

IOWA DEPARTMENT OF NATURAL RESOURCES

Construction Documents

for

Lake Manawa Law Enforcement Boat Storage Addition

Pottawattamie County, IA

PROJECT #22-04-78-03

PLANS PREPARED BY
LAND AND WATERS BUREAU
CONSERVATION AND RECREATION DIVISION



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	<p>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.</p> <hr/> RYAN E. RICHEY DATE My license renewal date is June 30, 2023. Pages or sheets covered by this seal: <h3 style="text-align: center;">A-001 - A-600</h3>
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	<p>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.</p> <hr/> BRETT JOHNSON DATE My license renewal date is DECEMBER 31, 2023. Pages or sheets covered by this seal: <h3 style="text-align: center;">C1 - C2</h3>
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	<p>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.</p> <hr/> JAMES R. DEEDS IV DATE My license renewal date is DECEMBER 31, 2022. Pages or sheets covered by this seal: <h3 style="text-align: center;">E0 - E5</h3>
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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	Brayton, IA
CONTACT	N/A	CONTACT	Mark Johnson
TELEPHONE	515.725.8200	TELEPHONE	515-250-3713
FAX	515.725.8202	FAX	-
EMAIL	N/A	EMAIL	MARK.JOHNSON@DNR.IOWA.GOV
ARCHITECT		CIVIL ENGINEER	
COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES
ADDRESS	502 E. 9TH. ST.	ADDRESS	502 E. 9TH. ST.
CITY, STATE, ZIP	DES MOINES, IA 50319	CITY, STATE, ZIP	DES MOINES, IA 50319
CONTACT	Ryan Richey	CONTACT	Brett Johnson
TELEPHONE	515.979.0107	TELEPHONE	515.778.6877
FAX	-	FAX	-
EMAIL	RYAN.RICHEY@DNR.IOWA.GOV	EMAIL	BRETT.JOHNSON@DNR.IOWA.GOV
ELECTRICAL DESIGNER		ELECTRICAL ENGINEER	
COMPANY	KCL Engineering	COMPANY	KCL Engineering
ADDRESS	300 4th Street	ADDRESS	300 4th Street
CITY, STATE, ZIP	West Des Moines, IA 50265	CITY, STATE, ZIP	West Des Moines, IA 50265
CONTACT	Jon LaCroix	CONTACT	James Deeds
TELEPHONE	515-344-2960	TELEPHONE	515-724-7938
FAX	-	FAX	-
EMAIL	J.LACROIX@KCLENGINEERING.COM	EMAIL	JDEEDS@KCLENGINEERING.COM

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PROJECT DESCRIPTION

Lake Manawa has a law enforcement boat storage building that isn't large enough or tall enough for their new, modern boats. This 40x48 addition will add the storage space and overhead door heights needed to get the larger boats under a roof. The project will be a post-frame structure with four (4) overhead doors and storage loft in the rear of the building.

AUTHORIZATION TO BID

BC - LAND AND WATERS DATE

AUTHORIZED - PARKS | WILDLIFE | FISHERIES | LAW ENFORCEMENT DATE

BID ITEMS		
ITEM NUMBER	ITEM DESCRIPTION	ESTIMATED QUANTITY
1	MOBILIZATION	LUMP SUM
2	DEMOLITION	LUMP SUM
3	CONSTRUCTION STAKING	LUMP SUM
4	CLASS A CRUSHED STONE	220 TONS
5	5" NON-REINFORCED PCC	7 SY
6	1"x1"x1" HDPE TEE	1 EA
7	1" CURB STOP	1 EA
8	1" HDPE PIPE	122 LF
9	SANITARY YARD HYDRANT WOODFORD MODEL S-3	1 EA
10	SEEDING AND MULCHING	LUMP SUM
11	ELECTRICAL AND ASSOCIATED ITEMS	LUMP SUM
12	POST-FRAME STORAGE BUILDING ADDITION	LUMP SUM

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

Boat Storage Addition for:
Lake Manawa LE

Council Bluffs, IA 51501
1100 South Shore Drive

NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER: 22-04-78-03

CHK'D BY: DATE: 10.24.2022

SHEET No:

A-001

DIMENSION NOTES

- IN INTERIOR SPACES THE ACTUAL DIMENSIONS MAY BE LESS IMPORTANT THAN IF AT TWO ELEMENTS IN THE BUILDING WERE TO BE EQUAL. IN THESE CASES, THE WORD "EQUAL OR EQ" IS USED IN LIEU OF THE ACTUAL DIMENSIONS.
- WHEN A ROOM CENTERLINE IS INDICATED ONLY ONE SIDE OF THE ROOMS ELEMENTS MAY BE DIMENSIONED.
- COLUMN IDENTIFICATION: DETAILS WILL GOVERN ALL DIMENSIONS AND NO DIMENSIONS WILL BE SHOWN ON SMALL SCALE PLANS.
- PARTITION CENTERED ON COLUMN OR GRID LINES WILL NOT BE DIMENSIONED ON SMALL SCALE PLANS.
- PARTITION WITH A FINISHED FACE FLUSH WITH FINISH FACE OF COLUMN WILL NOT BE DIMENSIONED ON SMALL SCALE PLANS.
- PARTITION FINISH FACE ON COLUMN OR GRID LINE WILL NOT BE DIMENSIONED ON SMALL SCALE PLANS.
- WHEN ONE JAMB OCCURS AT A COLUMN OR GRID LINE NO DIMENSIONS WILL BE SHOWN ON THE SMALL SCALE PLANS. THE OPENING WIDTH WILL BE GOVERNED BY CRITERIA OR SCHEDULES.
- WHEN NEITHER JAMB OCCURS AT A COLUMN OR GRID LINE ONE JAMB WILL BE DIMENSIONED.
- DOOR LOCATIONS ARE TO BE LOCATED BY ONE OF FOLLOWING:
 - ONE JAMB FACE LOCATED BY A PARTITION AT RIGHT ANGLE. 4" TYPICAL UNLESS INDICATED ON PLAN.
 - OR AS DIMENSIONED ON PLAN.
- PARTITIONS ARE DIMENSIONED TO FACE OF CMU OR FACE OF STUD UNLESS OTHERWISE NOTED.
- DIMENSIONS ARE INDICATED IN THE DOCUMENTS. THE DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.

MATERIAL LEGEND

EARTH	CONCRETE MASONRY UNIT	GYPSUM / STUCCO	brick
COMPACTED EARTH	metal stud	grout	CONCRETE
GRASS	PARTICLE BOARD	sand	ASPHALT
GRAVEL	PLYWOOD	foam INSULATION	cast stone
clay	BATT INSULATION	RIGID INSULATION	stone
fence	ACOUSTICAL CEILING TILE	ALUMINUM	glass
turf block	plastic	STEEL	WOOD BLOCKING
pavers	carpet	FINISHED WOOD	CONTINUOUS WOOD

SYMBOL LEGEND

	NORTH AAROW		ROOM/SPACE IDENTIFICATION
	DRAWING / DETAIL IDENTIFICATION		DOOR TAG
	SECTION REFERENCE		WINDOW TAG
	DETAIL REFERENCE		WALL TYPE REFERENCE KEYNOTE NUMBER -NEW C.S.I. DIVISION/KEY
	EXTERIOR ELEVATION		KEYNOTE - DEMOLITION
	INTERIOR ELEVATION		KEYNOTE - NEW/RENOVATION
	ELEVATION TARGET		KEYNOTE - FINISH/ACCESSORY
	COLUMN GRID		PROPERTY LINE REFERENCE
	MATCH LINES		CENTER LINE REFERENCE
			LEVEL CHANGE REFERENCE
			DETAIL CUT LINE
			REVISION NUMBER AND CLOUD

GENERAL NOTES

- THE FOLLOWING GENERAL NOTES SHALL PERTAIN TO THE ENTIRE SET OF CONTRACT DOCUMENTS
- A GENERAL CONTRACTOR SHALL NOTE THAT THE ARCHITECTURAL DRAWINGS ARE ESTABLISHING A MINIMUM MATERIAL OR CONSTRUCTION METHOD STANDARD. THE GENERAL CONTRACTOR SHALL PROVIDE A BID PRICE BASED ON THE SPECIFIC MATERIALS NOTED.
 - DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING WITH CONSTRUCTION.
 - GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL PERFORM THEIR WORK IN ACCORDANCE WITH ALL APPLICABLE CODES GOVERNING EACH TRADE.
 - THE CONTRACTOR SHALL MAINTAIN A CLEAN AND ORGANIZED JOB SITE, ACCEPTABLE TO THE OWNER.
 - THE CONTRACTOR SHALL COORDINATE THE SEQUENCE OF WORK WITH THE OWNER REPRESENTATIVE.
 - THERE SHALL BE NO DEVIATION BY THE GENERAL CONTRACTOR FROM THE CONSTRUCTION DOCUMENTS UNLESS APPROVED IN WRITING BY THE ARCHITECT.
 - EACH CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD PRIOR TO THE INITIATION OF WORK AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR CONDITIONS INTERFERING WITH THE ABILITY OF THE CONTRACTOR TO COMPLETE WORK AS OUTLINED ON THE CONSTRUCTION DRAWINGS.
 - ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH OTHER TRADES. LACK OF THIS COORDINATION RESULTING IN ADDED COST TO THE CONTRACT WILL BE BORNE BY THE CONTRACTOR.
 - GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE EXISTING BUILDING WATER TIGHT DURING CONSTRUCTION.
 - THE CONTRACTOR WILL VERIFY THAT EXIT EGRESS IS MAINTAINED FOR ALL OCCUPIED AREAS OF THE BUILDING THROUGHOUT ALL PHASES OF CONSTRUCTION.
 - PLAN DIMENSIONS ARE GIVEN TO FACE OF STUD OR BLOCK WALL. "CLEAR" DIMENSIONS ARE GIVEN TO THE FACE THE OWNER WILL ASSUME ALL LIABILITY AND SHALL TAKE PERSONAL RESPONSIBILITY FOR ANY DECISIONS THAT THEY MAKE TO CHANGE OR ALTER THE CONSTRUCTION DOCUMENTS WITHOUT THE ARCHITECT'S WRITTEN APPROVAL.
 - PROTECT ALL EXISTING FINISHES AND MATERIALS TO REMAIN, IN ACCORDANCE WITH ACCEPTABLE TRADE PRACTICES, MANUFACTURER, RECOMMENDATIONS, OR AS DIRECTED BY THE ARCHITECT.
 - CUTTING OF EXISTING CONSTRUCTION FOR THE INSTALLATION OF ALL NEW WORK BY ALL TRADES, AND THE SUBSEQUENT PATCHING THEREOF, SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, WHETHER THE WORK IS DONE BY HIS OWN FORCES OR NOT. GRINDING OF MATERIALS FOR REMOVAL SHALL NOT BE PERMITTED. CUTTING SHALL BE TO STRAIGHT LINE UNWORKMAN-LIKE CUTTING, DAMAGE RESULTING THEREFROM AND UNACCEPTABLE PATCHING SHALL BE REPAIRED AND/OR REPLACED TO AN ACCEPTABLE CONDITION APPROVED BY THE ARCHITECT. A OWNER PROJECT REPRESENTATIVE SHALL BE NOTIFIED PRIOR TO CUTTING OF ANY STRUCTURAL ITEM (I.E. CONCRETE FLOOR, MASONRY, WALL, ETC.) WITHIN THE EXISTING BUILDING. METHOD OF CUTTING SHALL BE APPROVED BY THE OWNER PROJECT REPRESENTATIVE.
 - PATCHING MATERIAL SHALL MATCH EXISTING ADJACENT MATERIALS AS CLOSELY AS POSSIBLE IN COLOR, PATTERNS, AND/OR TEXTURES.
 - ALL SALVAGE MATERIALS REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER. ALL NON-SALVAGE CONSTRUCTION MATERIALS AND DEBRIS FROM DEMOLITION WORK SHALL BE REMOVED FROM THE SITE AS WORK PROGRESSES, UNLESS OTHERWISE NOTED.
 - ISOLATE ALL DISSIMILAR METALS. G SHALL REQUEST APPROVAL BY THE ARCHITECT FOR MATERIALS USED FOR THIS PURPOSE, PRIOR TO INSTALLATION.
 - SEALANTS SHALL BE COMPATIBLE WITH ADJACENT SURFACE(S) THAT ARE IN CONTACT. REFER TO SPECIFICATIONS FOR APPROVED MANUFACTURERS AND PROCEDURES.
 - CAULK JOINTS DISSIMILAR EXPOSED TO VIEW MATERIALS AS REQUIRED BY THE ARCHITECT.
 - ALL DOOR HARDWARE TO BE FL ADA COMPLIANT.
 - ALL EXTERIOR WALLS, DOORS AND WINDOWS ARE EXISTING U.N.O.
 - ALL FINISHES TO BE PER CLASS INDICATED ON A-004
 - NO CONSTRUCTION SHALL OCCUR WITHOUT SHOP DRAWING APPROVAL. SHOP DRAWINGS TO BE PROVIDED TO ARCHITECT FOR REVIEW UPON BEING REVIEWED AND SIGNED/DATED BY THE GENERAL CONTRACTOR AND SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING ITEMS:
 - CABINERY MILLWORK
 - RUNNING TRIM AND CASING PROFILES
 - PAINT/LAMINATE COLOR SAMPLES
 - ACOUSTICAL CEILING AND GRID
 - TOILET ACCESSORIES
 - KITCHEN EQUIPMENT
 - ROOF PENETRATIONS
 - HVAC EQUIPMENT
 - PLUMBING EQUIPMENT AND FIXTURES
 - ELECTRICAL EQUIPMENT AND FIXTURES
 - PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL SUBMIT (2) COPIES OF MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL PRODUCTS USED TO PERFORM THE WORK.
- VERIFY ACTUAL LOCATIONS AND ELEVATIONS WITH DNR ENGINEER.
- ALL WORK SHALL CONFORM TO AND BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
- THE CONTRACTOR SHALL VISIT THE SITE AND INSPECT THE PROJECT AREA AND THOROUGHLY FAMILIARIZE THEMSELVES WITH THE ACTUAL JOB CONDITIONS PRIOR TO BEGINNING AND THE START OF WORK. FAILURE TO VISIT THE PROJECT SITE SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING THE WORK IN ACCORDANCE TO THE PLANS, SPECIFICATION, SPECIAL PROVISIONS AND CONTRACT.
- THE CONTRACTOR SHALL VERIFY, AT THE SITE, ALL DIMENSIONS AND CONDITIONS SHOWN ON THE PLANS AND SHALL NOTIFY THE DNR ENGINEER OF ANY DISCREPANCIES, OMISSIONS, AND/OR CONFLICTS PRIOR TO PROCEEDING WITH THE WORK.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIAL (EXCAVATED MATERIAL OR BROKEN CONCRETE) WHICH IS NOT DESIRABLE TO BE INCORPORATED INTO THE WORK INVOLVED ON THIS PROJECT. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES. NO MATERIAL SHALL BE PLACED WITHIN THE RIGHT-OF-WAY, UNLESS SPECIFICALLY STATED IN THE PLANS OR APPROVED BY THE DNR ENGINEER.
- THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE DNR ENGINEER.
- WHERE UTILITIES AND FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE DNR ENGINEER OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL BE AFFORDED ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.
- THE CONTRACTOR SHALL SHAPE GRADED AREA TO MAINTAIN SURFACE DRAINAGE. ALL ELEVATIONS ARE TO FINISH GRADE.
- THE CONTRACTOR IS EXPECTED TO HAVE MATERIALS, EQUIPMENT, AND LABOR AVAILABLE ON A DAILY BASIS TO INSTALL AND MAINTAIN EROSION CONTROL FEATURES ON THE PROJECT. THIS MAY INVOLVE SEEDING, SILT FENCE, ROCK DITCH CHECKS, SILT BASINS OR SILT DIKES.
- *DIVISIONS 20-41 OF THE STANDARD SPECIFICATIONS FOR BRIDGE AND HIGHWAY CONSTRUCTION, CURRENT EDITION WITH GS-15011 SHALL APPLY TO THIS PROJECT.

PROJECT NARRATIVE

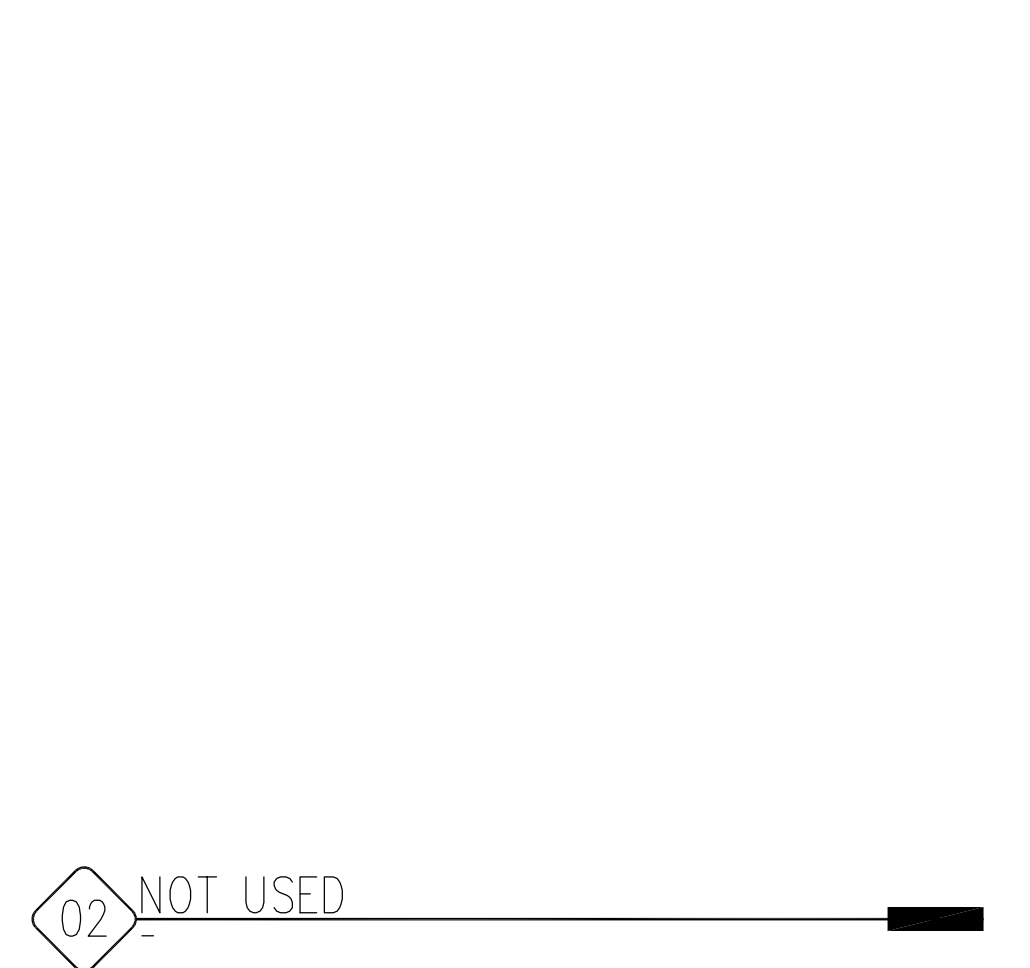
The contractor shall be responsible for providing and installing all items within this narrative, the drawings, and project manual unless specifically noted. This narrative is not meant to be a comprehensive account of all items to be covered by the contract, review all documents. The contractor is responsible for field verifying all dimensions and establishing all quantities that are dictated as "lump sum".

This project, Lake Manawa Law Enforcement – Storage Building Addition, shall commence after the contract is executed and shall be completed no later than August 31, 2023.

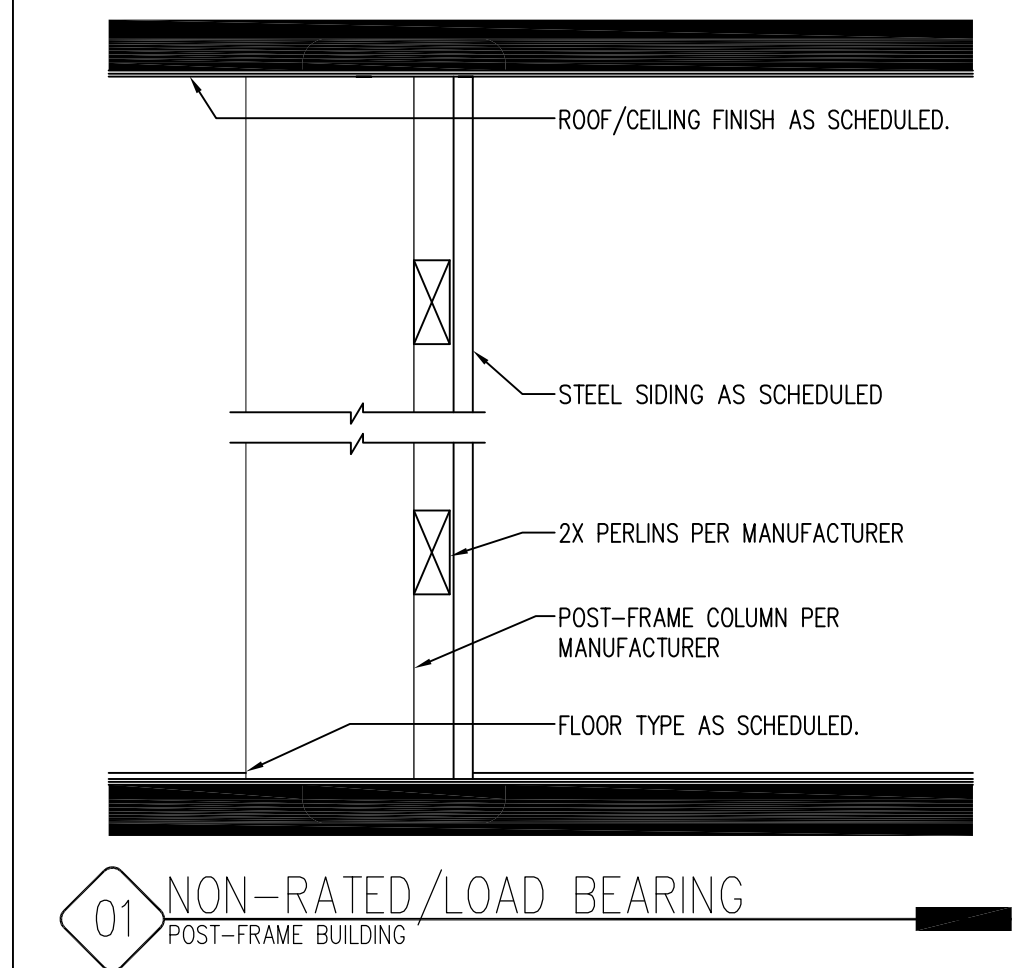
The contractor shall stump grind three (3) existing tree stumps and cut-down and remove one (1) large tree to the west of the existing storage building. The contractor shall also relocate the existing fuel station to the south, refer to electrical drawings for more information. The contractor shall also remove existing concrete, lights and poles, and electrical lines as shown on the site demolition plan. Contractor to clear vegetation and level the site for addition of a rock drive area, refer to civil drawings.

Contractor shall then install the new 48'-0" x 40'-0" post-frame building addition to the existing post-frame storage building. The new addition shall have steel siding and roofing as outlined on the finish schedule. The building shall be 16'-0" tall at the top plate, have four (4) overhead doors of varying sizes, and one walk-through door on the west end. The interior of the building, on the north end, shall receive a 6'-0" deep x 24'-0" long storage loft to store miscellaneous items and have a 100 psf load rating. The interior shall have a concrete slab and the exterior shall receive a concrete apron, refer to sheet A-100.

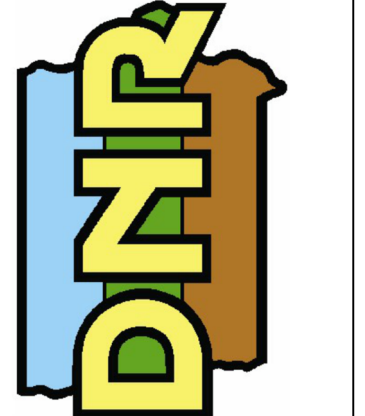
WALLTYPES



WALLTYPES



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 NARRATIVE, NOTES & WALL TYPES
Boat Storage Addition for:
Lake Manawa LE
Council Bluffs, IA 51501

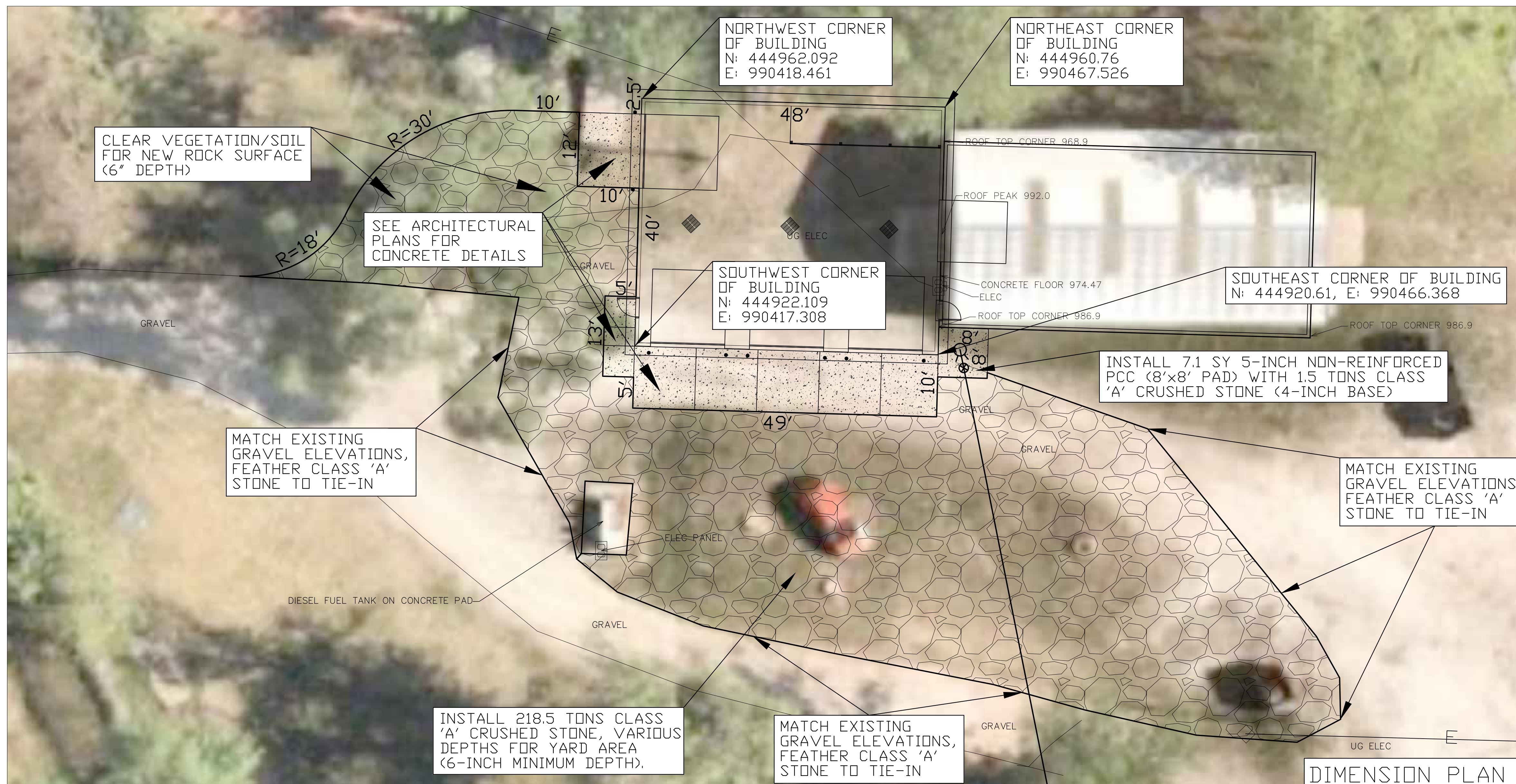
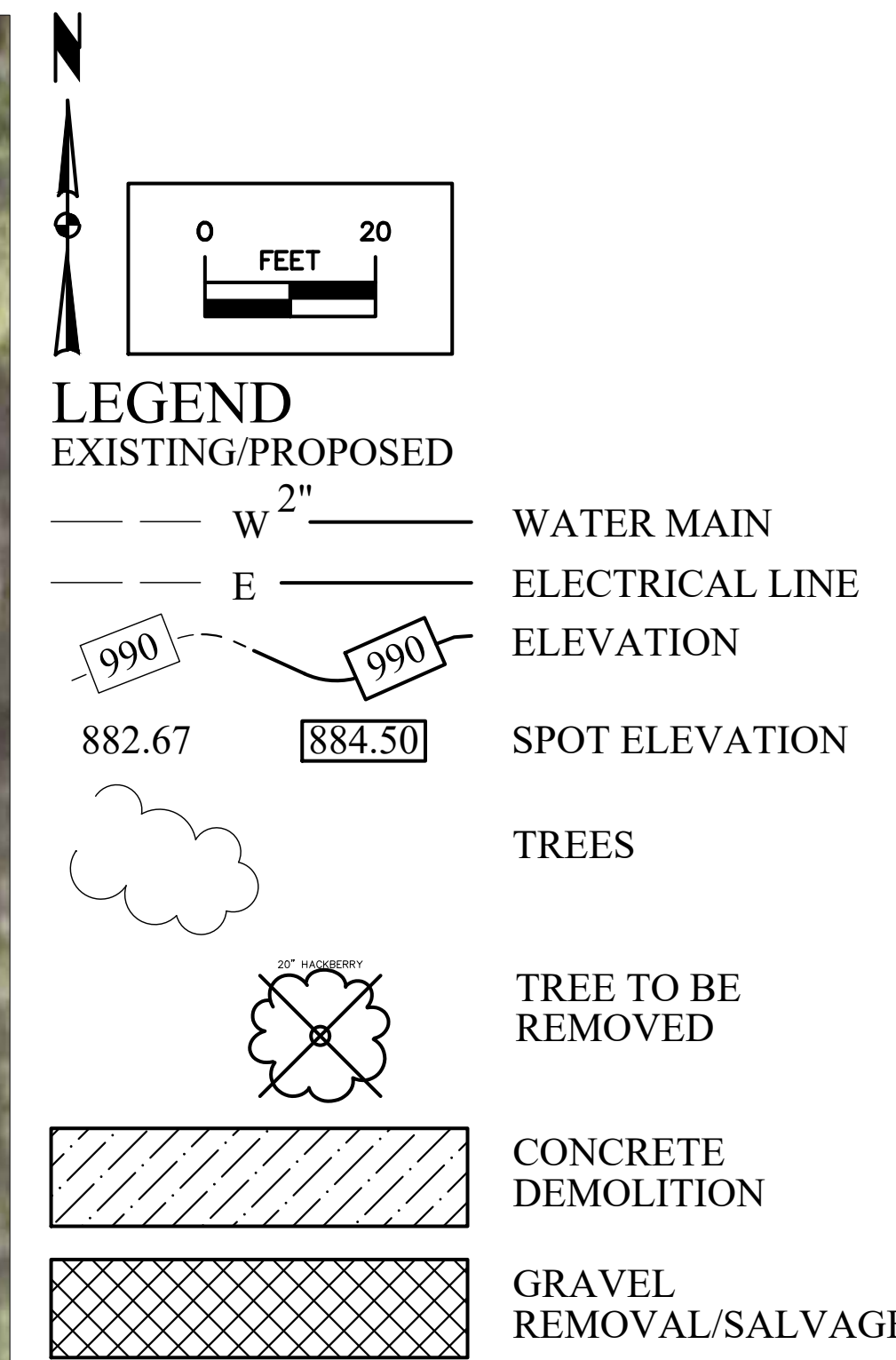
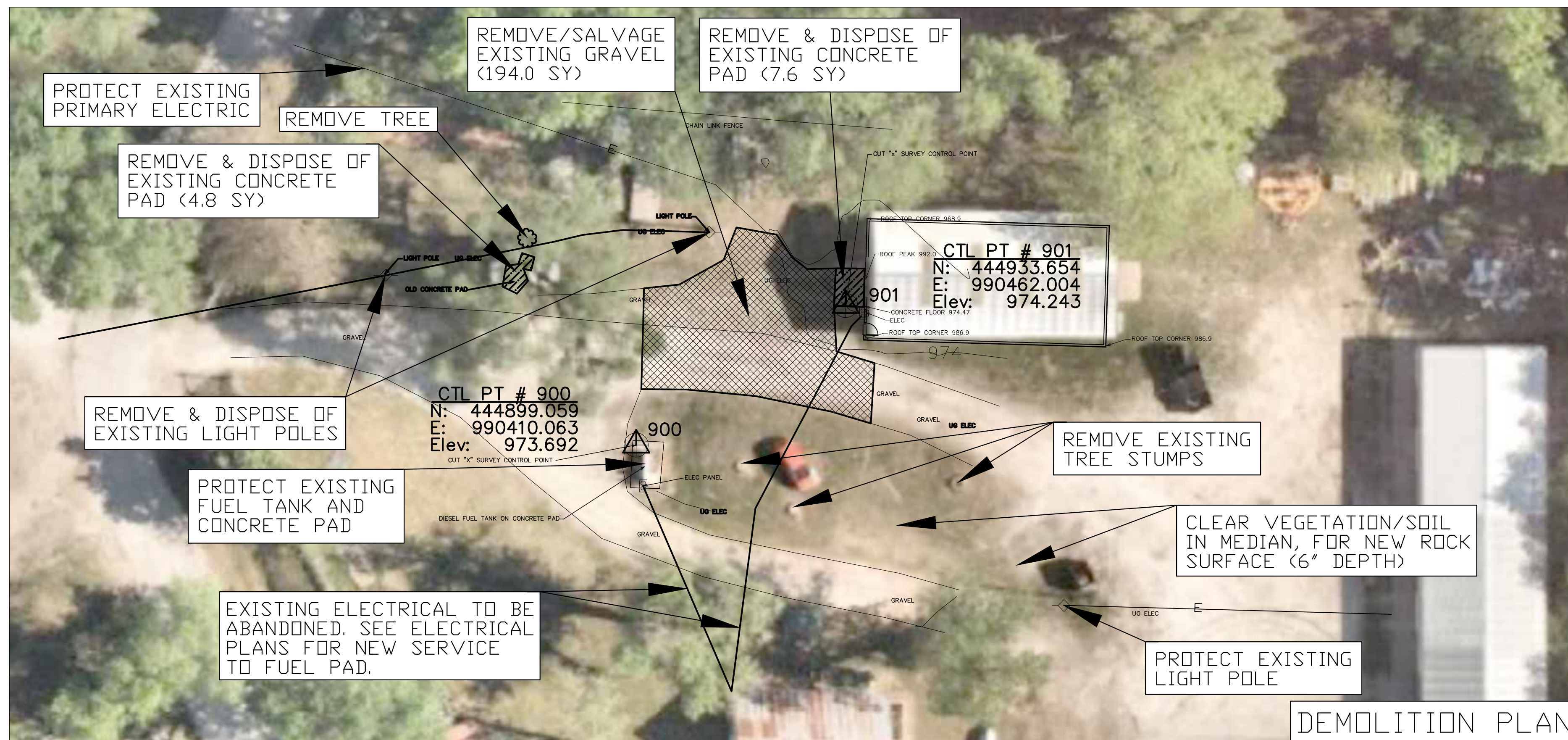
NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER:
22-04-78-03

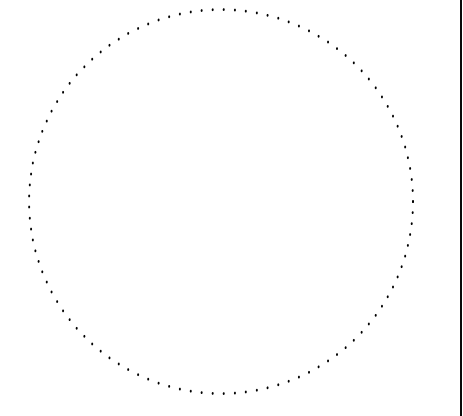
CHK'D BY: DATE:
10.24.2022

SHEET No:

A-002



CONSULTANT:



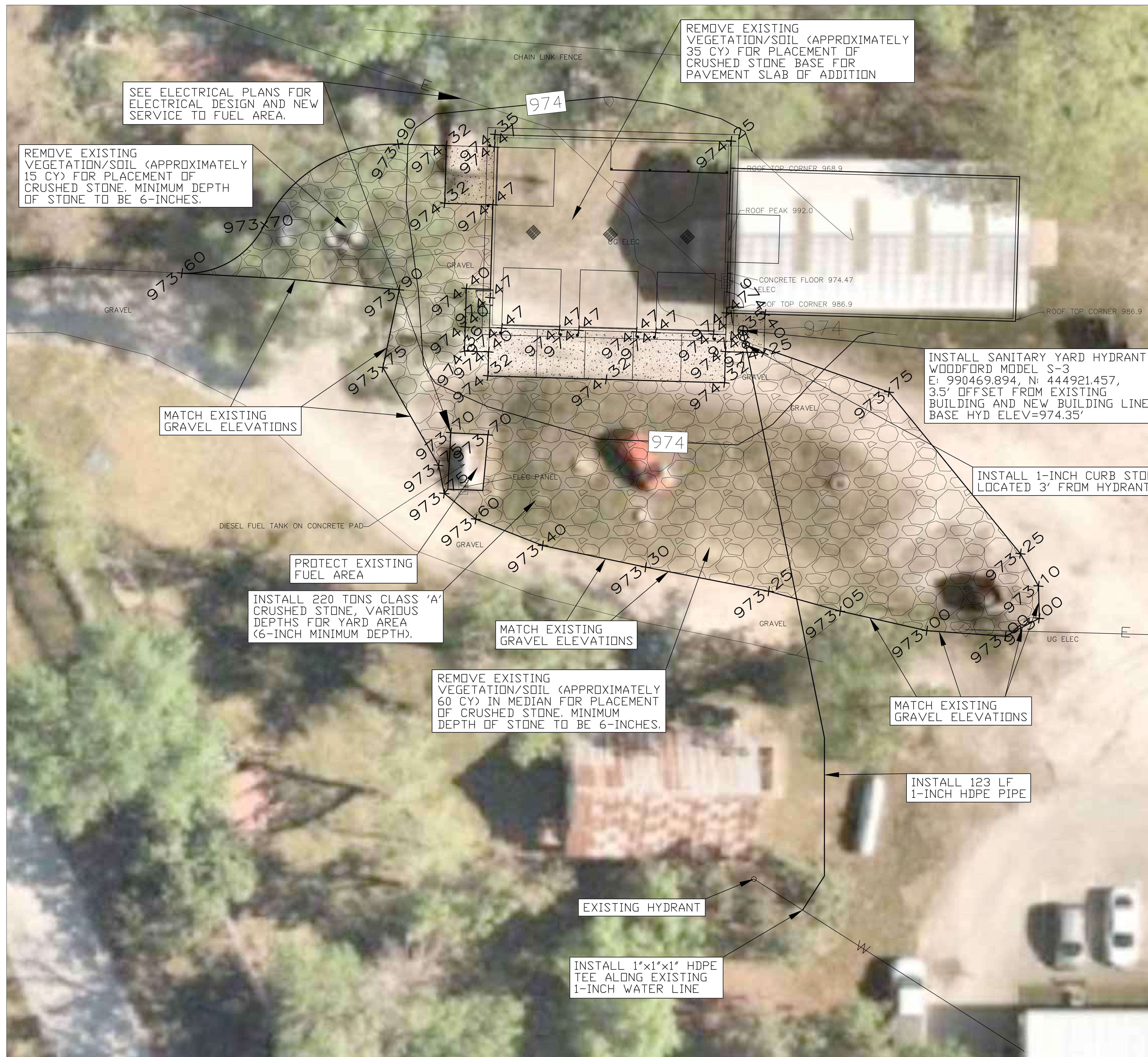
IOWA DEPARTMENT OF NATURAL RESOURCES
 ENGINEERING SERVICES - WALLACE BUILDING
 502 E. 9TH ST., DES MOINES, IA 50319-0034
 P: 515.725.8200 F: 515.725.8202

PROJECT CONTACT INFORMATION
 PROJECT CONTACT: MANAWA LE
 502 E. 9TH ST., DES MOINES, IA 50319-0034

SURVEY/DEMO/DIMENSION PLAN
 Boot Storage Addition for:
Lake Manawa LE
 Council Bluffs, IA 51501
 1100 South Shore Drive

NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER: 22-04-78-03
 CHK'D BY: DATE: 10.24.2022
 SHEET No:



GRADING NOTES

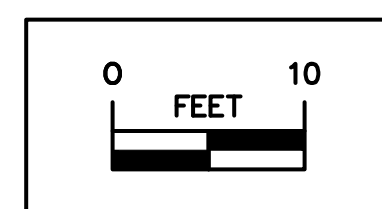
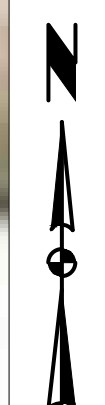
1. TWO WEEKS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY:
 - A. IOWA DNR PROJECT MANAGER: RYAN RICHEY 515-979-0107
 - B. DISTRICT INSPECTOR: MARK JOHNSON 515-250-3713
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATEWIDE URBAN STANDARD DESIGN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (SUDAS). ALL CONSTRUCTION TESTING TO BE IN ACCORDANCE WITH SUDAS AND IS THE EXPENSE OF THE CONTRACTORS.
3. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ABOVE MENTIONED CONTACTS OF ANY DISCREPANCIES.
4. 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.
5. 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.
6. CONTRACTOR TO PROTECT ALL UTILITY, PAVING, BUILDINGS, ETC. OUTSIDE OF LIMITS OF PROPOSED CONSTRUCTION.
7. IN THE EVENT THAT THERE IS A DISCREPANCY BETWEEN THE QUANTITIES AND THE PLANS, THE DETAILED PLANS SHALL GOVERN.
8. CONTRACTOR SHALL SEED/MULCH ALL DISTURBED AREAS (APPROXIMATELY 0.1 ACRE, USE TYPE 1 (PERMANENT LAWN MIXTURE) SEED MIX.
9. MAINTAIN ALL CUT AND FILL AREAS TO ACCOMMODATE SURFACE DRAINAGE.
10. FINISHED GRADE ON ALL NON-PAVED AREAS SHALL BE WITHIN 0.20 FOOT OF PLAN GRADE. PAVED AREAS SHALL BE WITHIN 0.10 FOOT.
11. TOPSOIL SHALL BE SPREAD TO A MINIMUM THICKNESS OF 6-INCHES ON ALL DISTURBED UNPAVED AREAS.
12. BACKFILL TO THE TOP OF ALL ROCK OR PAVED SURFACES.
13. ALL ELEVATIONS ARE TO THE GUTTER GRADE UNLESS NOTED OTHERWISE.
14. EARTHWORK QUANTITY IS ROUGHLY 110 CY. IF ANY EXCESS IS PRODUCED, WASTE WITHIN THE GRADED AREAS NORTH AND WEST OF THE ADDITION WHILE MAINTAINING DRAINAGE AND/OR STOCKPILE IN A LOCATION DESIGNATED BY THE INSPECTOR FOR STAFF USE.
15. NPDES GENERAL PERMIT #2 IS NOT REQUIRED FOR THIS PROJECT AS LESS THAN 1 ACRE IS BEING DISTURBED.

UTILITY NOTES

1. MAINTAIN A MINIMUM 4' COVER OVER WATER LINES.
2. 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.
3. WATER SERVICE TO BE 1-INCH HDPE PIPE.

LEGEND

- EXISTING/PROPOSED
- W^{2"} --- WATER MAIN
- E --- ELECTRICAL LINE
- ELEVATION
- 990 990 SPOT ELEVATION
- 882.67 884.50 SPOT ELEVATION
- TREES



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

GRADING/UTILITY PLAN

Boat Storage Addition for:
Lake Manawa LE

Council Bluffs, IA 51501
 1100 South Shore Drive

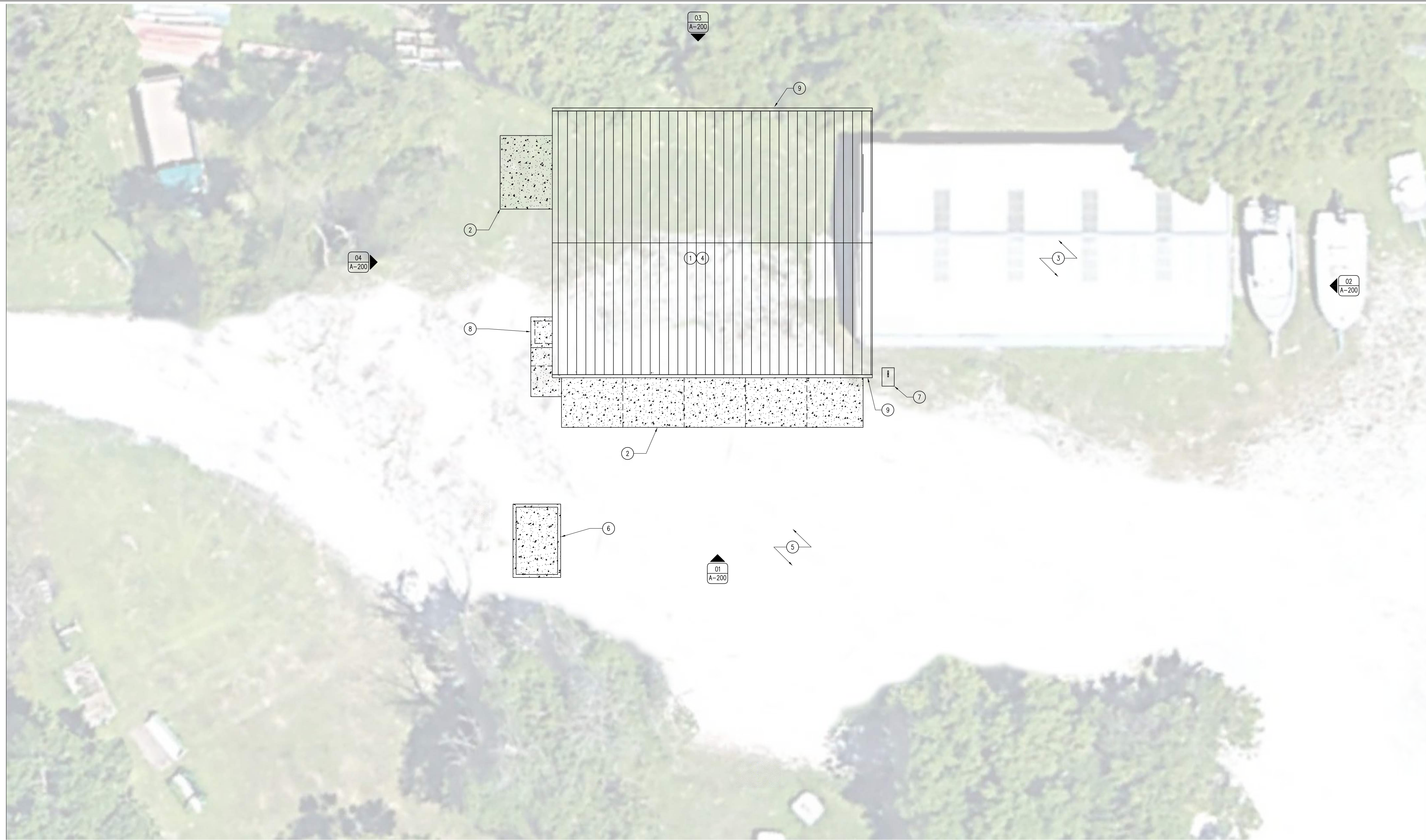
NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER:
 22-04-78-03

CHK'D BY: DATE:
 10.24.2022

SHEET No:

C2



01 ARCHITECTURAL SITE PLAN
SCALE: 3/16" = 1'-0"

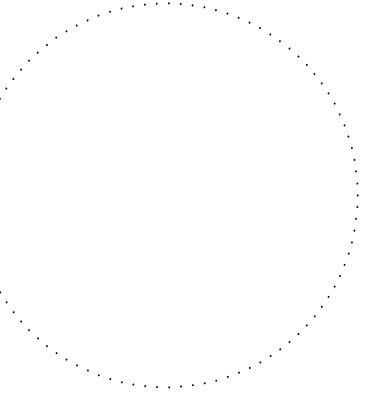
KEYNOTES

1. POST-FRAME BUILDING, REFER TO SHEET A-600. CONTRACTOR TO HAVE POST-FRAME STRUCTURE PRE-ENGINEERED PRIOR TO CONSTRUCTION. SUBMIT PLANS FOR APPROVAL.
2. 6" CONCRETE APRON OVER 6" SUBBASE, #4 REBAR 36" O.C. BOTH DIRECTIONS. SLOPE 1.5% AWAY FROM BUILDING.
3. EXISTING POST-FRAME BUILDING TO REMAIN, CONNECT NEW ADDITION TO THIS BUILDING, FLASH AND CONNECT BUILDING PER BUILDING MANUFACTURER.
4. 26 GAUGE EXPOSED FASTENER ROOF, REFER TO SHEET A-600.
5. ADD CRUSHED LIMESTONE TO EXISTING EQUIPMENT YARD, REFER TO CIVIL PLANS.
6. EXISTING FUEL TANKS TO REMAIN, NEW ELECTRICAL WIRING AND DEVICES TO BE INSTALLED. REFER TO ELECTRICAL PLANS.
7. FROST-FREE WATER HYDRANT, REFER TO CIVIL PLANS FOR MORE INFORMATION.
8. 5'-0" X 5'-0" CONCRETE STOOP FOOTING, REFER TO SHEET A-600 FOR MORE INFORMATION.
9. 6" STEEL GUTTER AND DOWNSPOUT ASSEMBLY, COLOR TO MATCH ROOF. PROVIDE PRE-CAST CONCRETE SPLASH BLOCKS ON NORTH SIDE OF BUILDING.

GENERAL NOTES

- A. REFER TO SCHEDULES, SHEET A-600.
- B. REFER TO INDEX SHEET FOR WALL TYPES, A-002.
- C. REFER TO ELECTRICAL AND CIVIL SHEETS FOR MORE INFORMATION.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- E. FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. ALL UTILITIES SHOWN ON PLAN ARE AN APPROXIMATION OF THEIR EXISTING LOCATION TO THE BEST OF THE DNR'S KNOWLEDGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE ALL UTILITIES PRIOR TO DIGGING. ASSUME ALL ELECTRICAL, WATER, GAS, AND SEWER LINES ARE LIVE AND RUNNING, UNLESS SPECIFICALLY NOTED OTHERWISE.
- F. CONTRACTOR SHALL HAVE POST-FRAME STRUCTURE PRE-ENGINEERED PRIOR TO CONSTRUCTION, SUBMIT PLANS FOR APPROVAL.

CONSULTANT:



**IOWA DEPARTMENT OF
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ENGINEERING SERVICES - WALLACE BUILDING
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ARCHITECTURAL SITE PLAN

Boat Storage Addition for:
Lake Manawa LE
Council Bluffs, IA 51501
1100 South Shore Drive

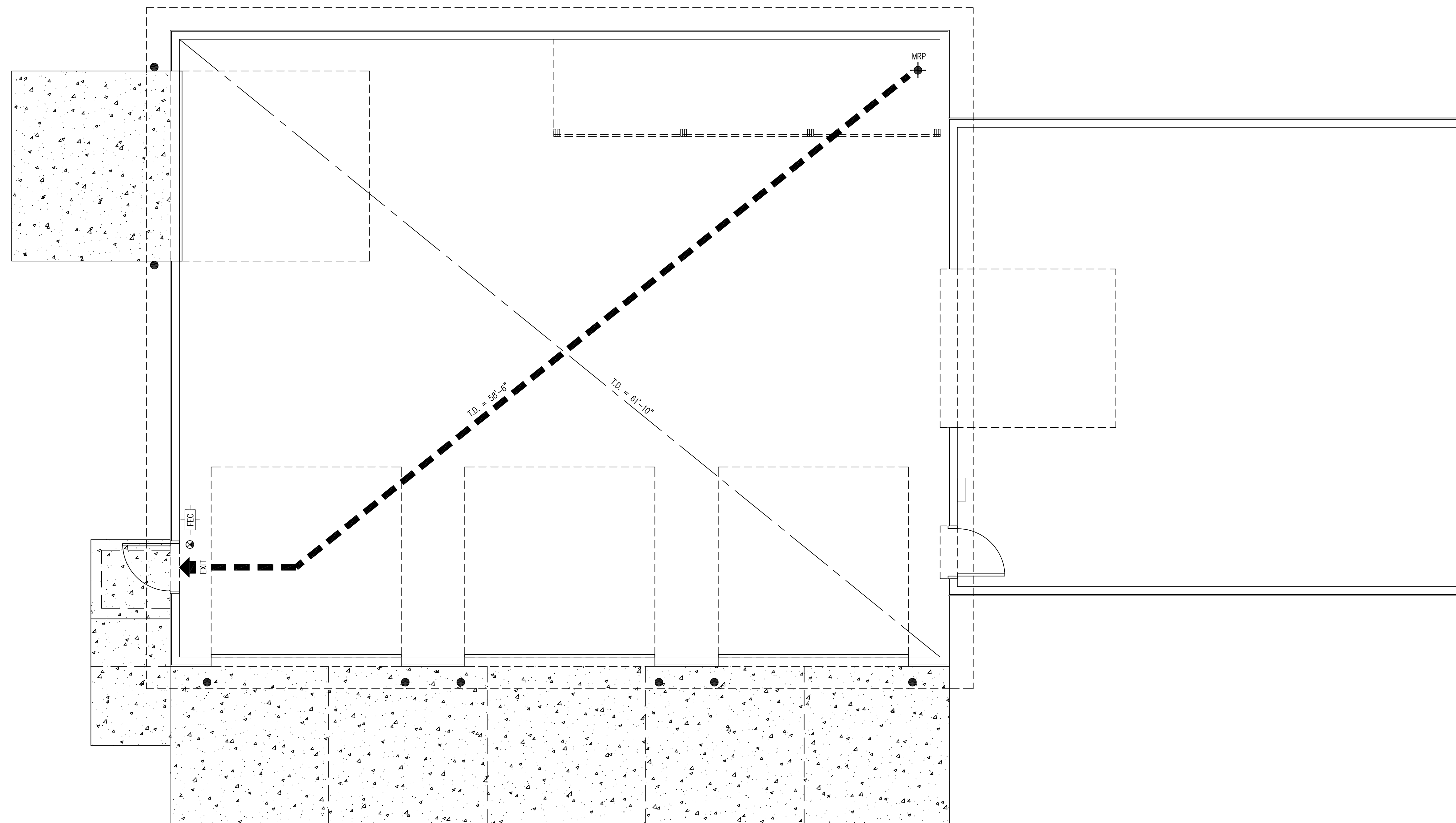
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DRAWN BY: PROJECT NUMBER:
22-04-78-03

CHK'D BY: DATE:
10.24.2022

SHEET No:

A-010



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

CODE SUMMARY

	BUILDING AREA	1,920 GSF	REQUIRED	PROVIDED
TENANT AREA	N/A		ALLOWABLE BLDG AREA (IBC TBL 503)	17,500 SF
CONSTRUCTION TYPE	V-B WITHOUT SPRINKLER SYSTEM		HEIGHT LIMITATION (IBC TBL 503)	2 STORIES (40')
OCCUPANCY	GROUP S-1 - STORAGE		AUTOMATIC SPRINKLER SYSTEM (NFPA 13)	NO
			EXIT ACCESS TRAVEL DISTANCE (IBC 1016.1)	200'-0"
			EXIT ACCESS DOORWAYS (IBC TBL 1019.1)	1
			EGRESS WIDTH PER OCCUPANT (IBC TBL 1005.1) LEVEL [.2"]	(.2') X 13 = 2.6"
				1 DOORS @ 36" = 36"

LIFE SAFETY LEGEND

SYMBOL	DESCRIPTION	LINE TYPE
D.E.	EXIT TO EXIT IN LINEAR FEET	-----
T.D.	TRAVEL DISTANCE FROM M.R.P.	-----
D.D.	DIAGONAL DISTANCE	-----
⊗	EXIT LIGHT	
◆	MOST REMOTE POINT (M.R.P.)	
⬆	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

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LIFE SAFETY PLAN

Boat Storage Addition for
Lake Manawa LE

Council Bluffs, IA 51501

1100 South Shore Drive

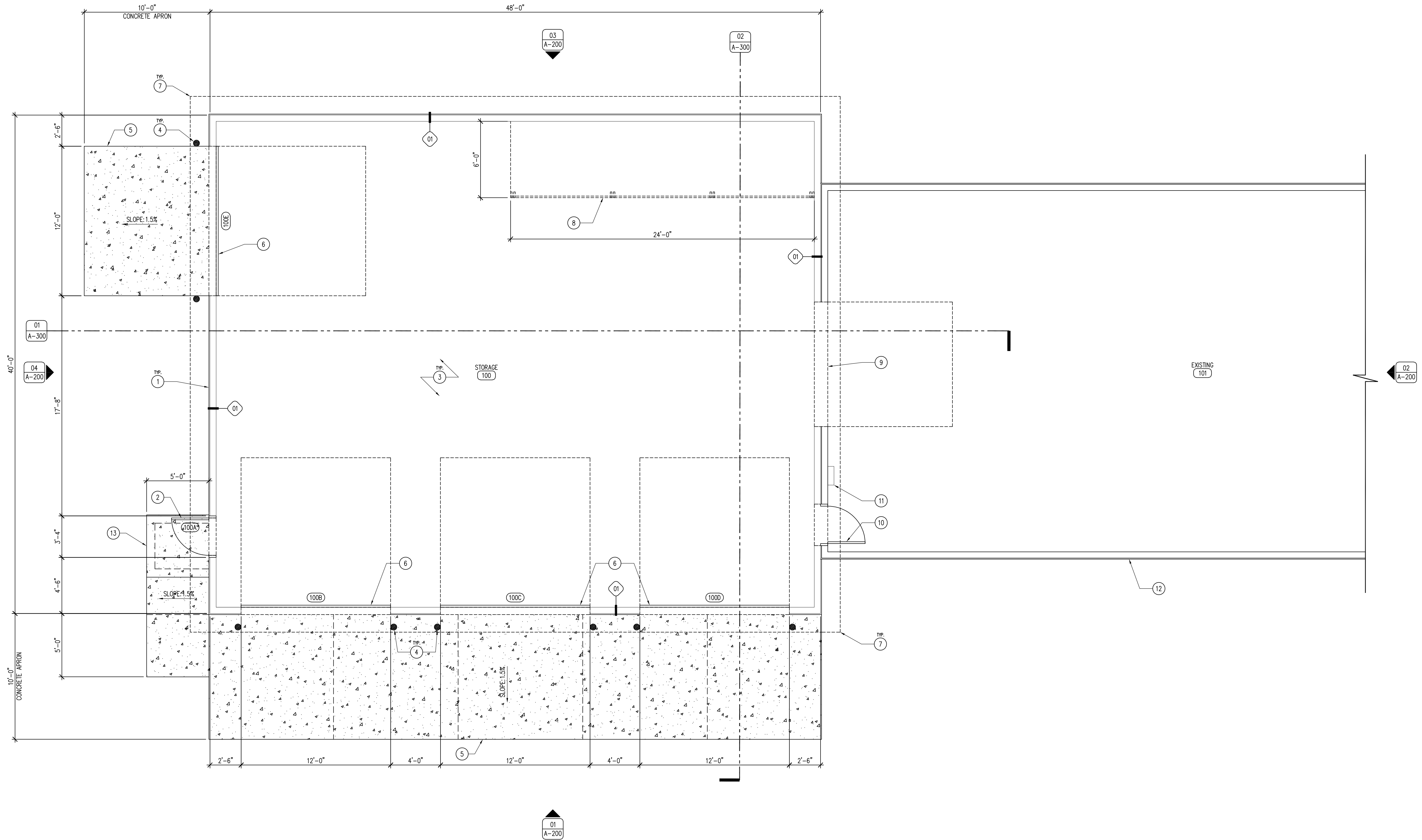
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10.24.2022

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A-020



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

KEYNOTES

1. POST-FRAME BUILDING WITH 26 GAUGE SIDING, REFER TO SHEET A-600.
2. DOOR AS SCHEDULED, REFER TO SHEET A-600.
3. 6" CONCRETE BUILDING SLAB OVER A VAPOR BARRIER AND 6" SUBBASE, #4 REBAR 36" O.C. BOTH DIRECTIONS.
4. STEEL TRAFFIC BOLLARD WITH PLASTIC COVER SLEEVE, REFER TO DETAIL 05/A-600.
5. 6" CONCRETE APRON OVER 6" SUBBASE, #4 REBAR 36" O.C. BOTH DIRECTIONS.
6. OVERHEAD GARAGE DOOR, REFER TO DOOR SCHEDULE SHEET A-600.
7. ROOF LINE ABOVE.
8. 6'-0" DEEP X 24'-0" LONG, SUSPENDED LOFT, TO BE ENGINEERED BY BUILDING MANUFACTURER TO HOLD 100 PSF. SAFETY CHAINS PER OSHA REGULATIONS, 18" AND 36" HEIGHT ABOVE LOFT DECK.
9. EXISTING OVERHEAD DOOR TO REMAIN, FIELD VERIFY DIMENSIONS FOR FRAMED OPENING IN NEW STORAGE BUILDING TO ACCOMMODATE EXISTING DOOR.
10. EXISTING DOOR TO REMAIN, FIELD VERIFY DIMENSIONS FOR FRAMED OPENING IN NEW STORAGE BUILDING TO ACCOMMODATE EXISTING DOOR.
11. EXISTING ELECTRICAL PANEL, REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION.
12. EXISTING POST-FRAME BUILDING TO REMAIN, FLASH PROPERLY THE ROOF TO HEADWALL AND SIDEWALLS, PER SIDING MANUFACTURER.
13. 5'-0" X 3'-0" CONCRETE STOOP FOOTING, REFER TO DETAIL 06/A-600.

GENERAL NOTES

- A. REFER TO SCHEDULES, SHEET A-600.
- B. REFER TO INDEX SHEET FOR WALL TYPES, A-002.
- C. REFER TO ELECTRICAL AND CIVIL SHEETS FOR MORE INFORMATION.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- E. FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. ALL UTILITIES SHOWN ON PLAN ARE AN APPROXIMATION OF THEIR EXISTING LOCATION TO THE BEST OF THE DNR'S KNOWLEDGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE ALL UTILITIES PRIOR TO DIGGING. ASSUME ALL ELECTRICAL, WATER, GAS, AND SEWER LINES ARE LIVE AND RUNNING, UNLESS SPECIFICALLY NOTED OTHERWISE.
- F. CONTRACTOR SHALL HAVE POST-FRAME STRUCTURE PRE-ENGINEERED PRIOR TO CONSTRUCTION, SUBMIT PLANS FOR APPROVAL.

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REFERENCE FLOOR PLAN

Boat Storage Addition for:
Lake Manawa LE

1100 South Shore Drive
Council Bluffs, IA 51501

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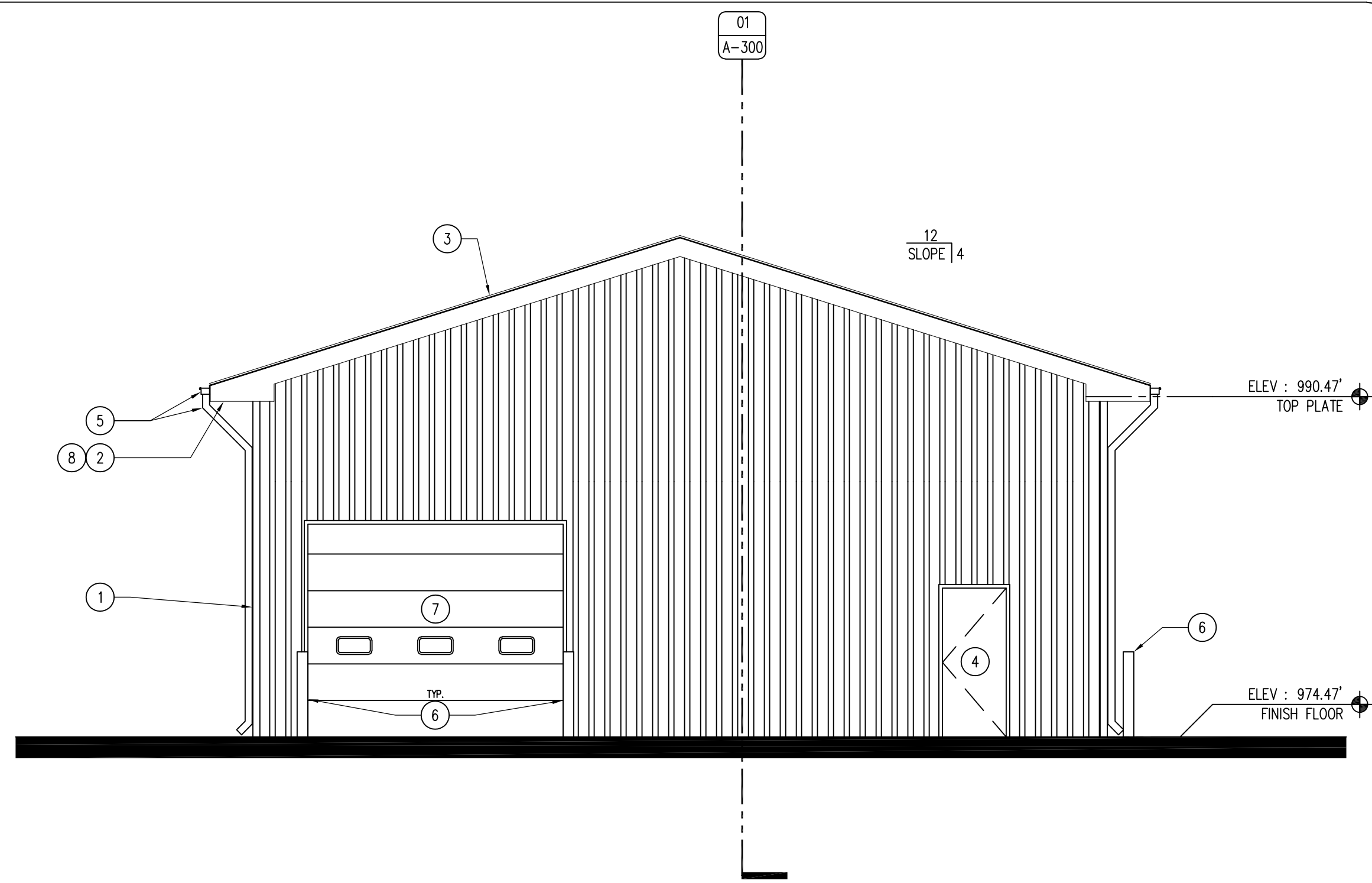
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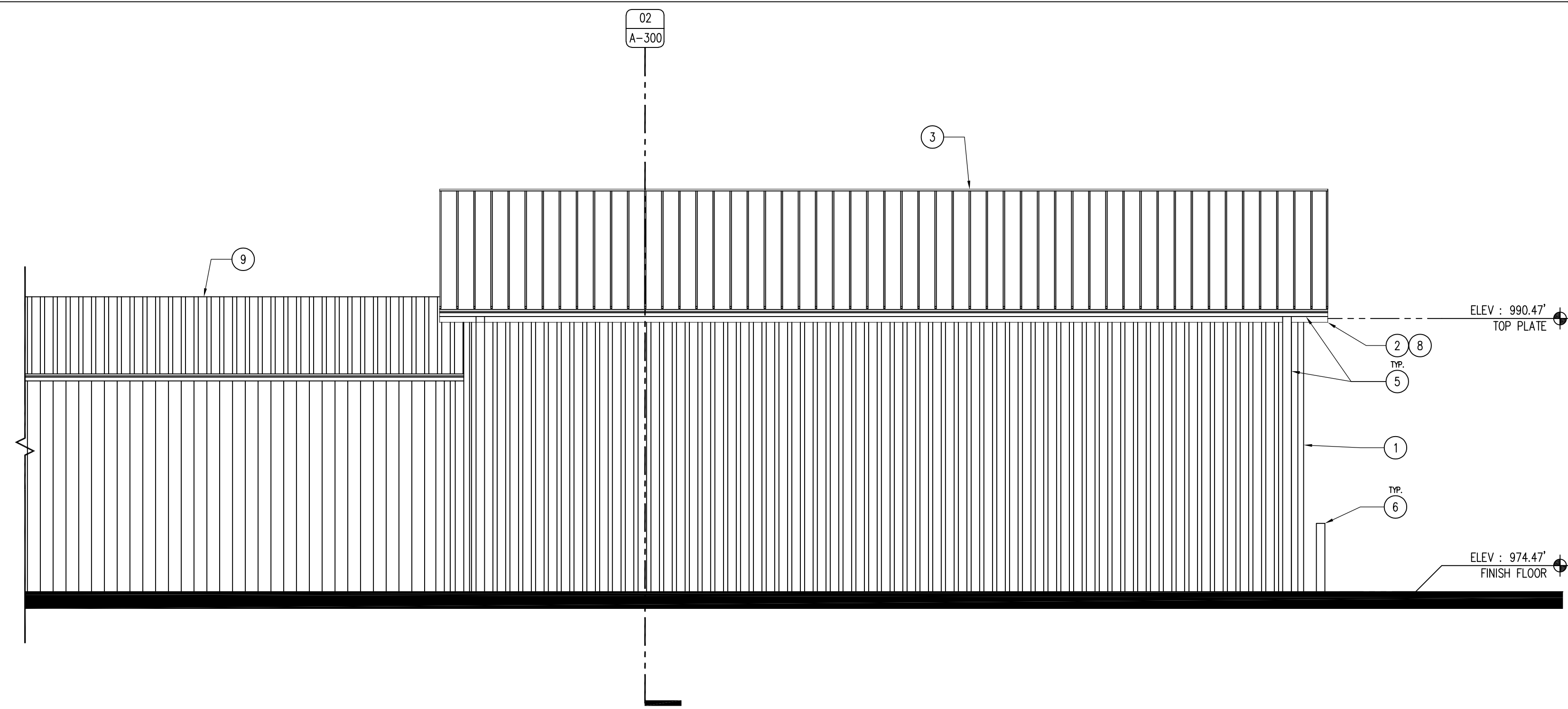
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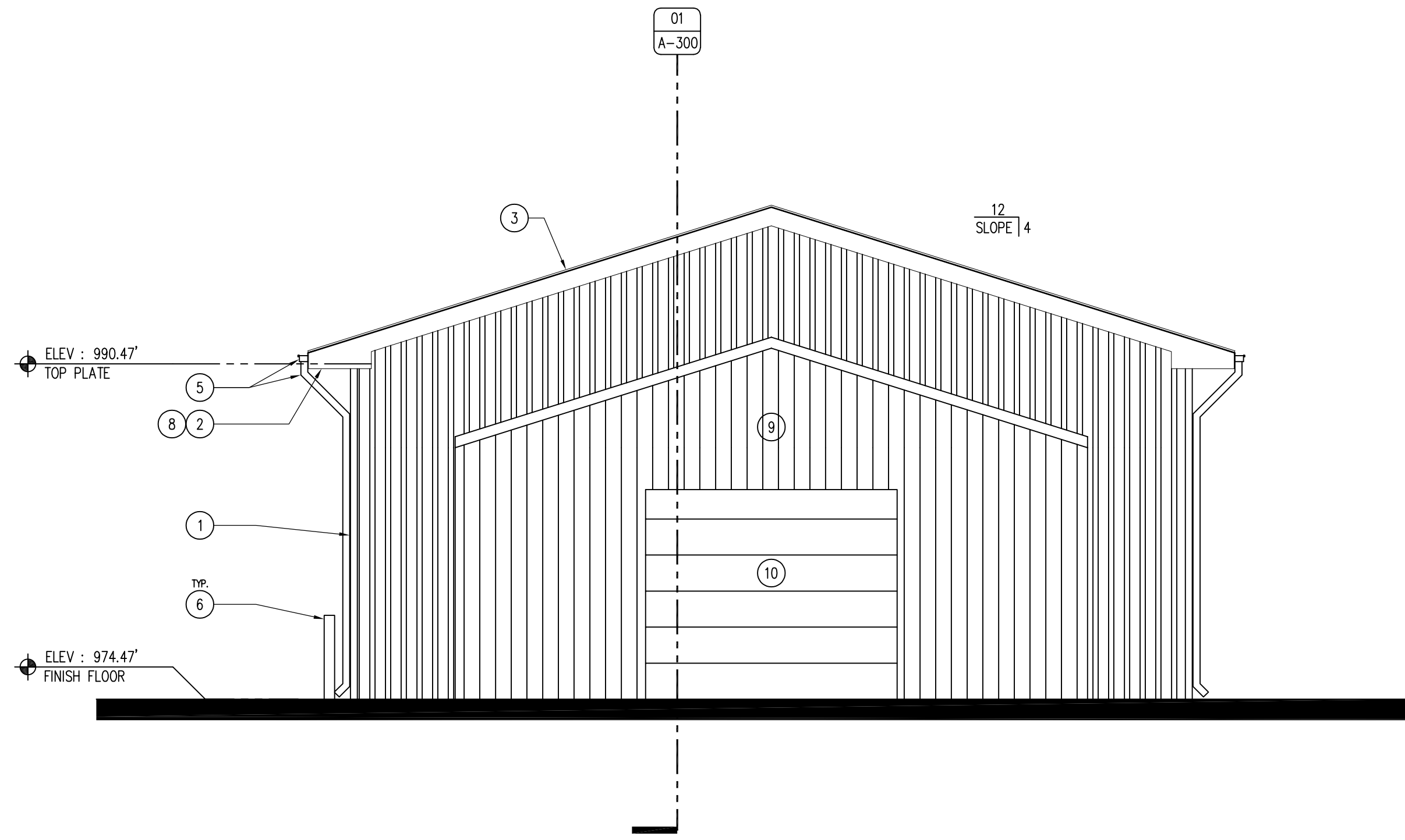
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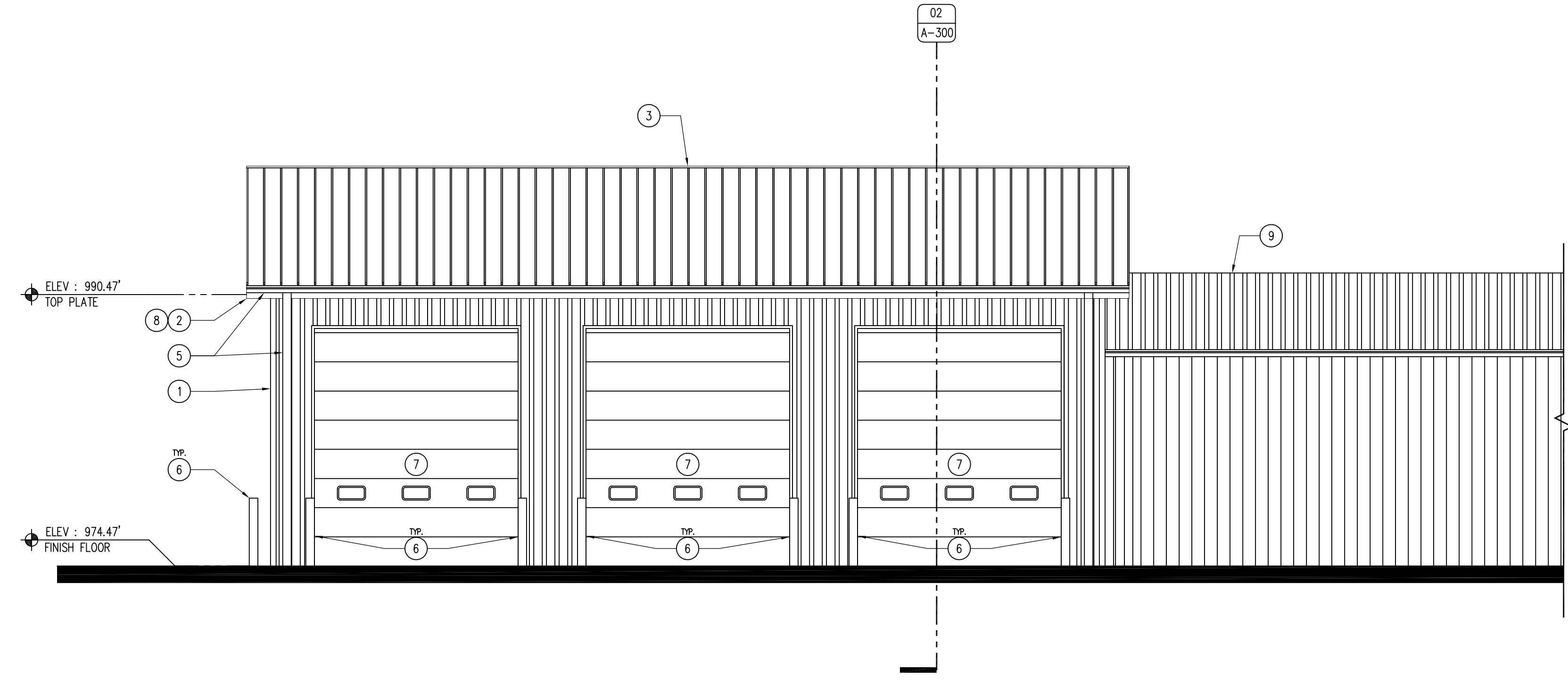
04 EXTERIOR ELEVATION - WEST
SCALE: 3/16" = 1'-0"



03 EXTERIOR ELEVATION - NORTH
SCALE: 3/16" = 1'-0"



02 EXTERIOR ELEVATION - EAST
SCALE: 3/16" = 1'-0"



01 EXTERIOR ELEVATION - SOUTH
SCALE: 3/16" = 1'-0"

KEYNOTES

1. POST-FRAME BUILDING WITH 26 GAUGE METAL SIDING, REFER TO SHEET A-600.
2. 29 GAUGE METAL "V" SOFFIT PANEL, COLOR TO MATCH ROOF.
3. 26 GAUGE METAL ROOF, REFER TO SHEET A-600.
4. DOOR AS SCHEDULED, REFER TO SHEET A-600.
5. METAL GUTTER AND DOWNSPOUT SYSTEM TO MATCH ROOF, FASCIA AND SOFFIT.
6. STEEL TRAFFIC BOLLARD WITH PLASTIC COVER SLEEVE, TWO PER OVERHEAD DOOR, REFER TO DETAIL 05/A-600.
7. OVERHEAD GARAGE DOOR WITH THREE SAFETY LIGHTS, REFER TO DOOR SCHEDULE SHEET A-600.
8. WRAP FASCIA IN BREAK METAL, COLOR TO MATCH ROOF AND SOFFIT.
9. EXISTING POST-FRAME BUILDING.
10. EXISTING OVERHEAD DOOR TO REMAIN.

GENERAL NOTES

- A. REFER TO SCHEDULES, SHEET A-600.
- B. REFER TO INDEX SHEET FOR WALL TYPES, A-002.
- C. REFER TO ELECTRICAL AND CIVIL SHEETS FOR MORE INFORMATION.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
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EXTERIOR ELEVATIONS

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Lake Manawa LE

1100 South Shore Drive
Council Bluffs, IA 51501

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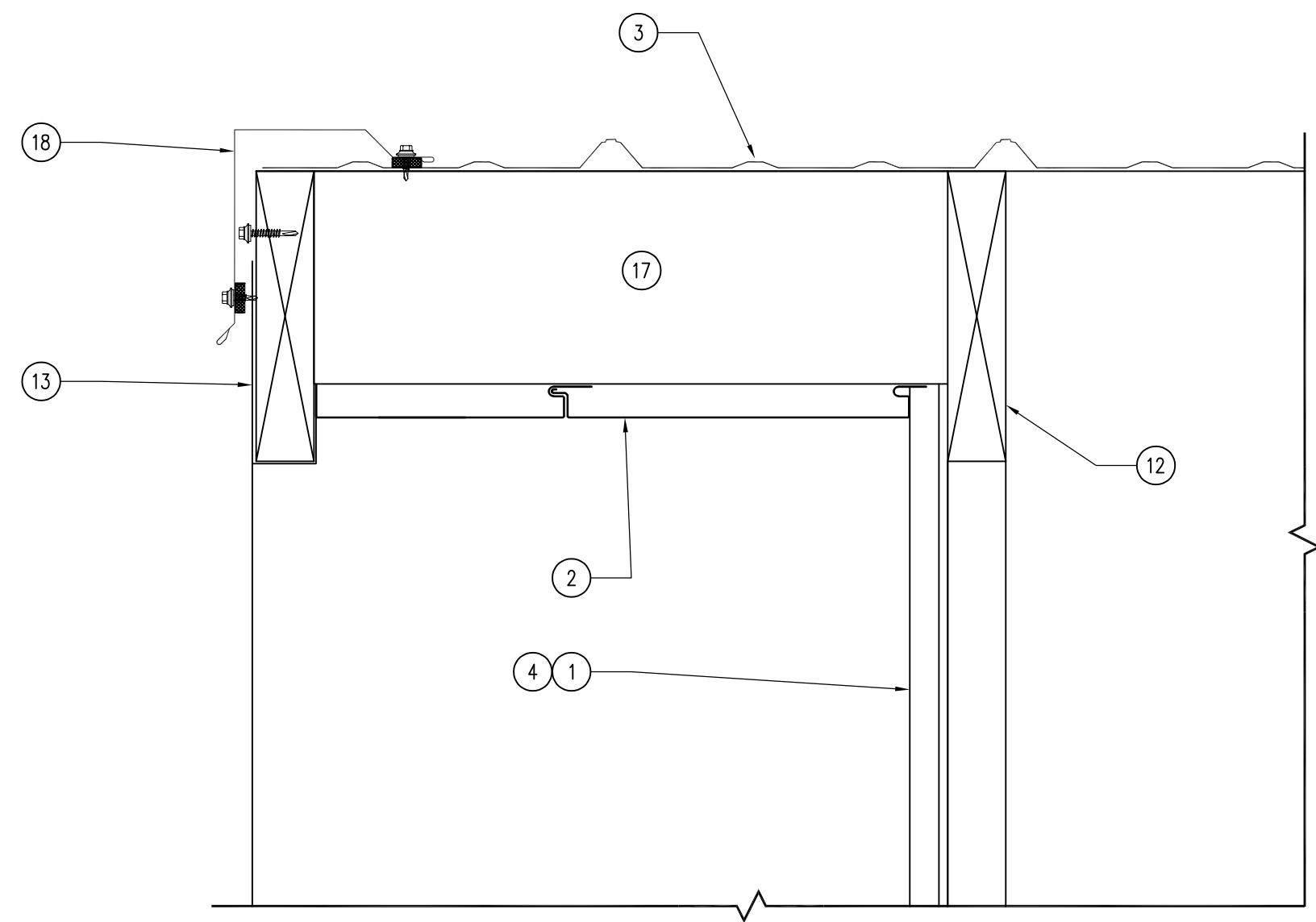
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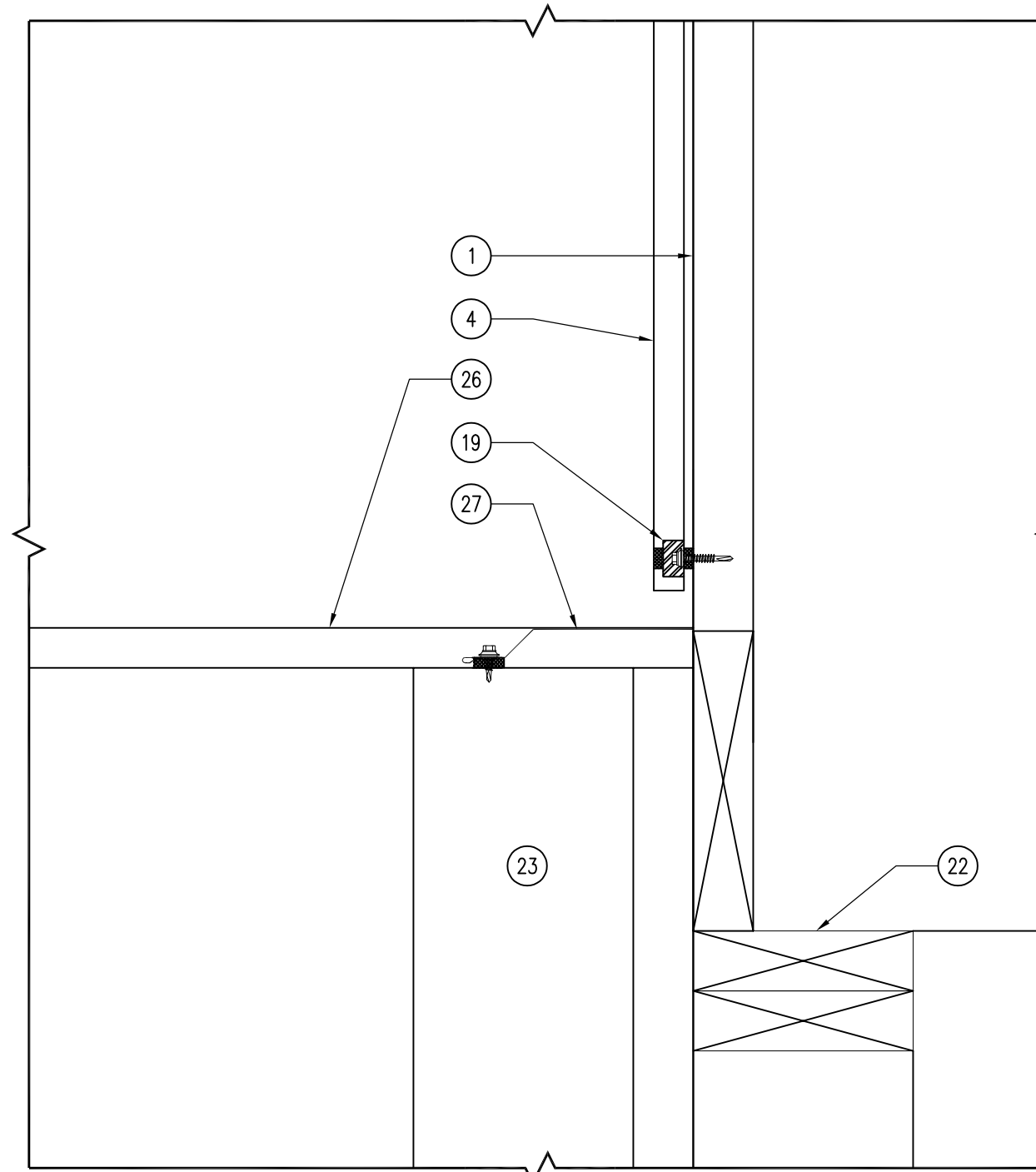
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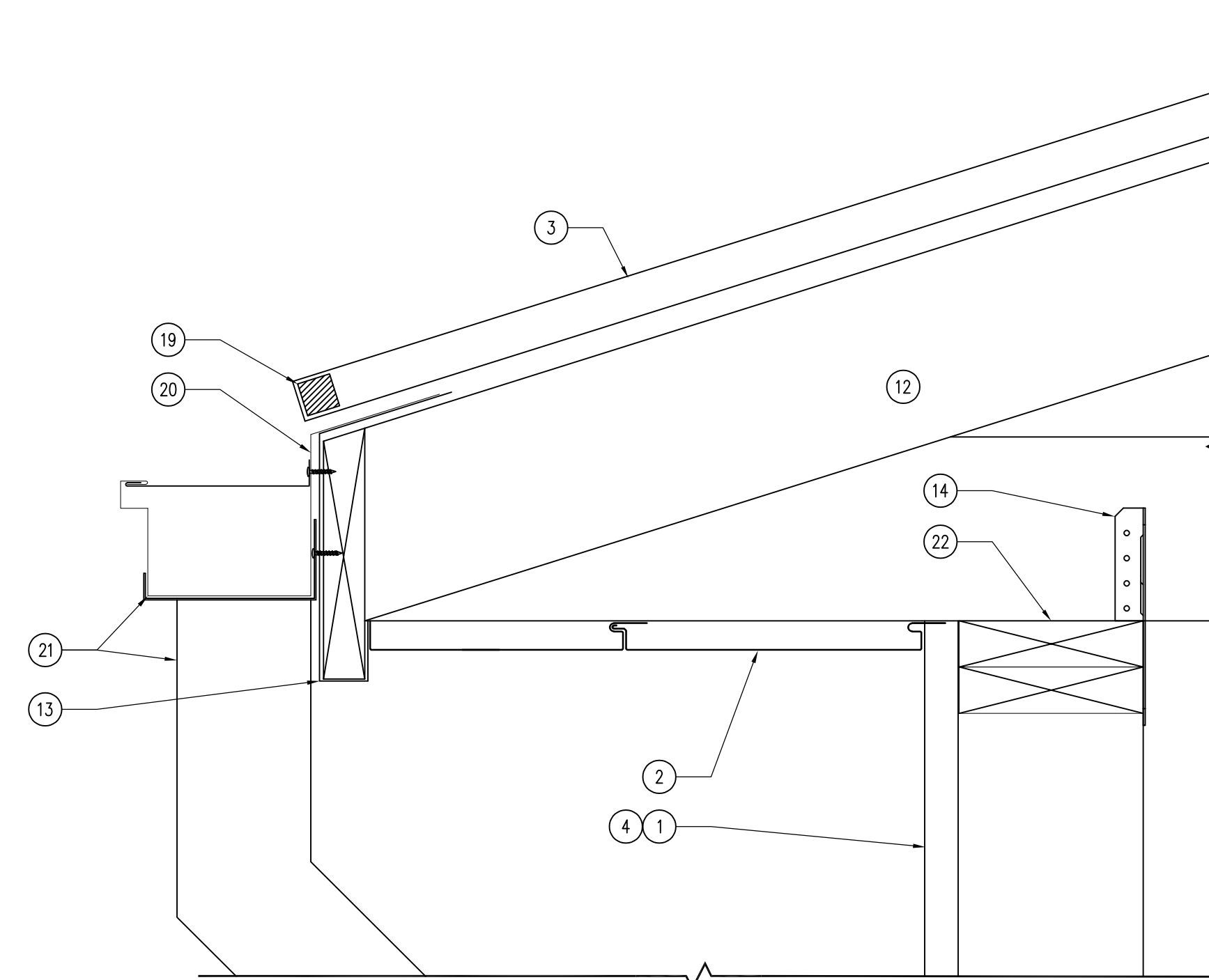
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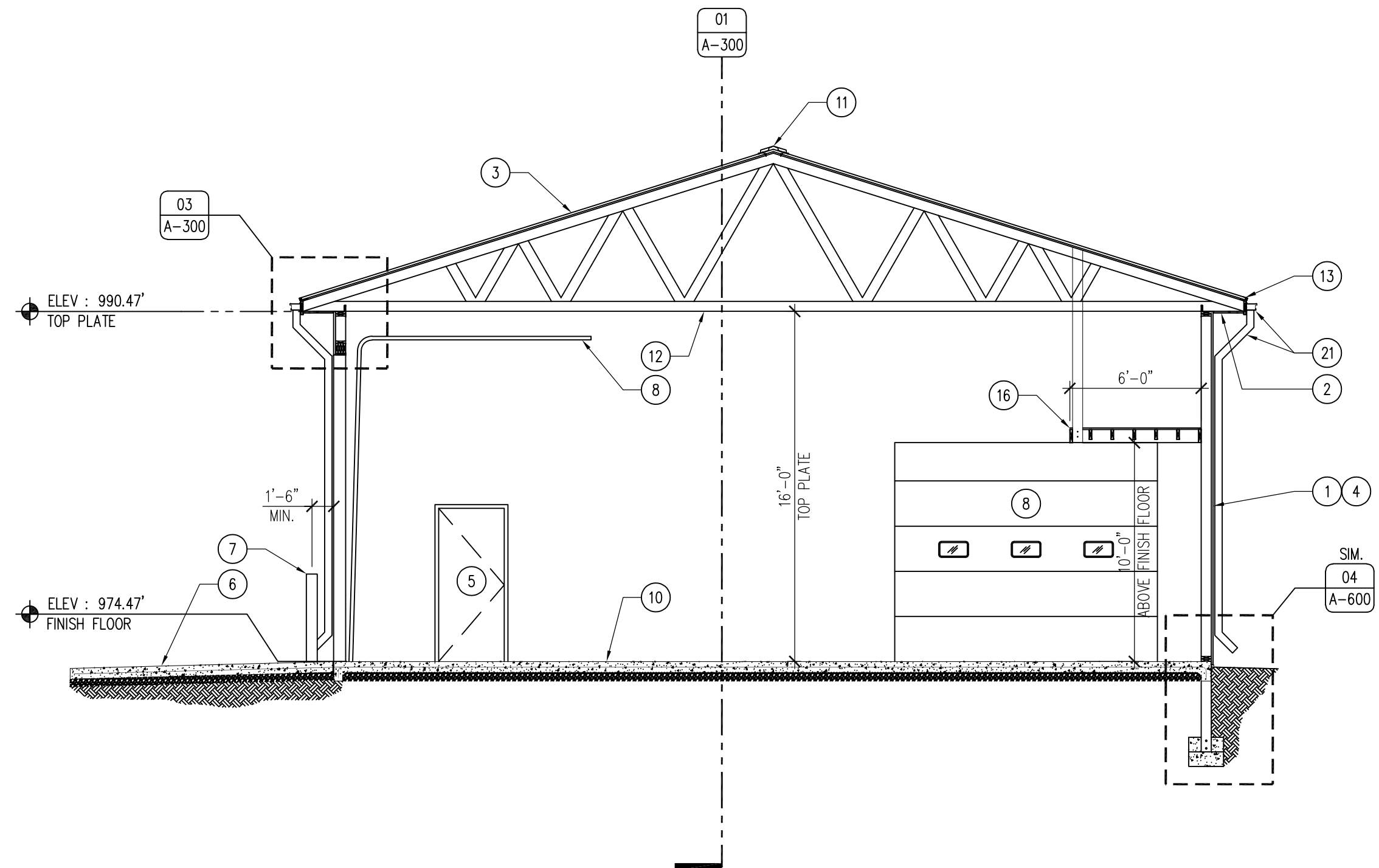
05 DETAIL - ROOF GABLE RAKE
SCALE: 3" = 1'-0"



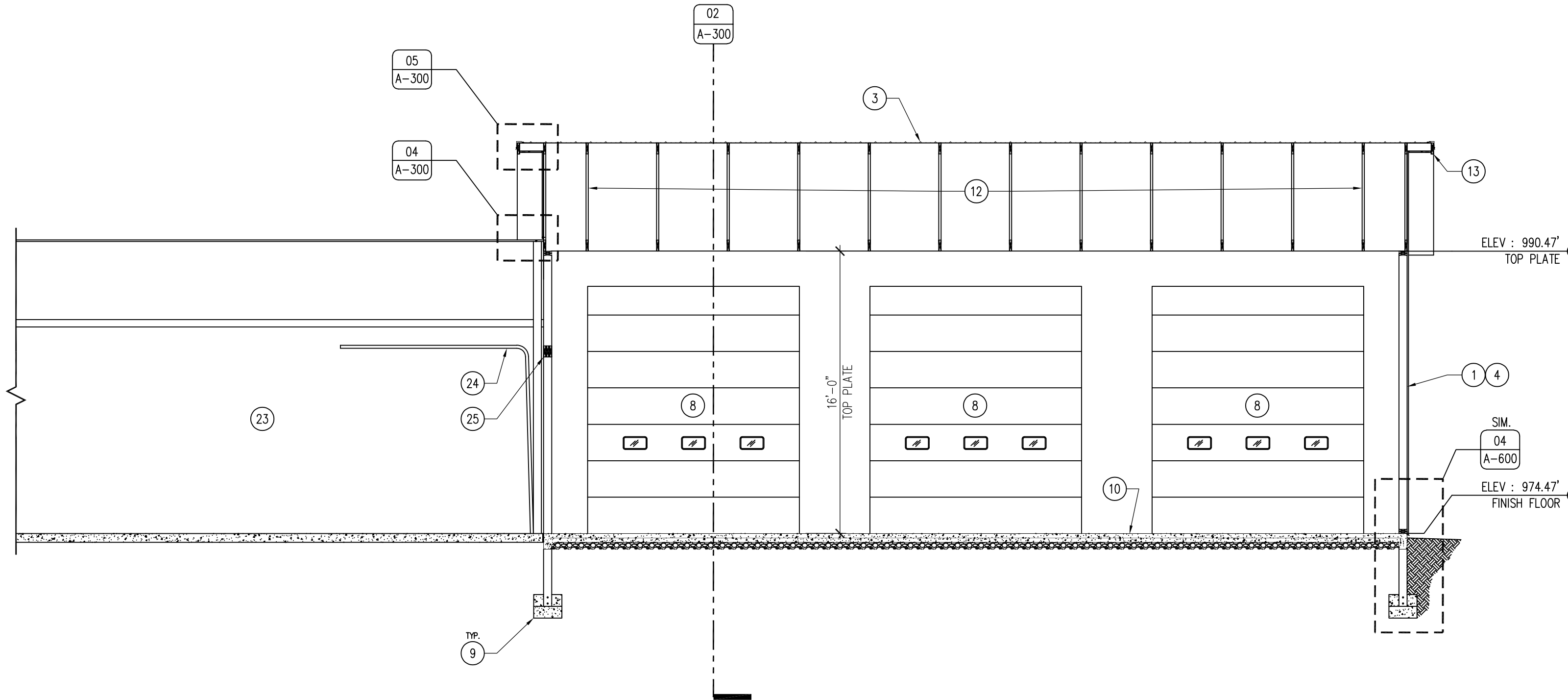
04 DETAIL - HEADWALL CONNECTION TO EXISTING BUILDING
SCALE: 3" = 1'-0"



03 DETAIL - ROOF EAVE
SCALE: 3" = 1'-0"



02 BUILDING SECTION
SCALE: 3/16" = 1'-0"



01 BUILDING SECTION
SCALE: 3/16" = 1'-0"

KEYNOTES

1. POST-FRAME BUILDING BY BUILDING MANUFACTURER.
2. 29 GAUGE STEEL "V" SOFFIT PANEL, COLOR TO MATCH ROOF.
3. 26 GAUGE STEEL ROOF OVER 2X PURLINS BY BUILDING MANUFACTURER, REFER TO SHEET A-600.
4. 26 GAUGE STEEL SIDING, REFER TO SHEET A-600.
5. DOOR AS SCHEDULED, REFER TO SHEET A-600.
6. 6" CONCRETE APRON OVER 6" SUBBASE, #4 REBAR 36" O.C. BOTH DIRECTIONS.
7. STEEL TRAFFIC BOLLARD WITH PLASTIC COVER SLEEVE, REFER TO DETAIL 05/A-600.
8. OVERHEAD GARAGE DOOR WITH THREE SAFETY LIGHTS, REFER SHEET A-600.
9. POST-FRAME FOOTING BY BUILDING MANUFACTURER, REFER TO DETAIL 04/A-600
10. 6" CONCRETE BUILDING SLAB OVER VAPOR BARRIER AND 6" SUBBASE, #4 REBAR 36" O.C. BOTH DIRECTIONS.
11. VENTED ROOF RIDGE BY STEEL ROOFING MANUFACTURER.
12. BUILDING TRUSS BY BUILDING MANUFACTURER, SPACING FOR DEMONSTRATION ONLY.
13. 2X FASCIA PER MANUFACTURER, WRAP WITH BREAK METAL TO MATCH ROOF AND SOFFIT.
14. SIMPSON HIGH-WIND TRUSS CLIP.
15. GABLE WALL FLASHING BY ROOFING MANUFACTURER.
16. 6'-0" DEEP SUSPENDED LOFT, TO BE ENGINEERED BY BUILDING MANUFACTURER TO HOLD 100 PSF. SAFETY CHAINS PER OSHA REGULATIONS, 18" AND 36" HEIGHT.
17. 2X OUTRIGGER, EXTEND 18" FOR OVERHANG, BY BUILDING MANUFACTURER.
18. ROOF RAKE TRIM BY ROOF MANUFACTURER.
19. INSIDE SIDING CLOSURE GASKET BY SIDING MANUFACTURER.
20. STEEL GUTTER APRON FLASHING BY ROOFING MANUFACTURER.
21. 6" STEEL GUTTER AND DOWNSPOUT ASSEMBLY, COLOR TO MATCH ROOF. PROVIDE PRE-CAST CONCRETE SPLASH BLOCKS ON REAR OF BUILDING WHERE CONCRETE APRON IS NOT PRESENT.
22. 2X TOP-PLATE BY BUILDING MANUFACTURER.
23. EXISTING POST-FRAME BUILDING TO REMAIN.
24. EXISTING OVERHEAD DOOR TO REMAIN.
25. HEADER FOR ROUGH OPENING TO ACCOMMODATE EXISTING OVERHEAD DOOR INTO NEW ADDITION, BY BUILDING MANUFACTURER, FIELD VERIFY LOCATION AND MEASUREMENTS.
26. EXISTING BUILDING STEEL ROOFING.
27. GABLE WALL FLASHING BY ROOFING MANUFACTURER.

GENERAL NOTES

- A. REFER TO SCHEDULES, SHEET A-600.
- B. REFER TO INDEX SHEET FOR WALL TYPES, A-002.
- C. REFER TO ELECTRICAL AND CIVIL SHEETS FOR MORE INFORMATION.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
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- F. CONTRACTOR SHALL HAVE POST-FRAME STRUCTURE PRE-ENGINEERED PRIOR TO CONSTRUCTION, SUBMIT PLANS FOR APPROVAL.

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BUILDING SECTIONS

Boat Storage Addition for:
Lake Manawa LE

Council Bluffs, IA 51501

1100 South Shore Drive

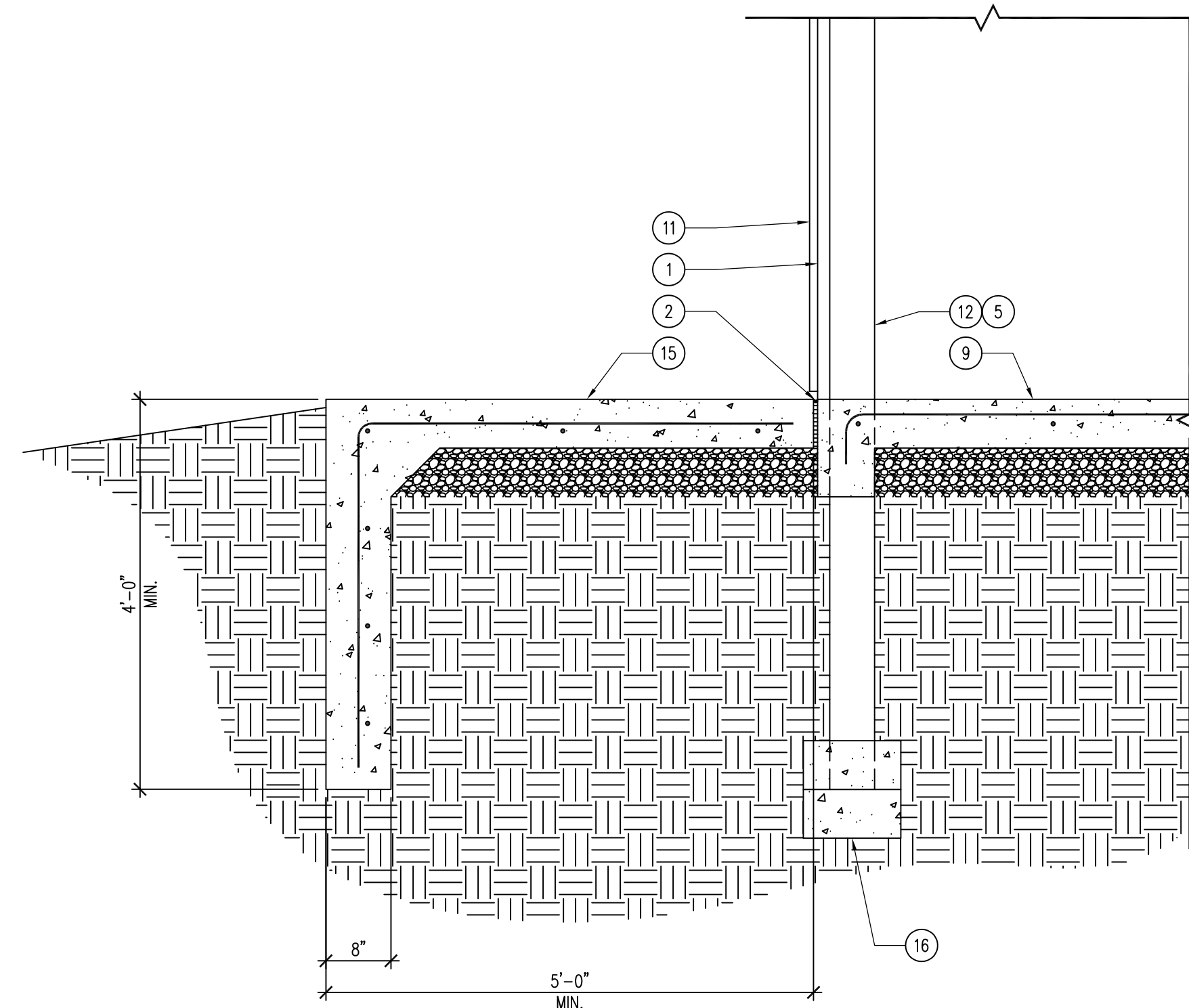
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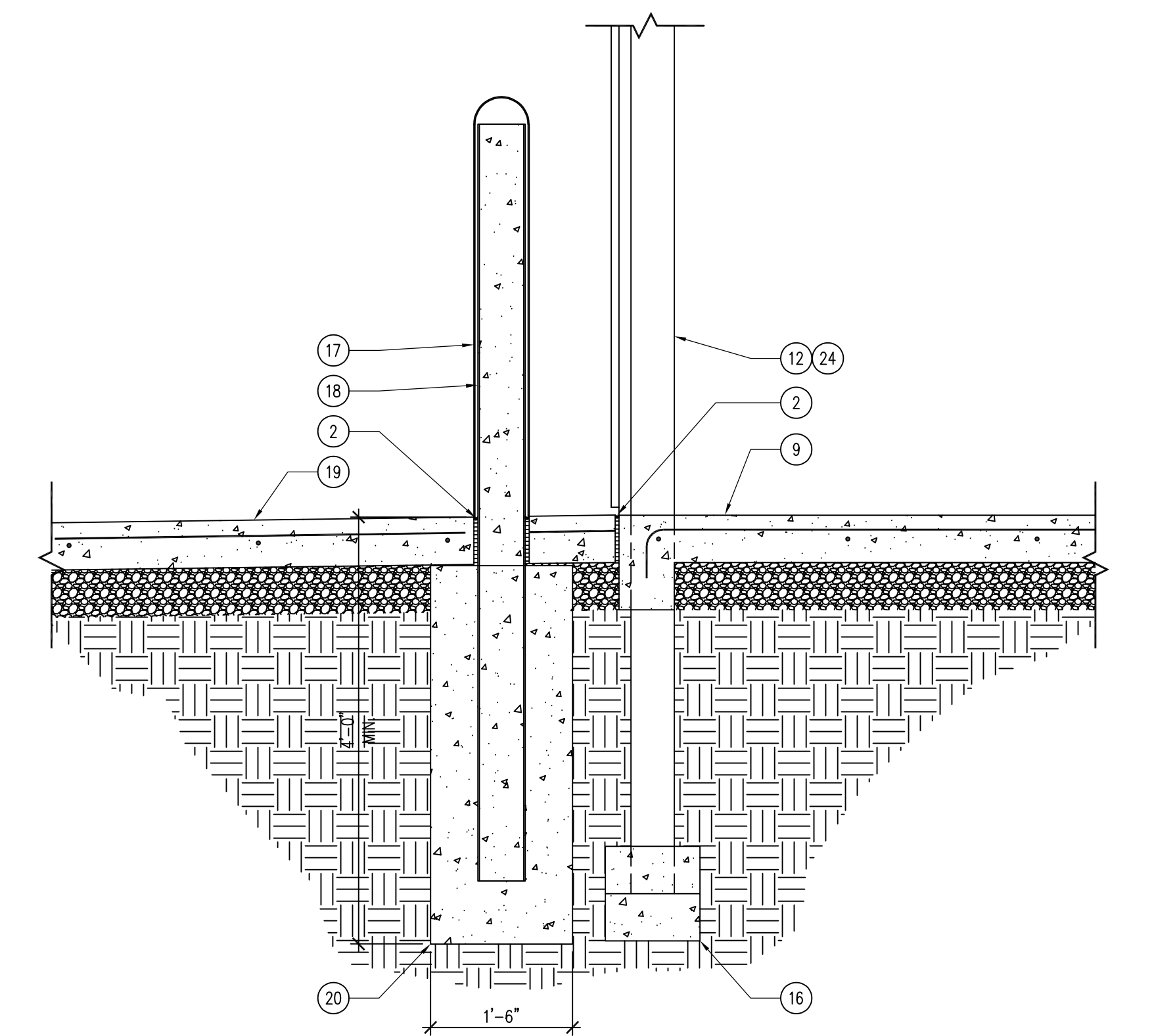
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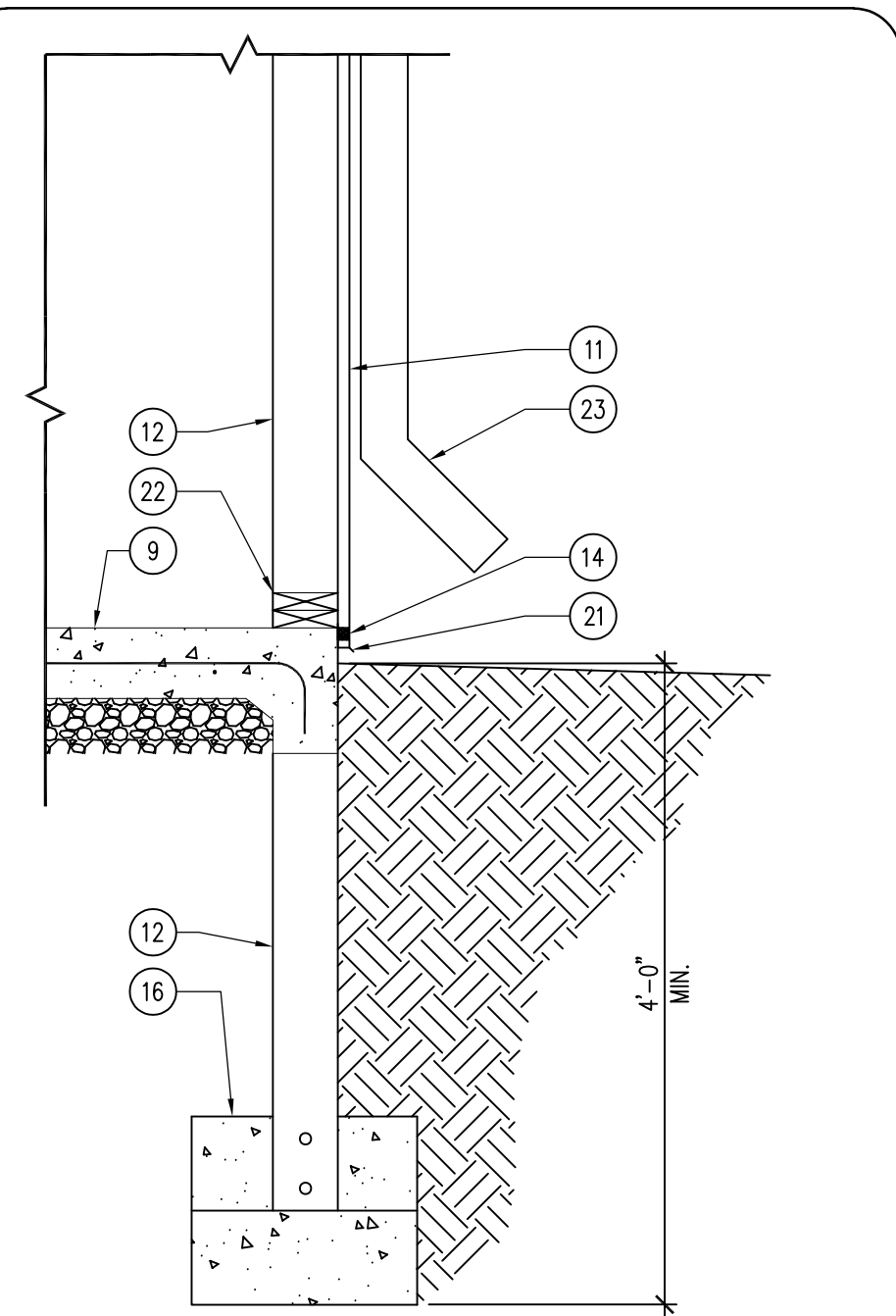
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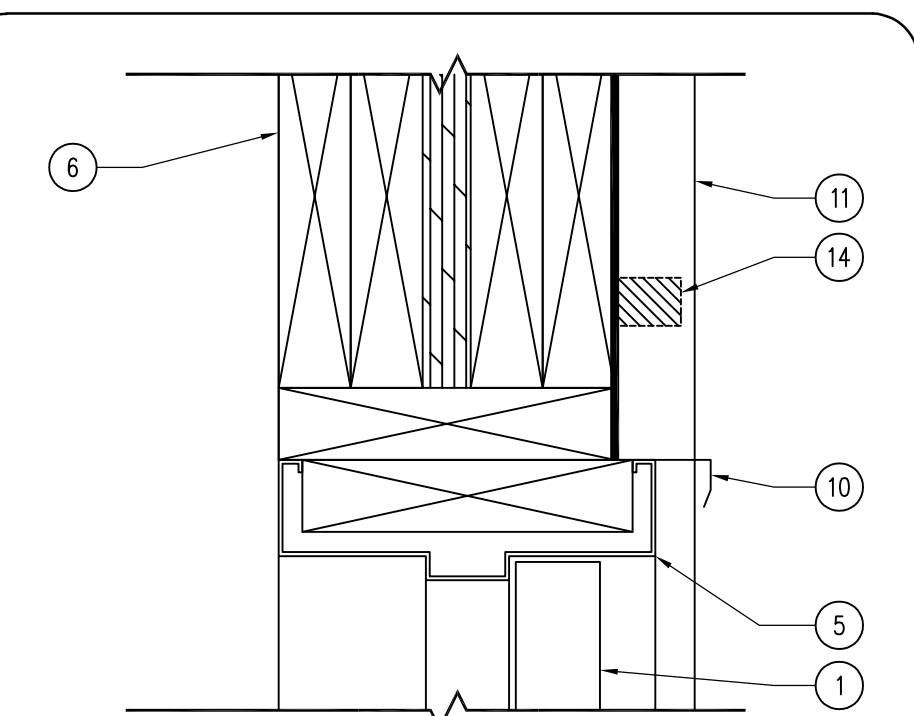
06 DETAIL - STOOP FOOTING
SCALE: 3/4" = 1'-0"



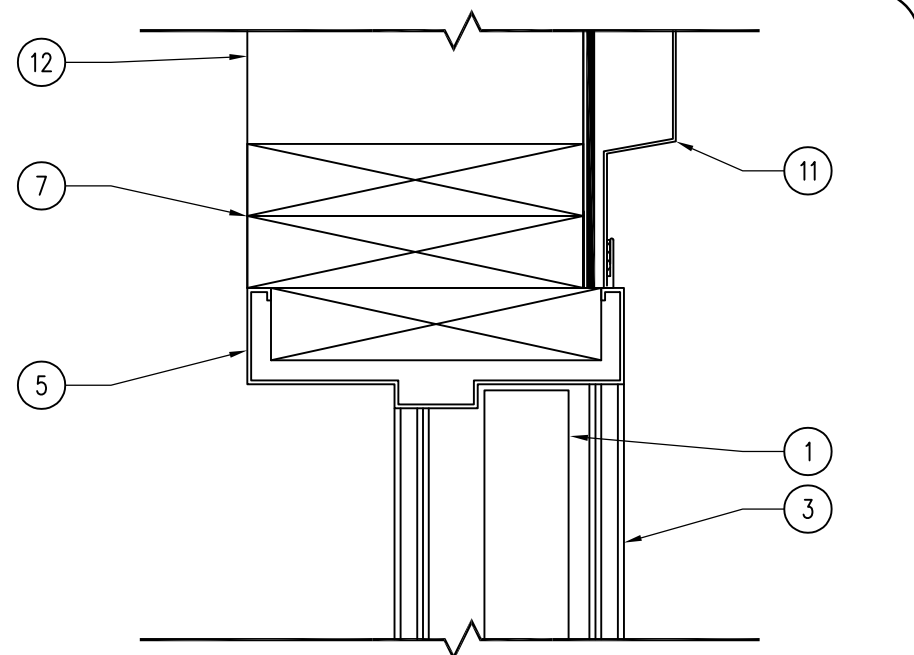
05 DETAIL - BOLLARD
SCALE: 3/4" = 1'-0"



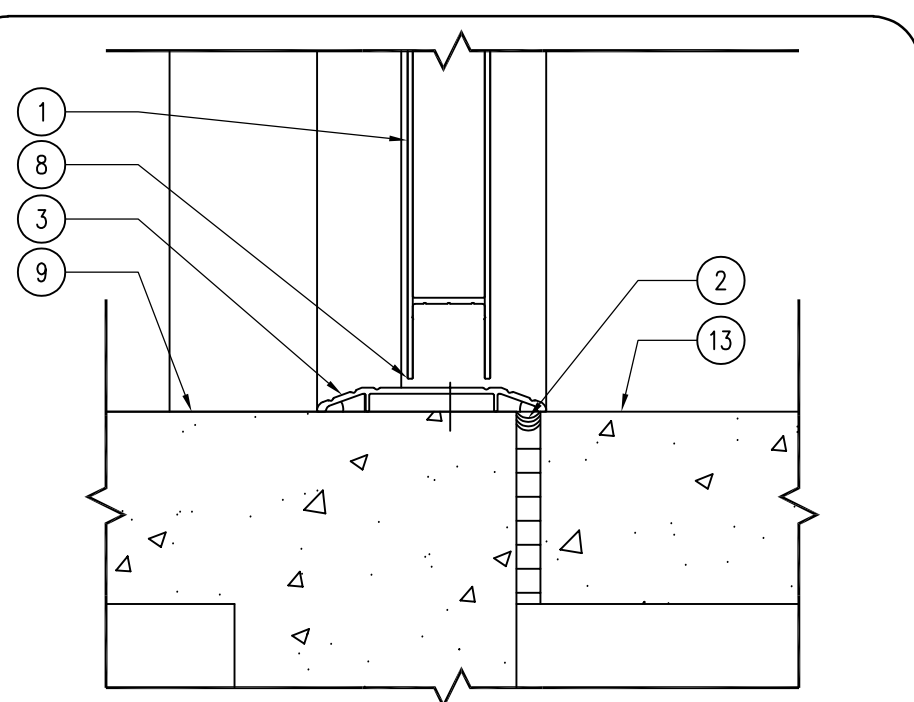
04 DETAIL - POST-FRAME FOOTING
SCALE: 3/4" = 1'-0"



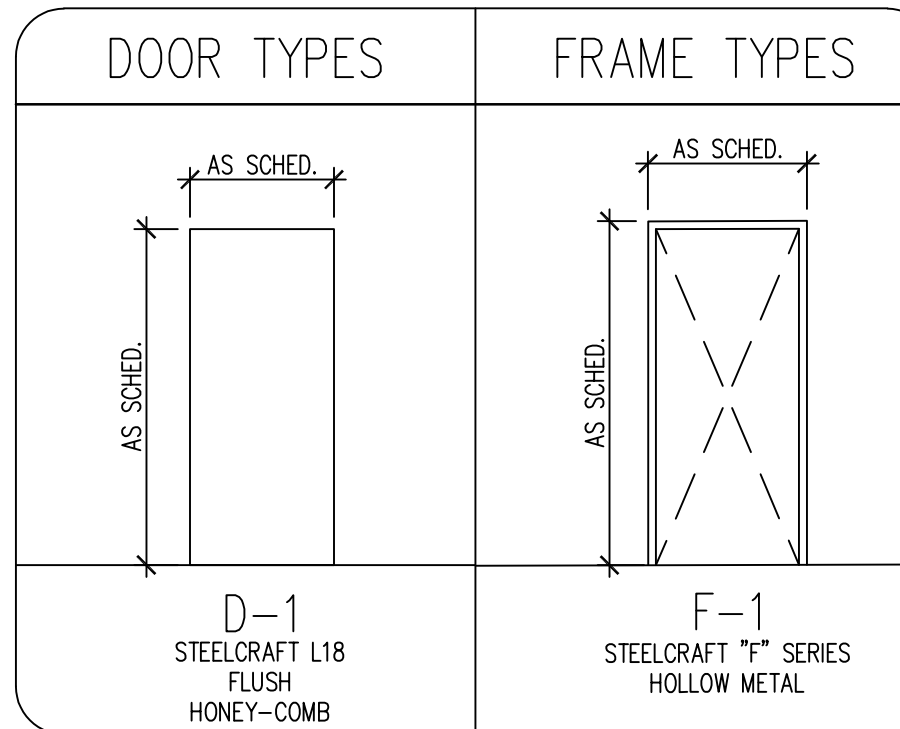
03 DOOR DETAIL - HEADER
SCALE: 3" = 1'-0"



02 DOOR DETAIL - JAMB
SCALE: 3" = 1'-0"



01 DOOR DETAIL - THRESHOLD
SCALE: 3" = 1'-0"



HARDWARE SCHEDULE

- A. ALL HARDWARE MODEL NUMBERS BASED ON SCHLAGE "ND-SERIES" LOCKSETS AND "IVES" HARDWARE, OR APPROVED EQUAL.
- B. HARDWARE FINISH TO BE : "SATIN CHROME (626)", UNLESS NOTED OTHERWISE.
- C. CHECK ALL QUANTITIES, DIMENSIONS AND FINISHES BEFORE ORDERING.
- D. ALL STEEL WALK-THROUGH DOORS TO BE GALVANIZED. PAINT ALL STEEL DOORS AND FRAMES DARK BRONZE.
- E. ALL STEEL WALK-THROUGH DOORS TO RECEIVE DRIP-CAPS BY MANUFACTURER.
- F. ALL GARAGE DOORS TO BE OVERHEAD DOOR COMPANY WITH ELECTRIC HOIST, OR APPROVED EQUAL. REFER TO DOOR SCHEDULE FOR TYPE. ALL DOORS TO HAVE THREE (3) SAFETY LIGHTS.

HARDWARE SET NO. 1 - DOORS: 100A

- 3 EA. NRP HINGES FB191 4 1/2 X 4 1/2
- 1 EA. ENTRANCE LOCKSET NDS0PD (ATHENS)
- 1 EA. DEADBOLT B66P
- 3 EA. PERIMETER SEALS BLACK GASKET
- 1 EA. THRESHOLD SEAL BLACK BROOM TYPE
- 1 EA. ADA THRESHOLD PLATE
- 1 EA. CLOSER LCN 4111

*KEYING FOR LOCKSET AND DEADBOLT TO BE THE SAME, COORDINATE WITH LOCAL LAW ENFORCEMENT STAFF FOR EXACT KEY MATCH.

FINISH SCHEDULE									
ROOM #	ROOM NAME	FLOORING	BASE	NORTH WALL FINISH	EAST WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CEILING	NOTES
100	STORAGE	CONC-1	-	-	-	-	-	OPEN	-
101	EXISTING	-	-	-	-	-	-	-	-

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
EXTERIOR FINISH							
SR-1	EXPOSED FASTENER ROOF PANEL	MCELROY	MAX-RIB ULTRA	26 GA	MATTE BLACK	KYNAR 500	OR APPROVED EQUAL
SS-1	EXPOSED FASTENER SIDING PANEL	MCELROY	MAX-RIB ULTRA	26 GA	CHARCOAL	KYNAR 500	OR APPROVED EQUAL
ST-1	STEEL TRIM	MCELROY	MAX-RIB ULTRA	MANUFACTURER	MATTE BLACK	KYNAR 500	OR APPROVED EQUAL

DOOR SCHEDULE													
DOOR NUMBER	DOOR			FRAME			FIRE RATING LABEL	HARDWARE		COMMENTS			
	WIDTH	HEIGHT	THICK.	TYPE	GLASS	FINISH		HEAD	JAMB		THRESHOLD	TYPE	FINISH
100A	3'-0"	7'-0"	1 3/4"	D-1	-	WHITE	03/A-600	02/A-600	01/A-600	F-1	SATIN BLACK	1 EXT.	EXT. STEELCRAFT L18- FLUSH DOOR
100B	12'-0"	14'-0"	-	-	MANUF.	WHITE	-	-	-	-	SATIN BLACK	-	MODEL 430 W/ SAFETY WINDOWS
100C	12'-0"	14'-0"	-	-	MANUF.	WHITE	-	-	-	-	SATIN BLACK	-	MODEL 430 W/ SAFETY WINDOWS
100D	12'-0"	14'-0"	-	-	MANUF.	WHITE	-	-	-	-	SATIN BLACK	-	MODEL 430 W/ SAFETY WINDOWS
100E	12'-0"	10'-0"	-	-	MANUF.	WHITE	-	-	-	-	SATIN BLACK	-	MODEL 430 W/ SAFETY WINDOWS

KEYNOTES

- 1. DOOR AS SCHEDULED.
- 2. 2" EXPANSION WITH CONTINUOUS SEALANT.
- 3. ADA COMPLIANT THRESHOLD.
- 4. WOOD BLOCKING AS REQUIRED.
- 5. DOOR FRAME AS SCHEDULED.
- 6. WOOD DOOR HEADER BY BUILDING MANUFACTURER.
- 7. 2X BY BUILDING MANUFACTURER.
- 8. BRUSH TYPE GASKET FOR EXTERIOR DOORS.
- 9. 6" THICK CONCRETE BUILDING SLAB OVER 6" SUBBASE WITH #4 REBAR 36" O.C., REFER TO SHEET 01/A-100.
- 10. DOOR DRIP-CAP FLASHING.
- 11. 26 GAUGE STEEL SIDING AS SCHEDULED, REFER TO FINISH SCHEDULE, A-600.
- 12. POST-FRAME BUILDING BY MANUFACTURER.
- 13. STOOP FOOTING, REFER TO 06/A-600.
- 14. INSIDE SIDING CLOSURE GASKET BY STEEL SIDING MANUFACTURER.
- 15. 6" CONCRETE STOOP WITH 8" CONCRETE STOOP FOOTING WITH #4 REBAR 24" O.C. ALL DIRECTIONS OVER 6" SUBBASE.
- 16. POST-FRAME FOOTING BY MANUFACTURER.
- 17. OSHA YELLOW PLASTIC COVER SLEEVES FOR ALL BOLLARDS.
- 18. 6" DIAMETER X 3/4" THICK STEEL POST, 8'-0" LONG. EMBED 3'-0" DEEP IN CONCRETE FOOTING, FILL POST SOLID WITH CONCRETE GROUT.
- 19. 6" THICK CONCRETE APRON OVER 6" SUBBASE WITH #4 REBAR 36" O.C., REFER TO SHEET 01/A-100.
- 20. CONCRETE BOLLARD FOOTING TO BE 1'-6" DIAMETER X 4'-0" DEEP.
- 21. BASE DRIP FLASHING BY SIDING MANUFACTURER.
- 22. TREATED SILL PLATE BY BUILDING MANUFACTURER.
- 23. STEEL GUTTER AND DOWNSPOUT SYSTEM, COLOR MATCH ROOFING.
- 24. OVERHEAD DOOR AS SCHEDULED.

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SCHEDULES AND DETAILS

Boat Storage Addition for:
Lake Manawa LE

Council Bluffs, IA 51501

NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:
22-04-78-03

CHK'D BY: DATE:
10.24.2022

SHEET NO:

A-600



GENERAL NOTE:

UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN SHOWN BASED UPON INFORMATION OBTAINED FROM FIELD LOCATIONS BY UTILITY COMPANIES, AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS ALSO POSSIBLE THAT THERE MAY BE OTHER UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES EXISTENCE THAT ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF EACH INDIVIDUAL PARTY REFERENCING THIS PLAN TO DETERMINE THE EXACT LOCATION AND TYPE OF UNDERGROUND FACILITIES ON THE SITE. HAND EXCAVATE AT CRITICAL POINTS AS NECESSARY TO VERIFY LOCATIONS, SIZES, ELEVATIONS, FLOW LINES, ETC. IF A PROBLEM OR INTERFERENCE EXISTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING.

GENERAL NOTES - ELECTRICAL

- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. DO NOT PROCEED WITH SYSTEM INSTALLATION OR ROUGH-IN UNTIL PROPER AND TIMELY COORDINATION HAS OCCURRED WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION. COORDINATION ITEMS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR EXPENSES ASSOCIATED WITH REWORK OF INSTALLED EQUIPMENT OR SYSTEMS NOT COORDINATED IN THE FIELD.
- B. ELECTRICAL DRAWINGS ARE ONLY A PORTION OF THE COMPLETE SET OF CONTRACT DOCUMENTS. THE ELECTRICAL SCOPE OF WORK IS DEFINED BY THE COMPLETE SET OF DOCUMENTS. THIS INCLUDES BUT IS NOT LIMITED TO REFERENCING ARCHITECTURAL PLANS FOR DIMENSIONS AND DETAILS, EQUIPMENT PLANS FOR ROUGH-IN REQUIREMENTS, MECHANICAL PLANS FOR EQUIPMENT SIZES AND LOCATIONS.

CODE NOTES - ELECTRICAL

- A. PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES.
- B. THE CURRENT ADOPTED EDITION OF THE ELECTRICAL CODE SHALL BE THE STANDARD FOR THE ELECTRICAL INSTALLATION. VERIFY WITH LOCAL OFFICIALS WHEN PERMITS ARE OBTAINED. NOTIFY DESIGN TEAM OF ANY DISCREPANCIES BETWEEN THE PROJECT MANUAL OR DRAWINGS AND THE GOVERNING CODE.
- C. INSTALLATION SHALL FOLLOW REQUIREMENTS OF THE ADAAG - AMERICANS WITH DISABILITIES ACT.
- D. REFER TO PROJECT MANUAL AND PROJECT CODE REVIEW SHEET FOR LIST OF APPLICABLE CODES.

DEMOLITION AND RENOVATION NOTES - ELECTRICAL

- A. ELECTRICAL DEMOLITION DRAWINGS SHOWING EXISTING CONDITIONS HAVE BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. ADDITIONAL COMPONENTS MAY EXIST WHICH ARE NOT SHOWN. HANDLE SUCH ITEMS IN A SIMILAR MANNER TO THOSE ITEMS WHICH ARE SHOWN.
- B. BECOME FAMILIAR WITH EXISTING ELECTRICAL SYSTEM WHICH WILL BE AFFECTED BY THE DEMOLITION WORK.
- C. PROVIDE EQUIPMENT, LABOR, AND MATERIALS TO REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK PROVIDED UNDER THIS CONTRACT.
- D. IN OCCUPIED AREAS BEYOND THE DEMOLITION SCOPE, KEEP EXISTING SYSTEMS NOT AFFECTED BY PROJECT SCOPE OPERATIONAL THROUGH THE DURATION OF THE PROJECT. OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE DEMOLITION AREA. INFORM OWNER'S REPRESENTATIVE OF THE REASON FOR AND DURATION OF THE SHUTDOWN AND ENSURE THAT THE SHUTDOWN IS MADE WITH AS LITTLE INCONVENIENCE TO OTHER AREAS AS POSSIBLE.
- E. REMOVE CONDUITS, BOXES, ETC. AS REQUIRED BY WALL, CEILING, AND ADJACENT COMPONENTS DEMOLITION. REMOVE EXISTING WIRE UNLESS OTHERWISE NOTED.
- F. INSTALL NEW CONDUCTORS FOR NEW CIRCUITS IN REMODELED AREAS UNLESS SPECIFICALLY NOTED OTHERWISE. RETAIN EXISTING CONDUITS IN GOOD CONDITION WHERE APPROVED BY ENGINEER OR AS INDICATED.
- G. IDENTIFY DISCONNECTED BRANCH CIRCUIT LOCATION OR ITEM SERVED BEFORE DISCONNECTION. UPDATE PANEL/EQUIPMENT DIRECTORY ACCORDINGLY.
- H. MAINTAIN CIRCUITS SERVING AREAS BEYOND THE DEMOLITION AREA. EXTEND NEW WIRING AND BYPASS DEMOLISHED DEVICES TO MAINTAIN EXISTING CIRCUITS.
- I. KEEP EXISTING SYSTEMS OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. DO NOT CUT EXISTING TELECOMMUNICATION WIRING, CABLES OR CONDUIT. CONTRACTORS WHO CUT IN-SERVICE CABLES ARE RESPONSIBLE FOR ALL DOWNTIME AND COSTS TO REPAIR.
- J. INSTALL BLANK COVER PLATES OVER OPENING AT REMOVED DEVICE LOCATIONS. THIS INCLUDES BUT IS NOT LIMITED TO, CLOCKS, RECEPTACLES, SWITCHES, JUNCTION BOXES, ETC.
- K. PROVIDE CUTTING AND PATCHING OF EXISTING MATERIALS AS REQUIRED FOR THE PROPER COMPLETION OF THE DEMOLITION WORK AND THE INSTALLATION OF THE NEW WORK.
- L. MAINTAIN FULL FUNCTIONAL AND AESTHETIC INTEGRITY OF DEVICES IDENTIFIED AS REMOVE/RELOCATE AND HANDLE WITH APPROPRIATE CARE TO ALLOW FOR REINSTALLATION. REPLACE DEVICES DAMAGED DURING DEMOLITION WITH NEW AT CONTRACTOR'S EXPENSE.
- M. REMOVED EQUIPMENT AND SYSTEMS REMAINS THE PROPERTY OF THE OWNER UNLESS OTHERWISE NOTED. DISPOSE OF ALL MATERIALS NOT SALVAGED BY THE OWNER.
- N. REMOVE AND REINSTALL CEILING TILES REQUIRED FOR THE WORK BEING DONE UNDER THIS CONTRACT. REPLACE CEILING TILES DAMAGED DURING CONSTRUCTION TO MATCH EXISTING.

INSTALLATION NOTES - ELECTRICAL

- A. BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BID.
- B. INCREASE CONDUCTOR SIZES ON 20A 120V-1 PHASE CIRCUITS EXCEEDING 100 FEET TO CENTER OF LOAD TO ACCOUNT FOR VOLTAGE DROP.
- C. RACEWAYS AND BOXES ARE SHOWN DIAGRAMMATICALLY ONLY AND INDICATE GENERAL AND APPROXIMATE LOCATIONS. LAYOUTS DO NOT ALWAYS SHOW THE TOTAL NUMBER OF RACEWAYS OR BOXES FOR THE CIRCUITS REQUIRED. NOR ARE THE LOCATIONS OF INDICATED RUNS INTENDED TO SHOW THE ACTUAL ROUTING OF THE RACEWAYS.
- D. LIGHT FIXTURES, SWITCHES, DEVICES, ETC. ARE SHOWN IN PREFERRED LOCATION. E.C. IS RESPONSIBLE FOR MODIFYING CONDUIT, HANGERS, CIRCUITING, ETC. TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- E. PROVIDE A DEDICATED GREEN INSULATED GROUND CONDUCTOR TO ALL DEVICES. DO NOT UTILIZE CONDUIT SYSTEM AS THE ONLY EQUIPMENT GROUNDING METHOD.
- F. DO NOT INSTALL BOXES BACK TO BACK ON OPPOSITE SIDES OF THE SAME WALL. MAINTAIN MINIMUM OF 8" DISTANCE BETWEEN BOXES WHEREVER APPLICABLE.
- G. BALANCE PANEL LOADS DURING INSTALLATION. CIRCUIT NUMBERING SHOWN ON PLANS MAY BE ADJUSTED TO ACCOMMODATE.
- H. PROVIDE TYPED PANEL DIRECTORY AT PROJECT COMPLETION FOR NEW PANELS AND EXISTING PANELS WITH CIRCUITS MODIFIED AS A RESULT OF THIS PROJECT. UTILIZE OWNER'S CURRENT ROOM NUMBERS AND EQUIPMENT NAMES AND RECEIVE APPROVAL PRIOR TO FINAL PLACEMENT.
- I. CONTRACTOR IS RESPONSIBLE FOR OPENINGS IN WALLS CREATED BY THEIR WORK. PENETRATIONS SHALL BE SEALED IN ACCORDANCE WITH THE RATINGS OF THE AFFECTED WALL. REFER TO ARCHITECTURAL CODE PLAN FOR RATED WALLS.

SITE NOTES - ELECTRICAL

- A. UTILITIES SHOWN ON ELECTRICAL SITE PLAN ARE SCHEMATIC ONLY. VERIFY ALL SITE CONDITIONS AND DIMENSIONS ON SITE PRIOR TO COMPLETING BID AND ORDERING OF EQUIPMENT.
- B. REPAIR ALL AFFECTED SURFACES AND RESTORE TO EXISTING CONDITIONS AT COMPLETION OF PROJECT.
- C. WARNING - CALL 48 HOURS BEFORE YOU DIG - IOWA LAW REQUIRES ANYONE DOING ANY EXCAVATION, FENCING, PLANTING OR DRILLING TO CALL 48 HOURS IN ADVANCE. HAND DIG WITHIN 18 INCHES OF ANY LOCATE MARK OR FLAG. IOWA ONE-CALL 1-800-292-8989.

NOTE: ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT

GENERAL SYMBOLS

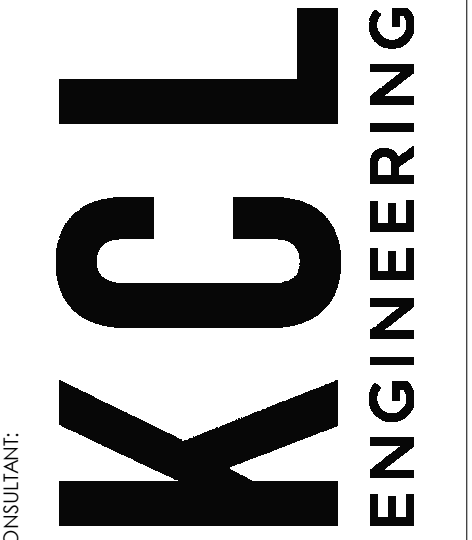
- CONDUIT UP, REFER TO TAG ON DRAWING FOR SIZE
- CONDUIT DOWN, REFER TO TAG ON DRAWING FOR SIZE
- JUNCTION BOX, CEILING OR FLOOR MOUNTED.
- JUNCTION BOX, WALL MOUNTED, ELEVATION AS NOTED.
- CIRCUIT HOMERUN, CONCEALED CONDUIT OR CABLE
- KEYNOTE
- SIM DETAIL DRAWING REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE
- SIM SECTION CUT REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE
- INTERIOR ELEVATION DRAWING REFERENCE TAG

POWER SYMBOLS

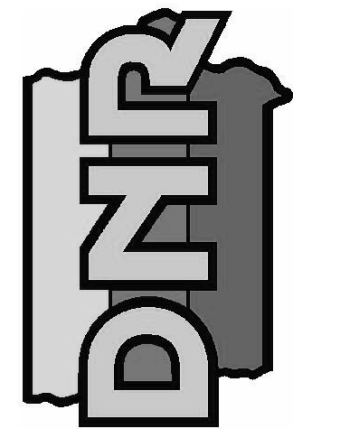
- DUPLEX RECEPTACLE, SURFACE RACEWAY, WALL MOUNT +18", OR AS NOTED
- DUPLEX GFCI WEATHER RESISTANT RECEPTACLE WITH WEATHER-PROOF IN-USE COVER, TAMPER-RESISTANT, WALL MOUNT +24", OR AS NOTED
- EQUIPMENT CONNECTION. REFER TO ELECTRICAL EQUIPMENT CONNECTION SCHEDULE FOR CONNECTION TYPE
- MOTORIZED DOOR OPERATOR CONTROL STATION, WALL MOUNT, +48", OR AS NOTED
- DOOR PUSH BUTTON (WEATHERPROOF), +48" OR AS NOTED
- JUNCTION BOX, WITH PULL STRING, WALL MOUNT, REFER TO PLAN OR DETAIL FOR MOUNTING HEIGHT
- UTILITY TRANSFORMER
- UTILITY METER
- SAFETY DISCONNECT SWITCH
- EMERGENCY PUSH BUTTON
- PANELBOARD - SURFACE MOUNTED
- CORD REEL, CEILING MOUNTED - REFER TO DETAIL

LIGHTING SYMBOLS

- SURFACE MOUNTED STRIP FIXTURE
- INDUSTRIAL STRIP LIGHT FIXTURE
- EMERGENCY LIGHT FIXTURE, WALL MOUNT, +96" OR AS NOTED
- EXIT SIGN, WALL MOUNT +96", SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
- EXTERIOR LIGHT FIXTURE, WALL MOUNT +10', OR AS NOTED
- EXTERIOR POLE MOUNTED LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
- SINGLE POLE SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG
- THREE WAY SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG
- OCCUPANCY SENSOR, WALL MOUNT +48" OR AS NOTED, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
- OCCUPANCY SENSOR, CEILING MOUNT, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
- TIMECLOCK



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ELECTRICAL NOTES AND SYMSBOLS

Boat Storage Addition for:
Lake Manawa LE

Council Bluffs, IA 51501

1100 South Shore Drive

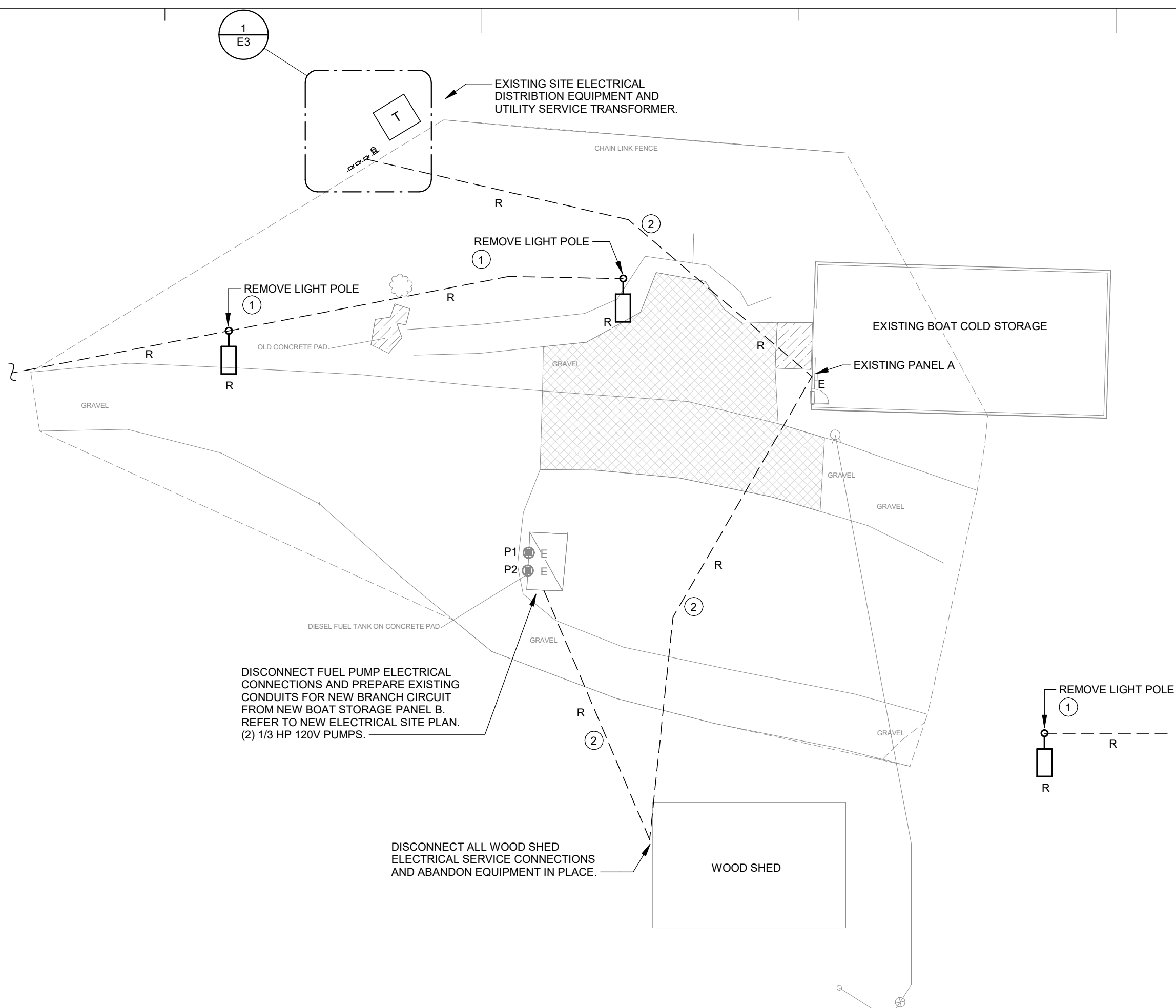
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22-04-78-03

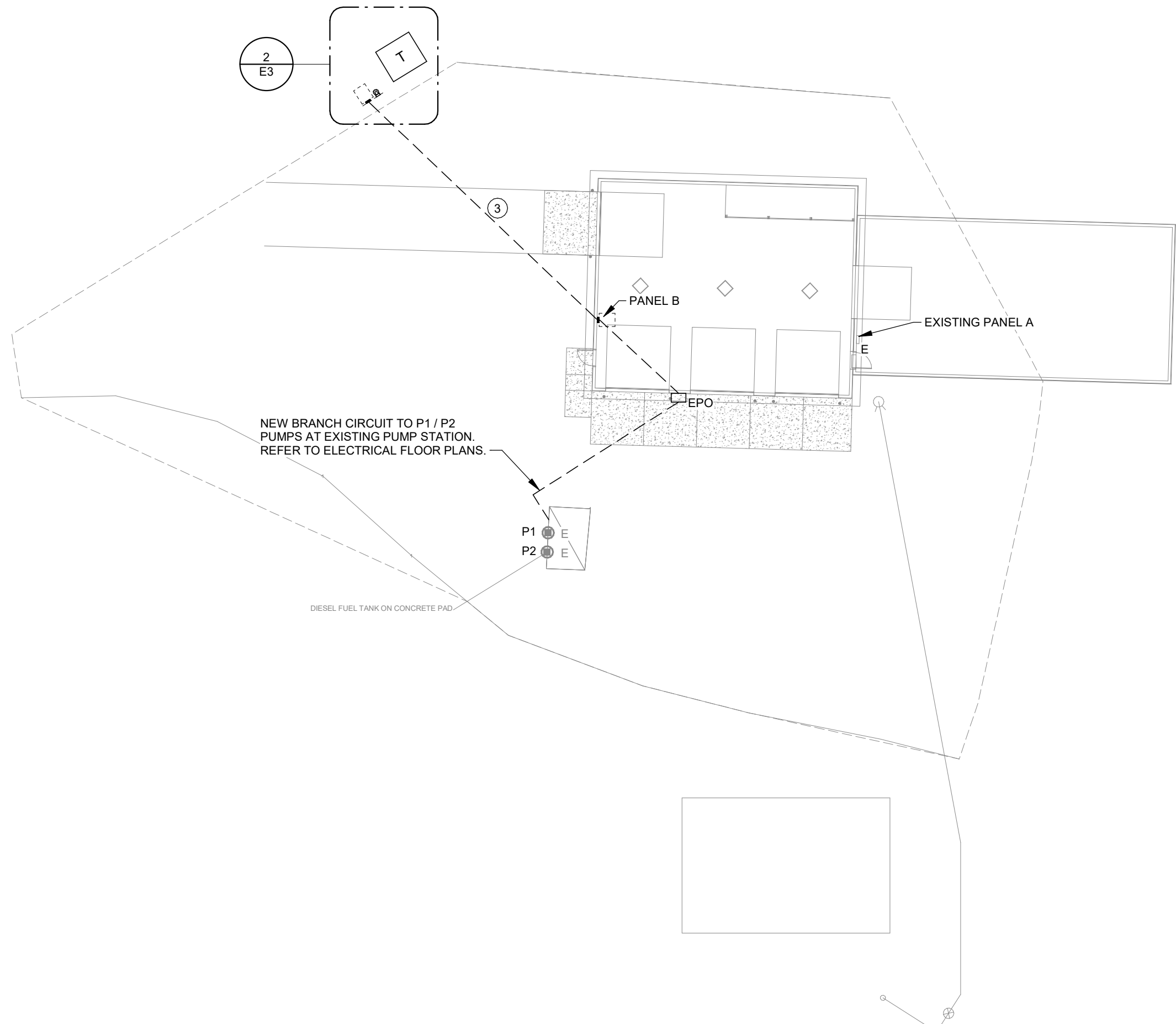
CHK'D BY: DATE:
11.08.2022

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E0



1 ELECTRICAL SITE DEMOLITION PLAN
1" = 20'-0"



2 ELECTRICAL SITE PLAN
1" = 20'-0"

SITE NOTES - ELECTRICAL

- A. UTILITIES SHOWN ON ELECTRICAL SITE PLAN ARE SCHEMATIC ONLY. VERIFY ALL SITE CONDITIONS AND DIMENSIONS ON SITE PRIOR TO COMPLETING BID AND ORDERING OF EQUIPMENT. REPAIR ALL AFFECTED SURFACES AND RESTORE TO EXISTING CONDITIONS AT COMPLETION OF PROJECT.
- B. WARNING - CALL 48 HOURS BEFORE YOU DIG: - IOWA LAW REQUIRES ANYONE DOING ANY EXCAVATION, FENCING, PLANTING OR DRILLING TO CALL 48 HOURS IN ADVANCE. HAND DIG WITHIN 18 INCHES OF ANY LOCATE MARK OR FLAG. IOWA ONE-CALL 1-800-292-8989.
- C.

POWER GENERAL NOTES

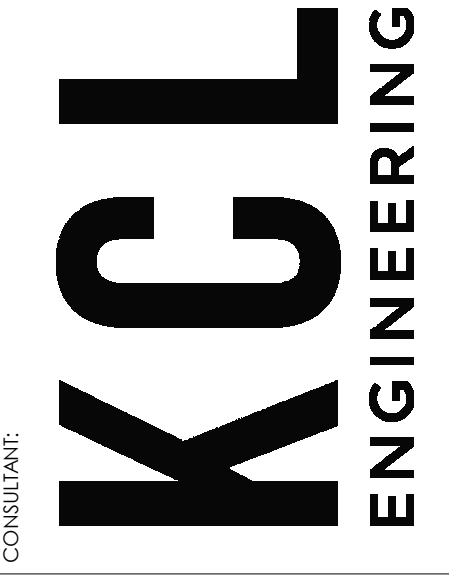
- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE 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.

ELECTRICAL DEMOLITION NOTES

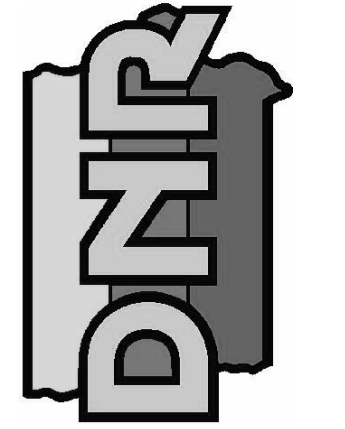
- 1. DEMOLITION DRAWINGS PRESENT LAYOUT OF EXISTING CONDITIONS AND MAJOR MECHANICAL/ELECTRICAL ITEMS. THEY ARE NOT TO BE CONSTRUED AS COMPLETE IN REPRESENTATION OF ACCESSORIES AND INCIDENTALS TO BE REMOVED, REPLACED, OR REWORKED. NOR SHOULD ACCESSIBILITY BE INFERRED. THE CONTRACTOR IS RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE BUILDING AND EXISTING CONDITIONS, PRIOR TO THE SUBMITTING OF A BID FOR THIS PROJECT.
- 2. REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.
- 3. THIS ELECTRICAL DEMOLITION DRAWING SHOWING EXISTING CONDITIONS HAS BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. ADDITIONAL COMPONENTS MAY EXIST WHICH DO NOT SHOW, AND SUCH ITEMS SHALL BE DEALT WITH IN A MANNER SIMILAR TO THOSE ITEMS WHICH DO SHOW. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS.
- 4. CONDUITS, BOXES, ETC., SHALL BE REMOVED AS REQUIRED BY WALL AND CEILING DEMOLITION AND REMOVALS. WIRING SHALL BE REMOVED. ALL WIRING FOR THE REMODELED AREAS SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE. ALL BRANCH CIRCUITS TO BE DISCONNECTED SHALL BE IDENTIFIED AS TO LOCATION OR ITEM SERVED BEFORE DISCONNECTING. CIRCUITS SERVING AREAS BEYOND THE IMMEDIATE DEMOLITION AREA SHALL BE MAINTAINED.
- 5. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH EXISTING ELECTRICAL SYSTEM WHICH WILL BE AFFECTED BY THE DEMOLITION WORK. CONTRACTOR SHALL OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE IMMEDIATE DEMOLITION AREA. SUCH PERMISSION WILL BE GRANTED ONLY AFTER OWNER'S REPRESENTATIVE IS INFORMED OF THE REASON FOR AND DURATION OF THE SHUTDOWN AND IS SATISFIED THAT THE SHUTDOWN CAN BE MADE WITH AS LITTLE INCONVENIENCE TO OTHER AREAS AS POSSIBLE.
- 6. PANELBOARDS, DISCONNECTS, FIXTURES, WIRING DEVICES, SIGNAL DEVICES, ETC., SHOWN ON PLANS SHALL BE REMOVED UNLESS NOTED OTHERWISE. REMOVAL SHALL BE DONE IN A TIMELY MANNER IN ACCORDANCE WITH THE GENERAL DEMOLITION WORK. COORDINATE WITH THE OWNER AND OTHER CONTRACTORS.
- 7. ABBREVIATIONS:
E - EXISTING ITEM TO REMAIN
ER - NEW LOCATION OF EXISTING ITEM
N - NEW ITEM IN EXISTING LOCATION
R - EXISTING ITEM TO BE REMOVED, PATCH AND/OR COVER
RN - REPLACE EXISTING WITH NEW
RR - EXISTING ITEM TO BE REMOVED AND RELOCATED

KEYNOTES

- 1 REMOVE LIGHT POLE, FIXTURE CONDUIT AND WIRING. CONDUIT BELOW GROUND MAY BE ABANDONED INPLACE. WOOD POLES MAY BE CUT 18" BELOW GRADE.
- 2 DISCONNECT AND REMOVE CONDUCTORS. CONDUIT MAY REMAIN ABANDONED BELOW GRADE.
- 3 REFER TO ONE-LINE DIAGRAM 2/E3.



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ELECTRICAL SITE PLANS

Boat Storage Addition for:
Lake Manawa LE

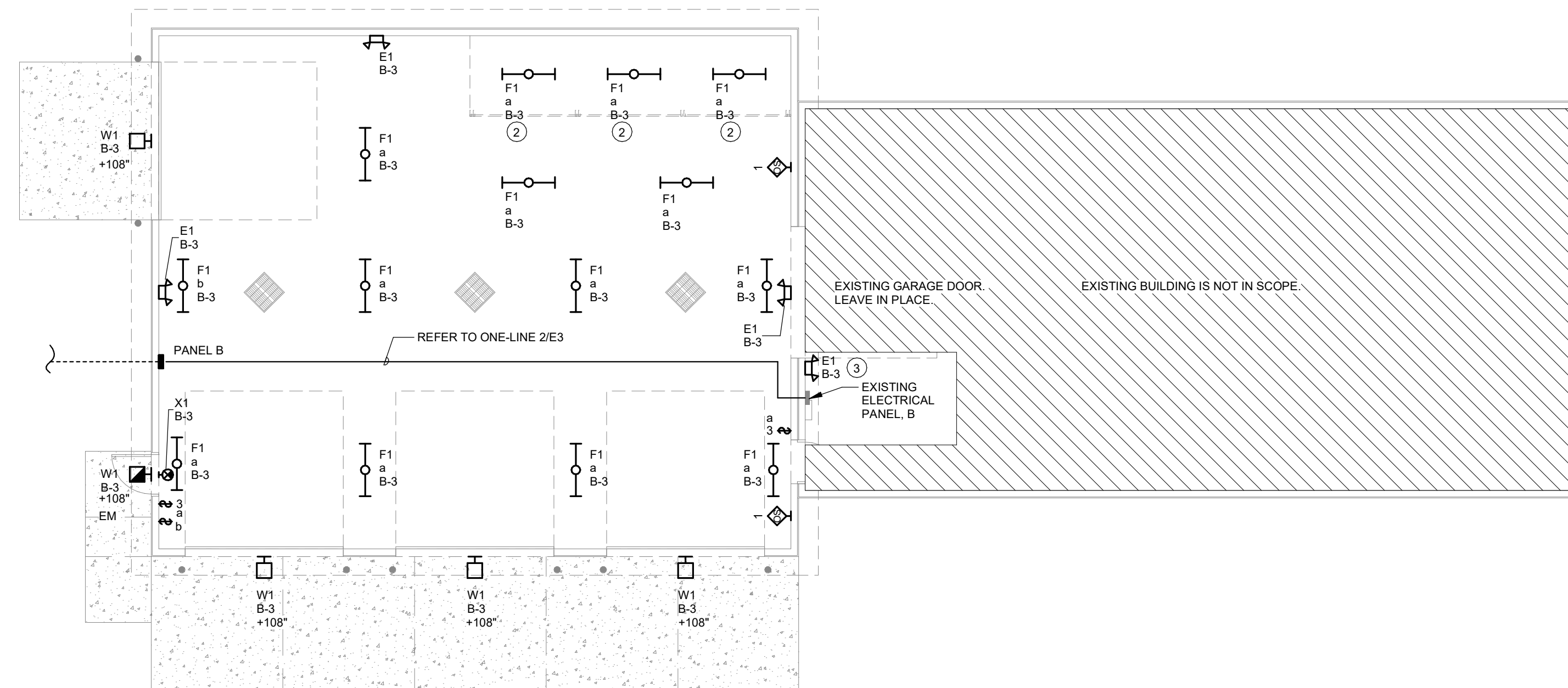
1100 South Shore Drive
Council Bluffs, IA 51501

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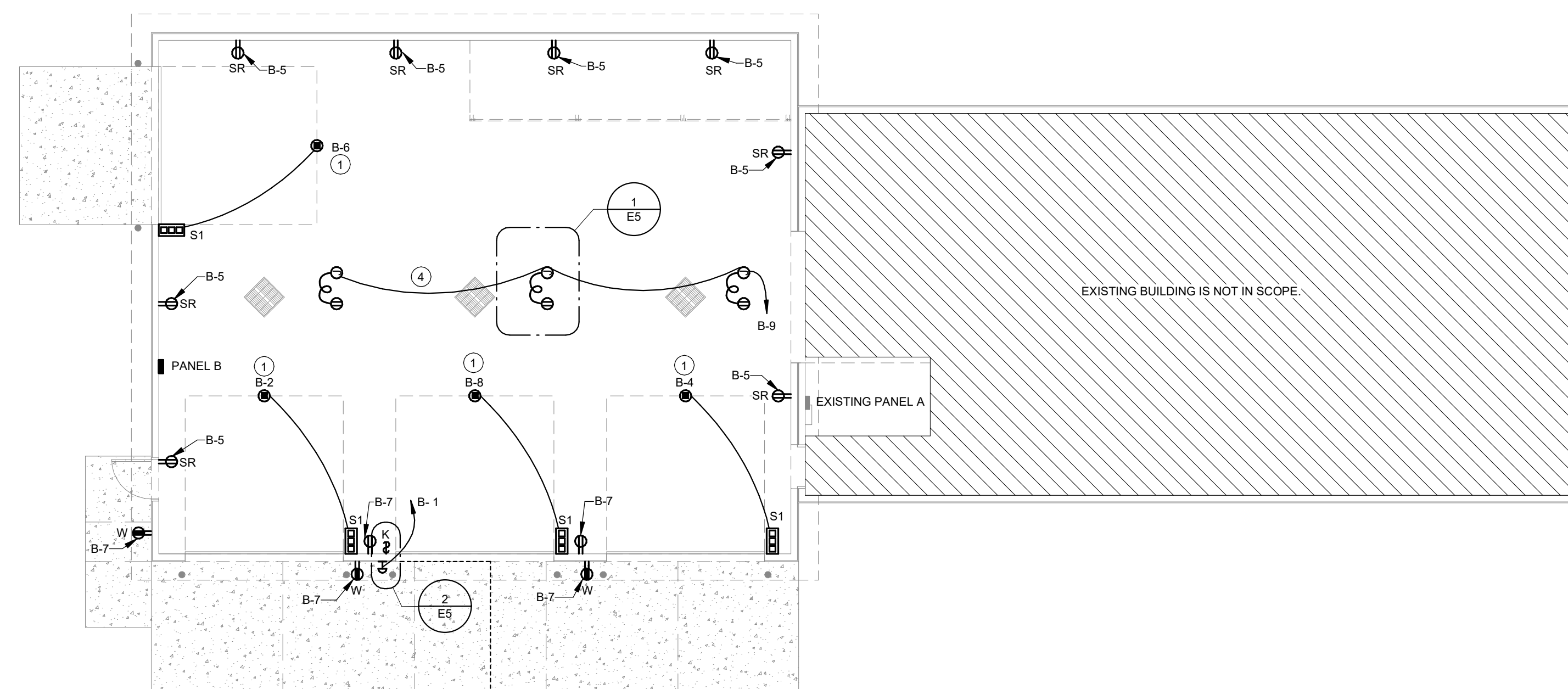
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22-04-78-03

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① FLOOR PLAN - LIGHTING
1/8" = 1'-0"



② FLOOR PLAN - POWER
1/8" = 1'-0"

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.
- 2 MOUNT LUMINAIRES BELOW STORAGE MEZZANINE.
- 3 ADD EMERGENCY LUMINAIRE NEAR EXISTING ELECTRICAL PANEL.
- 4 MOUNT ALL RECEPTACLE DEVICES +48" AFF VIA SURFACE MOUNT CONDUIT.
- 5 REFER TO ELECTRICAL SITE 2/E1.

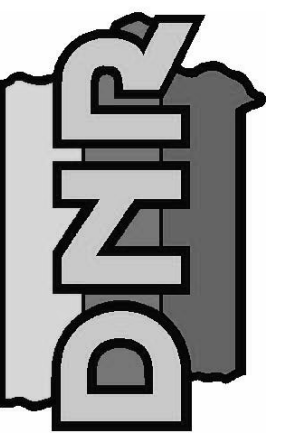
CONSULTANT:

KCL

ENGINEERING

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ELECTRICAL FLOOR PLANS

Boat Storage Addition for:
Lake Manawa LE

1100 South Shore Drive
Council Bluffs, IA 51501

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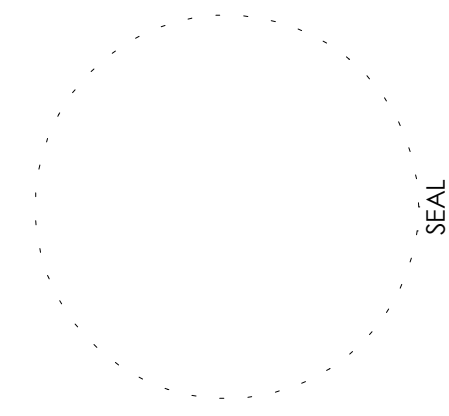
RISER DIAGRAM GENERAL NOTES

- A. DIAGRAM INDICATES OVERALL LAYOUT OF ELECTRICAL DISTRIBUTION SYSTEM. REFER TO FLOOR PLANS FOR EQUIPMENT LOCATIONS.
- B. USE COPPER CONDUCTORS UNLESS OTHERWISE INDICATED.
- C. MATCH NEUTRAL CONDUCTOR SIZE TO THE PHASE CONDUCTORS UNLESS OTHERWISE NOTED.
- D. ALL WIRING SHALL BE IN RACEWAY AS NOTED. REFER TO SPECIFICATIONS FOR CONDUIT APPLICATION REQUIREMENTS.
- E. INSTALL UTILITY TRANSFORMER PAD, METERING EQUIPMENT, AND SERVICE ENTRANCE FEEDERS IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS.

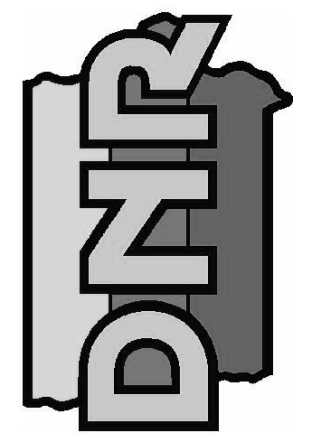
RISER DIAGRAM KEYED NOTES:

- 1. NOTE 1.
- 2. NOTE 2.

CONSULTANT:



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ELECTRICAL ONE-LINE DIAGRAM

Boat Storage Addition for:
Lake Manawa LE

Council Bluffs, IA 51501

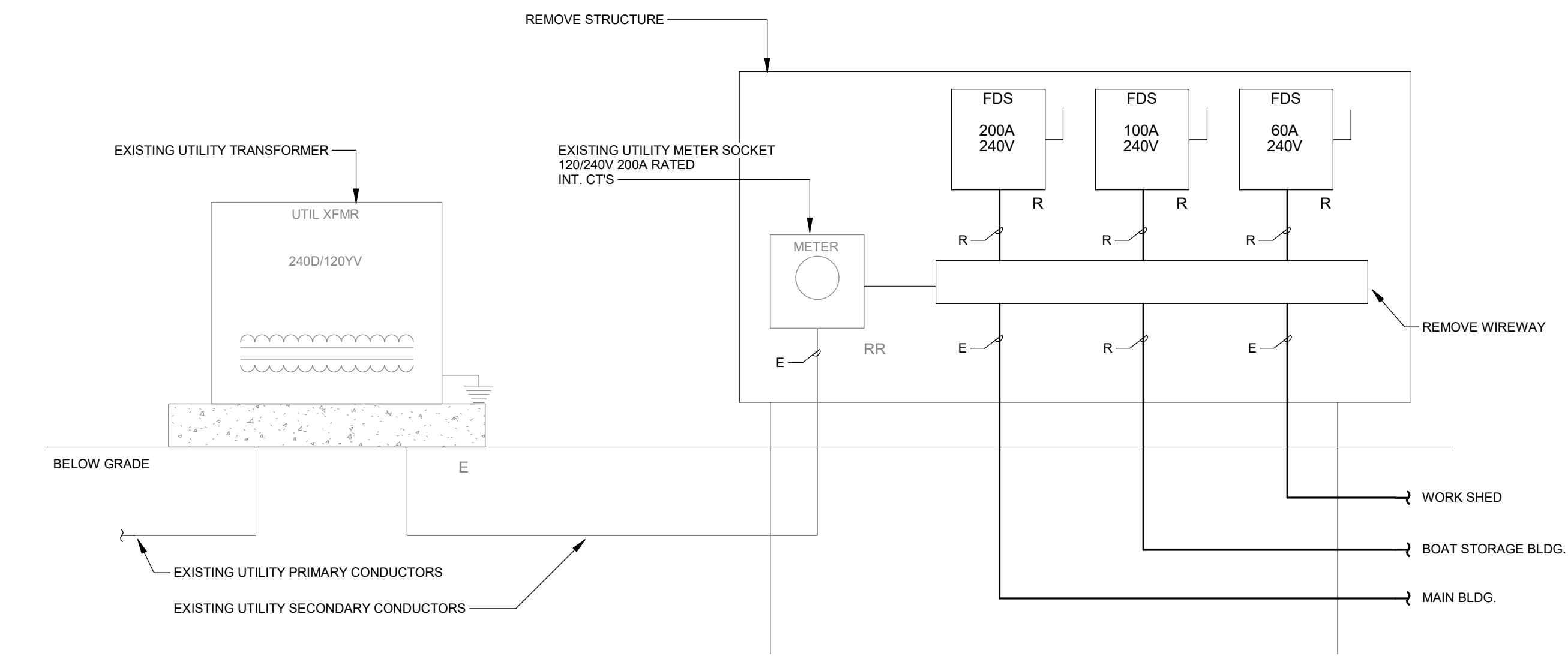
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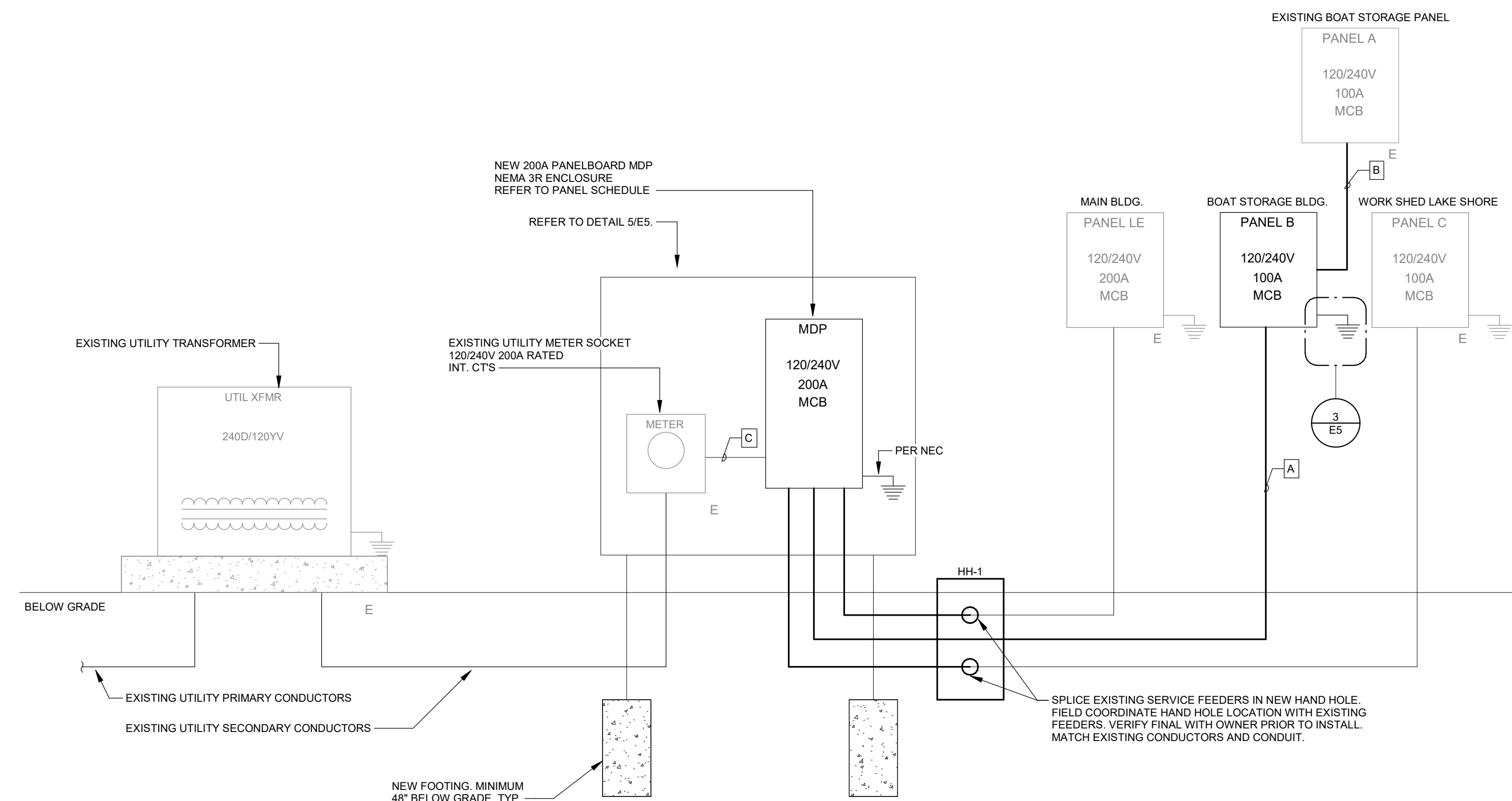
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E3



① ONE-LINE DIAGRAM - DEMOLITION
1/8" = 1'-0"



TAG	PHASE/NEUTRAL	GROUND	CONDUIT
A	#2 (3)	#6	1-1/4"
B	#3 (3)	#8	1-1/4"
C	#3/0 (3)	-	2-1/2"

② ONE-LINE DIAGRAM - NEW CONSTRUCTION
1/8" = 1'-0"

LIGHTING FIXTURE SCHEDULE

- NOTES:**
- ALL FIXTURES SHALL BE U.L. OR SIMILARLY LISTED.
 - 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: DEBBIE BAEDER

TYPE	MANUFACTURER	MODEL	DESCRIPTION	VOLTAGE	LOAD-VA	LAMP TYPE	APPROVED EQUALS
E1	LITHONIA	ELM2L-SDRT / ELA WG1	EMERGENCY UNIT, WALL MOUNTED, THERMOPLASTIC HOUSING, WIRE GUARD, 2 LED ADJUSTABLE LAMP HEADS, LEAD-CALCIUM MAINTENANCE FREE BATTERY, SELF-DIAGNOSTICS	120 V	2 VA	LED	SURE-LITES, LIGHTALARMS, DUAL-LITE
F1	COLUMBIA LIGHTING	HEIM-4-40-ML-RFA-E-U	CHAIN HUNG UTILITY STRIP FIXTURE 4', ENCLOSED AND GASKETED, LINEAR RIBBED ACRYLIC LENSING, WHITE FINISH, NON-DIMMING.	120 V	47 VA	LED	AS APPROVED BY ENGINEER
W1	COOPER MCGRAW	TRP1-24L-15-3K8-4-UNV-BLT-PC	EXTERIOR WALL PACK, 540 NOMINAL DELIVERED LUMENS, 80 CRI, 3000K, TYPE IV FORWARD THROW, BRONZE FINISH, BUTTON PHOTOCONTROL, AFTER HOURS DIMMING.	120 V	15 VA	LED	AS APPROVED BY ENGINEER
X1	LITHONIA	LQM-S-W-3-R-MVOLT-ELN-SD / ELA WG1	BACK MOUNT EXIT SIGN, SINGLE FACE, WIRE GUARD, BATTERY BACK UP, SELF-DIAGNOSTICS, WHITE FINISH, 3 YEAR WARRANTY, UNIVERSAL MOUNTING HARDWARE.	120 V	3 VA	RED LED	SURE-LITES, LIGHTALARMS, DUAL-LITE

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.
 - UNLESS INDICATED OTHERWISE, LIGHTING CONTROL SCHEMES/OPERATION SHALL BE AS FOLLOWS:

<u>CORRIDORS, VESTIBULES, COMMON SPACES:</u>	SENSORS PROGRAMMED FOR OCCUPANCY MODE, AUTOMATIC ON/OFF OPERATION, 20 MINUTES MINIMUM, 30 MINUTES MAXIMUM. DIMMING CONTROL OF FIXTURES WITHIN DAYLIGHT ZONES SHALL BE BY ALWAYS ON DAYLIGHT SENSOR.
<u>ALL OTHER SPACES</u>	SENSORS PROGRAMMED FOR VACANCY MODE, MANUAL ON/AUTOMATIC OFF OPERATION 20 MINUTES MINIMUM, 30 MINUTES MAXIMUM. DIMMING CONTROL OF FIXTURES WITHIN DAYLIGHT ZONES SHALL BE BY ALWAYS ON DAYLIGHT SENSOR.

DESIGNED BY: DEBBIE BAEDER

TYPE	DESCRIPTION	ELECTRICAL	MOUNTING	SENSOR TYPE	COVERAGE	APPROVED MANUFACTURERS
OS 1	WALL CORNER MOUNT OCCUPANCY SENSOR, WHITE FINISH, PROVIDE WITH CORNER MOUNT BRACKET OR ADJUSTABLE ARM TO ALLOW MOUNTING AT ORIENTATION SHOWN ON DRAWINGS. INTEGRAL AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION. 8-30 MINUTE TIMER SETTINGS.	120V / 0-10V DIMMING	WALL CORNER 8'-12'	DUAL-TECH	120 DEG BY 25'	HUBBELL, CRESTRON, ACUIY, WATTSTOPPER, GREENGATE, AS APPROVED BY ENGINEER.

BRANCH PANEL: B

LOCATION: STORAGE BAY
 SUPPLY FROM: MDP UTILITY
 MOUNTING: SURFACE
 ENCLOSURE: TYPE 1

VOLTAGE: 120/240 SINGLE
 PHASES: 1
 WIRES: 3

SCCR RATING: 10,000 A
 MAINS TYPE: MLO
 MAINS RATING: 100 A
 MCB RATING: 100 A

NOTES:

CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	CKT NO	AMP	P	CIRCUIT DESCRIPTION
EMERGENCY SHUT OFF	1	20 A	1	200	920	2	20 A	*	GARAGE DOOR
LIGHTING	1	20 A	3		757	4	20 A	*	GARAGE DOOR
RECEPTACLES	1	20 A	5	1440	920	6	20 A	*	GARAGE DOOR
EXTERIOR RECEPTACLES	1	20 A	7		900	8	20 A	*	GARAGE DOOR
DROP CORD	1	20 A	9	540	0	10	20 A	--	SPARE
SPARE	1	20 A	11		0	12	20 A	--	SPARE
SPARE	1	20 A	13	0	0	14	20 A	--	SPARE
SPARE	1	20 A	15		0	16	20 A	--	SPARE
SPARE	1	20 A	17	0	0	18	20 A	--	SPARE
SPARE	1	20 A	19		0	20	20 A	--	SPARE
SPACE	1	--	21	--	--	22	--	--	SPACE
SPACE	1	--	23	--	--	24	--	--	SPACE
SPACE	1	--	25	--	--	26	--	--	SPACE
EXISTING PANEL A	2	100 A	27		0	28	--	--	SPACE
			29	0	--	30	--	--	SPACE
				3825 VA	3497 VA				
				32 A	29 A				

LEGEND:
 "G" INDICATES GFCI TYPE BREAKER.

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED...	PANEL TOTALS
LIGHTING	757 VA	125.00%	946 VA	
POWER	3685 VA	100.00%	3685 VA	TOTAL CONN. LOAD: 7320 VA
RECEPTACLE	2880 VA	100.00%	2880 VA	TOTAL EST. DEMAND: 7509 VA
				TOTAL CONN.: 30 A
				TOTAL EST. DEMAND: 31 A

NOTES:

BRANCH PANEL: MDP

LOCATION: STORAGE BAY
 SUPPLY FROM: MDP UTILITY
 MOUNTING: SURFACE
 ENCLOSURE: TYPE 1

VOLTAGE: 120/208 SINGLE
 PHASES: 1
 WIRES: 3

SCCR RATING: 22,000 A
 MAINS TYPE: MCB
 MAINS RATING: 200 A
 MCB RATING: 200 A

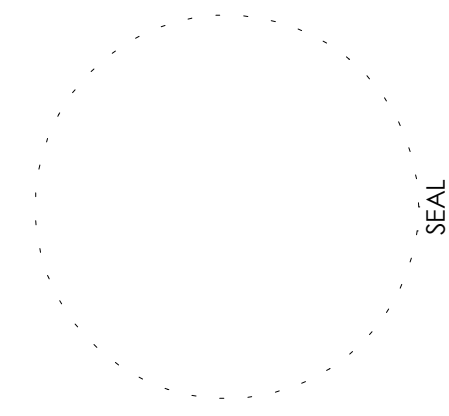
NOTES:

CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	CKT NO	AMP	P	CIRCUIT DESCRIPTION
EXISTING PANEL LE	2	--	125 A	0	0	2	100 A	--	NEW PANEL B IN BOAT STORAGE BUILDING
EXISTING SHORELINE SHED PANEL	2	--	60 A	0	0	6	60 A	--	SPARE
SPACE	1	--	9	--	--	10	--	--	SPACE
SPACE	1	--	11	--	--	12	--	--	SPACE
SPACE	1	--	13	--	--	14	--	--	SPACE
SPACE	1	--	15	--	--	16	--	--	SPACE
SPACE	1	--	17	--	--	18	--	--	SPACE
SPACE	1	--	19	--	--	20	--	--	SPACE
SPACE	1	--	21	--	--	22	--	--	SPACE
SPACE	1	--	23	--	--	24	--	--	SPACE
				0 VA	0 VA				
				0 A	0 A				

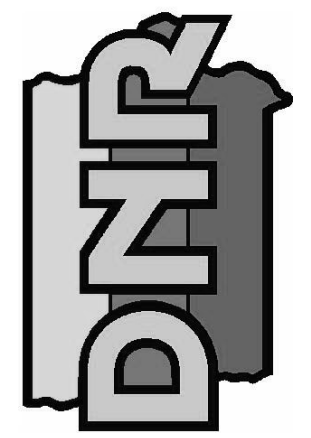
LEGEND:
 "G" INDICATES GFCI TYPE BREAKER.

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED...	PANEL TOTALS
				TOTAL CONN. LOAD: 0 VA
				TOTAL EST. DEMAND: 0 VA
				TOTAL CONN.: 0 A
				TOTAL EST. DEMAND: 0 A

NOTES:



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 SCHEDULES

Boat Storage Addition for:
Lake Manawa LE

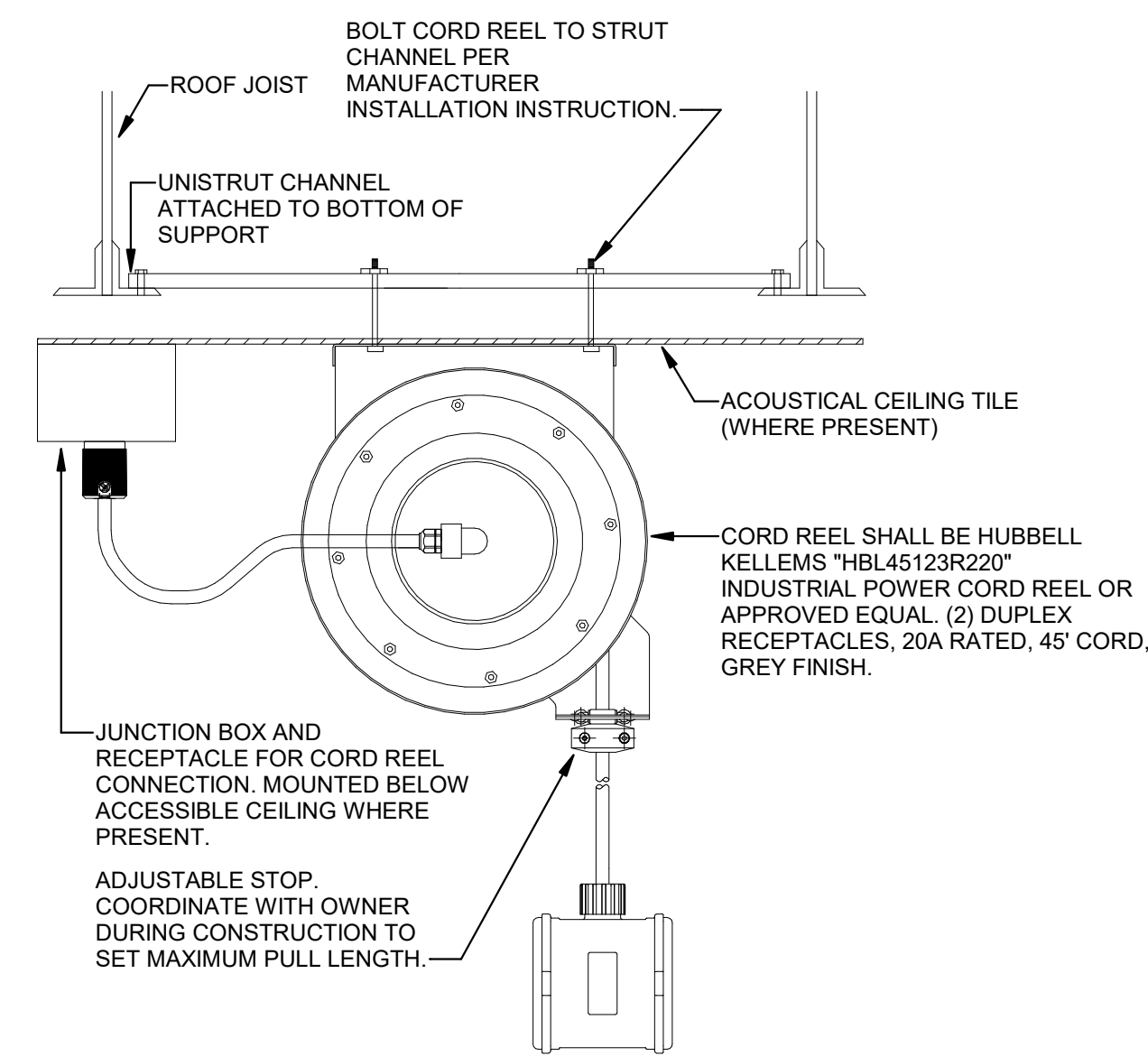
Council Bluffs, IA 51501
 1100 South Shore Drive

NO.	BY DATE	REVISION

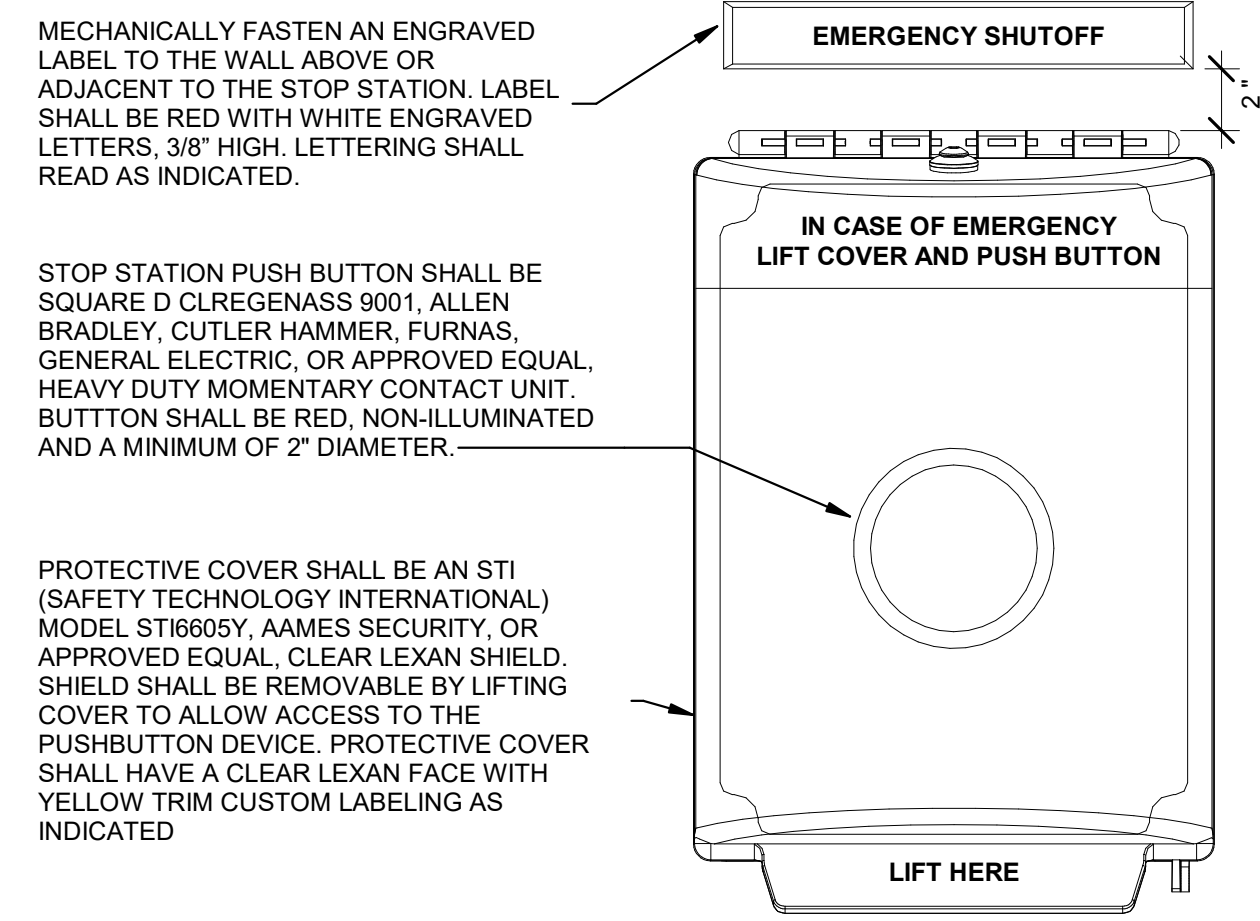
DRAWN BY: PROJECT NUMBER:
 22-04-78-03

CHKD BY: DATE:
 11.08.2022

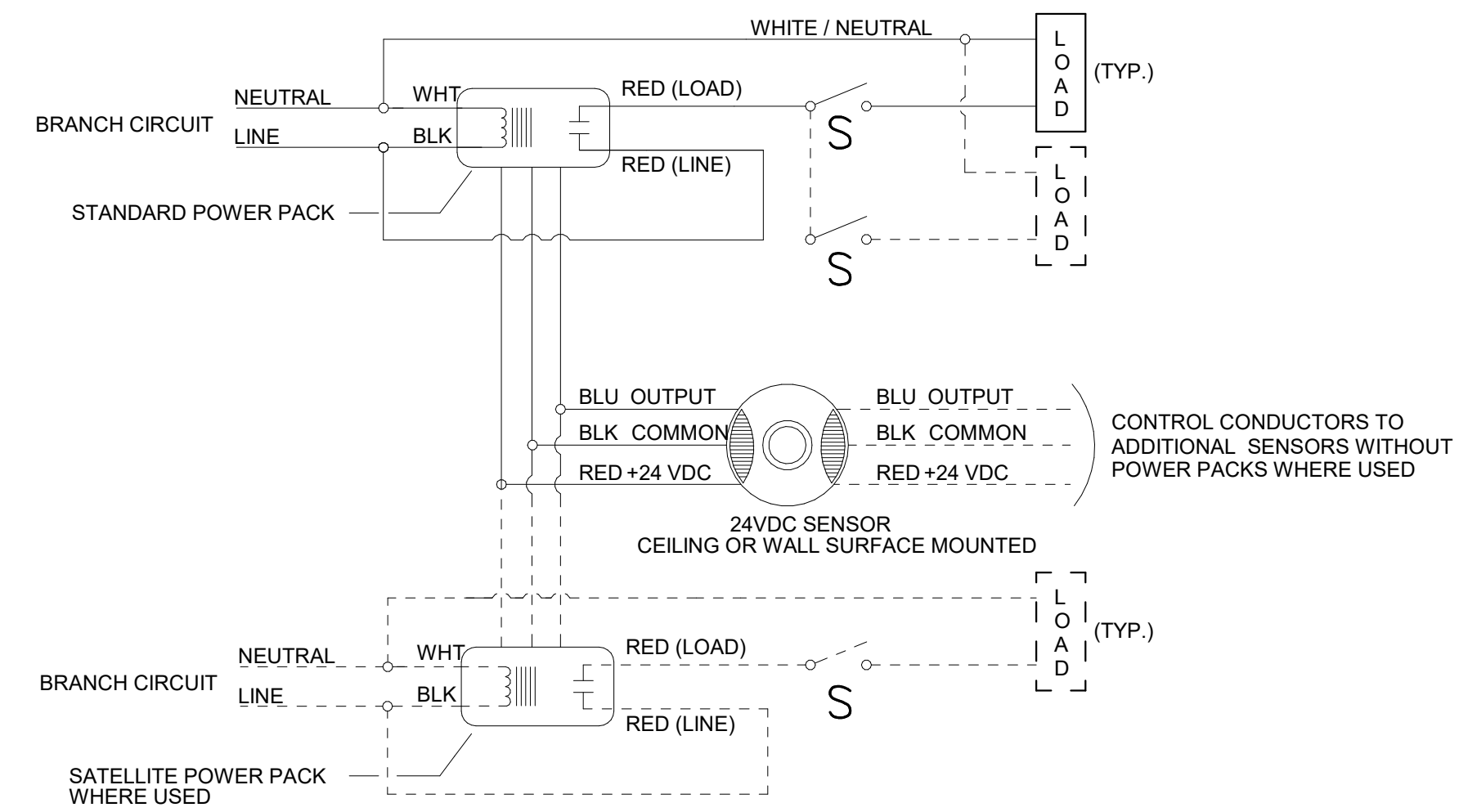
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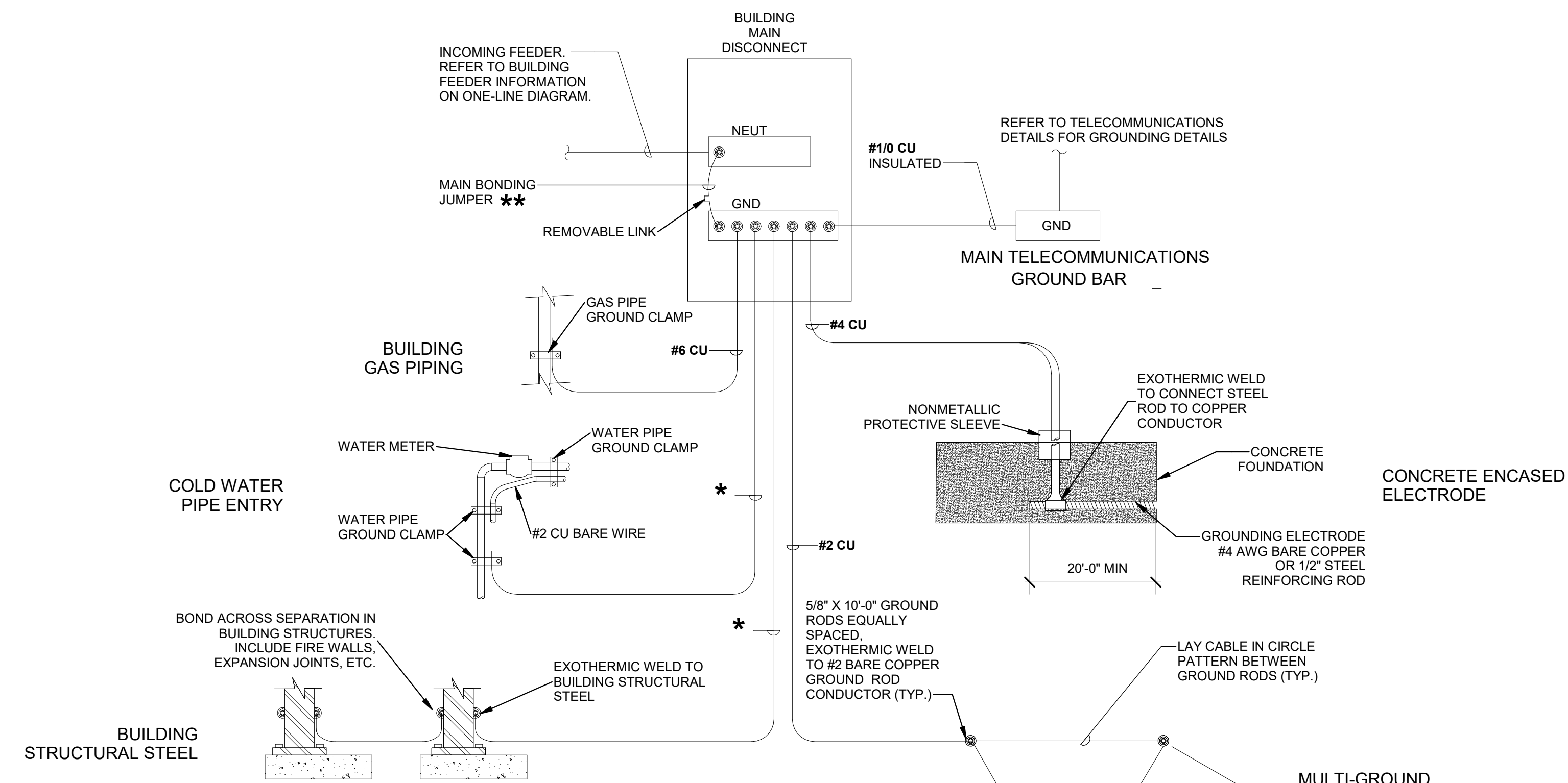
① RETRACTABLE CORD REEL MOUNTING DETAIL
1/4" = 1'-0"



② EMERGENCY PUSH OPERATOR
1/4" = 1'-0"



④ OCCUPANCY-DAYLIGHT SENSOR LIGHTING CONTROL WIRING DETAIL
1/8" = 1'-0"

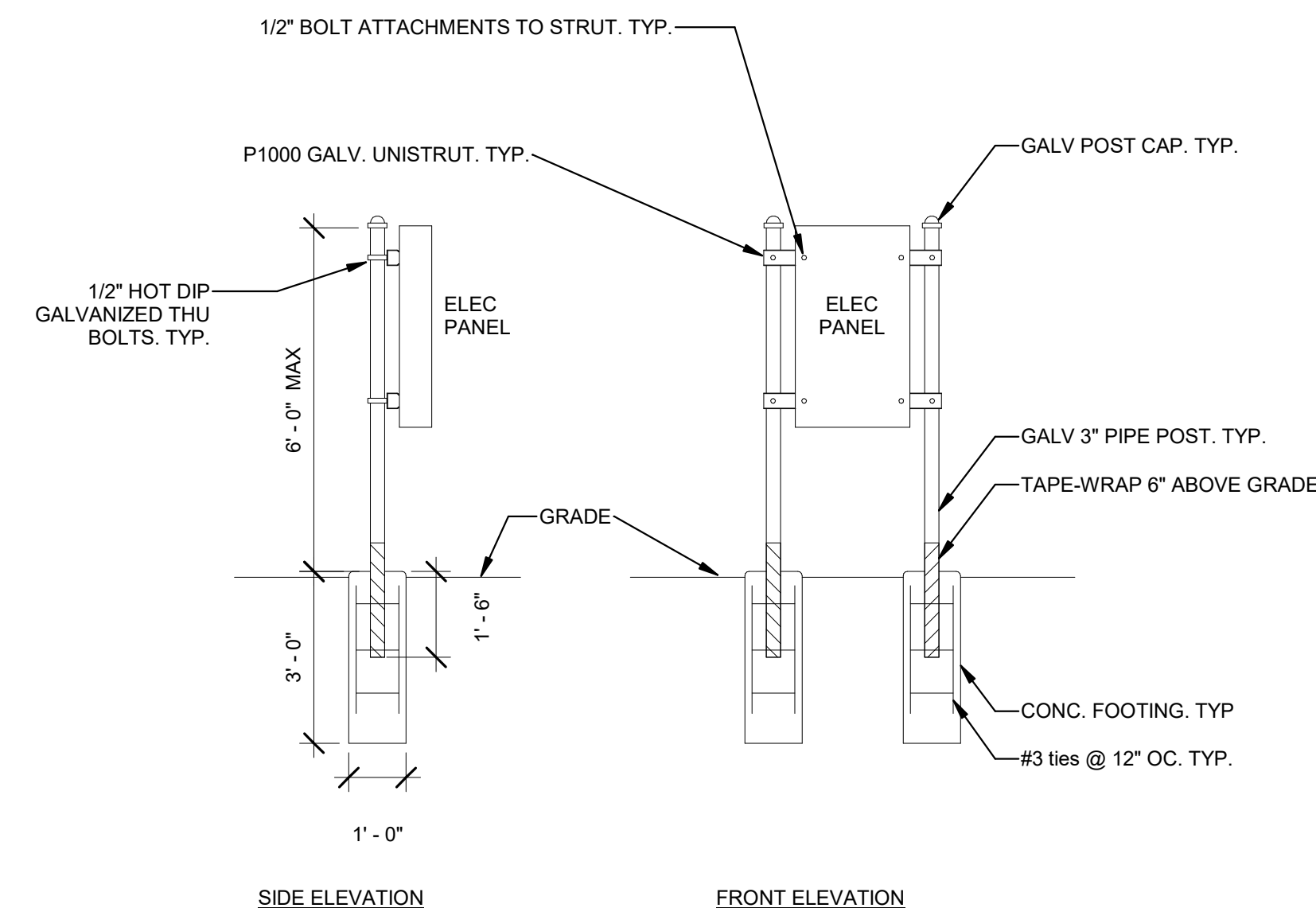


* SIZE GROUNDING ELECTRODE CONDUCTOR AND BONDING PER NEC 250.66 AND TABLE BELOW. ALL CONDUCTORS TO BE COPPER.
TABLE BASED ON NEC 2017

TABLE 250.66 GROUNDING ELECTRODE CONDUCTOR FOR ALTERNATING-CURRENT SYSTEMS	
SIZE OF LARGEST UNGROUNDING CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS (AWG/KCMIL)	SIZE OF GROUNDING ELECTRODE CONDUCTOR (AWG/KCMIL)
COPPER	ALUMINUM OR COPPER-CLAD AL
#2 OR SMALLER	#1/0 OR SMALLER
#1 OR #1/0	#2/0 OR #3/0
#2/0 OR #3/0	#4/0 OR 250
OVER #3/0 THROUGH 350	OVER 250 THROUGH 500
OVER 350 THROUGH 600	OVER 500 THROUGH 900
OVER 600 THROUGH 1100	OVER 900 THROUGH 1750
OVER 1100	OVER 1750

** SIZE BONDING JUMPER PER NEC 250.102. USE TABLE ABOVE FOR ALL CONDUCTORS BETWEEN #2 AND 1100. ALL INCOMING CONDUCTORS OVER 1100 CU OR 1750 AL SHALL BE SIZED PER THE TABLE 250.102(C). SERVICE EQUIPMENT SHALL BE SUPPLIED WITH BONDING JUMPER FROM THE MANUFACTURER.

③ GROUNDING ELECTRODE SYSTEM
1/8" = 1'-0"



⑤ RP PANEL STRUT RACK
3/8" = 1'-0"

NO.	BY	DATE	REVISION