

IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION DRAWINGS
FOR
OFFICE & STORAGE BUILDING
AT
LAKE WAPELLO STATE PARK
DAVIS COUNTY, IOWA

PROJECT # 23-05-26-01

PLANS PREPARED BY
LAND AND WATERS BUREAU

CONSERVATION AND RECREATION DIVISION



SHEET INDEX

SHEET NO.	SHEET TITLE
	ARCHITECTURAL
A-001	COVER SHEET
A-002	WALL TYPES, NOTES & SYMBOLS
A-003	PROJECT LOCATION
	CIVIL
C1	SURVEY/DIMENSION PLAN
C2	GRADING/UTILITY PLAN
C3	DETAILS
C4	SANITARY/SEPTIC PLAN
	ARCHITECTURAL
A-010	ARCHITECTURAL SITE DETAILS
A-020	LIFE SAFETY PLAN
A-100	REFERENCE FLOOR PLAN
A-101	DIMENSION FLOOR PLAN
A-110	REFLECTED CEILING
A-200	EXTERIOR ELEVATIONS
A-201	EXTERIOR ELEVATIONS
A-300	BUILDING SECTIONS AND ROOF DETAILS
A-301	BUILDING SECTIONS
A-400	ENLARGED FLOOR PLAN
A-401	INTERIOR ELEVATIONS & MILLWORK SECTIONS
A-600	FINISH, DOOR & WINDOW SCHEDULES
	MECHANICAL
M-000	MECHANICAL GENERAL NOTES AND SYMBOLS
M-100	FLOOR PLAN MECHANICAL
M-200	MECHANICAL DETAILS
M-300	MECHANICAL SCHEDULES
	PLUMBING
P-100	FLOOR PLANS - PLUMBING
P-200	PLUMBING DETAILS
P-300	PLUMBING SCHEDULES
	ELECTRICAL
E-000	ELECTRICAL NOTES
E-001	ELECTRICAL SITE PLAN
E-200	ELECTRICAL PLANS
E-201	LIGHTING PLANS
E-300	ONE-LINE DIAGRAM
E-400	ELECTRICAL SCHEDULES

I hereby certify that this architectural document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Architect under the laws of the State of Iowa.
 Digitally signed by Ryan E Richey
 DN: cn=Brett A Johnson, o=Iowa Department of Natural Resources, ou=Engineering, email=Brett.A.Johnson@dnr.iowa.gov, c=US, date=2023.03.21 21:48:25-0500

Ryan E Richey
 RYAN E. RICHEY DATE
 My license renewal date is June 30, 2023.
 Pages or sheets covered by this seal:
 A-001 - A-600

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.
 Digitally signed by Brett A Johnson
 DN: cn=Brett A Johnson, o=Iowa Department of Natural Resources, ou=Engineering, email=Brett.A.Johnson@dnr.iowa.gov, c=US, date=2023.03.21 21:48:25-0500

Brett A. Johnson March 21, 2023
 BRETT A. JOHNSON/IOWA REG. NO. 13653 DATE
 MY LICENSE RENEWAL DATE IS DECEMBER 31, 2023
 PAGES OR SHEETS COVERED BY THIS SEAL:
 C1 - C4

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.
 Digitally signed by Chad D Bass
 DN: cn=Chad D Bass, o=Iowa Department of Natural Resources, ou=Engineering, email=Chad.D.Bass@dnr.iowa.gov, c=US, date=2023.03.21 21:48:25-0500

Chad D Bass
 CHAD D. BASS DATE
 My license renewal date is DECEMBER 31, 2023.
 Pages or sheets covered by this seal:
 M-000 - P-300

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.
 Digitally signed by James R Deeds IV
 DN: cn=James R Deeds IV, o=Iowa Department of Natural Resources, ou=Engineering, email=James.R.Deeds.IV@dnr.iowa.gov, c=US, date=2023.03.21 21:48:25-0500

James R. Deeds IV
 JAMES R. DEEDS IV DATE
 My license renewal date is DECEMBER 31, 2024.
 Pages or sheets covered by this seal:
 E-000 - E-400

BID ITEMS

ITEM #	ITEM DESCRIPTION	ESTIMATED QUANTITY
1	MOBILIZATION	1 LS
2	CONSTRUCTION STAKING	1 LS
3	NPDES GENERAL PERMIT #2	1 LS
4	GRADING	1 LS
5	8" FILTER SOCK	420 LF
6	SEEDING, FERTILIZING AND MULCHING	1 LS
7	CLASS A CRUSHED STONE	855 TONS
8	SANITARY/SEPTIC/SAND FILTER SYSTEM	1 LS
9	12" RCP CLASS III	104 LF
10	12" RCP CLASS III FES	4 EA
11	1" TYPE K COPPER WATER SERVICE	80 LF
12	4X4X1 TAPPING TEE	1 EA
13	1" CURB STOP	1 EA
14	1" LP SERVICE LINE	60 LF
15	BLACK PVC COATED CHAIN LINK FENCING	6 LF
16	BLACK PVC COATED CHAIN LINK FENCING 12' SWING GATE	1 EA
17	6" NON-REINFORCED PCC PAVEMENT	32 SY
18	5" NON-REINFORCED PCC SIDEWALK	27.5 SY
19	PRECAST CONCRETE PARKING WHEEL STOPS	4 EA
20	PARKING SPACE CROSS HATCH PAINT STRIPING	1 LS
21	HANDICAP SIGNAGE	1 LS
22	OFFICE / SHOP BUILDING AND ALL ASSOCIATED ITEMS	1 LS
23	LP TANK, FUEL TANK, AND PAD	1 LS
24	TRAFFIC BOLLARDS AND SLEEVES	14 EA
25	MICROWAVE AND REFRIGERATOR	1 LS
26	WASHER AND DRYER	1 LS

PROJECT DATA - OFFICE BUILDING

OCCUPANT LOAD:	MEANS OF EGRESS:
GROUP B - BUSINESS BUSINESS AREAS - 750 SF GROSS (IBC TABLE 1004.1.1)	MIN. REQUIRED # EXITS = 2 EXITS PER LEVEL (IBC TABLE 1021.1) MAX TRAVEL DISTANCE = 200' (IBC 1016.1) DEAD-END CORRIDOR WIDTH = 20" MAX. (IBC 1018.4) MIN. CORRIDOR WIDTH = 36" CLEAR MIN. CLEAR OPENINGS FOR EXIT DOORS = 34" (ACTUAL 32")
GROUP S - STORAGE / ACCESSORY MECHANICAL/AUX AREAS - 192 SF GROSS (IBC TABLE 1004.1.1) GARAGE AREAS - 2,453 SF GROSS	FIRE EXTINGUISHERS: THE NUMBER AND LOCATION OF FIRE EXTINGUISHERS TO BE DETERMINED BY THE FIRE MARSHAL PRIOR TO CERTIFICATE OF OCCUPANCY.
BUSINESS 750 SF / 100 = 7.5 = 8 OCCUPANTS ACCESSORY - MECH. 192 SF / 300 = .64 = 1 OCCUPANT GARAGE - STORAGE 2,453 SF / 300 = 8.18 = 9 OCCUPANTS	BUILDING: ADDRESS: LAKE WAPELLO STATE PARK 15248 CAMPGROUND ROAD DRAKESVILLE, IA 52552 DAVIS COUNTY
TOTAL OCCUPANT LOAD = 18 OCCUPANTS	USE - OFFICE / STORAGE BUILDING CONSTRUCTION - TYPE V-B (WITHOUT SPRINKLER SYSTEM) NUMBER OF STORES - 1 STORY BUILDING HEIGHT - 22'-0" BUILDING AREA - 3,395 NSF BUILDING OCCUPANCY - GROUP B, BUSINESS & GROUP S-1, STORAGE
REQUIRED FIXTURES: 1 TOTAL WATER CLOSET (1 UNISEX)	WATER CLOSETS - 1 PER 25 FOR FIRST 50 = 1 REQUIRED / 1 PROVIDED LAVATORIES - 1 PER 40 FOR FIRST 80 = 1 REQUIRED / 1 PROVIDED

PROJECT DESCRIPTION

LAKE WAPELLO STATE PARK IS LOCATED IN DAVIS COUNTY, IOWA. THE PARK WILL RECEIVE A NEW OFFICE/SHOP AND STORAGE BUILDING AS SHOWN IN THE DOCUMENTS. THE OFFICE/SHOP WILL HAVE A GARAGE/STORAGE AREA WHICH WILL HAVE THREE (3) HEATED BAYS. THE OFFICE WILL HAVE ONE LARGE OPEN OFFICE SPACE, ONE STORAGE AREA, ONE RESTROOM, MECHANICAL ROOM AND A CONFERENCE/BREAKROOM. THERE WILL BE A ROCK DRIVE INTO THE GARAGE BAYS AND A STORAGE YARD TO THE REAR OF THE BUILDING. THE PUBLIC ENTRY WILL HAVE A LARGE OVERHANG WITH A DECORATIVE HEAVY TIMBER TRUSS IN ACCORDANCE WITH THE IOWA STATE PARKS DESIGN GUIDE.

AUTHORIZATION TO BID

ENGINEERING BUREAU CHIEF _____ DATE _____

AUTHORIZED - PARKS | WILDLIFE | FISHERIES | LAW ENFORCEMENT _____ DATE _____

DIRECTORY

OWNER		DISTRICT INSPECTOR	
COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES
ADDRESS	502 E. 9TH. ST.	ADDRESS	
CITY,STATE,ZIP	DES MOINES, IA 50319	CITY,STATE,ZIP	INDIANOLA, IA
CONTACT	N/A	CONTACT	JASON KRUSE
TELEPHONE	515.725.8200	TELEPHONE	515.250.3707
FAX	515.725.8202	FAX	-
EMAIL	N/A	EMAIL	JASON.KRUSE@DNRIOWA.GOV
ARCHITECT		ELECTRICAL ENGINEER	
COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	COMPANY	KCL ENGINEERING
ADDRESS	502 E. 9TH. ST.	ADDRESS	218 1/2 5TH STREET
CITY,STATE,ZIP	DES MOINES, IA 50319	CITY,STATE,ZIP	WEST DES MOINES, IA 50265
CONTACT	RYAN RICHEY	CONTACT	JON LACROIX
TELEPHONE	515.979.0107	TELEPHONE	515-344-2960
FAX	-	FAX	-
EMAIL	RYAN.RICHEY@DNRIOWA.GOV	EMAIL	JLACROIX@KCLENGINEERING.COM
CIVIL ENGINEER		MECHANICAL ENGINEER	
COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	COMPANY	KCL ENGINEERING
ADDRESS	502 E. 9TH. ST.	ADDRESS	218 1/2 5TH STREET
CITY,STATE,ZIP	DES MOINES, IA 50319	CITY,STATE,ZIP	WEST DES MOINES, IA 50265
CONTACT	BRETT JOHNSON	CONTACT	CHAD BASS
TELEPHONE	515.250.3711	TELEPHONE	515-205-1397
FAX	-	FAX	-
EMAIL	BRETT.JOHNSON@DNRIOWA.GOV	EMAIL	CBASS@KCLENGINEERING.COM

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
 ENGINEERING SERVICES - WALLACE BUILDING
 502 E. 9TH ST., DES MOINES, IA 50319-0034
 P: 515.725.8200
 F: 515.725.8202

COVER SHEET

NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK

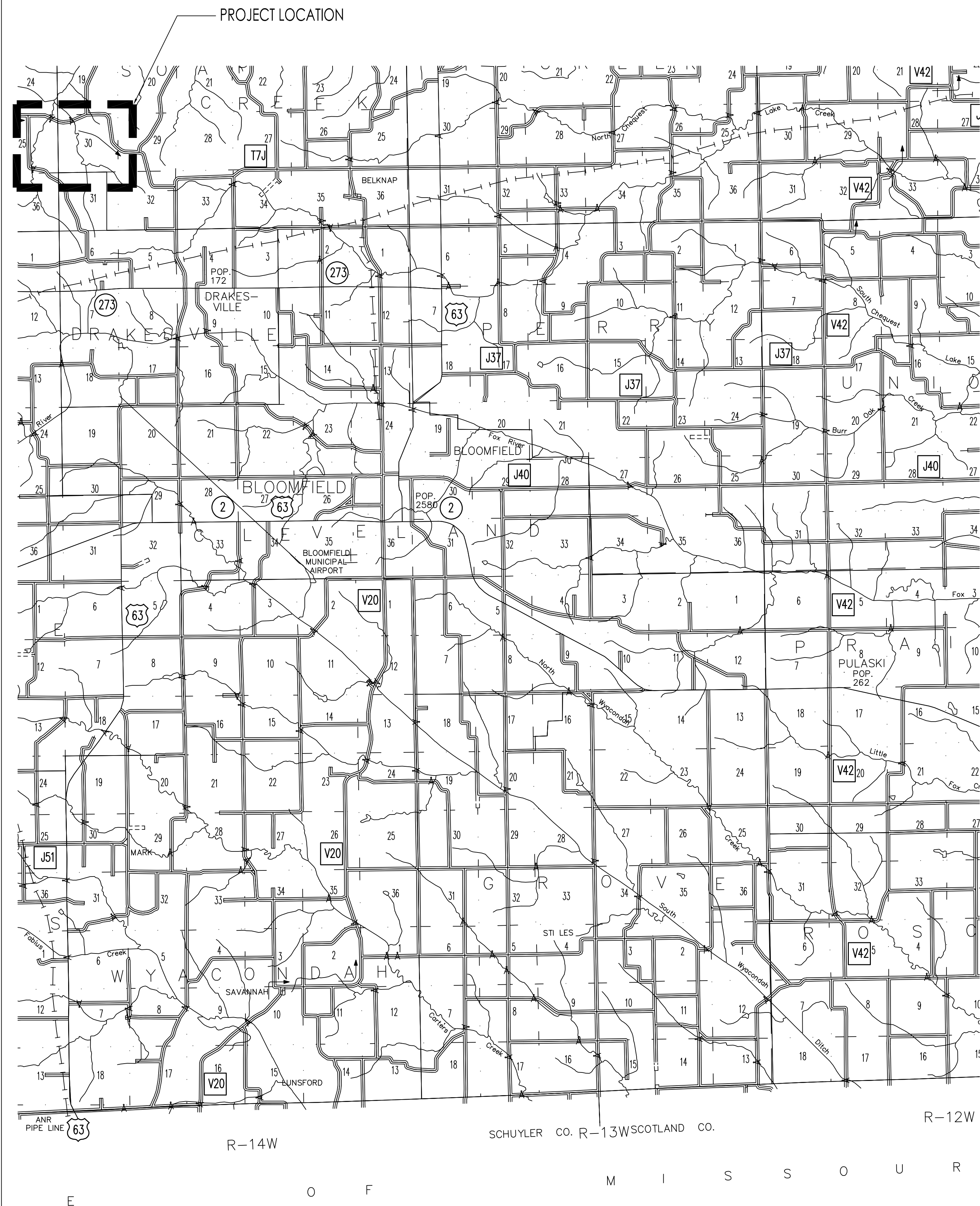
DRAKESVILLE, IA 52552

NO.	BY DATE	REVISION

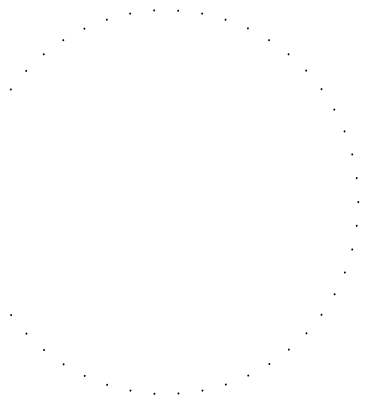
DRAWN BY: PROJECT NUMBER:
23-05-26-01

CHK'D BY: DATE:
03.21.2023

SHEET NO.: **A-001**



CONSULTANT:



IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



PROJECT LOCATION

NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK

15248 CAMPGROUND ROAD
DRAKESVILLE, IA 52552

NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:

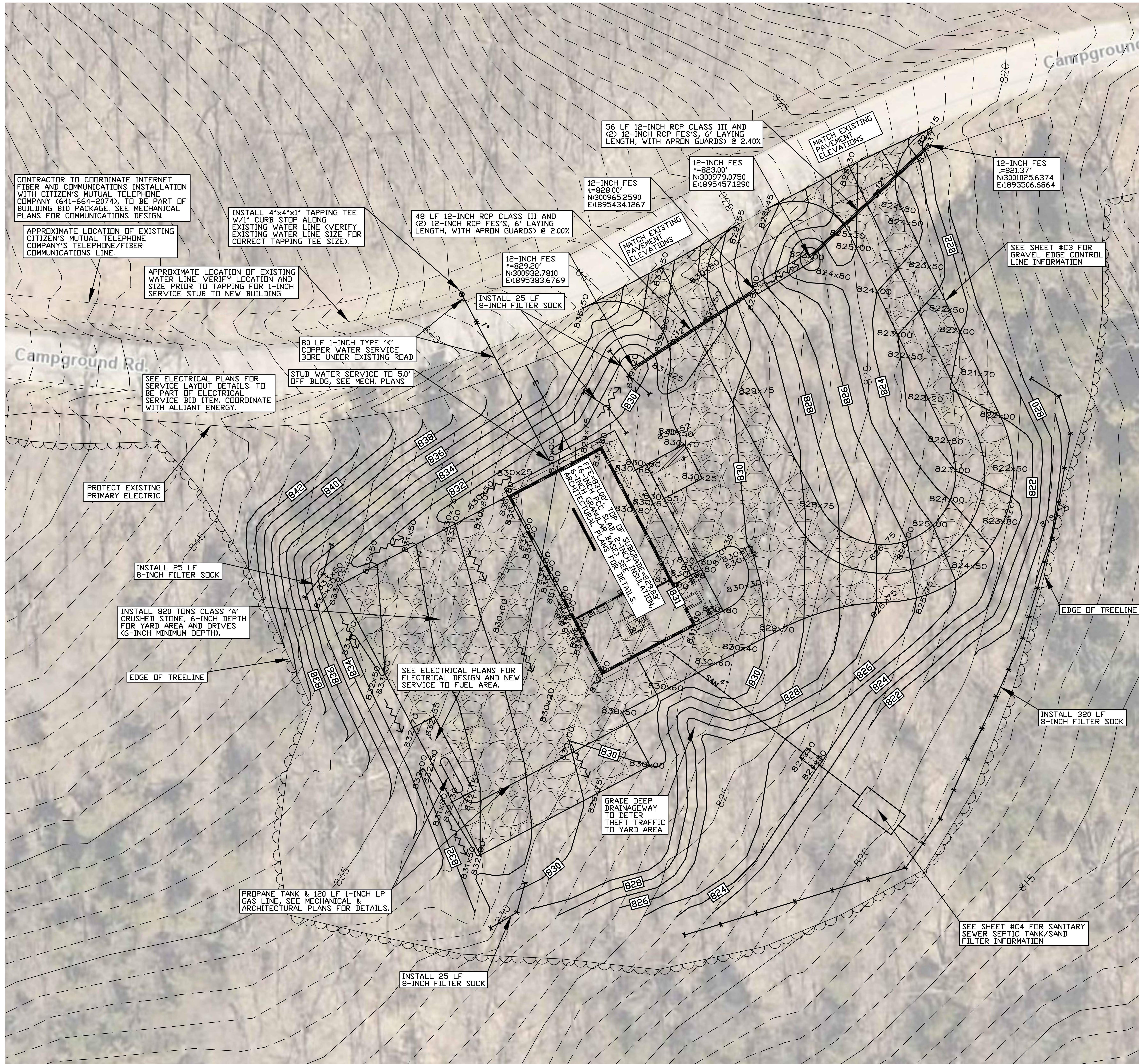
23-05-26-01

CHK'D BY: DATE:

03.21.2023

SHEET NO.:

A-003



GRADING NOTES

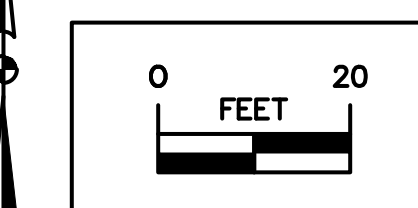
- TWO WEEKS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY:
 - IOWA DNR PROJECT MANAGER: RYAN RICHEY 515-979-0107
 - DISTRICT INSPECTOR: JASON KRUSE 515-250-3707
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATEWIDE URBAN STANDARD DESIGN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (SUDAS). ALL CONSTRUCTION TESTING TO BE IN ACCORDANCE WITH SUDAS AND IS THE EXPENSE OF THE CONTRACTORS.
- THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ABOVE MENTIONED CONTACTS OF ANY DISCREPANCIES.
- THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING FACILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL PUBLIC AND/OR PRIVATE UTILITIES SERVING THE AREA TO DETERMINE THE PRESENT EXTENT AND LOCATION OF THEIR FACILITIES BEFORE BEGINNING WORK.
- THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROPER UTILITY IMMEDIATELY UPON BREAKING OR DAMAGE TO ANY UTILITY LINE OR APPURTENANCE, OR THE INTERRUPTION OF THEIR SERVICE. HE SHALL NOTIFY THE PROPER UTILITY INVOLVED. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED.
- CONTRACTOR TO PROTECT ALL UTILITY, PAVING, BUILDINGS, ETC. OUTSIDE OF LIMITS OF PROPOSED CONSTRUCTION.
- IN THE EVENT THAT THERE IS A DISCREPANCY BETWEEN THE QUANTITIES AND THE PLANS, THE DETAILED PLANS SHALL GOVERN.
- CONTRACTOR SHALL SEED/MULCH ALL DISTURBED AREAS (APPROXIMATELY 1 ACRE), USE TYPE 1 (PERMANENT LAWN MIXTURE) SEED MIX.
- MAINTAIN ALL CUT AND FILL AREAS TO ACCOMMODATE SURFACE DRAINAGE.
- FINISHED GRADE ON ALL NON-PAVED AREAS SHALL BE WITHIN 0.20 FOOT OF PLAN GRADE. PAVED AREAS SHALL BE WITHIN 0.10 FOOT.
- TOPSOIL SHALL BE SPREAD TO A MINIMUM THICKNESS OF 6-INCHES ON ALL DISTURBED UNPAVED AREAS.
- BACKFILL TO THE TOP OF ALL ROCK OR PAVED SURFACES.
- ALL ELEVATIONS ARE TO THE GUTTER GRADE UNLESS NOTED OTHERWISE.
- EARTHWORK QUANTITY IS ROUGHLY 2,500 CY. IF ANY EXCESS IS PRODUCED, WASTE WITHIN THE LOOP ENTRANCE/EXIT DRIVE AND/OR EAST OF THE ENTRANCE/EXIT DRIVE.
- NPDES GENERAL PERMIT #2 IS REQUIRED FOR THIS PROJECT AS 1.5 ACRE IS BEING DISTURBED.

UTILITY NOTES

- MAINTAIN A MINIMUM 4' COVER OVER WATER LINES.
- SEE SHEET C4 FOR SANITARY SEWER SERVICE AND SEPTIC/SAND FILTER DESIGN.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATEWIDE URBAN STANDARD DESIGN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (SUDAS). ALL CONSTRUCTION TESTING TO BE IN ACCORDANCE WITH SUDAS AND IS THE EXPENSE OF THE CONTRACTORS.
- REFER TO MECHANICAL PLANS FOR UTILITY SERVICE CONNECTIONS TO OFFICE BUILDING AND INTERNAL BUILDING UTILITY DESIGN.
- WATER SERVICE TO BE 1-INCH TYPE 'K' COPPER.
- SEE ELECTRICAL PLANS FOR SERVICE LAYOUT DETAILS AND ALL ELECTRICAL WORK SHALL BE PART OF THE ELECTRICAL SERVICE BID ITEM. COORDINATE WITH ALLIANT ENERGY.

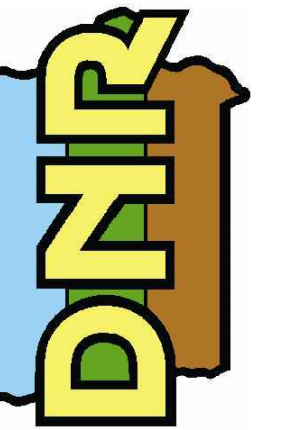
LEGEND

- EXISTING/PROPOSED
- S 6" — SANITARY SEWER
 - W 2" — WATER MAIN
 - ST 8" — STORM SEWER
 - E — ELECTRICAL LINE
 - 990 — ELEVATION
 - 882.67 884.50 — SPOT ELEVATION
 - (Cloud symbol) — TREES
 - (X symbol) — 8" FILTER SOCK



IOWA DEPARTMENT OF
NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



GRADING/UTILITY PLAN

NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK

DRAKESVILLE, IA 52552

15246 CAMPGROUND ROAD

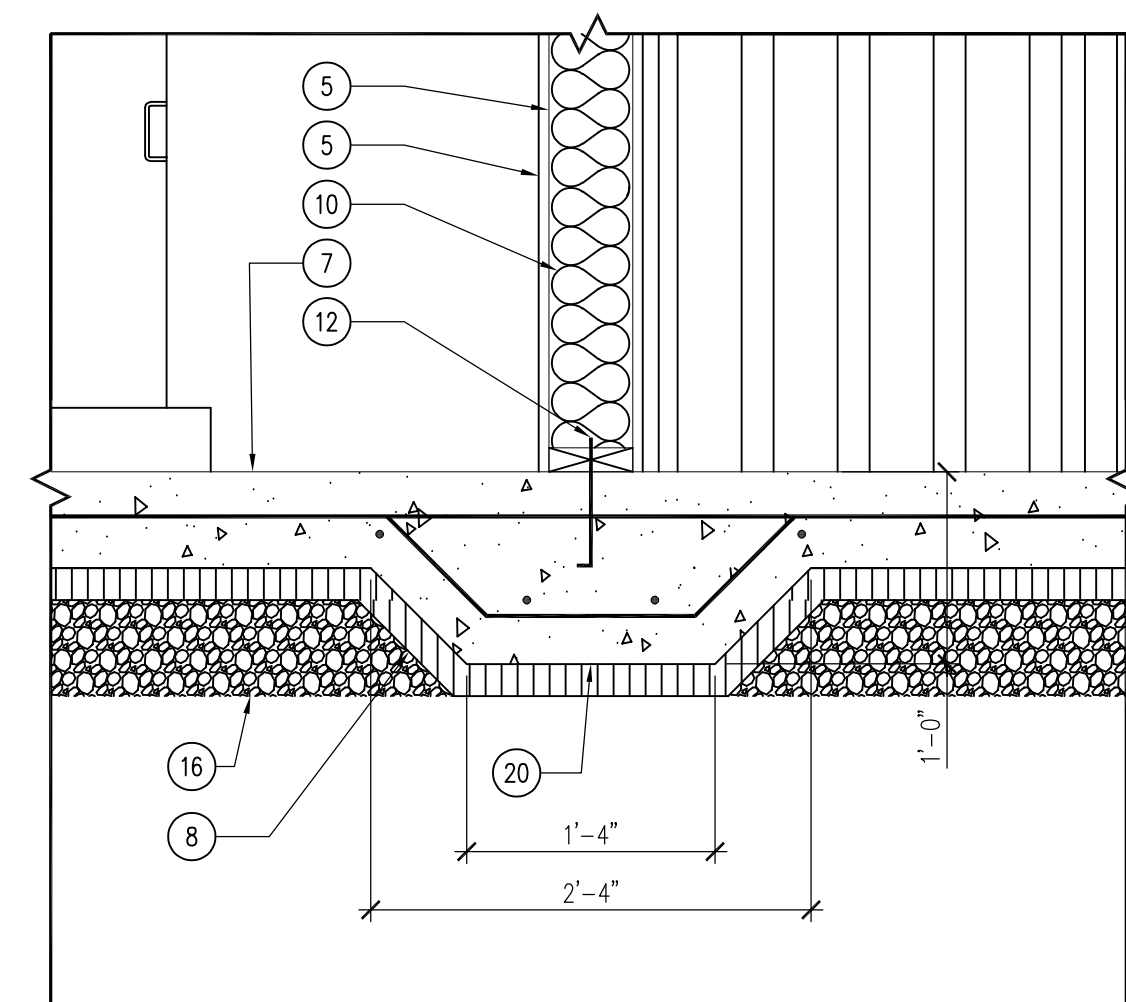
BY	DATE	REVISION

DRAWN BY: PROJECT NUMBER:
23-05-26-01

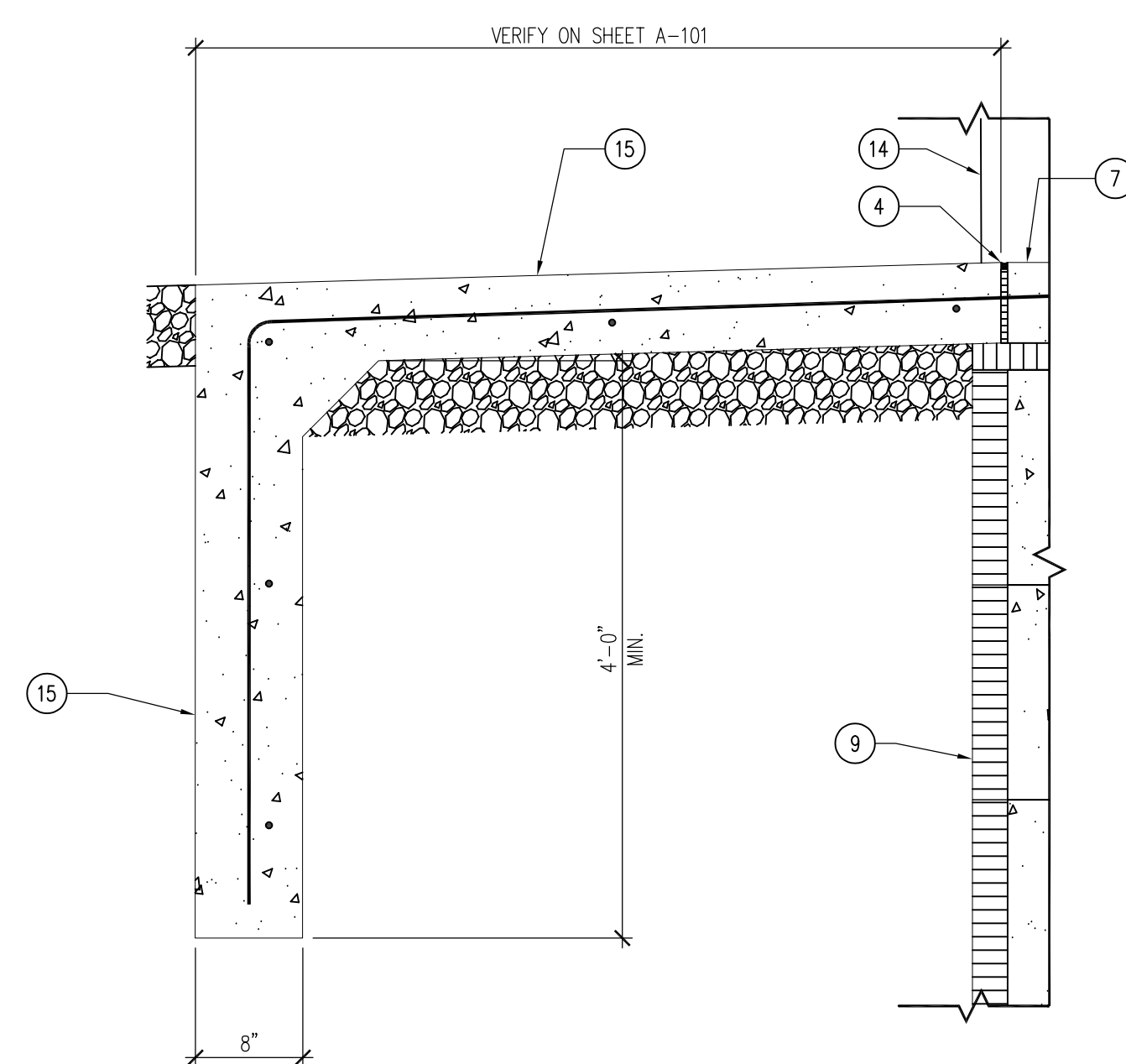
CHK'D BY: DATE:
03.21.2023

SHEET NO:

C2

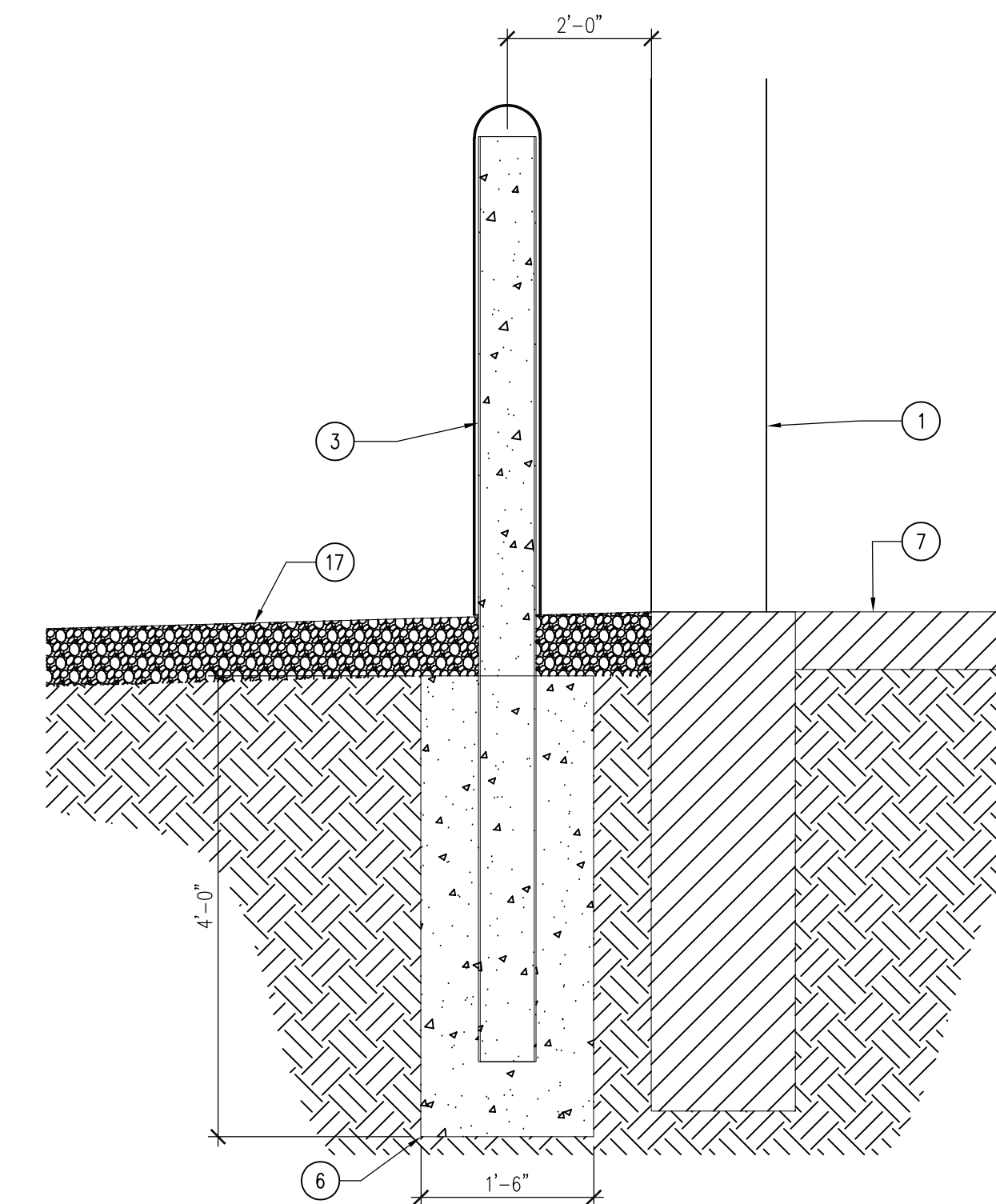


06 DETAIL - THICKENED SLAB AT PARTITION WALL
SCALE: 1" = 1'-0"

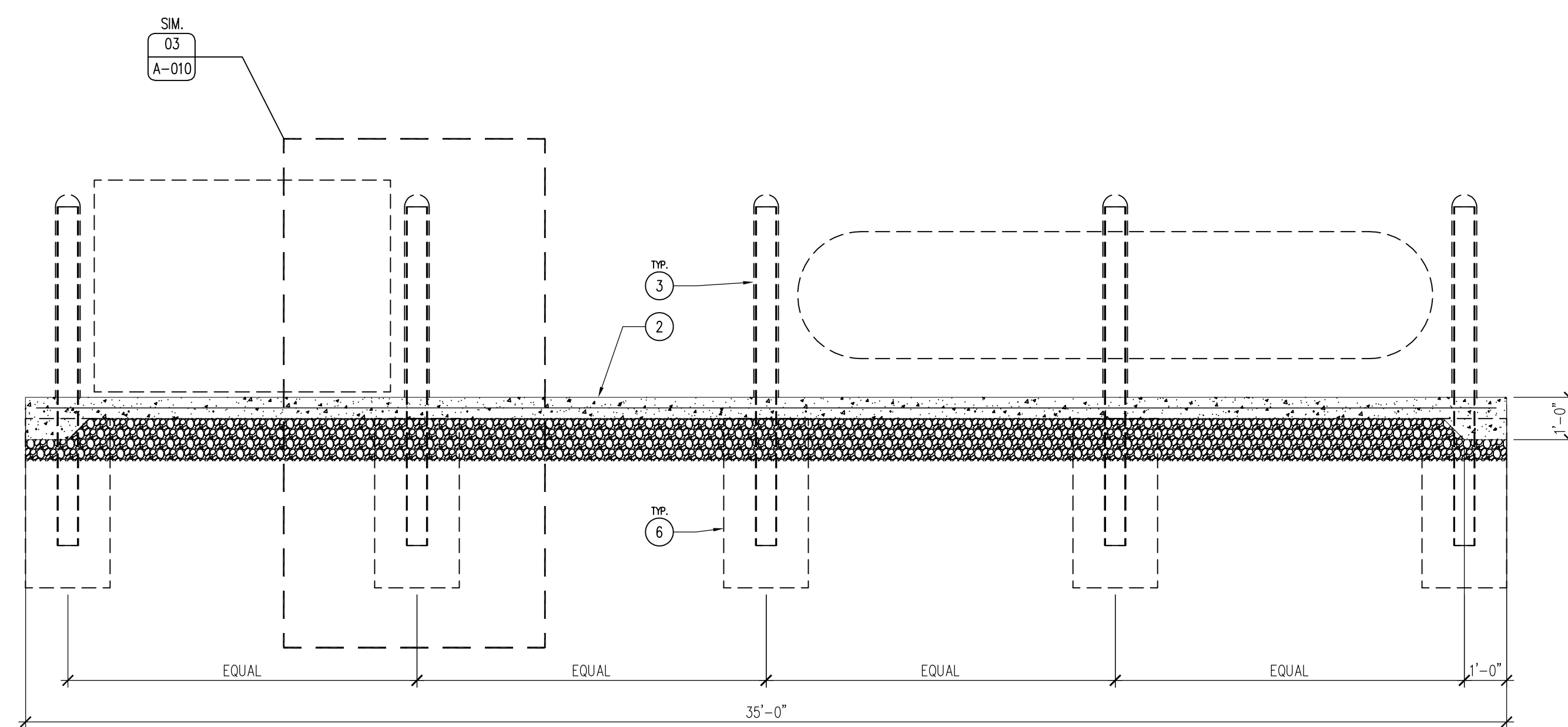


05 DETAIL - STOOP FOOTING
SCALE: 1" = 1'-0"

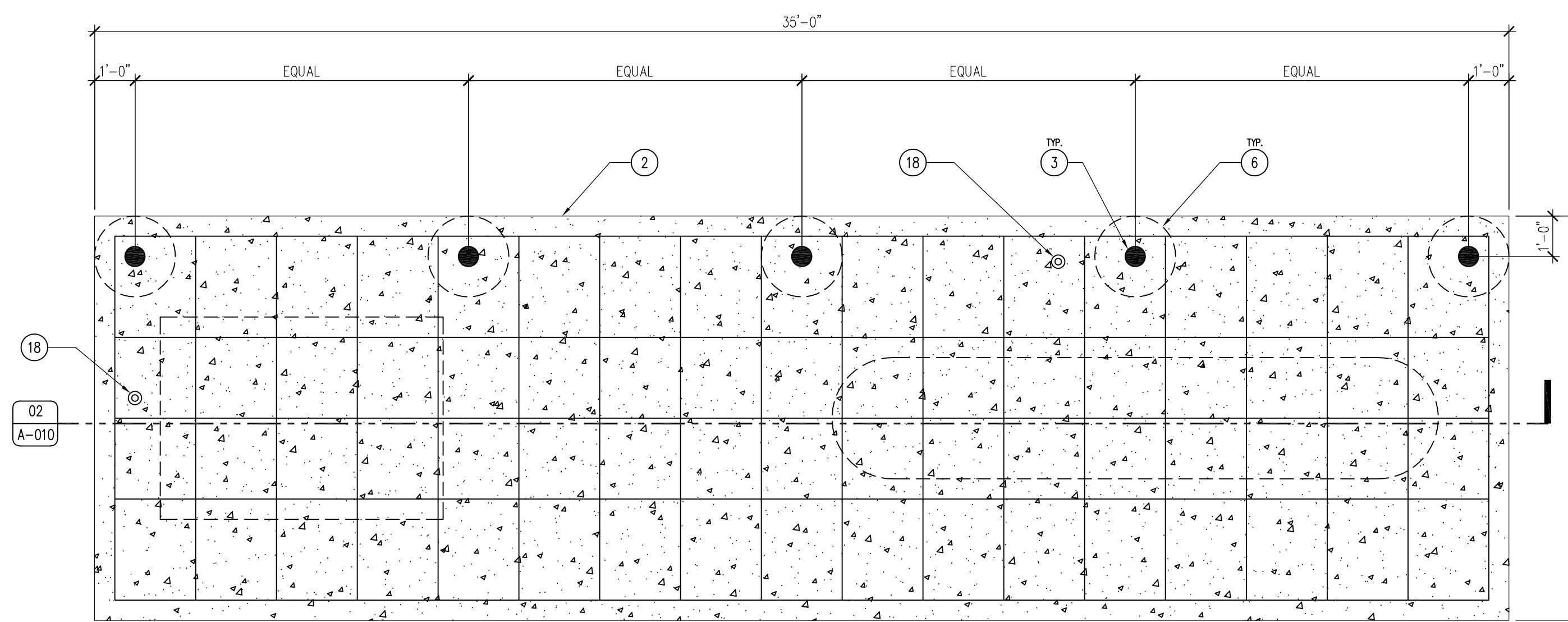
04 NOT USED
SCALE: 1" = 1'-0"



03 DETAIL - BOLLARD
SCALE: 3/4" = 1'-0"



02 SECTION - FUEL & LP TANK PAD
SCALE: 3/8" = 1'-0"



01 FUEL & LP TANK PAD PLAN
SCALE: 3/8" = 1'-0"

FUEL & LP TANK NARRATIVE

CONTRACTOR SHALL PROVIDE:

FUEL TANK - THE FUEL TANK SHALL BE A 500 GALLON DOUBLE WALL, SPLIT 250/250 WITH ALL NECESSARY TANK GAUGES, VENTS, CAPS, DRAIN PLUGS, OVERSPILL CONTAINMENT AND DECALS. ALL WIRING IS TO BE NEMA 4X EXPLOSION PROOF. TWO (2) FILL-RITE, 115VAC, 1/3HP, 20GPM FUEL PUMPS (OR EQUAL) ARE TO BE INCLUDED WITH THE TANK, INSTALLATION INCLUDES ELECTRICAL HOOKUP AND EMERGENCY SHUT-OFF SWITCH TO ADJACENT BUILDING (REFER TO ELECTRICAL). TANK MUST MEET ALL APPLICABLE CODES FOR OUTSIDE FUEL STORAGE TANKS. ANY PERMITS NECESSARY WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

LP TANK - CONTRACTOR SHALL PURCHASE AND INSTALL (OR COORDINATE INSTALLATION WITH LP SUPPLIER) ONE (1) ONE-THOUSAND GALLON (1,000 GA) LIQUID PROPANE TANK. CONTRACTOR SHALL INCLUDE ALL NECESSARY EQUIPMENT (REGULATORS, PIPING, ETC.) FOR PROPER USE OF THE TANK. REFER TO CIVIL PLANS FOR MORE INFORMATION.

CONCRETE PAD - TANKS SHALL BE BOLTED DOWN TO A 6" THICK CONCRETE PAD (8'-0" X 35'-0") WITH #4 REBAR 24" O.C. BOTH DIRECTIONS OVER 6" SUBBASE AND 12" THICKENED EDGE, TO BE POURED BY THE CONTRACTOR AT A LOCATION TO BE DETERMINED BY CIVIL PLANS. THREE (3) BOLLARDS SHALL BE INSTALLED IN THE LAYOUT AS SHOWN (FUEL TANK PAD ONLY), SEE BOLLARD DETAIL FOR MORE INFORMATION.

KEYNOTES

- PROPOSED BUILDING, REFER TO REFERENCE FLOOR PLAN SHEET A-100.
- CONCRETE PAD FOR FUEL TANK & LP TANK, 6" THICK WITH #4 REBAR 24" O.C. BOTH DIRECTIONS, 12" SUBBASE WITH 12" THICKENED EDGE, DIMENSION AS SHOWN.
- 6" DIAMETER X 3/4" THICK STEEL POST, 8'-0" LONG, 3'-0" EMBEDDED IN CONCRETE FOOTING. FILL POST SOLID WITH CONCRETE GROUT, PROVIDE OSHA YELLOW PLASTIC COVER SLEEVES FOR ALL BOLLARDS.
- 3/4" EXPANSION JOINT WITH CONTINUOUS POLYURETHANE SEALANT, CONCRETE GRAY.
- INTERIOR GYPSUM WALL BOARD, REFER TO WALL TYPES.
- 18" DIAMETER CONCRETE FOOTING, MINIMUM 48" DEEP.
- 6" CONCRETE BUILDING SLAB WITH #4 REBAR 24" O.C. BOTH DIRECTIONS.
- 2" RIGID R-10 40PSI XPS INSULATION. TAPE AND SEAL ALL JOINTS. LAY 15ML SUB-SLAB VAPOR BARRIER OVER INSULATION, OVERLAP SEAMS 6" MINIMUM, TAPE AND SEAL ALL JOINTS.
- INSULATED CONCRETE FORM STEM WALL.
- 6" R-19 THERMAL BATT INSULATION, REFER TO WALL TYPES.
- 2X6 DEMISING WALL, REFER TO WALL TYPES.
- SILL PLATE ANCHOR BOLT, REFER TO BUILDING MANUFACTURER'S DRAWINGS.
- 24 GA. DARK BRONZE FLASHING, MATCH ROOF COLOR.
- DOOR AS SCHEDULED.
- 6" THICK STOOP FOOTING, #4 REBAR 24" O.C. ALL DIRECTIONS WITH 6" SUBBASE. TURN DOWN STOOP FOOTING ON THREE SIDES, 8" THICK X 48" DEEP MINIMUM.
- 6" SUBBASE UNDER ENTIRE BUILDING SLAB.
- ROCK YARD, REFER TO CIVIL DRAWINGS.
- 2" CONDUIT STUB FOR FUEL ELECTRICAL/LP LINE. EXACT LOCATION TO BE DETERMINED ON-SITE BY INSPECTOR AND TANK SUPPLIER.
- TREATED SILL PLATE BY BUILDING MANUFACTURER.
- GRADE BEAM FOOTING, DIMENSION AS SHOWN. #4 REBAR HOOPS, 24" O.C., TIED TO SLAB REBAR, TWO (2) CONTINUOUS REBAR RUNNING LENGTH OF BEAM, TIE INTO PERIMETER FOOTING AT ENDS OF BEAM.

GENERAL NOTES

- REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-110.
- REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.
- FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- CONTRACTOR SHALL HAVE THIS BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
- ADD TWO (2) BOLLARDS NEXT TO ELECTRICAL TRANSFORMER, AND ONE (1) ADJACENT TO THE BUILDING CORNER, LOCATION AT THE DISCRETION OF THE DNR INSPECTOR.

ARCHITECTURAL SITE DETAILS

NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK

15248 CAMPGROUND ROAD
DRAKESVILLE, IA 52552

CONSULTANT:

**IOWA DEPARTMENT OF
NATURAL RESOURCES**
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



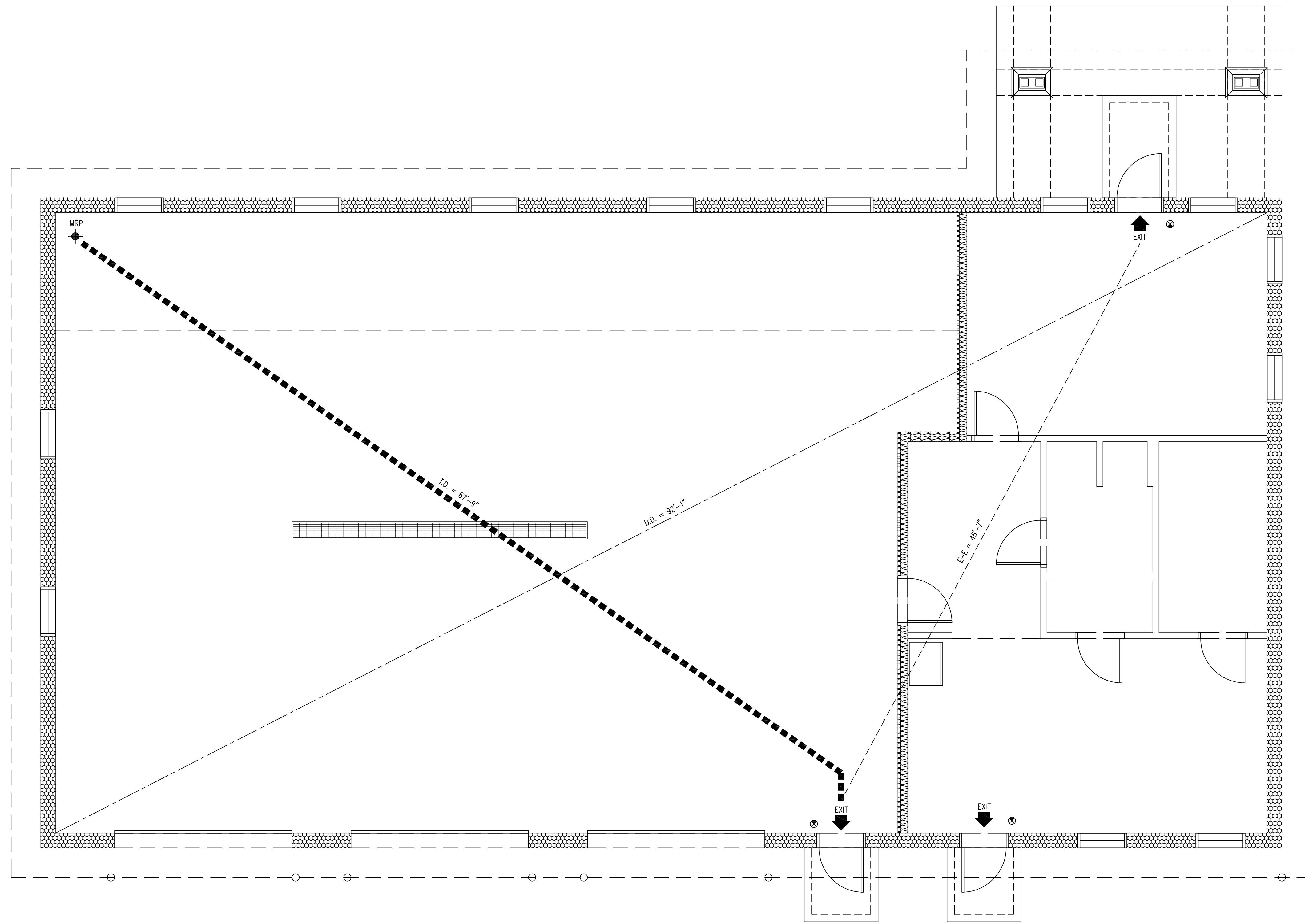
NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:
03-05-26-01

CHK'D BY: DATE:
03.21.2023

SHEET NO:

A-010



01 LIFE SAFETY PLAN
SCALE: 1/4" = 1'-0"

CODE SUMMARY

	BUILDING AREA	2,453 GSF	REQUIRED	PROVIDED
TENANT AREA	960 NSF	ALLOWABLE BLDG AREA (IBC TBL 503)	17,500 SF	3,413 SF
CONSTRUCTION TYPE	V-B WITHOUT SPRINKLER SYSTEM	HEIGHT LIMITATION (IBC TBL 503)	2 STORIES (40')	1 STORIES (18')
OCCUPANCY	GROUP B - BUSINESS / GROUP S-1 - STORAGE	AUTOMATIC SPRINKLER SYSTEM (NFPA 13)	NO	NO
		EXIT ACCESS TRAVEL DISTANCE (IBC 1016.1)	200'-0"	67'-9"
		EXIT ACCESS DOORWAYS (IBC TBL 1019.1)	1	3
		EGRESS WIDTH PER OCCUPANT (IBC TBL 1005.1) LEVEL [.2"]	(.2") X 13 = 2.6"	3 DOORS @ .36" = 108"

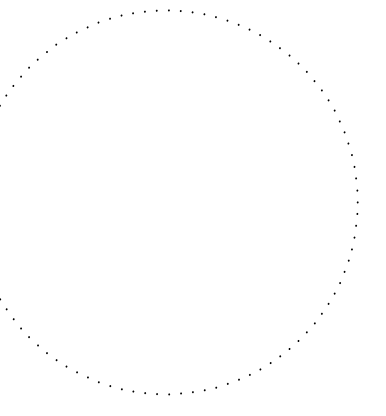
LIFE SAFETY LEGEND

SYMBOL	DESCRIPTION	LINE TYPE
E-E	EXIT TO EXIT IN LINEAR FEET	-----
T.D.	TRAVEL DISTANCE FROM M.R.P.	■■■■■■■■■■
D.D.	DIAGONAL DISTANCE	-----
⊗	EXIT LIGHT	
M.R.P.	MOST REMOTE POINT	◆
▲	EXIT / ENTRY	
[-FEC-]	FIRE EXTINGUISHER	

GENERAL NOTES

- a. INFORMATION PROVIDED ON THE LIFE SAFETY PLAN INDICATES EGRESS REQUIREMENTS.
- b. ALL CODE REFERENCES ARE FROM INTERNATIONAL BUILDING CODE, W/ AMENDMENTS UNLESS OTHERWISE NOTED

CONSULTANT:



IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



LIFE SAFETY PLAN

NEW OFFICE & STORAGE BUILDING FOR:

LAKE WAPELLO STATE PARK

15248 CAMPGROUND ROAD
DRAKESVILLE, IA 52552

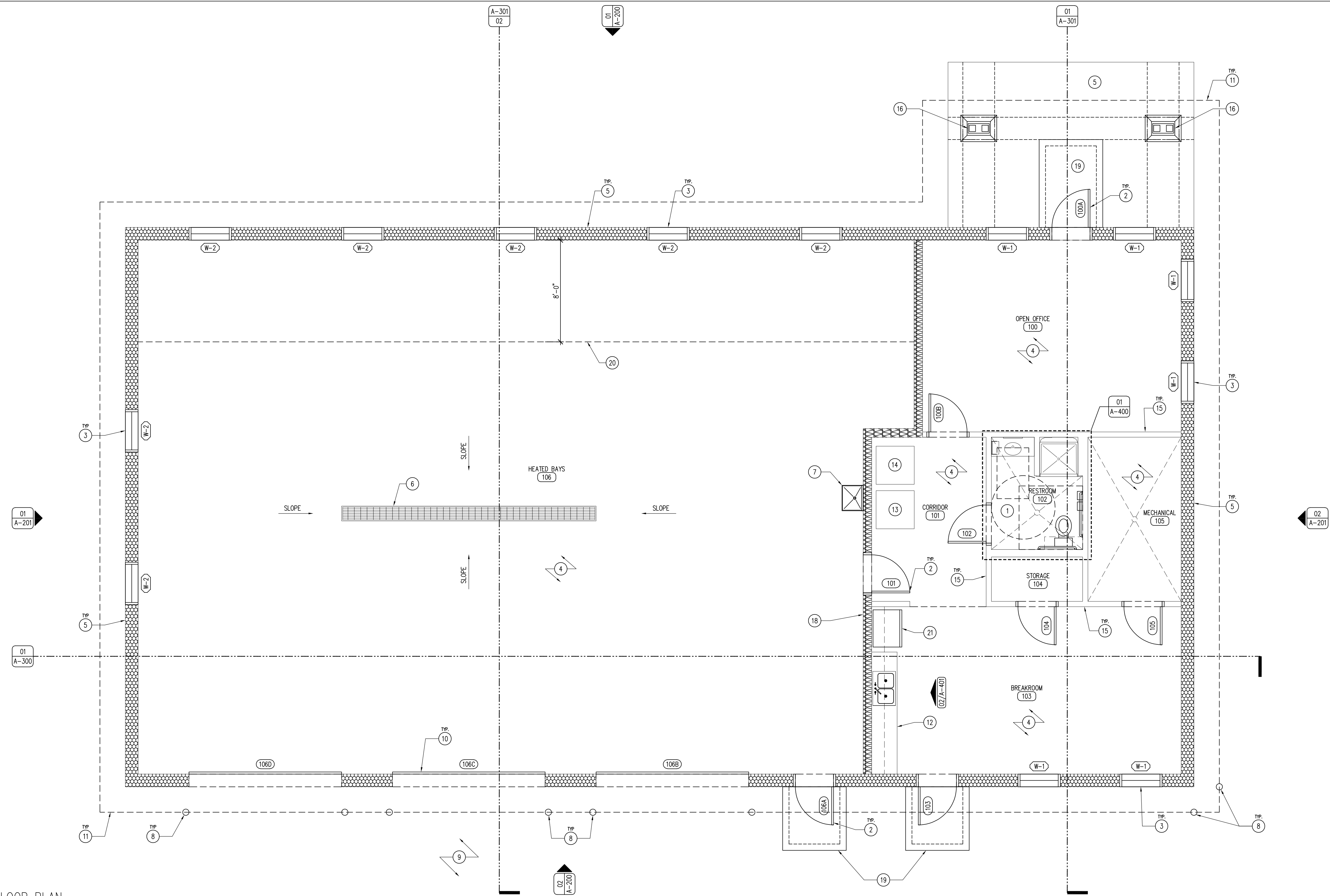
NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:
23-05-26-01

CHK'D BY: DATE:
03.21.2023

SHEET NO:

A-020



01 REFERENCE FLOOR PLAN
SCALE: 1/4" = 1'-0"

KEYNOTES

1. UNI-SEX RESTROOM, REFER TO ENLARGED FLOOR PLAN 01/A-400.
2. DOOR AS SCHEDULED, REFER TO SHEET A-600.
3. WINDOW AS SCHEDULED, REFER TO SHEET A-600.
4. CONCRETE FLOOR SLAB, SMOOTH TROWEL FINISH, REFER TO SHEET A-600.
5. SIP EXTERIOR WALL, REFER TO WALL TYPES SHEET A-002.
6. TRENCH DRAIN WITH HEAVY DUTY STEEL GRATE, LOCALLY SLOPE, REFER TO PLUMBING DRAWINGS.
7. UTILITY SINK, REFER TO PLUMBING DRAWINGS.
8. STEEL TRAFFIC BOLLARD, REFER TO SHEET A-010.
9. ROCK EQUIPMENT YARD, REFER TO CIVIL DRAWINGS.
10. OVERHEAD GARAGE DOOR, REFER TO DOOR SCHEDULE SHEET A-600.
11. ROOF LINE ABOVE.
12. CABINETS AND COUNTER-TOP AS SPECIFIED, REFER TO SHEET A-401.
13. SPEED QUEEN DR7 (DR7004WE) ELECTRIC DRYER, OR APPROVED EQUAL.
14. SPEED QUEEN TR7 (TR7003WN) ELECTRIC WASHER, OR APPROVED EQUAL.
15. 2X INTERIOR PARTITION WALL, REFER TO WALL TYPES SHEET A-002.
16. 6X6 ROUGH-SAWN DOUGLAS-FIR COLUMNS ON STONE COLUMN BASE, REFER TO SHEET A-301.
17. 6" CONCRETE PATIO WITH #4 REBAR 24" O.C. BOTH DIRECTIONS WITH 12" THICKENED EDGE, CONCRETE CONTROL JOINTS AS SHOWN.
18. 2X6 FIRE RATED DEMISING WALL, REFER TO WALL TYPES SHEET A-002.
19. STOOP FOOTING, BROOM FINISH, REFER TO SHEET A-010.
20. 8'-0" DEEP X LENGTH OF BUILDING, SUSPENDED LOFT, TO BE ENGINEERED BY BUILDING MANUFACTURER TO HOLD 100 PSF. SAFETY CHAINS PER OSHA REGULATIONS, 18" AND 36" HEIGHT.
21. REFRIGERATOR BY CONTRACTOR. GENERAL ELECTRIC MODEL #GBE210SKSS, OR APPROVED EQUAL.

GENERAL NOTES

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-110.
- C. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.
- E. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- F. CONTRACTOR SHALL HAVE THIS BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
- G. REFER TO ELECTRICAL DRAWINGS FOR LIGHTING AND POWER LAYOUTS.
- H. CONTRACTOR SHALL CAULK ALL INTERIOR CONCRETE SAW-CUT JOINTS AND ALL EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.

REFERENCE FLOOR PLAN

**NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK**

15248 CAMPGROUND ROAD
DRAKESVILLE, IA 52552

**IOWA DEPARTMENT OF
NATURAL RESOURCES**

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



CONSULTANT:

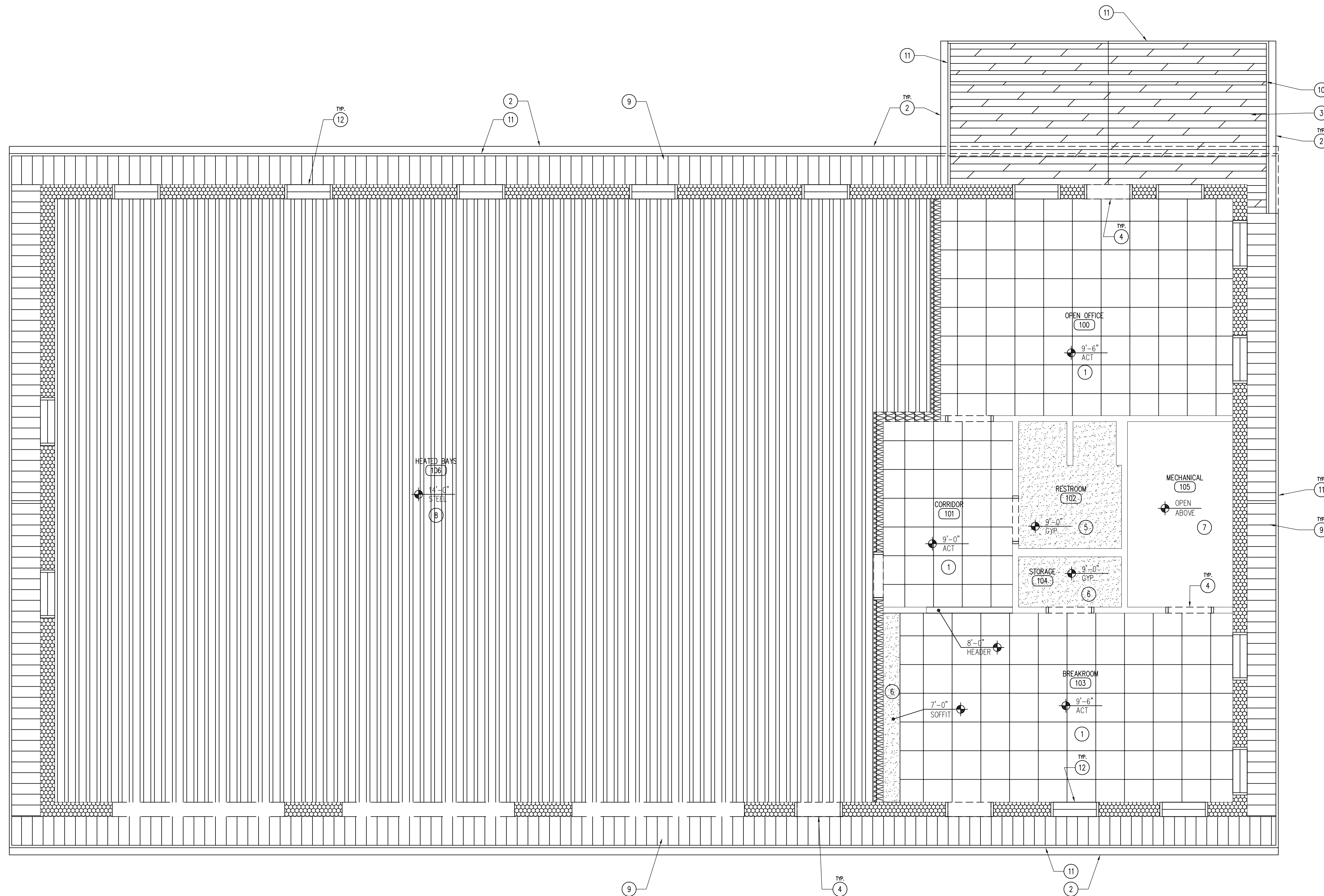
NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:
23-05-26-01

CHK'D BY: DATE:
03.21.2023

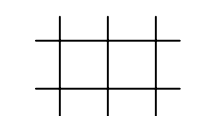
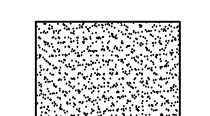

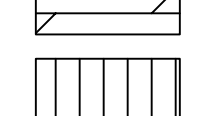
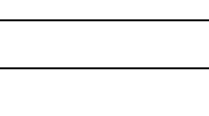
SHEET NO.:

A-100



01 REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

LEGEND

-  2' x 2' CEILING TILE AND GRID SYSTEM
-  1/2" GYPSUM BOARD - MOISTURE RESISTANT IN RESTROOM
-  29 GAUGE LINER PANEL
-  ALUMARCH KNOTWOOD SOFFIT
-  26 GAUGE V-GROOVE VENTED SOFFIT

KEYNOTES

1. 2' x 2' x 3/8" ARMSTRONG ULTIMA (TEGULAR) ACOUSTICAL CEILING TILE WITH 1/2" PRELUDE SUSPENSION SYSTEM.
2. 6" SEAMLESS GUTTER AND DOWNSPOUT SYSTEM TO MATCH ROOF COLOR. INCLUDE SHUR-FLO GUTTER GUARDS ON ALL GUTTERS.
3. ALUMARCH - KNOTWOOD ALUMINUM SOFFIT, REFER TO SHEET A-600.
4. DOOR HEADER BELOW.
5. 1/2" MOISTURE RESISTANT GYPSUM BOARD CEILING.
6. 1/2" GYPSUM BOARD CEILING.
7. NO-CEILING - OPEN TO GYPSUM DECKING ABOVE.
8. 29 GAUGE LINER PANEL - WHITE.
9. 26 GAUGE V-GROOVE VENTED SOFFIT PANELS, MATCH GUTTERS AND FLASHING.
10. ROUGH-SAWN DOUGLAS FIR TRUSS, REFER TO SHEET A-401.
11. 2X FASCIA, WRAP ENTIRE FASCIA IN 26 GAUGE BREAK METAL TO MATCH GUTTERS.
12. WINDOW HEADER BELOW.

GENERAL NOTES

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-110.
- C. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.
- E. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- F. CONTRACTOR SHALL HAVE THIS BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
- G. REFER TO ELECTRICAL DRAWINGS FOR LIGHTING AND POWER LAYOUTS.

REFLECTED CEILING PLAN

NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK

15248 CAMPGROUND ROAD
DRAKESVILLE, IA 52552

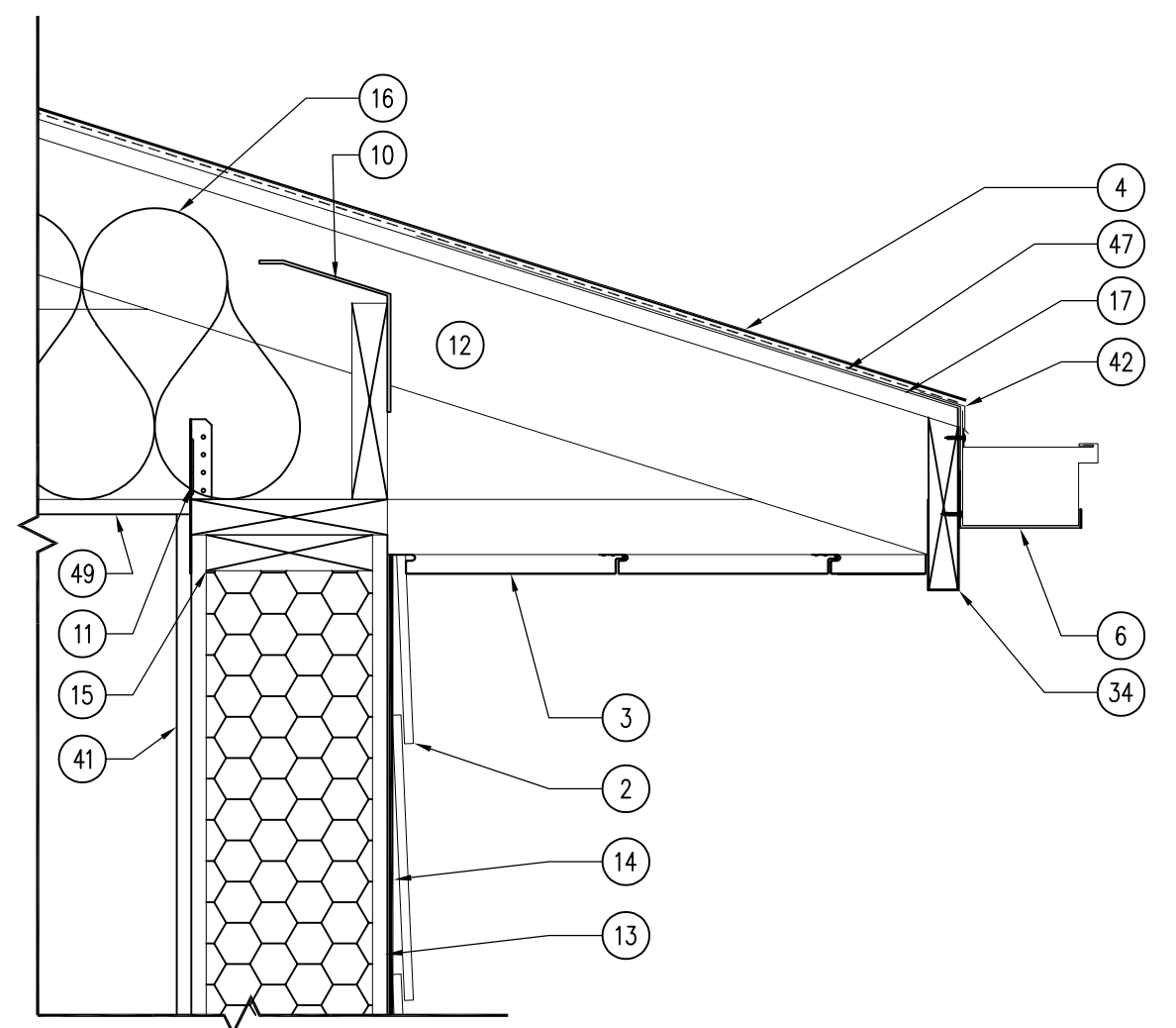
**IOWA DEPARTMENT OF
NATURAL RESOURCES**
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



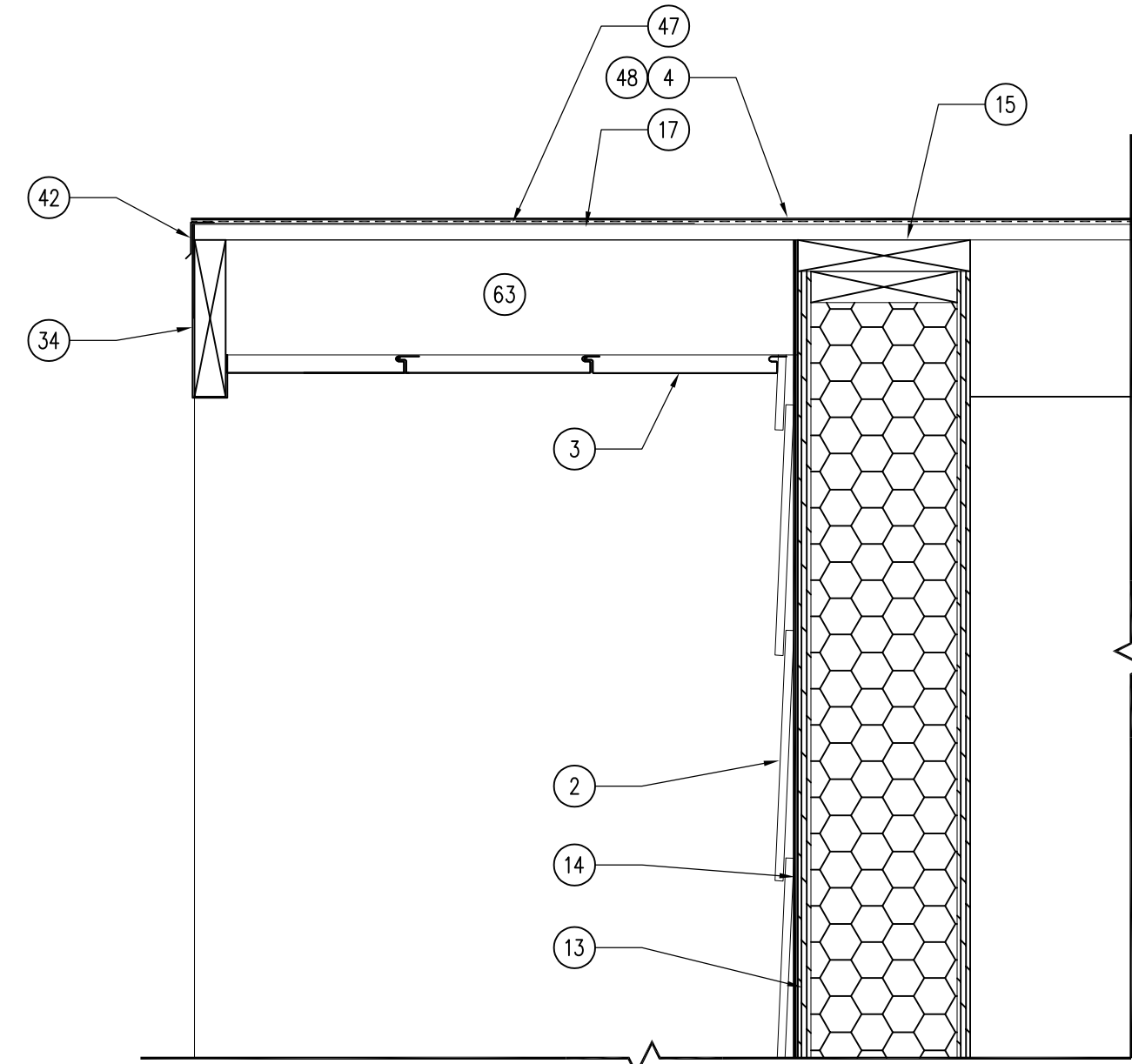
NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER:
23-05-26-01
CHK'D BY: DATE:
03.21.2023
SHEET NO:

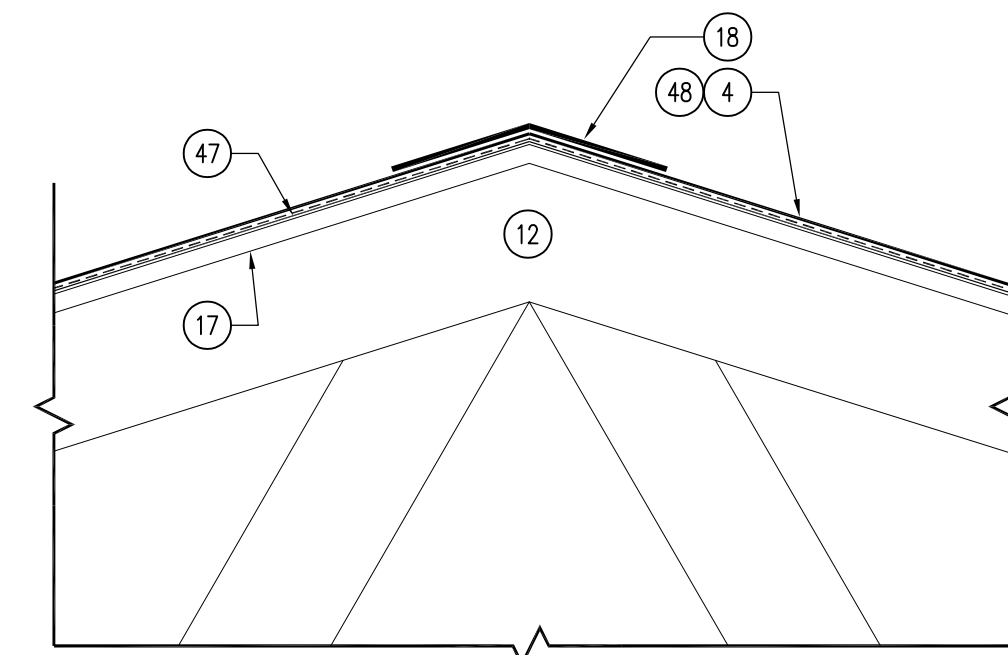
A-110



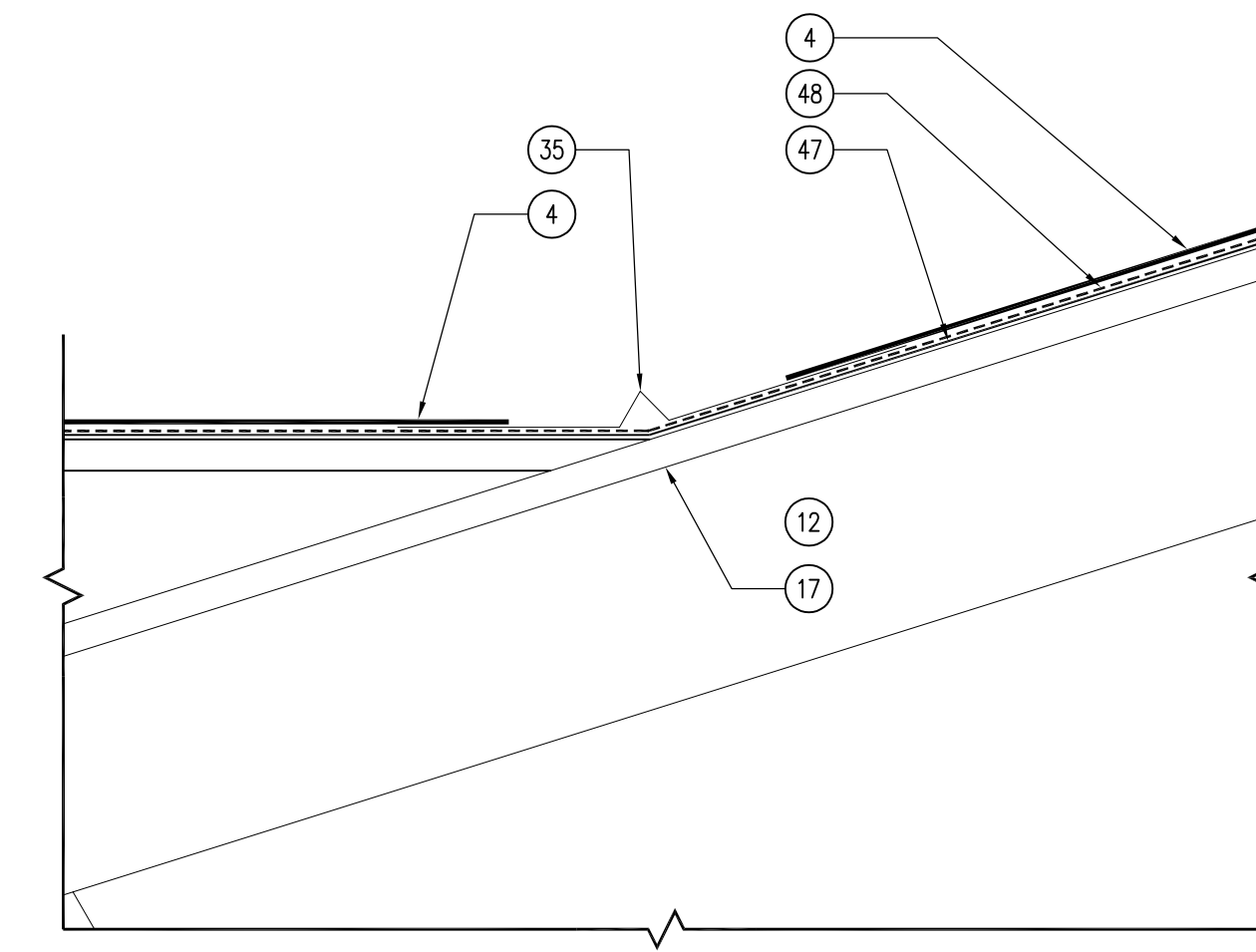
05 DETAIL - ROOF EAVE
SCALE: 1 1/2" = 1'-0"



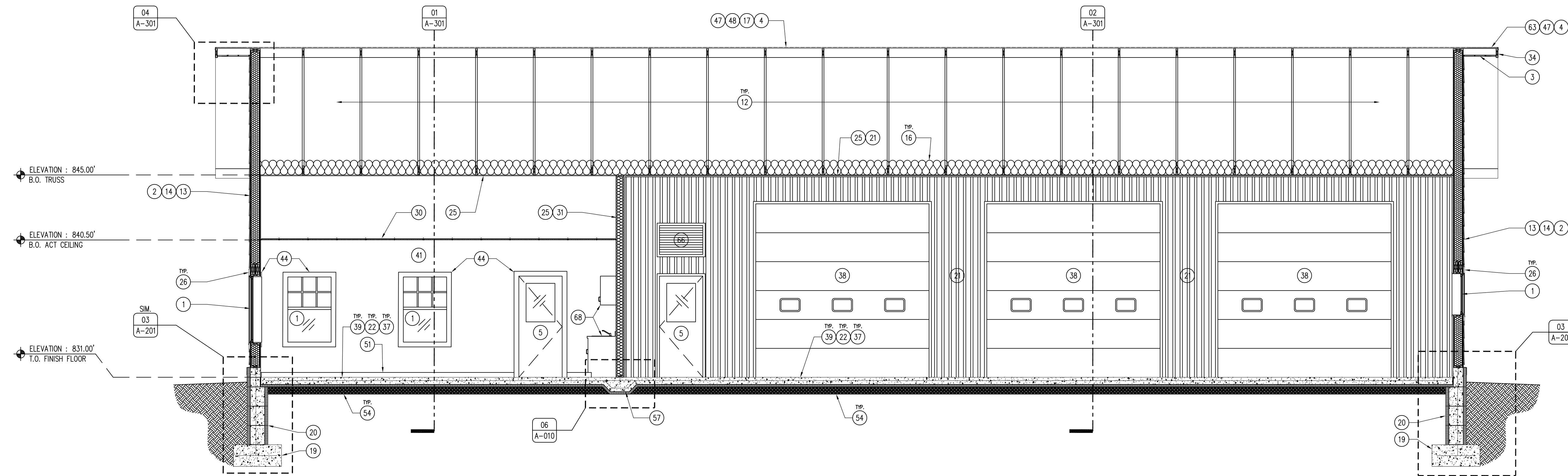
04 DETAIL - ROOF GABLE EDGE
SCALE: 1 1/2" = 1'-0"



03 DETAIL - ROOF RIDGE
SCALE: 1 1/2" = 1'-0"



02 DETAIL - ROOF VALLEY FLASHING
SCALE: 3" = 1'-0"



01 BUILDING SECTION
SCALE: 1/4" = 1'-0"

KEYNOTES

1. WINDOW AS SCHEDULED, REFER TO SHEET A-600.
2. LP SMARTSIDE CEDAR LAPSIDING, PAINT TWO (2) COATS PNT-4, REFER TO SHEET A-600.
3. 26 GAUGE METAL VENTED V-SOFFIT PANEL. COLOR TO MATCH GUTTERS AND FASCIA.
4. ROOF SHINGLES, REFER TO CEILING REQUIREMENTS ON SHEET A-600.
5. DOOR AS SCHEDULED, REFER TO SHEET A-600.
6. 6" SEAMLESS GUTTER AND DOWNSPOUT SYSTEM WITH SHUR-FLO GUTTER GUARDS, DARK BROWN.
7. TRAFFIC BOLLARD WITH PLASTIC COVER SLEEVE, REFER TO SHEET A-010.
8. ALLMARCH KNOTWOOD ALUMINUM SOFFIT, IROKO COLOR, INCLUDE ALL NECESSARY COMPONENTS.
9. 2X BLOCKING AS REQUIRED.
10. INSULATION Baffle, ALLOW FOR VENTING OF ATTIC SPACE.
11. TRUSS HANGER CLIP (SPECIFIED BY BUILDING MANUFACTURER).
12. TRUSS (DESIGNED BY BUILDING MANUFACTURER), FOR DEMONSTRATION PURPOSES ONLY.
13. 8 1/2" R-29 STRUCTURAL INSULATED PANEL (SIP) WALL, BY BUILDING MANUFACTURER.
14. BUILDING WRAP, PER BUILDING MANUFACTURER'S RECOMMENDATIONS.
15. TOP PLATE WITH SEALANT ON ALL POINTS, PER BUILDING MANUFACTURER'S RECOMMENDATIONS.
16. R-49 KRAFT-FACED FIBER-GLASS BATT ATTIC INSULATION.
17. 3/4" PLYWOOD/OSB ROOF DECK SHEATHING.
18. SHINGLE RIDGE VENT, BE SHINGLE MANUFACTURER.
19. CONCRETE SPREAD FOOTING WITH #5 REBAR, 12" O.C. ALL DIRECTIONS, VERTICALS EXTEND THROUGH ICF STEM WALL.
20. 12" CORE INSULATED CONCRETE FORM STEM WALL.
21. 29 GAUGE STEEL LINER PANEL THROUGHOUT ENTIRE HEATED BAY AREA - WHITE.
22. 2" R-10, 40PSI RIGID INSULATION UNDER ENTIRE SLAB, TAPE AND SEAL ALL JOINTS.
23. 1/2" EXPANSION JOINT WITH CONTINUOUS POLYURETHANE SEALANT, COLOR CONCRETE GRAY.
24. TREATED SIP SILL PLATE, PER MANUFACTURER'S RECOMMENDATIONS.
25. 3/4" TYPE X GYPSUM BOARD, INSTALL CONTINUOUSLY UNDER TRUSSES, FIRE TAPE AND CAULK.
26. LP SMARTSIDE CEDAR TRIM, BUILDING CORNERS TO MATCH SIDING (PNT-4), WINDOW AND DOOR TRIM TO BE FIELD PAINTED DARK BRONZE (PNT-3), REFER TO SHEET A-600.
27. SOUND BATT INSULATION, REFER TO WALL TYPES A-002.
28. 2X CRIPPLE WALL FOR ENTRY CANOPY WALL, BY BUILDING MANUFACTURER.
29. ADA ACCESSIBLE DOOR THRESHOLD.
30. 24 X 24 ARMSTRONG ULTIMA REGULAR ACOUSTIC CEILING TILES, REFER TO SHEET A-600.
31. 2X INTERIOR PARTITION WALL AS SCHEDULED, REFER TO SHEET A-002 FOR ASSEMBLY INFORMATION.
32. TRENCH DRAIN, REFER TO PLUMBING DRAWINGS.
33. 6" KRAFT-FACED R-19 THERMAL BATT INSULATION.
34. 2X FASCIA, WRAP IN DARK BRONZE BREAK METAL TO MATCH GUTTERS.
35. OPEN VALLEY METAL FLASHING PER ROOFING MANUFACTURER, DARK BRONZE.
36. METAL SILL/STEM-WALL PROTECTION FLASHING, DARK BRONZE.
37. 15 MIL PLASTIC VAPOR BARRIER, UNDER ENTIRE SLAB, TAPE AND SEAL ALL SEAMS.
38. OVERHEAD GARAGE DOOR, REFER TO SHEET A-600.
39. 6" CONCRETE SLAB WITH #4 REBAR 24" O.C. BOTH DIRECTIONS, TROWEL FINISH SMOOTH.
40. ROCK EQUIPMENT YARD, REFER TO CIVIL PLANS.
41. WALL FINISH AS SCHEDULED, REFER TO SHEET A-600.
42. METAL FLASHING, MATCH SOFFIT AND GUTTER COLOR.
43. BACKER ROD AND POLYURETHANE SEALANT.
44. MAPLE PLYWOOD EXTENSION JAMB AND SOLID TRIM, TWO (2) COATS OF SATIN POLYURETHANE.
45. 6X6 ROUGH-SAWN DOUGLAS FIR COLUMN, STAIN WITH TWO (2) COATS TWP 116.
46. HEAVY TIMBER, ROUGH-SAWN DOUGLAS FIR TRUSS, STAIN TWO (2) COATS TWP 116 WITH OVERSIZED METAL BRACKETS AS SHOWN, POWDER COAT BLACK. REFER TO SHEET A-401.
47. SELF-ADHERED, 40ML WATER AND ICE ROOFING UNDERLAYMENT MEMBRANE 24" FROM EAVES, RIDGES, GABLES, AND VALLEYS.
48. SYNTHETIC, NON-WOVEN, TEXTURED ROOF UNDERLAYMENT OVER ENTIRE ROOF DECK.
49. CEILING AS SCHEDULED, REFER TO SHEET A-110.
50. UTILITY SINK, REFER TO PLUMBING DRAWINGS.
51. RUBBER BASE, REFER TO SHEET A-600.
52. 18" WIDE, .018" ALUMINUM COIL FOR ICF PROTECTION. SLIDE UNDER SILL FLASHING AND BURY MINIMUM 6" IN GROUND, COLOR TO MATCH FASCIA AND GUTTER FLASHING.
53. JERICHO - THIN VENEER BY EDEN STONE, OR APPROVED EQUAL. MORTAR TO BE WHITE BASED ASTM C270, COLOR TBD. REFER TO SHEET A-400.
54. 6" SUBBASE UNDER ENTIRE BUILDING SLAB.
55. 4" HONED INDIANA LIMESTONE COLUMN CAP, BUFF COLORED, WITH DRIP EDGE.
56. CAST-IN-PLACE CONCRETE COLUMN FOUNDATION WITH #4 REBAR 12" O.C. ALL DIRECTIONS.
57. 12" THICKENED SLAB AT DEMISING WALL, REFER TO A-010.
58. 8" FOAM SILL GASKET MEMBRANE.
59. 3/4" OVERSIZED MILD-STEEL TRUSS BRACKET, POWDER COAT BLACK. ALL HARDWARE TO BE 3/4" GALVANIZED WITH LOCK WASHERS. BRACKETS TO BE PLACED ON BOTH SIDES OF TRUSS.
60. STEEL COLUMN BASE PLATE, 3/8" MILD-STEEL POWDER COATED BLACK. ANCHOR BOLTS TO BE UNDER COLUMNS, PILOT HOLE CAP AND BASE PLATE, THEN EPOXY SET ANCHOR BOLTS INTO CONCRETE BASE. LEVEL. EMBED MINIMUM 18". WELD 5" X 5" X 1/2" THICK COLUMN PLATE CENTERED BEHIND STEEL VERTICAL BRACKET TONGUES TO HOLD WOOD COLUMN ABOVE BOTTOM PLATE.
61. 6" CONCRETE PATIO WITH #4 REBAR 24" O.C. BOTH DIRECTION WITH 12" THICKENED SLAB EDGE, LIGHT BROOM FINISH.
62. SILL ANCHOR, PER BUILDING MANUFACTURER'S RECOMMENDATIONS.
63. 2X OUTRIGGER EAVE, PER BUILDING MANUFACTURER.
64. 2X OVERHANG CANOPY WITH 3" OSB BOTH SIDES.
65. STOOP FOOTING, REFER TO SHEET A-010.
66. LOUVER VENT, REFER TO MECHANICAL DRAWINGS.
67. 8'-0" DEEP X LENGTH OF BUILDING, SUSPENDED LOFT, TO BE ENGINEERED BY BUILDING MANUFACTURER TO HOLD 100 PSF. SAFETY CHAINS PER OSHA REGULATIONS, 18" AND 36" HEIGHT.
68. MILLWORK CABINETS, REFER TO A-401 FOR MORE INFORMATION.

GENERAL NOTES

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-110.
- C. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.
- E. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- F. CONTRACTOR SHALL HAVE THIS BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
- G. CONTRACTOR SHALL CAULK ALL CONCRETE SAW-CUT JOINTS AND EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.
- H. ALL LP SMARTSIDE PRODUCTS TO BE FIELD PAINTED TWO (2) COATS OF EXTERIOR LATEX ACRYLIC PAINT (SHERWIN WILLIAMS - DURATION OR APPROVED EQUAL), COLOR TBD.
- I. ALL STAIN TO BE TWP 116 - RUSTIC, COAT ALL MEMBERS TWO (2) TIMES. STAIN COLUMNS, TRUSSES, BEAMS AND FASCIA BOARDS. DO NOT STAIN ROOF DECK.
- J. UNDERSIDE OF WOOD ROOF DECKING TO RECEIVE TWO (2) COATS OF CLEAR GLOSS, UV RESISTANT, SPAR URETHANE.
- D. ALL BOLTS, NUTS, WASHERS TO BE HOT DIP GALVANIZED, ALL WASHERS TO BE LOCK-WASHERS.
- E. MORTAR COLOR TO BE WHITE BASE, BUFF.

CONSULTANT

IOWA DEPARTMENT OF
NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



BUILDING SECTIONS AND DETAILS

NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK

DRAKESVILLE, IA 52552

15248 CAMPGROUND ROAD

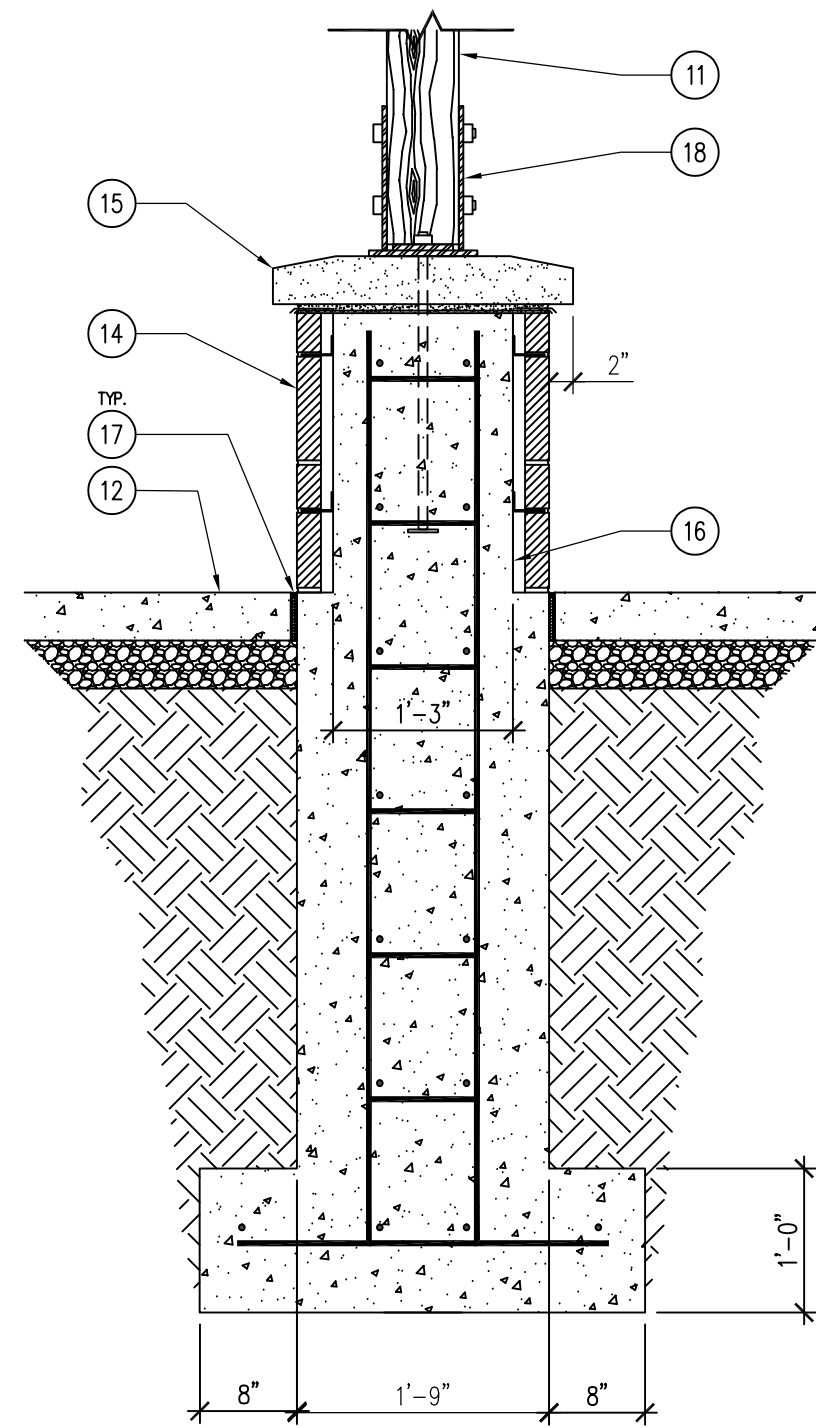
NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:
23-05-26-01

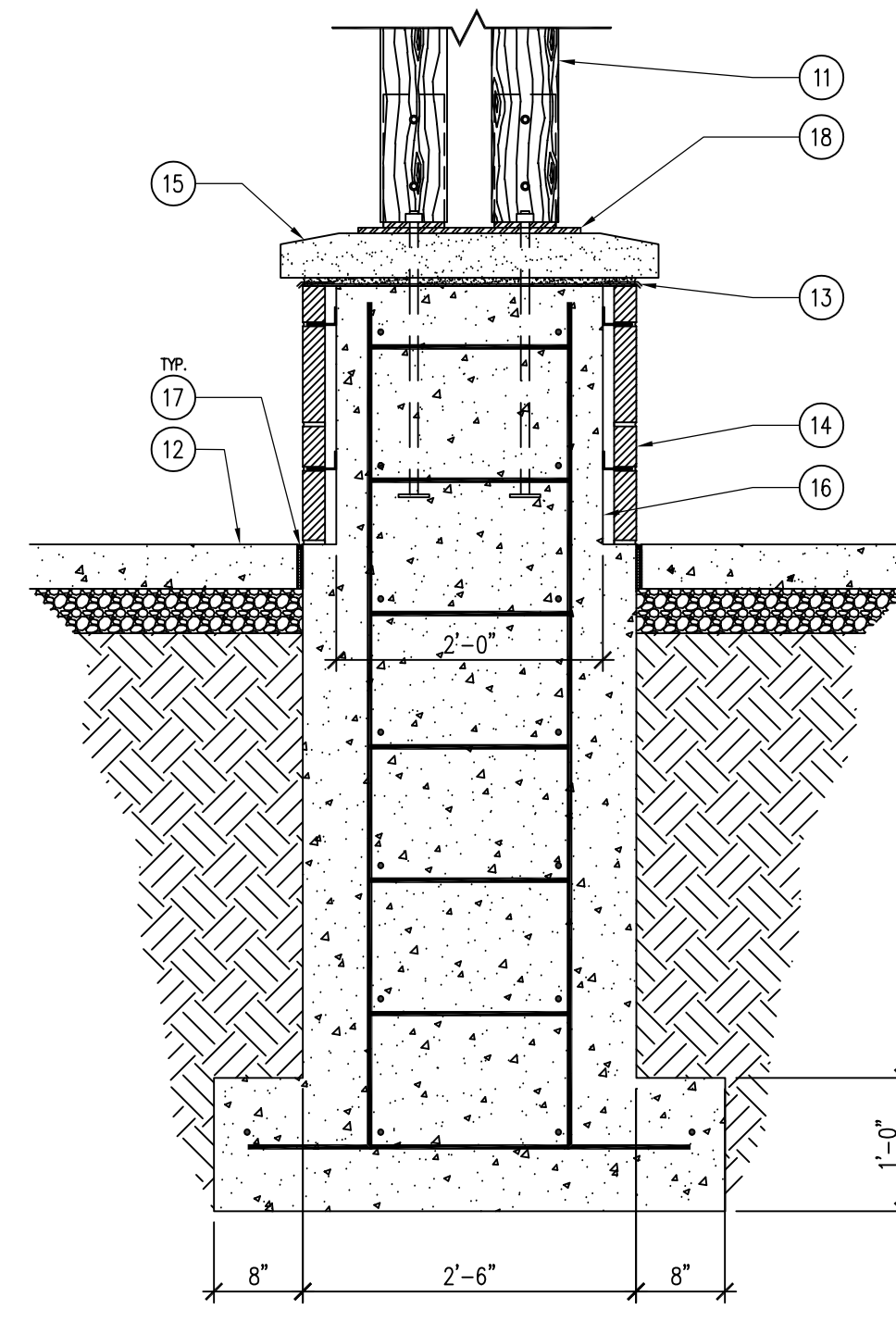
CHK'D BY: DATE:
03.21.2023

SHEET NO:

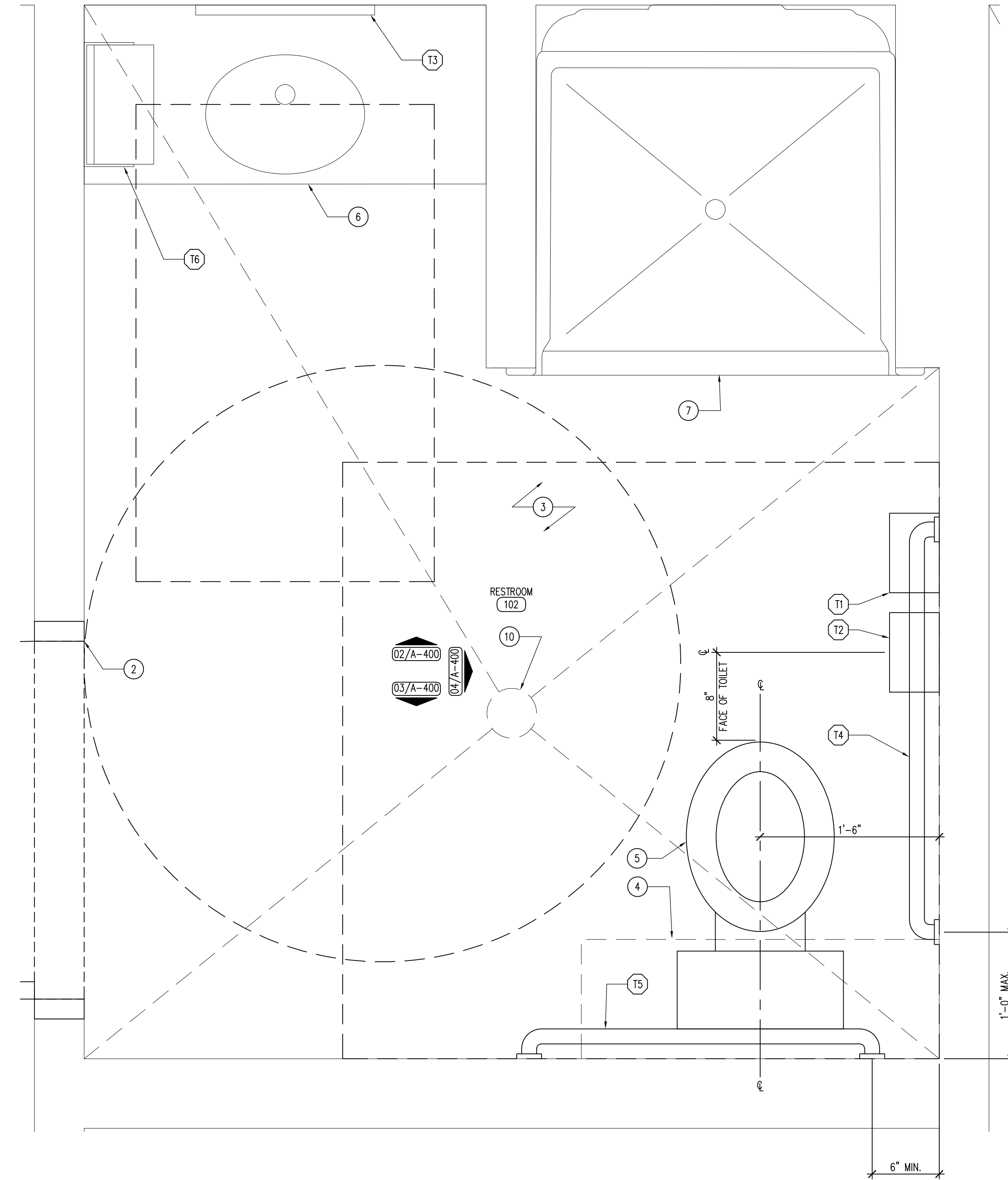
A-300



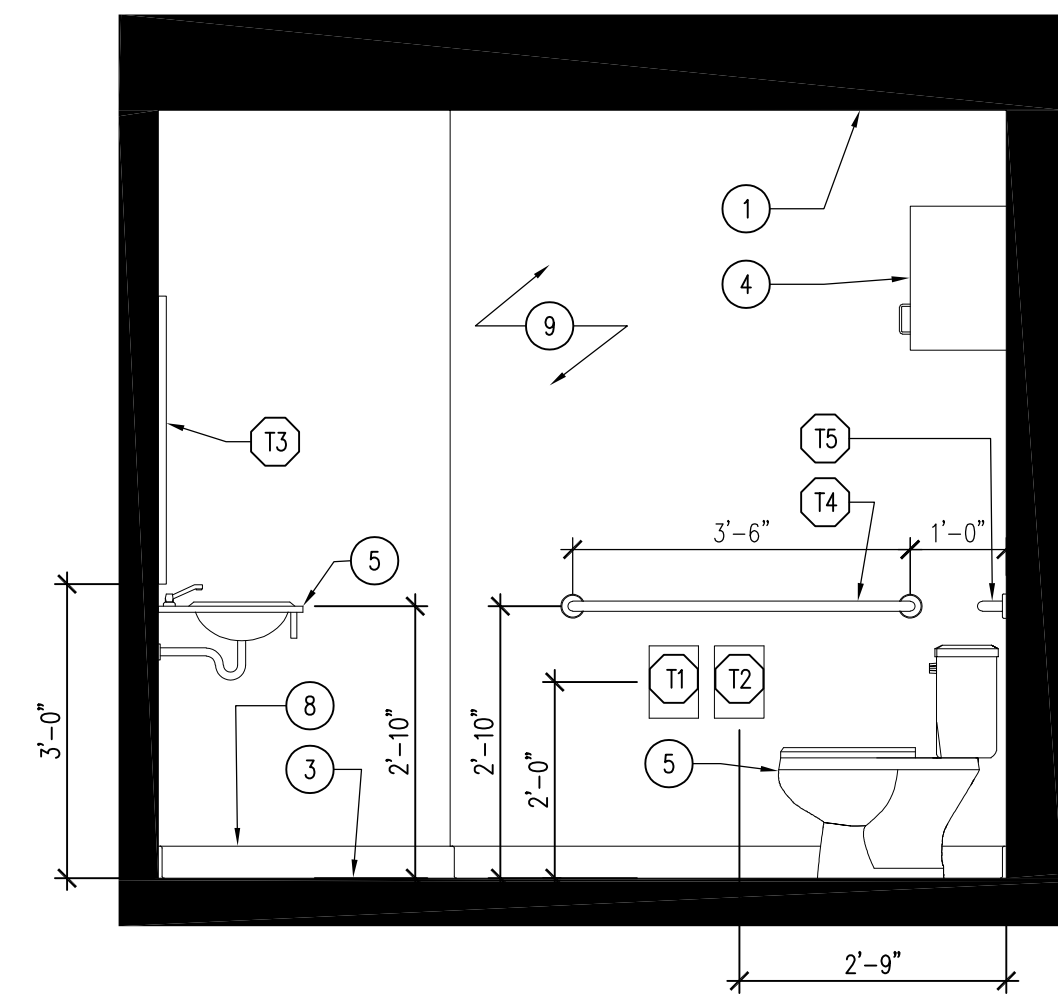
06 DETAIL - SECTION OF PORCH COLUMN BASE
SCALE: 3/4" = 1'-0"



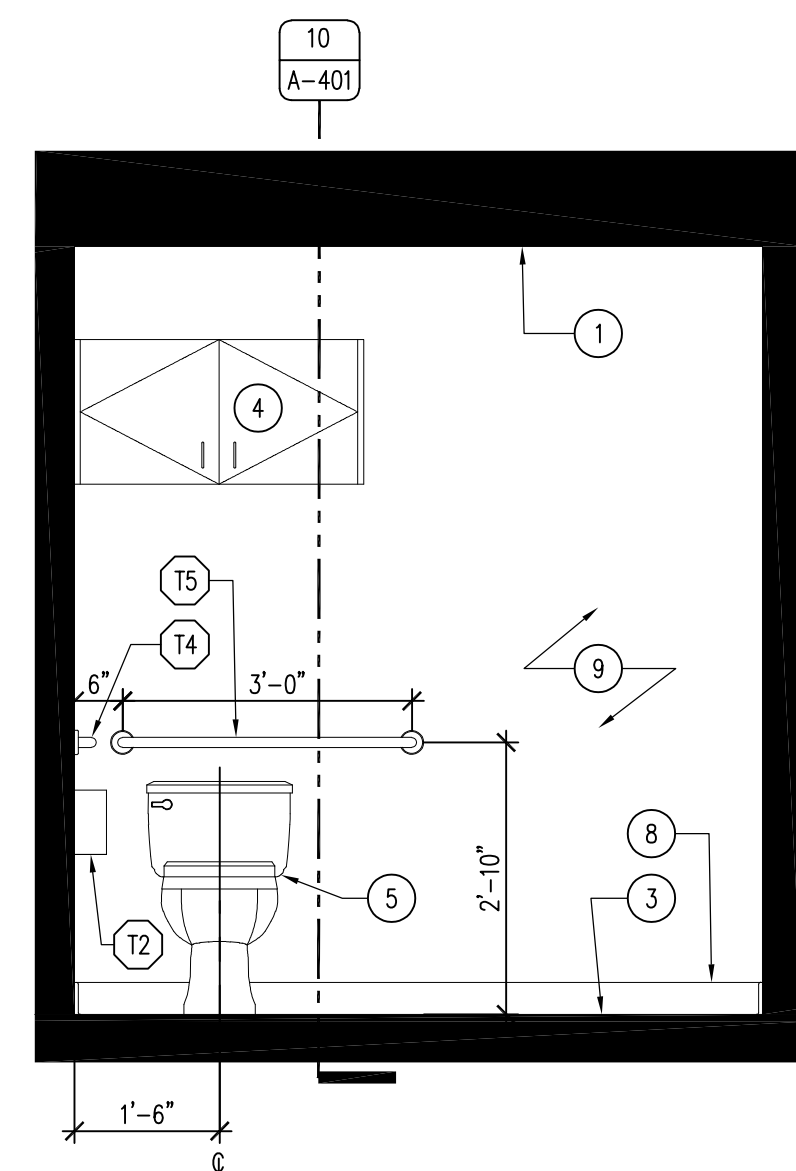
05 DETAIL - SECTION OF PORCH COLUMN BASE
SCALE: 3/4" = 1'-0"



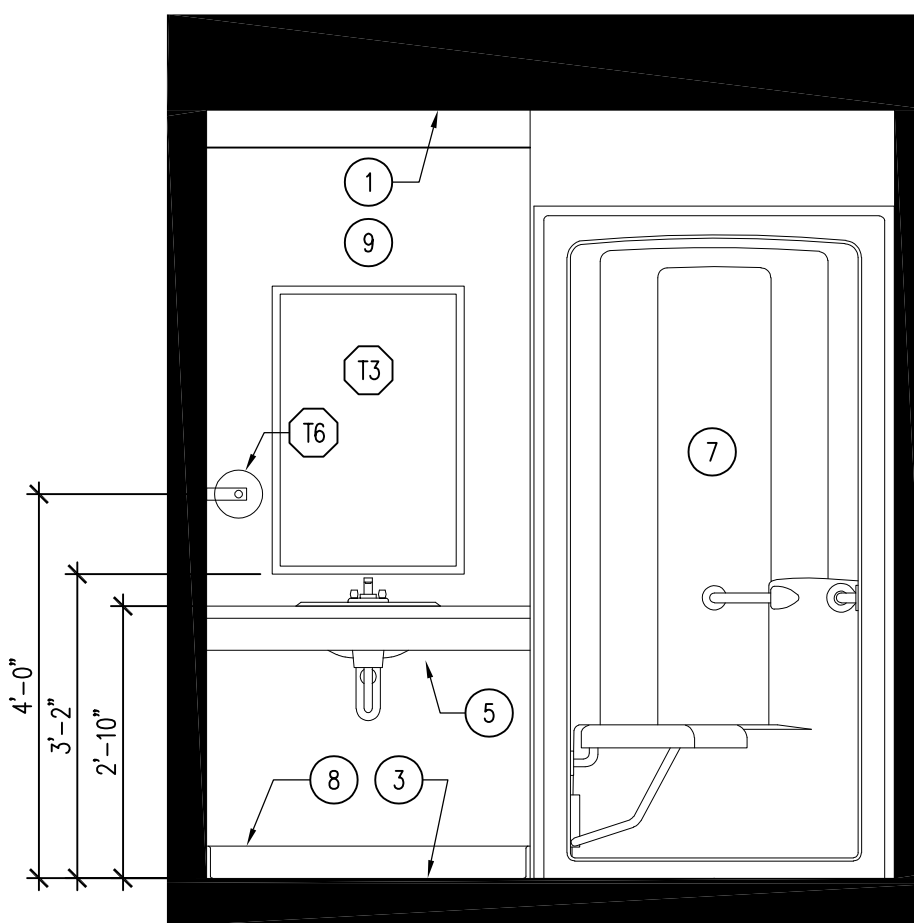
01 ENLARGED FLOOR PLAN
SCALE: 1 1/2" = 1'-0"



04 RESTROOM ELEVATION
SCALE: 1/2" = 1'-0"



03 RESTROOM ELEVATION
SCALE: 1/2" = 1'-0"



02 RESTROOM ELEVATION
SCALE: 1/2" = 1'-0"

TOILET ACCESSORY SCHEDULE

ALL MODEL NUMBERS BASED ON BOBRICK "CONTURA SERIES" WASHROOM EQUIPMENT UNLESS OTHERWISE NOTED.

- 1-1 SURFACE MOUNTED SANITARY NAPKIN DISPOSAL B-270
- 1-2 SURFACE MOUNTED TOILET TISSUE DISPENSER B-685
- 1-3 WELDED FRAMED MIRROR - MOUNT BOTTOM EDGE OF MIRROR 40" AFF B-290 2448
- 1-4 42" LONG X 1-1/2" DIAMETER, CONCEALED MOUNTING, STRAIGHT GRAB BAR B-6806 x 42
- 1-5 36" LONG X 1-1/2" DIAMETER, CONCEALED MOUNTING, STRAIGHT GRAB BAR B-6806 x 36
- 1-6 SURFACE MOUNTED ROLL TOWEL DISPENSER B-253

KEYNOTES

1. CEILING AS SCHEDULED, REFER TO REFLECTED CEILING PLAN SHEET A-110.
2. DOOR AS SCHEDULED, REFER TO SHEET A-600.
3. FINISH FLOOR AS SCHEDULED, REFER TO FINISH SCHEDULE SHEET A-600.
4. 3/4" PLYWOOD CABINET WITH HARDWOOD VENEER (WD-1) ON CONCEALED HINGES, PROVIDE DECORATIVE HARDWARE WIRE PULLS (DARK BRONZE), REFER TO A-401.
5. ADA COMPLIANT TOILET AS SCHEDULED, REFER TO PLUMBING DRAWINGS.
6. ADA UNDERMOUNT LAVATORY WITH SOLID SURFACE COUNTER (SS-1) AS SHOWN, WITH SCALD GUARDS. REFER TO PLUMBING DRAWINGS.
7. ADA COMPLIANT SHOWER SURROUND WITH TRANSLUCENT DOOR AS SCHEDULED. REFER TO PLUMBING DRAWINGS.
8. RUBBER WALL BASE AS SCHEDULED, REFER TO FINISH SCHEDULE SHEET A-600.
9. WALL FINISH AS SCHEDULED, REFER TO FINISH SCHEDULE SHEET A-600.
10. FLOOR DRAIN, REFER TO PLUMBING DRAWINGS.
11. 6X6 ROUGH-SAWN DOUGLAS FIR COLUMN, STAIN WITH TWO (2) COATS TWP 116.
12. CONCRETE PATIO SLAB, REFER TO SHEET A-100.
13. 60MIL EPDM UNDERLAYMENT WATER-PROOFING MEMBRANE WITH DARK BRONZE PROTECTIVE FLASHING CONTINUOUS.
14. CONCRETE COLUMN BASE WITH JERICHO - THIN VENEER BY EDEN STONE, OR APPROVED EQUAL. MORTAR TO BE WHITE BASED ASTM C270, COLOR TBD. TIE STONE TO BASE WITH STAINLESS ANCHORS AND ADD WEEP ROPES WHERE REQUIRED.
15. 4" HONED INDIANA LIMESTONE COLUMN CAP, BUFF COLORED. MANUFACTURER TO DRILL HOLES FOR COLUMN BASE PLATE. 3/8" THICK, FULL MORTAR BED JOINT ON CONCRETE FOOTING.
16. CAST IN PLACE CONCRETE COLUMN FOUNDATION WITH #4 REBAR 12" O.C. ALL DIRECTIONS.
17. 1/2" EXPANSION JOINT WITH CONTINUOUS FLOWABLE POLYURETHANE SEALANT.
18. STEEL COLUMN BASE PLATE, 3/8" MILD-STEEL POWDER COATED BLACK. ANCHOR BOLTS TO BE UNDER COLUMNS, PILOT HOLE CAP AND BASE PLATE, THEN EPOXY SET ANCHOR BOLTS INTO CONCRETE BASE, LEVEL EMBED MINIMUM 18". WELD 5" X 5" X 1/2" THICK COLUMN PLATE CENTERED BEHIND STEEL VERTICAL BRACKET TONGUES TO HOLD WOOD COLUMN ABOVE BOTTOM PLATE, REFER TO SHEET A-401.

GENERAL NOTES

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-101.
- C. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.
- E. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- F. CONTRACTOR SHALL HAVE THIS BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
- G. ALL PLYWOOD PRODUCTS TO HAVE NO ADDED UREA-FORMALDEHYDE (NAUF).
- H. ALL PLYWOOD CABINET AND DRAWER SURFACES TO HAVE VOC FREE CLEAR SATIN FINISH.

CONSULTANT:

IOWA DEPARTMENT OF
NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



ENLARGED PLANS AND ELEVATIONS

NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK

15248 CAMPGROUND ROAD
DRAKESVILLE, IA 52552

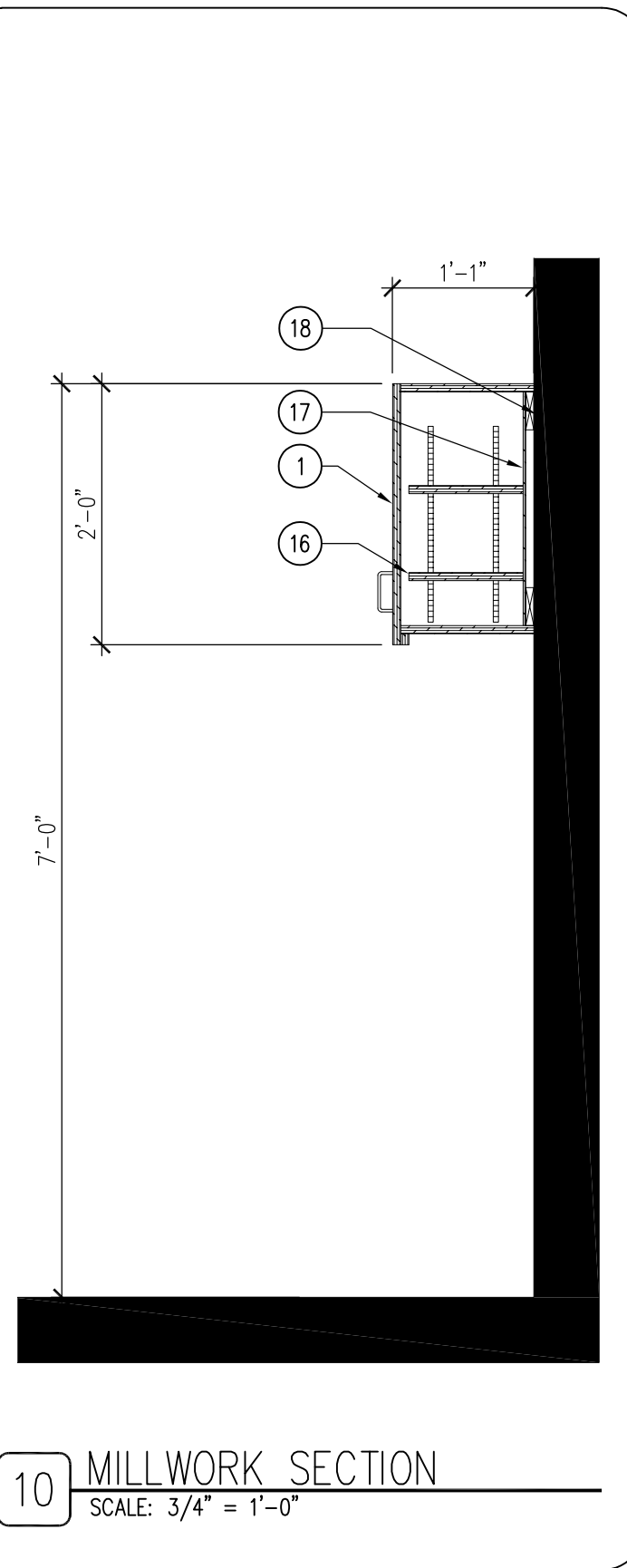
NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:
23-05-26-01

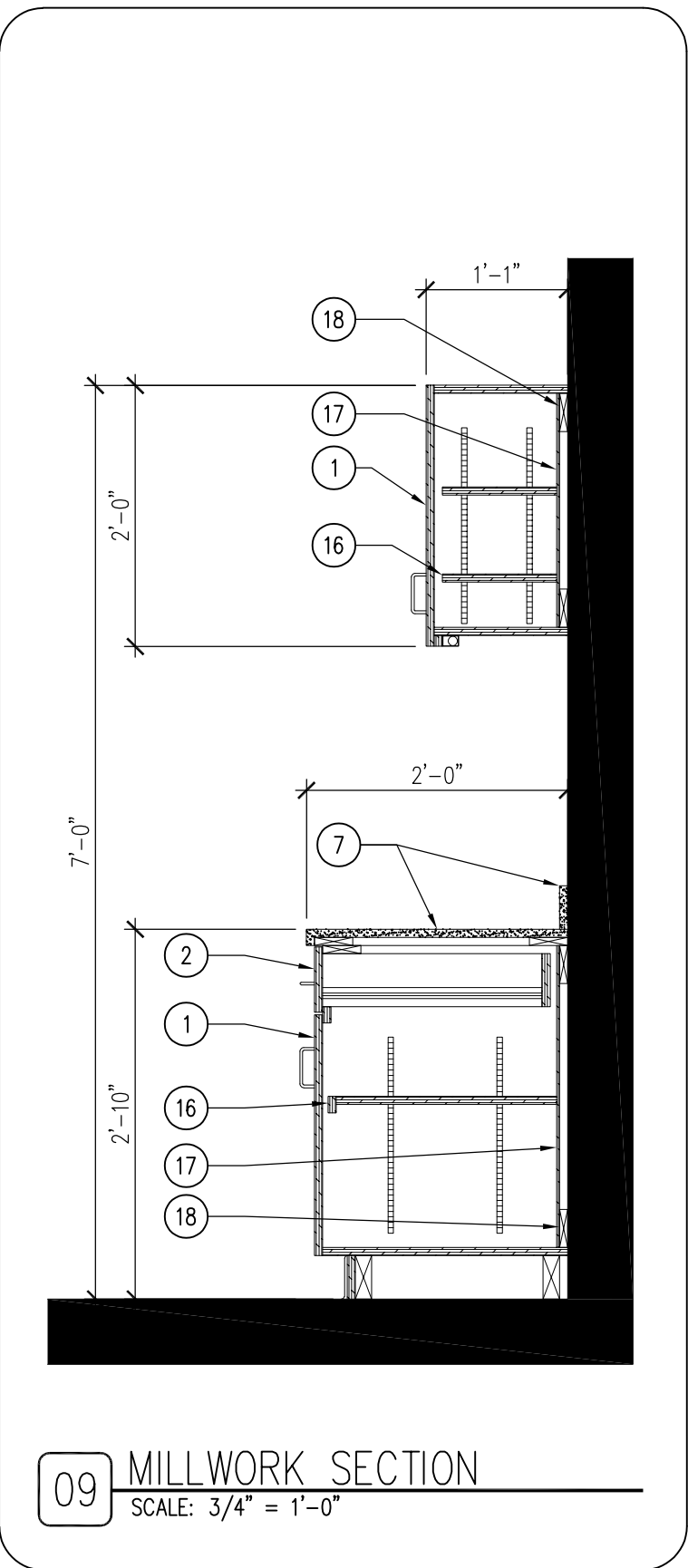
CHK'D BY: DATE:
03.21.2023

SHEET NO:

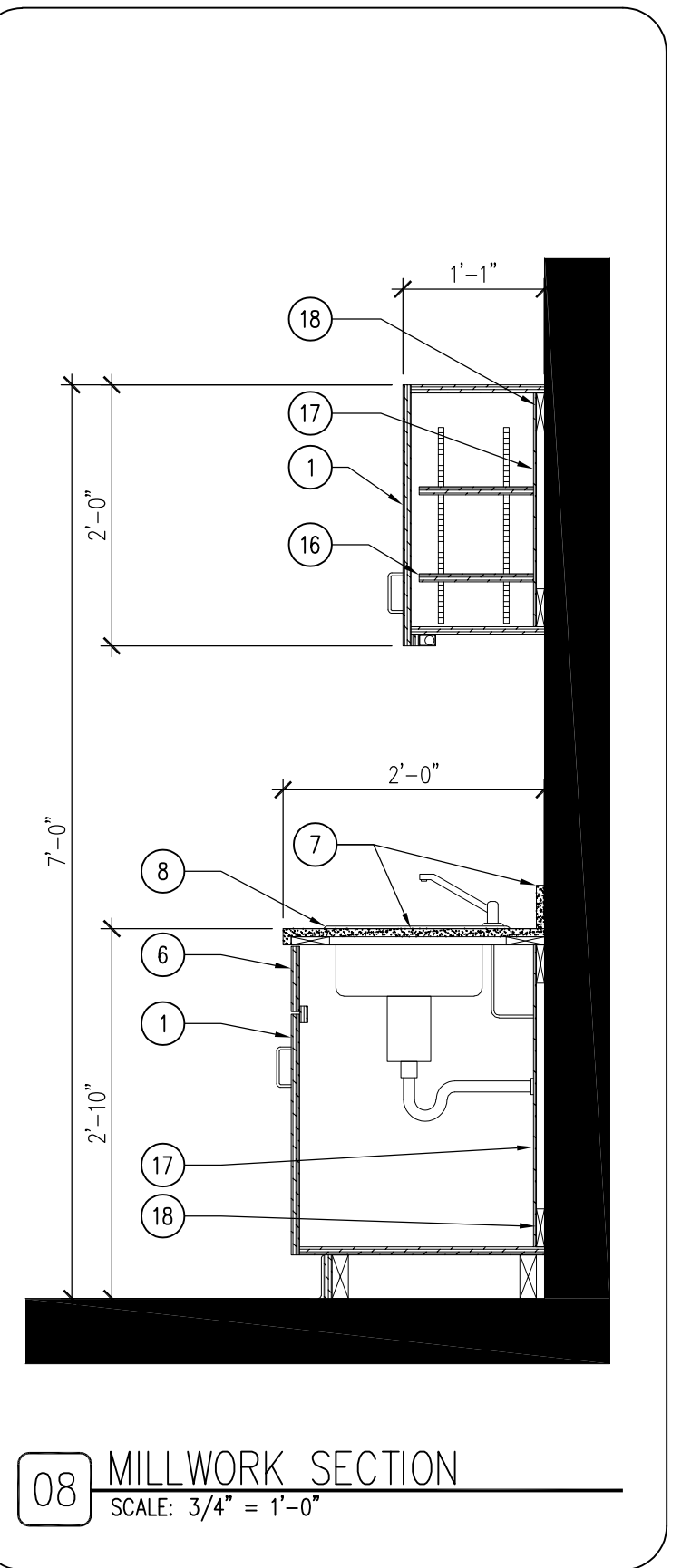
A-400



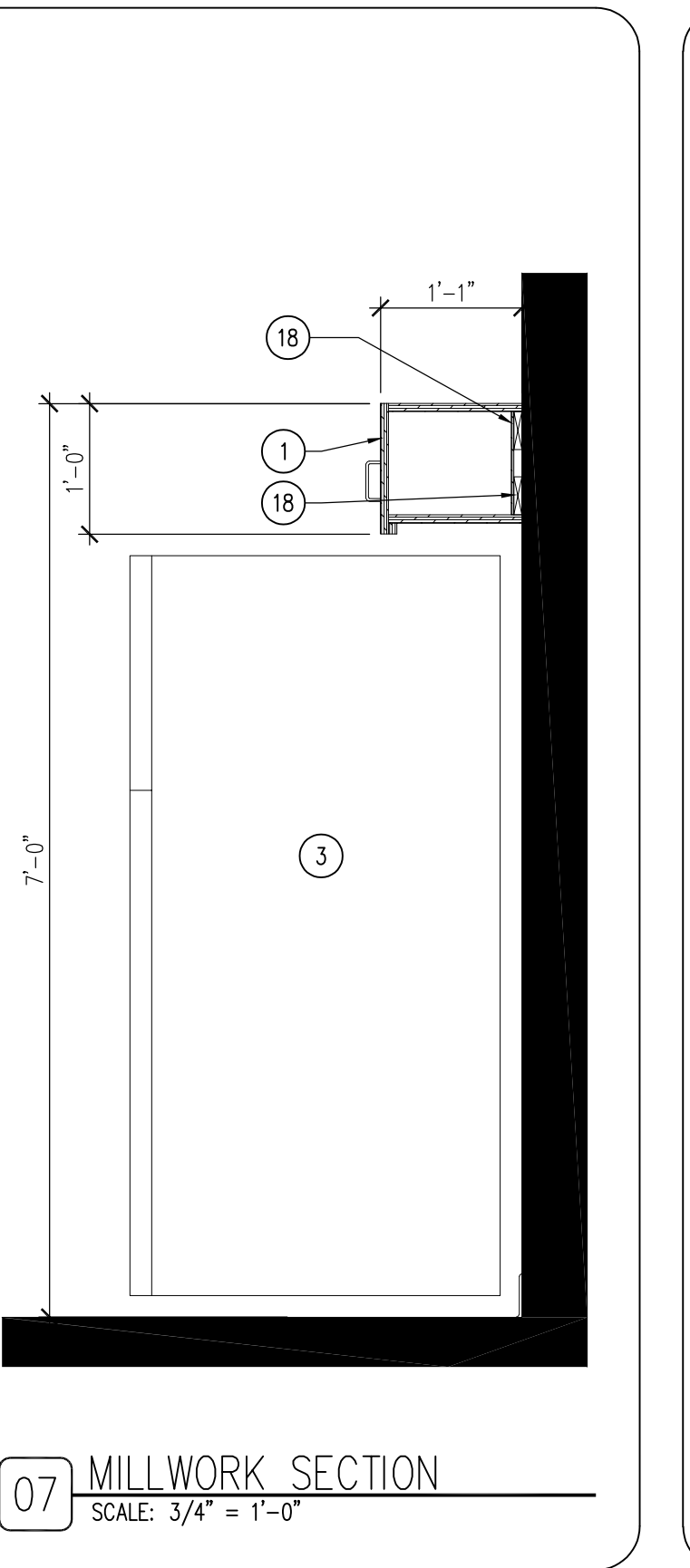
10 MILLWORK SECTION
SCALE: 3/4" = 1'-0"



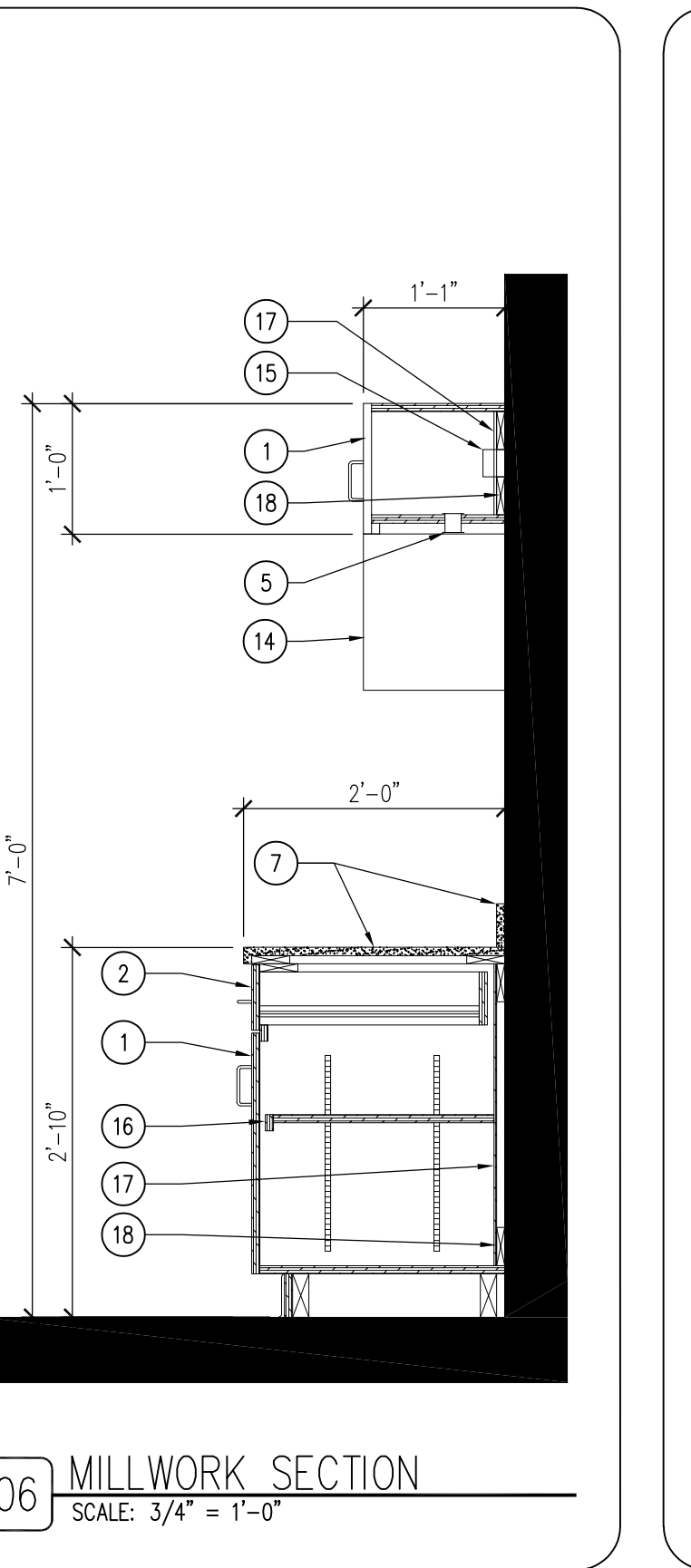
09 MILLWORK SECTION
SCALE: 3/4" = 1'-0"



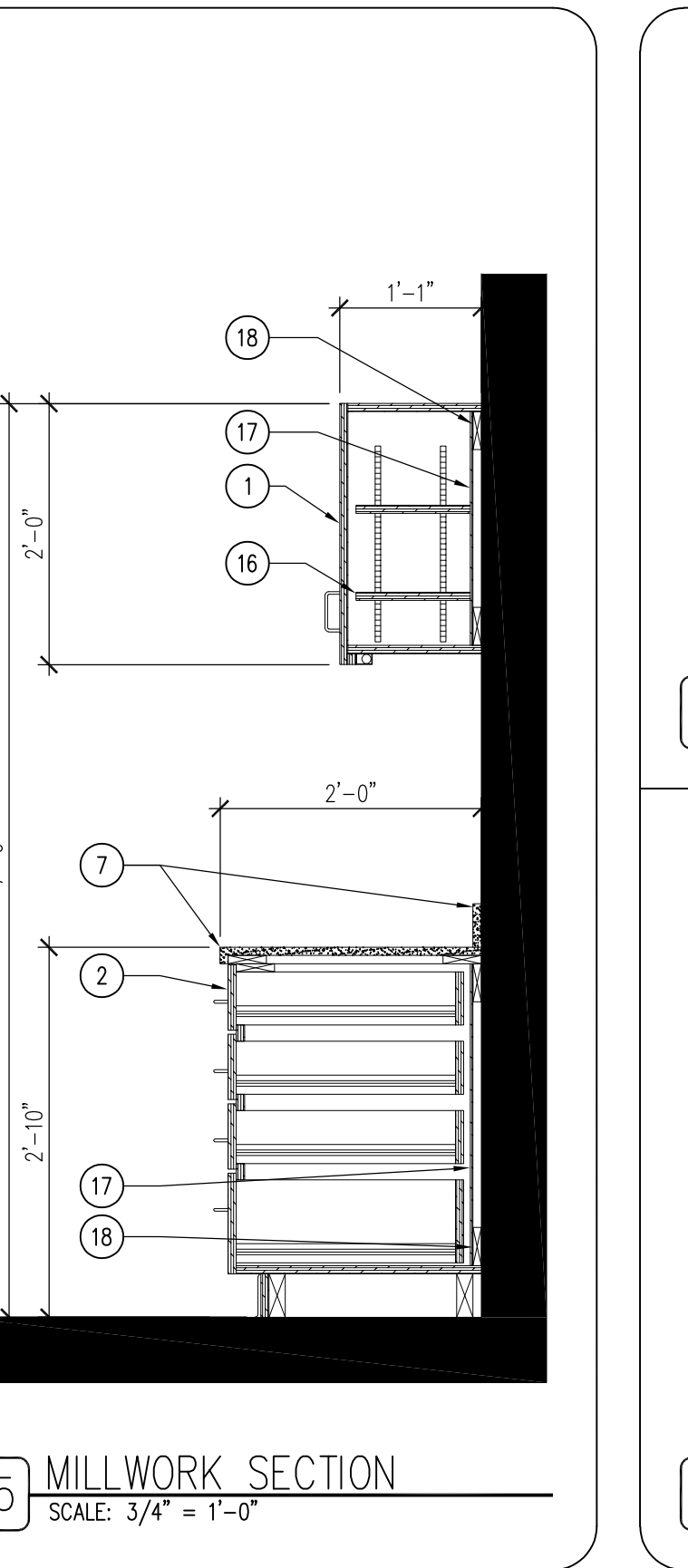
08 MILLWORK SECTION
SCALE: 3/4" = 1'-0"



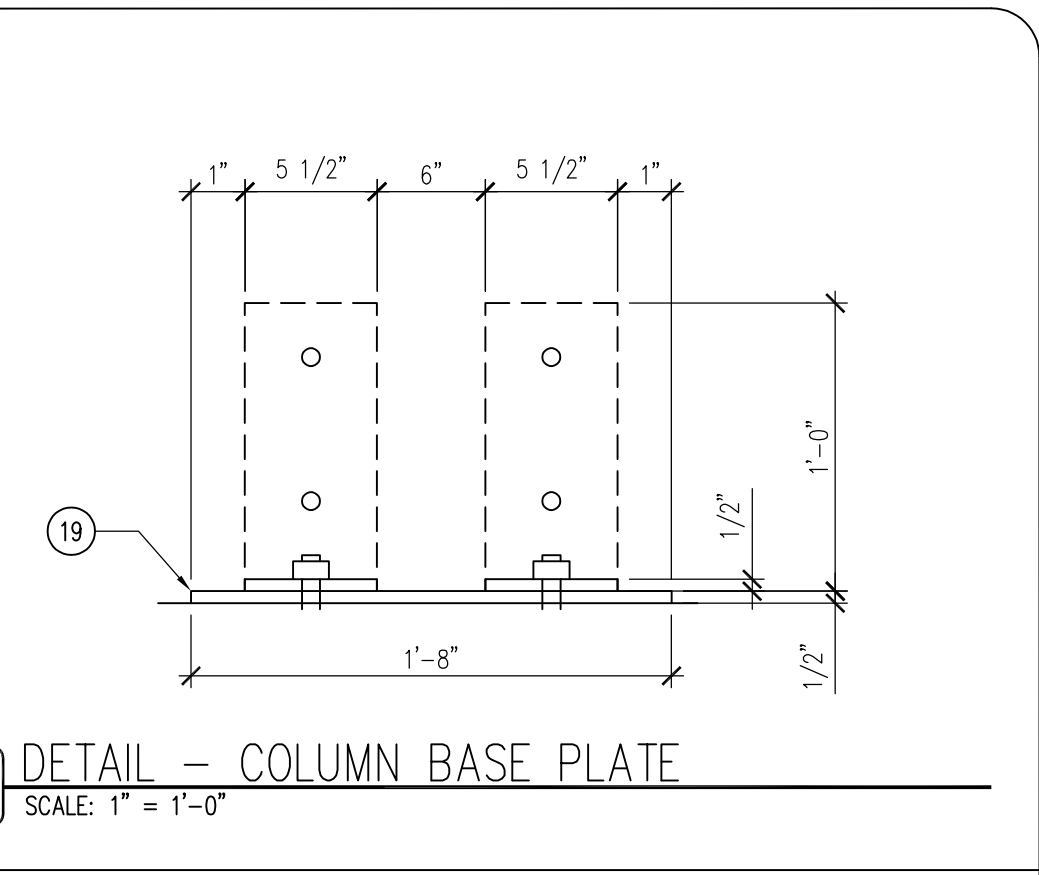
07 MILLWORK SECTION
SCALE: 3/4" = 1'-0"



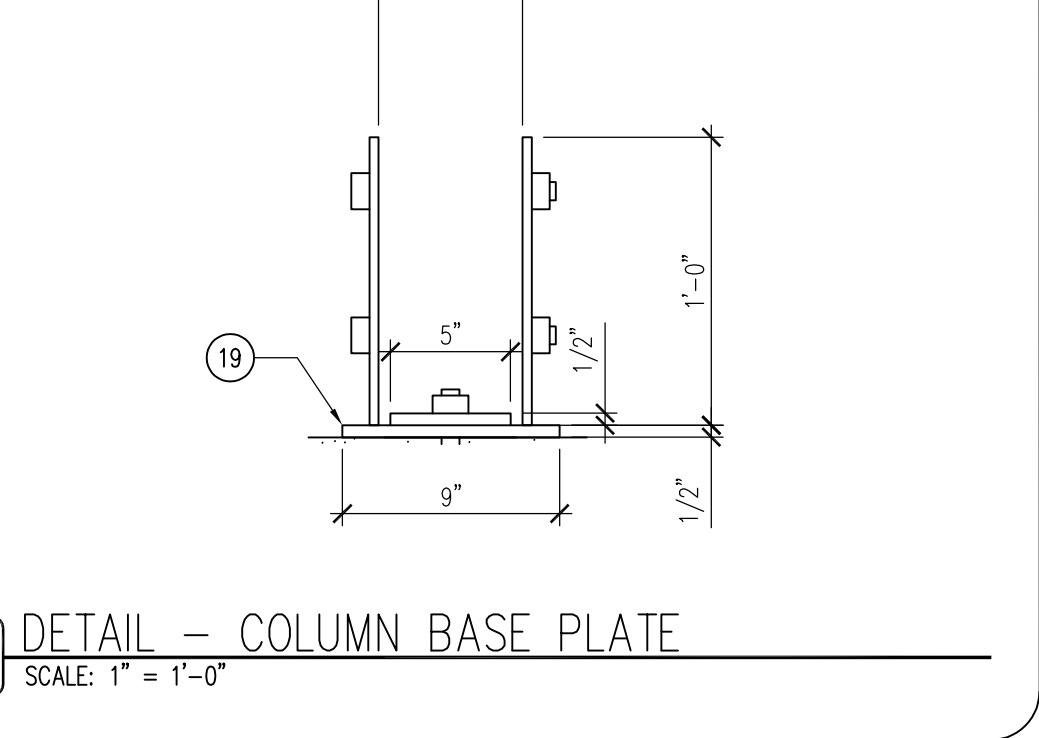
06 MILLWORK SECTION
SCALE: 3/4" = 1'-0"



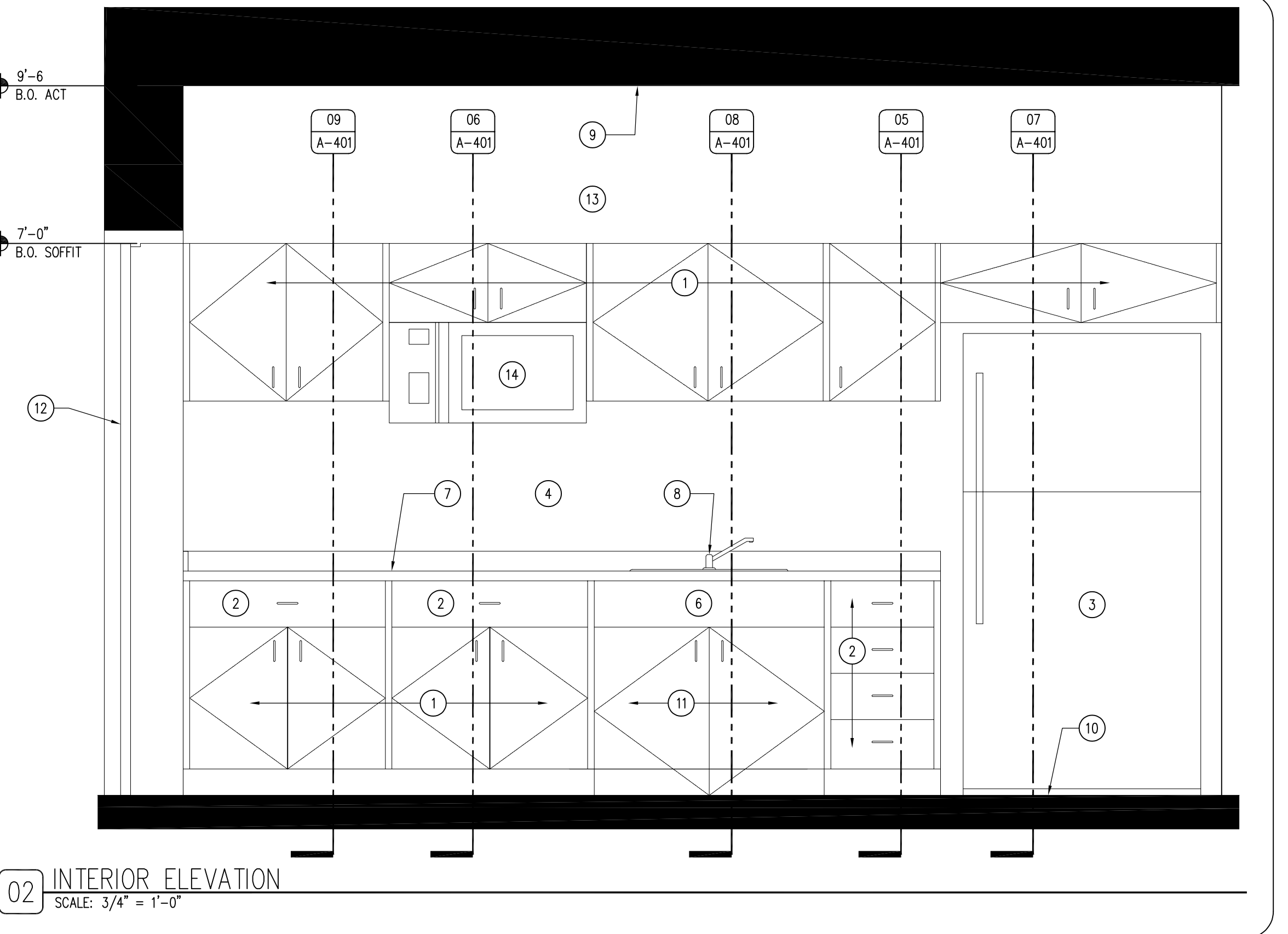
05 MILLWORK SECTION
SCALE: 3/4" = 1'-0"



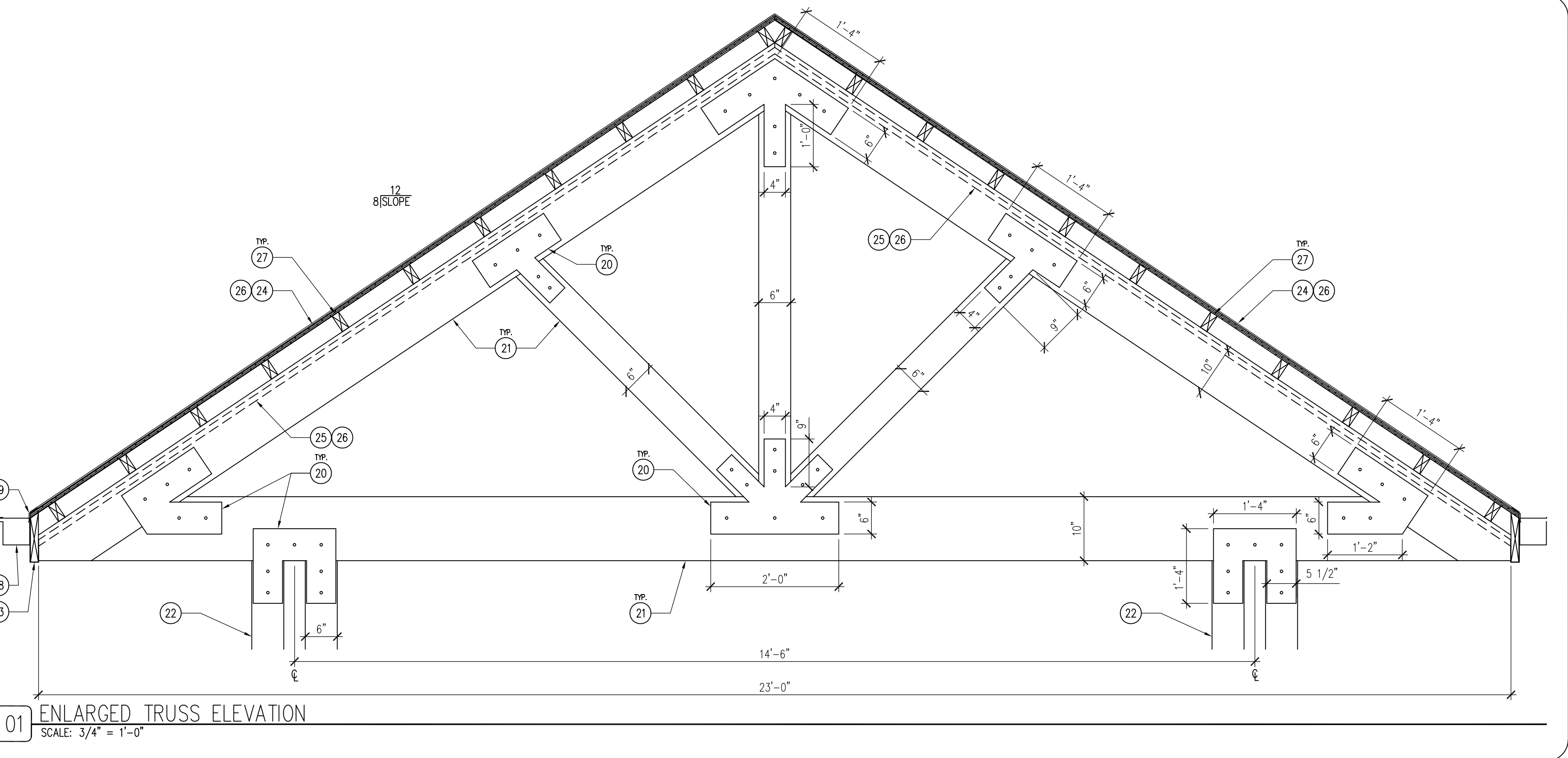
04 DETAIL - COLUMN BASE PLATE
SCALE: 1" = 1'-0"



03 DETAIL - COLUMN BASE PLATE
SCALE: 1" = 1'-0"



02 INTERIOR ELEVATION
SCALE: 3/4" = 1'-0"



01 ENLARGED TRUSS ELEVATION
SCALE: 3/4" = 1'-0"

KEYNOTES

1. 3/4" PLYWOOD DOOR ON CONCEALED HINGES WITH WOOD VENEER (WD-1). PROVIDE DECORATIVE HARDWARE WIRE PULLS (DARK BRONZE). REFER TO FINISH SCHEDULE SHEET A-600.
2. 3/4" PLYWOOD DRAWER WITH UNDERMOUNT SLIDES WITH WOOD VENEER (WD-1). PROVIDE DECORATIVE HARDWARE WIRE PULLS (DARK BRONZE). REFER TO FINISH SCHEDULE SHEET A-600.
3. REFRIGERATOR BY CONTRACTOR, GE MODEL #GEZ1DSSKSS, OR APPROVED EQUAL.
4. WALL FINISH AS SCHEDULED. REFER TO SHEET A-600.
5. GROMMET HOLE WITH PLASTIC GROMMET, SIZE ACCORDING TO MICROWAVE MANUFACTURER'S RECOMMENDATIONS.
6. 3/4" PLYWOOD VALENCE WITH WOOD VENEER (WD-1). REFER TO FINISH SCHEDULE SHEET A-600.
7. 3/4" SOLID SURFACE TOP AND BACKSPLASH (SS-1). REFER TO FINISH SCHEDULE SHEET A-600.
8. TWO-BASIN STAINLESS STEEL UNDER-MOUNT SINK. REFER TO PLUMBING DRAWINGS.
9. CEILING FINISH AS SCHEDULED. REFER TO REFLECTED CEILING PLAN SHEET A-110.
10. FLOOR AS SCHEDULED. REFER TO FINISH SCHEDULE SHEET A-600.
11. ADA COMPLIANT UNDER-SINK DOORS ON CONCEALED HINGES WITH WOOD VENEER (WD-1). PROVIDE DECORATIVE HARDWARE WIRE PULLS. REFER TO FINISH SCHEDULE SHEET A-600.
12. DOOR AS SCHEDULED. REFER TO DOOR SCHEDULE SHEET A-600.
13. GYPSUM SOFFIT/BULKHEAD ABOVE CABINETS.
14. MICROWAVE BY CONTRACTOR, GE MODEL #JWM2160RFS, OR APPROVED EQUAL.
15. ELECTRICAL OUTLET, REFER TO ELECTRICAL DRAWINGS.
16. 3/4" PLYWOOD SHELF WITH PLASTIC LAMINATE (PL-1) AND HARDWOOD EDGE BANDING, PROVIDE ADJUSTABLE HARDWARE.
17. 1/2" PLYWOOD BACKER BOARD WITH PLASTIC LAMINATE (PL-1).
18. 2X WOOD BLOCKING AS REQUIRED.
19. STEEL COLUMN BASE PLATE, 3/8" MILD-STEEL POWDER COATED BLACK. ANCHOR BOLTS TO BE UNDER COLUMNS, PILOT HOLE CAP AND BASE PLATE, THEN EPOXY SET ANCHOR BOLTS INTO CONCRETE BASE, LEVEL. EMBED MINIMUM 18". WELD 5" X 5" X 1/2" THICK COLUMN PLATE CENTERED BEHIND STEEL VERTICAL BRACKET TONGUES TO HOLD WOOD COLUMN ABOVE BOTTOM PLATE.
20. 3/8" STEEL CONNECTOR PLATE, EACH SIDE, AS SHOWN, POWDER COAT BLACK, WITH 3/4" GALVANIZED CARRIAGE BOLTS WITH LOCK-WASHERS AND NUTS.
21. 6X ROUGH-SAWN DOUGLAS FIR TRUSS, WITH TWO COATS TWP STAIN 116. REFER TO DIMENSIONS.
22. 2X FASCIA TO MATCH ROOF FASCIA, WRAP IN METAL TO MATCH ROOF.
23. ROOFING SHINGLES WITH UNDERLAYMENT AS DETAILED ON SHEET A-600, REFER TO SHINGLE REQUIREMENTS A-600.
24. ALUMINUM KNOTWOOD ALUMINUM SOFFIT, IROKO COLOR, INCLUDE ALL NECESSARY COMPONENTS.
25. 3/4" PLYWOOD/OSB SHEATHING.
26. 2X OUTRIGGER OVERHANG CANOPY STRUCTURE, BY BUILDING MANUFACTURER.
27. 6" SEAMLESS GUTTER, DARK BRONZE.
28. GUTTER APRON/DROP EDGE, DARK BRONZE.

GENERAL NOTES

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-110.
- C. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.
- E. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- F. CONTRACTOR SHALL HAVE THIS BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
- G. ALL PLYWOOD PRODUCTS TO HAVE NO ADDED UREA-FORMALDEHYDE (NAUF).
- H. ALL PLYWOOD CABINET AND DRAWER SURFACES TO HAVE VOC FREE CLEAR SATIN FINISH.

CONSULTANT:

**IOWA DEPARTMENT OF
NATURAL RESOURCES**
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



MILLWORK SECTIONS & TRUSS ELEVATION

NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK

15248 CAMPGROUND ROAD
DRAKESVILLE, IA 52552

NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:

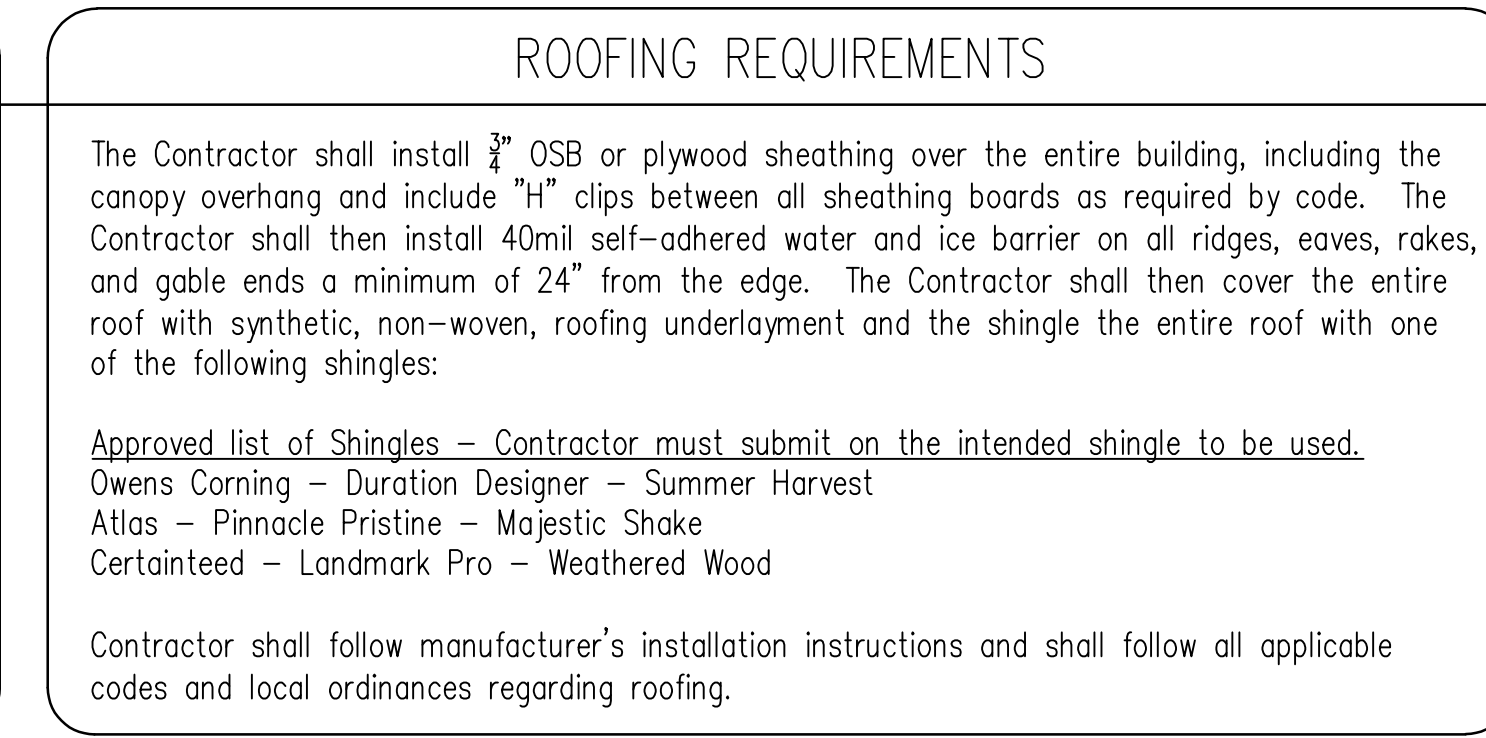
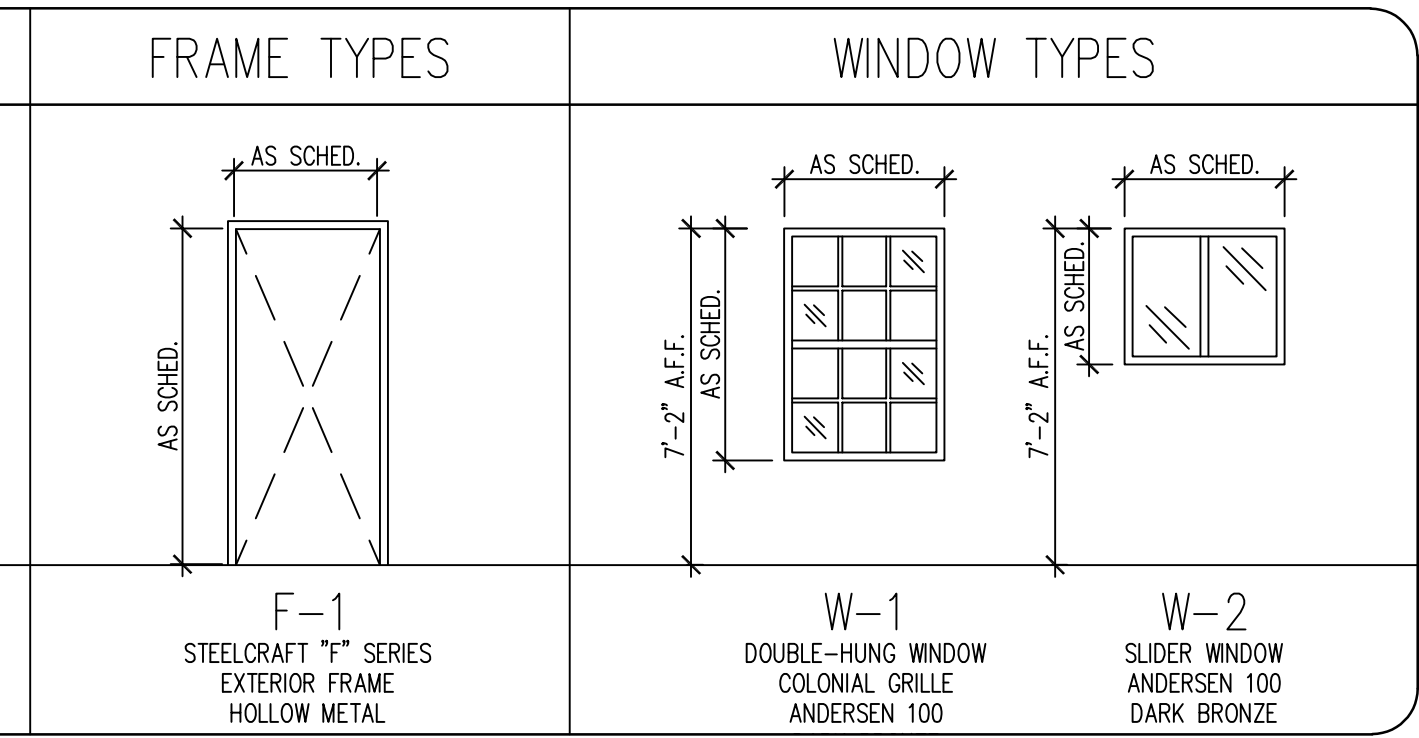
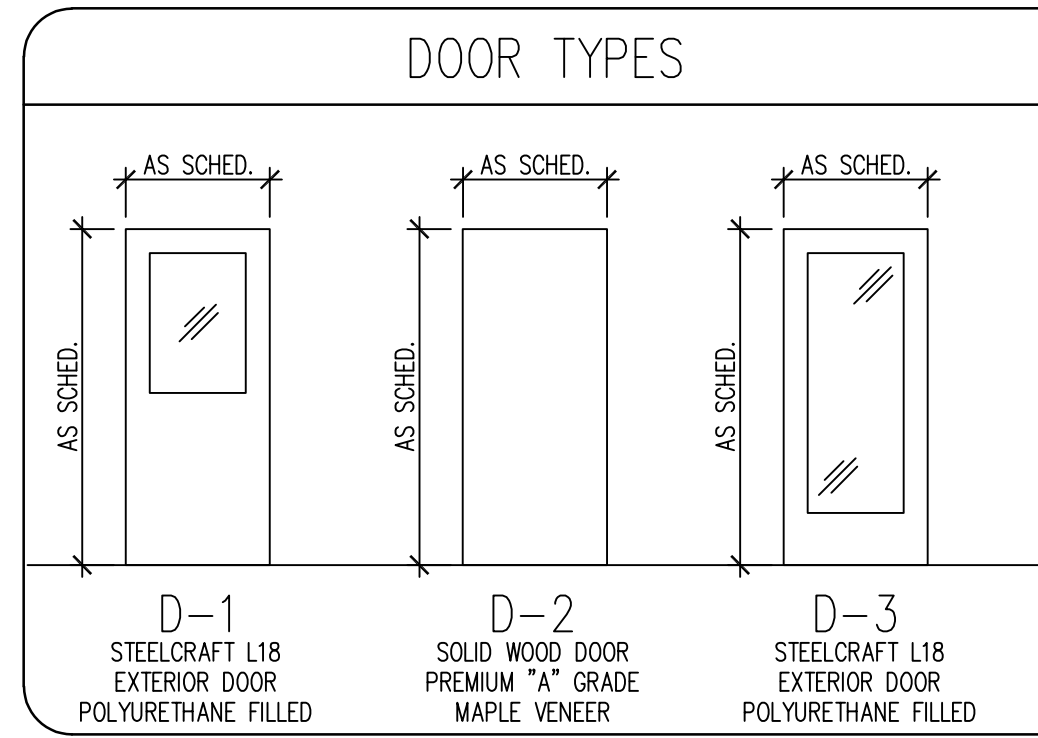
23-05-26-01

CHK'D BY: DATE:

03.21.2023

SHEET NO:

A-401



ROOFING REQUIREMENTS

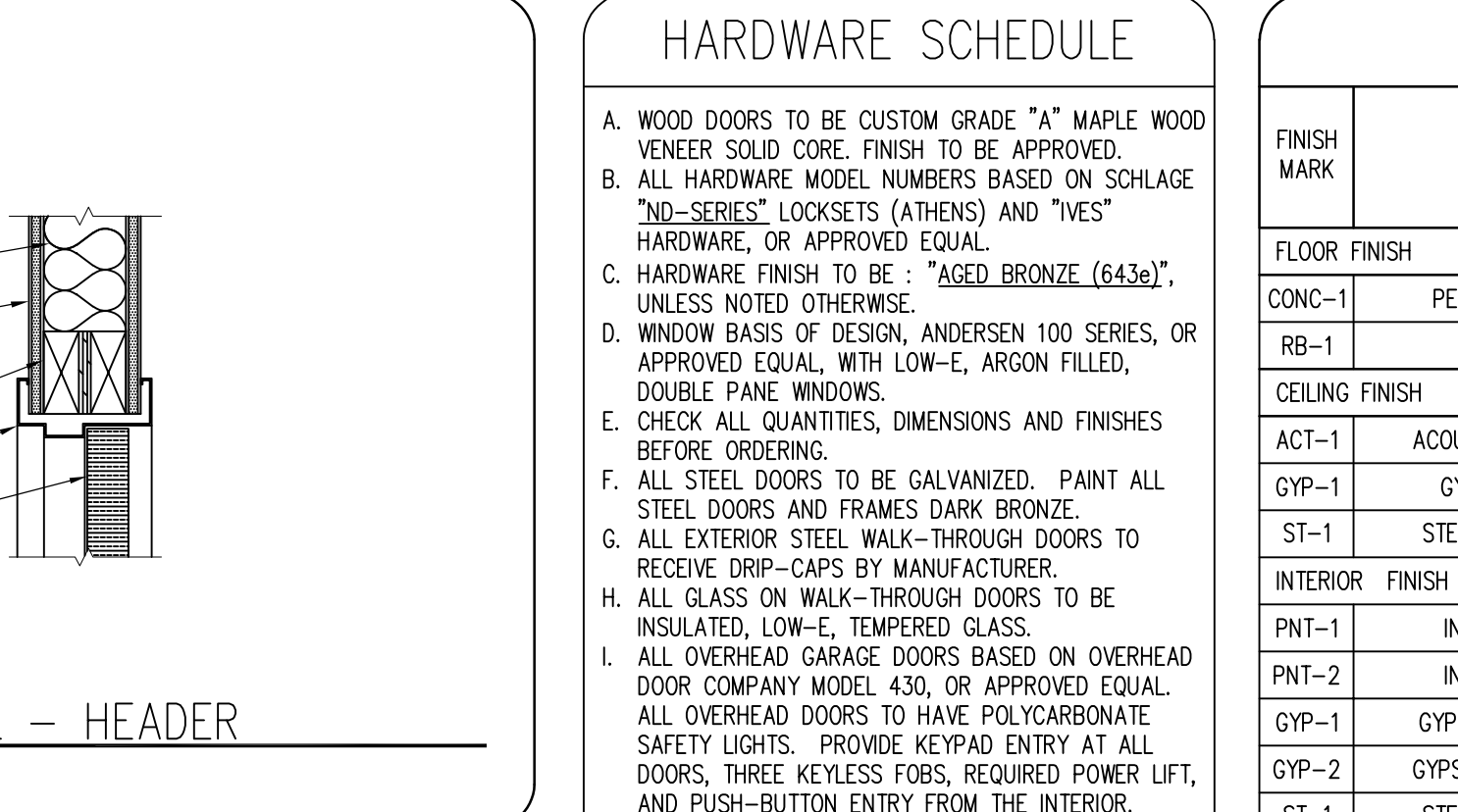
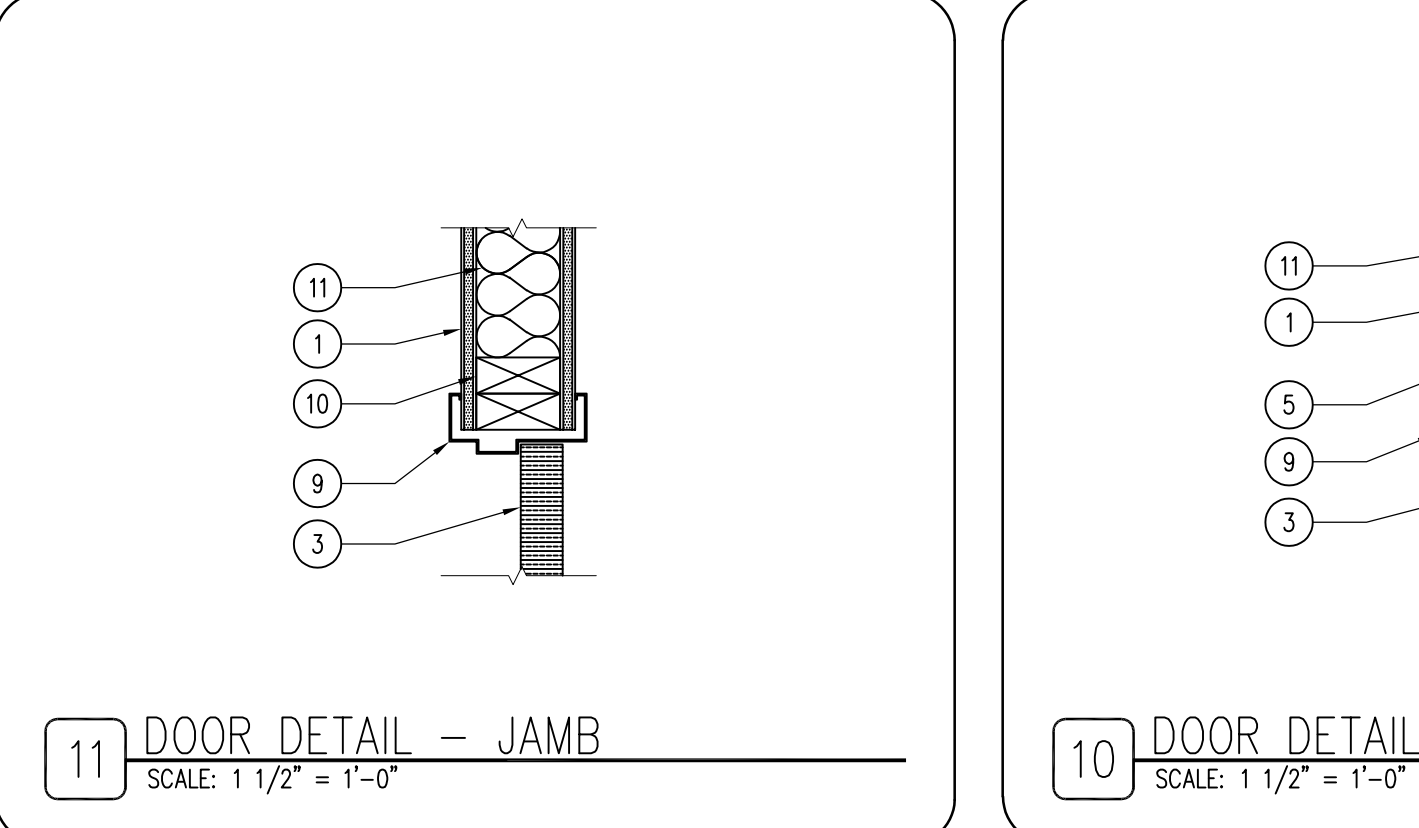
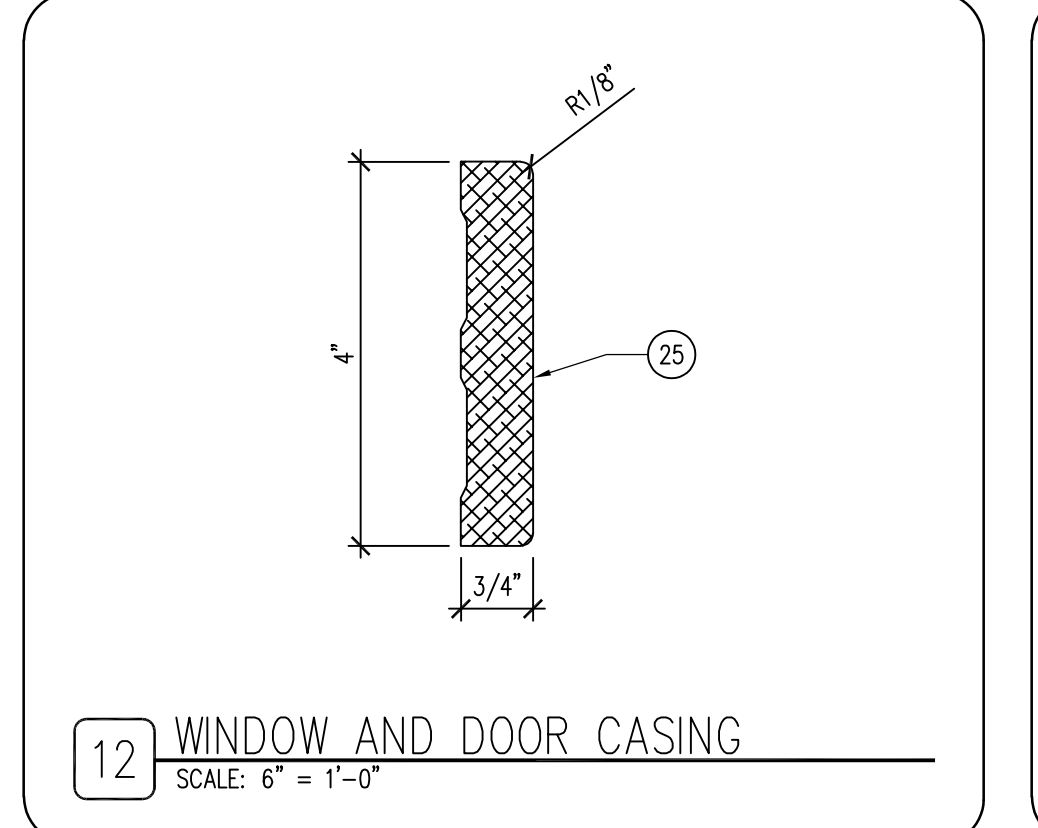
The Contractor shall install 5/8" OSB or plywood sheathing over the entire building, including the canopy overhang and include "H" clips between all sheathing boards as required by code. The Contractor shall then install 40mil self-adhered water and ice barrier on all ridges, eaves, rakes, and gable ends a minimum of 24" from the edge. The Contractor shall then cover the entire roof with synthetic, non-woven, roofing underlayment and the shingle the entire roof with one of the following shingles:

Approved list of Shingles - Contractor must submit on the intended shingle to be used.
 Owens Corning - Duration Designer - Summer Harvest
 Atlas - Pinnacle Pristine - Majestic Shake
 Certainteed - Landmark Pro - Weathered Wood

Contractor shall follow manufacturer's installation instructions and shall follow all applicable codes and local ordinances regarding roofing.

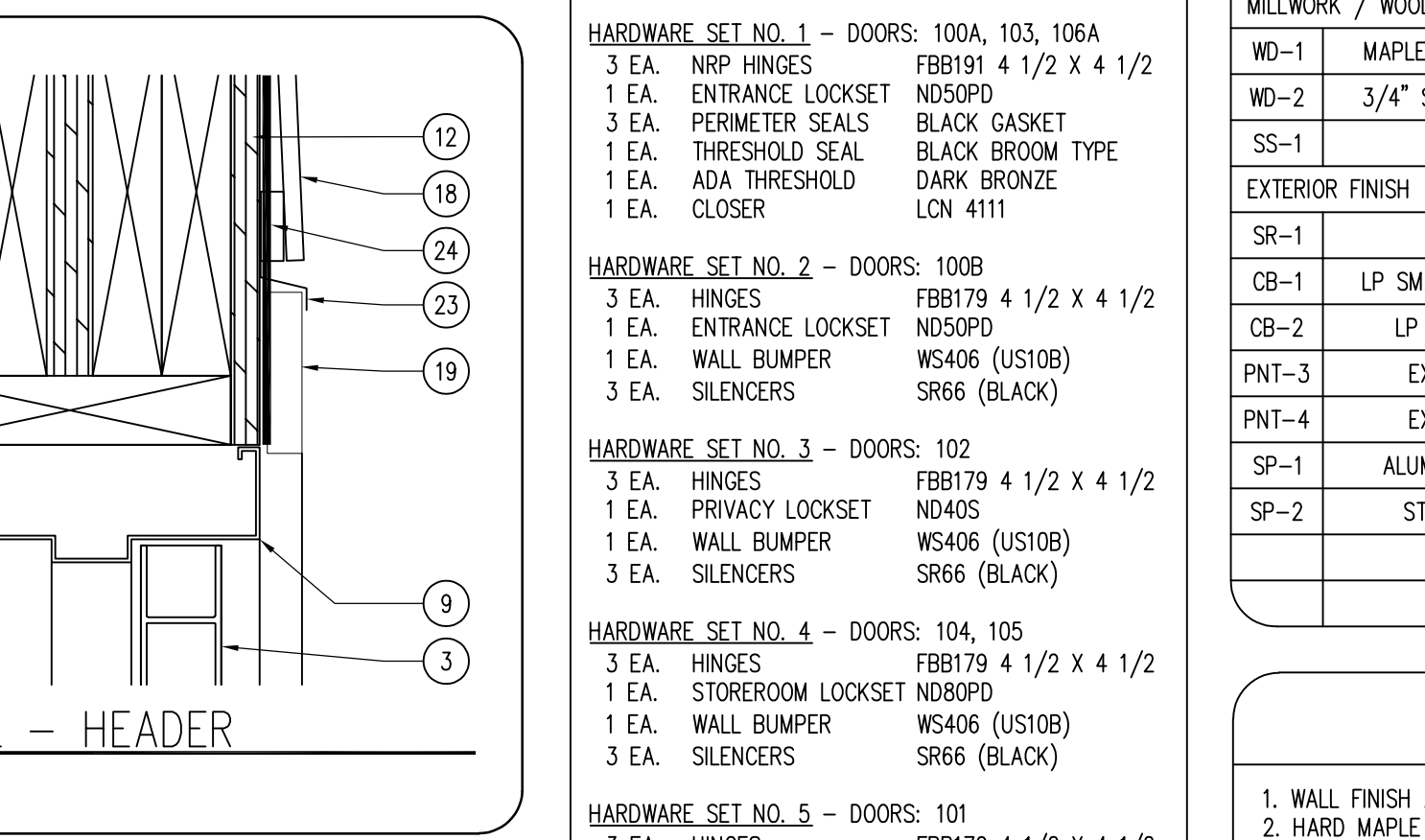
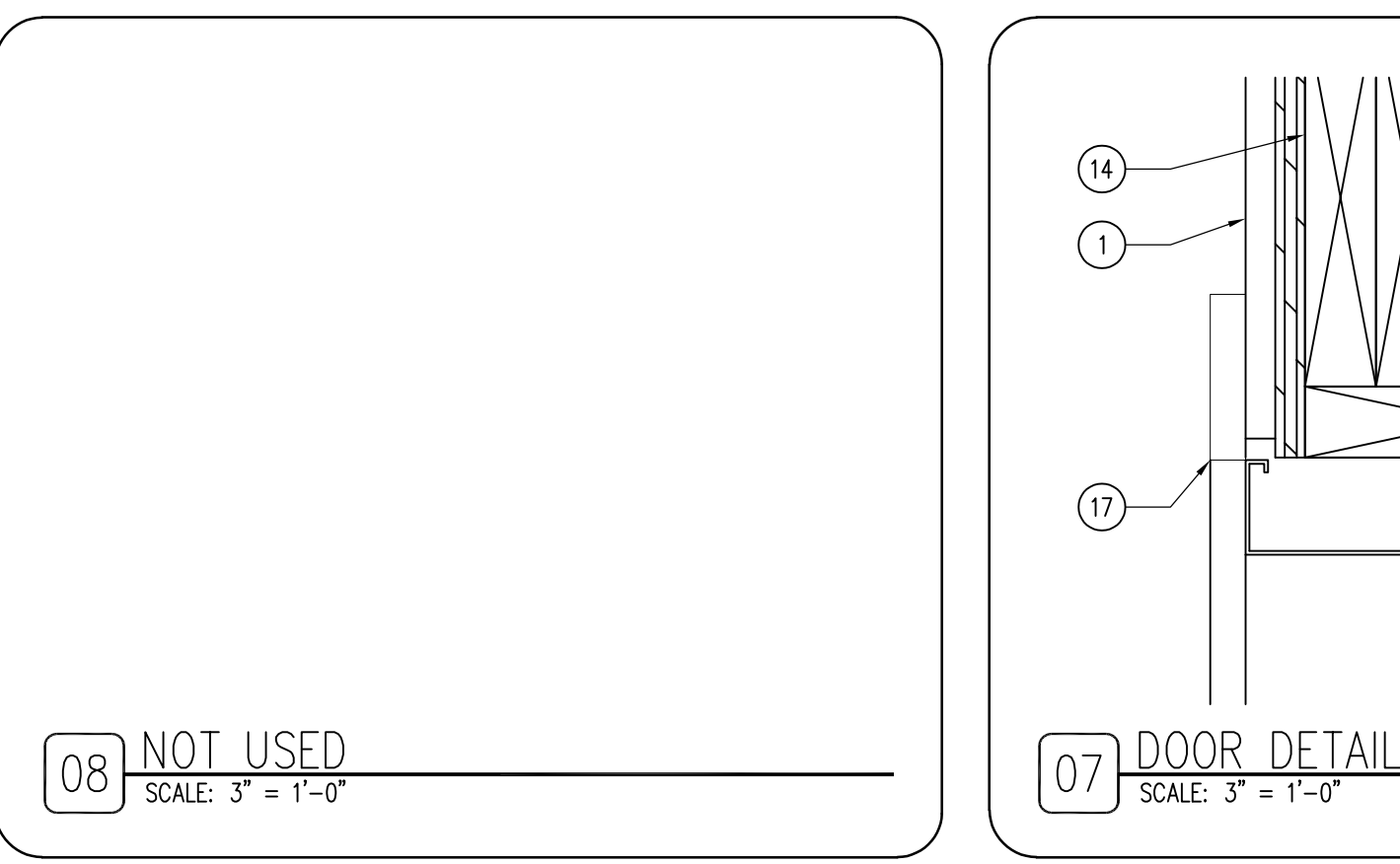
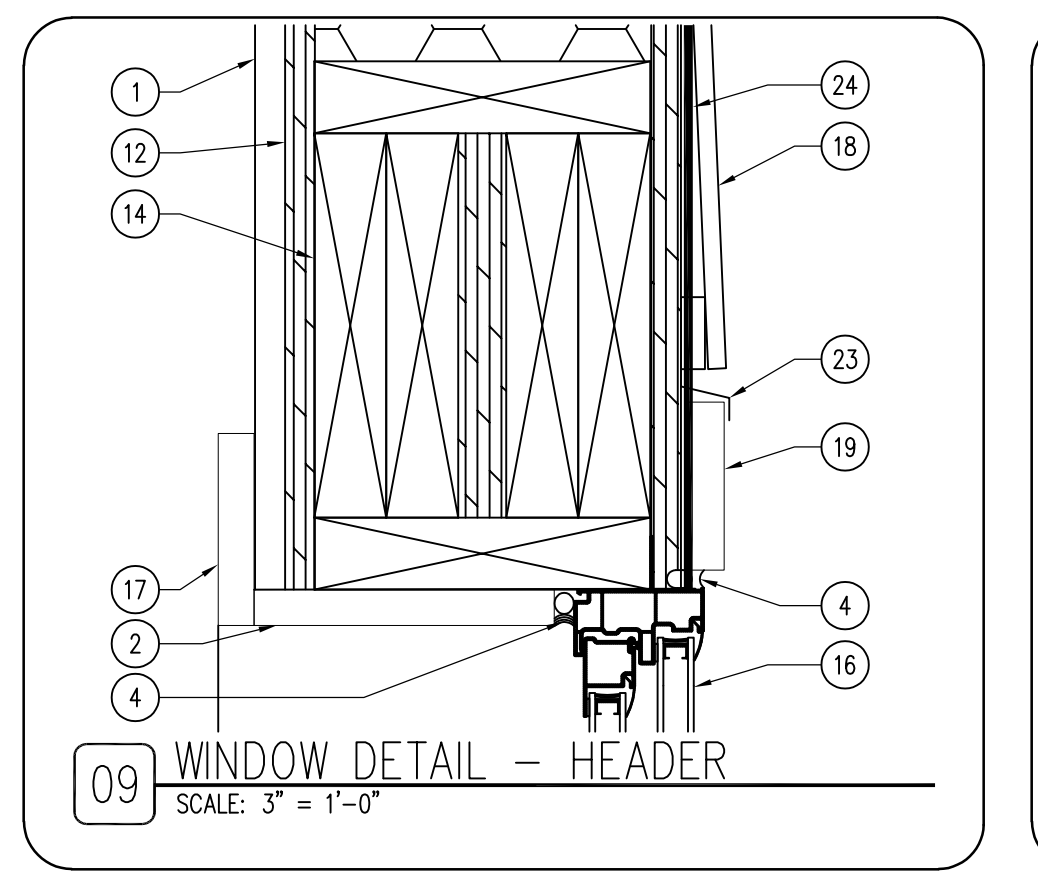
ROOM SCHEDULE

ROOM #	ROOM NAME	FLOORING	BASE	NORTH WALL FINISH	EAST WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CEILING	NOTES
100	OPEN OFFICE	CONC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-2	ACT-1	-
101	CORRIDOR	CONC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-2	ACT-1	-
102	RESTROOM	CONC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-2	GYP-1	-
103	MEETING ROOM	CONC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-2	ACT-1	-
104	CLOSET	CONC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-2	GYP-1	-
105	MECHANICAL	CONC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	OPEN	-
106	HEATED BAYS	CONC-1	-	ST-1	ST-1	ST-1	ST-1	ST-1	29 GAUGE STEEL LINER PANEL WALLS & CEILING



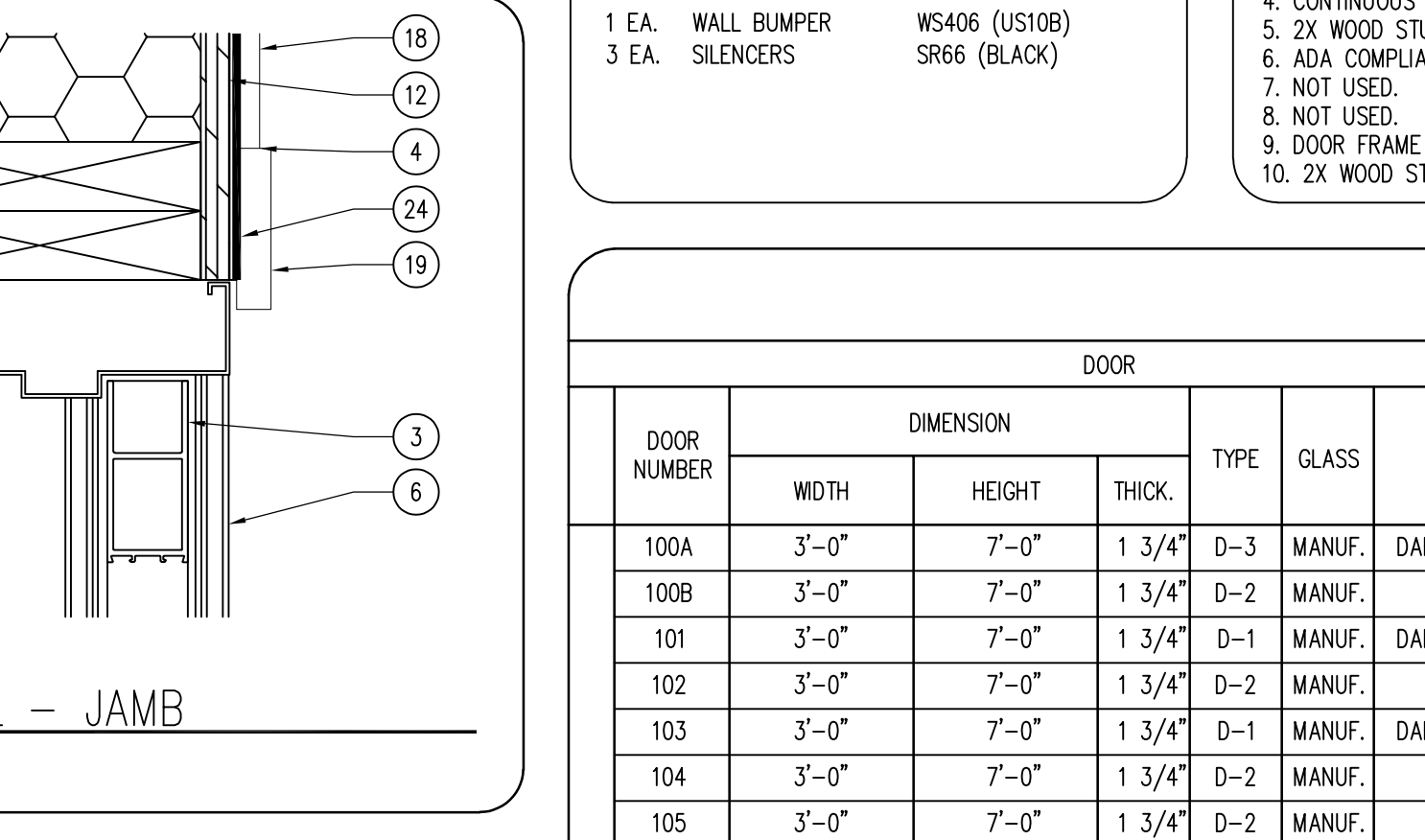
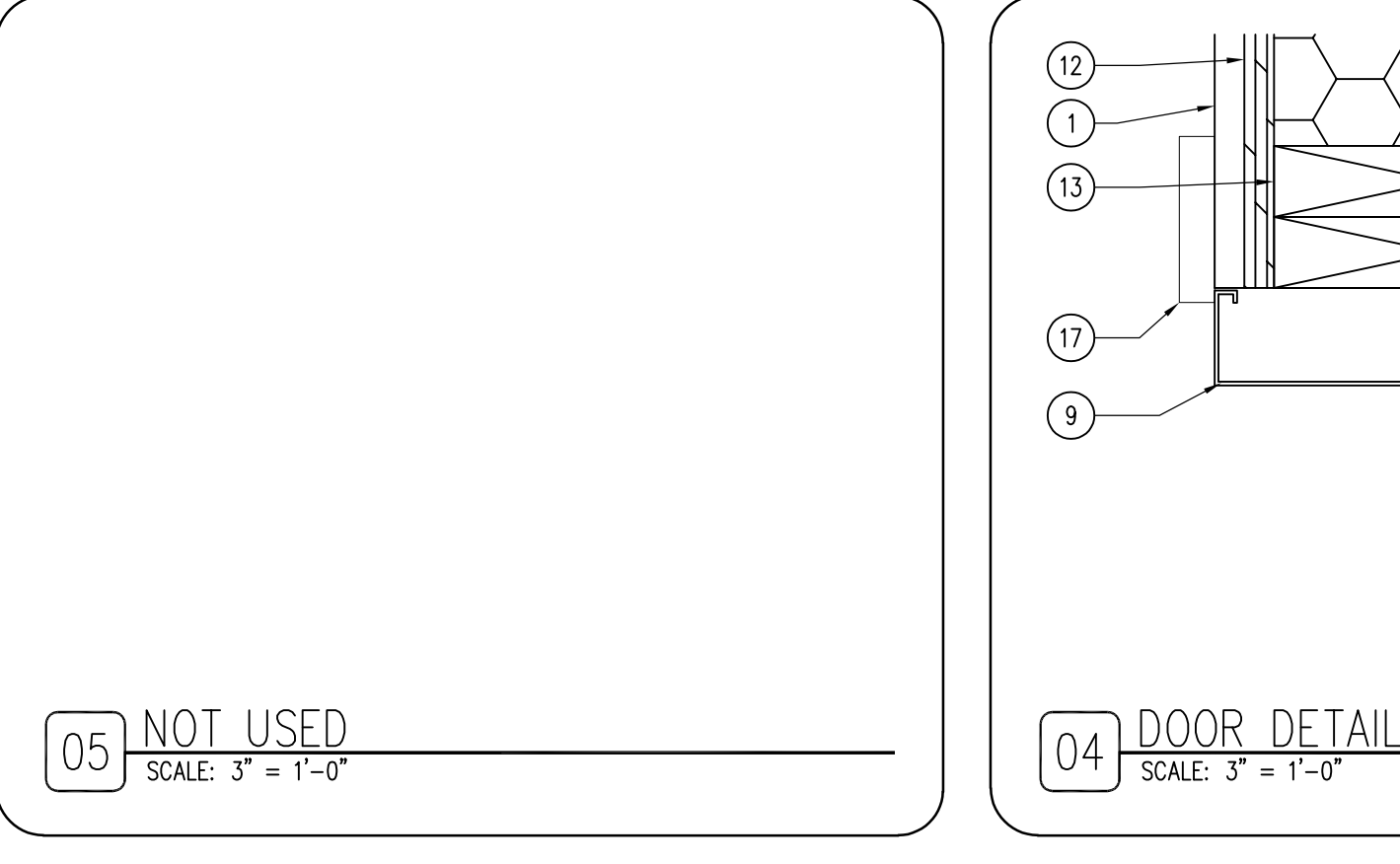
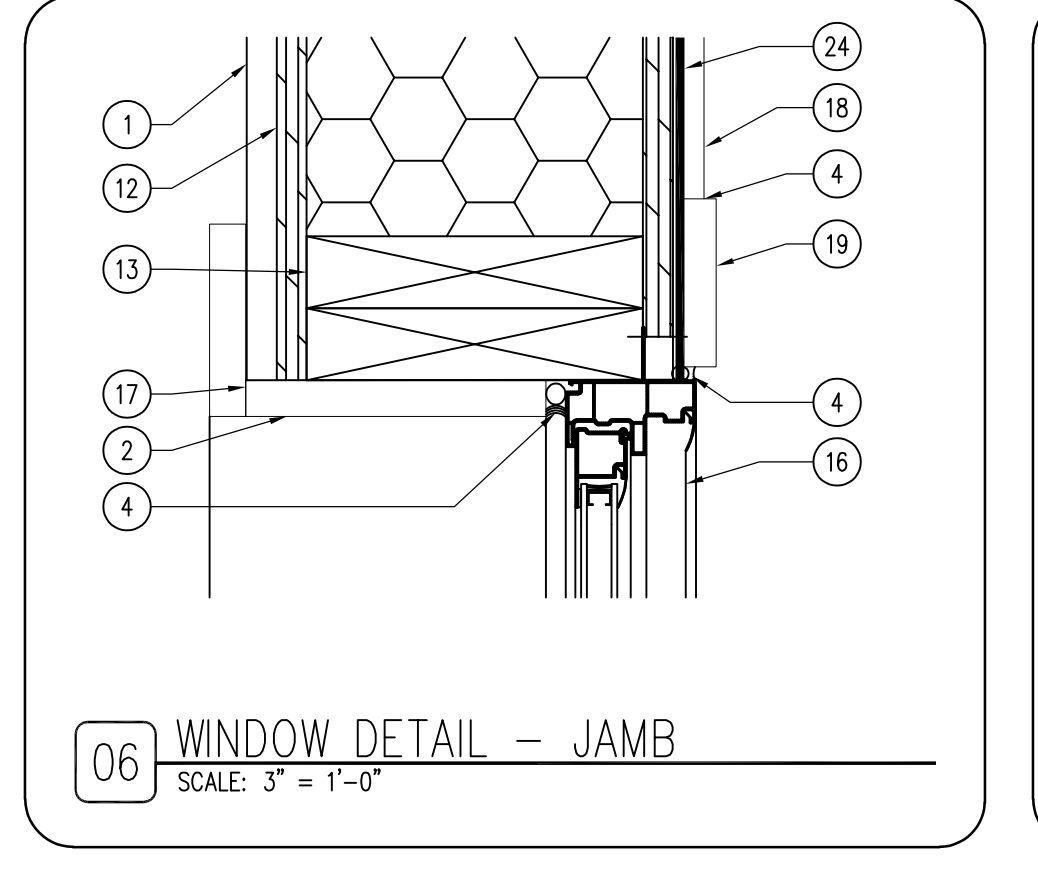
FINISH SCHEDULE

FINISH MARK	MATERIAL	MANUFACTURER INFO		DIMENSION	COLOR	FINISH	COMMENTS
		COMPANY NAME	PRODUCT NUMBER				
FLOOR FINISH							
CONC-1	PENETRATING SEALER	-	-	-	CLEAR	MATTE	SILANE, SILOXANE OR SILICONATE
RB-1	RUBBER BASE	JOHNSONITE	-	1/8" X 4" (TOE)	20 - CHARCOAL	-	INTERIOR ALL OFFICE ROOMS
CEILING FINISH							
ACT-1	ACOUSTICAL CLG TILE	ARMSTRONG	1911 REGULAR	24" X 24"	WHITE	ULTIMA	PRELUDE XL 15/16" SUSP. SYSTEM
GYP-1	GYPNUM CEILING	-	TYPE X	5/8"	-	NO FINISH	TAPE AND FIRE SEAL
ST-1	STEEL LINER PANEL	-	-	29 GAUGE	WHITE	MANUF.	INCLUDE REQUIRED TRIMS
INTERIOR FINISH							
PNT-1	INTERIOR PAINT	SHERWIN WILLIAMS	DURATION	-	SW9109 - NAT. LINEN	SATIN	2X COATS SW INT. DURATION
PNT-2	INTERIOR PAINT	SHERWIN WILLIAMS	DURATION	-	SW9111 - ANTLER VELVET	SATIN	2X COATS SW INT. DURATION
GYP-1	GYPNUM FIRE RATED	-	TYPE X	5/8"	-	ORANGE PEEL	TAPE AND FIRE SEAL PENETRATIONS
GYP-2	GYPNUM WALL BOARD	-	-	1/2"	-	ORANGE PEEL	MOISTURE RESISTANT IN RESTROOM
ST-1	STEEL LINER PANEL	-	-	29 GAUGE	WHITE	MANUF.	INCLUDE REQUIRED TRIMS
MILLWORK / WOOD FINISH							
WD-1	MAPLE VENEER PLYWOOD	-	-	3/4"	NATURAL	SATIN POLY	ALL WOOD/MILLWORK - SUBMIT SAMPLES
WD-2	3/4" SOLID HARD MAPLE	-	-	3/4" X 4"	NATURAL	SATIN POLY	ALL WOOD/MILLWORK - SUBMIT SAMPLES
SS-1	CORIAN	DUPONT	-	-	LAVA ROCK	MANUF.	ALL WOOD/MILLWORK - SUBMIT SAMPLES
EXTERIOR FINISH							
SR-1	SHINGLE ROOF	CERTAINTEED	LANDMARK PRO	-	WEATHERED WOOD	-	-
CB-1	LP SMARTSIDE - LAP SIDING	LP CORPORATION	38 SERIES CEDAR TEXT.	11.84"	PNT-4	-	2X COATS SW EXT. DURATION
CB-2	LP SMARTSIDE - TRIM	LP CORPORATION	440 SERIES CEDAR TEXT.	5.5"	PNT-3 & PNT-4	-	2X COATS SW EXT. DURATION
PNT-3	EXTERIOR PAINT	SHERWIN WILLIAMS	EXT. DURATION	-	COLOR MATCH D. BRONZE	SATIN	WINDOW AND DOOR TRIM
PNT-4	EXTERIOR PAINT	SHERWIN WILLIAMS	EXT. DURATION	-	SW6152 SUPERIOR BRONZE	SATIN	LAP SIDING AND BUILDING CORNERS
SP-1	ALUMINUM SOFFIT PANEL	ALUMARCH	KNOTWOOD	6"	IROKO	-	ENTRY CANOPY ONLY
SP-2	STEEL SOFFIT PANEL	-	V-GROOVE VENTED	26GA	MATCH FASCIA	-	ALL EAVES AND OVERHANGS



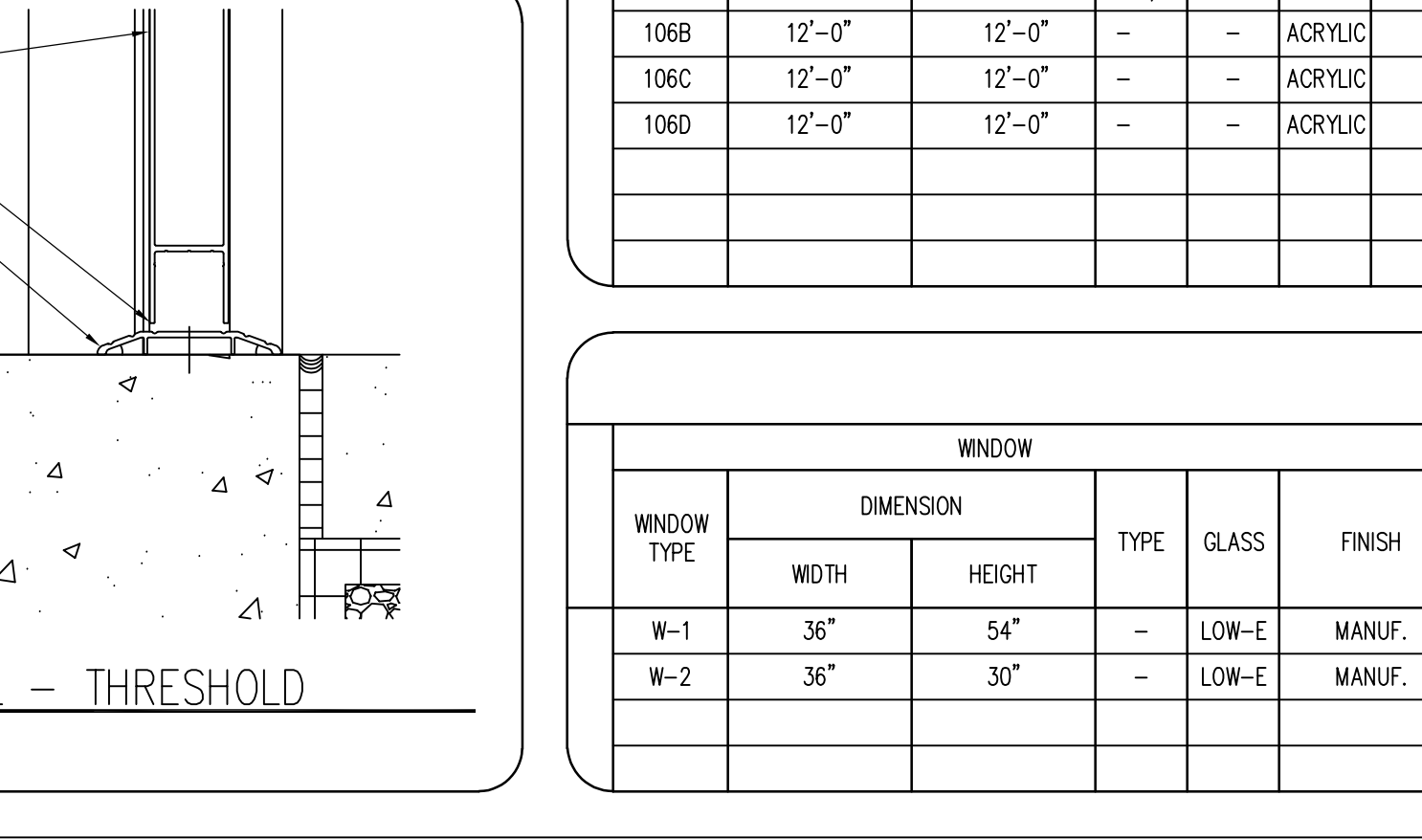
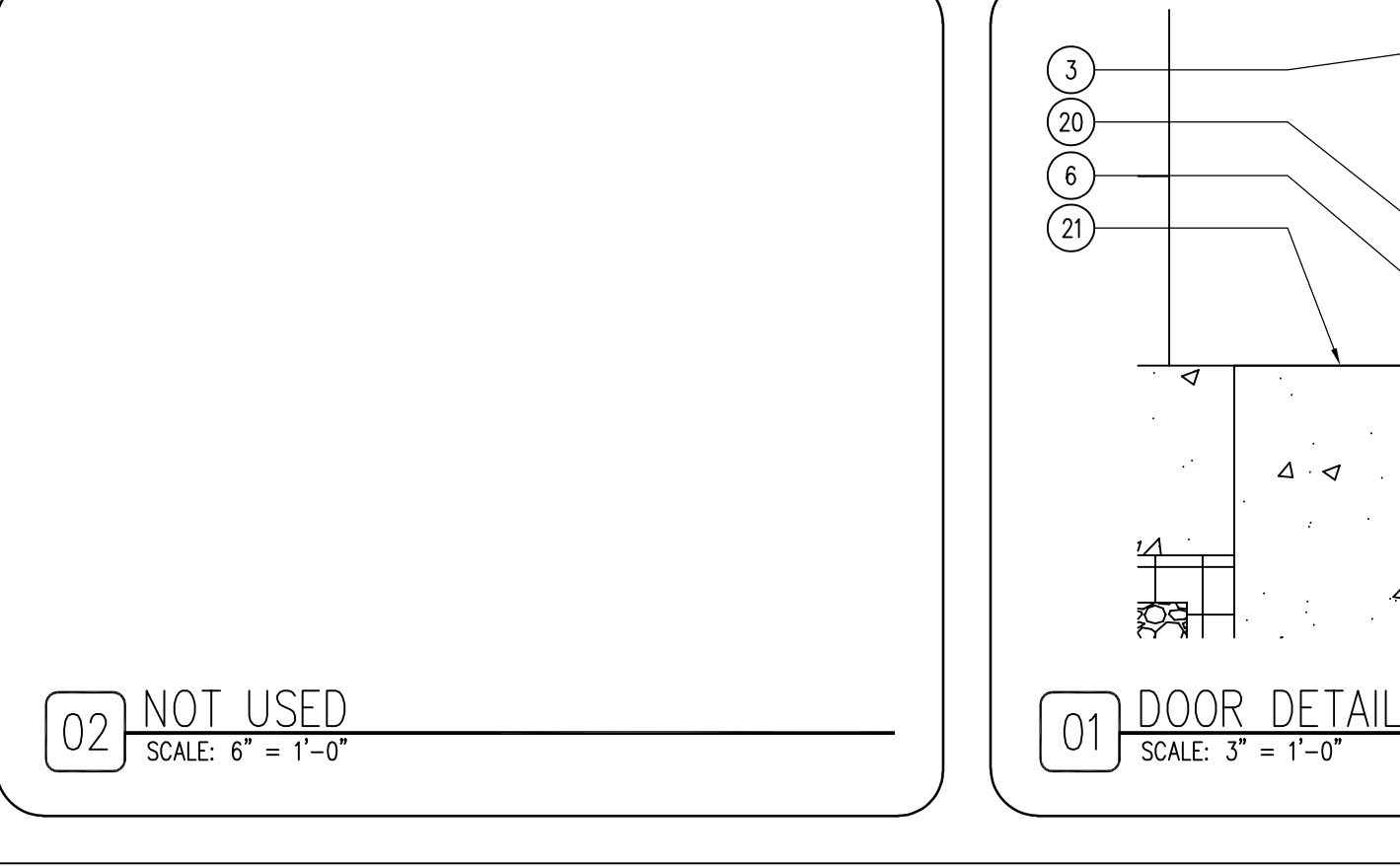
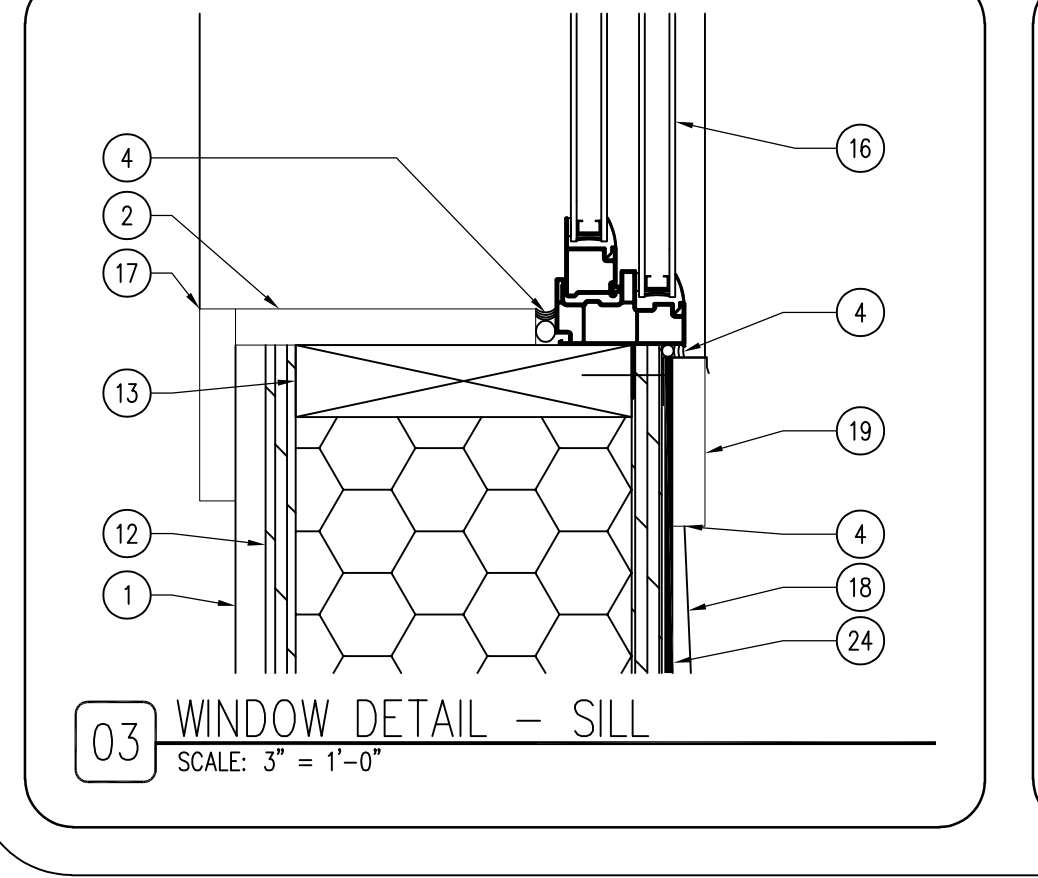
KEYNOTES

1. WALL FINISH AS SCHEDULED.
2. HARD MAPLE PLYWOOD JAMB EXT. WD-1.
3. DOOR AS SCHEDULED.
4. CONTINUOUS SEALANT AND BACKER ROD
5. 2X WOOD STUD HEADER.
6. ADA COMPLIANT THRESHOLD.
7. NOT USED.
8. NOT USED.
9. DOOR FRAME AS SCHEDULED.
10. 2X WOOD STUD JAMB.
11. SOUND BATT INSULATION.
12. SIP WALL SYSTEM AS SCHEDULED.
13. SIP JAMB, PER BUILDING MANUFACTURER.
14. SIP HEADER, PER BUILDING MANUFACTURER.
15. NOT USED.
16. WINDOW AS SCHEDULED.
17. HARD MAPLE CASING TRIM, WD-2.
18. LP SMARTSIDE SIDING, AS SCHEDULED.
19. LP SMARTSIDE TRIM, AS SCHEDULED.
20. BRUSH TYPE GASKET FOR EXTERIOR DOORS.
21. CONCRETE SLAB.
22. NOT USED.
23. FLASHING AS REQUIRED.
24. CONTINUOUS WRB BUILDING WRAP.
25. SOLID MAPLE WALL BASE, 2X COATS POLY.



DOOR SCHEDULE

DOOR NUMBER	DOOR			TYPE	GLASS	FINISH	FRAME			FIRE RATING LABEL	HARDWARE		COMMENTS		
	WIDTH	HEIGHT	THICK.				DETAILS				TYPE	FINISH		SET #	KEYSIDE ROOM NUMBER
							HEAD	JAMB	THRESHOLD						
100A	3'-0"	7'-0"	1 3/4"	D-3	MANUF.	DARK BRONZE	07/A-600	04/A-600	01/A-600	F-1	DARK BRONZE	1	EXT.	EXT. STEELCRAFT "L" SERIES - FULL LITE	
100B	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	-	F-1	DARK BRONZE	2	101	GRADE "A" MAPLE - CLEAR SATIN FINISH	
101	3'-0"	7'-0"	1 3/4"	D-1	MANUF.	DARK BRONZE	10/A-600	11/A-600	01/A-600 (SIM)	F-1	DARK BRONZE	5	-	EXT. STEELCRAFT "L" SERIES - HALF LITE	
102	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	-	F-1	DARK BRONZE	3	101	GRADE "A" MAPLE - CLEAR SATIN FINISH	
103	3'-0"	7'-0"	1 3/4"	D-1	MANUF.	DARK BRONZE	07/A-600	04/A-600	01/A-600	F-1	DARK BRONZE	1	EXT.	EXT. STEELCRAFT "L" SERIES - HALF LITE	
104	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	-	F-1	DARK BRONZE	4	103	GRADE "A" MAPLE - CLEAR SATIN FINISH	
105	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	-	F-1	DARK BRONZE	4	103	GRADE "A" MAPLE - CLEAR SATIN FINISH	
106A	3'-0"	7'-0"	1 3/4"	D-1	MANUF.	DARK BRONZE	07/A-600	04/A-600	01/A-600	F-1	DARK BRONZE	1	EXT.	EXT. STEELCRAFT "L" SERIES - HALF LITE	
106B	12'-0"	12'-0"	-	-	ACRYLIC	WHITE	-	-	-	-	DARK BRONZE	-	-	THERMACORE 592 W/ SAFETY WINDOWS	
106C	12'-0"	12'-0"	-	-	ACRYLIC	WHITE	-	-	-	-	DARK BRONZE	-	-	THERMACORE 592 W/ SAFETY WINDOWS	
106D	12'-0"	12'-0"	-	-	ACRYLIC	WHITE	-	-	-	-	DARK BRONZE	-	-	THERMACORE 592 W/ SAFETY WINDOWS	

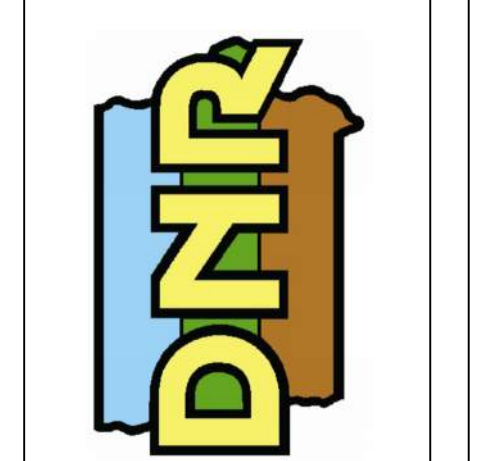


WINDOW SCHEDULE

WINDOW TYPE	WINDOW			TYPE	GLASS	FINISH	FRAME			QUANTITY	COMMENTS	
	WIDTH	HEIGHT	THICK.				DETAILS					
							HEAD	JAMB	SILL			
W-1	36"	54"	-	LOW-E	MANUF.	09/A-600	06/A-600	03/A-600	-	WHITE/D.BRONZE	6	ANDERSEN 100 - DOUBLE HUNG WITH COLONIAL GRILLE
W-2	36"	30"	-	LOW-E	MANUF.	09/A-600	06/A-600	03/A-600	-	WHITE/D.BRONZE	7	ANDERSEN 100 - SLIDER WINDOWS

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
 ENGINEERING SERVICES - WALLACE BUILDING
 502 E. 9TH ST., DES MOINES, IA 50319-0034
 P: 515.725.8200
 F: 515.725.8202



FINISH, DOOR & WINDOW SCHEDULES
 NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK
 15248 CAMPGROUND ROAD
 DRAKESVILLE, IA 52552

NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER: 23-05-26-01
 CHK'D BY: DATE: 03.21.2023
 SHEET NO:

A-600

MECHANICAL SYMBOLS

-----CW-----	COLD WATER
-----HW-----	HOT WATER SUPPLY
-----RHW-----	RECIRCULATING HOT WATER
-----SAN-----	SOIL, WASTE, OR SANITARY SEWER BELOW FLOOR OR GRADE
-----D-----	DRAIN
-----LP-----	LP GAS
-----V-----	VENT ABOVE FLOOR OR GRADE
	FLOOR DRAIN - TYPE AND SIZE AS NOTED
	HOSE BIBB - TYPE AS NOTED
	LOCATION OF THERMOSTAT/ROOM TEMPERATURE SENSOR +48" OR AS NOTED
	EXHAUST DUCT UP
	EXHAUST DUCT DOWN
	RECTANGULAR TO ROUND DUCT TRANSITION
	90 DEGREE MITERED ELBOW
	90 DEGREE MITERED ELBOW WITH TURNING VANES
	90 DEGREE RADIUS ELBOW
	90 DEGREE RADIUS ELBOW WITH TURNING VANES
	EQUIPMENT TAG
	NEW DUCTWORK

NOTE: NOT ALL SYMBOLS APPLY TO THIS PROJECT.

MECHANICAL GENERAL NOTES

COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

INCORPORATE INTO INSTALLATION MECHANICAL SPECIFICATIONS, DRAWINGS, STATE AND LOCAL CODES, AND OTHER APPLICABLE REQUIREMENTS.

ON COMPLETION OF THE INSTALLATION, MECHANICAL CONTRACTOR SHALL COOPERATE WITH THE OWNER TO PROVIDE ANY NECESSARY ADJUSTING AND BALANCING TO OBTAIN PROPER OPERATION OF ALL EQUIPMENT AND SYSTEMS. CONTRACTOR SHALL PROVIDE ALL FACILITIES AND EQUIPMENT, AND MAKE ALL TESTS, REQUIRED FOR ADJUSTMENTS AND BALANCING TO ESTABLISH THE PROPER PERFORMANCE OF ANY PIECE OF EQUIPMENT.

PIPING SHALL NOT BLOCK CLEARANCES TO MECHANICAL EQUIPMENT. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING PIPING IF ACCESS CLEARANCES ARE OBSTRUCTED.

	UNION
	RISER DOWN (ELBOW)
	RISER DOWN (TEE)
	RISER UP (ELBOW)
	NEW PIPING
	SHUT OFF VALVE (BALL, BUTTERFLY, ETC. REFER TO SPECS)

NOTE: NOT ALL SYMBOLS APPLY TO THIS PROJECT.

HVAC GENERAL NOTES

MECHANICAL CONTRACTOR TO PROVIDE A COMPLETE HVAC SYSTEM, INCLUDING DUCTWORK, MECHANICAL EQUIPMENT, SUPPORTS, HANGERS AND ALL APPURTENANCES. INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. INSTALL SYSTEM TO MEET ALL CITY AND STATE CODES AND REQUIREMENTS.

DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF DUCT SYSTEM. INDICATED DUCT LOCATIONS, CONFIGURATIONS, AND ARRANGEMENTS WERE USED TO SIZE DUCTS AND CALCULATE FRICTION LOSS FOR AIR-HANDLING EQUIPMENT SIZING AND FOR OTHER DESIGN CONSIDERATIONS.

ALL DUCT DIMENSIONS LISTED ARE INTERIOR FREE AREA DUCT DIMENSIONS AND DO NOT INCLUDE INSULATION REQUIREMENTS. CONTRACTOR MUST INCREASE DUCT SIZES ACCORDINGLY TO ACCOMMODATE INSULATION.

PLUMBING GENERAL NOTES

MECHANICAL CONTRACTOR TO PROVIDE A COMPLETE PLUMBING SYSTEM, INCLUDING, PIPE, INSULATION, HANGERS, SUPPORTS AND ALL APPURTENANCES. INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. SIZE AND INSTALL SYSTEM PER PLUMBING CODE. COMPLY WITH ALL LOCAL AND STATE CODES AND REQUIREMENTS.

DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PLUMBING SYSTEM.

MECHANICAL ABBREVIATIONS

ABSOR	ABSORPTION	EQUIP	EQUIPMENT	LDBT	LEAVING DRY BULB TEMPERATURE
ACU	AIR CONDITIONING UNIT	EST	EXTERNAL STATIC PRESSURE	LWT	LEAVING WATER TEMPERATURE
AD	ACCESS DOOR OR AREA DRAIN	EMBT	ENTERING WET BULB TEMPERATURE	LMBT	LEAVING WET BULB TEMPERATURE
AFF	ABOVE FINISHED FLOOR	EW	ELECTRIC WATER COOLER	MB	MOP BASIN
AFG	ABOVE FINISHED GRADE	EWT	ENTERING WATER TEMPERATURE	MBH	1000 BTUH
AHU	AIR HANDLING UNIT	EX	EXISTING	MC	MECHANICAL CONTRACTOR
AV	AIR VENT	EXH	EXHAUST	MECH	MECHANICAL
BOT	BOTTOM	EXP	EXPANSION	MH	MANHOLE
BTU	BRITISH THERMAL UNIT	FAI	FRESH AIR INTAKE	NTS	NOT TO SCALE
BTUH	BTU PER HOUR	FCU	FAN COIL UNIT	OA	OUTSIDE AIR
CA	COMPRESSED AIR	FD	FLOOR DRAIN	OD	OVERFLOW ROOF DRAIN
CB	CATCH BASIN	FLEX	FLEXIBLE	PSI	POUNDS PER SQUARE INCH
CENT	CENTRIFUGAL	FLR	FLOOR	PRV	POWER ROOF VENTILATOR
CFM	CUBIC FEET PER MINUTE	FPM	FEET PER MINUTE	PRV	PRESSURE REDUCING VALVE
CI	CAST IRON	FPS	FEET PER SECOND	PV	PRESSURE VENT
CL	CENTER LINE	FS	FLOOR SINK	PVC	POLYVINYL CHLORIDE
COND	CONDENSATE	FT	FINTUBE	RA	RETURN AIR
CO	CLEAN OUT	FTG	FOOTING	RD	ROOF DRAIN
CONC	CONCRETE	GA	GAGE	RH	RELATIVE HUMIDITY
CONTR	CONTRACTOR	GAL	GALLON	RTU	ROOF TOP UNIT
CP	CONDENSATE PUMP	GALV	GALVANIZED	RV	RELIEF VALVE
CU	COPPER	GC	GENERAL CONTRACTOR	SK	SINK
CUH	CABINET UNIT HEATER	GPH	GALLONS PER HOUR	SA	SUPPLY AIR
CWP	CIRCULATING WATER PUMP	GPM	GALLONS PER MINUTE	SH	SHOWER
DDC	DIRECT DIGITAL CONTROLS	H	WALL HYDRANT	SP	STATIC PRESSURE
DN	DOWN	HR	HOUR	TCC	TEMPERATURE CONTROL CONTRACTOR
DR	DRAIN	HTG	HEATING	TYP	TYPICAL
DS	DOWNSPOUT	HB	HOSE BIBB	UC	UNDER CUT DOOR (3/4")
EA	EXHAUST AIR	ISP	INTERNAL STATIC PRESSURE	UH	UNIT HEATER
EAT	ENTERING AIR TEMPERATURE	JR	JANITOR RECEPTOR	UR	URINAL
EC	ELECTRICAL CONTRACTOR	LAV	LAVATORY	UV	UNIT VENTILATOR
EDBT	ENTERING DRY BULB TEMPERATURE			VTR	VENT THROUGH ROOF
EF	EXHAUST FAN			WC	WATER CLOSET
EJ	EXPANSION JOINT			WH	WATER HEATER

NOTE: NOT ALL ABBREVIATIONS APPLY TO THIS PROJECT.

MECHANICAL WARRANTY NOTES

MECHANICAL CONTRACTOR SHALL WARRANT ALL EQUIPMENT AND INSTALLATION FOR A MINIMUM OF 1 YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION. AIR CONDITIONING REFRIGERATION SYSTEMS SHALL BE WARRANTED FOR A MINIMUM OF 5 YEARS (PARTS ONLY), NON-PRORATED, FROM THE DATE OF SUBSTANTIAL COMPLETION. THE WARRANTY SHALL APPLY TO COMPRESSORS, EVAPORATORS, AND CONDENSER COILS, HIGH AND LOW SIDE PIPING AND PIPING SPECIALTIES WHICH SHALL INCLUDE EXPANSION AND SOLENOID VALVES, RELIEF VALVES, FILTER-DRYER, AND SIGHT GLASSES. PRESSURE GAUGES AND PRESSURE SWITCHES ARE NOT UNDER THE EXTENDED WARRANTY EXCEPT FOR LOSS OF REFRIGERANT AND CONSEQUENTIAL DAMAGE TO THE SYSTEM WHICH WILL BE AN EXTENDED WARRANTY OBLIGATION. ALL DEFECTS THAT BECOME APPARENT WITHIN THE WARRANTY PERIOD SHALL BE REPAIRED BY THE MECHANICAL CONTRACTOR AS DIRECTED BY THE ENGINEER THROUGH THE OWNER'S REPRESENTATIVE. WARRANTY WILL NOT OBLIGATE THE MECHANICAL CONTRACTOR TO REPAIR DAMAGE RESULTING FROM ACCIDENT OR IMPROPER OPERATION OF CARE ON THE PART OF THE OWNER AND NOT DUE TO DEFECTIVE MATERIAL. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS AND OTHER WARRANTY INFORMATION.

NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:

23-05-26-01

CHK'D BY: DATE:

03.21.2023

SHEET No:

M-000

IOWA DEPARTMENT OF
NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515-725-8200
F: 515-725-8202

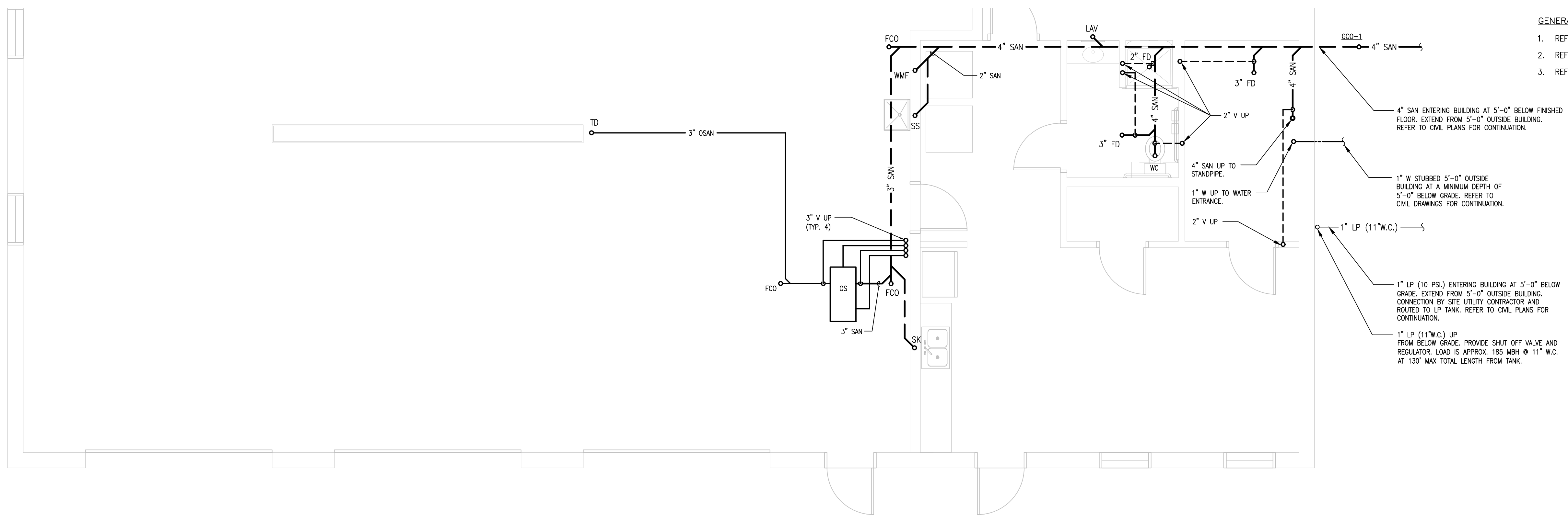


MECHANICAL GENERAL NOTES AND SYMBOLS

NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK

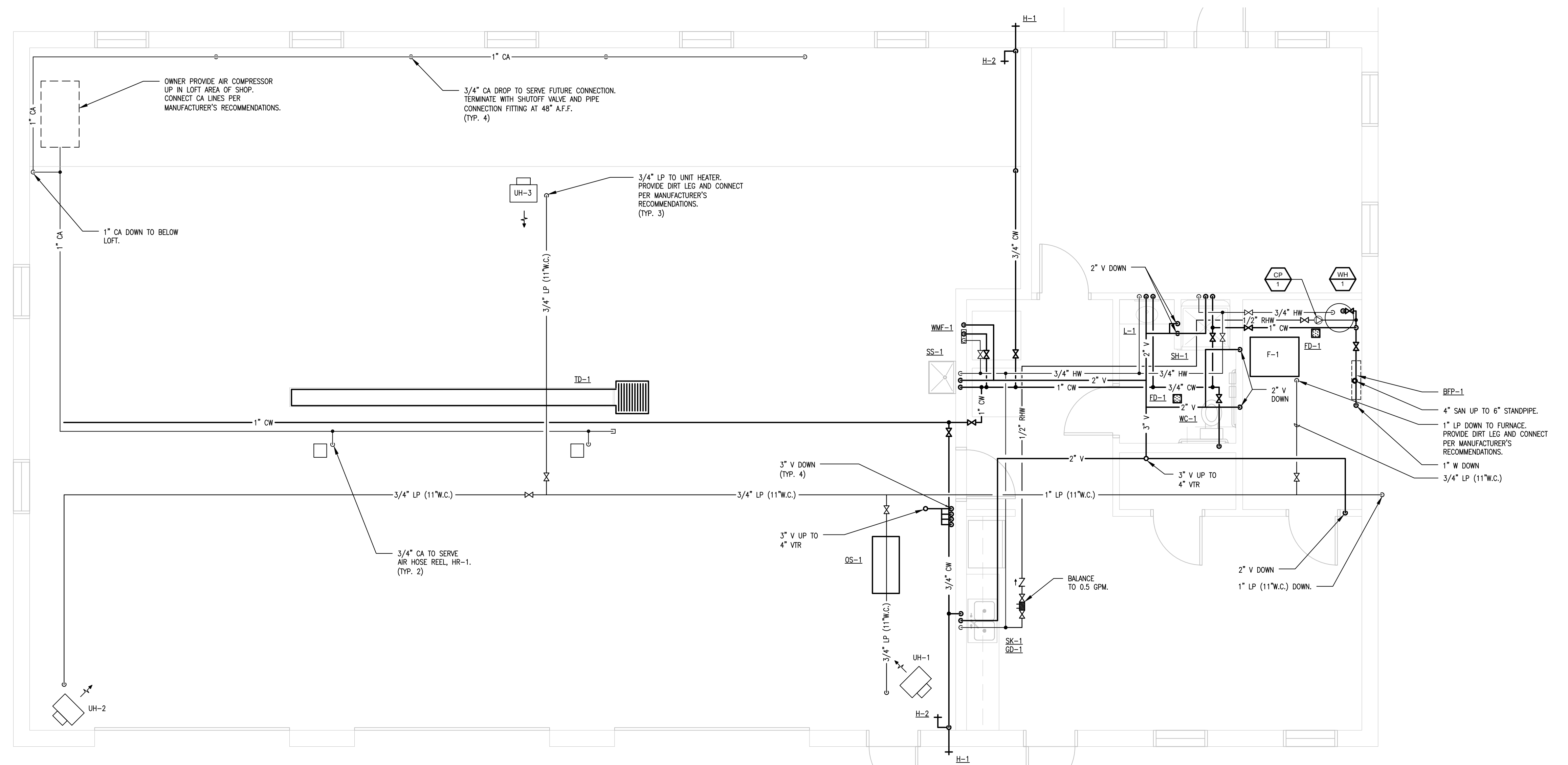
15248 CAMPGROUND ROAD
DRAKESVILLE, IA 52552

CONSULTANT
KCL
ENGINEERING
300 4th Street
West Des Moines, Iowa
515-724-7938
info@kclengineering.com



- GENERAL NOTES**
1. REFER TO M-000 FOR GENERAL NOTES.
 2. REFER TO P-200 FOR PLUMBING DETAILS.
 3. REFER TO P-300 FOR PLUMBING SCHEDULES.

NORTH ① **UNDERFLOOR PLAN - PLUMBING**
1/4" = 1'-0"



NORTH ① **FLOOR PLAN - PLUMBING**
1/4" = 1'-0"

CONSULTANT
KCL
 ENGINEERING
 300 4th Street
 West Des Moines, Iowa
 515.724.7938
 info@kclengineering.com

**IOWA DEPARTMENT OF
 NATURAL RESOURCES**
 ENGINEERING SERVICES - WALLACE BUILDING
 502 E. 9TH ST., DES MOINES, IA 50319-0034
 P: 515.725.8200
 F: 515.725.8202

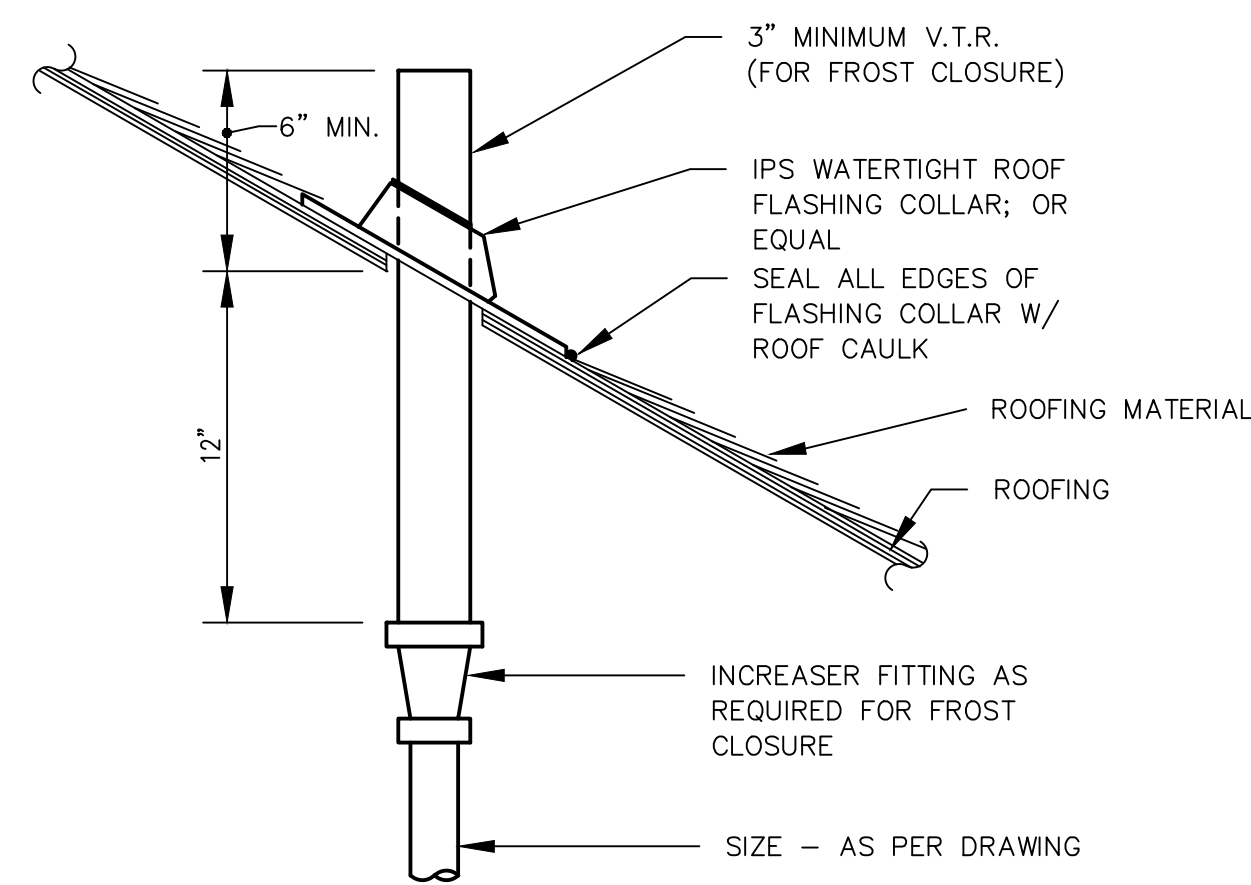


FLOOR PLANS - PLUMBING
 NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK
 15248 CAMPGROUND ROAD
 DRAKESVILLE, IA 52552

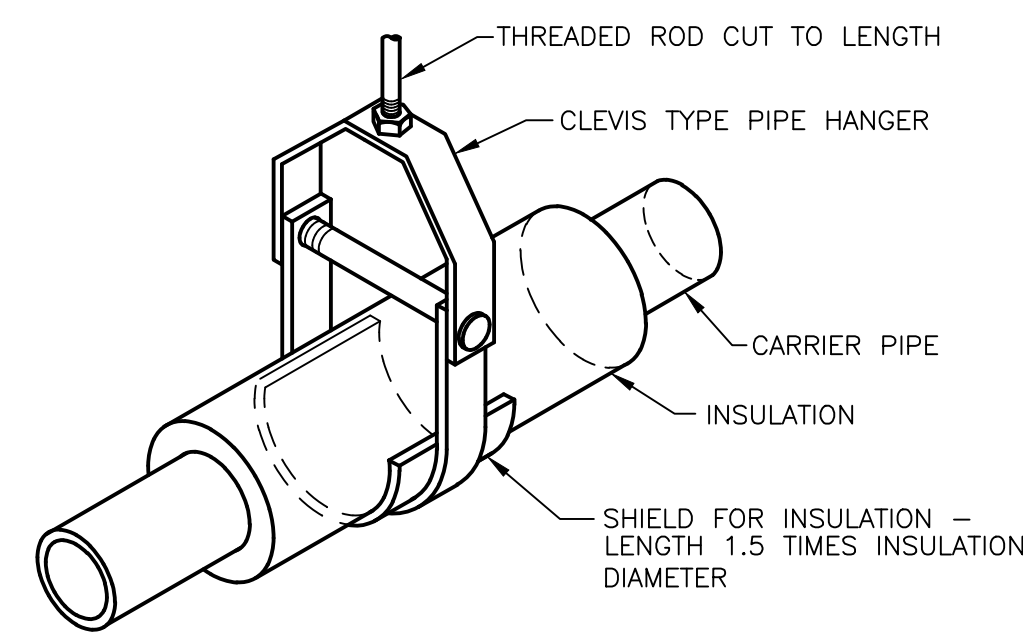
NO.	BY	REVISION

DRAWN BY: PROJECT NUMBER:
 23-05-26-01
 CHD BY: DATE:
 03.21.2023

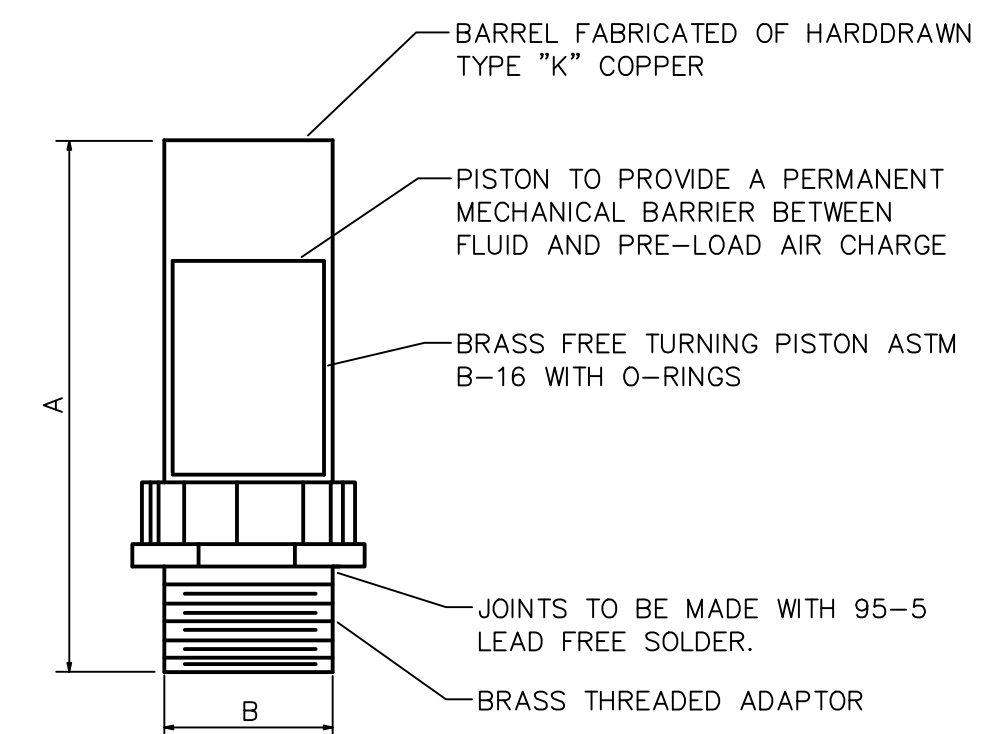
SHEET No:
P-100



8 PLUMBING VENT THROUGH PITCHED ROOF DETAIL
NOT TO SCALE

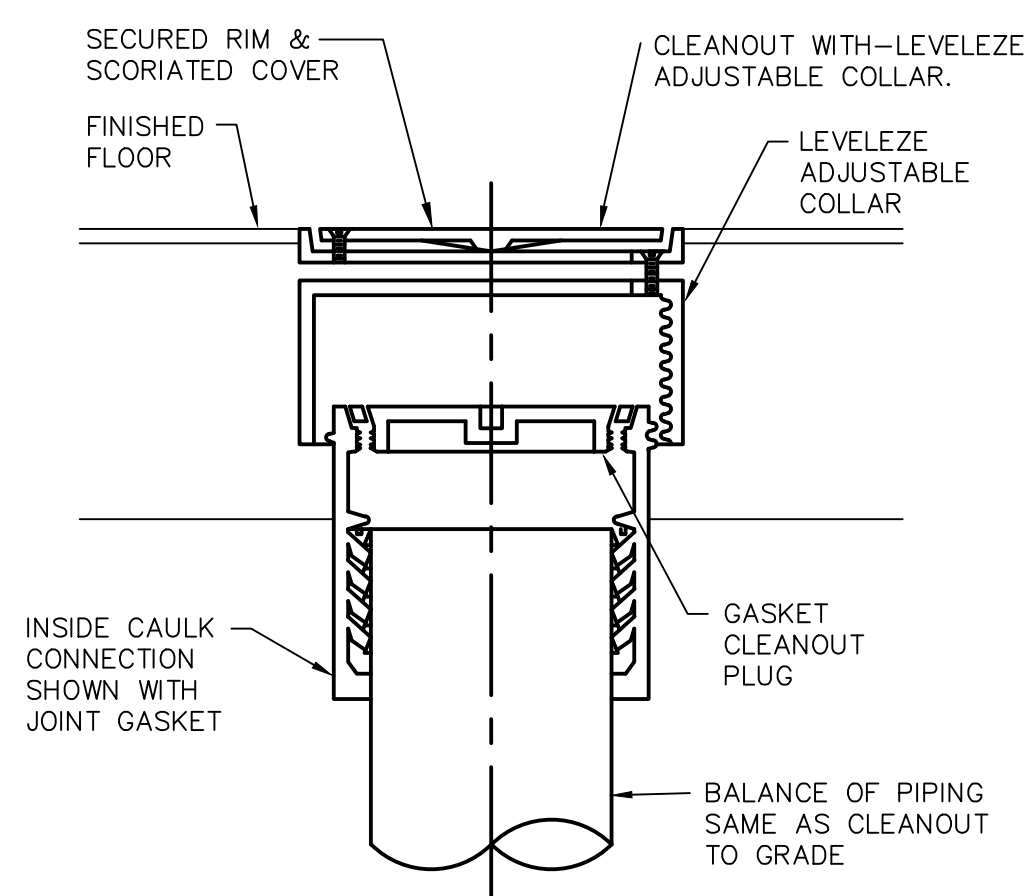


5 CLEVIS TYPE PIPE HANGER FOR INSULATED PIPE
NOT TO SCALE

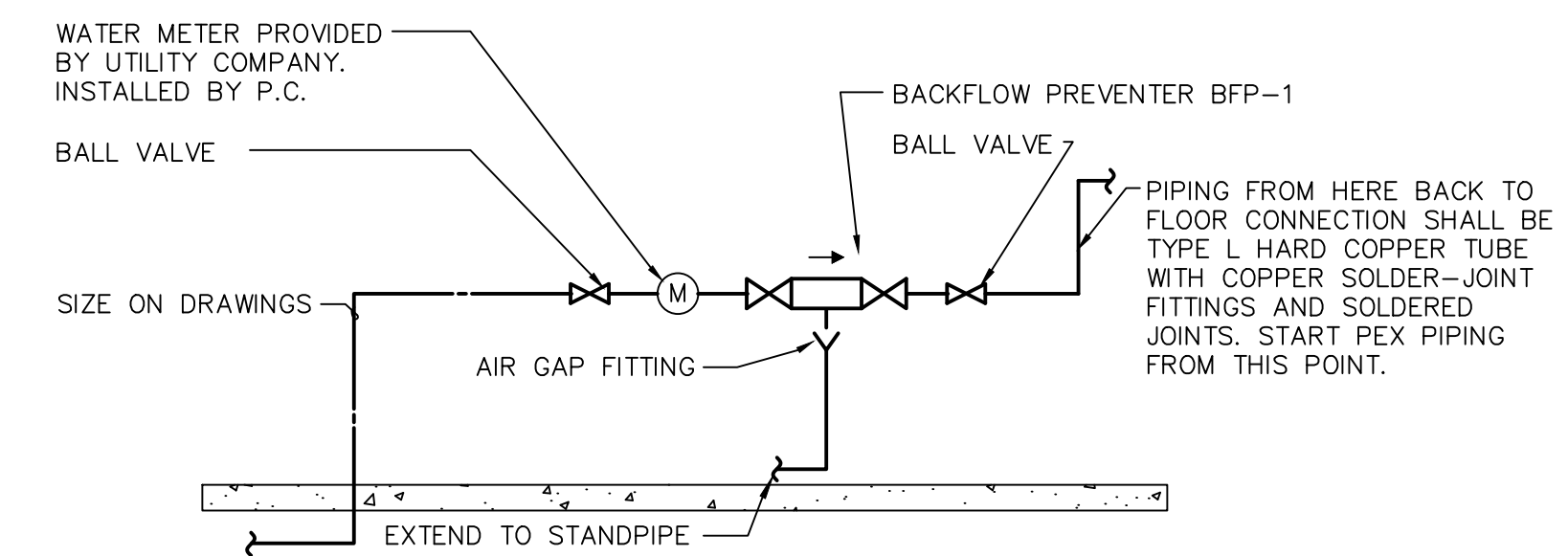


SIZE	SYMBOL	FIXTURE UNIT RATINGS	A SIZE	B SIZE
1/2"	A	1 - 11	5"	1/2"
3/4"	B	12 - 32	5"	3/4"
1"	C	33 - 60	7"	1"
1-1/4"	D	61 - 113	7"	1-1/4"
1-1/2"	E	114 - 154	9"	1-1/2"
2"	F	155 - 330	9"	2"

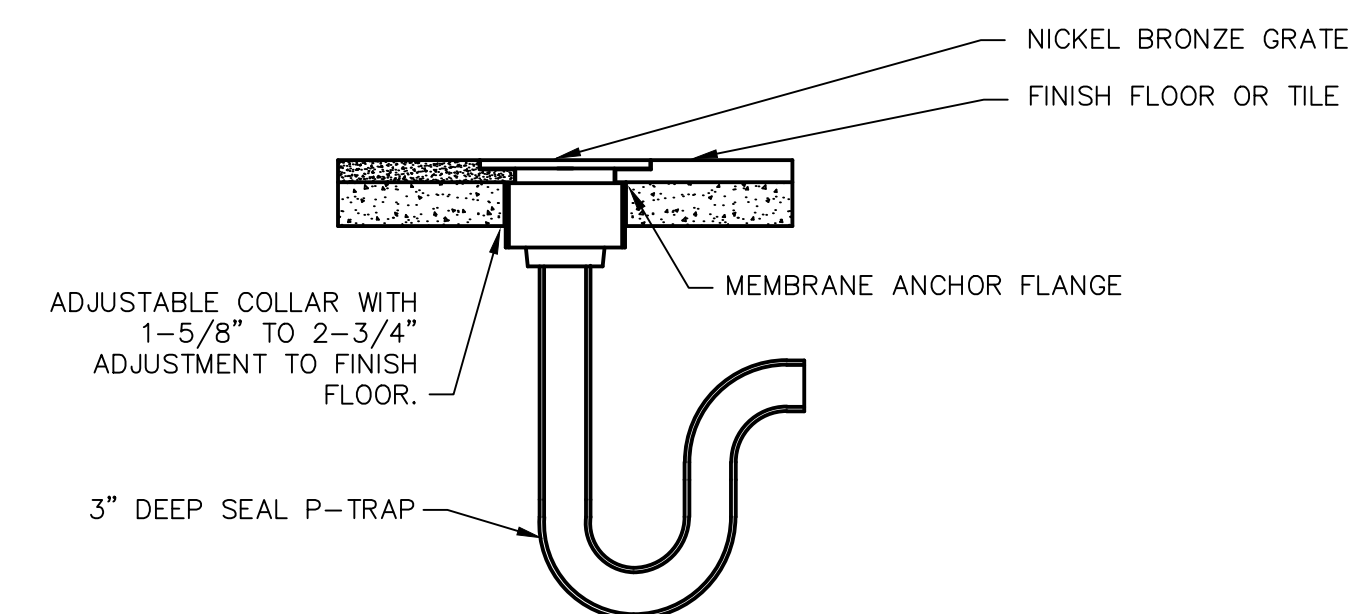
1 WATER SHOCK ARRESTOR DETAIL
NOT TO SCALE



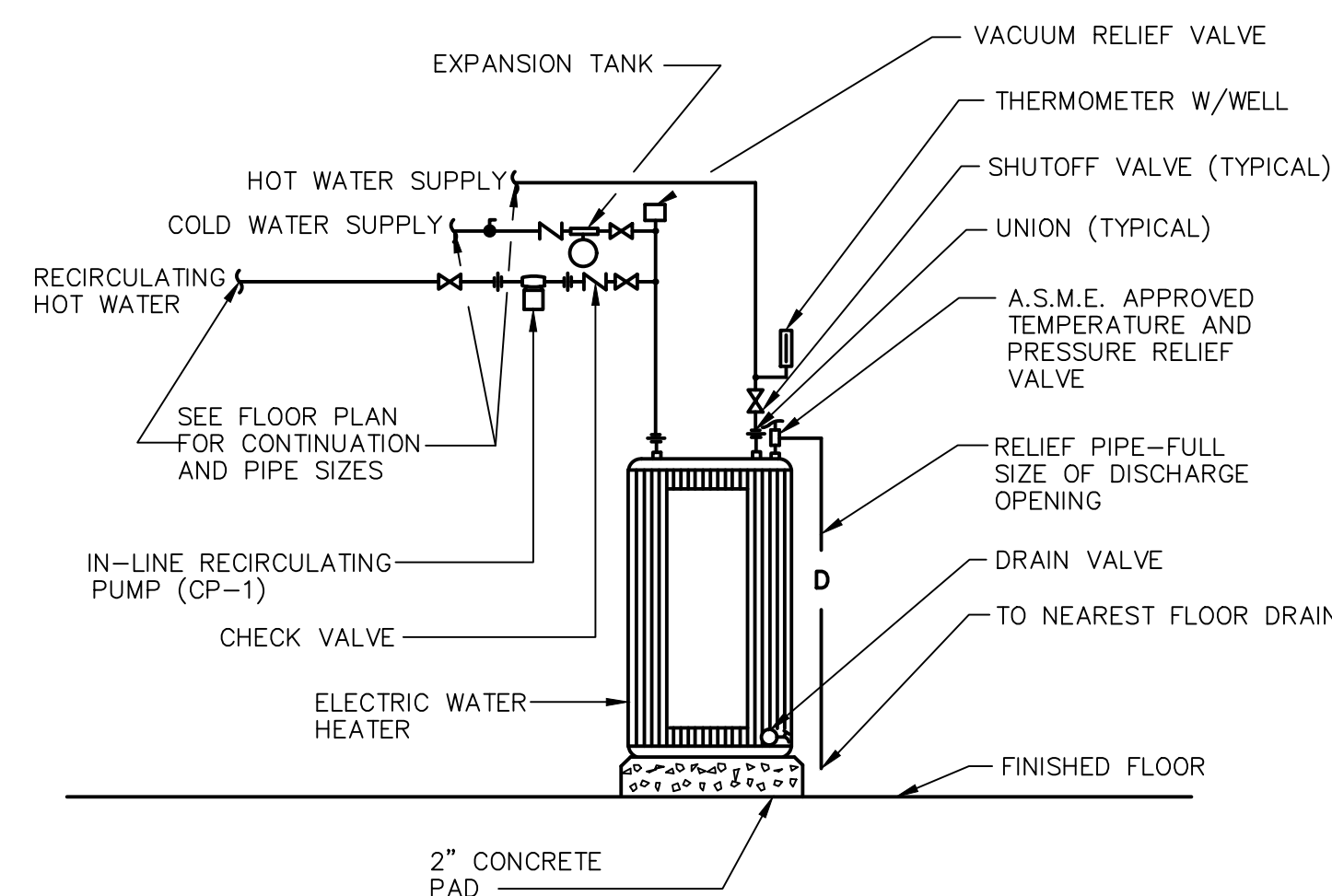
6 FLOOR CLEANOUT DETAIL
NOT TO SCALE



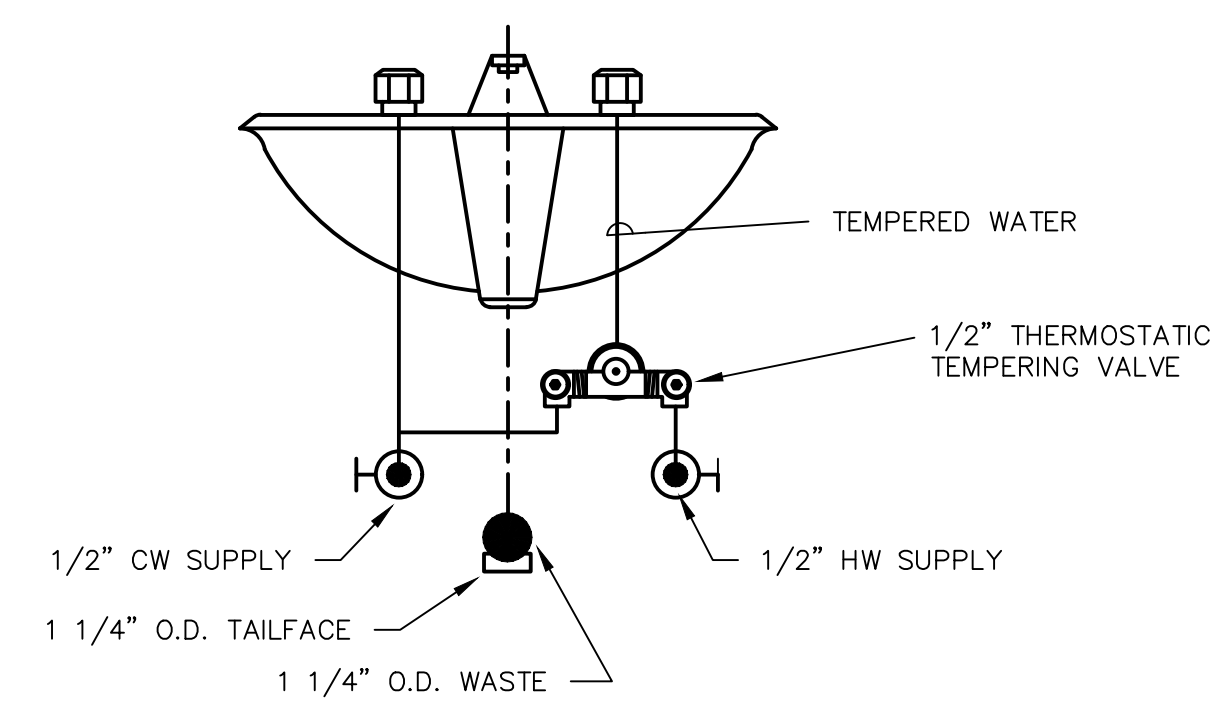
2 DOMESTIC WATER RISER DIAGRAM
NOT TO SCALE



3 FLOOR DRAIN DETAIL
NOT TO SCALE



7 WATER HEATER DETAIL
NOT TO SCALE



4 LOCAL MIXING VALVE DETAIL
NOT TO SCALE

NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:
23-05-26-01

CHK'D BY: DATE:
03.21.2023

SHEET No:

P-200

IOWA DEPARTMENT OF
NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515-725-8200
F: 515-725-8202



PLUMBING DETAILS

NEW OFFICE & STORAGE BUILDING FOR:
LAKE WAPELLO STATE PARK

DRAKESVILLE, IA 52552

15248 CAMPGROUND ROAD

CONSULTANT

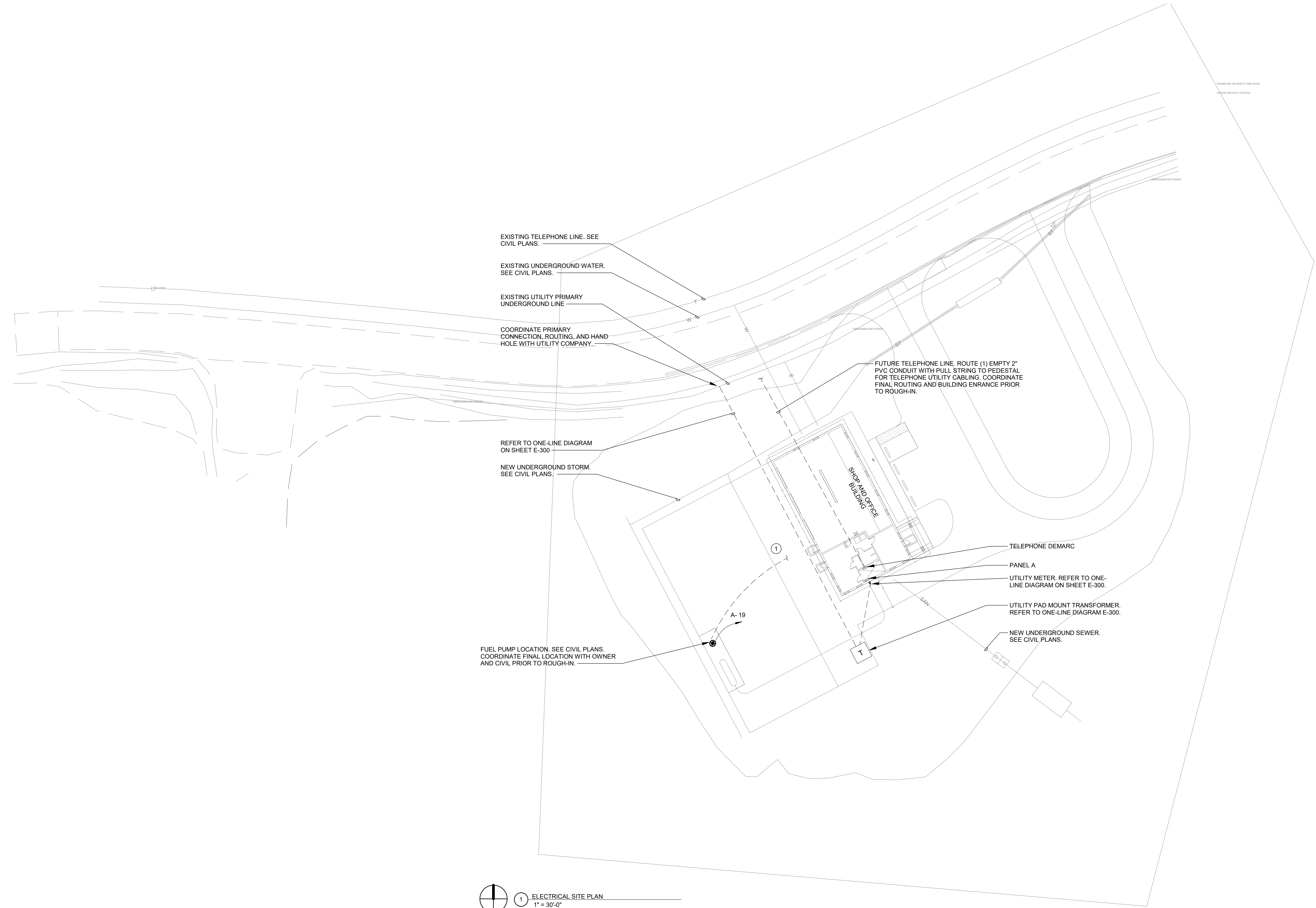
KCL
ENGINEERING
300 4th Street
West Des Moines, Iowa
515.724.7938
info@kclengineering.com

SITE NOTES - ELECTRICAL

1. UTILITIES SHOWN ON ELECTRICAL SITE PLAN ARE SCHEMATIC ONLY. VERIFY ALL SITE CONDITIONS AND DIMENSIONS ON SITE PRIOR TO SUBMITTING BID AND ORDERING EQUIPMENT.
2. REPAIR ALL AFFECTED SURFACES AND RESTORE TO EXISTING CONDITIONS AT COMPLETION OF PROJECT.
3. WARNING - CALL BEFORE YOU DIG: LAW REQUIRES ANYONE DOING EXCAVATION, FENCING, PLANTING OR DRILLING TO CALL 48 HOURS IN ADVANCE. HAND DIG WITHIN 18 INCHES OF ANY LOCATE MARK OR FLAG. ONE-CALL 811.

KEYNOTES #

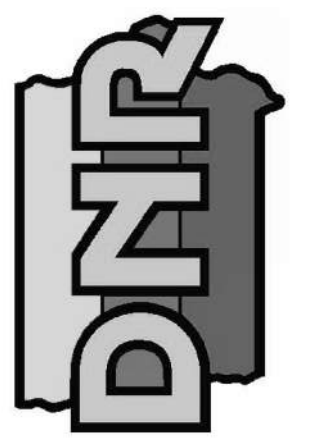
- 1 MOUNT ABOVE STORAGE LOFT. COORDINATE FINAL LOCATION WITH OWNER AND ARCHITECTURAL DRAWINGS.



1 ELECTRICAL SITE PLAN
1" = 30'-0"

CONSULTANT:
KCL
ENGINEERING
300 4th Street
West Des Moines, Iowa 50265
515.724.7938
info@kclengineering.com

**IOWA DEPARTMENT OF
NATURAL RESOURCES**
ENGINEERING SERVICES - WALLACE
BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



ELECTRICAL SITE PLAN
NEW OFFICE & STORAGE BUILDING FOR:
Lake Wapello State Park

15248 CAMPGROUND PAD
DRAKESVILLE, IA 52552

NO.	BY DATE	REVISION

DRAWN BY: DEB PROJECT NUMBER: 23-05-26-01
CHKD BY: JTL DATE: 03.21.2023

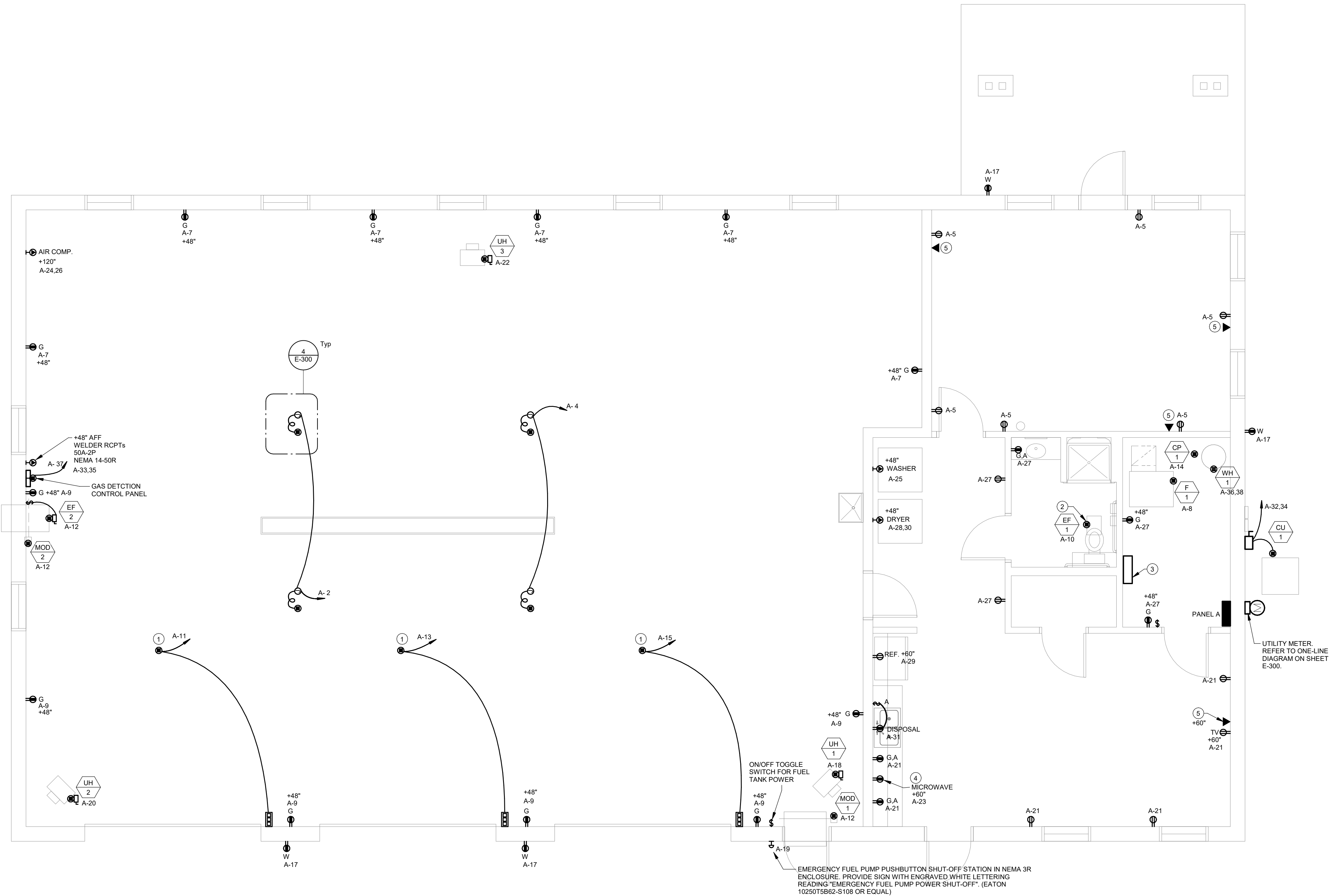
SHEET No:
E-001

POWER GENERAL NOTES

- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- B. COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL UNITS WITH M.C. AND FINAL MECHANICAL SHOP DRAWINGS.
- C. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.

KEYNOTES Ⓜ

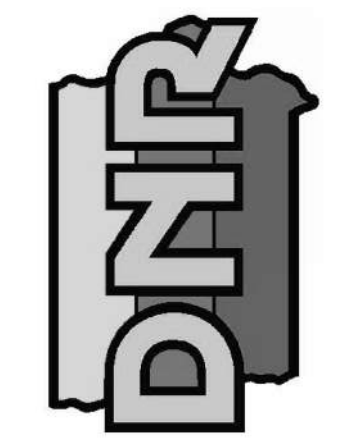
- 1 OVERHEAD DOOR MOTORIZED CONTROLLER. INSTALL DEVICES PER MANUFACTURER INCLUDING ALL LOW VOLTAGE SENSORS AND SWITCHES. PROVIDE EQUIPMENT DISCONNECT WHERE NECESSARY.
- 2 CONNECT TO LOCAL LIGHTING SWITCH.
- 3 FUTURE TELEPHONE UTILITY DEMARC LOCATION. STUB UP EMPTY 2" CONDUIT TO THIS LOCATION. REFER TO E-001 ELECTRICAL SITE PLAN.
- 4 VERIFY THE FINAL LOCATION WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.
- 5 DATA ROUGH-IN LOCATION ONLY. INSTALL DUAL GANG JUNCTION BOX WITH SINGLE GANG MUD RING, STAINLESS STEEL FACE PLATE AND ROUTE (1) 1" EMPTY CONDUIT TO ABOVE ACCESSIBLE CEILING WITH BUSHING AND PULL STRING.



1 ELECTRICAL FLOOR PLAN - POWER
1/4" = 1'-0"

CONSULTANT:
KCL
ENGINEERING
300 4th Street
West Des Moines, Iowa 50265
515.724.7938
info@kclengineering.com

**IOWA DEPARTMENT OF
NATURAL RESOURCES**
ENGINEERING SERVICES - WALLACE
BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



ELECTRICAL PLANS

NEW OFFICE & STORAGE BUILDING FOR:
Lake Wapello State Park

DRAKESVILLE, IA 52552

15248 CAMPGROUND ROAD

NO.	BY DATE	REVISION

DRAWN BY: **DEB** PROJECT NUMBER: **23-05-26-01**
CHKD BY: **JTL** DATE: **03.21.2023**

SHEET No:

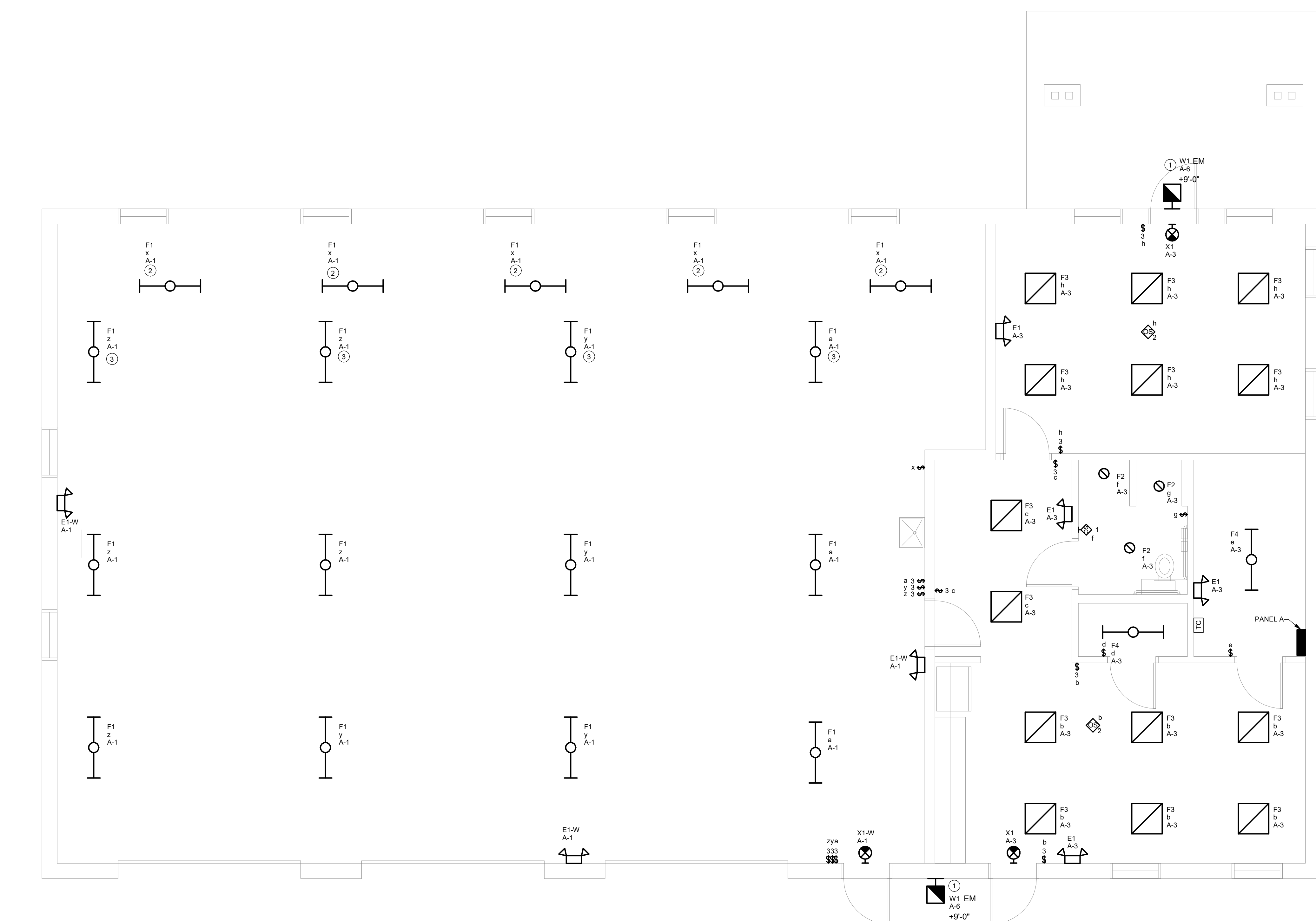
E-200

LIGHTING GENERAL NOTES

A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

KEYNOTES (B)

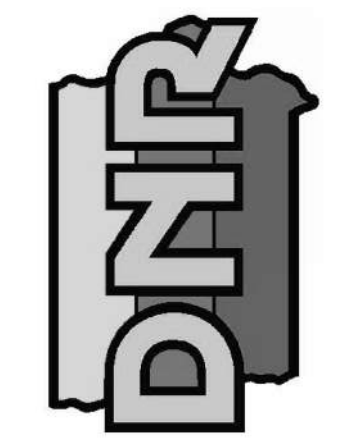
- 1 CONNECT TO ASTRONOMICAL TIMELOCK IN MECH ROOM.
- 2 MOUNT ON UNDERSIDE OF STORAGE LOFT. COORDINATE FINAL LOCATION WITH OWNER AND ARCHITECTURAL DRAWINGS.
- 3 MOUNT ABOVE STORAGE LOFT. COORDINATE FINAL LOCATION WITH OWNER AND ARCHITECTURAL DRAWINGS.



1 ELECTRICAL REFLECTED CEILING PLAN - LIGHTING
1/4" = 1'-0"

CONSULTANT:
KCL
ENGINEERING
300 4th Street
West Des Moines, Iowa 50265
515.724.7938
info@kclengineering.com

**IOWA DEPARTMENT OF
NATURAL RESOURCES**
ENGINEERING SERVICES - WALLACE
BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202



LIGHTING PLANS

NEW OFFICE & STORAGE BUILDING FOR:
Lake Wapello State Park

15248 CAMPGROUND ROAD
DRAKESVILLE, IA 52552

NO.	BY DATE	REVISION

DRAWN BY: DEB	PROJECT NUMBER: 23-05-26-01
CHKD BY: JTL	DATE: 03.21.2023

SHEET No:
E-201

LIGHTING FIXTURE SCHEDULE

NOTES:

- ALL FIXTURES SHALL BE U.L. OR SIMILARLY LISTED.
- INCLUDE A MINIMUM 1 YEAR WARRANTY FOR LIGHTING FIXTURES, WHERE NOT OTHERWISE SPECIFIED.
- REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS, DETAILS, AND CONFIGURATIONS OF ALL LUMINAIRES. IF ARCHITECTURAL DRAWINGS DO NOT CLARIFY EXACT MOUNTING LOCATION OR DETAIL, ISSUE AN RFI FOR ARCHITECT TO SPECIFICALLY CLARIFY PRIOR TO FIXTURE ROUGH-IN.
- VERIFY COMPATIBILITY OF LIGHT FIXTURES WITH CEILING MATERIAL, ADJACENT CONSTRUCTION, AND ADJACENT FINISHES PRIOR TO SHOP DRAWINGS SUBMITTAL. NOTIFY THE ARCHITECT OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.
- CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE NECESSARY TO INSTALL AND SUPPORT THE LUMINAIRES.
- AIM AND TARGET ADJUSTABLE INTERIOR AND EXTERIOR LIGHT FIXTURES UNDER THE OBSERVATION AND IN COMPLIANCE WITH RECOMMENDATIONS OF THE ARCHITECT. INCLUDE LABOR AND MATERIAL COSTS MADE NECESSARY BY THIS REQUIREMENT.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FILLING OUT ALL UTILITY REBATE FORMS FOR OWNER.

DESIGNED BY: DEB

TYPE	MANUFACTURER	MODEL	DESCRIPTION	FINISH	LUMENS	CRI	DRIVER TYPE	SOURCE-CCT	VOLTAGE	LOAD-VA	APPROVED EQUALS
E1	LITHONIA LIGHTING	ELM2L-120/347-SDRT	EMERGENCY UNIT, WALL OR CEILING MOUNTED, 2 LED ADJUSTABLE LAMP HEADS, MAINTENANCE FREE BATTERY	WHITE	EM	N/A	N/A	LED	120 V	2 VA	ISO-LITE, DUAL-LITE, OR AS APPROVED BY ENGINEER
E1-W	LITHONIA LIGHTING	ELM2L-UVOLT-SDRT / ELAWG1	EMERGENCY UNIT, WALL OR CEILING MOUNTED, 2 LED ADJUSTABLE LAMP HEADS, MAINTENANCE FREE BATTERY, WIRE GUARD	WHITE	EM	N/A	N/A	LED	120 V	2 VA	ISO-LITE, DUAL-LITE, OR AS APPROVED BY ENGINEER
F1	LITHONIA LIGHTING	CLX-L48-5000LM-HEF-FDL-WD-120-GZ10-LUGR-40K-80C-R1-PLR	CORD SET INSTALLATION, CHAIN HUNG 4' UTILITY STRIPLIGHT, FLAT ACRYLIC LENS, GENERAL DISTRIBUTION, GLARE REFLECTOR ACCESSORY. DAMP LISTED. PROVIDE AN ALLOWANCE FOR PLUG-READY LUMINAIRE. CONTRACTOR TO VERIFY OR PROVIDE SO CORD IF NOT INCLUDED WITH LUMINAIRE. CONTRACTOR TO INSTALL IN FIELD.	WHITE	5000	80	0-10V DIMMING TO 10%	LED-4000K	120 V	32 VA	AS APPROVED BY ENGINEER
F2	LITHONIA LIGHTING	L4-13LM-40K-120-G4-80CRI-ZXT // WPR-CSS-WET	RECESSED 4" ROUND DOWNLIGHT, PARABOLIC REFLECTOR, WIDE DISTRIBUTION, DAMP LOCATION	SEMI-SPECULAR	1300	80	0-10V DIMMING TO 10%	LED - 4000K	120 V	20 VA	ALPHABET LIGHTING, COOPER HALO OR AS APPROVED BY ENGINEER
F3	CREE	ZR24C-40K-10V-FD	RECESSED 2x2, SWITCHABLE CCT AND LUMEN PACKAGE	WHITE		80	0-10V DIMMING TO 10%	LED-4000K	120 V	0 VA	WILLIAMS, COLUMBIA, OR AS APPROVED BY ENGINEER
F4	LITHONIA LIGHTING	CLX-L48-3000LM-HEF-FDL-WD-120-GZ10-40K-80CRI	CHAIN HUNG 4' UTILITY STRIPLIGHT, FLAT ACRYLIC LENS, GENERAL DISTRIBUTION	WHITE	3000	80	0-10V DIMMING TO 10%	LED-4000K	120 V	20 VA	AS APPROVED BY ENGINEER
W1	HUBBELL LIGHTING	TRP1-24L-15-3K8-4W-UNV-DBT-PC-EH	BUILDING MOUNTED WALL PACK, TYPE 4 DISTRIBUTION, -30 DEGREE RATED EMERGENCY BATTERY PACK	BRONZE	1700	80	NON-DIMMING	LED-3000K	120 V	20 VA	LITHONIA LIGHTING, COOPER MCGRAW-EDISON, OR AS APPROVED BY ENGINEER
X1	LITHONIA LIGHTING	LQM-S-W-3-R-MVOLT-EL-N-SD / ELAWG1	BACK MOUNTED EXIT SIGN, SINGLE FACE, THERMOPLASTIC HOUSING, SELF-DIAGNOSTICS	WHITE	N/A	N/A	N/A	RED LED	120 V	2 VA	ISO-LITE, DUAL-LITE, OR AS APPROVED BY ENGINEER
X1-W	LITHONIA LIGHTING	LQM-S-W-3-R-MVOLT-EL-N-SD / ELAWG1	BACK MOUNTED EXIT SIGN, SINGLE FACE, THERMOPLASTIC HOUSING, SELF-DIAGNOSTICS, WIRE GUARD	WHITE	N/A	N/A	N/A	RED LED	120 V	2 VA	ISO-LITE, DUAL-LITE, OR AS APPROVED BY ENGINEER

BRANCH PANEL: A

LOCATION: MECH/ELEC **VOLTAGE:** 120/240 SINGLE **SCCR RATING:** 25,000 A

SUPPLY FROM: UTILITY METER **PHASES:** 1 **MAINS TYPE:** MCB

MOUNTING: SURFACE **WIRES:** 3 **MAINS RATING:** 225 A

ENCLOSURE: TYPE 1 **MCB RATING:** 225 A

NOTES:

INTEGRAL SURGE PROTECTION DEVICE - INCREASE TO 54 SPACE IF REQUIRED FOR INTEGRAL SPD. PROVIDE SPARES FOR REMAINING UNUSED SPACES.

CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	CKT NO	AMP	P	CIRCUIT DESCRIPTION
SHOP LIGHTING	1	20 A	1	551	360	2	20 A	1	CORD REELS
OFFICE LIGHTING	1	20 A	3		110	360	4	20 A	CORD REELS
RCPT OFFICE	1	20 A	5	1080	40	6	20 A	1	EXTERIOR LIGHTING
RCPT SHOP	1	20 A	7		1080	1270	8	20 A	F-1
RCPT SHOP	1	20 A	9	1080	100	10	20 A	1	EF-1
DOOR OPENER	1	20 A	11		920	1100	12	20 A	EF-2
DOOR OPENER	1	20 A	13	920	4500		14	20 A	CP-1
DOOR OPENER	1	20 A	15		920	0	16	20 A	SPARE
RCPT EXTERIOR	1	20 A	17	720	290	18	20 A	1	UH-1
FUEL PUMP/EMERGENCY SHUT OFF	1	20 A	19		1500	290	20	20 A	UH-2
RCPT BREAK ROOM	1	20 A	21	1080	290	22	20 A	1	UH-3
MICROWAVE	1	20 A	23		800	600	24	20 A	AIR COMPRESSOR
WASHER	1	G 20 A	25	1200	600		26		
RCPT LAUNDRY, MECH	1	20 A	27		900	1750	28		
REFRIGERATOR	1	G 20 A	29	1200	1750		30	50 A	DRYER
DISPOSAL	1	20 A	31		800	2080	32	30 A	CU-1
WELDER	2	50 A	33	3250	2080		34		
			35		3250	2250	36		
GAS DETECTION	1	20 A	37	920	2250		38	30 A	WH-1
SPARE	1	-- 20 A	39		0	0	40	20 A	SPARE
SPARE	1	-- 20 A	41	0	0		42	20 A	SPARE
				24261 VA	19980 VA				
				202 A	167 A				

LEGEND:

"G" INDICATES GFCI TYPE BREAKER

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED...	PANEL TOTALS
LIGHTING	701 VA	125.00%	876 VA	
POWER	22400 VA	100.00%	22400 VA	TOTAL CONN. LOAD: 44241 VA
RECEPTACLE	21140 VA	73.65%	15570 VA	TOTAL EST. DEMAND: 38846 VA
				TOTAL CONN.: 184 A
				TOTAL EST. DEMAND: 162 A

NOTES:

LIGHTING CONTROLS SCHEDULE

NOTES:

- ALL DEVICES SHALL BE U.L. OR SIMILARLY LISTED.
- ALL DEVICES PROVIDED WITH MANUFACTURER LIMITED 5 YEAR WARRANTY.
- PROVIDE LIGHTING CONTROLS WITH MANUFACTURER COMPLIANT POWER PACKS AND LOW VOLTAGE ROOM CONTROLLERS IN QUANTITY REQUIRED TO INSTALL A COMPLETE AND OPERATIONAL SYSTEM. MANUFACTURER OR MANUFACTURERS REP TO PROVIDE DEVICE QUANTITIES, LAYOUTS AND TYPICAL WIRING DETAILS DURING SHOP SUBMITTAL PROCESS. PROVIDE DIMMING COMPATIBLE DEVICES WHERE DIMMING CONTROLS ARE SHOWN. COORDINATE DIMMING TYPE WITH LIGHTING FIXTURES SHOWN. REFER TO LUMINAIRE SCHEDULE FOR FIXTURE DIMMING TYPE.
- WHERE WIRELESS LIGHTING CONTROLS ARE PROVIDED, POWERPACKS SHALL BE PROVIDED AND INSTALLED WITHIN MANUFACTURER RECOMMENDED DISTANCES TO ENSURE CONTROLLER OPERATION. INSTALL LOW VOLTAGE POWER PACKS AND ROOM CONTROLLERS ABOVE NEARBY ACCESSIBLE CEILING TILES OR IN MECHANICAL/STORAGE SPACES ADJACENT TO CONTROLLED FIXTURES. DO NOT INSTALL POWERPACKS EXPOSED IN COMMON SPACES OR IN INACCESSIBLE LOCATIONS.
- PROVIDE FACTORY AUTHORIZED REPRESENTATIVE TO DEMONSTRATE TYPICAL INSTALLATION AND COMMISSIONING OF EQUIPMENT.
- WHERE APPROVED EQUAL MANUFACTURER PRODUCTS SENSOR COVERAGE OR LOAD RATINGS DIFFER FROM BASIS OF DESIGN, CONTRACTOR AND MANUFACTURER ARE RESPONSIBLE FOR PROVIDING ADDITIONAL DEVICES AS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
- ETD'S AND ALL EMERGENCY LIGHTING CONTROLS COMPONENTS SHALL BE TESTED AND LISTED AS COMPATIBLE BY MANUFACTURER WITH NORMAL LIGHTING CONTROLS IN ALL AREAS.
- UNLESS INDICATED OTHERWISE, LIGHTING CONTROL SCHEMES/OPERATION SHALL BE AS FOLLOWS:

TYPE	DESCRIPTION	ELECTRICAL	MOUNTING	SENSOR TYPE	COVERAGE	APPROVED MANUFACTURERS
OS 1	WALL SWITCH OCCUPANCY SENSOR, DEVICE FINISH MATCHING WIRING DEVICES SPEC. RATED FOR MIN 1/8 HP MOTOR. INTEGRAL AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION. 8-30 MINUTE TIMER SETTINGS.	120V	WALL SWITCH / SINGLE GANG	PASSIVE INFRARED	1000 SQ FT / 180 DEG	HUBBELL, CRESTRON, ACUITY, WATTSTOPPER, GREENGATE, AS APPROVED BY ENGINEER.
OS 2	CEILING MOUNTED OCCUPANCY/VACANCY SENSOR, LIGHTING CONTROLS NETWORK COMPATIBLE DEVICE, ROOM CONTROLLER COMPATIBLE, ENABLING MULTI-ZONE SWITCHING CONTROL AND MULTI-SOURCE DIMMING. WHITE FINISH, AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION. 8-30 MINUTE TIMER SETTINGS. INDOOR USE.	LOW VOLTAGE	CEILING / 8'-12" MH	PASSIVE INFRARED	1000 SQ FT / 360 DEG	HUBBELL, CRESTRON, ACUITY, WATTSTOPPER, AS APPROVED BY ENGINEER.

DESIGNED BY: DEB

EQUIPMENT CONNECTION SCHEDULE

GENERAL NOTES:

- INCLUDE AUXILIARY CONTACTS AND LOW-VOLTAGE WIRING TO AUXILIARY EQUIPMENT THAT RUNS IN TANDEM WITH EQUIPMENT, (I.E. 120V DAMPERS WITH 480V MOTORS).

ABBREVIATIONS:

1	NEMA 1 ENCLOSURE	INT	INTEGRAL WITH EQUIPMENT FROM FACTORY
3R	NEMA 3R ENCLOSURE	MMS	MANUAL MOTOR STARTER WITH FUSES
4	NEMA 4 ENCLOSURE	NFD	NON-FUSED DISCONNECT SWITCH, HEAVY DUTY
4X	NEMA 4X ENCLOSURE	RD	RETURN AIR DUCT DETECTOR
BO	PROVIDED BY OTHERS	RSR	RUN STATUS RELAY, NORMALLY OPEN
CB	CIRCUIT BREAKER IN PANEL	SD	SUPPLY AIR DUCT DETECTOR
CSD	COMBINATION STARTER/DISCONNECT	SSP	START/STOP PUSHBUTTON WITH PILOT
CP	CORD AND PLUG PROVIDED WITH UNIT	SS	START/STOP PUSHBUTTON
ECB	ENCLOSED CIRCUIT BREAKER	ST	SHUNT TRIP
FAR	FIRE ALARM SHUTDOWN RELAY	TOR	TIME DELAY OFF RELAY
FDS	FUSED DISCONNECT SWITCH, HEAVY DUTY	TS	TOGGLE SWITCH WITH PLUG FUSE
GF	GROUND FAULT CIRCUIT INTERRUPTION	VFD	VARIABLE FREQUENCY DRIVE
HOA	HAND-OFF-AUTO		

TAG	ELECTRICAL CHARACTERISTICS					DISCONNECT			REMARKS
	VOLTAGE	PHASE	MOTOR HP	KW	MCA	TYPE	SIZE (AMPS)	NEMA RATING	
CP-1	120 V	1		0.08		CB			
CU-1	240 V	1			12	NFD	30	3R	PROVIDE AND INSTALL DISCONNECT
EF-1	120 V	1	FHP			INT			CONNECT TO LOCAL OCCUPANCY SENSOR WITH LIGHTS IN SPACE.
EF-2	120 V	1	1/4			HOA	20	1	POWER MOTORIZED DAMPER TO OPEN/CLOSE WITH FAN. INSTALL PROVIDED HOA.
F-1	120 V	1	FHP			CB			
MOD-1	120 V	1							POWER MOTORIZED LOUVER TO OPEN/CLOSE WITH FAN.
MOD-2	120 V	1							POWER MOTORIZED LOUVER TO OPEN/CLOSE WITH FAN.
UH-1	120 V	1			2.4				
UH-2	120 V	1			2.4				
UH-3	120 V	1			2.4				
WH-1	240 V	1		4.5		CB			

CONSULTANT:

KCL

ENGINEERING

300 4th Street
West Des Moines, Iowa 50265
515.724.7938
info@kclengineering.com

IOWA DEPARTMENT OF
NATURAL RESOURCES

DNR

ENGINEERING SERVICES - WALLACE
BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
F: 515.725.8202

ELECTRICAL SCHEDULES

NEW OFFICE & STORAGE BUILDING FOR:
Lake Wapello State Park

15248 CAMPGROUND ROAD
DRAKESVILLE, IA 52552

NO.	BY DATE	REVISION

DRAWN BY: DEB PROJECT NUMBER: 23-05-26-01

CHKD BY: JTL DATE: 03.21.2023

SHEET No: