	COLOR - MID TONE GREY	BOYS & GIRL'S LOCKER ROOM	MIKE CERUTTI, mcerutti@tnemec.com	ALTERNATE #3
EPX-3	TNEMEC EPOXY FLOORING & BASE	COLOR - BLACK	BOYS & GIRL'S LOCKER ROOM	MIKE CERUTTI, mcerutti@tnemec.com	ALTERNATE #3
EPX-4	TNEMEC EPOXY FLOORING & BASE	COLOR-BLUE	POOL DECK	MIKE CERUTTI, mcerutti@tnemec.com	MATCH DEX-O DFX-B-04;ALTERNATE 4
PAINT					
PT-1	SHERWIN WILLIAMS OR APPROVED EQUAL	EXTRA WHITE SW7006	GYP-1	HANK MEINKING, hank.meinking@sherwin.com	-
PT-2	SHERWIN WILLIAMS OR APPROVED EQUAL	IRON ORE SW7069	DOORS & FRAMES, RAILINGS, LOUVERS	HANK MEINKING, hank.meinking@sherwin.com	
TILE					
TIL-1	DALTILE	CUSTOM MOSAIC, KEYSTONE SERIES, 2"X2" SHEET MOUNTED, CUSTOM RANDOM DROP DESIGN - COLORS: 30% D617 - ARCTIC WHITE,30% D182 - SUEDE GREY, 10% D118 - BROWN BERRY, 10% D311 - EBONY, 10% D169 - WATERFALL, 10% D189 - NAVY	NATATORIUM WALLS / BOY'S AND GIRL'S LOCKER ROOMS	JOANNA WHITTAKER, joanna.whittaker@daltile.com	ALTERNATE #3, SEE IMAGE ON A-500 FOR REFERENCE IMAGE
TIL-2	DALTILE	COLORWHEEL, 4"X4", CHALKBOARD, GROUT: MAPEI, KERAPOXY EPOXY GROUT, COLOR: 100 WHITE	BOYS AND GIRL'S LOCKER ROOMS		ALTERNATE #3
TIL-3	DALTILE	KEYSTONE, 2"X2", EBONY/BLACK, GROUT: MAPEI, KERAPOXY EPOXY GROUT, COLOR: 100 WHITE	LANE MARKERS IN POOL, ACCENT TILE	JOANNA WHITTAKER, joanna.whittaker@daltile.com	
TIL-4	DALTILE	COLORWHEEL, 4"X4", ARCTICE WHITE, GROUT: MAPEI, KERAPOXY EPOXY GROUT, COLOR: 100 WHITE	EXTERIOR OF SHOWER DIVIDERS		ALTERNATE #3
TIL-5	DALTILE	KEYSTONES, 2"X2", ARCTIC WHITE, GROUT: MAPEI, KERAPOXY EPOXY GROUT, COLOR: 100 WHITE	INTERIOR OF POOL	JOANNA WHITTAKER, joanna.whittaker@daltile.com	BASE BID (INFILL TILE) & ALTERNATE 2
LOCKER					
LCR-1	HALLOWELL	CUSTOM 60" HIGH PHENOLIC CONSTRUCTION	BOYS AND GIRL'S LOCKER ROOMS	TY OHL, tohl@bradfordsystems.com	
SPECIALTY FINISH					
SS-1	CORIAN SOLID SURFACE	SILVER GRAY	SIDE WALLS OF SHOWER STALLS		ALL NECESSARY TRIM PIECES TO MATCH ADJACENT PANEL COLOR (ALTERNATE 3)
SS-2	CORIAN SOLID SURFACE	DEEP CLOUD	BACK WALLS OF SHOWER STALLS		ALL NECESSARY TRIM PIECES TO MATCH ADJACENT PANEL COLOR (ALTERNATE 3)
TOILET PARTITION					
PAR-1	ASI ACCURATE PARTITIONS	BLACK CORE PHENOLIC - SILVER GRAY	BOYS AND GIRS LOCKER ROOMS - SEE PLAN FOR SIZES		SEE DRAWING FOR PARTITION LAYOUT AND DIMENSIONS (ALTERNATE 3)

GENERAL NOTES: FINISH

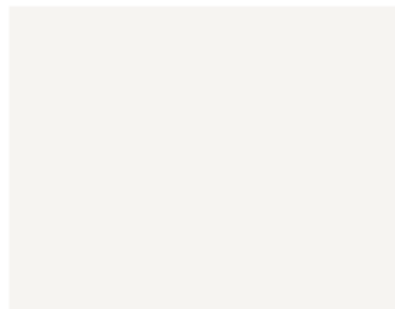
- REFER TO PLANS, RCPS, FINISH LEGEND, DOOR SCHEDULE, AND DETAILS FOR FINISH INFORMATION AND LOCATIONS.
- IDENTIFY AND INFORM CONSTRUCTION TEAM OF ALL CRITICAL PATH ITEMS, CRITICAL DEADLINES, AND DATE OF SUBSTANTIAL COMPLETION.
- GC TO REVIEW AND SUBMIT TO ARCHITECT SAMPLES OF EACH MATERIAL IN FINISH LEGEND. REFER TO PLANS, RCP, ELEVATIONS, FINISH LEGEND, DOOR SCHEDULE, AND DETAILS FOR FINISH INFORMATION AND LOCATIONS. SAMPLES TO BE THE SPECIFIED COLOR AND FINISH FOR REVIEW. REFERENCE GENERAL NOTES: SUBMITTALS FOR MORE INFO AND PROTOCOL.
- THE FINISH NAME TAKES PRECEDENT OVER THE FINISH PRODUCT NUMBER WHEN ORDERING MATERIALS. CONTACT ARCHITECT WITH DISCREPANCIES BEFORE ORDERING MATERIALS.
- PATCH AND REPAIR EXISTING FINISHES AS REQUIRED WHERE DEMOLITION OR NEW CONSTRUCTION OCCURS. NEW FINISHES TO MATCH EXISTING IN MANUFACTURER, COLOR, FINISH, AND TEXTURE. WHERE MATERIALS ARE NOT AVAILABLE FOR EXACT MATCH, SUBMIT PROPOSED REPLACEMENT MATERIALS TO ARCHITECT FOR BEFORE PURCHASE OR INSTALLATION.
- PATCH AND REPAIR OR REPLACE ANY EXISTING FINISHES IN BUILDING COMMON AREAS OUTSIDE SCOPE OF WORK IF DAMAGE OCCURS RELATED TO THE CONSTRUCTION OF THE SCOPE OF WORK.
- MAINTAIN AND PROTECT EXISTING FLOORING AND FINISHES NOTED TO REMAIN FOR DURATION OF CONSTRUCTION.
- CLEAN AND PREPARE FLOOR AREA SCHEDULED TO RECEIVE NEW FLOORING SO THE AREAS ARE ABLE TO ACCEPT NEW FLOORING, AND MAINTAIN REQUIRED FLOOR ASSEMBLY RATING, TO BE FLUSH AND CONTINUOUS WITH ADJACENT FLOOR SURFACE, AS REQUIRED FOR NEW FINISH.
- ALL INTERIOR FINISHES TO MEET OR EXCEED APPLICABLE CODE REQUIREMENTS, INCLUDING BUT NOT LIMITED TO FLAME SPREAD AND SMOKE DEVELOPMENT.
- ALL INTERIOR FINISH AND SUNDRIES TO MEET OR EXCEED CLASS II FLAME SPREAD, 26 - 75 AND SMOKE DEVELOPMENT RATING LESS THAN 450 AND ALL OTHER APPLICABLE CODES.
- ALL IMPACT-RESISTANT PANELS TO BE CLASS 1 COMPONENTS. TESTED IN ACCORDANCE WITH UL-723 (ASTM-E849) FLAME SPREAD 20 OR LESS. SMOKE DEVELOPED 400 OR LESS.
- UNO ALL PAINTED SURFACES TO RECEIVE A MINIMUM OF ONE (1) PRIMER COAT AND THEN TWO (2) FINISH PAINT COATS. TINT PRIMER COAT PER MANUFACTURER'S SPECIFICATIONS.
- UNO ALL HOLLOW METAL FRAMES TO RECEIVE PAINT PT-2. REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION.
- UNO ALL METAL DOORS TO RECEIVE PAINT PT-2. REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION.

UNO ALL PAINTED SURFACES TO RECEIVE THE FOLLOWING FINISHES:
GYP. BD. VERTICAL WALL SURFACES - EGGSHELL (SATIN)
GYP. BD. CEILINGS, SOFFITS, BULKHEADS - EGGSHELL (SATIN)
METAL SURFACES - SEMI-GLOSS

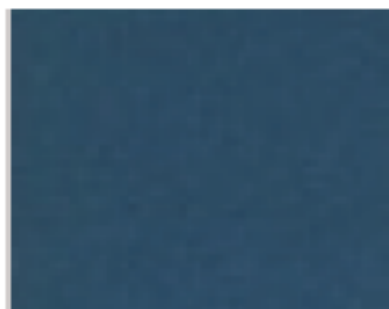


MOSAIC WALL DESIGN INTENT (KEYNOTE A10)
NOT TO SCALE

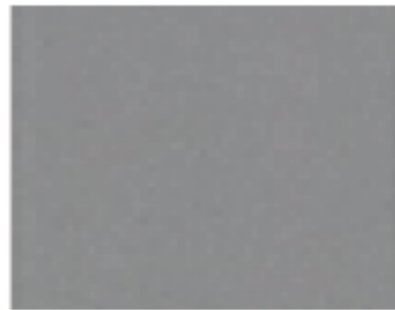
ALTERNATE 2



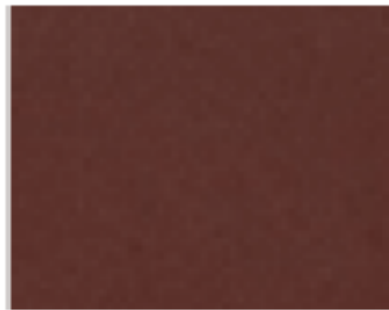
ARCTIC WHITE - D617
30%



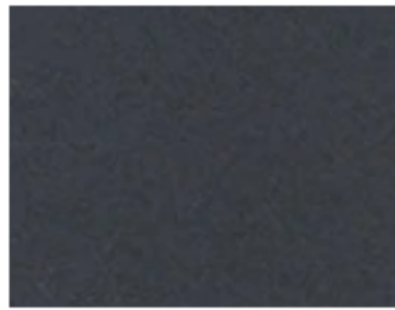
NAVY - D189
10%



SUEDE GRAY - D182
30%



BROWN BERRY - D118
10%

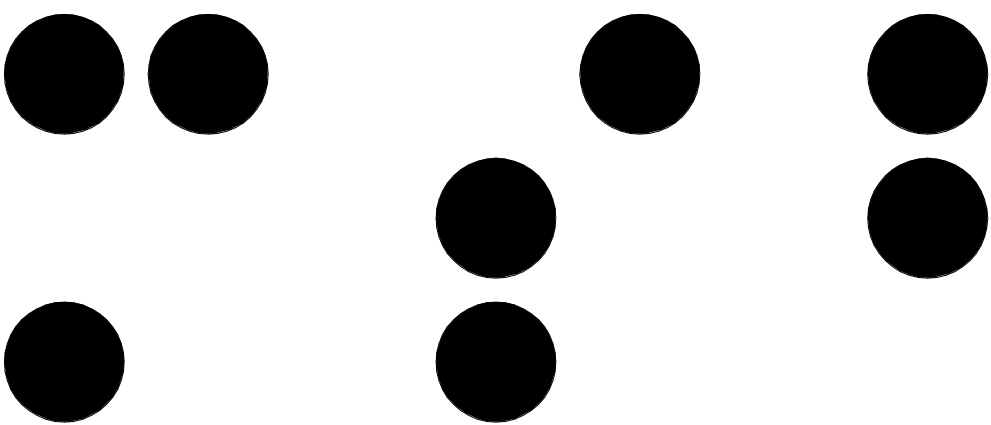


BLACK/EBONY - D311
10%



WATERFALL - D169
10%

MSB



POOL MOSAIC - MSB TEXT AND LRG-SCALE BRAILLE (KEYNOTE A19)
NOT TO SCALE

ALTERNATE 2



POOL MURAL - MULES LOGO (KEYNOTE A17)
NOT TO SCALE

ALTERNATE 2

STATE OF MISSOURI
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REPAIR SWIMMING POOL

MISSOURI SCHOOL FOR
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3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E2107-01
SITE# 2011
FACILITY # 5012011003,
501201104

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DATE: _____
ISSUE DATE: 07/06/22

CAD DWG FILE: A-500
DRAWN BY: AR
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DESIGNED BY: WD

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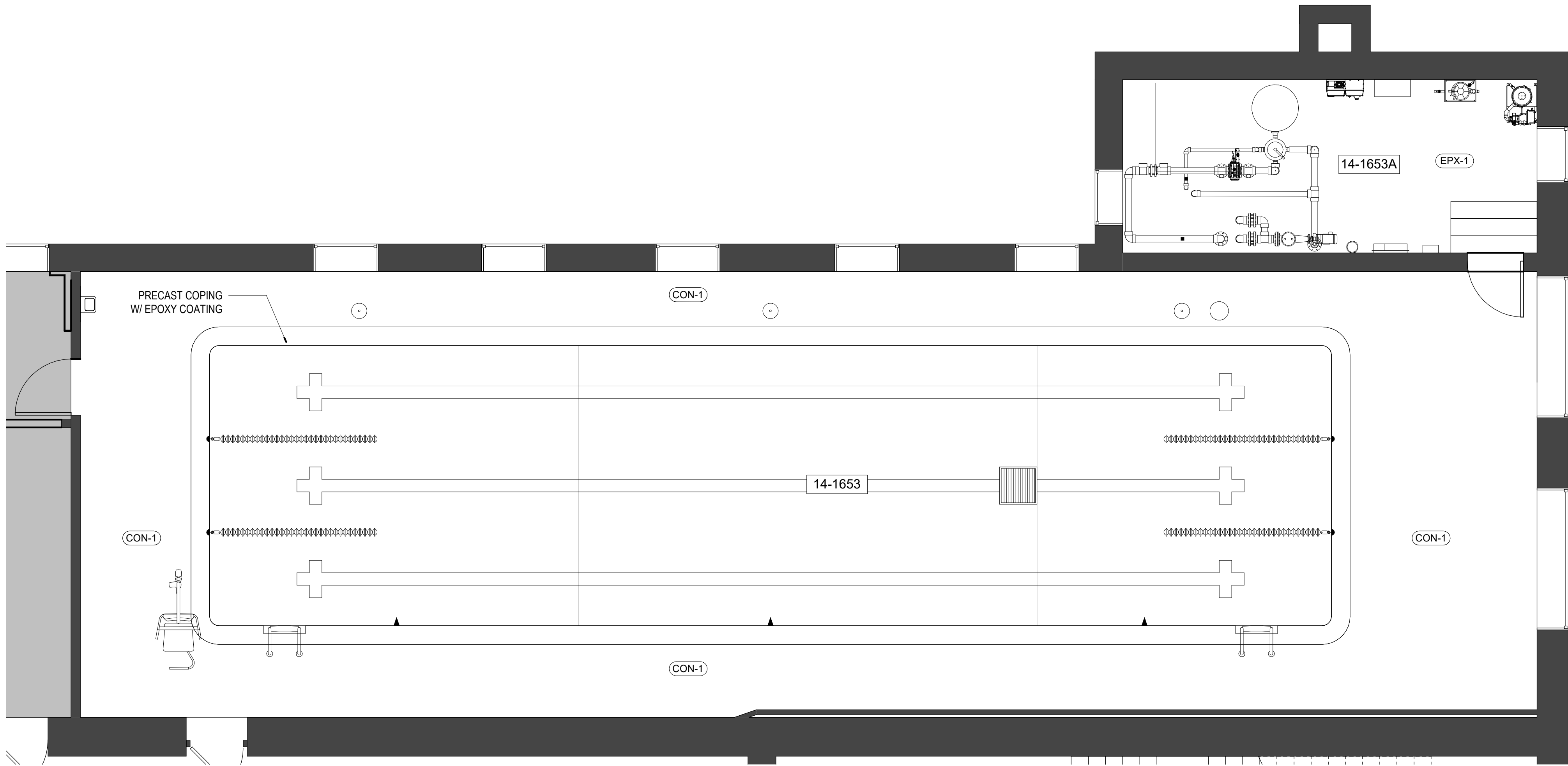
FINISH
LEGEND &
SCHEDULE

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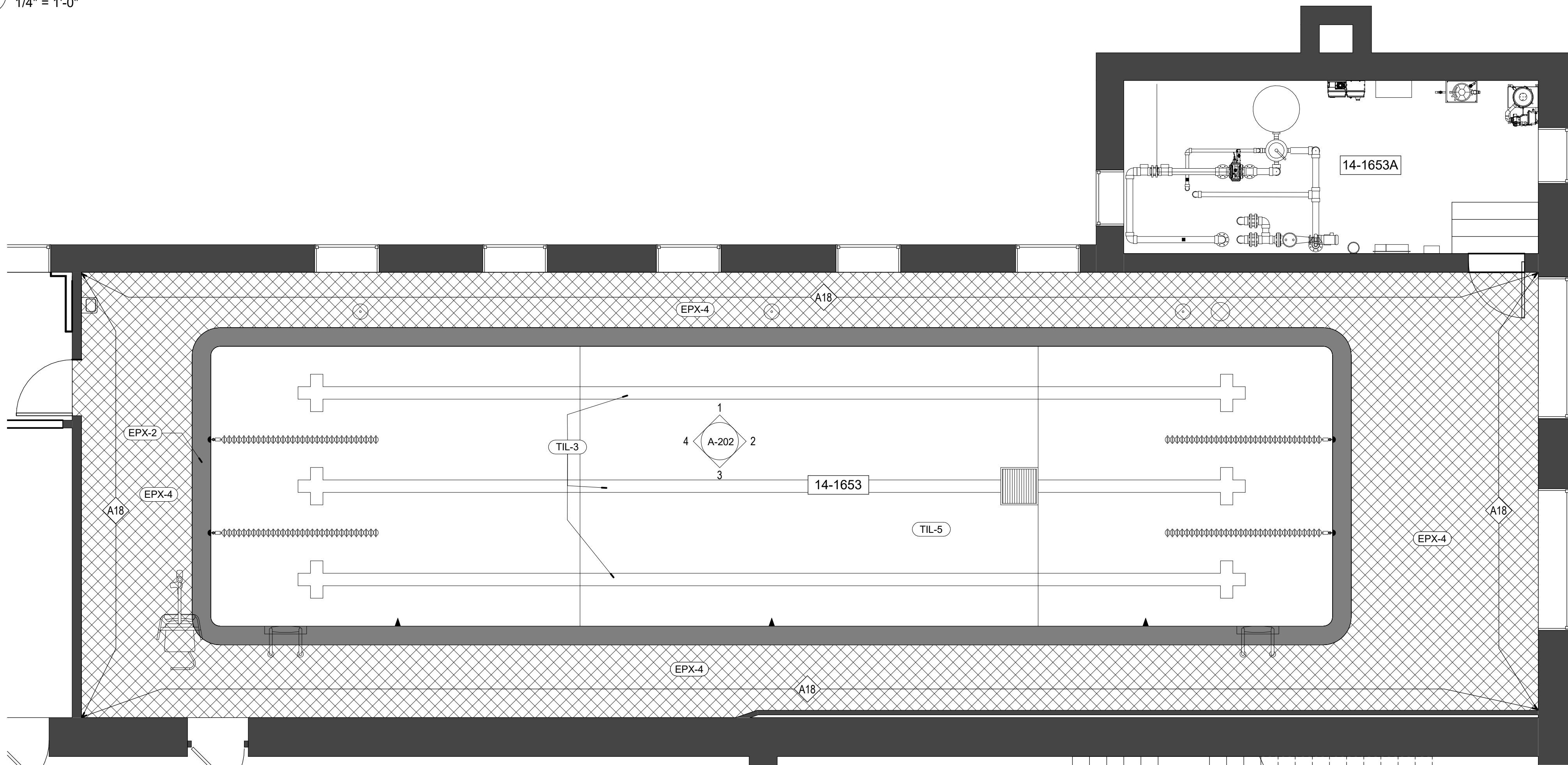
A-500

13 OF 45 SHEETS
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1 FLOOR PLAN - POOL - BASE BID
A-501 1/4" = 1'-0"



2 FLOOR PLAN - POOL - ALTERNATE BID
A-501 1/4" = 1'-0"

KEYED NOTES - ARCHITECTURAL

A18 ALTERNATE 1: PROVIDE NEW WALL TILE (TIL-1). ENTIRE POOL VOLUME (BOTTOM AND SIDES). TIL-3 (LANE MARKERS), TIL-5 (FIELD)

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DESIGNED BY: WD

SHEET TITLE:

FINISH PLANS
- POOL

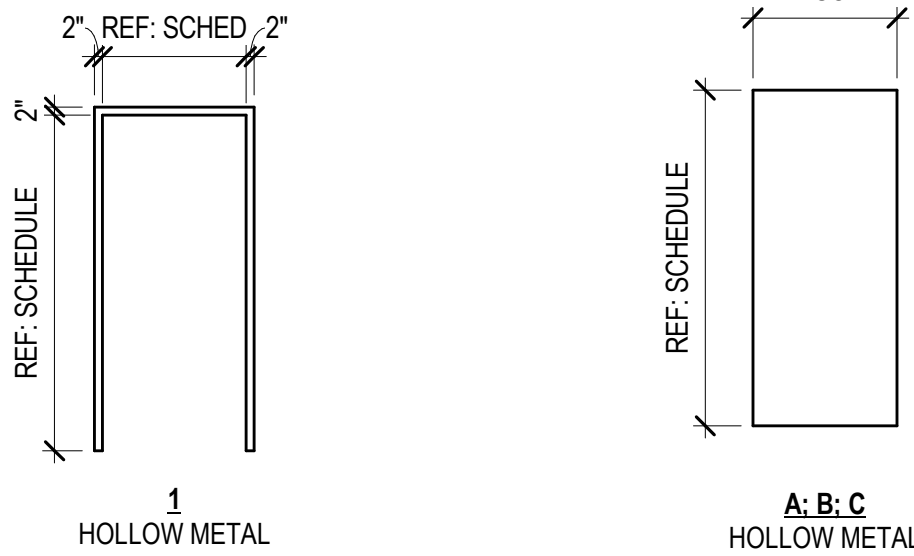
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14 OF 45 SHEETS
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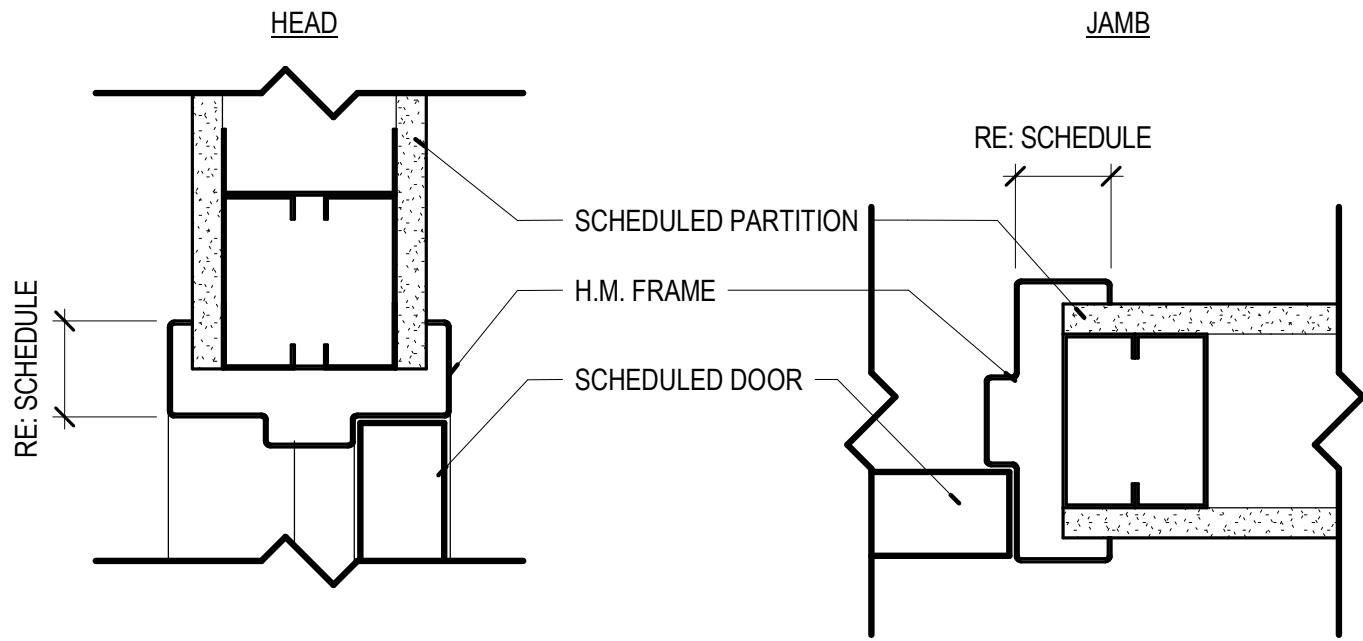


1 FRAME TYPES

A-901 1/4" = 1'-0"

2 DOOR TYPES

A-901 1/4" = 1'-0"



6 DETAIL - H.M. DOOR FRAME

A-901 3" = 1'-0"

DOOR SCHEDULE - NEW										
MARK	DOOR					FRAME		HARDWARE	COMMENTS	
	TYPE	WIDTH	HEIGHT	THICKNESS	FINISH	TYPE	FINISH			
BASEMENT										
14-1645C-1	A	2' - 6"	6' - 4"	1 3/4"	PTD	1	PTD	3	PROVIDE & INSTALL CLOTHES HOOK ON INT SIDE OF DOOR	
14-1645C-2	B	3' - 0"	6' - 8"	1 3/4"	PTD	1	PTD	2		
14-1651D-1	C	3' - 0"	6' - 8"	1 3/4"	PTD	1	PTD	4		
14-1651D-2	C	3' - 0"	6' - 8"	1 3/4"	PTD	1	PTD	1		
14-1653A	C	3' - 0"	6' - 8"	1 3/4"	PTD	1	PTD	5	90 MINUTE RATED	

GENERAL NOTES: DOOR, FRAME, & HARDWARE

- FIELD VERIFY ACCURACY OF ALL CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
- UNO ALL EXISTING DOORS, FRAMES, AND HARDWARE TO REMAIN.
- REPAIR FINISH ON ALL EXISTING DOORS TO REMAIN WITHIN SCOPE OF WORK, INCLUDING FILLING, SANDING, STAINING, AND/OR REFINISHING AS REQUIRED TO RETURN DOOR TO AS NEW APPEARANCE.
- CONFIRM ALL BUILDING STANDARDS FOR DOOR ASSEMBLIES WITH BUILDING OWNER, INCLUDING BUT NOT LIMITED TO: DOOR SIZE, MATERIAL, AND FINISH; HARDWARE STYLE, FUNCTION, AND FINISH; AND FRAME SIZE, TYPE, AND FINISH.
- FIELD VERIFY ALL DOOR AND FRAME SIZES PRIOR TO FABRICATION AND INSTALLATION.
- UNO ALL EXISTING AND NEW HARDWARE COMPONENTS TO MATCH BUILDING STANDARD.
- CONFIRM DOOR FUNCTION REQUIREMENTS AT ALL SCHEDULED OPENINGS WITH TENANT AND ARCHITECT.
- DOOR OPERATING DEVICES AND ANY SPECIAL LOCKING ARRANGEMENTS TO COMPLY WITH ALL ENFORCED BUILDING CODES, ICC/ANSI 117.1, AND ALL LOCAL, STATE, AND NATIONAL ACCESSIBILITY REQUIREMENTS.
- UNO PAINT ALL EXISTING AND NEW HOLLOW METAL DOOR FRAMES PT-2.
- REFER TO FINISH LEGEND FOR ADDITIONAL DOOR, FRAME, AND HARDWARE FINISH INFORMATION.
- EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE, OR EFFORT. THE OPERATION OF THE SECURITY DEVICES SHALL BE COMPLIANT WITH THE CODES.
- IF A DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3 INCHES FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.
- THE MAXIMUM FORCE FOR PUSHING OR PULLING OPEN A DOOR SHALL BE AS FOLLOWS: (1) FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY. (2) OTHER DOORS. (A) INTERIOR HINGED DOORS: 5 LBF (22.2N) (B) SLIDING OR FOLDING DOORS: 5 LBF (22.2N) THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT MAY HOLD THE DOOR IN A CLOSED POSITION.
- DOORS SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACE ON THE LOWER 10 INCHES.

DOOR HARDWARE NOTES:

- REFER TO SPECIFICATIONS FOR HARDWARE SETS
- DOORS SHALL BE OPERABLE FROM SINGLE EFFORT, NO GRASPING OR WRIST MOVEMENT USING LEVERS, PUSH-PULLS, OR PANIC DEVICES, AND SHALL BE OPENABLE WITHOUT USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
- HARDWARE SHALL BE MOUNTED AT 38" TO 44" AFF.
- DOOR CLOSERS SHALL PROVIDED A MINIMUM OF 3 SECONDS TO MOVE FROM A 70 DEGREE OPEN POSITION TO A POINT 3" FROM THE LATCH.

EFFORT TO OPERATE DOORS:

- INTERIOR DOOR = 5 POUNDS MAX
- EXTERIOR DOOR = 5 POUNDS MAX
- FIRE DOOR = 15 POUNDS MAX

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CAD DWG FILE: A-901

DRAWN BY: AR

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DESIGNED BY: WD

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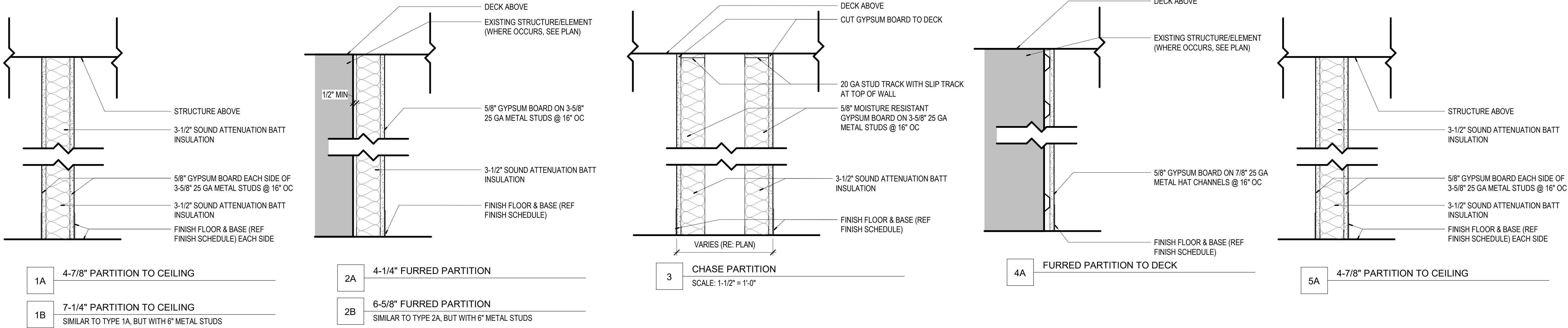
DOOR SCHED / DOOR, FRAME TYPES

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16 OF 45 SHEETS
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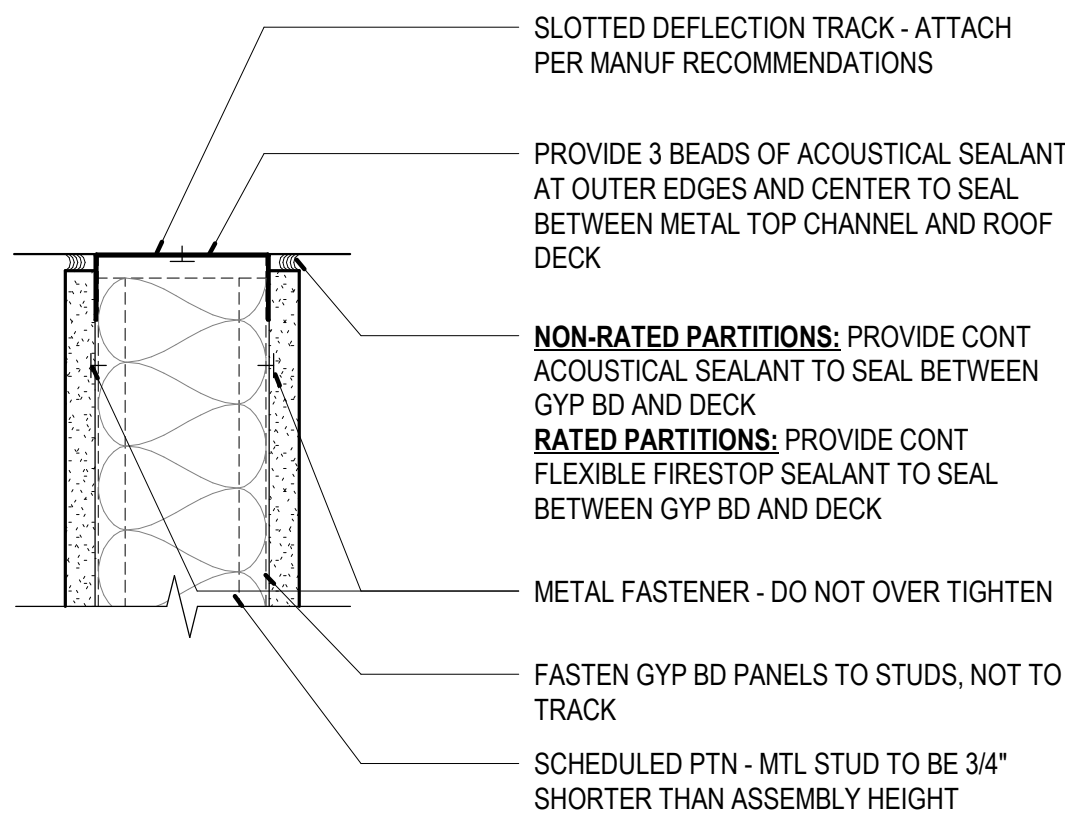


1 PARTITION TYPES
A-902 1 1/2" = 1'-0"

GENERAL NOTES: PARTITIONS

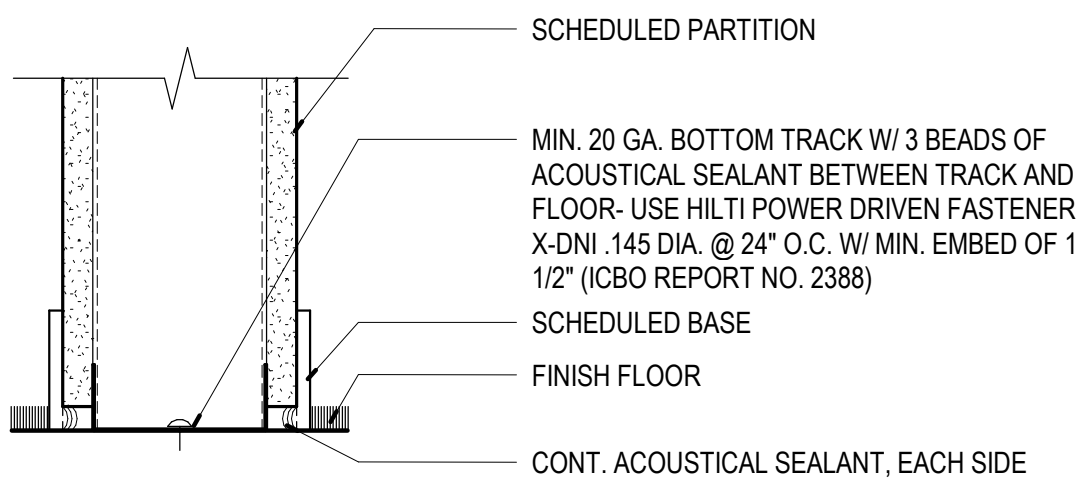
- ALL NEW, EXISTING, AND MODIFIED PARTITIONS TO RECEIVE A LEVEL FOUR (4) DRYWALL FINISH PRIOR TO APPLICATION OF PAINT TO SURFACE TO AVOID PAINT FLASHING. WALL FINISH LEVEL BASED ON GA-214-17 "RECOMMENDED LEVELS OF GYPSUM BOARD FINISH." REFER TO PARTITION TYPES FOR ADDITIONAL INFORMATION.
- CONTROL JOINTS: PROVIDE CONTROL JOINTS ACCORDING TO ASTM C 840 AND IN SPECIFIC LOCATIONS APPROVED BY ARCHITECT FOR VISUAL EFFECT. WHEN POSSIBLE ALIGN WITH DOOR FRAME.
- PARTITIONS ARE DIMENSIONED TO FACE OF PARTITION UNLESS NOTED OTHERWISE.
- PROVIDE 6" METAL STUDS AT ALL PARTITIONS WHERE NEW PLUMBING WASTE OR VENT LINES ARE LOCATED.
- INSTALL MOISTURE RESISTANT GYP BOARD AT ALL WET WALLS, INCLUDING BUT NOT LIMITED TO RESTROOM AND SINK LOCATIONS. PROVIDE GYP TILE BACKER BOARD AT ALL WALLS TO RECEIVE CERAMIC TILE & SOLID SURFACE SHOWER PANELS.
- ALL FIRESTOP SYSTEMS TO MEET UL TESTED SYSTEMS. SYSTEMS MUST BE SUBMITTED TO AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION. GC IS TO KEEP A COPY OF ALL APPROVED SYSTEMS ON SITE FOR DURATION OF PROJECT. ALL INSTALLED SYSTEMS MUST BE LABELED AND DOCUMENTED. DOCUMENTATION IS TO BE SUBMITTED TO OWNER AND ARCHITECT UPON COMPLETION OF THE PROJECT.
- PROVIDE THROUGH PENETRATION FIRESTOP SYSTEMS FOR ALL ITEMS PENETRATING FIRE-RATED ASSEMBLIES. PENETRATIONS TO BE DESIGNED, TESTED, AND FIRE-RESISTANCE RATED TO RESIST FOR A PRESCRIBED PERIOD OF TIME THE SPREAD OF FIRE THROUGH PENETRATIONS. PROVIDE UL-LISTED ASSEMBLIES AS REQUIRED.

NOTE:
ASSEMBLY DESIGN IS BASED ON UL #HW-D-0209. SELECTED MANUF TO SUBMIT APPROVED UL ASSEMBLY REQUIREMENTS



3 DETAIL - UNDERSIDE OF TRACK
A-902 3" = 1'-0"

NOTE:
1. METAL FRAMING PER ICCES LEGACY REPORT ER-4943P AND ICBO REPORT NO. 4782.
2. SEE ICBO ES REPORT NO. 1632 FOR USE IN FIRE-RESISTIVE ASSEMBLIES.



2 BASE OF TRACK
A-902 3" = 1'-0"



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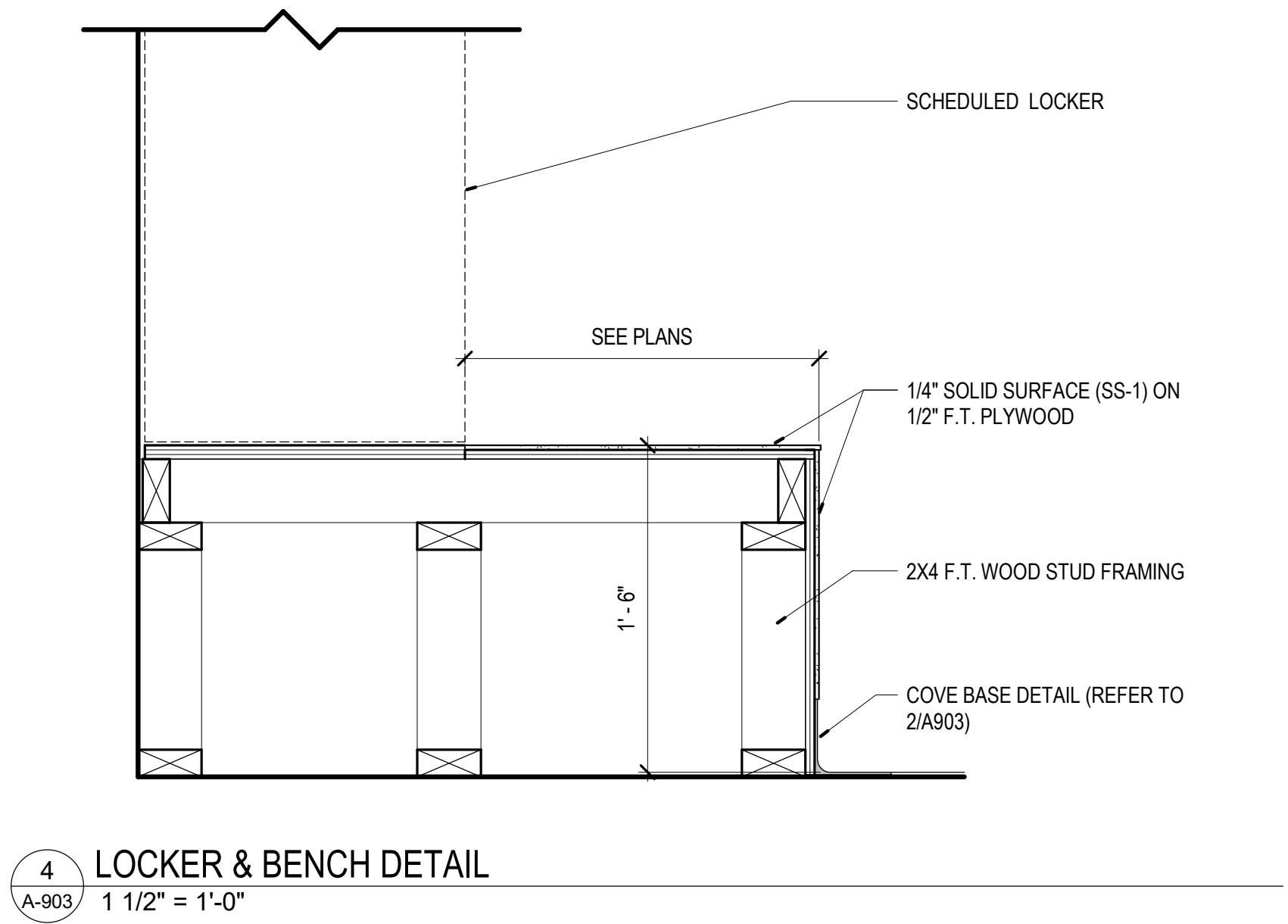
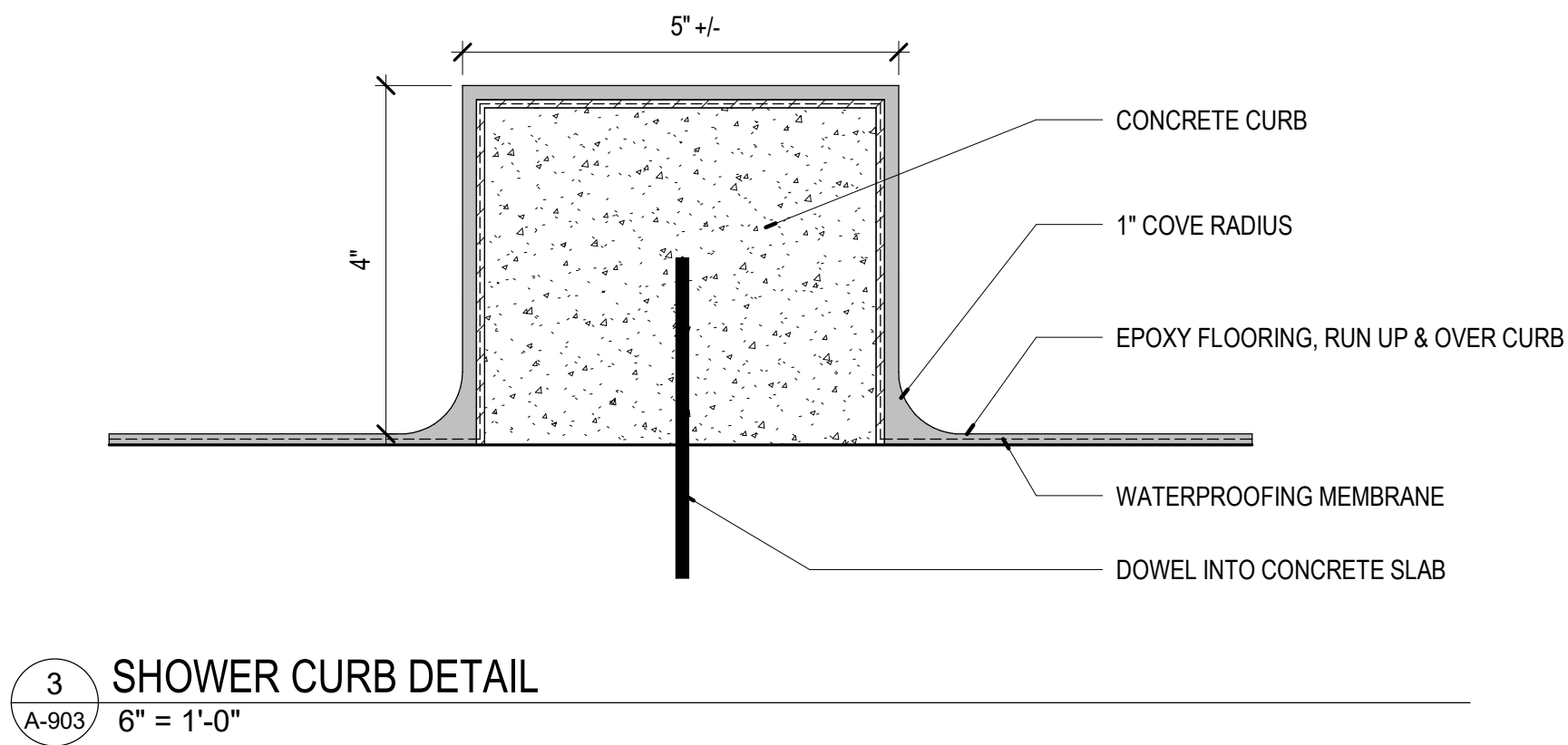
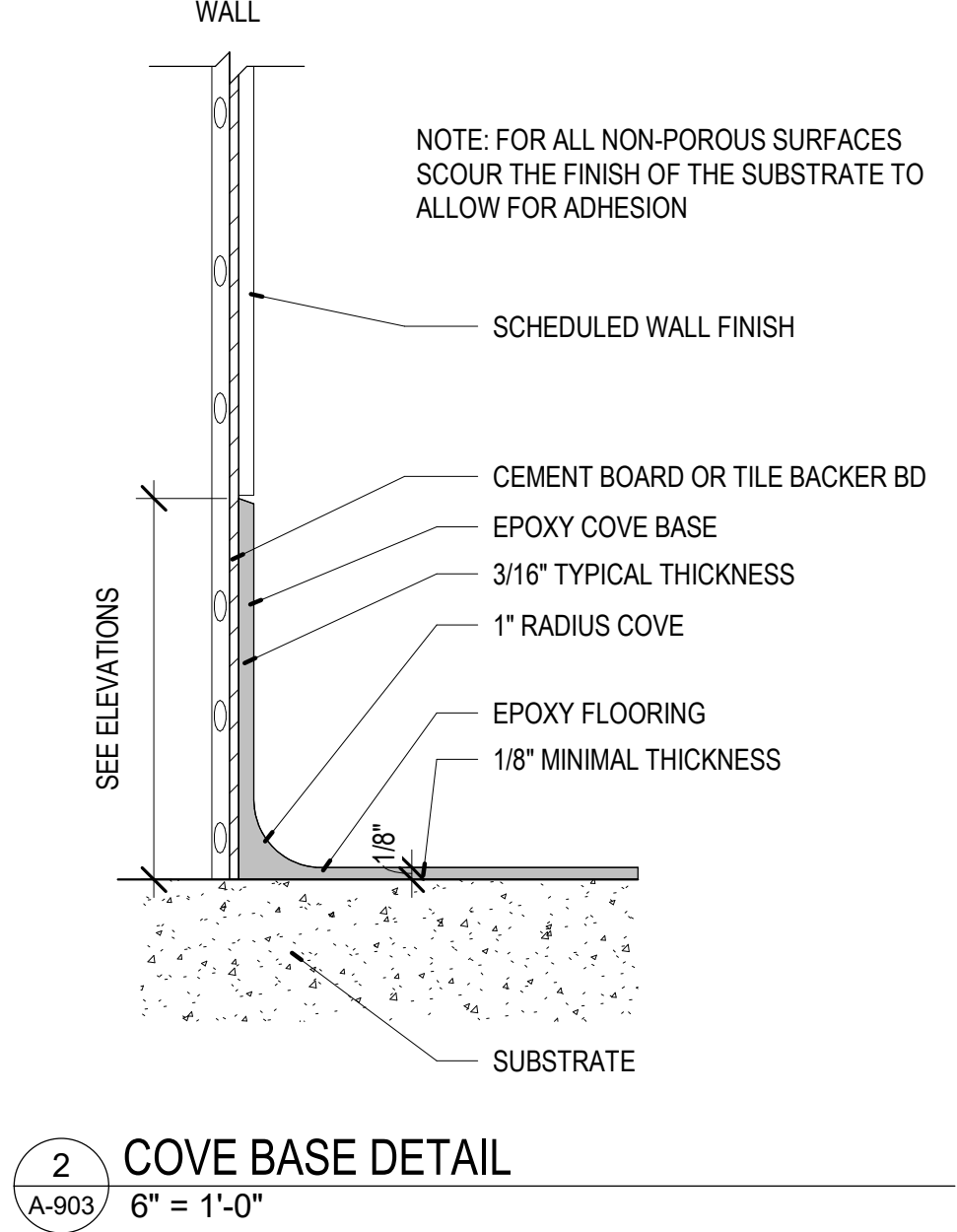
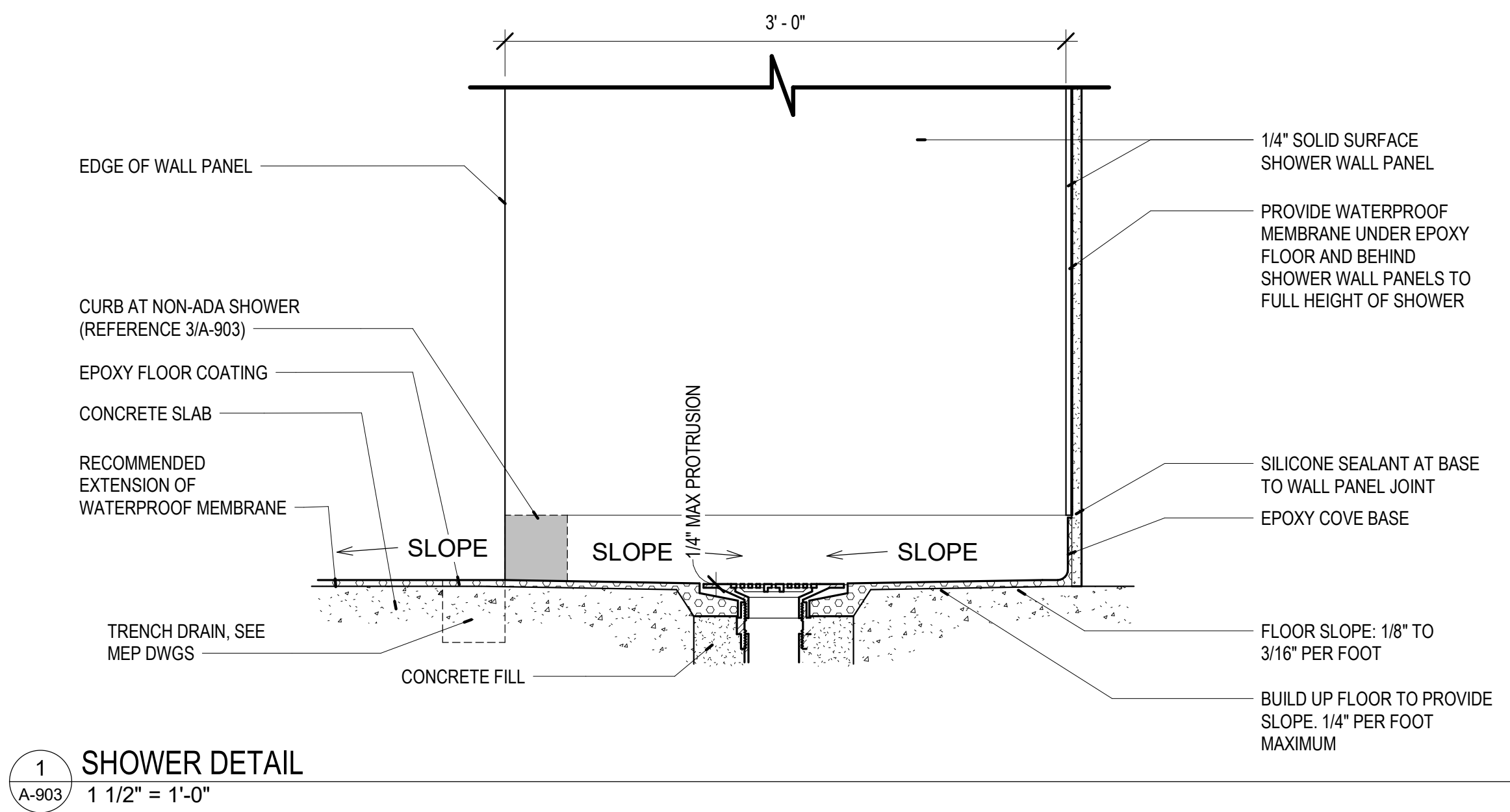
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PARTITION
TYPES

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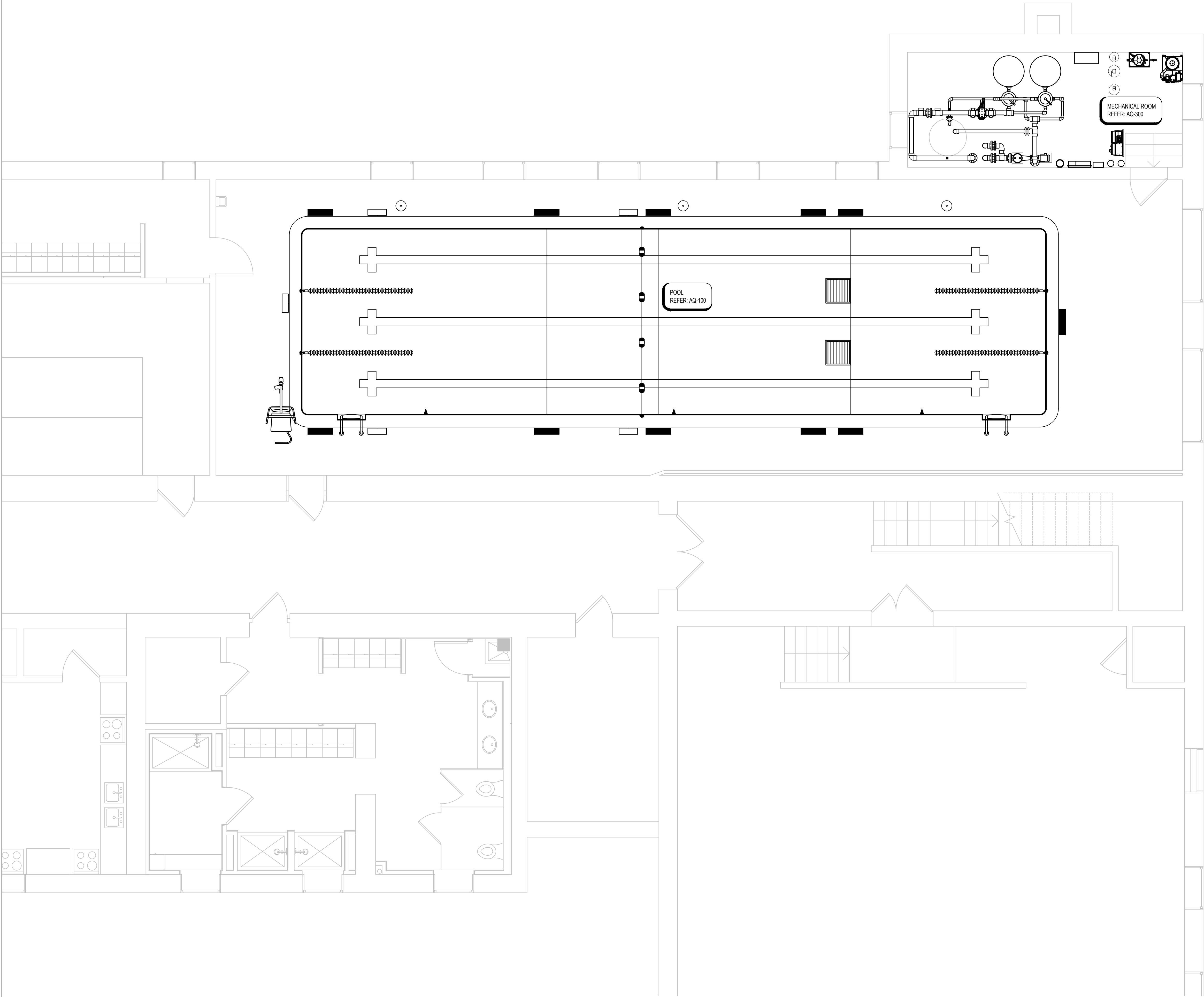
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DESIGNED BY: WD

SHEET TITLE:

DETAILS

SHEET NUMBER:

A-903



1
AQ-000
POOL REFERENCE PLAN
1/4" = 1'-0"

DESIGN DATA		
	UNITS	POOL
LENGTH	FT.	60'-0"
WIDTH	FT.	15'-0"
WATER SURFACE AREA	SQ. FT.	889
PERIMETER	FT.	150'
VOLUME	GALLON	35,000
RECIRCULATION SYSTEM		
POOL TURNOVER RATE	HOURLY	5.07
RECIRCULATION RATE	GPM	115
SEWER CAPACITY	GPM	REFER TO PLUMBING
BATHER LOAD	PERSON	60

- GENERAL POOL NOTES
1.

⬢ DENOTES WATER DEPTH FROM WATER LEVEL.
2.

TYPICAL POOL DIMENSIONS SHOWN ARE FROM INSIDE FINISHED POOL WALL.
3.

DEPTH MARKERS AND WARNING SIGNS ARE SHOWN IN APPROXIMATE LOCATIONS. DEPTH MARKERS AND WARNING SIGNS SHALL NOT EXCEED 25'-0" APART FROM EACH OTHER, AND SHALL BE PLACED AT EVEN FOOT INTERVALS PER LOCAL CODE.
4.

ALL PROPRIETARY NAMES MENTIONED ARE TO DESIGNATE PERFORMANCE STANDARDS. EQUIVALENT PRODUCTS SHALL BE SUBMITTED FOR APPROVAL.
5.

SLIP RESISTANT DECK FINISH REQUIRED. REFER TO ARCHITECT.
6.

REFER TO PLUMBING FOR DECK DRAINS AND HOSE BIBBS.
7.

ALL SURFACE WATER SHALL DRAIN AWAY FROM THE POOL.
8.

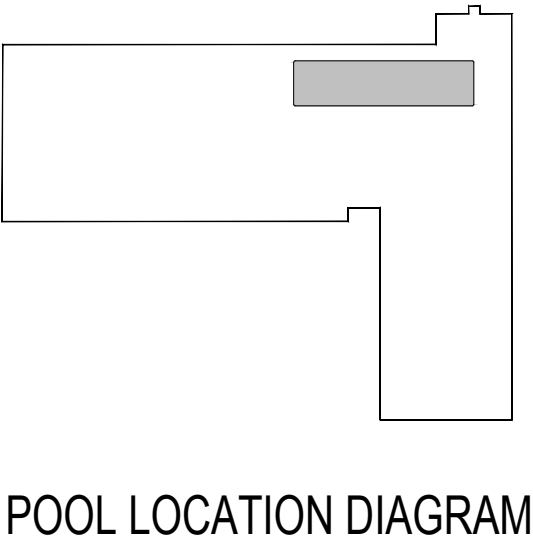
REFER TO ELECTRICAL FOR GFI OUTLETS IN NATATORIUM.
9.

ELECTRICAL INSPECTOR SHALL APPROVE INSTALLATION OF BONDING GRID FOR POOL REINFORCING AND ALL POOL EMBEDS PRIOR TO PLACEMENT OF CONCRETE.
10.

NO GROUND WATER SHALL BE ALLOWED TO RISE ABOVE ANY PORTION OF THE POOL BOTTOM DURING CONSTRUCTION.
11.

THE POOL MUST BE WATER TESTED IN ACCORDANCE TO THE HYDROSTATIC TIGHTNESS TESTING OF AN OPEN CONCRETE CONTAINMENT STRUCTURE AS REQUIRED BY THE AMERICAN CONCRETE INSTITUTE (ACI) 308.1-10 SECTION 2. REFER: 8/AQ-303

DRAWING INDEX	
SHEET	DESCRIPTION
AQ-000	POOL REFERENCE PLAN
AQ-001	POOL DEMOLITION & RENOVATION PLAN
AQ-100	POOL PLAN & SECTIONS
AQ-101	POOL DETAILS
AQ-200	POOL PIPING PLANS
AQ-300	POOL MECHANICAL ROOM PLAN & SECTIONS
AQ-301	POOL MECHANICAL DETAILS
AQ-302	POOL MECHANICAL DETAILS
AQ-303	POOL MECHANICAL DETAILS
AQ-400	POOL SYSTEMS SCHEMATIC

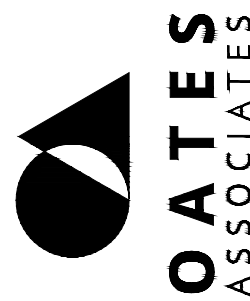


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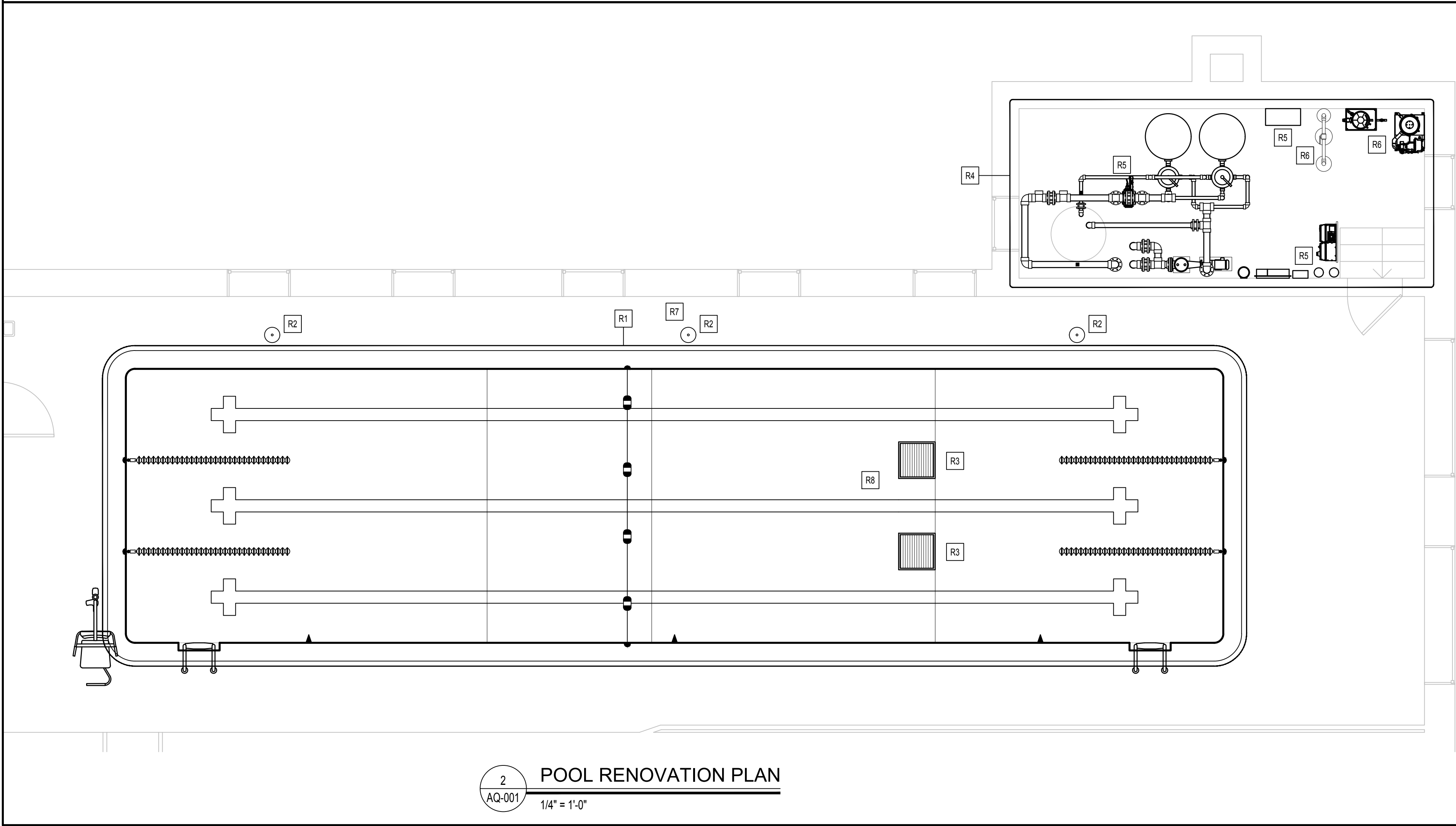
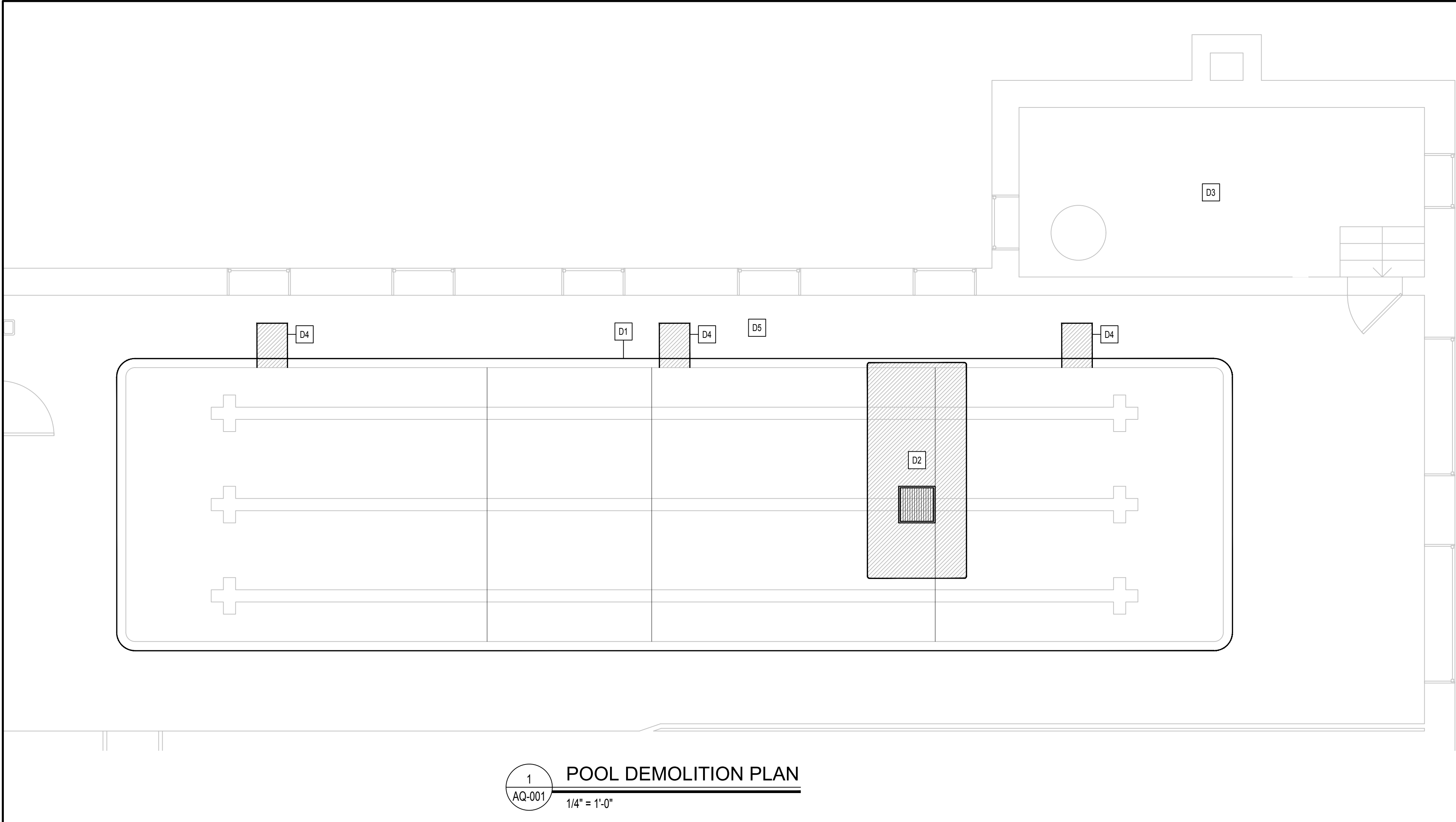
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CHECKED BY: CCS
DESIGNED BY: CCS

SHEET TITLE:

POOL
REFERENCE
PLAN

SHEET NUMBER:

AQ-000



GENERAL POOL DEMOLITION & RENOVATION NOTES

- COORDINATE ALL DEMOLITION PLANS AND WORK WITH ARCHITECT AND CONSTRUCTION DOCUMENTS PRIOR TO THE START OF DEMOLITION.
- REVIEW RECORD DOCUMENTS OF EXISTING CONSTRUCTION PROVIDED BY THE OWNER. NEITHER THE OWNER NOR ENGINEER MAKES ANY GUARANTEE THAT THE EXISTING CONDITIONS REFLECT THOSE INDICATED IN THE RECORD DOCUMENTS. CONTRACTOR TO PROVIDE NOTIFICATION OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH DEMOLITION.
- CONTRACTOR TO SURVEY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED IN THE CONTRACT DOCUMENTS TO DETERMINE THE EXTENT OF DEMOLITION REQUIRED. CONTRACTOR TO RECORD EXISTING CONDITIONS WITH DETAILED PRECONSTRUCTION PHOTOGRAPHS.
- UNLESS OTHERWISE INDICATED, DEMOLITION WASTE BECOMES PROPERTY OF THE CONTRACTOR.
- EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE RECYCLED, REUSED, SALVAGED, REINSTALLED, OR OTHERWISE INDICATED TO REMAIN OWNER'S PROPERTY, REMOVE DEMOLISHED MATERIALS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM. OWNER HAS THE FIRST RIGHT OF REFUSAL ON ALL DEMOLITION MATERIALS.
- IF HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB. IMMEDIATELY NOTIFY THE OWNER AND ENGINEER.
- INDICATE RECEIPT AND ACCEPTANCE OF ANY HAZARDOUS WASTES BY A LANDFILL FACILITY LICENSED TO ACCEPT SUCH HAZARDOUS WASTES.
- MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS. REFER TO OTHER TRADES FOR COORDINATION.
- ELECTRICIAN SHALL VERIFY EXISTING BOND GRID. ALL NEW EMBEDS AND MECHANICAL EQUIPMENT SHALL BE BONDED PER NEC ARTICLE 680.
- PRIOR TO DRAINING THE POOLS FOR CONSTRUCTION, THE CONTRACTOR SHALL COMPLETE A WATER TIGHTNESS TEST FOR THE POOL STRUCTURES AND REPORT TEST RESULTS FOR THE ENGINEER TO REVIEW. REFER TO THE SWIMMING POOL SPECIFICATION FOR TESTING REQUIREMENTS.
- CONTRACTOR TO DRAIN AND FILL POOL AT A RATE NOT TO EXCEED 1" OF POOL DEPTH PER HOUR AND AT A WATER TEMPERATURE WITHIN 10 DEGREES FAHRENHEIT OF AMBIENT TO CONTROL MOISTURE AND THERMAL SHOCK TO THE TILE.
- ALL EXISTING BELOW GRADE POOL PIPING SYSTEMS SHALL BE HYDROSTATICALLY (WATER) PRESSURE TESTED FOR LEAKS BEFORE THE START OF CONSTRUCTION TO VERIFY WATER TIGHTNESS. PNEUMATIC (AIR) TESTING NOT PERMITTED. REPORT TEST RESULTS TO THE ENGINEER TO REVIEW. REFER TO THE SWIMMING POOL SPECIFICATION FOR TESTING REQUIREMENTS.
- PROTECT ALL EXISTING POOL FINISHES AND ANY OTHER POOL RELATED APPURTENANCES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUOUSLY MONITORING GROUNDWATER LEVELS ON THE SITE DURING ANY AND ALL PERIODS WHEN THE SWIMMING POOL IS NOT FULL OF WATER. PROTECTION OF THE EXISTING POOL STRUCTURE FROM DAMAGE DUE TO HYDROSTATIC PRESSURE IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR TO PROVIDE AND EXECUTE APPROVED DUST CONTROL PLAN.
- ALL AREAS OF WORK MUST HAVE DOUBLE CONTAINMENT AND DEDICATED EXHAUST INDEPENDENT OF HVAC.
- CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS FOLLOWING DEMOLITION OPERATIONS. CONTRACTOR TO RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE THE START OF DEMOLITION OPERATIONS.

POOL DEMOLITION KEYNOTES

COORDINATE ALL DEMOLITION PLANS WITH ARCHITECT AND CONSTRUCTION DOCUMENTS PRIOR TO DEMOLITION	
D1	REMOVE GUTTER (ENTIRE PERIMETER)
D2	REMOVE MAIN DRAIN SUMP & POOL SLAB IN THE AREA INDICATED ON PLAN
D3	REMOVE ALL POOL MECHANICAL EQUIPMENT AND EXPOSED PIPING
D4	REMOVE DECK FOR INSTALLATION OF NEW POOL SKIMMERS
D5	REMOVE PIPING BELOW THE POOL DECK AS SHOWN ON THE DRAWINGS
D6	REMOVE POOL LADDERS & ANCHORS

POOL RENOVATION KEYNOTES

COORDINATE ALL RENOVATION PLANS WITH ARCHITECT AND CONSTRUCTION DOCUMENTS PRIOR TO RENOVATION	
R1	PROVIDE NEW COPING STONE, WARNING SIGNS, & DEPTH MARKERS AT TOP OF POOL WALL. REFER: 5/AQ-101
R2	PROVIDE NEW SKIMMERS REFER: 2/AQ-303
R3	PROVIDE NEW MAIN DRAINS REFER: 3/AQ-303
R4	PROVIDE NEW RECIRCULATION PUMP, FILTER, & PIPING. HEATER BY OTHERS REFER: POOL MECHANICAL DETAILS
R5	PROVIDE NEW W/LC & UV SYSTEM REFER: POOL MECHANICAL DETAILS
R6	PROVIDE NEW SWIMMING POOL CHEMICAL TREATMENT SYSTEM & EYEWASH STATION. REFER: CHEMICAL FEED SCHEDULE
R7	PROVIDE NEW UNDERDECK PIPING
R8	REPLACE DAMAGED/DEMOLISHED TILES AS NECESSARY/INCLUDING POOL COVE. REFER: 3/AQ-101
R9	PROVIDE NEW POOL LADDERS & ANCHORS REFER: 2/AQ-101

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REPAIR SWIMMING POOL

MISSOURI SCHOOL FOR
THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E2107-01
SITE# 2011
FACILITY # 5012011003,
501201104

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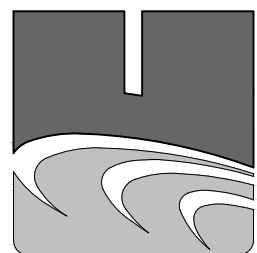
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DEMOLITION &
RENOVATION
PLAN**

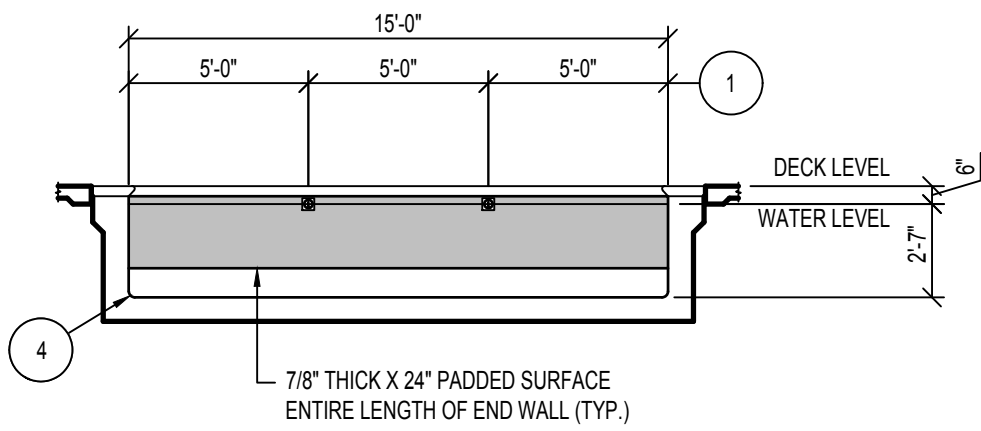
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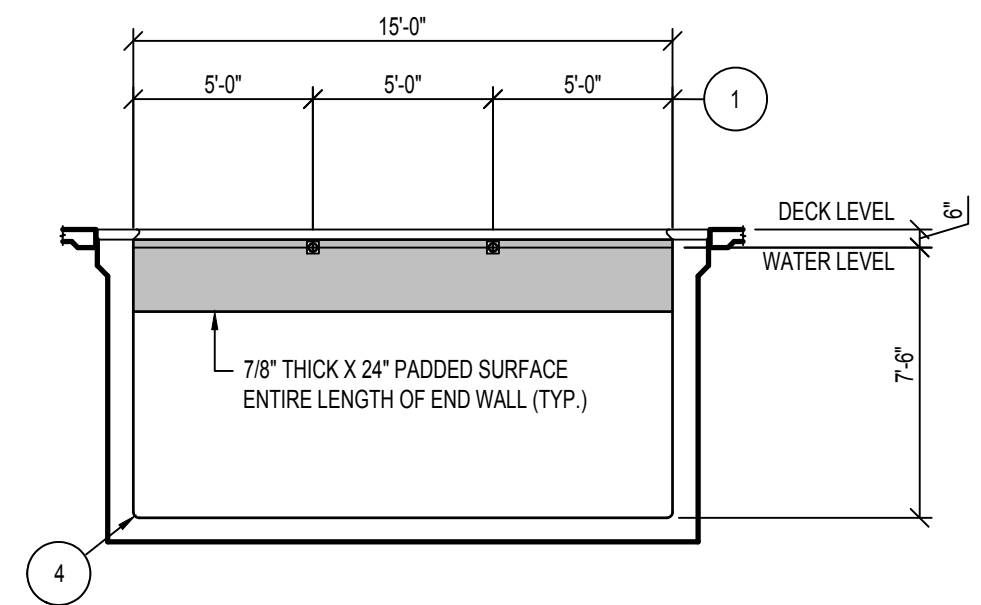
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07/06/2022



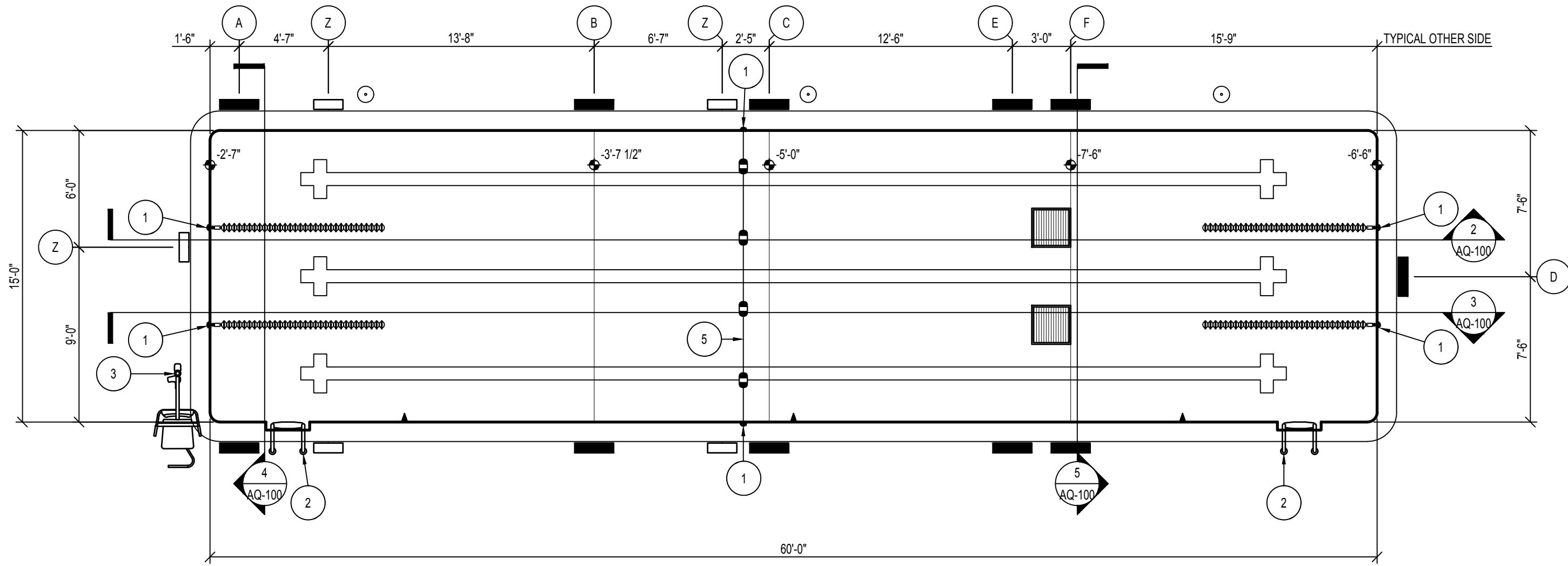
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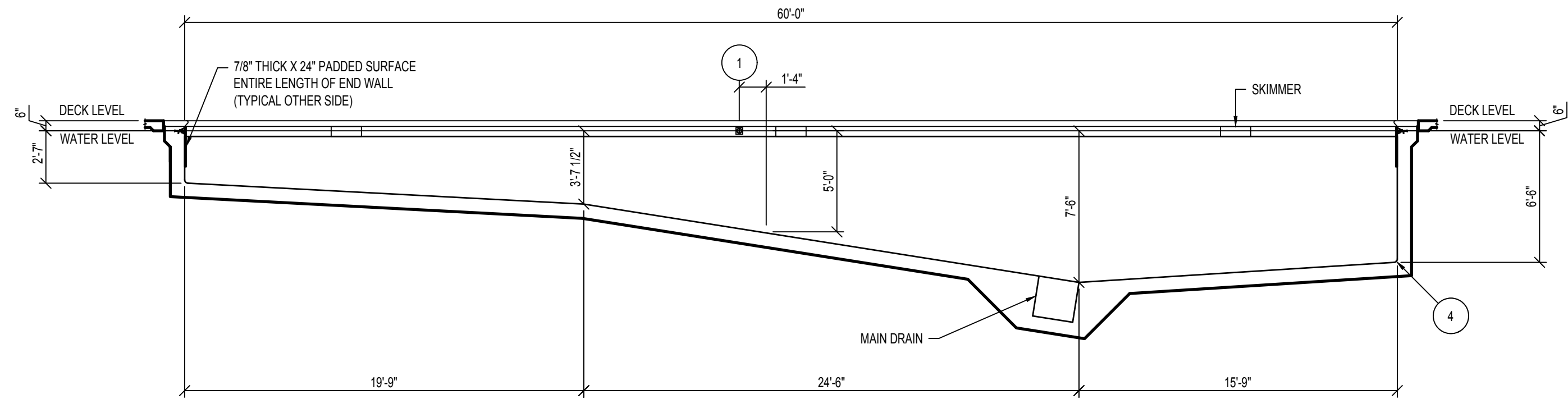
4 POOL SECTION
AQ-100 3/16" = 1'-0"



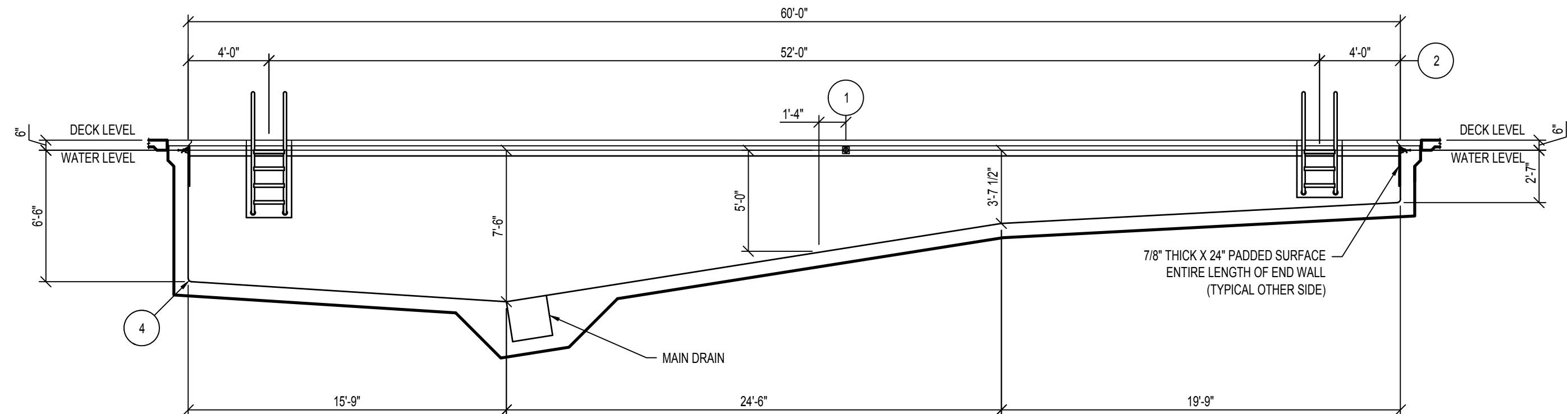
5 POOL SECTION
AQ-100 3/16" = 1'-0"



1 POOL PLAN
AQ-100 3/16" = 1'-0"



2 POOL SECTION
AQ-100 3/16" = 1'-0"



3 POOL SECTION
AQ-100 3/16" = 1'-0"

DEPTH & WARNING SIGNAGE SCHEDULE	
ID	SIGNAGE
A	2 FT 7 IN
B	3 FT 7 IN
C	5 FT 0 IN
D	6 FT 6 IN
E	7 FT 0 IN
F	7 FT 6 IN
Z	NO DIVING

REFER: 5/AQ-101

POOL EQUIPMENT SCHEDULE	
ID	ITEM
1	LANE/SAFETY ROPE CUP ANCHOR REFER: 1/AQ-101
2	REMOVABLE LADDER REFER: 2/AQ-101
3	POOL LIFT & ANCHOR REFER: 4/AQ-101
4	POOL COVE REFER: 3/AQ-101
5	SAFETY ROPE

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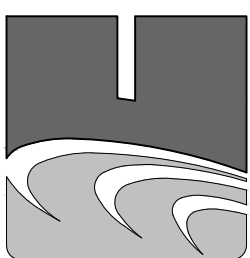
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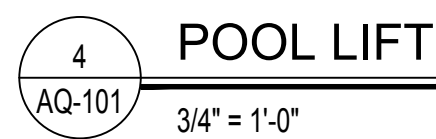
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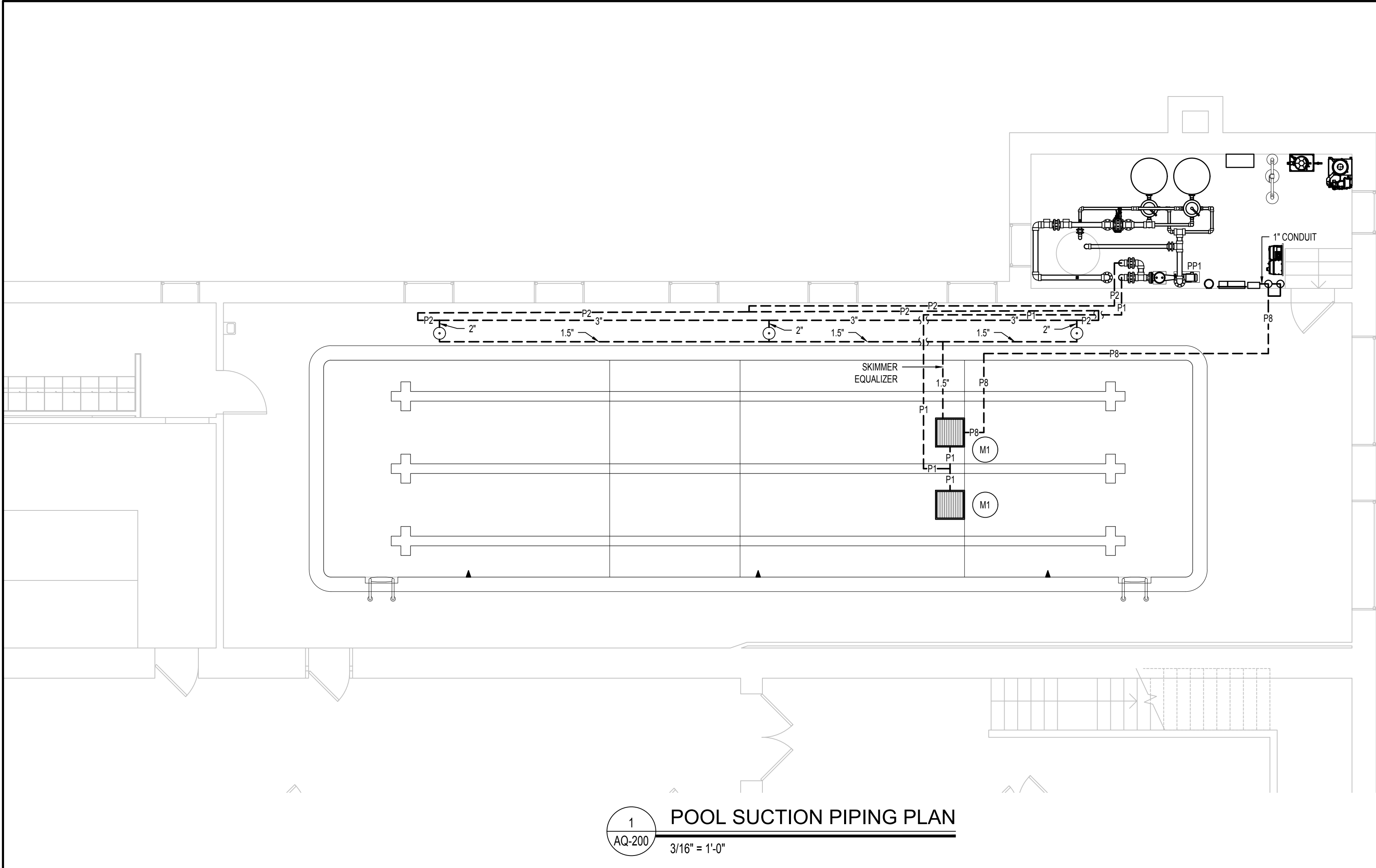
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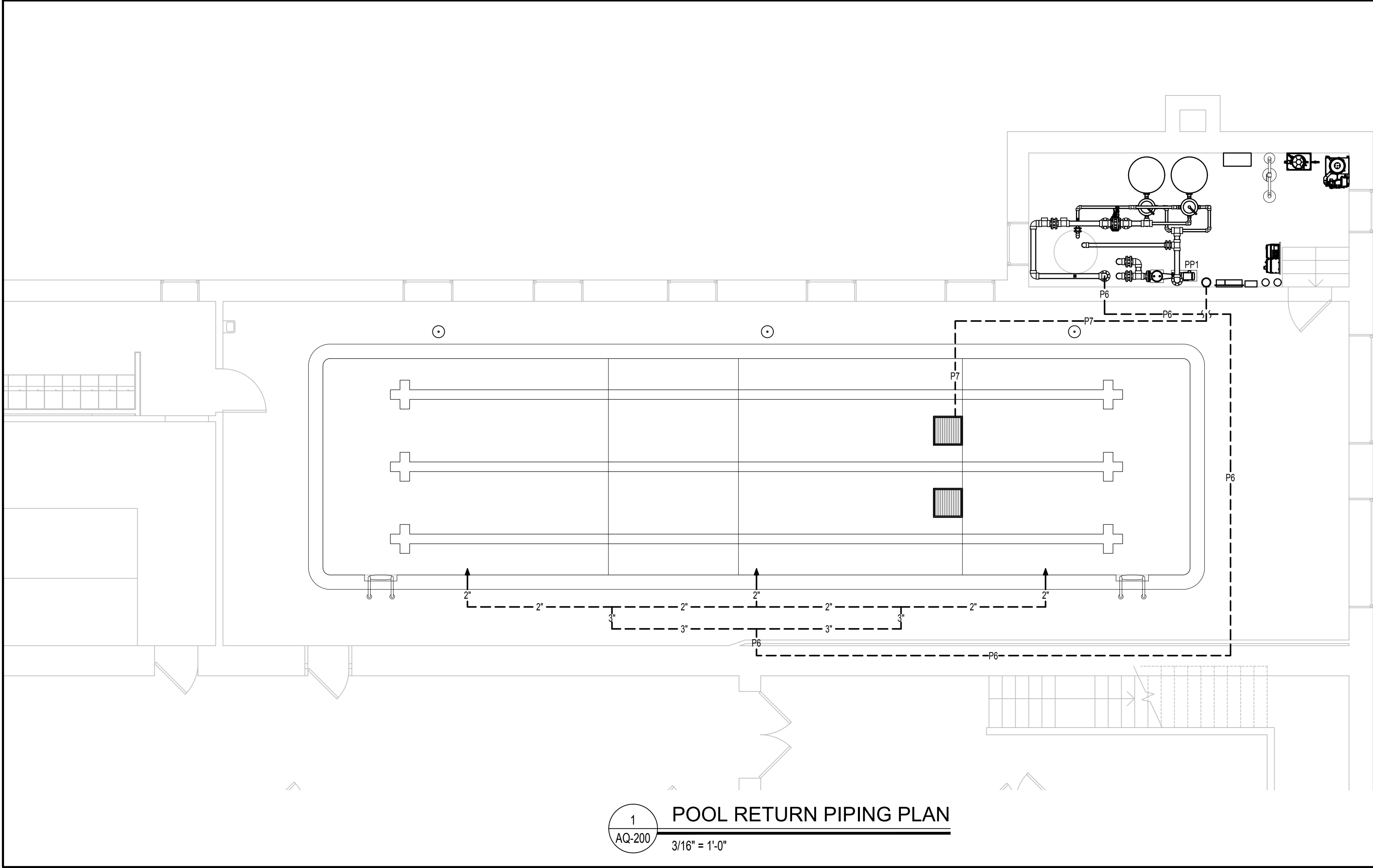


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1
AQ-200
3/16" = 1'-0"



1
AQ-200
3/16" = 1'-0"

GENERAL PIPING NOTES

1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERATIONAL PIPING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
2. PIPE SIZES INDICATED ARE NOMINAL, I.P.S.
3. UNLESS OTHERWISE NOTED, ALL OVERHEAD PIPING SHALL BE TIGHT TO UNDERSIDE OF STRUCTURE OR SLAB.
4. ALL BALANCING VALVES AND BUTTERFLY VALVES SHALL BE PROVIDED WITH POSITION INDICATORS AND MAXIMUM ADJUSTABLE STOPS (MEMORY STOPS).
5. ALL VALVES SHALL BE INSTALLED SO THAT THE VALVE REMAINS IN SERVICE WHEN THE EQUIPMENT OR PIPING ON THE EQUIPMENT SIDE OF THE VALVE IS REMOVED.
6. PROVIDE CHAIN WHEEL OPERATORS FOR ALL VALVES IN EQUIPMENT ROOMS MOUNTED GREATER THAN 7'-0" ABOVE FINISHED FLOOR; CHAIN SHALL EXTEND TO 7'-0" ABOVE FINISHED FLOOR LEVEL.
7. ALL VALVE HARDWARE MUST BE 316L STAINLESS STEEL AND MEET ANSI HARDWARE INSTALLATION GUIDELINES. REFER: 6/AQ-303
8. INSTALL ALL PIPING WITHOUT FORCING OR SPRINGING.
9. ALL PIPING WORK SHALL BE COORDINATED WITH ALL TRADES AND SITE CONDITIONS. OFFSETS, EXPANSION LOOPS, OR TRANSITIONS IN PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
10. ALL PIPING INDICATED SHALL BE CONSIDERED DIAGRAMMATIC.
11. ALL SWIMMING POOL PIPING ROUTED BELOW THE POOL SHELL SHALL BE CONCRETE ENCASED SCHEDULE 40 PVC. REFER: 10/AQ-302
12. ALL UNDERGROUND OR EXPOSED SWIMMING POOL PIPING SHALL BE SCHEDULE 80 PVC, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO PLANS AND SPECIFICATIONS FOR ANY SPECIFIC REQUIREMENTS REGARDING PLACEMENT AND BACKFILLING OF BELOW GRADE POOL PIPE.
13. ALL DIMENSIONS INDICATED FROM THE FINISH WALL SURFACE AND DO NOT ACCOUNT FOR ANY VARIATIONS IN EITHER GRADE OR SLOPE DISTANCES.
14. THE CHEMICAL SENSOR LINE SHALL BE A 3/4" TO 1" DIAMETER, SCHEDULE 80 PVC PIPE EXTENDED FROM THE WET CELL SENSOR TO ITS RESPECTIVE FILL FUNNEL AND THE BACKWASH CATCH BASIN OR PUMP SUCTION.
15. ALL PIPE TEES SHALL BE SIZED FOR LARGEST PIPE CONNECTION.

PUMP SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	SIZE	GPM	TDH	HP	NPSHR	HAIR/LINT	
									MAKE	SIZE
PP1	COMPETITION POOL RECIRCULATION PUMP REFER: 1/AQ-301	PACO	15507 LC	4 X 4	115	73	5	5.27	MER-MADE	4X4

- NOTE:
1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA MUST BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS.
 2. POOL PUMPS AND STRAINERS MUST BE INSTALLED ON HOUSEKEEPING PADS.
 3. PROVIDE INFLUENT AND EFFLUENT GAUGES FOR EACH PUMP. PRESSURE GAUGES HAVE A RANGE OF 0-60 PSI. COMPOUND GAUGES HAVE A RANGE OF 0-30 HG / 0-60 PSI.
 4. PROVIDE CHECK VALVE.
 5. PROVIDE VARIABLE FREQUENCY DRIVE.
 6. PROVIDE WITH 208 VOLT, 3 PHASE, 60HZ, 3530 RPM MOTOR.

MAIN DRAIN SCHEDULE

ID	DESCRIPTION	SIZE	QTY	DESIGN FLOW (GPM)	DESIGN VELOCITY (FPS)	MFG ALLOWABLE FLOW @ COVER (GPM)	MAX SYSTEM FLOW (GPM)	MODEL	MANUFACTURER	NOTES
M1	MAIN DRAINS	18" X 18"	2	115	0.10	616	616	MLD-FGD-1818	NEPTUNE BENSON	1-7

- NOTE:
1. MAIN DRAIN GRATING MUST BE MANUFACTURED BY NEPTUNE BENSON.
 2. MAXIMUM FACE VELOCITY MUST NOT EXCEED 1.5 FEET PER SECOND.
 3. THE INSTALLED LIFE OF THE MAIN DRAIN COVER MUST BE 10 YEARS.
 4. ALL MAIN DRAINS MUST BE INSTALLED IN THE POOL FLOOR. WALL SUMPS WILL NOT BE PERMITTED.
 5. FASTEN MAIN DRAIN COVER TO EMBEDDED PVC FRAME/POOL FLOOR WITH S/S TAMPER PROOF FASTENERS AT A SPACING NO GREATER THAN 24" O.C. REFER TO FRAME AND GRATE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 6. PROVIDE WATER BONDING FITTING IN MAIN DRAIN SUMP AT DEEPEST SECTION OF THE POOL. BASIS OF DESIGN: PERMA-CAST SWIMMING POOL PRODUCTS MODEL PB-SK-20.
 7. PROVIDE HYDROSTATIC RELIEF VALVE IN EACH MAIN DRAIN. BASIS OF DESIGN: HAYWARD MODEL SP1056 & SP1055.

PIPING LEGEND

LEGEND	QTY.	ITEM	MAKE	MODEL
▲	3	WALL INLET REFER: 1/AQ-303	HAYWARD	SP1421E & SP1022S
▨	2	MAIN DRAIN REFER: 3/AQ-303	REFER TO MAIN DRAIN SCHEDULE	
○	3	SKIMMER REFER: 2/AQ-303	STA-RITE	U-3 #08650-1403 (WHITE)
----	N/A	BELOW GRADE PIPING	CHEMTROL	SCH 80 PVC

PIPE SCHEDULE

ID	DESCRIPTION
P1	4" FROM M1 TO PP1
P2	4" FROM SKIMMERS TO PP1
P3	4" FROM PP1 TO P9 & P10
P4	3" FROM P3 TO BACKWASH BASIN
P5	2" FROM FILTERS TO BACKWASH BASIN
P6	4" FROM P11 & P12 TO INLETS
P7	3" FROM FILL FUNNEL TO M1
P8	2" FROM WATER LEVEL CONTROLLER STANDPIPES TO M1
P9	2" FROM P3 TO FILTER
P10	2" FROM P3 TO FILTER
P11	2" FROM FILTER TO P6
P12	2" FROM FILTER TO P6



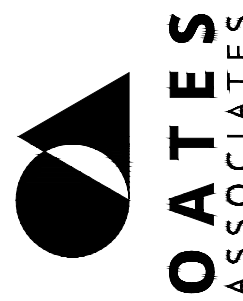
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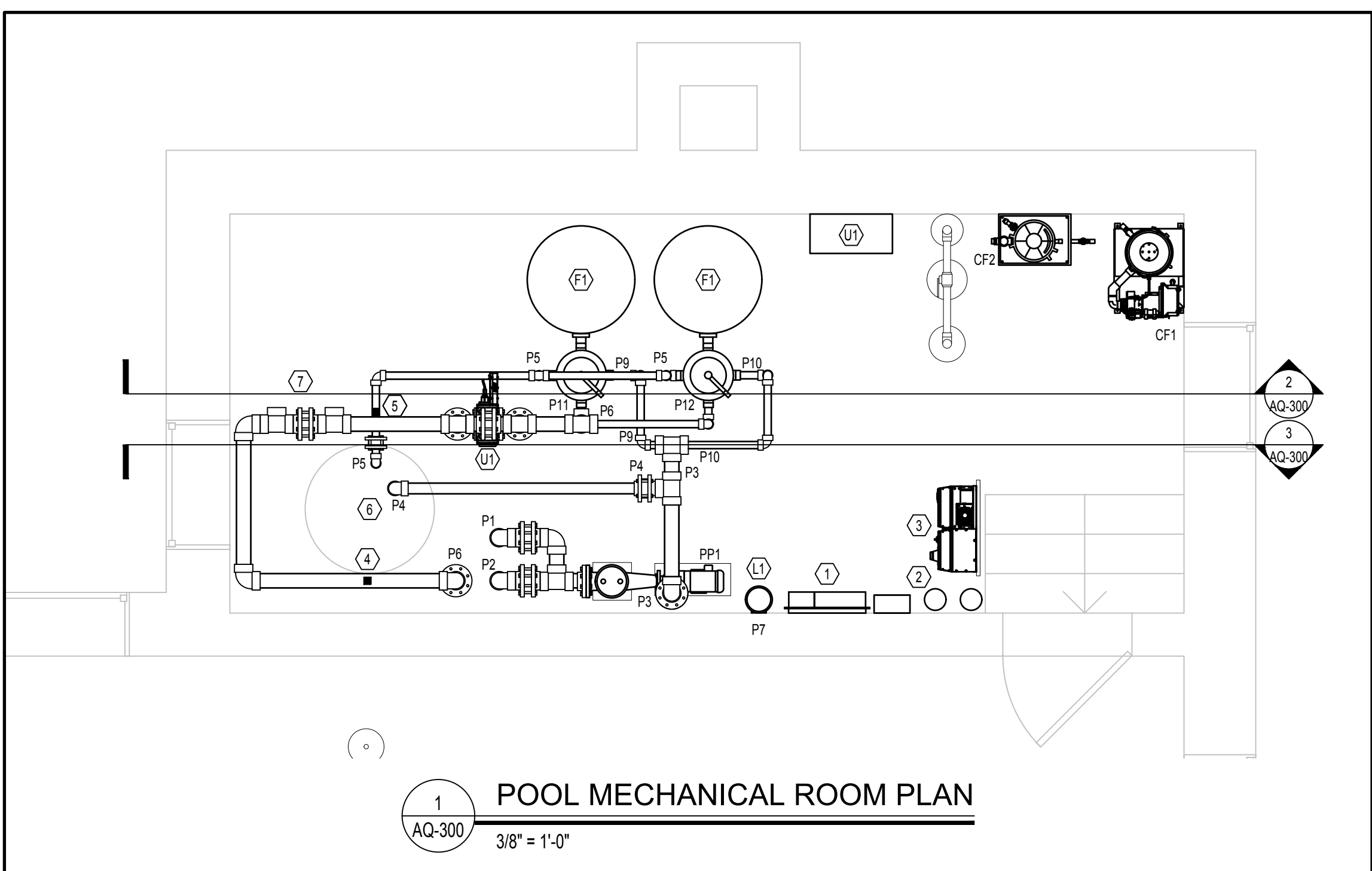
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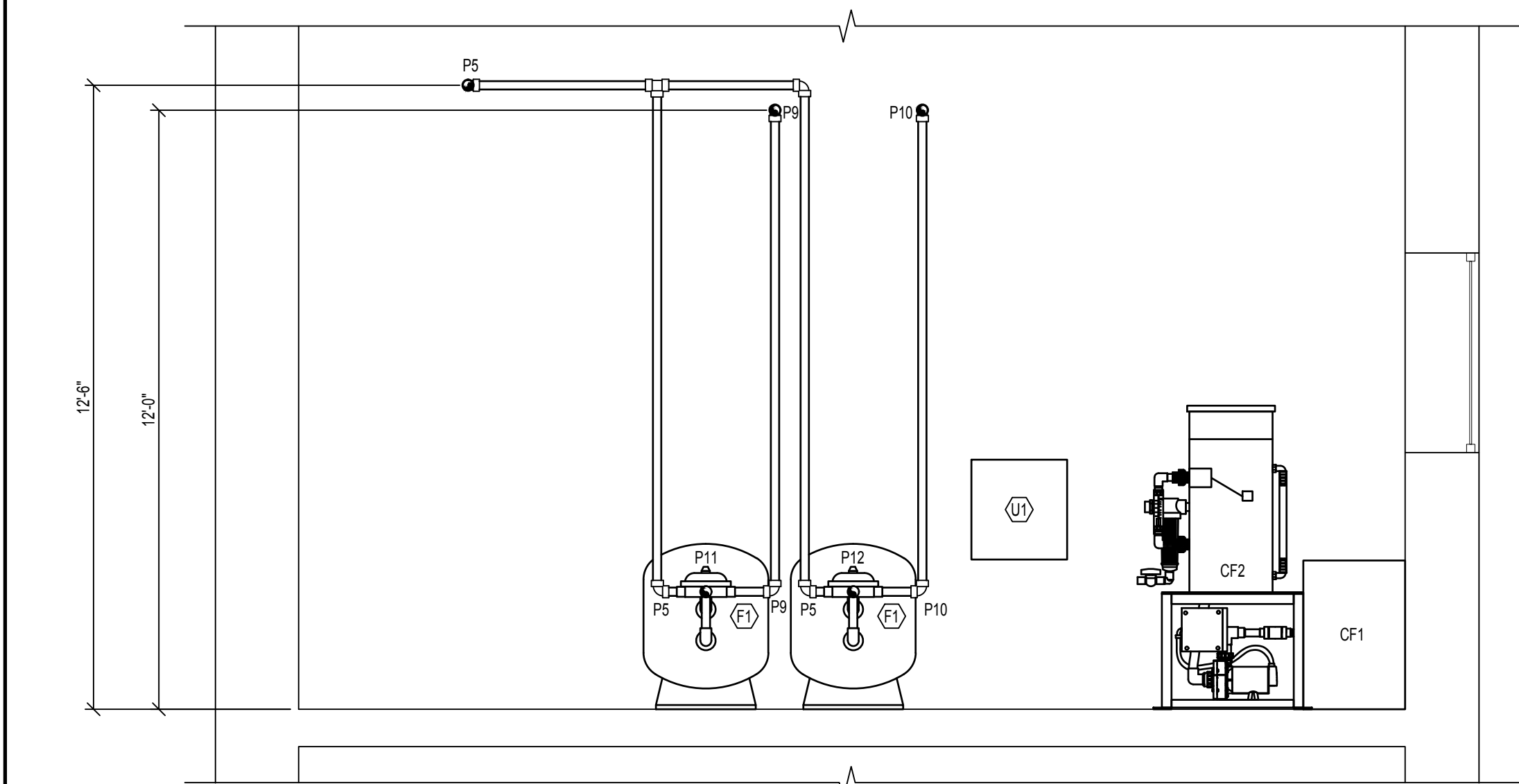
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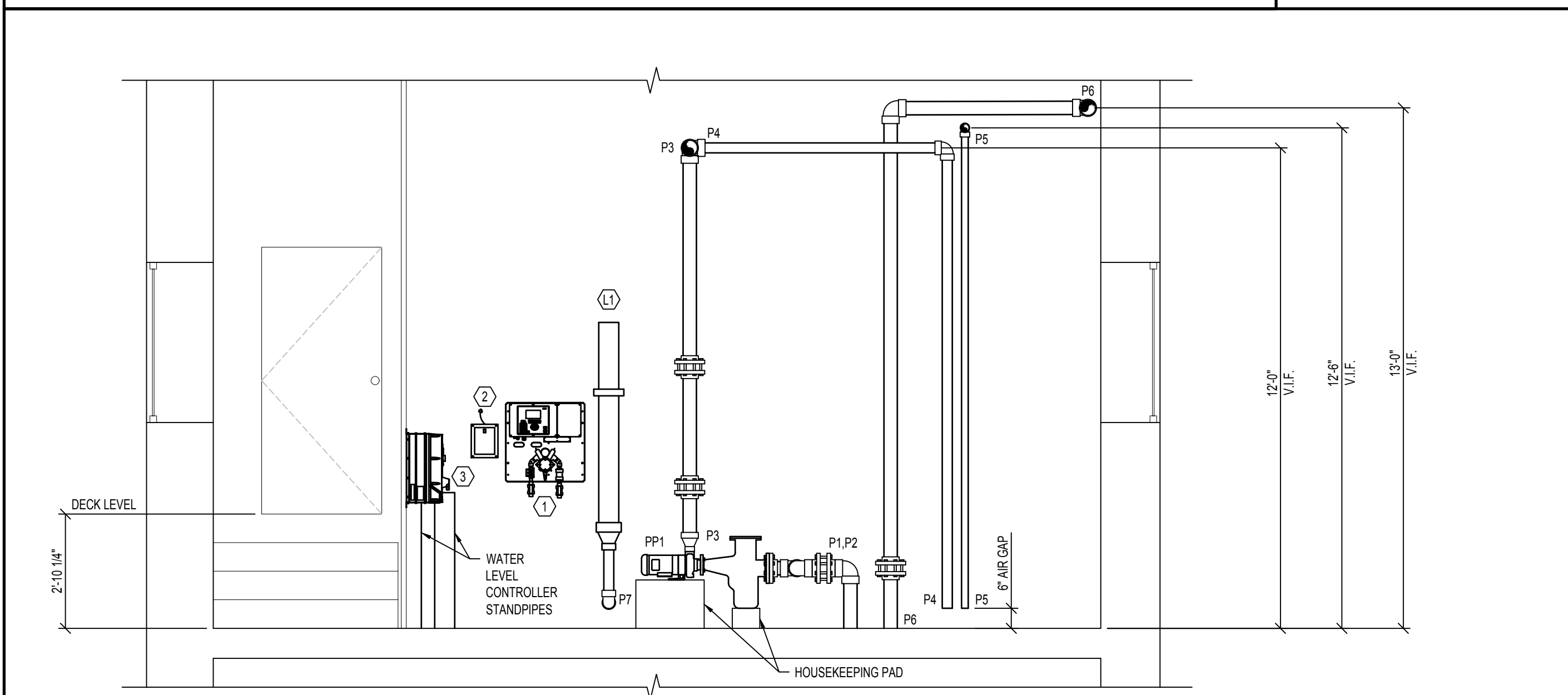
23 OF 45 SHEETS
07/06/2022



1
AQ-300
3/8" = 1'-0"



2
AQ-300
3/8" = 1'-0"



3
AQ-300
3/8" = 1'-0"

UV TREATMENT SYSTEMS SCHEDULE

ID	MODEL NUMBER	US EPA 3-LOG AND CALCULATED 40MJ/CM2 (GPM)	CALCULATED 80 MJ/CM2 (GPM)	LAMPS	POWER (KW)	VOLTAGE (V) WITH BREAKER SIZE (50 OR 60 HZ)
U1	WF-115-3-N	242	211	1 @ 1.5KW	1.5	208 V (1Ø)-20A

NOTE:
1. THE BASIS OF DESIGN MANUFACTURER IS EVOQUA TECHNOLOGIES LTD. ALTERNATE MANUFACTURER: PROMINENT, AQUIONICS OR APPROVED EQUAL.
2. INTERLOCK UV SYSTEM WITH CHEMICAL CONTROLLER OR RECIRCULATION PUMP.
3. REFER: 3/AQ-301

FILL SCHEDULE

ID	FRESH WATER SUPPLY GPM (MIN.)	FILL FUNNEL SIZE	REDUCER SIZE	SPLASH COLLAR SIZE	FILL LINE SIZE TO POOL	DESIGN FILL TIME (HOURS)
L1	24	6"	6" X 4"	4"	3"	24

NOTES:
REFER: 1/AQ-302

CHEMICAL FEED SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	TUBE #	HP	FLOW
CF1	CHLORINATION BOOSTER PUMP REFER: 2/AQ-301	ACCUTAB	1030	N/A	1	67 LBS/DAY
CF2	ACID FEED PUMP REFER: 5/AQ-301	ACID-RITE	450	N/A	1	12 LBS/HR

NOTE:
1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN.
2. PROVIDE WITH 120 VOLT, SINGLE PHASE, ADJUSTABLE FEED.
3. INTERLOCK WITH POOL RECIRCULATION PUMP.

PIPE SCHEDULE

ID	DESCRIPTION
P1	4" FROM M1 TO PP1
P2	4" FROM SKIMMERS TO PP1
P3	4" FROM PP1 TO P9 & P10
P4	3" FROM P3 TO BACKWASH BASIN
P5	2" FROM FILTERS TO BACKWASH BASIN
P6	4" FROM P11 & P12 TO INLETS
P7	3" FROM FILL FUNNEL TO M1
P8	2" FROM WATER LEVEL CONTROLLER STANDPIPES TO M1
P9	2" FROM P3 TO FILTER
P10	2" FROM P3 TO FILTER
P11	2" FROM FILTER TO P6
P12	2" FROM FILTER TO P6

CONTRACTOR SUPPLIED POOL CHEMICALS

DESCRIPTION	AMOUNT
CALCIUM HYPOCHLORITE	FULL FEEDER(S) + 50 LBS
SODIUM BISULFATE	FULL FEEDER + 50 LBS
SODIUM BICARBONATE	200 LBS
CALCIUM CARBONATE	100 LBS
SODIUM THIOSULFATE	50 LBS

EQUIPMENT SCHEDULE

ID	ITEM
1	CHEMICAL CONTROLLER REFER: 4/AQ-301
2	WATER LEVEL CONTROLLER & STANDPIPES REFER: 7/AQ-303
3	VARIABLE FREQUENCY DRIVE AND BYPASS PANEL (MOUNTED ON FLOOR TO CEILING UNISTRUT)
4	FLOW METER SENSOR REFER: 2/AQ-302
5	IMPACT FLOW METER REFER: 3/AQ-302
6	EXISTING BACKWASH BASIN (36" DIAMETER)
7	HEATER TEES REFER: 7/AQ-301

GENERAL POOL MECHANICAL ROOM NOTES

1. THE FOLLOWING INFORMATION MUST BE LAMINATED AND POSTED IN THE POOL MECHANICAL ROOM: BACKWASH PROCEDURE, POOL FILLING AND DRAINING, VALVE REFERENCE CHART, POOL MECHANICAL ROOM PLAN, POOL PIPING SCHEMATICS AND POOL SYSTEMS SCHEMATICS.

PIPING

- MINIMUM 7'-0" CLEARANCE BENEATH ALL OVERHEAD PIPING.
- PROVIDE AND SUPPORT OVERHEAD AND VERTICAL PIPING PER SPECIFICATION REQUIREMENTS.
- LABEL AND IDENTIFY ALL PIPING IN COMPLIANCE WITH THE SPECIFICATIONS.
- ALL FLOW METERS MUST BE SIZED TO MATCH THE PIPE ON WHICH IT IS INSTALLED. PROVIDE PRESSURE GAUGES ON INFLUENT AND EFFLUENT SIDE OF EACH FILTRATION SYSTEM AND A FULL LINE SIZE FLOW METER ON FILTER RETURN.
- HYDROSTATICALLY TEST ALL PIPING AT 50 PSI FOR TWO HOURS AND MAINTAIN A PRESSURE OF 20 PSI IN ALL PIPING THROUGHOUT CONSTRUCTION. SECURE ALL FIXTURES PER SPECIFICATION REQUIREMENTS BEFORE HYDROSTATIC TEST.
- REFER TO DETAILS 4-9 ON DRAWING AQ-302 FOR INSTALLATION OF PIPE SUPPORTS.

CHEMICAL TREATMENT

- CHEMICAL FEED REQUIREMENTS - REFER TO THE POOL SYSTEMS SCHEMATIC(S) ON AQ-400.
- INTERLOCK POOL RECIRCULATION PUMP WITH ITS CORRESPONDING WATER CHEMISTRY CONTROLLER, CHEMICAL FEED PUMP(S), AND HEATER(S).
- PROVIDE SIGNAGE ON MECHANICAL ROOM DOORS IN COMPLIANCE WITH THE STATE FIRE CODE. REFER: 8/AQ-301
- SECURE CHEMICAL METERING PUMP FEED LINES TO WALL AND/OR OVERHEAD WITH CLIPS OR DEVICES THAT DO NOT CRIMP, DISTORT OR ALLOW HIGH AND LOW AREAS IN TUBING RUNS. PROVIDE CHECK VALVE AND SHUT-OFF VALVE BEFORE LINES ENTER POOL RETURN PIPING.
- WATER CHEMISTRY CONTROLLERS MUST CONTROL THE SANITIZING SYSTEM AND PH CONTROL SYSTEM AND SHUT THEM DOWN UPON LOSS OF SAMPLE STREAM FLOW.
- SAMPLE FEED PIPING TO/FROM THE RECIRCULATION SYSTEM TO THE WATER CHEMISTRY CONTROLLER MUST BE PIPED PER THE SYSTEMS SCHEMATIC. BYPASS PIPING MUST BE SADDLED OR TEED. NO TAPPING OR DRILLING INTO THE PIPING WILL BE ALLOWED.
- VERIFY REMOTE ACCESS CAPABILITY TO ALL CHEMICAL CONTROLLERS. REFER TO ELECTRICAL.
- INSTALL SANITIZER INJECTION POINT DOWNSTREAM OF PH BUFFER INJECTION POINT ON FILTERED WATER RETURN PIPE. CHEMICAL INJECTION POINTS MUST BE LOCATED DOWNSTREAM OF ALL OTHER EQUIPMENT/SYSTEMS IN THE POOL MECHANICAL ROOM AT A MAXIMUM HEIGHT OF 7'-0" ABOVE FINISHED FLOOR. REFER: 6/AQ-301

ELECTRICAL

- GFCI'S PROVIDED AT OUTLETS. REFER TO ELECTRICAL.
- POOL EQUIPMENT ROOM AND CHEMICAL STORAGE AREAS MUST BE PROVIDED WITH ARTIFICIAL LIGHTING SUFFICIENT TO ILLUMINATE ALL EQUIPMENT AND SUPPLIES. REFER TO ELECTRICAL.
- CONDUIT MUST BE ROUTED OVERHEAD OR BELOW GRADE.
- PROVIDE ELECTRICAL CONNECTION TO POOL HEATERS. REFER TO ELECTRICAL.

FILTER SCHEDULE

ID	MANUFACTURER	FILTER MODEL	QTY.	FILTRATION TYPE	MAXIMUM FILTRATION RATE (GPM/SQ. FT.)	REQUIRED FILTRATION AREA (SQ. FT.)	DESIGN FILTRATION RATE (GPM/SQ.FT.)	DESIGN FILTRATION AREA (SQ. FT.)	FILTER BACKWASH RATE (GPM/SQ. FT.)	BACKWASH FLOW RATE PER FILTER (GPM)
F1	PENTAIR	TRITON TR 100	2	HRS	15.0	8.8	13.0	9.82	15.0	74

NOTE:
1. BACKWASH METHOD MUST BE MANUAL.
2. ALL FILTER SUPPORTS MUST BE SEISMICALLY RATED FOR THE SEISMIC ZONE IN WHICH IT IS INSTALLED IN ACCORDANCE WITH LOCAL AND/OR STATE REQUIREMENTS.
3. FILTER MANUFACTURER MUST CERTIFY FILTER MEDIA.
4. VALVES MUST BE PROVIDED TO BACKWASH EACH FILTER VESSEL INDEPENDENTLY.
5. THE BACKWASH PIPING MUST TERMINATE NO CLOSER THAN 6" ABOVE THE FLOOD RIM OF THE BACKWASH CATCH BASIN OR TWICE THE PIPE DIAMETER, WHICHEVER IS GREATER.
6. FILTER TANK ASSEMBLIES MUST BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL FOR A MAXIMUM FLOW RATE 20 GPM PER SQUARE FOOT OF FILTER MEDIA.
7. THE BACKWASH THROTTLING VALVE(S) HANDLE MUST BE REMOVED AND TURNED OVER TO THE OWNER ONCE THE BACKWASH FLOW RATE(S) HAVE BEEN TESTED, ADJUSTED AND BALANCED.
8. PROVIDE 1" DIAMETER, SCHEDULE 80 PIPE FROM THE AUTOMATIC AIR VENT ON EACH OF THE FILTER VESSEL TO THE NEAREST FLOOR DRAIN OR BACKWASH CATCH BASIN. THE VENT PIPE MUST BE SLOPED TO THE DRAIN.
9. VESSEL MUST BE BACKWASHED AT NO LESS THAN 15.0 GPM/SF.
10. PROVIDE MILLED ANGULAR SHAPED PARTICLES OF SILICA QUARTZ FOR FILTER MEDIA. PARTICLE SIZE MUST BE BETWEEN 0.45MM AND 0.55MM AND HAVE A MAXIMUM UNIFORMITY COEFFICIENT OF 1.53.

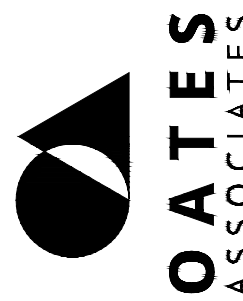
PUMP SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	SIZE	GPM	TDH	HP	NPSHR	HAIR/LINT	
									MAKE	SIZE
PP1	COMPETITION POOL RECIRCULATION PUMP REFER: 1/AQ-301	PACO	15507 LC	4 X 4	115	73	5	5.27	MER-MADE	4X4

NOTE:
1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA MUST BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS.
2. POOL PUMPS AND STRAINERS MUST BE INSTALLED ON HOUSEKEEPING PADS.
3. PROVIDE INFLUENT AND EFFLUENT GAUGES FOR EACH PUMP. PRESSURE GAUGES HAVE A RANGE OF 0-60 PSI. COMPOUND GAUGES HAVE A RANGE OF 0-30 HG / 0-60 PSI.
4. PROVIDE CHECK VALVE.
5. PROVIDE VARIABLE FREQUENCY DRIVE.
6. PROVIDE WITH 208 VOLT, 3 PHASE, 60HZ, 3530 RPM MOTOR.



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DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

REPAIR SWIMMING POOL

MISSOURI SCHOOL FOR
THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E2107-01
SITE# 2011
FACILITY # 5012011003,
5012011004

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/06/2022

CAD DWG FILE: _____
DRAWN BY: SAM
CHECKED BY: CCS
DESIGNED BY: CCS

SHEET TITLE:

POOL MECH. ROOM PLAN & SECTIONS

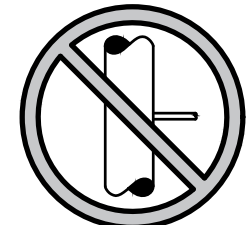
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AQ-300

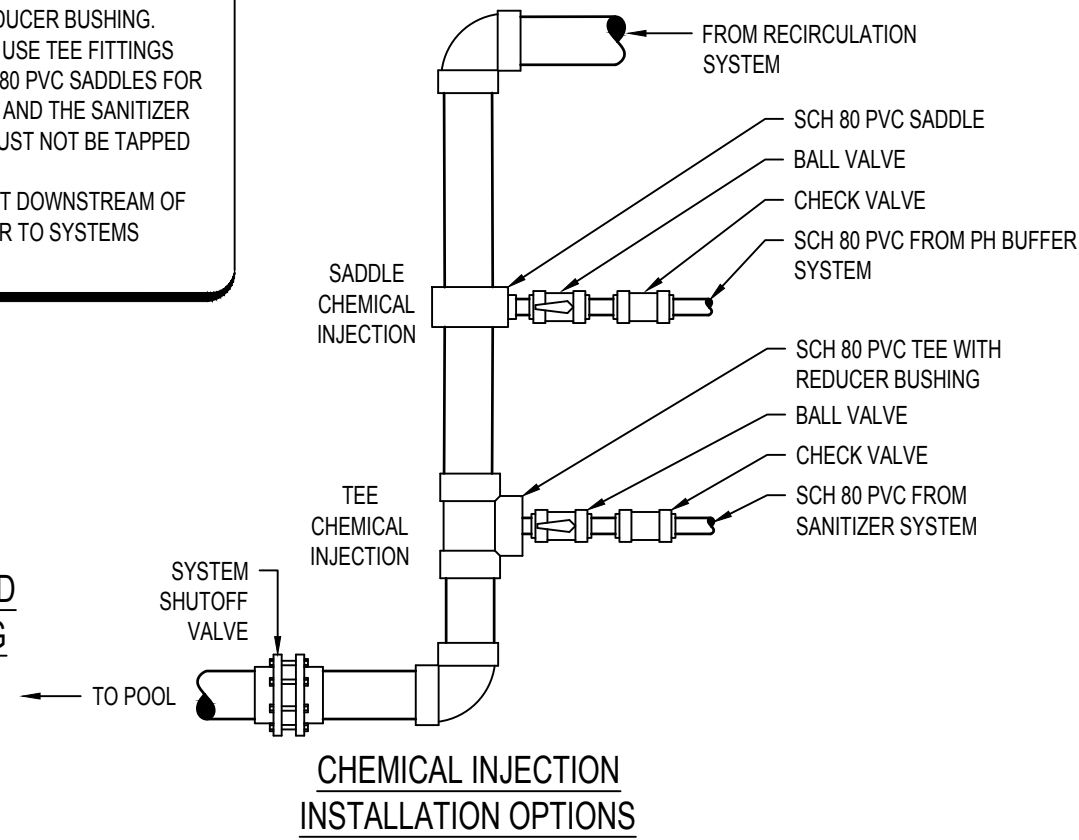
24 OF 45 SHEETS
07/06/2022



- NOTE:
1. CHEMICAL INJECTIONS MUST BE SCH 80 PVC SADDLES OR SCH 80 PVC TEE FITTINGS WITH REDUCER BUSHING.
2. POOL CONTRACTOR CAN ELECT TO USE TEE FITTINGS WITH REDUCER BUSHINGS OR SCH 80 PVC SADDLES FOR BOTH THE PH CHEMICAL INJECTION AND THE SANITIZER INJECTION. CHEMICAL INJECTION MUST NOT BE TAPPED INTO RECIRCULATION PIPING.
3. INSTALL SANITIZER INJECTION POINT DOWNSTREAM OF PH BUFFER INJECTION POINT. REFER TO SYSTEMS SCHEMATIC.

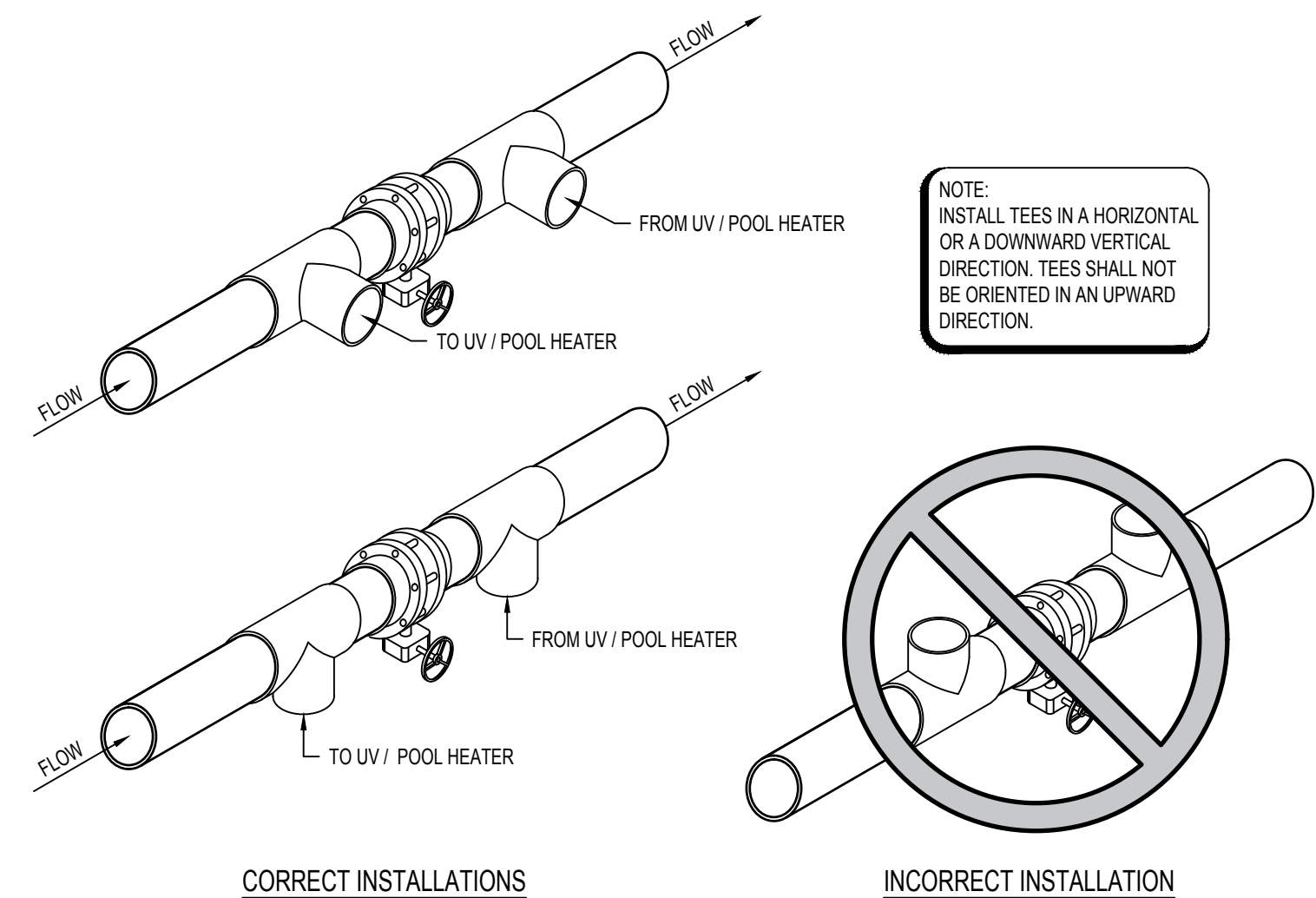


DO NOT DRILL AND
TAP POOL PIPING



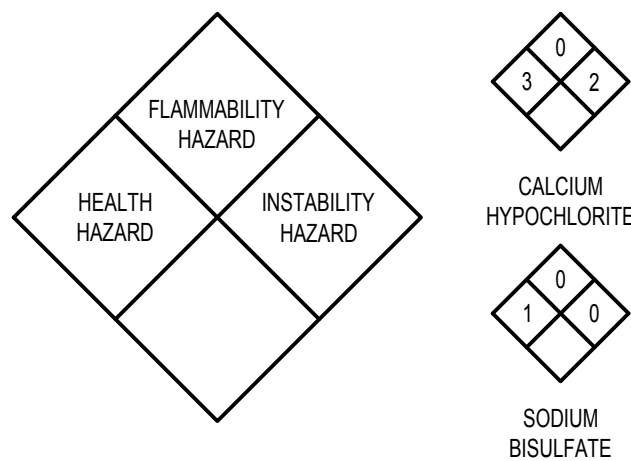
6
AQ-301
1/2" = 1'-0"

CHEMICAL INJECTION



7
AQ-301
1/2" = 1'-0"

PIPING BYPASS

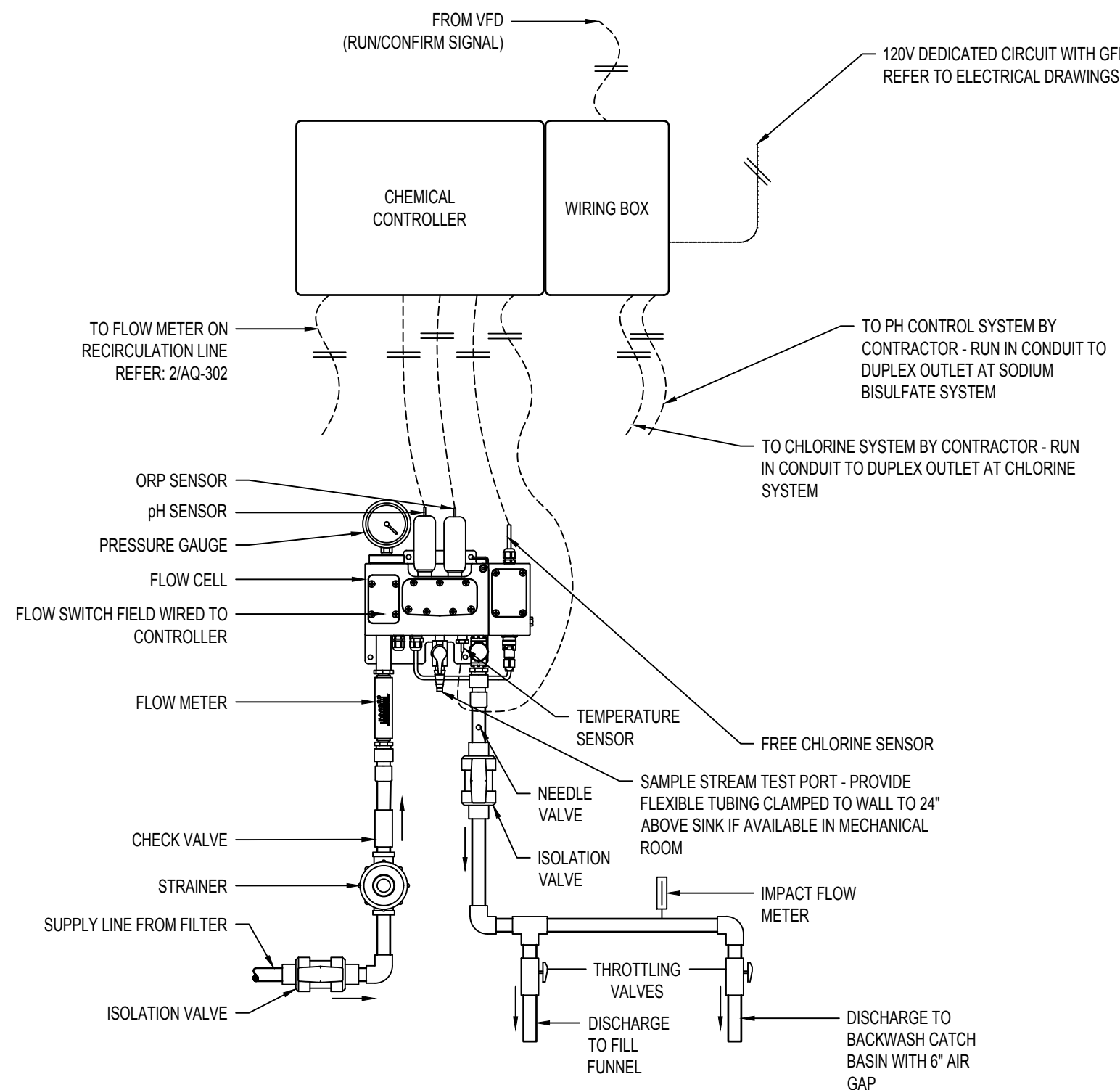


RATING EXPLANATION GUIDE			
RATING	HEALTH HAZARD	FLAMMABILITY HAZARD	INSTABILITY HAZARD
4	CAN BE LETHAL	BELOW 73 DEGREES F	MAY EXPLODE AT NORMAL TEMPERATURES & PRESSURES
3	CAN CAUSE SERIOUS OR PERMANENT INJURY	ABOVE 73 DEGREES, BELOW 100 DEGREES F	MAY EXPLODE AT HIGH TEMPERATURE OR SHOCK
2	CAN CAUSE TEMPORARY INCAPACITATION OR RESIDUAL INJURY	ABOVE 100 DEGREES F, BELOW 200 DEGREES F	VIOLENT CHEMICAL CHANGE AT HIGH TEMPERATURES OR PRESSURES
1	CAN CAUSE SIGNIFICANT IRRITATION	ABOVE 200 DEGREES F	NORMALLY STABLE. HIGH TEMPERATURES MAKE UNSTABLE
0	NO HAZARD	WILL NOT BURN	STABLE

CONFIRM SIGNAGE WITH LOCAL FIRE MARSHAL AND/OR BUILDING CODES PRIOR TO INSTALLATION.

8
AQ-301
NTS

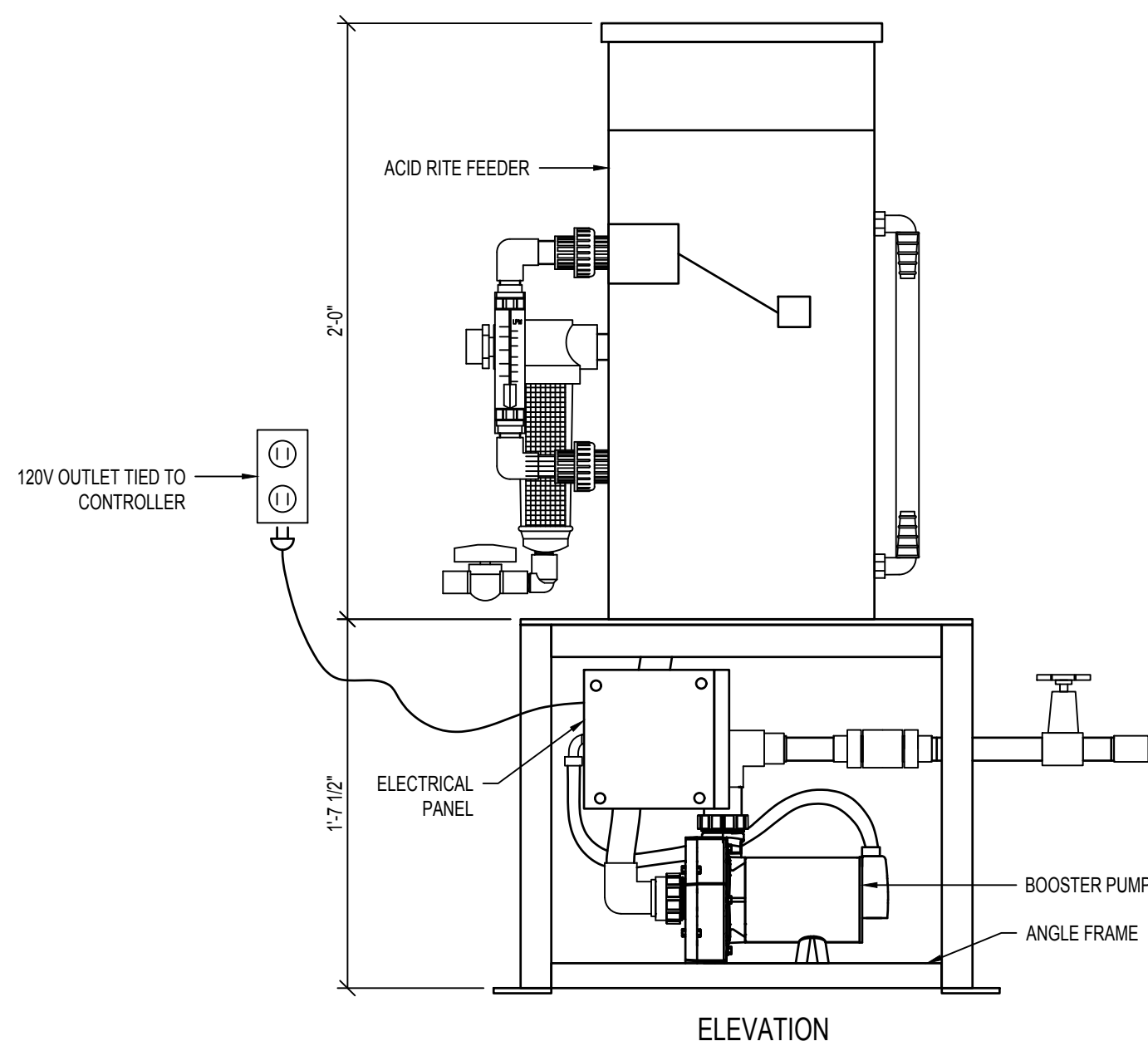
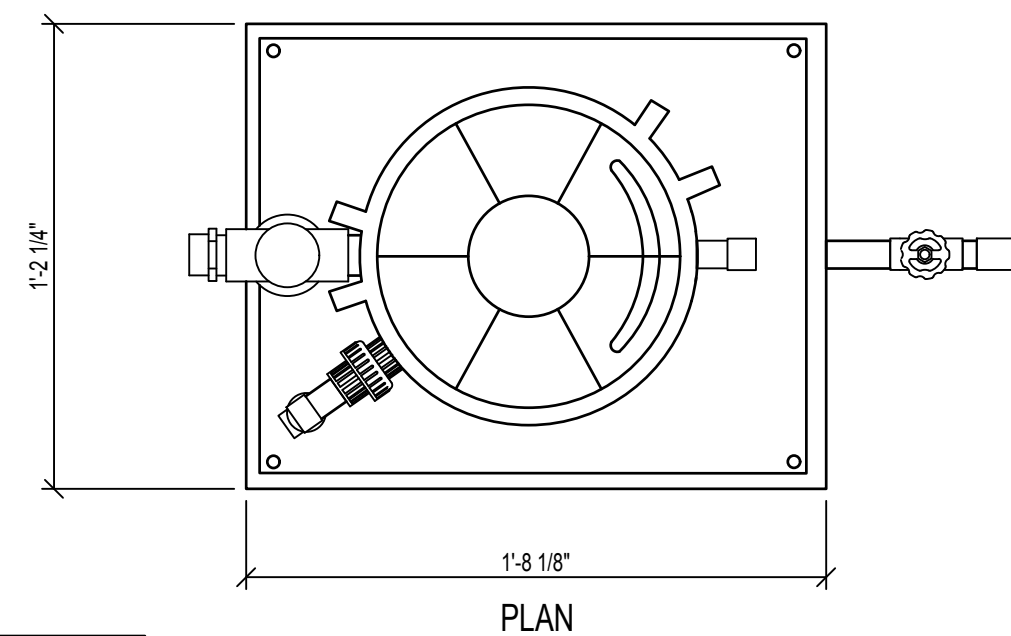
HAZARD SIGNAGE



- NOTES:
1. DRAWING IS FOR REFERENCE ONLY. REFER TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. PIPE RUN FROM RECIRCULATION PIPE TO SAMPLE CELL TO BE 50 FEET OR LESS.
3. SAMPLE FEED PIPING TO/FROM THE RECIRCULATION SYSTEM TO THE WATER CHEMISTRY CONTROLLER MUST BE SADDLED OR TEED. NO TAPPING OR DRILLING INTO THE PIPING WILL BE ALLOWED.

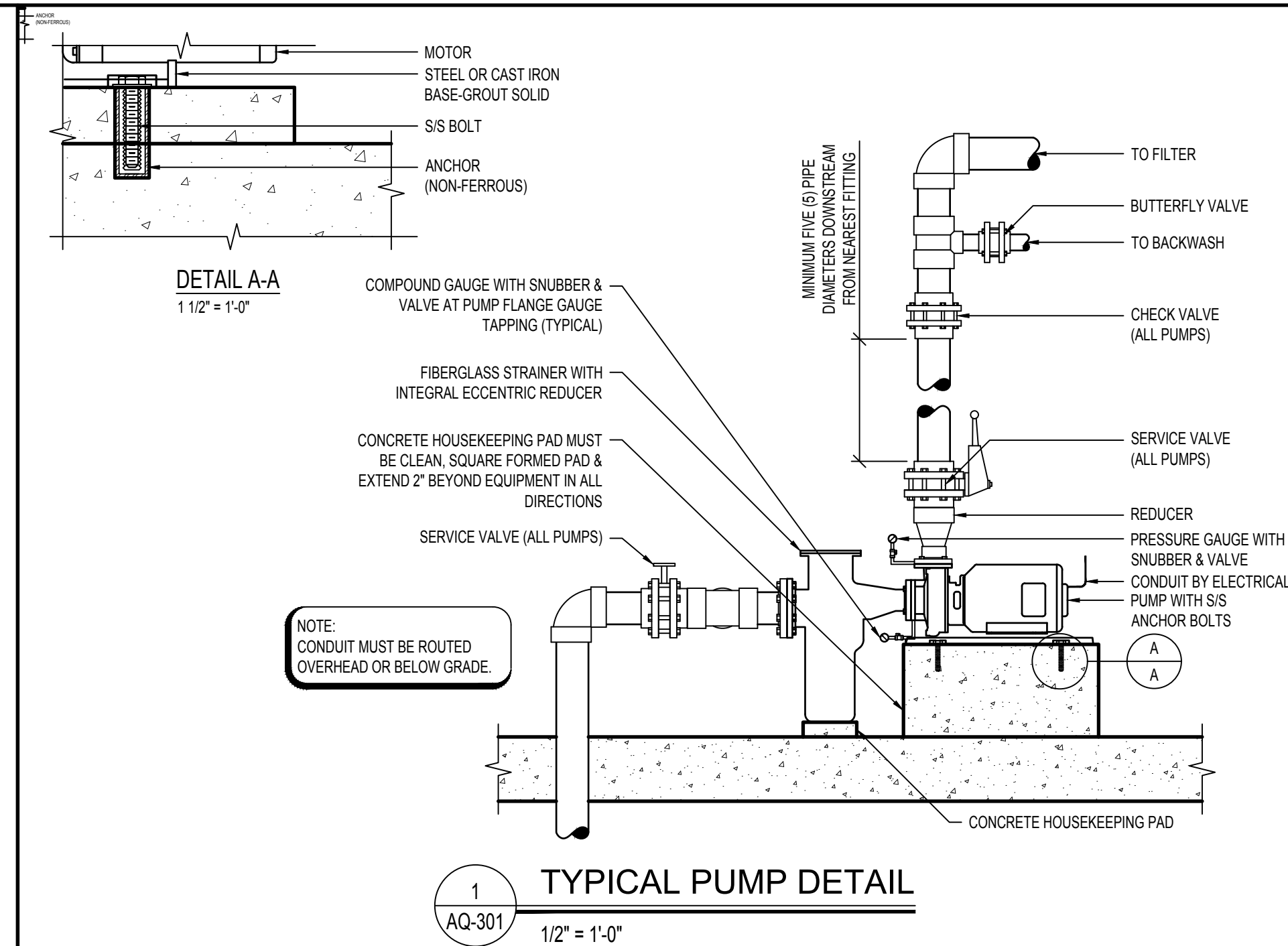
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AQ-301
1/2" = 1'-0"

CHEMICAL CONTROLLER



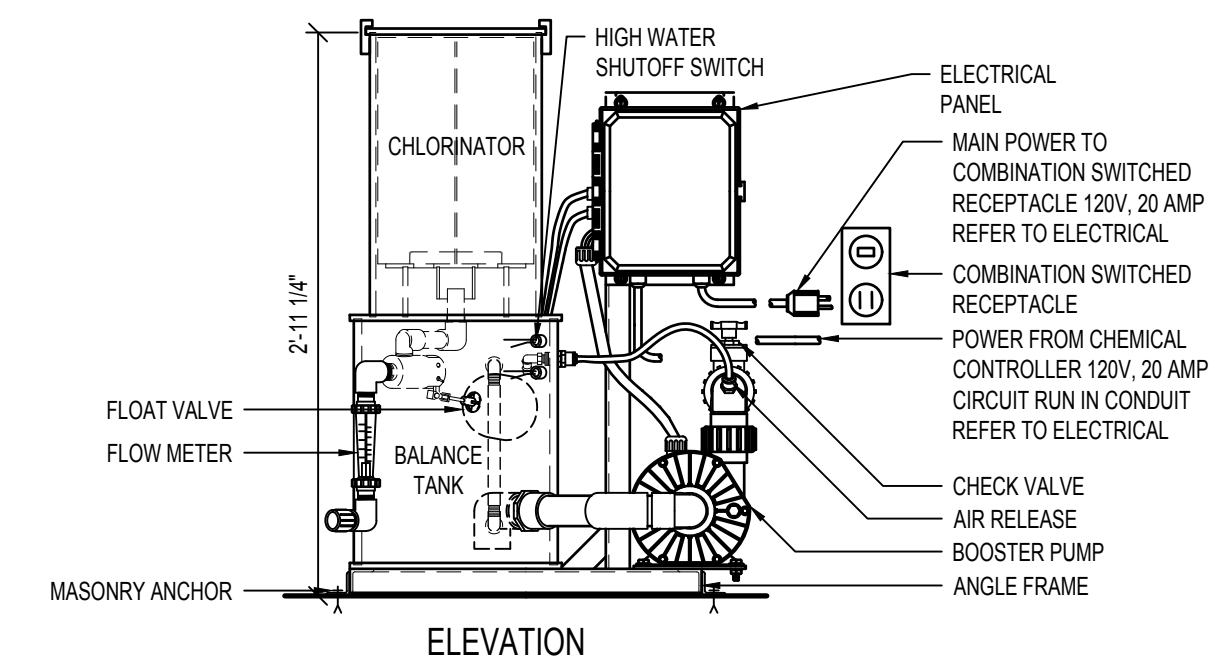
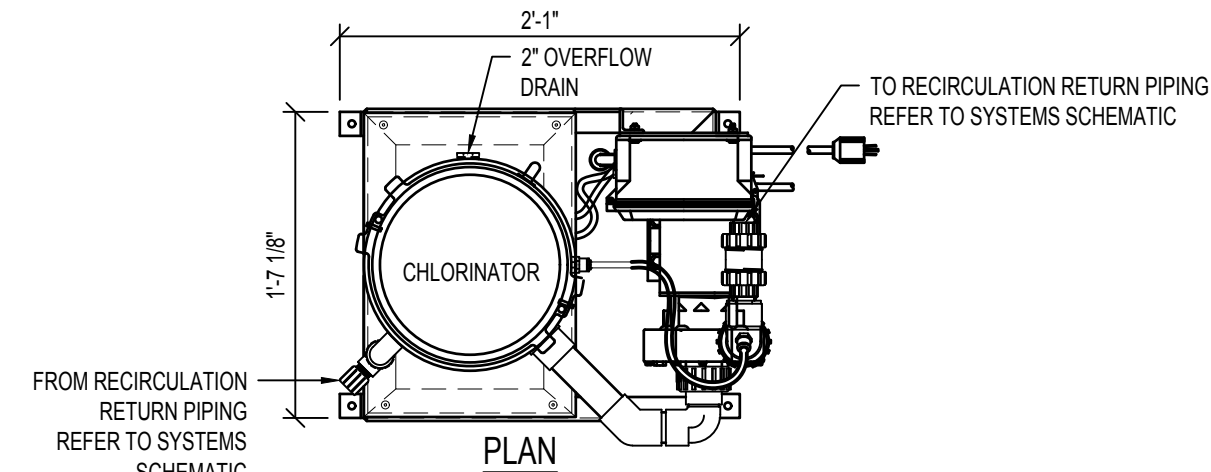
5
AQ-301
1/2" = 1'-0"

ACID SYSTEM



1
AQ-301
1/2" = 1'-0"

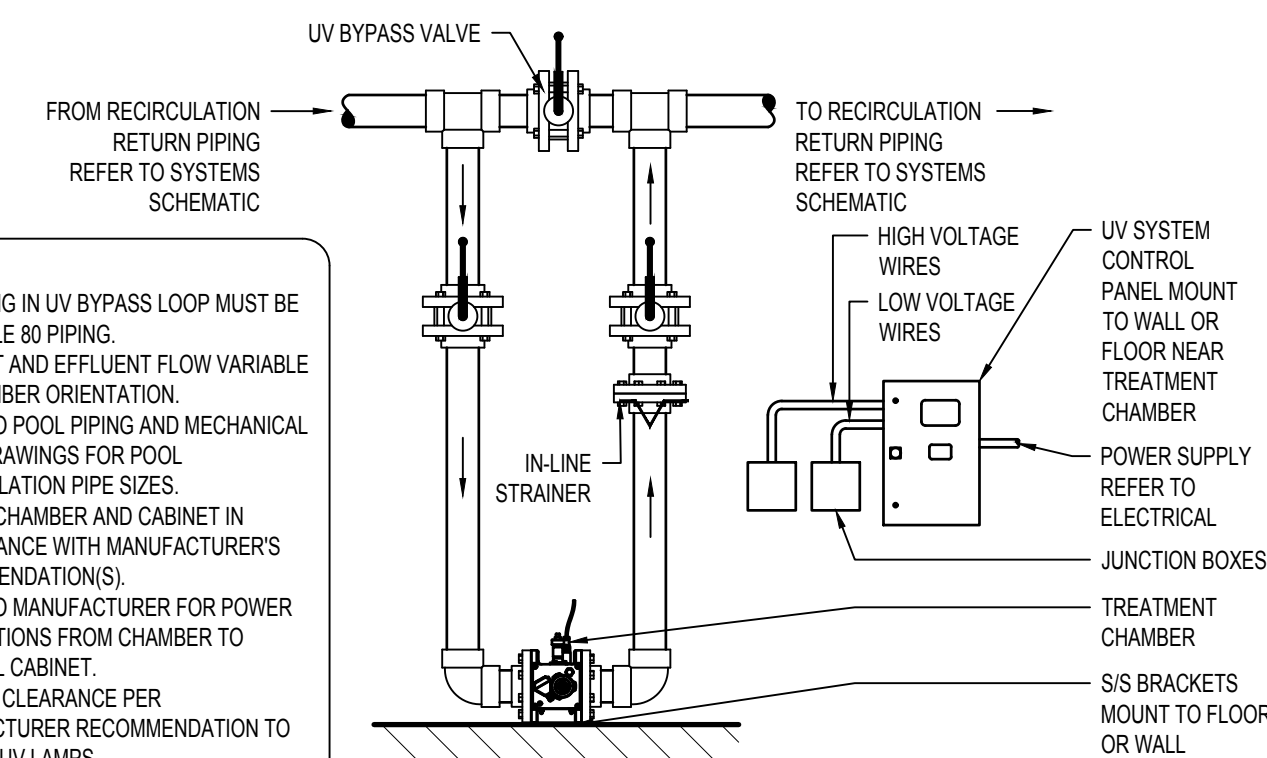
TYPICAL PUMP DETAIL



2
AQ-301
1" = 1'-0"

CHLORINATION SYSTEM

- NOTE:
1. ALL PIPING IN UV BYPASS LOOP MUST BE SCHEDULE 80 PIPING.
2. INFLUENT AND EFFLUENT FLOW VARIABLE ON CHAMBER ORIENTATION.
3. REFER TO POOL PIPING AND MECHANICAL ROOM DRAWINGS FOR POOL RECIRCULATION PIPE SIZES.
4. INSTALL CHAMBER AND CABINET IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
5. REFER TO MANUFACTURER FOR POWER CONNECTIONS FROM CHAMBER TO CONTROL CABINET.
6. PROVIDE CLEARANCE PER MANUFACTURER RECOMMENDATION TO REMOVE UV LAMPS.
7. REFER TO DETAIL 7/AQ-301 FOR UV BYPASS CONNECTION.



3
AQ-301
1/2" = 1'-0"

UV TREATMENT SYSTEM



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PROJECT # E2107-01
SITE# 2011
FACILITY # 5012011003,
501201104

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ISSUE DATE: 07/06/2022

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DRAWN BY: SAM
CHECKED BY: CCS
DESIGNED BY: CCS

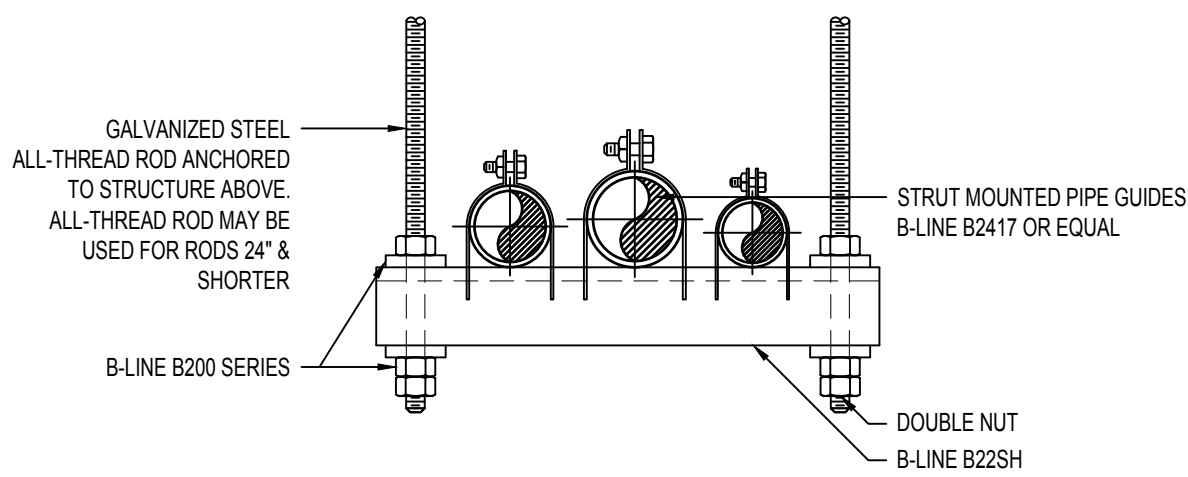
SHEET TITLE:

POOL
MECHANICAL
DETAILS

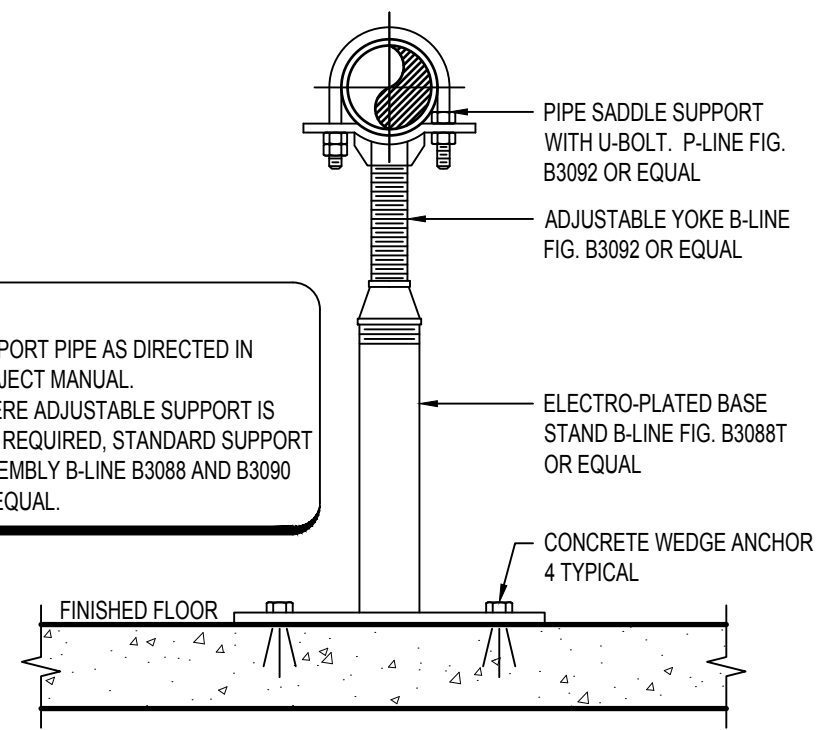
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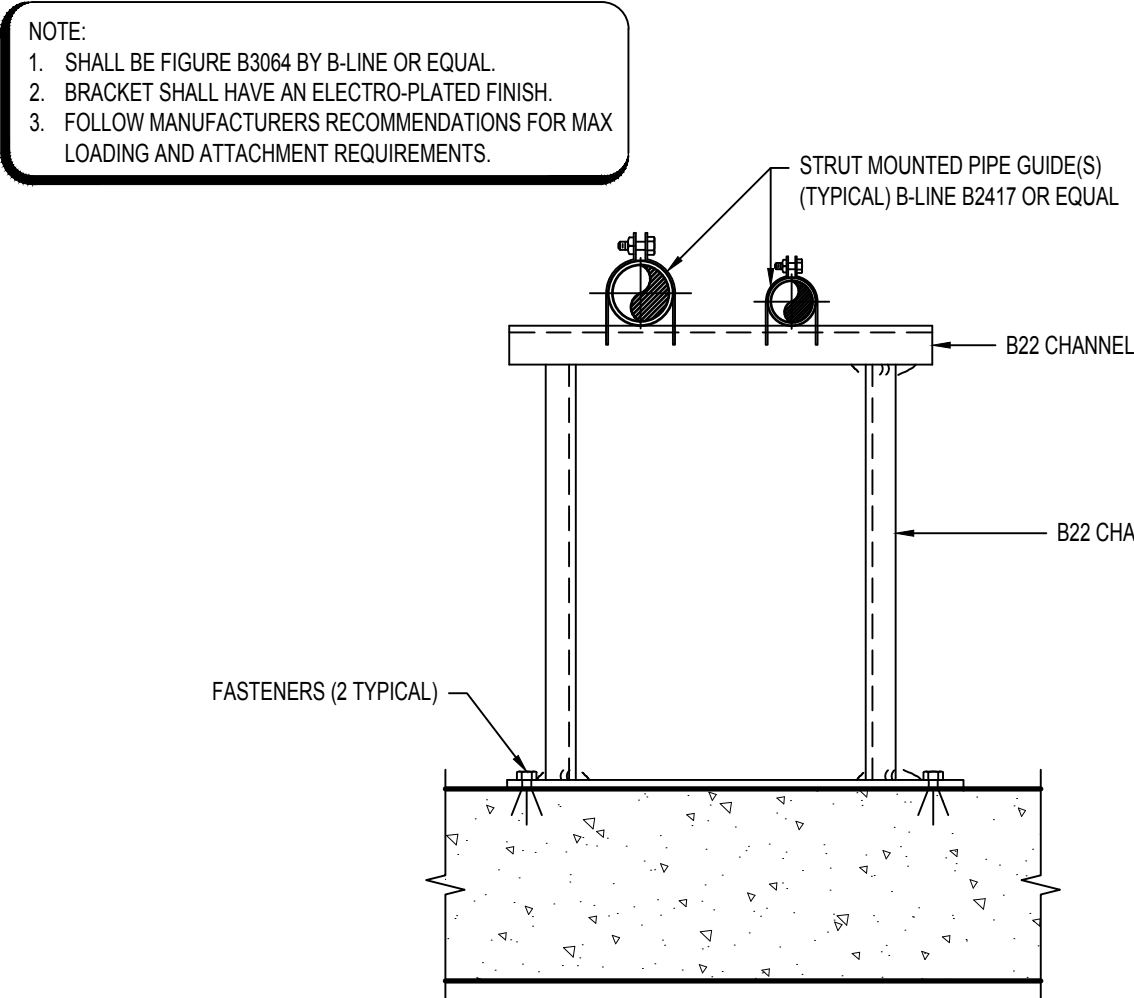
25 OF 45 SHEETS
07/06/2022



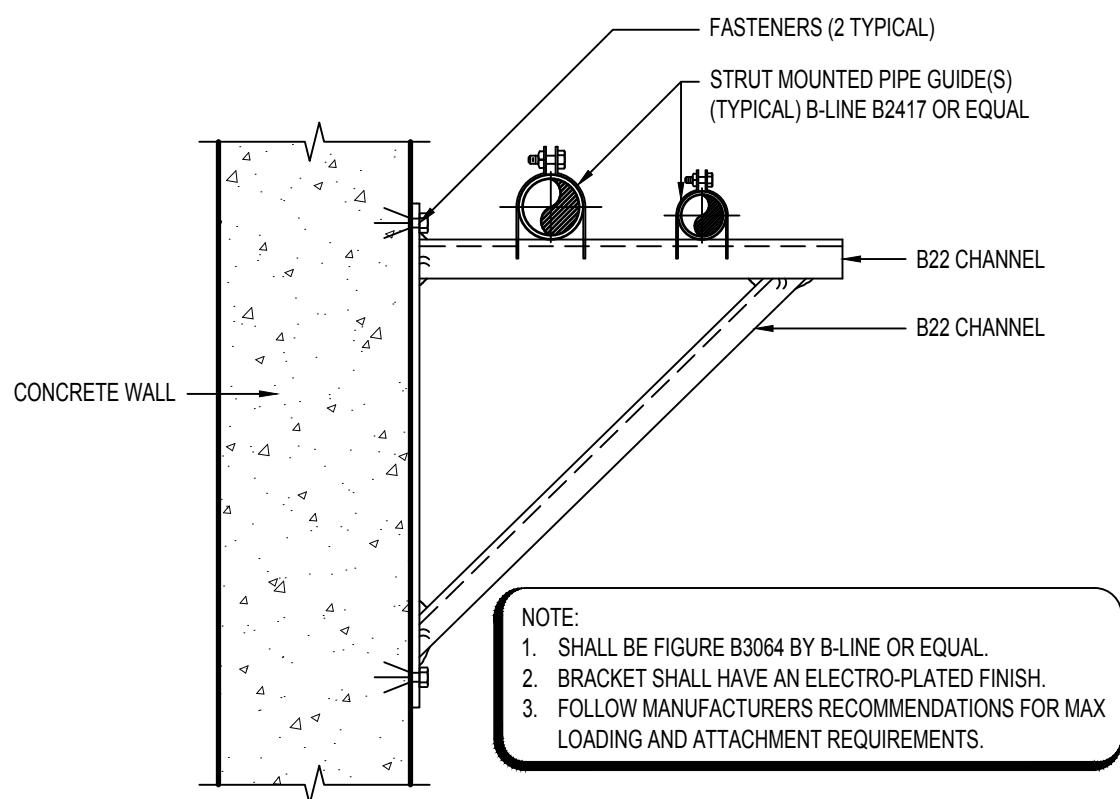
8 **TRAPEZE HANGER**
AQ-302 3\"/>



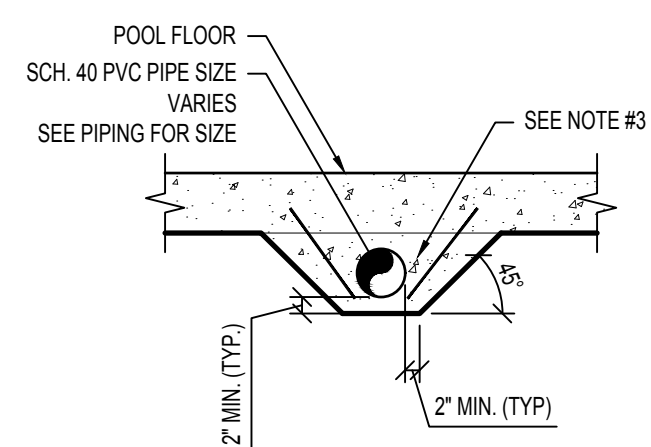
4 **FLOOR MOUNTED PIPE SUPPORT**
AQ-302 3\"/>



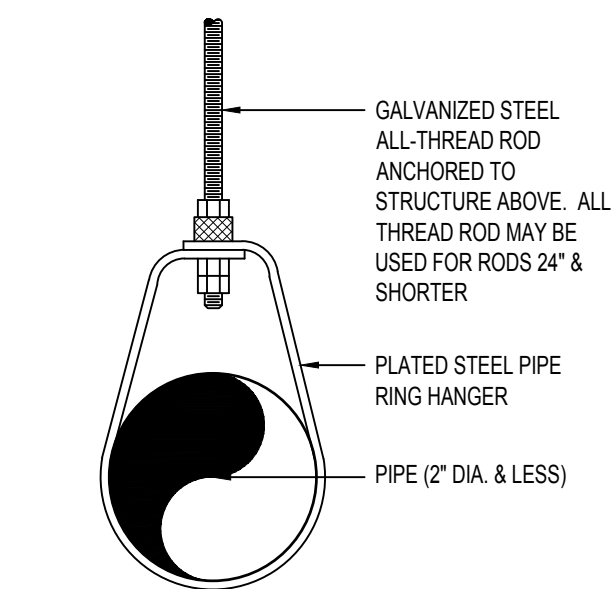
9 **FLOOR MOUNTED ADJUSTABLE STRUT BRACKET**
AQ-302 3\"/>



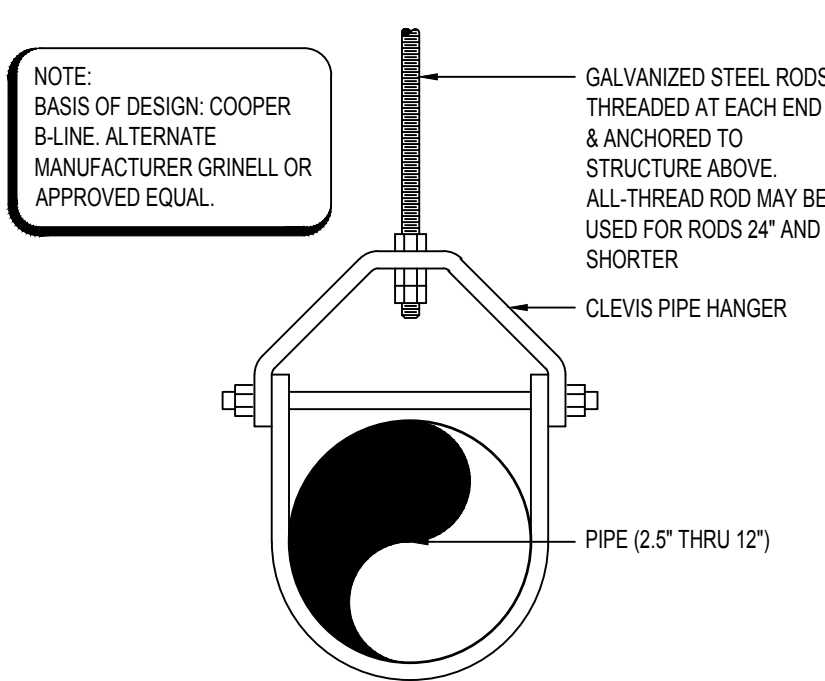
5 **ADJUSTABLE STRUT BRACKET**
AQ-302 3\"/>



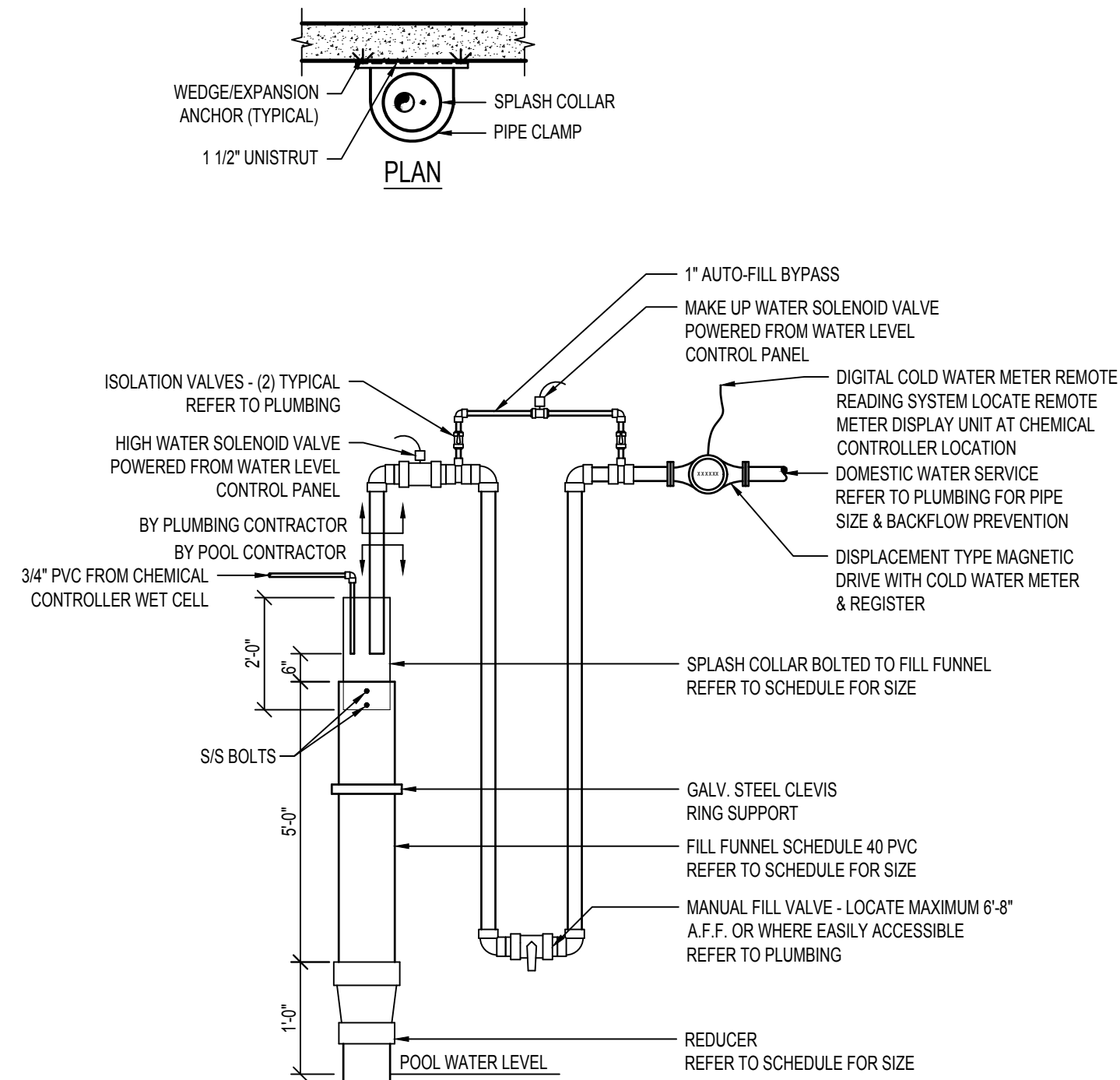
10 **CONCRETE ENCASED PIPE**
AQ-302 1\"/>



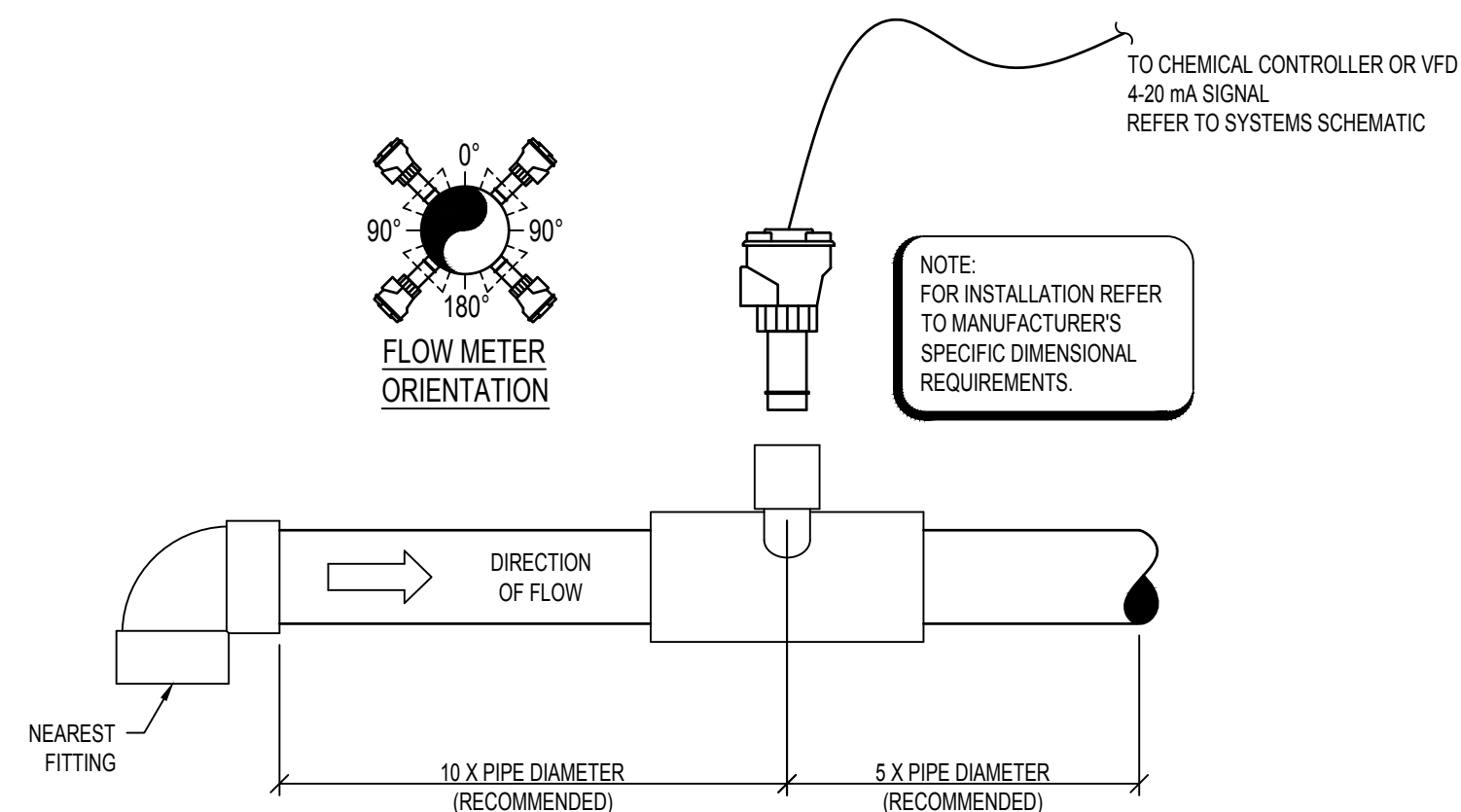
7 **SWIVEL RING PIPE HANGER**
AQ-302 1 1/2\"/>



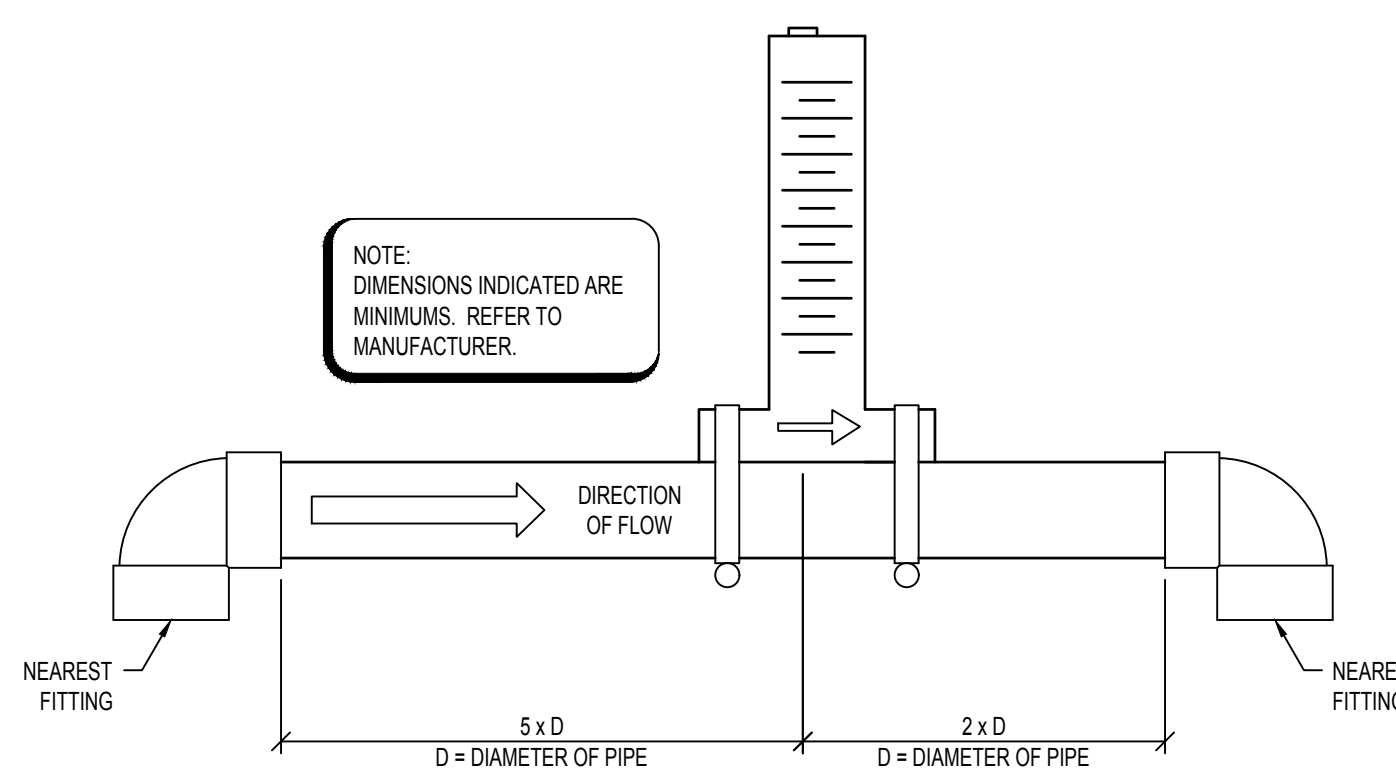
6 **CLEVIS PIPE HANGER**
AQ-302 1 1/2\"/>



1 **FILL FUNNEL**
AQ-302 3/8\"/>



2 **FLOW METER SENSOR**
AQ-302 3/4\"/>



3 **IMPACT FLOW METER**
AQ-302 3/4\"/>



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FACILITY # 5012011003,
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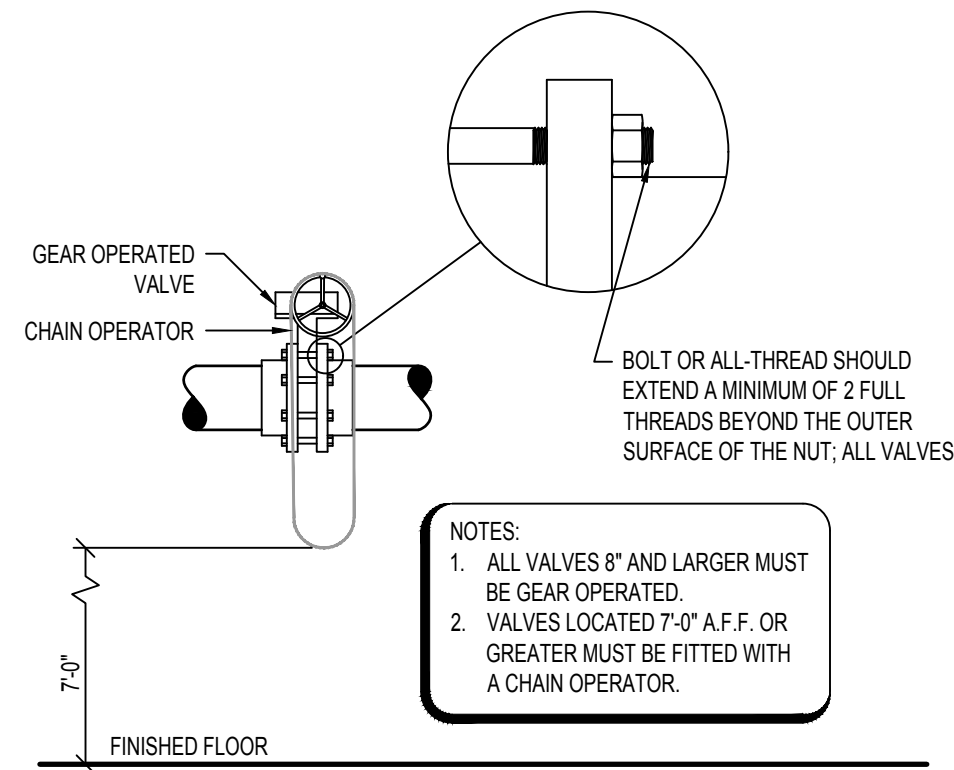
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DRAWN BY: SAM
CHECKED BY: CCS
DESIGNED BY: CCS

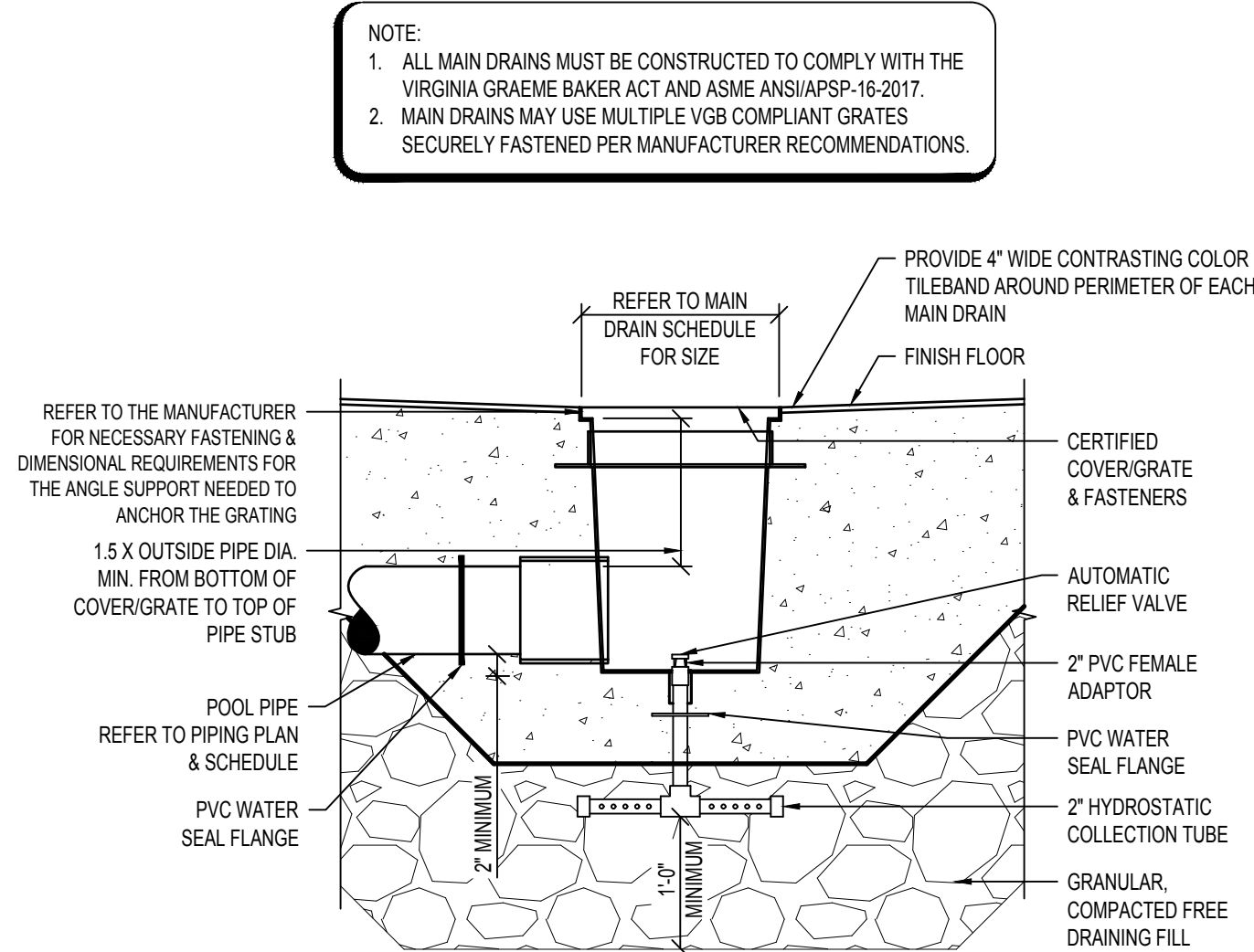
SHEET TITLE:
**POOL
MECHANICAL
DETAILS**

SHEET NUMBER:
AQ-302

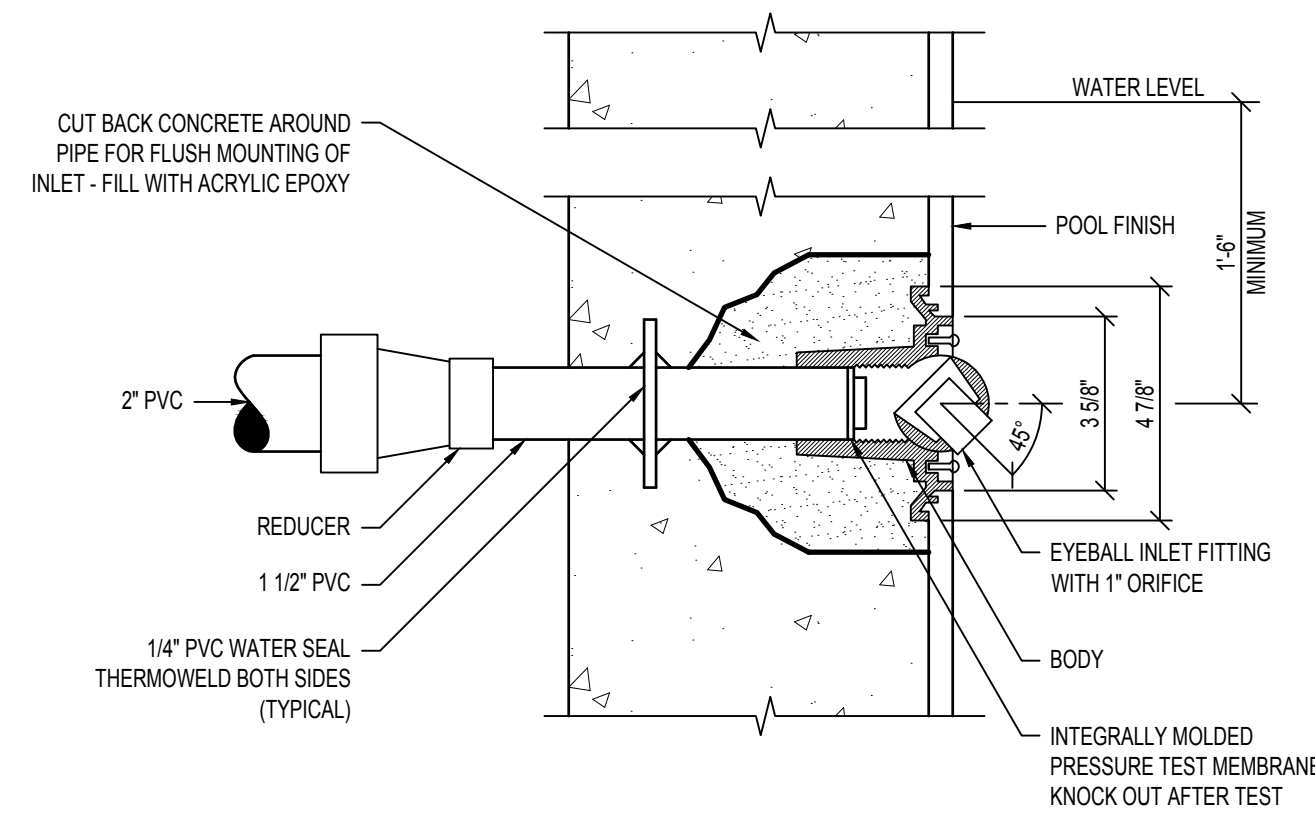
26 OF 45 SHEETS
07/06/2022



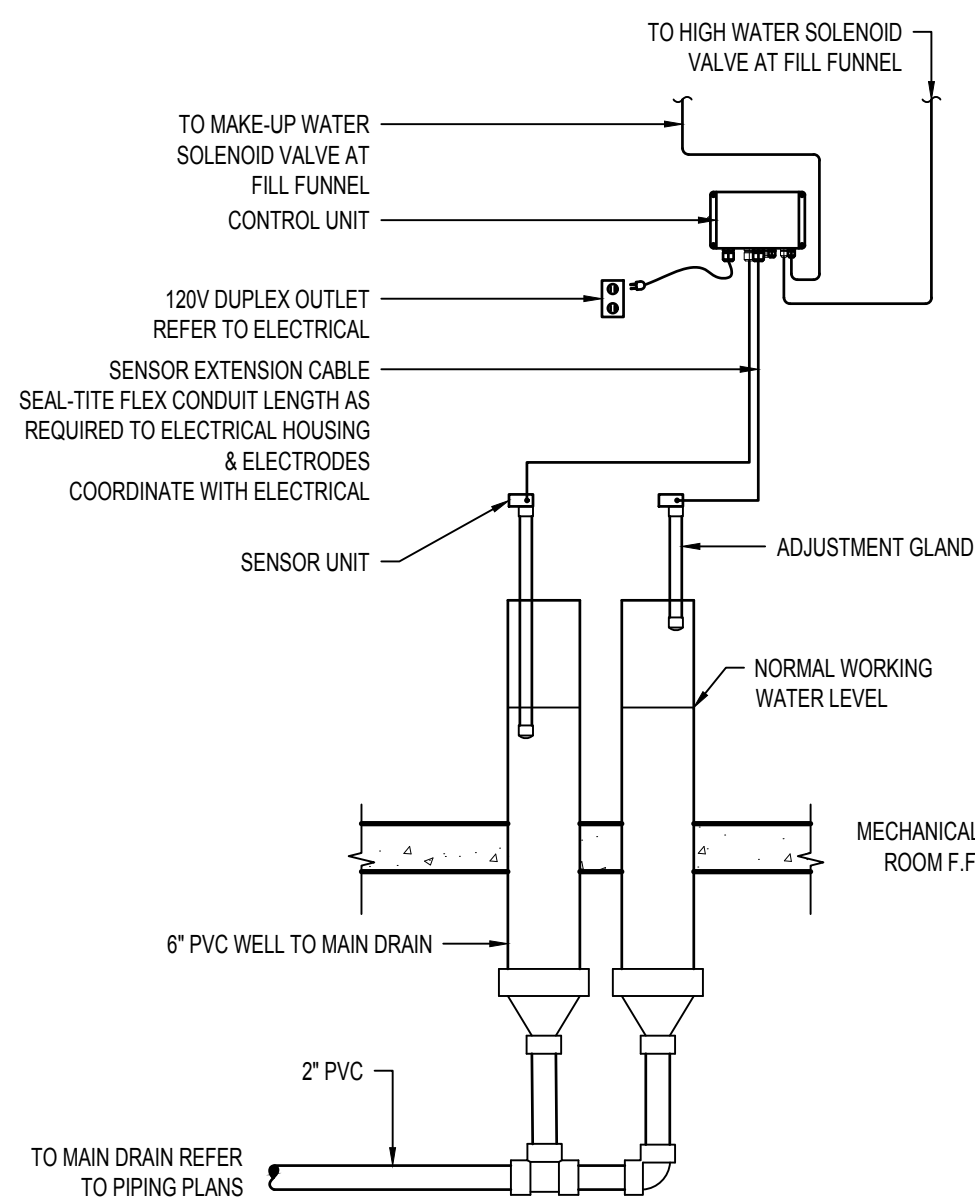
6 VALVE
AQ-303
1/2" = 1'-0"



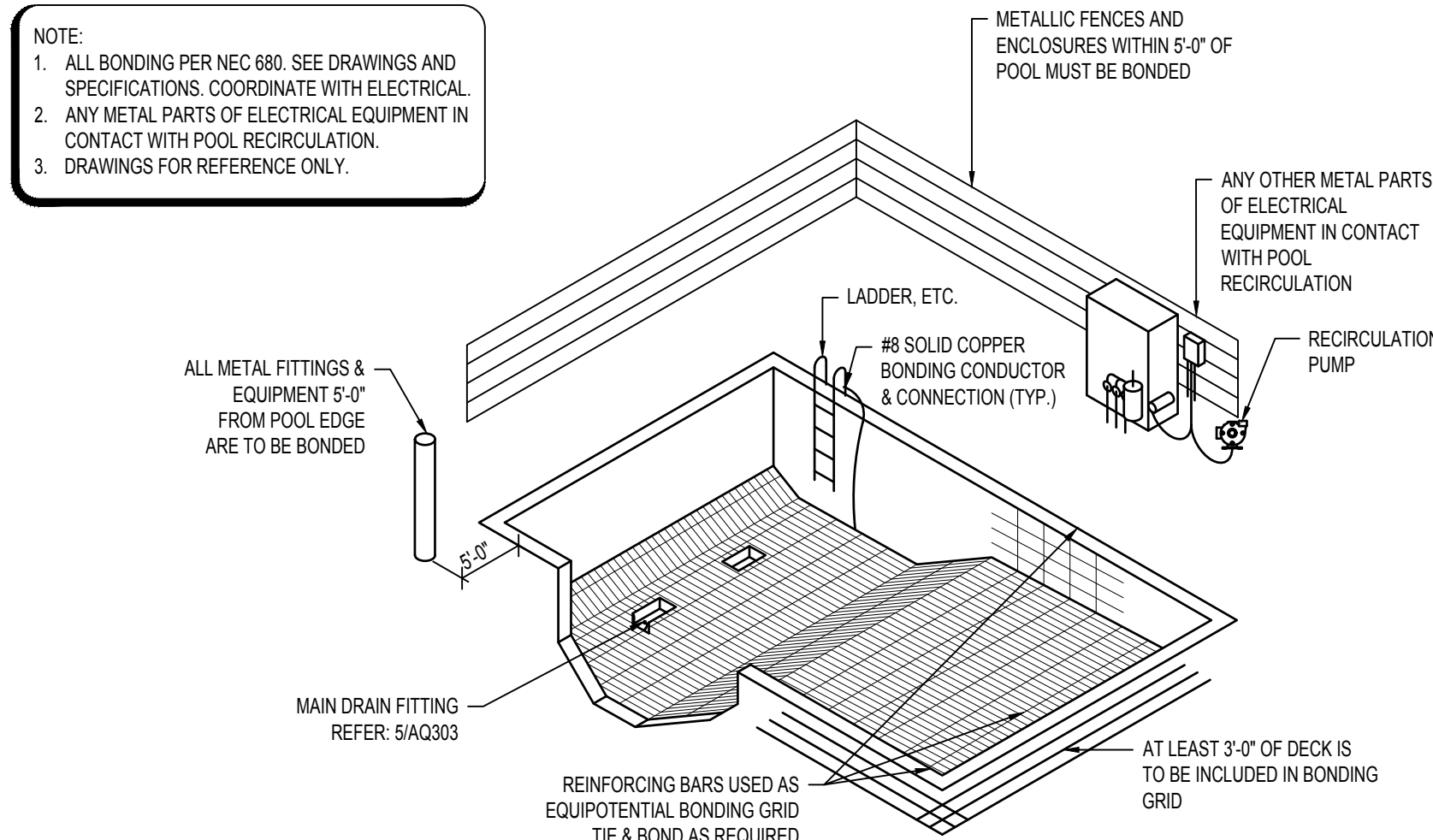
3 MAIN DRAIN
AQ-303
3/4" = 1'-0"



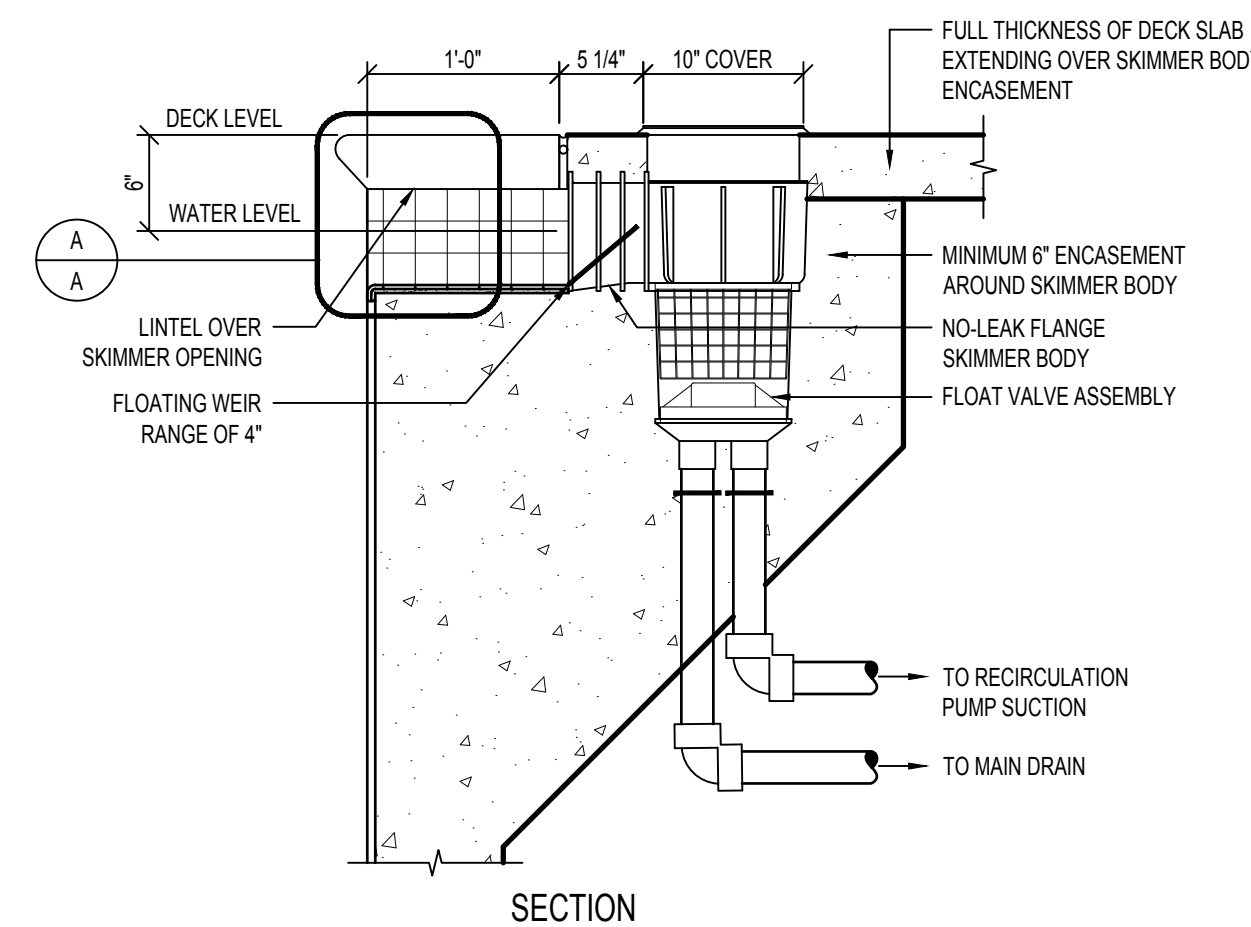
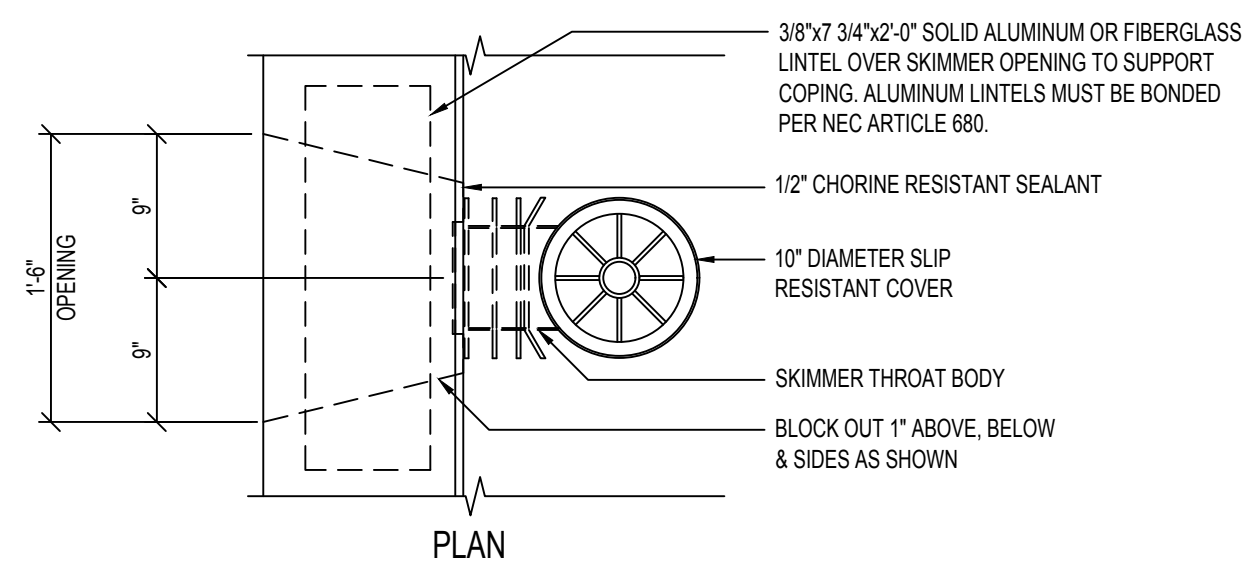
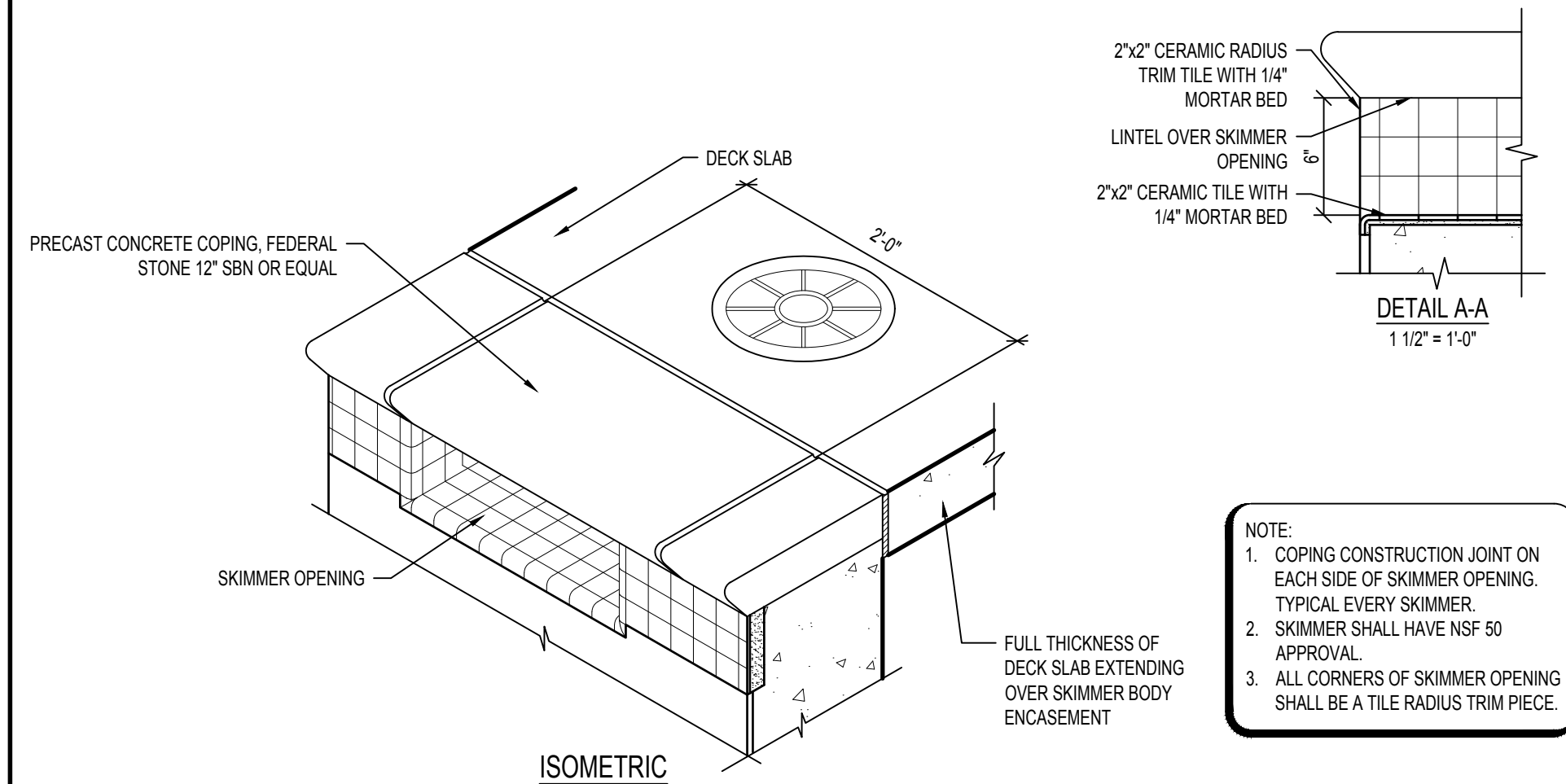
1 WALL INLET
AQ-303
3" = 1'-0"



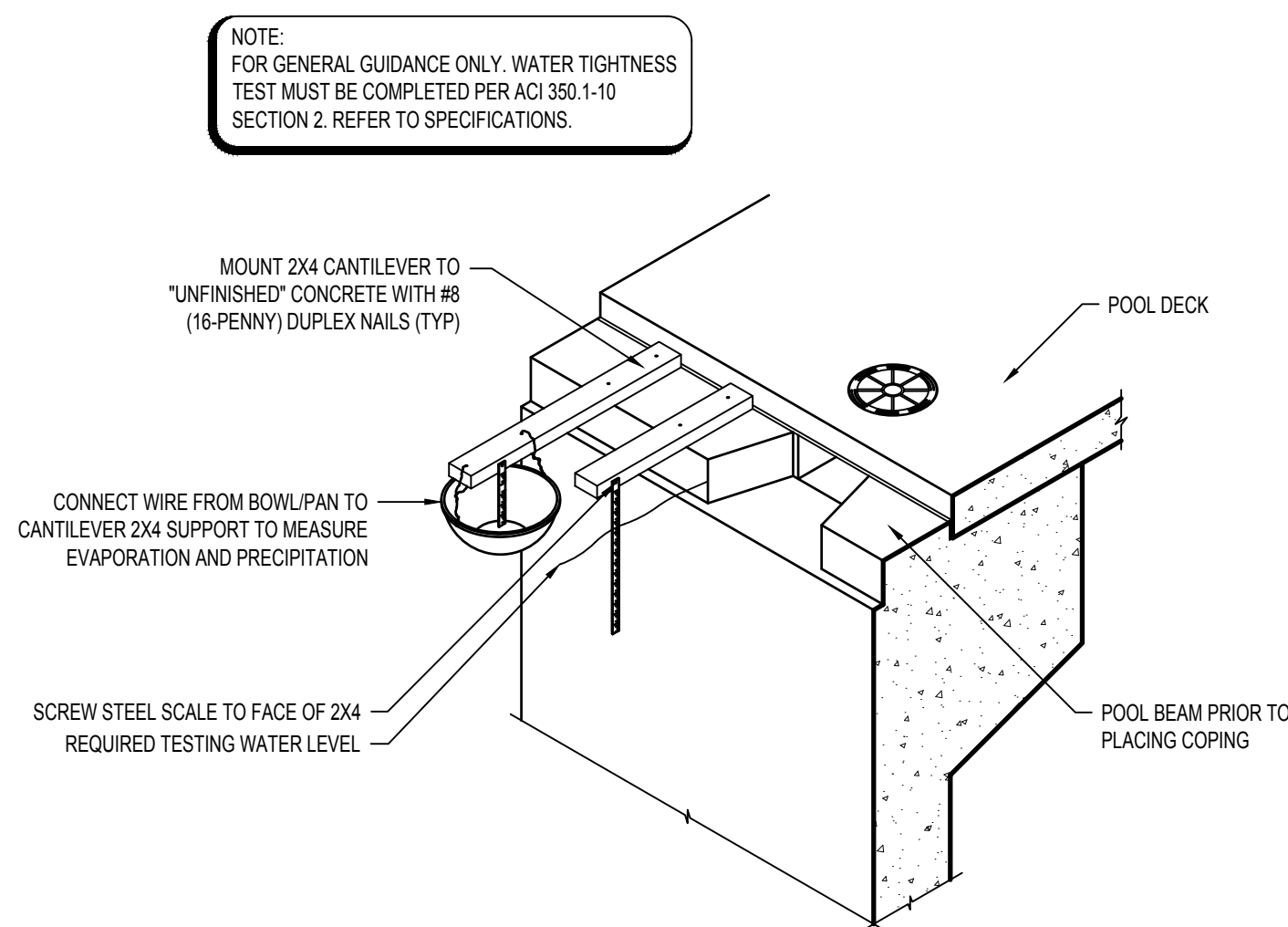
7 WATER LEVEL CONTROLLER
AQ-303
3/4" = 1'-0"



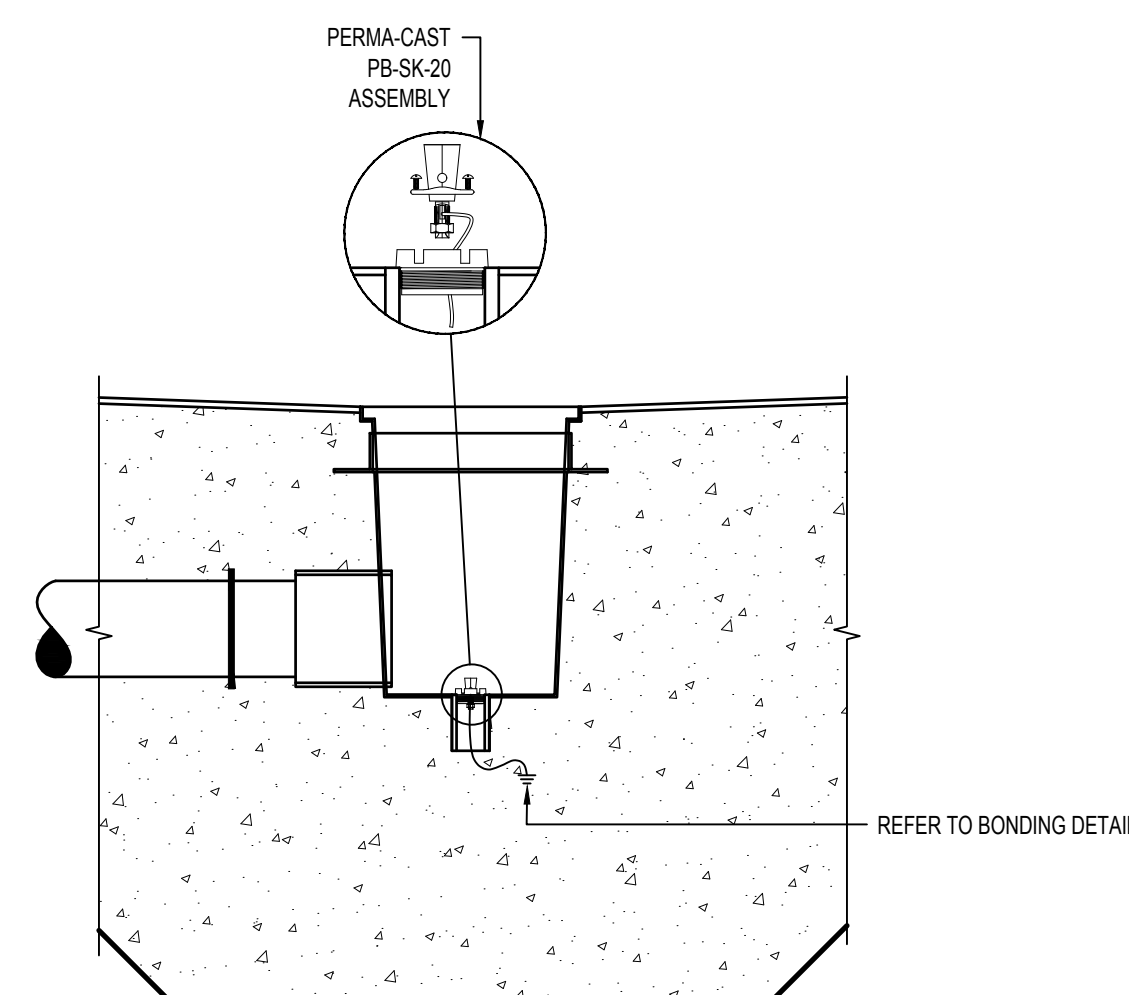
4 TYPICAL POOL BONDING DETAIL
AQ-303
NTS



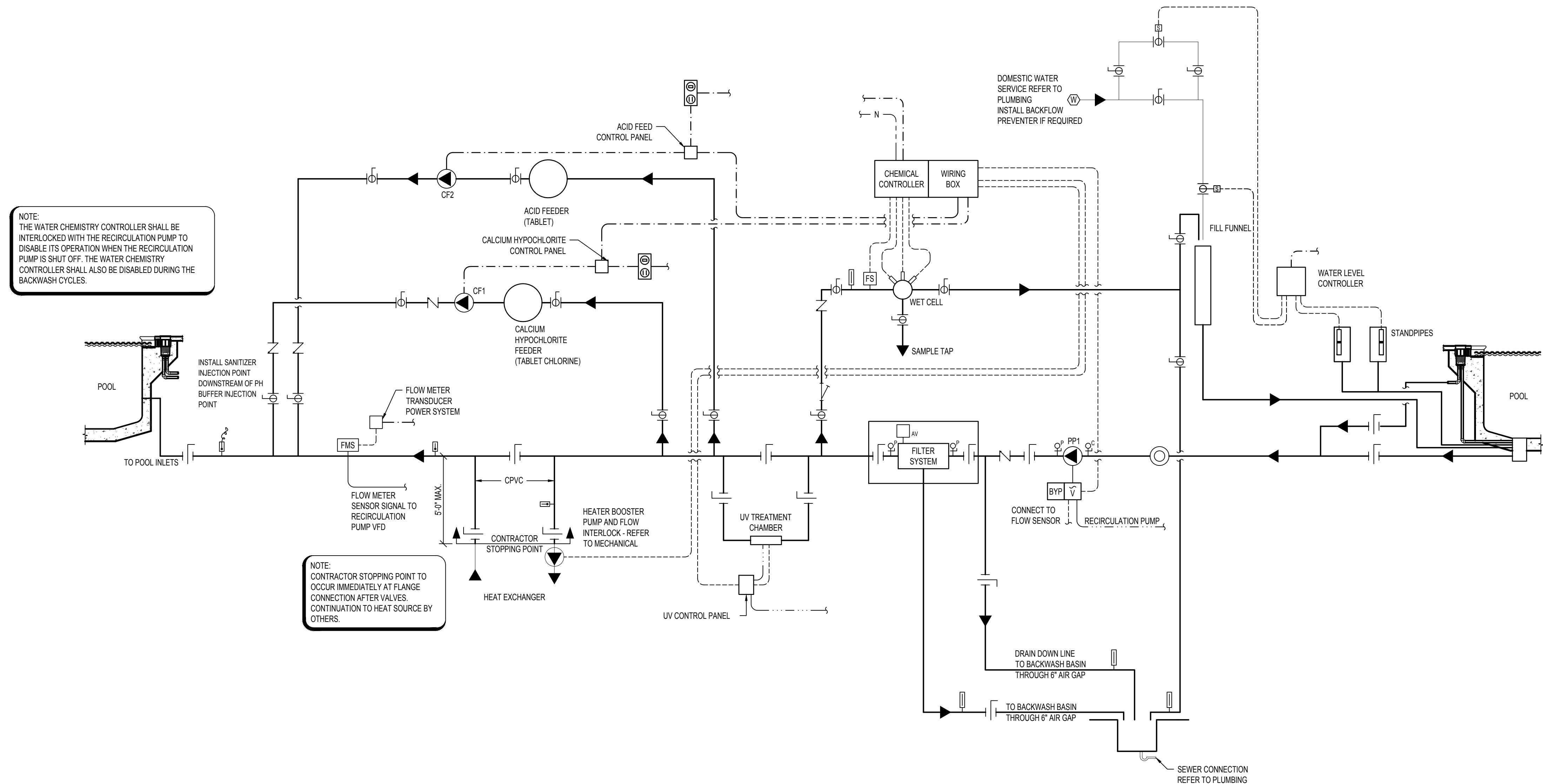
2 SKIMMER DETAIL
AQ-303
1" = 1'-0"



8 WATER TEST SET-UP
AQ-303
NTS

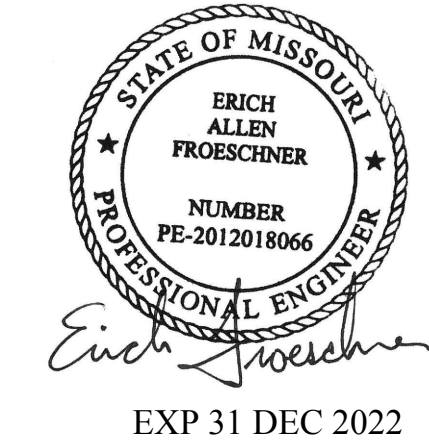


5 MAIN DRAIN BONDING DETAIL
AQ-303
3/4" = 1'-0"



SCHEMATIC LEGEND	
LEGEND	ITEM
	FLOW DIRECTION
	BUTTERFLY VALVE
	BALL VALVE
	MODULATING FLOAT VALVE
	SOLENOID VALVE
	CHECK VALVE
	THREE WAY VALVE
	PUMP
	HAIR AND LINT STRAINER
	"Y" STRAINER
	FLOW METER SENSOR
	FLOW SWITCH
	IMPACT FLOW METER
	VENTURI FLOW METER
	WATER METER
	AUTOMATIC AIR VENT
	AIR VENT
	AIR INLET
	PRESSURE GAUGE AND COCK
	COMPOUND GAUGE AND COCK
	DIGITAL TEMP SENSOR
	THERMOMETER
	PNEUMATIC ACTUATOR
	FLOW CONTROL VALVE
	COMBINATION SWITCH/RECEPTACLE
	AUTOMATIC PUMP SHUT-OFF DEVICE
	VARIABLE FREQUENCY DRIVE
	REMOTE START/STOP
	EMERGENCY STOP
	VARIABLE FREQUENCY DRIVE BYPASS
	CONTACT MOTOR SELECTOR
	15 MINUTE TIMER SWITCH
	LOW VOLTAGE CONTROL
	WATER LINE
	1 PHASE POWER
	3 PHASE POWER
	VENT LINE
	CO LINE
	NETWORK LINE BY ELECTRICAL
	GAS LINE

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REVISION: _____
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ISSUE DATE: 07/06/2022

CAD DWG FILE: _____
DRAWN BY: SAM
CHECKED BY: CCS
DESIGNED BY: CCS

SHEET TITLE:

POOL
SYSTEMS
SCHEMATIC

SHEET NUMBER:

AQ-400

28 OF 45 SHEETS
07/06/2022





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SITE# 2011
FACILITY # 5012011005

REVISION: _____
DATE: _____
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DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/06/2022

CAD DWG FILE: S-001
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: HJC

SHEET TITLE:

GENERAL
NOTES

SHEET NUMBER:

S-001

CODES AND SPECIFICATIONS

- PROJECT IS DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE - 2018, INCLUDING ALL REFERENCED STANDARDS AS LISTED IN CHAPTER 35.
- MINIMUM LOADING CONDITIONS ARE PER THE ASCE STANDARD, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-16"
- WHERE CONFLICT OCCURS BETWEEN REFERENCED CODES AND STANDARDS, SPECIFICATIONS, AND GENERAL NOTES, THE MOST STRINGENT REQUIREMENT SHALL GOVERN.

DESIGN CRITERIA:

RISK CATEGORY	II
SEISMIC DESIGN DATA:	
IMPORTANCE FACTOR, I	1.0
MAPPED SPECTRAL RESPONSE ACCELERATIONS	
SHORT PERIOD PARAMETER, S _s	0.365
1 SECOND PARAMETER, S ₁	0.148
SOIL SITE CLASS	D
DESIGN SPECTRAL RESPONSE ACCELERATIONS	
SHORT PERIOD PARAMETER, S _{ds}	0.367
1 SECOND PARAMETER, S _{d1}	0.218
RESPONSE MODIFICATION FACTOR,	
SPRING-ISOLATED COMPONENTS, R	2.0

GENERAL PROVISIONS

- STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND WORK. IF A DISCREPANCY BETWEEN DRAWINGS IS OBSERVED, CONTACT THE ENGINEER IMMEDIATELY.
- NO OPENING SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
- NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
- DIMENSIONS OF OPENINGS IN FLOORS, ROOFS, AND WALLS, AND ASSOCIATED SURROUNDING FRAMING, AND ANCHOR BOLT SIZES AND LOCATIONS ASSOCIATED WITH MECHANICAL EQUIPMENT, SHALL BE VERIFIED BY THE CONTRACTOR WITH ACTUAL EQUIPMENT FURNISHED FOR THE PROJECT PRIOR TO FABRICATION AND INSTALLATION.
- ALL OPENINGS AND SLEEVES ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS. FOR REQUIRED OPENINGS, REFER TO THE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, AND CIVIL DRAWINGS.
- THE CONFIGURATION OF STRUCTURAL FRAMING REQUIRED TO SUPPORT MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT IS BASED ON PRELIMINARY PRODUCT INFORMATION. THE CONTRACTOR SHALL VERIFY WITH THE MANUFACTURER OF THE EQUIPMENT FURNISHED FOR THE PROJECT THAT THE CONFIGURATION IS SUITABLE. EQUIPMENT SHALL BE SUPPORTED ON ALL SIDES BY STRUCTURAL FRAMING, IF FRAMING IS NOT LOCATED UNDER EQUIPMENT CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.
- THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES.
- ALL THINGS WHICH, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, OMISSIONS, CONTRADICTIONS, OR AMBIGUITIES, IN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. PLANS AND/OR SPECIFICATIONS WILL BE CORRECTED, OR WRITTEN INTERPRETATION OF THE ALLEGED DEFICIENCY, OMISSION, CONTRADICTION, OR AMBIGUITY WILL BE MADE BY THE ARCHITECT BEFORE THE AFFECTED WORK PROCEEDS.
- CHECK ALL DIMENSIONS AGAINST REQUIREMENTS OF OTHER CONTRACT DOCUMENTS. FIELD VERIFY DIMENSIONS RELATING TO EXISTING CONDITIONS PRIOR TO ORDERING MATERIALS AND FABRICATION.
- ALL SHOP DRAWINGS AND PRODUCT SUBMITTALS ARE REVIEWED FOR GENERAL CONFORMANCE WITH THE PROJECT DOCUMENTS. REVIEWED SUBMITTALS DO NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY TO CONFORM WITH THE DESIGN DRAWINGS AND SPECIFICATIONS.
- DETAILS NOTED AS "TYPICAL"/"TYP." ARE TO APPLY TO ALL CONDITIONS, INCLUDING SIMILAR CONDITIONS, ON THE PROJECT EXCEPT WHERE SPECIFIC DETAILS OR SECTIONS ARE PROVIDED. "TYPICAL" DETAILS APPLY REGARDLESS OF BEING SPECIFICALLY NOTED OR CUT ON THE DRAWINGS. SPECIFIC DETAILS SHALL ALSO APPLY TO THOSE CONDITIONS WHICH ARE THE SAME OR SIMILAR ELSEWHERE ON THE JOB REGARDLESS OF BEING SPECIFICALLY NOTED OR CUT ON DRAWINGS.

EXISTING CONDITIONS

- CONTRACTOR SHALL BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING AND PROVIDE THE NECESSARY MEANS AND METHODS TO ACCOMPLISH THE SPECIFIED WORK.
- FIELD VERIFY ALL CONDITIONS, SIZES, SPACINGS, AND DIMENSIONS OF EXISTING STRUCTURES OR OBSTACLES PRIOR TO FABRICATION AND/OR NEW CONSTRUCTION. CONTACT ENGINEER IMMEDIATELY IF EXISTING CONDITIONS, ETC. VARY FROM THOSE SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY REMOVAL AND REPLACEMENT/RELOCATION OF ANY NON-STRUCTURAL ELEMENTS NECESSARY TO COMPLETE THE STRUCTURAL WORK. FOLLOW ALL APPLICABLE CODES AND REQUIREMENTS OF THE AFFECTED TRADES. PROVIDE FOR THIS REQUIREMENT IN THE BID.
- CONTRACTOR SHALL CONFINE ALL OPERATIONS TO THE AREA SHOWN ON THE PLANS. ANY AREA DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- WHERE NEW CONCRETE MEETS EXISTING CONCRETE, CONTRACTOR SHALL CHIP OR SAW CUT CONCRETE EDGES TO FORM A FLUSH AND CLEAN SURFACE PRIOR TO INSTALLATION OF NEW CONCRETE.
- CONTRACTOR SHALL PROVIDE TEMPORARY OR PERMANENT SHORING TO ALL EXISTING CONSTRUCTION WHERE NEW CONSTRUCTION ABUTS, TO PREVENT DAMAGE DURING NEW CONSTRUCTION WHETHER SHOWN ON THESE DRAWINGS OR NOT. ANY DAMAGE TO EXISTING STRUCTURES, FOUNDATIONS, ETC. SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER PRIOR TO PROJECT COMPLETION.

CONCRETE NOTES

- CONCRETE MATERIALS AND CONSTRUCTIONS SHALL ADHERE TO THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY", ACI 318, YEAR ACCORDING TO PROJECT BUILDING CODE.
- GENERAL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE", ACI 301, YEAR ACCORDING TO PROJECT BUILDING CODE.
- CONCRETE 28-DAY COMPRESSIVE STRENGTH AND DENSITY SHALL BE AS FOLLOWS:

INTENDED USE	f _c (PSI)	DENSITY (PCF)
FOUNDATIONS	4000	145
SLAB ON GRADE	4000	145
ALL OTHER CONCRETE	4000	145
- REINFORCING SHALL CONFORM TO:

a. DEFORMED BARS	ASTM A615 GRADE 60
b. DEFORMED BARS (WELDED)	ASTM A706
c. WELDED WIRE FABRIC	ASTM A1064
- ALL REINFORCING SHALL BE DETAILED, FABRICATED, SUPPORTED, AND PLACED IN ACCORDANCE WITH THE "ACI DETAILING MANUAL" AND CRSI'S "MANUAL OF STANDARD PRACTICE", LATEST EDITIONS.
- REINFORCING SHALL BE PLACED WITH CONCRETE COVER AS SHOWN IN DETAILS. WHERE BAR PLACEMENT IS NOT SHOWN, PROVIDE CONCRETE COVER PER ACI 318, WITH THE FOLLOWING MINIMUM DIMENSIONS WHERE CONCRETE IS:

a. CAST AGAINST EARTH	3 IN
b. EXPOSED TO EARTH & WEATHER	2 IN
- SPLICE REINFORCING BARS WITH CLASS "B" SPLICES, UNO, PER THE REQUIREMENTS OF ACI 318. PROVIDE MINIMUM OF 6" LAP SPLICING FOR WWF IN SOG AND 12" FOR ELEVATED SLABS.
- CENTRAL LINE OF SPLICE OF WELDED WIRE FABRIC IN ELEVATED FLOOR SLABS SHALL BE LOCATED AT MIDSPAN OF FLOOR SLAB.
- SPLICES SHALL NOT BE LOCATED OVER FLOOR BEAMS.
- PROVIDE FOUNDATION DOWELS OF THE SAME SIZE AND LOCATION AS THAT REQUIRED IN COLUMN AND/OR WALL ABOVE. PROVIDE DEVELOPMENT AND SPLICES PER ACI 318.
- CONSTRUCTION JOINTS SHALL BE LOCATED ON THE SHOP DRAWINGS AND ARE SUBJECT TO APPROVAL OF THE ENGINEER. LOCATE AT POINTS OF MINIMUM SHEAR. REINFORCING SHALL BE CONTINUOUS THROUGH THE JOINT UNLESS IT ALSO FUNCTIONS AS A CONTROL JOINT (50% PASSES). SUBMIT DETAILS OF CONSTRUCTION JOINTS IN THE SHOP DRAWINGS. HORIZONTAL CONSTRUCTION JOINTS ARE NOT ALLOWED IN WALLS OR SLABS.
- CONTROL JOINTS SHALL BE SPACED AT 15 FOOT MAXIMUM INTERVALS. LAYOUT SHALL CREATE NEARLY SQUARE OR RECTANGULAR (1.5:1 MAX) SECTIONS. SUBMIT CONTROL JOINT LAYOUT FOR APPROVAL.
- PROVIDE 3/4" CHAMFERS AT ALL EDGES THAT ARE EXPOSED TO VIEW IN THE FINISHED STRUCTURE UNLESS SHOWN OTHERWISE IN THE ARCHITECTURAL DRAWINGS.
- CONCRETE EXPOSED TO FREEZE THAW CYCLES SHALL HAVE 6% AIR ENTRAINMENT. DO NOT AIR ENTRAIN CONCRETE TO BE TROWEL FINISHED.
- CONCRETE FINISH SHALL CONFORM TO ACI 301 UNO ON ARCHITECTURAL DRAWINGS.
- REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC. FOR INFORMATION ON DOOR AND WINDOW LOCATIONS, LOUVER OPENINGS, SLEEVES, CONDUIT, DRAINS, MISCELLANEOUS EMBEDDED ITEMS, ETC. THAT ARE TO BE INCORPORATED IN THE WORK. THE VARIOUS TRADES ARE RESPONSIBLE FOR PROVIDING AND PLACING THEIR ITEMS.

CONC. CONT

- SEE MECHANICAL, ELECTRICAL, AND CIVIL DRAWINGS FOR EQUIPMENT PADS AND FOUNDATION LOCATIONS. SEE TYPICAL DETAILS FOR CONSTRUCTION UNLESS SPECIFIC DETAILS ARE PROVIDED.
- SEE PLUMBING AND ARCHITECTURAL DRAWINGS FOR UNDERFLOOR AND PERIMETER FOUNDATION DRAINS.
- PROVIDE CONTINUOUS WATERSTOPS IN JOINTS OF PITS, RETAINING WALLS, AND OTHER SIMILAR CONSTRUCTIONS. WATERSTOP PRODUCTS SHALL BE APPROVED BY THE ENGINEER WHERE NOT SPECIFICALLY CALLED OUT ON DRAWINGS.
- ALL STEEL ELEMENTS LOCATED BELOW GRADE SHALL BE COATED WITH A MINIMUM OF 1/8" MASTIC AND COVERED WITH 3" MINIMUM CONCRETE FOR PROTECTION.
- EQUIPMENT PADS, TOPPING SLABS, FILL SLABS, ETC. SHALL BE REINFORCED WITH #4 AT 16" O.C. EACH WAY, UNO.
- CONDUITS, PIPES, AND SLEEVES OF ANY MATERIAL NOT HARMFUL TO CONCRETE AND WITHIN THE LIMITATIONS OF ACI 318 SHALL BE PERMITTED TO BE EMBEDDED IN CONCRETE, ONLY WITH PRIOR WRITTEN APPROVAL OF THE ARCHITECT. THE CONTRACTOR SHALL SUBMIT DETAILED DIMENSIONED AND COORDINATED DRAWINGS OF PROPOSED EMBEDDED CONDUIT, PIPES, AND SLEEVES TO THE ARCHITECT PRIOR TO CONSTRUCTION.
- CONDUITS AND PIPES EMBEDDED WITHIN A SLAB, WALL, OR BEAM (OTHER THAN THOSE MERELY PASSING THROUGH) SHALL SATISFY THE FOLLOWING:
 - THEY SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN 1/3 THE OVERALL THICKNESS OF THE SLAB, WALL, OR BEAM IN WHICH THEY ARE EMBEDDED.
 - THEY SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS OR WIDTHS
 - THEY SHALL NOT SIGNIFICANTLY IMPAIR THE STRENGTH OF THE CONSTRUCTION.
- ALL ANCHOR BOLTS, INSERTS, SLEEVES AND OTHER EMBEDDED ITEMS SHALL BE SET BEFORE CONCRETE IS PLACED.
- THE CONTRACTOR SHALL MAKE ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT OF FORMS AND SHRINKAGE OF CONCRETE WHEN CONSTRUCTING FORMS AND FORM WORK.
- THE CONTRACTOR ALONE IS RESPONSIBLE FOR THE ADEQUACY OF ALL FORMS, SHORING, ETC., USED IN CONSTRUCTION OF CONCRETE WORK.
- ALL COLUMNS AND FOOTINGS ARE CENTERED ON COLUMN LINES EXCEPT WHERE OTHERWISE SHOWN ON THE PLANS.
- WALL CONSTRUCTION AND CONTROL JOINTS SHALL BE LOCATED ON SHOP DRAWINGS FOR APPROVAL AND SPACED NOT TO EXCEED THE FOLLOWING, WITHOUT WRITTEN APPROVAL BY STRUCTURAL ENGINEER OF RECORD:

a. CONSTRUCTION JOINTS	65 FEET
b. CONTROL JOINTS	25 FEET
- ALL ABUTTING CONCRETE MEMBERS SHALL BE DOWELED TOGETHER, UNLESS POURED MONOLITHICALLY. DOWELS SHALL BE EQUAL IN SIZE AND SPACING TO THE REINFORCING IN THE ADJACENT MEMBER.

STATEMENT OF SPECIAL INSPECTIONS

- SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH THE IBC SECTION 1704 AND 1705 TOGETHER WITH THE LOCAL AND STATE AMENDMENTS. REFER TO THE SECTIONS AND TABLES CONTAINED IN THE IBC FOR MATERIAL SPECIFIC INSPECTION TYPES AND FREQUENCIES.
- SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED ACCREDITED INDEPENDENT AGENCY. THE CONTRACTOR WILL SECURE AND PAY FOR THE SERVICES OF THE AGENCY TO PERFORM ALL SPECIAL INSPECTIONS AND ASSOCIATED TESTS. INSPECTORS FOR EACH SYSTEM AND MATERIAL SHALL BE
- INTERNATIONAL CODE COUNCIL (ICC) CERTIFIED OR OTHERWISE APPROVED BY THE BUILDING OFFICIAL.
- THE SPECIAL INSPECTOR SHALL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONTRACT DOCUMENTS AND SUBMIT RECORDS OF INSPECTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
- SPECIAL INSPECTIONS AND ASSOCIATED TESTING REPORTS SHALL BE SUBMITTED TO THE ENGINEER, CONTRACTOR, BUILDING OFFICIAL, AND OWNER WITHIN ONE WEEK OF INSPECTION OR WITHIN ONE WEEK OF TEST COMPLETION. INSPECTIONS FOR WHICH REPORTING SHALL BE REQUIRED ARE NOTED IN THE SECTIONS AND TABLES CONTAINED IN THE IBC CHAPTER 17.
- AT THE CONCLUSION OF CONSTRUCTION, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF PREVIOUSLY NOTED DISCREPANCIES SHALL BE SUBMITTED.
- STATEMENT OF SPECIAL INSPECTION REQUIREMENTS FOR SEISMIC RESISTANCE SHALL BE IN ACCORDANCE WITH IBC SECTION 1705 TOGETHER WITH LOCAL AND STATE AMENDMENTS.
- STATEMENT OF SPECIAL INSPECTION REQUIREMENTS SHALL APPLY TO THE FOLLOWING:
 - SEISMIC FORCE RESISTING SYSTEMS IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY B, C, D, E, OR F.
 - REFER TO GENERAL STRUCTURAL NOTES FOR BASIC SEISMIC FORCE RESISTING SYSTEMS FOR EACH STRUCTURE AND DESIGNATED SEISMIC DESIGN CATEGORY.
 - DESIGNATED SEISMIC SYSTEMS IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, OR F.
 - EXTERIOR WALL PANELS AND THEIR ANCHORAGE, SUSPENDED CEILING SYSTEMS AND THEIR ANCHORAGE,
 - ACCESS FLOORS AND THEIR ANCHORAGE, AND STEEL STORAGE DESIGN CATEGORY D, E OR F.
 - ANCHORAGE OF ELECTRICAL EQUIPMENT FOR EMERGENCY AND STANDBY POWER SYSTEMS IN STRUCTURES
 - ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, OR F.
 - ALL ELECTRICAL EQUIPMENT IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY E OR F.
 - INSTALLATION AND ANCHORAGE OF PIPING SYSTEMS AND THEIR ASSOCIATED MECHANICAL UNITS DESIGNED
 - TO CARRY HAZARDOUS MATERIALS AND INSTALLATION AND ANCHORAGE OF DUCTWORK DESIGNED TO CARRY
 - HAZARDOUS MATERIALS IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, OR F.
 - STORAGE RACKS THAT ARE 8 FEET OR GREATER IN HEIGHT IN STRUCTURES ASSIGNED TO SEISMIC DESIGN
 - CATEGORY D, E, OR F.

ABBREVIATIONS

&	AND		K
<	ANGLE		
@	AT		L
¢	CENTER LINE	LBS	POUND(S)
∅	DIAMETER	L.F.	LINEAR FEET
#	POUND OR NUMBER	LL	LIVE LOAD
ℙ	PROPERTY LINE	L.W.	LONG WAY
A.B.	A ANCHOR BOLT	MAS.	M MASONRY
ADD	ADDENDUM, ADDITIONAL	MAT.	MATERIAL
A.F.F.	ABOVE FINISH FLOOR	MAX.	MAXIMUM
AGG.	AGGREGATE	MECH.	MECHANICAL
ALUM.	ALUMINUM	MEZZ.	MEZZANINE
ALT.	ALTERNATE	MFR	MANUFACTURE, MANUFACTURER,
APPROX.	APPROXIMATE		MANUFACTURED
ARCH.	ARCHITECT, ARCHITECTURAL	MIN.	MINIMUM
ASPH.	ASPHALT	MISC.	MISCELLANEOUS
BLDG	B BUILDING	NTS	N NOT TO SCALE
BLKG	BLOCKING	N.S.	NEAR SIDE
BM	BEAM	NOM.	NOMINAL
BOTT.	BOTTOM		
B.O.	BOTTOM OF		
BRG	BEARING	O.C.	O ON CENTER
		O.D.	OUTSIDE DIAMETER
		OH	OVERHEAD
		OPNG	OPENING
		OPP.	OPPOSITE
CF	C CUBIC FEET		
CJ	CONTROL JOINT		
CSJ	CONSTRUCTION JOINT		
CMU	CONCRETE MASONRY UNIT		
CFSF	COLD-FORMED STEEL FRAMING	PL.	P PLATE
COL.	COLUMN	PSF	POUNDS / SQUARE FOOT
CONC.	CONCRETE	PSI	POUNDS / SQUARE INCH
CONST.	CONSTRUCTION		
CONT.	CONTINUOUS, CONTINUED		
CTR	CENTER	QTY	Q QUANTITY
CTRL	CONTROL		
CY	CUBIC YARD		
DBL	D DOUBLE	REINF.	R REINFORCE, REINFORCED,
DEMO.	DEMOLITION, DEMOLISH	REQ'D	REINFORCING
DET.	DETAIL	REV.	REQUIRED
DIA.	DIAMETER		REVISION, REVERSE
DIM.	DIMENSION	SCHED.	S SCHEDULE
DL	DEAD LOAD	SECT.	SECTION
DN	DOWN	SDS	SELF-DRIVING SCREW
DWG	DRAWING(S)	SHT	SHEET
		S.W.	SHORT WAY
		SIM.	SIMILAR
EA.	E EACH	SPEC.	SPECIFICATION
E.O.D	EDGE OF DECK	S.S.	STAINLESS STEEL
E.O.S.	EDGE OF SLAB	STD	STANDARD
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM	S.F.	STORE FRONT
E.J.	EXPANSION JOINT	T.O.	T TOP OF
ELEC.	ELECTRIC, ELECTRICAL	T.O.C.	TOP OF CONCRETE
ELEV	ELEVATION, ELEVATOR	T.O.F.	TOP OF FOOTING
EQ.	EQUAL	T.O.F.F	TOP OF FINISHED FLOOR
EQUIP.	EQUIPMENT	T.O.S.	TOP OF STEEL
EXIST.	EXISTING	T.O.W.	TOP OF WALL
EXP.	EXPANSION	TYP.	TYPICAL
F.S.	F FAR SIDE	U.N.O.	U UNLESS NOTED OTHERWISE
FDN	FOUNDATION		
F.F.	FINISH FLOOR		
FIN	FINISH	V.I.F.	V VERIFY IN FIELD
FT	FOOT, FEET	VERT.	VERTICAL
FTG	FOOTING		
F.V.	FIELD VERIFY		
GA	G GAUGE	w/	W WITH
GALV	GALVANIZED	w/o	WITHOUT
GC	GENERAL CONTRACTOR	W.W.F.	WELDED WIRE FABRIC
GR.	GRADE		
		YD	Y YARD
HORIZ.	H HORIZONTAL		
HT	HEIGHT		
HS	HIGH STRENGTH		
I.D.	I INSIDE DIAMETER		
IN.	INCH		
INT.	INTERIOR		
JST	J JOIST		
JT	JOINT		

EDGE OF EQUIP.

#4 CONT. @ PERIMETER

SLAB ON GRADE, SEE PLAN

4" MIN.

#4 DWLS. @ 18" O.C. @ PERIMETER SET IN HILTI HY-200 ADHESIVE w/ 2" EMBED MIN.

#4 @ 18" O.C. EA. WAY

2" CLR.

1'-6"

TYPICAL HOUSEKEEPING PAD DETAIL

NOTE:

- ALL OTHER MECHANICAL AND ARCHITECTURAL TOPPING PADS ARE SIMILAR.
- VERIFY LOCATION OF CONC. PADS PER ARCH. & AQUATIC DWGS.
- FOR PADS ≥ 10", USE 2 LAYERS OF REINFORCING, SAME SIZE & SPACING AS TOP.



EXP. 12/31/2022

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REPAIR SWIMMING POOL

MISSOURI SCHOOL FOR
THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E2107-01
SITE# 2011
FACILITY # 5012011005

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 07/06/2022

CAD DWG FILE: S-002
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: HJC

SHEET TITLE:

GENERAL
NOTES &
DETAILS

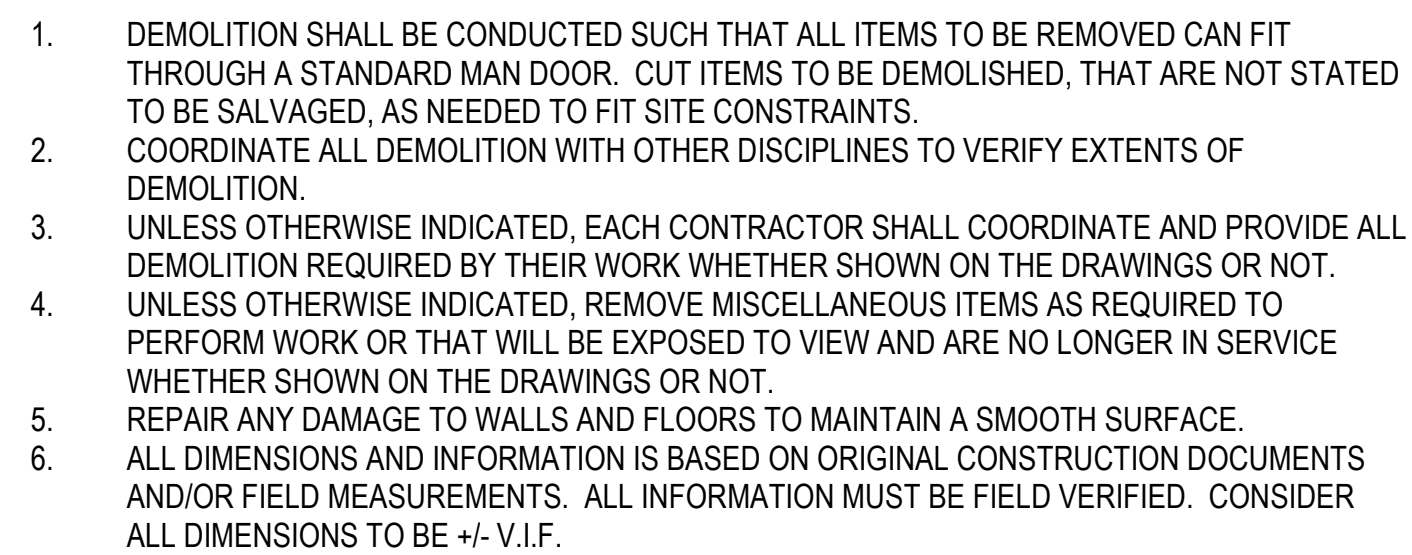
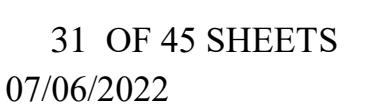
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S-002

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REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
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DATE: _____
ISSUE DATE: 07/06/2022

CAD DWG FILE: S-101
DRAWN BY: SLP
CHECKED BY: HJC
DESIGNED BY: HJC

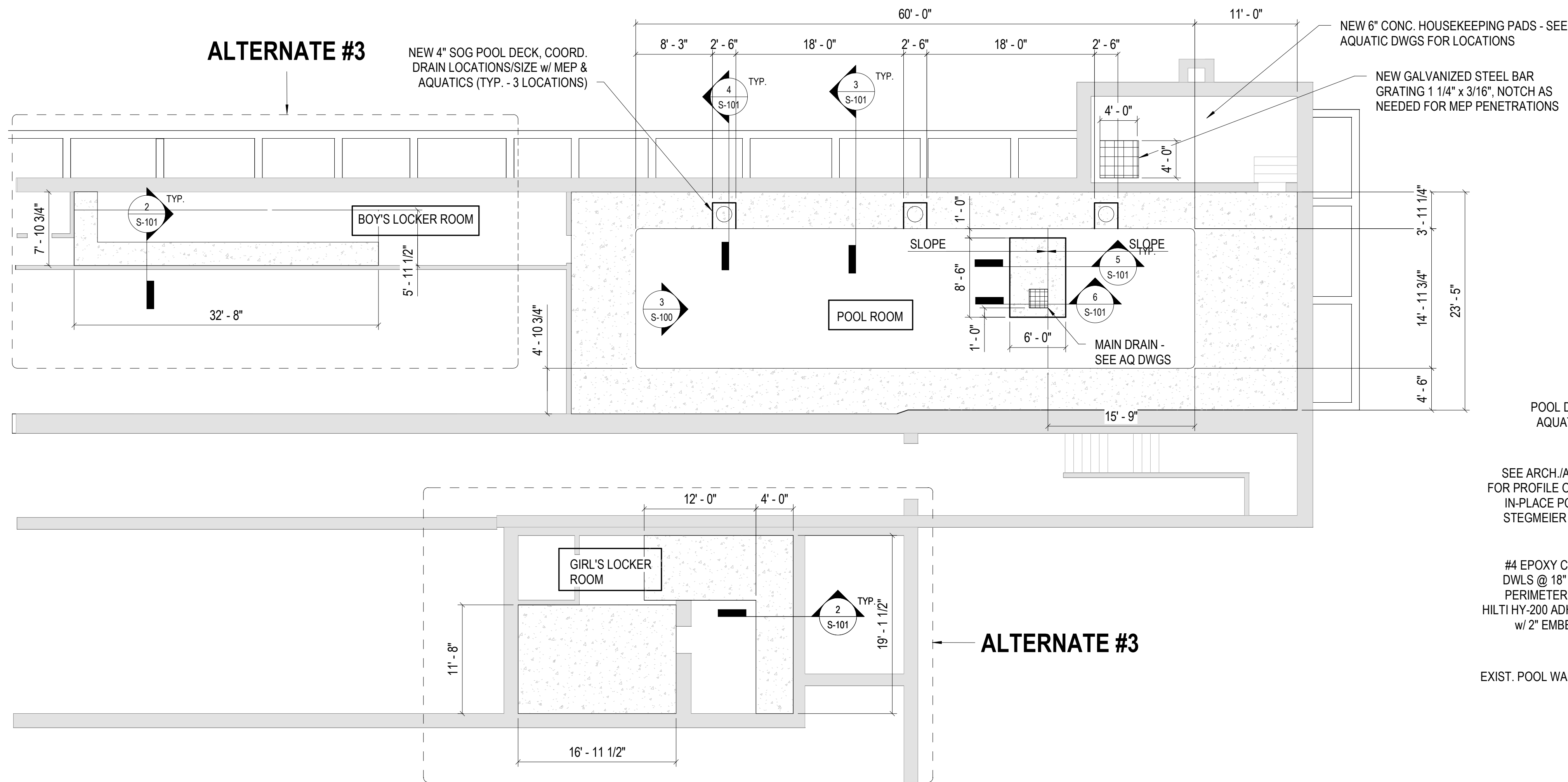
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POOL PLAN

SHEET NUMBER:

S-101

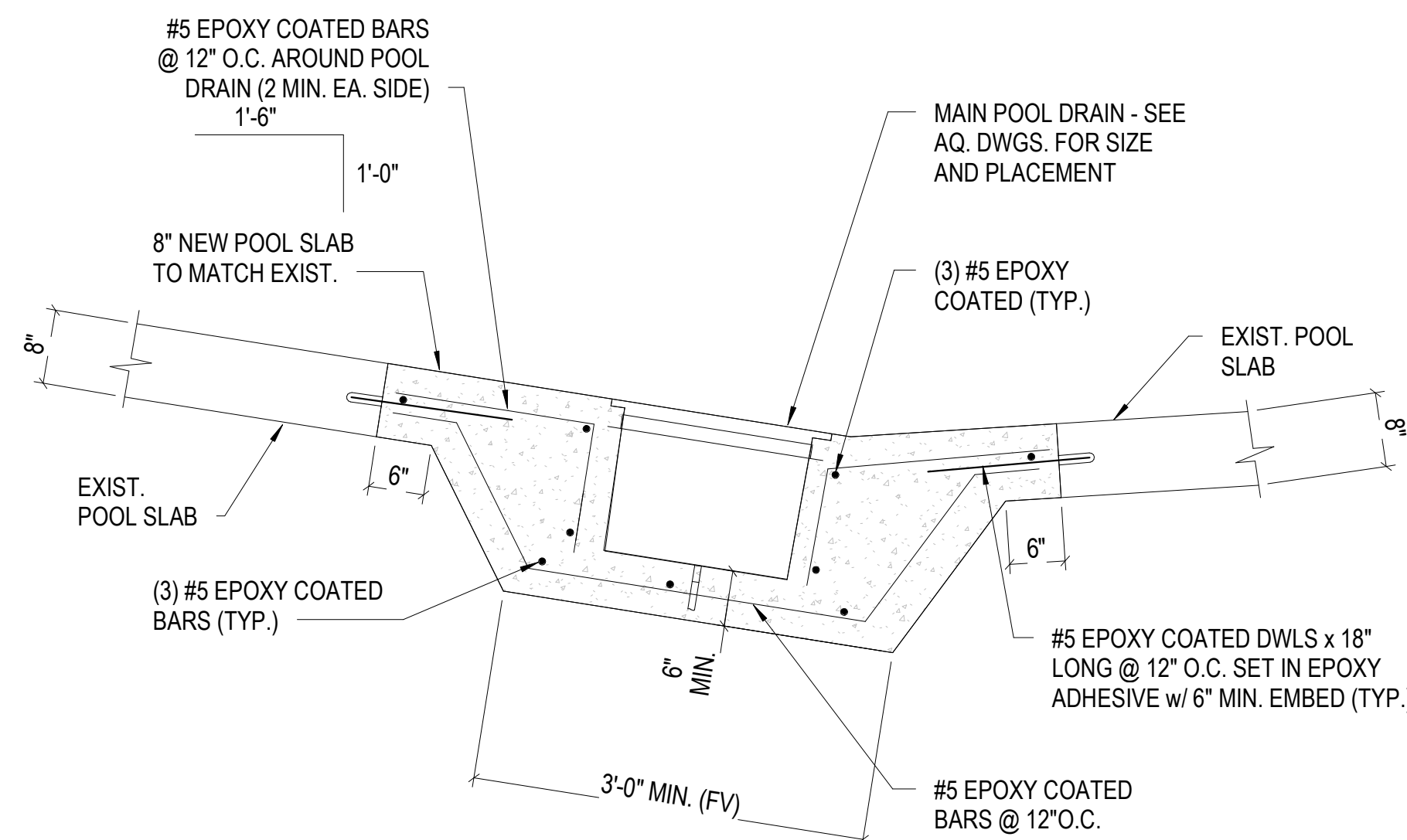
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07/06/2022



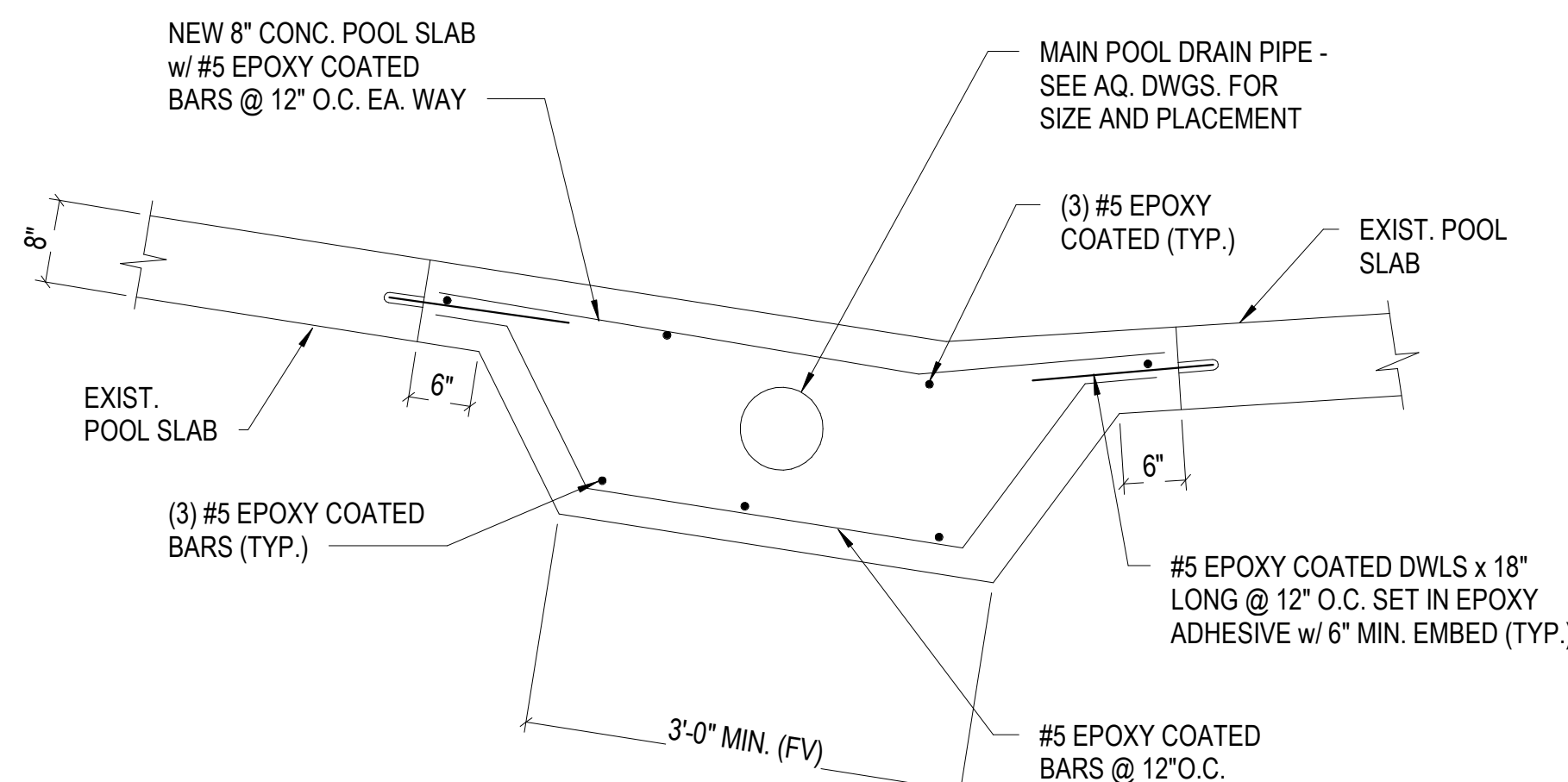
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PLAN NOTES:

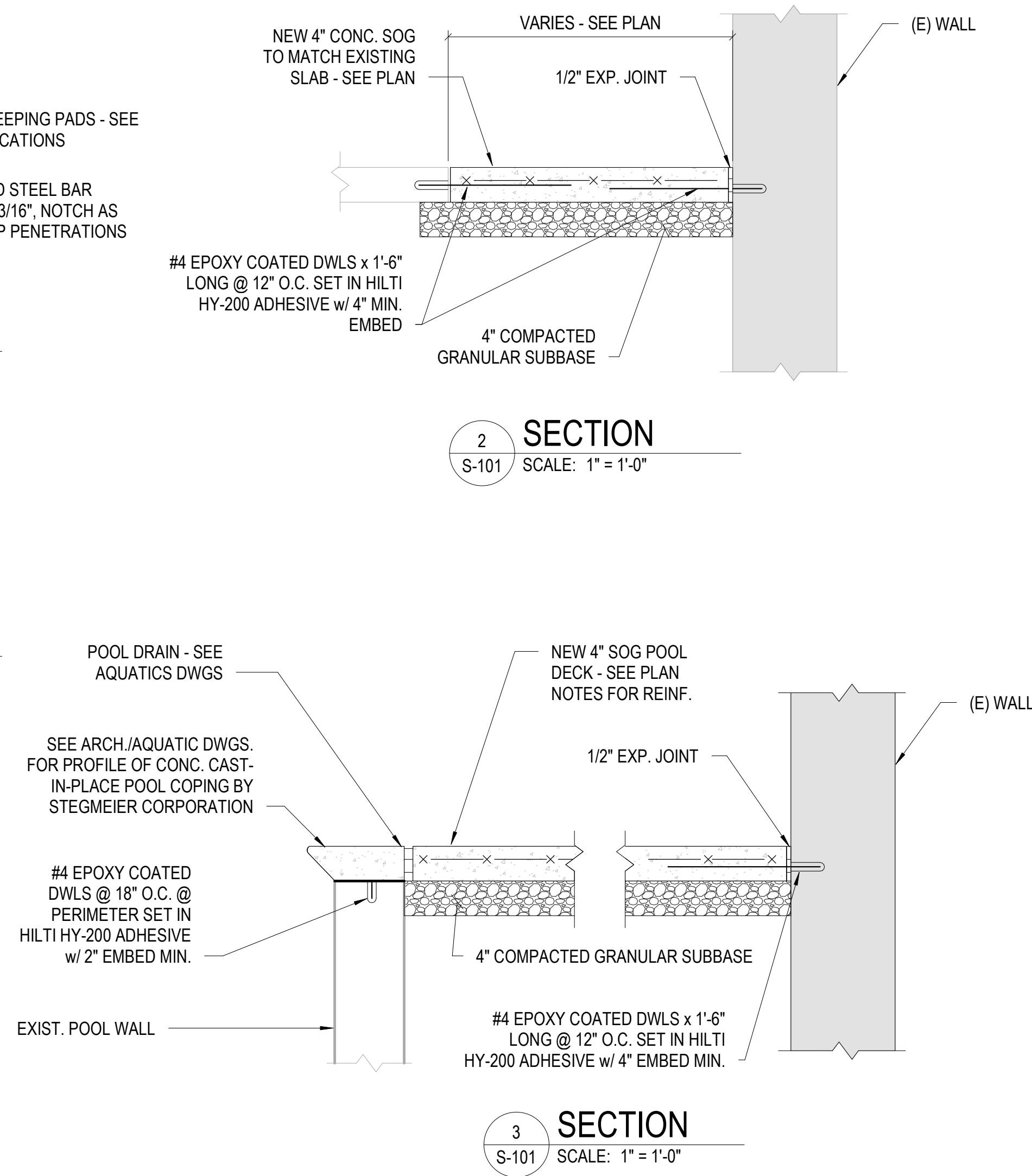
- NEW POOL DECK SLAB CONSTRUCTION: 4" SOG REINFORCED w/ EPOXY COATED 6x6 W2.9/2.9 W.W.F.
- CONTRACTOR TO INCLUDE ALLOWANCE FOR FILLING ANY VOIDS BENEATH THE EXISTING SLAB-ON-GRADE WITH CRUSHED STONE BACKFILL IN ALL SLAB DEMO LOCATIONS.



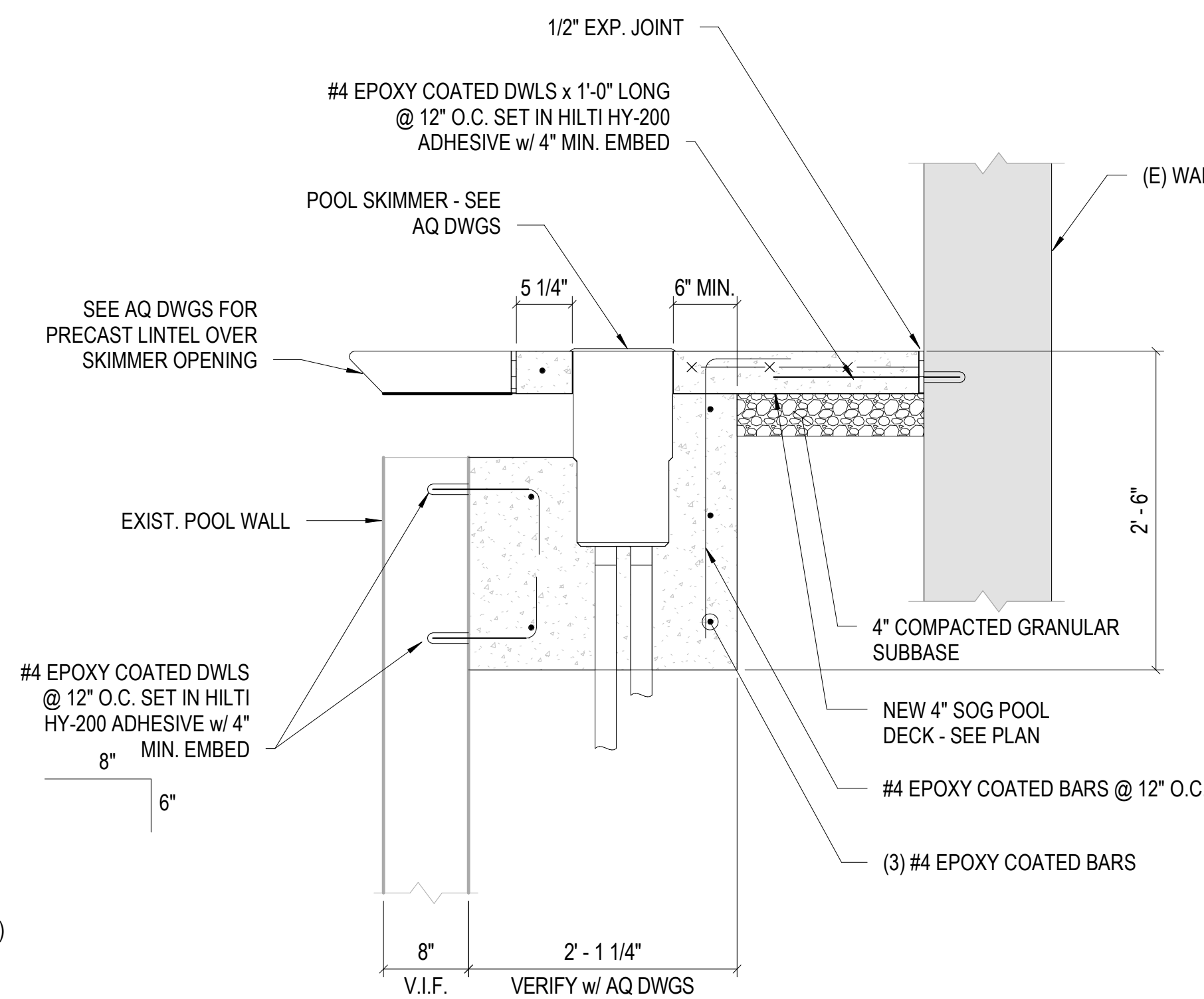
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S-101
SCALE: 3/4" = 1'-0"



5
S-101
SCALE: 3/4" = 1'-0"


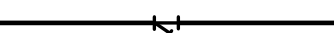






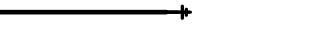


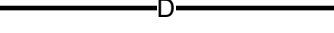
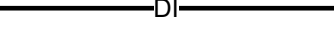





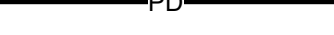

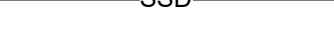
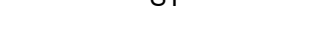

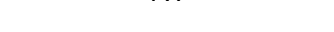
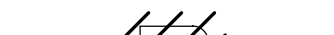

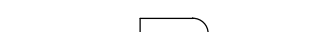






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S-101
SCALE: 1" = 1'-0"


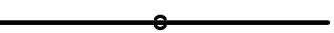



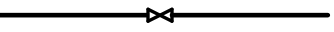

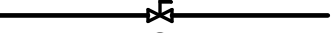
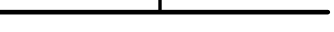
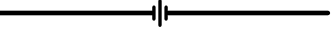

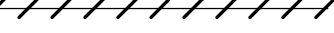


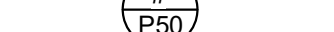


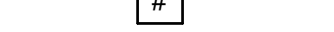
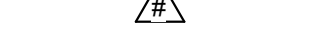

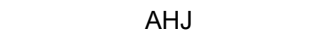



















4
S-101
SCALE: 1" = 1'-0"

PLUMBING SYMBOLS & ABBREVIATIONS

	NOT ALL SYMBOLS ARE USED FOR THIS PROJECT TRAPPED CONNECTION
	STRAINER
	BALANCING VALVE
	CLEANOUT (CO)
	OS & Y GATE VALVE
	TEMPERATURE GAUGE
	THERMOSTATIC MIXING VALVE
	REDUCED PRESSURE BACKFLOW PREVENTER
	HOSE BIBB/WALL HYDRANT
	ACID VENT
	ACID WASTE
	DRAIN PIPING
	DEIONIZED WATER PIPING
	REVERSE OSMOSIS PIPING (RO)
	DOMESTIC COLD WATER PIPING (CW)
	DOMESTIC HOT WATER PIPING (HW)
	DOMESTIC HOT WATER RETURN PIPING (HWR)
	NON-POTABLE WATER PIPING
	PUMP DISCHARGE PIPING
	SANITARY PIPING
	SUBSOIL DRAINAGE PIPING
	STORM PIPING
	OVERFLOW STORM PIPING
	TEMPERED WATER
	VENT PIPING
	EXISTING FIXTURE TO BE REMOVED
	EXISTING FIXTURE
	NEW FIXTURE
	FLEXIBLE CONNECTION
	FLOOR DRAIN/FLOOR SINK (FD/FS)
	CIRCULATION PUMP

COMMON SYMBOLS & ABBREVIATIONS

	NOT ALL SYMBOLS ARE USED FOR THIS PROJECT DIRECTION OF FLOW
	BRANCH CONNECTION, BOTTOM
	BRANCH CONNECTION, TOP
	ELBOW, TURNED DOWN
	ELBOW, TURNED UP
	SHUTOFF VALVE
	CHECK VALVE
	PRESSURE REDUCING VALVE
	PRESSURE GAUGE
	UNION
	PIPING CAP
	EXISTING PIPING TO BE REMOVED
	MATCH LINE
	CONNECTION TO EXISTING
	DETAIL DESIGNATION
	RISER DESIGNATION
	KEYED NOTE
	REVISION NOTE
	ABOVE FINISHED FLOOR
	AUTHORITIES HAVING JURISDICTION
	ACCESS PANEL
	BOTTOM OF PIPE
	DIAMETER
	DOWN
	EXISTING
	FINISHED FLOOR ELEVATION
	GALLONS PER HOUR
	GALLONS PER MINUTE
	HORSEPOWER
	INVERT ELEVATION
	NORMALLY CLOSED
	NOT TO SCALE
	POUNDS PER SQUARE INCH
	REVOLUTIONS PER MINUTE
	ROUGH-IN
	SHUTOFF VALVE
	TOTAL DYNAMIC HEAD
	VERIFY IN FIELD

FIRE STOPPING NOTES

- MATERIALS: USE ONLY FIRE STOP PRODUCTS THAT HAVE BEEN UL 1479, ASTM E-814, OR UL 2079 TESTED FOR SPECIFIC FIRE RATE CONSTRUCTION CONDITIONS CONFORMING TO CONSTRUCTION ASSEMBLY TYPE, PENETRATING ITEM TYPE, ANNULAR SPACE REQUIREMENTS, AND FIRE RATING INVOLVED FOR EACH SEPARATE INSTANCE.
- FOR SINGLE PENETRATIONS: A READY-TO-USE LATEX BASED INTUMESCENT SEALANT IS REQUIRED TO MAINTAIN THE FIRE RATING OF THE ASSEMBLY PENETRATED. THE SEALANT MUST HAVE UL LISTING FOR BOTH SLEEVED AND NON-SLEEVED APPLICATIONS.
- FOR LARGE OPENINGS: CONTAINING MULTIPLE PENETRATIONS (2 OR MORE), A READY-TO-USE FOAM INTUMESCENT BLOCK MATERIAL MUST BE ABLE TO BE REMOVED AND REINSTALLED WITHOUT COMPROMISING FIRE PROTECTION INTEGRITY. COMPLY WITH MANUFACTURER'S RECOMMENDED PROCEDURES AND PRECAUTIONS. DO NOT USE DAMAGED OR EXPIRED MATERIALS.
- MANUFACTURERS: JOHNS MANVILLE INTERNATIONAL, 3M BRAND, CSD SEALING SYSTEMS, HILTI, CIBA-GEIGY, HEAVY-DUTY / NEALSON. REFER TO DIVISION 7 FOR FURTHER REQUIREMENTS.

PLUMBING ABBREVIATIONS

ADA	NOT ALL SYMBOLS ARE USED FOR THIS PROJECT AMERICANS WITH DISABILITIES ACT
AP	ACCESS PANEL
BP	BOOSTER PUMP
BT	BATHTUB
BTC	BRANCH TO CONNECTION
BV	BALANCE VALVE
CI	CAST IRON
CO	CLEANOUT
CSS	CLINICAL SERVICE SINK
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DS	DOWNSPOUT
DW	DISHWASHER
DWH	DOMESTIC WATER HEATER
EEW	EMERGENCY EYE WASH
ESEW	EMERGENCY SHOWER & EYE WASH
ESH	EMERGENCY SHOWER
ET	EXPANSION TANK
EWC	ELECTRIC WATER COOLER
FCO	FLOOR CLEAN OUT
GCO	GRADE CLEANOUT
GD	GARBAGE DISPOSAL
HB	HOSE BIBB
HWRP	HOT WATER RETURN PUMP
HWST	HOT WATER STORAGE TANK
IM	ICE MAKER
IW	INDIRECT WASTE
LA	LAVATORY
MB	MOP BASIN
NIC	NOT IN CONTRACT
OB	OUTLET BOX
RD	ROOF DRAIN
RPZ	REDUCED PRESSURE BACKFLOW PREVENTER
S	SANITARY
S/S	STAINLESS STEEL
SH	SHOWER
SK	SINK
SP	SUMP PUMP
SS	SANITARY STACK
SSK	SHOP SINK
SW	SOFT WATER
TMV	THERMOSTATIC MIXING VALVE
UR	URINAL
V	VENT
VB	VACUUM BREAKER
VS	VENT STACK
VTR	VENT THRU ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WD	WASHER DRAIN
WH	WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WM	WATER METER
WS	WASTE STACK
WSV	WASTE STACK VENT
YCO	YARD CLEANOUT

PLUMBING GENERAL NOTES

- PIPING DRAWINGS ARE TO BE CONSIDERED SCHEMATIC AND ARE NOT INTENDED TO INDICATE ALL CHANGES IN DIRECTION.
- DUE TO THE LIMITED SPACE AVAILABLE FOR THE INSTALLATION OF ALL THE PLUMBING WORK, COORDINATION BETWEEN ALL OTHER TRADES IS OF THE UTMOST IMPORTANCE.
- THESE PLANS ARE DIAGRAMMATIC IN NATURE. THIS CONTRACTOR SHALL BE PREPARED TO MAKE ALTERATIONS TO FIT JOB CONDITIONS. THIS CONTRACTOR SHALL FURNISH A COMPLETE AND CODE COMPLYING SYSTEM. THIS CONTRACTOR SHALL REPORT, IN WRITING, ANY DISCREPANCIES WHICH PREVENT THE INSTALLATION OF WORK AS SHOWN.
- IF THIS CONTRACTOR DOES NOT CLEARLY UNDERSTAND THESE PLANS OR IS NOT COMPLETELY SURE OF THEIR MEANING, THIS CONTRACTOR SHOULD OBTAIN THE ENGINEER'S WRITTEN EXPLANATION AND/OR INTERPRETATION PRIOR TO SUBMITTING BIDS. SINCE THIS CONTRACTOR WILL BE HELD RIGIDLY TO THE INTERPRETATION OF THE ENGINEER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISIONS, TRANSITIONS, OFFSETS, ETC., TO AVOID DUCTWORK, PIPING, EQUIPMENT, OR STRUCTURE AND TO MAKE A COMPLETE AND FUNCTIONING SYSTEM.
- COORDINATE THE INSTALLATION OF ALL PIPING, VALVES, AND EQUIPMENT WITH GENERAL CONTRACTOR AND RELATED STRUCTURAL, MECHANICAL, ELECTRICAL, AND FIRE PROTECTION CONTRACTORS.
- ALL FIXTURES AND PIPING SHALL BE SIZED, VENTED, TRAPPED AND INSTALLED IN ACCORDANCE WITH INTERNATIONAL PLUMBING CODE 2018 EDITION AND THE INTERNATIONAL BUILDING CODE 2018 EDITION.
- FURNISH AND INSTALL SUPPLY STOP SHUT-OFF VALVES ON ALL FIXTURE WATER SUPPLY LINES. FURNISH AND INSTALL WATER HAMMER ARRESTORS PER PD1 WH201 AND AS INDICATED ON PLANS. INSTALL VALVES IN ACCESSIBLE LOCATIONS. IF LOCATION IS NOT READILY ACCESSIBLE, COORDINATE ACCESS PANEL REQUIREMENTS WITH GENERAL CONTRACTOR.
- ALL PIPING SHALL BE CONCEALED IN CHASE, WALL, CEILING, FLOORING, ETC. UNLESS OTHERWISE NOTED. PIPING SHOWN OUTSIDE OF WALL FOR CLARITY ONLY.
- EQUIPMENT AND FIXTURE SYMBOLOGY ON PLANS MAY NOT REFLECT ACTUAL TYPE. REFER TO SPECIFICATIONS AND SCHEDULES FOR FIXTURE OR EQUIPMENT TYPE.
- FURNISH AND INSTALL CONCRETE EQUIPMENT PAD FOR ALL EQUIPMENT SUPPLIED BY THIS CONTRACTOR. PAD SHOULD BE A MINIMUM OF 4" THICK AND EXTEND 6" PAST EDGE OF EQUIPMENT IN ALL DIRECTIONS.
- ALL ITEMS INCLUDED ON THESE DRAWINGS AND THE SPECIFICATIONS SHALL BE INCLUDED IN THE CONTRACTOR'S BID.
- CAULK ALL PIPING PENETRATIONS THROUGH WALLS TO MINIMIZE SOUND PENETRATIONS THROUGH WALLS.
- LOCATIONS OF FLOOR DRAINS, FLOOR SINKS, TRENCH DRAINS, ETC. INDICATED ON THESE DRAWINGS ARE CONSIDERED APPROXIMATE. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF FINAL AND EXACT LOCATIONS WITH ALL OTHER TRADES AND EQUIPMENT SUPPLIERS PRIOR TO INSTALLATION. DRAINS, ETC. NOT CORRECTLY LOCATED AS DETERMINED BY THE ARCHITECT/ENGINEER/OWNER, SHALL BE REMOVED AND RELOCATED AT THIS CONTRACTOR'S EXPENSE.
- STARTING ELEVATION FOR SANITARY SEWER PIPING TO BE NOT LESS THAN 1'-6" BELOW FINISHED FLOOR UNLESS NOTED OTHERWISE.
- ALL EXPOSED PLUMBING PIPING IN FINISHED ROOMS, OPEN TO STRUCTURE, SHALL BE PAINTED TO MATCH EXISTING. INSULATED PIPING AND SLEEVED PIPING SHALL BE PAINTED WITH PAINT THAT HAS ELASTOMERIC PROPERTIES, SUITABLE FOR APPLICATION ON INSULATION/SLEEVES. FOLLOW PAINT MANUFACTURER'S INSTRUCTIONS FOR SURFACE PREPARATION AND PAINT APPLICATION.

PLUMBING DEMOLITION GENERAL NOTES

- THIS CONTRACTOR SHALL VISIT THE PROJECT SITE, AND VERIFY LOCATIONS, ELEVATIONS AND SIZES OF ALL UTILITIES AT SITE PRIOR TO PROCEEDING WITH WORK. EXISTING SYSTEMS AND STRUCTURE SHALL BE INVESTIGATED FOR BEST POSSIBLE ROUTING OF COLD WATER, HOT WATER, SANITARY WASTE AND VENT, STORM AND MEDICAL/LABORATORY GAS PIPING.
- THESE PLANS ARE DIAGRAMMATIC IN NATURE SINCE THE ONLY AVAILABLE INFORMATION HAS BEEN OBTAINED FROM EXISTING PLANS, SPECIFICATIONS, AND FIELD SURVEYS. THE EXACT LOCATION OF PIPING, FIXTURES, AND EQUIPMENT MAY DEViate FROM THE LOCATION INDICATED ON THESE DRAWINGS. EXTREME ACCURACY IS NOT GUARANTEED. THIS CONTRACTOR SHALL BE PREPARED TO MAKE ALTERATIONS TO NEW AND/OR EXISTING SERVICES TO FIT JOB CONDITIONS. THIS CONTRACTOR SHALL FURNISH A COMPLETE AND CODE COMPLYING SYSTEM. THIS CONTRACTOR SHALL REPORT, IN WRITING, ANY DISCREPANCIES WHICH PREVENT THE INSTALLATION OF WORK AS SHOWN.
- IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO REPAIR THE EXISTING SURFACES TO REMAIN WHERE THEIR WORK HAS BEEN COMPLETED. REPAIR SHALL INCLUDE, BUT NOT LIMITED TO, ANY EXISTING WALL, CEILING OR FLOOR THAT IS SCHEDULED TO REMAIN. REPAIR, PAINTING, AND PATCHING SHALL BE COMPLETED BY AN APPROPRIATE CONTRACTOR QUALIFIED FOR THIS TYPE OF WORK.
- THE OWNER SHALL MAINTAIN ALL SALVAGE RIGHTS OF FIXTURES, EQUIPMENT AND MATERIALS REMOVED. HOWEVER, ALL FIXTURES, EQUIPMENT AND MATERIALS NOT CLAIMED BY THE OWNER SHALL BE REMOVED FROM THE PREMISES AND PROPERLY DISPOSED OF BY THE DEMOLITION CONTRACTOR.
- CEILING REMOVAL, STORAGE, AND REPLACEMENT FOR NEW PIPING INSTALLATION SHALL BE BY THE GENERAL CONTRACTOR.
- IF HAZARDOUS MATERIALS (ASBESTOS) ARE ENCOUNTERED DURING DEMOLITION OPERATIONS, THE CONTRACTOR WILL STOP WORK AT THE PARTICULAR LOCATION AND NOTIFY BUILDING OWNER OF THE HAZARDOUS MATERIAL. THE CONTRACTOR WILL CONTINUE WORK AFTER REMOVAL OF HAZARDOUS MATERIALS IS COMPLETED.
- TEMPORARY CONNECTIONS SHALL BE PROVIDED BY RESPECTIVE PLUMBING AND FIRE PROTECTION CONTRACTORS WHEN EXTENDED INTERRUPTIONS OF SERVICES AND UTILITIES SUCH AS WATER, WASTE AND FIRE PROTECTION WHICH SERVE OTHER AREAS ARE NECESSARY.
- COORDINATE WITH MAINTENANCE PERSONNEL AS TO SOURCE OF UTILITIES AND TEMPORARILY DISCONNECT OR SHUT OFF SERVICES OR UTILITIES AT NEAREST MAIN. TEMPORARY AND ACCESSIBLE ISOLATION VALVES SHALL BE INSTALLED CLOSE TO THIS POINT OF WORK.
- IT IS ESSENTIAL THAT BUILDING OPERATIONS CONTINUE WITH MINIMAL INTERRUPTIONS. IT IS NECESSARY THAT OPERATION OF EXISTING SYSTEMS BE INTERFACED WITH AS LITTLE DISRUPTION AS POSSIBLE EXCEPT IN AREAS VACATED FOR CONTRUCTION WORK. WORK WHICH WILL INTERFERE WITH OPERATION OF EXISTING FIRE SUPPRESSION AND PLUMBING SYSTEMS OR WHICH REQUIRE DOWNTIME, WILL BE SCHEDULED ONLY AFTER CONSULTATION WITH AND PERMISSION GIVEN BY THE OWNER. ALLOW 10 DAYS PRIOR TO ANTICIPATED INTERRUPTION OF SYSTEMS. WORK MAY BE REQUIRED TO BE PERFORMED OUTSIDE NORMAL WORKING HOURS.
- ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS SHALL BE READ IN CONJUNCTION WITH THESE DRAWINGS.
- ALL PIPE HANGERS AND SUPPORTS SHALL BE REMOVED ALONG WITH PIPING BEING REMOVED.
- THE CONTRACTOR SHALL COORDINATE DEMOLITION WORK WITH PROJECT'S PHASING SCHEDULE PRIOR TO COMMENCEMENT OF ANY WORK.
- WHEN PLACING NEW PLUMBING FIXTURES, CONTRACTOR SHALL VERIFY LOCATIONS OF PLUMBING VENTS. OFFSET VENTS THAT TERMINATE WITHIN 12 FEET OF HVAC UNITS OUTDOOR AIR INTAKES, CONTRACTOR SHALL FIELD VERIFY PRIOR TO BID WHERE THE INTERFERENCE'S ARE AND PRICE ACCORDINGLY OR MAKE ALLOWANCES IN BID.
- USE CAUTION WHEN SAW-CUTTING THROUGH EXISTING CONCRETE FLOOR OR WALL CONSTRUCTION FOR THE INSTALLATION OF PLUMBING SYSTEMS TO AVOID CUTTING REBAR AT EDGE OF OPENING. LEAVE SUFFICIENT REBAR EXPOSED TO THE NEW REINFORCING FOR REPLACEMENT CONCRETE AND/OR OTHER STRUCTURAL ATTACHMENTS FOR NEW CONSTRUCTION.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

ENGINEER OF RECORD:



MICHAEL R. HOFF
MO. LICENSE NO. 2013000576 EXP-12/31/2023
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ELEMENTARY &
SECONDARY EDUCATION

REPAIR SWIMMING POOL

MISSOURI SCHOOL FOR
THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E2107-01
SITE# 2011
FACILITY # 5012011003,
501201104

REVISION: _____

DATE: _____

REVISION: _____

DATE: _____

REVISION: _____

DATE: _____

ISSUE DATE: 07/06/2022

CAD DWG FILE: M-001

DRAWN BY: ASK

CHECKED BY: MJB

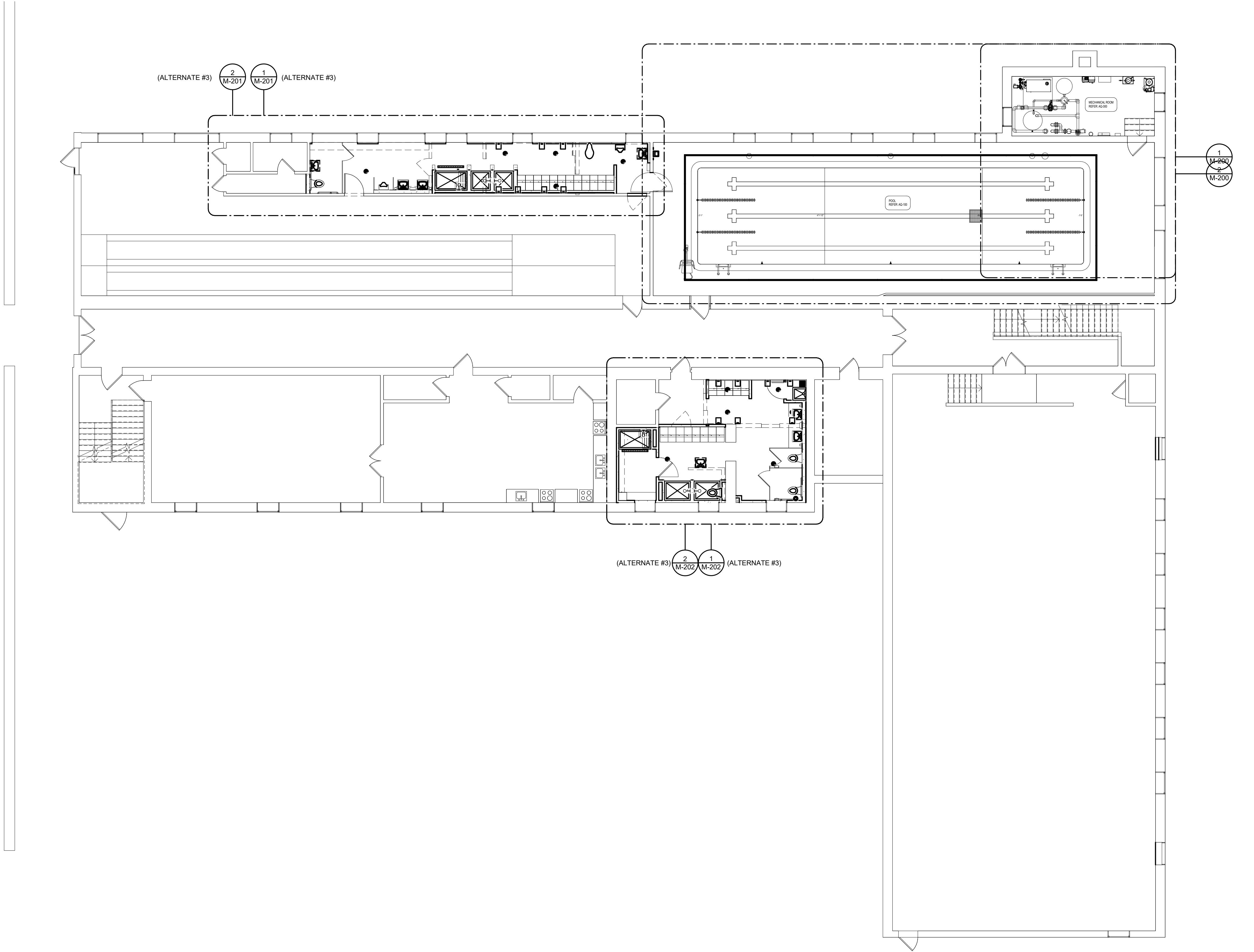
DESIGNED BY: ASK

SHEET TITLE:

LEGEND &
NOTES -
MECHANICAL

SHEET NUMBER:

M-001



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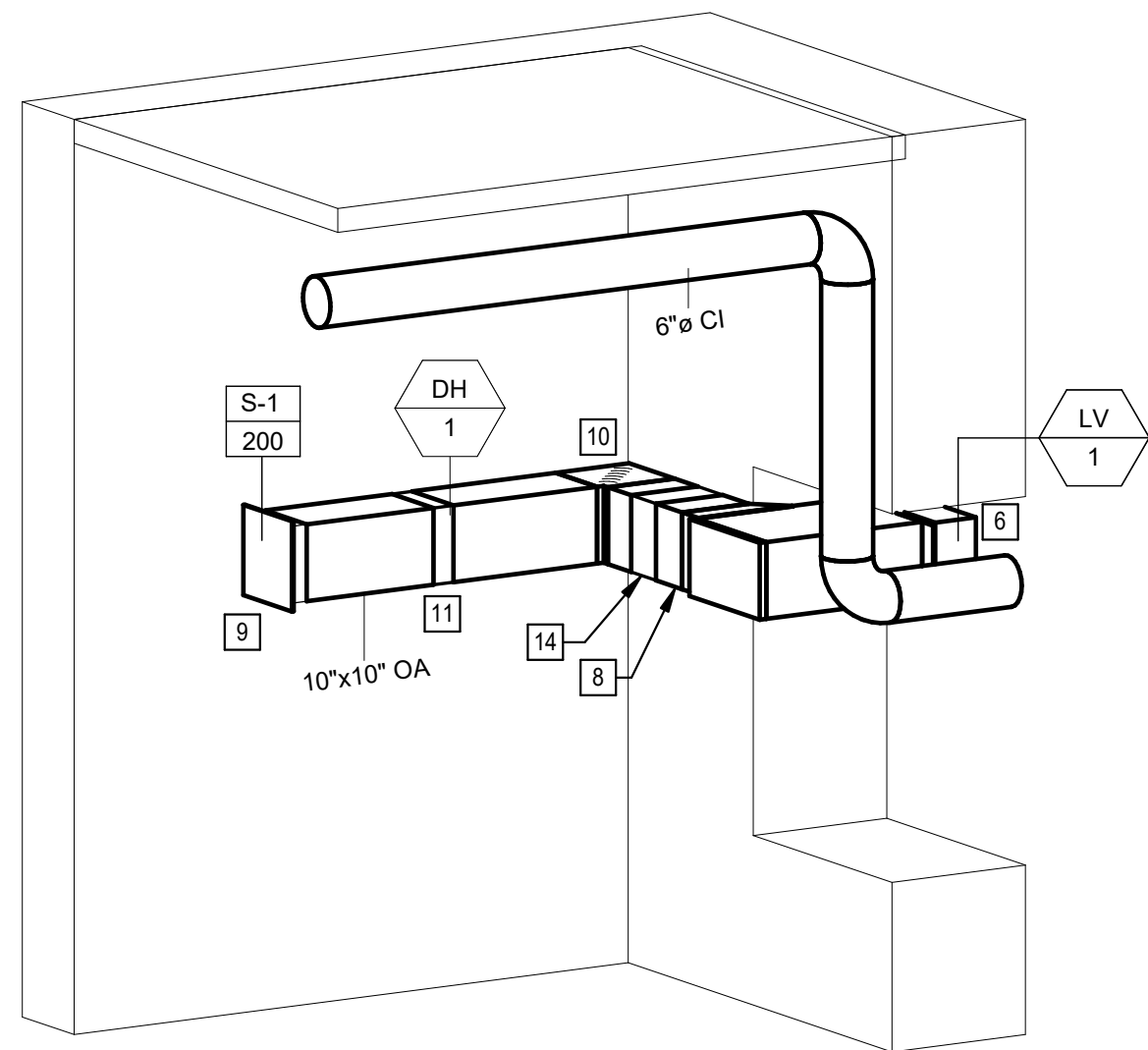
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CAD DWG FILE: M-100
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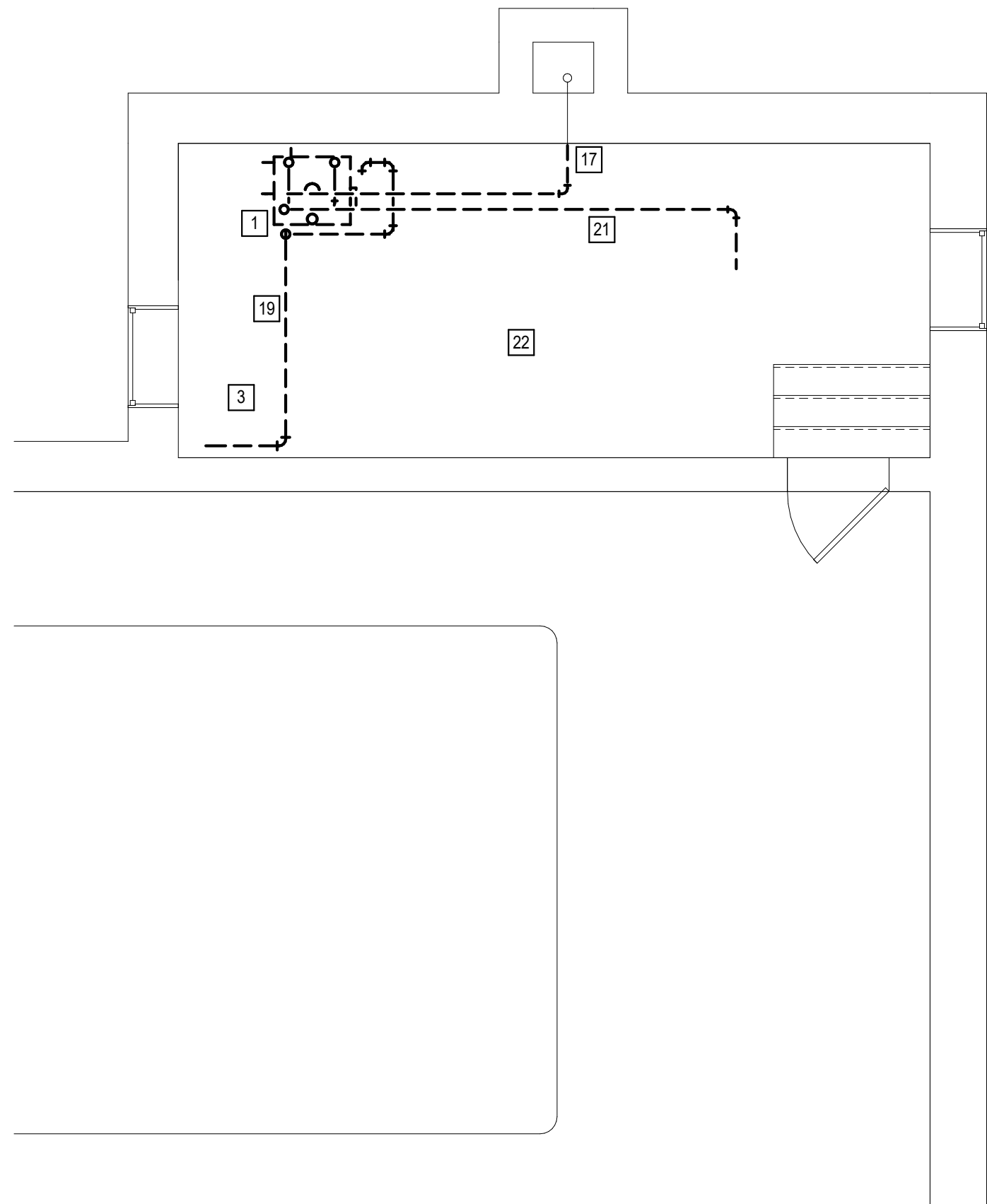
SHEET TITLE:
**OVERALL PLAN
- MECHANICAL**

SHEET NUMBER:

M-100



3 INTAKE AIR DETAIL
M-200



1 POOL DEMOLITION PLAN
M-200 1/4" = 1'-0"

MECHANICAL ROOM EXHAUST SYSTEM CONTROL SEQUENCE:

THE INTENT OF THE FOLLOWING CONTROL SEQUENCE IS TO PROVIDE 24/7 EXHAUST FOR THE MECHANICAL ROOM AT DURING ALL SEASONS AND TO CREATE A NEGATIVE PRESSURE ROOM. LOUVER (LV-1) ALLOWS MAKEUP AIR TO ENTER THE ROOM FROM OUTSIDE. DUCT HEATER (DH-1) HEATS THE MAKEUP AIR AS NEEDED TO KEEP THE ROOM AT A MINIMUM 60°F. IN THE EVENT THAT THE DUCT HEATER MALFUNCTIONS, THE TEMPERATURE IN THE ROOM WILL DROP TO 52°F AND THE THERMOSTAT WILL SIGNAL THE SYSTEM TO SHUTDOWN TO KEEP UNTREATED MAKEUP AIR FROM FREEZING EQUIPMENT, PIPES, ETC. **EQUIPMENT ROOM SHALL BE POSITIVELY PRESSURIZED** TO MAINTAIN PROPER OPERATION OF COMBUSTION APPLIANCES IN THE ROOM AND TO AVOID PULLING COMBUSTION EXHAUST AIR IN THROUGH THE COMBUSTION EXHAUST FLUE.

EXHAUST FAN (EF-1):

- NORMAL OPERATION: ON 24HRS A DAY AND 7 DAYS A WEEK.
- MANUAL SHUTOFF CONTROL SHALL BE BY CIRCUIT BREAKER IN NEARBY ELECTRIC PANEL.
- WHEN EXHAUST FAN (EF-1) IS OFF, DUCT HEATER (DH-1) SHALL BE OFF.
- WHEN EXHAUST FAN (EF-1) IS OFF, LOUVER ON FAN SHALL CLOSE.
- WHEN EXHAUST FAN (EF-1) IS OFF, LOUVER (LV-1) SHALL CLOSE.

DUCT HEATER (DH-1):

- WHEN EXHAUST FAN (EF-1) IS OFF, DUCT HEATER (DH-1) SHALL BE OFF.
- ON/OFF SHALL BE CONTROLLED BY THERMOSTAT SET POINT.
- ON/OFF SHALL BE CONTROLLED BY DUCT AIRFLOW SWITCH.

THERMOSTAT (T-1):

- SHALL BE SET AT 60°F
- EMERGENCY OVERRIDE: IF TEMPERATURE IN ROOM DROPS BELOW 52° OR ABOVE 90°, SIGNAL EXHAUST FAN (EF-1) TO SHUTOFF.

LOUVER (LV-1):

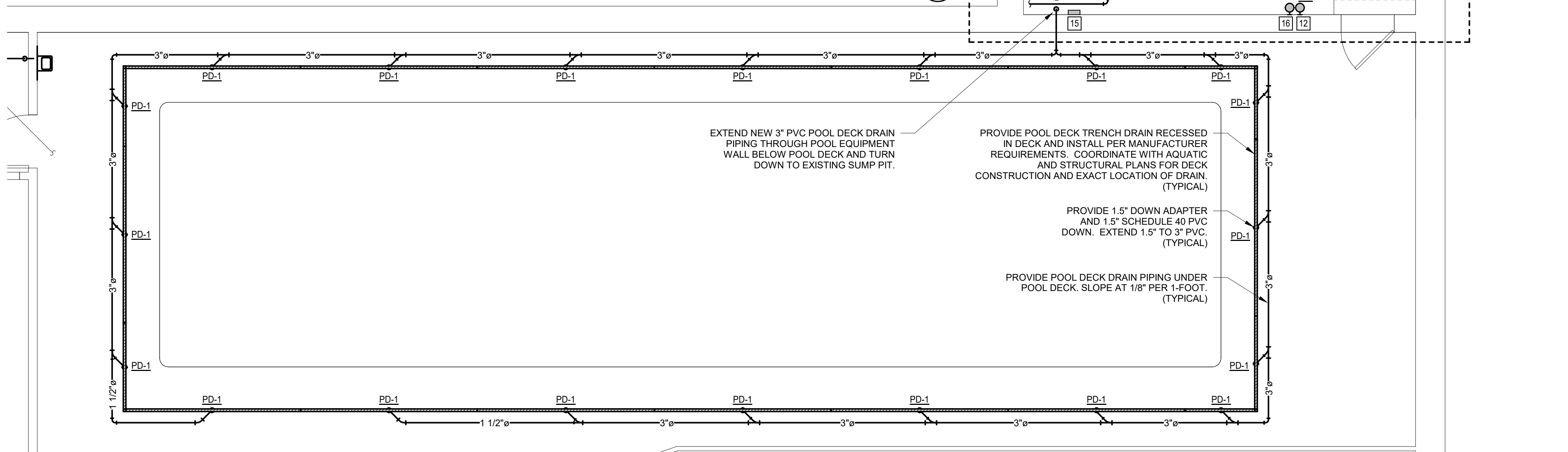
- WHEN EXHAUST FAN (EF-1) IS OFF, ACTUATOR ON LOUVER (LV-1) CLOSSES LOUVER.
- WHEN EXHAUST FAN (EF-1) IS ON, ACTUATOR ON LOUVER (LV-1) OPENS LOUVER.

GENERAL NOTES

- PROVIDE ALL NECESSARY RELAYS, CONTROL WIRING, TRANSFORMERS, ETC. TO PROVIDE CONTROL SEQUENCE AS NOTED ON PLANS FOR MECHANICAL ROOM (POOL EQUIPMENT ROOM) EXHAUST AIR SYSTEM. ALL DEVICES AND WIRING SHALL BE IN IP68 RATED RACEWAYS AND ENCLOSURES AND INSTALLED IN ACCESSIBLE LOCATION.
- CONTRACTOR SHALL MAINTAIN ALL RATED ASSEMBLIES AS DESIGNATED ON ARCHITECTURAL PLANS.
- CONTRACTOR SHALL MAINTAIN THE OPERATION AND INTEGRITY OF ANY EXISTING MECHANICAL SYSTEMS NOT NOTED FOR REMOVAL ON THESE PLANS AND VERIFY THEIR OPERATION PRIOR TO WORK COMPLETION.
- CONTRACTOR IS RESPONSIBLE FOR ALL CORING, PATCH, AND REPAIR OF ALL WALL AND FLOOR SYSTEMS AS REQUIRED DUE TO NEW CONSTRUCTION. MAINTAIN THE RATINGS OF ALL RATED ASSEMBLIES. PROVIDE ALL MATERIAL, MODIFICATIONS, AND ADJUSTMENTS AS NEEDED TO MAINTAIN THESE RATINGS THROUGH WALLS, FLOORS, CEILINGS, STAIRWELLS, ETC. AS INDICATED ON ARCHITECTURAL PLANS.
- CONTRACTOR SHALL PROVIDE ALL PATCHWORK AND PREPARE PATCHED AREAS FOR FINISH PER ARCHITECT REQUIREMENTS.
- CONTRACTOR SHALL SCHEDULE AND EXECUTE ALL WORK WITH REGARD TO THE OWNER'S USE AND OCCUPANCY OF THE BUILDING AND PROPERTY. COORDINATE ALL SYSTEM SHUT-DOWN HOURS WITH THE OWNER.
- OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR ALL DEMOLISHED MATERIALS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO DIFFUSERS, EQUIPMENT, DEVICES, SENSORS, ETC. STORE ITEMS ON SITE AS DIRECTED BY OWNER.
- REFER TO ARCHITECTURAL DEMOLITION PLANS FOR PHASING AND EXTENTS OF DEMOLITION.
- CLOSELY COORDINATE ALL WORK WITH ALL OTHER TRADES AND NEW CONSTRUCTION.
- ANY ADDITIONAL IMPACT COST, DESIGN MODIFICATIONS, ADDITIONAL ARCHITECTURAL AND/OR ENGINEERING SERVICES, MATERIALS, LABOR CHANGES, SCHEDULE CHANGES AND/OR OTHER UNANTICIPATED CONSEQUENCES RESULTING FROM SUBSTITUTIONS OR CONTRACTOR'S DISCRETION IN LIEU OF THE CONTRACT DOCUMENTS SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR, SUBCONTRACTOR, AND/OR SUPPLIER. NO ADDITIONAL COST SHALL BE INCURRED TO THE ARCHITECT, ENGINEER OR OWNER FOR THESE CHANGES.
- PAINT GAS PIPING YELLOW IN POOL EQUIPMENT ROOM

KEYED NOTES

- REMOVE EXISTING POOL HEATER AND ALL ASSOCIATED ACCESSORIES, SUPPORTS, ETC.
- PROVIDE NEW POOL HEATER.
- REMOVE EXISTING SUMP PUMPS AND ASSOCIATED PUMP CONTROLLER. RETAIN PUMP DISCHARGE PIPING. COORDINATE ALL WORK WITH ELECTRICAL CONTRACTOR.
- PROVIDE NEW SUMP PUMPS IN EXISTING SUMP PUMP PIT. CONNECT EXISTING SUMP DISCHARGE PIPING TO NEW SUMP PUMPS. COORDINATE ALL ELECTRICAL REQUIREMENTS WITH MANUFACTURER REQUIREMENTS, NEW CONTROL PANEL, AND ELECTRICAL CONTRACTOR.
- PROVIDE NEW WALL-MOUNTED PROP EXHAUST FAN IN EXISTING WINDOW LOCATION.
- PROVIDE NEW LOUVER IN EXISTING WINDOW LOCATION. KEEP LOUVER INSTALLATION HIGH AND TIGHT IN EXISTING WINDOW LOCATION. INSTALL PER MANUFACTURER'S REQUIREMENTS, REFER TO DETAILS FOR MORE INFORMATION. COORDINATE TO PROVIDE INSULATED PARTITION IN REMAINING WINDOW OPENING, AND REFER TO ARCHITECTURAL PLANS.
- PROVIDE MOTORIZED ACTUATOR ON ACCESSIBLE SIDE OF DUCT AS SHOWN. PROVIDE ACCESS PANEL IN DUCTWORK AT MOTORIZED ACTUATOR.
- PROVIDE 1" FILTER RACK AND MERV 8 FILTER.
- PROVIDE GRILLE WITH INTEGRAL BALANCING DAMPER AND BALANCE TO CFM AS SHOWN.
- COORDINATE ALL WORK WITH EXISTING AND NEW EQUIPMENT, CLEARANCES, CONDUIT, PIPING, ETC. ADJUST SYSTEM INSTALLATION ELEVATION AS NEEDED.
- PROVIDE NEW DUCT HEATER PER MANUFACTURER REQUIREMENTS. KEEP 24" FROM ELBOW, 24" FROM GRILLE, AND 48" FROM FILTER RACK. MAINTAIN CONTROL PANEL REQUIRED CLEARANCE.
- PROVIDE NEW HARD-WIRED THERMOSTAT PRO T725 WITH TRANSFORMER IN DUCT HEATER CONTROL PANEL. COORDINATE INSTALLATION WITH THERMOSTAT AND DUCT HEATER MANUFACTURER, AND WITH NEARBY EQUIPMENT ON WALL. KEEP THERMOSTAT ON INTERIOR WALL AND AWAY FROM HEAT GENERATING EQUIPMENT. INTERCONNECT WITH EQUIPMENT PER CONTROL SEQUENCE ON PLANS.
- IN MECHANICAL ROOM: ALL MECHANICAL CONTROLS DEVICES, EQUIPMENT, AND CONTROL WIRING SHALL BE PROVIDED IN PVC CONDUIT AND IP68 RATED ENCLOSURES IN ACCESSIBLE LOCATION. ALL DUCTWORK SHALL BE ALUMINUM PER SMACNA REQUIREMENTS UNLESS NOTED OTHERWISE.
- PROVIDE GRAVITY BACKDRAFT DAMPER.
- PROVIDE NEW SUMP PUMP CONTROL PANEL EQUAL TO: ZOELLER 10-1112 REV-B. COORDINATE PUMP CONTROL SETUP WITH EXISTING PUMP CONTROLLER SETUP. COORDINATE INSTALLATION WITH OTHER TRADES AND CLEARANCE REQUIREMENTS.
- PROVIDE NEW CARBON MONOXIDE DETECTOR AND COORDINATE LOCATION WITH NEARBY EQUIPMENT. INTERCONNECT WITH NEW EXHAUST FAN EF-1 TO SHUTDOWN FAN ON ALARM.
- REMOVE EXISTING POOL HEATER FLUE DUCT WITHIN ROOM BACK TO WALL AND CAP.
- CAP EXISTING FLUE WALL PENETRATION AND PROVIDE UNINTERRUPTED AIR TIGHT SEAL AROUND NEW WALL PENETRATION CAP.
- REMOVE EXISTING GAS PIPING IN ROOM SERVING EXISTING POOL HEATER AND REPLACE WITH NEW PER NEW WORK PLAN.
- PROVIDE NEW 2" GAS PIPING FROM EXISTING 2" OR GREATER GAS PIPING SERVING ROOM AND DOWN TO NEW POOL HEATER.
- REMOVE EXISTING WATER PIPING SERVING EXISTING POOL HEATER AND REPLACE WITH NEW PER NEW WORK PLANS.
- PROVIDE NEW 2" HOT AND COLD WATER PIPING TO SERVE NEW POOL HEATER, COORDINATE CONNECTIONS WITH EXISTING PIPING AND EQUIPMENT. COORDINATE WITH MANUFACTURER REQUIREMENTS. EXTEND NEW COLD WATER PIPING TO COLD WATER PIPING SERVING ROOM. EXTEND NEW HOT WATER PIPING TO POOL EQUIPMENT AND COORDINATE REQUIREMENTS WITH POOL EQUIPMENT PROVIDER.
- ALTERNATE #2:** REMOVE AND SALVAGE EXISTING TO REMAIN WALL-MOUNTED EQUIPMENT AND DEVICES IN AREA AND STORE IN A SAFE PLACE FOR REINSTALLATION.
- ALTERNATE #2:** COORDINATE INSTALLATION OF EXISTING SALVAGED WALL-MOUNTED EQUIPMENT AND DEVICES WITH NEW WALL FINISH PROVIDER.



2 POOL FLOOR PLAN
M-200 1/4" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

ENGINEER OF RECORD:



CARL V. HAUCK
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REPAIR SWIMMING POOL

MISSOURI SCHOOL FOR
THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E2107-01
SITE# 2011
FACILITY # 5012011003,
501201104

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ISSUE DATE: 07/06/2022

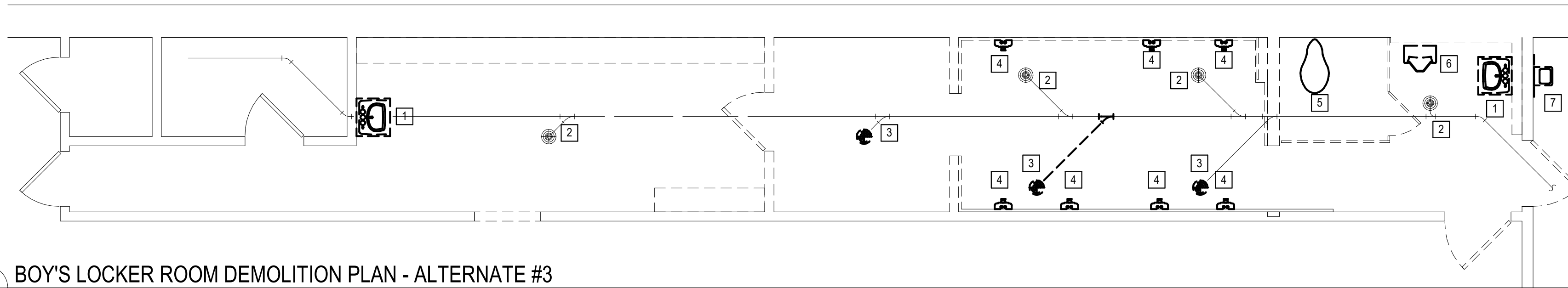
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POOL PLANS -
MECHANICAL**

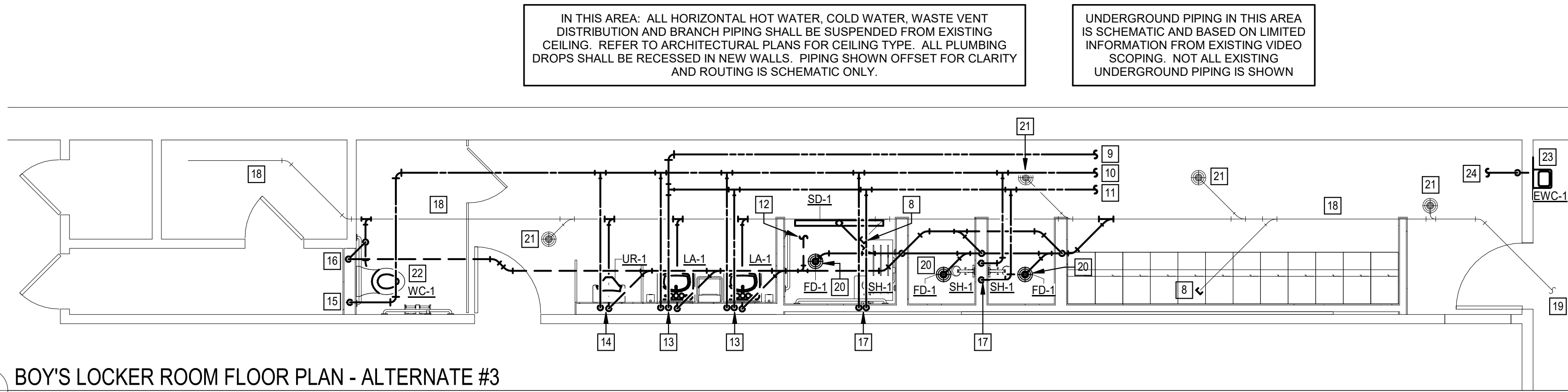
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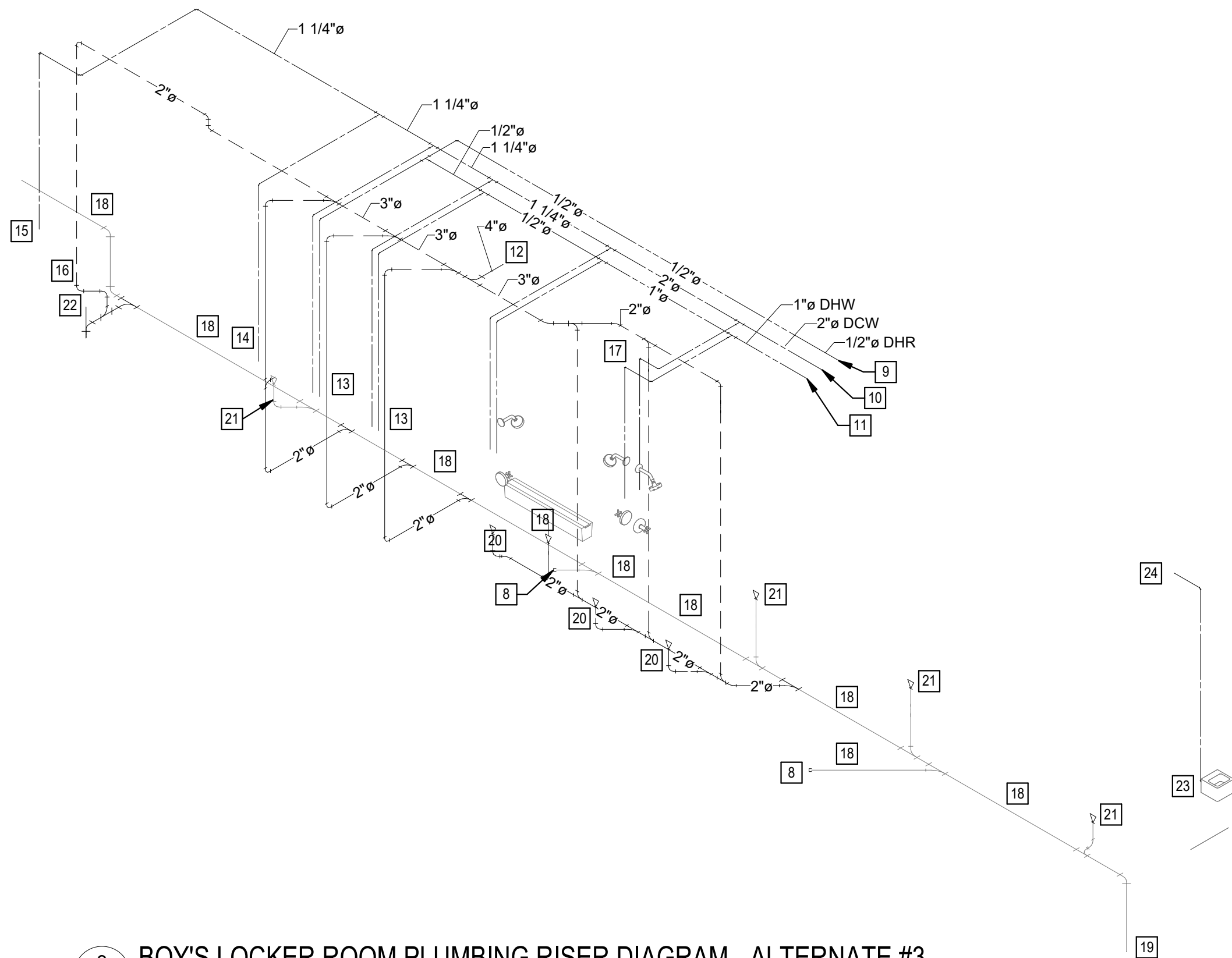
35 OF 45 SHEETS
07/06/2022



1 BOY'S LOCKER ROOM DEMOLITION PLAN - ALTERNATE #3
M-201 1/4" = 1'-0"



2 BOY'S LOCKER ROOM FLOOR PLAN - ALTERNATE #3
M-201 1/4" = 1'-0"



3 BOY'S LOCKER ROOM PLUMBING RISER DIAGRAM - ALTERNATE #3
M-201

GENERAL NOTES

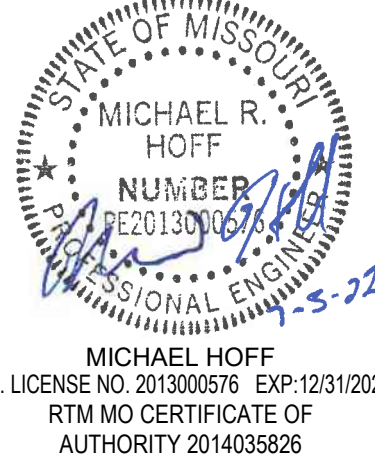
- PROVIDE TWO 45° ELBOWS INSTEAD OF A 90° ELBOW WHEN MAKING 90° TURNS WITH 4" OR GREATER WASTE PIPING.
- PROVIDE FINISHED FLOOR CLEANOUTS PER PLUMBING FIXTURE SCHEDULE ON ANY NEW OR EXISTING 4" OR GREATER WASTE PIPING EXCEEDING 75-FT IN LENGTH ASSOCIATED WITH THE SCOPE OF THIS PROJECT. PROVIDE TWO-WAY TEES IN-LINE WITH MAIN AND FULL SIZE WASTE PIPING UP TO CLEANOUT.
- PROVIDE FINISHED WALL CLEANOUTS IN WASTE PIPING UNDER LAVATORIES.
- PROVIDE HYDRO-JETTING FOR ALL EXISTING TO REMAIN WASTE PIPING, SERVING LOCKER ROOMS, BACK TO EXISTING MAIN SERVING LOCKER ROOM.
- CONTRACTOR SHALL VERIFY ALL NEW AND EXISTING PLUMBING SYSTEMS AFFECTED BY THE SCOPE OF THIS PROJECT ARE FULLY OPERATIONAL AS INTENDED PER THIS DESIGN BEFORE PROJECT COMPLETION.
- CONTRACTOR SHALL MAINTAIN OPERATION INTEGRITY OF ALL EXISTING TO REMAIN PLUMBING SYSTEMS AND PROVIDE ALL NECESSARY PIPING, FITTINGS, DEVICES, EQUIPMENT, ETC.
- PROVIDE SHUTOFF VALVES ON ALL NEW DOMESTIC WATER BRANCH PIPING SERVING A SINGLE FIXTURE. LOCATE IN ACCESSIBLE LOCATION.
- PROVIDE SHUTOFF VALVES ON ALL NEW DOMESTIC WATER DISTRIBUTION PIPING SERVING AREA AND LOCATE NEAR EXISTING MAIN LINE AND IN ACCESSIBLE LOCATION.

KEYED NOTES

- REMOVE EXISTING LAVATORY AND ALL ASSOCIATED PIPING, ACCESSORIES, SUPPORTS, ETC.
- EXISTING FLOOR DRAIN TO REMAIN.
- REMOVE EXISTING FLOOR DRAIN AND BELOW SLAB PIPING BACK TOP MAIN LATERAL.
- REMOVE EXISTING SHOWER AND ALL ASSOCIATED PIPING, HANGERS, BRACKETS, ETC.
- REMOVE EXISTING WATER CLOSET AND ASSOCIATED PIPING.
- REMOVE EXISTING LAVATORY AND ASSOCIATED PIPING, HANGERS, BRACKETS, ACCESSORIES.
- REMOVE EXISTING DRINKING FOUNTAIN AND ASSOCIATED COLD WATER PIPING. PREPARE WASTE AND VENT PIPING FOR NEW FIXTURE CONNECTION.
- CAP EXISTING WASTE PIPING UNDER SLAB AND SEAL SLAB PENETRATION.
- PROVIDE 0.75" DOMESTIC HOT WATER RETURN BACK TO EXISTING DOMESTIC HOT WATER RECIRCULATION PUMP-SERVING AREA. REBALANCE EXISTING DOMESTIC HOT WATER CIRCULATION SYSTEM.
- PROVIDE 2" COLD WATER TO SERVE AREA AS SHOWN. EXTEND TO NEAREST EXISTING 2" OR LARGER DOMESTIC COLD WATER PIPING SERVING LOCKER ROOM.
- PROVIDE 1" DOMESTIC HOT WATER AND EXTEND TO NEAREST 1.25" OR LARGER DHW PIPING SERVING LOCKER ROOM.
- PROVIDE NEW 3" WASTE VENT PIPING AND EXTEND TO NEAREST 3" OR GREATER WASTE VENT SERVING LOCKER ROOM.
- PROVIDE 0.5" HOT AND COLD WATER TO NEW THERMOSTATIC MIXING VALVE SERVING LAVATORY. EXTEND 0.75" TEMPERED WATER AND 0.5" COLD WATER AND 2" VENT DOWN TO NEW LAVATORY. PROVIDE THERMOSTATIC MIXING VALVE AND SUPPORT PER MANUFACTURER REQUIREMENTS.
- PROVIDE 0.75" COLD WATER AND 2" VENT DOWN TO NEW URINAL.
- PROVIDE 1.25" COLD WATER DOWN TO NEW WATER CLOSET.
- PROVIDE 2" VENT DOWN UNDER SLAB AND ANGLE TO NEW UNDERGROUND WASTE PIPING SERVING NEW WATER CLOSET.
- PROVIDE 0.75" HOT AND COLD WATER DOWN TO SERVE NEW SHOWERS. TEE 0.5" HOT AND COLD WATER TO EACH SHOWER'S MIXING VALVE. PROVIDE 0.5" TEMPERED WATER FROM EACH VALVE TO THEIR RESPECTIVE SHOWER HEAD. COORDINATE WITH NEW SHOWER HEAD AND VALVE INSTALLATION.
- EXISTING WASTE PIPING SHALL REMAIN.
- APPROXIMATE EXISTING WASTE PIPING LOCATION AND CONTINUATION TO BUILDING WASTE SYSTEM.
- PROVIDE 2" TRAPPED WASTE UP TO NEW FLOOR DRAIN.
- EXISTING FLOOR DRAIN AND ASSOCIATED WASTE PIPING SHALL REMAIN.
- PROVIDE 4" WASTE UP TO NEW WATER CLOSET.
- PROVIDE NEW DRINKING FOUNTAIN IN EXISTING LOCATION. RECONNECT EXISTING WASTE AND VENT PIPING. PROVIDE NEW 0.5" COLD WATER PIPING AND CONNECT TO DRINKING FOUNTAIN.
- EXTEND NEW 0.5" COLD WATER PIPING TO NEAREST NEW OR EXISTING, 0.75" OR GREATER COLD WATER DISTRIBUTION PIPING SERVING LOCKER ROOM.

STATE OF MISSOURI
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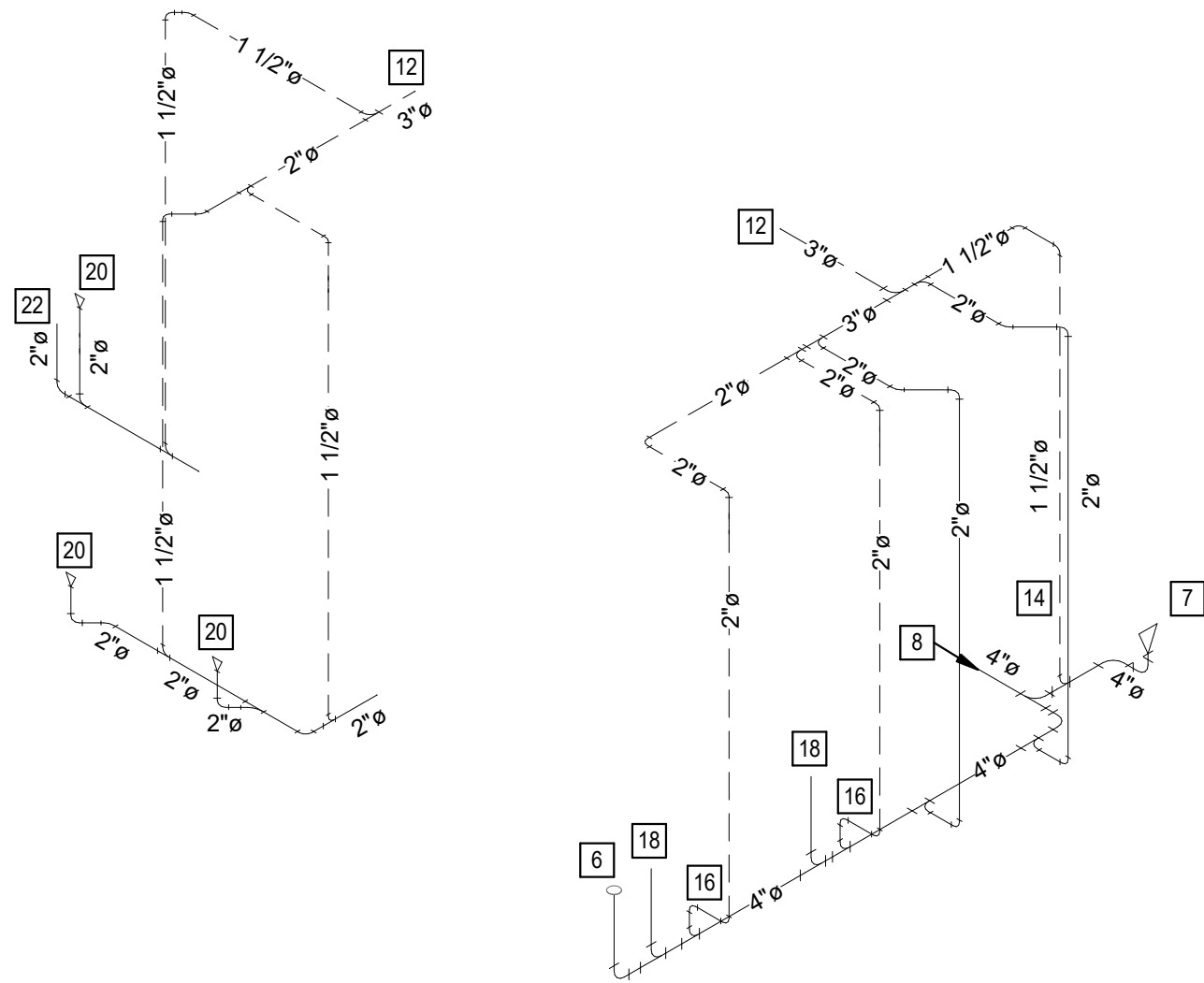
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CAD DWG FILE: M-201
DRAWN BY: ASK
CHECKED BY: MJB
DESIGNED BY: ASK

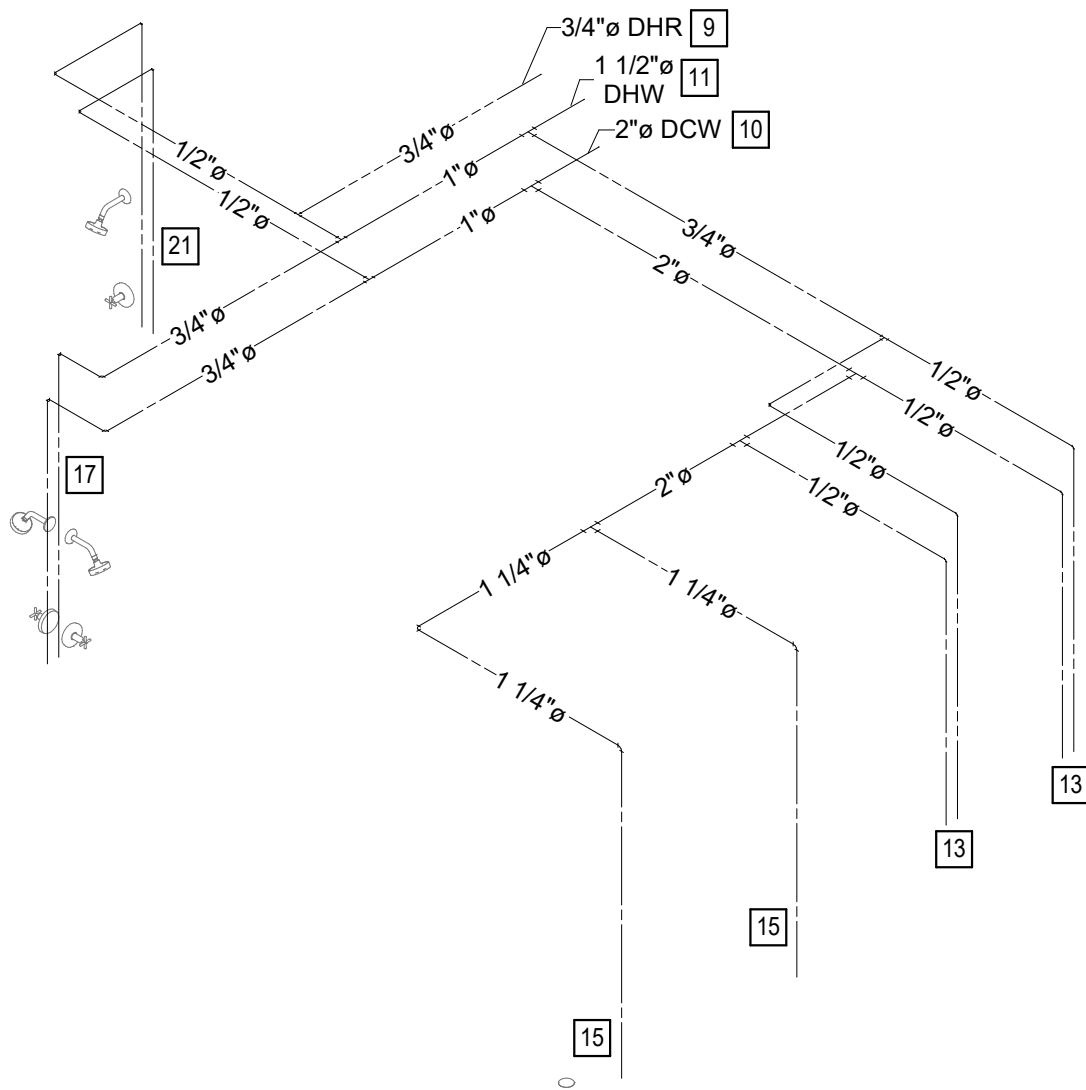
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**BOY'S LOCKER
ROOM PLANS -
MECHANICAL**

SHEET NUMBER:

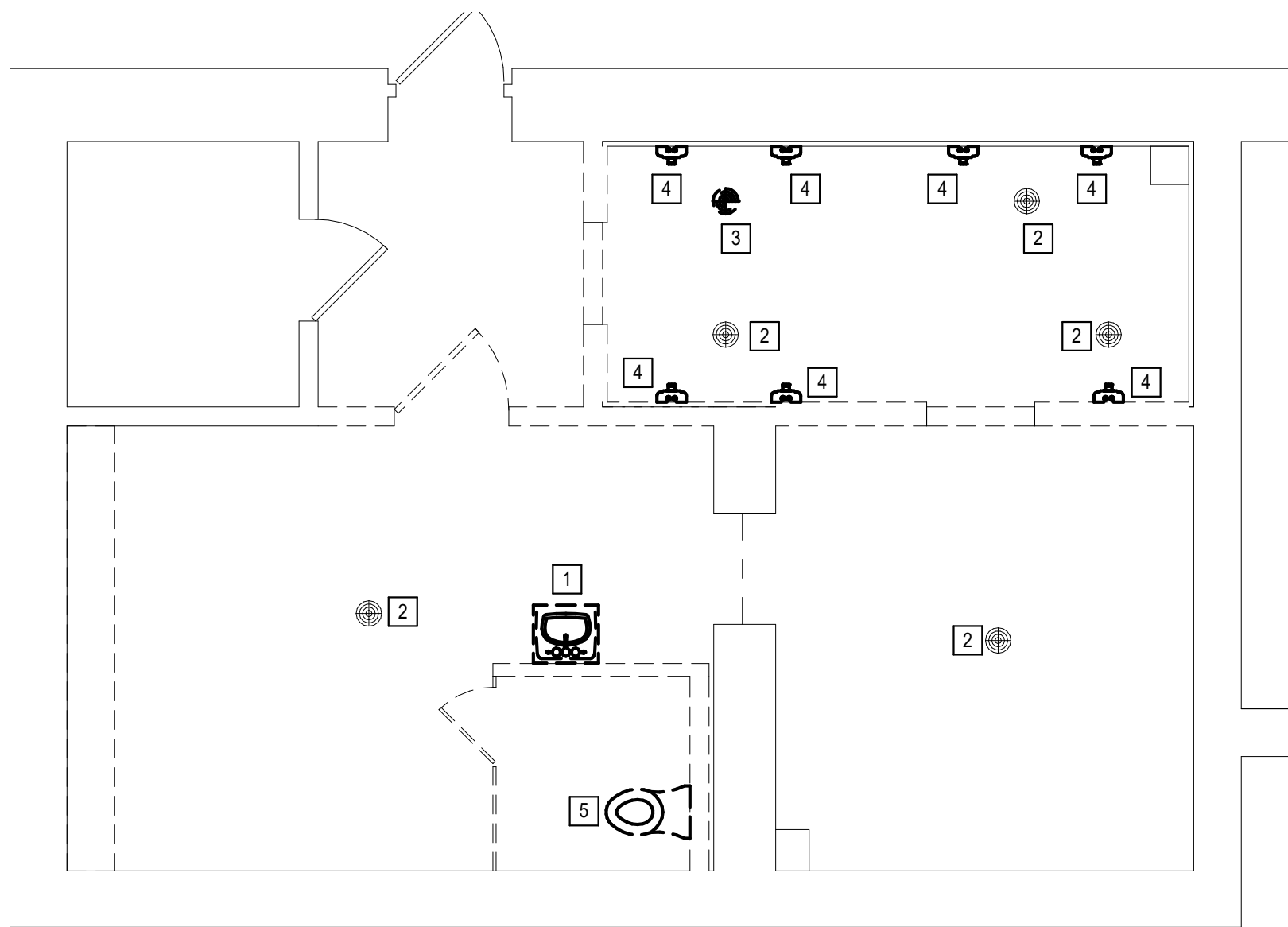
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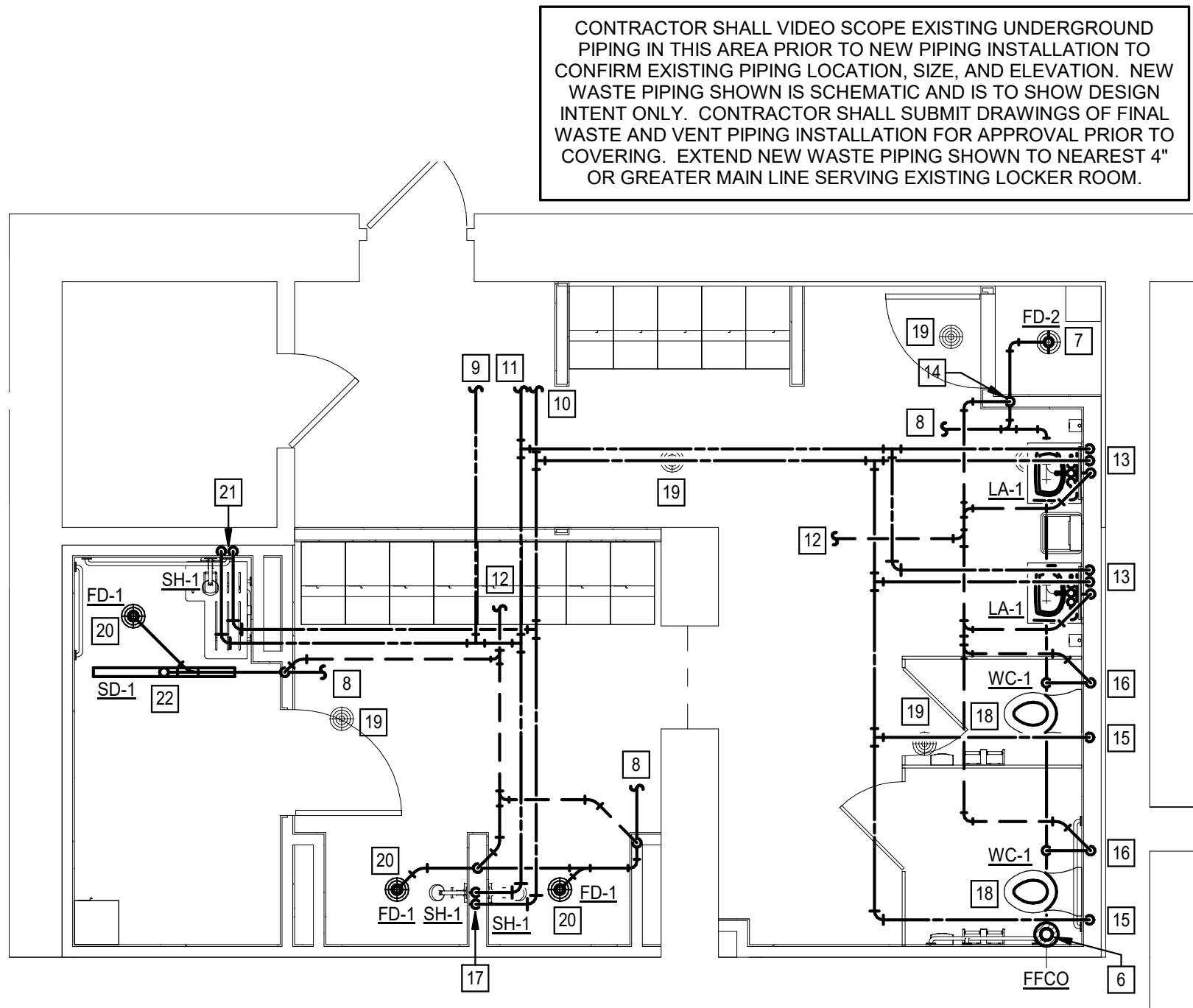
4 GIRL'S LOCKER ROOM WASTE & VENT RISER DIAGRAM - ALTERNATE #3
M-202



3 GIRL'S LOCKER ROOM DOMESTIC WATER RISER DIAGRAM - ALTERNATE #3
M-202



1 GIRL'S LOCKER ROOM DEMOLITION PLAN - ALTERNATE #3
1/4" = 1'-0"



2 GIRL'S LOCKER ROOM FLOOR PLAN - ALTERNATE #3
1/4" = 1'-0"

GENERAL NOTES

- A. PROVIDE TWO 45° ELBOWS INSTEAD OF A 90° ELBOW WHEN MAKING 90° TURNS WITH 4" OR GREATER WASTE PIPING.
- B. PROVIDE FINISHED FLOOR CLEANOUTS PER PLUMBING FIXTURE SCHEDULE ON ANY NEW OR EXISTING 4" OR GREATER WASTE PIPING EXCEEDING 75-FT IN LENGTH ASSOCIATED WITH THE SCOPE OF THIS PROJECT. PROVIDE TWO-WAY TEES IN-LINE WITH MAIN AND FULL SIZE WASTE PIPING UP TO CLEANOUT.
- C. PROVIDE FINISHED WALL CLEANOUTS IN WASTE PIPING UNDER LAVATORIES.
- D. PROVIDE HYDRO-JETTING FOR ALL EXISTING TO REMAIN WASTE PIPING, SERVING LOCKER ROOMS, BACK TO EXISTING MAIN SERVING LOCKER ROOM.
- E. CONTRACTOR SHALL VERIFY ALL NEW AND EXISTING PLUMBING SYSTEMS AFFECTED BY THE SCOPE OF THIS PROJECT ARE FULLY OPERATIONAL AS INTENDED PER THIS DESIGN BEFORE PROJECT COMPLETION.
- F. CONTRACTOR SHALL MAINTAIN OPERATION INTEGRITY OF ALL EXISTING TO REMAIN PLUMBING SYSTEMS AND PROVIDE ALL NECESSARY PIPING, FITTINGS, DEVICES, EQUIPMENT, ETC.
- G. PROVIDE SHUTOFF VALVES ON ALL NEW DOMESTIC WATER BRANCH PIPING SERVING A SINGLE FIXTURE. LOCATE IN ACCESSIBLE LOCATION.
- H. PROVIDE SHUTOFF VALVES ON ALL NEW DOMESTIC WATER DISTRIBUTION PIPING SERVING AREA AND LOCATE NEAR EXISTING MAIN LINE AND IN ACCESSIBLE LOCATION.

KEYED NOTES

- 1 REMOVE EXISTING LAVATORY AND ALL ASSOCIATED PIPING, ACCESSORIES, SUPPORTS, ETC.
- 2 EXISTING FLOOR DRAIN TO REMAIN.
- 3 REMOVE EXISTING FLOOR DRAIN AND BELOW SLAB PIPING BACK TOP MAIN LATERAL.
- 4 REMOVE EXISTING SHOWER AND ALL ASSOCIATED PIPING, HANGERS, BRACKETS, ETC.
- 5 REMOVE EXISTING WATER CLOSET AND ASSOCIATED PIPING.
- 6 PROVIDE 4" WASTE UP TO FINISHED FLOOR CLEANOUT.
- 7 PROVIDE 4" TRAPPED WASTE UP TO NEW FLOOR DRAIN.
- 8 PROVIDE NEW WASTE PIPING AND EXTEND TO NEAREST 4" OR GREATER WASTE PIPING MAIN SERVING LOCKER ROOM.
- 9 PROVIDE 0.75" DOMESTIC HOT WATER RETURN BACK TO EXISTING DOMESTIC HOT WATER RECIRCULATION PUMP SERVING AREA. REBALANCE EXISTING DOMESTIC HOT WATER CIRCULATION SYSTEM.
- 10 PROVIDE 2" COLD WATER TO SERVE AREA AS SHOWN. EXTEND TO NEAREST EXISTING 2" OR LARGER DOMESTIC COLD WATER PIPING SERVING LOCKER ROOM.
- 11 PROVIDE 1.5" DOMESTIC HOT WATER AND EXTEND TO NEAREST 1.25" OR LARGER DHW PIPING SERVING LOCKER ROOM.
- 12 PROVIDE NEW 3" VENT PIPING AND EXTEND TO NEAREST 3" OR GREATER VENT SERVING LOCKER ROOM.
- 13 PROVIDE 0.5" HOT AND COLD WATER TO NEW THERMOSTATIC MIXING VALVE SERVING LAVATORY. EXTEND 0.75" TEMPERED WATER AND 0.5" COLD WATER AND 2" VENT DOWN TO NEW LAVATORY. PROVIDE THERMOSTATIC MIXING VALVE AND SUPPORT PER MANUFACTURER REQUIREMENTS.
- 14 PROVIDE 2" VENT DOWN TO WASTE PIPING SERVING MOP BASIN.
- 15 PROVIDE 1.25" COLD WATER DOWN TO NEW WATER CLOSET.
- 16 PROVIDE 2" VENT DOWN UNDER SLAB AND ANGLE TO NEW UNDERGROUND WASTE PIPING SERVING NEW WATER CLOSET.
- 17 PROVIDE 0.75" HOT AND COLD WATER DOWN TO SERVE NEW SHOWERS. TEE 0.5" HOT AND COLD WATER TO EACH SHOWER'S MIXING VALVE. PROVIDE 0.5" TEMPERED WATER FROM EACH VALVE TO THEIR RESPECTIVE SHOWER HEAD. COORDINATE WITH NEW SHOWER HEAD AND VALVE INSTALLATION.
- 18 PROVIDE 4" WASTE UP TO NEW WATER CLOSET.
- 19 EXISTING FLOOR DRAIN AND ASSOCIATED WASTE PIPING SHALL REMAIN.
- 20 PROVIDE 2" TRAPPED WASTE UP TO NEW FLOOR DRAIN.
- 21 PROVIDE 0.5" HOT AND COLD WATER DOWN TO SHOWER MIXING VALVE. PROVIDE 0.75" TEMPERED WATER FROM MIXING VALVE TO THEIR RESPECTIVE SHOWER HEAD. COORDINATE WITH NEW SHOWER HEAD AND VALVE INSTALLATION.
- 22 PROVIDE 2" TRAPPED WASTE UP TO NEW LINEAR SHOWER DRAIN. COORDINATE INSTALLATION CLOSELY WITH SLAB AND FLOOR PROVIDER.

STATE OF MISSOURI
MICHAEL L. PARSON,
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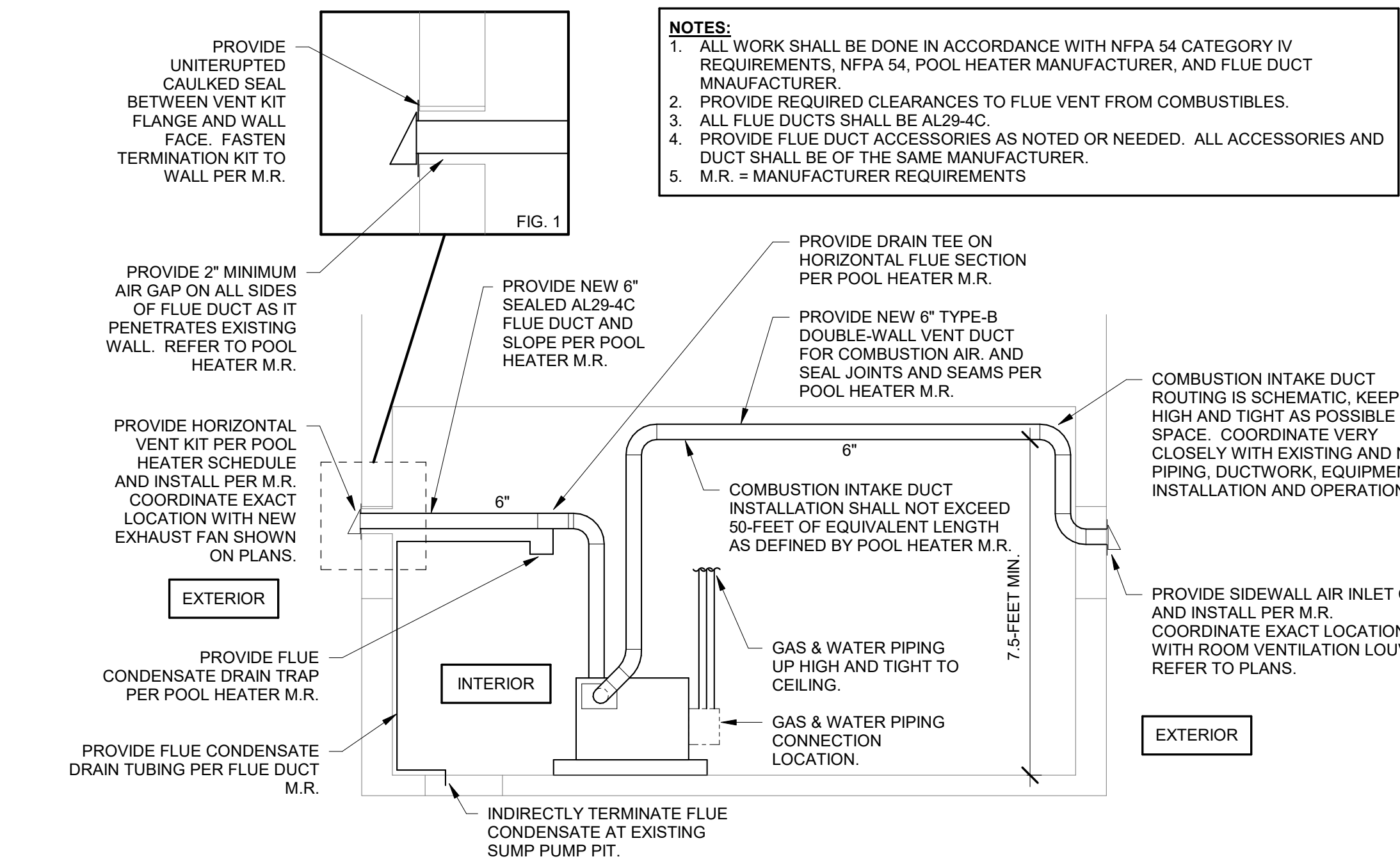
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CHECKED BY: Checker
DESIGNED BY: Designer

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ROOM PLANS -
MECHANICAL

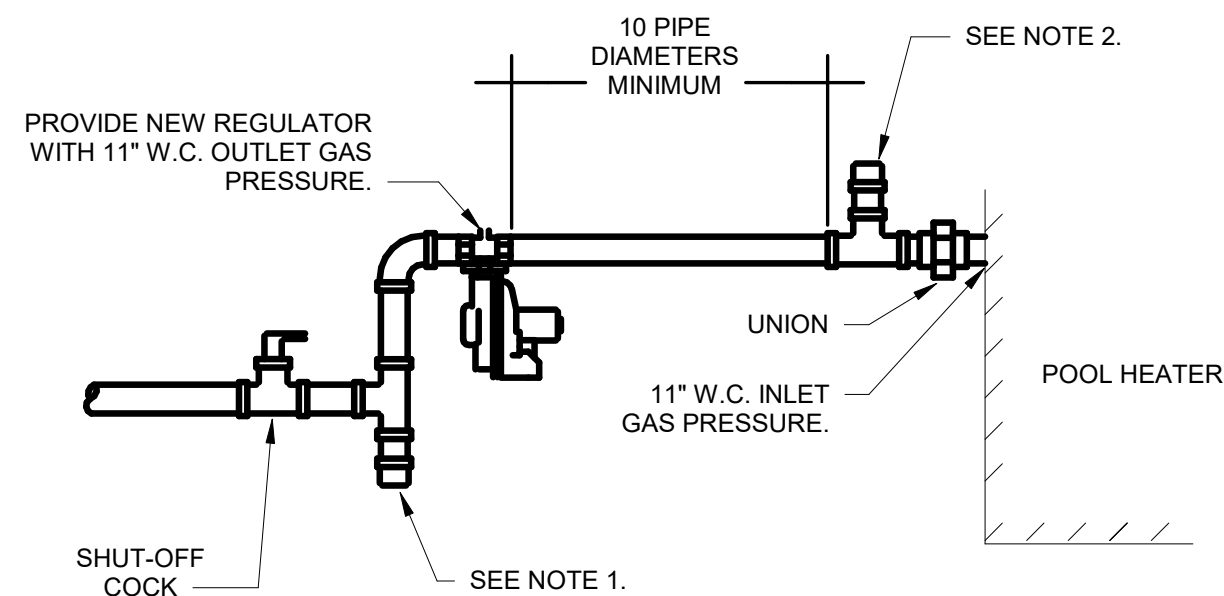
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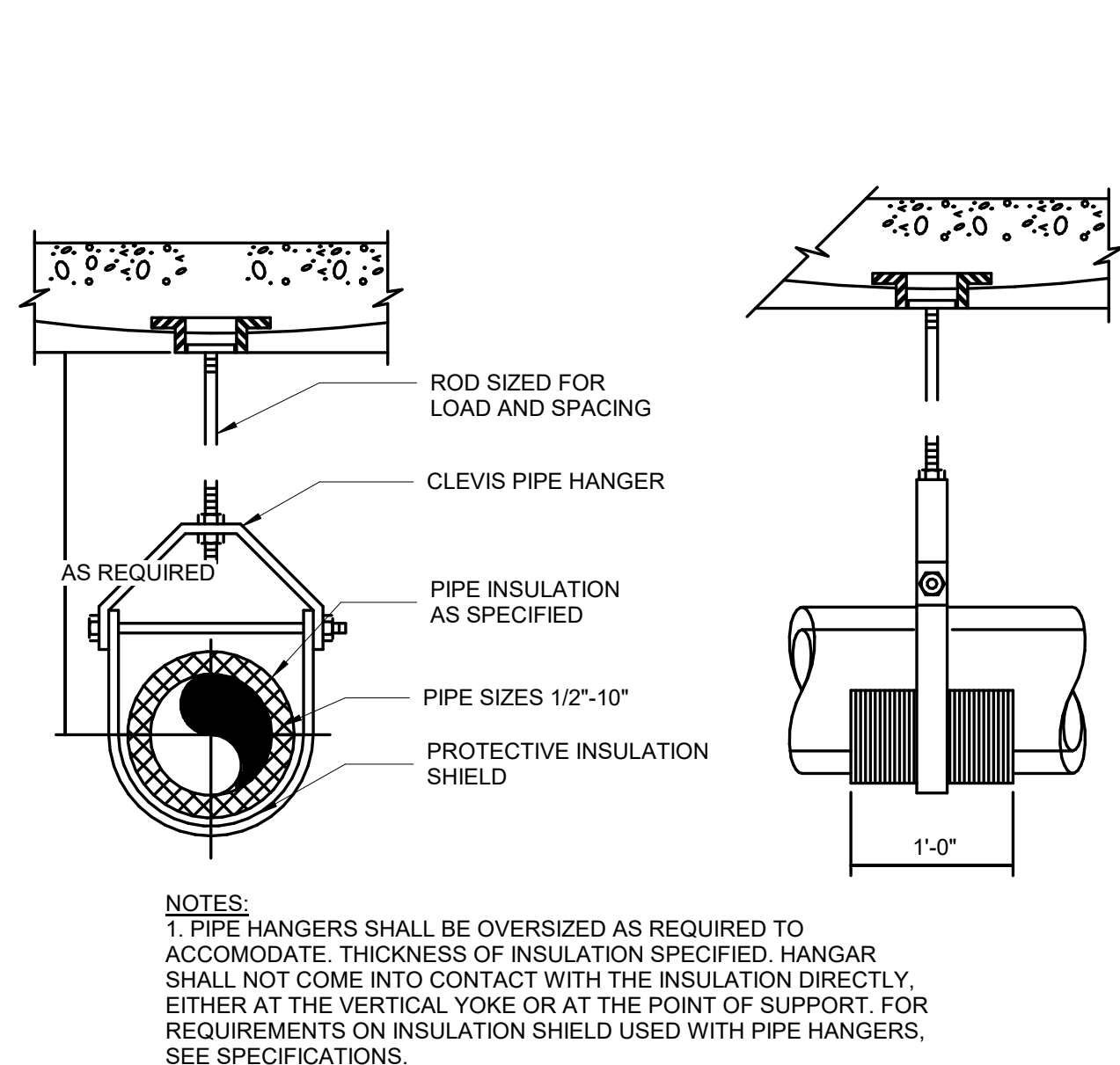




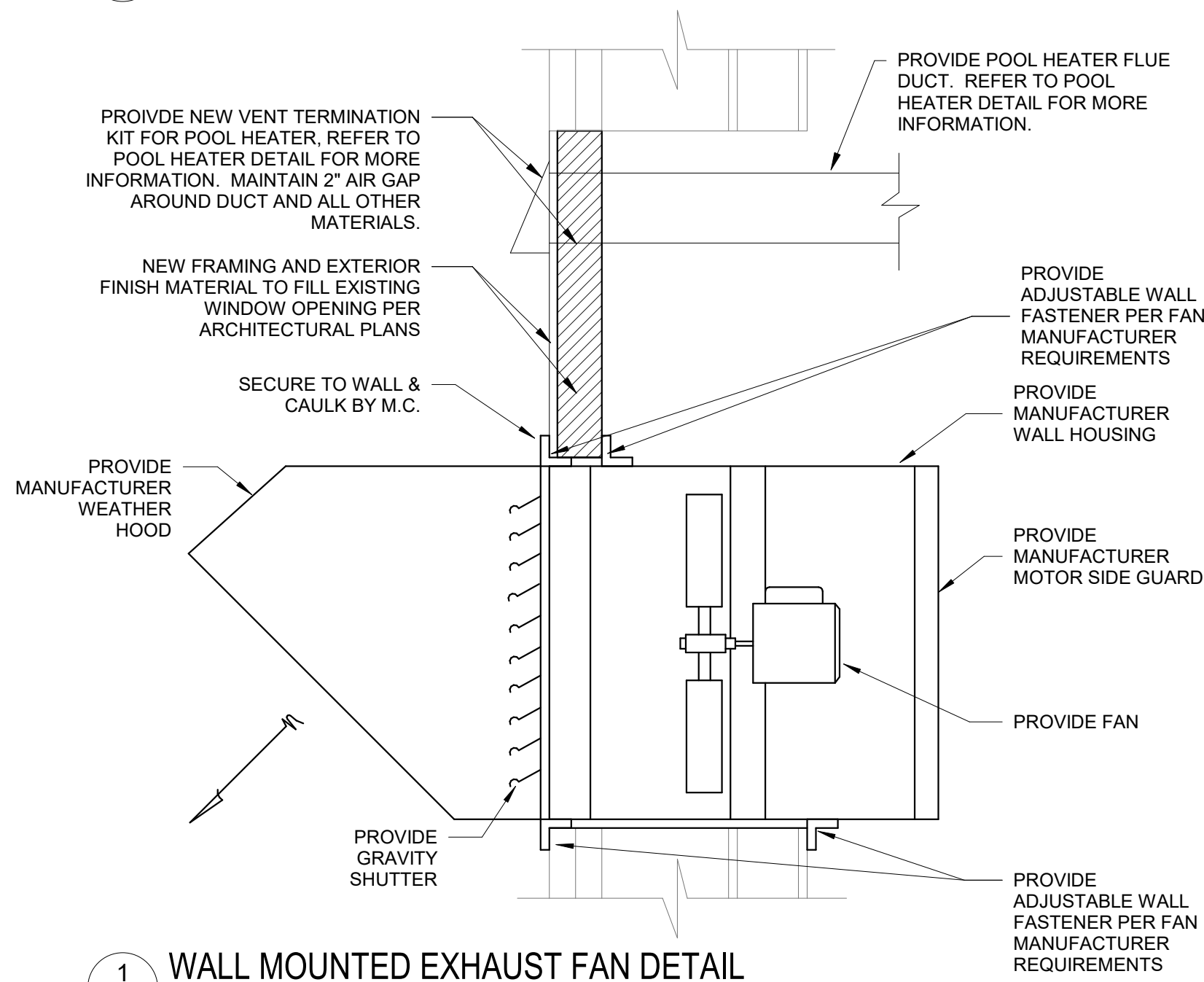
3 POOL HEATER DETAIL
M-501 NOT TO SCALE



2 TYPICAL NATURAL GAS CONNECTION
M-501 NOT TO SCALE



4 INSULATED PIPE HANGAR
M-501 NOT TO SCALE



NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH NFPA 54 CATEGORY IV REQUIREMENTS, NFPA 54, POOL HEATER MANUFACTURER, AND FLUE DUCT MANUFACTURER.
2. PROVIDE REQUIRED CLEARANCES TO FLUE VENT FROM COMBUSTIBLES.
3. ALL FLUE DUCTS SHALL BE AL29-4C.
4. PROVIDE FLUE DUCT ACCESSORIES AS NOTED OR NEEDED. ALL ACCESSORIES AND DUCT SHALL BE OF THE SAME MANUFACTURER.
5. M.R. = MANUFACTURER REQUIREMENTS

DUCT HEATER SCHEDULE									
PLAN MARK	#	MANUFACTURER	MODEL	WIDTH	LENGTH	WATTS	VOLTAGE	PHASE	NOTES
DH	1	GREENHECK	IDHE	8"	8"	4 KW	208	3	1,2,3,4,5
NOTES:									
	*	ALL MANUFACTURERS LISTED ARE BASIS OF DESIGN, SEE SPECIFICATIONS FOR ADDITIONAL MANUFACTURERS.							
	1	DUST TIGHT CONTROL BOX WITH GASKETED DOOR							
	2	ROOM THERMOSTAT PRO T725, REFER TO PLANS FOR LOCATION.							
	3	80/20 NICR GRADE A ELEMENT WIRE							
	4	SLIP-IN							
	5	PROVIDE FOR LINED DUCTWORK. COORDINATE HEATER INSTALLATION AND DUCTWORK LINING WITH MANUFACTURER INSTALLATION REQUIREMENTS.							

FAN SCHEDULE										
MARK	EQUIPMENT			FAN				ELECTRICAL		NOTES
	MANUFACTURER	MODEL	CFM	ESP	HP	RPM	VOLTAGE	PHASE	WATTS	
EF-1	GREENHECK	S1-10-428-P	200	0.33 in-wg	2	1650	208	1	78	1,2,3,4,5,6,7,8
NOTES:										
1. ALL MANUFACTURERS LISTED ARE BASIS OF DESIGN, SEE SPECIFICATIONS FOR ADDITIONAL MANUFACTURERS.										
2. PROVIDE WITH GRAVITY SHUTTER										
3. PROVIDE WITH WALL HOUSING										
4. PROVIDE WITH MOTOR SIDE GUARD										
5. PROVIDE WITH EPOXY POWDER COATED TEAO MOTOR										
6. PROVIDE WITH ALLUMINUM FAN BLADES										
7. REFER TO CONTROL SEQUENCE ON PLANS AND PROVIDE ALL CONTROL WIRING, RELAYS, DEVICES, ETC AS NEEDED TO PROVIDE A COMPLETE SYSTEM.										
8. ALL PARTS OF THE FAN THAT COME IN CONTACT WITH THE AIRSTREAM OR THE INTERIOR SIDE OF THE ROOM SHALL BE EPOXY POWDER COATED OR ALUMINUM IN CONSTRUCTION, INCLUDING BUT NOT LIMITED TO THE FAN MOTOR HOUSING, FAN SHAFT, FAN BLADES, FAN AND MOTOR MOUNTS, WALL HOUSING, DAMPER GUARD, DAMPER, ALL OTHER LISTED ACCESSORIES, ETC. ALL WIRING RACEWAYS FACTORY INSTALLED SHALL BE IP68 RATED. REFER TO ELECTRICAL SPECIFICATIONS FOR ALL OTHER ELECTRICAL MATERIAL REQUIREMENTS.										
9. PROVIDE WITH WEATHERHOOD										

LOUVER SCHEDULE									
MARK	MANUFACTURER	MODEL	HEIGHT	WIDTH	SERVICE	CFM	FREE AREA (SF)	VELOCITY (FPM)	NOTES
LV-1	GREENHECK	EAD-632W	1'-0"	1'-6"	SUPPLY	200	0.29	700 FPM	
NOTES:									
1. ALL MANUFACTURERS LISTED ARE BASIS OF DESIGN, SEE SPECIFICATIONS FOR ADDITIONAL MANUFACTURERS.									
2. PROVIDE ALUMINUM INSECT SCREEN.									
3. COLOR SHALL BE AS SELECTED BY ARCHITECT.									
4. PROVIDE MOTORIZED ACTUATOR AND INTERCONNECT PER PLANS.									

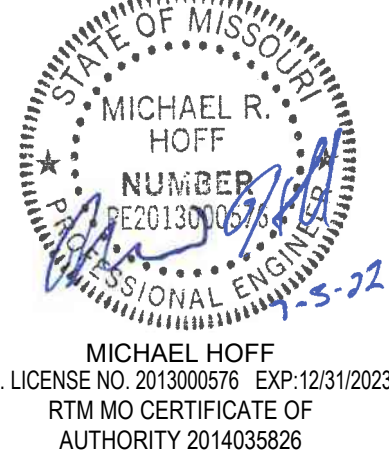
POOL HEATER SCHEDULE										
MARK	EQUIPMENT			GAS HEAT			ELECTRIC			NOTES
	MANUFACTURER	MODEL	CAPACITY (GAL)	INPUT (btu/h)	OUTPUT (btu/h)	EFFICIENCY (%)	VOLTAGE	PHASE	FLA	
PH-1	LOCHINVAR	CP-0502	1.7	500,000	425,000	85	120 V	1	12 A	1,2,3,4,5,6,7
NOTES:										
1. ALL MANUFACTURERS LISTED ARE BASIS OF DESIGN, SEE SPECIFICATIONS FOR ADDITIONAL MANUFACTURERS.										
2. PROVIDE TITANIUM GASKETED PLATE AND FRAME										
3. EPOXY COATED STEEL WITH STAINLESS STEEL HARDWARE										
4. 150 PSI MAXIMUM WORKING PRESSURE.										
5. PROVIDE LOCHINVAR HORIZONTAL VENT TERMINATION KIT 100141702.										
6. PROVIDE LOCHINVAR DIRECT VENT KIT AND DV BOX ADAPTER.										
7. PROVIDE MERV 4 COMBUSTION INLET AIR FILTER										
8. PROVIDE LOCHINVAR SUPPLY AIR INLET CAP										

PUMP SCHEDULE											
MARK	MANUFACTURER	MODEL	TYPE	HP	RPM	FLOW (GPM)	DISCHARGE SIZE (DIAMETER)	TOTAL HEAD (ft)	FLUID		NOTES
									TYPE	MAXIMUM TEMP (°F)	
SP-1	ZOELLER	295	SUBMERSIBLE	2	3450	160	3,000	25'-0"	WASTE	130°F	1,2,3,4,5,6,7,8
SP-2	ZOELLER	295	SUBMERSIBLE	2	3450	160	3,000	25'-0"	WASTE	130°F	1,2,3,4,5,6,7,8
NOTES:											
1. ALL MANUFACTURERS LISTED ARE BASIS OF DESIGN, SEE SPECIFICATIONS FOR ADDITIONAL MANUFACTURERS.											
2. PROVIDE PUMP CONTROLLER EQUAL TO: ZOELLER											
3. PUMP CONTROLLER SHALL HAVE NEMA 4X ENCLOSURE											
4. PROVIDE WITH BRONZE IMPELLER											
5. PROVIDE WITH STAINLESS STEEL HARDWARE											
6. PROVIDE WITH STAINLESS STEEL SHAFT											
7. PROVIDE WITH CERAMIC MECHANICAL SEALS											
8. PROVIDE WITH CAST-IRON HOUSING WITH EPOXY POWDER COATING.											
9. COORDINATE ELECTRICAL REQUIREMENTS WITH EXISTING CIRCUITRY AND ELECTRICAL CONTRACTOR.											

AIR TERMINAL SCHEDULE											
MARK	MANUFACTURER	MODEL	DUCT CONNECTION SIZE	SERVICE	FRAME	FINISH	DAMPER	NC (MAX)	THROW (FT)	MAXIMUM ▲P (IN WG)	NOTES
S-1	KRUEGER	880	10"X10"	SUPPLY	ALUMINUM / DUCT MOUNT	WHITE	Yes	30	5	0.04 in-wg	1,2
NOTES:											
* ALL MANUFACTURERS LISTED ARE BASIS OF DESIGN, SEE SPECIFICATIONS FOR ADDITIONAL MANUFACTURERS.											
1 FASTENERS SHALL BE MADE OF ALUMINUM.											
2 PROVIDE WITH OBD											

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DRAWN BY: ASK

CHECKED BY: MJB

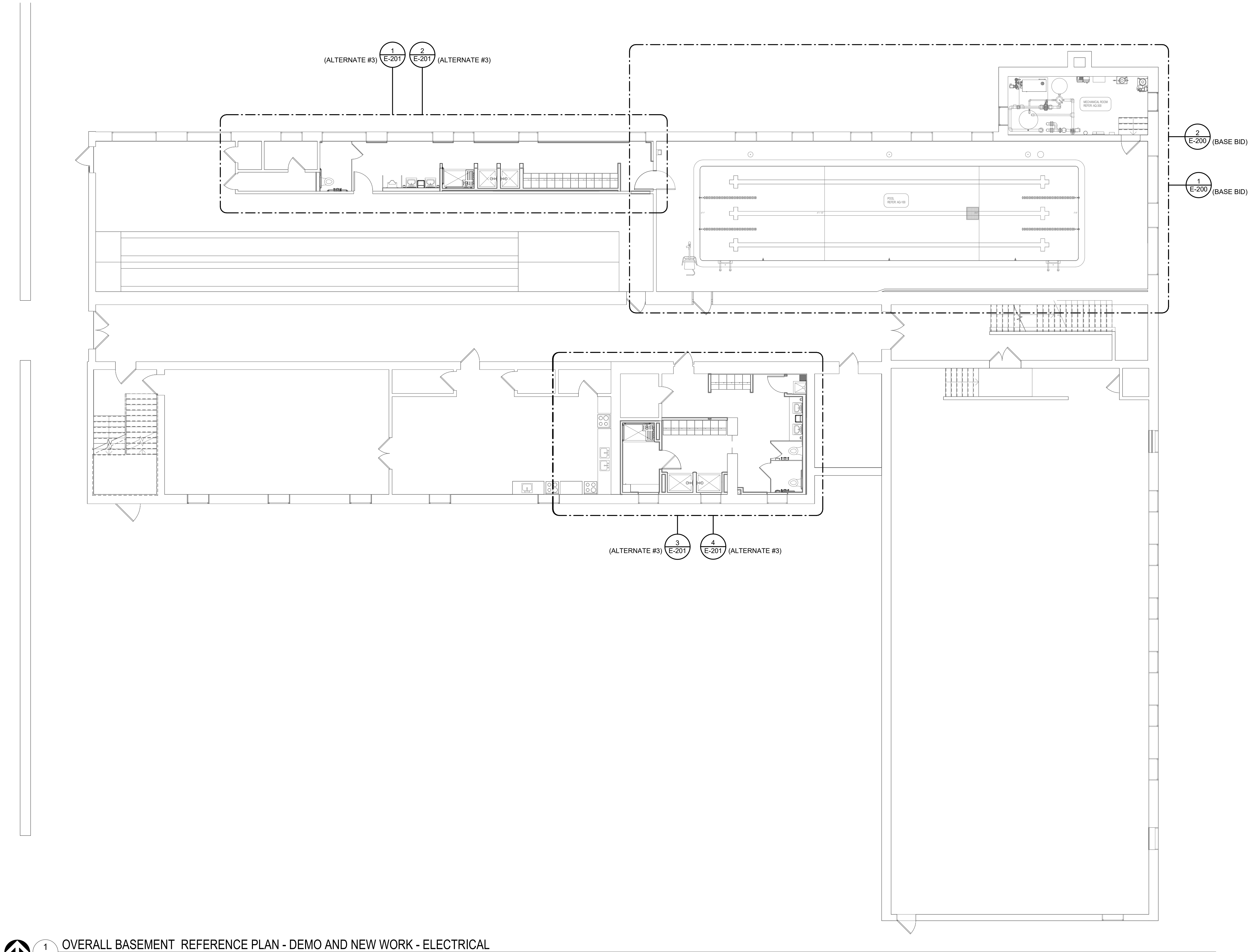
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SHEET TITLE:
**DETAILS AND
SCHEDULES -
MECHANICAL**

SHEET NUMBER:

M-501

39 OF 45 SHEETS
07/06/2022



 1 OVERALL BASEMENT REFERENCE PLAN - DEMO AND NEW WORK - ELECTRICAL
E-100 1/8" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
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REPAIR SWIMMING POOL

MISSOURI SCHOOL FOR
THE BLIND
3815 MAGNOLIA AVENUE
ST. LOUIS, MO

PROJECT # E2107-01
SITE# 2011
FACILITY # 5012011003,
501201104

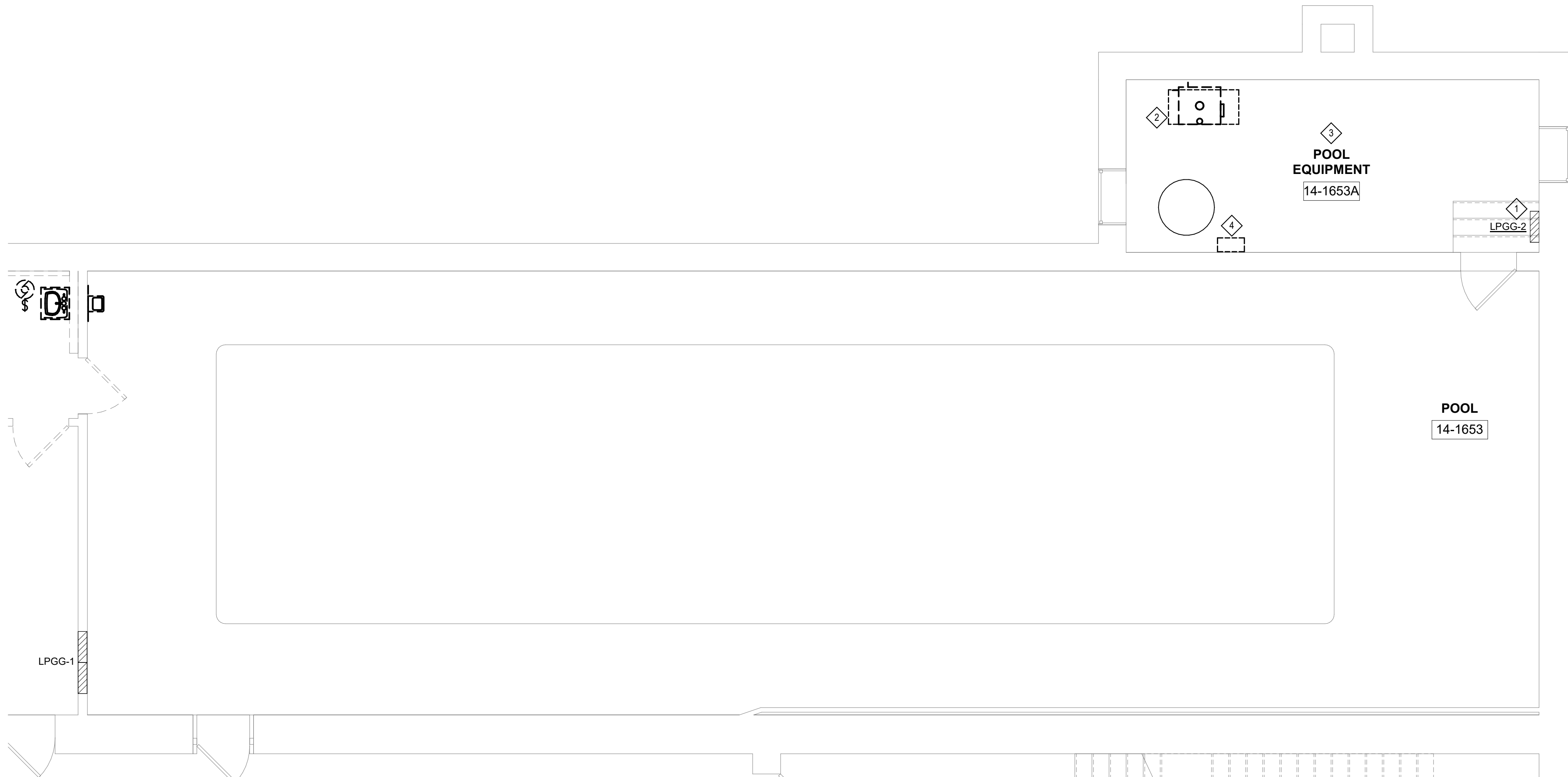
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CHECKED BY: CH
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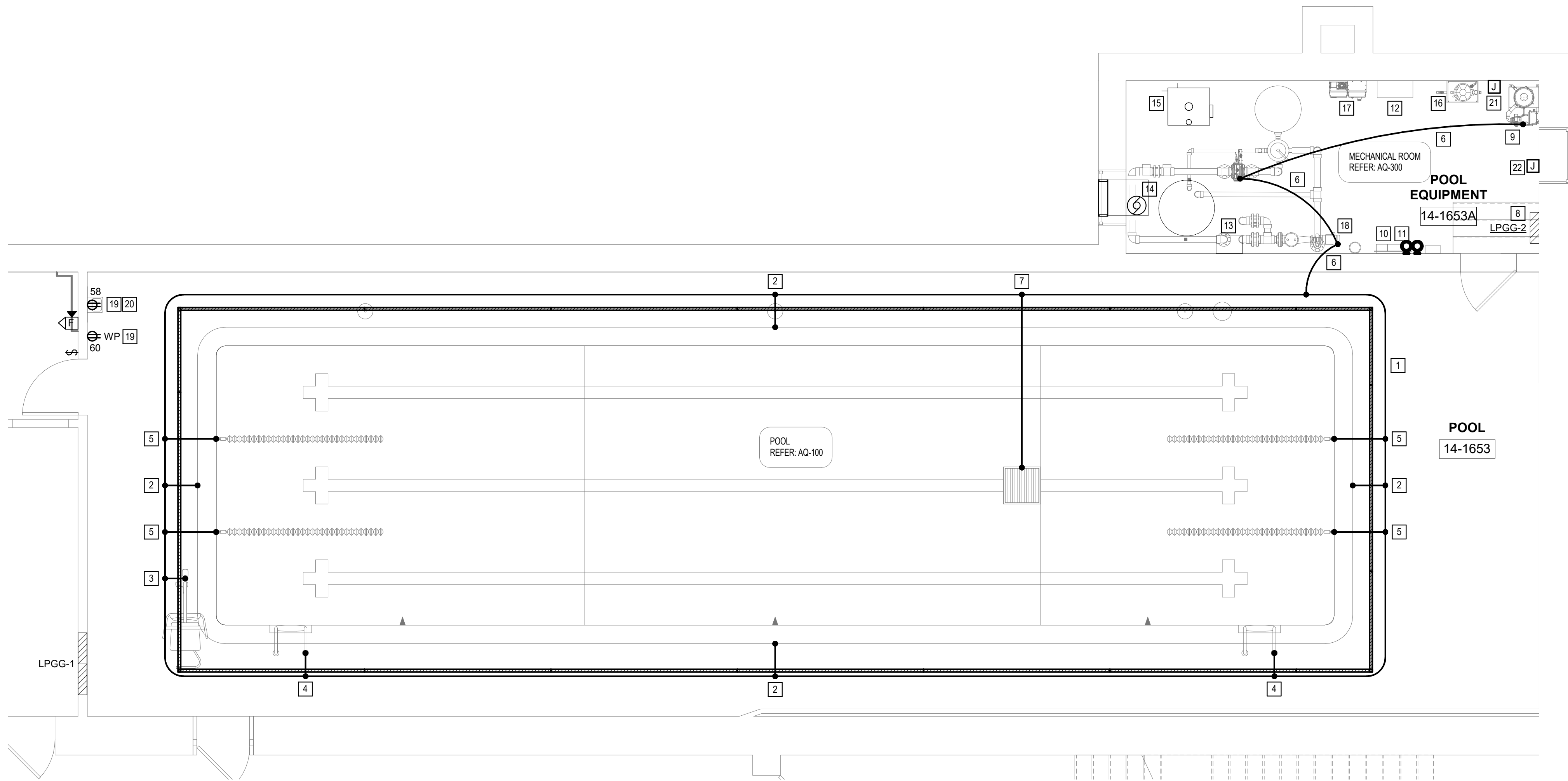
SHEET TITLE:
**OVERALL PLAN
- BASEMENT**

SHEET NUMBER:

E-100



1 POOL DEMOLITION PLAN - ELECTRICAL - BASE BID
1/4" = 1'-0"



2 POOL PLAN NEW - ELECTRICAL - BASE BID
1/4" = 1'-0"

GENERAL NOTES

- ALL WORK ON THIS SHEET SHALL BE PROVIDED UNDER BASE BID UNLESS NOTED OTHERWISE.
- USE #8 SOLID BARE COPPER WIRE FOR ALL BONDING CONNECTIONS IN POOL AREA. ALL CONDUCTOR-TO-CONDUCTOR AND CONDUCTOR-TO-STEEL CONNECTIONS SHALL BE EXOTHERMICALLY WELDED.
- USE LISTED CONNECTORS OR OTHER APPROVED METHODS AT BOND LOCATIONS IN POOL AREA.
- INFORMATION ON DRAWINGS WAS OBTAINED FROM CASUAL FIELD OBSERVATION. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BID.
- CONTRACTOR SHALL REPAIR AND/OR REROUTE CIRCUITS THAT ARE DISRUPTED BY DEMOLITION.
- CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING AS REQUIRED FOR EXECUTION OF WORK.
- ALL CIRCUITS NO LONGER IN USE AFTER DEMOLITION SHALL BE REMOVED TO THE NEAREST JUNCTION BOX AND CAPPED OFF.
- ALL NEW CIRCUITS ON THIS SHEET SHALL ORIGINATE FROM PANELBOARD LPGG-2 UNLESS NOTED OTHERWISE.
- ALL CONDUITS, SUPPORTS, HARDWARE, JUNCTION BOXES AND ENCLOSURES FOR CIRCUITS IN POOL ROOM AND POOL EQUIPMENT ROOM SHALL BE CORROSION-RESISTANT (PVC OR STAINLESS STEEL). EXISTING METALLIC CONDUITS SHALL NOT BE REUSED.
- CONTRACTOR SHALL REVIEW POOL EQUIPMENT DRAWINGS AND PROVIDE ALL POWER AND CONTROL WIRING PER MANUFACTURER'S REQUIREMENTS.
- CONTRACTOR SHALL REVIEW POOL EQUIPMENT WIRING SCHEMATIC ON SHEET AQ-400 AND PROVIDE ALL FIELD WIRING PER MANUFACTURER'S REQUIREMENTS

DEMOLITION KEYED NOTES

- EXISTING PANELBOARD IN CORROSIVE RESISTANT ENCLOSURE TO REMAIN
- DISCONNECT EXISTING GAS FIRED POOL WATER HEATER AND PUMP. REMOVE CIRCUIT TO PANELBOARD LPGG-2.
- DISCONNECT POWER TO EXISTING POOL EQUIPMENT TO BE DEMOLISHED AND REMOVE CIRCUITS TO PANELBOARD LPGG-2.
- DISCONNECT POWER TO EXISTING SUMP PUMP CONTROLLER TO BE REPLACED. REMOVE CIRCUIT TO PANELBOARD LPGG-2.

NEW WORK KEYED NOTES

- PROVIDE #8 SOLID COPPER RING AROUND POOL PERIMETER 18" - 24" AWAY FROM INSIDE WALL OF POOL ENCASED IN NEW CONCRETE DECK.
- BOND PERIMETER OF POOL TO POOL SHELL REINFORCEMENT STEEL AT (4) LOCATIONS AS SHOWN.
- BOND CHAIR LIFT TO PERIMETER BOND RING.
- BOND THE METALLIC PARTS OF POOL LADDERS TO PERIMETER BOND RING.
- BOND THE METALLIC PARTS OF LANE ANCHORS TO PERIMETER BOND RING.
- CONTINUE PERIMETER BOND RING TO PUMPS.
- BOND THE METALLIC PARTS OF POOL DRAIN TO PERIMETER BOND RING.
- ALL NEW CIRCUITS SHALL ORIGINATE FROM EXISTING PANEL LPGG-2. PROVIDE NEW CIRCUIT BREAKERS AS REQUIRED.
- PROVIDE COMBINATION SWITCHED RECEPTACLE FOR NEW CHLORINIZATION SYSTEM. EXTEND (2) #12 AND #12 GROUND IN 3/4" CONDUIT FROM CHEMICAL CONTROLLER. SEE POOL EQUIPMENT DRAWINGS FOR MORE INFORMATION.
- PROVIDE (2) 120V CONNECTIONS TO NEW CHEMICAL CONTROLLER. EXTEND (4) #12 AND #12 GND IN 3/4" CONDUIT TO CIRCUIT 22 & 24 IN PANELBOARD LPGG-2 AND PROVIDE (2) 20A/1P GFCI CIRCUIT BREAKERS. COORDINATE REQUIREMENTS WITH INSTALLATION OF EQUIPMENT. SEE POOL EQUIPMENT DRAWINGS FOR MORE INFORMATION.
- EXTEND (2) #12 AND #12 GND IN 3/4" CONDUIT FROM CHEMICAL CONTROLLER TO NEW CHLORINIZATION SYSTEM. SEE POOL EQUIPMENT DRAWINGS FOR MORE INFORMATION.
- PROVIDE 208V, SINGLE-PHASE CONNECTION NEW UV TREATMENT SYSTEM. EXTEND (2) #12 AND #12 GROUND IN 3/4" CONDUIT TO CIRCUIT 2/4 IN PANELBOARD LPGG-2.
- CONNECT NEW SUMP PUMP CONTROLLER. EXTEND (3) #10 AND #10 GND IN 3/4" CONDUIT TO PANELBOARD LPGG-2. SEE EQUIPMENT DATA SCHEDULE ON SHEET E-600 FOR MORE INFORMATION.
- PROVIDE CONNECTION TO NEW THRU-WALL EXHAUST FAN. EXTEND (2) #12 AND #12 GND IN 3/4" CONDUIT TO PANELBOARD LPGG-2. SEE EQUIPMENT DATA SCHEDULE ON SHEET E-600 FOR MORE INFORMATION.
- PROVIDE CONNECTION TO NEW GAS-FIRED POOL HEATER, INCLUDING 120V FIELD INTERCONNECTION WIRING BETWEEN BOILER COMPONENTS PER MANUFACTURER'S REQUIREMENTS. EXTEND (2) #12 AND #12 GND IN 3/4" CONDUIT TO PANELBOARD LPGG-2. SEE EQUIPMENT DATA SCHEDULE ON SHEET E-600 FOR MORE INFORMATION.
- PROVIDE COMBINATION SWITCHED RECEPTACLE FOR NEW ACID SYSTEM. EXTEND (2) #12 AND #12 GND IN 3/4" CONDUIT FROM CHEMICAL CONTROLLER. SEE POOL EQUIPMENT DRAWINGS FOR MORE INFORMATION.
- PROVIDE CONNECTION TO VARIABLE FREQUENCY DRIVE AND BYPASS PANEL FOR COMPETITION POOL RECIRCULATION PUMP. EXTEND (3) #10 AND #10 GND IN 3/4" CONDUIT TO CIRCUIT 25/27/29 IN PANELBOARD LPGG-2. EXTEND (3) #10 AND #10 GND IN 3/4" CONDUIT FROM THE VFD TO THE COMPETITION POOL RECIRCULATING PUMP AND CONNECT. SEE POOL EQUIPMENT DRAWINGS FOR MORE INFORMATION.
- MAKE CONNECTION TO COMPETITION POOL RECIRCULATING PUMP WITH CIRCUIT FROM VARIABLE FREQUENCY DRIVE AND BYPASS PANEL. SEE KEYED NOTE 17 THIS SHEET.
- OUTLET TO BE CIRCUITED TO NEW GFCI CIRCUIT BREAKER IN PANELBOARD LPGG-1.
- PROVIDE OUTLET FOR ELECTRIC WATER COOLER /BOTTLE FILLER. COORDINATE LOCATION WITH INSTALLATION OF EQUIPMENT.
- PROVIDE CONNECTION TO 4KW ELECTRIC UNIT HEATER DH-1. EXTEND (3) #12 AND #12 GND. IN 3/4" CONDUIT TO PANELBOARD LPGG-2. SEE EQUIPMENT DATA SCHEDULE ON SHEET E-600 FOR MORE INFORMATION.
- PROVIDE 120V CIRCUIT IN JUNCTION BOX FOR LOW VOLTAGE CONTROL TRANSFORMER FOR LOUVER LV-1. EXTEND (2) #12 AND #12 GND. IN 3/4" CONDUIT TO CIRCUIT 9 IN PANELBOARD LPGG-2.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

ENGINEER OF RECORD:



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MANAGEMENT, DESIGN
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DEPARTMENT OF
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DRAWN BY: MC

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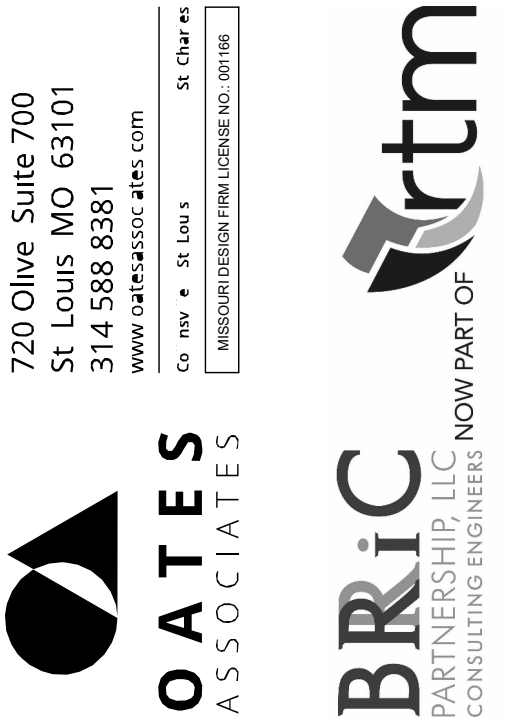
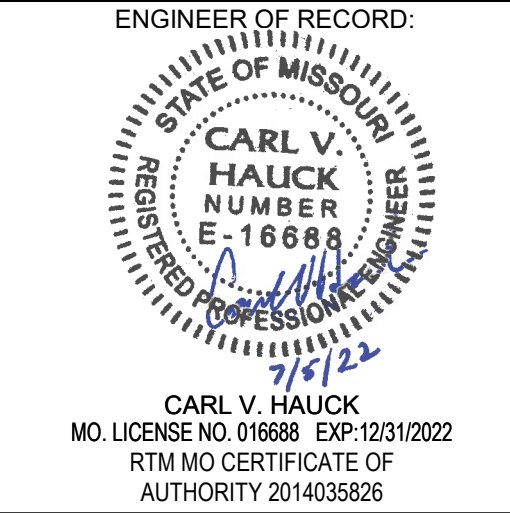
SHEET TITLE:

ENLARGED
POOL PLANS -
ELECTRICAL

SHEET NUMBER:

E-200

42 OF 45 SHEETS
07/06/2022



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CAD DWG FILE: E-600
DRAWN BY: Author
CHECKED BY: Checker
DESIGNED BY: Designer

SHEET TITLE:
**ELECTRICAL
SCHEDULES**

SHEET NUMBER:

E-600

LIGHT FIXTURE SCHEDULE

PLAN MARK	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	ACCESSORIES AND REMARKS	LUMINAIRE VOLTAGE	LIGHT SOURCE INFORMATION			MAXIMUM INPUT WATTS
						TYPE	LUMENS	COLOR TEMP	
A	4FT LED FIXTURE W/ LENS	LITHONIA	LBL4-4000LM-80CRI-35K-MIN10-GZT-MVOLT	FIXTURE SHALL BE LISTED FOR USE IN DAMP LOCATIONS.	MVOLT	LED	4000	3500K	32
		METALUX	4WSNLED-LD4-40SL-F-UNV-L835-CD1-U						
		COLUMBIA	LAWR-35LW-EU						
AE	4FT LED FIXTURE W/ LENS, EMERGENCY BATTERY	LITHONIA	LBL4-4000LM-80CRI-35K-MIN10-GZT-MVOLT-EL14L	PROVIDE EMERGENCY BATTERY. FIXTURE SHALL BE LISTED FOR USE IN DAMP LOCATIONS.	MVOLT	LED	4000	3500K	32
		METALUX	4WSNLED-LD4-40SL-F-UNV-EL14W-L835-CD1-U						
		COLUMBIA	LAWR-35LW-EU-ELL14						
B	4FT WALL-MOUNTED VANITY	AXIS	ARWLED-800-80-35-S-2-AP-UNV-DP-1	FIXTURE SHALL BE LISTED FOR USE IN DAMP LOCATIONS.	MVOLT	LED	3200	3500K	32
		METALUX	4BCLED-LD4-32SL-F-UNV-L835-CD1-U						
		COLUMBIA	W3B4-35VW-SFA-EDU						
C	4FT LED STRIP LIGHT WITH LENS	LITHONIA	CLX L48 5000LM SEF RDL MVOLT GZ10 35K 80CRI WH	FIXTURE SHALL BE LISTED FOR USE IN DAMP LOCATIONS.	MVOLT	LED	3000	3500K	20
		METALUX	4SNLED-LD5-30SL-LN-UNV-L835-CD1-U						
		COLUMBIA	LCL4-35ML-EU						
D	4" CYLINDER DOWNLIGHT	LITHONIA	LDN4CYL-35/10-L04AR-LSS-MVOLT-GZ10-PM-DWHG	PROVIDE SURFACE-MOUNTED BACKBOX AND PENDANT STEM. STEM LENGTH WILL BE 24" MAXIMUM, BUT WILL BE CONFIRMED DURING THE SUBMITTAL PROCESS. FIXTURE SHALL BE LISTED FOR USE IN DAMP LOCATIONS.	MVOLT	LED	1000	3500K	11
		HALO COMMERCIAL	HCC4S10D010MW-HCC8PXXMW-HM412835-41MDC						
		WILLIAMS	4CR-L12/835-WHT-DIM-UNV-OM-CS-PM24						
F	2FT WALL MOUNTED FIXTURE	LITHONIA	WL2-22L-GZ1-LP835-NOC	FIXTURE SHALL BE LISTED FOR USE IN DAMP LOCATIONS.	MVOLT	LED	2120	3500K	21
		METALUX	2BCLED-LD4-24HL-F-UNV-L835-CD1-U						
		COLUMBIA	W3B2-35MW-SFA-EDU						

LIGHTING CONTROL SEQUENCE GENERAL NOTES:

- A. CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE, CLIPS, ANGLES, FRAMES, ETC AS REQUIRED TO MOUNT THE FIXTURES IN OR ON THE SURFACES THEY ARE TO BE INSTALLED.
B. REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS OF LIGHT FIXTURES.
C. WHEN INSTALLING LUMINAIRES, CONTRACTOR SHALL USE THE LIGHT FIXTURE MANUFACTURER'S MOUNTING HARDWARE AND FOLLOW ALL MANUFACTURER'S INSTALLATION DIRECTIONS.
D. ALL RECESSED DOWNLIGHTS MUST BE INSTALLED SO THAT THE BOTTOM OF THE THROAT IS EVEN WITH THE FINISHED CEILING PLANE. THE OVERLAPPING FLANGE MUST THEN FIT FLUSH TO THE CEILING PLANT/THROAT. NO LIGHT LEAK MUST BE VISIBLE. ALL MISCELLANEOUS HARDWARE ABOVE THE CEILING PLANE TO ACCOMPLISH THE ABOVE SHALL BE INCLUDED IN THE BASE BID.
E. ALL RECESSED DOWNLIGHTS SHALL HAVE SELF-FLANGED REFLECTORS.
F. ALL LIGHT FIXTURES SHALL HAVE A U.L. LABEL.
G. WHEN FIXTURES ARE INSTALLED IN CONTINUOUS ROWS 2 OR MORE, FIXTURES SHALL BE APPROVED FOR USE AS WIREWAY.
H. REFER TO DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION CONCERNING FIXTURES, FINISHES, DRIVERS, ETC.
I. INDOOR LED COLOR TEMPERATURE SHALL BE 3500 KELVIN. OUTDOOR LED COLOR TEMPERATURE SHALL BE 3500 KELVIN, UNLESS NOTED OTHERWISE.
J. VERIFY CEILING CONDITIONS AND COORDINATE LIGHT FIXTURE MOUNTING HARDWARE AND TRIMS NEEDED PRIOR TO ORDERING.
K. VERIFY QUANTITIES, MODEL NUMBERS AND DESCRIPTIONS WITH MANUFACTURERS PRIOR TO PLACING ORDER.
L. CATALOG NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURE AND CATALOG NUMBERS ONLY. CONTRACTOR SHALL CONSIDER THE COMPLETE DESCRIPTION, NOTES, SPECIFICATIONS, MOUNTING AND INSTALLATION CONDITIONS IN CONJUNCTION WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURER LISTED AR THE BASIS OF DESIGN.
M. CONTRACTOR SHALL PROVIDE ALL LIGHT FIXTURES UNLESS NOTED OTHERWISE.
N. EMERGENCY BATTERIES FOR LIGHT FIXTURES SHALL BE CONNECTED TO THE UNSWITCHED LIGHTING CIRCUIT IN THE SAME ROOM/AREA
O. LUMENS AND INPUT WATTS SHOWN ON THE LIGHT FIXTURE SCHEDULE ARE FOR REFERENCE ONLY. CONTRACTOR SHALL PERFORM LIGHTING CALCULATIONS TO DETERMINE THE REQUIRED LUMEN OUTPUT FOR EACH ROOM/SPACE TO MEET IES LIGHT LEVEL RECOMMENDATIONS.

EQUIPMENT DATA SCHEDULE

PLAN MARK	EQUIPMENT	LOCATION	FURNISH BY (1)	MOTOR OR EQUIPMENT DATA			FED FROM	BRANCH CIRCUIT (3)	DISCONNECT SWITCH AT EQUIPMENT					STARTER								REMARKS	
				HP/KW/A (2)	VOLTS/ PHASE	INST. BY/ CONN. BY (1)			TYPE (4)	NEMA ENCLOS. TYPE	SWITCH/ FUSE SIZE	FURNISH. BY (1)	INST. BY/ CONN. BY (1)	NEMA SIZE	TYPE (5)	NEMA ENCLOS. TYPE	SWITCH/ FUSE SIZE	ACCESS. (6)	FURNISH. BY (1)	CONN. BY (1)	CONTROL WIRING BY (1)		
EF-1	THRU-WALL EXHAUST FAN	POOL EQUIPMENT 14-1653A	23	---	120/ 1	23 / 26	<u>LPGG-2</u>	21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NOTE 6
PH-1	POOL HEATER	POOL EQUIPMENT 14-1653A	22	---	120/ 1	22 / 26	<u>LPGG-2</u>	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NOTE 6
SP-1	SUMP PUMP	POOL EQUIPMENT 14-1653A	22	---	208/ 3	22 / 26	<u>LPGG-2</u>	26 / 28 / 30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NOTE 6
DH-1	4KW ELECT. DUCT HEATER	POOL EQUIPMENT 14-1653A	23	---	208/ 3	23 / 26	<u>LPGG-2</u>	1 / 3 / 5	---	---	---	---	---	---	---	---	---	---	---	---	23	---	NOTE 6

(1) SPECIFICATION DIVISION NUMBER:
DIVISION 22 - PLUMBING
DIVISION 23 - MECHANICAL
DIVISION 26 - ELECTRICAL
GC - GENERAL CONTRACTOR

(2) HORSEPOWER (HP) IS SHOWN
UNLESS AMPS(A) OR KILOWATTS (KW)
ARE CALLED OUT.

ALL MAGNETIC AND SOLID STATE STARTERS ARE TO BE EQUIPPED WITH AUXILIARY CONTACTS, PILOT LIGHTS
AND FUSED CONTROL POWER TRANSFORMERS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(3) REFER TO FEEDER SCHEDULE WHEN
THIS COLUMN CONTAINS A FEEDER
DESIGNATION INSTEAD OF
CONDUCTOR SIZE.

(4) NF - NON FUSED
F- FUSED
TOG - TOGGLE

(5) STARTER TYPE:

- COMB1 - COMBINATION FULL VOLTAGE NON-REVERSING MAGNETIC
STARTER WITH FUSED DISCONNECT SWITCH.
COMB2 - COMBINATION FULL VOLTAGE NON-REVERSING MAGNETIC
STARTER WITH FUSED DISCONNECT SWITCH.
COMB3 - COMBINATION FULL VOLTAGE NON-REVERSING MAGNETIC
STARTER WITH THERMAL MAGNETIC MOLDED CASE CIRCUIT
BREAKER DISCONNECT.
COMB4 - COMBINATION FULL VOLTAGE NON-REVERSING MAGNETIC
STARTER WITH MAGNETIC ONLY MOLDED CASE CIRCUIT
BREAKER DISCONNECT.

- FVNR - FULL VOLTAGE NON-REVERSING MAGNETIC STARTER
WITHOUT DISCONNECT.
MAN - MANUAL STARTER WITH PILOT LIGHT.
SDS - STAR DELTA STARTER.
PWC - PREWIRED CONTROL PANEL.
VFD - VARIABLE FREQUENCY DRIVE.
2S2W - 2 SPEED, 2 WINDING
2S1W - 2 SPEED, SINGLE WINDING

(6) ACCESSORIES:

- HOAP - HOA WITH PILOT LIGHT
PB - START/STOP PUSH BUTTON
(MOMENTARY CONTACT)

(7) KEY TO REMARKS:

- (1) FIRE ALARM INTERLOCK
(2) INTEGRAL DISCONNECT SWITCH
(3) MOUNT DISCONNECT SWITCH ON EQUIPMENT HOUSING
(4) INTEGRAL MOTOR STARTER/VFD
(5) POWER TO THIS UNIT IS FED FROM THE OUTDOOR UNIT
(6) NO DISCONNECT REQUIRED. EQUIPMENT IS WITHIN
SIGHT OF PANEL.

LIGHTING CONTROL SEQUENCE OF OPERATION

SPACE TYPE	ROOM NAME/NUMBER	MANUAL ON/OFF WALL SWITCH	DIMMER SWITCH	OVERRIDE SWITCH (2-HOUR TIMER)	MULTI-ZONE SWITCH	MULTI-ZONE SCENE (GRAPHIC)	TIME SCHEDULE ON	TIME SCHEDULE OFF	OCCUPANCY SENSOR VACANCY MODE	OCCUPANCY SENSOR OCCUPANCY MODE	INTERIOR DAYLIGHT SENSOR (ON/OFF AND DIMMING)	EXTERIOR PHOTO CONTROL ON	STAND-ALONE ROOM CONTROLS	OCCUPANCY TIME OUT PERIOD (MINUTES)	PLUGLOAD CONTROLLED	NETWORKED	DIMMING LEVELS SET BY PROGRAMMING	CONTROLLED BY MASTER SWITCH	DUSK TO DAWN	REMARKS
LOCKER ROOM	BOYS LOCKER ROOM / 14-1651C	X	X	-	-	-	-	-	-	X	-	-	X	30	-	-	-	-	-	1
LOCKER ROOM	GIRLS LOCKER ROOM / 14-1654C	X	X	-	-	-	-	-	-	X	-	-	X	30	-	-	-	-	-	2 3

LIGHTING CONTROL SEQUENCE GENERAL NOTES:

- A. THE LIGHTING CONTROL SYSTEM SHALL COMPLY WITH THE 2018 IECC. THE SYSTEM SHALL INCLUDE BUT IS NOT LIMITED TO INDIVIDUAL
ROOM CONTROLS (WALL SWITCH, OCCUPANCY SENSORS, POWER PACKS, ETC.), OCCUPANCY SENSORS, DAYLIGHT SENSORS, WALL
SWITCHES (DIMMER, SCENE CONTROLLERS, OVERRIDE SWITCHES), NETWORK SWITCH AND BRIDGES, ETC. FOR A COMPLETE
OPERATIONAL INSTALLATION.
B. STAND-ALONE ROOM CONTROLS SHALL INCLUDE ALL NECESSARY COMPONENTS SUCH AS WALL SWITCHES (ON/OFF, DIMMER, SCENE
CONTROLLER, ETC.), OCCUPANCY SENSOR (CEILING OR WALL), POWER PACKS, LOW AND LINE VOLTAGE WIRING, ETC. FOR A COMPLETE
WORKING INSTALLATION.
C. OCCUPANCY SENSORS SHALL PROVIDE COMPLETE COVERAGE OF EACH SPACE INDICATED. CONTRACTOR'S SUBMITTAL PACKAGE
SHALL INCLUDE OCCUPANCY COVERAGE MAP TO CONFIRM ADEQUATE COVERAGE. ADD OCCUPANCY SENSORES AS REQUIRED.
D. CONTRACTOR SHALL COORDINATE TIME SCHEDULING WITH THE OWNER FOR LIGHTING TO BE CONTROLLED BY A TIME SCHEDULE.

LIGHTING CONTROL SEQUENCE REMARKS:

- 1 ACTIVATION OF ANY MOTION SENSOR IN THE BOYS LOCKER ROOM
SHALL TURN ON ALL LIGHTING FIXTURES WITHIN THE LOCKER ROOM.
2 ACTIVATION OF ANY MOTION SENSOR IN THE GIRLS LOCKER ROOM
SHALL TURN ON ALL LIGHTING FIXTURES WITHIN THE LOCKER ROOM
EXCEPT THE ISOLATED SHOWER AREA.
3 ACTIVATION OF THE MOTION SENSOR IN THE GIRLS LOCKER ROOM
ISOLATED SHOWER AREA SHALL TURN ON ALL LIGHTING FIXTURES
WITHIN THE LOCKER ROOM.

Branch Panel: LPGA-1														
Location: BOWLING ALLEY 14-1651					Volts: 120/208 Wye					A.I.C. Rating: 10000				
Supply From:					Phases: 3					Mains Type: MLO				
Mounting: Recessed					Wires: 4					Mains Rating: 600 A				
Enclosure: Type 1										MCB Rating: 1 A				
Notes:														
CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT	
1	POOL LIGHTS	20 A	1	0 VA	0 VA					1	20 A	EXISTING LOAD	2	
3	POOL LIGHTS	20 A	1			0 VA	0 VA			1	20 A	CONSENSATE PUMP	4	
5	POOL LIGHTS	20 A	1					0 VA	0 VA	1	20 A	EXISTING LOAD	6	
7	POOL LIGHTS	20 A	1	0 VA	0 VA					1	20 A	HEATER-BOYS LOCKER RM	8	
9	EXISTING LOAD	20 A	1			0 VA	0 VA			1	20 A	ROOM 1003E WEST A/C UNIT	10	
11	COM OUTLETS RM 110E	20 A	1					0 VA	0 VA	1	20 A	EXISTING LOAD	12	
13	EXISTING LOAD	20 A	1	0 VA	0 VA					1	20 A	EXISTING LOAD	14	
15	EAST OUTLETS RM 110	20 A	1			0 VA	0 VA			1	20 A	EXISTING LOAD	16	
17	EXISTING LOAD	20 A	1					0 VA	0 VA	1	20 A	EXISTING LOAD	18	
19	BOWLING ALLEY OVERHEAD BLACK LIGHTS	20 A	1	0 VA	0 VA					1	20 A	LANE 1 PIN SETTER	20	
21	EXISTING LOAD	20 A	1			0 VA	0 VA			1	20 A	BOWLING ALLEY LIGHTS	22	
23	LOCKER LIGHTS	20 A	1					0 VA	0 VA	1	20 A	LANE 2 PIN SETTER	24	
25	FIRE DOORS	20 A	1	0 VA	0 VA					1	20 A	GIRLS SHOWER ROOM	26	
27	LOCKER RM LTS	20 A	1			0 VA	0 VA			1	20 A	E. BASEMENT HALL	28	
29	EXISTING LOAD	20 A	1					0 VA	0 VA	1	20 A	BOWLING ALLEY LIGHTS	30	
31	EXISTING LOAD	20 A	1	0 VA	0 VA					2	30 A	EXISTING LOAD	32	
33	EXISTING LOAD	20 A	1			0 VA	0 VA						34	
35	EXISTING LOAD	20 A	1					0 VA	0 VA				36	
37	EXISTING LOAD	20 A	1	0 VA	0 VA					3	100 A	POOL BOILER ROOM	38	
39						0 VA	0 VA						40	
41	MINI SPLIT CONDENSER	200 A	3					0 VA	0 VA	1	20 A	EXISTING LOAD	42	
43				0 VA	0 VA					1	20 A	SCORE TABLE	44	
45	EXISTING LOAD	20 A	1			0 VA	0 VA			1	20 A	EXISTING LOAD	46	
47	EXISTING LOAD	20 A	1					0 VA	600 VA	1	20 A	FLUSH VALVES - BOY'S LOCKER ROOM	48	
49	EXISTING LOAD	20 A	1	0 VA	1500...					1	20 A	HAND DRYER - BOY'S LOCKER ROOM	50	
51	EF-8	15 A	1			0 VA	1500...			1	20 A	HAND DRYER - BOY'S LOCKER ROOM	52	
53	EF-7	15 A	2					0 VA	360 VA	1	20 A	RECEPTS - BOY'S LOCKER ROOM, POOL ROOM	54	
55				0 VA	195 VA					1	20 A	LIGHTING - BOY'S LOCKER ROOM	56	
57	SPACE	--	--			0 VA	800 VA			1	20 A	EWG/BOTTLE FILLER - POOL ROOM	58	
59	SPACE	--	--					0 VA	180 VA	1	20 A	RECEPTACLE - POOL ROOM	60	
61	SPACE	--	--	0 VA	0 VA					--	--	SPACE	62	
63	SPACE	--	--			0 VA	0 VA			--	--	SPACE	64	
65	SPACE	--	--					0 VA	0 VA	--	--	SPACE	66	
67	SPACE	--	--	0 VA	0 VA					--	--	SPACE	68	
69	SPACE	--	--			0 VA	0 VA			--	--	SPACE	70	
71	SPACE	--	--					0 VA	0 VA	--	--	SPACE	72	
73				0 VA	0 VA					--	--	SPACE	74	
75	FCU-1	15 A	3			0 VA	0 VA			--	--	SPACE	76	
77								0 VA	0 VA	--	--	SPACE	78	
79				0 VA	0 VA					--	--	SPACE	80	
81	DHU-1	50 A	3			0 VA	0 VA			--	--	SPACE	82	
83								0 VA	0 VA	--	--	SPACE	84	
Total Load:				1692 VA		2300 VA		1140 VA						
Total Amps:				15 A		20 A		10 A						
Legend:														
Load Classification		Connected Load		Demand Factor		Estimated Demand		Panel Totals						
Lighting		195 VA		125.00%		243 VA								
Power		3600 VA		100.00%		3600 VA		Total Conn. Load: 5132 VA						
Receptacle		1340 VA		100.00%		1340 VA		Total Est. Demand: 5180 VA						
								Total Conn.: 14 A						
								Total Est. Demand: 14 A						
Notes:														

KEYED NOTES	
1	PROVIDE NEW CIRCUIT BREAKER.
2	PROVIDE NEW GFCI CIRCUIT BREAKER.
3	PROVIDE NEW CIRCUIT BREAKER TO REPLACE EXISTING.

Branch Panel: LPGA-2

Location: POOL EQUIPMENT 14-1653A

Supply From:

Mounting: Surface

Enclosure: Type 4X

Volts: 120/208 Wye

Phases: 3

Wires: 4

A.I.C. Rating: 10000

Mains Type: MLO

Mains Rating: 100 A

MCB Rating: 0 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1				1334...	750 VA								2
3	DH-1	20 A	3			1334...	750 VA			2	20 A	UV TREATMENT SYSTEM	4
5								1334...	0 VA	1	20 A	POOL EXHAUST FANS	6
7	109E PRINTER	20 A	1	0 VA	0 VA					1	20 A	SPARE	8
9	LV-1 TRANSFORMER	20 A	1			100 VA	0 VA			1	20 A	CUSTODIAL SUP. REC.	10
11	LIGHTS	20 A	1					0 VA	0 VA	1	20 A	RECEP. AT PUMP	12
13	BOILER AND CONDENS. PUMP	20 A	1	0 VA	0 VA								14
15	CUSTODIAL SUP. REC.	20 A	1			0 VA	0 VA			2	20 A	A.C. JACKIE FOOTE	16
17	A.C. FOR PRINTER 109E	20 A	1					0 VA	0 VA	1	20 A	EXISTING LOAD	18
19	NEW PUMPS CONDENSATE	20 A	1	0 VA	0 VA					--	--	SPACE	20
21	EF-1	20 A	1			53 VA	1920...			1	20 A	CHEMICAL CONTROLLER	22
23	POOL HEATER	20 A	1					1452...	1920...	1	20 A	CHEMICAL CONTROLLER	24
25				2005...	900 VA								26
27	POOL RECIRCULATION PUMP VFD	30 A	3			2005...	900 VA			3	30 A	SUMP PUMP	28
29								2005...	900 VA				30
Total Load:				4989 VA		7062 VA		7611 VA					
Total Amps:				42 A		62 A		66 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Spare	19662 VA	100.00%	19662 VA		
				Total Conn. Load:	19662 VA
				Total Est. Demand:	19662 VA
				Total Conn.:	55 A

Notes:

Branch Panel: LPGG-3													
Location: CLOSET 14-1652B						Volts: 120/208 Wye				A.I.C. Rating: 10000			
Supply From:						Phases: 3				Mains Type: MLO			
Mounting: Surface						Wires: 4				Mains Rating: 225 A			
Enclosure: Type 1										MCB Rating: 0 A			
Notes:													
CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1				0 VA	0 VA								2
3	RANGE	60 A	3			0 VA	0 VA			3	15 A	FCU-2	4
5								0 VA	0 VA				6
7	FLUSH VALVES - GIRL'S LOCKER ROOM	20 A	1	600 VA	0 VA								8
9	HAND DRYER - GIRL'S LOCKER ROOM	20 A	1			1500...	0 VA			3	100 A	H.E. RM #3 FEED	10
11	HAND DRYER - GIRL'S LOCKER ROOM	20 A	1					1500...	0 VA				12
13	RANGE	60 A	2	0 VA	0 VA	0 VA	0 VA			1	15 A	EF-9	14
15	RECEPTS - GIRL'S LOCKER ROOM	20 A	1			0 VA	0 VA			--	--	SPACE	16
19	LIGHTS - GIRL'S LOCKER ROOM	20 A	1	195 VA	0 VA			900 VA	0 VA	2	60 A	EXISTING LOAD	18
21	LIGHTS-BIG ROOM & REC EXHAUST FAN	20 A	1			0 VA	0 VA			1	20 A	LIGHTS-HALL	20
23	LIGHTS-KITCHEN	20 A	1					0 VA	0 VA	1	20 A	GFI BY SLOP SINK	24
25	LIGHTS-CLOSET - REC. COUNTER	20 A	1	0 VA	0 VA					1	20 A	REC.-COUNTER TOP EXHAUST FAN	26
27	REC.-KITCHEN CLOCK,REFRIG.	20 A	1			0 VA	0 VA			1	20 A	REC.-GIRLS SHOWER ROOM	28
29	REC.-GIRLS SHOWER ROOM	20 A	1					0 VA	0 VA	1	20 A	REC.-GIRLS SHOWER ROOM	30
31	REC.-GIRLS SHOWER ROOM	20 A	1	0 VA	0 VA					1	20 A	REC.-GIRLS SHOWER ROOM	32
33	106E A/C UNIT	20 A	1			0 VA	0 VA			1	20 A	HAIR DRYER 34&36 208	34
35	104E A/C UNIT	20 A	1					0 VA	0 VA	1	20 A	HAIR DRYER 34&36 208	36
37	RM 104 N&E WALL	20 A	1	0 VA	0 VA					1	20 A	HAIR DRYER 38&40	38
39	RM 100 N. WALL	20 A	1			0 VA	0 VA			1	20 A	HAIR DRYER 38&40	40
41	RM 104 W. WALL	20 A	1					0 VA	0 VA	1	20 A	RM 104 W. WALL	42
43	EXISTING LOAD	20 A	1	0 VA	0 VA					1	20 A	RM 104 S. WALL	44
45	CONDENSATE PUMP-GIRLS LOCKER RM	20 A	1			0 VA	0 VA			1	20 A	8E-LIGHT	46
47	CUSTODIAL A/C	20 A	2					0 VA	0 VA	1	20 A	EXISTING LOAD	48
49	EXISTING LOAD	20 A	1	0 VA	0 VA					--	--	EXISTING LOAD	50
51	EXISTING LOAD	20 A	1			0 VA	0 VA			--	--	SPACE	52
53	SPACE	--	--					0 VA	0 VA	--	--	SPACE	54
55	NO BUS	--	--	0 VA	0 VA					--	--	NO BUS	56
57	NO BUS	--	--			0 VA	0 VA			--	--	NO BUS	58
59	NO BUS	--	--					0 VA	0 VA	--	--	NO BUS	60
Total Load:				793 VA		1500 VA		2400 VA					
Total Amps:				7 A		13 A		21 A					
Legend:													
Load Classification		Connected Load		Demand Factor		Estimated Demand		Panel Totals					
Lighting		195 VA		125.00%		243 VA							
Power		3600 VA		100.00%		3600 VA				Total Conn. Load:		4692 VA	
Receptacle		900 VA		100.00%		900 VA				Total Est. Demand:		4740 VA	
										Total Conn.:		13 A	
										Total Est. Demand:		13 A	
Notes:													