ITD D4 STANLEY

Mobile Home Unit and Site Design

STANLEY, ID

ABBREVIATIONS

ACPS	ACOUSTIC CEILING PANEL SYSTEM	HVAC	HEATING, VENTING & AIR CONDITIONING
AC	AIR CONDITIONING	INSUL	INSULATION
ADJ	ADJUSTABLE	INT	INTERIOR
AFF	ABOVE FINISH FLOOR	LAM	LAMINATED
ALT	ALTERNATE	LOC	LOCATION
ALUM	ALUMINUM	LRG	LARGE
AV	AUDIO/ VISUAL	MAS	MASONRY
BRD	BOARD	MAX	MAXIMUM
BLDG	BUILDING	MECH	MECHANICAL
BTM	BOTTOM	MTL	METAL
CAB	CABINET	MANUF	MANUFACTURER
CG	CORNER GUARD	MHU	MANUFACTURED HOME UNIT
CJ	CONTROL JOINT	MIN	MINIMUM
CLG	CEILING	MISC	MISCELLANEOUS
CLR	CLEAR	NA	NOT APPLICABLE
CMU	CONCRETE MASONRY UNIT	NO	NUMBER
COL	COLUMN	NOM	NOMINAL
CONC	CONCRETE	NTS	NOT TO SCALE
CONN	CONNECTION	OC or ℄	ON CENTER OR CENTER LINE
CONT	CONTINUOUS	OFCI	OWNER FURNISHED - CONTRACTOR INSTALLED
DEMO	DEMOLITION	PT	PRESSURE TREATED
DTL	DETAIL	PART BRD	PARTICLE BOARD
DF	DRINKING FOUNTAIN	PLAN	PLASTIC LAMINATE
DIA	DIAMETER	PEJ	PETROLEUM EXPANSION JOINT
DIM	DIMENSION	PLY	PLYWOOD
DISP	DISPENSER	PRE-FIN	PRE-FINISHED
DR	DOOR	PWR	POWER
DWG	DRAWING	RCP	REFLECTED CEILING PLAN
DWR	DRAWER	RD	ROOF DRAIN
EA	EACH	REF	REFERENCE
EF	EXHAUST FAN	REINF	REINFORCEMENT
EIFS	EXT. INSUL. & FIN. SYSTEM	REQ	REQUIRED
EJ	EXPANSION JOINT	RM	ROOM
ELEC	ELECTRICAL	SHT	SHEET
EMER	EMERGENCY	SHTG	SHEATHING
EQ	EQUAL	SIM	SIMILAR
EQUIP	EQUIPMENT	SPEC	SPECIFICATIONS
ETR	EXISTING TO REMAIN	SQ	SQUARE
EXP	EXPOSED	SAN	SANITARY SEWER
EXPAN	EXPANSION	SS	SOLID SURFACE
EXT	EXTERIOR	SST	STAINLESS STEEL
FD	FLOOR DRAIN	STL	STEEL
FE	FIRE EXTINGUISHER	STOR	STORAGE
FEC	FIRE EXTINGUISHER CABINET	STRUCT	STRUCTURAL
FF	FINISH FLOOR	SUSP	SUSPENDED
FG	FINISH GRADE	TEMP	TEMPERATURE
FLR	FLOOR (ING)	TERM	TERMINATION
FTG	FOOTING	TOF	TOP OF FOOTING
GA	GAUGE	TOB	TOP OF BEARING
GALV	GALVANIZED	TYP	TYPICAL
GL	GLASS	VERT	VERTICAL
HC	HOLLOW CORE	VT	VINYL TILE
HM	HOLLOW METAL	w/	WITH
MHU	MANUFACTURED HOME UNIT	w/o	WITHOUT
HORIZ	HORIZONTAL	WD	WOOD
HR	HOUR	WP	WATER PROOF

SYMBOLS

- (F) — NEW BLDG. GRID
- (#) — DOOR NUMBER
- (#) — WINDOW MARKER
- ROOM NAME / # — ROOM NUMBER
- W3A — WALL TYPE
- ZONE NAME / RM # / CLG. HT #'-#" — CEILING TAG
- ELEVATION
- 4 / A501 — DETAIL NUMBER / SHEET NUMBER — DETAIL SYMBOL
- 3/A200 — DETAIL NUMBER / SHEET NUMBER — DETAIL CUT
- 4 / A300 — SECTION NUMBER / SHEET NUMBER — WALL SECTION
- 3/A400 — SHEET NUMBER / ELEVATION NUMBER — BLDG. ELEVATION
- 3 / A202 — SECTION LETTER / SHEET NUMBER — BLDG. SECTION
- # / A500 / # — ELEVATION NUMBER / SHEET NUMBER — WALL ELEVATION
- J / A300 — DRAWING NUMBER / SHEET NUMBER — TITLE — 3/4" = 1'-0"
- = DEMOLITION
- = EXISTING
- = NEW CONSTRUCTION
- = ADD ALT *(SCOPE)*

BUILDING DESCRIPTION

THE SCOPE OF THIS PROJECT IS FOR A NEW MANUFACTURED HOME UNIT (MHU) ON THE EXISTING ITD STANLEY SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DEVELOP THE SITE AND PROVIDE MHU FOUNDATION PER STRUCTURAL WITH MECHANICAL, PLUMBING AND ELECTRICAL FOR THE MHU PER THE FULL SET OF DRAWINGS. THE MHU IS TO BE SITE DELIVERED ONICE FOUNDATION IS COMPLETE. HOOK-UP ALL UTILITIES, CRAWL SPACE SKIRTING INSTALLED, AND CANOPY ROOFS WITH STAIRS & LANDING INSTALLED AS PART OF THE PROJECT COMPLETION.

THE MANUFACTURED HOME UNIT IS PURCHASED AND INSTALLED BY THE CONTRACTOR.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW FULL JURISDICTION or IDOPL PERMITTING REQUIREMENTS, TO INCLUDE BUT NOT LIMITED TO:

Factory built structures will be reviewed through the modular building program, approved, inspected and then given a insignia, prior to installation. The installation will require a permit and inspections, per the Idaho Manufactured installation instructions.

Manufactures installation instructions to be on site for inspectors, inspection, and verification of installation. Inspector to ensure that the roof snow loading requirements are met for the jurisdiction in which the project is built.

BLDG. INFO.

ACTUAL MHU AREA: 934 SF

OCCUPANCY CLASSIFICATION: (R) Residential (Manufactured Home)

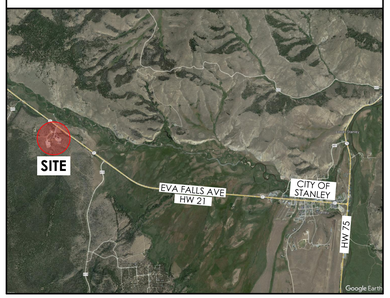
Manufactured Home: Homes built on/after June 15, 1976; federalized construction to one single, nation-wide standard (24 CFR §3280) under authority of the National Manufactured Housing Construction and Safety Standards Act of 1974, signed into law by President Ford

PERMITTING THROUGH IDOPL (IDAHO DIVISION OF OCCUPATIONAL AND PROFESSIONAL LICENSES). REQUIRED PERMITTING:

- FOUNDATION PERMIT
- INSTALLATION PERMIT and INSTALLATION TAG
- ON-SITE MECHANICAL, PLUMBING AND ELECTRICAL PERMITTING

REF. INFO AT:
idahohousingassociation.org
dbs.Idaho.gov

LOCATION MAP



CONSULTANTS

STRUCTURAL ENGINEER

HECO ENGINEERS
Corporate Office: 32 N Main St - Payette, ID 83661
Nampa Office: 5700 E Franklin Rd, Suite 160 - Nampa, ID 83687
Mailing: PO Box 235 - Payette, ID 83661
Phone: 208 642 3304 x 153

ELECTRICAL & PLUMBING ENGINEER

HECO ENGINEERS
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CIVIL ENGINEER

HECO ENGINEERS
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Mailing: PO Box 235 - Payette, ID 83661
Phone: 208 642 3304 x 153

CONTACTS

OWNER

IDAHO TRANSPORTATION DEPARTMENT (ITD)
11331 WEST CHINDEN BLVD.
BOISE, IDAHO 83714
CONTACT: JACOB JACKSON
EMAIL: jackob.jackson@itd.idaho.gov

ARCHITECT

MATT FRANKEL
122 S. MAIN STREET SUITE 1
POCATELLO, ID 83240
PH: 208.232.3741
E-MAIL: matt@myersanderson.com

DEFERRED SUBMITTALS

N/A

DRAWING INDEX

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REGISTERED PROFESSIONAL ARCHITECT
AR 987379
MATTHEW FRANKEL
STATE OF IDAHO

AIA NCARB ASID

ITD D4 STANLEY
Mobile Home Unit and Site Design
STANLEY, ID

PROJECT NAME

SHEET TITLE:

COVER SHEET

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

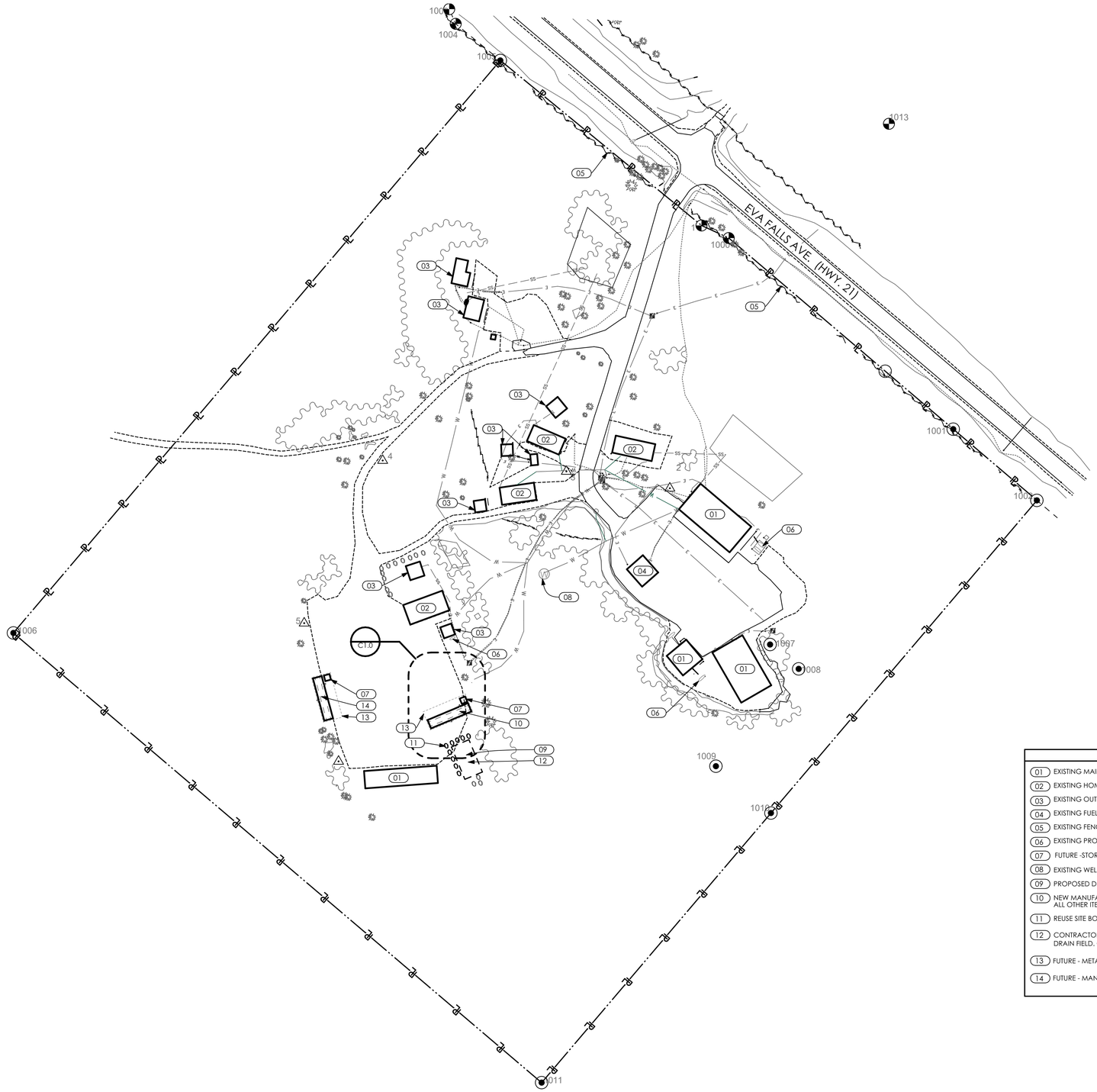
REVISION	DATE

CLIENT PROJ. NUMBER:

ARCH. JOB NUMBER: 23607

SHEET ISSUED DATE: April 2024

SHEET **G100**



LEGEND

- SET 5/8" REBAR W/RPC "DEA CONTROL"
- FOUND BRASS CAP PER ROS 262930
- FOUND 5/8" IRON ROD W/YPC PLS 8806
- CALCULATED POINT
- WELL
- PROPANE TANK
- CONIFER TREE
- BOULDER
- WATER TANK/FILL

SITE PLAN KEYED NOTES

01	EXISTING MAINTENANCE BUILDING TO REMAIN.
02	EXISTING HOME TO REMAIN.
03	EXISTING OUTBUILDING TO REMAIN.
04	EXISTING FUEL BUILDING TO REMAIN.
05	EXISTING FENCE TO REMAIN.
06	EXISTING PROPANE TANKS TO REMAIN.
07	FUTURE -STORAGE SHED *(NOT IN SCOPE)*
08	EXISTING WELL
09	PROPOSED DRAIN FIELD. SEE CIVIL.
10	NEW MANUFACTURED HOME CONTRACTOR SHALL REMOVE ALL DEBRIS, VEGETATION AND ALL OTHER ITEMS ON SITE FOR NEW MANUFACTURED HOME.
11	REUSE SITE BOULDERS TO CREATE PERIMETER AROUND DRAIN FIELD.
12	CONTRACTOR TO REMOVE ALL VEGETATION IN THIS AREA IN PREPARATION FOR NEW DRAIN FIELD. COORDINATE WITH CIVIL DRAWINGS.
13	FUTURE - METAL BUILDING OVER BUILD *(NOT IN SCOPE)*
14	FUTURE - MANUFACTURED HOME LOCATION *(NOT IN SCOPE)*

1 SP100

ARCHITECTURAL SITE PLAN

SCALE: 1" =100'

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Mobile Home Unit
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ARCHITECTURAL SITE PLAN

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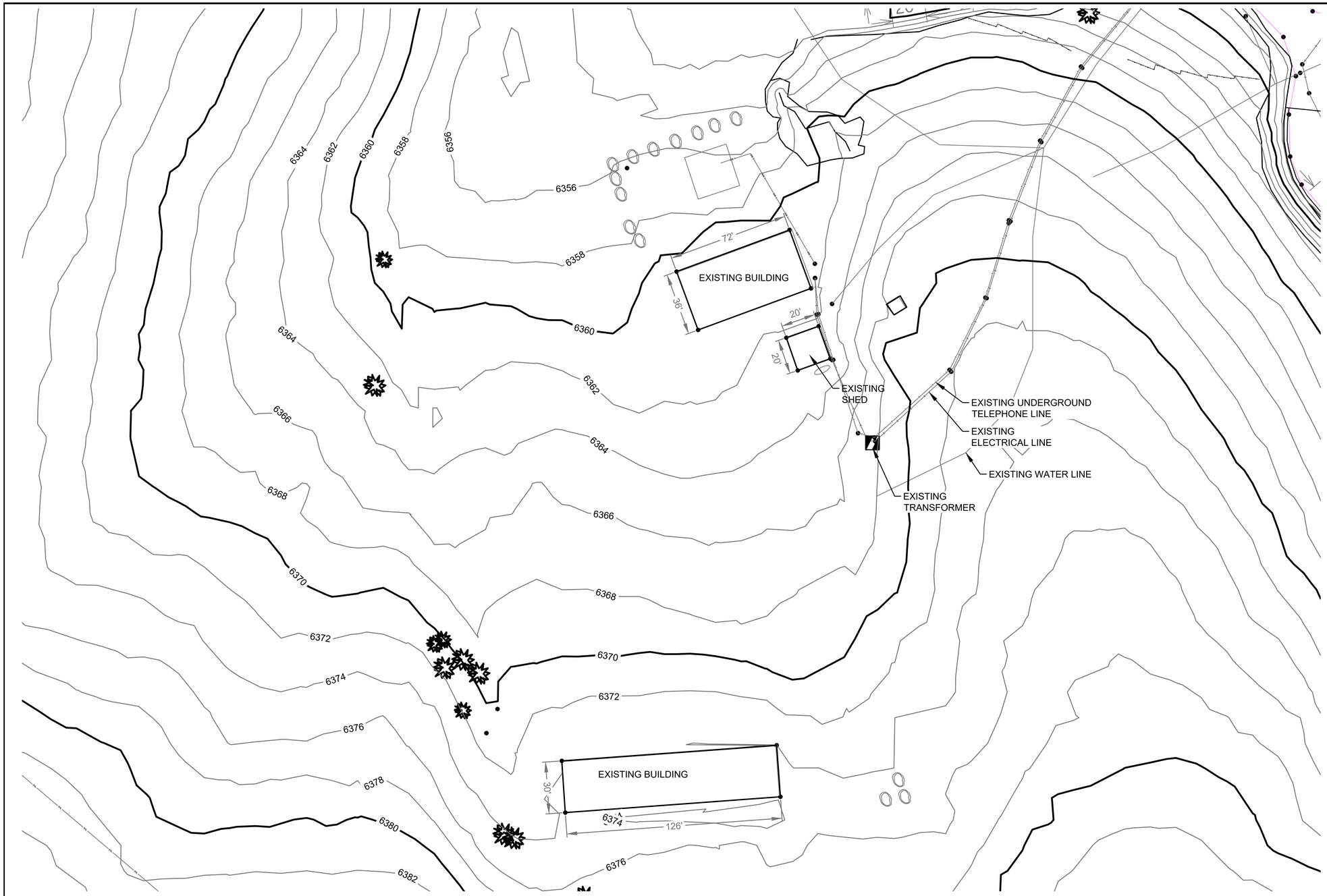

1 C0.1 EXISTING SITE LAYOUT

30' 0 30' 60'
SCALE OF FEET

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PROFESSIONAL ENGINEER
LICENSED
14844
STATE OF IDAHO
BART BROOKE
1-31-24

ASID NCARB AIA

PROJECT NAME:
ITD MOBILE HOME UNIT AND SITE DESIGN
STANLEY, ID

SHEET TITLE:
EXISTING SITE LAYOUT

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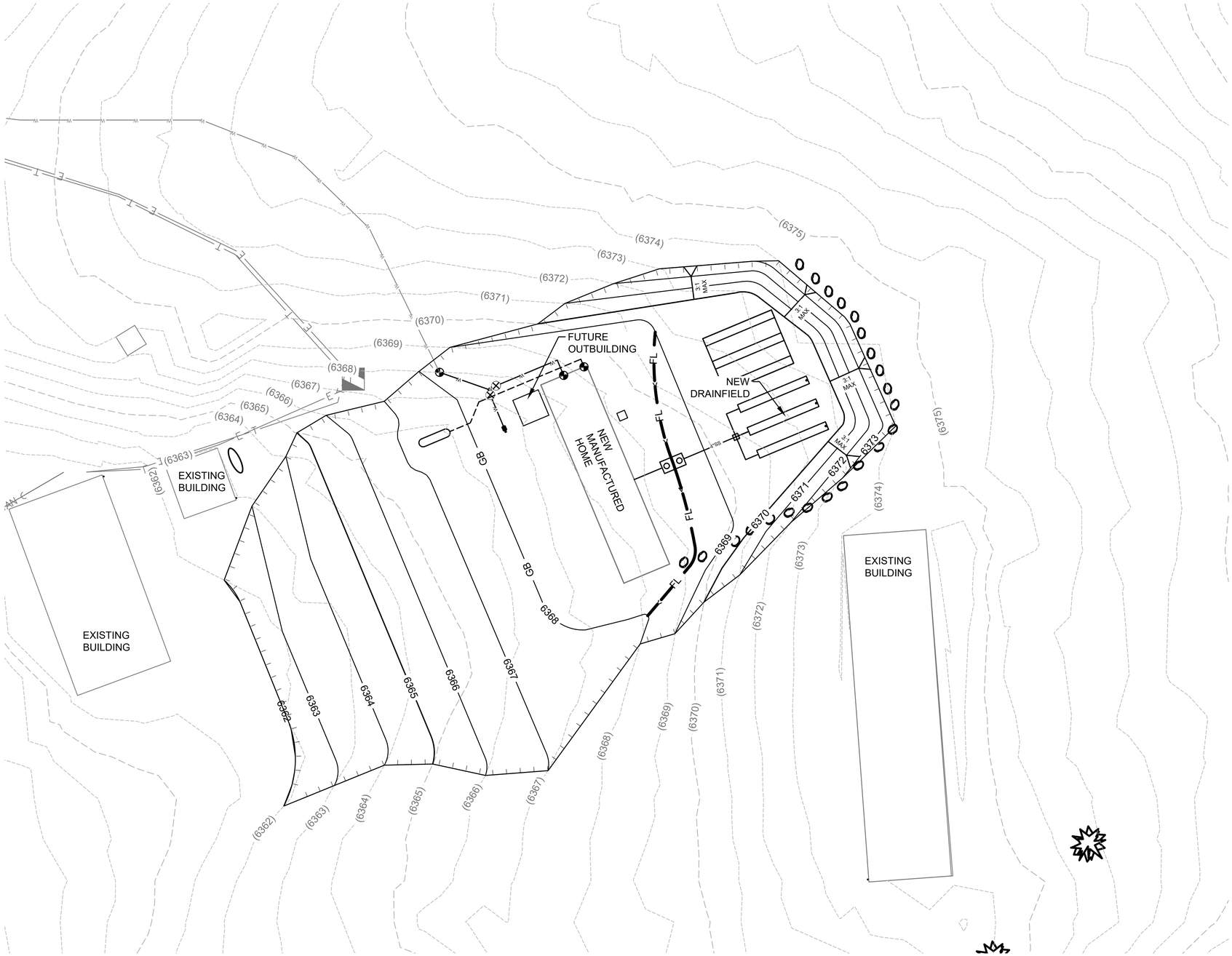
REVISION	DATE

CLIENT PROJ. NUMBER: ITD23-0375
ARCH. JOB NUMBER: 23607
SHEET ISSUED DATE: JANUARY 2024
SHEET C0.1



1 C1.0 OVERALL SITE LAYOUT

20' 0 20' 40'
SCALE OF FEET

SHEET NOTES:

1. EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. CONTRACTOR TO FIELD LOCATE ALL EXISTING UTILITIES AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
2. SEE SHEET C2.0 FOR ENLARGED SITE LAYOUT.
3. SEE SHEET C2.0/C2.1 FOR DRAINFIELD SIZING AND DISPOSAL DETAILS.
4. SEE SHEET C3.0 FOR SITE GRADING PLAN.

LEGEND:

SS SS	SANITARY SEWER
W W W	WATER
2400	NEW CONTOUR
(2400)	EXISTING CONTOUR
E	EXISTING ELECTRICAL LINE
T	EXISTING UNDERGROUND TELEPHONE LINE
FL	FLOW LINE
GB	GRADE BREAK
	DAYLIGHT LINE
	ISOLATION VALVE
	FROST-FREE YARD HYRANT

ABBREVIATIONS:

EA	EACH
EG	EXISTING GRADE
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOW LINE
FS	FINISH SURFACE
GB	GRADE BREAK
GPD	GALLONS PER DAY
HP	HIGH POINT
LP	LOW POINT
MAX	MAXIMUM
MIN	MINIMUM
POC	POINT OF CONNECTION
SF	SAFETY FACTOR
SF	SQUARE FOOT
S	SEWER
SS	SANITARY SEWER
TYP	TYPICAL
W	WATER

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1-31-24
ASID NCARB AIA

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STANLEY, ID

PROJECT NAME:

SHEET TITLE:

OVERALL SITE LAYOUT, LEGEND, AND ABBREVIATIONS

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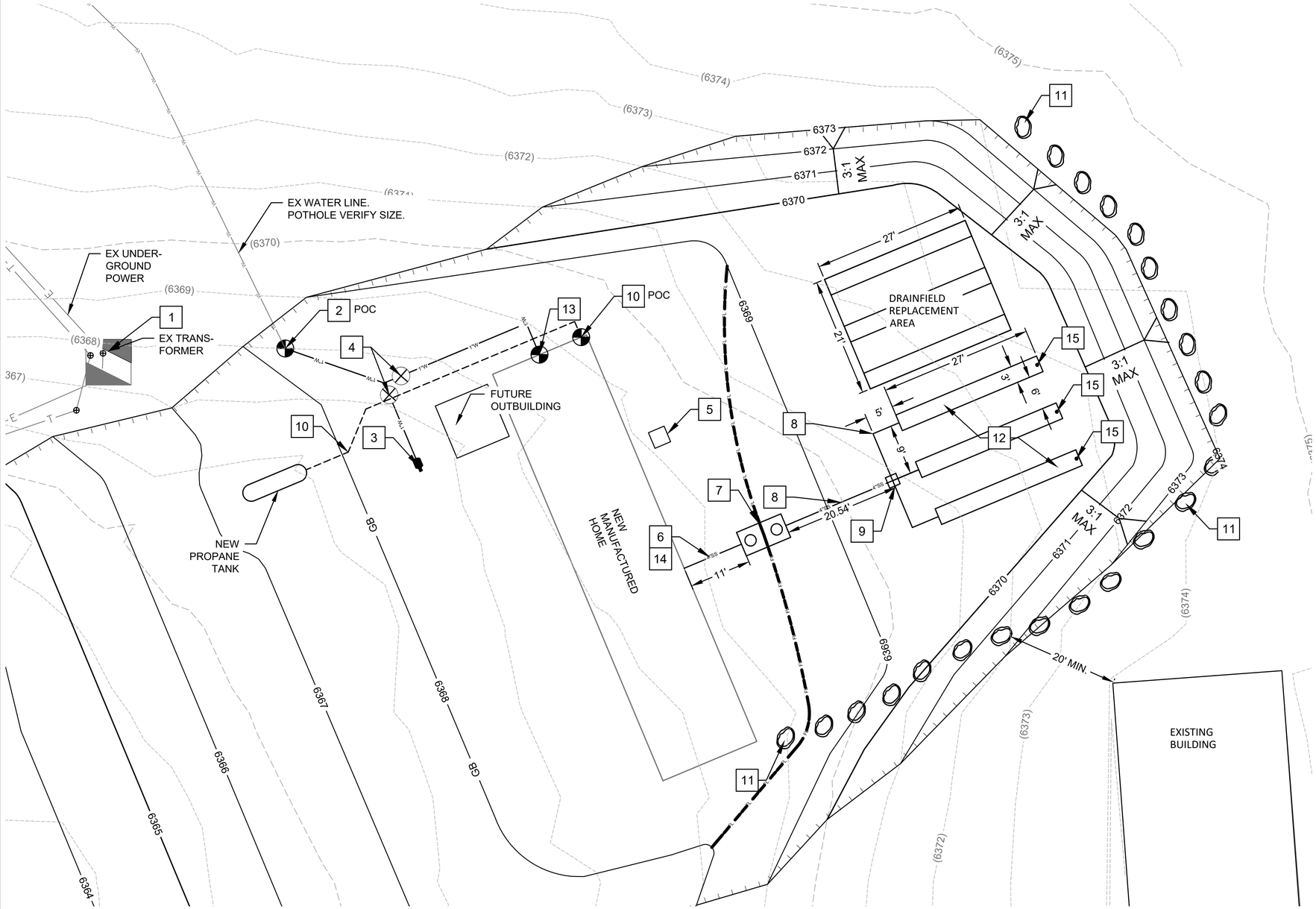
SHEET C1.0



1 C2.0 SITE LAYOUT

10' 0 10' 20'
SCALE OF FEET

HECO ENGINEERS

SHEET NOTES:

1. EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. CONTRACTOR TO FIELD LOCATE ALL EXISTING UTILITIES AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
2. THE PROPOSED DRAINFIELD SIZING IS CONSERVATIVELY OVER SIZED GIVEN THE ASSUMED SOIL APPLICATION RATE. SEE C1.1 FOR SIZING CALCULATIONS.

KEYNOTES:

1. INSTALL UNDERGROUND POWER TO CONNECT TO EXISTING TRANSFORMER. SEE ELECTRICAL SHEET FOR DETAILS.
2. CONNECT TO EXISTING WATER LINE.
3. INSTALL 1" ISOLATION BALL VALVES.
4. INSTALL WATER SERVICE WITH FROST-FREE YARD HYDRANT. SEE DETAIL 3, SHEET C2.2.
5. INSTALL 3' X 3' CONCRETE PAD FOR CONDENSER.
6. INSTALL 4" SDR-35 PVC SEWER PIPE 2% MIN.
7. INSTALL 1000-GAL SEPTIC TANK PER COUNTY HEALTH DISTRICT STANDARDS. SEE DETAIL 1, SHEET C2.2.
8. INSTALL 4" SDR-35 PVC SEWER PIPE 2% MIN. SEE DETAIL 1, SHEET C2.1.
9. INSTALL DISTRIBUTION BOX. SEE DETAIL 1, SHEET C2.2.
10. 1" LPG GAS LINE. SEE MECHANICAL DRAWING SHEET M2.0 FOR CONTINUATION.
11. RELOCATE EXISTING SITE BOULDERS TO ESTABLISH PERIMETER AROUND DRAINFIELD.
12. INSTALL DRAINFIELD PER COUNTY HEALTH DISTRICT STANDARDS. SEE DETAIL 2, SHEET C2.2.
13. 1" COLD WATER LINE. SEE MECHANICAL DRAWING SHEET M2.0 FOR CONTINUATION.
14. INSTALL RIGID INSULATION 4-INCHES THICK BY 2-FEET WIDE OVER TOP OF SEWER PIPE BETWEEN MANUFACTURED HOME EDGE OF PAD AND SEPTIC TANK. PROVIDE 6-INCH LAYER OF REJECT SAND BETWEEN TOP OF PIPE AND RIGID INSULATION.
15. INSTALL INSPECTION PORT AND VENTILATION RISER PER DETAIL 2 SHEET C2.2.

PRELIMINARY DRAINFIELD SIZING CALCULATIONS:

CURRENTLY THE EXISTING SOIL TYPE IS UNKNOWN. HOWEVER, NRCS SOIL MAPPING IN THE AREA INDICATES THE PRESENCE OF THREE SOIL TYPES:

1. CASTLEPEAK-YANKEEFORK COMPLEX,
2. REDFISH-FEZIP-LILYAKE COMPLEX, AND
3. STRUGGLE COMPLEX.

THESE ARE RESPECTIVELY ASSOCIATED WITH VERY GRAVELLY SANDY LOAM, EXTREMELY GRAVELLY SANDY LOAM, AND EXTREMELY GRAVELLY COURSE SAND. ALL THESE MATERIALS ARE CONSIDERED TO BE WELL DRAINING AND SUITABLE FOR PERCOLATION FOLLOWING SECONDARY TREATMENT THROUGH A SAND BED HAVING A MINIMUM LAYER THICKNESS OF 36-INCHES. AN ASSUMED PRELIMINARY APPLICATION RATE OF 1.2 GPD/FT^2 IS USED IN THE PRELIMINARY DESIGN.

SOIL APPLICATION RATE = 1.2 GPD/FT^2
1 NEW BUILDING WITH 3 BEDROOMS ≈ 2-3 BEDROOMS @ 250 GPD/EA (250 GPD)
ARC CHAMBERS PROVIDE (25% ALLOWABLE REDUCTION)

SYSTEM SIZING CALCULATIONS WITH ARC CHAMBERS:
LENGTH = [(250 GPD) / (1.2 GPD/FT^2)] / 3-FT^2/LF = 69-FT
TWENTY-FIVE PERCENT REDUCTION = 69-FT(0.75) = 52-LF
REDUCTION LENGTH = 52.1 LF (2 LEGS EACH 27' LONG)
(USE 3 LEGS EACH 27' LONG) = 81-FT
PRELIMINARY DESIGN SAFETY FACTOR = 81/52 = S.F. 1.56

SYSTEM SIZING USING A STANDARD SYSTEM WITH 6-FT SEPARATION BETWEEN TRENCH SIDEWALLS:
AREA REQUIRED = [(250 GPD / (1.2 GPD/FT^2)] = 208.33 FT^2
TRENCHES = (3) TRENCHES 27'-0" X 4' WIDE = 324 FT^2
PRELIMINARY DESIGN SAFETY FACTOR = 324/208 = S.F. 1.56

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PROFESSIONAL ENGINEER LICENSED 14844 STATE OF IDAHO BART BROOKE
1-31-24
ASID NCARB AIA

PROJECT NAME:
ITD MOBILE HOME UNIT AND SITE DESIGN
STANLEY, ID

SHEET TITLE:
SITE LAYOUT

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

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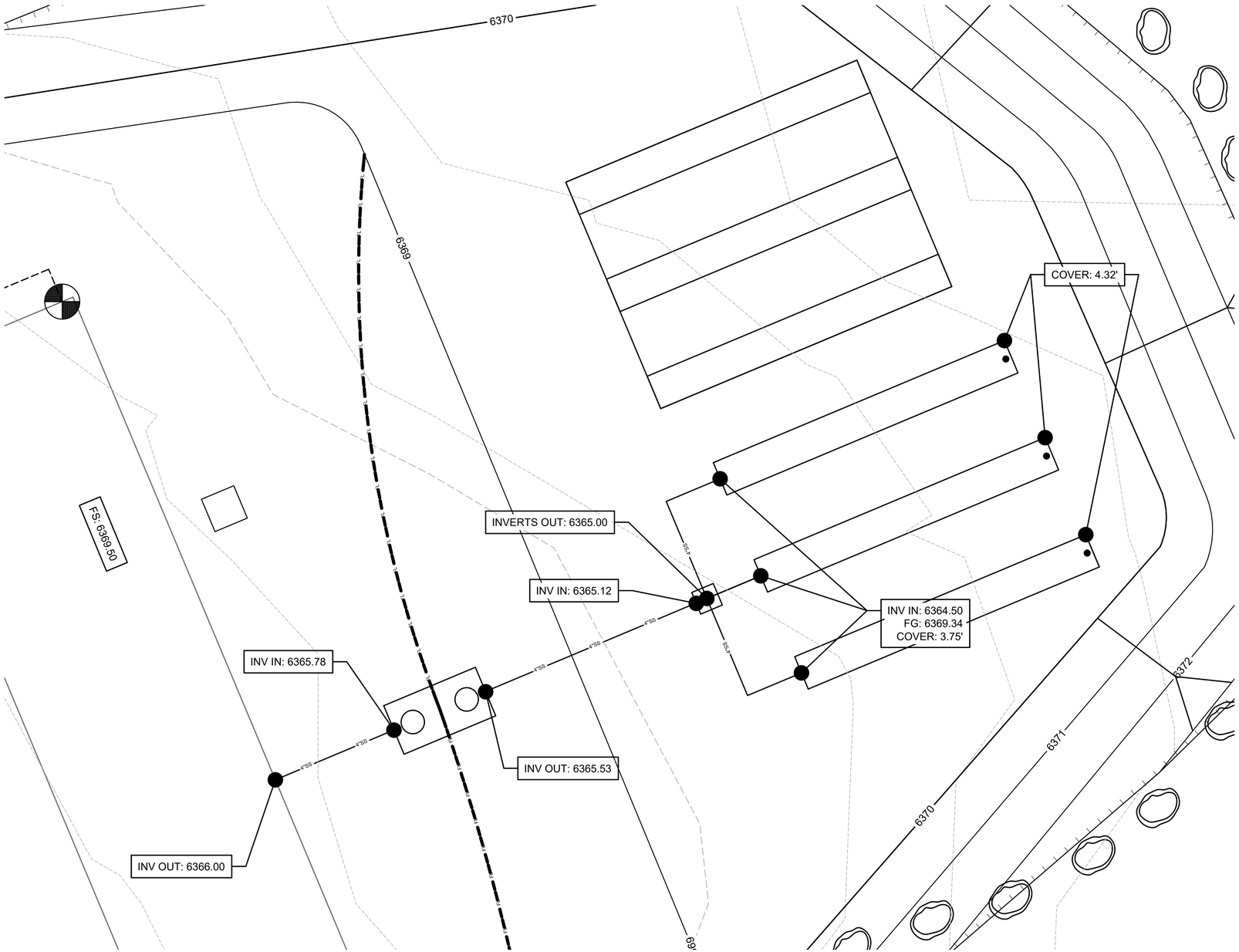
SHEET	C2.0



1 C2.1 SITE LAYOUT

5' 0 5' 10'
SCALE OF FEET

HECO ENGINEERS

SHEET NOTES:

1. EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. CONTRACTOR TO FIELD LOCATE ALL EXISTING UTILITIES AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
2. THE PROPOSED DRAINFIELD SIZING IS CONSERVATIVELY OVER SIZED GIVEN THE ASSUMED SOIL APPLICATION RATE. SEE C1.1 FOR SIZING CALCULATIONS.
3. FINAL INVERT ELEVATIONS TO BE VERIFIED BY ENGINEER UPON PERMIT ISSUANCE BY COUNTY HEALTH DISTRICT PRIOR TO CONSTRUCTION AS SEWER TREATMENT AND DISPOSAL SYSTEM PERMIT ISSUANCE MAY AFFECT FINAL DESIGN.
4. CONTRACTOR SHALL FOLLOW INFILTRATOR'S INSTALLATION REQUIREMENTS FOR COVER UP TO AND OVER 4-FEET. CONTACT THE TECHNICAL SERVICE DEPARTMENT (800) 221-4436 FOR CURRENT INSTALLATION INSTRUCTIONS.
5. INSTALL RIGID INSULATION 4-INCHES THICK BY 2-FEET WIDE OVER TOP OF SEWER PIPE BETWEEN MANUFACTURED HOME EDGE OF PAD AND SEPTIC TANK. PROVIDE 6-INCH LAYER OF REJECT SAND BETWEEN TOP OF PIPE AND RIGID INSULATION.

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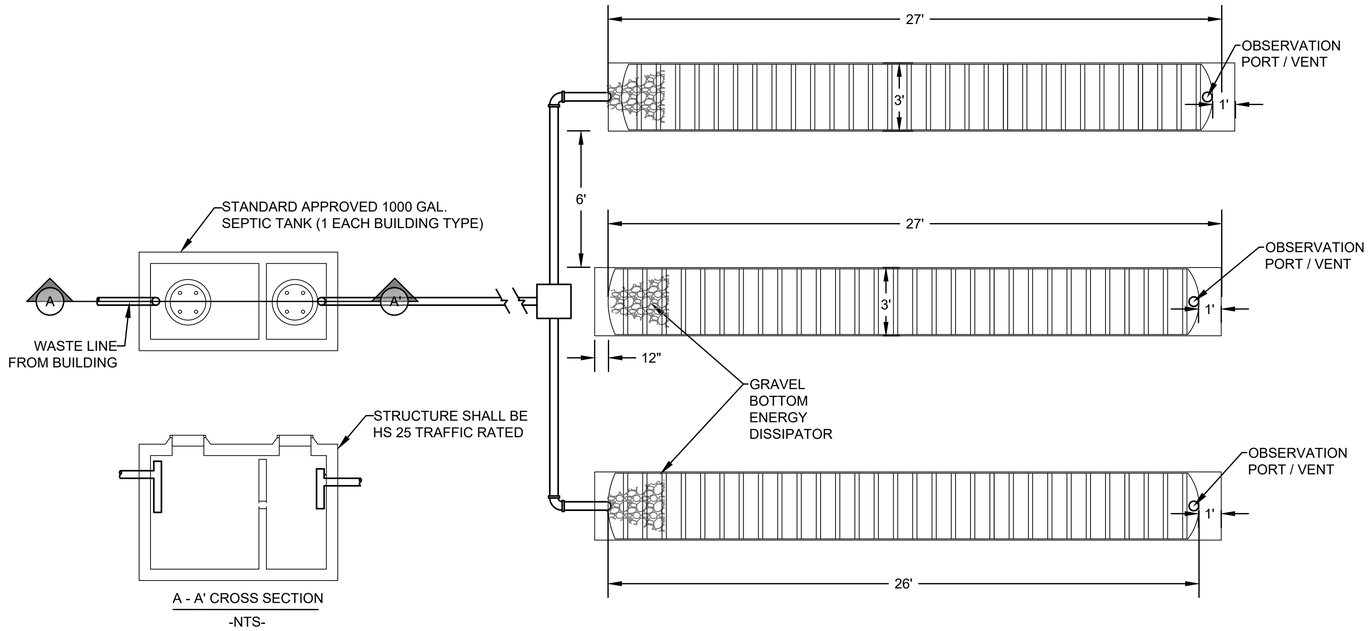


A - A' CROSS SECTION

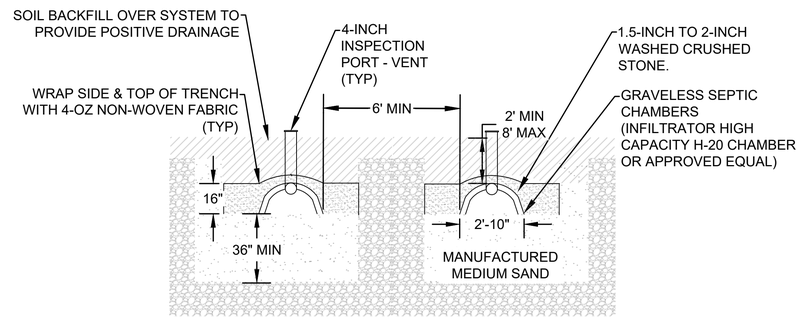
-NTS-

1 C2.2 SEPTIC SYSTEM & DRAINFILED ENLERGED PLAN DETAIL

SCALE: NTS

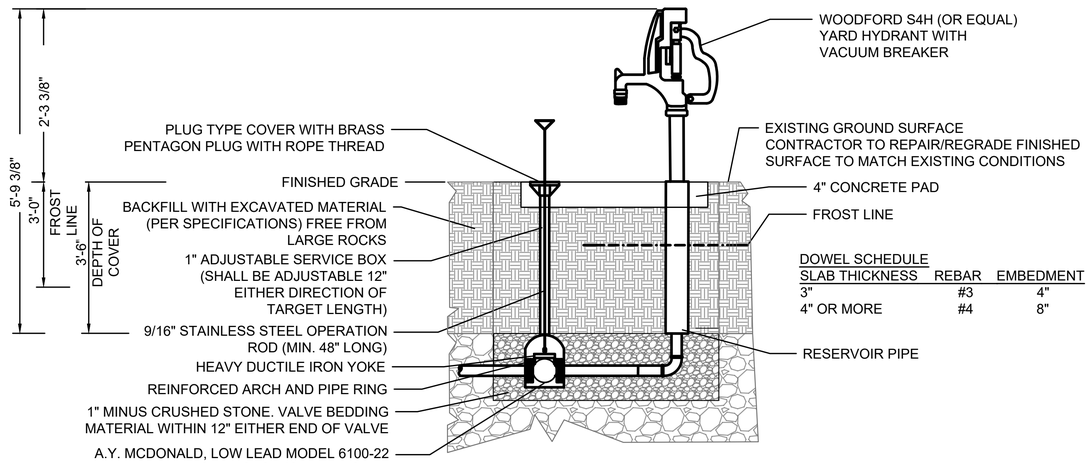
SHEET NOTES:

1. PRELIMINARY DRAINFIELD SIZING NEEDS TO BE CONFIRMED PENDING RESULTS BASED ON STATE HEALTH DISTRICT SITE INSPECTION.



2 C2.2 DRAINFIELD SECTIONS

SCALE: NTS



DOWEL SCHEDULE

SLAB THICKNESS	REBAR	EMBEDMENT
3"	#3	4"
4" OR MORE	#4	8"

NOTES:

1. SERVICE BOX SHALL ACCOMMODATE UP TO 1" SERVICE.
2. SERVICE BOX TO BE INSTALLED IN SUCH A MANNER AS TO ENSURE IT WILL BE FREE FROM OBSTRUCTIONS AND DEBRIS AND THAT NO MATERIAL WILL INTERFERE WITH VALVE OPERATION.
3. ONE HYDRANT LOCATION IS INSTALLED IN A CONCRETE PAD. CONTRACTOR SHALL REPLACE PAD REMOVED DURING INSTALLATION. IF A CONCRETE PATCH IS REQUIRED THE PATCH SHALL BE DOWELED: SEE SCHEDULE FOR REBAR SIZE AND EMBEDMENT ABOVE. SEE SHEET C2.0 FOR HYDRANT LOCATION.

3 C2.2 YARD HYDRANT

SCALE: NTS

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SHEET C2.2

HECO ENGINEERS

KEYNOTES: #

1. CONSTRUCT 4' X 16' LEVEL PAD FOR PROPANE TANK.
2. CONSTRUCT DRAINAGE SWALE FLOW LINE 1% MIN SLOPE.

SLOPE VARIES 10% MAX (TYP.)

SLOPE VARIES 5% MIN. (TYP.)

VARIES 5% MIN. 10% MAX

SLOPE VARIES 1% MIN. 10% MAX

FG:6369.17

FG:6369.17

FS: 6369.50

FG:6369.17

FG:6369.17

FL:6368.20

FL/HP: 6369.00

27'

1% MIN

4% MAX

4% MAX

4% MAX

10% MAX

1% MIN

1% MIN

5.5%

2.0%

1.9%

4"SS

3:1 MAX

3:1 MAX

3:1 MAX

3:1 MAX

GB

GB

GB

GB

FL

FL

FL

1

2

2

EXISTING BUILDING

(6362) (6363) (6364) (6365) (6366) (6367) (6368) (6369) (6370) (6371) (6372) (6373) (6374) (6375)

10' 0 10' 20'

SCALE OF FEET

1 C3.0 GRADING PLAN

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PROFESSIONAL ENGINEER LICENSED 14844 STATE OF IDAHO BART BROOKE

ASID NCARB AIA

1-31-24

PROJECT NAME:

ITD MOBILE HOME UNIT AND SITE DESIGN

STANLEY, ID

SHEET TITLE:

GRADING PLAN

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

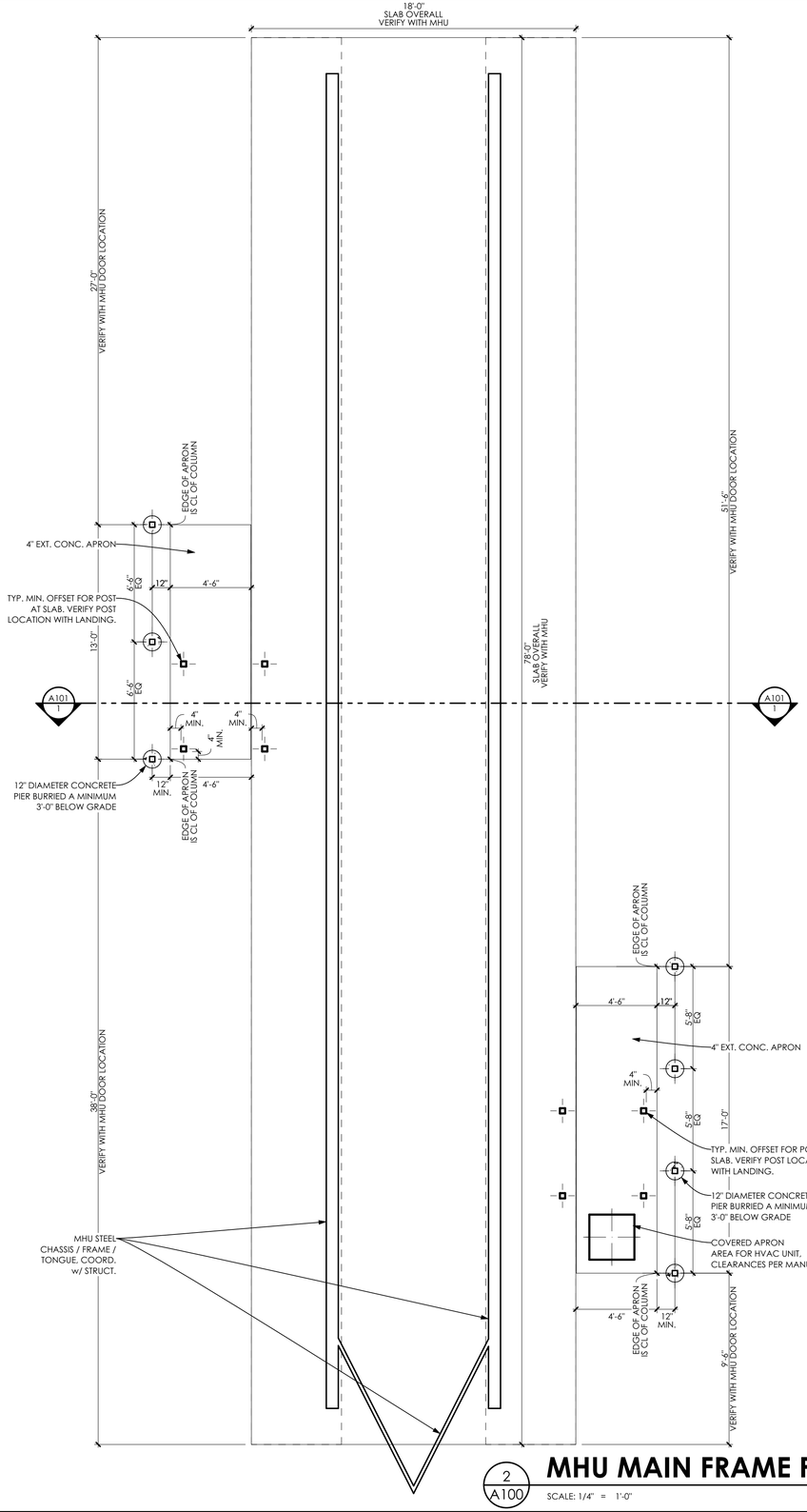
REVISION	DATE

CLIENT PROJ. NUMBER: ITD23-0375

ARCH. JOB NUMBER: 23607

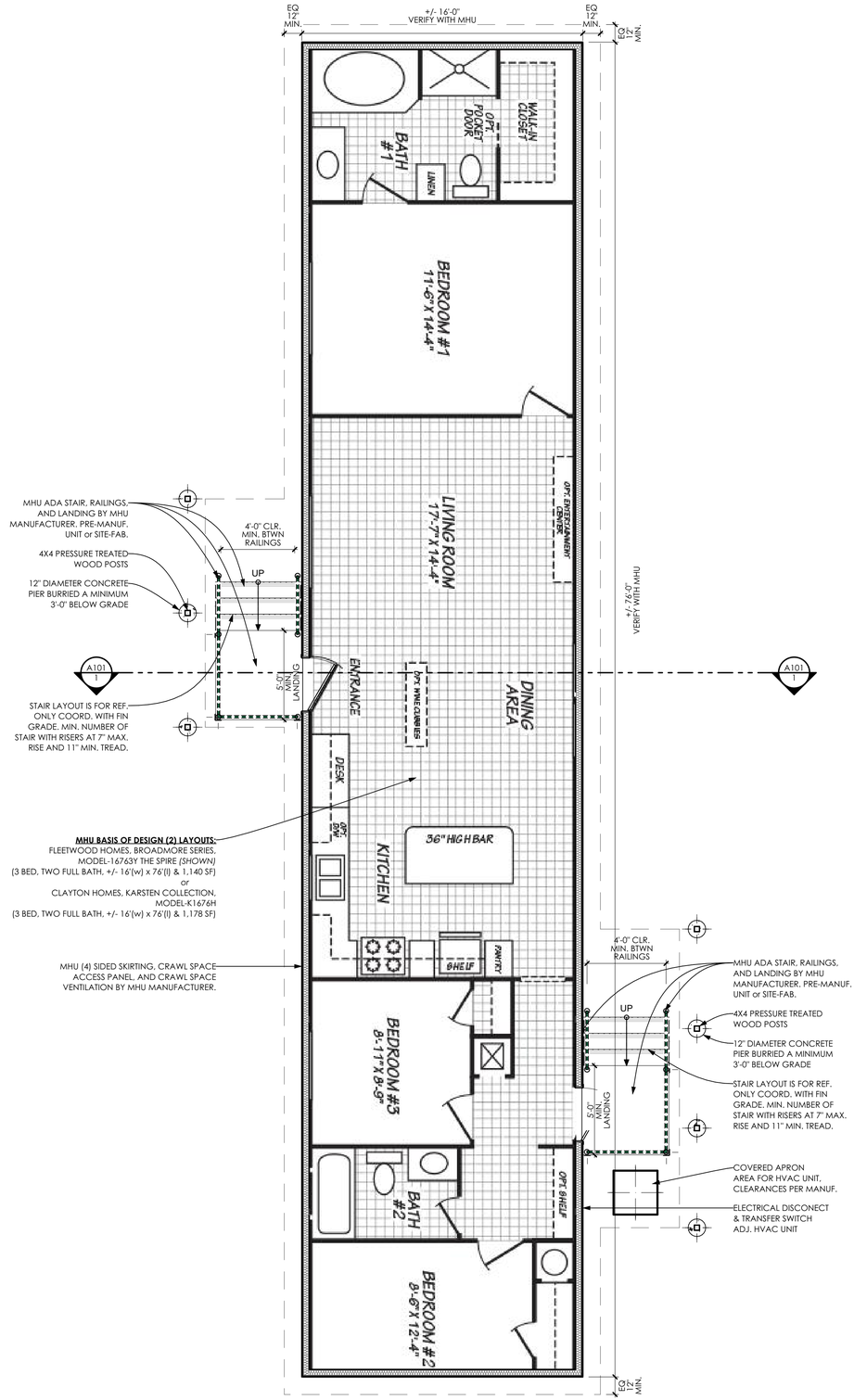
SHEET ISSUED DATE: JANUARY 2024

SHEET C3.0



2 A100 **MHU MAIN FRAME PLAN**

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



MHU BASIS OF DESIGN (2) LAYOUTS:
FLEETWOOD HOMES, BROADMORE SERIES, MODEL-16763Y THE SPIRE *(SHOWN)*
(3 BED, TWO FULL BATH, +/- 16'(w) x 76'(l) & 1,140 SF)
or
CLAYTON HOMES, KARSTEN COLLECTION, MODEL-K1676H
(3 BED, TWO FULL BATH, +/- 16'(w) x 76'(l) & 1,178 SF)

1 A100 **MHU FLOOR PLAN**

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

GENERAL NOTES

1) VERIFY MHU FINAL SIZE PRIOR TO SLAB LAYOUT AND INSTALLATION.

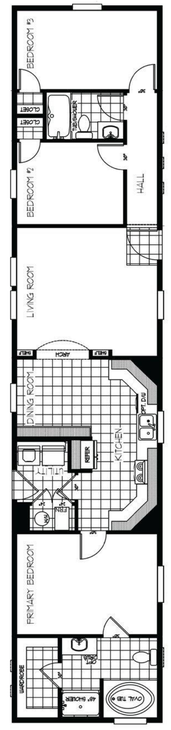
2) SEE PLUMBING, AND ELECTRICAL SHEET FOR ALL MHU ROUGH-IN AND HOOK-UP ITEMS.

3) ALL LOCATIONS FOR STAIR CONC. APRONS, STAIRS, RAILINGS, AND LANDINGS WILL NEED TO BE FIELD VERIFIED PRIOR TO INSTALLATION BASED ON MHU SELECTION & LAYOUT.

4) ALL LOCATIONS FOR CANOPY COLUMN FOUNDATIONS, CANOPY COLUMNS, CANOPY ROOF FRAMING, AND ASSOCIATED CANOPY ROOFING ITEMS WILL NEED TO BE FIELD VERIFIED PRIOR TO INSTALLATION BASED ON MHU SELECTION & LAYOUT.

5) ALL MHU SELECTIONS SHALL MEET MINIMUM SNOW LOAD OF 128 PSF AND MINIMUM WIND SPEED OF 115 MPH.

6) ALTERNATE MHU FLOOR PLAN: *(BELOW)*
CLAYTON HOMES, KARSTEN COLLECTION, MODEL - K1676H
(3 BED, TWO FULL BATH, +/- 16'(w) x 76'(l) & 1,178 SF)



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REGISTERED PROFESSIONAL ARCHITECT
AR 987379
MATTHEW FRANKEL
STATE OF IDAHO
AIA NCARB ASID

ITD D4 STANLEY
Mobile Home Unit
and Site Design
STANLEY, ID

PROJECT NAME:

SHEET TITLE:

OVERALL FLOOR PLANS

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

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REVISION	DATE

CLIENT PRO.: NUMBER:

ARCH. JOB NUMBER: 23607

SHEET ISSUED DATE: April 2024

SHEET **A100**

FLEETWOOD HOMES, BROADMORE SERIES, MODEL-16763Y THE SPIRE

Standard Features

- Bathroom Additional Specs: Framed bathroom mirrors / Towel bar & tissue holder
- Bathroom Cabinets: 36" height lavy cabinet
- Bathroom Faucets: Dual handle faucets
- Bathroom Shower: 60" 3 pc. ABS tub/shower per plan in Mbath / 60" 3 pc. ABS tub/shower in Guest Bath
- Insulation (Ceiling): R-28
- Exterior Wall On Center: 16" o.c.
- Floor Decking: 19/32" T&G OSB floor decking
- Front Rear Eaves: 6" Eave all sides Multi section
- Side Wall Height: 8' flat ceilings
- Front Door: 36" In-swing front door w/deadbolt
- Rear Door: 34" Fiberglass out-swing rear door w/deadbolt
- Shingles: Class A fire rated limited lifetime architectural shingles
- Window Trim: 4" trim all windows / Painted shutters FDS & hitch end (multi section) / Painted shutters hitch end only (single section)
- Ceiling Texture: Textured ceilings (orange peel)
- Interior Doors: 2-Panel white interior doors / Residential style mortise door hinges (3)
- Kitchen Backsplash: Laminate backsplash
- Kitchen Drawer Type: Bank of drawers
- Kitchen Flooring: Vinyl flooring
- Kitchen Range Type: 30" stainless steel Whirlpool free standing electric range, w/clock, window & timer
- Ceiling Fans: Wire & brace for ceiling fan in living room
- Electrical Service: 200 Amp all electric service (gas optional)
- Shut Off Valves Throughout: Shut-off valve on toilets
- Water Shut Off Valves: Master water shut-off valve
- Window Decor: 2" Wood Faux blinds optional
- Bathroom Backsplash: Laminate backsplash
- Bathroom Fans: Exhaust fan
- Bathroom Flooring: Vinyl flooring
- Bathroom Sink: Acrylic sink
- Additional Specs: Black roof vents
- Endwall Eaves: No rear end wall eave on singlewides
- Exterior Wall Studs: 2" x 4" Exterior walls
- Insulation (Floors): R-22
- Roof Load: 30 lb. Roof load
- Insulation (Walls): R-11
- Exterior Lighting: Porch lights all exterior doors
- Roof Pitch: 3:12 Roof pitch
- Siding: LP Smart Panel exterior siding
- Window Type: White waterfall window & door trim
- Carpet Grade: Factory select Livewire carpet (shipped loose on multi-wides) / 7/16" – 7# Carpet pad (shipped loose on multi-wides)
- Corner Wall Type: Factory select vinyl covered wall panels T/O
- Interior Lighting: LED can lights T/O
- Kitchen Cabinetry: MDF face frame & cabinet door / 30" overhead kitchen cabinets / Shelf & Bead board above refrigerator / Wood ply drawer sides
- Kitchen Faucets: Dual handle chrome faucet
- Kitchen Range Hood: 30" power range hood with light
- Kitchen Refrigerator: 18 cu. ft. stainless steel Whirlpool frost free refrigerator
- Kitchen Sink: 7" Double cell stainless steel sink
- Home Warranty Info: 1 Year structural warranty (see warranty manual for complete details)
- Furnace: Electric furnace
- Water Heater: 30 gallon electric water heater
- Exterior Outlets: GFI patio plug near rear door

MHU SELECTION NOTES:

1) ALL MHU FINISH SELECTIONS, INTERIOR AND EXTERIOR, ARE TO BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL VIA MHU SUBMITTAL. MHU SUBMITTAL SHOULD INCLUDE ALL STANDARD OPTION FOR FLEETWOOD HOMES, BROADMORE SERIES, MODEL-16763Y THE SPIRE TO INCLUDE:
   - FLOOR PLAN LAYOUT WITH TILE SHOWER BATH #1 OPTION
   - GAS OPTION WITH ELEC SERVICE
   - GAS FURNACE
   - GAS WATER HEATER
   - PAINTED SHUTTER MULTI SELECTION
   - 2" BLINDS
2) PROPANE IS THE FUEL SOURCE FOR THE BUILDING, GAS APPLIANCES SELECTION WHERE AVAILABLE. COORD. w/ CIVIL DRAWING FOR TANK CONNECTION.
3) ALL MHU SELECTIONS SHALL MEET MINIMUM SNOW LOAD OF 128 PSF AND MINIMUM WIND SPEED OF 115 MPH.

CLAYTON HOMES, KARSTEN COLLECTION, MODEL-K1676H

Standard Features

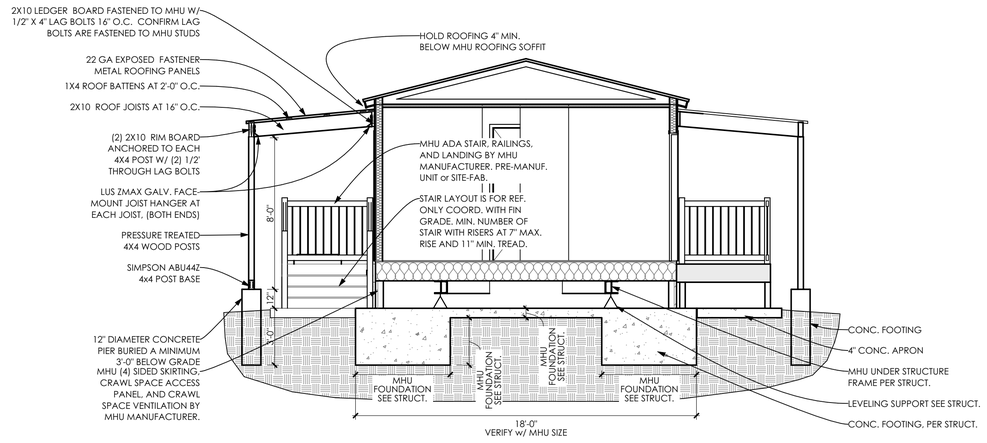
- Bathroom Additional Specs: Bathroom Towel Bars & Tissue Holders / Standard Window in Bath(Model Specific)
- Bathroom Sink: Rectangular Porcelain Bath Sinks
- Additional Specs: Kwikset® Exterior Locksets / Exterior GFI Receptable at Front & Rear Doors / Exterior Hose Bibb
- Exterior Wall Studs: x6 Exterior Walls
- Insulation (Floors): R22
- Front Rear Eaves: 12" Residential Eaves (6" Eaves for Singlewide Sidewalls)
- Interior Wall Studs: 2x4 Interior Walls
- Roof Truss: Engineered Trusses
- Insulation (Walls): R19
- Front Door: 36" 6-Panel In-Swing Fiberglass Front Door with Deadbolt, Knocker, & Viewer
- Rear Door: 36" 6-Panel In-Swing Fiberglass Rear Door with Deadbolt
- Shingles: CertainTeed® Landmark® Series Designer Architectural Shingles w/Pro-Rated Lifetime Warranty
- Interior Doors: Raised Panel Interior Passage Doors w/Mortised Hinges & Residential Door Stops
- Wall Finish: Single Color Paint for Walls & Ceilings (Low-VOC Paint)
- Window Treatment: Cased & Trimmed Windows T/O (Excluding Transoms)
- Kitchen Cabinetry: European Frameless Component Cabinet System with ¾" Construction / 30" Tall Overhead Cabinets / 36" Base Cabinet Height / Cityscape Overhead Cabinets Above Range/Fridge / 2.75" Cabinet Crown Molding
- Kitchen Lighting: Recessed LED Can Lighting in Kitchen & Dining Room
- Kitchen Refrigerator: Frigidaire 18CF Black or White Refrigerator w/Top Freezer
- Furnace: Carrier® SmartComfort™ High-Eff Gas or Electric Downflow Furnace
- Shut Off Valves Throughout: Master Water Shutoff Valve
- Washer Dryer Hook Up: Prep for Electric Dryer and Washer
- Water Shut Off Valves: Water Shut-Off Valves T/O
- Roof Decking: 7/16" OSB Roof Decking
- Bathroom Lighting: Recessed LED Can Lights Above Sinks & Showers
- Bathroom Shower: 1 Piece 60" Fiberglass Shower in Master Bath w/Glass Door/Enclosure / 1 Piece 60" Tub/Shower Combo in Guest Baths
- Bathroom Toilet Type: Elongated Toilets
- Insulation (Ceiling): R33
- Exterior Wall On Center: 16" O.C.
- Floor Decking: 5/8" Interlocking Tongue and Groove OSB Floor Decking
- Floor Joists: 2x6 Floor Joists on 27" Wide & 40'-6" Wide Homes / 2x8 Floor Joists on 30" Wide & 15'-6" Wide Homes / Floor Joists 16" On Center
- Interior Wall On Center: 24" O.C.
- Roof Load: 20# Roof Load
- Side Wall Height: 8'-6" Sidewall Height - Flat Ceilings
- Dormer: Standard Dormer Model Specific
- Exterior Lighting: Coach Light at Exterior Doors
- Roof Pitch: 3:12 Roof Pitch 27' Wide Homes / 3:12 Roof Pitch 15'-6" Wide Homes / 2.59:12 Roof Pitch 30' Wide Homes / 2.13:12 Roof Pitch 40'-6" Wide Homes
- Siding: LP® SmartSide® Panel Siding
- Window Type: Kinro Dual-Pane Low-E Vinyl Thermopane Windows
- Interior Lighting: LED Lighting T/O Home
- Interior Walls: 1/2" American Drywall, Tape & Texture T/O w/Bullnose Rounded Corners, Orange Peel Texture
- Kitchen Backsplash: 4" Laminate Backsplash & Crescent Edge
- Kitchen Custom Options: Wilsonart® Laminate Countertops
- Kitchen Drawer Type: Solid Wood Cab Doors & Drawer Fronts
- Kitchen Faucets: Pfister® Brushed Nickel Metal Faucets
- Kitchen Range Type: Frigidaire Black or White Gas or Electric Coil Range (4-Burners)
- Kitchen Sink: White Acrylic 9" Deep Sink w/Sprayer
- Heat Duct Registers: Perimeter Floor Duct System (Central Floor Ducts on Single Section Homes)
- Thermostat: Ecobee 3 Pro Smart Thermostat
- Water Heater: Rheem® 40 Gallon Electric Water Heater
- Exterior Outlets: Exterior GFI Receptacle (2)

MHU SELECTION NOTES:

1) ALL MHU FINISH SELECTIONS, INTERIOR AND EXTERIOR, ARE TO BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL VIA MHU SUBMITTAL. MHU SUBMITTAL SHOULD INCLUDE ALL STANDARD OPTION FOR CLAYTON HOMES, KARSTEN COLLECTION, MODEL-K1676H.
2) PROPANE IS THE FUEL SOURCE FOR THE BUILDING, GAS APPLIANCES SELECTION WHERE AVAILABLE. COORD. w/ CIVIL DRAWING FOR TANK CONNECTION.
3) ALL MHU SELECTIONS SHALL MEET MINIMUM SNOW LOAD OF 128 PSF AND MINIMUM WIND SPEED OF 115 MPH.

2 A101 MHU STANDARD OPTIONS AND NOTES

SCALE: 1" = 1'-0"



1 A101 BUILDING SECTION @ CANOPY

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

GENERAL NOTES

1) VERIFY MHU FINAL SIZE PRIOR TO SLAB LAYOUT AND INSTALLATION.
2) SEE PLUMBING, AND ELECTRICAL SHEET FOR ALL MHU ROUGH-IN AND HOOK-UP ITEMS.
3) ALL LOCATIONS FOR STAIR CONC. APRONS, STAIRS, RAILINGS, AND LANDINGS WILL NEED TO BE FIELD VERIFIED PRIOR TO INSTALLATION BASED ON MHU SELECTION & LAYOUT.
4) ALL LOCATIONS FOR CANOPY COLUMN FOUNDATIONS, CANOPY COLUMNS, CANOPY ROOF FRAMING, AND ASSOCIATED CANOPY ROOFING ITEMS WILL NEED TO BE FIELD VERIFIED PRIOR TO INSTALLATION BASED ON MHU SELECTION & LAYOUT.
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REGISTERED PROFESSIONAL ARCHITECT
087379
MATTHEW FRANKEL
STATE OF IDAHO
ASID NCARB AIA

PROJECT NAME:
ITD D4 STANLEY
Mobile Home Unit
and Site Design
STANLEY, ID

SHEET TITLE:
SECTION AND MHU INFO

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

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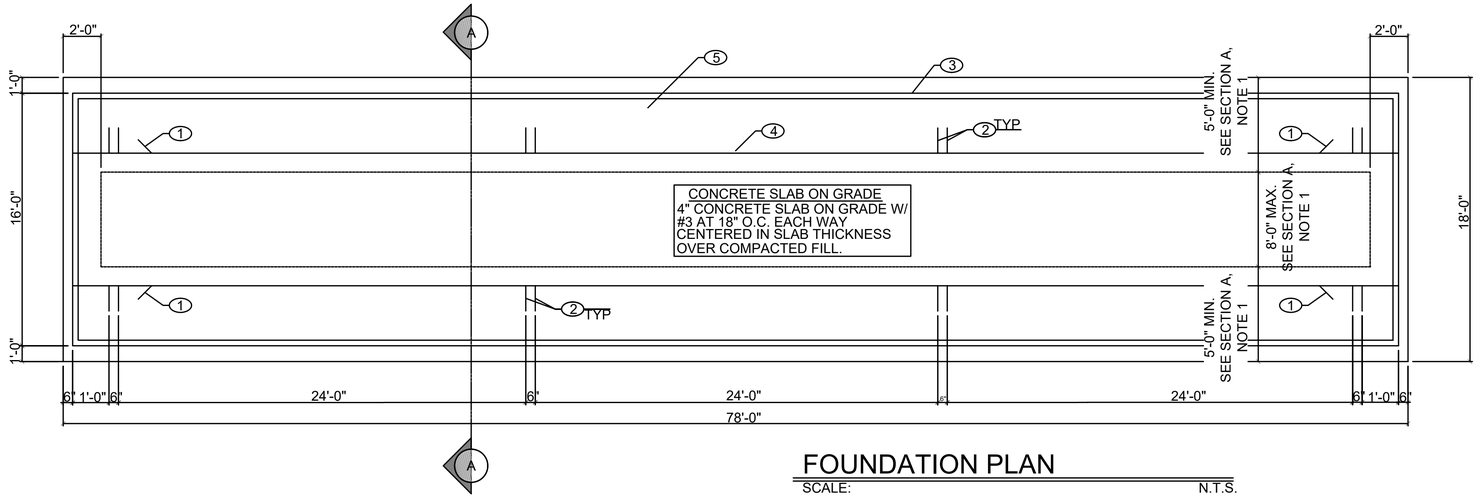
ARCH. JOB NUMBER: 23607

SHEET ISSUED DATE: April 2024

SHEET **A101**



FOUNDATION PLAN

SCALE: N.T.S.

PLAN KEYNOTES

1. LONGITUDINAL HOLD DOWN ANCHOR, SEE DETAIL 1 OF S1.1
2. TRANSVERSE HOLD DOWN ANCHOR, SEE DETAIL 2 OF S1.1
3. PERIMETER SKIRT WALL BY OTHERS, SEE DETAIL 3 OF S1.1
4. MODULAR CHASSIS/FRAME BEAM BY MOBILE HOME MANUFACTURER
5. CONCRETE FOOTING, SEE DETAILS
6. MODULAR BUILDING BY MOBILE HOME MANUFACTURER

GENERAL NOTES:

1. DESIGN IS BASED ON A SINGLE 16' WIDE MANUFACTURED HOME . CONTRACTOR TO COORDINATE WITH THE MANUFACTURER AND INFORM THE ENGINEER FOR A REDESIGN IF ANY OF THE FOLLOWING IS UNTRUE:

   A. WEIGHT OF THE MANUFACTURED HOME IS BETWEEN 305 LBS AND 493.5 LBS PER LINEAR FOOT. THE DISTRIBUTED WEIGHT SHALL BE DETERMINED BY TAKING THE TOTAL WEIGHT OF THE HOME, INCLUDING MECHANICAL EQUIPMENT, AND DIVIDING IT BY THE LENGTH OF THE HOME.

   B. THE MODULAR STEEL CHASSIS OR FRAME MEMBERS ARE AT LEAST 8 FEET APART CENTER-TO-CENTER.

CONCRETE:

1. MINIMUM 28 DAY CONCRETE STRENGTH SHALL BE AS FOLLOWS:

USE:	CONCRETE STRENGTH:	MAX W/C RATIO	AIR ENTRAINMENT
FOUNDATION	4500 PSI	0.45	5.5% ± 1%

2. ALL NORMAL WEIGHT CONCRETE SHALL BE REGULAR WEIGHT OF 150 POUNDS PER CUBIC FOOT USING HARD-ROCK AGGREGATES. AGGREGATE USED IN CONCRETE SHALL CONFORM TO ASTM C33.
3. LAP SPLICES SHALL BE 12" FOR #3 BAR AND 24" FOR #5 BAR.
4. MAXIMUM SLUMP FOR ALL CONCRETE SHALL BE 6". PORTLAND CEMENT SHALL CONFORM TO ASTM C150. TYPE V CEMENT SHALL BE USED FOR CONCRETE IN CONTACT WITH ALKALINE SOIL, AND TYPE II ELSEWHERE.
5. NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY THE TESTING AGENCY.
6. CONCRETE PLACEMENT AND QUALITY SHALL BE PER RECOMMENDATIONS IN ACI 614, ACI 301, AND ACI 318. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND AND UNDER FLOOR DUCTS, ETC. CAST CLOSURE POUR, WHERE SHOWN ON PLANS AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED. REMOVE ALL DEBRIS FROM FORMS BEFORE PLACING CONCRETE.
7. ALL ITEMS TO BE CAST IN CONCRETE SUCH AS REINFORCING, DOWELS, BOLTS, ANCHORS, PIPES, SLEEVES, ETC., SHALL BE SECURELY POSITIONED IN THE FORMS BEFORE PLACING THE CONCRETE.
8. COLD/HOT WEATHER CONCRETE CONSTRUCTION: PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH IN COMPLIANCE WITH ACI 305 AND 306.
9. CONCRETE MIXES SHALL BE DESIGNED BY A CERTIFIED LABORATORY AND APPROVED BY THE STRUCTURAL ENGINEER.
10. LIMIT ALKALI-SILICA REACTION (ASR) TO 0.1% EXPANSION AT 28 DAYS IN CONCRETE MIX AT ALL EXTERIOR CONCRETE AND INTERIOR CONCRETE EXPOSED TO MOISTURE.

FOUNDATION PLAN NOTES

A. VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS AND MANUFACTURER OF HOME.

B. THE DEPTH OF FOOTING DIMENSION INDICATED ON THE PLAN IS A MINIMUM. FOUNDATION CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO INSURE THAT THESE MINIMUMS ARE SUFFICIENT FOR THE WORK.

C. STRUCTURE TO BE LEVELED AND MODULES FULLY SUPPORTED PRIOR TO THE INSTALLATION OF HOLD DOWNS, MODULAR UNITS W/OUTRIGGERS EXTENDING PAST TRANSPORT RAIL IN EXCESS OF 30 INCHES SHALL BE SUPPORTED ALONG THE PERIMETER AT NOT MORE THAN 4-0" O.C. SHIM AND BLOCK AS NECESSARY TO INTERFACE PIERS W/ FLOOR MEMBERS.

D. LATERAL HOLD DOWNS SHALL BE TIE-DOWN ENGINEERING, INC. OR APPROVED EQUAL.

E. ANCHOR SHALL BE INSTALLED AT THE LOCATION INDICATED ON THE DRAWINGS, WET SET INTO FLOWABLE FILL. THE ANCHOR HAS A MIN. ALLOWABLE HOLDING FORCE OF 3,150 POUNDS (WORKING STRESS) HORIZONTAL & VERTICAL STABILIZER DEVICE REQUIRED AT EACH ANCHOR.

F. FOR SIDEWALK AND LANDING LOCATION, SEE ARCHITECTURAL DRAWINGS.

G. THE SOIL DESIGN VALUE OF 1500 PSF PER IBC PRESCRIPTIVE VALUES, CONTINGENT THAT THE SOIL ON THE SITE PREDOMINANTLY CONSISTS OF ONE OF THE FOLLOWING: SANDY GRAVEL OR GRAVEL (GW OR GP), SANDY (SW AND SP), SILTY SAND (SM), CLAYEY SAND (SC), SILTY GRAVEL (GM), OR CLAYEY GRAVEL (GC). THESE SOIL CLASSIFICATIONS CAN BE FOUND IN TABLE 1806.2 OF CHAPTER 18 OF THE IBC. VERIFICATION OF SOIL CLASSIFICATION IS THE RESPONSIBILITY OF THE CONTRACTOR.

H. ALL FOUNDATIONS SHALL BEAR ON COMPACTED ENGINEERING FILL OR COMPETENT NATIVE SOIL SUBBASE COMPACTED TO 95% DRY DENSITY (STANDARD PROCTOR). GRADE IS DEFINED AS LOWEST ADJACENT GRADE WITHIN 5 FEET OF THE BUILDING FOR PERIMETER FOOTINGS. WHERE EXTERIOR PAVING OR CONCRETE IS DIRECTLY ADJACENT TO BUILDING, GRADE IS DEFINED AS TOP OF EXTERIOR PAVING AT LEAST 5 FEET FROM BUILDING. CONCRETE FOOTING EXCAVATIONS SHALL BE CLEAN AND FREE OF LOOSE DEBRIS OR UN-COMPACTED MATERIAL AT TIME OF CONCRETE PLACEMENT.

I. CONCRETE SLABS ON GRADE SHALL BE SUPPORTED ON A 4 INCH (MIN) LAYER OF FREE-DRAINING GRANULAR MAT (DRAINAGE FILL COURSE). THE MAT SHOULD CONSIST OF A WELL GRADED SAND AND GRAVEL MIXTURE WITH MAXIMUM 3/4-INCH CRUSHED AGGREGATE. THE GRANULAR MAT SHOULD BE COMPACTED TO NO LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698.

HECO ENGINEERS

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PROFESSIONAL ENGINEER LICENSED 18348 STATE OF IDAHO JOSEPH EIXENBERGER
1-31-24
LSD NCARB AIA

ITD MOBILE HOME UNIT AND SITE DESIGN
STANLEY, ID

PROJECT NAME:

SHEET TITLE:
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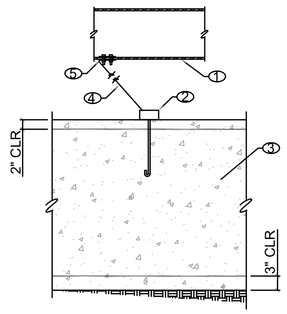
ARCH. JOB NUMBER: 23607
SHEET ISSUED DATE: JANUARY 2024
SHEET S1.0

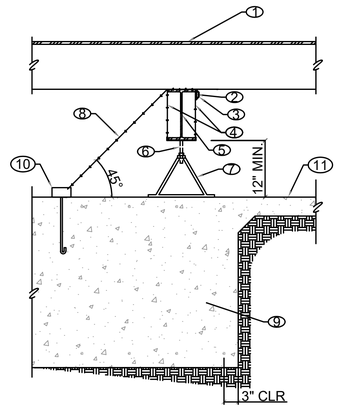


KEYNOTES:
1. MODULAR CHASSIS/FRAME
2. TYP. M1J2-12 CONC. J ANCHOR BY TIE-DOWN ENGINEERING, SEE FOUNDATION PLAN
3. CONCRETE FOOTING W/ #5 AT 10" O.C. LONGITUDINAL AT THE TOP AND BOTTOM OF FOOTING
4. TYPICAL STRAP

NOTE:
1. VERTICAL AND HORIZONTAL STABILIZER DEVICE REQUIRED AT EACH ANCHOR.

1 / S1.1 LONGITUDINAL HOLD DOWN

N.T.S.

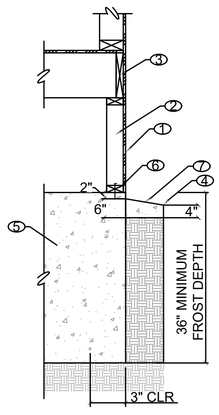


KEYNOTES:
1. MODULAR FLOOR JOIST
2. TIE DOWN BUCKLE OPPOSITE SIDE OF HOLD DOWN ANCHOR
3. METAL HOLD DOWN STRAP THROUGH BUCKLE TWO TIMES
4. METAL HOLD DOWN STRAP AROUND CHASSIS/FRAME
5. MODULAR STEEL CHASSIS/FRAME
6. MODULAR LEVELING SUPPORT JACK BEYOND
7. MODULAR LEVELING SUPPORT JACKS; MIN. CAPACITY 6,000 LBS WORKING LOAD 1'-0" FROM THE END @ 4'-0" O.C. MAX
8. METAL HOLD DOWN STRAP DOWN TO HOLD ANCHOR
9. CONCRETE FOOTING W/ #5 AT 10" O.C. LONGITUDINAL AT THE TOP AND BOTTOM OF FOOTING
10. TYP. M1J2-12 CONC. J ANCHOR BY TIE-DOWN ENGINEERING, SEE FOUNDATION PLAN
11. CONCRETE SLAB ON GRADE, SEE PLAN

NOTE:
1. VERTICAL AND HORIZONTAL STABILIZER DEVICE REQUIRED AT EACH ANCHOR.

2 / S1.1 BUCKLE-IN STRAP

N.T.S.

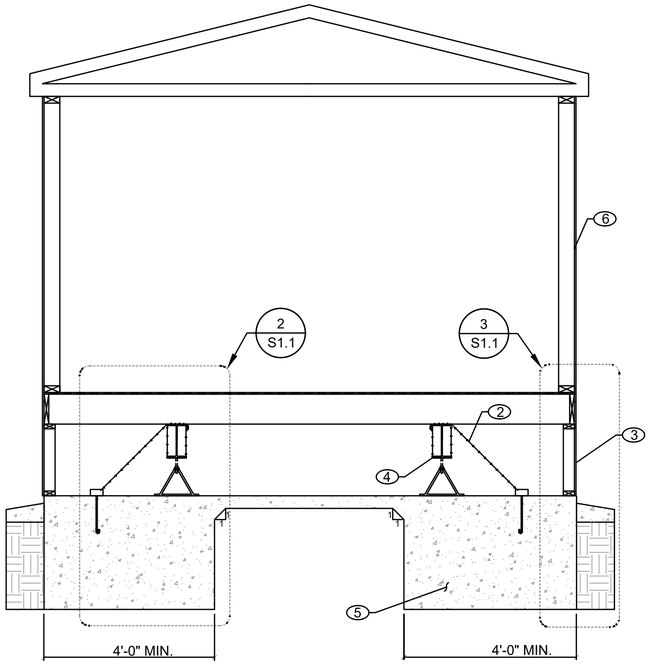


KEYNOTES:
1. INSULATED WOOD SKIRTING, BY MOBILE HOME MANUFACTURER
2. WALL FRAMING BY OTHERS (MINIMUM: 2X4 DF-L #2 SOLID FRAMING @ EA. JAMB STUD OF THE EXTERIOR MODULAR BUILDING FOR ALL OPENINGS AT 16" O.C. REMAINDER)
3. MODULAR BUILDING FRAMING BY MOBILE HOME MANUFACTURER
4. FINISH GRADE PER CIVIL
5. CONCRETE FOOTING W/ #5 AT 10" O.C. LONGITUDINAL AT THE TOP AND BOTTOM OF FOOTING
6. CONT. 2x PT SOLE PLATE W/ ATTACHMENT BY MOBILE HOME MANUFACTURER
7. SLAB DRIP EDGE

NOTE:
1. PRESERVATIVE TREAT AND WATERPROOF (PER ARCH) ANY WOOD FRAMING WITHIN 8" OF FINISH GRADE

3 / S1.1 SKIRT WALL AT FOUNDATION

N.T.S.



A FOUNDATION SECTION

N.T.S.

NOTE:
1. THE MINIMUM WIDTH OF THE CONCRETE FOOTING IS 4 FEET. A LARGER FOOTING MAY BE REQUIRED DEPENDING ON THE SPACING OF THE CHASSIS OR FRAME, THE DEPTH OF THE FRAMING, AND THE HEIGHT OF THE SUPPORT. CONTRACTOR TO COORDINATE WITH MANUFACTURER AND ADJUST THE WIDTH SUCH THAT THE ANCHOR IS EMBEDDED A MINIMUM OF 6" FROM THE EDGE AND THE SUPPORT AND SKIRT WALL ARE FULLY SUPPORTED BY THE FOUNDATION.

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PROFESSIONAL ENGINEER LICENSED 18348 STATE OF IDAHO JOSEPH EIXENBERGER
1-31-24
AIA NCARB ASID

PROJECT NAME:
ITD MOBILE HOME UNIT AND SITE DESIGN
STANLEY, ID

SHEET TITLE:
STRUCTURAL DETAILS

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

REVISION	DATE

CLIENT PROJ. NUMBER: ITD23-0375
ARCH. JOB NUMBER: 23607
SHEET ISSUED DATE: JANUARY 2024
SHEET: S1.1

SECTION 15010: BASIC MECHANICAL REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION-1 SPECIFICATION SECTIONS, APPLY TO THE WORK OF THIS SECTION.

1.02 SUMMARY

A. FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND SERVICES FOR ALL MECHANICAL WORK AS SPECIFIED AND INDICATED, IN ACCORDANCE WITH PROVISIONS OF CONTRACT DOCUMENTS. COMPLETELY COORDINATE WITH WORK OF ALL OTHER TRADES. ALTHOUGH SUCH WORK IS NOT SPECIFICALLY INDICATED, FURNISH AND INSTALL ALL SUPPLEMENTARY OR MISCELLANEOUS ITEMS, APPURTENANCES AND DEVICES INCIDENTAL TO OR NECESSARY FOR A SOUND, SECURE AND COMPLETE INSTALLATION.

B. FURNISH AND PROVIDE ALL NECESSARY NOTICES, OBTAIN AND PAY FOR ALL PERMITS AND PAY ALL GOVERNMENT SALES TAXES, FEES AND OTHER COSTS INCURRED IN CONNECTION WITH THE WORK. OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR THE WORK.

C. DRAWINGS, USE AND INTERPRETATION:

1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT, EXCEPT -WHEN SPECIFICALLY DIMENSIONED OR DETAILED.
2. FOR EXACT LOCATIONS OF BUILDING ELEMENTS, REFER TO DIMENSIONED ARCHITECTURAL AND STRUCTURAL DRAWINGS.
3. FIELD MEASUREMENTS TAKE PRECEDENCE OVER DIMENSIONED DRAWINGS.
4 PIPING AND DUCTWORK PLANS ARE INTENDED TO SHOW SIZE, CAPACITY, APPROXIMATE LOCATION, DIRECTION AND GENERAL RELATIONSHIP OF ONE WORK PHASE TO ANOTHER, BUT NOT THE EXACT DETAIL OR ARRANGEMENT.
5. FIELD VERIFY LOCATIONS AND ARRANGEMENT OF ALL EXISTING SYSTEMS AND EQUIPMENT.

1.03 QUALITY ASSURANCE

A. PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.

1.04 JOB CONDITIONS

A. CAUSE AS LITTLE INTERFERENCE OR INTERRUPTION OF EXISTING UTILITIES AND SERVICES AS POSSIBLE. WORK WHICH WILL CAUSE INTERFERENCE OR INTERRUPTION SHALL BE SCHEDULED IN ADVANCE WITH CONSTRUCTION MANAGER.

B. EXAMINE CONTRACT DOCUMENTS TO DETERMINE HOW OTHER WORK WILL AFFECT EXECUTION OF MECHANICAL WORK.

C. DETERMINE AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES.

D. ESTABLISH LINES AND LEVELS FOR EACH SYSTEM AND COORDINATE WITH OTHER SYSTEMS TO PREVENT CONFLICTS AND MAINTAIN PROPER CLEARANCES AND ACCESSIBILITY.

PART 2 - PRODUCTS

2.01 GENERAL

A. MATERIALS FOR MECHANICAL WORK: USE ONLY PRIME QUALITY, NEW MATERIALS, APPARATUS AND EQUIPMENT.

1. STANDARD PRODUCTS OF MANUFACTURER SPECIFIED.
2. WHERE MORE THAN ONE UNIT IS REQUIRED ON ANY ITEM, FURNISH BY THE SAME MANUFACTURER, EXCEPT WHERE SPECIFIED OTHERWISE.
3. INSTALL SAME MANUFACTURER, EXCEPT AS OTHERWISE SPECIFIED.
4. INSTALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

B. FURNISH EQUIPMENT THAT WILL OPERATE UNDER ALL CONDITIONS OF LOAD WITHOUT ANY SOUND OR VIBRATION THAT IS OBJECTIONABLE IN THE OPINION OF THE ARCHITECT/ENGINEER. VIBRATION OR NOISE CONSIDERED OBJECTIONABLE WILL BE CORRECTED BY THE SUBCONTRACTOR AT HIS EXPENSE.

C. FURNISH AND INSTALL ALL NECESSARY FOUNDATIONS, SUPPORTS, PADS, BASES AND PIERS REQUIRED FOR ALL MATERIALS AND EQUIPMENT FURNISHED UNDER THIS CONTRACT.

D. PROVIDE ALL REQUIRED FIRE STOPPING AT PIPING AND DUCT PENETRATIONS OF FIRE RATED WALL, FLOORS, CEILINGS AND ROOFS.

2.02 MATERIALS AND EQUIPMENT

A. DELIVER MATERIALS OR EQUIPMENT TO SITE IN THE MANUFACTURER'S ORIGINAL UNOPENED, LABELED CONTAINERS AND ADEQUATELY PROTECT AGAINST MOISTURE, TAMPERING OR DAMAGE FROM IMPROPER HANDLING OR STORAGE. DO NOT DELIVER TO SITE BEFORE ITEMS ARE READY FOR INSTALLATION.

B. FACTORY APPLIED FINISHES: REPAIR AND/OR REFINISH WORK DAMAGED BY THE WORK OF THIS DIVISION, TO THE ENGINEER'S SATISFACTION. OBTAIN FINISHING MATERIALS FROM EQUIPMENT MANUFACTURER.

C. COMPLY WITH THE REQUIREMENTS FOR SUBSTITUTIONS SPECIFIED ELSEWHERE IN THIS SECTION.

2.03 MANUFACTURERS

A. QUALIFICATIONS: FIRMS REGULARLY ENGAGED IN MANUFACTURE OF PRODUCTS SPECIFIED, OF TYPES AND CAPACITIES REQUIRED, WHOSE PRODUCTS HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR NOT LESS THAN 5 YEARS, UNLESS OTHERWISE SPECIFIED.

B. SUBJECT TO COMPLIANCE WITH REQUIREMENTS SPECIFIED, PROVIDE MATERIAL OR PRODUCT FROM ONE OF THE MANUFACTURERS LISTED FOR EACH ITEM.

2.04 SUBMITTALS

A. WITHIN THIRTY DAYS AFTER AWARD OF CONTRACT, PROVIDE SIX COPIES OF A COMPLETE LIST OF ALL MATERIALS AND EQUIPMENT PROPOSED FOR THIS PROJECT.

B. INCLUDE MAKE, TYPE, MANUFACTURER'S NAME, TRADE DESIGNATION, OPERATING WEIGHT AND LOCATION OF THE CENTER OF GRAVITY (WHERE APPLICABLE) OF EACH ITEM OF EQUIPMENT IN MANUFACTURER'S CUT SHEET.

C. APPROVAL OF SUBMITTALS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY OF DEVIATIONS FROM THE PLANS OR SPECIFICATIONS, UNLESS HE HAS, IN WRITING, CALLED THE ARCHITECTS/ENGINEERS ATTENTION TO DEVIATIONS AT THE TIME OF SUBMISSION, AND OBTAINED HIS WRITTEN APPROVAL. APPROVAL OF SUBMITTALS DOES NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS IN SHOP DRAWINGS OR LITERATURE.

D. EQUIPMENT REQUIRING SUBMITTALS:

1. PLUMBING FIXTURES.
2. HVAC EQUIPMENT
3. GRILLES, REGISTERS, DIFFUSERS.

2.05 SUBSTITUTION

A. GENERAL:

1. MODEL, SIZE AND SCHEDULED DATA REFER TO THE MANUFACTURER INDICATED IN EQUIPMENT SCHEDULES.
2. MANUFACTURERS NAMED IN THIS SPECIFICATION ARE ACCEPTABLE, BUT THEIR EQUIPMENT, MATERIALS AND/OR METHODS ARE SUBJECT TO THE ENGINEER'S REVIEW AND ACCEPTANCE.
3. WHERE "OR EQUAL" IS MENTIONED AND MANUFACTURER, MATERIAL AND/OR METHOD OTHER THAN SPECIFIED ARE SUBMITTED FOR APPROVAL, INCLUDE PROOF OF EQUALITY. THE BURDEN OF PROOF AS TO THE EQUALITY OF ANY PROPOSED SUBSTITUTE MANUFACTURER, MATERIAL OR METHOD SHALL REST UPON THE CONTRACTOR.
4. THE ENGINEER'S DECISION SHALL BE FINAL.

B. REQUESTS FOR SUBSTITUTION REVIEW AND ACCEPTANCE SHALL BE ACCOMPLISHED BY TABLE OF COMPARISON LISTING PERTINENT FEATURES OF BOTH SPECIFIED AND PROPOSED MATERIALS, SUCH AS MATERIAL OF CONSTRUCTION, REPLACEMENT OR MAINTENANCE ACCESS, MOTOR TYPE, HORSEPOWER, VOLTAGE, PHASE, SERVICE FACTOR. REVIEW OF PROPOSED SUBSTITUTIONS WILL NOT BE MADE UNTIL RECEIPT OF SATISFACTORY COMPARISON TABULATION.

C. SUBMITTAL OF SUBSTITUTIONS SHALL BE LIMITED TO ONE PROPOSAL FOR EACH TYPE OR KIND OF ITEM, UNLESS OTHERWISE PERMITTED BY ENGINEER. IF FIRST PROPOSED PRODUCT SUBMITTAL IS REJECTED, CONTRACTOR SHALL THEN SUBMIT THE FIRST-NAMED OR SCHEDULED PRODUCT.

PART 3 - EXECUTION

3.01 GENERAL

A. COORDINATE ALL WORK WITH THE VARIOUS TRADES INVOLVED TO PROVIDE A COMPLETE AND SATISFACTORY INSTALLATION.

C. WHEN CHANGES IN LOCATION OF ANY WORK ARE REQUIRED, OBTAIN APPROVAL OF ENGINEER BEFORE MAKING CHANGE.

D. DO NOT CHANGE INDICATED SIZES WITHOUT APPROVAL OF ENGINEER.

E. PROVIDE ALL NECESSARY OFFSETS AND CROSSOVERS IN PIPING AND DUCTWORK, WHETHER INDICATED OR NOT.

F. INSTALL PIPING PARALLEL TO WALLS AND VERTICALLY PLUMB.

G. EXAMINE AREAS AND CONDITIONS UNDER WHICH MECHANICAL SYSTEM MATERIALS AND PRODUCTS ARE TO BE INSTALLED. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN MANNER ACCEPTABLE TO INSTALLER.

3.02 ELECTRICAL

A. ELECTRIC MOTORS REQUIRED FOR EQUIPMENT SPECIFIED IN THIS SECTION SHALL BE PROVIDED AND INSTALLED BY THIS SUBCONTRACTOR. MOTOR STARTERS, DISCONNECTS, RELAYS, PILOT LIGHTS, ETC. ARE, IN GENERAL, TO BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. STARTERS, RELAYS, CONTROLS, ETC. WHICH IS FACTORY ASSEMBLED INTO PACKAGED EQUIPMENT SHALL BE FURNISHED BY THIS SUBCONTRACTOR UNDER THIS SECTION OF THE SPECIFICATIONS.

B. ALL MOTORS SHALL BE PROVIDED WITH ADEQUATE STARTING AND PROTECTIVE EQUIPMENT AS SPECIFIED OR REQUIRED. MOTOR CAPACITY SHALL BE SUFFICIENT TO OPERATE DRIVEN DEVICE UNDER ALL CONDITIONS OF OPERATION AND LOAD WITHOUT OVERLOAD. MINIMUM HORSEPOWER SHALL BE AS SPECIFIED.

3.03 EXCAVATING, TRENCHING, AND BACKFILLING

A. GENERAL: LAY PIPE TO REQUIRED LINES AND GRADES. PLACE FITTINGS AND VALVES AT REQUIRED LOCATIONS AND WITH JOINTS CENTERED, SPIGOTS HOME, AND VALVE STEMS PLUMB.

1. SUBSURFACE EXPLORATIONS: WHENEVER NECESSARY TO DETERMINE LOCATION OF EXISTING UNDERGROUND UTILITY STRUCTURES, EXAMINE AVAILABLE RECORDS AND MAKE EXPLORATIONS AND EXCAVATIONS NECESSARY TO DETERMINE UTILITY LOCATIONS.
2. OBSTRUCTIONS CAUSED BY OTHER UTILITY STRUCTURES: WHERE GRADES OR ALIGNMENT OF PIPE IS OBSTRUCTED BY EXISTING UTILITY STRUCTURES SUCH AS CONDUITS, DUCTS, PIPES, BRANCH CONNECTIONS TO MAIN SEWERS, OR MAIN DRAINS, PERMANENTLY SUPPORT, RELOCATE, REMOVE, OR RECONSTRUCT OBSTRUCTION.
3. PROTECTING UNDERGROUND AND SURFACE STRUCTURES: PROVIDE TEMPORARY SUPPORT AND ADEQUATE PROTECTION AND MAINTENANCE OF UNDERGROUND AND SURFACE UTILITY STRUCTURES, DRAINS, SEWERS, AND OTHER OBSTRUCTIONS ENCOUNTERED IN PROGRESS OF THE WORK. PROTECT POLES, FENCES, TREES, AND OTHER PROPERTY UNLESS THEIR REMOVAL IS AUTHORIZED. SATISFACTORILY RESTORE ANY PROPERTY DAMAGED.
4. DEVIATIONS: MAKE NO DEVIATION FROM REQUIRED LINE OR GRADE WITHOUT WRITTEN PERMISSION.

3.04 CUTTING AND PATCHING

A. PROVIDE ALL CUTTING AND PATCHING NECESSARY TO INSTALL THE WORK SPECIFIED IN THIS SECTION.

1. PATCHING SHALL MATCH ADJACENT SURFACES.
2. NO STRUCTURAL MEMBERS SHALL BE CUT WITHOUT THE APPROVAL OF THE ARCHITECT/ENGINEER.
3. LOCATE OPENINGS AND SLEEVES TO PERMIT NEAT INSTALLATION OF PIPING, DUCTWORK AND EQUIPMENT.

3.05 INSTALLATION OF EQUIPMENT

A. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

B. PROVIDE ALL NECESSARY ANCHORING DEVICES AND SUPPORTS.

1. USE STRUCTURAL SUPPORTS SUITABLE FOR EQUIPMENT, OR AS INDICATED.
2. CHECK LOADINGS AND DIMENSIONS OF EQUIPMENT WITH SHOP DRAWINGS.
3. DO NOT CUT OR WELD TO BUILDING STRUCTURAL MEMBERS, UNLESS SPECIFICALLY INDICATED OTHERWISE.
4. PROVIDE ALL EQUIPMENT SUPPORTS NOT DETAILED ON ARCHITECTURAL AND MECHANICAL DRAWINGS.

C. VERIFY THAT EQUIPMENT WILL FIT SUPPORT LAYOUTS INDICATED.

1. WHERE SUBSTITUTE EQUIPMENT IS USED, REVISE INDICATED SUPPORTS TO FIT.
2. COORDINATE SIZE AND LOCATION OF ROOF PENETRATIONS AND WALL OPENINGS WITH WORK OF OTHER SECTIONS.

D. INSTALL RAIN HOODS AND METAL COUNTER FLASHINGS AS INDICATED AND TO MAKE ALL PENETRATIONS OF MECHANICAL WORK THROUGH WALLS AND ROOFS, WATER AND WEATHER-TIGHT. FURNISH ALL CLAMPS, WATERPROOFING MATERIAL AND LABOR NECESSARY.

E. INSTALL EQUIPMENT TO PERMIT EASY ACCESS FOR NORMAL MAINTENANCE.

1. MAINTAIN EASY ACCESS TO FILTERS, MOTORS, DRIVES, VALVES, ETC.
2. MINOR CHANGES FROM THE DRAWINGS MAY BE MADE, WITH PRIOR APPROVAL, TO ALLOW FOR BETTER ACCESSIBILITY.

F. IN MECHANICAL AREAS, COORDINATE LOCATIONS OF FLOOR DRAINS, FLOOR SINKS, ETC., WITH LOCATIONS OF EQUIPMENT AND HOUSEKEEPING PADS. LOCATE DRAINS TO PROPERLY SERVE EQUIPMENT AND TO RESULT IN ORDERLY ROUTING OF DRAIN PIPING, WHILE MINIMIZING TRIPPING HAZARDS, ETC.

3.06 INSTALLATION OF EQUIPMENT FURNISHED BY OWNER OR OTHER DIVISION

A. RECEIVE, UN-CRATE, INSPECT, MOVE IN PLACE AND INSTALL ANY OWNER SUPPLIED EQUIPMENT.

B. PROVIDE ROUGH-IN AND FINAL CONNECTIONS TO ALL EQUIPMENT REQUIRING MECHANICAL SERVICES.

C. INSTALL ALL FITTINGS, VALVES, AND OTHER ITEMS FURNISHED AS INTEGRAL PART OF EQUIPMENT, BUT SHIPPED LOOSE.

3.07 FIELD QUALITY CONTROL

A. PERFORM INDICATED TESTS TO DEMONSTRATE WORKMANSHIP, OPERATION, AND PERFORMANCE.

1. CONDUCT TESTS IN PRESENCE OF INSPECTORS OF AGENCIES HAVING JURISDICTION, AS REQUIRED.
2. FURNISH ALL LUBRICATING MATERIALS REQUIRED FOR TEST.

B. REPAIR OR REPLACE EQUIPMENT AND SYSTEMS FOUND INOPERATIVE OR DEFECTIVE AND RE-TEST.

1. IF EQUIPMENT OR SYSTEM FAILS RE-TEST, REPLACE IT WITH PRODUCTS WHICH CONFORM WITH CONTRACT DOCUMENTS.
2. CONTINUE REMEDIAL MEASURES AND RE-TESTS UNTIL SATISFACTORY RESULTS ARE OBTAINED.

3.08 ADJUST AND CLEAN

A. INSPECT ALL EQUIPMENT AND PUT IN GOOD WORKING ORDER.

B. CLEAN ALL EXPOSED AND CONCEALED ITEMS:

1. CLEAN FLOOR DRAINS, CLEANOUTS, AND PLUMBING FIXTURES.
2. CLEAN SPECIALTIES SUCH AS TRAPS AND STRAINERS.

C. EQUIPMENT AND MATERIALS: REMOVE FOREIGN MATERIALS INCLUDING DIRT, GREASE, SPLASHED PAINT, AND PLASTER, ETC. RESTORE TO ORIGINAL CONDITION AND FINISH DAMAGED ITEMS.

D. DOMESTIC WATER SYSTEMS:

1. STERILIZATION: AFTER ABOVE FLUSHING, DRAINING, AND REFILLING, STERILIZE DOMESTIC WATER SYSTEMS IN ACCORDANCE WITH REQUIREMENTS OF PUBLIC HEALTH AGENCY HAVING JURISDICTION. IF HEALTH DEPT. DOES NOT HAVE SPECIFIC REQUIREMENTS, USE FOLLOWING ALTERNATIVE.
   a. ALTERNATIVE PROCEDURE: STERILIZE DOMESTIC WATER SYSTEMS WITH 4% CHLORINE SOLUTION INJECTED INTO SYSTEM TO CONCENTRATION OF 50 PARTS PER MILLION AND ALLOW TO STAND FOR 24 HOURS. AFTER THIS PERIOD, PURGE THROUGHOUT ENTIRE STRUCTURE AT OUTLETS; REDUCE SYSTEM CHLORINE CONTENT TO LESS THAN 1 PART PER MILLION.
2. WARNING SIGNS: PROVIDE SIGNS AT OUTLETS DURING CHLORINATION.

E. GAS: AFTER TESTING OF NATURAL GAS OR PROPANE SYSTEM, AND BEFORE ANY GAS OR PROPANE IS PUT INTO LINE, BLOW OUT ENTIRE SYSTEM OF PIPING TO REMOVE SCALE AND DIRT; PURGE AIR BY FILLING SYSTEM WITH GAS.

F. ADJUSTING: ADJUST EQUIPMENT AND SYSTEM COMPONENTS AS INDICATED OR AS OTHERWISE REQUIRED TO RESULT IN INTENDED SYSTEM OPERATION. THEREAFTER, AS A RESULT OF SYSTEM OPERATION, OR AS DIRECTED, MAKE READJUSTMENTS AS NECESSARY TO REFINE PERFORMANCE AND TO EFFECT COMPLETE SYSTEM TUNEUP.

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ASID NCARB AIA

1-31-24

ITD MOBILE HOME UNIT AND SITE DESIGN

STANLEY, ID

PROJECT NAME:

SHEET TITLE:

BASIC MECHANICAL REQUIREMENTS SPECIFICATION SECTION 15010

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CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

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REVISION	DATE

CLIENT PROJ. NUMBER: ITD23-0375

ARCH. JOB NUMBER: 23607

SHEET ISSUED DATE: JANUARY 2024

SHEET M0.0

3.09 TESTING

A. PIPING:

1. ALL PLUMBING PIPING SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE UNIFORM PLUMBING CODE, LATEST EDITION. OTHER PIPING SYSTEMS SHALL BE TESTED TO 1.5 TIMES THE OPERATING PRESSURE, FOR A MINIMUM PERIOD OF TWO HOURS. IF THE TEST PRESSURES FALLS MORE THAT 5 PERCENT DURING THE TEST PERIOD, THE LEAK SHALL BE LOCATED, REPAIRED, AND THE TEST REPEATED.
2. TEST THERMOMETERS, PRESSURE GAGES, AND WATER METERS FOR ACCURATE INDICATION; AUTOMATIC WATER FEEDERS, AIR VENTS, TRAP PRIMERS, VACUUM BREAKERS, AND OTHER SPECIALTIES FOR PROPER PERFORMANCE.

B. SYSTEMS:

1. ALL SYSTEMS, INCLUDING HEATING, VENTILATING, AIR CONDITIONING, AND PLUMBING SYSTEMS, SHALL BE TESTED AT THE COMPLETION OF THE BUILDING TO ESTABLISH THE SYSTEMS OPERATE AS SPECIFIED AND REQUIRED. TESTING SHALL BE PERFORMED AFTER AIR AND WATER BALANCING IS COMPLETED.
2. ALL CONTROLS SHALL BE CALIBRATED ACCURATELY AND ALL EQUIPMENT SHALL BE ADJUSTED FOR SATISFACTORY OPERATION. EXCESSIVE VIBRATION OR NOISE FROM ANY SYSTEM SHALL BE CORRECTED.
3. THE AIR CONDITIONING SYSTEM SHALL BE TESTED FOR SATISFACTORY OPERATION WHEN THE OUTSIDE AIR TEMPERATURE REACHES 60 DEGREES F. OR WARMER. ALL OTHER SYSTEMS SHALL BE TESTED AT BUILDING COMPLETION.
4. ALL TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE ARCHITECT/ENGINEER OR HIS REPRESENTATIVE.

C. HANGERS AND SUPPORTS:

1. WITH SYSTEMS IN NORMAL OPERATION, TEST HANGERS, SUPPORTS AND RODS TO INSURE THEY ARE PLUMB AND SUPPORTING PROPER SHARE OF LOAD. ADDITIONALLY SUPPORT SYSTEMS AND EQUIPMENT THAT SWAY, CRAWL, OR VIBRATE.

D. OTHER MATERIALS AND EQUIPMENT:

1. TEST AS SPECIFIED; AS RECOMMENDED BY EQUIPMENT MANUFACTURER; AND AS OTHERWISE NECESSARY OR DIRECTED TO ASSURE THEY ARE COMPLETE, OPERABLE, AND READY FOR USE.

3.10 BALANCING

A. PRIOR TO FINAL ACCEPTANCE BY THE OWNERS, ALL AIR SYSTEMS IN THE BUILDING SHALL BE BALANCED TO DELIVER THE QUANTITIES AS SPECIFIED OR DIRECTED. THE AIR BALANCE SHALL BE PERFORMED BY AN INDEPENDENT AGENCY SPECIALIZING IN BALANCING.

B. TEST PROCEDURES:

1. EXAMINE INSTALLED WORK AND CONDITIONS UNDER WHICH TESTING IS TO BE DONE TO ENSURE THAT WORK HAS BEEN COMPLETED, CLEANED, AND IS OPERABLE. DO NOT PROCEED WITH TESTING, ADJUSTING AND BALANCING (TAB) WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN MANNER ACCEPTABLE TO TESTER.
2. TEST, ADJUST AND BALANCE ENVIRONMENTAL SYSTEMS AND COMPONENTS, AS INDICATED, IN ACCORDANCE WITH PROCEDURES OUTLINED IN APPLICABLE STANDARDS.
3. TEST, ADJUST AND BALANCE SYSTEM DURING SUMMER SEASON FOR AIR CONDITIONING SYSTEMS AND DURING WINTER SEASON FOR HEATING SYSTEMS, INCLUDING AT LEAST PERIOD OF OPERATION AT OUTSIDE CONDITIONS WITHIN 5 DEGREES F WET BULB TEMPERATURE OF MAXIMUM SUMMER DESIGN CONDITION, AND WITHIN 10 DEGREES F DRY BULB TEMPERATURE OF MINIMUM WINTER DESIGN CONDITION. WHEN SEASONAL OPERATION DOES NOT PERMIT MEASURING FINAL TEMPERATURES, THEN TAKE FINAL TEMPERATURE READINGS WHEN SEASONAL OPERATION DOES PERMIT.
4. PREPARE REPORT OF TEST RESULTS, INCLUDING INSTRUMENTATION CALIBRATION REPORTS, IN FORMAT RECOMMENDED BY APPLICABLE STANDARDS.
5. PATCH HOLES IN INSULATION, DUCTWORK AND HOUSINGS, WHICH HAVE BEEN CUT OR DRILLED FOR TEST PURPOSES, IN MANNER RECOMMENDED BY ORIGINAL INSTALLER.
6. MARK EQUIPMENT SETTINGS, INCLUDING DAMPER CONTROL POSITIONS, VALVE INDICATORS, FAN SPEED CONTROL LEVERS, AND SIMILAR CONTROLS AND DEVICES, TO SHOW FINAL SETTINGS AT THE COMPLETION OF TAB WORK. PROVIDE MARKINGS WITH PAINT OR OTHER SUITABLE PERMANENT IDENTIFICATION MATERIALS.
7. RETEST, ADJUST, AND BALANCE SYSTEMS SUBSEQUENT TO SIGNIFICANT SYSTEM MODIFICATIONS, AND RESUBMIT TEST RESULTS.

3.11 SYSTEMS START UP

A. STARTUP REQUIREMENTS APPLY TO CONTRACTOR AND OWNER SUPPLIED EQUIPMENT AND SYSTEMS.

B. PRIOR TO FINAL ACCEPTANCE, AT TIME AGREED TO BY THE OWNER AND ENGINEER, PUT ALL SYSTEMS INTO SATISFACTORY OPERATION.

C. AT FIRST HEATING OR COOLING SEASON FOLLOWING FINAL ACCEPTANCE, START UP SYSTEMS NOT STARTED DUE TO LACK OF SEASONAL DESIGN LOAD OR OPERATION OF THE CENTRAL SYSTEM.

D. OPERATE ALL SYSTEMS IN GOOD WORKING ORDER FOR PERIOD OF FIVE (5) WORKING DAYS.

E. PROVIDE SERVICES OF AUTHORIZED FACTORY SERVICE REPRESENTATIVE TO PERFORM START-UP AND OPERATION DEMONSTRATION SERVICES.

F. PERFORM SERVICES IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN START-UP INSTRUCTIONS. TEST CONTROL AND DEMONSTRATE COMPLIANCE WITH REQUIREMENTS. REPLACE DAMAGED OR MALFUNCTIONING CONTROLS AND EQUIPMENT.

G. MAINTENANCE AND OPERATION TRAINING:

1. AFTER THE MECHANICAL SYSTEM IS COMPLETELY INSTALLED AND OPERATIONAL, THE MECHANICAL CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO HOURS OF TRAINING AND INSTRUCTION TIME FOR THE BUILDING OWNER OR HIS REPRESENTATIVE. DURING THIS PERIOD, THE CONTRACTOR SHALL INSTRUCT THE OWNER IN THE OPERATION AND MAINTENANCE OF ALL PARTS OF THE MECHANICAL SYSTEM, USING THE O&M MANUAL WHERE APPLICABLE.

3.12 SPECIAL TOOLS

A. FURNISH TO OWNER NOT LATER THAN WHEN OWNER TAKES POSSESSION OF EQUIPMENT.

B. DEFINITION OF SPECIAL TOOLS: IDENTIFIED IN OR OTHERWISE IMPLIED BY, THE MANUFACTURER'S OPERATION AND MAINTENANCE MANUALS FOR THE FURNISHED EQUIPMENT, OR WHICH ARE OTHERWISE REQUIRED FOR THE OPERATION, WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES FOR OPERATION, ADJUSTMENT AND MAINTENANCE. SPECIAL TOOLS DO NOT INCLUDE THOSE REQUIRED FOR MAJOR REPAIRS NORMALLY DONE BY FACTORY TRAINED OR OTHERWISE SPECIALIZED SERVICE PERSONNEL, NOR DO THEY INCLUDE THOSE NORMALLY FOUND IN THE POSSESSION OF OWNER'S ON SITE MAINTENANCE PERSONNEL.

3.13 RECORD DOCUMENTS AND OPERATING AND MAINTENANCE MANUALS

A. THE CONTRACTOR SHALL PROVIDE TWO COPIES OF AN OPERATIONS AND MAINTENANCE MANUAL AT LEAST THIRTY DAYS PRIOR TO COMPLETION OF WORK. THE MANUAL SHALL BE OF THE THREE RING BINDER TYPE, ENTITLED, "OPERATION AND MAINTENANCE MANUAL," WITH THE JOB NAME AND YEAR OF COMPLETION ALSO INCLUDED. THE MANUAL SHALL INCLUDE, AS A MINIMUM:

1. LIST OF ALL EQUIPMENT WITH MANUFACTURER'S NAME, MODEL NUMBER, AND LOCAL REPRESENTATIVE, SERVICE FACILITIES AND NORMAL CHANNEL OF SUPPLY FOR EACH ITEM.
2. SYSTEM DESCRIPTION: DESCRIPTION OF START UP AND OPERATING PROCEDURES.
3. CONTROLS: DIAGRAMS AND DESCRIPTION OF OPERATION SEQUENCE OF EACH SYSTEM.
4. EQUIPMENT: MANUFACTURER'S BROCHURES, RATINGS, CERTIFIED SHOP DRAWINGS, LUBRICATION CHARTS AND DATA, PARTS LISTS WITH PART NUMBERS, AND BELT AND SHEAVE DATA. MARK EACH SHEET WITH EQUIPMENT IDENTIFICATION NUMBER AND ACTUAL INSTALLED CONDITION.
5. MATERIALS AND ACCESSORIES: MANUFACTURER'S BROCHURES, PARTS LISTS WITH PART NUMBERS AND LUBRICATION DATA WHERE APPLICABLE. MARK EACH SHEET WITH EQUIPMENT IDENTIFICATION NUMBER OR SYSTEM AND LOCATION OF INSTALLATION; AND TO SPECIFICALLY IDENTIFY WHICH OPTIONS ARE PROVIDED (IN CASE WHERE DATA SHEET SHOWS MULTIPLE OPTIONS).
6. CERTIFICATE OF FACTORY TEST AND CODE COMPLIANCE AS SPECIFIED.
7. AIR AND/OR WATER SYSTEM BALANCE REPORT AS HEREIN SPECIFIED.
8. GUARANTEE LETTER AS HEREIN SPECIFIED.
9. ANY ADDITIONAL INFORMATION REQUIRED TO ENABLE THE OWNER TO PROPERLY OPERATE AND MAINTAIN THE BUILDING MECHANICAL SYSTEM.

B. PROVIDE TWO COMPLETE SETS OF BLUELINE AS-BUILT MECHANICAL DRAWINGS.

1. THE DRAWINGS SHALL INDICATE ALL DEPARTURES FROM THE CONTRACT DRAWINGS, AND SHALL LOCATE ALL UNDERGROUND UTILITY LINES WITH DIMENSIONS FROM ESTABLISHED BUILDING LINES. MAKE ALL NOTATIONS NEAT AND LEGIBLE, WITH RED INDELIBLE PENCIL. AT THE COMPLETION OF THE WORK, THESE AS-BUILT DRAWINGS SHALL BE SIGNED AND DATED BY THE MECHANICAL CONTRACTOR, AND RETURNED TO THE ARCHITECT/ENGINEER.

3.14 GUARANTEE

A. ALL WORK FURNISHED UNDER THIS SECTION SHALL BE GUARANTEED IN WRITING TO BE FREE FROM DEFECTIVE WORK OR MATERIALS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF THE CONTRACT. ALL REPAIRS OR REPLACEMENTS BECAUSE OF DEFECTIVE MATERIALS OR WORKMANSHIP OR NONCOMPLIANCE WITH CODE SHALL BE PROVIDED WITHOUT ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL FURNISH A LETTER INDICATING ABOVE GUARANTEE WITH SPACE FOR DATE OF ACCEPTANCE AND EXPIRATION OF GUARANTEE. LETTER SHALL BE INCLUDED IN O&M MANUAL.

END OF SECTION 15010

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PROFESSIONAL ENGINEER LICENSED 14844 STATE OF IDAHO BART BROOKE
ASID NCARB AIA
1-31-24

PROJECT NAME:
ITD MOBILE HOME UNIT AND SITE DESIGN
STANLEY, ID

SHEET TITLE:
BASIC MECHANICAL REQUIREMENTS SPECIFICATION SECTION 15010

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

REVISION	DATE

CLIENT PROJ. NUMBER: ITD23-0375
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SHEET ISSUED DATE: JANUARY 2024
SHEET M0.1

SECTION 15400: PLUMBING

PART 1 - GENERAL

1.01 SUMMARY

A. THIS SECTION COVERS THE WORK NECESSARY FOR THE PLUMBING SYSTEM, COMPLETE. THE MECHANICAL GENERAL PROVISIONS, SECTION15010, ARE TO BE INCLUDED AS PART OF THIS SECTION OF THE SPECIFICATIONS.

1.02 QUALITY ASSURANCE

A. THE PLUMBING SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE, ANSI STANDARDS, INTERNATIONAL MECHANICAL CODE, NFPA AND IBC, AS APPLICABLE.

PART 2 - PRODUCTS

2.01 GENERAL

A. PLUMBING FIXTURES AND EQUIPMENT SHALL BE AS LISTED ON THE DRAWINGS. IN ADDITION TO THOSE SPECIFICALLY LISTED, THE FOLLOWING MANUFACTURERS ARE APPROVED FOR BIDDING ONLY, WITH FINAL APPROVAL FOR INSTALLATION BASED ON SUBMITTAL DATA FURNISHED.

1. FIXTURES: AMERICAN STANDARD, KOHLER, ELJER, ELKAY, JUST, SUNROC, HALSEY-TAYLOR, OASIS, HAWS, CRANE, ACORN, BRADLEY.
2. SPECIALTIES: BELL & GOSSETT, CLA VAL CO., FEBCO SALES, HERSEY PRODUCTS, ITT, WATTS, J.R. SMITH
3. CARRIERS AND DRAINAGE PRODUCTS: J.R. SMITH, JOSAM, ZURN, AND WADE.
4. WATER HEATERS: BRADFORD-WHITE, RHEEM, AO SMITH, STATE AND AMERICAN.
5. INSULATION: ARMSTRONG WORLD INDUSTRIES, CERTAINTEED, KNAUF FIBER GLASS, MANVILLE PRODUCTS, OWENS-CORNING FIBERGLASS, PITTSBURGH CORNING
6. NATURAL GAS PRODUCTS: DEZURIK CORP, JENKINS BROS, LUKENHEIMER CO, NIBCO, POWELL (THE WM.) CO, ROCKWELL INTERNATIONAL, STOCKHAM VALVES AND FITTINGS, WALWORTH
7. ALL OTHER MANUFACTURERS REQUIRE PRIOR APPROVAL.

2.02 FIXTURE AND PIPING STANDARDS

A. PLUMBING FIXTURES: ANSI A112, ARI 1010, Z358.1 ANSI/ASSE 1011, 1013, 1019, PDI WH-201

B. PIPING: ASTM D2321, D1527, D2468, D2661, D2235, D2665, D3311, D2564

2.03 PLUMBING FIXTURES AND TRIM

A. ALL PLUMBING FIXTURES SHALL BE PROVIDED COMPLETE WITH ALL REQUIRED TRIM FOR A COMPLETE AND OPERATIONAL SYSTEM. ALL EXPOSED TRIM SHALL BE CHROME PLATED. ALL PIPING PENETRATIONS THROUGH FINISHED WALL SHALL BE PROVIDED WITH CHROME ESCUTCHEONS. ALL PLUMBING FIXTURES SHALL BE CAULKED AND SEALED TO SURROUNDING SURFACES.

2.04 PIPING AND FITTINGS:

A. GENERAL:

1. UNDERGROUND SANITARY SEWER AND STORM DRAIN LINES SHALL BE INSTALLED AT 1/4-INCH PER FOOT SLOPE, UNLESS OTHERWISE INDICATED. IF SUCH SLOPE IS NOT POSSIBLE DUE TO EXISTING INVERTS,APPROVAL SHALL BE OBTAINED FROM THE ARCHITECT/ENGINEER AND THE AUTHORITY HAVING JURISDICTION BEFORE ANY PIPING IS INSTALLED AT A LESSER SLOPE.
2. CONNECTIONS BETWEEN PIPING OF DISSIMILAR MATERIALS SHALL BE MADE WITH DIELECTRIC UNIONS.
3. PROVIDE STANDARD MANUFACTURED WATER HAMMER ARRESTERS AT ALL FLUSH VALVES. SIZE AND LOCATE PER MANUFACTURERS RECOMMENDATIONS. PROVIDE ACCESS PANELS FOR ACCESS TO ALL WATER HAMMER ARRESTERS.

B. DOMESTIC HOT AND COLD WATER:

1. PIPING INSIDE BUILDING ABOVE SLAB OR ABOVE GRADE IN CRAWL SPACE SHALL BE ASTM B88, TYPE"L," HARD DRAWN COPPER. FITTINGS SHALL BE ANSI/ASME B16.23 CAST BRASS, OR ANSI/ASME B16.29 WROUGHT COPPER. JOINTS SHALL BE ANSI/ASTM B32 SOLDER, GRADE 95-5, LEAD FREE.
2. PIPING UNDERGROUND WITHIN 5 FEET OF THE BUILDING LINE OR BELOW FLOOR SLAB, SMALLER THAN 4 INCHES, SHALL BE ASTM B88, TYPE "K," HARD DRAWN OR SOFT ANNEALED COPPER. FITTINGS SHALL BE ANSI/ASME B16.29 WROUGHT COPPER. JOINTS SHALL BE ANSI/ASTM B32 SOLDER, GRADE 95-5, LEAD FREE. NO JOINTS SHALL BE INSTALLED BENEATH CONCRETE FLOOR SLABS.

C. SANITARY SEWER AND VENT:

1. PIPING AND FITTINGS SHALL BE ABS, ASTM D2680 OR D2751 WITH ABS FITTINGS. JOINTS SHALL BE ASTM D2235, SOLVENT WELDED AS PER SOLVENT MANUFACTURER'S INSTRUCTIONS. ALL MAIN SEWER RISERS (1 STORY OR MORE), SHALL BE CAST IRON CISPI 301, HUBLESS, SERVICE WEIGHT, FOR PREVENTION OF NOISE TRANSMISSION. ALL PIPING PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, OR CEILINGS SHALL BE CAST IRON OR STEEL, AND SHALL BE FIRE SEALED PER LOCAL BUILDING INSPECTORS REQUIREMENTS. ALL PIPING LOCATED ABOVE CEILINGS IN AREAS USED AS RETURN AIR PLENUMS SHALL BE CAST IRON OR STEEL.

D. HANGERS AND SUPPORTS:

1. PIPE HANGERS SHALL BE PROVIDED TO ADEQUATELY SUPPORT ALL PIPING SYSTEMS. HANGERS SHALL BE VERTICALLY ADJUSTABLE TO PROVIDE FOR PROPER PITCH AND DRAINAGE. HANGERS SHALL ALLOW FOR EXPANSION AND CONTRACTION OF THE PIPING SYSTEMS.
2. HANGERS FOR PIPE SIZES 1/2 TO 4 INCHES SHALL BE ADJUSTABLE CLEVIS TYPE.
3. HANGERS FOR COLD PIPE, SIZES 6 INCHES AND OVER, SHALL BE ADJUSTABLE CLEVIS TYPE.
4. HANGERS FOR HOT PIPE 6" AND OVER, SHALL BE ADJUSTABLE STEEL YOKE, CAST IRON ROLL, DOUBLE HANGER TYPE.
5. VERTICAL PIPES SHALL BE SUPPORTED WITH STEEL RISERS CLAMPS.
6. ALL INSULATED PIPING SHALL BE PROVIDED WITH MINIMUM 18 GAUGE GALVANIZED INSULATION SHIELDS, 12 INCHES LONG, AND OVERSIZED HANGERS.
7. HANGER ROD SIZING AND SPACING FOR PIPE SHALL BE AS FOLLOWS:

A. PIPE SIZE TO 1-1/4", 3/8" ROD DIAMETER, 6-1/2 FOOT MAX SPACING

B. PIPE SIZE TO 2", 3/8" ROD DIAMETER, 10 FOOT MAX SPACING

C. PIPE SIZE TO 3", 1/2" ROD DIAMETER, 10 FOOT MAX SPACING

D. PIPE SIZE TO 6", 5/8" ROD DIAMETER, 10 FOOT MAX SPACING

E. PIPE SIZE TO 12", 7/8" ROD DIAMETER, 14 FOOT MAX SPACING

F. PVC/ABS (ALL SIZES), 3/8" ROD DIAMETER, 6 FOOT MAX SPACING

G. CAST IRON NO-HUB, 5/8" ROD DIAMETER, 6 FOOT MAX SPACING AND AT JOINTS

8. PROVIDE HANGERS WITHIN 12 INCHES OF EACH HORIZONTAL ELBOW.
9. PROVIDE HANGERS WITH MINIMUM 1-1/2 INCHES VERTICAL ADJUSTMENT.

2.05 INSULATION:

A. GENERAL:

1. ALL INSULATION SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS, AS TESTED BY ASTM E84, NFPA 255, AND UL 723, NOT EXCEEDING

A. FLAME SPREAD: 25

B. SMOKE DEVELOPED: 50

B. PIPING:

1. INSULATION SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
2. INSULATION SHALL BE CONTINUOUS THROUGH PENETRATIONS.
3. ALL INSULATION SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER.
4. ENTIRE LENGTH OF HOT WATER PIPING SHALL BE INSULATED. COLD WATER PIPING WITHIN EIGHT FEET OF WATER HEATER SHALL BE INSULATED.

2.06 VALVES AND STRAINERS:

A. BALL VALVES:

1. VALVES 2 INCHES AND SMALLER SHALL BE BRONZE BODY, STAINLESS STEEL BALL, TEFLON SEATS, AND LEVER HANDLE. VALVES OVER 2 INCHES SHALL BE CAST STEEL BODY, CHROME PLATED STEEL BALL TEFLON SEATS, AND LEVER HANDLE.

B. CHECK VALVES:

1. VALVES 2 INCHES AND SMALLER SHALL BE BRONZE Y-PATTERN, SWING CHECK, BRONZE DISC, 200 PSI WOG. VALVES OVER 2 INCHES SHALL BE IRON BODY, BRONZE TRIM, SWING CHECK, RENEWABLE DISC AND SEAT.

C. STRAINERS:

1. STRAINERS 3 INCHES AND SMALLER SHALL BE IRON BODY, Y-PATTERN, 20-MESH MONEL SCREEN.

PART 3 - EXECUTION

3.01 WORKMANSHIP

A. GENERAL:

1. INSTALL ALL PIPING, FIXTURES, EQUIPMENT, AND ACCESSORIES AS SHOWN, AND IN STRICT ACCORDANCE WITH THE PLUMBING LAWS, RULES, AND REGULATIONS OF THE STATE AND/OR CITY. ALL WORK SHALL BE DONE IN A NEAT AND ORDERLY FASHION, AND LEFT IN A CONDITION SATISFACTORY TO THE ARCHITECT/ENGINEER.

B. PIPING:

1. ALL PIPING SHALL BE RUN PARALLEL OR PERPENDICULAR TO ESTABLISHED BUILDING LINES. INSTALL PIPING SO AS TO ALLOW FOR EXPANSION. WASTE AND VENT PIPING OCCURRING ABOVE FLOOR SLAB SHALL BE INSTALLED TRUE AND PLUMB. EXTEND VENTS AT LEAST 1 FOOT ABOVE ROOF AND PROVIDE WATERTIGHT FLASHING SLEEVES. EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 15010 OF THESE SPECIFICATIONS.

C.FIXTURES:

1.1 INSTALL FIXTURES TRUE AND PLUMB WITH BUILDING WALLS. CAULK ALL PLUMBING FIXTURES AT JOINTS ALONG WALL, COUNTERTOPS, AND OTHER INTERSECTING SURFACE.

1.2 LOCATE FIXTURES AS SHOWN AND PER MANUFACTURER'S INSTRUCTIONS.

1.3 FURNISH ALL REQUIRED TRIM FOR FIXTURES TO PROVIDE A COMPLETE AND WORKABLE INSTALLATION.

3.02 TESTS

A. GENERAL:

1. ALL PIPING, FIXTURES, AND EQUIPMENT SHALL BE INSPECTED AND APPROVED BEFORE CONCEALING OR COVERING. ALL WORK SHALL BE TESTED AS REQUIRED BY SECTION 15010 OF THESE SPECIFICATIONS, AND SHALL BE LEAK PROOF BEFORE INSPECTION IS REQUESTED. ALL TESTS SHALL BE REPEATED IF REQUIRED BY THOSE MAKING THE INSPECTION.
2. ALL POTABLE WATER SYSTEMS SHALL BE FLUSHED AND DISINFECTED IN ACCORDANCE WITH SECTION 15010 OF THESE SPECIFICATIONS. FOLLOWING DISINFECTION, SYSTEM SHALL BE FLUSHED AND WATER SAMPLED TO SHOW COMPLIANCE WITH REQUIREMENTS OF PUBLIC HEALTH AUTHORITY HAVING JURISDICTION. IF TESTED WATER DOES NOT MEET REQUIREMENT, DISINFECTING SHALL BE REPEATED UNTIL WATER QUALITY MEETS REQUIREMENTS.

A.FIXTURES AND EQUIPMENT:

1. FILL ALL PLUMBING FIXTURES WITH WATER AND CHECK FOR LEAKS OR RETARDED FLOW. REPAIR AS REQUIRED. ADJUST EACH PIECE OF PLUMBING EQUIPMENT AS REQUIRED TO INSURE PROPER FUNCTION. LEAVE ALL FIXTURES AND EQUIPMENT IN FIRST CLASS OPERATING CONDITION.

END OF SECTION 15400

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1-31-24

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PROJECT NAME:

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ABBREVIATIONS

@	AT
Ø	DIAMETER/PHASE
</L	ANGLE
#	NUMBER/POUND
°	DEGREE(D) DEPTH
(E)	EXISTING
(F)	FUTURE
(L)	LENGTH
(N)	NEW
(W)	WIDTH
ABS	ACRYLONITRILE BUTADIENE STYRENE
ABV	ABOVE
ADA	AMERICAN DISABILITIES ACT
ADJ	ADJUSTABLE
AFC	BOVE FINISHED CEILING
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AFS	ABOVE FINISH SLAB
ALT	ALTERNATE
AL	ALUMINUM
ANOD	ANODIZED
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
AUTO	AUTOMATIC
AUX	AUXILIARY
BDD	BACK DRAFT DAMPER
BFF	BELOW FINISH FLOOR
BFS	BELOW FINISH SLAB
BG	ELOW GRADE
BHP	BRAKE HORSEPOWER
BI	BACKWARD INCLINED
BLDG	BUILDING
BOD	BOTTOM OF DUCT
BOS	BOTTOM OF STEEL
BRD	BOARD
BRG	BEARING
BTU	BRITISH THERMAL UNIT
BOP	BOTTOM OF PIPE
BOT	BOTTOM
CA	COMBUSTION AIR
CAP	CAPACITY
CB	CATCH BASIN
CD	CONDENSATE DRAIN
CF	CUBIC FEET
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFF	CAP FOR FUTURE
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CNT	CENTER
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
COND	CONDENSATE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS/CONTINUATION
CONTR	CONTRACTOR
CTC	CENTER TO CENTER
CV	VALVE COEFFICIENT
CDA	CLEAN DRY AIR
CFF	CAP FOR FUTURE
CHR	CHILLED WATER RETURN
CHS	CHILLED WATER SUPPLY
CLK	CAULK(ING)
CLR	CLEAR
COTG	CLEANOUT TO GRADE
CW	DOMESTIC COLD WATER
CW/	COORDINATE WITH
CWFR	CHEMICAL WATER FEED RETURN
CWFS	CHEMICAL WATER FEED SUPPLY
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
CX	CONNECT TO EXISTING
DBL	DOUBLE
DEPT	DEPARTMENT
DET	DETAIL
DIM	DIMENSION
DISCH	DISCHARGE
DN	DOWN
DS	DOWNSPOUT
DSP	DRY STANDPIPE
DWG	DRAWING
DCBP	DOUBLE CHECK BACKFLOW PREVENTOR
DSN	DOWNSPOUT NOZZLE
E	EAST
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EFF	EFFICIENCY
EG	EXHAUST GRILLE
ELECT	ELECTRICAL
ELEV	ELEVATION
EMERG	EMERGENCY
ENCL	ENCLOSED/ENCLOSURE
ENT	ENTERING
EQ	EQUAL
EQUIP	EQUIPMENT
ESP	EXTERNAL STATIC PRESSURE
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F	FIRE SERVICE
FA	FIRE ALARM
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FH	FIRE HYDRANT
FIN	FINISH
FINS/IN	FINS PER INCH
FLA	FULL LOAD AMPS
FLASH	FLASHING
FLR	FLOOR(ING)
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPM	FEET PER MINUTE
FRPF	FIREPROOF
FT	FEET/FOOT
FURR	FURRING
FS	FLOOR SINK
FUT	FUTURE
GA	GAUGE OR GAGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GND	GROUND
GCO	GRADE CLEANOUT
GPM	GALLONS PER MINUTE
GW	GREASE WASTE
HCP	HANDICAP
HD	HEAD
HDWR	HARDWARE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR
HT	HEIGHT
H20	WATER
HB	HOSE BIB
HGR	HOT GLYCOL RETURN
HGS	HOT GLYCOL SUPPLY
HPC	HIGH PRESSURE CONDENSATE
HORIZ	HORIZONTAL
HW	POTABLE HOT WATER SUPPLY
HWC	DOMESTIC HOT WATER RECIRC
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
IDW	INDIRECT WASTE
IE	INVERT ELEVATION
IGV	INLET GUIDE VANE(S)
IMC	INTERNATIONAL MECHANICAL CODE
IN	INCH
IND	INDIRECT
INSUL	INSULATION
INT	INTERIOR
IPC	INTERNATIONAL PLUMBING CODE
IA	INSTRUMENT AIR
J-BOX	JUNCTION BOX
JST	JOIST
KW	KILOWATT
KWH	KILOWATT HOUR
L	LINED
LAV	LAVATORY
LBS	POUNDS
LF	LINEAL FEET/FOOT
LPG	LIQUEFIED PETROLEUM GAS
LRA	LOCKED ROTOR AMP
L/S	LITERS PER SECOND
LWT	LEAVING WATER TEMPERATURE
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
M	METER
MAT	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEZZ	MEZZANINE
MFG	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MM	MILLIMETER
MO	MOTOR OPERATED
MOCP	MAX OVERLOAD CURRENT PROTECTION
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MC	MECHANICAL CONTRACTOR
MHT	MALE HOSE THREAD
MPC	MEDIUM PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
MSG	MANUFACTURED STANDARD GAUGE
N	NORTH
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NG	NATURAL GAS
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NOM	NOMINAL
NTS	NOT TO SCALE
NUM	NUMBER
NPW	NON-POTABLE WATER
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OH	OVERHEAD
OZ	OUNCE
ODL	OVERFLOW DRAIN LEADER
OH	OVERHEAD
OS&Y	OUTSIDE STEM & YOKE
P	PRESSURE
PH	PHASE(S)
PLBG	PLUMBING
POC	POINT OF CONNECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
P/T	PRESSURE/TEMPERATURE
PHWR	POTABLE HOT WATER RETURN
PHWS	DOMESTIC HOT WATER
PIV	POST INDICATOR VALVE
PRV	PRESSURE REDUCING VALVE
PVC	POLYVINYL CHLORIDE
PW	POTABLE WATER
RA	RETURN AIR
RAD	RADIUS
RD	ROOF DRAIN
RDL	ROOF DRAIN LEADER
RE:	REFERENCE
REFL	REFLECTED
REL	RELOCATE
REM	REMOVE
REINF	REINFORCE
RQD	REQUIRED
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
R	RISER
REFG	REFRIGERATION/REFRIGERANT
REQD	REQUIRED
RFLD	REFLECTED
RIO	ROUGH IN ONLY
RO	REVERSE OSMOSIS
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
S	SOUTH
SCHED	SCHEDULE
SECT	SECTION
SER	SERIES
SF	SQUARE FOOT
SIM	SIMILAR
SOV	SHUT OFF VALVE
SPEC	SPECIFICATION
SQ	SQUARE
SS	SANITARY SEWER
SST	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SYS	SYSTEM
SHT	SHEET
TOS	TOP OF STEEL
TYP	TYPICAL
TPW	TEMPERED POTABLE WATER
TWR	TEMPERED WATER RETURN
TWS	TEMPERED WATER SUPPLY
UBC	UNIFORM BUILDING CODE
UFC	UNIFORM FIRE CODE
UL	UNDERWRITERS LABORATORY
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UPC	UNIFORM PLUMBING CODE
U	URINAL
UG	UNDERGROUND
V	VOLT
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VEL	VELOCITY
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
VTR	VENT THRU ROOF
VA	VALVE
VIF	VERIFY IN FIELD
VRV	VACUUM RELIEF VALVE
VTR	VENT THRU ROOF
W	WEST
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WP	WATERPROOF
WPD	WATER PRESSURE DROP
WT	WEIGHT
W	WEST/WASTE
WCO	WALL CLEANOUT
WH	WATERHEATER

NOTE: ALL ABBREVIATIONS LISTED ABOVE MAY NOT APPEAR ON THESE DOCUMENTS.

PLUMBING AND PIPING LEGEND

SYMBOL	DESCRIPTION
CA	COMPRESSED AIR
COND	CONDENSATE DRAIN
CDA	CLEAN DRY AIR
CO2	CARBON DIOXIDE
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CW	DOMESTIC COLD WATER
	DEMO ITEMS
GW	GREASE WASTE
HE	HELIUM
HGR	HOT GLYCOL RETURN
HGS	HOT GLYCOL SUPPLY
HPC	HIGH PRESSURE CONDENSATE
HPS	HIGH PRESSURE STEAM
HW	DOMESTIC HOT WATER
HWC	DOMESTIC HOT WATER RECIRCULATION
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
IA	INSTRUMENT AIR
IDW	INDIRECT WASTE
LPG	LIQUEFIED PETROLEUM GAS
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
MA	MEDICAL AIR
MPC	MEDIUM PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
MV	MEDICAL VACUUM
N2	NITROGEN
N2O	NITROUS OXIDE
NG	NATURAL GAS
	DIRECTION OF FLOW
	REDUCER
	PIPE DROP
	PIPE DROP
	PIPE RISE
	PIPE RISE
	VENT THRU ROOF
	WALL CLEAN-OUT
	FLOOR CLEAN-OUT
	GRADE CLEAN-OUT
	PIPE CAP
	CHECK VALVE
	DOUBLE CHECK ASSEMBLY
RP	REDUCED PRESSURE BACK FLOW ASSY.
	CONTROL VALVE
	PRESSURE REDUCING VALVE
	PRESSURE REGULATOR
N.C.	BALL VALVE (NORMALLY CLOSED)
	BALL VALVE (NORMALLY OPEN)
	GATE VALVE
	AGA RATED GAS VALVE
	THREE WAY CONTROL VALVE
	FLEXIBLE PUMP CONNECTOR
	UNION
S	SOLENOID VALVE
	STRAINER
PRV	PRESSURE RELIEF VALVE

SYMBOL	DESCRIPTION
	WATER HAMMER ARRESTOR
NPW	NON POTABLE WATER
ODL	OVERFLOW DRAIN LEADER
PHWR	POTABLE HOT WATER RETURN
PHWS	POTABLE HOT WATER SUPPLY
PW	POTABLE WATER
RDL	ROOF DRAIN LEADER
SD	STORM DRAIN
SS	SANITARY SEWER
TPW	TEMPERED POTABLE WATER
TWR	TEMPERED WATER RETURN
TWS	TEMPERED WATER SUPPLY
VENT	VENT
	THERMOMETER
	CIRCUIT SETTER
	PRESSURE GAUGE
	HOSE BIBB
	IN-LINE PUMP
	IN-LINE PUMP
	QUICK DISCONNECT
	BREAK LINE
	STEAM VALVE
	BUTTERFLY VALVE
	BALANCE VALVE
	DIAPHRAGM VALVE
	DOWNSPOUT NOZZLE
	FLOOR DRAIN ROUND OR SQUARE
	FLOW METER
	FLOW SWITCH
	FLOOR SINK
	FLOW VALVE
	GAS METER
	GLOBE VALVE
	INLINE TEMPERATURE GAUGE
	PLUG VALVE
	OUTSIDE STEM AND YOKE
	RECIRC PUMP
	TEMPERATURE CONTROL VALVE
	THERMO WELL
	EXPANSION TANK
	ROOF DRAIN
	OVERFLOW DRAIN
	VERTICAL VALVE
	VACUUM RELIEF VALVE
	MANUAL AIR VENT
	AUTOMATIC AIR VENT
	POINT OF CONNECTION TO EXISTING

NOTE: ALL ABBREVIATIONS LISTED ABOVE MAY NOT APPEAR ON THESE DOCUMENTS.

HECO ENGINEERS

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PROFESSIONAL ENGINEER LICENSED 14844 STATE OF IDAHO BART BROOKE — ASID NCARB AIA

1-31-24

ITD MOBILE HOME UNIT AND SITE DESIGN

STANLEY, ID

PROJECT NAME:

SHEET TITLE:

GENERAL NOTES AND LEGEND

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

REVISION	DATE

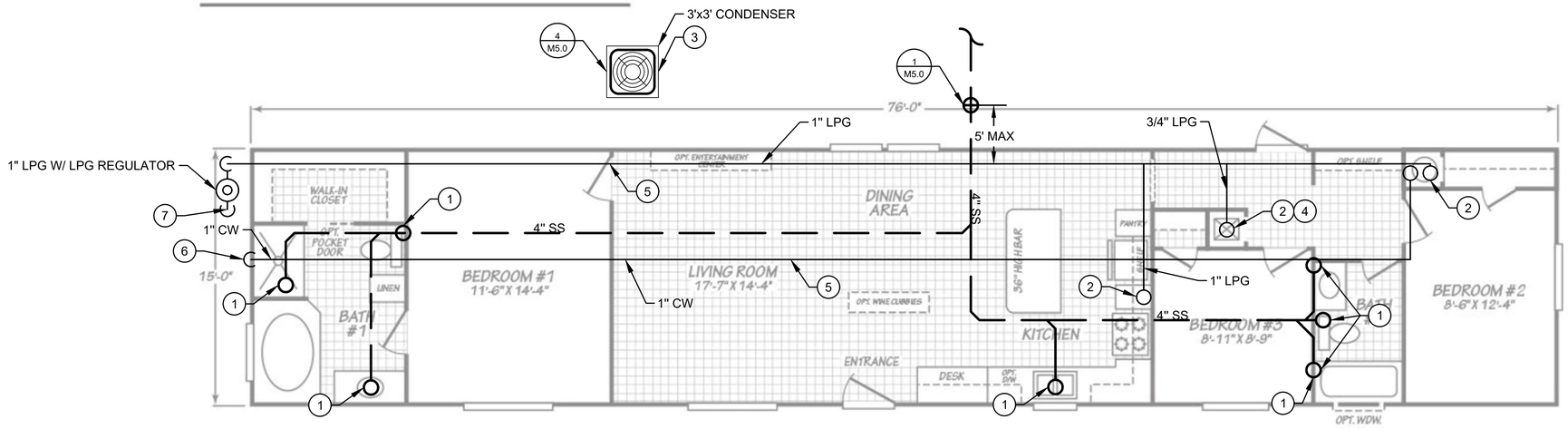
CLIENT PROJ. NUMBER: ITD23-0375

ARCH. JOB NUMBER: 23607

SHEET ISSUED DATE: JANUARY 2024

SHEET M1.0

BROADMORE SERIES



1 M2.0 PLUMBING & HVAC PLAN
SCALE: NTS

KEYNOTES:

1. ALL PLUMBING FIXTURES ARE PLUMBED WITHIN THE BUILDING AND DROPS ARE PROVIDED TO CONNECT PER MANUFACTURED HOME INSTALLATION MANUAL.
2. ALL LPG APPLIANCES ARE INSTALLED AND PLUMBED WITHIN MANUFACTURED HOME. CONTRACTOR TO CONNECT TO QUICK DISCONNECTS PER MANUFACTURED HOME INSTALLATION INSTRUCTIONS.
3. CONDENSING UNIT INSTALL ON 3'x3' CONCRETE PAD. ROUTE REFRIGERATION UNITS UNDER UNIT TO FAN COIL UNIT IN BUILDING PER MANUFACTURER'S REQUIREMENTS.
4. EXTEND CONDENSATION OUT THE BUILDING AND TERMINATE AT AN APPROVED LOCATION PER MANUFACTURED HOME INSTALLATION MANUAL.
5. SUPPORT CW/LPG LINES UNDER JOIST OF MOBILE HOME TIGHT TO INSULATION. INSULATE 1" CW LINE W/ 1-1/2" NEOPRENE INSULATION AND WRAP WITH SELF REGULATING HEAT TAPE.
6. CONNECT TO WATER LINE. SEE CIVIL SHEETS FOR CONNECTION LOCATION.
7. CONNECT TO LPG LINE. SEE CIVIL SHEETS FOR CONNECTION LOCATION AND ROUTING TO TANK.

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PROFESSIONAL ENGINEER LICENSED 14844 STATE OF IDAHO BART BROOKE — ASID NCARB AIA

1-31-24

PROJECT NAME:
ITD MOBILE HOME UNIT AND SITE DESIGN
STANLEY, ID

SHEET TITLE:
PLUMBING NEW SITE PLAN

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

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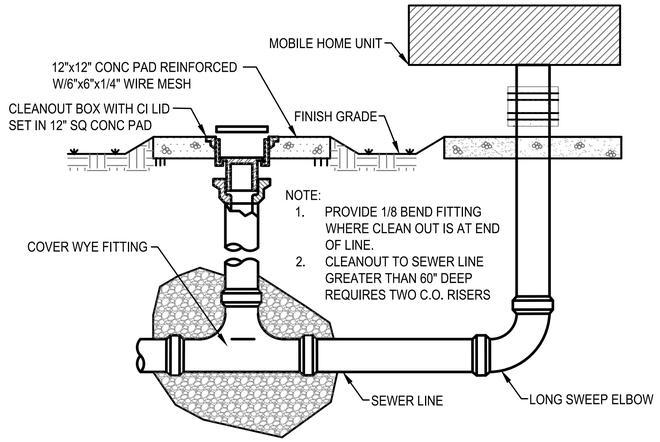
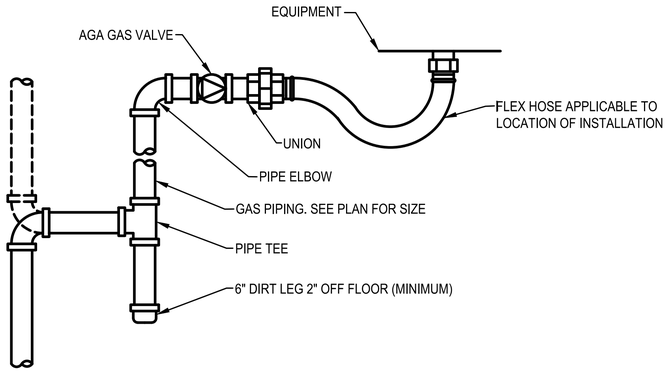
REVISION	DATE

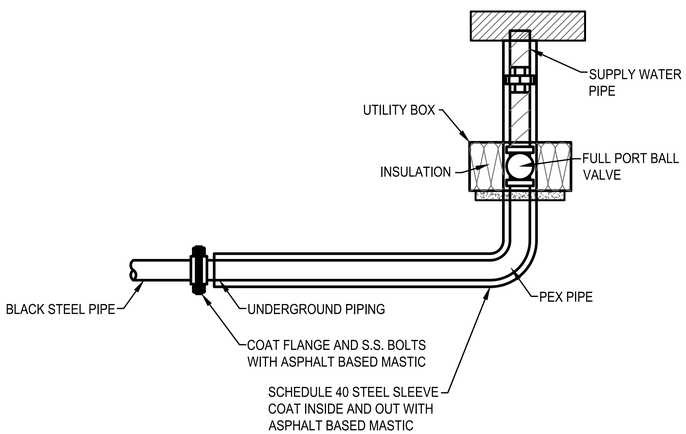
CLIENT PROJ. NUMBER:	ITD23-0375
ARCH. JOB NUMBER:	23607
SHEET ISSUED DATE:	JANUARY 2024
SHEET	M2.0



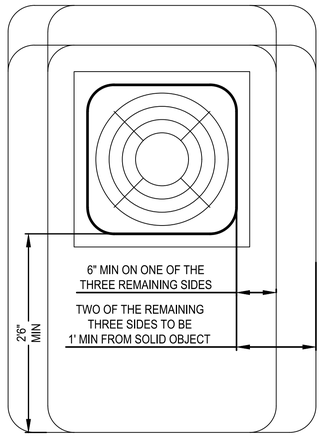
1 M5.0 GRADE CLEAN OUT
SCALE: NTS

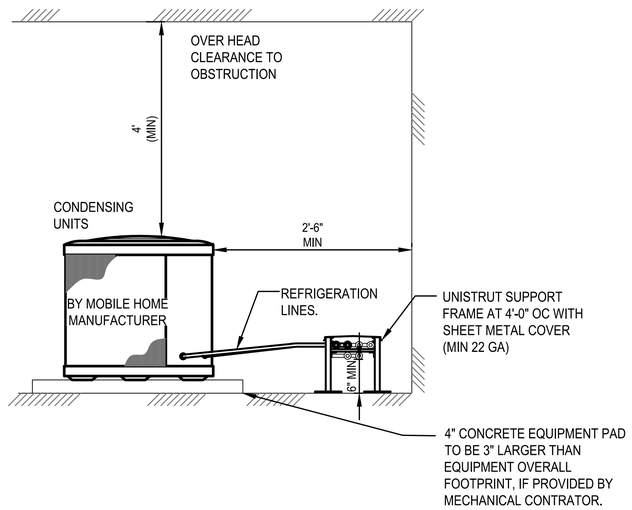


2 M5.0 GAS CONNECTION DETAIL
SCALE: NTS



3 M5.0 BELOW FOUNDATION CRAWL ENTRANCE
SCALE: NTS





4 M5.0 CONDENSING UNIT DETAIL
SCALE: NTS

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PROFESSIONAL ENGINEER LICENSED 14844 STATE OF IDAHO BART BROOKE
ASID NCARB AIA
1-31-24

PROJECT NAME:
ITD MOBILE HOME UNIT AND SITE DESIGN
STANLEY, ID

SHEET TITLE:
PLUMBING DETAILS

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

REVISION	DATE

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SHEET M5.0

POWER SYSTEM DEVICE SYMBOLS

- DUPLEX OUTLET. +18" AFF UNO.
- FOURPLEX OUTLET. +18" AFF UNO.
- GFI OUTLET. +18" AFF UNO.
- GFI OUTLET. ABOVE COUNTER
- FOURPLEX GFI OUTLET. +18" AFF UNO.
- DEDICATED SIMPLEX GFCI OUTLET. +18" AFF UNO.
- EQUIPMENT CONNECTION
- TL 120V TWIST LOCK RECEPTACLE.
- T TRANSFORMER.
- J JUNCTION BOX.
- FLUSH MOUNTED PANELBOARD/ENCLOSURE.
- F FUSED DISCONNECT SWITCH. SIZE AS INDICATED, NEMA 1 UNO, 3 POLE UNO.
- NON-FUSED DISCONNECT SWITCH. SIZE AS INDICATED, NEMA 1 UNO, 3 POLE UNO.

CIRCUIT WIRING SYMBOLS

- CONDUIT STUBBED OR SLEEVE, CAPPED, AND MARKED WITH PULL CORD
- CIRCUIT CONCEALED IN CEILING OR WALL. 3/4"C-2#12,1#12G UNO.
- CIRCUIT CONCEALED IN FLOOR OR UNDERGROUND. 3/4"C-2#10,1#10G UNO.

RACEWAY SIZE — 3/4"C
CONDUCTOR QUANTITY — 2#12:C-1 — CONDUCTOR SIZE, CIRCUIT NUMBER, PANEL
GROUNDING CONDUCTOR SIZE — 1#12:GND

- #### CONDUIT AND WIRE SIZE CALLOUT.

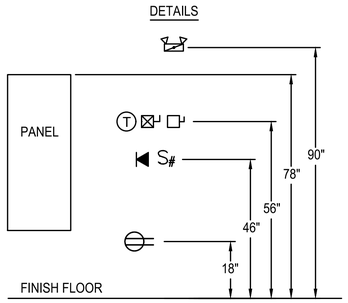
ONE-LINE DIAGRAM SYMBOLS

- PANEL ****** BRANCH PANEL.
- A CIRCUIT BREAKER. SIZE AND TYPE AS SPECIFIED
- M METER AND BASE
- SERVICE GROUND. GROUND PER NEC ARTICLE 250
- TRANSFORMER

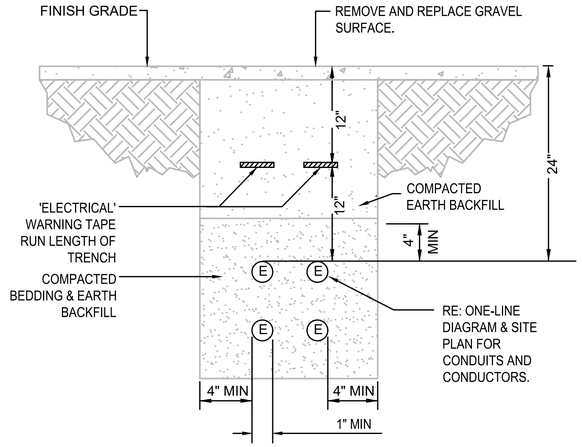
1. COLOR CODE WIRES AS FOLLOWS:

CONDUCTORS	120/208V	480/277V
PHASE A	BLACK	BROWN
PHASE B	RED	ORANGE
PHASE C	BLUE	YELLOW
NEUTRAL	WHITE	GRAY
GROUND	GREEN	GREEN

2. ELECTRICAL DEVICES AND LINEWORK ARE SHOWN BOLD FOR NEW, BOLD/DASHED FOR DEMO & RELOCATED AND MEDIUM/DASHED FOR EXISTING.
3. DIMENSIONED LENGTHS SHALL TAKE PRECEDENCE OVER SCALED LENGTHS.
4. FURNISH AND INSTALL A COMPLETE ELECTRICAL SYSTEM AS DEPICTED FROM THE PLANS AND SPECIFICATIONS. COMPLETE AS NOTED OR IMPLIED, NOT LIMITED TO WHAT IS SHOWN.
5. COORDINATE ALL DEVICE/EQUIPMENT LOCATIONS AND SPECIFIC REQUIREMENTS WITH MECHANICAL TRADE PRIOR TO ROUGH-IN.



1 E0.0 TYPICAL HEIGHTS DETAIL
SCALE: NTS



2 E0.0 TRENCHING DETAIL
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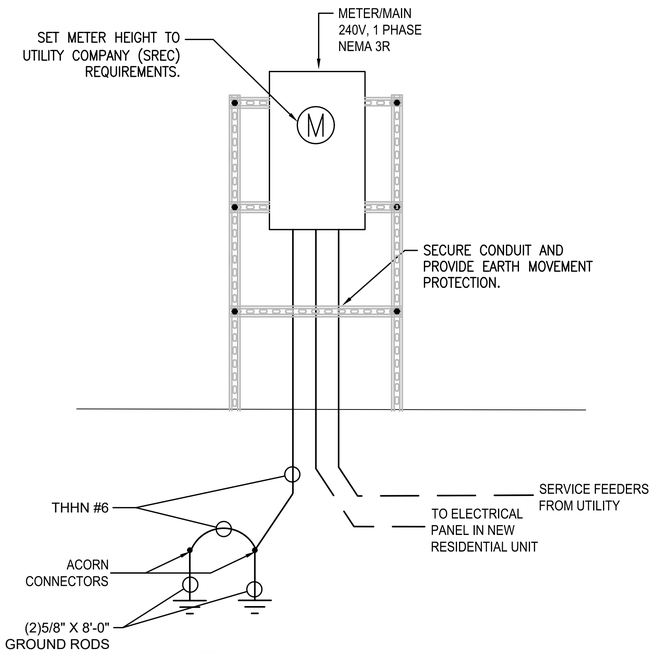
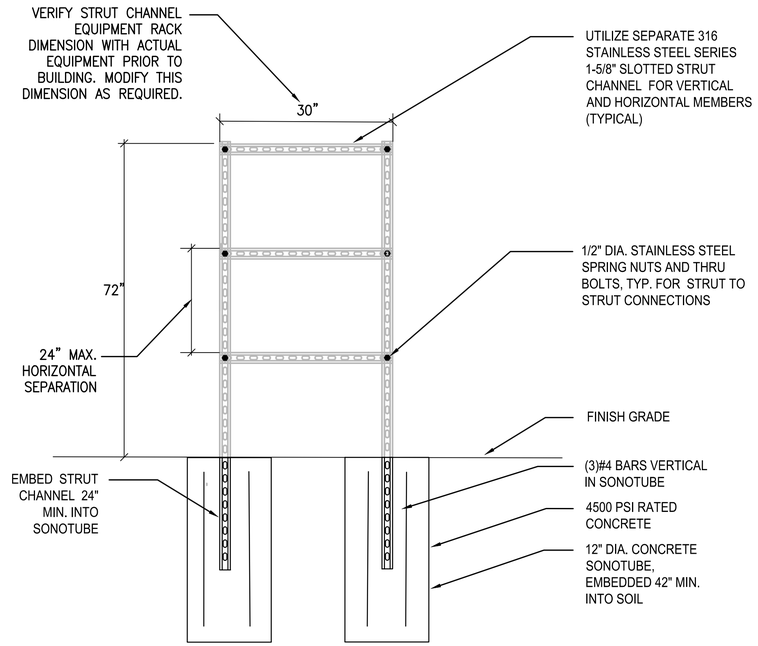


3 E0.0 METER/MAIN RACK ELEVATION
SCALE: NTS



4 E0.0 METER/MAIN RACK DETAIL
SCALE: NTS

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PROFESSIONAL ENGINEER LICENSED 17578 STATE OF IDAHO PHILO V CARTER — ASID AIA NCARB
1-31-24

PROJECT NAME:
ITD MOBILE HOME UNIT AND SITE DESIGN
STANLEY, ID

SHEET TITLE:
ELECTRICAL COVER

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

REVISION	DATE

CLIENT PROJ. NUMBER: ITD23-0375
ARCH. JOB NUMBER: 23607
SHEET ISSUED DATE: JANUARY 2024
SHEET E0.0

ELECTRICAL SHEET SPECIFICATIONS

PART 1 – GENERAL

1.1 SCOPE OF WORK

FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT AND PROVIDE ALL ASSOCIATED LABOR REQUIRED AND NECESSARY TO COMPLETE THE WORK INTENDED BY OR INFERRED FROM THIS SHEET SPECIFICATION AND DRAWING PACKAGE, AND ALL OTHER WORK AND OR MISCELLANEOUS ITEMS, NOT SPECIFICALLY MENTIONED, BUT REASONABLY INFERRED FOR A COMPLETE INSTALLATION, INCLUDING ALL ACCESSORIES AND APPURTENANCES REQUIRED FOR TESTING OF THE SYSTEM. IT IS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS THAT ALL SYSTEMS BE COMPLETE AND READY FOR OPERATION. THIS PROJECT INCLUDES GENERAL POWER, LIGHTING, AND COMMUNICATIONS SYSTEM RACEWAY. FIRE ALARM SYSTEM, IF REQUIRED, IS TO BE DESIGN/BUILD BY ELECTRICAL CONTRACTOR. COMMUNICATIONS SYSTEM CABLING AND HEAD-END EQUIPMENT IS BY OWNER.

1.2 CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL COMPLY WITH LATEST RULES, CODES AND REGULATIONS, INCLUDING, BUT NOT LIMITED TO THE MOST CURRENT ADOPTED VERSIONS OF OSHA, THE NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING AND FIRE CODES, NFPA, AND OTHER APPLICABLE STATE AND LOCAL CODES, LAWS AND REGULATIONS. CODE COMPLIANCE IS MANDATORY. NOTHING IN THESE DRAWINGS AND SPECIFICATIONS PERMITS WORK NOT CONFORMING TO THESE CODES. WHERE WORK IS SHOWN TO EXCEED MINIMUM CODE REQUIREMENTS, COMPLY WITH DRAWINGS AND SPECIFICATIONS.

1.3 LICENSE, FEES AND PERMITS

ELECTRICAL CONTRACTOR IS TO ARRANGE FOR REQUIRED INSPECTIONS AND PAY ALL LICENSE, PERMIT AND INSPECTION FEES.

1.4 CONDITIONS AT SITE

VISIT TO SITE IS REQUIRED OF ALL BIDDERS PRIOR TO SUBMISSION OF BID. ALL BIDDERS WILL BE HELD TO HAVE FAMILIARIZED THEMSELVES WITH ALL DISCERNIBLE CONDITIONS AND NO EXTRA PAYMENT WILL BE ALLOWED FOR WORK REQUIRED BECAUSE OF THESE CONDITIONS, WHETHER SPECIFICALLY MENTIONED OR NOT. LINES OF OTHER SERVICES THAT ARE DAMAGED AS A RESULT OF THIS WORK SHALL PROMPTLY BE REPAIRED AT NO EXPENSE TO THE OWNER TO COMPLETE SATISFACTION OF THE OWNER.

1.5 SAFETY

THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. CONTRACTOR SHALL HAVE AN ESTABLISHED SAFETY PLAN THAT ALL EMPLOYEES ARE TRAINED ON.

1.6 GUARANTEE

GUARANTEE THE INSTALLATION FREE FROM DEFECTS OF WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER DATE OF CERTIFICATE OF FINAL PAYMENT AND PROMPTLY REMEDY ANY DEFECTS DEVELOPING DURING THIS PERIOD, WITHOUT CHARGE.

1.7 SUBSTITUTIONS

WHEREVER POSSIBLE, MORE THAN ONE MANUFACTURER HAS BEEN LISTED FOR VARIOUS ITEMS OF EQUIPMENT, ANY ONE OF WHICH WILL BE ACCEPTABLE. BASE THE BID ON USE OF MATERIALS SPECIFIED. IF, AFTER AWARD OF THE CONTRACT, A SUBSTITUTE IS PROPOSED, THE REQUEST FOR PERMISSION TO SUBSTITUTE SHALL BE ACCOMPANIED WITH A STATEMENT OF THE AMOUNT OF MONEY TO BE RETURNED TO THE CONTRACT IF THE SUBSTITUTION IS PERMITTED. THE OWNER IS THE SOLE JUDGE OF ACCEPTABILITY OF PROPOSED SUBSTITUTIONS, IF A SUBSTITUTE ITEM IS PERMITTED, AND ANY REDESIGN EFFORT IS THEREBY NECESSITATED, THE REQUIRED REDESIGN SHALL BE AT THE CONTRACTOR'S EXPENSE.

1.8 SHOP DRAWINGS AND MATERIALS LISTS

SUBMIT TO THE OWNER, SEVEN (7) COPIES OF COMPLETE SHOP DRAWINGS AND MATERIALS LISTS FOR REVIEW WITHIN FOURTEEN (14) DAYS AFTER AWARD OF CONTRACT, ALL PROPOSED DEVIATIONS FROM SPECIFICATIONS MUST BE CLEARLY LISTED UNDER A PROMINENT HEADING ENTITLED "DEVIATIONS".

1.9 WORKMANSHIP

ONLY QUALITY WORKMANSHIP WILL BE ACCEPTED. HAPHAZARD OR POOR INSTALLATION PRACTICE WILL BE CAUSE FOR REJECTION OF WORK.

1.10 COORDINATION

COORDINATE WORK WITH OTHER TRADES TO AVOID CONFLICT AND TO PROVIDE CORRECT ROUGH-IN AND CONNECTION FOR EQUIPMENT FURNISHED BY OTHER TRADES THAT REQUIRE ELECTRICAL CONNECTIONS. VERIFY EQUIPMENT DIMENSIONS AND REQUIREMENTS WITH PROVISIONS SPECIFIED UNDER THIS SECTION. CHECK ACTUAL JOB CONDITIONS BEFORE FABRICATING WORK. REPORT NECESSARY CHANGES IN TIME TO PREVENT NEEDLESS WORK AND OR DELAYS.

1.11 CUTTING AND PATCHING

ALL CUTTING AND PATCHING REQUIRED FOR WORK OF THIS DIVISION IS INCLUDED HEREIN. COORDINATION WITH GENERAL CONTRACTOR AND OTHER TRADES IS IMPERATIVE.

1.12 SITE CLEANUP

A. AFTER ALL OTHER WORK HAS BEEN ACCOMPLISHED, CLEAN ALL EXPOSED CONDUIT, FIXTURES, EQUIPMENT AND SUPPORTS. TOUCH UP PAINT ON ANY EQUIPMENT SCRAPED OR SCRATCHED DURING CONSTRUCTION. DAMAGED EQUIPMENT CAUSED BY THIS CONTRACTOR WILL BE REPLACED.

B. LEAVE ALL AREAS INVOLVING ELECTRICAL WORK IN A CONDITION SATISFACTORY TO THE OWNER. REMOVE ALL CRATES, CARDBOARD, PACKING MATERIAL, WASTE MATERIAL, AND OTHER DEBRIS LEFT OVER FROM CONSTRUCTION DAILY.

PART 2 – PRODUCTS

2.1 MATERIAL APPROVAL

ALL MATERIALS MUST BE NEW AND BEAR U.L. LABEL. MATERIALS THAT ARE NOT COVERED BY UL TESTING STANDARDS SHALL BE TESTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY OF A GOVERNMENTAL AGENCY APPROVED BY THE AUTHORITY HAVING JURISDICTION.

2.2 WIRES AND CABLES

A. CONDUCTORS FOR 600V SYSTEMS AND BELOW SHALL BE STRANDED COPPER (UNLESS NOTED OTHERWISE), #12 AWG MINIMUM.

B. INSULATION SHALL BE THWN FOR WET LOCATIONS AND THHN FOR DRY LOCATIONS.

2.3 OUTLET BOXES, JUNCTION AND PULL BOXES

A. OUTLET BOXES SHALL BE GALVANIZED OR CADMIUM PLATED STEEL SIZED AS PER N.E.C. OR AS NOTED. UTILIZE RESIDENTIAL-GRADE PLASTIC HANGER BOXES FOR NETWORK/COMMUNICATIONS CONNECTION POINTS. USE FOUR (4) INCH SQUARE OCTAGON BOX FOR FIXTURES AND TILE TYPE DEVICE BOXES.

2.4 WIRING DEVICES

A. PROVIDE AND INSTALL ALL WIRING DEVICES WITH COVERPLATES AS NOTED ON THE PLANS. DEVICES AND COVER PLATES SHALL MATCH THE EXISTING COLOR AND TYPE.

B. DEVICES: WALL SWITCHES AND CONVENIENCE OUTLETS SHALL BE RATED FOR 20-AMP, 125-VOLT (NEMA 5-20 ANSI C73.12) SPECIFICATION GRADE DEVICES EXCEPT AS NOTED. RESIDENTIAL GRADE DEVICES ARE NOT PERMITTED.

C. PROVIDE FACTORY-FABRICATED WIRING DEVICES, IN TYPES, AND ELECTRICAL RATINGS FOR APPLICATIONS INDICATED AND COMPLYING WITH NEMA STDS. PUB. NO. WD1.

D. PROVIDE WIRING DEVICES (OF PROPER VOLTAGE RATING) AS FOLLOWS:

MFGR	C.O.'S	1-POLE	3-WAY	4-WAY	W/PILOT
HUBBELL	5362 L	1221 L	1223 L	1234 L	1221-P1 L
P&S	5362 L	20AC1 L	20AC3 L	20AC4 L	20AC1-CPL
LEVITON	5362 L	1223 L	1223 L	1224 L	

E. COVER PLATES: ALL DEVICES SHALL HAVE COVERPLATES. THEY SHALL HAVE A PLAIN FLAT SURFACE WITH BEVELED EDGES COMPATIBLE WITH THE DEVICE. THE COVER PLATES IN THE SHOP, PARTS, TOOL ROOM AND FIRE RISER ROOM SHALL BE STAINLESS STEEL. COVER PLATES IN ALL OFFICE TYPE AREAS, SHOWROOM, RESTROOM AND HALLWAYS SHALL BE HIGHLY IMPACT RESISTANT (NYLON OR LEXAN) AND SHALL MATCH THE COLOR OF THE ASSOCIATED DEVICE.

F. EMPTY BOXES: SHALL BE COVERED WITH MATCHING COVERPLATES. PROVIDE HARDWARE AS NEEDED.

G. EXTERIOR DEVICES SHALL BE 20A GFCI TYPE WITH WATERPROOF HIGHLY IMPACT RESISTANT CLEAR WHILE IN USE TYPE COVER.

2.5 WIRE CONNECTORS

A. FOR WIRE SIZES #8 AWG AND SMALLER: INSULATED PRESSURE TYPE (WITH LIVE SPRING) RATED 105°C, 600V, FOR BUILDING WIRING AND 1000V IN FIXTURES, SCOTCHLOK OR IDEAL.

B. FOR WIRE SIZES #6 AWG AND LARGER: T&B OR EQUIVALENT COMPRESSION TYPE WITH 3M #33+ OR PLYMOUTH "SLIPKNOT GREY" TAPE INSULATION.

2.6 PANELBOARD

PANELBOARDS SHALL BE AS MANUFACTURED BY SQUARE D, GENERAL ELECTRIC, SIEMENS, OR EATON/CUTLER HAMMER. PROVIDE PANELBOARDS AS INDICATED ON SCHEDULES, WITH THE FOLLOWING FEATURES: TINNED ALUMINUM BUS (98 PERCENT CONDUCTIVITY), MECHANICAL-TYPE MAIN AND NEUTRAL LUGS, NEUTRAL BUS RATED 100 PERCENT OF PHASE BUS, GROUND BUS BONDED TO ENCLOSURE, BOLT-ON MOLDED-CASE THERMAL-MAGNETIC BREAKERS.

2.7 RACEWAYS

A. OUTDOORS:

EXPOSED: RIGID STEEL OR INTERMEDIATE METAL CONDUIT
CONCEALED: RIGID STEEL OR INTERMEDIATE METAL CONDUIT
UNDERGROUND: RIGID NON-METALLIC CONDUIT
TO VIBRATING EQUIPMENT: LIQUID-TIGHT FLEXIBLE METAL CONDUIT

B. INDOORS:

EXPOSED: ELECTRICAL METALLIC TUBING, RIGID STEEL CONDUIT, PVC-COATED RIGID STEEL CONDUIT
CONCEALED: ELECTRIC METALLIC TUBING, METAL CLAD (WHERE ALLOWED BY AHJ)
DAMP OR WET LOCATIONS: RIGID STEEL CONDUIT
TO VIBRATING EQUIPMENT: FLEXIBLE METAL CONDUIT

PART 3 – EXECUTION

3.1 – GENERAL

A. ELECTRIC SYSTEM LAYOUTS INDICATED ON THE DRAWINGS ARE GENERALLY DIAGRAMMATIC, BUT SHALL BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION AND WORK OF OTHER TRADES WILL PERMIT.

B. CONSULT ALL OTHER DRAWINGS. VERIFY SCALES AND REPORT ANY DIMENSIONAL DISCREPANCIES OR OTHER CONFLICTS TO ARCHITECT BEFORE SUBMITTING BID.

C. ALL HOME RUNS ARE INDICATED AS STARTING FROM THE DEVICE NEAREST THE PANEL AND CONTINUING IN THE GENERAL DIRECTION OF THAT PANEL. CONTINUE SUCH CIRCUITS TO THE PANEL AS THOUGH THE ROUTES WERE COMPLETELY INDICATED.

D. AVOID CUTTING AND BORING HOLES THROUGH STRUCTURE OR STRUCTURAL MEMBERS WHEREVER POSSIBLE. OBTAIN PRIOR APPROVAL OF ARCHITECT AND CONFORM TO ALL STRUCTURAL REQUIREMENTS WHEN CUTTING OR BORING THE STRUCTURE IS NECESSARY AND PERMITTED.

3.2 – ELECTRICAL GROUNDING

GROUND ALL ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NEC ARTICLE 250. IN ADDITION PROVIDE A SEPARATE GROUND WIRE FOR ALL FEEDERS AND BRANCH CIRCUITS.

3.3 – ELECTRICAL EQUIPMENT INSTALLATION

A. HEAD ROOM MAINTENANCE: IF MOUNTING HEIGHTS OR OTHER LOCATION CRITERIA ARE NOT INDICATED, ARRANGE AND INSTALL COMPONENTS AND EQUIPMENT TO PROVIDE THE MAXIMUM POSSIBLE HEADROOM.

B. MATERIALS AND COMPONENTS: INSTALL LEVEL, PLUMB, AND PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS, UNLESS OTHERWISE INDICATED.

C. EQUIPMENT: INSTALL TO FACILITATE SERVICE, MAINTENANCE, AND REPAIR OR REPLACEMENT OF COMPONENTS. CONNECT FOR EASE OF DISCONNECTING, WITH MINIMUM INTERFERENCE WITH OTHER INSTALLATIONS.

D. RIGHT OF WAY: COORDINATE INSTALLATION OF ELECTRICAL DEVICES WITH OTHER TRADES.

3.4 – RACEWAY AND CABLE INSTALLATION

RACEWAY:

A. ABOVE GRADE: RIGID STEEL OR IMC IN WET LOCATIONS, WHERE SUBJECT TO MECHANICAL DAMAGE AND IN CONCRETE OR BLOCK WALLS, EMT IN OTHER LOCATIONS WHERE PERMITTED BY CODE. METAL CLAD ONLY WHERE ALLOWED BY LOCAL AUTHORITY HAVING JURISDICTION.

B. CONCEAL RACEWAYS AND CABLES WITHIN FINISHED WALLS, CEILINGS, AND FLOORS, UNLESS OTHERWISE INDICATED.

C. INSTALL RACEWAYS AND CABLES AT LEAST SIX (6) INCHES AWAY FROM PARALLEL RUNS OF FLUES AND STEAM OR HOT-WATER PIPES. LOCATE HORIZONTAL RACEWAY RUNS ABOVE WATER AND STEAM PIPING.

D. USE TEMPORARY RACEWAY CAPS TO PREVENT FOREIGN MATTER FROM ENTERING.

E. MAKE CONDUIT BENDS AND OFFSETS SO INSIDE DIAMETER IS NOT REDUCED. KEEP LEGS OF BENDS IN THE SAME PLANE AND STRAIGHT LEGS OFFSETS PARALLEL, UNLESS OTHERWISE INDICATED.

F. USE RACEWAY FITTINGS AND CABLE FITTINGS COMPATIBLE WITH RACEWAYS AND CABLES AND SUITABLE FOR THIS APPLICATION AND LOCATION.

G. INSTALL RACEWAYS EMBEDDED IN SLABS IN MIDDLE THIRD OF SLAB THICKNESS WHERE PRACTICAL, AND LEAVE AT LEAST 1-INCH OF CONCRETE COVER.

H. SECURE RACEWAYS TO REINFORCING RODS TO PREVENT SAGGING OR SHIFTING DURING CONCRETE PLACEMENT.

I. SPACE RACEWAYS LATERALLY TO PREVENT VOIDS IN CONCRETE.

J. INSTALL CONDUIT LARGER THAN 1-INCH TRADE SIZE PARALLEL TO OR AT RIGHT ANGLES TO MAIN REINFORCEMENT. WHERE CONDUIT IS AT RIGHT ANGLES TO REINFORCEMENT, PLACE CONDUIT CLOSE TO SLAB SUPPORT.

K. TRANSITION FROM NONMETALLIC TUBING TO RIGID STEEL CONDUIT, OR IMC BEFORE RISING ABOVE FLOOR.

L. MAKE EXPOSED BENDS FOR BANKED RUNS FROM SAME CENTERLINE IN ORDER THAT BENDS ARE PARALLEL. USE FACTORY ELBOWS ONLY WHERE ELBOWS CAN BE INSTALLED PARALLEL; OTHERWISE, PROVIDE FIELD BENDS FOR EXPOSED PARALLEL RACEWAYS.

CABLES:

A. INSTALL PULL WIRES IN EMPTY RACEWAYS. USE NO. 14 AWG ZINC-COATED STEEL OR MONOFILAMENT PLASTIC LINE WITH NOT LESS THAN 200-LB TENSILE STRENGTH. LEAVE AT LEAST 12-INCHES OF SLACK AT EACH END OF PULL WIRE.

B. INSTALL TELEPHONE AND SIGNAL SYSTEM RACEWAYS, 2-INCH TRADE SIZE AND SMALLER, IN MAXIMUM LENGTHS OF 150 FEET (45 M) AND WITH A MAXIMUM OF TWO 90-DEGREE BENDS OR EQUIVALENT. SEPARATE LENGTHS WITH PULL OR JUNCTION BOXES WHERE NECESSARY TO COMPLY WITH THESE REQUIREMENTS, IN ADDITION TO REQUIREMENTS ABOVE.

C. CONNECT MOTORS AND EQUIPMENT SUBJECT TO VIBRATION, NOISE TRANSMISSION, OR MOVEMENT WITH A MAXIMUM OF 72-INCH FLEXIBLE CONDUIT. INSTALL LFMC IN WET OR DAMP LOCATIONS. INSTALL A SEPARATE GROUND CONDUCTOR ACROSS FLEXIBLE CONNECTIONS.

D. SET FLOOR BOXES LEVEL AND TRIM AFTER INSTALLATION TO FIT FLUSH TO FINISHED FLOOR SURFACE.

E. CONDUCTORS: TYPE THHN/THWN INSULATED CONDUCTORS IN RACEWAY.

F. INSTALL SPLICES AND TAPS THAT ARE COMPATIBLE WITH CONDUCTOR MATERIAL AND THAT POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATINGS THAN UNSPLICED CONDUCTORS.

G. INSTALL WIRING AT OUTLETS WITH AT LEAST 12 INCHES OF SLACK CONDUCTOR AT EACH OUTLET.

H. CONNECT OUTLET AND COMPONENT CONNECTIONS TO WIRING SYSTEMS AND TO GROUND. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS, ACCORDING TO MANUFACTURER'S PUBLISHED TORQUE-TIGHTENING VALUES. IF MANUFACTURER'S TORQUE VALUES ARE NOT INDICATED, USE THOSE SPECIFIED IN UL 486A.

3.5 IDENTIFICATION

A. PROVIDE ENGRAVED 3 LAYER LAMINATE PLASTIC NAMEPLATES FOR PANELBOARDS, DISCONNECT SWITCHES AND ALL SIMILAR DEVICES.

B. COLOR-CODE 480/277-VOLT SYSTEM THREE PHASE SERVICE, FEEDERS, AND BRANCH-CIRCUIT CONDUCTORS THROUGHOUT THE SECONDARY ELECTRICAL SYSTEM AS FOLLOWS:

1. PHASE A: BROWN
2. PHASE B: ORANGE
3. PHASE C: YELLOW
4. NEUTRAL: GRAY
5. GROUND: GREEN WITH YELLOW STRIPE

C. COLOR-CODE 208/120-VOLT SYSTEM THREE PHASE SERVICE, FEEDERS, AND BRANCH-CIRCUIT CONDUCTORS THROUGHOUT THE SECONDARY ELECTRICAL SYSTEM AS FOLLOWS:

1. PHASE A: BLACK
2. PHASE B: RED
3. PHASE C: BLUE
4. NEUTRAL: WHITE
5. GROUND: GREEN

3.7 OPERATING AND MAINTENANCE INSTRUCTIONS (O+M MANUAL)

PREPARE THREE (3) COPIES FOR ALL EQUIPMENT.

3.8 RECORD AS-BUILTS

PROVIDE (1) CLEAN, LEGIBLE COPY OF DRAWINGS TO ENGINEER INDICATING ALL DEVIATIONS FROM INITIAL DESIGN (AS-BUILT CONDITIONS).

3.9 STRUT CHANNEL – MANUFACTURERS

SUBJECT TO COMPLIANCE WITH REQUIREMENTS SET FORTH IN THE DRAWINGS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:

1. UNISTRUT
2. COOPER B-LINE
3. ALLIED TUBE & CONDUIT
4. THOMAS & BETTS
5. WESANCO
6. GS GLOBAL METAL
7. APPROVED EQUAL

END OF SECTION

HECO ENGINEERS

Myers ■ Anderson
▪ Architecture ▪ Interior Design ▪ Historic Preservation
122 South Main Street ▪ Pocatello, Idaho 83204 ▪ Tel. (208) 232 - 3741 ▪ Fax (208) 232 - 3782

PROFESSIONAL ENGINEER LICENSED 17578 STATE OF IDAHO PHILO V CARTER
ASID NCARB AIA
1-31-24

PROJECT NAME:
ITD MOBILE HOME UNIT AND SITE DESIGN
STANLEY, ID

SHEET TITLE:
ELECTRICAL COVER

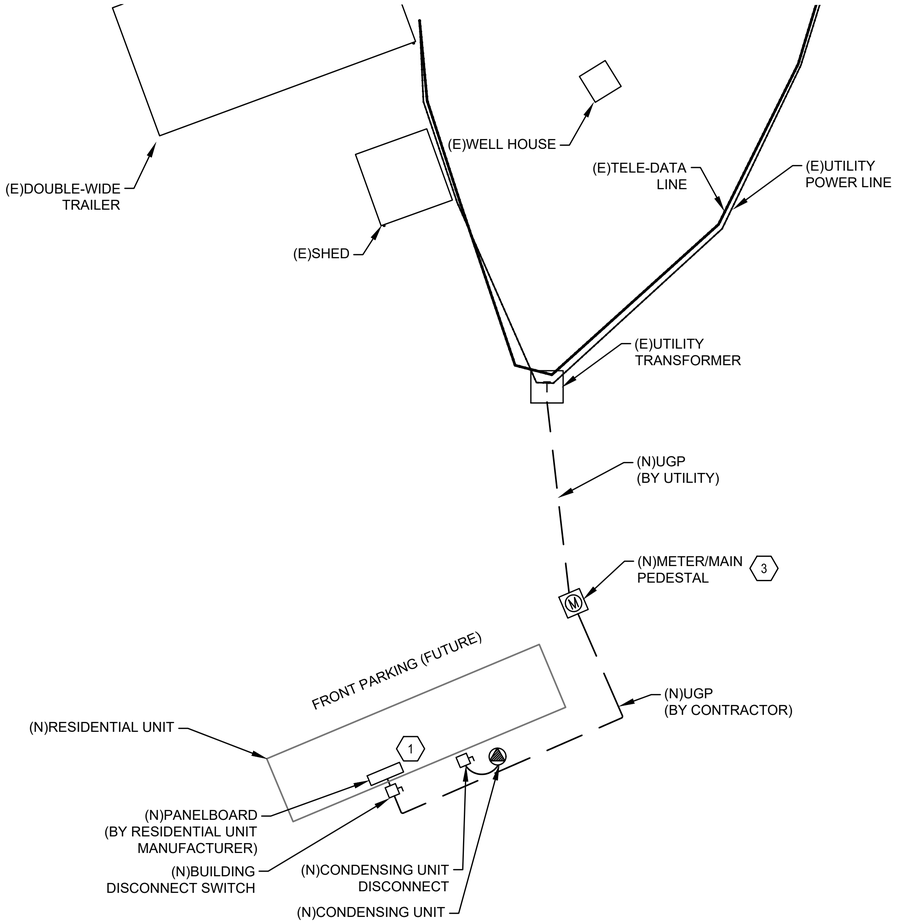
DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

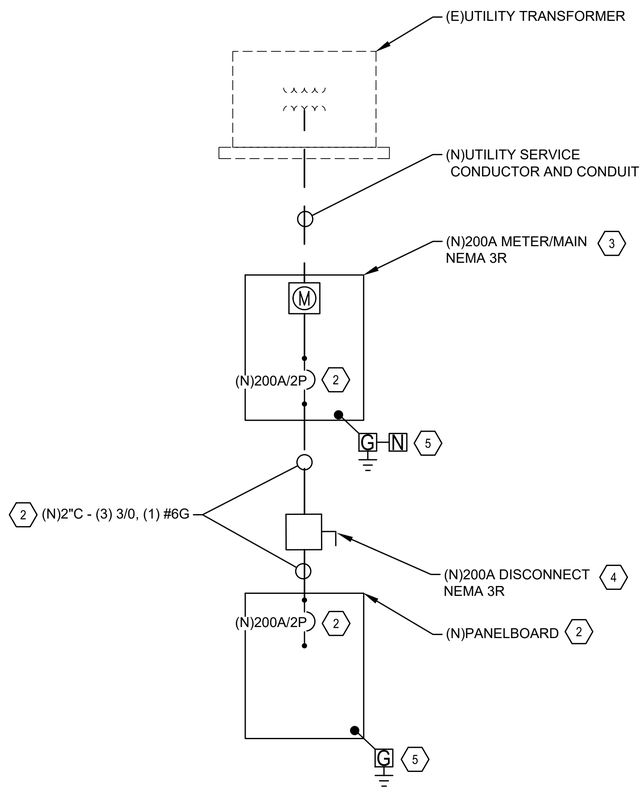
DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

REVISION	DATE

CLIENT PROJ. NUMBER: ITD23-0375
ARCH. JOB NUMBER: 23607
SHEET ISSUED DATE: JANUARY 2024
SHEET E0.1



1 E1.0 ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"



2 E1.0 ONE-LINE DIAGRAM
SCALE: NTS

SHEET NOTES:

1. SITE PLAN SHOWS PROPOSED ELECTRICAL INSTALLATION FOR NEW RESIDENTIAL UNIT AND METER/MAIN.
2. CONTRACTOR GROUND METER/MAIN PEDESTAL AND NEW RESIDENTIAL UNIT PER NEC 250.
3. CONTRACTOR MAKE ALL CONNECTIONS FROM METER/MAIN TO RESIDENTIAL UNIT INDOOR PANEL.
4. CONTRACTOR TO LABEL METER/MAIN TO MATCH ADDRESS OF NEW RESIDENTIAL UNIT.
5. CONTRACTOR VERIFY NEC SERVICE OUTLET REQUIREMENTS MET FOR HVAC INSTALLATION. INSTALL 125V/20A OUTLET IF NECESSARY (GFCI PROTECTION AND WEATHERPROOF COVER REQUIRED FOR AN OUTDOOR OUTLET).
6. RESIDENTIAL UNIT MANUFACTURER TO MAKE ALL INDOOR CONNECTIONS.
7. UTILITY COMPANY CONTACT INFORMATION:
   SALMON RIVER ELECTRIC COOPERATIVE (SREC)
   DENNIS SWINDELL, OPERATIONS MGR.
   (208) 879-2283 EXT. 106
   dennis@srec.org

KEYNOTES:

1. PANEL LOCATION INDOORS, NEAR BACK EXIT OF NEW RESIDENTIAL UNIT.
2. THE RESIDENTIAL PANELBOARD SIZE AND CIRCUIT BREAKERS ARE DETERMINED BY THE MANUFACTURER OF THE RESIDENCE. CONTRACTOR ADJUST METER/MAIN BREAKER SIZE, CONDUIT, DISCONNECT, AND CONDUCTOR SIZES FROM METER/MAIN TO RESIDENTIAL PANEL BASED ON FINAL SELECTION OF MAIN BREAKER SIZE IN THE RESIDENTIAL PANEL.
3. INSTALL METER/MAIN AND ASSOCIATED EQUIPMENT IN ACCORDANCE WITH UTILITY (SREC) REQUIREMENTS FOR UNDERGROUND SERVICE. COORDINATE INSTALLATION WITH UTILITY (SREC).
4. INSTALL 200A/2P BUILDING DISCONNECT, SQUARE D DTU224NRB OR EQUAL. NEMA 3R ENCLOSURE REQUIRED. SEE KEYNOTE NO.2 REGARDING FINAL SIZES OF ELECTRICAL EQUIPMENT.
5. CONTRACTOR GROUND PER NEC 250.

20' 0 20' 40'
SCALE OF FEET

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