IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION DRAWINGS FOR SHOWER BUILDINGS & CABIN RENOVATIONS AT PINE LAKE STATE PARK HARDIN COUNTY, IOWA

IOWA ONE CALL
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PROJECT # 19-02-42-01
PLANS PREPARED BY
LAND AND WATERS BUREAU
CONSERVATION AND RECREATION DIVISION

REGISTERED PROFESSIONAL ARCHITECT
RYAN E. RICHEY
06461
IOWA

I hereby certify that this architectural document was prepared by me or under my direct personal supervision and that I am a duly Registered Professional Architect under the laws of the State of Iowa.

3/17/20
RYAN E. RICHEY DATE

My license renewal date is JUNE 30, 2021.

Pages or sheets covered by this seal:

A-001 – C-002

LICENSED PROFESSIONAL ENGINEER
CHAD D. BASS
21397
IOWA

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.

3-17-20
CHAD D. BASS DATE

My license renewal date is DECEMBER, 31 2021.

Pages or sheets covered by this seal:

M0 – P3

LICENSED PROFESSIONAL ENGINEER
JAMES R. DEEDS IV
17588
IOWA

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.

3-17-20
JAMES R. DEEDS IV DATE

My license renewal date is DECEMBER 31, 2020.

Pages or sheets covered by this seal:

E1 – E4

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BID ITEMS

ITEM NUMBER	ITEM DESCRIPTION	ESTIMATED QUANTITY
1	DEMOLITION AND SALVAGE	1 LS
2	TREE CLEARING AND GRUBBING	1 LS
3	GRADING	1 LS
4	SEEDING, FERTILIZING AND MULCHING	1 LS
5	CLASS 'A' CRUSHED STONE	10 TN
6	SANITARY SEWER SERVICE (SHOWER BUILDINGS & CAMP HOST SITE)	1 LS
7	SANITARY MANHOLE FOR SHOWER BUILDINGS	2 EA
8	DOMESTIC WATER LINES TO SHOWER BUILDINGS	1 LS
9	DRAIN DOWN WATER PIT	2 EA
10	SITE ELECTRICAL SERVICE	1 LS
11	CONCRETE PARKING, SIDEWALKS, & STOOP FOOTINGS	1 LS
12	SHOWER BUILDING (NORWAY PINE – ALL ITEMS INCLUSIVE)	1 LS
13	FAMILY SHOWER BUILDING (JUNIPER – ALL ITEMS INCLUSIVE)	1 LS
14	PIT LATRINE BUILDING (ALL ITEMS INCLUSIVE)	1 LS
15	CABIN RENOVATIONS (FOUR CABINS ALL ITEMS INCLUSIVE)	1 LS
16	CAMP HOST SITE (ALL ITEMS INCLUSIVE)	1 LS
17	CONSTRUCTION STAKING	1 LS
18	MOBILIZATION	1 LS
	ALTERNATE #1	
19	NEW SHELTER CONSTRUCTION (ALL ITEMS INCLUSIVE)	1 LS
	ALTERNATE #2	
20	EXISTING SHELTER SLAB REPLACEMENT AND SIDEWALK	1 LS

PROJECT SCOPE NARRATIVE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL ITEMS WITHIN THIS NARRATIVE, THE DRAWINGS, AND PROJECT MANUAL UNLESS SPECIFICALLY NOTED OTHERWISE.

CONTRACTOR SHALL DEMOLISH, IN THEIR ENTIRETY, THE RESTROOM BUILDING AND SHOWER BUILDING, AND ALL SIDEWALKS AND PAVED DRIVE SURFACE LEADING TO AND AROUND THE BUILDINGS AS SHOWN ON SHEET A-005. THE CONTRACTOR SHALL ALSO DEMOLISH THE PIT LATRINE AND CONCRETE SHELTER SLAB AT THE CIRCLE POINT SHELTER, REFER TO SHEET A-005. THE CONTRACTOR SHALL DEMOLISH THE PATIOS IN FRONT OF ALL FOUR (4) CABINS TO MAKE WAY FOR A NEW CONCRETE PATIO AS SHOWN ON SHEET A-011. SPECIAL CARE SHALL BE TAKEN TO NOT DAMAGE ADJACENT AREAS DURING DEMOLITION AND SHALL RESTORE ALL AREAS AFTER COMPLETION.

THE CONTRACTOR SHALL PHASE CONSTRUCTION OF THE FOLLOWING ITEMS: THE EAST SHOWER BUILDING SHALL BE DEMOLISHED FIRST AND NEW IOWA STANDARD SHOWER BUILDING (NORWAY PINE) SHALL BE INSTALLED AND OPERATIONAL FIRST. THE WEST RESTROOM BUILDING SHALL BE DEMOLISHED AND NEW IOWA STANDARD FAMILY SHOWER BUILDING (JUNIPER) SHALL BE INSTALLED NEXT. THE CONTRACTOR SHALL INSTALL A NEW ADA COMPLIANT PARKING SPOT, SIDEWALKS, WATER PITS AT ALL LOCATIONS AS SHOWN IN SHEET A-013. CONTRACTOR IS REQUIRED TO INSTALL A CAST FOOTING AS DETAILED ON SHEET A-013 FOR ALL SHOWER BUILDINGS. CONTRACTOR SHALL RUN NEW WATER, ELECTRIC, AND SANITARY LINES, AS REQUIRED BY PRECAST MANUFACTURER, AS SHOWN ON PAGE A-010.

CONTRACTOR SHALL DEMOLISH THE EXISTING CONCRETE PATIOS ADJACENT TO THE FOUR (4) CABINS AND INSTALL A NEW STOOP FOOTING AND CONCRETE PATIO WITH FIRE-RING, AS SHOWN IN SHEET A-011. THE CONTRACTOR SHALL ALSO REMOVE CONCRETE AROUND FRONT DOOR OF THE SHOP & OFFICE BUILDING AND INSTALL A NEW STOOP FOOTING AS SHOWN IN SHEET A-013. CONTRACTOR SHALL INSTALL AN ACCESSIBLE CONCRETE PARKING SPOT NEW CABIN #1 AS SHOWN ON SHEET A-011.

CONTRACTOR SHALL DEMOLISH THE INTERIOR OF ALL FOUR (4) CABINS AS OUTLINED IN SHEET A-050. THE CONTRACTOR SHALL THEN RENOVATE THE CABINS WITH NEW RESTROOM, AND KITCHEN LAYOUT AS SHOWN ON SHEETS A-100 THROUGH A-301, WITH NEW MECHANICAL, AND ELECTRICAL WORK, REFER TO MEP SHEETS.

CONTRACTOR SHALL DEMOLISH THE PIT LATRINE AT THE CIRCLE POINT AREA. CONTRACTOR SHALL INSTALL NEW SIDEWALK, AND PIT LATRINE, THEN INSTALL, AS ALTERNATE #2, NEW CONCRETE SHELTER SLAB AT CENTER POINT SHELTER AS SHOWN ON SHEET A-012. AS ALTERNATE #1, THE CONTRACTOR SHALL DEMOLISH THE EXISTING SHELTER AND INSTALL A NEW SHELTER PER SHEET A-012.

CONTRACTOR SHALL, BUT IS NOT LIMITED TO, PERFORM ALL WORK OUTLINED IN THE ABOVE NARRATIVE. CONTRACTOR SHALL REFER TO ALL SUBSEQUENT DRAWINGS FOR MORE INFORMATION REGARDING THIS PROJECT. REFER TO ARCHITECTURAL, CIVIL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR MORE INFORMATION. CONTRACTOR SHALL PERFORM ALL INCIDENTAL WORK NECESSARY TO COMPLETE ALL CONSTRUCTION OUTLINED IN THESE DOCUMENTS. CONTRACTOR SHALL PERFORM WORK IN COMPLIANCE WITH ALL CODES AND ORDINANCES ACCORDING TO THE LAW.

PROJECT DESCRIPTION

PINE LAKE STATE PARK IS LOCATED JUST NORTH EAST OF ELDORA, IOWA. THE PARK WILL RECEIVE A NEW HOST, FULL HOOKUP CAMP SITE, TWO NEW SHOWER BUILDINGS, A NEW PIT LATRINE, A NEW SLAB ON THE CENTER POINT SHELTER, AND INTERIOR RENOVATIONS IN THE FOUR CABINS. AS AN ALTERNATE, A NEW DESIGN GUIDE SHELTER AND DEMO OF THE ORIGINAL SHELTER. ALSO, THE CONTRACTOR SHALL DEMOLISH THE EXISTING SHOWER/RESTROOM BUILDINGS AND MISCELLANEOUS OTHER ITEMS AS SHOWN IN THE DRAWINGS.

AUTHORIZATION TO BID

3/16/2020
ENGINEERING BUREAU CHIEF DATE

3/16/2020
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	JEFFERSON, IA
CONTACT	N/A	CONTACT	DON LABATE
TELEPHONE	515.725.8200	TELEPHONE	515.250.3714
FAX	515.725.8202	FAX	–
EMAIL	N/A	EMAIL	DON.LABATE@DNR.IOWA.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	JAMES DEEDS
TELEPHONE	515.979.0107	TELEPHONE	515-371-9970
FAX	–	FAX	–
EMAIL	RYAN.RICHEY@DNR.IOWA.GOV	EMAIL	JDEEDS@KCLENGINEERING.COM
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	–	COMPANY	KCL ENGINEERING
	–	ADDRESS	218 1/2 5TH STREET
	–	CITY,STATE,ZIP	WEST DES MOINES, IA 50265
	–	CONTACT	CHAD BASS
	–	TELEPHONE	515-205-1397
	–	FAX	–
	–	EMAIL	CBASS@KCLENGINEERING.COM
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CONSULTANTS:

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

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-001

DIMENSION NOTES

1. 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.
2. WHEN A ROOM CENTERLINE IS INDICATED ONLY ONE SIDE OF THE ROOMS ELEMENTS MAY BE DIMENSIONED.
3. COLUMN IDENTIFICATION: DETAILS WILL GOVERN ALL DIMENSIONS AND NO DIMENSIONS WILL BE SHOWN ON SMALL SCALE PLANS.
4. PARTITION CENTERED ON COLUMN OR GRID LINES WILL NOT BE DIMENSIONED ON SMALL SCALE PLANS.
5. PARTITION WITH A FINISHED FACE FLUSH WITH FINISH FACE OF COLUMN WILL NOT be DIMENSIONED ON SMALL SCALE PLANS.
6. PARTITION FINISH FACE ON COLUMN OR GRID LINE WILL NOT BE DIMENSIONED ON SMALL SCALE PLANS .
7. 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.
8. WHEN NEITHER JAMB OCCURS AT A COLUMN OR GRID LINE ONE JAMB WILL BE DIMENSIONED.
9. DOOR LOCATIONS ARE TO BE LOCATED BY ONE OF FOLLOWING:
   a. ONE JAMB FACE LOCATED BY A PARTITION AT RIGHT ANGLE. 4"TYPICAL UNLESS INDICATED ON PLAN.
   b. OR AS DIMENSIONED ON PLAN.
10. PARTITIONS ARE DIMENSIONED TO FACE OF CMU OR FACE OF STUD UNLESS OTHERWISE NOTED.
11. 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
00 TITLE SCALE: 0 = 0'-0"	DRAWING / DETAIL IDENTIFICATION
00 A-000	SECTION REFERENCE
00 A-000	DETAIL REFERENCE
00 A-000	EXTERIOR ELEVATION
00/A-100	INTERIOR ELEVATION
ELEVATION : 0'-0" DESCRIPTION1	ELEVATION TARGET
1 A	COLUMN GRID
00 A-000 / 00 A-000	MATCH LINES
ROOM 000	ROOM/SPACE IDENTIFICATION
100	DOOR TAG
00	WINDOW TAG
00	WALL TYPE REFERENCE KEYNOTE NUMBER -NEW C.S.I. DIVISION/KEY
00	KEYNOTE – DEMOLITION
00	KEYNOTE – NEW/RENOVATION
00	KEYNOTE – FINISH/ACCESSORY
ℙ	PROPERTY LINE REFERENCE
℄	CENTER LINE REFERENCE
0"	LEVEL CHANGE REFERENCE
	DETAIL CUT LINE
1	REVISION NUMBER AND CLOUD

GENERAL NOTES

THE FOLLOWING GENERAL NOTES SHALL PERTAIN TO THE ENTIRE SET OF CONTRACT DOCUMENTS

1. 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.
2. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING WITH CONSTRUCTION.
3. GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL PERFORM THEIR WORK IN ACCORDANCE WITH ALL APPLICABLE CODES GOVERNING EACH TRADE.
4. THE CONTRACTOR SHALL MAINTAIN A CLEAN AND ORGANIZED JOB SITE, ACCEPTABLE TO THE OWNER.
5. THE CONTRACTOR SHALL COORDINATE THE SEQUENCE OF WORK WITH THE OWNER REPRESENTATIVE..
6. THERE SHALL BE NO DEVIATION BY THE GENERAL CONTRACTOR FROM THE CONSTRUCTION DOCUMENTS UNLESS APPROVED IN WRITING BY THE ARCHITECT.
7. 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.
8. 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.
9. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE EXISTING BUILDING WATER TIGHT DURING CONSTRUCTION.
10. THE CONTRACTOR WILL VERIFY THAT EXIT EGRESS IS MAINTAINED FOR ALL OCCUPIED AREAS OF THE BUILDING THROUGHOUT ALL PHASES OF CONSTRUCTION.
11. PLAN DIMENSIONS ARE GIVEN TO FACE OF STUD OR BLOCK WALL. "CLEAR" DIMENSIONS ARE GIVEN TO THE FACE
12. 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.
13. PROTECT ALL EXISTING FINISHES AND MATERIALS TO REMAIN, IN ACCORDANCE WITH ACCEPTABLE TRADE PRACTICES, MANUFACTURER, RECOMMENDATIONS, OR AS DIRECTED BY THE ARCHITECT.
14. 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.
15. PATCHING MATERIAL SHALL MATCH EXISTING ADJACENT MATERIALS AS CLOSELY AS POSSIBLE IN COLOR, PATTERNS, AND/OR TEXTURES.
16. 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.
17. ISOLATE ALL DISSIMILAR METALS. G SHALL REQUEST APPROVAL BY THE ARCHITECT FOR MATERIALS USED FOR THIS PURPOSE, PRIOR TO INSTALLATION.
18. SEALANTS SHALL BE COMPATIBLE WITH ADJACENT SURFACE(S) THAT ARE IN CONTACT. REFER TO SPECIFICATIONS FOR APPROVED MANUFACTURERS AND PROCEDURES.
19. CAULK JOINTS OF DISSIMILAR EXPOSED TO VIEW MATERIALS AS REQUIRED BY THE ARCHITECT.
20. ALL DOOR HARDWARE TO BE FL. ADA COMPLIANT.
21. ALL EXTERIOR WALLS, DOORS AND WINDOWS ARE EXISTING U.N.O.
22. ALL FINISHES TO BE PER CLASS INDICATED ON A-004
23. 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:
   - CABINETRY 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
24. 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 BIDDING 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.

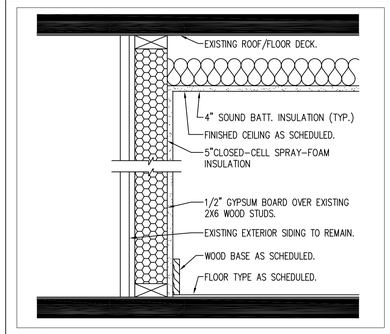
WHERE UTILITIES AND FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE DNR ENGINEER OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL BE AFFORDED ACCESS TO THESE FACILITIES 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.

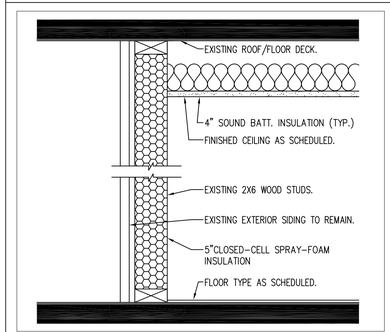
THE CONTRACTOR IS EXPECTED TO HAVE MATERIALS, EQUIPMENT, AND LABOR AVAILABLE ON A DAILY BASIS TO INSTALL AND MAINTAIN EROSION CONTROL FEATURES ON THE PROJECT. THIS MAY INVOLVE SEEDING, SILT FENCE, ROCK DITCH CHECKS, SILT BASINS OR SILT DIKES.

WALLTYPES

08 NOT USED



07 NON-RATED/BEARING
EXISTING EXTERIOR STUD WALL



06 NON-RATED/BEARING
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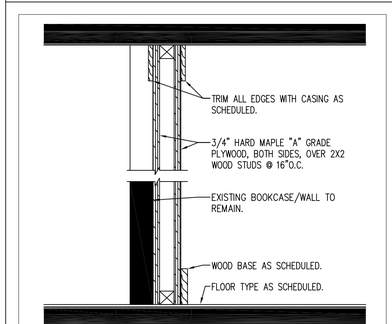
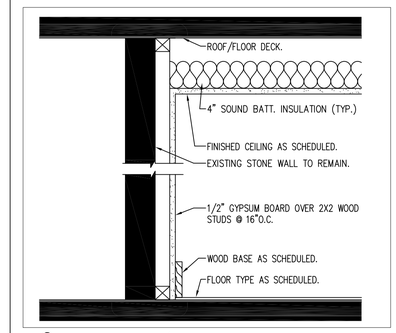


05 NON-RATED/NON-BEARING
2X2 WOOD FURRING WALL

WALLTYPES



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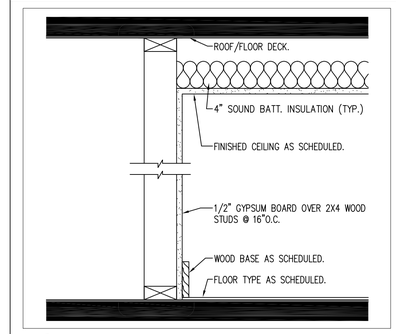
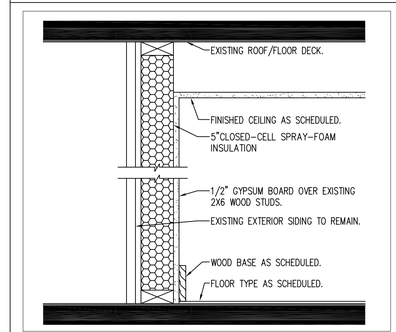
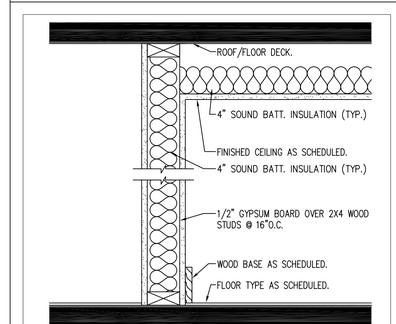
2X2 WOOD FURRING WALL



03 NON-RATED/NON-BEARING
2X4 WOOD STUD WALL



02 NON-RATED/BEARING
EXISTING EXTERIOR STUD WALL



01 NON-RATED/NON-BEARING
2X4 WOOD STUD WALL

CONSULTANT:

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ENGINEERING SERVICES - WALLACE BUILING
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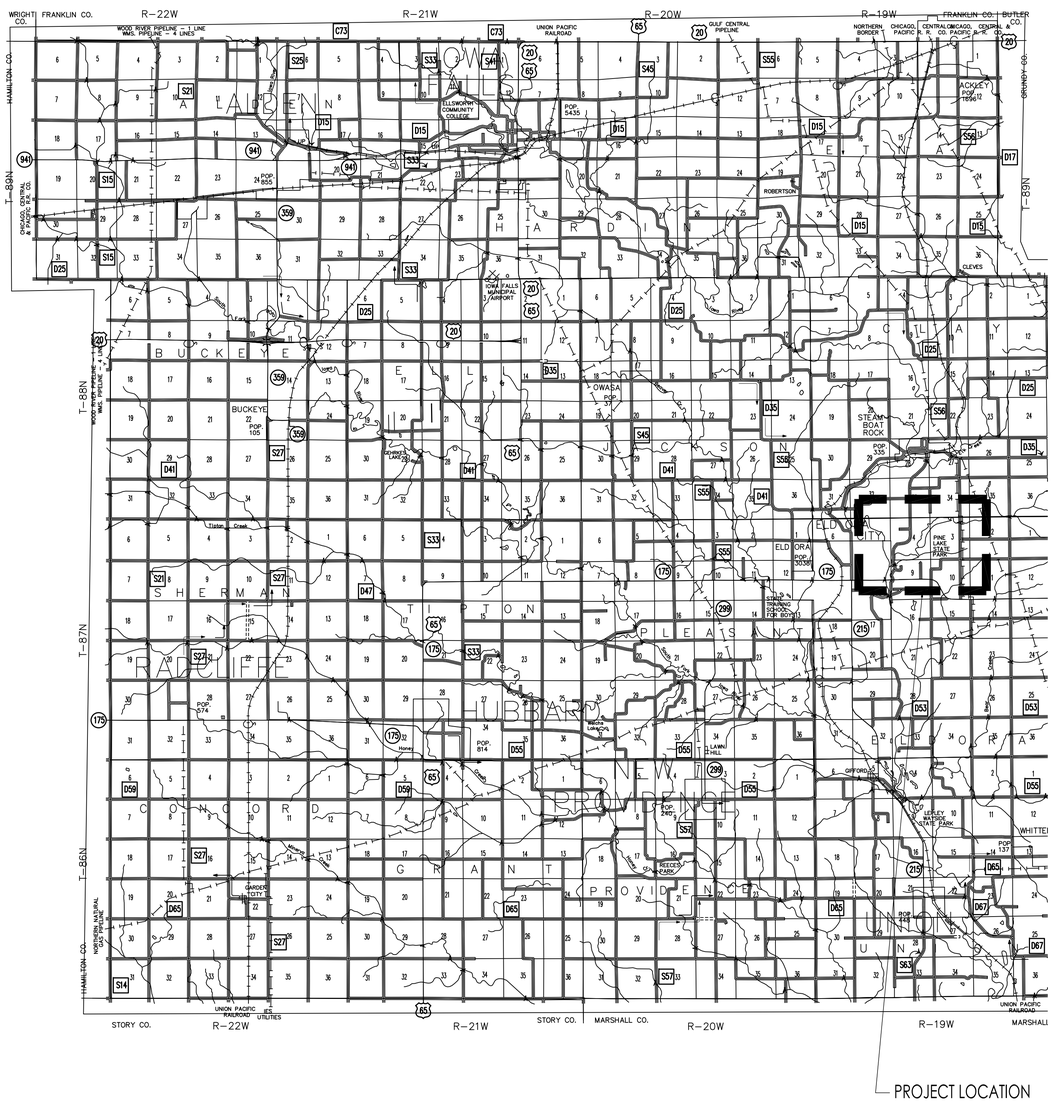
F: 515.725.8202

WALL TYPES, NOTES & SYMBOLS

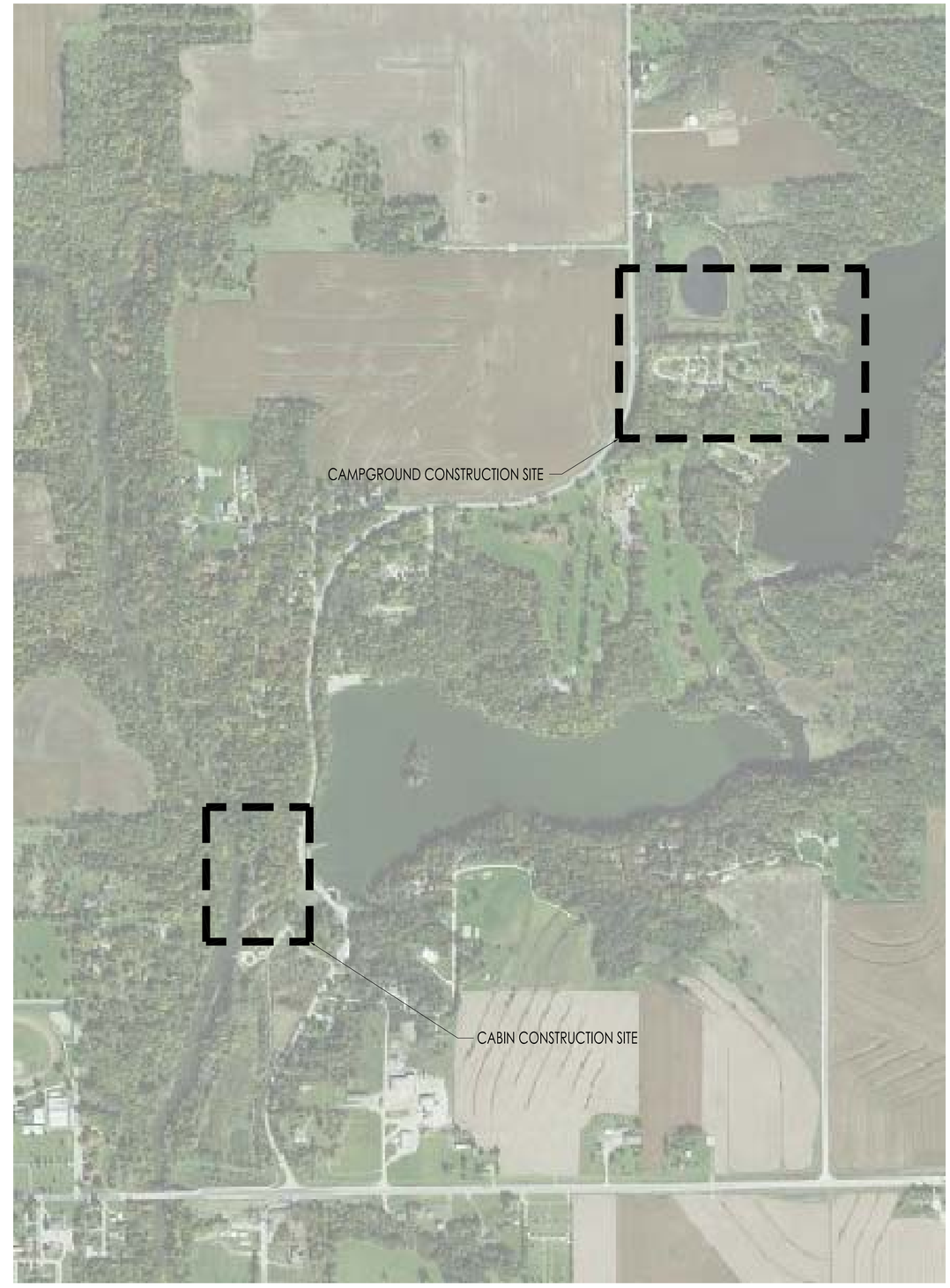
SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK
22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-002



HARDIN COUNTY MAP



PINE LAKE STATE PARK

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES

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

PROJECT LOCATION

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:

PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56

ELDORA, IA 50627

NO.	BY: DATE	REVISION

DRAWN BY:

PROJECT NUMBER: 19-02-42-01

CHK'D BY:

DATE: 03.17.2020

SHEET No:

A-003

01 CAMPGROUND DEMOLITION SITE PLAN
SCALE: 1/64" = 1'-0"

KEYNOTES

1. DEMOLISH EXISTING DRIVE/SIDEWALK, FILL, COMPACT, AND RESTORE DISTURBED AREA.
2. DEMOLISH EXISTING SHOWER BUILDING, PHASE 1 OF CONSTRUCTION, REFER TO PROJECT SCOPE FOR DETAILS. FILL, COMPACT, AND RESTORE AREA.
3. DEMOLISH EXISTING RESTROOM BUILDING, PHASE 2 OF CONSTRUCTION, REFER TO PROJECT SCOPE FOR DETAILS. FILL, COMPACT, AND RESTORE AREA.
4. ALTERNATE #1: DEMOLISH EXISTING SHELTER BUILDING, RESTORE SURROUNDING AREA. ALTERNATE #2: REMOVE EXISTING CONCRETE SHELTER SLAB, PROTECT EXISTING SHELTER IN PLACE AND PREP GROUND FOR NEW SLAB.
5. DEMOLISH EXISTING PIT LATRINE, PHASE 1 OF CONSTRUCTION, REFER TO PROJECT SCOPE FOR DETAILS. FILL, COMPACT, AND RESTORE AREA.
6. DEMOLISH EXISTING ELECTRICAL POLE, REMOVE AND DISPOSE POLE AND LIGHT, DISCONNECT ELECTRICAL TO LIGHT. FILL, COMPACT, AND RESTORE AREA.
7. DEMOLISH EXISTING FOUNDATIONS AND CONCRETE SLABS, FILL, COMPACT, AND RESTORE AREA.

GENERAL NOTES

A. ALL ELECTRICAL SHALL BE NEC CODE COMPLIANT AND ALL CODES AND ORDINANCES SHALL BE FOLLOWED WHICH ARE REQUIRED BY LAW. ALL OUTLETS TO BE MOUNTED AT 42" A.F.F.
B. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
C. PRECAST CONCRETE MODULAR BUILDING BY HUFFCUTT OR PRE-APPROVED EQUAL.
D. ALL SANITARY AND WATER LINE WORK SHALL COMPLY WITH ALL APPLICABLE CODES AS NECESSARY BY LAW PER STATE AND LOCAL JURISDICTION.
E. REMOVE ALL TREES WHICH CONFLICT WITH THE INSTALLATION OF THE NEW SHOWER/RESTROOM BUILDING, PROTECT ALL TREES IN PLACE WHICH MAY REMAIN.
F. GRADE EXISTING SITE -6" BELOW CURRENT BUILDING ELEVATION FOR PROPER INSTALL OF PRECAST BUILDING. COORDINATE WITH DNR INSPECTOR AND PRECAST SHOWER BUILDING MANUFACTURER PRIOR TO PROJECT COMMENCEMENT.
G. CONTRACTOR TO RESTORE ALL DISTURBED AREAS OF CONSTRUCTION AND DEMOLITION, FILL HOLES, GRADE AND SEED.

CONSULTANT:

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CAMPGROUND DEMO SITE PLAN

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY	DATE	REVISION

DRAWN BY:
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DATE: 03.17.2020
SHEET No:
A-005

CAMPGROUND SHOWER ELECTRICAL NARRATIVE

THE FOLLOWING NARRATIVE DESCRIBES THE MODIFIED ELECTRICAL DISTRIBUTION TO THE NEW CAMPGROUND SHOWER BUILDINGS AND ADJACENT POWER NEEDS. PLEASE REFER TO SHEET A-010, A-400, A-401, C-001, & C-002 FOR MORE INFORMATION. ALL ELECTRICAL WORK TO BE NEC COMPLIANT AND FOLLOW ALL CODES AND LOCAL ORDINANCES AS REQUIRED BY LAW.

ELECTRICAL POWER SHALL BE PROVIDED TO THE WEST SHOWER BUILDING BY ELECTRICAL CONDUCTORS FROM DISTRIBUTION PANEL #2. PROVIDE 3-#2/0 COPPER CONDUCTORS, APPROXIMATELY 100 FEET LONG, AND ONE #4 COPPER GROUND WIRE FROM 150A BREAKER (CIRCUIT #7) IN THE DISTRIBUTION PANEL. THESE CONDUCTORS SHALL CROSS THE ROAD IN THE EXISTING 3" CONDUIT TO BE LOCATED IN THE FIELD.

THE BREAKERS IN DISTRIBUTION PANEL #2 SHALL BE REARRANGED AS FOLLOWS: CIRCUIT #4 AND #5 SHALL REMAIN AS 175A BREAKERS. CIRCUITS #6 AND #7 BREAKERS SHALL BE SWAPPED BETWEEN THE TWO. CIRCUIT #6 SHALL USE THE 100A BREAKER FROM THE OLD LATRINE (CIRCUIT #7) AND THE SHOWER BUILDING SHALL USE THE 150A BREAKER FROM THE OLD CIRCUIT #6 LAYOUT. CIRCUIT # 6 CURRENTLY HAS 5-50A ELECTRICAL CAMP SITE PEDESTALS ON THE CIRCUIT. TWO OF THOSE CAMP SITES ARE BEING REMOVED SO THAT CIRCUIT #6 WILL SERVE ONLY 3 CAMP SITES AT 50A EACH. CODE ALLOWS THE USE OF A 100A MAIN BREAKER FOR THREE 50A SITES.

THE EXISTING KIOSK IS SERVED ELECTRICALLY BY A CAMP SITE PEDESTAL TO THE NORTH OF THE NEW HOST SITE PEDESTAL. THAT SERVICE SHALL REMAIN AND THE PEDESTAL SHALL BE LOCKED FROM PUBLIC ACCESS.

ELECTRICAL POWER SHALL BE PROVIDED TO THE EAST SHOWER BUILDING BY ELECTRICAL CONDUCTORS FROM DISTRIBUTION PANEL #4. PROVIDE 3-#2/0 COPPER CONDUCTORS, APPROXIMATELY 200 FEET LONG, AND ONE #4 COPPER GROUND WIRE FROM A 150A BREAKER IN THE DISTRIBUTION PANEL. THESE CONDUCTORS SHALL CROSS THE ROAD IN A NEW 3" CONDUIT TO BE LOCATED IN THE FIELD AND PUSHED UNDER THE ROAD.

THE BREAKERS IN DISTRIBUTION PANEL #4 SHALL BE REARRANGED AS FOLLOWS: CIRCUIT #11 TO THE OLD CONCESSION BUILDING AND CIRCUIT #12 TO THE OLD WATER TREATMENT BUILDING ARE TO BE ELIMINATED. THE EXISTING BREAKERS SHALL REMAIN IN PLACE AND BE NOTED AS BLANK. CIRCUIT #13 TO THE SHOWER BUILDING IS TO BE UPGRADED TO A NEW 150A-2 POLE CIRCUIT BREAKER TO MATCH THE OTHER BREAKERS. CIRCUIT #14 HAS NO CHANGE. THERE MAY BE AN ADDITIONAL BREAKER TO THE LIFT STATION. SEE NOTE BELOW.

ELECTRICAL CONTRACTOR SHALL INVESTIGATE THE SERVICE TO THE EXISTING LIFT STATION TO DETERMINE IF THE SYSTEM MEETS CODE. IT IS SUSPECTED THAT THE SERVICE TO THE LIFT STATION IS BEING PROVIDED BY LEGS OFF OF TWO SEPARATE DISTRIBUTION PANELS (#3 AND #4) AND A GROUND SPLICE BOX (PER THE OLD PLANS). A REPAIR/UPGRADE TO THIS CIRCUIT WILL BE HANDLED BY CHANGE ORDER AFTER THE INVESTIGATION AND PROPOSED REMEDY IS PRESENTED IF IT IS FOUND TO BE NON-CONFORMING OR A SAFETY ISSUE.

02 NOT USED
SCALE: 1/32" = 1'-0"

01 DEMOLITION PLAN - BOAT RAMP SITE
SCALE: 1/32" = 1'-0"

KEYNOTES

1. DEMOLISH EXISTING DRIVE/SIDEWALK, FILL, COMPACT, AND RESTORE DISTURBED AREA.
2. DEMOLISH EXISTING SHOWER BUILDING, PHASE 1 OF CONSTRUCTION, REFER TO PROJECT SCOPE FOR DETAILS.
3. DEMOLISH EXISTING RESTROOM BUILDING, PHASE 2 OF CONSTRUCTION, REFER TO PROJECT SCOPE FOR DETAILS.
4. REMOVE EXISTING CONCRETE SHELTER SLAB, PROTECT EXISTING SHELTER IN PLACE AND PREP GROUND FOR NEW SLAB. ALTERNATE #1: DEMOLISH EXISTING SHELTER BUILDING.
5. DEMOLISH EXISTING PIT LATRINE, PHASE 1 OF CONSTRUCTION, REFER TO PROJECT SCOPE FOR DETAILS.
6. DEMOLISH EXISTING ELECTRICAL POLE, REMOVE AND DISPOSE POLE AND LIGHT, DISCONNECT ELECTRICAL TO LIGHT.
7. DEMOLISH EXISTING FOUNDATIONS AND CONCRETE SLABS, RESTORE AREA.

GENERAL NOTES

A. ALL ELECTRICAL SHALL BE NEC CODE COMPLIANT AND ALL CODES AND ORDINANCES SHALL BE FOLLOWED WHICH ARE REQUIRED BY LAW. ALL OUTLETS TO BE MOUNTED AT 42" A.F.F.
B. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
C. PRECAST CONCRETE MODULAR BUILDING BY HUFFCUTT OR PRE-APPROVED EQUAL.
D. ALL SANITARY AND WATER LINE WORK SHALL COMPLY WITH ALL APPLICABLE CODES AS NECESSARY BY LAW PER STATE AND LOCAL JURISDICTION.
E. REMOVE ALL TREES WHICH CONFLICT WITH THE INSTALLATION OF THE NEW SHOWER/RESTROOM BUILDING, PROTECT ALL TREES IN PLACE WHICH MAY REMAIN.
F. GRADE EXISTING SITE -6" BELOW CURRENT BUILDING ELEVATION FOR PROPER INSTALL OF PRECAST BUILDING. COORDINATE WITH DNR INSPECTOR AND PRECAST SHOWER BUILDING MANUFACTURER PRIOR TO PROJECT COMMENCEMENT.
G. CONTRACTOR TO RESTORE ALL DISTURBED AREAS OF CONSTRUCTION.

CONSULTANT:

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BOAT RAMP DEMO PLAN & ELECTRICAL NARRATIVE

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-006

01 CAMPGROUND SITE PLAN
SCALE: 1/64" = 1'-0"

KEYNOTES

1. 4-HOLE FAMILY STYLE, IOWA STANDARD PRECAST CONCRETE SHOWER BUILDING (JUNIPER).
2. IOWA STANDARD PRECAST CONCRETE SHOWER BUILDING (NORWAY PINE).
3. 1-HOLE, LEFT HANDED, IOWA STANDARD PRECAST CONCRETE PIT LATRINE BUILDING.
4. 24" NEENAH CAST IRON DETECTION PANELS, ENTIRE WIDTH OF SIDEWALK.
5. 5'-0" CONCRETE SIDEWALK, REFER TO A-013 FOR DETAILS.
6. DRAIN-DOWN PIT, REFER TO 01/A-013 FOR DETAILS.
7. EXISTING ROAD TO REMAIN.
8. ADA PARKING SIGN, REFER TO SHEET A-013 FOR DETAILS.
9. ELECTRICAL LINE TO PROPOSED SHOWER BUILDING.
10. CURB RAMP SIDEWALK, REFER SHEET A-013 FOR DETAILS.
11. EXISTING ELECTRICAL DISTRIBUTION PANEL TO REMAIN.
12. EXISTING SIDEWALK TO REMAIN.
13. 4" SCHEDULE 40 PVC SANITARY LINE FROM NEW BUILDING TO EXISTING MANHOLE.
14. SANITARY MANHOLE, REFER TO SHEET A-014 FOR MORE INFORMATION.
15. 2" COPPER WATER SERVICE LINE TO SHOWER BUILDING.
16. ELECTRICAL HAND-HOLE BOX, CONNECT EXISTING LINE TO NEW LINE TO SHOWER BUILDING.
17. EXISTING PARKING AREA TO REMAIN.
18. EXISTING DISTRIBUTION PANEL TO REMAIN, RUN NEW ELECTRICAL TO BUILDING.
19. EXISTING ELECTRICAL LINE.
20. PRECAST CONCRETE WHEEL STOPS, REFER TO SHEET A-013 FOR DETAILS.
21. CONCRETE ADA PARKING AREA WITH STRIPING AND SYMBOL PAINT, REFER TO SHEET A-012 FOR DETAILS. DO NOT STRIPE OR SIGN THE PARKING AREA BY CABINS.
22. NEW CONCRETE FULL HOOK-UP CAMPSITE, REFER TO SHEET C-1 FOR MORE INFORMATION.
23. EXISTING SHELTER TO REMAIN, REPLACE CONCRETE SLAB, REFER TO 01/A-012 FOR MORE INFORMATION.
24. EXISTING SANITARY MANHOLE TO REMAIN.
25. EXISTING WATER PIT TO REMAIN.
26. SANITARY CLEANOUT WITH CAST IRON COVER, WITH CAP, CAST INTO SIDEWALK FLUSH.
27. 6" THICK CONCRETE SHELTER SLAB WITH 4" SUBBASE. #4 REBAR 36" O.C. BOTH DIRECTIONS.
28. EXISTING SHELTER COLUMN, $\frac{1}{2}$" EXPANSION AND FLOWABLE POLYURETHANE CAULK CONTINUOUS.
29. PROPOSED SHELTER BUILDING SLAB, SLAB ELEVATION DETERMINED BY DNR INSPECTOR, SLOPE 1% TO DRAIN WATER. REFER TO REFERENCE PLAN SHEET A-500.
30. 6'-0" X 4'-0" X 6" CONCRETE PAD WITH #4 EPOXY COATED REBAR 36" O.C. BOTH DIRECTIONS AND 4" SUBBASE. DOWEL INTO SHELTER PAD WITH 24" LONG, #4 DOWELS 12" O.C.
31. INSTALL ONE NEW PILOT ROCK Q3-2460 BB SURFACE MOUNT GRILL WITH S7 SHELF.
32. EXISTING FIRE-RING TO BE REINSTALLED.
33. 6" DEEP X 6" RING OF PEA GRAVEL AROUND ENTIRE PERIMETER OF FIRE-RING. INSTALL $\frac{1}{8}$" STEEL RETAINER RING AROUND ROCK IN GRASSED AREA. GRAVEL SHOULD BE FLUSH WITH PATIO.
34. 6" THICK CONCRETE PATIO WITH #4 REBAR 24" O.C., BOTH DIRECTIONS, OVER 4" SUBBASE.
35. EXISTING BUILDING TO REMAIN, $\frac{1}{2}$" EXPANSION WITH FLOWABLE POLYURETHANE CAULK CONTINUOUS.
36. STOOP FOOTING, REFER TO SHEET A-013 FOR MORE INFORMATION.

GENERAL NOTES

A. ALL ELECTRICAL SHALL BE NEC CODE COMPLIANT AND ALL CODES AND ORDINANCES SHALL BE FOLLOWED WHICH ARE REQUIRED BY LAW. ALL OUTLETS TO BE MOUNTED AT 42" A.F.F.
B. ALL SANITARY AND WATER LINE WORK SHALL COMPLY WITH ALL APPLICABLE CODES AS NECESSARY BY LAW PER STATE AND LOCAL JURISDICTION.
C. REMOVE ALL TREES WHICH CONFLICT WITH THE INSTALLATION OF THE NEW SHOWER/RESTROOM BUILDING, PROTECT ALL TREES IN PLACE WHICH MAY REMAIN.
D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
E. PRECAST CONCRETE MODULAR BUILDING BY HUFFCUTT OR PRE-APPROVED EQUAL. ALL PRE-CAST SHOWERS AND RESTROOM FACILITIES SHALL RECEIVE A FULL PERIMETER FOOTING AND BETWEEN ALL MODULES, REFER TO SHEET A-013.
F. GRADE EXISTING SITE -6" BELOW CURRENT BUILDING ELEVATION FOR PROPER INSTALL OF PRECAST BUILDING. COORDINATE WITH DNR INSPECTOR AND PRECAST SHOWER BUILDING MANUFACTURER PRIOR TO PROJECT COMMENCEMENT.
G. CONTRACTOR TO RESTORE ALL DISTURBED AREAS OF CONSTRUCTION. FILL, COMPACT, AND SEED.

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
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CAMPGROUND SITE PLAN

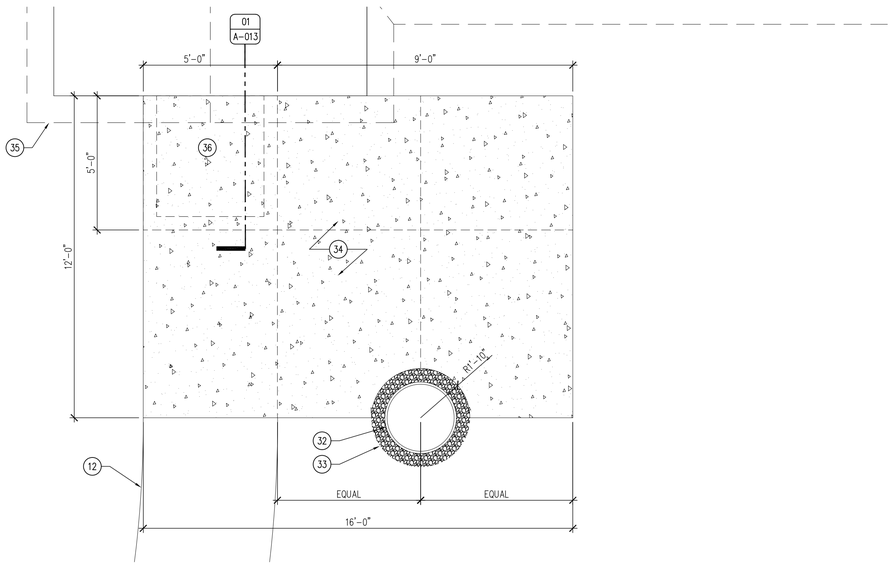
SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-010

03 NOT USED
SCALE: 1/4" = 1'-0"



02 ENLARGED CABIN PATIO PLAN
SCALE: 3/8" = 1'-0"

01 CABIN SITE PLAN
SCALE: 1/32" = 1'-0"

KEYNOTES

1. 4-HOLE FAMILY STYLE, IOWA STANDARD PRECAST CONCRETE SHOWER BUILDING (JUNIPER).
2. IOWA STANDARD PRECAST CONCRETE SHOWER BUILDING (NORWAY PINE).
3. 1-HOLE, LEFT HANDED, IOWA STANDARD PRECAST CONCRETE PIT LATRINE BUILDING.
4. 24" NEENAH CAST IRON DETECTION PANELS, ENTIRE WIDTH OF SIDEWALK.
5. 5'-0" CONCRETE SIDEWALK, REFER TO A-013 FOR DETAILS.
6. DRAIN-DOWN PIT, REFER TO 01/A-013 FOR DETAILS.
7. EXISTING ROAD TO REMAIN.
8. ADA PARKING SIGN, REFER TO SHEET A-013 FOR DETAILS.
9. ELECTRICAL LINE TO PROPOSED SHOWER BUILDING.
10. CURB RAMP SIDEWALK, REFER SHEET A-013 FOR DETAILS.
11. EXISTING ELECTRICAL TRANSFORMER TO REMAIN.
12. EXISTING SIDEWALK TO REMAIN.
13. 4" SCHEDULE 40 PVC SANITARY LINE FROM NEW BUILDING TO EXISTING MANHOLE.
14. SANITARY MANHOLE, REFER TO SHEET A-014 FOR MORE INFORMATION.
15. 2" COPPER WATER SERVICE LINE TO SHOWER BUILDING.
16. ELECTRICAL HAND-HOLE BOX, CONNECT EXISTING LINE TO NEW LINE TO SHOWER BUILDING.
17. EXISTING PARKING AREA TO REMAIN.
18. EXISTING DISTRIBUTION PANEL TO REMAIN, RUN NEW ELECTRICAL TO BUILDING.
19. EXISTING ELECTRICAL LINE.
20. PRECAST CONCRETE WHEEL STOPS, REFER TO SHEET A-013 FOR DETAILS.
21. CONCRETE ADA PARKING AREA WITH STRIPING AND SYMBOL PAINT, REFER TO SHEET A-012 FOR DETAILS. DO NOT STRIPE OR SIGN THE PARKING AREA BY CABINS.
22. NEW CONCRETE FULL HOOK-UP CAMPSITE, REFER TO SHEET C-1 FOR MORE INFORMATION.
23. EXISTING SHELTER TO REMAIN, REPLACE CONCRETE SLAB, REFER TO 01/A-012 FOR MORE INFORMATION.
24. EXISTING SANITARY MANHOLE TO REMAIN.
25. EXISTING WATER PIT TO REMAIN.
26. SANITARY CLEANOUT WITH CAST IRON COVER, WITH CAP, CAST INTO SIDEWALK FLUSH.
27. 6" THICK CONCRETE SHELTER SLAB WITH 4" SUBBASE. #4 REBAR 36" O.C. BOTH DIRECTIONS.
28. EXISTING COLUMN, $\frac{1}{2}$" EXPANSION AND FLOWABLE POLYURETHANE CAULK CONTINUOUS.
29. PROPOSED SHELTER BUILDING SLAB, SLAB ELEVATION DETERMINED BY DNR INSPECTOR, SLOPE 1% TO DRAIN WATER. REFER TO REFERENCE PLAN SHEET A-500.
30. 6'-0" X 4'-0" X 6" CONCRETE PAD WITH #4 EPOXY COATED REBAR 36" O.C. BOTH DIRECTIONS AND 4" SUBBASE. DOWEL INTO SHELTER PAD WITH 24" LONG, #4 DOWELS 12" O.C.
31. INSTALL ONE NEW PILOT ROCK Q3-2460 B8 SURFACE MOUNT GRILL WITH S7 SHELF.
32. EXISTING FIRE-RING TO BE REINSTALLED.
33. 6" DEEP X 6" RING OF PEA GRAVEL AROUND ENTIRE PERIMETER OF FIRE-RING. INSTALL $\frac{1}{8}$" STEEL RETAINER RING AROUND ROCK IN GRASSED AREA. GRAVEL SHOULD BE FLUSH WITH PATIO.
34. 6" THICK CONCRETE PATIO WITH #4 REBAR 24" O.C., BOTH DIRECTIONS, OVER 4" SUBBASE.
35. EXISTING BUILDING TO REMAIN, $\frac{1}{2}$" EXPANSION WITH FLOWABLE POLYURETHANE CAULK CONTINUOUS.
36. STOOP FOOTING, REFER TO SHEET A-013 FOR MORE INFORMATION.

GENERAL NOTES

A. ALL ELECTRICAL SHALL BE NEC CODE COMPLIANT AND ALL CODES AND ORDINANCES SHALL BE FOLLOWED WHICH ARE REQUIRED BY LAW. ALL OUTLETS TO BE MOUNTED AT 42" A.F.F.
B. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
C. PRECAST CONCRETE MODULAR BUILDING BY HUFFCUTT OR PRE-APPROVED EQUAL.
D. ALL SANITARY AND WATER LINE WORK SHALL COMPLY WITH ALL APPLICABLE CODES AS NECESSARY BY LAW PER STATE AND LOCAL JURISDICTION.
E. REMOVE ALL TREES WHICH CONFLICT WITH THE INSTALLATION OF THE NEW SHOWER/RESTROOM BUILDING, PROTECT ALL TREES IN PLACE WHICH MAY REMAIN.
F. GRADE EXISTING SITE -6" BELOW CURRENT BUILDING ELEVATION FOR PROPER INSTALL OF PRECAST BUILDING. COORDINATE WITH DNR INSPECTOR AND PRECAST SHOWER BUILDING MANUFACTURER PRIOR TO PROJECT COMMENCEMENT.
G. CONTRACTOR TO RESTORE ALL DISTURBED AREAS OF CONSTRUCTION.

CONSULTANT:

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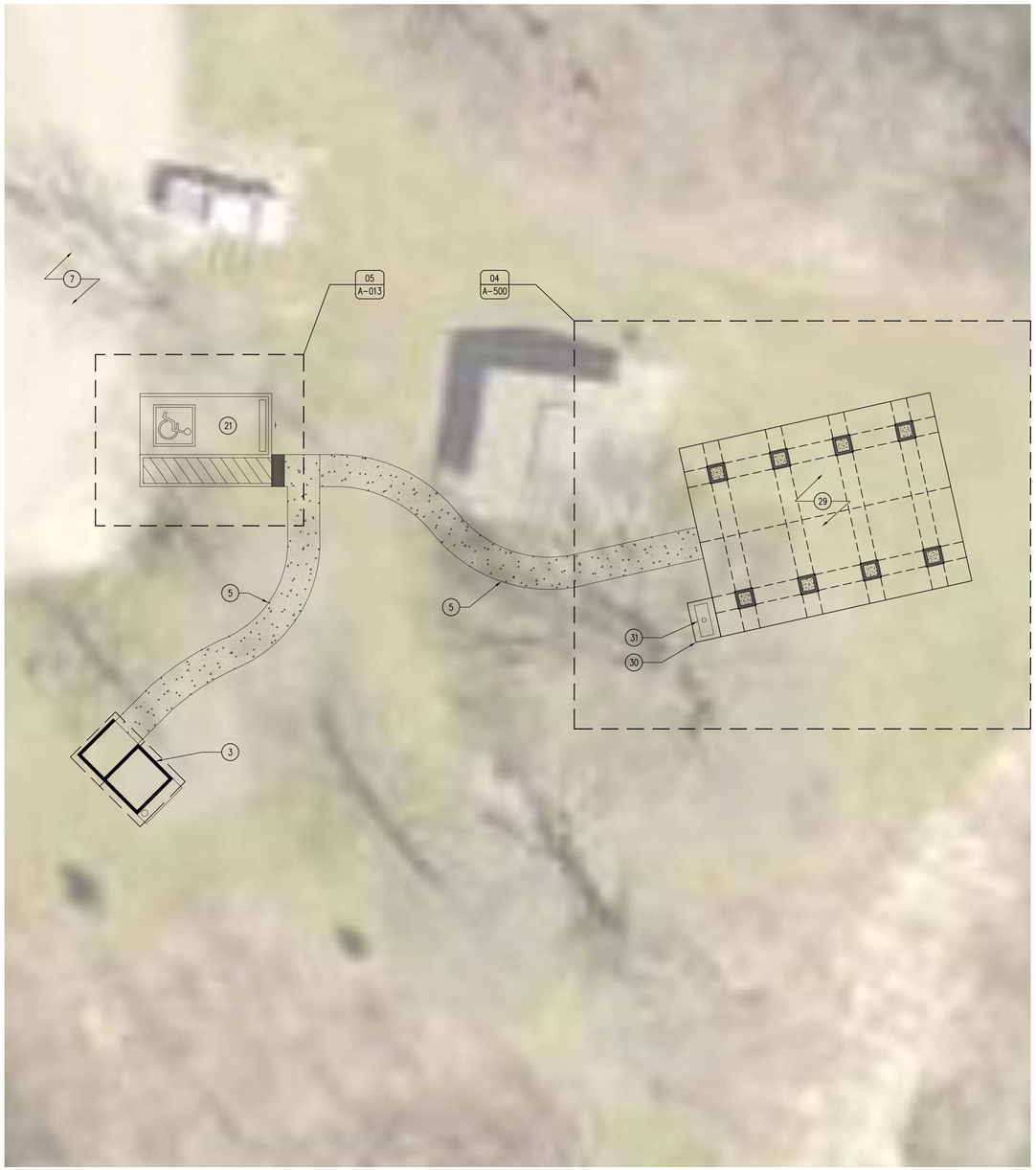
CABIN SITE PLAN

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

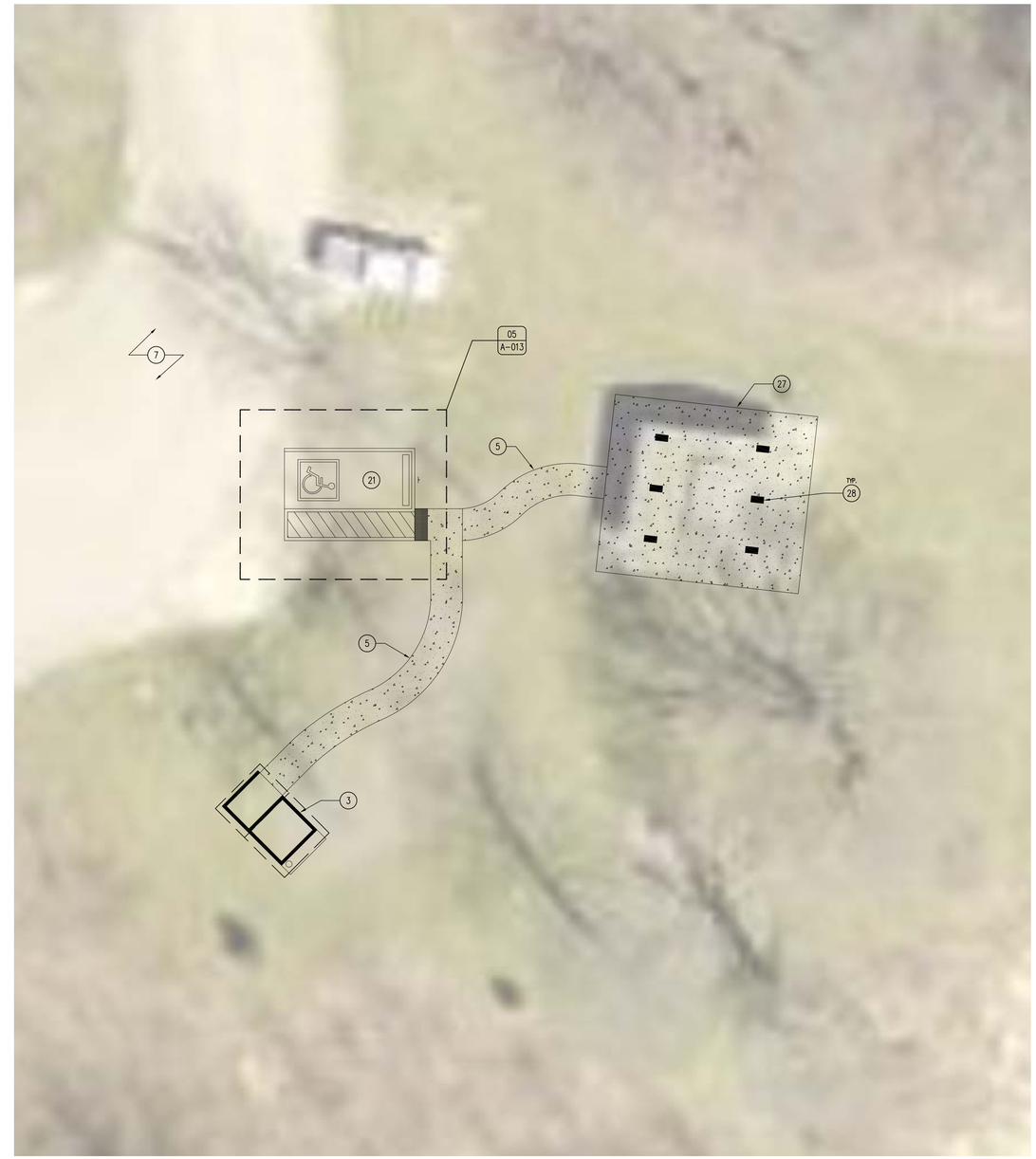
22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-011



02 ALTERNATE #1: DESIGN GUIDE SHELTER, SIDEWALK, PARKING, & PIT LATRINE
SCALE: 3/32" = 1'-0"



01 ALTERNATE #2: EXISTING SHELTER SLAB, SIDEWALK, PARKING, & PIT LATRINE
SCALE: 3/32" = 1'-0"

KEYNOTES

1. 4-HOLE FAMILY STYLE, IOWA STANDARD PRECAST CONCRETE SHOWER BUILDING (JUNIPER).
2. IOWA STANDARD PRECAST CONCRETE SHOWER BUILDING (NORWAY PINE).
3. 1-HOLE, LEFT HANDED, IOWA STANDARD PRECAST CONCRETE PIT LATRINE BUILDING.
4. 24" NEENAH CAST IRON DETECTION PANELS, ENTIRE WIDTH OF SIDEWALK.
5. 5'-0" CONCRETE SIDEWALK, REFER TO A-013 FOR DETAILS.
6. DRAIN-DOWN PIT, REFER TO 01/A-013 FOR DETAILS.
7. EXISTING ROAD TO REMAIN.
8. ADA PARKING SIGN, REFER TO SHEET A-013 FOR DETAILS.
9. ELECTRICAL LINE TO PROPOSED SHOWER BUILDING.
10. CURB RAMP SIDEWALK, REFER SHEET A-013 FOR DETAILS.
11. EXISTING ELECTRICAL DISTRIBUTION PANEL TO REMAIN.
12. EXISTING SIDEWALK TO REMAIN.
13. 4" SCHEDULE 40 PVC SANITARY LINE FROM NEW BUILDING TO EXISTING MANHOLE.
14. SANITARY MANHOLE, REFER TO SHEET A-014 FOR MORE INFORMATION.
15. 2" COPPER WATER SERVICE LINE TO SHOWER BUILDING.
16. ELECTRICAL HAND-HOLE BOX, CONNECT EXISTING LINE TO NEW LINE TO SHOWER BUILDING.
17. EXISTING PARKING AREA TO REMAIN.
18. EXISTING DISTRIBUTION PANEL TO REMAIN, RUN NEW ELECTRICAL TO BUILDING.
19. EXISTING ELECTRICAL LINE.
20. PRECAST CONCRETE WHEEL STOPS, REFER TO SHEET A-013 FOR DETAILS.
21. CONCRETE ADA PARKING AREA WITH STRIPING AND SYMBOL PAINT, REFER TO SHEET A-012 FOR DETAILS. DO NOT STRIPE OR SIGN THE PARKING AREA BY CABINS.
22. NEW CONCRETE FULL HOOK-UP CAMPSITE, REFER TO SHEET C-1 FOR MORE INFORMATION.
23. EXISTING SHELTER TO REMAIN, REPLACE CONCRETE SLAB, REFER TO 01/A-012 FOR MORE INFORMATION.
24. EXISTING SANITARY MANHOLE TO REMAIN.
25. EXISTING WATER PIT TO REMAIN.
26. SANITARY CLEANOUT WITH CAST IRON COVER, WITH CAP, CAST INTO SIDEWALK FLUSH.
27. 6" THICK CONCRETE SHELTER SLAB WITH 4" SUBBASE. #4 REBAR 36" O.C. BOTH DIRECTIONS.
28. EXISTING SHELTER COLUMN, $\frac{1}{2}$" EXPANSION AND FLOWABLE POLYURETHANE CAULK CONTINUOUS.
29. PROPOSED SHELTER BUILDING SLAB, SLAB ELEVATION DETERMINED BY DNR INSPECTOR, SLOPE 1% TO DRAIN WATER. REFER TO REFERENCE PLAN SHEET A-500.
30. 6'-0" X 4'-0" X 6" CONCRETE PAD WITH #4 EPOXY COATED REBAR 36" O.C. BOTH DIRECTIONS AND 4" SUBBASE. DOWEL INTO SHELTER PAD WITH 24" LONG, #4 DOWELS 12" O.C.
31. INSTALL ONE NEW PILOT ROCK Q3-2460 B8 SURFACE MOUNT GRILL WITH S7 SHELF.
32. EXISTING FIRE-RING TO BE REINSTALLED.
33. 6" DEEP X 6" RING OF PEA GRAVEL AROUND ENTIRE PERIMETER OF FIRE-RING. INSTALL $\frac{1}{8}$" STEEL RETAINER RING AROUND ROCK IN GRASSED AREA. GRAVEL SHOULD BE FLUSH WITH PATIO.
34. 6" THICK CONCRETE PATIO WITH #4 REBAR 24" O.C., BOTH DIRECTIONS, OVER 4" SUBBASE.
35. EXISTING BUILDING TO REMAIN, $\frac{1}{2}$" EXPANSION WITH FLOWABLE POLYURETHANE CAULK CONTINUOUS.
36. STOOP FOOTING, REFER TO SHEET A-013 FOR MORE INFORMATION.

GENERAL NOTES

A. ALL ELECTRICAL SHALL BE NEC CODE COMPLIANT AND ALL CODES AND ORDINANCES SHALL BE FOLLOWED WHICH ARE REQUIRED BY LAW. ALL OUTLETS TO BE MOUNTED AT 42" A.F.F.
B. ALL SANITARY AND WATER LINE WORK SHALL COMPLY WITH ALL APPLICABLE CODES AS NECESSARY BY LAW PER STATE AND LOCAL JURISDICTION.
C. REMOVE ALL TREES WHICH CONFLICT WITH THE INSTALLATION OF THE NEW SHOWER/RESTROOM BUILDING, PROTECT ALL TREES IN PLACE WHICH MAY REMAIN.
D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
E. PRECAST CONCRETE MODULAR BUILDING BY HUFFCUTT OR PRE-APPROVED EQUAL. ALL PRE-CAST SHOWERS AND RESTROOM FACILITIES SHALL RECEIVE A FULL PERIMETER FOOTING AND BETWEEN ALL MODULES, REFER TO SHEET A-013.
F. GRADE EXISTING SITE -6" BELOW CURRENT BUILDING ELEVATION FOR PROPER INSTALL OF PRECAST BUILDING. COORDINATE WITH DNR INSPECTOR AND PRECAST SHOWER BUILDING MANUFACTURER PRIOR TO PROJECT COMMENCEMENT.
G. CONTRACTOR TO RESTORE ALL DISTURBED AREAS OF CONSTRUCTION. FILL, COMPACT, AND SEED.

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
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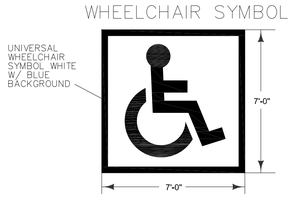
SHELTER REFERENCE FLOOR PLANS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-012

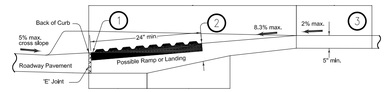


All dimensions shown are nominal. For proper proportion details, see current MUTCD Standard Highway Signs and Markings booklet.

Pavement word, symbol, and arrow markings are to be proportionally scaled to fit within the width of the facility upon which they are applied.

IOWA DOT STANDARD ROAD PLAN PM-111 SYMBOLS AND LEGENDS

09 DETAIL – UNIVERSAL SYMBOL
NTS



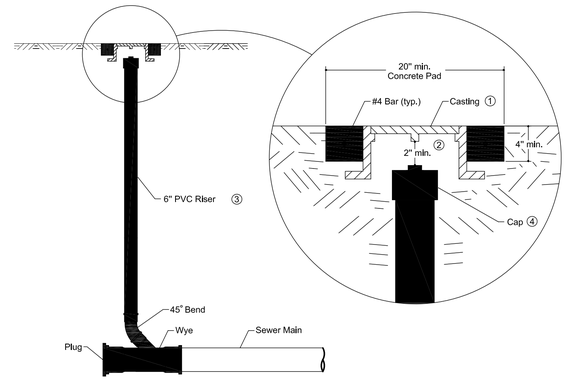
TYPICAL SECTION – CURB RAMP

1 Install a 24" deep (min) x width of sidewalk of Neenah cast-iron detectable warnings at entrance to vehicular traffic lane.

2 Provide a minimum of 6" of concrete below the detectable warning panel.

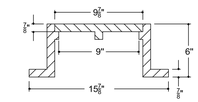
3 Landing: Maximum slope of 2% in any direction.

08 DETAIL – CURB RAMP
NTS



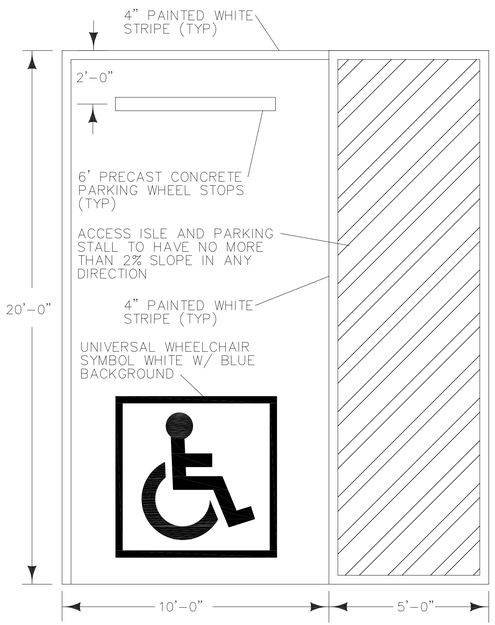
CLEANOUT

1. Standard duty casting complying with AASHTO M 306. Mark lid with "Sanitary" or "Sanitary C.O."
2. Do not allow casting to bear on top of riser pipe.
3. 6 inch PVC Service Pipe
4. Threaded PVC cap or iron body ferrule with brass screw plug

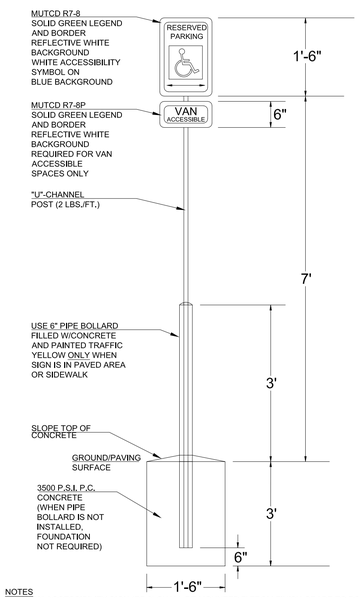


CASTING 1
(Dimensions are nominal)

03 DETAIL – CLEAN-OUT
SCALE: NTS



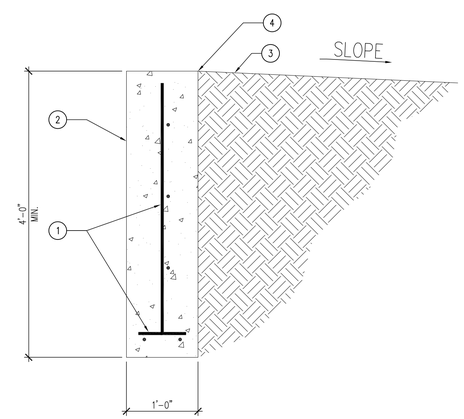
07 HANDICAP PARKING SPACE
NTS



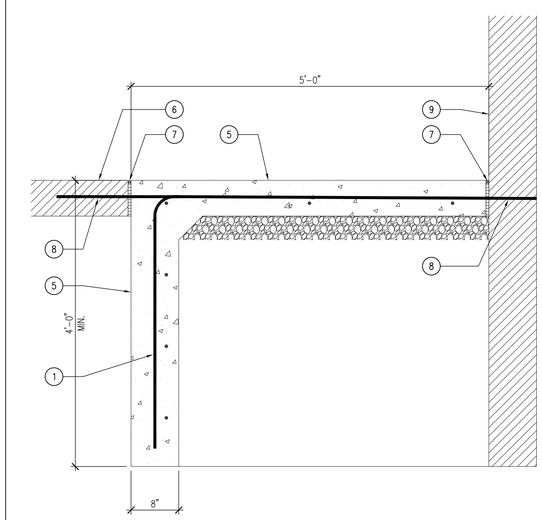
NOTES
1. 12"x18" ACCESSIBILITY SIGN (R7-8) SHALL BE MOUNTED 7' FROM FINISH GRADE TO BOTTOM EDGE OF SIGN FACE. MOUNTING HEIGHT MAY BE REDUCED TO 5' IF PLACED IN A LANDSCAPE AREA IN WHICH PEDESTRIANS ARE NOT EXPECTED TO USE.
2. BOLLARD MAY BE OMITTED IF INSTALLED IN LANDSCAPE AREAS. WHEN INSTALLED IN LANDSCAPE AREAS, MOUNTING POST SHALL BE DRIVEN A MINIMUM OF 3' BELOW FINISHED GRADE. ALTERNATE MOUNTING POSTS MUST BE APPROVED BY THE FIELD INSPECTOR PRIOR TO CONSTRUCTION.
3. SIGNAGE SHALL BE INSTALLED IN FRONT OF EACH ACCESSIBLE SPACE, CENTERED ON THE WIDTH OF THE SPACE.
4. REFER TO AMERICANS WITH DISABILITIES ACT AND ARCHITECTURAL BARRIERS ACT ACCESSIBILITY GUIDELINES (ADAAG), LATEST EDITION, FOR REQUIRED NUMBER OF ACCESSIBLE SPACE. PER ADAAG, ONE VAN ACCESSIBLE SPACE SHALL BE PROVIDED, MINIMUM, WITH ADDITIONAL VAN ACCESSIBLE SPACES PER ADAAG REQUIREMENTS.
5. ALL SIGNAGE SHALL BE ENGINEER GRADE .080 ALUMINUM REFLECTIVE SIGN MEETING THE REQUIREMENTS OF THE MUTCD AND ADAAG.

06 HANDICAP SIGN
NTS

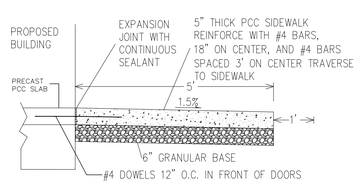
* FOOTING TO BE PLACED AROUND ENTIRE PERIMETER OF PRECAST SHOWER BUILDINGS AND BETWEEN ALL MODULES.
* FOLLOW ALL MANUFACTURER INSTALLATION INSTRUCTIONS.



02 DETAIL – PRECAST SHOWER BUILDING FOOTING
SCALE: 1'-0" = 1'-0"

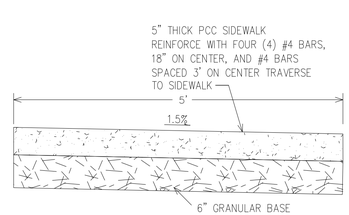


01 DETAIL – STOOP FOOTING
SCALE: 1'-0" = 1'-0"



PERIMETER OF BUILDING

05 DETAIL – BUILDING SIDEWALK
NTS



SIDEWALK DETAIL

04 DETAIL – SIDEWALK
NTS

KEYNOTES

1. #4 REBAR 12" O.C. BOTH DIRECTIONS WITH 2 #4 REBAR RUNNING CONTINUOUS AT THE BASE OF FOOTING.
2. 12" X 48" DEEP, CONCRETE TRENCH FOOTING. ENTIRE BUILDING PERIMETER AND AT ALL PRECAST WALLS WHERE UNITS CONNECT.
3. GRADE, RESLOPE AWAY FROM BUILDING.
4. FORM TOP 6" OF FOUNDATION TO MAKE A CLEAN EXTERIOR EDGE.
5. STOOP FOOTING, 5'-0" X 5'-0" X 6" THICK CONCRETE SIDEWALK WITH #4 REBAR 24" O.C. BOTH DIRECTIONS OVER 4" OF SUBBASE, TURNDOWN FOUNDATION, 4'-0" DEEP X 8" THICK WITH #4 REBAR 12" O.C. BOTH DIRECTIONS CONTINUOUS THREE (3) SIDES. CONTRACTOR SHALL INSTALL FIVE (5) NEW STOOP FOOTINGS AT ALL CABINS AND AT EXISTING PARK OFFICE.
6. NEW CONCRETE PATIO AREA, REFER TO SHEET A-011.
7. 1/2" EXPANSION WITH FLOWABLE POLYURETHANE CAULK CONTINUOUS.
8. 2'-0" LONG #4 DOWEL BARS INTO ADJACENT SLAB 18" O.C.
9. EXISTING BUILDING TO REMAIN.

CONSULTANT:

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ENGINEERING SERVICES - WALLACE BUILING
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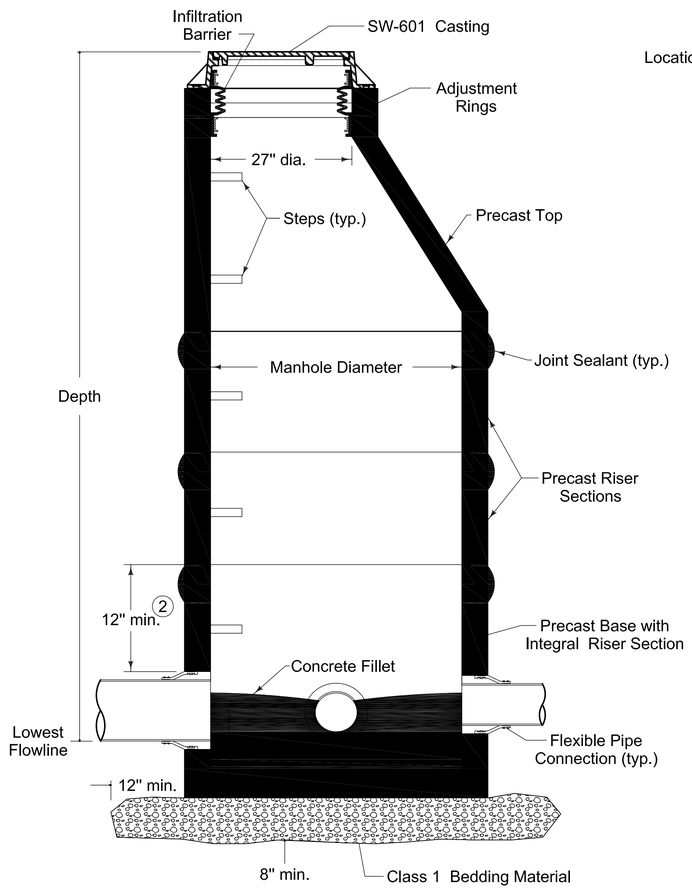
SITE DETAILS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

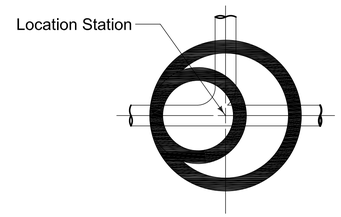
22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-013



TYPICAL SECTION



PLAN

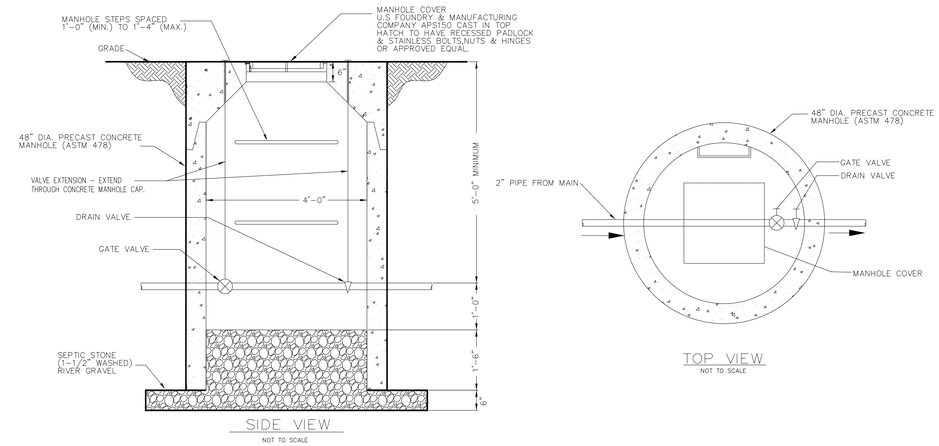
(1) For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.

(2) 12 inch minimum riser height above all pipe openings.

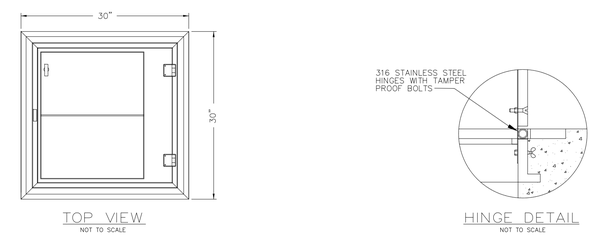
Manhole Diameter (inches)	Maximum Pipe Diameter (1) (inches) for 2 Pipes	
	At 180° Separation	At 90° Separation
48	24	18
60	36	24
72	42	30
84	48	36
96	60	42

* CONTRACTOR SHALL FIELD VERIFY DEPTHS & LOCATIONS WITH DNR INSPECTOR

01 DETAIL – MAN-HOLE
SCALE: NTS

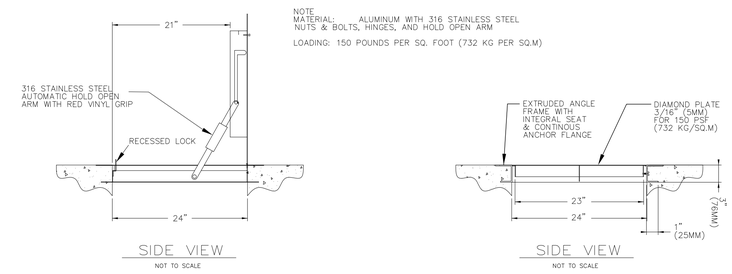


DRAIN-DOWN PIT
NOT TO SCALE



NOTE
MATERIAL: ALUMINUM WITH 316 STAINLESS STEEL NUTS & BOLTS, HINGES, AND HOLD OPEN ARM

LOADING: 150 POUNDS PER SQ. FOOT (732 KG PER SQ.M)



MANHOLE COVER
NOT TO SCALE

01 DETAIL – DRAIN-DOWN PIT
SCALE: NTS

CONSULTANT:

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ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034
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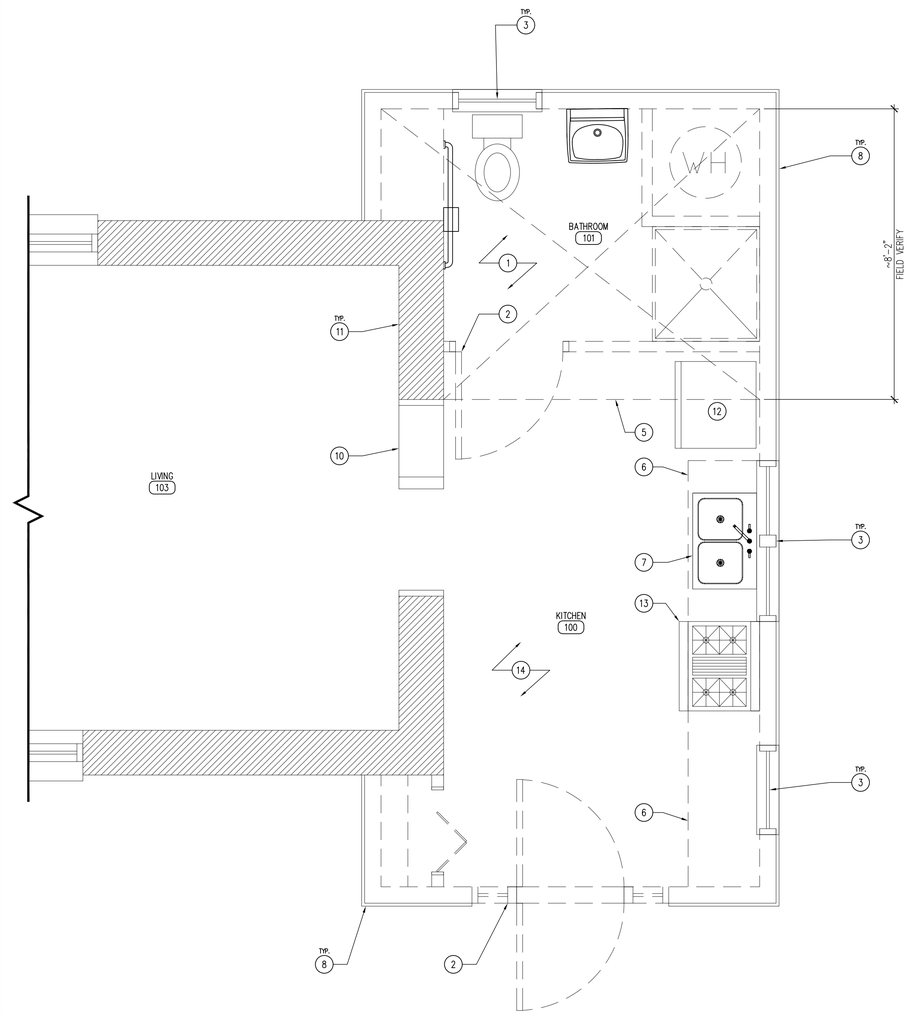
SITE DETAILS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S26
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No:
A-014



01 DEMOLITION FLOOR PLAN – CABINS
SCALE: 1/2" = 1'-0"

02 NOT USED
SCALE: 1/2" = 1'-0"

KEYNOTES

1. DEMOLISH ENTIRE INTERIOR OF BATHROOM, TOILET, SHOWER, SINK, WATER-HEATER AND ALL ACCESSORIES TO BE REMOVED. DISCUSS WITH DNR INSPECTOR WHETHER MATERIALS ARE TO BE SALVAGED.
2. DEMOLISH EXISTING DOOR.
3. EXISTING WINDOW TO REMAIN.
4. DEMOLISH EXISTING FRONT DOOR AND SIDELIGHTS TO ROUGH OPENING.
5. SAW-CUT AND DEMOLISH CONCRETE SLAB IN THE BATHROOM AREA AS SHOWN.
6. DEMOLISH EXISTING CABINETS AND COUNTER TOPS.
7. DEMOLISH KITCHEN SINK AND WATER LINES, REFER TO PLUMBING DRAWINGS.
8. EXISTING EXTERIOR STUD WALL, REMOVE INTERIOR FINISHES, INSULATION, AND ELECTRICAL, PREP FOR INSTALL OF NEW MATERIALS. REFER TO SHEET A-100 AND MEP DRAWINGS FOR MORE INFORMATION.
9. NOT USED.
10. EXISTING BOOKCASE TO REMAIN.
11. EXISTING STONE WALL TO REMAIN.
12. EXISTING REFRIGERATOR TO BE MOVED WHILE WORK IS BEING PERFORMED.
13. EXISTING STOVE/OVEN TO BE MOVED WHILE WORK IS BEING PERFORMED.
14. EXISTING FLOOR FINISH TO REMAIN, PROTECT IN PLACE.

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. REFER TO ELECTRICAL DRAWINGS FOR LIGHTING AND POWER LAYOUTS.
G. CONTRACTOR SHALL CAULK ALL INTERIOR CONCRETE SAW-CUT JOINTS AND ALL EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034
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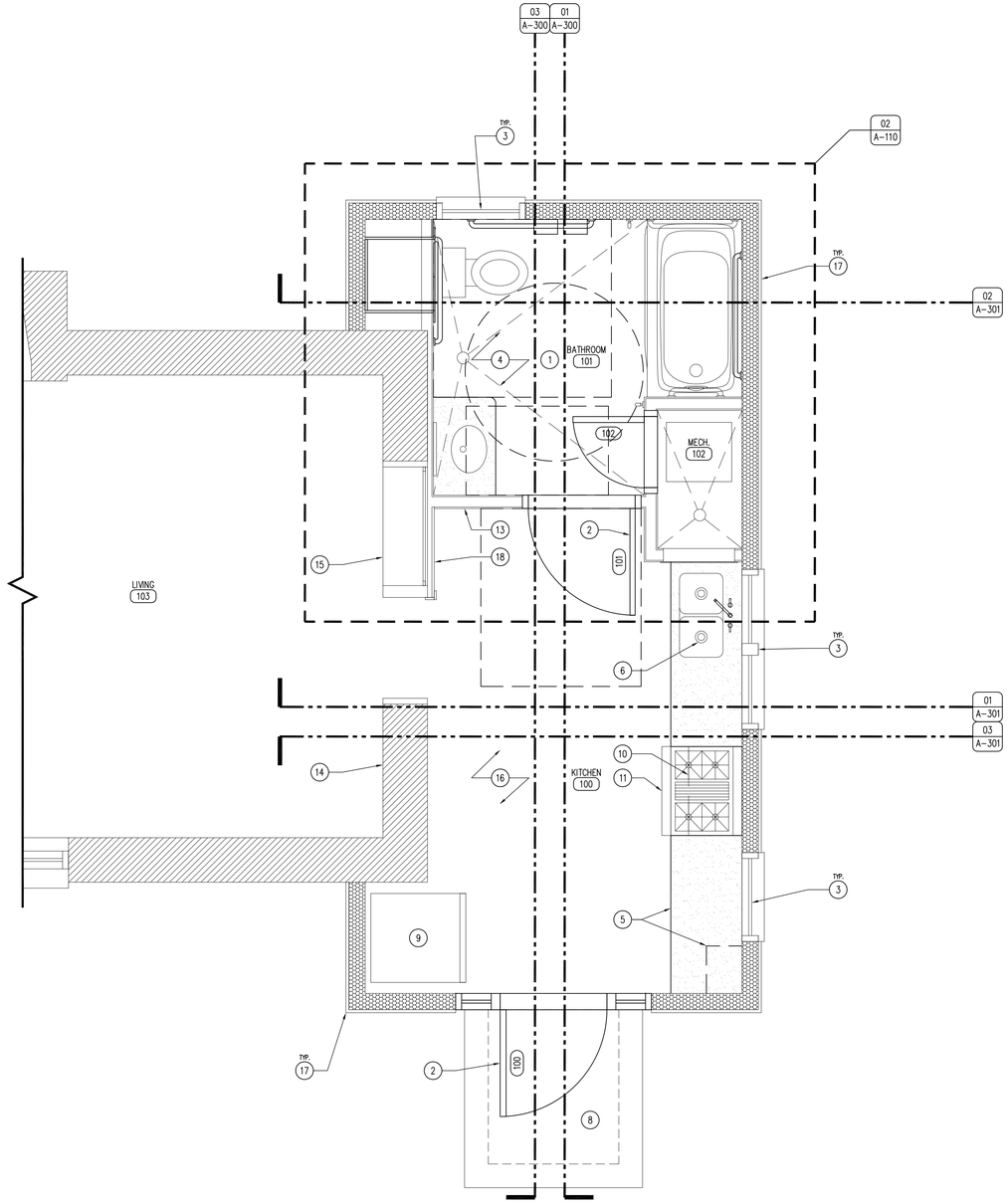
DEMOLITION FLOOR PLANS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

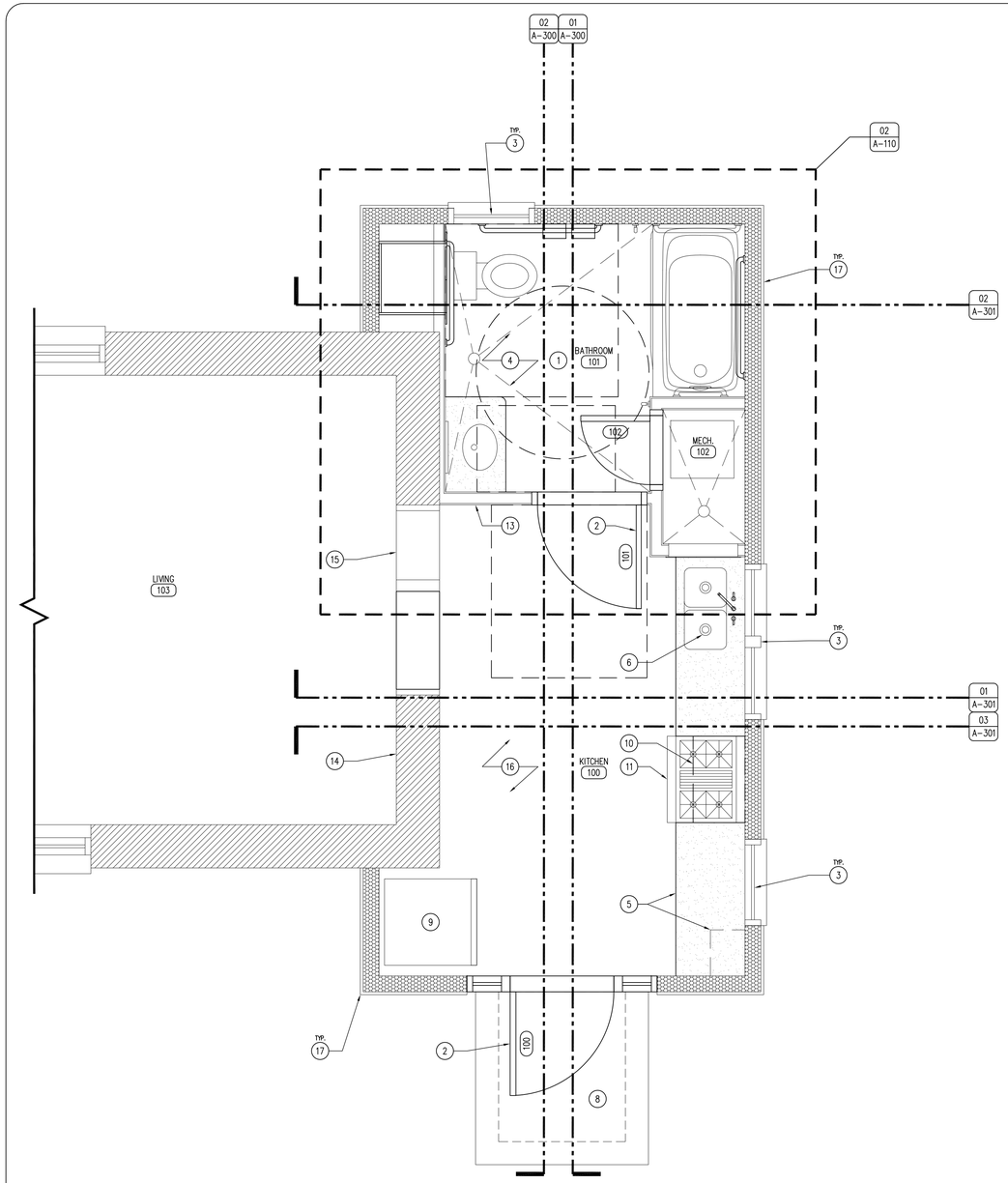
22620 COUNTY HIGHWAY S26
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
CHK'D BY:
PROJECT NUMBER: 19-02-42-01
DATE: 03.17.2020
SHEET No: A-050



02 REFERENCE FLOOR PLAN – CABIN 3
SCALE: 1/2" = 1'-0"



01 REFERENCE FLOOR PLAN – CABIN 1, 2, & 4
SCALE: 1/2" = 1'-0"

KEYNOTES

1. COMPLIANT BATHROOM, REFER TO SHEET A-110 FOR MORE INFORMATION.
2. DOOR AS SCHEDULED, REFER TO SHEET A-600.
3. EXISTING WINDOW TO REMAIN.
4. FLOOR FINISH AS SCHEDULED, REFER TO SHEET A-600.
5. QUARTZ COUNTER-TOP AND CABINETS, REFER TO SHEET A-600.
6. UNDERMOUNT ADA SINK, REFER TO PLUMBING DRAWINGS.
7. CONCRETE PATIO, REFER TO SHEET A-011.
8. STOOP FOOTING, REFER TO SHEET A-010.
9. REFRIGERATOR BY OWNER.
10. MICROWAVE BY OWNER.
11. OVEN BY OWNER.
12. EXISTING WINDOWS TO REMAIN.
13. STUD WALL, REFER TO A-101 AND A-002 FOR MORE INFORMATION.
14. EXISTING WALL TO REMAIN.
15. EXISTING BOOK SHELVES AND DOOR ARCH TO REMAIN.
16. EXISTING FLOOR TO REMAIN.
17. EXISTING WALL TO RECEIVE 5" OF CLOSED-CELL SPRAY-FOAM, REFER TO SHEET A-002.
18. 2X STUD WALL WITH ¾" HARD MAPLE PLYWOOD WITH ¾" HARD MAPLE TRIM, REFER TO SHEET A-600.

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. REFER TO ELECTRICAL DRAWINGS FOR LIGHTING AND POWER LAYOUTS.
G. CONTRACTOR SHALL CAULK ALL INTERIOR CONCRETE SAW-CUT JOINTS AND ALL EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034
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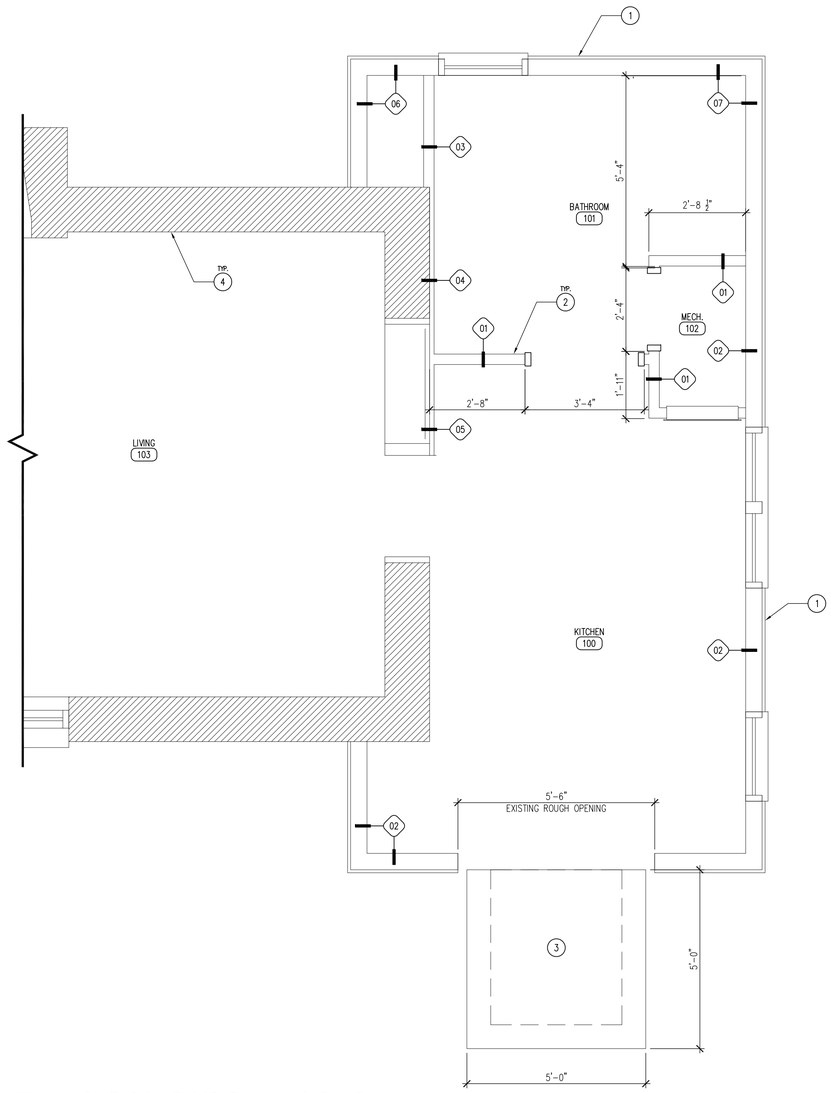
REFERENCE FLOOR PLANS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

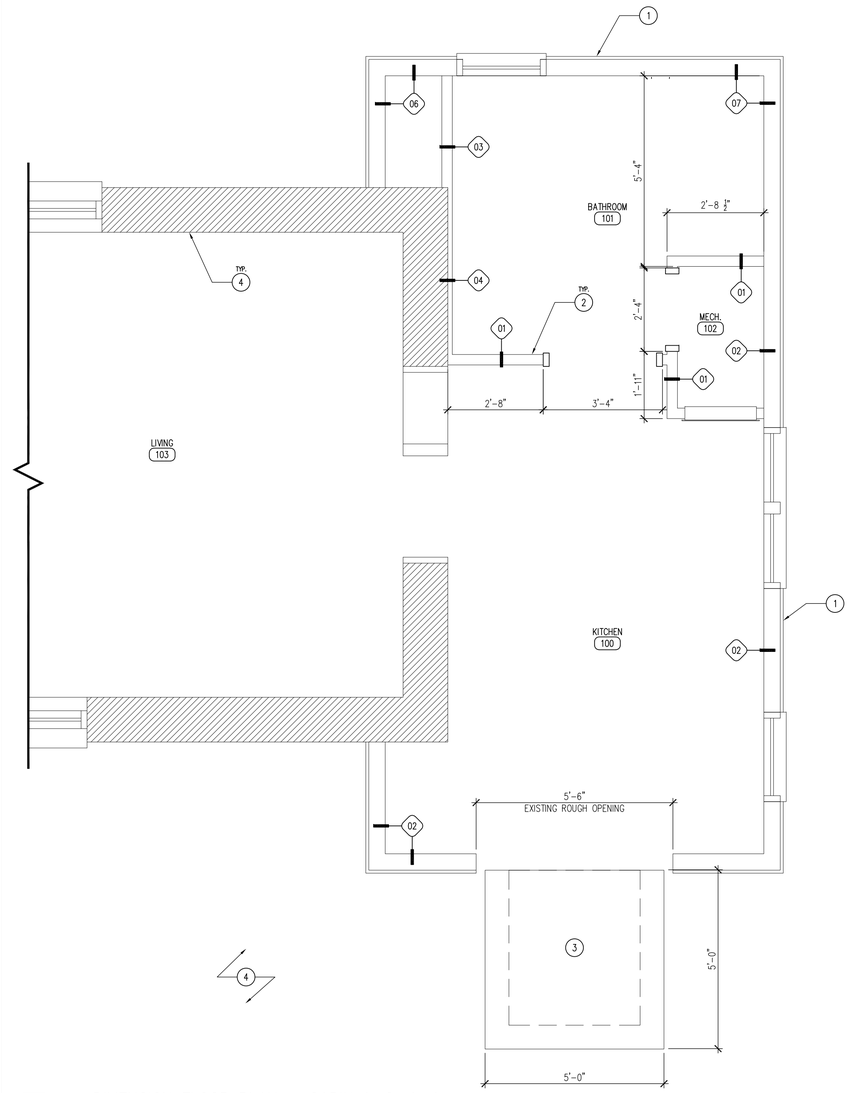
22620 COUNTY HIGHWAY S36
ELDORA, IA 50627

NO.	BY DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: **A-100**



02 DIMENSION FLOOR PLAN – CABIN 3
SCALE: 1/2" = 1'-0"



01 DIMENSION FLOOR PLAN – CABIN 1, 2, & 4
SCALE: 1/2" = 1'-0"

KEYNOTES

1. EXISTING EXTERIOR STUD WALL, SEE WALL TYPES SHEET A-002.
2. INTERIOR STUD WALL, SEE WALL TYPES SHEET A-002.
3. STOOP FOOTING.
4. EXISTING STONE WALL TO REMAIN.

GENERAL NOTES

A. REFER TO FINISH & DOOR 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.
E. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.

CONSULTANT:

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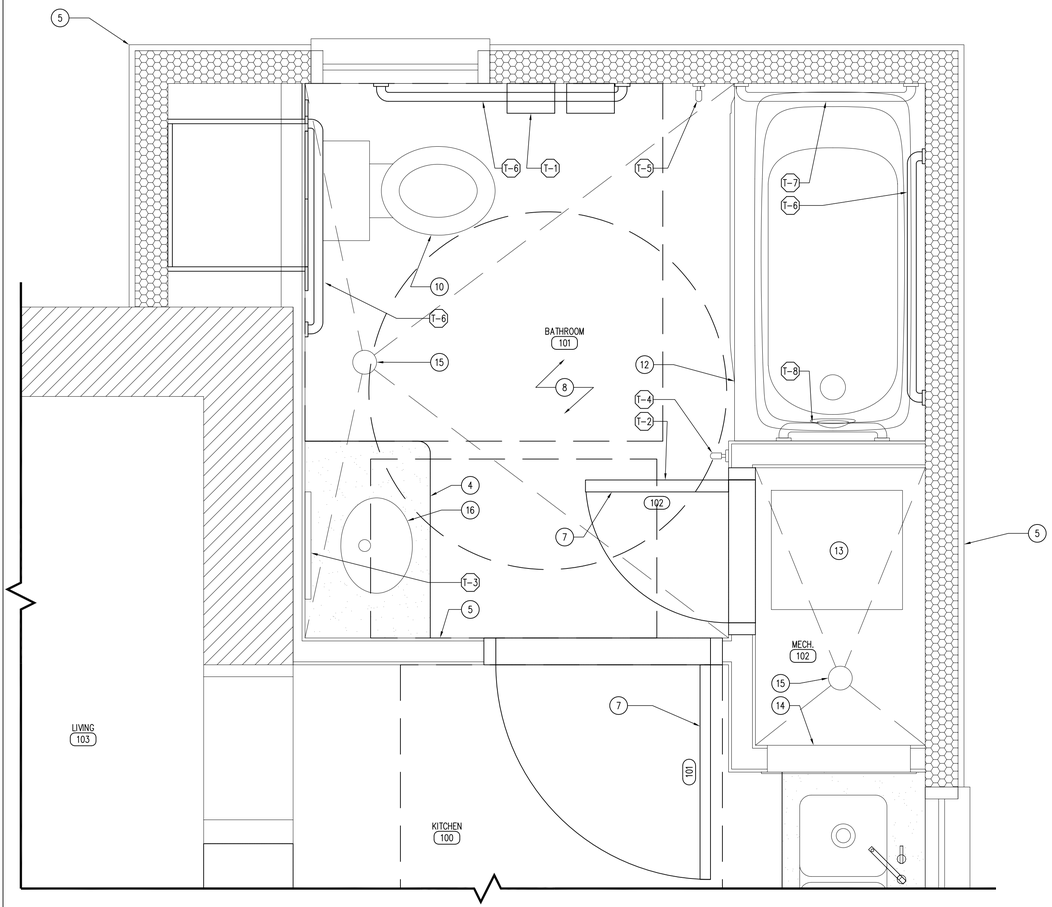
DIMENSION FLOOR PLANS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

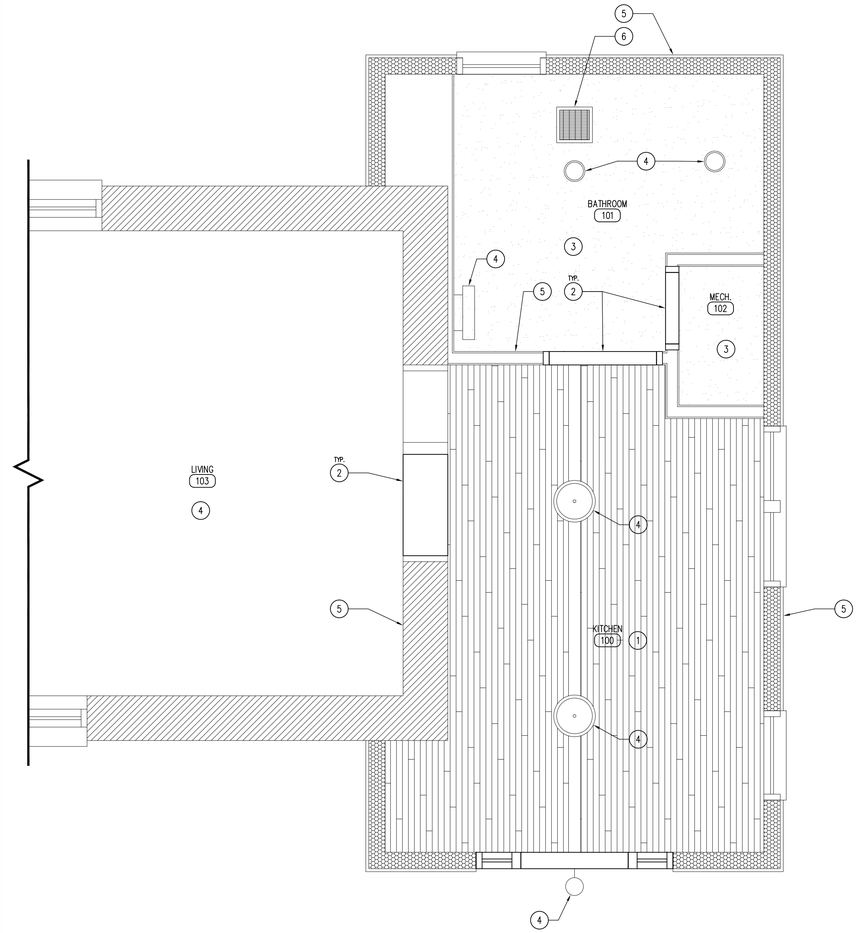
22620 COUNTY HIGHWAY S26
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: **A-101**



02 ENLARGE FLOOR PLAN – BATHROOM
SCALE: 1" = 1'-0"



01 CEILING PLAN – ALL CABINS
SCALE: 1/2" = 1'-0"

RESTROOM ACCESSORIES

ALL MODEL NUMBERS BASED ON BOBRICK WASHROOM EQUIPMENT IN SATIN STAINLESS STEEL, UNLESS OTHERWISE NOTED.

- T-1 SURFACE-MOUNTED SINGLE-ROLL TISSUE DISPENSER B-6857
- T-2 CONCEALED MOUNTING WITH SNAP FLANGE TOWEL BARS B-530 x 18
- T-3 SURFACE MOUNTED CABINET MIRROR B-2908 2436
- T-4 SINGLE CLOTHES HOOK – CENTER ON DOOR B-6827
- T-5 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS B-6806 x 36
- T-6 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS B-6806 x 42
- T-7 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS B-6806 x 24
- T-8 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS B-6806 x 18

LEGEND

- LED CAN LIGHT FIXTURE
- LED WALL SCONCE
- LED VANITY LIGHT
- BATH EXHAUST FAN
- LED CHANDELIER FIXTURE
- EXISTING 4/4 PINE T&G
- 5/8" TYPE X GYPSUM BOARD

KEYNOTES

1. EXISTING T&G CEILING TO REMAIN.
2. DOOR HEADER/WINDOW BELOW.
3. ⅝" GYPSUM HARD CEILING.
4. ELECTRICAL LIGHT FIXTURE, REFER TO ELECTRICAL PLAN.
5. WALL, REFER TO A-101 FOR MORE INFORMATION.
6. BATH EXHAUST FAN, REFER TO MECHANICAL PLAN.
7. DOOR AS SCHEDULED, REFER TO SHEET A-600.
8. FINISH FLOOR AS SCHEDULED, REFER TO FINISH SCHEDULE SHEET A-600.
9. ¾" PLYWOOD CABINET WITH HARDWOOD VENEER (WD-1) ON CONCEALED HINGES, PROVIDE DECORATIVE HARDWARE WIRE PULLS (DARK BRONZE), REFER TO SHEET A-600.
10. ADA COMPLIANT TOILET AS SCHEDULED, REFER TO PLUMBING DRAWINGS.
11. ADA COMPLIANT UNDERMOUNT LAVATORY AND QUARTZ COUNTERTOP (QTZ-1) AS SHOWN, WITH SCALD GUARDS. REFER TO PLUMBING DRAWINGS.
12. ADA COMPLIANT TUB/SHOWER SURROUND, REFER TO PLUMBING DRAWINGS.
13. AIR HANDLING UNIT, REFER TO MECHANICAL DRAWINGS.
14. LOUVERED RETURN GRILLE, REFER TO MECHANICAL DRAWINGS.
15. FLOOR DRAIN, REFER TO PLUMBING DRAWINGS.
16. 1 ½" QUARTZ COUNTER TOP (QTZ-1), REFER TO SHEET A-600 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. REFER TO ELECTRICAL DRAWINGS FOR LIGHTING AND POWER LAYOUTS.

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034
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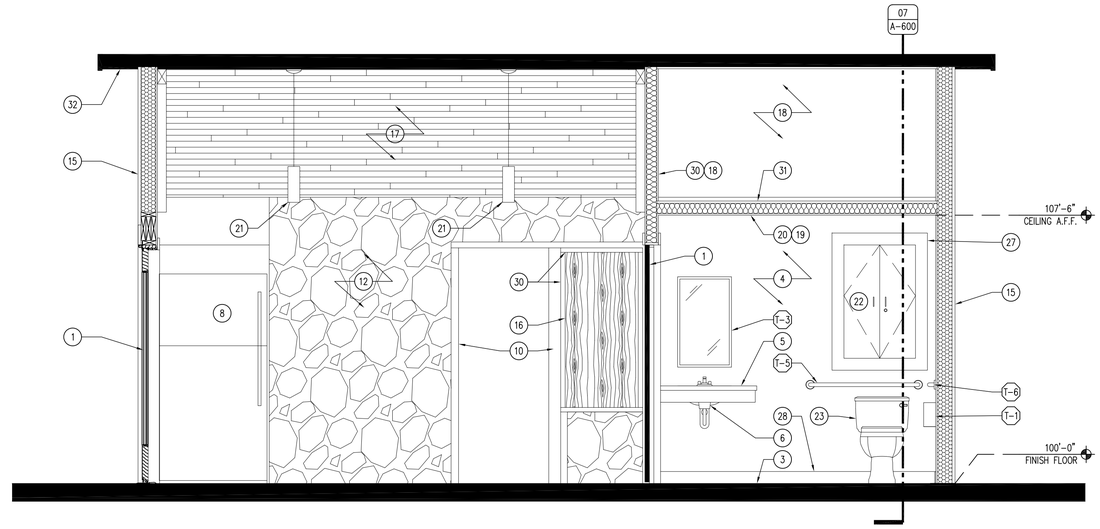
RCP & ENLARGED PLANS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

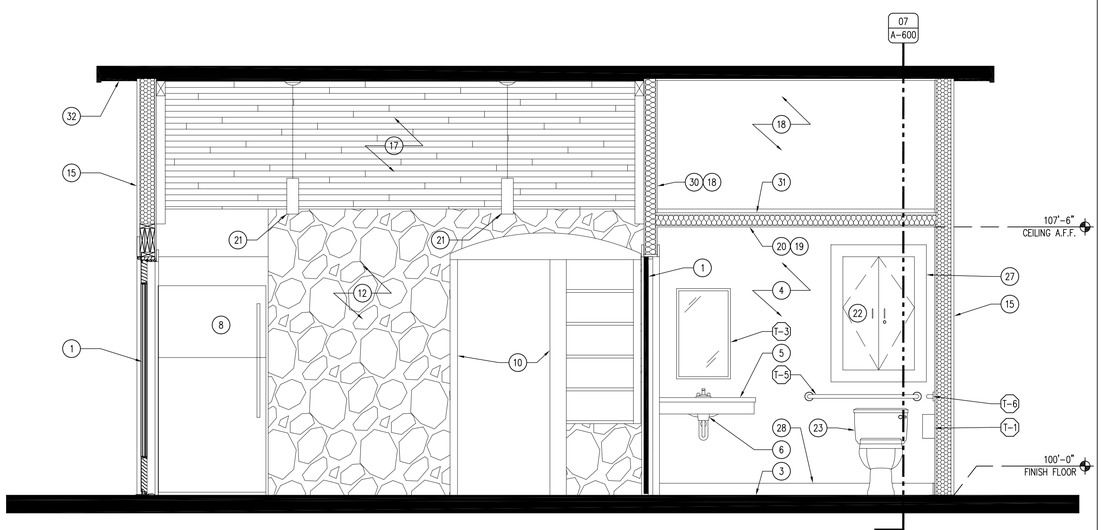
NO.	BY	DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-110

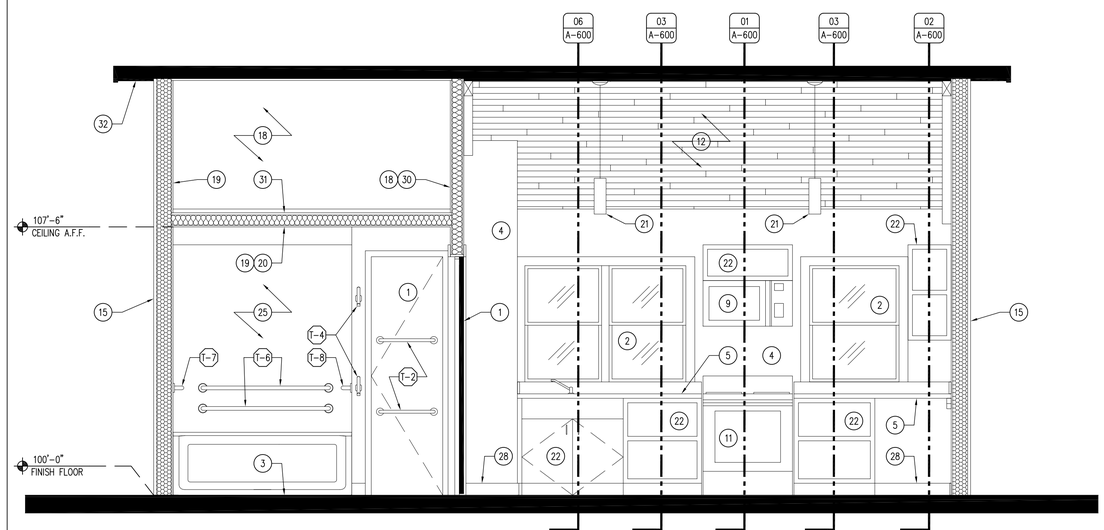


04 ROOF DETAIL – EAVE
SCALE: 3" = 1'-0"

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



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



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

RESTROOM ACCESSORIES

ALL MODEL NUMBERS BASED ON BOBRICK WASHROOM EQUIPMENT IN SATIN STAINLESS STEEL, UNLESS OTHERWISE NOTED.

- T-1 SURFACE-MOUNTED SINGLE-ROLL TISSUE DISPENSER B-6857
- T-2 CONCEALED MOUNTING WITH SNAP FLANGE TOWEL BARS B-530 x 18
- T-3 SURFACE MOUNTED CABINET MIRROR B-2908 2436
- T-4 SINGLE CLOTHES HOOK – CENTER ON DOOR B-6827
- T-5 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS B-6806 x 36
- T-6 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS B-6806 x 42
- T-7 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS B-6806 x 24
- T-8 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS B-6806 x 18

KEYNOTES

1. DOOR AS SCHEDULED, REFER TO SHEET A-600.
2. EXISTING WINDOW TO REMAIN.
3. FLOOR FINISH AS SCHEDULED, REFER TO SHEET A-600.
4. WALL FINISH AS SCHEDULED, REFER TO SHEET A-002 AND A-600.
5. 1 ¼" QUARTZ COUNTER-TOP (QTZ-1), REFER SHEET A-600.
6. UNDERMOUNT ADA SINK, REFER TO PLUMBING DRAWINGS.
7. CONCRETE PATIO, REFER TO SHEET A-011.
8. REFRIGERATOR BY OWNER.
9. MICROWAVE BY OWNER.
10. EXISTING WOOD BOOKCASE TO REMAIN.
11. OVEN BY OWNER.
12. EXISTING WALL TO REMAIN.
13. EXISTING BOOK SHELVES AND DOOR ARCH TO REMAIN.
14. EXISTING FLOOR TO REMAIN.
15. EXISTING WALL TO RECEIVE 5" OF CLOSED-CELL SPRAY-FOAM, REFER TO SHEET A-002.
16. ¾" HARD MAPLE PLYWOOD, REFER TO SHEET A-002.
17. EXISTING T&G CEILING TO REMAIN.
18. ⅝" TYPE X GYPSUM BOARD CEILING.
19. ½" GYPSUM BOARD (MOISTURE RESISTANT IN BATHROOM), REFER TO SHEET A-002..
20. 2X6 STUD CEILING, 12" O.C.
21. ELECTRICAL LIGHT FIXTURE, REFER TO ELECTRICAL PLAN.
22. ¾" PLYWOOD CABINET WITH HARDWOOD VENEER (WO-1), REFER TO SHEET A-600.
23. ADA COMPLIANT TOILET AS SCHEDULED, REFER TO PLUMBING DRAWINGS.
24. ADA COMPLIANT UNDERMOUNT LAVATORY AND QUARTZ COUNTERTOP (QTZ-1) AS SHOWN, WITH SCALD GUARDS. REFER TO PLUMBING DRAWINGS.
25. ADA COMPLIANT TUB/SHOWER SURROUND, REFER TO PLUMBING DRAWINGS.
26. LOUVERED RETURN GRILLE, REFER TO MECHANICAL DRAWINGS.
27. HARD MAPLE TRIM, REFER TO SHEET A-600.
28. HARD MAPLE BASE, REFER TO SHEET A-600.
29. HARD MAPLE BOOKCASE TRIM, REFER TO SHEET A-600.
30. 2X4 STUD WALL, REFER TO SHEET A-002.
31. ¾" T&G PLYWOOD FLOOR DECKING.
32. EXISTING ROOF TO REMAIN.
33. 2X4 STUD SOFFIT WITH ½" GYPSUM BOARD.
34. EXISTING LOUVERED GRILLE, REUSE IN NEW LOCATION.

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. REFER TO ELECTRICAL DRAWINGS FOR LIGHTING AND POWER LAYOUTS.
G. CONTRACTOR SHALL CAULK ALL INTERIOR CONCRETE SAW-CUT JOINTS AND ALL EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.

CONSULTANT:

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

CABIN INTERIOR ELEVATIONS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

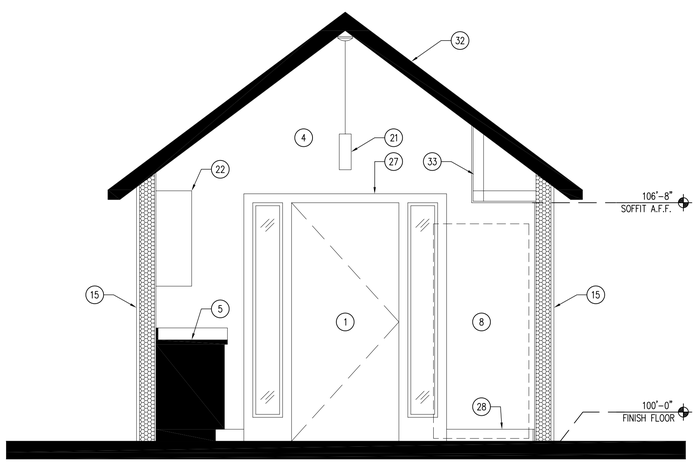
22620 COUNTY HIGHWAY S26
ELDORA, IA 50627

NO.	BY / DATE	REVISION

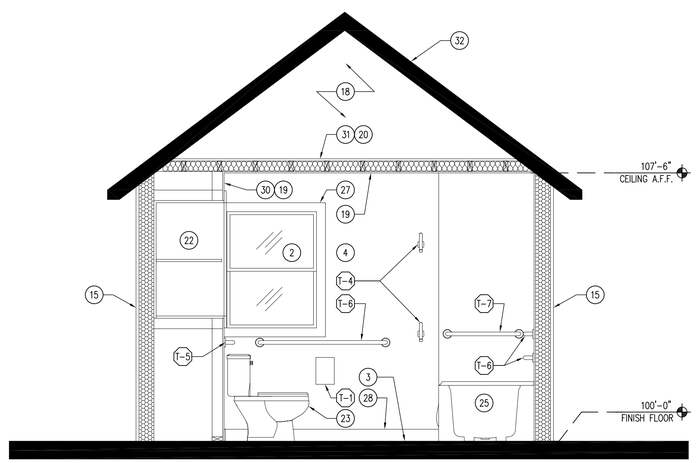
DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: **A-300**

05 NOT USED
SCALE: 3" = 1'-0"

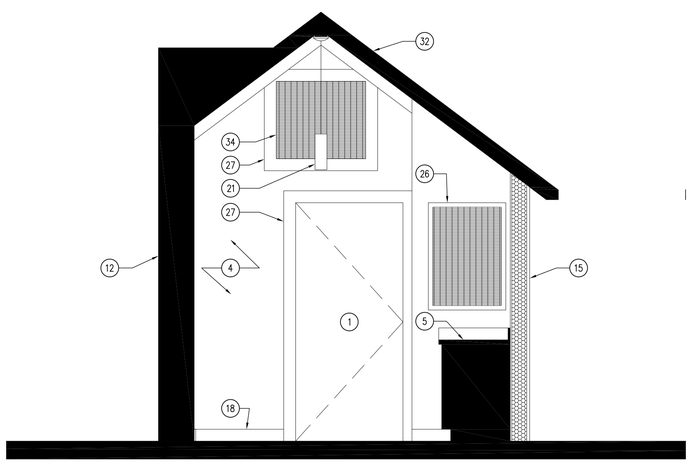
04 NOT USED
SCALE: 3" = 1'-0"



03 SECTION – CABIN INTERIOR
SCALE: 1/2" = 1'-0"



02 SECTION – CABIN INTERIOR
SCALE: 1/2" = 1'-0"



01 SECTION – CABIN INTERIOR
SCALE: 1/2" = 1'-0"

RESTROOM ACCESSORIES

ALL MODEL NUMBERS BASED ON BOBRICK WASHROOM EQUIPMENT IN SATIN STAINLESS STEEL, UNLESS OTHERWISE NOTED.

1-1 SURFACE-MOUNTED SINGLE-ROLL TISSUE DISPENSER
B-6857

1-2 CONCEALED MOUNTING WITH SNAP FLANGE TOWEL BARS
B-530 x 18

1-3 SURFACE MOUNTED CABINET MIRROR
B-2908 2436

1-4 SINGLE CLOTHES HOOK – CENTER ON DOOR
B-6827

1-5 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS
B-6806 x 36

1-6 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS
B-6806 x 42

1-7 CONCEALED MOUNTING WITH SNAP FLANGE GRAB BARS
B-6806 x 24

KEYNOTES

1. DOOR AS SCHEDULED, REFER TO SHEET A-600.
2. EXISTING WINDOW TO REMAIN.
3. FLOOR FINISH AS SCHEDULED, REFER TO SHEET A-600.
4. WALL FINISH AS SCHEDULED, REFER TO SHEET A-002 AND A-600.
5. 1 $\frac{1}{4}$" QUARTZ COUNTER-TOP (QTZ-1), REFER SHEET A-600.
6. UNDERMOUNT ADA SINK, REFER TO PLUMBING DRAWINGS.
7. CONCRETE PATIO, REFER TO SHEET A-011.
8. REFRIGERATOR BY OWNER.
9. MICROWAVE BY OWNER.
10. EXISTING WOOD BOOKCASE TO REMAIN.
11. OVEN BY OWNER.
12. EXISTING WALL TO REMAIN.
13. EXISTING BOOK SHELVES AND DOOR ARCH TO REMAIN.
14. EXISTING FLOOR TO REMAIN.
15. EXISTING WALL TO RECEIVE 5" OF CLOSED-CELL SPRAY-FOAM, REFER TO SHEET A-002.
16. $\frac{3}{4}$" HARD MAPLE PLYWOOD, REFER TO SHEET A-002.
17. EXISTING T&G CEILING TO REMAIN.
18. $\frac{5}{8}$" TYPE X GYPSUM BOARD CEILING.
19. $\frac{1}{2}$" GYPSUM BOARD (MOISTURE RESISTANT IN BATHROOM), REFER TO SHEET A-002..
20. 2X6 STUD CEILING, 12" O.C.
21. ELECTRICAL LIGHT FIXTURE, REFER TO ELECTRICAL PLAN.
22. $\frac{3}{4}$" PLYWOOD CABINET WITH HARDWOOD VENEER (WD-1), REFER TO SHEET A-600.
23. ADA COMPLIANT TOILET AS SCHEDULED, REFER TO PLUMBING DRAWINGS.
24. ADA COMPLIANT UNDERMOUNT LAVATORY AND QUARTZ COUNTERTOP (QTZ-1) AS SHOWN, WITH SCALD GUARDS. REFER TO PLUMBING DRAWINGS.
25. ADA COMPLIANT TUB/SHOWER SURROUND, REFER TO PLUMBING DRAWINGS.
26. LOUVERED RETURN GRILLE, REFER TO MECHANICAL DRAWINGS.
27. HARD MAPLE TRIM, REFER TO SHEET A-600.
28. HARD MAPLE BASE, REFER TO SHEET A-600.
29. HARD MAPLE BOOKCASE TRIM, REFER TO SHEET A-600.
30. 2X4 STUD WALL, REFER TO SHEET A-002.
31. $\frac{3}{4}$" T&G PLYWOOD FLOOR DECKING.
32. EXISTING ROOF TO REMAIN.
33. 2X4 STUD SOFFIT WITH $\frac{1}{2}$" GYPSUM BOARD.
34. EXISTING LOUVERED GRILLE, REUSE IN NEW LOCATION.

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. REFER TO ELECTRICAL DRAWINGS FOR LIGHTING AND POWER LAYOUTS.
G. CONTRACTOR SHALL CAULK ALL INTERIOR CONCRETE SAW-CUT JOINTS AND ALL EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
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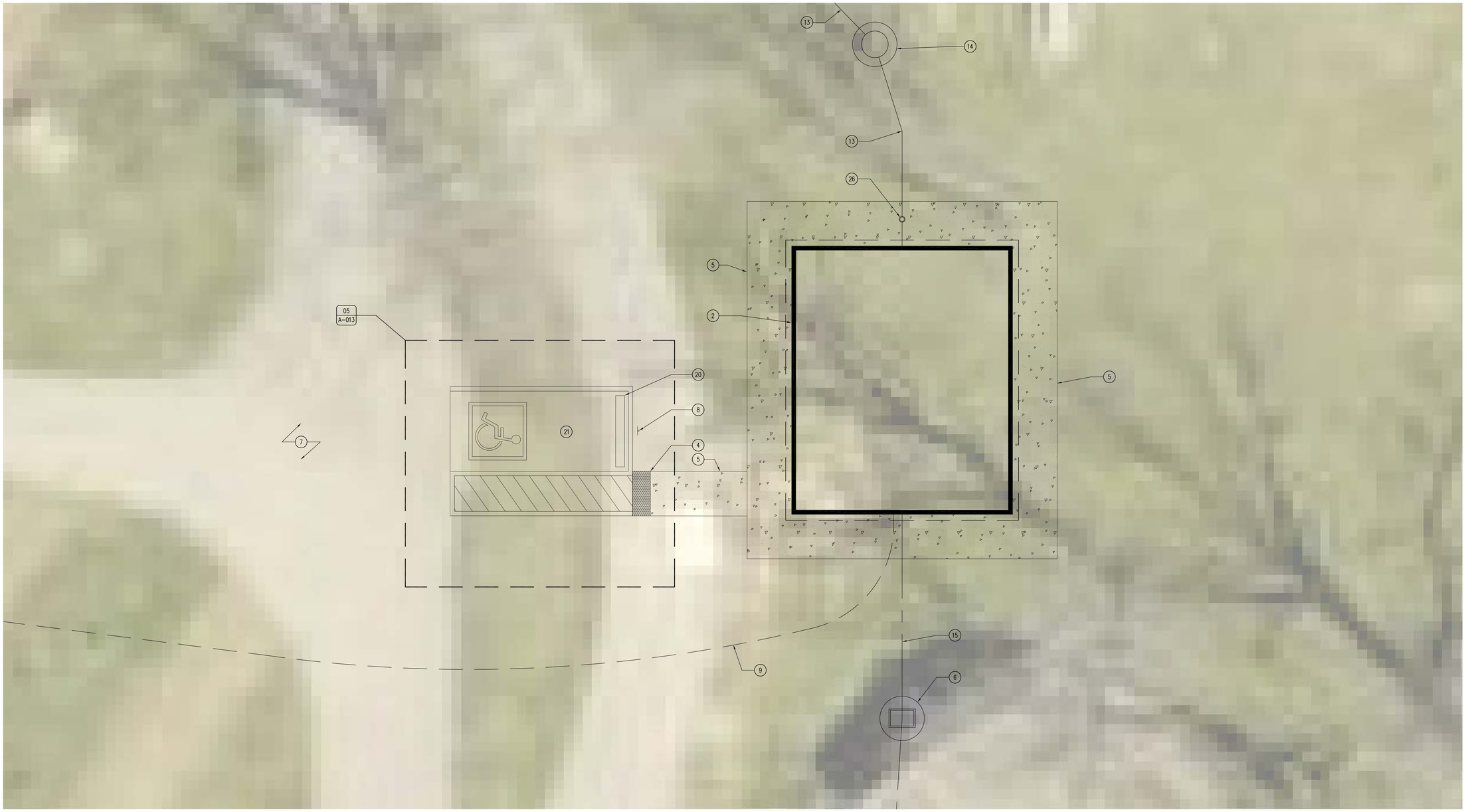
CABIN INTERIOR ELEVATIONS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S26
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
CHK'D BY:
PROJECT NUMBER: 19-02-42-01
DATE: 03.17.2020
SHEET No: A-301



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

KEYNOTES

1. 4-HOLE FAMILY STYLE, IOWA STANDARD PRECAST CONCRETE SHOWER BUILDING (JUNIPER).
2. IOWA STANDARD PRECAST CONCRETE SHOWER BUILDING (NORWAY PINE).
3. 1-HOLE, LEFT HANDED, IOWA STANDARD PRECAST CONCRETE PIT LATRINE BUILDING.
4. 24" NEENAH CAST IRON DETECTION PANELS, ENTIRE WIDTH OF SIDEWALK.
5. 5'-0" CONCRETE SIDEWALK, REFER TO A-013 FOR DETAILS.
6. DRAIN-DOWN PIT, REFER TO 01/A-013 FOR DETAILS.
7. EXISTING ROAD TO REMAIN.
8. ADA PARKING SIGN, REFER TO SHEET A-013 FOR DETAILS.
9. ELECTRICAL LINE, FROM EXISTING DISTRIBUTION PANEL, TO PROPOSED SHOWER BUILDING.
10. CURB RAMP SIDEWALK, REFER SHEET A-013 FOR DETAILS.
11. EXISTING ELECTRICAL DISTRIBUTION PANEL TO REMAIN.
12. EXISTING SIDEWALK TO REMAIN.
13. 4" SCHEDULE 40 PVC SANITARY LINE TO MANHOLE.
14. SANITARY MANHOLE, REFER TO SHEET A-014 FOR MORE INFORMATION.
15. 2" COPPER WATER SERVICE LINE TO SHOWER BUILDING.
16. NOT USED.
17. EXISTING PARKING AREA TO REMAIN.
18. EXISTING DISTRIBUTION PANEL TO REMAIN, RUN NEW ELECTRICAL TO BUILDING.
19. EXISTING ELECTRICAL LINE.
20. PRECAST CONCRETE WHEEL STOPS, REFER TO SHEET A-013 FOR DETAILS.
21. CONCRETE ADA PARKING AREA WITH STRIPING AND SYMBOL PAINT, REFER TO SHEET A-012 FOR DETAILS. DO NOT STRIPE OR SIGN THE PARKING AREA BY CABINS.
22. NEW CONCRETE FULL HOOK-UP CAMPSITE, REFER TO SHEET C-1 FOR MORE INFORMATION.
23. EXISTING SHELTER TO REMAIN, REPLACE CONCRETE SLAB, REFER TO 01/A-012 FOR MORE INFORMATION.
24. EXISTING SANITARY MANHOLE TO REMAIN.
25. EXISTING WATER PIT TO REMAIN.
26. SANITARY CLEANOUT WITH CAST IRON COVER, WITH CAP, CAST INTO SIDEWALK FLUSH.
27. 6" THICK CONCRETE SHELTER SLAB WITH 4" SUBBASE. #4 REBAR 36" O.C. BOTH DIRECTIONS.
28. EXISTING SHELTER COLUMN, $\frac{1}{2}$" EXPANSION AND FLOWABLE POLYURETHANE CAULK CONTINUOUS.
29. PROPOSED SHELTER BUILDING SLAB, SLAB ELEVATION DETERMINED BY DNR INSPECTOR, SLOPE 1% TO DRAIN WATER. REFER TO REFERENCE PLAN SHEET A-500.
30. 6'-0" X 4'-0" X 6" CONCRETE PAD WITH #4 EPOXY COATED REBAR 36" O.C. BOTH DIRECTIONS AND 4" SUBBASE. DOWEL INTO SHELTER PAD WITH 24" LONG, #4 DOWELS 12" O.C.
31. INSTALL ONE NEW PILOT ROCK G3-2460 BB SURFACE MOUNT GRILL WITH S7 SHELF.
32. EXISTING FIRE-RING TO BE REINSTALLED.
33. 6" DEEP X 6" RING OF PEA GRAVEL AROUND ENTIRE PERIMETER OF FIRE-RING. INSTALL $\frac{3}{8}$" STEEL RETAINER RING AROUND ROCK IN GRASSED AREA. GRAVEL SHOULD BE FLUSH WITH PATIO.
34. 6" THICK CONCRETE PATIO WITH #4 REBAR 24" O.C., BOTH DIRECTIONS, OVER 4" SUBBASE.
35. EXISTING BUILDING TO REMAIN, $\frac{1}{2}$" EXPANSION WITH FLOWABLE POLYURETHANE CAULK CONTINUOUS.
36. STOOP FOOTING, REFER TO SHEET A-013 FOR MORE INFORMATION.

GENERAL NOTES

A. ALL ELECTRICAL SHALL BE NEC CODE COMPLIANT AND ALL CODES AND ORDINANCES SHALL BE FOLLOWED WHICH ARE REQUIRED BY LAW. ALL OUTLETS TO BE MOUNTED AT 42" A.F.F.
B. ALL SANITARY AND WATER LINE WORK SHALL COMPLY WITH ALL APPLICABLE CODES AS NECESSARY BY LAW PER STATE AND LOCAL JURISDICTION.
C. REMOVE ALL TREES WHICH CONFLICT WITH THE INSTALLATION OF THE NEW SHOWER/RESTROOM BUILDING, PROTECT ALL TREES IN PLACE WHICH MAY REMAIN.
D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
E. PRECAST CONCRETE MODULAR BUILDING BY HUFFCUTT OR PRE-APPROVED EQUAL. ALL PRE-CAST SHOWERS AND RESTROOM FACILITIES SHALL RECEIVE A FULL PERIMETER FOOTING AND BETWEEN ALL MODULES, REFER TO SHEET A-013.
F. GRADE EXISTING SITE -6" BELOW CURRENT BUILDING ELEVATION FOR PROPER INSTALL OF PRECAST BUILDING. COORDINATE WITH DNR INSPECTOR AND PRECAST SHOWER BUILDING MANUFACTURER PRIOR TO PROJECT COMMENCEMENT.
G. CONTRACTOR TO RESTORE ALL DISTURBED AREAS OF CONSTRUCTION. FILL, COMPACT, AND SEED.

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.725.8200
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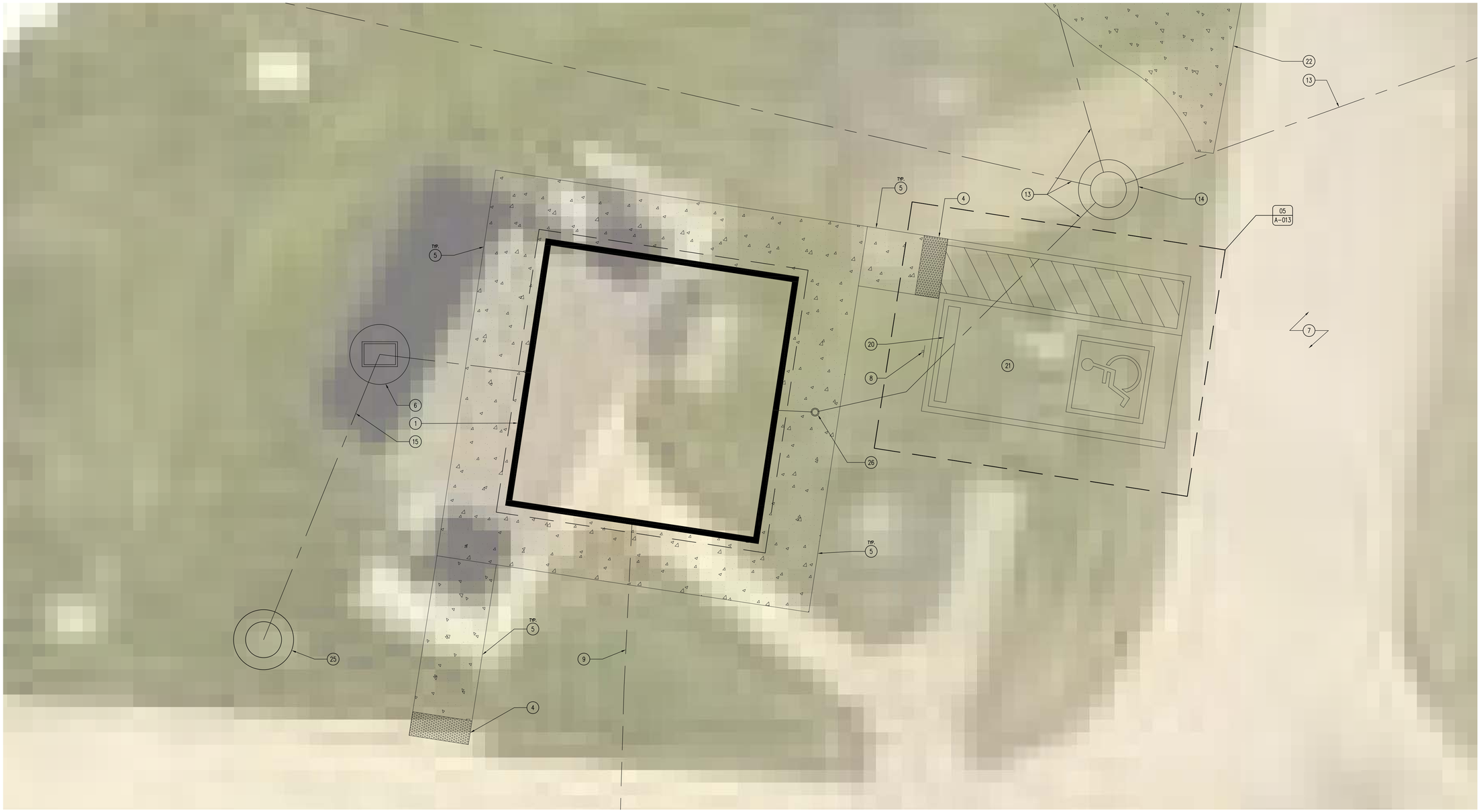
ENLARGED SITE PLAN (EAST)

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S36
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-400



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

KEYNOTES

1. 4-HOLE FAMILY STYLE, IOWA STANDARD PRECAST CONCRETE SHOWER BUILDING (JUNIPER).
2. IOWA STANDARD PRECAST CONCRETE SHOWER BUILDING (NORWAY PINE).
3. 1-HOLE, LEFT HANDED, IOWA STANDARD PRECAST CONCRETE PIT LATRINE BUILDING.
4. 24" NEENAH CAST IRON DETECTION PANELS, ENTIRE WIDTH OF SIDEWALK.
5. 5'-0" CONCRETE SIDEWALK, REFER TO A-013 FOR DETAILS.
6. DRAIN-DOWN PIT, REFER TO 01/A-013 FOR DETAILS.
7. EXISTING ROAD TO REMAIN.
8. ADA PARKING SIGN, REFER TO SHEET A-013 FOR DETAILS.
9. ELECTRICAL LINE, FROM EXISTING DISTRIBUTION PANEL, TO PROPOSED SHOWER BUILDING.
10. CURB RAMP SIDEWALK, REFER SHEET A-013 FOR DETAILS.
11. EXISTING ELECTRICAL DISTRIBUTION PANEL TO REMAIN.
12. EXISTING SIDEWALK TO REMAIN.
13. 4" SCHEDULE 40 PVC SANITARY LINE TO MANHOLE.
14. SANITARY MANHOLE, REFER TO SHEET A-014 FOR MORE INFORMATION.
15. 2" COPPER WATER SERVICE LINE TO SHOWER BUILDING.
16. NOT USED.
17. EXISTING PARKING AREA TO REMAIN.
18. EXISTING DISTRIBUTION PANEL TO REMAIN, RUN NEW ELECTRICAL TO BUILDING.
19. EXISTING ELECTRICAL LINE.
20. PRECAST CONCRETE WHEEL STOPS, REFER TO SHEET A-013 FOR DETAILS.
21. CONCRETE ADA PARKING AREA WITH STRIPING AND SYMBOL PAINT, REFER TO SHEET A-012 FOR DETAILS. DO NOT STRIPE OR SIGN THE PARKING AREA BY CABINS.
22. NEW CONCRETE FULL HOOK-UP CAMPSITE, REFER TO SHEET C-1 FOR MORE INFORMATION.
23. EXISTING SHELTER TO REMAIN, REPLACE CONCRETE SLAB, REFER TO 01/A-012 FOR MORE INFORMATION.
24. EXISTING SANITARY MANHOLE TO REMAIN.
25. EXISTING WATER PIT TO REMAIN.
26. SANITARY CLEANOUT WITH CAST IRON COVER, WITH CAP, CAST INTO SIDEWALK FLUSH.
27. 6" THICK CONCRETE SHELTER SLAB WITH 4" SUBBASE. #4 REBAR 36" O.C. BOTH DIRECTIONS.
28. EXISTING SHELTER COLUMN, $\frac{1}{2}$" EXPANSION AND FLOWABLE POLYURETHANE CAULK CONTINUOUS.
29. PROPOSED SHELTER BUILDING SLAB, SLAB ELEVATION DETERMINED BY DNR INSPECTOR, SLOPE 1% TO DRAIN WATER. REFER TO REFERENCE PLAN SHEET A-500.
30. 6'-0" X 4'-0" X 6" CONCRETE PAD WITH #4 EPOXY COATED REBAR 36" O.C. BOTH DIRECTIONS AND 4" SUBBASE. DOWEL INTO SHELTER PAD WITH 24" LONG, #4 DOWELS 12" O.C.
31. INSTALL ONE NEW PILOT ROCK 03-2460 BB SURFACE MOUNT GRILL WITH S7 SHELF.
32. EXISTING FIRE-RING TO BE REINSTALLED.
33. 6" DEEP X 6" RING OF PEA GRAVEL AROUND ENTIRE PERIMETER OF FIRE-RING. INSTALL $\frac{1}{8}$" STEEL RETAINER RING AROUND ROCK IN GRASSED AREA. GRAVEL SHOULD BE FLUSH WITH PATIO.
34. 6" THICK CONCRETE PATIO WITH #4 REBAR 24" O.C., BOTH DIRECTIONS, OVER 4" SUBBASE.
35. EXISTING BUILDING TO REMAIN, $\frac{1}{2}$" EXPANSION WITH FLOWABLE POLYURETHANE CAULK CONTINUOUS.
36. STOOP FOOTING, REFER TO SHEET A-013 FOR MORE INFORMATION.

GENERAL NOTES

A. ALL ELECTRICAL SHALL BE NEC CODE COMPLIANT AND ALL CODES AND ORDINANCES SHALL BE FOLLOWED WHICH ARE REQUIRED BY LAW. ALL OUTLETS TO BE MOUNTED AT 42" A.F.F.
B. ALL SANITARY AND WATER LINE WORK SHALL COMPLY WITH ALL APPLICABLE CODES AS NECESSARY BY LAW PER STATE AND LOCAL JURISDICTION.
C. REMOVE ALL TREES WHICH CONFLICT WITH THE INSTALLATION OF THE NEW SHOWER/RESTROOM BUILDING, PROTECT ALL TREES IN PLACE WHICH MAY REMAIN.
D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
E. PRECAST CONCRETE MODULAR BUILDING BY HUFFCUTT OR PRE-APPROVED EQUAL. ALL PRE-CAST SHOWERS AND RESTROOM FACILITIES SHALL RECEIVE A FULL PERIMETER FOOTING AND BETWEEN ALL MODULES, REFER TO SHEET A-013.
F. GRADE EXISTING SITE -6" BELOW CURRENT BUILDING ELEVATION FOR PROPER INSTALL OF PRECAST BUILDING. COORDINATE WITH DNR INSPECTOR AND PRECAST SHOWER BUILDING MANUFACTURER PRIOR TO PROJECT COMMENCEMENT.
G. CONTRACTOR TO RESTORE ALL DISTURBED AREAS OF CONSTRUCTION. FILL, COMPACT, AND SEED.

CONSULTANT:

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

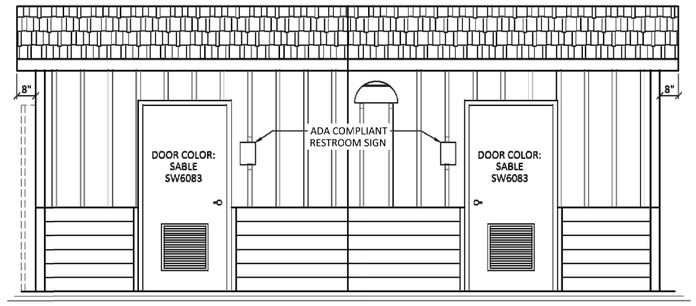
ENLARGED SITE PLAN (WEST)

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

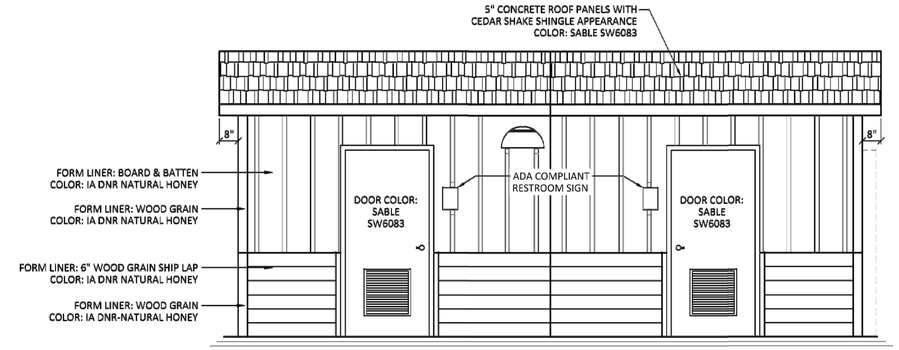
22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY	DATE	REVISION

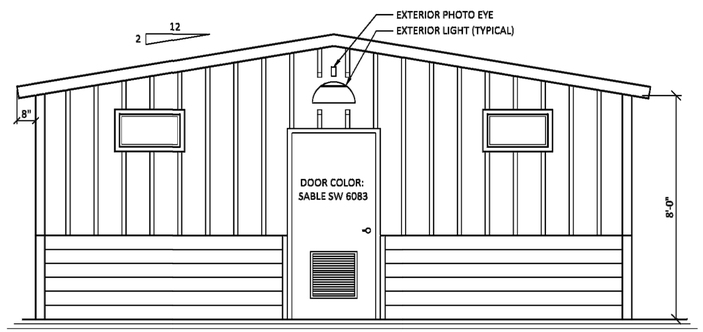
DRAWN BY: | PROJECT NUMBER: 19-02-42-01
CHK'D BY: | DATE: 03.17.2020
SHEET No:
A-401



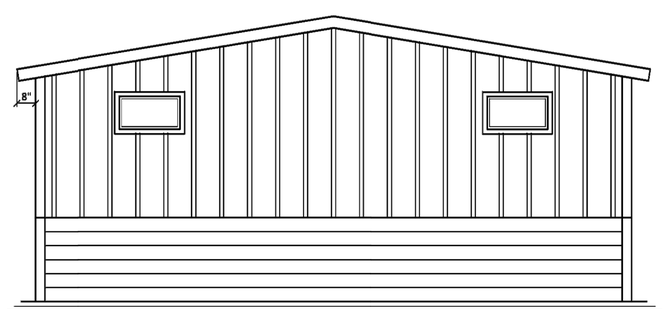
NORTH ELEVATION



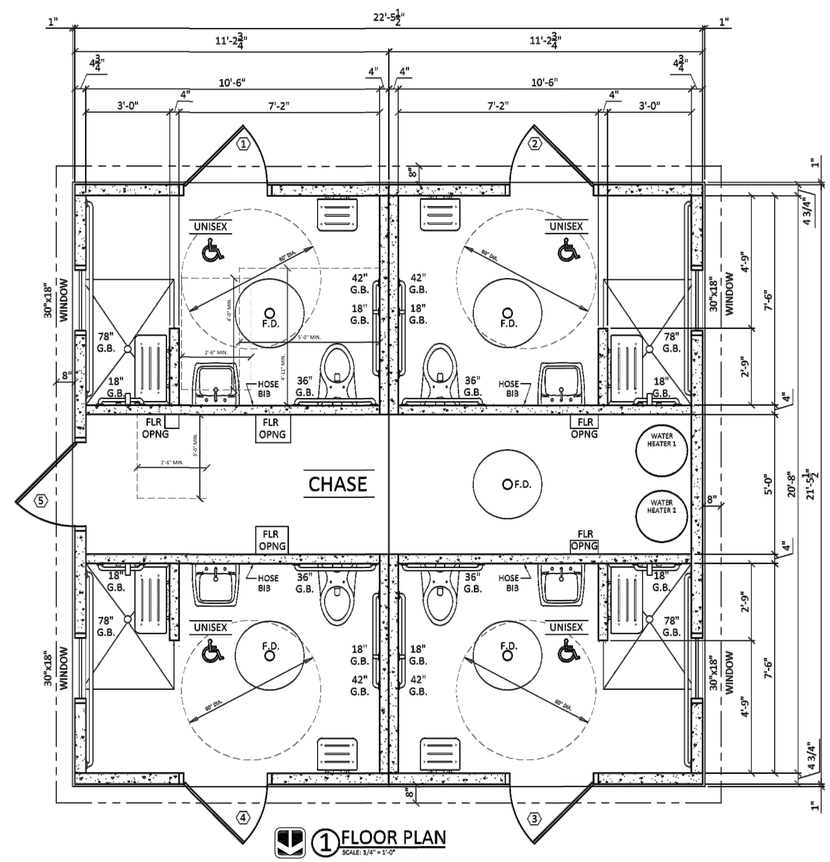
SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION



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

GENERAL NOTES

A. ALL ELECTRICAL SHALL BE NEC CODE COMPLIANT AND ALL CODES AND ORDINANCES SHALL BE FOLLOWED WHICH ARE REQUIRED BY LAW. ALL OUTLETS TO BE MOUNTED AT 42" A.F.F.
B. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
C. PRECAST CONCRETE MODULAR BUILDING BY HUFFCUTT OR PRE-APPROVED EQUAL.
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G. CONTRACTOR TO RESTORE ALL DISTURBED AREAS OF CONSTRUCTION.
H. PRE-CAST SHOWERS TO RECEIVE A FULL PERIMETER FROST FOOTING AROUND ENTIRE BUILDING AND BETWEEN ALL MODULES, PER MANUFACTURER'S RECOMMENDATIONS. REFER TO SHEET A-013 FOR MORE INFORMATION.

01 PRECAST SHOWER BUILDING – IOWA STANDARD FAMILY SHOWER BUILDING
SCALE: NTS

CONSULTANT:

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

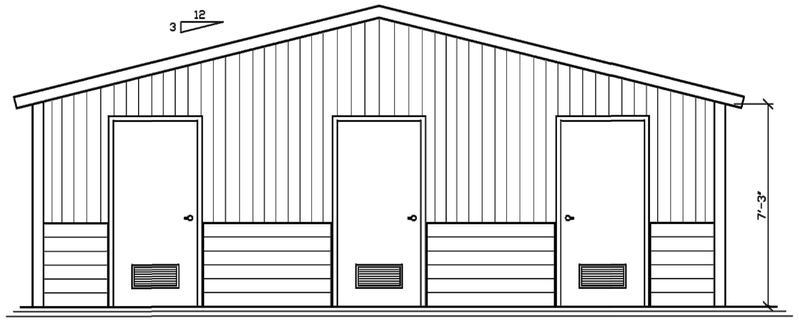
PRECAST FAMILY SHOWER BUILDING

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

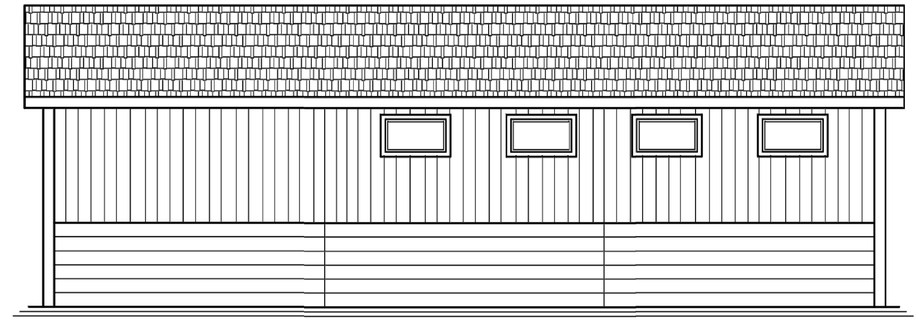
22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-402

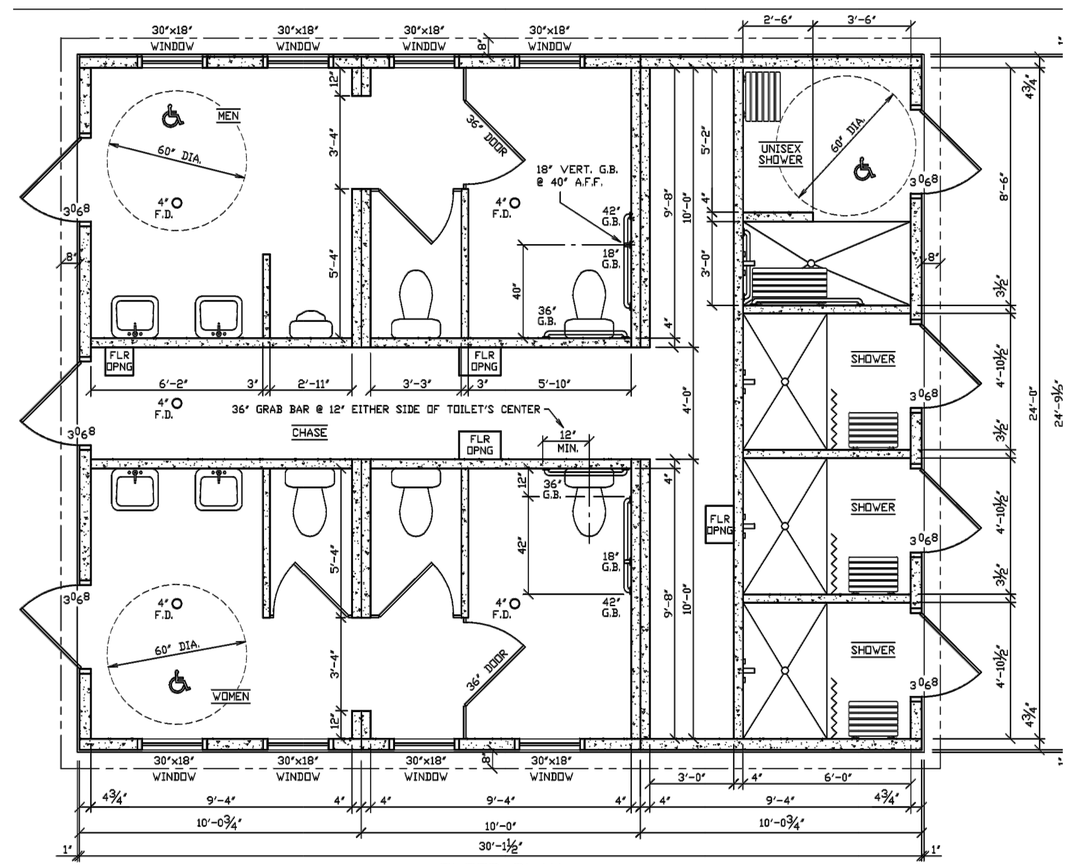


NORTH ELEVATION



WEST ELEVATION

SOUTH ELEVATION



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

NOTE:
INSTALL ALL TOILET HORIZ. GRAB BARS @ 33"-36" A.F.F.

GENERAL NOTES

A. ALL ELECTRICAL SHALL BE NEC CODE COMPLIANT AND ALL CODES AND ORDINANCES SHALL BE FOLLOWED WHICH ARE REQUIRED BY LAW. ALL OUTLETS TO BE MOUNTED AT 42" A.F.F.
B. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
C. PRECAST CONCRETE MODULAR BUILDING BY HUFFCUTT OR PRE-APPROVED EQUAL.
D. ALL SANITARY AND WATER LINE WORK SHALL COMPLY WITH ALL APPLICABLE CODES AS NECESSARY BY LAW PER STATE AND LOCAL JURISDICTION.
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G. CONTRACTOR TO RESTORE ALL DISTURBED AREAS OF CONSTRUCTION.
H. PRE-CAST SHOWERS TO RECEIVE A FULL PERIMETER FROST FOOTING AROUND ENTIRE BUILDING AND BETWEEN ALL MODULES, PER MANUFACTURER'S RECOMMENDATIONS. REFER TO SHEET A-013 FOR MORE INFORMATION.

01 PRECAST SHOWER BUILDING – IOWA STANDARD SHOWER BUILDING
SCALE: NTS

CONSULTANTS:

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

PRECAST SHOWER BUILDING

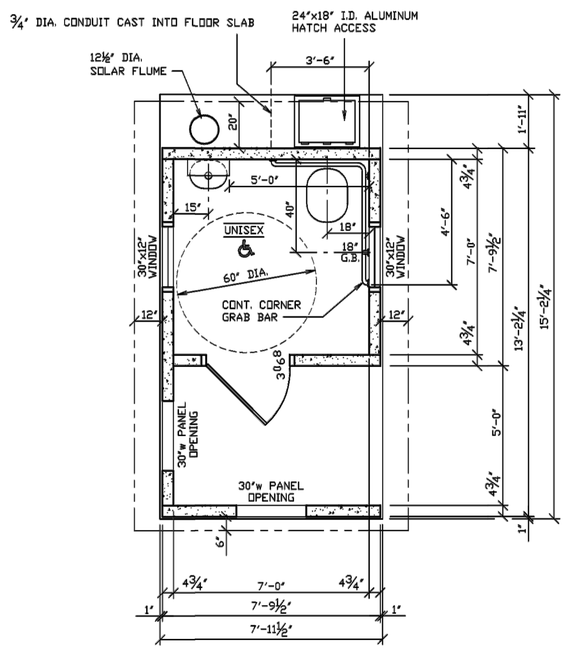
SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

ELDORA, IA 50627

22620 COUNTY HIGHWAY S56

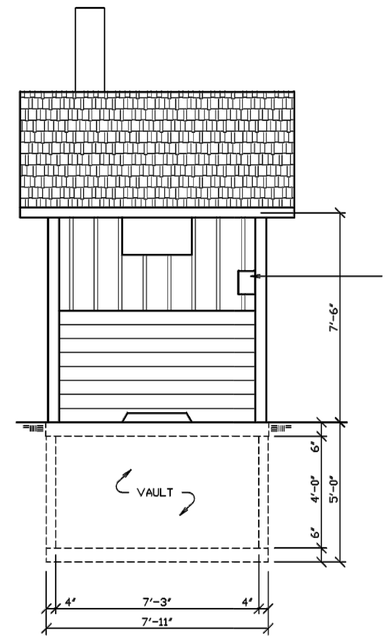
NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-403

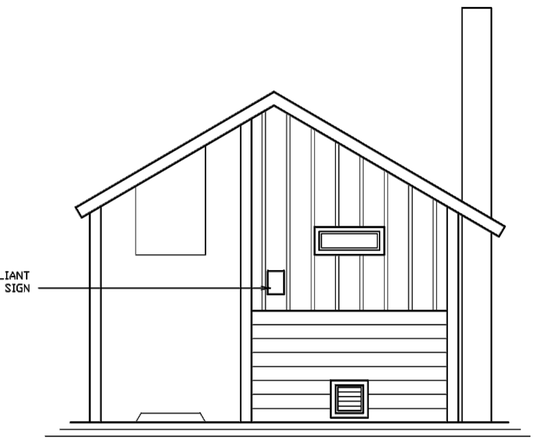


FLOOR PLAN
SCALE: 1/4" = 1'-0"

NOTES:
- INSTALL CONT. CORNER GRAB BARS @ 33"-36" A.F.F.
- INSTALL 18" VERT. G.B. @ 40" A.F.F. (FROM BOTTOM OF GRAB BAR)



FRONT ELEVATION
SCALE: 1/4" = 1'-0"



RIGHT ELEVATION
SCALE: 1/4" = 1'-0"

GENERAL NOTES

A. ALL ELECTRICAL SHALL BE NEC CODE COMPLIANT AND ALL CODES AND ORDINANCES SHALL BE FOLLOWED WHICH ARE REQUIRED BY LAW. ALL OUTLETS TO BE MOUNTED AT 42" A.F.F.
B. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
C. PRECAST CONCRETE MODULAR BUILDING BY HUFFCUTT OR PRE-APPROVED EQUAL.
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G. CONTRACTOR TO RESTORE ALL DISTURBED AREAS OF CONSTRUCTION.

01 PRECAST PIT LATRINE BUILDING – IOWA STANDARD LEFT HANDED PIT LATRINE
SCALE: NTS

CONSULTANT:

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

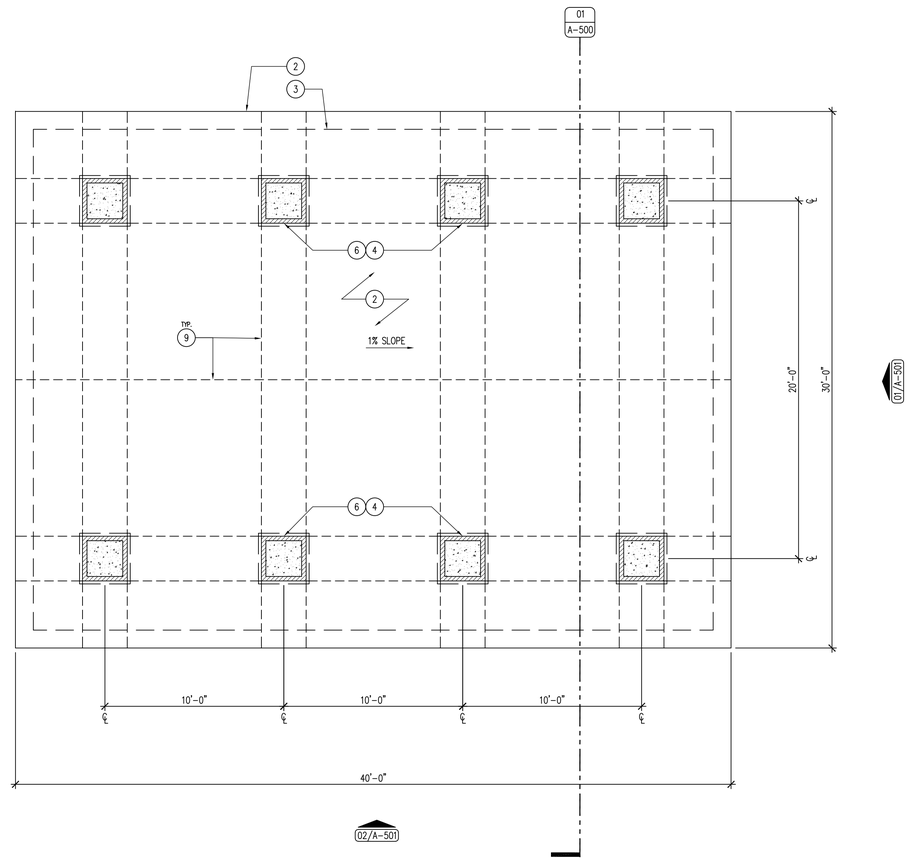
PRECAST PIT LATRINE BUILDING

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

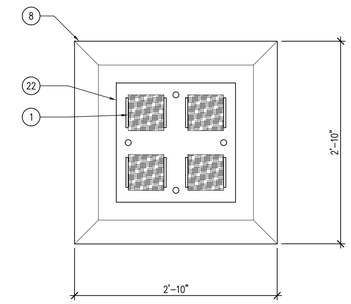
22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY / DATE	REVISION

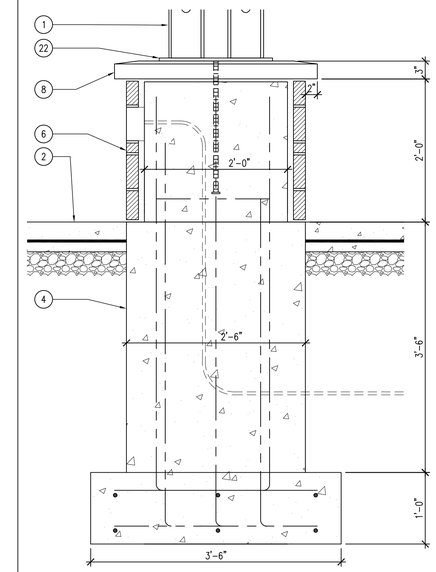
DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-404



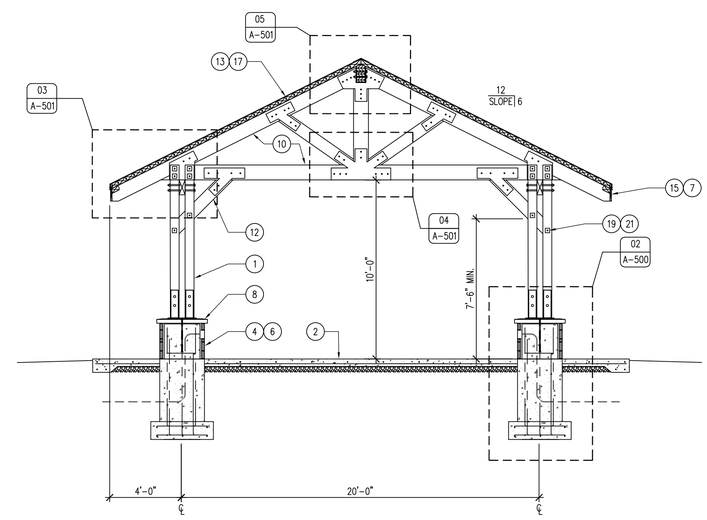
04 REFERENCE FLOOR PLAN
SCALE: 1/4" = 1'-0"



03 DETAIL – COLUMN CAP
SCALE: 1" = 1'-0"



02 DETAIL – FOOTING SECTION
SCALE: 1" = 1'-0"



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

KEYNOTES

1. 6X6 ROUGH SAWN DOUGLAS FIR COLUMNS, FINISH WITH TWP 100 SERIES STAIN, COLOR TBD.
2. 6" THICK CONCRETE SLAB WITH EPOXY COATED #4 REBAR 36" O.C. BOTH DIRECTIONS WITH 4" COMPACTED FILL BENEATH. SLOPE CONCRETE (1% SLOPE).
3. THICKENED SLAB EDGE WITH TWO (2) EPOXY COATED #4 REBAR RUNNING CONTINUOUSLY THE PERIMETER OF THE SLAB.
4. CONCRETE COLUMN BASE FOUNDATION WITH EPOXY COATED #5 REBAR 12" O.C. ALL DIRECTIONS. SLAB TO SLOPE 1%, CONCRETE COLUMN BASE SHALL BE ADJUSTED IN FIELD TO ACCOMMODATE THE DIFFERENCE IN ELEVATION, STONE TO BE FLUSH WITH SLAB.
5. CONTINUOUS PERIMETER EXPANSION JOINT WITH SELF-LEVELING SEALANT.
6. EDEN STONE, VALDIERS FULL-VENEER CHESTNUT WEBSTONE TUMBLED SANDSTONE. ASTM C270 MORTAR TO BE USED, ⅜" MORTAR JOINT, COLOR TBD.
7. CONTINUOUS PERIMETER COPPER DRIP EDGE.
8. 4" THICK X 34" X 34" SELECT GRADE, GRAY INDIANA LIMESTONE CAP WITH SLOPED TOP AS SHOWN.
9. CONCRETE SAW-CUT CONTROL JOINTS.
10. 4X10 ROUGH SAWN DOUGLAS FIR TRUSS CHORD, STAIN TO BE TWP 100 SERIES, COLOR TBD.
11. 4X8 ROUGH SAWN DOUGLAS FIR TRUSS WEB, STAIN TO BE TWP 100 SERIES, COLOR TBD.
12. 4X8 ROUGH SAWN DOUGLAS FIR KNEE BRACE, BOTTOM OF BRACE TO BE MINIMUM 8'-0" A.F.F., STAIN TO MATCH COLUMNS AND TRUSSES.
13. 3X6 TONGUE AND GROVE DOUGLAS FIR ROOF DECKING, TWO COATS OF CLEAR GLOSS EXTERIOR GRADE (UV RESISTANT) POLYURETHANE.
14. 4X10 ROUGH SAWN DOUGLAS FIR BEAM, MAKE SPLICE CONNECTIONS WITHIN COLUMN POSTS.
15. 1X10 WESTERN RED CEDAR FASCIA, STAIN TO MATCH COLUMNS AND TRUSSES.
16. 4X10 ROUGH SAWN DOUGLAS FIR CENTER WEB, STAIN TO BE TWP 100 SERIES, COLOR TBD.
17. CERTAINTEED LANDMARK TL SHINGLES (WEATHERED WOOD), OVER 30LB FELT.
18. ⅜" STEEL CONNECTOR PLATE BRACKET BOTH SIDES, POWDER-COAT PLATES BLACK PRIOR TO INSTALLATION.
19. ¾" DIAMETER HOT DIP GALVANIZED BOLTS WITH NUTS AND LOCK WASHERS.
20. 5 ½" X 12" LAMINATED RIDGE BEAM, STAIN TO MATCH COLUMNS AND TRUSSES.
21. 3" X 3" X ⅜" STEEL WASHERS, POWDER-COAT BLACK PRIOR TO INSTALLATION.
22. ½" GRADE A36 STEEL COLUMN LEVELING PLATE WITH ANCHORS, EMBED 24" MINIMUM. POWDER-COAT BLACK PRIOR TO INSTALLATION.
23. NOT USED..
24. NOT USED.
25. ⅜" STEEL MAIN TRUSS WEB CONNECTOR BRACKET. BRACKET TO HAVE ⅜" WELDED BOTTOM PLATE AND BRACKETS ON BOTH SIDES TO CREATE ONE SINGLE WEB BRACKET. POWDER-COAT PLATES BLACK PRIOR TO INSTALLATION.

GENERAL NOTES

A. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
B. ALL STAIN TO BE TWP 100 SERIES STAIN, COAT ALL MEMBERS TWO (2) TIMES, COLOR TBD. STAIN COLUMNS, TRUSSES, BEAMS AND FASCIA BOARDS.
C. WOOD ROOF DECKING TO RECEIVE TWO (2) COATS OF CLEAR GLOSS, UV RESISTANT, POLYURETHANE.
D. REFER TO SITE PLAN FOR MORE INFORMATION.
E. ALL BOLTS, NUTS, WASHERS TO BE HOT DIP GALVANIZED, ALL WASHERS TO BE LOCK-WASHERS.
F. SLOPE SLAB TO DRAIN 1% AS SHOWN ON SITE PLAN. CONCRETE BASES SHALL HAVE A CONSISTENT (LEVEL) TOP ELEVATION, WOOD COLUMNS SHALL BE THE SAME LENGTH THROUGHOUT, STONE TO BE LEVEL WITH SLAB ALL SIDES.
G. MORTAR COLOR TO BE WHITE BASE, COLOR TBD, SUBMIT SAMPLES.

CONSULTANT:

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

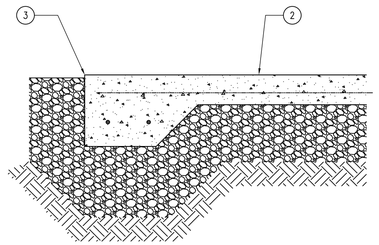
ALTERNATE: SHELTER PLAN & DETAILS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

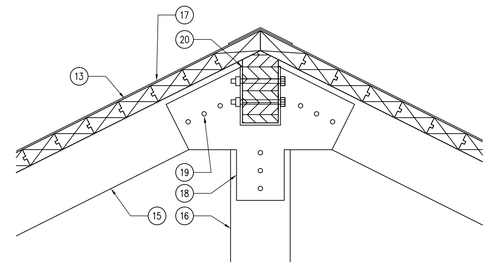
22620 COUNTY HIGHWAY S36
ELDORA, IA 50627

NO.	BY DATE	REVISION

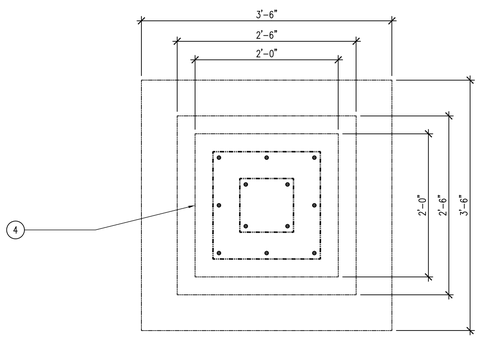
DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: **A-500**



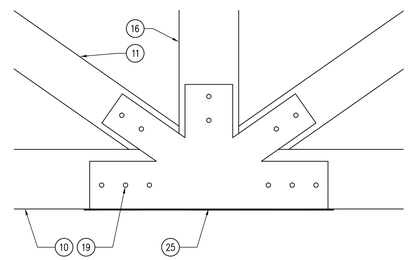
08 DETAIL – SLAB EDGE
SCALE: 1" = 1'-0"



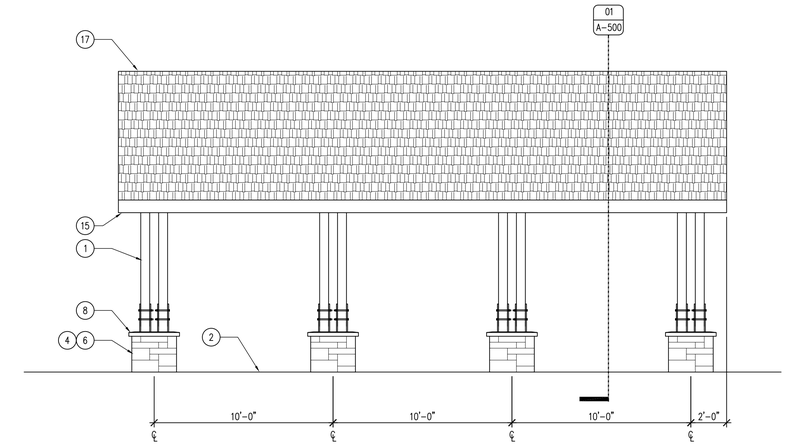
05 DETAIL – RIDGE
SCALE: 1" = 1'-0"



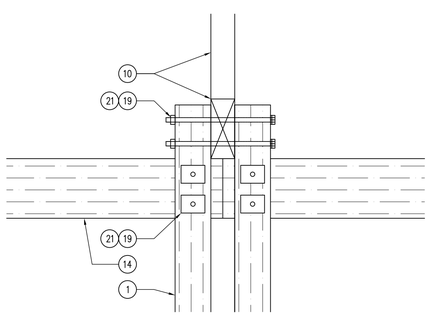
07 DETAIL – COLUMN BASE
SCALE: 1" = 1'-0"



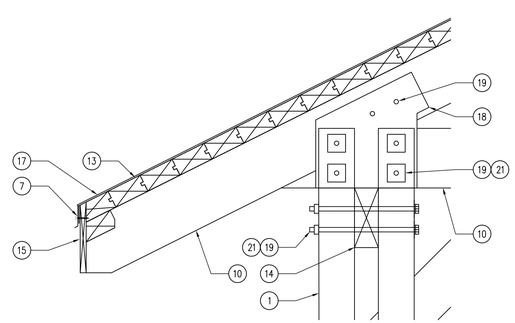
04 DETAIL – TRUSS CONNECTOR
SCALE: 1" = 1'-0"



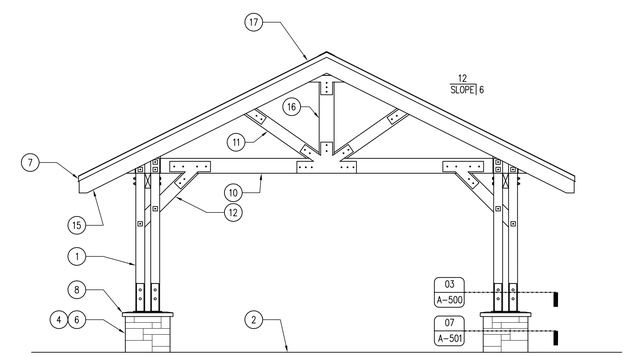
02 BUILDING ELEVATION – EAVE SIDE
SCALE: 1/4" = 1'-0"



06 DETAIL – BEAM & TRUSS CONNECTIONS
SCALE: 1" = 1'-0"



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



01 BUILDING ELEVATION – GABLE SIDE
SCALE: 1/4" = 1'-0"

KEYNOTES

1. 6X6 ROUGH SAWN DOUGLAS FIR COLUMNS, FINISH WITH TWP 100 SERIES STAIN, COLOR TBD.
2. 6" THICK CONCRETE SLAB WITH EPOXY COATED #4 REBAR 36" O.C. BOTH DIRECTIONS WITH 4" COMPACTED FILL BENEATH. SLOPE CONCRETE (1% SLOPE).
3. THICKENED SLAB EDGE WITH TWO (2) EPOXY COATED #4 REBAR RUNNING CONTINUOUSLY THE PERIMETER OF THE SLAB.
4. CONCRETE COLUMN BASE FOUNDATION WITH EPOXY COATED #5 REBAR 12" O.C. ALL DIRECTIONS. SLAB TO SLOPE 1%, CONCRETE COLUMN BASE SHALL BE ADJUSTED IN FIELD TO ACCOMMODATE THE DIFFERENCE IN ELEVATION, STONE TO BE FLUSH WITH SLAB.
5. CONTINUOUS PERIMETER EXPANSION JOINT WITH SELF-LEVELING SEALANT.
6. EDEN STONE, VALDERS FULL-VENEER CHESTNUT WEBSTONE TUMBLED SANDSTONE. ASTM C270 MORTAR TO BE USED, ⅜" MORTAR JOINT, COLOR TBD.
7. CONTINUOUS PERIMETER COPPER DRIP EDGE.
8. 4" THICK X 34" X 34" SELECT GRADE, GRAY INDIANA LIMESTONE CAP WITH SLOPED TOP AS SHOWN.
9. CONCRETE SAW-CUT CONTROL JOINTS.
10. 4X10 ROUGH SAWN DOUGLAS FIR TRUSS CHORD, STAIN TO BE TWP 100 SERIES, COLOR TBD.
11. 4X8 ROUGH SAWN DOUGLAS FIR TRUSS WEB, STAIN TO BE TWP 100 SERIES, COLOR TBD.
12. 4X8 ROUGH SAWN DOUGLAS FIR KNEE BRACE, BOTTOM OF BRACE TO BE MINIMUM 8'-0" A.F.F., STAIN TO MATCH COLUMNS AND TRUSSES.
13. 3X6 TONGUE AND GROVE DOUGLAS FIR ROOF DECKING, TWO COATS OF CLEAR GLOSS EXTERIOR GRADE (UV RESISTANT) POLYURETHANE.
14. 4X10 ROUGH SAWN DOUGLAS FIR BEAM, MAKE SPLICE CONNECTIONS WITHIN COLUMN POSTS.
15. 1X10 WESTERN RED CEDAR FASCIA, STAIN TO MATCH COLUMNS AND TRUSSES.
16. 4X10 ROUGH SAWN DOUGLAS FIR CENTER WEB, STAIN TO BE TWP 100 SERIES, COLOR TBD.
17. CERTAINTEED LANDMARK TL SHINGLES (WEATHERED WOOD), OVER 30LB FELT.
18. ⅜" STEEL CONNECTOR PLATE BRACKET BOTH SIDES, POWDER-COAT PLATES BLACK PRIOR TO INSTALLATION.
19. ¾" DIAMETER HOT DIP GALVANIZED BOLTS WITH NUTS AND LOCK WASHERS.
20. 5 ½" X 12" LAMINATED RIDGE BEAM, STAIN TO MATCH COLUMNS AND TRUSSES.
21. 3" X 3" X ⅜" STEEL WASHERS, POWDER-COAT BLACK PRIOR TO INSTALLATION.
22. ½" GRADE A36 STEEL COLUMN LEVELING PLATE WITH ANCHORS, EMBED 24" MINIMUM. POWDER-COAT BLACK PRIOR TO INSTALLATION.
23. NOT USED..
24. NOT USED.
25. ¾" STEEL MAIN TRUSS WEB CONNECTOR BRACKET. BRACKET TO HAVE ⅜" WELDED BOTTOM PLATE AND BRACKETS ON BOTH SIDES TO CREATE ONE SINGLE WEB BRACKET. POWDER-COAT PLATES BLACK PRIOR TO INSTALLATION.

GENERAL NOTES

A. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
B. ALL STAIN TO BE TWP 100 SERIES STAIN, COAT ALL MEMBERS TWO (2) TIMES, COLOR TBD. STAIN COLUMNS, TRUSSES, BEAMS AND FASCIA BOARDS.
C. WOOD ROOF DECKING TO RECEIVE TWO (2) COATS OF CLEAR GLOSS, UV RESISTANT, POLYURETHANE.
D. REFER TO SITE PLAN FOR MORE INFORMATION.
E. ALL BOLTS, NUTS, WASHERS TO BE HOT DIP GALVANIZED, ALL WASHERS TO BE LOCK-WASHERS.
F. SLOPE SLAB TO DRAIN 1% AS SHOWN ON SITE PLAN. CONCRETE BASES SHALL HAVE A CONSISTENT (LEVEL) TOP ELEVATION, WOOD COLUMNS SHALL BE THE SAME LENGTH THROUGHOUT, STONE TO BE LEVEL WITH SLAB ALL SIDES.
G. MORTAR COLOR TO BE WHITE BASE, COLOR TBD, SUBMIT SAMPLES.

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
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502 E. 9TH ST., DES MOINES, IA 50319-0034
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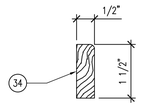
ALTERNATE: SHELTER ELEVATIONS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

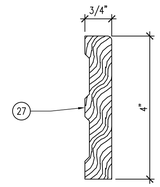
22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY DATE	REVISION

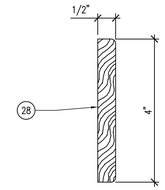
DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: A-501



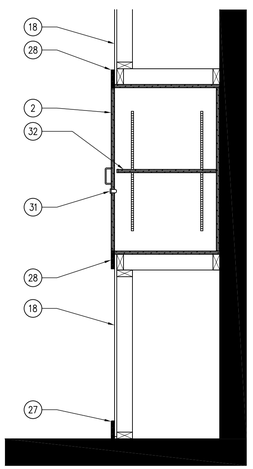
10 MILLWORK – BOOKCASE TRIM
SCALE: 6" = 1'-0"



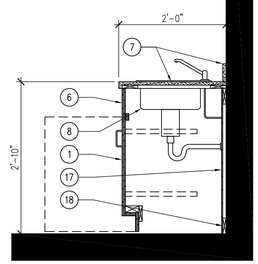
09 MILLWORK – BASE TRIM
SCALE: 6" = 1'-0"



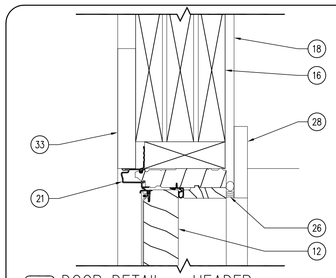
08 MILLWORK – CASING TRIM
SCALE: 6" = 1'-0"



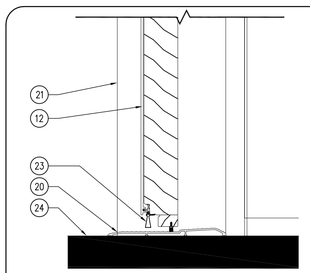
07 MILLWORK – BATHROOM CABINET
SCALE: 1" = 1'-0"



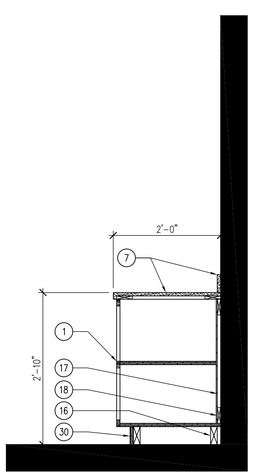
06 MILLWORK – SINK BASE
SCALE: 1" = 1'-0"



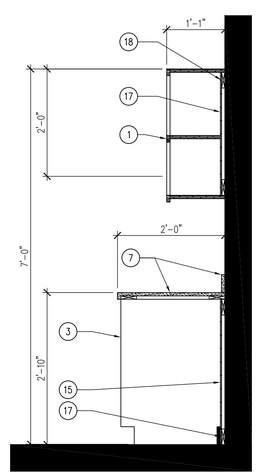
05 DOOR DETAIL – HEADER
SCALE: 3" = 1'-0"



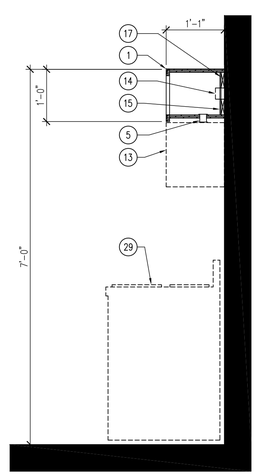
04 DOOR DETAIL – SILL
SCALE: 3" = 1'-0"



03 MILLWORK – BASE CABINET
SCALE: 1" = 1'-0"



02 MILLWORK – COUNTER & UPPER
SCALE: 6" = 1'-0"



01 MILLWORK DETAIL – MICROWAVE
SCALE: 1" = 1'-0"

HARDWARE SCHEDULE

HARDWARE SET NO. 1 – DOORS: 101

3 EA.	HINGES	FBB179 4 1/2 X 4 1/2
1 EA.	PRIVACY LOCKSET	ND40S (ATHENS)
1 EA.	FLOOR STOP	FS444
1 EA.	ADA THRESHOLD	

HARDWARE SET NO. 2 – DOORS: 100

3 EA.	HINGES	FBB179 4 1/2 X 4 1/2
1 EA.	ENTRANCE LOCKSET	REUSE EXISTING
3 EA.	PERIMETER SEALS	BLACK GASKET
1 EA.	THRESHOLD SEAL	FAST SEAL
1 EA.	LCN 1450	SRT DARK BRONZE
1 EA.	ADA THRESHOLD	

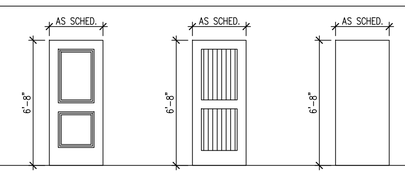
HARDWARE SET NO. 3 – DOORS: 103

3 EA.	HINGES	FBB179 4 1/2 X 4 1/2
3 EA.	PERIMETER SEALS	BLACK GASKET
1 EA.	THRESHOLD SEAL	BLACK GASKET
1 EA.	DEAD-BOLT	B661P
1 EA.	FLOOR STOP	FS444
1 EA.	THRESHOLD WITH SEAL	

ROOM #	ROOM NAME	FLOORING	BASE	NORTH WALL FINISH	EAST WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CEILING	NOTES
100	KITCHEN	EXISTING	EXISTING	PNT-1	PNT-1	PNT-1	PNT-2	EXISTING	MAINTAIN EXISTING CAR-SIDING CEILING FINISH
101	BATHROOM	CONC-1	WB-1	PNT-1	PNT-1	PNT-1	PNT-2	GYP-1	–
101	MECHANICAL	CONC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-2	GYP-1	–
103	LIVING	EXISTING	–	–	–	–	–	–	EXISTING FINISHES TO REMAIN

FINISH MARK	MATERIAL	MANUFACTURER INFO		DIMENSION	COLOR	FINISH	COMMENTS
		COMPANY NAME	PRODUCT NUMBER				
FLOOR FINISH							
CONC-1	SEALED CONCRETE	–	–	–	–	HIGH GLOSS	SEAL CONCRETE 2X
WB-1	HARD MAPLE BASE	–	–	3/4" X 4"	NATURAL	CLEAR	–
CEILING FINISH							
GYP-1	5/8" TYPE X FIRE GYPSUM	–	–	5/8'	–	PNT-1	–
GYP-2	GYPSUM WALL BOARD	USG	–	1/2"	WHITE	PNT-1/PNT-2	HEAVY ORANGE PEEL
INTERIOR FINISH							
PNT-1	INTERIOR PAINT	SHERWIN WILLIAMS	SW 6105	–	DIVINE WHITE	PEARL	COMMON
PNT-2	INTERIOR PAINT	SHERWIN WILLIAMS	SW 6106	–	KILIM BEIGE	PEARL	ACCENT
GYP-1	5/8" TYPE X FIRE GYPSUM	–	–	5/8'	–	–	2 LAYERS MECHANICAL ROOM
MILLWORK / WOOD FINISH							
WD-1	HARD MAPLE VENEER PLYWOOD	–	–	–	CLEAR	SATIN	ALL SHELVES AND CABINET BOXES
WD-2	3/4" SOLID HARD MAPLE	–	–	–	CLEAR	SATIN	ALL FACEFRAMES, DOORS, & DRAWERS
QTZ-1	QUARTZ	DUPONT	–	1.25"	CALACUTTA NATURA	MANUF.	ALL WOOD/MILLWORK – SUBMIT SAMPLES

DOOR TYPES

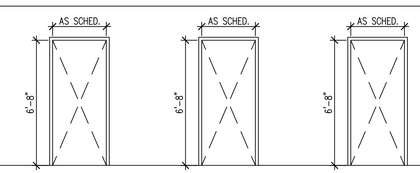


D-1
ENTRANCE DOOR
16GA GALVANIZED
STEELCRAFT CE – HD2
URETHANE CORE

D-2
BEAD FACE DOOR
GRADE "AA"
HARD MAPLE DOOR
PANEL DOOR

D-3
FLUSH SLAB DOOR
GRADE "AA"
HARD MAPLE DOOR
SOLID CORE

FRAME TYPES



F-1
EXTERIOR FRAME
14 GAUGE GALVANIZED
WELDED W/ DRIPCAP

F-2
WOOD
HARD MAPLE

F-3
STEEL FRAME
18GA.

DOOR SCHEDULE

DOOR NUMBER	DOOR DIMENSION WIDTH	DOOR DIMENSION HEIGHT	DOOR DIMENSION THICK.	DOOR TYPE	DOOR GLASS	DOOR FINISH	FRAME DETAILS HEAD	FRAME DETAILS JAMB	FRAME DETAILS THRESHOLD	FRAME TYPE	FRAME FINISH	FIRE RATING LABEL	HARDWARE SET #	HARDWARE KEYSIDE ROOM NUMBER	COMMENTS
100	3'-0"	6'-8"	1 3/4"	D-1	MANUF.	DARK BRONZE	05/A-600	–	04/A-600	F-1	DARK BRONZE	–	2	EXT.	OUTSWING – STEELCRAFT CE 16GA DOOR
101	3'-0"	6'-8"	1 3/4"	D-2	–	CLEAR	–	–	–	F-2	CLEAR	–	1	100	–
102	2'-0"	6'-8"	1 3/4"	D-3	–	CLEAR	–	–	–	F-3	CLEAR	–	3	101	–

KEYNOTES

1. ¾" PLYWOOD CABINET WITH WOOD VENEER (WD-1). $\frac{3}{4}$" X 1 $\frac{1}{2}$" SOLID MAPLE FACE-FRAME SURROUND. REFER TO FINISH SCHEDULE SHEET A-600.
2. ¾" PLYWOOD DOOR WITH WOOD VENEER (WD-1), HIDDEN SOFT-CLOSE HINGES. PROVIDE DECORATIVE HARDWARE WIRE PULLS (DARK BRONZE), REFER TO FINISH SCHEDULE SHEET A-600.
3. CABINET BEYOND.
4. WALL FINISH AS SCHEDULED, REFER TO SHEET A-600.
5. GROMMET HOLE WITH PLASTIC GROMMET, SIZE ACCORDING TO MICROWAVE MANUFACTURER'S RECOMMENDATIONS.
6. ¾" PLYWOOD VALENCE WITH WOOD VENEER (WD-1). $\frac{1}{2}$" HARD MAPLE EDGE BANDING. REFER TO FINISH SCHEDULE SHEET A-600.
7. 1 $\frac{1}{2}$" QUARTZ COUNTER-TOP (QZT-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.
10. FLOOR AS SCHEDULED. REFER TO FINISH SCHEDULE SHEET A-600.
11. ADA COMPLIANT $\frac{3}{4}$" PLYWOOD UNDER-SINK DOORS, WITH $\frac{1}{2}$" HARD MAPLE EDGE BANDING, ON SLIDER HINGES WITH WOOD VENEER (WD-1). PROVIDE DECORATIVE HARDWARE WIRE PULLS (DARK BRONZE), REFER TO FINISH SCHEDULE SHEET A-600. BLOCK AND BRACKET DOOR AS NECESSARY.
12. DOOR AS SCHEDULED, REFER TO DOOR SCHEDULE SHEET A-600.
13. MICROWAVE AND FAN EXHAUST COMBO SET BY OWNER.
14. ELECTRICAL OUTLET, REFER TO ELECTRICAL DRAWINGS.
15. ¼" PLYWOOD BACKER BOARD WITH WOOD VENEER (WD-1).
16. 2X WOOD BLOCKING AS REQUIRED.
17. 1X WOOD BLOCKING AS REQUIRED.
18. 1/2" GYPSUM WALL BOARD.
19. CONTINOUS SEALANT AND BACKER ROD.
20. ADA COMPLIANT THRESHOLD.
21. DOOR FRAME AS SCHEDULED.
22. EXISTING HEADER.
23. BRUSH TYPE GASKET FOR EXTERIOR DOORS.
24. CONCRETE SLAB, REFER A-100 AND FINISH SCHEDULE.
25. METAL FLASHING W/ SEALANT, AS REQUIRED.
26. 1/2" EXPANSION JOINT WITH COMPRESSIBLE EXPANSION MATERIAL AND SEALANT.
27. HARD MAPLE BASE S4S WITH $\frac{1}{16}$" RADIUS TOP EDGE AND TWO COATS OF POLYURETHANE.
28. HARD MAPLE CASING S4S WITH $\frac{1}{16}$" RADIUS BOTH EDGES AND TWO COATS OF POLYURETHANE.
29. STOVE BY OWNER.
30. $\frac{3}{4}$" PLYWOOD (WD-1) TOE-KICK.
31. KEYED CYLINDER LOCK.
32. ¾" PLYWOOD ADJUSTABLE SHELF WITH $\frac{1}{2}$" HARD MAPLE EDGE BANDING AND WOOD VENEER (WD-1).
33. EXISTING SIDING TO REMAIN.
34. HARD MAPLE BOOKCASE TRIM S4S WITH $\frac{1}{16}$" RADIUS TOP EDGE AND TWO COATS OF POLYURETHANE.

GENERAL NOTES

A. WOOD DOORS TO BE CUSTOM GRADE "AA" MAPLE WOOD VENEER SOLID CORE. FINISH TO BE APPROVED BY ARCHITECT.
B. ALL HARDWARE MODEL NUMBERS BASED ON SCHLAGE "ND-SERIES" LOCKSETS AND "IVES" HARDWARE.
C. HARDWARE FINISH TO BE : "AGED BRONZE (643a)", UNLESS NOTED OTHERWISE.
D. CHECK ALL QUANTITIES, DIMENSIONS AND FINISHES BEFORE ORDERING.
E. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.
F. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
G. ALL PLYWOOD PRODUCTS TO HAVE NO ADDED UREA-FORMALDEHYDE (NAUF).
H. ALL WOOD SURFACES TO HAVE TWO (2) COATS, VOC-FREE, CLEAR SATIN POLYURETHANE FINISH.

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILDING
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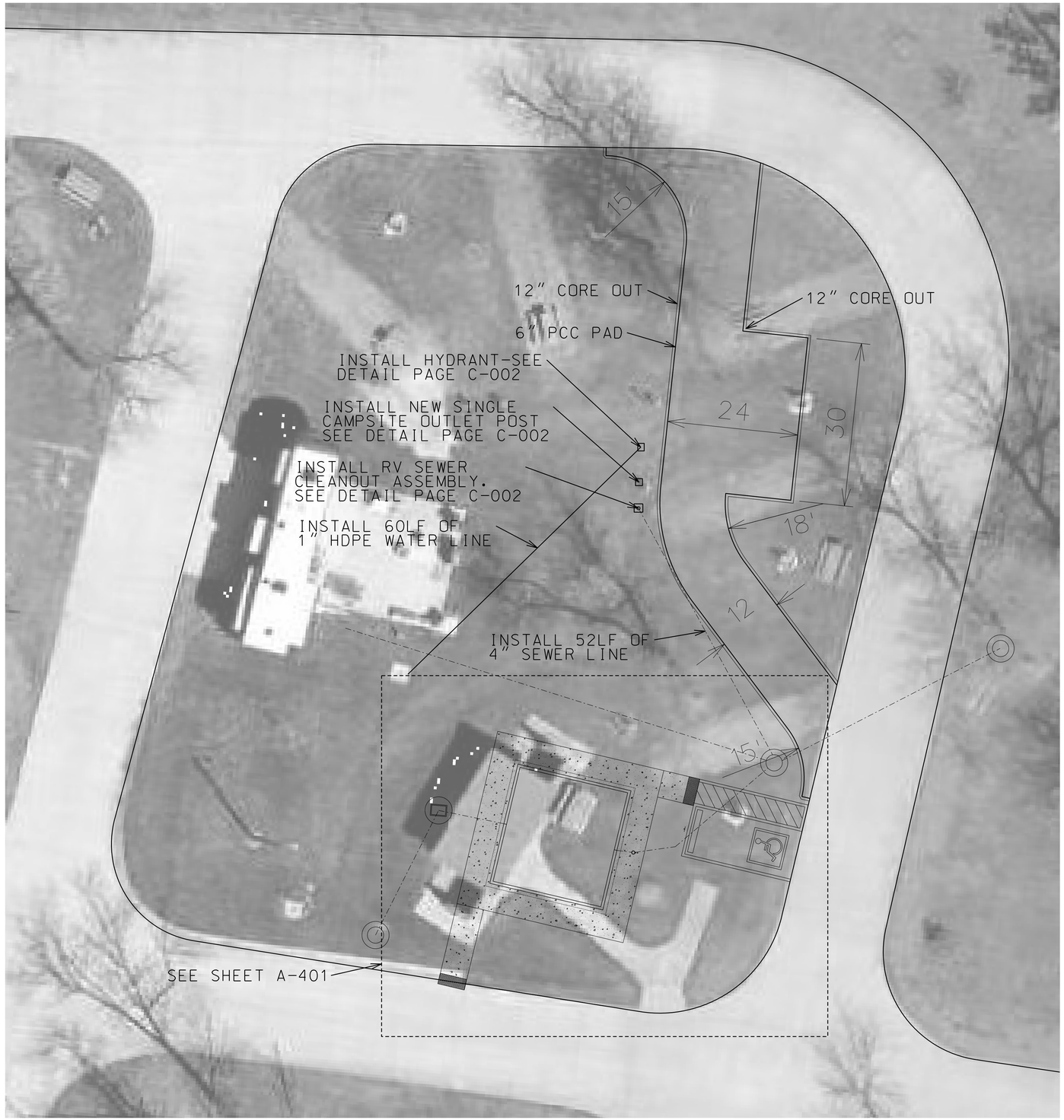
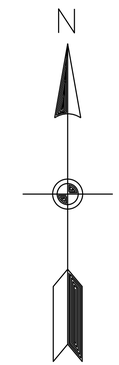
DETAILS, FINISH & DOOR SCHEDULES

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK
22620 COUNTY HIGHWAY S36
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No:
A-600





SCALE 1"= 10'

NOTES:

1. CONCRETE SHALL BE REINFORCED WITH 1/2" REBAR ON 2 FOOT CENTERS.

2. MINIMUM DISTANCE BETWEEN SEWER AND WATER SERVICE SHALL BE 10'.

3. 12" CORE OUT SHALL BE 0.5 FEET OUTSIDE OF CONCRETE PAD FOOTPRINT. WASTE WILL BE DISPOSED OF AS DIRECTED BY DNR INSPECTOR.

4. CONTRACTOR SHALL PLACE AND COMPACT SPECIAL BACKFILL TO 6" DEPTH.

ESTIMATED QUANTITIES FOR BID ITEM 29
CAMPGROUND HOST SITE

ITEM	QTY
1" HDPE WATER LINE	60 L.F.
4" SCHEDULE 40 PVC SEWER LINE	52 L.F.
SINGLE CAMPSITE OUTLET POST - 50 AMP	1 EA.
RV SEWER CLEANOUT ASSEMBLY	1 EA.
EXCAVATION CLASS 10 CORE OUT, 12" DEPTH	68 C.Y.
SPECIAL BACKFILL, 6" DEPTH	68 TONS
CONCRETE, CLASS C PCC	202 S.Y.
CORPORATION STOP	1 EA.
CURB STOP/VALVE BOX	1 EA.
DECTECTABLE WARNING TAPE 3" SEWER	52 L.F.
DECTECTABLE WARNING TAPE 3" WATER	60 L.F.

CONSULTANT:

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ENGINEERING SERVICES - WALLACE BUILING
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CAMP HOST SITE PLAN

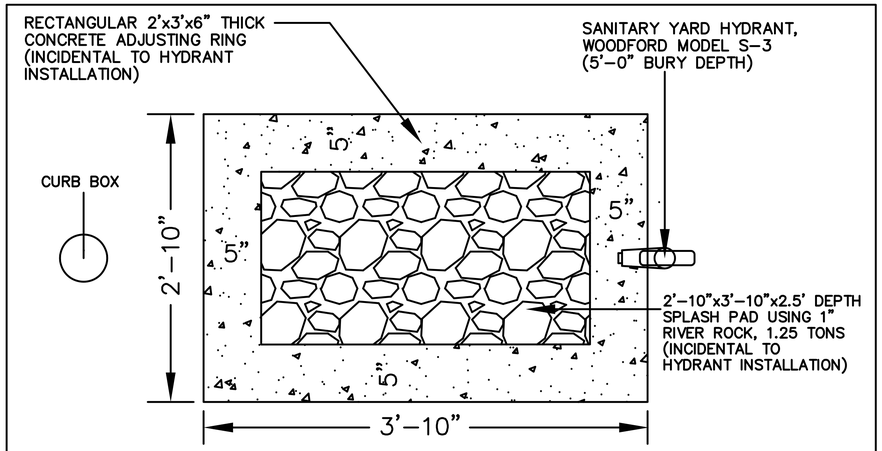
SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY DATE	REVISION

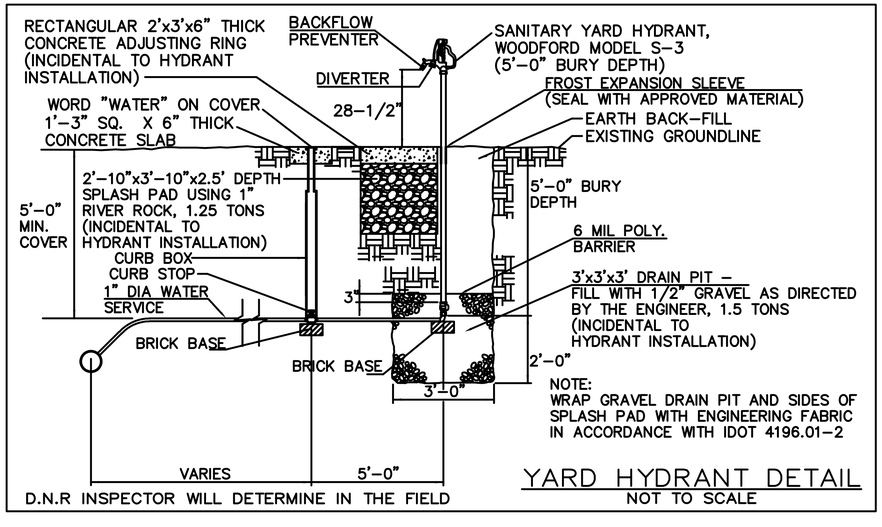
DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: C-001

PLAN VIEW

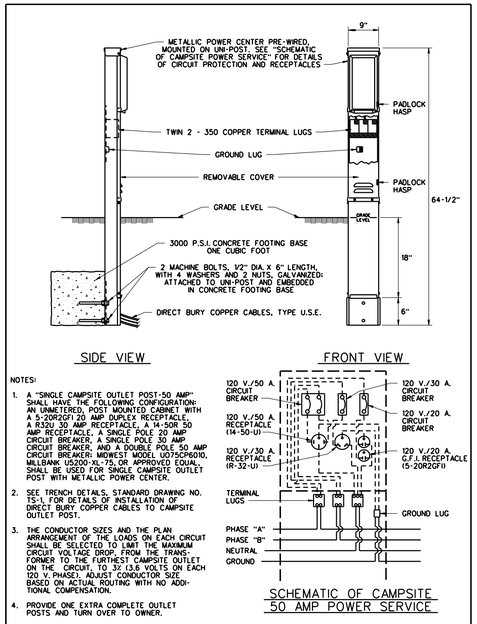


YARD HYDRANT DETAIL
NOT TO SCALE

PROFILE VIEW



YARD HYDRANT DETAIL
NOT TO SCALE

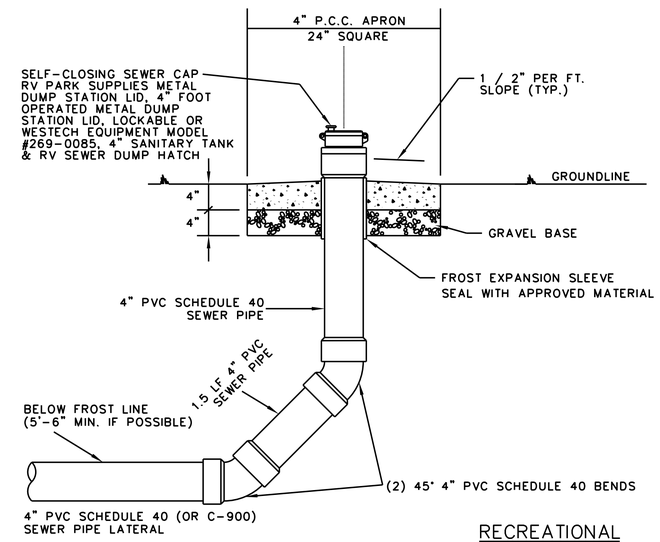


NOTES:

1. A "SINGLE CAMPSITE OUTLET POST-50 AMP" SHALL HAVE THE FOLLOWING CONFIGURATION: AN UNMETERED, POST MOUNTED CABINET WITH A 5-20R2GFI 20 AMP DUPLEX RECEPTACLE, A R32U 30 AMP RECEPTACLE, A 14-50R 50 AMP RECEPTACLE, A SINGLE POLE 20 AMP CIRCUIT BREAKER, A SINGLE POLE 30 AMP CIRCUIT BREAKER, AND A DOUBLE POLE 50 AMP CIRCUIT BREAKER: MIDWEST MODEL U075CP6010, MILLBANK U5200-XL-75, OR APPROVED EQUAL. SHALL BE USED FOR SINGLE CAMPSITE OUTLET POST WITH METALLIC POWER CENTER.
2. SEE TRENCH DETAILS, STANDARD DRAWING NO. TS-1, FOR DETAILS OF INSTALLATION OF DIRECT BURY COPPER CABLES TO CAMPSITE OUTLET POST.
3. THE CONDUCTOR SIZES AND THE PLAN ARRANGEMENT OF THE LOADS ON EACH CIRCUIT SHALL BE SELECTED TO LIMIT THE MAXIMUM CIRCUIT VOLTAGE DROP, FROM THE TRANSFORMER TO THE FURTHEST CAMPSITE OUTLET ON THE CIRCUIT, TO 3% (3.6 VOLTS ON EACH 120 V. PHASE). ADJUST CONDUCTOR SIZE BASED ON ACTUAL ROUTING WITH NO ADDITIONAL COMPENSATION.
4. PROVIDE ONE EXTRA COMPLETE OUTLET POSTS AND TURN OVER TO OWNER.

SCHEMATIC OF CAMPSITE 50 AMP POWER SERVICE

CAMPGROUND ELECTRICAL SYSTEM STANDARD DRAWING NO. SC-1	
DETAILS OF CAMPSITE OUTLET POST	
REVISION DATE 5/25/17	SHEET 10 OF 10



RECREATIONAL VEHICLE TO SANITARY SEWER CONNECTION
NOT TO SCALE

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILING
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CAMP HOST SITE DETAILS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK
22620 COUNTY HIGHWAY S56
ELDORA, IA 50627

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 19-02-42-01
CHK'D BY:
DATE: 03.17.2020
SHEET No: C-002

MECHANICAL SYMBOLS

CW	COLD WATER
HW	HOT WATER SUPPLY
SS	SOIL, WASTE, OR SANITARY SEWER BELOW FLOOR OR GRADE
D	DRAIN
CD	CONDENSATE DRAIN ABOVE FLOOR OR GRADE
V	VENT ABOVE FLOOR OR GRADE
REF	REFRIGERANT LINE
FD TYPE-1	FLOOR DRAIN – TYPE AND SIZE AS NOTED
T	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
SSI 1	EQUIPMENT TAG
	NEW DUCTWORK
	DUCTWORK TO BE REMOVED

NOTE: NOT ALL SYMBOLS APPLY TO THIS PROJECT.

	UNION
MV	AIR VENT – MANUAL
AV	AIR VENT – AUTOMATIC
	THERMOMETER WITH GAGE COCK
	PRESSURE GAUGE WITH GAGE COCK
	STRAINER
	REDUCED PRESSURE BACKFLOW PREVENTER
"A"	WATER HAMMER ARRESTOR – SIZE AS NOTED
	CHECK VALVE
	RISER DOWN (ELBOW)
	RISER DOWN (TEE)
	RISER UP (ELBOW)
	NEW PIPING
	EXISTING PIPING TO REMAIN
	PIPING TO BE REMOVED
	SHUT OFF VALVE (BALL, BUTTERFLY, ETC. REFER TO SPECS)
	POINT OF CONNECTION OF NEW WORK TO EXISTING OR POINT OF DISCONNECTION OF DEMOLITION WORK

NOTE: NOT ALL SYMBOLS APPLY TO THIS PROJECT.

MECHANICAL ABBREVIATIONS

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

NOTE: NOT ALL ABBREVIATIONS 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.

MECHANICAL DEMOLITION NOTES

MECHANICAL DEMOLITION DRAWINGS SHOWING EXISTING CONDITIONS HAVE BEEN PREPARED BASED ON FIELD OBSERVATION ONLY. 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.

CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH EXISTING MECHANICAL SYSTEMS WHICH WILL BE AFFECTED BY THE DEMOLITION WORK. CONTRACTOR SHALL OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES. SUCH PERMISSION WILL BE GRANTED ONLY AFTER OWNER'S REPRESENTATIVE IS INFORMED OF THE REASON FOR AND DURATION OF THE SHUTDOWN.

PIPING, HANGERS, DUCTWORK, GRILLES, REGISTERS, DIFFUSERS, 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.

CONSULT WITH THE OWNER AT THE INCEPTION OF THE PROJECT TO DETERMINE DISPOSITION OF REMOVED EXISTING EQUIPMENT.

EQUIPMENT AND/OR MATERIALS SCHEDULED FOR ABANDONMENT AND REMOVAL ARE TO BECOME CONTRACTOR'S SALVAGE AND SHALL BE HAULED AWAY FROM THE SITE PROMPTLY. EXCEPTION SHALL BE ANY EQUIPMENT LISTED FOR OWNER SALVAGE.

REMOVE ALL ABANDONED PIPING, DUCTWORK. REFER TO ARCH PLANS FOR CEILINGS/WALLS REMOVED.

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 DUCT LINER.

PLUMBING GENERAL NOTES

MECHANICAL CONTRACTOR TO PROVIDE A COMPLETE PLUMBING SYSTEM, INCLUDING, PIPE, INSULATION, HANGERS, SUPPORTS, EQUIPMENT, FIXTURES, MIXING VALVES, VALVES, 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 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 OWNERS 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.

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GENERAL NOTES - MECHANICAL

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK
22620 COUNTY HIGHWAY S56
ELDORA, IOWA 50627

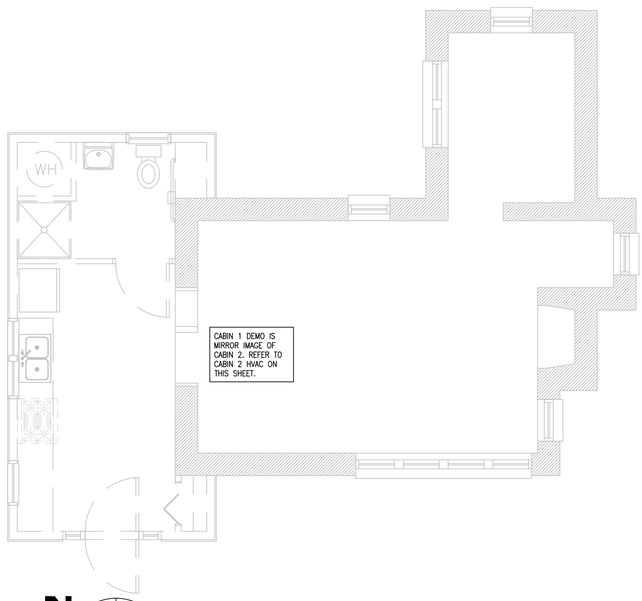
NO.	BY / DATE	REVISION

DRAWN BY: CB	PROJECT NUMBER: 19-02-42-01
CHK'D BY: ML	DATE: 03.17.2020

SHEET No: M0

GENERAL NOTES

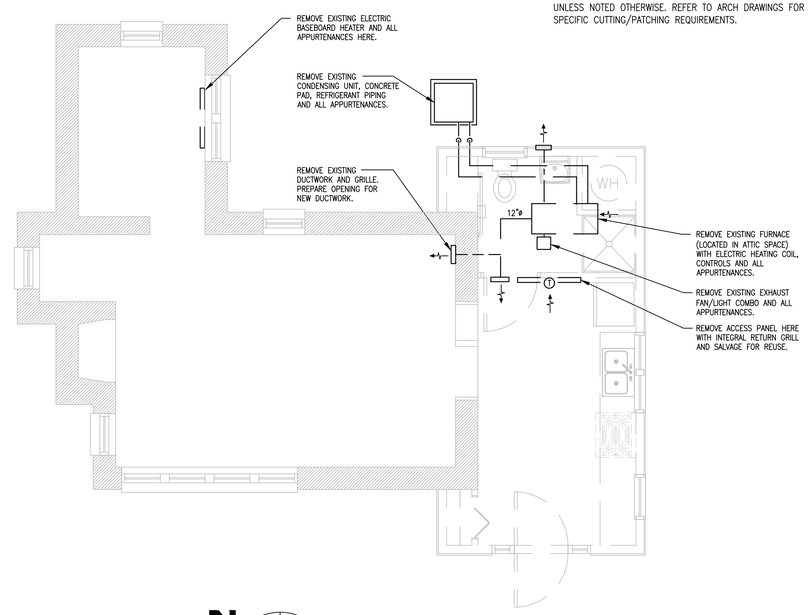
1. REFER TO MO FOR GENERAL NOTES.
2. DEMO ALL EXISTING HVAC EQUIPMENT, CONTROLS SUPPORTS AND ACCESSORIES UNLESS NOTED OTHERWISE.
3. REMOVE ALL HANGERS AND SUPPORTS ASSOCIATED WITH DUCTWORK AND PIPING TO BE REMOVED.
4. PATCH ALL WALLS AND FLOORS TO MATCH EXISTING THAT ARE CUT FOR THE REMOVAL OF MECHANICAL EQUIPMENT UNLESS NOTED OTHERWISE. REFER TO ARCH DRAWINGS FOR SPECIFIC CUTTING/PATCHING REQUIREMENTS.



N

CABIN 1 DEMO PLAN - MECHANICAL

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



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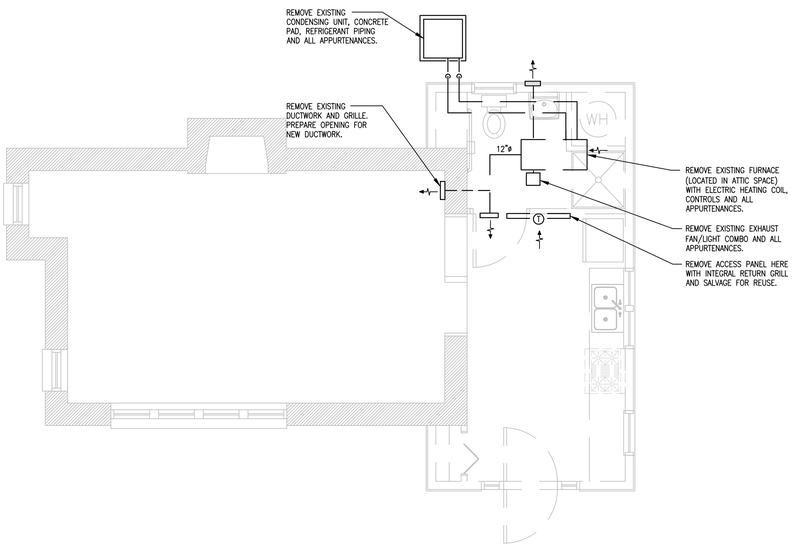
CABIN 2 DEMO PLAN - MECHANICAL

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



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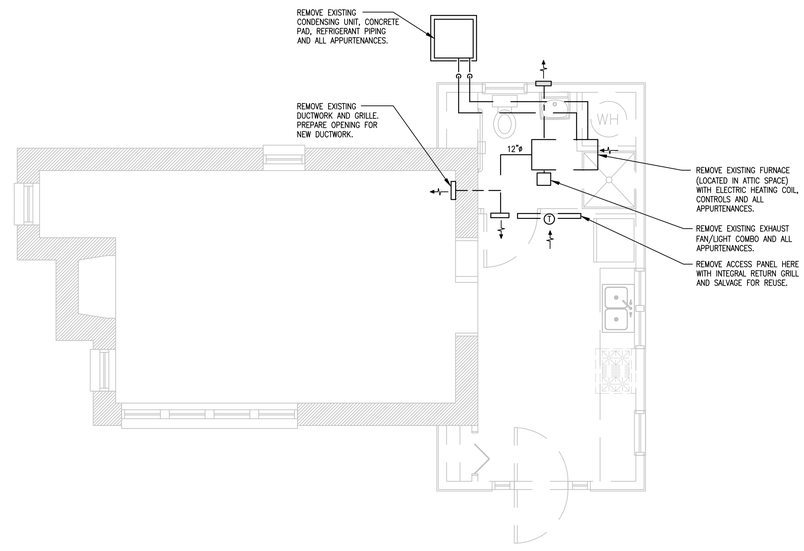
CABIN 3 DEMO PLAN - MECHANICAL

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



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CABIN 4 DEMO PLAN - MECHANICAL

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

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CABIN DEMO PLANS - MECHANICAL

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IOWA 50627

NO.	BY / DATE	REVISION

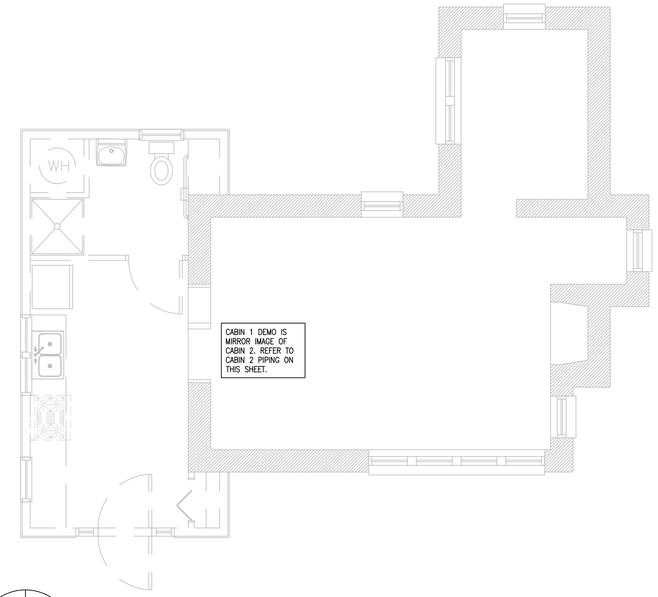
DRAWN BY: CB	PROJECT NUMBER: 19-02-42-01
CHK'D BY: ML	DATE: 03.17.2020

SHEET No:

MD1

GENERAL NOTES

1. REFER TO M0 FOR GENERAL NOTES.
2. DEMO ALL EXISTING PLUMBING FIXTURES AND ACCESSORIES UNLESS NOTED OTHERWISE.
3. REMOVE ALL HANGERS AND SUPPORTS ASSOCIATED WITH EQUIPMENT AND PIPING TO BE REMOVED.
4. RESTROOM FLOORS WILL BE SAW CUT AND REMOVED BY G.C. FOR UNDER FLOOR WORK. REFER TO ARCH DRAWINGS FOR SPECIFIC DETAILS.



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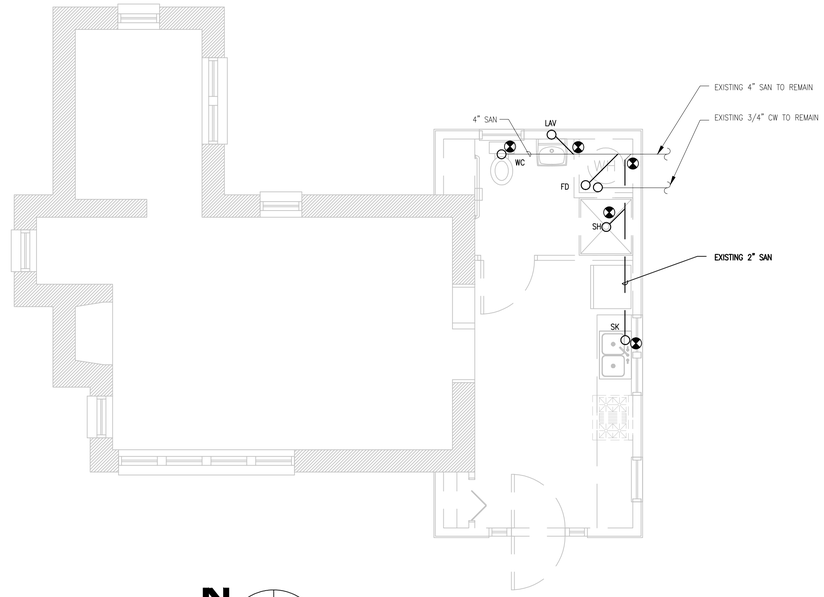
CABIN 1 DEMO UNDER FLOOR PLAN - PLUMBING

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



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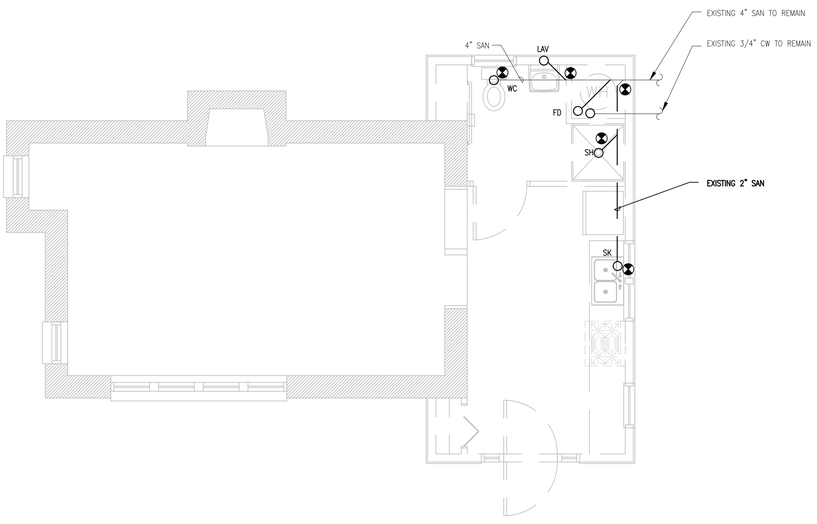
CABIN 2 DEMO UNDER FLOOR PLAN - PLUMBING

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



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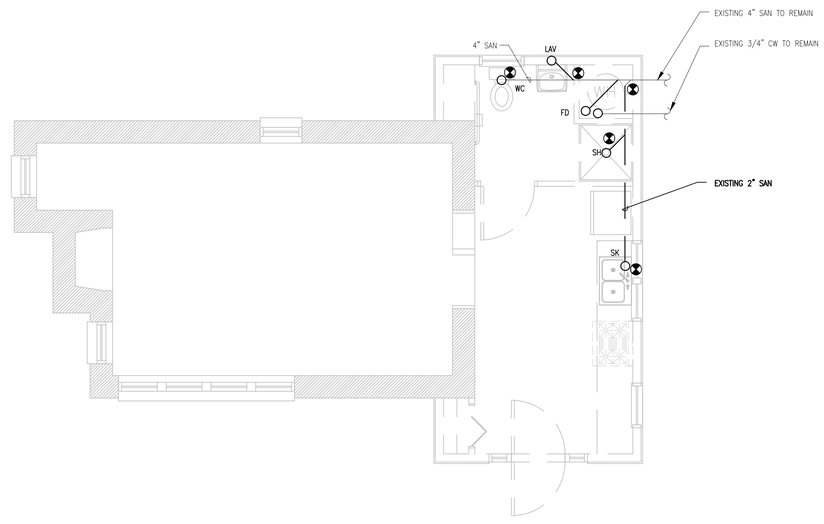
CABIN 3 DEMO UNDER FLOOR PLAN - PLUMBING

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



N

CABIN 4 DEMO UNDER FLOOR PLAN - PLUMBING

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

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CABIN DEMO UNDER FLOOR - PLUMBING

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IOWA 50627

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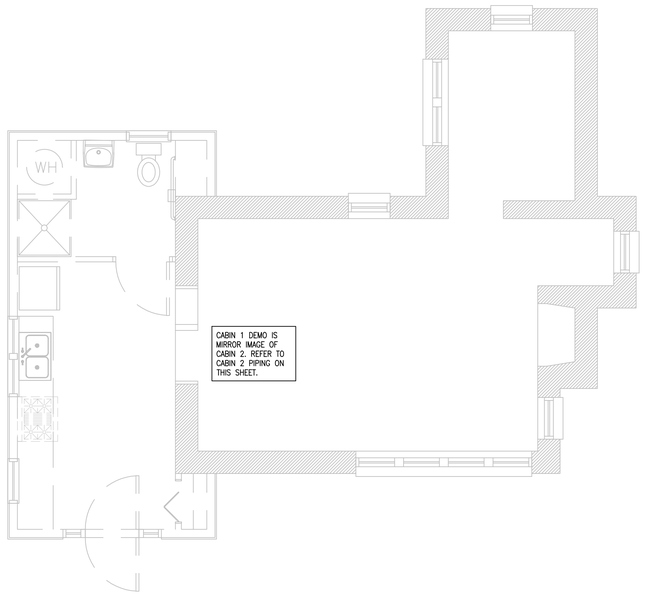
CHK'D BY: ML	DATE: 03.17.2020

SHEET No:
PD0

GENERAL NOTES

1. REFER TO MO FOR GENERAL NOTES.
2. DEMO ALL EXISTING PLUMBING FIXTURES AND ACCESSORIES UNLESS NOTED OTHERWISE.
3. REMOVE ALL HANGERS AND SUPPORTS ASSOCIATED WITH EQUIPMENT AND PIPING TO BE REMOVED.
4. RESTROOM FLOORS WILL BE SAW CUT AND REMOVED BY G.C. FOR UNDER FLOOR WORK. REFER TO ARCH DRAWINGS FOR SPECIFIC DETAILS.



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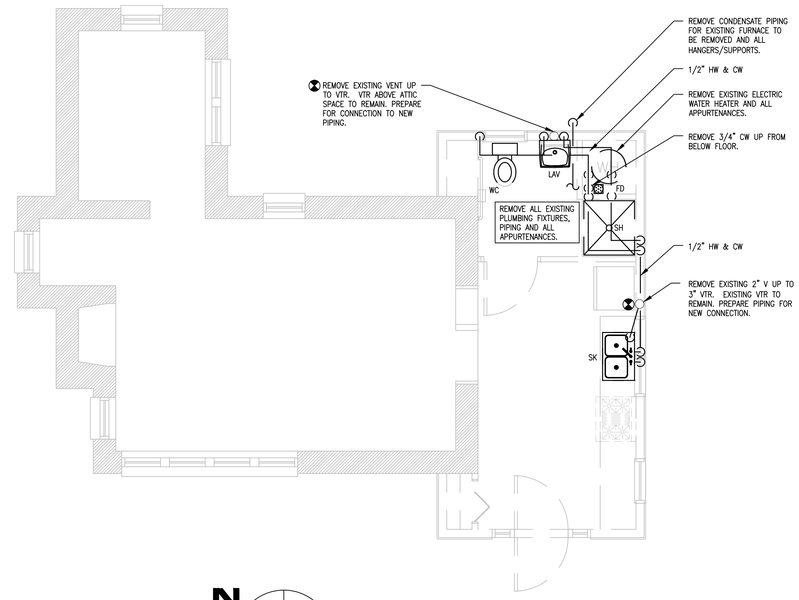
CABIN 1 DEMO FLOOR PLAN - PLUMBING

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



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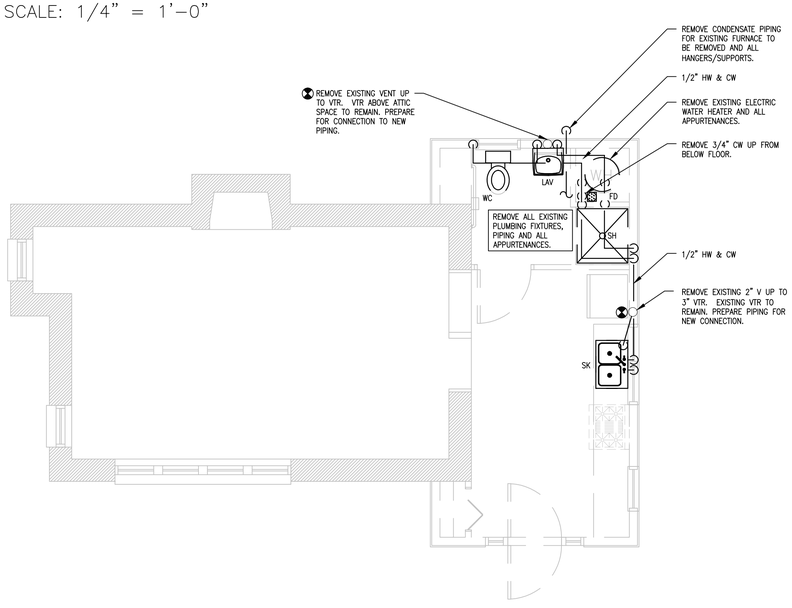
CABIN 2 DEMO FLOOR PLAN - PLUMBING

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



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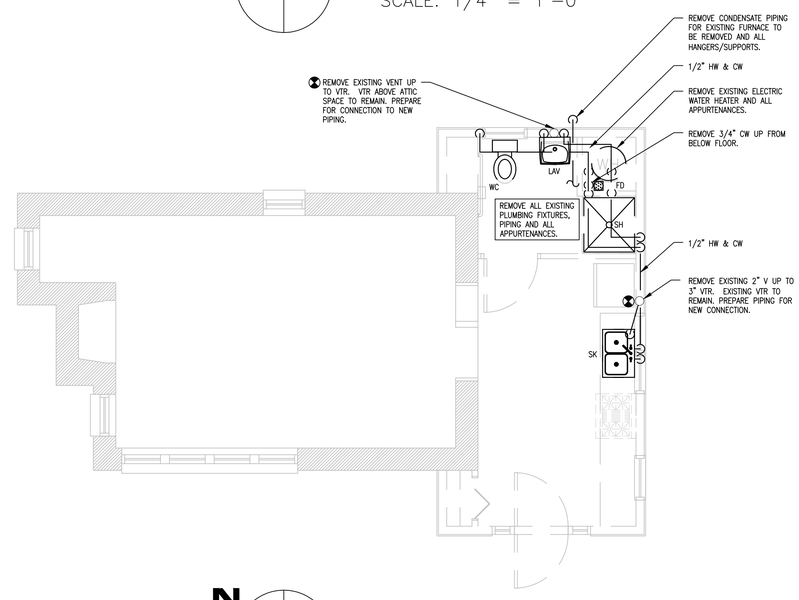
CABIN 4 DEMO FLOOR PLAN - PLUMBING

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



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CABIN 3 DEMO FLOOR PLAN - PLUMBING

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CABIN DEMO FLOOR PLANS - PLUMBING

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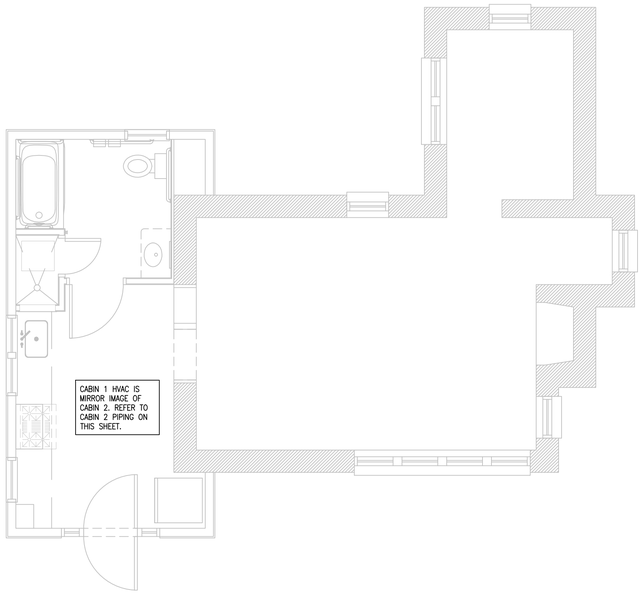
PD1

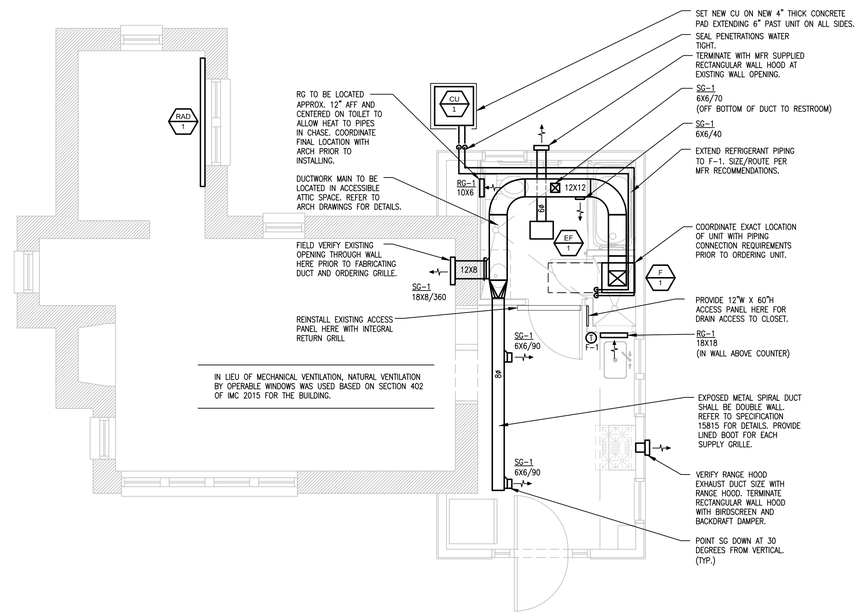
GENERAL NOTES

1. REFER TO M0 FOR GENERAL NOTES.
2. REFER TO M2 FOR MECHANICAL DETAILS.



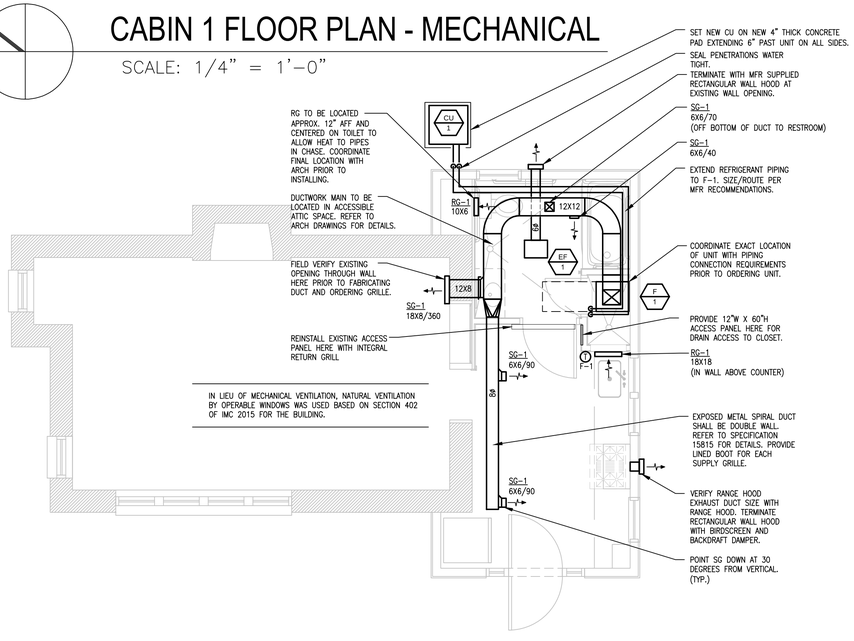
CABIN 1 FLOOR PLAN - MECHANICAL

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



CABIN 2 FLOOR PLAN - MECHANICAL

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



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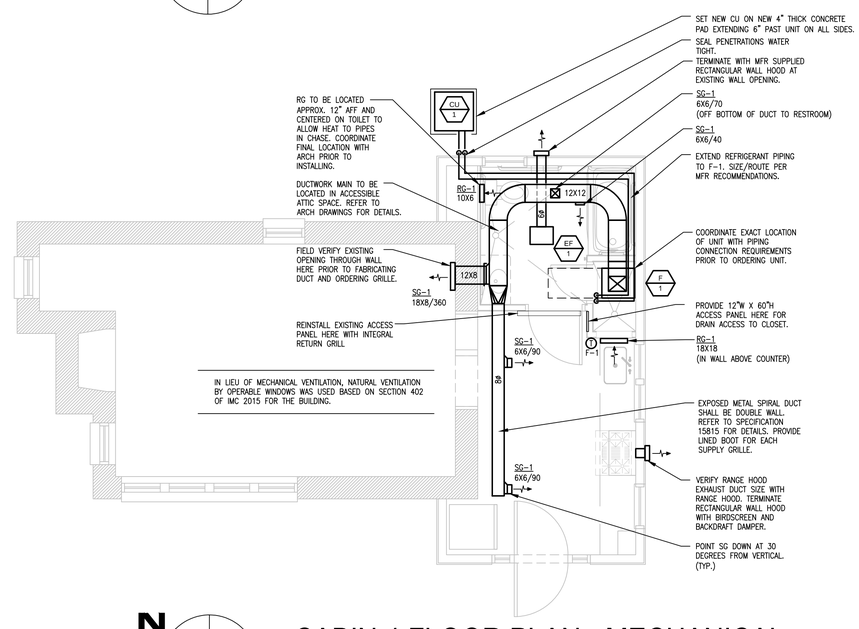

CABIN 4 FLOOR PLAN - MECHANICAL

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CABIN FLOOR PLANS - MECHANICAL

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
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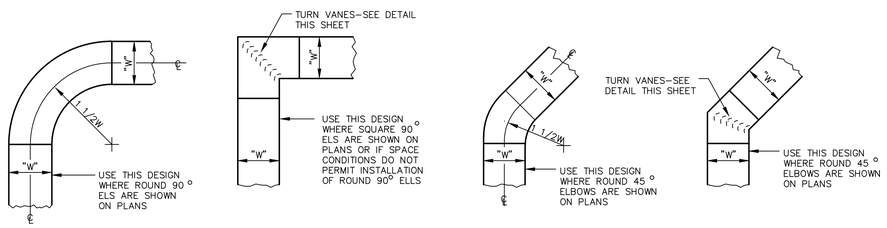
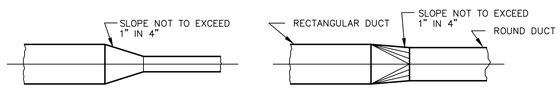
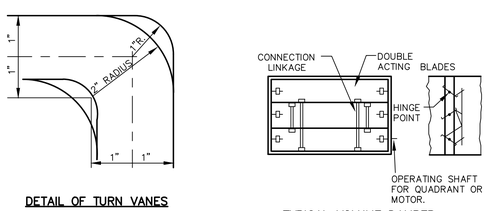


ROUND 90° ELBOW | SQUARE 90° ELBOW | ROUND 45° ELBOW | SQUARE 45° ELBOW

CONSTRUCTION OF 90° ELBOWS | CONSTRUCTION OF 45° ELBOWS



TYPICAL RECTANGULAR TRANSITION | TYPICAL RECTANGULAR TO ROUND TRANSITION

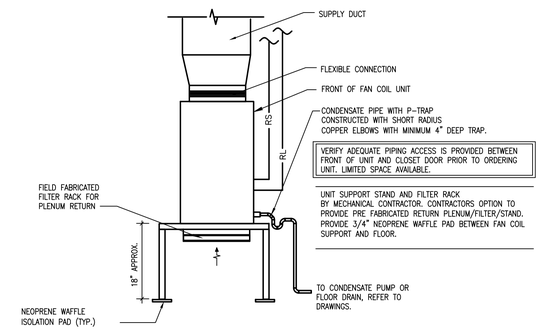


DETAIL OF TURN VANES | TYPICAL VOLUME DAMPER

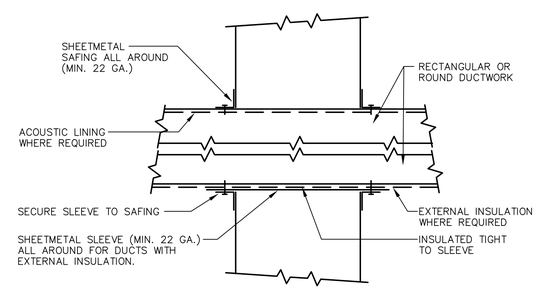
INSTALLATION NOTES

1. ALL DUCTS SHALL BE CONSTRUCTED AND ERECTED IN A NEAT AND WORKMANLIKE MANNER.
2. DUCTS SHALL BE CONSTRUCTED OF THE WEIGHTS, GAGES AND MATERIAL AS SPECIFIED.
3. THE DIMENSION SHOWN FOR ALL DUCTS SHOWN IN PLAN GIVE THE WIDTH FIRST AND THEN THE HEIGHT.
4. DUCT RISERS SHOULD BE SUPPORTED BY ANGLES AT EVERY FLOOR.
5. TURNING VANES SHALL BE INSTALLED IN ALL ABRUPT ELBOWS TO PREVENT TURBULENCE.
6. DUCTS SHALL BE SECURELY ATTACHED TO THE BUILDING CONSTRUCTION IN AN APPROVED MANNER.
7. DIVERGING TRANSITION PIECES SHALL BE MADE AS GRADUAL AS POSSIBLE.
8. ACCESS PANELS SHOULD BE PLACED BEFORE AND/OR AFTER EQUIPMENT INSTALLED IN THE DUCT.
9. DUCT AREA SHOULD NOT BE DECREASED MORE THAN 10 PERCENT WHEN OBSTRUCTIONS CANNOT BE AVOIDED, AND THEN A STREAMLINED FITTING SHOULD BE USED.
10. FLEXIBLE FABRIC CONNECTIONS (OR EQUAL) SHOULD BE USED ON OUTLETS OF HEAT PUMPS.
11. JOINTS AND SEAMS OF SUPPLY DUCTS SHALL BE FASTENED SECURELY AND MADE AIR TIGHT.

1 DETAILS OF THE LOW VELOCITY DUCT LAYOUT
NOT TO SCALE



2 VERTICAL AHU / FILTER PLENUM
NOT TO SCALE



3 DUCT PENETRATION THROUGH NON–FIRE RATED WALL
NOT TO SCALE

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MECHANICAL DETAILS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK
22620 COUNTY HIGHWAY S56
ELDORA, IOWA 50627

NO.	BY / DATE	REVISION

DRAWN BY: CB	PROJECT NUMBER: 19-02-42-01
CHK'D BY: ML	DATE: 03.17.2020

SHEET No: M2

EXHAUST FAN SCHEDULE

REFERENCE	EF-1
MANUFACTURER	GREENHECK
MODEL #	SP-B110
TYPE	IN-CEILING
SERVES	BATHROOM
CFM	75
ESP (IN. W.C.)	0.30
FAN RPM	950
BELT/DIRECT	DIRECT
SPEED CONTROL (YES/NO)	YES
SONES	2
DAMPER TYPE	GRAV. BACKDRAFT
BHP	100 W
MOTOR HP	100 W
VOLTAGE/PH	120/1
NOTES	1,2,3

NOTES:
1. PLUG DISCONNECT BY FAN MFR.
2. FAN TO INCLUDE LOW PROFILE WHITE EXHAUST GRILLE.
3. FAN TO BE CONNECTED TO ROOM LIGHT SWITCH.

ELECTRIC FURNACE SCHEDULE

REFERENCE	F-1
MANUFACTURER	GOODMAN
MODEL #	AVPTC25B14BA
SERVES	CABIN
CFM	650
ESP (IN. W.C.)	0.5
NOMINAL TONS	2
SEER	16
ELECTRIC HEATING COIL (KW)	8
FAN HP	0.50
MCA	4.9
MOCP	15
VOLTAGE/PH	240/1
NOTES	1,2,3,4

NOTES:
1. PROVIDE UNIT WITH DISCONNECT AND SEVEN DAY PROGRAMMABLE THERMOSTAT.
2. PROVIDE WITH HEATER KIT MODEL HKSC08XC-240V (MCA-47, MOCP-50)
3. COOLING COIL IS INTEGRAL TO UNIT.
4. UNIT IS VARIABLE SPEED ECM FAN.

CONDENSING UNIT SCHEDULE

REFERENCE	CU-1
MANUFACTURER	GOODMAN
INDOOR / OUTDOOR MODEL #	GSX160181F
SERVES	F-1
NOMINAL TONS	1.5
REFRIGERANT	R410A
# COMPRESSORS	1
SEER @ AHRI	16.0
VOLTAGE/PH	240/1
MCA	12.2
OVERCURRENT PROTECTION (AMPS)	20
NOTES	1

NOTES:
1. DISCONNECT SHALL BE PROVIDED / INSTALLED BY E.C.

RADIATOR - ELECTRIC SCHEDULE

REFERENCE	RAD-1
MANUFACTURER	INDEECO
MODEL #	BCSI
NOMINAL CABINET LENGTH (IN)	87"
CABINET HEIGHTxDEPTH (IN)	8" X 3"
ELEMENT HEATING (BTUH)	6,830
KW (OUTPUT)	2
VOLTAGE/PH	240/1
NOTES	1,2,3

NOTES:
1. PROVIDE UNITS WITH WHITE FINISH; REFER TO ARCH FOR FINAL COLOR SELECTION.
2. PROVIDE UNIT WITH INTEGRAL DISCONNECT AND INTEGRAL THERMOSTAT.
3. UNIT TO BE WALL MOUNTED. COORDINATE EXACT HEIGHT WITH TRIMWINDOW.

GRILLES REGISTERS AND DIFFUSERS SCHEDULE

REFERENCE	MATERIAL	MARGIN (IN)	INLET (IN)	FACE (IN)	DAMPER	MFR	MODEL	NOTES
RG-1 (RETURN GRILLE)	ALUMINUM	1 1/4"	SEE DWG	INLET +2"	NO	TITUS	350FL	1,2
SG-1 (SUPPLY GRILLE)	ALUMINUM	1 1/4"	SEE DWG	INLET +2"	YES	TITUS	300FL	1,2

NOTES:
1. REFER TO ARCH DRAWINGS FOR FINAL CEILING TYPE FOR MOUTING TYPE.
2. PROVIDE WITH WHITE FINISH.

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MECHANICAL SCHEDULES

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NO.	BY / DATE	REVISION

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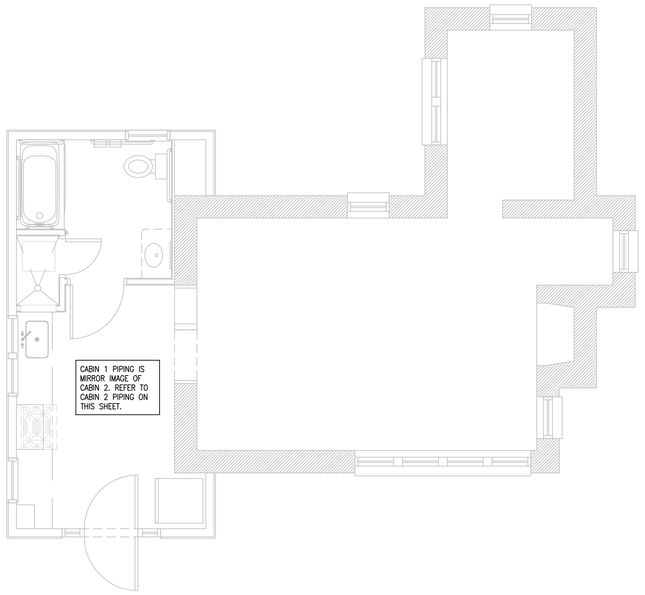
DATE: 03.17.2020
SHEET No: M3

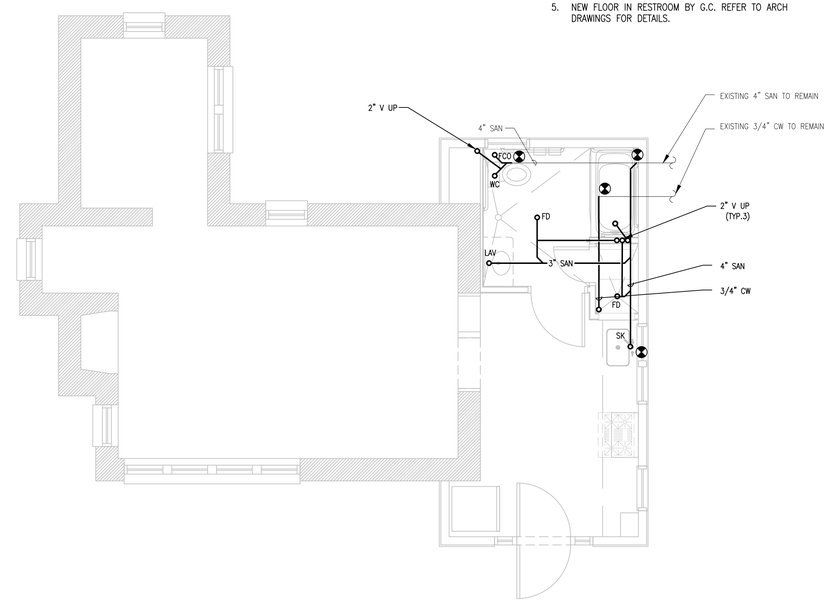
GENERAL NOTES

1. REFER TO M0 FOR GENERAL NOTES.
2. REFER TO PLUMBING ROUGH-IN SCHEDULE ON P3 FOR MINIMUM FIXTURE CONNECTION SIZES.
3. REFER TO P3 FOR PLUMBING MATERIAL LIST.
4. REFER TO P2 FOR PLUMBING DETAILS.
5. NEW FLOOR IN RESTROOM BY G.C. REFER TO ARCH DRAWINGS FOR DETAILS.



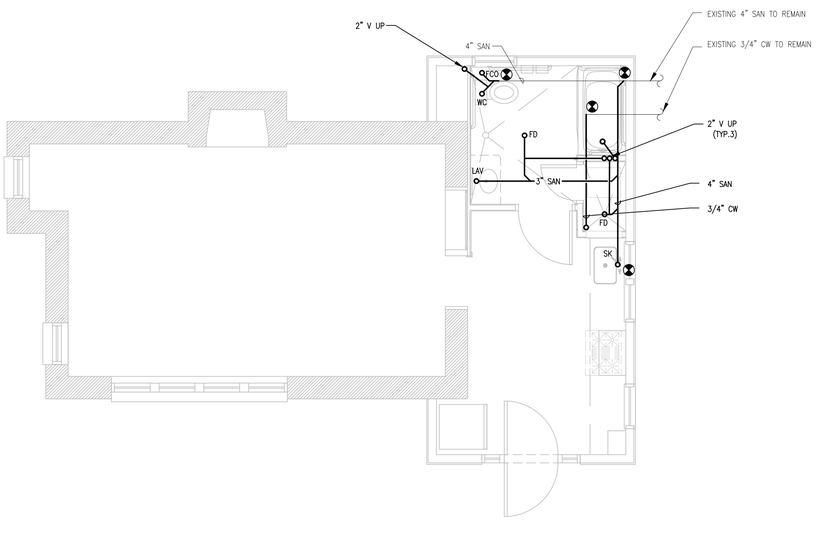
CABIN 1 UNDER FLOOR PLAN - PLUMBING

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



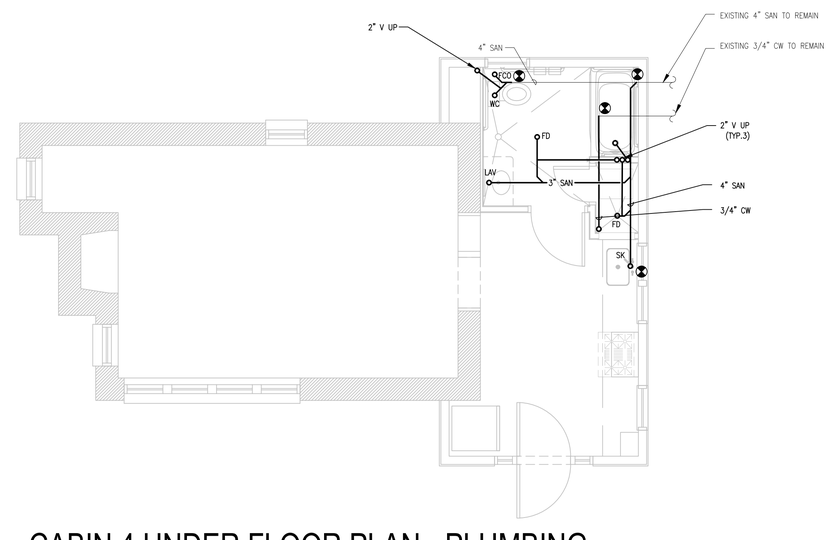
CABIN 2 UNDER FLOOR PLAN - PLUMBING

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



CABIN 3 UNDER FLOOR PLAN - PLUMBING

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



CABIN 4 UNDER FLOOR PLAN - PLUMBING

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

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CABIN UNDER FLOOR PLANS - PLUMBING

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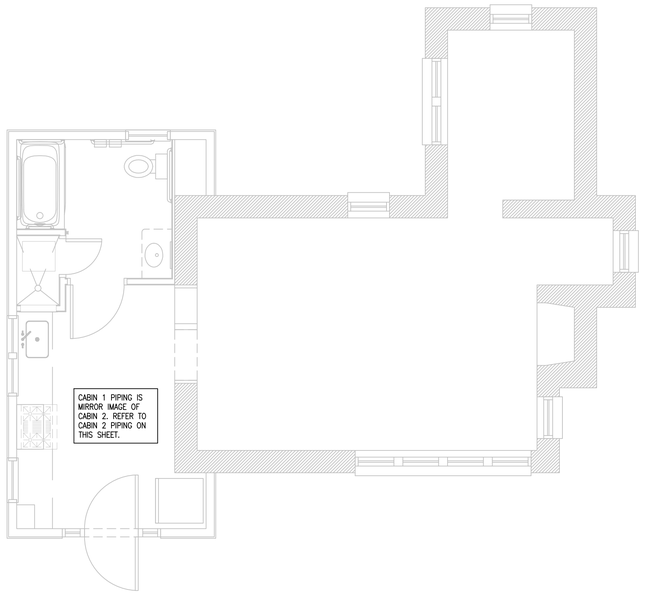
SHEET No:
P0

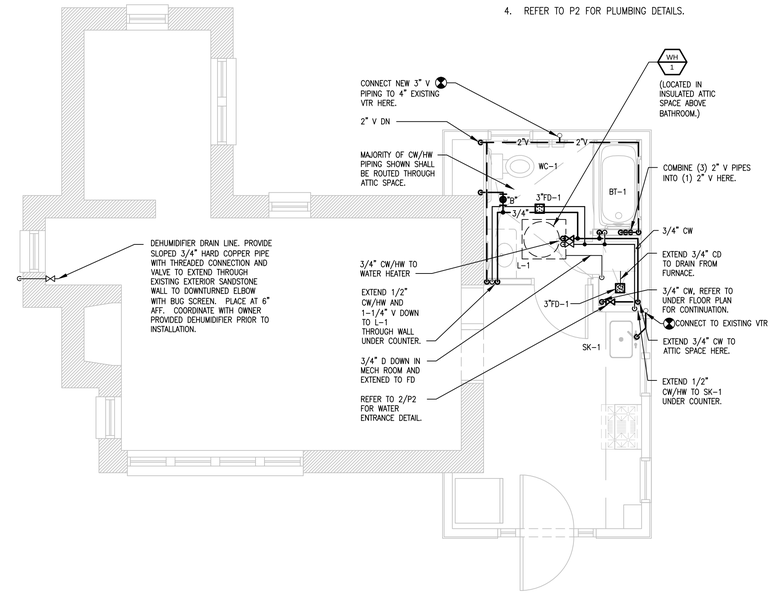
GENERAL NOTES

1. REFER TO M0 FOR GENERAL NOTES.
2. REFER TO PLUMBING ROUGH-IN SCHEDULE ON P3 FOR MINIMUM FIXTURE CONNECTION SIZES.
3. REFER TO P3 FOR PLUMBING MATERIAL LIST.
4. REFER TO P2 FOR PLUMBING DETAILS.



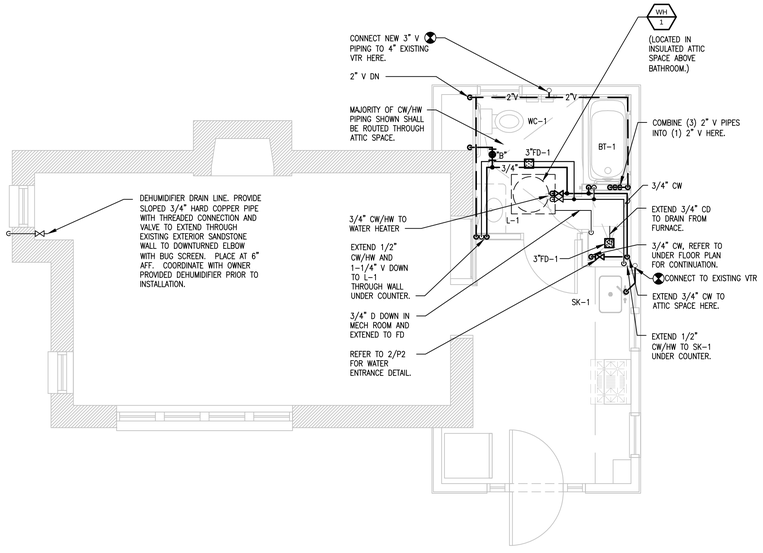
CABIN 1 FLOOR PLAN - PLUMBING

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



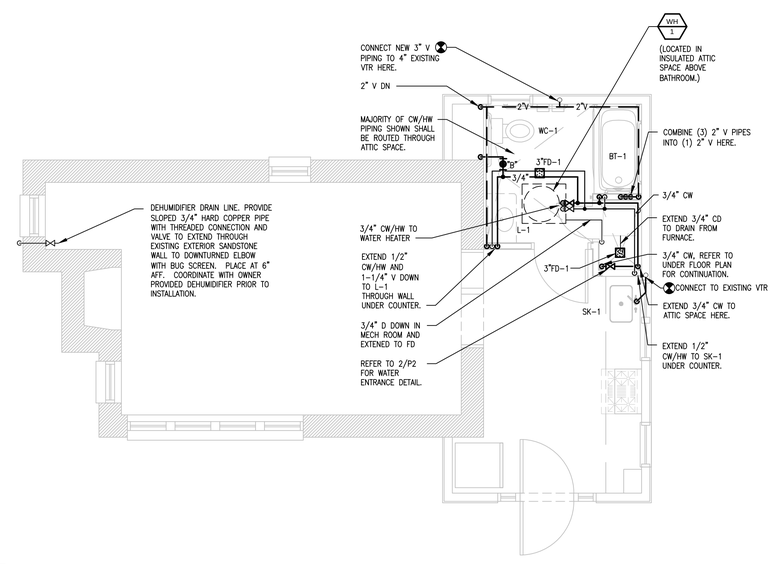
CABIN 2 FLOOR PLAN - PLUMBING

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



CABIN 4 FLOOR PLAN - PLUMBING

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



CABIN 3 FLOOR PLAN - PLUMBING

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

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CABIN FLOOR PLANS - PLUMBING

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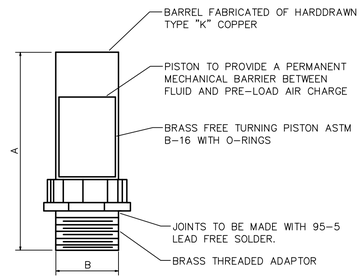
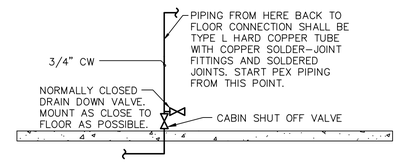
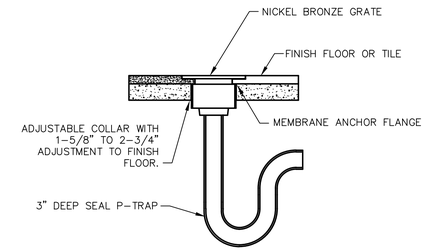


SIZE	SYMBOL	FIXTURE UNIT RATINGS	A SIZE	B SIZE
1/2"	A	1 – 11	5"	1/2"
3/4"	B	12 – 32	5"	3/4"
1"	C	33 – 60	7"	1"
1-1/4"	D	61 – 113	7"	1-1/4"
1-1/2"	E	114 – 154	9"	1-1/2"
2"	F	155 – 330	9"	2"

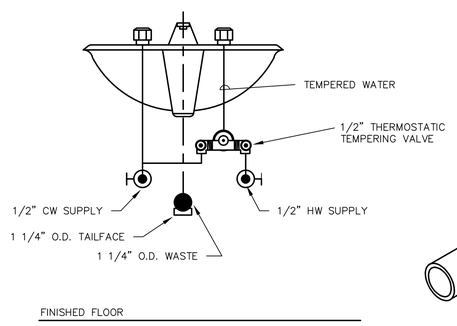
1 WATER SHOCK ARRESTOR DETAIL
NOT TO SCALE



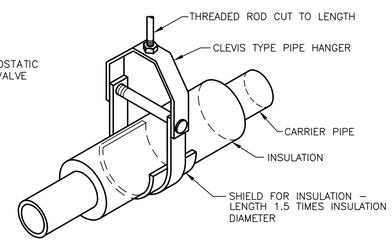
2 DOMESTIC WATER RISER DIAGRAM
NOT TO SCALE



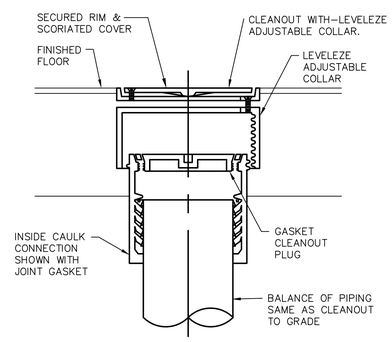
3 FLOOR DRAIN DETAIL
NOT TO SCALE



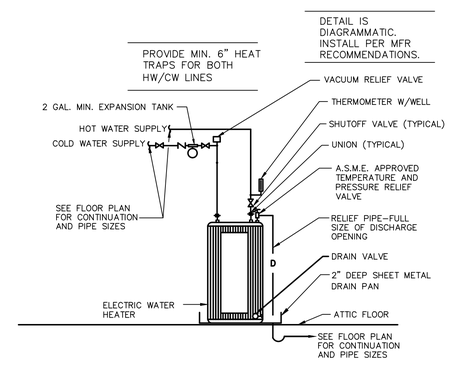
4 LOCAL MIXING VALVE DETAIL
NOT TO SCALE



5 CLEVIS TYPE PIPE HANGER FOR INSULATED PIPE
NOT TO SCALE



6 FLOOR CLEANOUT DETAIL
NOT TO SCALE



7 WATER HEATER DETAIL
NOT TO SCALE

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PLUMBING DETAILS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:

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NO.	BY / DATE	REVISION

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P2

PLUMBING FIXTURE SCHEDULE

REFERENCE	MFR	MODEL	DESCRIPTION	TRIM
BFP-1	WATTS	009/909	BACKFLOW PREVENTOR - REDUCED PRESSURE ZONE ASSEMBLY, BRONZE BODY CONSTRUCTION OR FDA APPROVED EPOXY COATED CAST IRON. INTERNAL PRESSURE RELIEF VALVE BETWEEN TWO CHECK VALVES. REPLACABLE SILICONE SEAT DISCS. PROVIDE WITH AIR GAP DRAIN FITTING. SERVICE OF ALL COMPONENTS SHALL BE THROUGH SINGLE ACCESS BRONZE COVER WITH STAINLESS BOLTS. COMPLY WITH AWWA AND ASSE.	
FCO-1	ZURN	Z1400	ADJUSTABLE FLOOR CLEANOUT, CAST IRON BODY, TAPERED THREAD PLUG AND ROUND NICKEL BRONZE SCORIATED CAST IRON HEAVY-DUTY SECURED TOP, ADJUSTABLE TO FINISHED FLOOR. OUTLET SIZE AS NOTED ON DRAWINGS.	NA
FD-1	ZURN	ZB-415-6B-P-ZB	CAST IRON BODY FLOOR DRAIN,TYPE "B" 6" ROUND POLISHED NICKEL BRONZE STRAINER. OUTLET SIZE AS NOTED ON DRAWINGS, MIN. 3".	PROVENT SYSTEMS WATERLESS TRAP PRIMER DESIGNED TO ALLOW FUNCTION OF FLOOR DRAIN WHILE PREVENTING SEWER GAS FROM MIGRATING UP THROUGH DRAIN GRATE AS TRAP WATER SEAL DRIES OUT.
L-1	KOHLER	K-2210	UNDER COUNTER MOUNT VITREOUS CHINA LAVATORY, WITH OVERFLOW, PROVIDE WITH CLAMP ASSEMBLY, ADA COMPIANT.	DELTA "21C" OR APPROVED EQUAL TWO HANDLE TYPE FAUCET, WITH METAL POP-UP AND TRAP, LEVER BLADE HANDLES. MAXIMUM FIXTURE FLOW TO BE 0.5 GPM. PROVIDE POWERS "LFLM495" POINT OF USE MIXING VALVE UNDER FIXTURE. MIXING VALVE MUST MEET ASSE 1070 AND IPC 2015 REQUIREMENTS. PROVIDE WITH 1/4 TURN, 3/8" BRASS STOPS. PROVIDE WITH TRUEBRO "LAV GUARD" CW, HW AND WASTE PIPE GUARDS AND ESCUTCHEONS.
SK-1	ELKAY	ELUHE3118	DOUBLE BOWL, UNDER COUNTER MOUNT, P-TRAP, BOWL DIMENSIONS: 13.5" L x16" W x 6" D. UNDERCOATED, BASKET STRAINER. VERFIY FINAL DIMENSIONS FROM ARCH ELEVATION AND MILWORK DRAWINGS.	DELTA "101LF-HDF" OR APPROVED EQUAL, BRASS CONSTRUCTION, CHROME-PLATED FINISH, SWING SPOUT FAUCET, 8" REACH, 1.5 GPM AERATOR, SINGLE LEVER HANDLE, SEPARATE SPRAY WASH, TWO HOLE SUPPLIES FAUCET. PROVIDE WITH 1/4 TURN, 3/8" BRASS STOPS.
BT-1	STERLING	71240126	BATHTUB AND SMOOTH WALL SURROUND WITH HIGH GLOSS FINISH, ADA, COMPRESSION MOLDED, COLOR BY ARCH. 60"W x 30" D x 15"H, 10 YEAR WARRANTY, CAULKLESS SEAM INSTALLATION. DRAIN ORIENTATION TO BE DETERMINED FROM DRAWINGS.	ADA SHOWER ASSEMBLY TO HAVE THE FOLLOWING ITEMS: KOHLER "T15621-4-CP" FACE PLATE TRIM, KOHLER "304-K-NA" PRESSURE BALANCED SHOWER MIXING VALVE WITH HIGH-TEMP. LIMIT, KOHLER "15136-S-CP" DIVERTER TUB SPOUT, KOHLER "8520-CP" HANDHELD SHOWER HEAD KIT WITH SLIDE BAR, METAL HOSE VACUUM BREAKER AND WALL ELBOW, 2.5 GPM FLOW, 1/2" IPS SUPPLY INLETS, CHECK STOPS AND INTEGRAL STRAINER. COORDINATE MOUNTING HEIGHTS WITH ARCHITECT.
WC-1 (ADA)	KOHLER	K-3979	FLOOR MOUNTED, 1.6 GPF, WHITE VITREOUS CHINA, ELONGATED BOWL, TANK TYPE TOILET, POLISHED CHROME TRIP LEVER, ADA COMPLIANT HEIGHT.	PROVIDE WITH ELONGATED SEAT, COVER AND 3/8" NPT ANGLE SUPPLY WITH STOP.

NOTES:
1. REFER TO PLUMBING FIXTURE SCHEDULE FOR MINIMUM CONNECTION SIZES.

ELECTRIC WATER HEATER

REFERENCE	WH-1
MANUFACTURER	AO SMITH
MODEL #	ENJB-40
SERVES	CABIN
GALLONS	38
ENERGY FACTOR	0.92
RECOVERY GPM 90F RISE	21
INPUT KW	4.50
VOLTAGE/PH	240 / 1
NOTES	1,2,3,4

NOTES:
1. UNIT TO BE CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE
2. UNIT TO MEET REQUIREMENTS OF ASHRAE 90.1
3. COORINATE HEIGHT AVAILABLE FOR UNIT IN ATTIC PRIOR TO ORDERING.
4. DISCONNECT PROVIDED BY E.C.

PLUMBING FIXTURES ROUGH-IN SCHEDULE

FIXTURE	CW	HW	VENT	WASTE	NOTES
LAVATORY	1/2"	1/2"	1 1/4"	1 1/4"	1,2,3
SINK	1/2"	1/2"	1 1/2"	1 1/2"	1,2,3
WATER CLOSET (TANK)	1/2"	-	2"	4"	1,2,3
BATH TUB / SHOWER COMBO	1/2"	1/2"	1 1/2"	3"	1,2,3
FLOOR DRAIN	-	-	2"	3"	1,2,3

NOTES:
1. ALL SIZES SHOWN ARE MINIMUM CONNECTION SIZES, REFER TO DRAWINGS FOR FINAL SIZES.
2. ALL BELOW FLOOR WASTE SIZES ARE TO BE A MINIMUM OF 2".
3. ALL HORIZONTAL BRANCH PIPING TO BE A MINIMUM OF 3/4".

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P3

ELECTRICAL SYMBOLS

- L1 — WALL MOUNTED LIGHT FIXTURE – HEIGHT AS NOTED
- F1 — STRIP LIGHT FIXTURE – SURFACE MOUNTED
- F1 — UTILITY STRIP FIXTURE
- F/L S1 — BATHROOM FAN/LIGHT
- E1 — EMERGENCY LIGHT FIXTURE – WALL MOUNTED, +96" OR AS NOTED
- OC — OCCUPANCY SENSOR, CEILING MOUNTED
- OC — OCCUPANCY SENSOR, WALL MOUNTED. +48" OR AS NOTED
- bS — SINGLE POLE SWITCH, +48" OR AS NOTED LOWERCASE LETTERING DENOTES SWITCH LEG
- bS 6 D — DIMMER SWITCH, +48" OR AS NOTED (6=600W, 10=1000W, 15=1500W, 20=2000W) LOWERCASE LETTERING DENOTES SWITCH LEG
- C A — DUPLEX GROUND FAULT RECEPTACLE, TAMPER-RESISTANT +18" OR AS NOTED. (A=ABOVE COUNTER +8")
- W — DUPLEX GROUND FAULT "WR"-TYPE RECEPTACLE WITH IN-USE WEATHERPROOF COVER, +24" OR AS NOTED
- EQUIPMENT CONNECTION AS NOTED
- EQUIPMENT CONNECTION AS NOTED, +18" OR AS NOTED
- SAFETY DISCONNECT SWITCH, SEE EQUIPMENT SCHEDULE
- 120V INTERCONNECTED FIRE ALARM HORN WITH XENON STROBE BRK 7010BSL SERIES – OR APPROVED EQUAL
- EXPOSED CONDUIT
- CONDUIT CONCEALED IN CEILING OR WALL CONSTRUCTION
- CONDUIT CONCEALED IN FLOOR CONSTRUCTION OR UNDERGROUND
- LIGHTING AND POWER PANEL – FLUSH MOUNTED
- LIGHTING AND POWER PANEL – SURFACE MOUNTED
- PANEL AS NOTED – SURFACE MOUNTED
- 3 — NOTE REFERENCE
- AHU 1 — EQUIPMENT IDENTIFICATION / EQUIPMENT NUMBER
- M — METER

IOWA ONE CALL
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CALL - BEFORE - YOU - DIG

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 IN 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.

ELECTRICAL ABBREVIATIONS

ACT	DEVICE MOUNTED +8" ABOVE COUNTER TOP (VERIFY LOCATION)
AFF	ABOVE FINISHED FLOOR
BKR	BREAKER
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION CAMERA
CKT	CIRCUIT
E	EXISTING ITEM TO REMAIN
EC	ELECTRICAL CONTRACTOR
EM	EMERGENCY LIGHT FIXTURE
ER	NEW LOCATION OF EXISTING ITEM
F	ROUGH IN FOR FUTURE DEVICE
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HOA	HAND OFF AUTOMATIC
JB	JUNCTION BOX
K	KEYED
LC	LIGHTING CONTACTOR
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MLO	MAIN LUGS ONLY
MSS	MOTOR STARTER SWITCH
N	NEW DEVICE IN EXISTING LOCATION
NIC	NOT IN CONTRACT
NM	NONMETALLIC
NTS	NOT TO SCALE
PC	PHOTOCELL
R	EXISTING ITEM TO BE REMOVED, PATCH AND/OR COVER
RN	REPLACE EXISTING WITH NEW
RR	EXISTING ITEM TO BE REMOVED AND RELOCATED
TB	TERMINAL BOARD
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TYP	TYPICAL
UPS	UNINTERRUPTIBLE POWER SUPPLY
WG	WIREGUARD COVER
W	WEATHERPROOF DEVICE
WAP	WIRELESS ACCESS POINT
XFMR	TRANSFORMER
+24"	INDICATES MOUNTING HEIGHT CENTER LINE OF DEVICE TO FINISHED FLOOR

FIRE ALARM NOTES

1. REFER TO SYMBOL SCHEDULE ON SHEET E0.0.
2. INTERCONNECT ALL FOUR SMOKE DETECTORS WITHIN EACH CABIN.
3. IN GENERAL, REQUIREMENTS ARE AS FOLLOWS:
   - 3.1. PHOTOELECTRIC SMOKE SENSING CHAMBER.
   - 3.2. 177 CANDELA XENON STROBE LIGHT.
   - 3.3. SOLID STATE PIEZO HORN RATED AT 85DB.
   - 3.4. POWERED VIA 120V CONNECTION USING #12 CONDUCTORS IN ROMEX (TYPE NM CABLE).
   - 3.5. TWO AAA BATTERY BACKUP.
   - 3.6. CAPABLE OF INTERCONNECTION OF UP TO 18 ALARMS.
   - 3.7. UNIT SHALL MEET REQUIREMENTS OF UL217, UL1971, ADA, ANSI 117.1, NFPA 72, NFPA 101, AND THE ICC.

ELECTRICAL GENERAL NOTES

1. THE ENTIRE PROJECT SHALL COMPLY WITH THE CURRENT ISSUE OF THE NATIONAL ELECTRIC CODE (NEC), INCLUDING AMENDMENTS, AND WITH ALL STATE, LOCAL, AND OTHER CODES AS APPLICABLE. THE CURRENT ISSUE SHALL BE THE ISSUE THAT IS IN EFFECT WHEN THE CONSTRUCTION PERMITS ARE SECURED FOR THE WORK. THE INTERPRETATIONS AND DECISIONS OF THE AUTHORITY HAVING JURISDICTION OF APPLICABLE CODES SHALL GOVERN.
2. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED STATE AND LOCAL PERMITS AND ASSOCIATED FEES.
3. NOTE THAT THE ELECTRICAL DRAWINGS ARE ONLY A PORTION OF THE COMPLETE SET OF PLANS. THE COMPLETE SET OF PLANS SHALL BE USED TO DEFINE THE ELECTRICAL WORK. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, USING THE ARCHITECTURAL PLANS FOR DIMENSIONS AND DETAILS; EQUIPMENT PLANS FOR ROUGH-IN REQUIREMENTS, AND THE MECHANICAL PLANS FOR EQUIPMENT SIZES AND LOCATIONS. COORDINATE ALL WIRING DEVICE LOCATIONS AND ELEVATIONS INDICATED ON PLANS WITH THE OWNER, ARCHITECT AND FINAL FURNITURE/EQUIPMENT LAYOUTS.
4. 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.
5. PROVIDE RACEWAY, CABINETS, JUNCTION BOXES, BACKBOXES, PULL STRINGS AND FITTINGS FOR ALL INTERCOM, AND A/V. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING FINAL RACEWAY SIZES AND LOCATIONS WITH EQUIPMENT SUPPLIERS AND INSTALLERS.
6. RACEWAYS AND BOXES ARE SHOWN DIAGRAMMATICALLY ONLY AND INDICATE THE GENERAL AND APPROXIMATE LOCATION. THE LAYOUT DOES NOT 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.
7. PROVIDE ELECTRICAL CONNECTIONS AND ACCESSORIES INCLUDING STARTERS, DISCONNECTS, ETC. AS REQUIRED FOR THE BUILDING EQUIPMENT SHOWN ON THE DRAWINGS. INFORMATION ON THE DRAWINGS IS FOR GENERAL DESCRIPTION AND ESTIMATING PURPOSES ONLY. VERIFY LOCATION, VOLTAGE, CURRENT, PHASE, INRUSH, ETC. FOR EACH ITEM OF EQUIPMENT BEFORE PROCEEDING WITH WIRING FOR IT. WIRING DETAILS SHALL BE FURNISHED BY THE SUPPLIERS OF THE EQUIPMENT AS NECESSARY TO PROVIDE PROPER OPERATION OF THE EQUIPMENT.
8. MAXIMUM LOAD PER 20A/1P CIRCUIT. 1920 WATTS AT 120V.
9. VOLTAGE DROP SHALL BE LIMITED TO 3% ON ALL BRANCH CIRCUITS.
10. ALL 120V-1ø CIRCUITS EXCEEDING 100 LINEAR FEET BETWEEN ORIGIN AND CONNECTED LOAD SHALL HAVE CONDUCTORS INCREASED TO ACCOUNT FOR VOLTAGE DROP.
11. ALL CONDUCTOR SIZES ARE BASED ON COPPER UNLESS OTHERWISE NOTED.
12. ALL WIRING TO BE RUN IN CONDUIT, AND ALL CONDUIT TO BE RUN CONCEALED IN ALL AREAS UNLESS OTHERWISE ALLOWED BY THESE DRAWINGS AND/OR SPECIFICATIONS.
13. SUPPORT ALL CONDUITS FROM STRUCTURAL SLABS, AND STRUCTURAL MEMBERS. DO NOT SUPPORT CONDUITS FROM NONSTRUCTURAL MEMBERS.
14. PROVIDE PLANT, LABOR, AND MATERIALS TO REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.

ELECTRICAL GENERAL DEMO NOTES

1. THE 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.
2. 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 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.
3. PROVIDE PLANT, LABOR, AND MATERIALS TO REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.
4. CONDUITS, BOXES, ETC., SHALL BE REMOVED AS REQUIRED BY SCHEDULED DEMOLITION AND REMOVALS. WIRING SHALL BE REMOVED. ALL BRANCH CIRCUITS TO BE DISCONNECTED SHALL BE IDENTIFIED AS TO LOCATION OR ITEM SERVED BEFORE DISCONNECTING. CIRCUITS SERVING AREAS BEYOND THE DEMOLITION AREA SHALL BE MAINTAINED.
5. EXISTING CONDUITS MAY BE RETAINED FOR CONTINUED USE AS APPLICABLE.
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. DO NOT CUT EXISTING TELECOMMUNICATION WIRING, CABLES OR CONDUIT AS EXISTING SYSTEMS SHALL REMAIN OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. CONTRACTOR WHO CUTS IN-SERVICE CABLES SHALL BE RESPONSIBLE FOR ANY AND ALL DOWNTIME AND COSTS TO REPAIR.
8. EQUIPMENT AND/OR MATERIALS SCHEDULED FOR ABANDONMENT AND REMOVAL ARE TO BECOME CONTRACTOR'S SALVAGE AND SHALL BE HAULED AWAY FROM THE SITE PROMPTLY.
9. MISCELLANEOUS MATERIALS IN CONJUNCTION WITH EQUIPMENT AND/OR MATERIALS TO BE REMOVED SHALL ALSO BE REMOVED UNLESS THEY ALSO HAVE A DEFINITE FUNCTION WITH FACILITIES THAT ARE REMAINING.
10. PROVIDE CUTTING AND PATCHING OF EXISTING CONSTRUCTION AS REQUIRED FOR THE PROPER COMPLETION OF THE DEMOLITION WORK AND THE INSTALLATION OF THE NEW WORK.

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ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK
22620 COUNTY HIGHWAY S56
ELDORA, IOWA 50627

NO.	BY / DATE	REVISION

DRAWN BY: JTL	PROJECT NUMBER: 19-02-42-01
CHK'D BY: JV	DATE: 03.17.2020

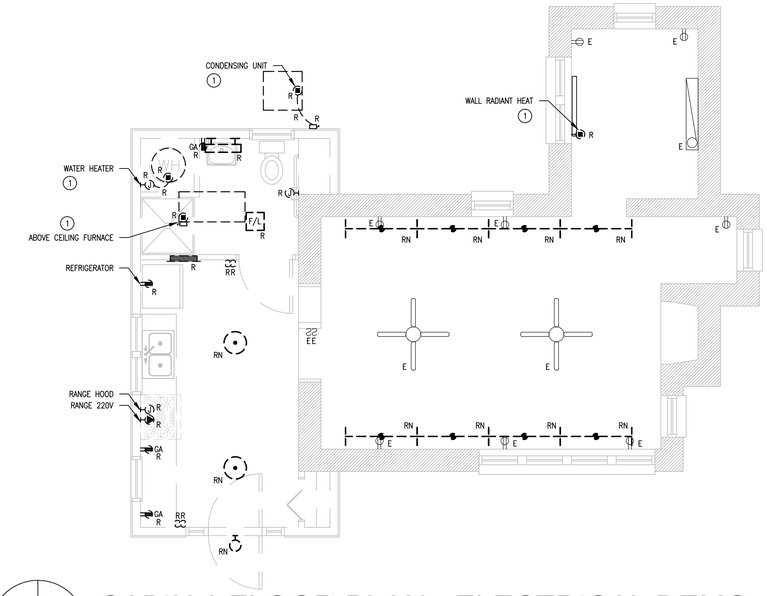
SHEET No: E1

GENERAL DEMO 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.

KEYED NOTES

1. REMOVE MECHANICAL EQUIPMENT AND ASSOCIATED EQUIPMENT, CONDUIT AND WIRING.



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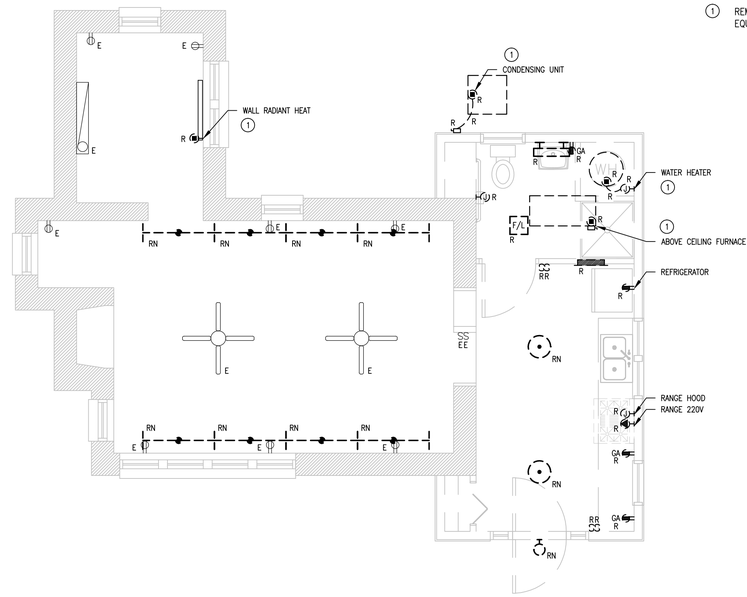
CABIN 1 FLOOR PLAN - ELECTRICAL DEMO

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



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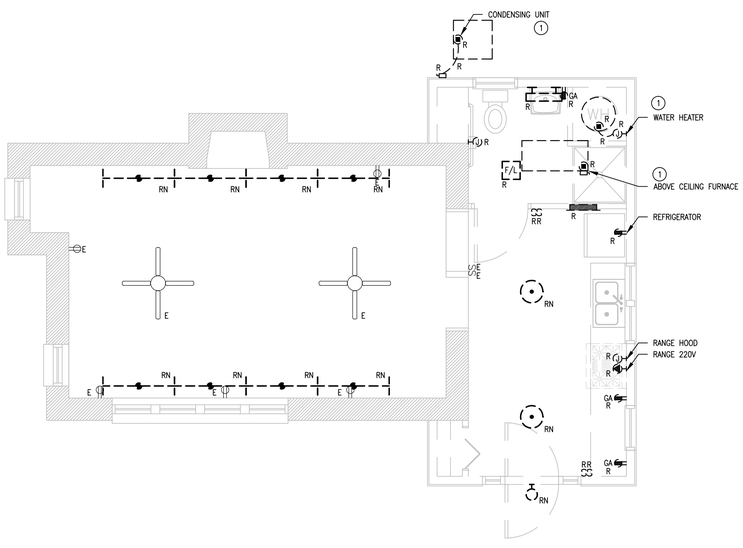
CABIN 2 FLOOR PLAN - ELECTRICAL DEMO

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



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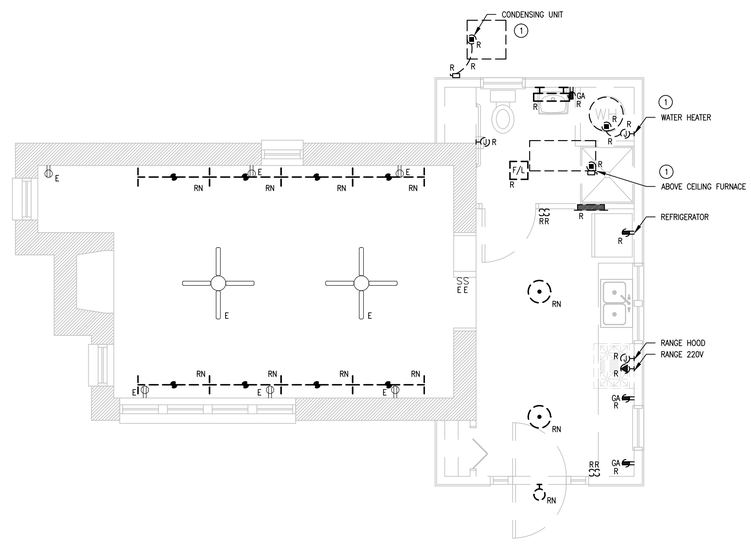
CABIN 3 FLOOR PLAN - ELECTRICAL DEMO

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



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CABIN 4 FLOOR PLAN - ELECTRICAL DEMO

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

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ELECTRICAL DEMO FLOOR PLANS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK
22620 COUNTY HIGHWAY S56
ELDORA, IOWA 50627

NO.	BY / DATE	REVISION

DRAWN BY:	PROJECT NUMBER:
JTL	19-02-42-01
CHK'D BY:	DATE:
JV	03.17.2020

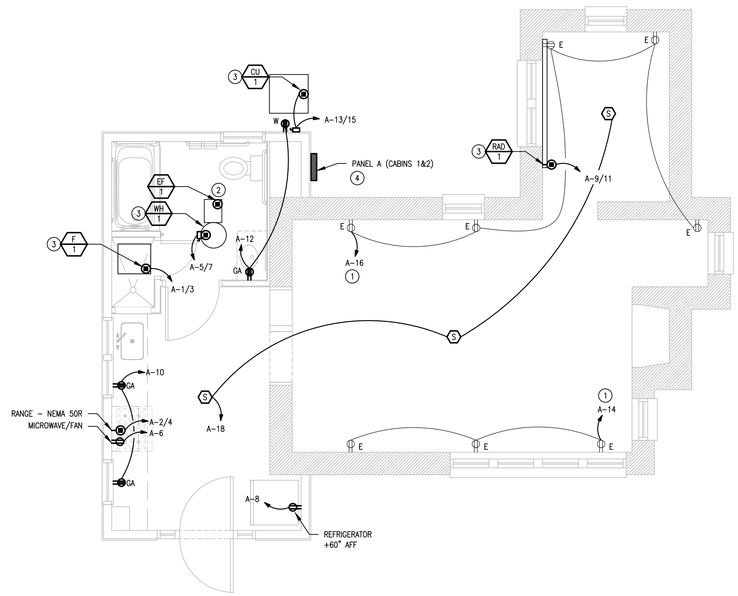
SHEET No:
ED1

GENERAL NOTES

1. 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.

KEYED NOTES

1. EXTEND AND CONNECT EXISTING CIRCUIT TO NEW CIRCUIT BREAKER IN PANEL A/B. PROVIDE PULL BOXES WHERE NECESSARY. ROUTE CIRCUIT TO AVOID SURFACE MOUNT CONDUIT WHERE POSSIBLE.
2. CONNECT EF-1 TO LIGHT CIRCUIT SWITCH LEG SO FAN OPERATES VIA OCCUPANCY SENSOR.
3. COORDINATE FINAL MECHANICAL EQUIPMENT CONNECTION WITH M.C. AND FINAL EQUIPMENT SHOP DRAWINGS.
4. NEW EXTERIOR BRANCH PANEL. NEMA 3R RATED. COORDINATE FINAL LOCATION WITH ARCHITECT AND EXISTING SITE CONDITIONS. REFER TO ONE-LINE DIAGRAM 1/E4.



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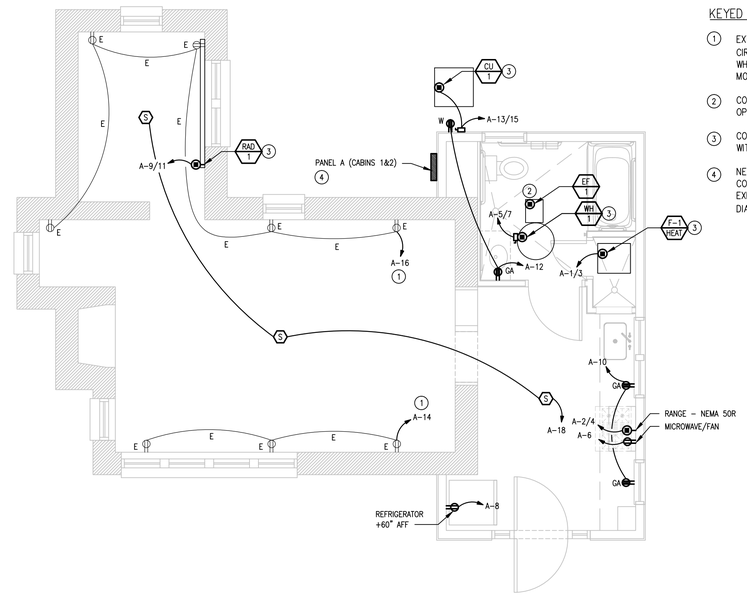
CABIN 1 FLOOR PLAN - POWER AND SYSTEMS

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



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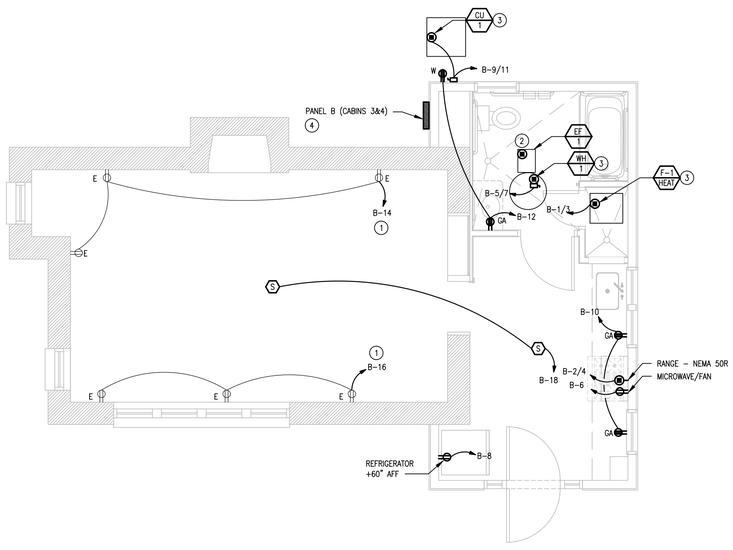
CABIN 2 FLOOR PLAN - POWER AND SYSTEMS

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



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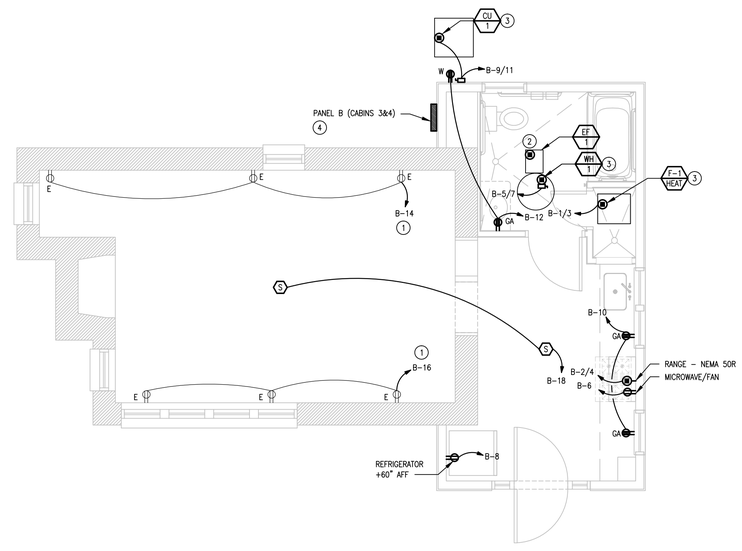
CABIN 3 FLOOR PLAN - POWER AND SYSTEMS

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



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CABIN 4 FLOOR PLAN - POWER AND SYSTEMS

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

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POWER AND SYSTEMS FLOOR PLANS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:

PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IOWA 50627

NO.	BY / DATE	REVISION

DRAWN BY: JTL	PROJECT NUMBER: 19-02-42-01
CHK'D BY: JV	DATE: 03.17.2020

SHEET No:

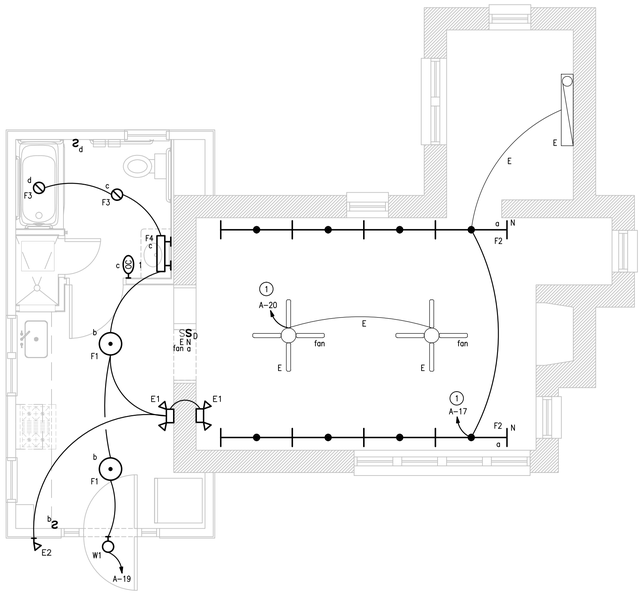
E2

GENERAL NOTES

1. 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.

KEYED NOTES

1. EXTEND AND CONNECT EXISTING CIRCUIT TO NEW CIRCUIT BREAKER IN PANEL A/B. PROVIDE PULL BOXES WHERE NECESSARY. ROUTE CIRCUIT TO AVOID SURFACE MOUNT CONDUIT WHERE POSSIBLE. EXISTING SWITCH LEG SHALL REMAIN.



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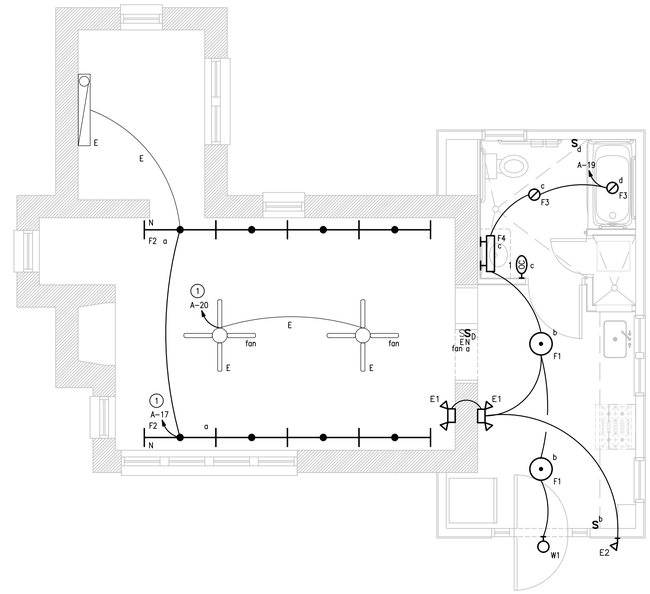
CABIN 1 FLOOR PLAN - LIGHTING

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



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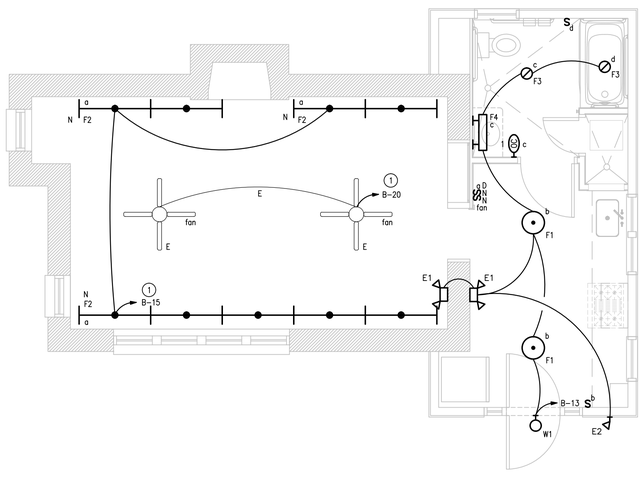
CABIN 2 FLOOR PLAN - LIGHTING

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



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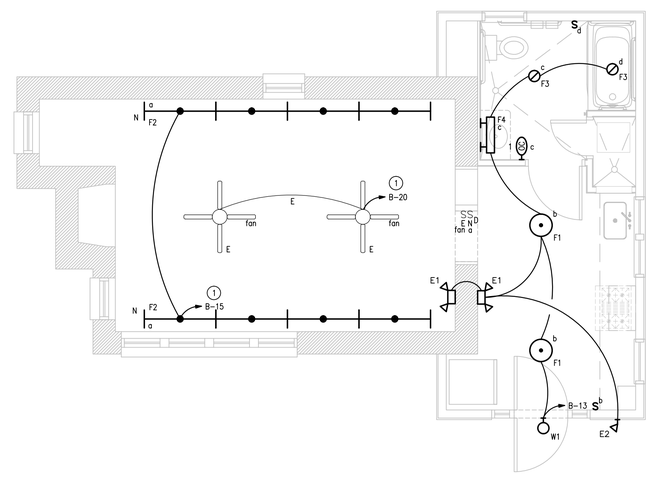
CABIN 3 FLOOR PLAN - LIGHTING

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



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CABIN 4 FLOOR PLAN - LIGHTING

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

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LIGHTING FLOOR PLANS

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:

PINE LAKE STATE PARK

22620 COUNTY HIGHWAY S56
ELDORA, IOWA 50627

NO.	BY / DATE	REVISION

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JTL	19-02-42-01
CHK'D BY:	DATE:
JV	03.17.2020

SHEET No:

E3

LUMINAIRE SCHEDULE

TYPE	MANUFACTURER	MODEL NUMBER	DESCRIPTION	DIMENSIONS	LAMP TYPE	LAMP QUANTITY	BALLAST	FIXTURE LOAD	FIXTURE VOLTS	APPROVED EQUALS
F1	SEA-GULL LIGHTING	65851-782	GLADSTONE THREE LAMP PENDANT WITH BRONZE FINISH. COMPATATBLE WITH EITHER INCANDESCENT OR LED LAMPS. PROVIDE WITH 10' CHAIN. COORDINATE FINAL LOCATION AND HEIGHT WITH OWNER / ARCHITECT.	19" DIAMETER	CREE 9.5W (60W) WARM WHITE LED BULB	(3)	AS PROVIDED BY MANUFACTURER	28	120	THOMAS, KICHLER OR AS APPROVED BY ENGINEER
F2	MODA LIGHT	ECOFLEX INTERIOR	FIELD CUT LED TAPE LIGHT AND INSTALL USING MANUFACTURER PROVIDED EXTRUSION BOW XTRUSION. FIELD CUT TO MATCH LENGTH AS SHOWN ON DRAWINGS. CONNECT TO EXISTING SWITCH LEG AND INSTALL LINE VOLTAGE DIMMER IN EXISTING LOCATION.	-	2700K CCT LED TAPE	AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	1.4 W/FT	120	AS APPROVED BY ENGINEER
F3	WILLIAMS	4PR-TL-L15-80-40-DIM-UNV-S-W-OF-CS-WET/CC	SHOWER / RESTROOM WET LOCATION 4" ROUND LED DOWNLIGHT. MINIMUM 1,500 LUMENS AT 4,000K CCT. FLUSH LENS WITH CLEAR SEMI-SPECULAR REFLECTOR. MINIMUM 80 CRI.	4" DIAMETER	4000K CCT LED	AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	17	120	EATON, PRESCOLITE, CREE, ALPHABET OR AS APPROVED BY ENGINEER
F4	SEA-GULL LIGHTING	44941-782	WINDGATE THREE LIGHT WALL/BATH. HEIRLOOM BRONZE FINISH. WALL MOUNTED INSTALLATION. COMPATATBLE WITH EITHER INCANDESCENT OR LED LAMPS.	24.25" X 8.25"	CREE 9.5W (60W) WARM WHITE LED BULB	(3)	AS PROVIDED BY MANUFACTURER	28	120	THOMAS BELLA 3-LAMP WALL, KICHLER WEDGEPORT 3-LAMP OR AS APPROVED BY ENGINEER
W1	LITHONIA	OMS-1000-PR2-120-DD8	MOTION SENSING TWIN PAR HOLDER WITH INTEGRAL PHOTOCELL. LAMP WITH LED BULBS. MOTION TIMER TO BE SET FOR 10 MIN. COORDINATE FINAL INSTALLATION HEIGHT WITH OWNER.	8" X 7" X 4.25"	CREE 90W PAR38 3000K CC	(2)	AS PROVIDED BY MANUFACTURER	180	120	AS APPROVED BY ENGINEER
E1	DUAL LITE	LM-40-2	6-12VDC EMERGENCY LIGHTING PACK FOR EMERGENCY LIGHTING. DC DRIVER TO LAST MINIMUM OF 90 MINUTES ONCE ACTIVATED.	13-1/2" X 4"	AS PROVIDED BY MANUFACTURER	2	AS PROVIDED BY MANUFACTURER	40	120	LIGHTALARMS, EMERGILITE OR AS APPROVED BY ENGINEER
E2	DUAL LITE	OCR-S-Z-1203L	LED SINGLE HEAD REMOTE EMERGENY FIXTURE. 12V 3WATT LED LAMP. UL WET LOCATION LISTED.	BASE WIDTH - 3 1/2"	LED	AS PROVIDED BY MANUFACTURER	LED DRIVER AS PROVIDED BY MANUFACTURER	3-4	120	LIGHTALARMS, EMERGILITE OR AS APPROVED BY ENGINEER

PANEL A - CABINS 1&2

DNR - PINE LAKE

LOAD DESCRIPTION	LOAD (VA)	TY	BRKR AMP	BRKR P	CKT NO	PHASE A	PHASE B	CKT NO	BRKR AMP	BRKR P	TY	LOAD (VA)	LOAD DESCRIPTION
F-1	11040	M	50	2	1	8020		2	*50	2	A	5000	RANGE
-					3		8020	4					-
WH-1	4500	M	30	2	5	3750		6	*20	1	A	1500	MICROWAVE
-					7		3450	8	*20	1	A	1200	REFRIGERATOR
RAD-1	2000	M	20	2	9	1360		10	20	1	R	360	KITCHEN RECEPTACLES
-					11		1360	12	20	1	R	360	BATHROOM RECEPTACLES
CU-1	2928	M	20	2	13	2004		14	**20	1	R	540	COMMON SPACE RECEPTACLES
-					15		2364	16	**20	1	R	900	BEDROOM RECEPTACLES
LIGHTING	700	L	20	1	17	1240		18	20	1	R	540	SMOKE DETECTORS
LIGHTING	400	L	20	1	19		900	20	20	1	L	500	EXISTING FANS
SPARE			20	1	21			22	20	1			SPARE
SPARE			20	1	23			24	20	1			SPARE
SPARE			20	1	25			26	20	1			SPARE
SPACE					27			28					SPACE
SPACE					29			30					SPACE

*PROVIDE GFCI BREAKER
**PROVIDE COMBINATION AFCI BREAKER

VOLTS-PHASE-WIRE	120/240V-1PHASE-3W				
BUS RATING	150A			TOTAL LOAD BY PHASE	(KVA)
MAIN BREAKER RATING	150A				
MOUNTED	SURFACE NEMA 3R			A PHASE CONNECTED LOAD	16.37
DEMAND LIGHTING	1.60	KVA @ 100%	1.60	B PHASE CONNECTED LOAD	16.09
DEMAND RCPT. 10KVA @ 100%+	2.70	KVA @ 50%	2.70	C PHASE CONNECTED LOAD	
DEMAND MOTOR	20.47	KVA @ 100%	20.47		
DEMAND APPLIANCES	7.70	KVA @ 100%	7.70		
OTHER		KVA @ %		DEMAND LOAD SUMMARY	TOTAL KVA
TOT. DEMAND (KVA)	32.47				
TOT. DEMAND (AMPS)	135.28			LIGHTING	1.60
				RECEPT.	2.70
TOT. CONNECTED LOAD (KVA)	32.47			MOTOR	20.47
TOT. CONNECTED LOAD (AMPS)	135.28			APPLIANCE	7.70
				OTHER	

CABINS 1&2

PANEL B - CABINS 3&4

DNR - PINE LAKE

LOAD DESCRIPTION	LOAD (VA)	TY	BRKR AMP	BRKR P	CKT NO	PHASE A	PHASE B	CKT NO	BRKR AMP	BRKR P	TY	LOAD (VA)	LOAD DESCRIPTION
F-1	11040	M	50	2	1	8020		2	*50	2	A	5000	RANGE
-					3		8020	4					-
WH-1	4500	M	30	2	5	3750		6	*20	1	A	1500	MICROWAVE
-					7		3450	8	*20	1	A	1200	REFRIGERATOR
CU-1	2928	M	20	2	9	1824		10	20	1	R	360	KITCHEN RECEPTACLES
-					11		1824	12	20	1	R	360	BATHROOM RECEPTACLES
LIGHTING	700	L	20	1	13	1240		14	**20	1	R	540	COMMON SPACE RECEPTACLES
LIGHTING	400	L	20	1	15		940	16	**20	1	R	540	COMMON SPACE RECEPTACLES
SPARE			20	1	17	360		18	20	1	R	360	SMOKE DETECTORS
SPARE			20	1	19		500	20	20	1	L	500	EXISTING FANS
SPARE			20	1	21			22	20	1			SPARE
SPARE			20	1	23			24	20	1			SPARE
SPARE			20	1	25			26	20	1			SPARE
SPACE					27			28					SPACE
SPACE					29			30					SPACE

*PROVIDE GFCI BREAKER
**PROVIDE COMBINATION AFCI BREAKER

VOLTS-PHASE-WIRE	120/240V-1PHASE-3W				
BUS RATING	150A			TOTAL LOAD BY PHASE	(KVA)
MAIN BREAKER RATING	150A				
MOUNTED	SURFACE NEMA 3R			A PHASE CONNECTED LOAD	15.19
DEMAND LIGHTING	1.60	KVA @ 100%	1.60	B PHASE CONNECTED LOAD	14.73
DEMAND RCPT. 10KVA @ 100%+	2.16	KVA @ 50%	2.16	C PHASE CONNECTED LOAD	
DEMAND MOTOR	18.47	KVA @ 100%	18.47		
DEMAND APPLIANCES	7.70	KVA @ 100%	7.70		
OTHER		KVA @ %		DEMAND LOAD SUMMARY	TOTAL KVA
TOT. DEMAND (KVA)	29.93				
TOT. DEMAND (AMPS)	124.70			LIGHTING	1.60
				RECEPT.	2.16
TOT. CONNECTED LOAD (KVA)	29.93			MOTOR	18.47
TOT. CONNECTED LOAD (AMPS)	124.70			APPLIANCE	7.70
				OTHER	

CABINS 3&4

EQUIPMENT SCHEDULE

TAG	ELECTRICAL CHARACTERISTICS VOLT/PHASE	MOTOR HP	KW	MCA	DISCONNECT TYPE	SIZE (AMPS)	NEMA RATING	FUSE (AMPS)	REMARKS
F-1 WITH HEATER KIT	240 / 1	-	-	47	INT	-	-	-	UNIT IS PROVIDED WITH INTEGRAL 50A-2P CB
CU-1	240 / 1	-	-	12.2	NFD	30	3R	-	-
EF-1	120 / 1	-	0.1	-	BO	-	-	-	CONNECT TO LOCAL LIGHTING CIRCUIT SWITCH LEG
RAD-1	240 / 1	-	2	-	INT	-	-	-	-
WH-1	240 / 1	-	4.5	-	NFD	30	3R	-	-

ABBREVIATIONS:

CB	CIRCUIT BREAKER IN PANELBOARD
CP	CORD AND PLUG
NFD	NON-FUSED DISCONNECT SWITCH
INT	INTEGRAL WITH EQUIPMENT FROM FACTORY
HOA	HAND OFF AUTO SWITCH

OCCUPANCY SENSOR SCHEDULE

TYPE	MANUFACTURER & MODEL NUMBER	MOUNTING	VOLTAGE	DETAILS	APPROVED EQUALS
OC	GREENGATE CONTROLS ONW-P-1001-MV-N-W	WALL	120-277V	500 SQUARE FOOT COVERAGE PASSIVE INFRARED WALLBOX OCCUPANCY SENSOR WITH MANUAL ON SWITCH AND INTEGRAL DAYLIGHTING PHOTOCELL. IMPACT RESISTANT PIR LENS AND HOUSING WITH WHITE FINISH. 120/277 VOLT INPUT POWER. INTEGRAL SELF-ADJUSTING SENSITIVITY MICROPROCESSOR. FIELD CONFIGURE SENSOR FOR AUTOMATIC ON/OFF OPERATION. FULL FIVE YEAR WARRANTY FURNISHED BY MANUFACTURER.	WATTSTOPPER LEVITON SCHNEIDER ELECTRIC HUBBLE

1. SENSOR EQUIPMENT MANUFACTURERS SHALL PROVIDE FACTORY AUTHORIZED REPRESENTATIVE TO DEMONSTRATE TYPICAL INSTALLATION AND COMMISSIONING OF EQUIPMENT TO INSTALLING CONTRACTOR DURING PROJECT CONSTRUCTION.

2. OCCUPANCY SENSOR TIME-OFF SETTINGS SHALL BE 20 MINUTES MINIMUM AND 30 MINUTES MAXIMUM.

TAG	PHASE	GROUND	CONDUIT
A	(3) #2/0	#6	2"

NOTE: CONDUCTORS SHALL BE THWN COPPER UNLESS INDICATED OTHERWISE.

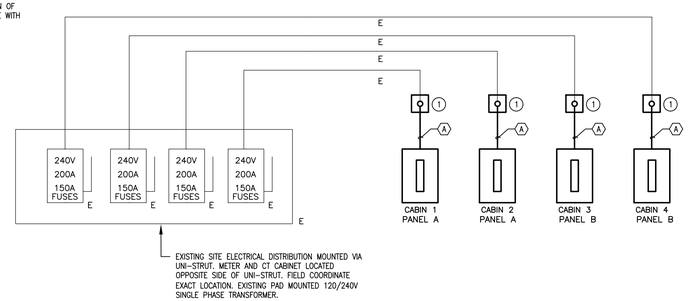
POWER RISER NOTES:

1. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH EXISTING SPECIAL OR ELECTRICAL SYSTEMS WHICH WILL AFFECT AND BE AFFECTED BY INSTALLATION OF THE NEW SYSTEMS AND SERVICES. THEY SHALL PLAN THE INSTALLATION OF THEIR WORK SO THAT INTERRUPTIONS OF SERVICES TO BUILDINGS SHALL BE AT A MINIMUM, AND SUCH INTERRUPTIONS SHALL OCCUR AT OWNER'S CONVENIENCE. EACH INTERRUPTION SHALL BE FOR AS SHORT A DURATION AS POSSIBLE. CONTRACTOR SHALL OBTAIN PERMISSION FROM THE OWNER TO SHUT OFF SERVICES TO ANY LOCATION. SUCH PERMISSION WILL BE GRANTED ONLY AFTER NOTIFYING THE OWNER IN WRITING TWO WEEKS PRIOR TO POWER OUTAGE AND INFORMING THEM OF THE REASON FOR AND DURATION OF THE SHUTDOWN, AND BEING SATISFIED THAT THE SHUTDOWN CAN BE MADE WITH AS LITTLE INCONVENIENCE AS POSSIBLE.

2. COORDINATE ALL SERVICE ENTRANCE AND SITE WORK WITH LOCAL UTILITY COMPANY. ALLIANT ENERGY.

POWER RISER KEYNOTES:

1. SPLICE EXISTING UNDERGROUND CONDUCTORS VIA NEW UNDERGROUND HAND HOLE. SIZE HAND HOLE PER NEC. CONNECT CIRCUIT TO NEW EXTERIOR BRANCH PANEL.



1 ONE-LINE DIAGRAM
NOT TO SCALE

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ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034
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ELECTRICAL DETAILS AND SCHEDULES

SHOWER BUILDINGS & CABIN RENOVATIONS FOR:
PINE LAKE STATE PARK
22620 COUNTY HIGHWAY S56
ELDORA, IOWA 50627

NO.	BY DATE	REVISION

DRAWN BY: JTL	PROJECT NUMBER: 19-02-42-01
CHK'D BY: JV	DATE: 03.17.2020

SHEET No:
E4