STILLWATER ELEMENTARY SCHOOL PORTABLE

RIVERVIEW SCHOOL DISTRICT No. 402

PROJECT INFORMATION

SITE ADDRESS
11530 320th Ave, NE.
CARNATION, WA 98014

ZONING
RA2.5

PARCEL NUMBER
332607-9040

LEGAL DESCRIPTION
NE ¼ SECTION 33, TWP 26 N, RNG. 7E, W.M.

SITE AREA
819,363 S.F. (18.81 ACRES)

TOTAL BUILDING COVERAGE
EXISTING BUILDINGS = 57,530 S.F. NEW PORTABLE = 1,773 S.F.
TOTAL = 59,303 S.F.

SITE IMPERVIOUS LESS BUILDINGS
98,176 S.F.

TOTAL IMPERVIOUS (EXISTING AND NEW
19.22 %

STATISTICS

OCCUPANCY TYPE
GROUP E

BUILDING AREA
TOTAL AREA = 1,773 S.F.

CONSTRUCTION TYPE
V-B (NOT RATED)

BUILDING HEIGHT
1 STORY - 14'-0" MAXIMUM HEIGHT

CODE INFORMATION

2015 INTERNATIONAL BUILDING CODE W/ WASHINGTON STATE AMENDMENTS

2015 INTERNATIONAL FIRE CODE

2015 INTERNATIONAL MECHANICAL CODE

2015 INTERNATIONAL PLUMBING CODE W/ WASHINGTON STATE AMENDMENTS

2015 NREC

BARRIER FREE - INTERNATIONAL CODE COUNCIL - ANSI STANDARD 117.1

ABBREVIATIONS

NOTE: ADDITIONAL ABBREVIATIONS INCLUDED THROUGHOUT DRAWING SET

@	AT		
C	CENTERLINE	LAM	LAMINATED
Ø	DIAMETER OR ROUND	LAV	LAVATORY
#	POUND	LF	LINEAL FEET
AB	ANCHOR BOLTS		
ACP	ACOUSTICAL CEILING PANEL	MAX	MAXIMUM
ACT	ACOUSTICAL CEILING TILE	MB	MARKER BOARD
AFF	ABOVE FINISH FLOOR	MECH	MECHANICAL
		MDO	MEDIUM DENSITY OVERLAY
BD	BOARD	MDF	MEDIUM DENSITY FIBERBOARD
BIT	BITUMINOUS	MIN	MINIMUM OR MINUTE
BLDG	BUILDING	MTL	METAL
BLKG	BLOCKING		
BM	BEAM	NIC	NOT IN CONTRACT
BO	BOTTOM OF	NO	NUMBER
BS	BACKSPLASH	NTS	NOT TO SCALE
CG	CORNER GUARD	OC	ON CENTER
CJ	CONTROL JOINT	OFCI	OWNER FURNISH CONTRACTOR INSTALL
CLG	CEILING	OFOI	OWNER FURNISH OWNER INSTALL
CMU	CONCRETE MASONRY UNIT	OH	OPPOSITE HAND
COL	COLUMN		
CONC	CONCRETE	PAV	PAVEMENT
CONST	CONSTRUCTION	PL	PLASTIC LAMINATE
CONT	CONTINUOUS	PLYWD	PLYWOOD
CPT	CARPET	PR	PAIR
CR	CARD READER	PRES TD	PRESERVATIVE TREATED
CT	CERAMIC TILE	PT	PAINT
DBL	DOUBLE	RB	RUBBER BASE
DP	DEEP	RECPT	RECEPTACLE
DS	DOWNSPOUT	REQD	REQUIRED
DTL	DETAIL	REV	REVISIONS
(E)	EXISTING	RM	ROOM
ETC	ETCETERA		
EA	EACH	SC	SOLID CORE
EJ	EXPANSION JOINT	SCHED	SCHEDULE
ELECT	ELECTRICAL	SF	SQUARE FOOT
ELEV	ELEVATION	SECT	SECTION
EM	ENTRY MAT	SIM	SIMILAR
EO	EDGE OF	SPEC	SPECIFICATION
EQ	EQUAL	SQ	SQUARE
EQUIP	EQUIPMENT	SS	STAINLESS STEEL
EXH	EXHAUST	SSCG	STAINLESS STEEL CORNER GUARD
EXT	EXTERIOR	STD	STANDARD
		STL	STEEL
FA	FIRE ALARM	STOR	STORAGE
FDN	FOUNDATION	STRUCT	STRUCTURAL OR STRUCTURE
FIN	FINISH	SV	SHEET VINYL
FF	FINISH FLOOR		
FR	FIRE ALARM	TB	TACKBOARD
FMT	FLEXIBLE MARBLE TILE	T&G	TONGUE & GROOVE
FRP	FIBER REINFORCED PANEL	THK	THICK
FT	FOOT OR FEET	TO	TOP OF
FX	FIRE EXTINGUISHER	TS	TUBE STEEL
		TWS	TACKABLE WALL SURFACE (ARCH.)
GA	GAUGE	TYP	TYPICAL
GALV	GALVANIZED		
GWB	GYPSUM WALLBOARD	U	URINAL
		UNO	UNLESS NOTED OTHERWISE
HACP	HUNG ACOUSTICAL CEILING PANELS		
HM	HOLLOW METAL	VCT	VINYL COMPOSITION TILE
H	HEIGHT OR HIGH	VERT	VERTICAL
HR	HOUR	VWC	VINYL WALL COVERING
		W	WIDE OR WIDTH
ID	INSIDE DIAMETER	W/	WITH
IN	INCHES	WD	WOOD
INSUL	INSULATION	WG	WIRE GROMMETS
INT	INTERIOR	WM	WALL MAT
		W/O	WITHOUT
JT	JOINT	WST	WAINSCOT
JST	JOIST	WWF	WELDED WIRE FABRIC

ARCHITECTURAL SYMBOLS

BUILDING SECTION SYMBOL
WALL SECTION SYMBOL
DETAIL SYMBOL
INTERIOR ELEVATION SYMBOL
ROOM NAME & ROOM NUMBER
BUBBLE NOTE
DOOR SYMBOL
DOOR NUMBER
WINDOW, RELITE AND SKYLIGHT TYPE SYMBOL
WALL TYPE SYMBOL
LOUVER SYMBOL
REVISION SYMBOL
GRID LINE SYMBOL

SCHEDULE OF DRAWINGS

A0.00 PROJECT INFORMATION SHEET AND OVERALL SITE PLAN

CIVIL DRAWINGS
C1.0 COVER SHEET
C1.1 DEMOLITION AND TESC PLAN
C1.2 PAVING AND UTILITY PLAN
C1.3 PAVING AND UTILITY NOTES AND DETAILS

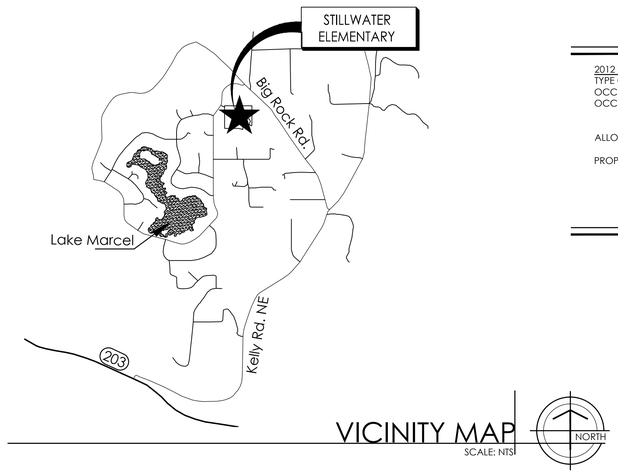
ARCHITECTURAL DRAWINGS
A2.00 FLOOR PLAN

STRUCTURAL DRAWINGS
F1 FOUNDATION PLAN / NOTES / DETAILS

ELECTRICAL DRAWINGS
E0.01 ELECTRICAL LEGEND, NOTES AND SPECIFICATIONS
E1.01 ELECTRICAL SITE PLAN
E2.01 1ST FLOOR AND ATTIC ELECTRICAL PLAN
E3.01 ELECTRICAL DETAILS
E4.01 ONE-LINE DIAGRAM & PANEL SCHEDULE

MODULAR BUILDING DRAWINGS (FOR REFERENCE ONLY)
Sheet's A-1.0, A-2.0,A-3.0,A-4.0,E-1.0,M-1.0,S-1.0 AND S-2.0

WELCOME RAMP DRAWINGS (FOR REFERENCE & COORDINATION)
R1 STANDARD PLANS / DETAILS / NOTES



VICINITY MAP
SCALE: NTS

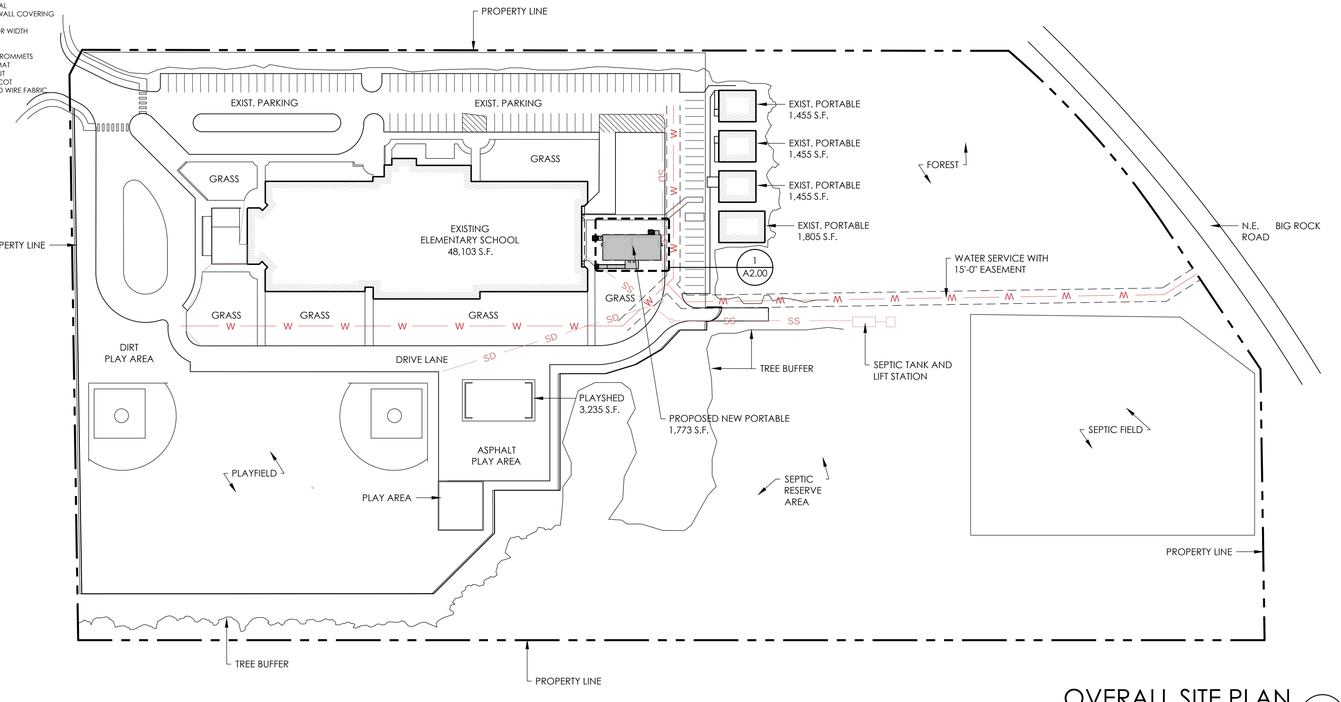
NORTH

CODE ANALYSIS

2012 IBC BUILDING CODE - BUILDING INFORMATION
TYPE OF CONSTRUCTION: V-B (NOT RATED)
OCCUPANCY CLASSIFICATION: E - EDUCATIONAL PER 305.1
OCCUPANCY CALCULATION:
EDUCATIONAL CLASSROOM AREA 20 S.F. NET PER OCCUPANT
OCCUPANT LOAD = 84 PEOPLE (SEE A2.00)
ALLOWABLE AREA PER TABLE 503
V-B & E = (1) FLOOR @ 9,500 S.F. MAXIMUM ALLOWED
PROPOSED BUILDING AREA: 1,773 gross S.F. (OUTSIDE WALL) 1,650 S.F. (INSIDE WALL)
ROOF AREA: 1,866 gross S.F. (6" OVERHANG AT EAVES)
+ 82 gross S.F. (AWNING)
1,948 S.F. TOTAL

SCOPE OF WORK

1. Provide grading and portable classroom building pad and premanufactured ramp pad construction.
2. Provide control points for portable classroom building to be placed and set by others.
3. Provide electrical and storm utility services and final connections to the portable classroom building to be placed and set by others.
4. Provide the electrical connection between the two portable halves
4. Provide electrical work inside the portable classroom building as shown on the electrical drawings. (Fire Alarm, data, clock, intercom etc..)
5. Provide final site concrete side walk improvements as shown.
6. Provide site restoration at all areas disturbed by construction..
7. Coordinate with authorities having jurisdiction on all approvals for occupancy.



OVERALL SITE PLAN
SCALE: 1" = 80'- 0"

1

NORTH

PROJECT TEAM

STRUCTURAL ENGINEER (FOUNDATIONS)
BRIGGS ENGINEERING
PO BOX 140537
GARDEN CITY, IDAHO
P: 208-871-0200
F: NONE
CONTACT: DEAN BRIGGS

ELECTRICAL ENGINEER
BCE ENGINEERS, INC.
6021 12th STREET E SUITE 200
TACOMA, WASHINGTON 98424
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F: 253-922-0896
CONTACT: CARRIE TAYLOR

CIVIL ENGINEER
AHBL
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101 EAST 26TH STREET, SUITE 300
TACOMA, WASHINGTON 98421
P 253-531-0206
F 253-531-9197
CONTACTS: RAY MOW, AIA

OWNER
RIVERVIEW SCHOOL DISTRICT No. 407
15510 1ST AVENUE NE
P.O. BOX 519
DUVALL, WA 98019
P: (425) 844-4500
F: (425) 844-4502
CONTACT: RUBY PEREZ

ERICKSON • McGOVERN Architects
Erickson McGovern P.L.L.C.
101 E. 26th Street, Suite 300, Tacoma, WA 98421

PROJECT INFORMATION SHEET

STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

7925 REGISTERED ARCHITECT
RAYMOND C. MOW
STATE OF WASHINGTON

Project: 2016-47
Drawn: SJT

BID	May 30, 2017

Sheet:

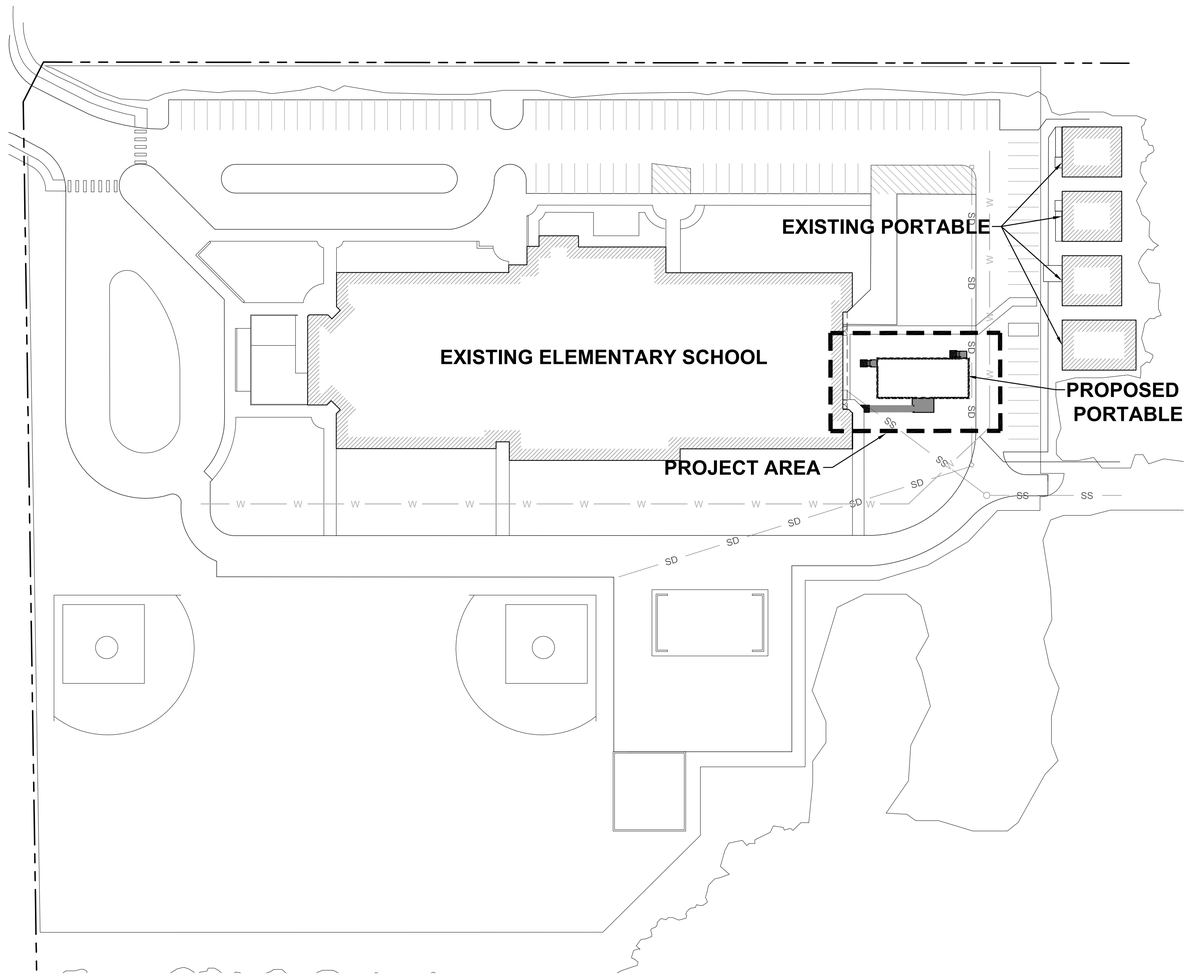
A0.00

Plotted: Jun 04, 2017 – 2:35pm File: X:\2016-47 Stillwater Elem Portable\6 Drawings\9 – Current\2016-47 A0.00.dwg By: RAY

STILLWATER ELEMENTARY SCHOOL PORTABLE

KING COUNTY, WASHINGTON

NE 1/4 SEC. 33, TWP 26 N., RNG. 7 E., W.M.



OWNER/APPLICANT

RIVERVIEW SCHOOL DISTRICT
15510 1ST AVE. NE
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CONTACT: SANDY BECHTEL
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PHONE: (253) 383-2422
CONTACT: DAVID NASON, PE
EMAIL: dnason@ahbl.com
CONTACT: NICK RHEAUME, PE
EMAIL: nrheaume@ahbl.com

ARCHITECT

ERICKSON MC GOVERN
101 E 26TH ST, TACOMA, WA 98421
PH: (253) 531-0206
CONTACT: RAY MOW
EMAIL: ray@ericksonmcgovern.com

SITE ADDRESS

11530 320TH AVE NE
CARNATION, WA 98014

PARCEL NUMBER

3326079040

TOPOGRAPHIC NOTE

THE EXISTING CULTURAL AND TOPOGRAPHIC DATA SHOWN ON THESE DRAWINGS HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, AHBL CANNOT ENSURE ACCURACY AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THAT INFORMATION OR FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.

TRENCH NOTE

IF WORKERS ENTER ANY TRENCH OR OTHER EXCAVATION FOUR OR MORE FEET IN DEPTH THAT DOES NOT MEET THE OPEN PIT REQUIREMENTS OF WSDOT SECTION 2-09.3(3)B, IT SHALL BE SHORED AND CRIBBED. THE CONTRACTOR ALONE SHALL BE RESPONSIBLE FOR WORKER SAFETY AND AHBL ASSUMES NO RESPONSIBILITY. ALL TRENCH SAFETY SYSTEMS SHALL MEET THE REQUIREMENTS OF THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT, CHAPTER 49.17 RCW. CHAPTER 49.17 RCW.

UTILITY NOTE

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES THAT INCUR DUE TO THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. AHBL ASSUMES NO LIABILITY FOR THE LOCATION OF UNDERGROUND UTILITIES.

FILL SPECIFICATION

FILL MATERIAL SHALL NOT CONTAIN PETROLEUM PRODUCTS, OR SUBSTANCES WHICH ARE HAZARDOUS, DANGEROUS, TOXIC, OR WHICH OTHERWISE VIOLATE ANY STATE, FEDERAL, OR LOCAL LAW, ORDINANCE, CODE, REGULATION, RULE, ORDER, OR STANDARD.

AUTOCAD FILE

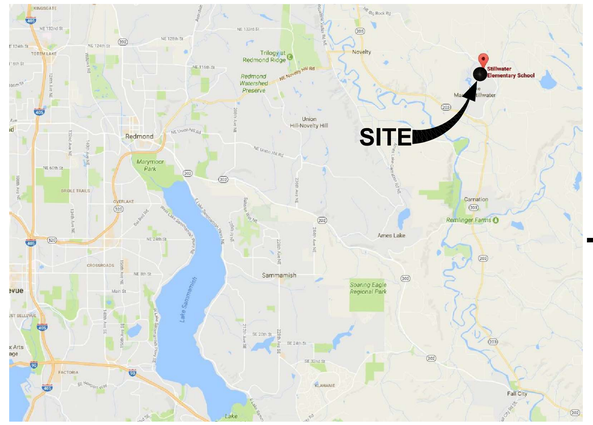
AN AUTOCAD DRAWING FILE IS AVAILABLE TO ASSIST WITH SITE LAYOUT. PLEASE NOTE THAT ELECTRONIC FILES ARE PROVIDED FOR CONTRACTOR'S CONVENIENCE AND SHALL NOT REPLACE NOR BE USED TO SUBSTITUTE THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT LAYOUT ACCORDING TO CONTRACT DOCUMENTS AND COST FOR ELECTRONIC AUTOCAD FILES.
PHONE: (253) 383-2422
FAX: (253) 383-2572
CONTACT: NICK RHEAUME, PE

N

GRAPHIC SCALE

0 25 50 100

1" = 50 FEET



VICINITY MAP

NOT TO SCALE

LEGEND:

EXISTING		PROPOSED
○	SANITARY SEWER CLEANOUT	●
	STORM CATCH BASIN	
○	DOWNSPOUT	● DS
	FIRE HYDRANT	
	BALL VALVE	
S	SANITARY SEWER LINE	S
P	ELECTRICAL LINE	
W	WATER LINE	W
	CEMENT CONCRETE	
	GRAVEL SURFACING	

SHEET INDEX

SHT. #	DESCRIPTION
C1.0	COVER SHEET
C1.1	DEMOLITION AND TESC PLAN
C1.2	PAVING AND UTILITY PLAN
C1.3	PAVING AND UTILITY NOTES AND DETAILS

ERICKSON • McGOVERN Architects
Erickson McGovern P.L.L.C.
101 E. 26th Street, Suite 300, Tacoma, WA 98421

COVER SHEET

STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

DOREEN S. GIFT
STATE OF WASHINGTON
23467
REGISTERED
PROFESSIONAL ENGINEER
04/11/17

Project: 2160792.10
Drawn:

PERMIT	04/11/17
Bid	May 30, 2017

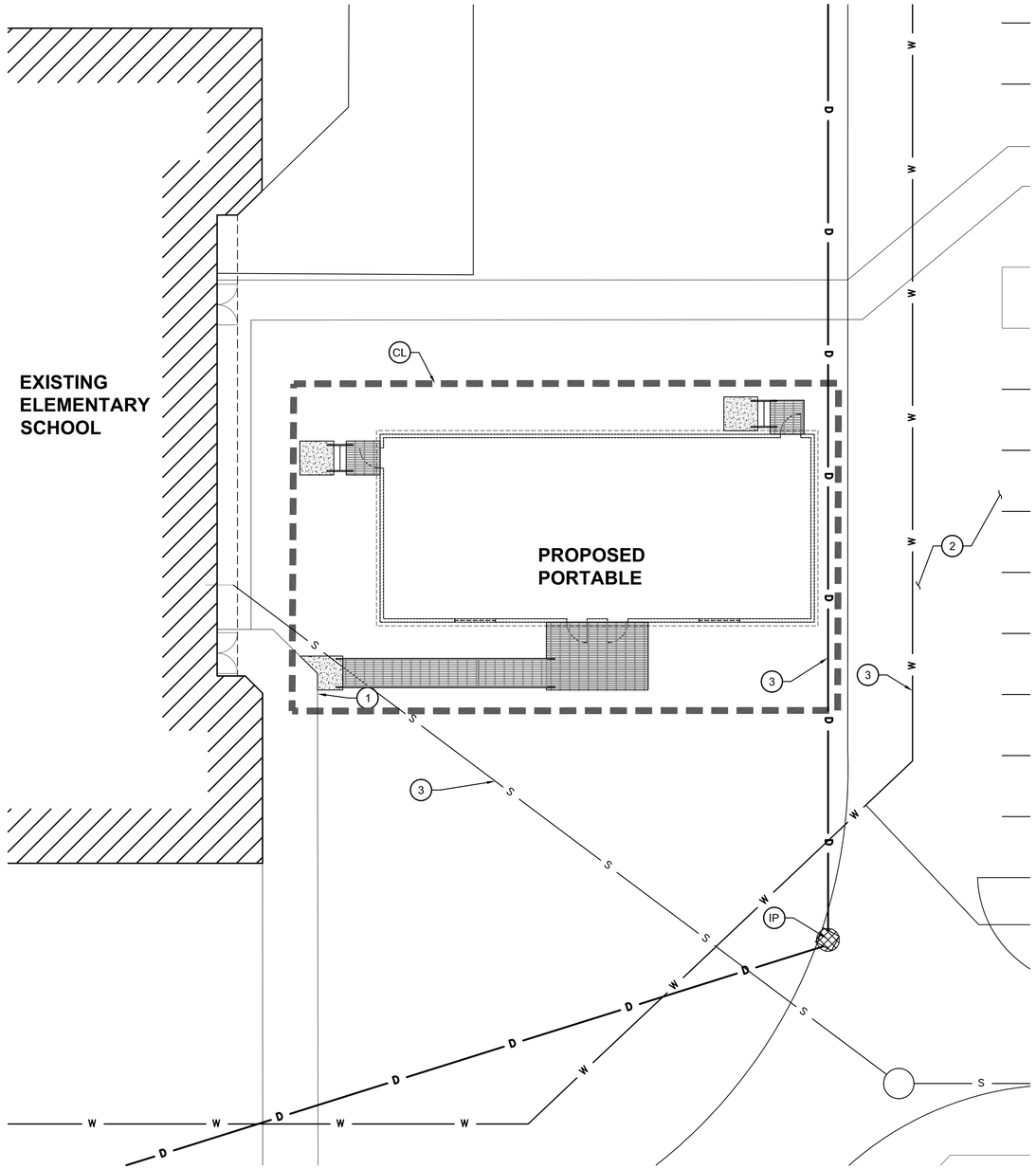
Sheet:

C1.0

1

Plotted: Apr 11, 2017 - 12:45pm File: Q:\2016\2160792\10_CIV\CAD\2160792-SH-COVR.dwg By: MFOSTER

STILLWATER ELEMENTARY SCHOOL PORTABLE
KING COUNTY, WASHINGTON
NE 1/4 SEC. 33, TWP 26 N., RNG. 7 E., W.M.



DEMOLITION NOTES:

1. CLEARING: IT IS THE INTENT OF THE WORK UNDER THIS CONTRACT TO CONDUCT ALL CLEARING NECESSARY TO BE ABLE TO COMPLETE ALL THE WORK OF THIS PROJECT.
2. CONTRACTOR SHALL LEGALLY DISPOSE OF THE OWNER'S PROPERTY, ALL DEMOLISHED AND REMOVED MATERIALS, UNLESS INDICATED OTHERWISE.
3. CONTRACTOR SHALL PROTECT EXISTING UTILITIES WITHIN THE WORK AREA AND RESTORE ANY UTILITIES DAMAGED DUE TO CONSTRUCTION.
4. CONTRACTOR SHALL MINIMIZE DUST GENERATION ONSITE BY SPRINKLING THE SITE WITH WATER UNTIL SURFACE IS WET.

TESC NOTES:

1. INSTALL INLET PROTECTION IN ALL EXISTING CATCH BASINS WITHIN 150 FEET DOWNSTREAM OF THE PROJECT.
2. PREVENT EROSION AND SEDIMENT TRACKING OUTSIDE THE CLEARING/PROJECT LIMITS. IMMEDIATELY SWEEP ALL SEDIMENT TRACKED OUTSIDE CLEARING/PROJECT LIMITS.
3. CONTRACTOR SHALL CLEARLY MARK CLEARING/PROJECT LIMITS.
4. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO PRE-PROJECT CONDITIONS. BARE SOILS SHALL BE STABILIZED w/ HYDROSEED PRIOR TO FINAL COMPLETION.

KEY NOTES:

1. PROTECT EXISTING SIDEWALK TO REMAIN.
2. PROTECT EXISTING ASPHALT TO REMAIN.
3. PROTECT EXISTING UTILITY LINES TO REMAIN

TESC LEGEND:

IP INLET PROTECTION (1 / C1.1)

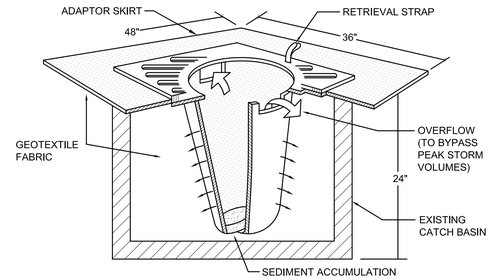
CL CLEARING/PROJECT LIMITS

N

GRAPHIC SCALE

0 5 10 20

1" = 10 FEET



NOTES:
1. FILTERS SHALL BE INSPECTED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN 1/3 FULL.
2. INSTALL INLET PROTECTION IN ALL NEW STORM STRUCTURES THAT WILL COLLECT STORMWATER AS THEY ARE INSTALLED.

1 INLET PROTECTION
NOT TO SCALE

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Erickson McGovern P.L.L.C.
101 E. 26th Street, Suite 300, Tacoma, WA 98421

DEMOLITION AND TESC PLAN

STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

DOREEN S. GAY — STATE OF WASHINGTON — 21467 — REGISTERED PROFESSIONAL ENGINEER — 04/11/17

Project: 2160792.10
Drawn:

PERMIT	04/11/17
Bid	May 30, 2017

Sheet:

C1.1

2

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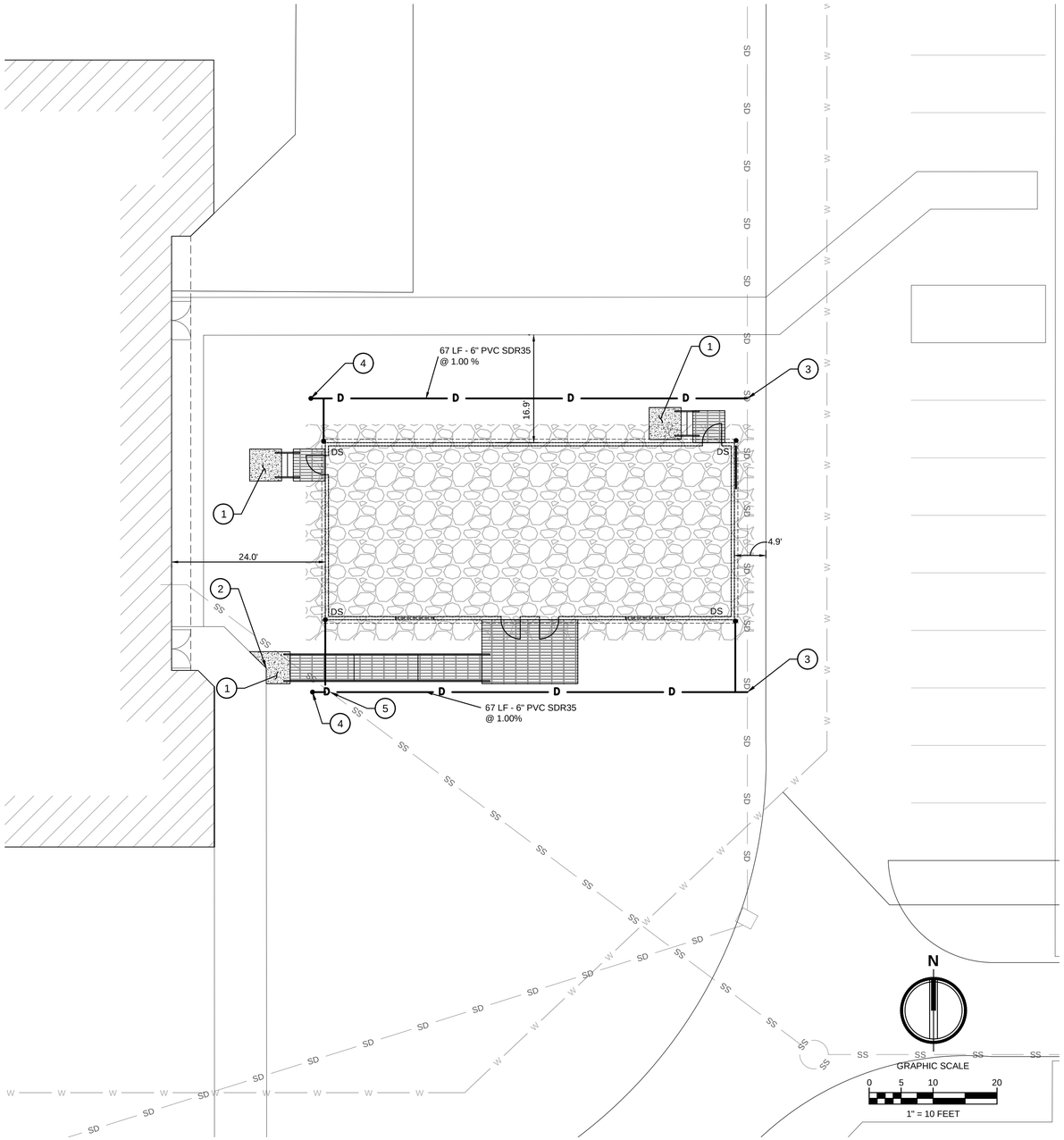
STILLWATER ELEMENTARY SCHOOL PORTABLE
KING COUNTY, WASHINGTON
NE 1/4 SEC. 33, TWP 26 N., RNG. 7 E., W.M.



LEGEND:

EXISTING		PROPOSED
○	STORM CLEANOUT	● 5 C1.3
	STORM CATCH BASIN	
○	DOWNSPOUT	● DS 2 C1.3
	FIRE HYDRANT	
	BALL VALVE	
SD	STORM DRAINAGE LINE	D 3 C1.3
W	WATER LINE	
P	ELECTRICAL LINE	
	CEMENT CONCRETE	1 C1.3
	GRAVEL SURFACING	4 C1.3

STORMWATER NOTES:

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH COUNTY STANDARDS AND THE MOST CURRENT COPY OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (WSDOT/APWA) AND AS AMENDED BY THE COUNTY OR THE STATE.
2. CONNECT ALL DOWNSPOUTS TO STORM SYSTEM AT 1.0% MINIMUM.
3. ALL STORM LINES SHALL HAVE 1' MINIMUM COVER TO TOP OF PIPE.
4. CALL THE UNDERGROUND LOCATE LINE 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATIONS.
5. ALL EROSION CONTROL AND STORMWATER FACILITIES SHALL BE REGULARLY INSPECTED AND MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION.

KEY NOTES:

1. CONCRETE PAD SLOPE NOT TO EXCEED 2% IN ANY DIRECTION
2. EDGE OF CONCRETE TO MATCH EXISTING SIDEWALK
3. CONNECT TO EXISTING STORM SYSTEM. CONTRACTOR SHALL POTHOLE AND VERIFY CONNECTION IE AT THE START OF THE PROJECT AND NOTIFY ENGINEER OF ANY CONFLICTS.
4. SDCO 5 C1.3
5. PROVIDE 9" MINIMUM SEPARATION BETWEEN UTILITIES. CONTRACTOR SHALL POTHOLE AND VERIFY AT THE START OF THE PROJECT AND NOTIFY ENGINEER OF ANY CONFLICTS.

ERICKSON • McGOVERN
Erickson McGovern P.L.L.C.
101 E. 26th Street, Suite 300, Tacoma, WA 98421

PAVING AND UTILITY PLAN

STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

DARREN S. GALL
STATE OF WASHINGTON
23467
REGISTERED
PROFESSIONAL ENGINEER
04/11/17

Project: 2160792.10
Drawn:

PERMIT	04/11/17
Bid	May 30, 2017

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3

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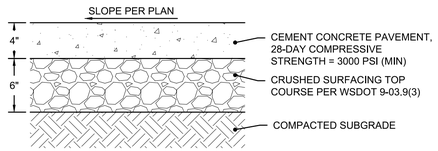
STILLWATER ELEMENTARY SCHOOL PORTABLE

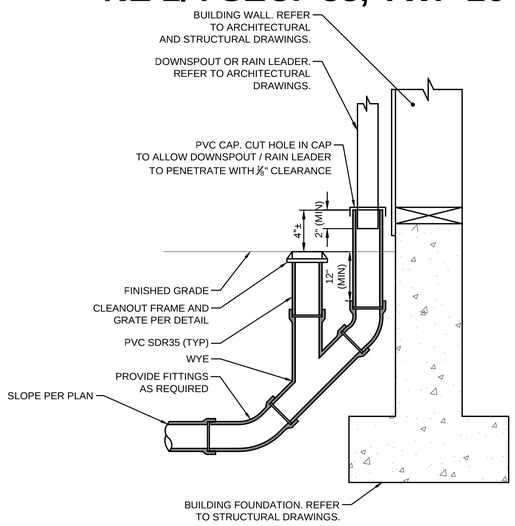
KING COUNTY, WASHINGTON

NE 1/4 SEC. 33, TWP 26 N., RNG. 7 E., W.M.

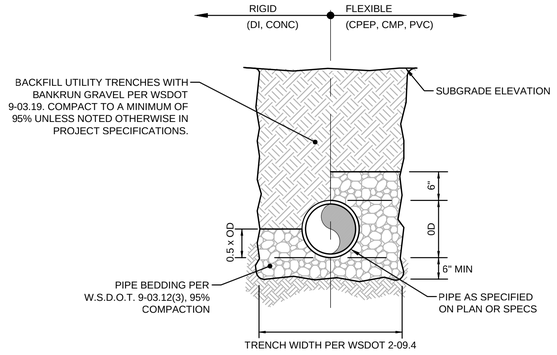


NOTES:
1. DEPTHS INDICATED ARE COMPACTED THICKNESS.
2. ALL BASE COURSES (INCLUDING CRUSHED SURFACING TOP COURSE AND SUBGRADE) SHALL BE COMPACTED TO A FIRM AND UNYIELDING STATE AND SHALL BE APPROVED BY THE CITY ENGINEER.

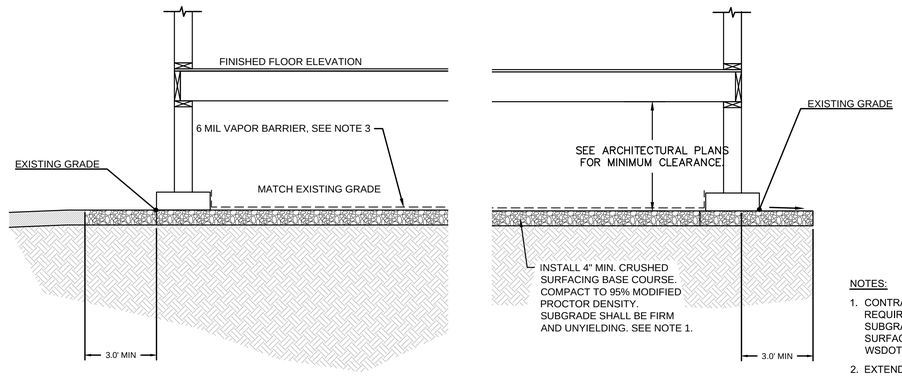
1 CEMENT CONCRETE PAD
NOT TO SCALE



2 ROOF DOWNSPOUT CONNECTION
NOT TO SCALE

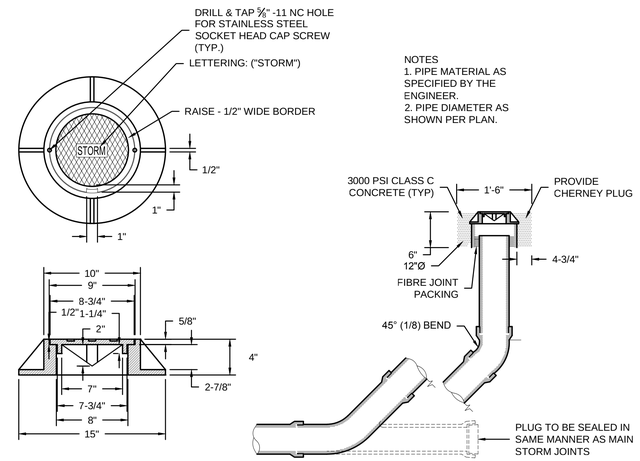


3 PIPE BEDDING AND TRENCH BACKFILL
NOT TO SCALE



4 TYPICAL PORTABLE PAD
NOT TO SCALE

NOTES:
1. CONTRACTOR SHALL OVEREXCAVATE WHERE REQUIRED TO PROVIDE FIRM AND UNYIELDING SUBGRADE AND PROVIDE CRUSHED SURFACING BASE COURSE CONFORMING TO WSDOT 9-03.9(3), 95% COMPACTION.
2. EXTEND FOUNDATION MATERIAL 3.0' BEYOND SIDES OF PORTABLE EXCEPT WHERE INDICATED ON THE PLAN.
3. SEE ARCHITECTUAL PLANS FOR PORTABLE FOUNDATION AND STRUCTURE.
4. CONTRACTOR SHALL COMPACT NATIVE SOIL OR FILL MATERIAL UNDER FOUNDATION MATERIAL TO 95%.
5. SOIL SHALL NOT BE PLACED AGAINST SKIRTING UNLESS OTHERWISE INDICATED.



5 STORM CLEANOUT DRAIN
NOT TO SCALE

ERICKSON • McGOVERN
Erickson McGovern P.L.L.C.
101 E. 26th Street, Suite 300, Tacoma, WA 98421

PAVING AND UTILTY NOTES AND DETAILS

STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

DARREN S. GAY
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04/11/17

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Sheet:

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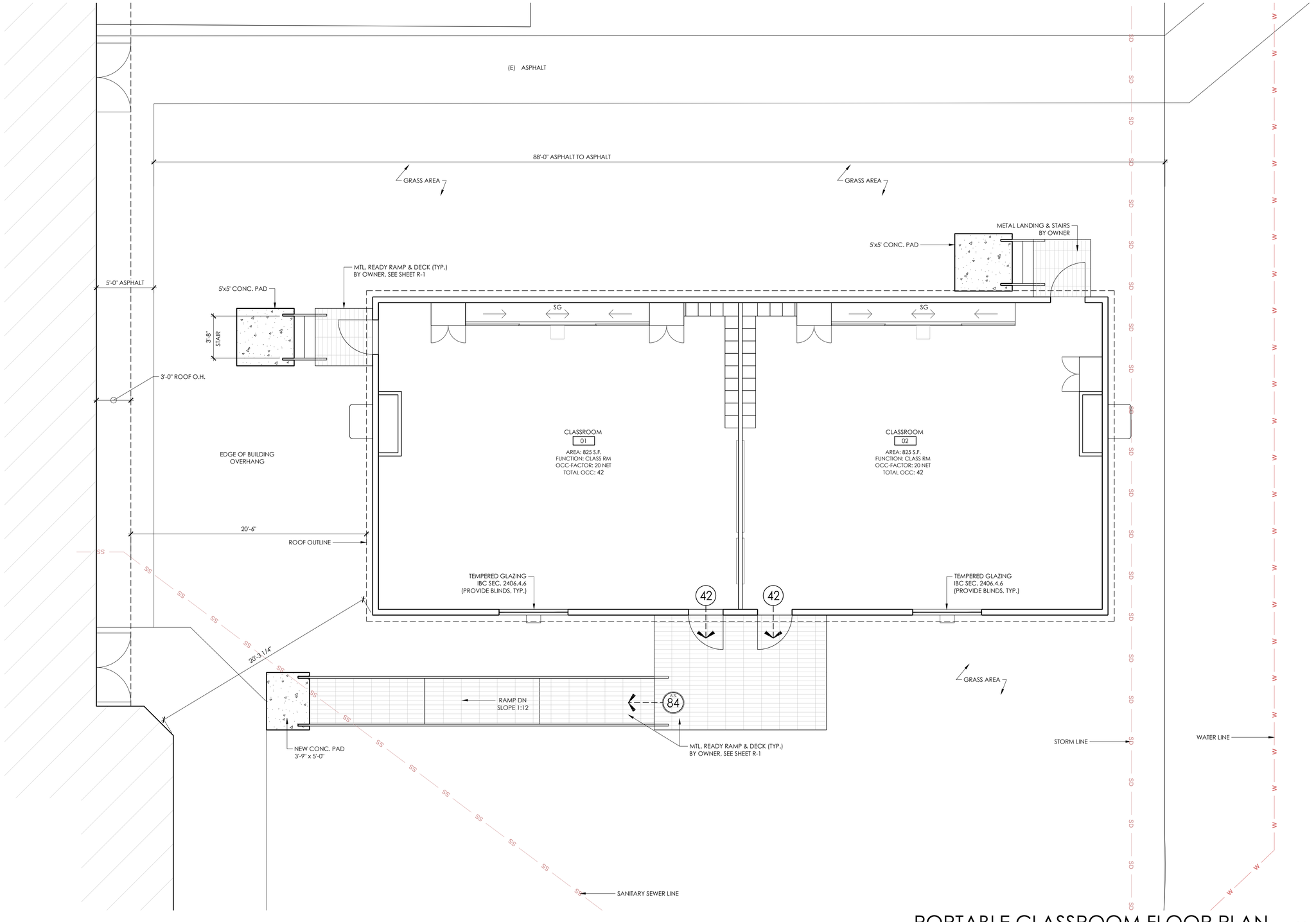

PORTABLE CLASSROOM FLOOR PLAN

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

1

NORTH

ERICKSON • McGOVERN Architects
Erickson McGovern P.L.L.C.
101 E. 24th Street, Suite 300, Tacoma, WA 98421

PORTABLE CLASSROOM FLOOR PLAN

STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

7925 REGISTERED ARCHITECT
RAYMOND C. MOW
STATE OF WASHINGTON

Project: 2016-47
Drawn: JTM
Bid May 30, 2017

Sheet:

A2.00

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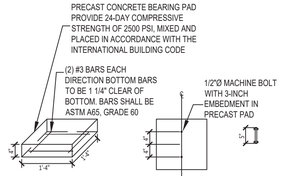
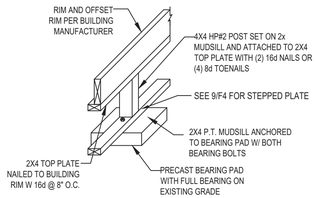
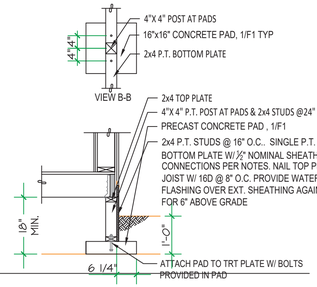
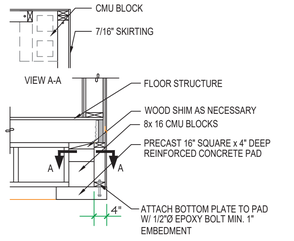


1 F1 **PERIMETER BEARING PAD**
Scale: 1/2" = 1'-0"

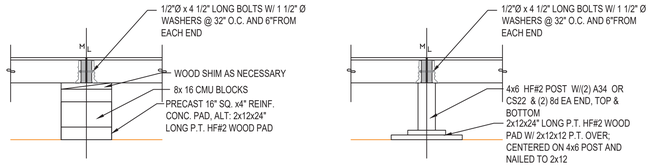




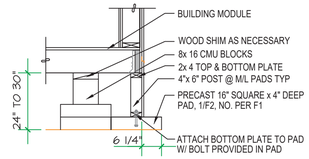
2 F1 **PERIMETER SUPPORT**
Scale: 1/2" = 1'-0"



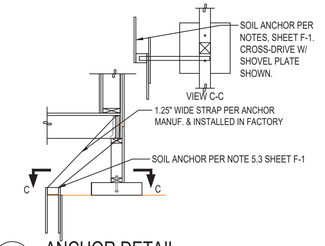
2A F1 **OPTIONAL CORNER DETAIL**
Scale: 1/2" = 1'-0"



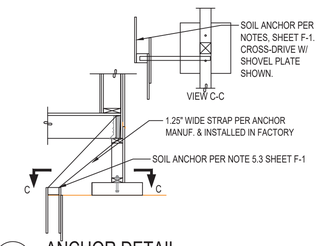
3 F1 **M/L RIM JOIST SUPPORT OPTIONS**
Scale: 1/2" = 1'-0"



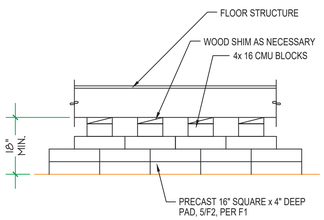
4 F1 **EXTERIOR MATELINE COLUMN**
Scale: 1/2" = 1'-0"

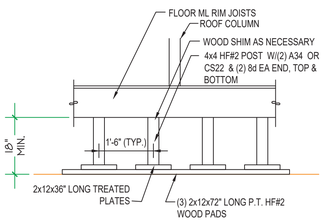


5 F1 **ANCHOR DETAIL**
Scale: 3/8" = 1'-0"



5A F1 **ANCHOR DETAIL**
Scale: 3/8" = 1'-0"





6 F1 **INTERIOR MATELINE COLUMN SUPPORT OPTIONS**
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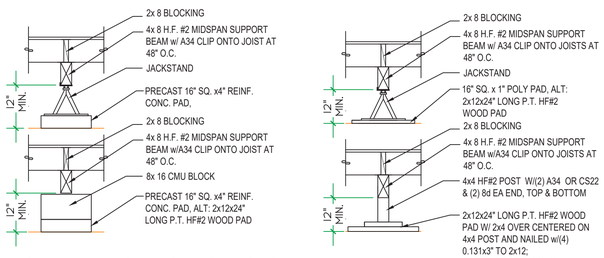

7 F1 **MID-SPAN BEAM SUPPORT OPTIONS**
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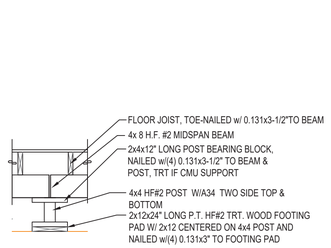

7A F1 **MID-SPAN BEAM SPLICE**
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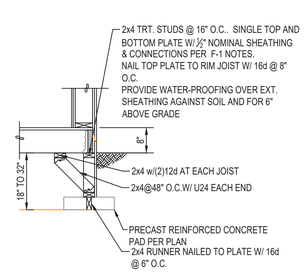
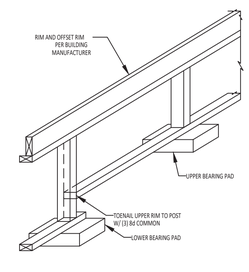
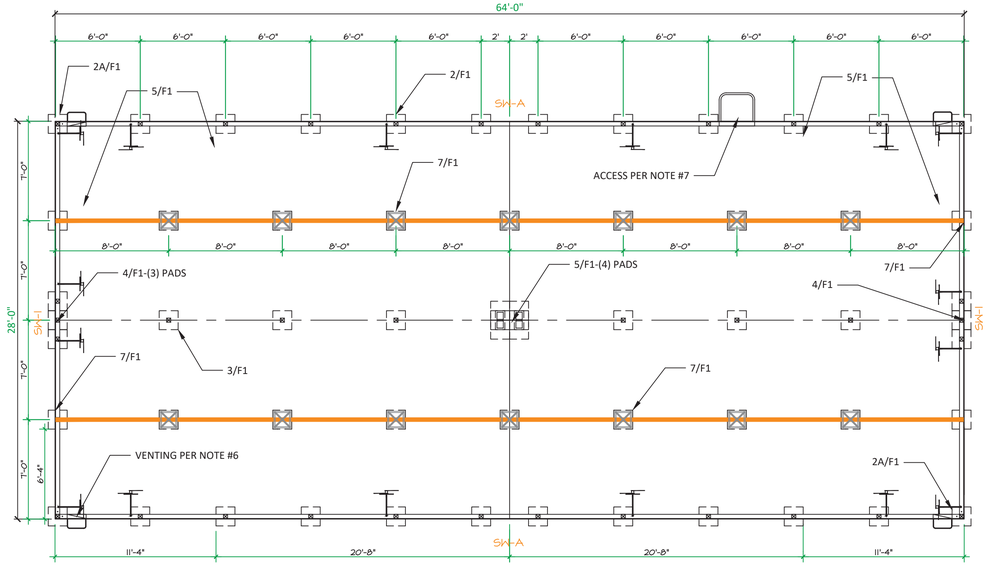


8 F1 **FROST RESISTANT FDN WALL**
Scale: 1/2" = 1'-0"



9 F1 **STEPPED BOTTOM PLATE**
Scale: 1/2" = 1'-0"



A 28x64 DOUBLE CLASSROOM - FOUNDATION PLAN
3/16" = 1'-0"

STRUCTURAL NOTES: CLASSROOM-MODULAR

1. DESIGN INFORMATION & LOADING:
   - 1.1. BUILDING CODE — IBC, 2015 EDITION
   - 1.2. ROOF LIVE LOAD — 25 PSF, SNOW
   - 1.3. FLOOR LIVE LOAD — 40 PSF OR 1,000# CONC.
   - 1.4. WIND CRITERION — 110 MPH, EXP B, Kzt=1.0
   - 1.5. SEISMIC CRITERION — SDS=0.800, CLASS D, CATEGORY, D
   - 1.6. ASSUMED SOIL BEARING — 1,500 PSF VERIFY W/LOCAL BUILDING OFFICIAL)
2. CONCRETE:
   - 2.1. COMPRESSIVE STRENGTH — 2,500 PSI
   - 2.2. REINFORCING YIELD — 60 KSI
3. MASONRY:
   - 3.1. 8x16x8 UNITS — ASTM C-90, GRADE N
   - 3.2. SET UNITS W/CORES VERTICAL & NO MORE THAN 3 HIGH, PER PLAN
4. WOOD:
   - 4.1. ALL WOOD MEMBERS OF THE FOUNDATION SYSTEM SHALL BE SPF-STD OR BETTER.
   - 4.2. ALL WOOD IN CONTACT WITH SOIL SHALL BE PRESSURE TREATED WITH CONNECTORS MEETING CODE.
5. SPECIALTY ITEMS:
   - 5.1. SPECIALTY ITEMS TO BE "MINUTE MAN ANCHORS, INC." 305 W. KING ST., E. FLAT ROCK, NC 28726OR EQUIVALENT. ITEM MODEL # SHALL BE AS DESIGNATED OR APPROVED EQUAL.
   - 5.2. METAL PIERS TO BE CAPABLE OF SUPPORTING 6,000#
   - 5.3. SOIL ANCHORS SHALL BE: DRIVEN ANCHOR W/ STABILIZER PLATE ("AZTEX OR MMA-35 W/MMASD2); AUGAR-TYPE SET VERTICAL W/STABILIZER CAP (MMA-92) WITH ULTIMATE DESIGN LOAD OF 4750#. INSTALL GROUND PORTION OF THE ANCHOR PRIOR TO SETTING THE BUILDING. CONNECT ANCHOR TIES TO BUILDING ONLY AFTER BUILDING IS FULLY BLOCKED AND LEVELED.
   - 5.4. INSTALL ALL SPECIALTY ITEMS PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
6. VENTING:
   - 6.1. PROVIDE UNDER FLOOR VENTILATION PER IBC CODE AND LOCAL REQUIREMENTS AT 1 NET SF OF VENTILATION PER 150 SF OF FLOOR AREA. SEE CALCULATIONS THIS SHEET
   - 6.2. IF A SUITABLE VAPOR RETARDER IS INSTALLED THE RATIO MAY BE INCREASED TO 1/500, IF ACCEPTABLE TO THE LOCAL BUILDING OFFICIAL.
7. ACCESS:
   - 7.1. PROVIDE ACCESS TO THE UNDER FLOOR AREA PER THE CODE.
   - 7.2. PROVIDE 18" MIN. CLEARANCE FROM SOIL TO UNDERSIDE OF ANY UNTREATED WOOD MEMBER.
   - 7.3. PROVIDE 12" MIN. CLEARANCE UNDER FROM SOIL TO UNDERSIDE OF ALL BUILDING MEMBERS.
8. SITE CONDITIONS:
   - 8.1. FOUNDATION SUBGRADE TO BE A MINIMUM OF 4" OF COMPACTED ROAD-MIX GRAVEL OVER STABLE UNDISTURBED NATIVE SOILS OR STRUCTURAL FILL, COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY PER ASTM D-698.
   - 8.2. SLOPE FINISHED GRADE AWAY FROM THE BUILDING FOUNDATION AT A MIN. GRADE OF 2%.
9. FOUNDATION SHEAR WALL:
   - 9.1. ALL LUMBER AND SHEATHING SHALL BE PRESSURE TREATED FOR EXPOSURE.
   - 9.2. ALL CONNECTORS SHALL BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL.
   - 9.3. SHEATHING: ½" or 15/32" PLYWD (PS-1); 15/32" OR 7/16" OSB (PS-2)
   - 9.4. FRAMING: HF-STUD, 16" O.C., PRESSURE TREATED FOR EXPOSURE
   - 9.5. BOTTOM PLATE: ATTACH BOTTOM PLATE TO CONCRETE PADS W/BOLTS PROVIDED.
   - 9.6. SHEAR NAILING: LAP SHEATHING OVER FLOOR RIM JOISTS, STUDS & BOTTOM PLATE. SHEAR NAIL SHEATHING AS INDICATED BELOW:
     - 9.6.1. SW-1: 8d @ 4" O.C. EDGES & 12" O.C. FIELD
     - 9.6.2. SW-A: 8d @ 6" O.C. EDGES & 12" O.C. FIELD

Bid May 30, 2017

DEAN W. BRIGGS
STATE OF WASHINGTON
10376
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
RENEWS: 09/27/2017

Aries Building SYSTEMS

DEAN W. BRIGGS, PE
BRIGGS
SERVING TEH WESTERN UNITES STATES
PO BOX 140537, GARDEN CITY, ID 83714 - (208) 871-0200

RIVERVIEW SCHOOL DISTRICT
STILLWATER ELEMENTARY SCHOOL
11530 320TH AVE N.E., CARNATION, WA 98014

28x64 MODULAR CLASSROOM - SW FOUNDATION
PLAN/NOTES/DETAILS

SCALE: AS SHOWN
DWG NO. 201707.01.1-F1
DWG DATE: JANUARY 2017
REVISION DATES: 01/29/2017

F1

SHEET : 1 OF 1

STEVE YANTZER

ELECTRICAL SPECIFICATIONS

1. IT IS THE INTENTION OF THESE SPECIFICATIONS AND THE ACCOMPANYING DRAWINGS TO DESCRIBE AND PROVIDE FOR THE FURNISHING, INSTALLING, TESTING AND PLACING IN SATISFACTORY AND SUCCESSFUL OPERATION ALL EQUIPMENT, MATERIALS, DEVICES AND NECESSARY APPURTENANCES TO PROVIDE A COMPLETE ELECTRICAL SYSTEM.

2. THE WORK SHALL COMPLY WITH THE LATEST EDITION OF THE APPLICABLE STANDARDS AND CODES OF THE FOLLOWING:

   NEC NATIONAL ELECTRICAL CODE
   WAC296-46B WASHINGTON STATE ELECTRICAL CODE
   NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
   NFPA NATIONAL FIRE PROTECTION ASSOCIATION
   U.L. UNDERWRITERS LABORATORIES INC.
   FEDERAL, STATE AND LOCAL BUILDING CODES
   ETL ELECTRICAL TESTING LABORATORIES

3. THE ELECTRICAL DRAWINGS ARE INTENDED TO SERVE AS WORKING DRAWINGS FOR GENERAL LAYOUT. THE EQUIPMENT LAYOUT IS DIAGRAMMATIC AND UNLESS SPECIFICALLY DIMENSIONED OR DETAILED, DOES NOT INDICATE ALL FITTINGS, HARDWARE OR APPURTENANCES REQUIRED FOR A COMPLETE OPERATING INSTALLATION.

4. ALL ELECTRICAL MATERIALS SHALL BE KEPT STORED IN AN ORDERLY FASHION PROTECTED FROM HEAT, COLD, AND THE WEATHER.

5. ALL DEBRIS SHALL BE REMOVED FROM PREMISES DURING WORK, AS DIRECTED, AND AT COMPLETION OF JOB.

6. TEMPORARY OR INTERIM USE OF ANY AND ALL PORTIONS OF THE ELECTRICAL SYSTEM SHALL BE UNDER THE SUPERVISION OF THE ELECTRICAL CONTRACTOR.

7. THE CONTRACTOR SHALL MAINTAIN, IN ADDITION TO ANY REFERENCE DRAWINGS, AN AS-BUILT SET OF PRINTS, ON WHICH ALL DEVIATIONS FROM THE ORIGINAL DESIGN SHALL BE DRAFTED IN A NEAT, LEGIBLE MANNER WITH RED COLORED PENCIL. THIS RED LINED SET SHALL IDENTIFY ALL DRAWING REVISIONS INCLUDING ADDENDA ITEMS, CHANGE ORDERS, AND CONTRACTOR REVISIONS. THE CONTRACTOR IS RESPONSIBLE TO REVISE PANEL SCHEDULES AND LOAD CALCULATIONS AS REQUIRED.

8. UPON COMPLETION OF THE ELECTRICAL WORK, THE CONTRACTOR SHALL DELIVER THE RED LINED DRAWINGS AND ONE SET OF NEATLY DRAFTED AS-BUILT DRAWINGS TO THE ENGINEER FOR TRANSMITTAL THROUGH THE ENGINEER TO THE OWNER.

9. PROVIDE A WRITTEN WARRANTY THAT THE ELECTRICAL WORK IS FREE FROM MECHANICAL AND ELECTRICAL DEFECTS. CONTRACTOR SHALL REPLACE AND REPAIR, TO THE SATISFACTION OF THE ENGINEER, ANY PARTS OF THE INSTALLATION WHICH MAY FAIL WITHIN A PERIOD OF 12 MONTHS AFTER THE DATE OF SUBSTANTIAL COMPLETION, PROVIDED THAT SUCH FAILURE IS DUE TO DEFECTS IN MATERIAL OR WORKMANSHIP, OR FAILURE TO FOLLOW THE SPECIFICATIONS AND DRAWINGS.

10. UPON COMPLETION OF THE ELECTRICAL WORK, THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS FOR PROJECT CLOSEOUT.

11. ALL MATERIALS MUST BE OF THE QUALITY HEREIN SPECIFIED. ALL MATERIALS SHALL BE NEW, OF THE BEST QUALITY AND FREE FROM DEFECTS. THEY SHALL BE DESIGNED TO ENSURE SATISFACTORY OPERATION AND OPERATIONAL LIFE IN THE ENVIRONMENTAL CONDITIONS WHICH WILL PREVAIL WHERE THEY ARE BEING INSTALLED.

12. EACH TYPE OF MATERIAL SHALL BE OF THE SAME MAKE AND QUALITY. THE MATERIALS FURNISHED SHALL BE STANDARD PRODUCTS OF THE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH EQUIPMENT AND SHALL BE THE MANUFACTURER'S LATEST STANDARD DESIGN.

13. ALL MATERIALS SHALL BE U.L. OR E.T.L. LISTED FOR THE PURPOSE FOR WHICH THEY ARE USED.

14. EQUIPMENT IN COMPLIANCE WITH U.L. STANDARDS BUT NOT BEARING THEIR LABEL IS NOT ACCEPTABLE. IF THE MANUFACTURER CANNOT ARRANGE FOR LABELING OF AN ASSEMBLED UNIT AT THE FACTORY THE UNIT SHALL BE FIELD EVALUATED PER THE WASHINGTON STATE ADMINISTRATIVE CODE (WAC) AND THE ELECTRICAL INSPECTOR'S REQUIREMENTS.

15. ALL THE SYSTEMS MENTIONED SHALL BE COMPLETE AND OPERATIONAL IN EVERY DETAIL EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE. MENTION OF CERTAIN MATERIALS IN THESE SPECIFICATIONS SHALL NOT BE CONSTRUED AS RELEASING THE CONTRACTOR FROM FURNISHING SUCH ADDITIONAL MATERIALS AND PERFORMING ALL LABOR REQUIRED TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.

16. FLEXIBLE CONDUIT SHALL BE USED ONLY FOR CONNECTION TO MOTORS AND EQUIPMENT SUBJECT TO VIBRATION WITH 90 DEGREES LOOP MINIMUM TO ALLOW FOR ISOLATION. USE LIQUID TIGHT FOR PUMPS, EQUIPMENT WHICH IS REGULARLY WASHED DOWN, AND EQUIPMENT IN DAMP LOCATIONS. PROVIDE GROUND WIRE WHEN REQUIRED BY CODE.

17. MOTOR CIRCUITS: ALL INDIVIDUAL MOTOR CIRCUITS WITH FULL LOAD AMPERES RATINGS (FLA) OF 480 AMPERES OR LESS SHALL BE PROTECTED BY BUSSMANN LOW-PEAK DUAL-ELEMENT FUSES LPN-RK (250 VOLTS) OR LPS-RK (600 VOLTS). LARGER H.P. MOTORS SHALL BE PROTECTED BY BUSSMANN TYPE KRP-C LOW-PEAK TIME-DELAY FUSES OF THE RATINGS SHOWN ON THE DRAWINGS. ALL OTHER MOTORS, (SUCH AS 1.0 SERVICE FACTOR MOTORS) SHALL BE PROTECTED BY BUSSMANN LOW-PEAK DUAL-ELEMENT FUSES LPN-RK (250 VOLTS) OR LPS-RK (600 VOLTS) INSTALLED IN RATINGS OF APPROXIMATELY 115% OF THE MOTOR FULL LOAD CURRENT EXCEPT AS NOTED ABOVE. THE FUSES SHALL BE UL CLASS RK1 DUAL ELEMENT TIME DELAY OR CLASS L.

18. CAREFUL CONSIDERATION SHALL BE GIVEN TO CLEARANCES UNDER AND OVER BEAMS, PIPES AND DUCTS, TO PROVIDE PROPER HEADROOM IN ALL CASES. CHECK DRAWINGS TO DETERMINE HEIGHTS OF ALL SUSPENDED CEILINGS AND SIZE OF PIPE SHAFTS WHERE RACEWAY AND WIRE-WAYS SHALL RUN. COORDINATE INSTALLATION OF DIVISION 26 WIRING AND EQUIPMENT WITH DIVISION 23 AND OTHER TRADES. WHERE INSUFFICIENT ROOM FOR PROPER INSTALLATION APPEARS, OBTAIN CLARIFICATION FROM ENGINEER BEFORE ANY INSTALLATION IS BEGUN.

19. THE CONTRACTOR IS RESPONSIBLE FOR ACCOMPLISHING ELECTRICAL WORK. THE WORK SHALL COORDINATE WITH THAT OF THE OTHER CONTRACTORS AND/OR OTHER TRADES DOING WORK IN THE BUILDING AND SHALL EXAMINE ALL DRAWINGS, INCLUDING THE SEVERAL DIVISIONS OF MECHANICAL FOR CONSTRUCTION DETAILS AND NECESSARY COORDINATION. SPECIFIC LOCATIONS OF CONSTRUCTION FEATURES AND EQUIPMENT SHALL BE OBTAINED FROM THE CONTRACT DOCUMENTS, FIELD MEASUREMENTS, AND/OR FROM THE TRADE PROVIDING THE MATERIAL OR EQUIPMENT. NO EXTRA COSTS WILL BE ALLOWED FOR FAILURE TO OBTAIN THIS INFORMATION.

20. THE CONTRACTOR WILL NOT BE PAID FOR WORK REQUIRING REINSTALLATION DUE TO LACK OF COORDINATION OR INTERFERENCE WITH OTHER CONTRACTORS OR TRADES. THIS INCLUDES, BUT IS NOT LIMITED TO, REMOVING, REPLACING, RELOCATING, CUTTING, PATCHING, AND FINISHING.

21. PROVIDE IDENTIFYING ENGRAVED BAKELITE NAMEPLATE ON ALL EQUIPMENT, INCLUDING PULL BOXES, TO CLEARLY INDICATE ITS USE, AREA SERVED, CIRCUIT IDENTIFICATION, VOLTAGE, AND ANY OTHER USEFUL DATA.

22. PROVIDE ACCESS PANELS AS NEEDED FOR PULL BOXES AND EQUIPMENT LOCATED ABOVE CEILING OR BEHIND WALLS.

23. ALL PENETRATION THROUGH WALL MUST BE MADE SUCH AS TO RETAIN THE WALL OR FLOOR RATING.

24. PROVIDE HANGERS, BRACKETS, AND SUSPENSION RODS AND SUPPLEMENTARY STEEL TO SUPPORT EQUIPMENT.

GENERAL NOTES (APPLY TO ALL DRAWINGS)

1. SEE EACH DRAWING FOR ADDITIONAL GENERAL NOTES THAT ARE SPECIFIC TO AN AREA OR DRAWING.

2. PRIOR TO BIDDING THE CONTRACTOR/INSTALLING VENDOR IS RESPONSIBLE TO VERIFY ALL CMU/CONCRETE WALLS, BRICK WALLS, EXISTING UNDERGROUND CONDUIT CAPACITIES, CABLE ROUTING AND ALL WORK REQUIRED TO FACILITATE A COMPLETE AND FULLY FUNCTIONAL SYSTEM. ALL WALLS SHALL BE CORE DRILLED AS REQUIRED.

3. PROVIDE CORE DRILLING AS REQUIRED TO ACCOMMODATE NEW WORK. CORE DRILLED HOLES CAN NOT PENETRATE THROUGH ANY EXISTING REBAR AND CONDUIT CONTAINED IN THE EXISTING CONCRETE SLAB OR WALLS. CORE DRILL LOCATIONS MAY NEED TO BE MODIFIED TO ACCOMMODATE EXISTING OBSTRUCTIONS CONTAINED WITHIN THE FLOOR OR WALL. NEVER CORE DRILL A STRUCTURAL BEAM OR MODIFY THE STRUCTURAL INTEGRITY OF THE BUILDING. PROVIDE WEATHERPROOF SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH EXTERIOR WALLS.

4. ALL JUNCTION BOXES SHALL BE SIZED PER NEC, UNLESS A LARGER SIZE IS IDENTIFIED ON THE PLANS. PROVIDE SECURITY SCREWS FOR JUNCTION BOXES LOCATED IN AREAS THAT ARE EXPOSED TO THE PUBLIC, STUDENTS, OR SCHOOL STAFF.

5. ONLY BRANCH CIRCUIT HOMERUNS ARE SHOWN WITH NUMBER OF CONDUCTORS/WIRES. E.C. SHALL PROVIDE ALL REQUIRED CONDUCTORS/WIRES TO ALL DEVICES AS NECESSARY IN ORDER TO INSTALL ALL CIRCUITS, SWITCHING AND GROUNDING COMPLETE. PANEL CIRCUIT NUMBERS ARE SHOWN TO CLARIFY CIRCUITING CONFIGURATION. CONDUCTOR HASH MARKS ARE NOT SHOWN FOR #12 WIRE, #10 NEUTRALS SWITCH LEGS OR GROUNDING CONDUCTORS BETWEEN DEVICES.

6. SEAL ALL WALL PENETRATIONS.

7. FIELD VERIFY DIMENSIONS AS DISTANCES MAY NOT BE EXACT.

8. ALL EXPOSED CONDUITS SHALL BE PAINTED TO MATCH ADJACENT SURFACES, ROUTED TIGHT TO WALL, AND LOCATED AS INCONSPICUOUSLY AS POSSIBLE. ALL EXPOSED EXTERIOR CONDUIT SHALL BE GAVANIZED RIGID STEEL.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	LIGHTING
	RECESSED FLUORESCENT LIGHT FIXTURE, PROVIDED WITH PORTABLES.
	TELEVISION AND COMMUNICATION SYSTEM
	COMMUNICATION / DATA JUNCTION BOX PROVIDED WITH PORTABLES, DISTRICT TO PROVIDE CONNECTIONS
	RECEPTACLES
	DUPLEX RECEPTACLE
G	DUPLEX RECEPTACLE, G INDICATES GROUND FAULT CIRCUIT INTERRUPTER
	EQUIPMENT AND WIRING
	CONDUIT STUB OUT (PROVIDE CONCRETE MARKER ON EXTERIOR)
	DEDICATED CONDUIT HOMERUN TO PANEL & CIRCUIT NUMBERS AS INDICATED ON PLANS
	RACEWAY CONCEALED IN WALL OR CEILING
	RACEWAY CONCEALED UNDERGROUND
	MARKS INDICATE NUMBER OF #12 AWG UNLESS NOTED OTHERWISE
	120/208 VOLT PANELBOARD (OR AT RATED VOLTAGE AS NOTED)
	MAIN DISTRIBUTION BOARD
HH	HANDHOLE
	FIRE ALARM SYSTEM
	SMOKE DETECTOR WITH BASE
	HEAT DETECTOR - RATE OF RISE AND FIXED TEMPERATURE TYPE
P	PULL STATION - DISTRICT TO PROVIDE AND INSTALL
	COMBINATION HORN/STROBE - DISTRICT TO PROVIDE AND INSTALL
	MISCELLANEOUS
1	CONSTRUCTION NOTES
W	W INDICATES WEATHERPROOF FOR ALL DEVICES, PROVIDE LOCKING COVER ON RECEPTACLES.
A E2 E3	DETAIL CALL OUT - A INDICATES DETAIL IDENTIFICATION, E2 INDICATES SHEET TAKEN FROM, E3 INDICATES SHEET DRAWN ON
$	ALL DEVICES WITH LIGHT LINE WEIGHT INDICATES EXISTING TO BE RETAINED

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ELECTRICAL LEGEND, NOTES NAD SPECIFICATIONS

STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

MICHAEL L. COZART
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
2/28/17

Project:	2016-47
Drawn:	D.S.
Bid	May 30, 2017
CONSTR. SET	01/30/17

Sheet:

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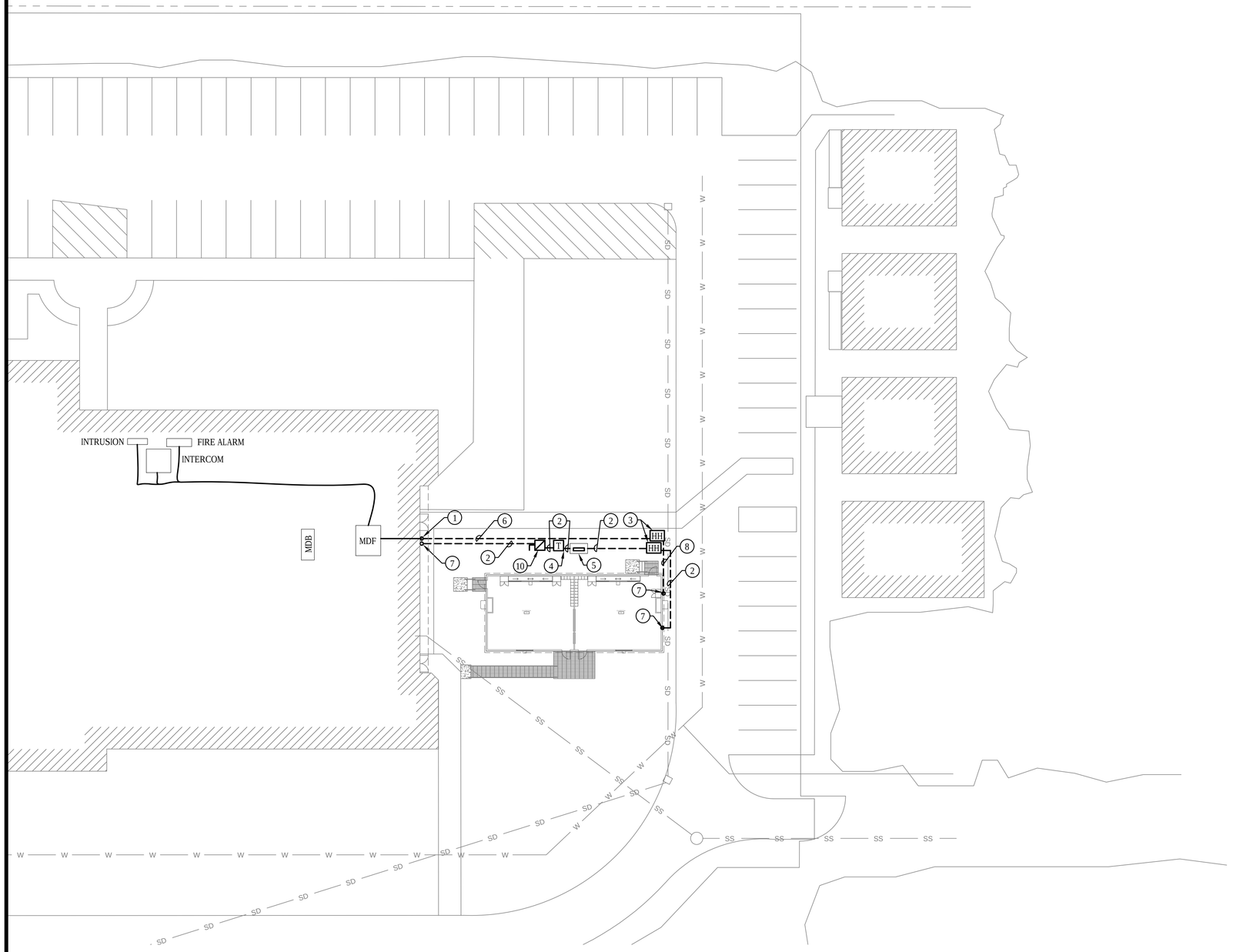

1 ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

N

GENERAL NOTES

1. SEE SHEET E0.01 FOR GENERAL NOTES.

CONSTRUCTION NOTES

1. ROUTE POWER AND SYSTEMS CONDUITS DOWN EXTERIOR WALL. PAINT TO MATCH EXTERIOR.
2. SEE ONE-LINE DIAGRAM FOR POWER CONDUIT/FEEDER SIZES.
3. 3030LA VAULT.
4. SEE ONE-LINE DIAGRAM FOR TRANSFORMER SIZE.
5. PANEL PDC. PROVIDE UNISTRUT FOR MOUNTING.
6. (4) 2" CONDUITS AND (1) 1" CONDUIT.
7. STUB-UP AT EXTERIOR WALL OF PORTABLE, ROUTE UP EXTERIOR WALL TO PANEL LOCATION.
8. (2) 2" CONDUITS FOR SYSTEMS AND (1) 1" CONDUIT FOR FIRE ALARM.
9. SEE SHEET E2.01 FOR CONTINUATION.
10. 250A FUSED NEMA 3R FUSED DISCONNECT. MOUNT TO UNISTRUT.

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STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

ELECTRICAL SITE PLAN

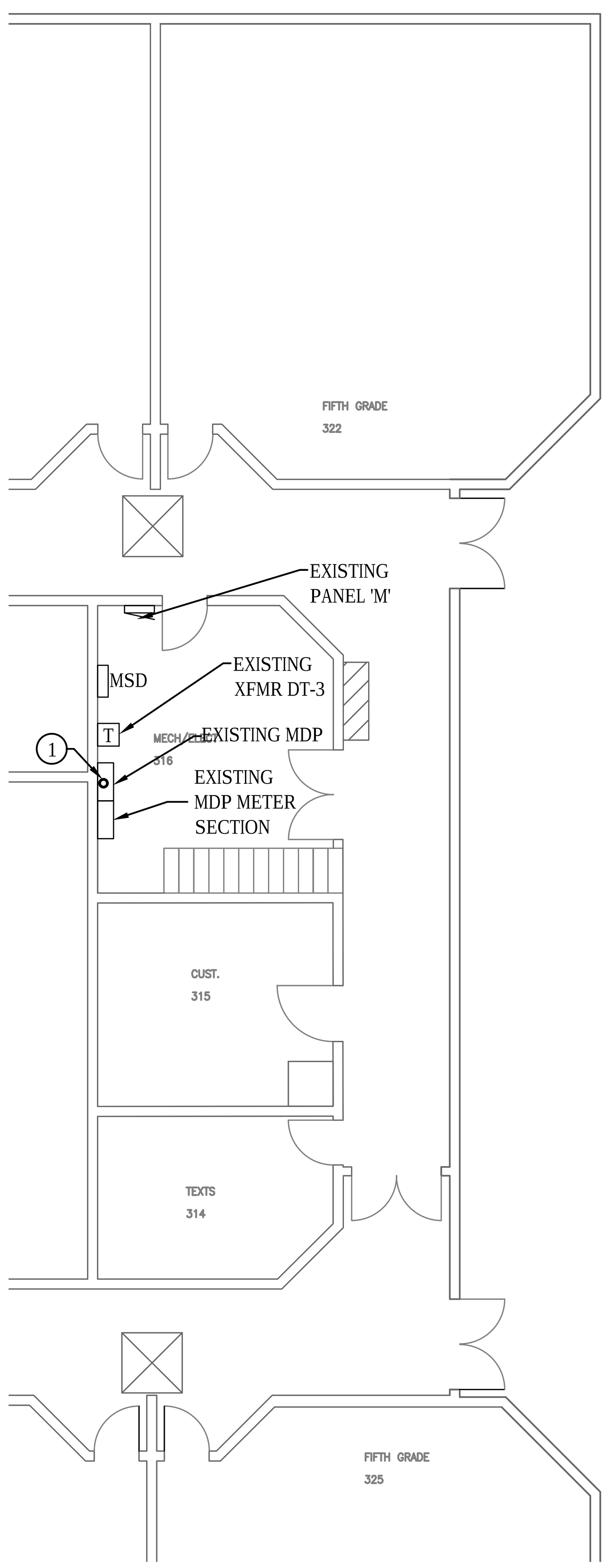
MICHAEL L COLANT
STATE OF WASHINGTON
21008
REGISTERED
PROFESSIONAL ENGINEER
2/28/17

Project:	2016-47
Drawn:	D.S.
Bid	May 30, 2017
CONSTR. SET	01/30/17

Sheet:

E1.01

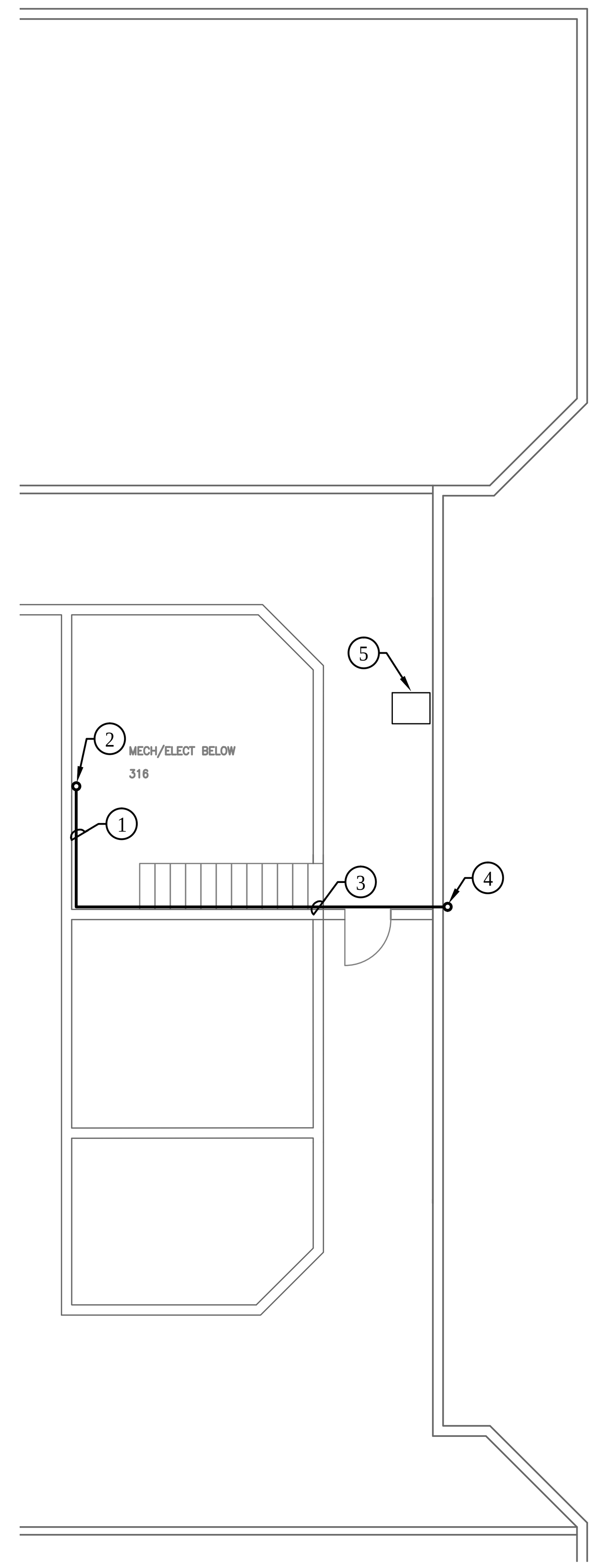
Plotted: Apr 13, 2017 - 7:43pm File: N:\Projects\2016-395_Drawings\Electrical\2016395_ElecSite.dwg By: DANS



CONSTRUCTION NOTES

1. ROUTE CONDUIT UP THROUGH TOR OF MDP, ALONG WALL TO CEILING.

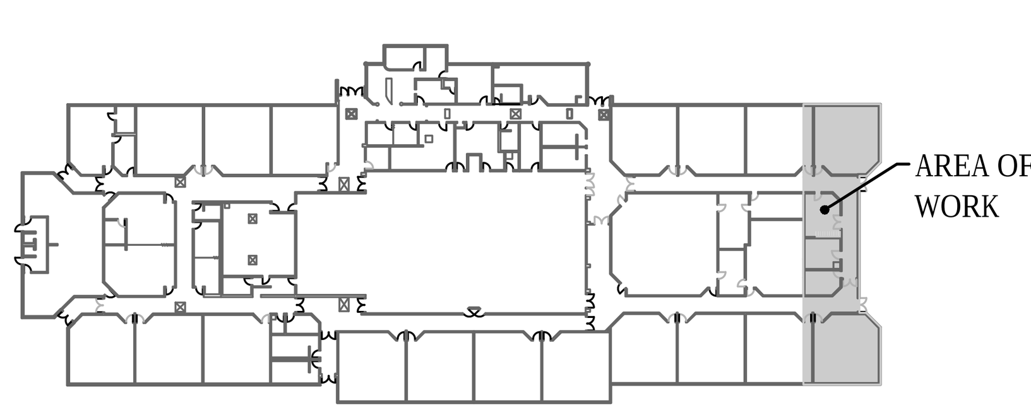
1 **1ST FLOOR ELECTRICAL PLAN**
SCALE: 1/8" = 1-0"



CONSTRUCTION NOTES

1. SEE ONE-LINE DIAGRAM FOR CONDUIT/CONDUCTOR SIZES.
2. ROUTE DOWN TO 'MSD'.
3. ROUTE UP TO CEILING. ROUTE ALONG WALL ABOVE DOOR.
4. ROUTE THROUGH EXTERIOR WALL, LB DOWN EXTERIOR WALL.
5. EXISTING MDF RACK.

2 **ATTIC ELECTRICAL PLAN**
SCALE: 1/8" = 1'-0



KEY PLAN

ERICKSON • McGOVERN
Architects
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1ST FLOOR AND ATTIC ELECTRICAL PLAN

STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

MICHAEL L. COZART
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
2/28/17

Project:	2016-47
Drawn:	D.S.
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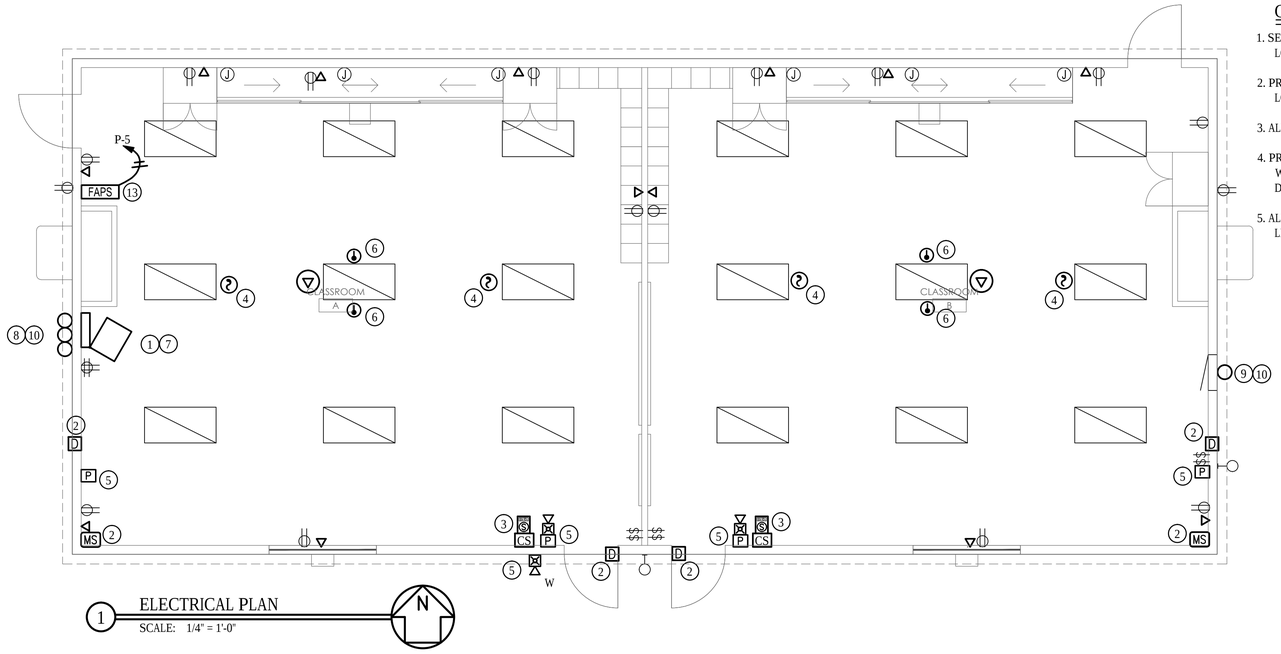
Sheet:

E2.01

Plotted: Apr 12, 2017 - 7:43pm File: R:\dwgs\216\216-395_Drawings\Electrical\216395_E201.dwg By: DANS



1 ELECTRICAL PLAN

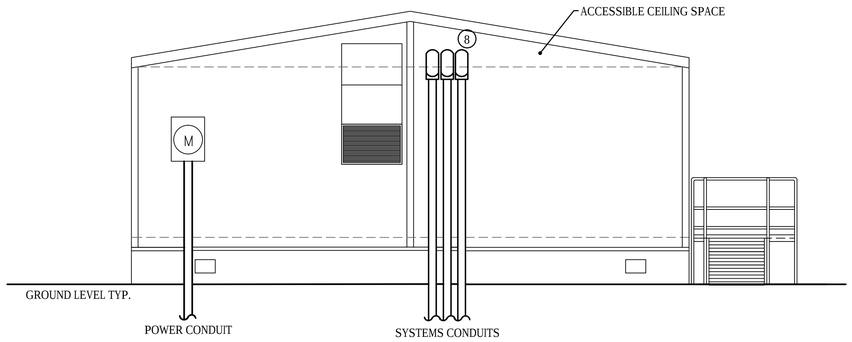
SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. SEE TYPICAL LAYOUT FOR PORTABLE THIS SHEET. FIELD VERIFY EXACT LOCATIONS ON SITE PRIOR TO ROUGH-IN.
2. PROVIDE NEW CAT 6 CABLES, JACKS, TERMINATIONS AND TESTING AT LOCATIONS SHOWN.
3. ALL EXPOSED EXTERIOR CONDUIT SHALL BE GRS.
4. PROVIDE 10' SERVICE LOOP AT EQUIPMENT RACK, 4' SERVICE LOOP AT THE WORKSTATION AND 10' SERVICE LOOP WHERE CALLED OUT ON BACKBONE DIAGRAM.
5. ALL LOW VOLTAGE CABLES INSTALLED IN EXTERIOR CONDUIT SHALL BE UL LISTED FOR WET LOCATIONS.

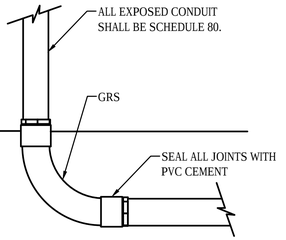
CONSTRUCTION NOTES

1. PROVIDE NEW IDF ENCLOSURE WITH KEY LOCK, FIBER LIU, PATCH PANEL AND TERMINATIONS FOR 6 STRAND MULTIMODE FIBER. TERMINATE WITH LC STYLE CONNECTORS.
2. PROVIDE INTRUSION ALARM DEVICE. PROVIDE CABLE BACK TO INTRUSION ALARM PANEL IN SCHOOL MAIN OFFICE. MATCH MANUFACTURER SPECIFIC FOR DEVICE. PROGRAM ADDITIONAL ZONE FOR PORTABLE MONITORING IN MAIN SCHOOL. EXISTING INTRUSION ALARM SYSTEM IS A RADIONICS OMEGALARM D8112
3. PROVIDE NEW COMBINATION INTERCOM/CLOCK SPEAKER TO MATCH EXISTING IN SCHOOL. PROVIDE (1) AQC430 FOR EACH INTERCOM/CLOCK SPEAKER. THE EXISTING INTERCOM SYSTEM IS A TELECENTER IV LOCATED IN MAIN OFFICE.
4. PROVIDE SMOKE DETECTORS. PROVIDE CABLES BACK TO FIRE ALARM LOOP. PROGRAM NEW ZONE FOR PORTABLE IN MAIN SCHOOL. EXISTING FIRE ALARM PANEL IS A SIMPLEX 4002 LOCATED IN MAIN OFFICE.
5. PROVIDE FIRE ALARM PULL STATION, FIRE ALARM HORN/STROBE AT DOOR LOCATION. PROVIDE CABLE UP TO SMOKE DETECTOR INITIATING LOOP. PROVIDE CABLE TO FIRE ALARM NOTIFICATION LOOP.
6. PROVIDE HEAT DETECTOR MOUNTED TO STRUCTURE ABOVE T-BAR CEILING.
7. PROVIDE FIRE RATED BACKBOARD PAINTED WHITE. MOUNT IDF ENCLOSURE TO BACKBOARD. BACKBOARD SHALL SIZED AS REQUIRED TO PROVIDE PROPER MOUNTING SURFACE FOR IDF INCLOSURE.
8. QUANTITIES SHOWN ARE DIAGRAMMATIC, PROVIDE CONDUITS AS LISTED ON E1.01. SUPPORT CONDUITS WITH 7/8" GALVANIZED UNISTRUT.
9. PANELS PROVIDED WITH PORTABLE BUILDING. ROUTE CONDUIT/CONDUCTORS UP EXTERIOR WALL OF PORTABLE BUILDING. SEE ONE-LINE DIAGRAM FOR PANEL, CONDUIT AND CONDUCTOR SIZES.
10. SEE SITE PLAN ON SHEET E1.01 FOR CONTINUATION.
11. PROVIDE (1) 6 STRAND MULTI-MODE OM3 FIBER OPTIC CABLE IN 1" INNERDUCT FROM NEW PORTABLE TO EXISTING MDF.
12. PROVIDE NEW SYSTEMS 3030LA VAULT.
13. PROVIDE FIRE ALARM POWER SUPPLY WITH DEDICATED RECEPTACLE.



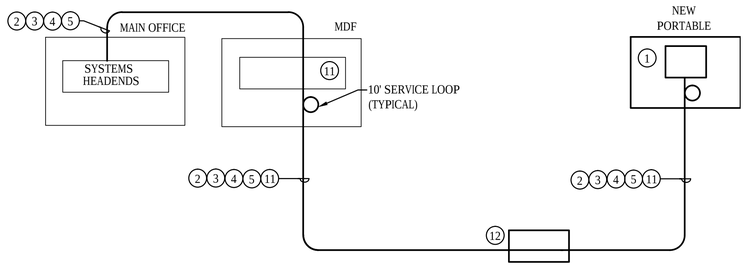
2 POWER/SYSTEM CONDUIT DIAGRAM

SCALE: DIAGRAMMATIC



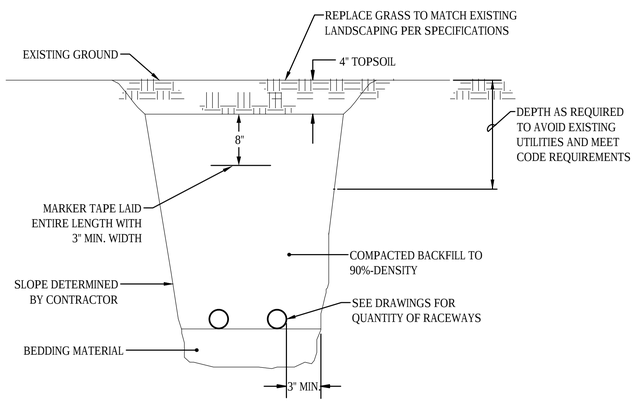
3 CONDUIT TRANSITION DETAIL

SCALE: DIAGRAMMATIC



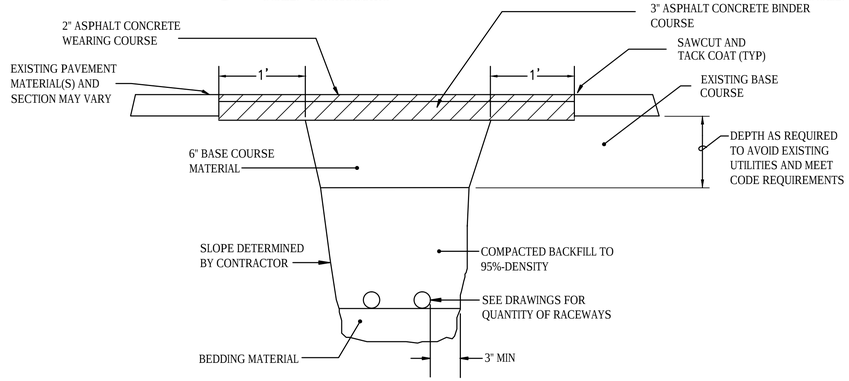
4 SYSTEMS BACKBONE DIAGRAM

SCALE: DIAGRAMMATIC



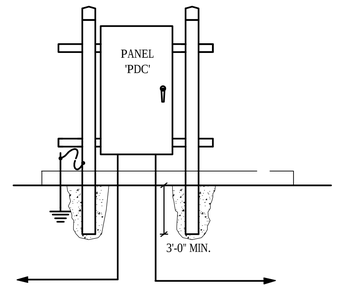
5 DIRECT BURY RACEWAY - GRASS AREA

SCALE: DIAGRAMMATIC



6 DIRECT BURY RACEWAY - ASPHALT AREAS

SCALE: DIAGRAMMATIC



7 ELECTRICAL PANELBOARD MOUNTING DETAIL

SCALE: NOT TO SCALE

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ELECTRICAL DETAILS

STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

MICHAEL L COLLARD STATE OF WASHINGTON 24006 REGISTERED PROFESSIONAL ENGINEER
2/28/17

Project: 2016-47
Drawn: D.S.

Bid	May 30, 2017
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Sheet:

E3.01

Plotted: Apr 12, 2017 - 7:42pm File: R:\Projects\2016-047_Drawings\Electrical\2016_E3D1.dwg By: DAVIS

LOAD TYPE	LOAD	CIRCUIT DIRECTORY	CIR. NO.	CIR BRKR P	CIR BRKR AMP	A	B	C	CIR BRKR P	CIR BRKR AMP	CIR. NO.	CIRCUIT DIRECTORY	LOAD	LOAD TYPE
SF	17430	PORTABLE 1 (P-1)	1	2		17430			2		2	SPARE		
SF	17494		3		200		17494			200	4			
R	500	RECEPTACLE	5	1	20			500	1	20	6	SPARE		
		SPACE	7								8	SPACE		
		SPACE	9								10	SPACE		
		SPACE	11								12	SPACE		
		SPACE	13								14	SPACE		
		SPACE	15								16	SPACE		
		SPACE	17								18	SPACE		
		SPACE	19								20	SPACE		
		SPACE	21								22	SPACE		
		SPACE	23								24	SPACE		
		SPACE	25								26	SPACE		
		SPACE	27								28	SPACE		
		SPACE	29								30	SPACE		
	35424	TOTAL			THIS PANEL->	17430	17494	500					TOTAL	
						17430	17494	500						

PANEL: PDC (NEW) — 3 PH 4 WIRE — VOLTAGE: 208Y/120V — 400A MCB
LOC: — MOUNT: SURFACE — FEED: BOTTOM
TYPE: NEMA 3R — POLES: 30 — SF MAINS: — 6,716AIC MINIMUM

LIGHTING(125%) = 1170.00 — LARGEST MOTOR(125%) = 0.00 — KITCHEN LOADS(65%) = 0.00
RECEPTS<=10000(100%) = 4960.00 — OTHER MOTORS(100%) = 0.00 — APPLIANCES(100%) = 0.00
RECEPTS>10000(50%) = 0.00 — MOTOR TOTAL = 0.00 — DEDICATED(100%) = 500.00
RECEPTS TOTAL = 4960.00 — WATER HEATERS(100%) = 0.00 — MISC(100%) = 0.00
ELECTRIC HEAT(100%) = 29028.00

TOTAL CONNECTED LOAD (VA): 35,424.00
TOTAL CONNECTED CURRENT (A): 98.33
TOTAL DEMAND LOAD (VA): 35,658.00
TOTAL DEMAND CURRENT (A) 98.98

NOTES: L=LIGHTING, R=RECEPTACLES, H=ELECTRIC HEAT, ML=LARGEST MOTOR, MO=OTHER MOTORS, WH=WATER HEATERS, K=KITCHEN LOADS, A=APPLIANCES, D=DEDICATED, X=MISC, SF=SUB FEED

LOAD TYPE	LOAD	CIRCUIT DIRECTORY	CIR. NO.	CIR BRKR P	CIR BRKR AMP	A	B	CIR BRKR P	CIR BRKR AMP	CIR. NO.	CIRCUIT DIRECTORY	LOAD	LOAD TYPE
H	7257	HEAT PUMP 1	1	2		14514		2		2	HEAT PUMP 2	7257	H
H	7257		3		90		14514		90	4		7257	H
L	936	LIGHTING - INTERIOR/EXTERIOR	5	1	20	2196		1	20	6	RECEPTACLES	1260	R
R	1080	RECEPTACLES	7	1	20		1980	1	20	8	RECEPTACLES	900	R
R	720	RECEPTACLES	9	1	20	720		1	20	10	SPARE		
		SPARE	11				500	1	20	12	ACTIVE BOARD	500	R
		SPACE	13					1	20	14	SPARE		
D	500	FIRE ALARM	15	1	20		500			16	SPACE		
		SPACE	17							18	SPACE		
		SPACE	19							20	SPACE		
	17750	TOTAL			THIS PANEL->	17430	17494				TOTAL	17174	
						17430	17494						

PANEL: P1 (NEW) — 1 PH 3 WIRE — VOLTAGE: 120/208V — 200A MCB
LOC: — MOUNT: FLUSH — FEED: BOTT
TYPE: NEMA 1 — POLES: 20 — SF MAINS: — 3,094AIC MINIMUM

LIGHTING(125%) = 1170.00 — LARGEST MOTOR(125%) = 0.00 — KITCHEN LOADS(65%) = 0.00
RECEPTS<=10000(100%) = 4460.00 — OTHER MOTORS(100%) = 0.00 — APPLIANCES(100%) = 0.00
RECEPTS>10000(50%) = 0.00 — MOTOR TOTAL = 0.00 — DEDICATED(100%) = 500.00
RECEPTS TOTAL = 4460.00 — WATER HEATERS(100%) = 0.00 — MISC(100%) = 0.00
ELECTRIC HEAT(100%) = 29028.00

TOTAL CONNECTED LOAD (VA): 34,924.00
TOTAL CONNECTED CURRENT (A): 167.90
TOTAL DEMAND LOAD (VA): 35,158.00
TOTAL DEMAND CURRENT (A): 169.03

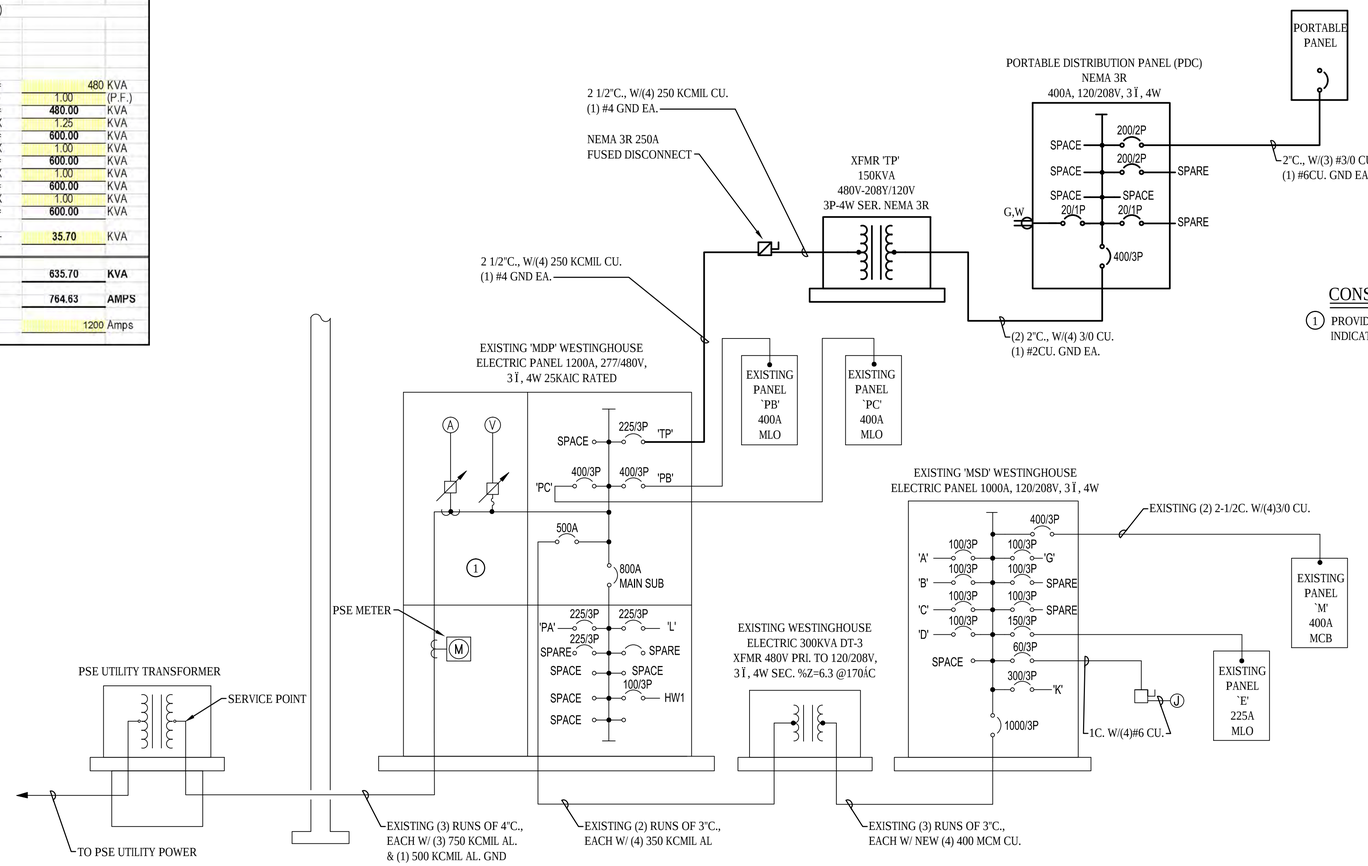
NOTES: L=LIGHTING, R=RECEPTACLES, H=ELECTRIC HEAT, ML=LARGEST MOTOR, MO=OTHER MOTORS, WH=WATER HEATERS, K=KITCHEN LOADS, A=APPLIANCES, D=DEDICATED, X=MISC, SF=SUB FEED

UTILITY 1-YEAR PEAK DEMAND CALCULATION WORKSHEET

NEC 220-87 AND WAC 296-46B-900(3)(j)

1-Year Peak Demand Date : Dec. 2016
Phase to Phase Voltage (Volts) : 480
Phases (1=Single Phase, 3=Three Phase) : 3

Utility Peak Demand	=	480	KVA
Power Factor	/	1.00	(P.F.)
Apparent Peak Demand	=	480.00	KVA
NEC 220-87(2) adjustment factor	X	1.25	KVA
Adjusted Peak Demand	=	600.00	KVA
Seasonal adjustment factor	X	1.00	KVA
Seasonal adjustment peak demand	=	600.00	KVA
Occupancy adjustment factor	X	1.00	KVA
Occupancy adjustment peak demand	=	600.00	KVA
Other adjustement factor(s)	X	1.00	KVA
Peak Demand with Adjustements	=	600.00	KVA
New Calculated Demand Load Added	+	35.70	KVA
Metered Demand Based CALCULATED LOAD :		635.70	**KVA**
		764.63	**AMP'S**
Existing Panel Size:		1200	Amps



1 EXISTING ONE-LINE DIAGRAM
SCALE: DIAGRAMMATIC

CONSTRUCTION NOTES

1. PROVIDE/ATTACH LAMINATE PLATE ON PANEL 'MDP' INDICATING THE MAX AMPACITY IS 1155 AMPS.

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ONE-LINE DIAGRAM & PANEL SCHEDULES

STILLWATER ELEMENTARY SCHOOL PORTABLE
RIVERVIEW SCHOOL DSITRICT No. 407

MICHAEL L. COZART — STATE OF WASHINGTON — 24606 — REGISTERED PROFESSIONAL ENGINEER
2/28/17

Project:	2016-47
Drawn:	D.S.
Bid	May 30, 2017
CONSTR. SET	01/30/17

Sheet:

E4.01

FASTENING SCHEDULE [a]

CONNECTION DESCRIPTION	FASTENING [b]
JOIST TO SILL OR GIRDER, TOE NAIL	(3)
SOLE PLATE TO JOIST OR BLOCKING, TYP FACE-NAIL	16d @ 16"O.C.
SOLE PLATE TO JOIST OR BLOCKING, AT BRACE WALL PANELS	(3) 16d @ 16"O.C.
TOP PLATE TO STUD, END-NAIL	(2) 16d
STUD TO SOLE PLATE, END NAIL	(2) 16d
DOUBLE STUDS, FACE-NAIL	16d @ 24"O.C.
DOUBLE TOP PLATES, TYP FACE-NAIL	16d @ 16"O.C.
DOUBLE TOP PLATES, LAP SPLICE	(8) 16d
RIM JOIST TO TOP PLATE, TOE -NAIL	8d @ 6"O.C.
TOP PLATES, LAPS & INTERSECTIONS, FACE NAIL	(2) 16d
CONTINUOUS HEADER, TWO PIECES	16d @ 16"O.C. ALONG EA. EDGE
CEILING JOIST TO PLATE, TOE-NAIL	(3)
CONTINUOUS HEADER TO STUD, TOE-NAIL	(4)
CEILING JOISTS, LAPS OVER PARTITIONS, FACE -NAIL	(3) 16d
CEILING JOISTS TO PARALLEL RAFTERS, FACE-NAIL	(3) 16d
RAFTER TO PLATE, TOE-NAIL	(3)
BUILT-UP CORNER STUDS	16d @ 24"O.C.
WOOD STRUCTURAL PANELS AND PARTICLE BOARD [c]	
SUB-FLOOR, ROOF AND WALL SHEATHING TO FRAMING	
1/2" AND LESS	6d [d]
19/32 TO 3/4" TO	8d [d] OR 10d OR 8d [f]
FIBERBOARD SHEATHING	
1/2"	NO. 11ga. NAIL [n] OR 6d [e]
	NO. 16ga. STAPLE [h]
INTERIOR PANELING:	
1/4"	4d [i]
ALUMINUM DRIP RAIL	#6 x3/4" HEX HEAD SCREWS @ 4 1/2"O.C.
STEEL GALVANIZED ROOFING	PER MANUFACUTRES INSTRUCTIONS
MEMBRANE ROOFING	PER MANUFACTURES INSTRUCTIONS

NOTES:

a. TAKEN FROM I.B.C. TABLE 2304.10.1 (NOTE: NOT ALL ITEMS AND FASTENERS ARE USED ON ALL JOBS.)
b. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLE BOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO I.B.C. SECTION 2304.6.1 NAILS FOR WALL SHEATHING MAY BE COMMON, BOX OR CASING.
c. NAILS SPACED AT 6"O.C. AT EDGES, 12"O.C. AT INTERMEDIATE SUPPORT (6"O.C. WHERE INTERMEDIATE SUPPORT AT 48" OR MORE.
d. COMMON OR DEFORMED SHANK
e. COMMON
f. DEFORMED SHANK
g. CORROSION-RESISTANT ROOFING NAILS WITH 7/16" DIA. HEAD AND 1 1/2" LENGTH FOR 1/2" SHEATHING AND 1 3/4" LENGTH FOR 25/32 SHEATHING CONFORMING TO THE REQUIRMENTS OF I.B.C. TABLE 2304.10.1
h. CORROSION RESISTANT STAPLES WITH 7/16" OR 1" CROWN AND 1 1/4" LENGTH FOR 1/2" SHEATHING AND 1 1/2" LENGTH FOR 25/32" SHEATHING. PANEL SUPPORTS AT 16" (20" IF STRENGTH AXIS IN LONG DIRECTION OF PANEL, UNLESS OTHERWISE MARKED.)
i. CASING (1 1/2"x0.080") OR FINISH (1 1/2"x0.072") NAILS 6" EDGE, 12" INTERMEDIATE.

GENERAL:

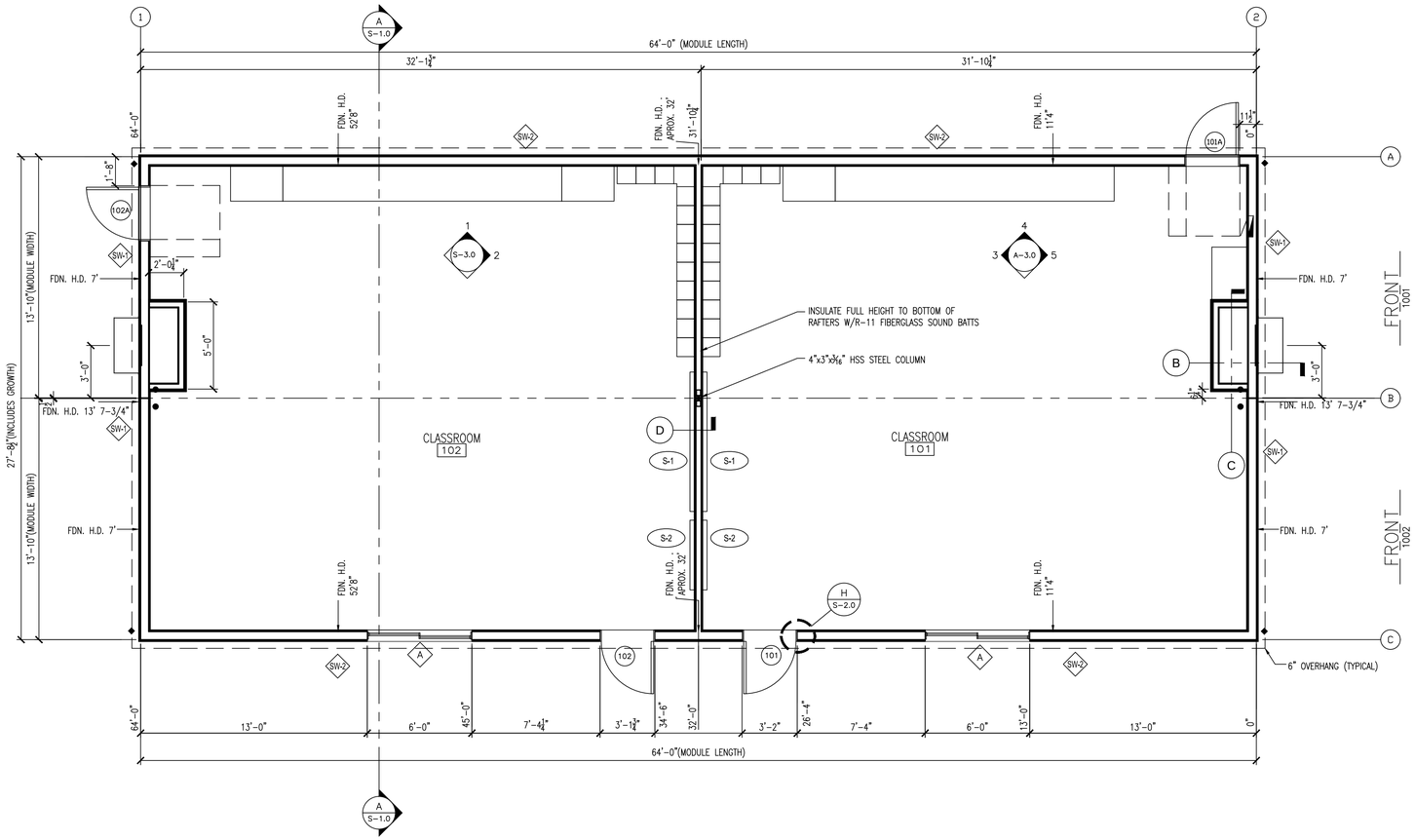
1. ALL NEW FACILITIES SHALL BE BUILT IN ACCORDANCE WITH ACCESSIBILITY REQUIREMENTS FOR BARRIER FREE ACCESS (WAC-51-50-1100).
2. ALL STAIRS, RAMPS, LANDINGS, AND HANDRAILS TO BE SUPPLIED AND INSTALLED ON SITE BY OTHERS, UNDER SEPARATE LOCAL PERMIT (UNLESS NOTED OTHERWISE)

BUILDING ENVELOPE:

1. CODE REFERENCES BELOW REFER TO THE WASHINGTON STATE ENERGY CODE (WSEC) 2015 EDITION.
2. INSULATION SHALL BE PROVIDED WITH A R-VALUE IDENTIFICATION MARK FROM THE MANUFACTURER (WSEC C303.1.1
3. FENESTRATION PRODUCTS TO BE SUPPLIED WITH A LABEL WITH RATED U-FACTOR, SHGC, VT AND LEAKAGE RATINGS (WSEC C303.1.3)
4. ALL INSULATION MATERIALS SHALL BE INSTALLED PER MANUFACTURES INSTRUCTIONS TO MAINTAIN PROPER DENSITIES, MAINTAIN CLEARANCES, AND OBTAIN FULL R-VALUE. (WSEC C303.2)
5. ROOF/CEILING INSULATION SHALL BE INSTALLED W/ MIN 1" CLEAR AIR SPACE TO ROOFING MEMBERS ABOVE. WHEN EAVE VENTING IS REQUIRED INSTALL BAFFLES TO DEFLECT AIR OVER SURFACE OF INSULATION. (IBC 1203.2)
6. EXTERIOR WALL CAVITIES SHALL BE FULLY INSULATED TO THE LEVELS OF THE SURROUNDING WALLS.
7. FLOOR INSULATION SHALL BE INSTALLED IN A PERMANENT MANNER IN SUBSTANTIAL CONTACT WITH THE SURFACE BEING INSULATED. SUPPORTS SHALL BE SPACED AT NOT MORE THAN 24"O.C. INSULATION SHALL NOT BLOCK CRAWL SPACE VENTS.
8. DOOR AND GLAZING U-FACTOR, SHGC & VT SHALL BE OBTAINED FROM NFRC LABEL, PRODUCTS LACKING THIS LABEL SHALL BE ASSIGNED A DEFAULT VALUE FROM WSEC TABLES IN CHAPTER 3 (WSEC C303.1.3)
9. VAPOR RETARDER (CLASS I OR II) REQUIRED AT INTERIOR SIDE OF FRAME WALLS IN ZONES 5,6,7,8 AND MARINE 4 . (IBC 1405.3.1)
10. WSEC C402.5.1 A CONTINUOUS AIR BARRIER SHALL BE PROVIDED THROUGHOUT THE BUILDING THERMAL ENVELOPE. THE AIR BARRIERS SHALL BE PERMITTED TO BE LOCATED ON THE INSIDE OR OUTSIDE OF THE BUILDING ENVELOPE, LOCATED WITHIN THE ASSEMBLIES COMPOSING THE ENVELOPE, OR ANY COMBINATION THEREOF. THE AIR BARRIER SHALL COMPLY WITH SECTIONS C402.5.1.1 AND 402.5.1.2

STRUCTURAL :

1. WINDOWS AND DOORS SHALL HAVE A MIN OF (2) STUDS AT EACH SIDE (1 KING STUD AND ONE TRIMMER)
2. ALL NAILING AND FASTENING NOT CALLED OUT ON PLANS AND DETAILS SHALL BE PER IBC 2304.10.1 NAILING SCHEDULE (LOCATED ON THIS SHEET)



FLOOR PLAN

1/4" = 1'-0"

N REF.

STRUCTURAL REQUIREMENTS

MODULE DESIGN SUMMARY

A. DESIGN CRITERIA: REFER TO CODE ANALYSYS LOCATED ON THIS SHEET

B. ROOF SHEATHING: 7/16" OSB (24/16 SPAN RATING) OVER RAFTERS @24"O.C.

C. ROOF JOISTS: 2x12 HF-2 @ 24"O.C.

D. ROOF MATE LINE BEAM: (1)1.5"x24" LVL BEAM EACH MODULE. PROVIDE BRACING FROM BOTTOM OF BEAM TO RAFTERS @8'-0" O.C. (NOTE: CONNECT BEAMS ON SITE @48" O.C. W/ 1/2" THRU BOLTS (ALT. SDS 1/4"x3.5" SCREWS @48"O.C.))

E. END COLUMNS: MIN. (1)2x6 HF-STUD PER MODULE, PROVIDE (2)MSTA-18 STRAPS COLUMN TO RIM AND COLUMN TO BEAM PER COLUMN.

F. INTERMEDIATE COLUMNS: (1)HSS 4x3x3/16" STEEL COLUMN PER MODULE.
FASTEN W/. (4)SDS 1/4"x3 SCREWS TOP AND BOTTOM PER COLUMN (ALT ½" CARRIAGE BOLTS AT TOP)

G. EXTERIOR WALL STUDS: 2x6 HF-STUD @16"O.C.

H. MATE LINE WALL STUDS: NOT USED

I. HEADERS:
HEADER 1, EXTERIOR DOORS: (2) MIN. 2x6 HF-STUD
HEADER 2, EXTERIOR WINDOWS: (2) MIN. 2x8 HF-2

J. MATE LINE BEAM HEADER: NOT USED

K. FLOOR DECKING: (1) LAYER 3/4" T&G APA RATED FLOOR SHEATHING OVER JOISTS @16"O.C.

L. FLOOR RIM JOISTS: (1)1.5x7.25" LVL AT EACH SIDE OF MODULE, PROVIDE SUPPORTS @8'-0" O.C MAX.

M. FLOOR JOISTS: 2x8 HF-2 JOISTS @16"O.C (NOTE: PROVIDE MID SPAN FOUNDATION SUPPORT ON SITE)

N. DBL. FLOOR JOISTS SUPPORT FOR MATE LINE HEADER: NOT USED

O. ROOF DIAPHRAGM: 7/16" OSB SHEATHING OVER JOISTS @ 24"O.C. W/ UNBLOCKED EDGES. FASTEN W/ 8d NAILS @ 6" BOUNDARY, 6" EDGE & 12" FIELD.

P. TOP PLATE SPLICE: PROVIDE MIN 2x6 SPLICE PLATE W/ (15) 12d NAILS EACH SIDE OF SPLICE, PROVIDE
● (1) PAIR OF SIMPSON FSC CONNECTORS AT INSIDE FACE OF WALL (RIM TO RIM) AT EACH END WALL MATE LINE. (SITE INSTALL ALL THREAD ROD)

Q. BUILDING END SHEAR WALLS: (SHORT WALLS)
- SHEATHING: MIN. 3/8" APA RATED SUB-SHEATHING. FASTEN W/ 8d NAILS @6"O.C. EDGE, 12"O.C. FIELD. USE (1) STUD AT PANEL EDGES. BLOCK ALL PANEL EDGES
◆ - HOLD DOWNS: (2)2x6 W/ (2) MSTA-18 STRAPS (WALL TO RIM) AT CORNERS & DOORS

R. BUILDING SIDE SHEAR WALLS: (LONG WALLS)
- SHEATHING: MIN. 3/8" APA RATED SUB-SHEATHING. FASTEN W/ 8d NAILS @6"O.C. EDGE, 12"O.C. FIELD. USE (1) STUD AT PANEL EDGES. BLOCK ALL PANEL EDGES
- HOLD DOWNS: NO ADDITIONAL HOLD DOWNS REQUIRED

DOOR AND FRAME SCHEDULE

MARK	DESCRIPTION	DOOR SIZE WD	DOOR SIZE HGT	DOOR SIZE THK	DOOR MATERIAL	DOOR FINISH	DOOR GLAZING	FRAME MATL	FRAME TYPE	FRAME THROAT	HARDWARE SET	HARDWARE LATCH	ROUGH OPENING WIDTH	ROUGH OPENING HEIGHT	ENVELOPE REQUIREMENTS DOOR U	ENVELOPE REQUIREMENTS LITE U	ENVELOPE REQUIREMENTS SHGC
101	HINGED SINGLE FLUSH	3'-0"	6'-8"	1 3/4"	18 GA. INS. METAL	PAINT	N/A	16 GA. STEEL	HMKD	8-5/8"	1	LEVER/PANIC	37 3/4"	81 1/4"	0.37 DEFAULT	N/A	N/A
102	HINGED SINGLE FLUSH	3'-0"	6'-8"	1 3/4"	18 GA. INS. METAL	PAINT	N/A	16 GA. STEEL	HMKD	8-5/8"	1	LEVER/PANIC	37 3/4"	81 1/4"	0.37 DEFAULT	N/A	N/A
101A	HINGED SINGLE FLUSH	3'-0"	6'-8"	1 3/4"	18 GA. INS. METAL	PAINT	N/A	16 GA. STEEL	HMKD	8-5/8"	1	LEVER/PANIC	37 3/4"	81 1/4"	0.37 DEFAULT	N/A	N/A
102A	HINGED SINGLE FLUSH	3'-0"	6'-8"	1 3/4"	18 GA. INS. METAL	PAINT	N/A	16 GA. STEEL	HMKD	8-5/8"	1	LEVER/PANIC	37 3/4"	81 1/4"	0.37 DEFAULT	N/A	N/A

DOOR HARDWARE LEGEND:

SET (1):
LATCH: VON DUPRIN 22L PANIC W/ LEVER TRIM- BEST 1CC7A2 GREEN CONSTRUCTION CORE IN 12E-72-626 HOUSING
CLOSER: LCN 1461
HINGES: STAINLESS STEEL BALL BEARING NRP
T'HOLD, W' STRIP, & SWEEP: ADA

WINDOW SCHEDULE

MARK	QTY	TYPE	MFR.	MODEL	GLAZING	FILL	SIZE WIDTH	SIZE HEIGHT	FRAME MATERIAL	FRAME COLOR	ENVELOPE REQ. U-FACTOR	ENVELOPE REQ. SHGC	ROUGH OPENING WD	ROUGH OPENING HGT	ROUGH OPENING HEAD HGT.	NOTES
A	2	72"X48" HORIZONTAL SLIDER	ATRIUM	6000	DUAL GLAZED, LOW-E, ARGON, TEMPERED	ARGON	6'-0"	4'-0"	VINYL	WHITE	.29 NFRC	<.40 NFRC	72"	48"	80	ALPINE OAK LINER & 2¼"CASING, 1" ASCOT HORIZ. MINI BLINDS, W/SCREEN

WINDOW NOTE:
INSTALL GALV FLASHING UNDER SIDING AND OVER TOP FLANGE

ROOM FINISH SCHEDULE

MARK	NAME	WALLS NORTH MAT'L	WALLS NORTH FIN.	WALLS EAST MAT'L	WALLS EAST FINISH	WALLS SOUTH MAT'L	WALLS SOUTH FIN.	WALLS WEST MAT'L	WALLS WEST FIN.	CEILING MAT'L	FLOORING SUB-FLR	FLOORING FINISH	FLOORING BASE	NOTES
101	CLASSROOM	GWB	VTB	GWB	VTB	GWB	VTB	GWB	VTB	ACT	OSB	BO	BO	--
102	CLASSROOM	GWB	VTB	GWB	VTB	GWB	VTB	GWB	VTB	ACT	OSB	BO	BO	--

ROOM FINISH KEY

FLOOR
OSB - ⅜" ORIENTED STRAND BOARD STURD-I-FLOOR SUBFLOOR
BO - BY OTHERS

WALL
GWB - GYPSUM WALL BOARD, ⅝" TYPE X OVER ½" RIGID INSULATION @ EXT. WALLS
VTB - VINYL COVERED TACK BOARD "CALCUTTA TAN"
ACT - ACOUSTIC CEILING TILE (ARMSTRONG 769A CORTEGA)

EQUIPMENT SCHEDULE

MARK	QTY.	DESCRIPTION	COMMENTS
S-1	2 EA.	WHITE BOARD 8'X4' CLAIRIDGE LCS DELUXE MAGNETIC W/ TRAY & MAP RAIL	INSTALLED ON SITE BY OTHERS, MOUNT AT 33" AFF TO BOTTOM
S-2	2 EA.	TACK BOARD 4'X4' CLAIRIDGE 844F WITH ALUMINUM FRAME	MOUNT AT 33" AFF TO BOTTOM

CODE ANALYSIS

THIS STRUCTURE MEETS CONSTRUCTION REQUIRMENTS OF WAC-51-50 (IBC 2015) INTERNATIONAL BUILDING CODE AS AMENDED FOR WASHINGTON STATE GOLD LABEL INSIGNIAS.

BUILDING TYPE: VB
OCCUPANCY GROUP: E
BUILDING USE: CLASSROOM
BUILDING AREA: 1,773 SQ. FT.

NUMBER OF OCCUPANTS (IBC TABLE 1004.1.1) (AREA / FLOOR AREA PER PERSON)
CLASSROOM: NET 1660 / 20 84

TOTAL OCCUPANTS: 84

ENERGY CODE: 2015 WSEC

COMPLIANCE METHOD: COMPONENT PREFORMANCE

CLIMATE ZONE: 4C
GLAZING PERCENTAGE :
GLAZING AREA / GROSS WALL AREA :
48.0 / 1481.9 = 3.2%

DESIGN LOADS
ROOF LIVE: 30psf
PONDING: N/A

FLOOR LIVE:
CLASSROOM: 40psf

CONCENTRATED 30"SQ.: 1,000psf

WIND LOAD: 110
EXPOSURE: B

SEISMIC DESIGN REQUIREMENTS:
DESIGN CATEGORY: D
DESIGN Sds: 0.817
DESIGN Ss: 1.226

NOTES:
1. REFER TO PLAN AND SECTIONS FOR INSTALLED INSULATION VALUES

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
A-1.0	FLOOR PLAN
A-2.0	EXTERIOR ELEVATIONS
A-3.0	INTERIOR ELEV.
A-4.0	REFLECTED CEILING PLAN
E-1.0	ELECTRICAL PLAN
M-1.0	MECHANICAL PLAN
S-1.0	BUILDING SECTION
S-2.0	STRUCTURAL DETAILS
Z-1.0	SCOPE

WHITLEY EVERGREEN INC.
mobile and modular buildings
14219 SMOKEY POINT BLVD. MARYSVILLE, WA 98271
PHONE: (360) 653-5799 FAX: (360) 659-1735

MARK	DATE	REVISION
A		
A		
A		
A		

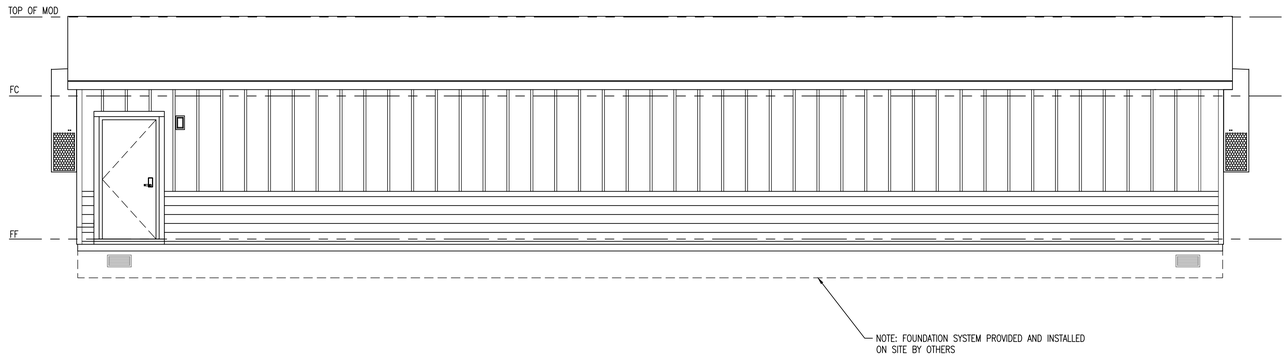
MARK	DATE	REVISION
A	1-17-17	CUSTOMER

RELEASE LEVEL: CUSTOMER
DRAWN BY: MDP ### ###
REV. BY: #### ### ###
CHK. BY: - ###

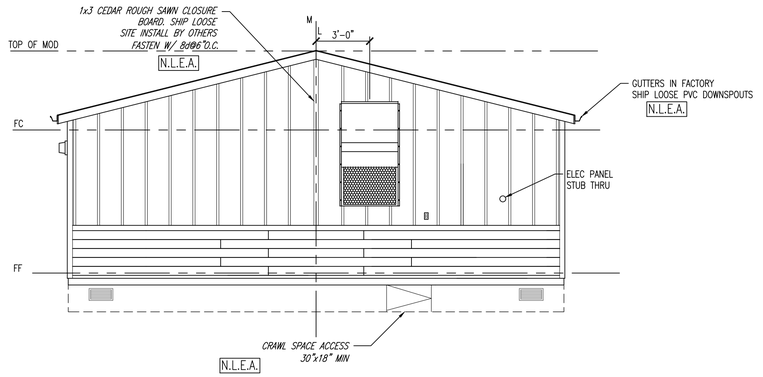
JOB NAME: RIVERVIEW STOCK 2016
DESCRIPTION: ----
SHEET TITLE: FLOOR PLAN
S/N: TBD
STD PLAN NO: ----

PLOT STAMP: 1/18/2017 11:09 AM

JOB NO: TBD
SHT. A-1.0
DATE: 1-17-17



NORTH ELEVATION
1/4" = 1'-0"



EAST ELEVATION
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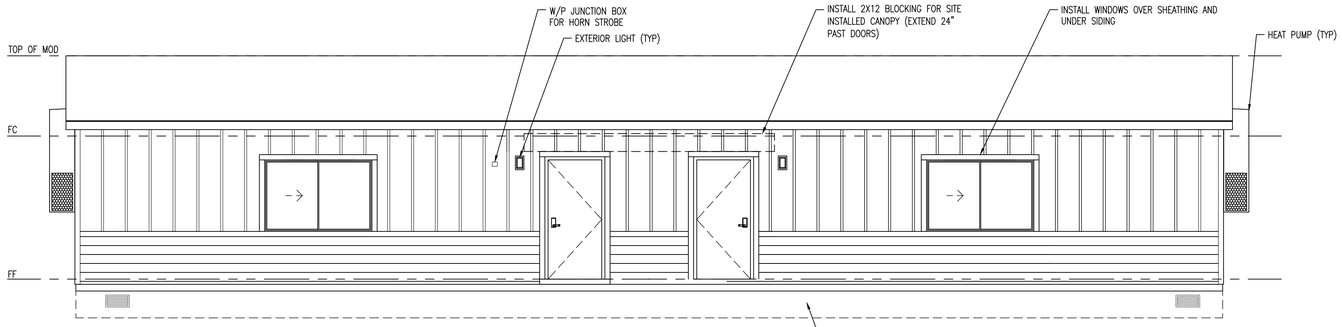
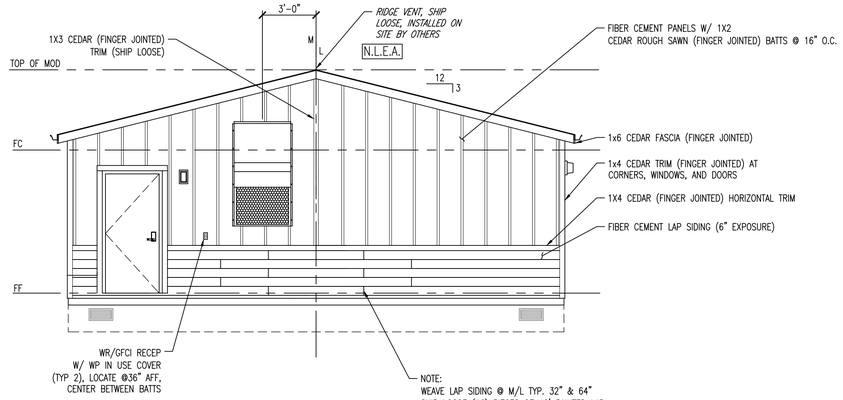


SOUTH ELEVATION
1/4" = 1'-0"



WEST ELEVATION
1/4" = 1'-0"

ATTIC VENTING IN ACCORDANCE W/ 2015 IBC 1203.1 SEE CALCULATION BELOW

VENTING REQUIRED:

$\frac{28' \text{ X } 64' = 1773 \text{ SQ FT}}{300} = 5.91 \text{ SQ FT X } 144 = 851 \text{ SQ IN}$

VENTING PROVIDED:

64 SCREENED VENT BLOCK X 9.42 SQ IN = 603 SQ IN
64 LF RIDGE VENT X 11 SQ IN/FT = 704 SQ IN
TOTAL = 1307 SQ IN

FOUNDATION VENT CALCULATION:

$28'\text{x } 64' = \frac{1773 \text{ sq ft}}{1500} = 1.182 \text{ sq ft X } 144 = 170.2 \text{ sq in}$

MIN FOUNDATION VENTS PROVIDED: 4 VENTS AT 75 sq in EACH = 300 sq in

NOTE: INSTALL VENTS AT EA CORNER MIN. FOR CROSS VENTILATION. (CRAWL SPACE VAPOR BARRIER REQUIRED)

MARK	REVISION	DATE
1	---	---
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MARK	REVISION	DATE
1	---	---
2	---	---
3	---	---
A	CUSTOMER	1-17-17

RELEASE LEVEL: CUSTOMER
DRAWN BY: MDP ####
REV. BY: ####
CHK. BY: - ####

PLOT STAMP: 1/18/2017 11:05 AM

JOB NAME: RIVERVIEW STOCK 2016
DESCRIPTION: ---
SHEET TITLE: EXTERIOR ELEVATIONS
STD PLAN NO: ---
S/N: TBD

WHITLEY EVERGREEN INC.
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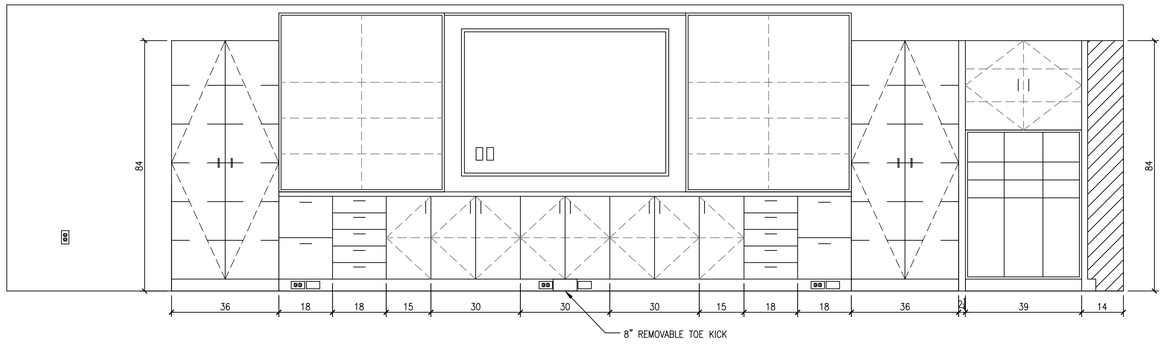
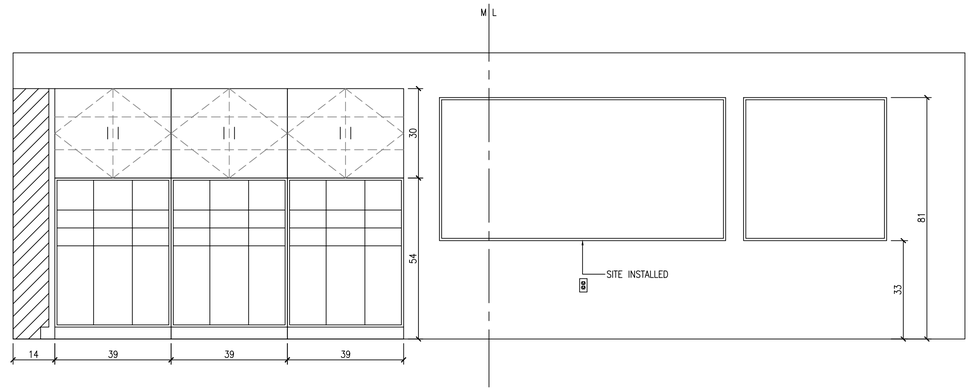
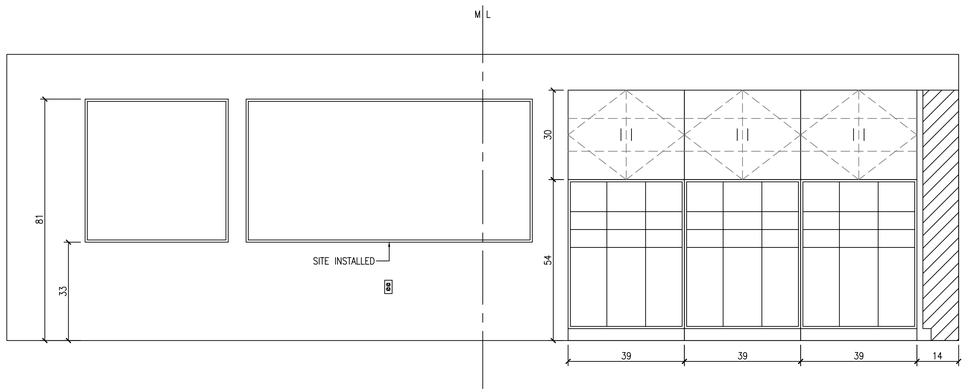
JOB NO: TBD
SHT. A-2.0
DATE: 1-17-17



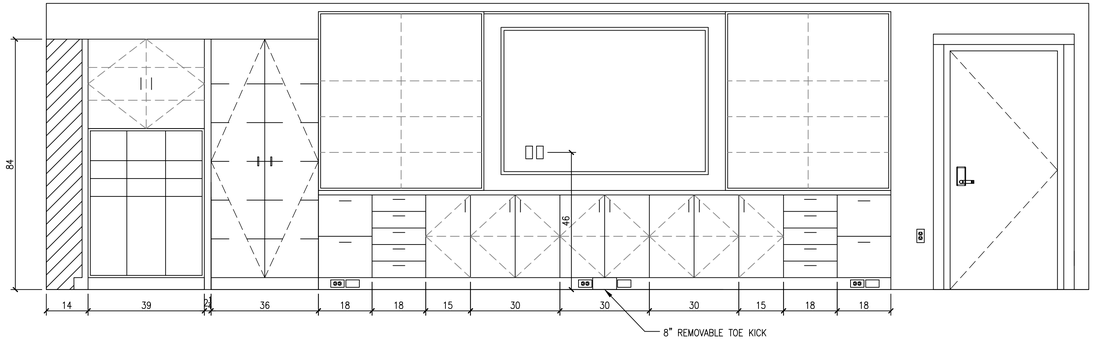
1 102 NORTH
1/2" = 1'-0"



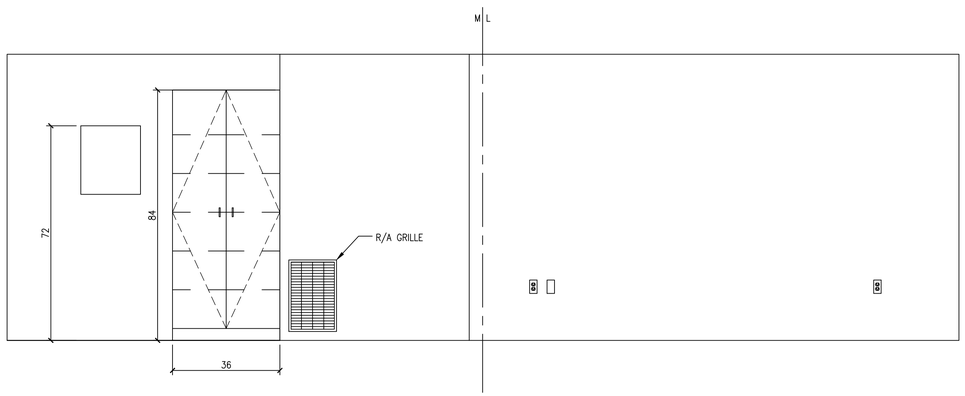
2 102 EAST
1/2" = 1'-0"



3 101 WEST
1/2" = 1'-0"



4 101 NORTH
1/2" = 1'-0"



5 101 EAST
1/2" = 1'-0"

MARK	REVISION	DATE
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MARK	REVISION	DATE
1	---	---
2	---	---
3	---	---
4	CUSTOMER	1-17-17
5	REVISION	DATE

PLOT STAMP: 1/18/2017 11:06 AM

RELEASE LEVEL: CUSTOMER
DRAWN BY: MDP ####
REV. BY: #### ####
CHK. BY: - ####

JOB NAME: RIVERVIEW STOCK 2016
DESCRIPTION: ---
SHEET TITLE: INTERIOR ELEV.
S/N: TBD
STD PLAN NO: ---

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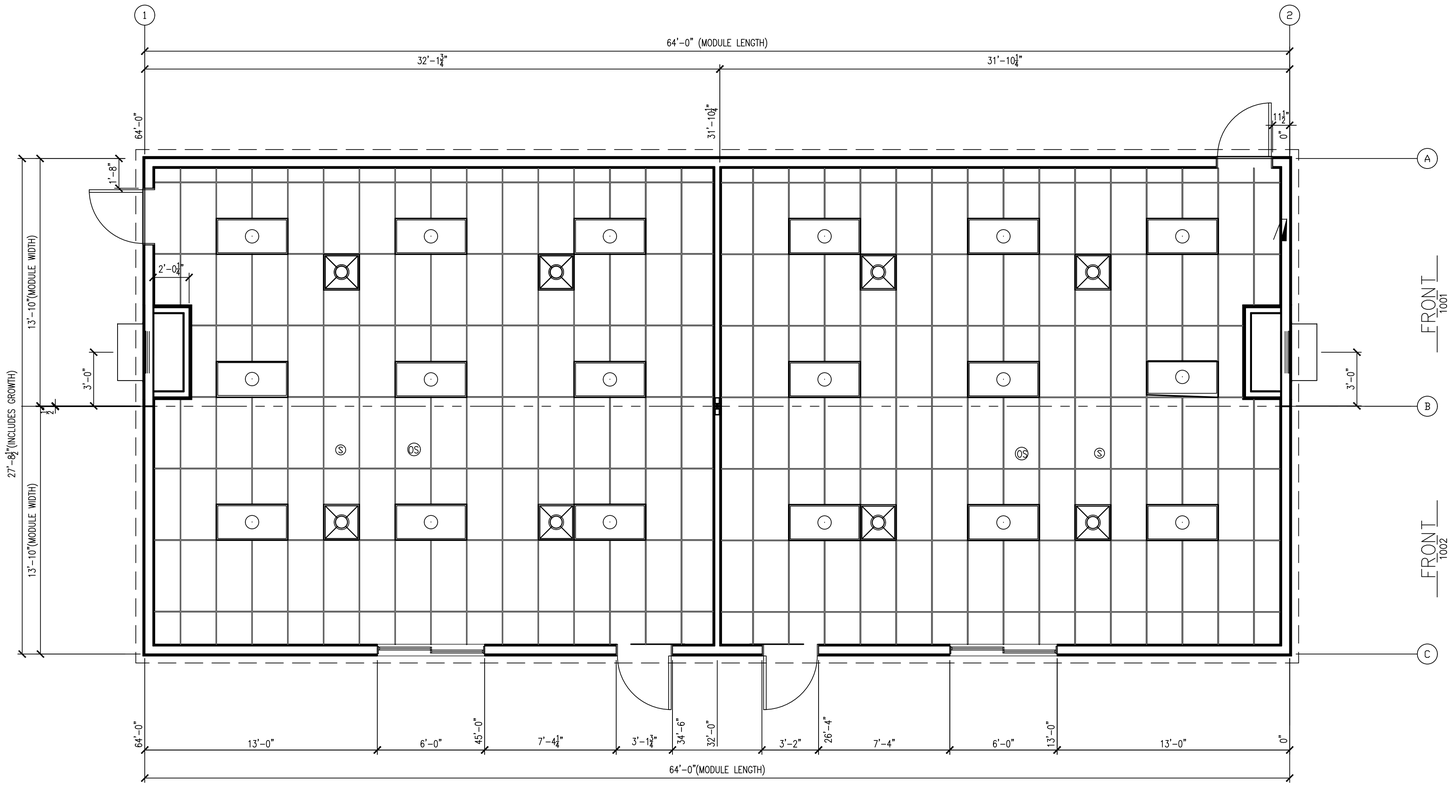
JOB NO: TBD
SHT. A-3.0
DATE: 1-17-17



REFLECTED CEILING PLAN LEGEND:

- SUPPLY AIR DIFFUSER 24"X24" DUCTED. LAY IN STYLE
- RECESSED (CEILING GRID) LED LIGHT W/ DIFFUSER
- OS — OCCUPANCY SENSOR, FOR CONTROLLED RECEPTACLES
- S — SMOKE DETECTOR
- 2X4 SUSPENDED CEILING GRID WITH ACOUSTIC TILES

MARK	REVISION	DATE
1	---	---
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PLOT STAMP: 1/18/2017 11:06 AM

RELEASE LEVEL: CUSTOMER

DRAWN BY:	-	####
REV. BY:	####	####
CHK. BY:	-	####

MARK	REVISION	DATE
1	---	---
2	---	---
3	CUSTOMER	1-17-17
4	---	---
5	---	---

JOB NAME: RIVERVIEW STOCK 2016
DESCRIPTION: ---
SHEET TITLE: REFLECTED CEILING PLAN
S/N: TBD
STD PLAN NO: ---

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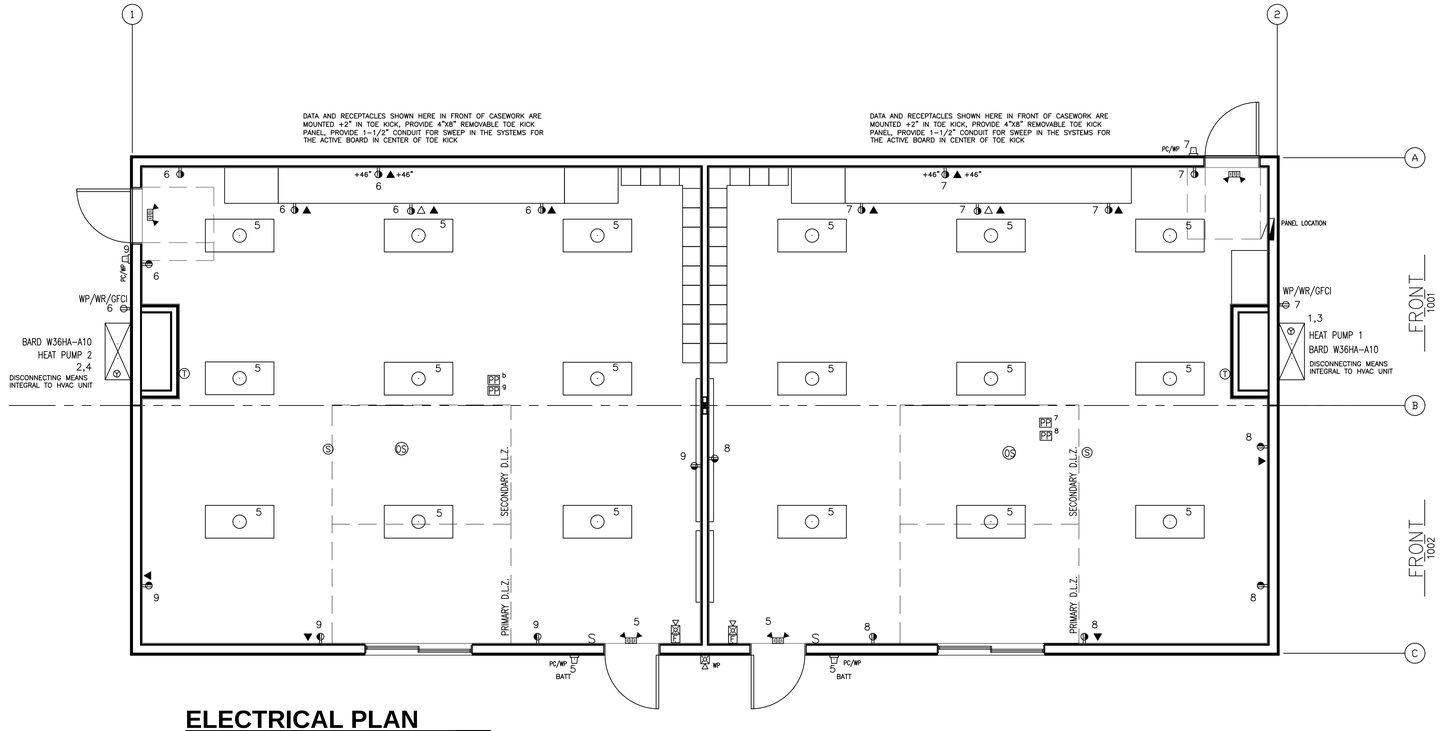
JOB NO: TBD
SHT. A-4.0
DATE: 1-17-17

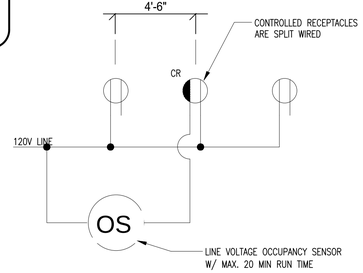
SYMBOL LEGEND

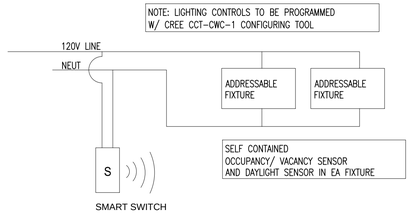
SYMBOL	DESCRIPTION
CKT#	2'X4' LED TROFFERS– CREE ZR24–40L–35–CMA 120V 44VA WHITLEY TO SUPPLY (1) CREE CONFIGURING TOOL CCT–CWC–1
PC/WP	HARRIS 300 SERIES FLUORESCENT 120V 26VA W/ INTEGRAL PHOTOCELL MOUNT @ 84" AFF
PC/WP BATT	HARRIS 300 SERIES FLUORESCENT 120V 26VA W/BATTERY BACKUP AND INTEGRAL PHOTO CELL MOUNT @ 84" AFF
S	SMART SWITCH, CREE # CWS–CWC 120V, MOUNT AT 48" AFF (U.N.O)
OS	OCCUPANCY SENSOR: (FOR CONTROLLED RECEPTACLES) – CONTROL UNIT – WATTSTOPPER BZ200. – SENSOR – SENSORSWITCH CM PDT 10
	EXITRONIX EXIT/EGRESS LIGHT W/BATTERY BACKUP 120V 10VA
	GENERAL PURPOSE SPLIT WIRED RECEPTACLE, 20AMP MFR STD. W/ COVER PLATE (MOUNT @ 18"AFF U.N.O.)
WP/WR/GFCI	GFCI, WEATHER RESISTANT RECEPTACLE, 20AMP, MFR STD. W/ WEATHER PROOF IN–USE COVER (MOUNT @18"AFF U.N.O)
	HARDWIRED CONNECTION.
	120/208 VOLT SINGLE PHASE PANEL, MFR. STD. 200AMP, 20 SPACE NEMA–1 FLUSH MOUNT ENCLOSURE, SERVICE EQUIPMENT RATED, W/ MAIN BREAKER. STUB CONDUIT THRU WALL, SITE CONTRACTOR TO EXTEND CONDUIT TO MAIN PANEL AND PULL WIRE, PROVIDE 1" CONDUIT INTO FLOOR CAVITY FOR SITE INSTALLATION OF GROUND CONDUCTOR.
▲ △	DATA/COM ROUGH IN – DOUBLE GANG J–BOX W/ SINGLE GANG MUD RING, (INSTALL AT SAME HEIGHT AS ADJACENT RECEPTACLE UNLESS NOTED OTHERWISE – WALL ROUGH IN –3/4" CONDUIT TO ABOVE CEILING & BELOW FLOOR. 8"X4" OPENING IN TOE KICK W/ BLANK COVER, PROVIDE 1 1/2" CONDUIT FOR SWEEP IN THE SYSTEMS FOR ACTIVE BOARD
F	FIRE ALARM PULL STATION: ROUGH IN ONLY. WHITLEY TO PROVIDE BACK BOX AND ½ CONDUIT ONLY. SEE DETAIL BELOW ON THIS SHEET. MOUNT @48" AFF
	FIRE ALARM HORN STROBE: ROUGH IN ONLY. WHITLEY TO PROVIDE BACK BOX AND ½ CONDUIT ONLY. SEE DETAIL BELOW ON THIS SHEET. MOUNT @ 80" AFF
WP	FIRE ALARM EXTERIOR HORN STROBE: ROUGH IN ONLY. WHITLEY TO PROVIDE BACK BOX AND ½ CONDUIT ONLY. MOUNT @84" AFF
S	FIRE ALARM SMOKE DETECTOR: ROUGH IN AND INSTALL ON SITE BY OTHERS, (REFERENCE ONLY)
T	THERMOSTAT SEE MECHANICAL MOUNT AT 48" AFF, BARD 8403–060
PP X	POWERPACK FOR CONTROLLED RECEPTACLE CIRCUIT CIRCUIT NUMBER ADJACENT TO PACK

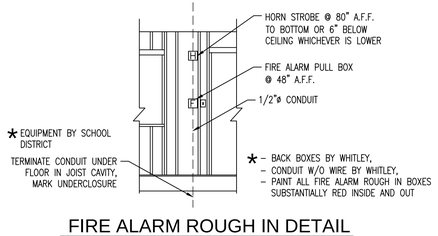


ELECTRICAL PLAN
1/4" = 1'–0"

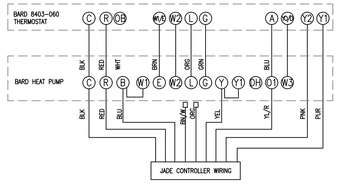
MAX. IN SPACES OVER 200 S.F.







FIRE ALARM ROUGH IN DETAIL
SCALE: N.T.S.



GENERAL
1. ALL DIMENSIONS ARE IN INCHES FROM FINISH FLOOR TO CENTER OF BOX UNLESS NOTED OTHERWISE

2. DEFINITIONS: U.N.O. – UNLESS NOTED OTHERWISE
AFF – ABOVE FINISH FLOOR

3. ITALICS INDICATE WORK DONE ON SITE

ELECTRICAL
1. BUILDING TO BE WIRED IN MC, EMT, OR FLEX

2. TYPICAL WIRE SIZES:
15 AMP – #14 CU 30 AMP – #10 CU
20 AMP – #12 CU 35 AMP – # 8 CU

3. SERVICE ENTRANCE – BY OTHERS

4. ALL RECEPTACLES TO BE INSTALLED 18" A.F.F. TO CENTER OF RECEPTACLE, UNLESS OTHERWISE SPECIFIED.

5. GROUND FAULT CIRCUIT PROTECTION REQUIRED FOR ALL RECEPTACLES IN WET AREAS.

6. ALL CONDUCTORS AND CONDUITS SHALL BE SIZED AND INSTALLED TO COMPLY WITH THE 2014 N.E.C.

LIGHTING
1. EACH SPACE ENCLOSED BY WALLS OR CEILING HEIGHT PARTITIONS SHALL BE PROVIDED WITH LIGHTING CONTROLS LOCATED WITHIN THAT SPACE. THE LIGHTING CONTROLS, WHETHER ONE OR MORE, SHALL BE CAPABLE OF TURNING OFF ALL LIGHTS WITHIN THE SPACE. THE CONTROLS SHALL BE READILY ACCESSIBLE, AT THE POINT(S) OF ENTRY/EXIT. (EXCEPTION: LIGHTING CONTROLLED BY AUTOMATIC CONTROLS) (WSEC C405.2.1.1)

2. THE MAXIMUM LIGHTING POWER THAT MAY BE CONTROLLED FROM A SINGLE SWITCH OR AUTOMATIC CONTROL SHALL NOT EXCEED 16 AMPERES. A MASTER CONTROL MAY BE PROVIDED AS LONG AS THE INDIVIDUAL SWITCHES RETAIN THE ABILITY TO FUNCTION INDEPENDENTLY (WSEC C405.2.5)

3. ALL EXTERIOR LIGHTING NOT REQUIRED TO REMAIN ON 24 HOURS CONTINUOUS, SHALL BE CONTROLLED BY A PHOTOCELL (WSEC C405.2.4)

4. OCCUPANCY SENSORS SHALL BE CAPABLE OF TURNING LIGHTS OFF NOT MORE THAN 30 MINUTES AFTER AREA HAS BEEN VACATED, LIGHTING CONTROLLED BY OCCUPANCY SENSORS SHALL HAVE A WALL MOUNTED SWITCH CAPABLE OF TURNING OF LIGHTS WHEN SPACE IS OCCUPIED. (WSEC C405.2.2.2)

5. DAYLITE ZONES SHALL BE CONTROLLED INDEPENDENTLY FROM GENERAL AREA LIGHTING. EACH DAYLIGHT CONTROL ZONE SHALL NOT EXCEED 2,500 SQUARE FEET. CONTIGUOUS DAYLIGHT ZONES ADJACENT TO VERTICAL FENESTRATION ARE ALLOWED TO BE CONTROLLED BY A SINGLE CONTROLLING DEVICE PROVIDED THAT THEY NOT INCLUDE ZONES FACING MORE THAN TWO ADJACENT CARDINAL ORIENTATIONS (WSEC C405.2.2.3)

6. AUTOMATIC DAYLIGHT CONTROLS SHALL BE PROVIDED TO REDUCE THE LIGHTING POWER IN THE DAYLIGHT ZONES CONTINUOUSLY TO A MAX. OF 20% FULL POWER (WSEC C405.2.2.3.2)

7. LIGHTING CONTROLS WHICH ANY AUTOMATIC CONTROL SHALL BE TESTED TO ENSURE CONTROL DEVICES, COMPONENTS, EQUIPMENT AND SYSTEMS ARE CALIBRATED, ADJUSTED, AND OPERATE IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATION. SEQUENCES OF OPERATION SHALL BE TESTED TO ENSURE COMPLIANCE WITH PLANS AND SPECIFICATIONS. A COMPLETE REPORT OF TEST PROCEDURES AND RESULTS SHALL BE PREPARED AND FILED WITH THE OWNER. (WSEC C408.3)

8. ALL INDICATED WIRE SIZES BASED ON 75–DEG EQUIPMENT TERMINAL RATINGS IN ACCORDANCE WITH NEC310–16. WHERE EQUIPMENT IS PROVIDED AT LESS THAN 75–DEGREE, CONTRACTOR SHALL PROVIDE CONDUCTOR SIZE ADJUSTED ACCORDINGLY TO REFLECT EQUIPMENT RATINGS.

LIGHTING BUDGET CALCULATIONS

MAXIMUM ALLOWED INTERIOR LIGHTING WATTAGE (SPACE BY SPACE METHOD)

SPACE TYPE	AREA	VA/SF	VA ALLOWED
CLASSROOM	1638	1.00	1638
TOTAL VA ALLOWED			1638 VA

LIGHT REDUCTION / REDUCED LIGHTING POWER (PER WSEC C406.3.1)

TOTAL VA ALLOWED x 0.75 = 0.75 x 1638 = 1228.5 VA ALLOWED PER SECTION C406 ADDITIONAL EFFICIENCY OPTIONS

PROPOSED INTERIOR LIGHTING WATTAGE:

(18) LED TROFFERS AUTO DIMMABLE @ 44.0 VA	792
TOTAL PROPOSED INTERIOR LIGHTING VA	792 VA

PERCENTAGE OF INSTALLED INTERIOR LIGHTING CONFIGURED WITH ENHANCED CONTROL FUNCTIONS (WSEC C406.4)
100% / 18 LIGHTS = 5.56% PER LIGHT, 18 LTS W/ ENHANCED CONTROLS. X 5.56 = 100%

MAXIMUM ALLOWED EXTERIOR TRADABLE LIGHTING WATTAGE:

TRADABLE SURFACE	WATTS/LF	LF	VA ALLOWED
MAIN ENTRY	30	3	90
OTHER ENTRY	20	9	180
BASIC SITE ALLOWANCE ZONE 3			750
TOTAL VA ALLOWED			1020
PROPOSED EXTERIOR LIGHTING WATTAGE:			
(4) WALL MOUNT FLUORESCENT FIXTURES @26VA			104
TOTAL PROPOSED LIGHTING VA			104

POWER RISER DIAGRAM

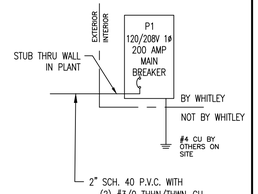
NOTES:
MODULAR MANUFACTURER SHALL INSTALL ELECTRICAL PANEL THAT IS SERVICE ENTRANCE RATED

OWNER TO PROVIDE CALCULATED OR ACTUAL AIC FAULT CURRENT RATING AT ELECTRICAL PANELS, BEFORE FINAL ENGINEERING.

MANUFACTURER ASSUMES TO BE 10kaic UNLESS ADVISED OTHERWISE

GROUNDING ELECTRODE CONDUCTOR SIZED PER NEC TABLE 250.66

SERVICE ENTRANCE GROUNDING CONDUCTOR, CONDUIT TO BUILDING P.O.C., METER, AND TRANSFORMER (IF REQUIRED) INSTALLED BY OTHERS ON SITE. UNDER SEPARATE LOCAL PERMIT.



PANEL P1

VOLTAGE (L–N):	120		ENCLOSURE TYPE:	NEMA 1	
VOLTAGE (L–L):	208		MOUNTING:	RECESSED	
PHASES, WIRES:	1 ϕ, 3 W		AIC RATING:	10000	
MINIMUM BUS CAPACITY (A):	200 A		NOTES:	----	
MAIN O.C. DEVICE (A):	200 A				

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA) A		PHASE LOADS (VA) B		POLE	TRIIP AMPS	DESCRIPTION	CKT NO
1,3	HEAT PUMP 1	90	2	7257	7257			2	90	HEAT PUMP 2	2,4
1,3	HEAT PUMP 1	90	2			7257	7257	2	90	HEAT PUMP 2	2,4
5	LIGHTS: INT, EXT	20	1	936	1260			1	20	REC 7	6
7	REC 6	20	1			1080	900	1	20	REC 5	8
9	REC 4	20	1	720	0			1	0	SPACE	10
11	SPACE	0	1			0	0	1	0	SPACE	12
13	SPACE	0	1	0	0			1	0	SPACE	14
15	SPACE	0	1			0	0	1	0	SPACE	16
17	SPACE	0	1	0	0			1	0	SPACE	18
19	SPACE	0	1			0	0	1	0	SPACE	20
				CONNECTED LOAD PHASE TOTALS (VA)							
				17430		16494					

	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
Equipment	0.0	1.00	0.0
Lighting	0.9	1.25	1.2
Motors	5.3	1.00	5.3
Motors (Largest)	3.7	1.25	4.7
Receptacles (0 – 10 KVA)	4.0	1.00	4.0
Elec Heating	20.0	1.00	20.0
TOTAL:	33.9		35.1
LOAD (AMPS):	163.1		168.7

DEMAND LOAD	35.1KVA
SPARE CAPACITY	6.5 KVA
SPARE CAPACITY	31.3 AMPS
SPARE CAPACITY	16 %

DATE	MARK	REVISION

DATE	MARK	CUSTOMER
1-17-17		

RELEASE LEVEL: CUSTOMER
DRAWN BY: MDP ####
REV. BY: ####
CHK. BY: - ####

JOB NAME: RIVERVIEW STOCK 2016
DESCRIPTION: ---- STD PLAN NO. ----
SHEET TITLE: ELECTRICAL PLAN
S/N: TBD

PLOT STAMP: 1/18/2017 11:09 AM

WHITLEY EVERGREEN INC.
mobile and modular buildings
14219 SMOKEY POINT BLVD. MARYSVILLE WA 98271
PHONE: (360) 653-5790 FAX: (360) 659-7735

WHITLEY EVERGREEN

JOB NO: TBD
SHT. E-1.0
DATE: 1-17-17

SYMBOL LEGEND

SYMBOL	QTY.	DESCRIPTION
10ø		DUCT – RIGID, 26ga GALV. ROUND METAL
		DUCT – FLEXIBLE INSULATED DUCTING.
	8 EA. 10"ø	DAMPER – ADJUSTABLE INLINE METAL
	8 EA. 10"ø	SUPPLY AIR DIFFUSER – SHOEMAKER HVL – 10" NECK UNLESS NOTED OTHERWISE – NO DAMPER – 24x24 LAY IN
R.A.G.	4 EA.	RETURN AIR GRILL – MFR STD. – LOUVERED METAL – 16"x24"
T	2 EA.	THERMOSTAT – BARD – MODEL #8403-060 – PROGRAMMABLE W/ MICROPROCESSOR, NIGHT SETBACK, 7 DAY, BATTERY BACKUP
HP-1	2 EA.	HEAT PUMP – BARD W36HA-A10 – 3 TON SINGLE PACKAGE VERTICAL HEAT PUMP W/10kw BACK UP HEAT STRIP – CAPACITY & EFFICIENCY COOLING: 34,600 BTUH @ 10.0 EER HEATING: 32,000 BTUH @3.0 COP BLOWER PERFORMANCE: 1,395 CFM HIGH SPEED DRY COIL

NOTES:
1. MECHANICAL SYSTEMS AND EQUIPMENT SERVING HEATING, COOLING, VENTILATING, AND OTHER NEEDS SHALL COMPLY WITH SECTION WSEC NREC C403.2 (REFERRED TO AS THE MANDATORY PROVISIONS)

2. EQUIPMENT SHALL MEET THE MINIMUM EFFICIENCY REQUIREMENTS OF TABLES C403.2.3(3)

3. PACKAGED ELECTRIC EQUIPMENT PROVIDING BOTH HEATING AND COOLING WITH A TOTAL COOLING CAPACITY GREATER THAN 6,000 BTU/H SHALL BE A HEAT PUMP. C403.2.3.3

4. THE SUPPLY OF HEATING AND COOLING ENERGY TO EACH ZONE SHALL BE CONTROLLED BY INDIVIDUAL THERMOSTATIC CONTROLS CAPABLE OF RESPONDING TO TEMPERATURE WITHIN THE ZONE. AT A MINIMUM, EACH FLOOR OF A BUILDING SHALL BE CONSIDERED AS A SEPARATE ZONE. CONTROLS ON SYSTEMS REQUIRED TO HAVE ECONOMIZERS AND SERVING SINGLE ZONES SHALL HAVE MULTIPLE COOLING STAGE CAPABILITY AND ACTIVATE THE ECONOMIZER WHEN APPROPRIATE AS THE FIRST STAGE OF COOLING. C403.2.4.1

5. UNITARY AIR COOLED HEAT PUMPS SHALL INCLUDE MICROPROCESSOR CONTROLS THAT MINIMIZE SUPPLEMENTAL HEAT USAGE DURING START-UP, SET-UP, AND DEFROST CONDITIONS. THESE CONTROLS SHALL ANTICIPATE NEED FOR HEAT AND USE COMPRESSION HEATING AS THE FIRST STAGE OF HEAT. CONTROLS SHALL INDICATE WHEN SUPPLEMENTAL HEATING IS BEING USED THROUGH VISUAL MEANS (E.G., LED INDICATORS). HEAT PUMPS EQUIPPED WITH SUPPLEMENTARY HEATERS SHALL BE INSTALLED WITH CONTROLS THAT PREVENT SUPPLEMENTAL HEATER OPERATION ABOVE 40°F. C403.2.4.1.1

6. SETPOINT OVERLAP RESTRICTION. WHERE USED TO CONTROL BOTH HEATING AND COOLING, ZONE THERMOSTATIC CONTROLS SHALL PROVIDE A TEMPERATURE RANGE OR DEADBAND OF AT LEAST 5°F (2.8°C) WITHIN WHICH THE SUPPLY OF HEATING AND COOLING ENERGY TO THE ZONE IS CAPABLE OF BEING SHUT OFF OR REDUCED TO A MINIMUM. C403.2.4.1.2

7. FOR ALL OCCUPANCIES OTHER THAN GROUP R, EACH ZONE SHALL BE PROVIDED WITH THERMOSTATIC SETBACK CONTROLS THAT ARE CONTROLLED BY EITHER AN AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROL SYSTEM. C403.2.4.2

8. THERMOSTATIC SETBACK CONTROLS SHALL HAVE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13° C) OR UP TO 85°F (29°C). C403.2.4.2.1

9. AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROLS SHALL BE CAPABLE OF STARTING AND STOPPING THE SYSTEM FOR SEVEN DIFFERENT DAILY SCHEDULES PER WEEK AND RETAINING THEIR PROGRAMMING AND TIME SETTING DURING A LOSS OF POWER FOR AT LEAST 10 HOURS. ADDITIONALLY, THE CONTROLS SHALL HAVE A MANUAL OVERRIDE THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP TO 2 HOURS; A MANUALLY OPERATED TIMER CAPABLE OF BEING ADJUSTED TO OPERATE THE SYSTEM FOR UP TO 2 HOURS; OR AN OCCUPANCY SENSOR. C403.2.4.2.2

10. AUTOMATIC START CONTROLS SHALL BE PROVIDED FOR EACH HVAC SYSTEM. THE CONTROLS SHALL BE CAPABLE OF AUTOMATICALLY ADJUSTING THE DAILY START TIME OF THE HVAC SYSTEM IN ORDER TO BRING EACH SPACE TO THE DESIRED OCCUPIED TEMPERATURE IMMEDIATELY PRIOR TO SCHEDULED OCCUPANCY. C403.2.4.2.3

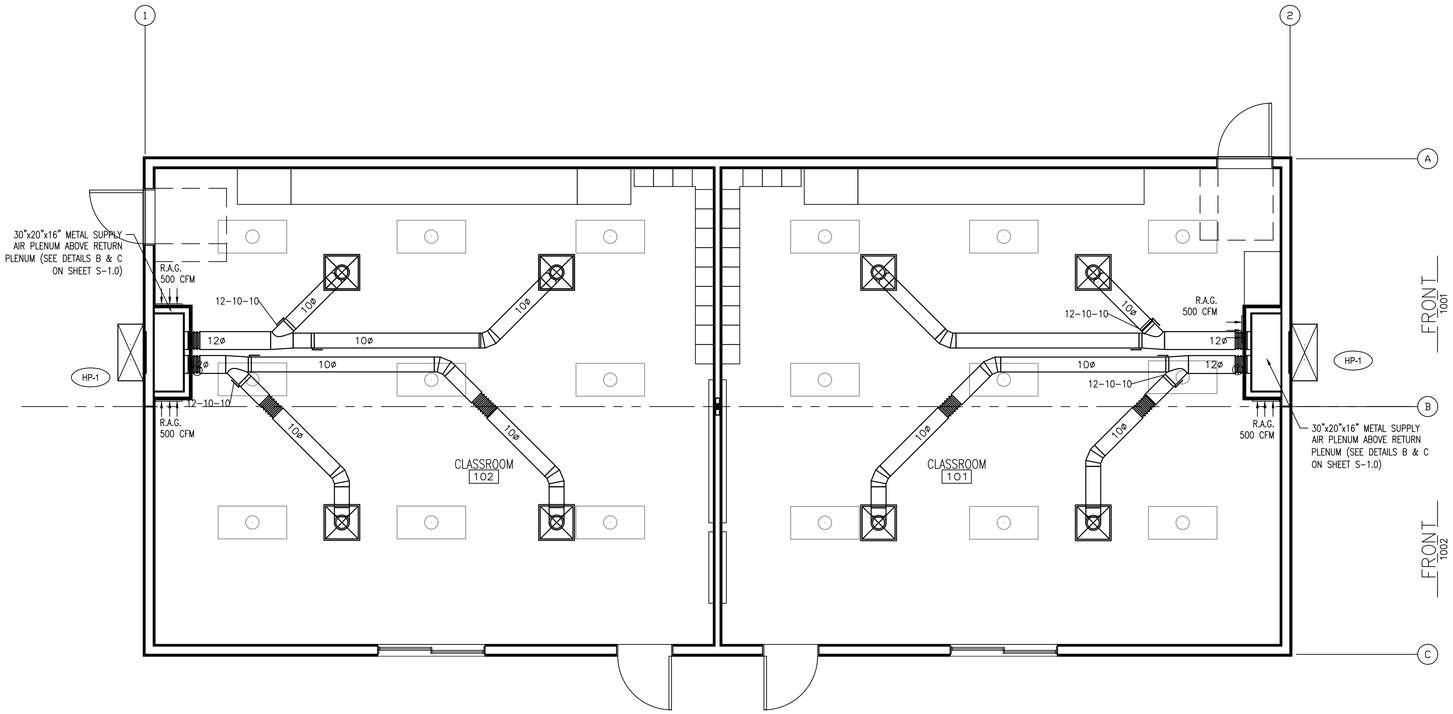
11. BOTH OUTDOOR AIR SUPPLY AND EXHAUST DUCTS SHALL BE EQUIPPED WITH MOTORIZED DAMPERS THAT WILL AUTOMATICALLY SHUT
WHEN THE SYSTEMS OR SPACES SERVED ARE NOT IN USE OR DURING BUILDING WARM-UP, COOLDOWN, AND SETBACK. C403.2.4.3

12. VENTILATION, EITHER NATURAL OR MECHANICAL, SHALL BE PROVIDED IN ACCORDANCE WITH CHAPTER 4 OF THE INTERNATIONAL MECHANICAL CODE. WHERE MECHANICAL VENTILATION IS PROVIDED, THE SYSTEM SHALL PROVIDE THE CAPABILITY TO REDUCE THE OUTDOOR AIR SUPPLY TO THE MINIMUM REQUIRED BY CHAPTER 4 OF THE INTERNATIONAL MECHANICAL CODE. C403.2.6

13. CLASSROOMS, GYMS, AUDITORIUMS AND CONFERENCE ROOMS LARGER THAN 500 SQUARE FEET OF FLOOR AREA SHALL HAVE OCCUPANCY SENSOR CONTROL THAT WILL EITHER CLOSE OUTSIDE AIR DAMPERS OR TURN OFF SERVING EQUIPMENT WHEN THE SPACE IS UNOCCUPIED EXCEPT WHERE EQUIPPED WITH ANOTHER MEANS TO AUTOMATICALLY REDUCE OUTSIDE AIR INTAKE BELOW DESIGN RATES WHEN SPACES ARE PARTIALLY OCCUPIED. C403.2.6.3

14. DUCTWORK SHALL BE CONSTRUCTED AND ERECTED IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE. C403.2.8.3

15. ALL LONGITUDINAL AND TRANSVERSE JOINTS, SEAMS AND CONNECTIONS OF SUPPLY AND RETURN DUCTS OPERATING AT A STATIC PRESSURE LESS THAN OR EQUAL TO 2 INCHES WATER GAUGE (W.G.) (500 PA) SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS EMBEDDED-FABRIC SYSTEMS OR TAPES INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. PRESSURE CLASSIFICATIONS SPECIFIC TO THE DUCT SYSTEM SHALL BE CLEARLY INDICATED ON THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE. C403.2.8.3.1



MECHANICAL PLAN
1/4" = 1'-0"

OUTDOOR AIRFLOW CALCULATION
PER CLASSROOM (101, 102)

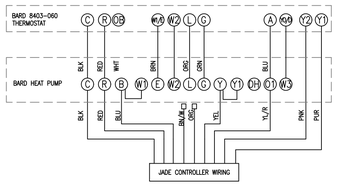
EDUCATION – CLASSROOM (AGES 9 AND OVER)

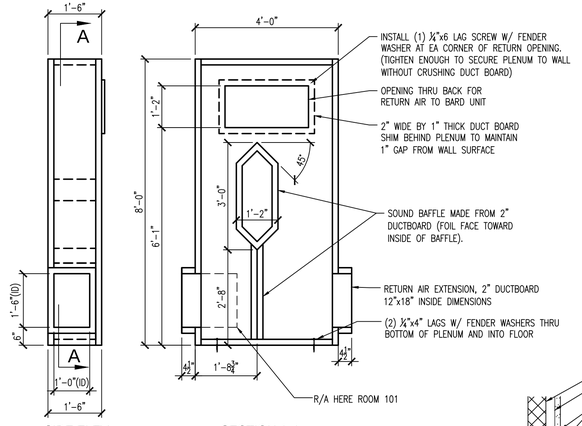
Az = 820 SQFT (ZONE FLOOR AREA)
Pz = 35 PER 1,000 = 820 / 1,000 = 0.82*35 = 28.7 PEOPLE (ZONE POPULATION)
Rp = 10 CFM/PERSON (PEOPLE OUTDOOR AIR RATE – TABLE 403.3)
Ra = 0.12 (AREA OUTDOOR RATE – TABLE 403.3)

Vz = Rp*Pz + Ra*Az
Vz = 10*29 + 0.12*820
Vz = 290 + 98.4 = MIN. 388.4 CFM OSA REQUIRED

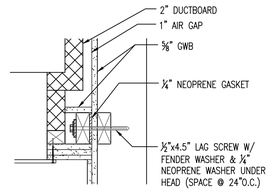
HEAT PUMP FAN	1117 CFM	1117/10=11.17
OUTSIDE REQUIREMENT	388.4 CFM	388.4/11.17= 34.77

** FACTORY TO SET MIN POSITION IN JADE CONTROLLER
TO 34.77% (4.75 VDC MIN. POS SET POINT) OPEN POSITION BEFORE SHIPPING. FINAL ADJUSTMENTS TO BE MADE BY OTHERS AFTER MODULES ARE SET UP AND TESTED. **

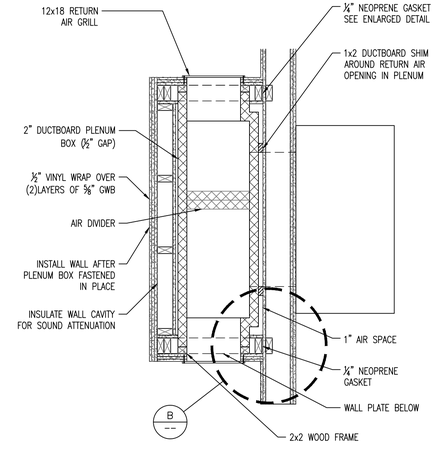




PLENUM DETAIL
1/2" = 1'-0"



ATTACHMENT DETAIL
1-1/2" = 1'-0"



B PLENUM PLAN
3/4" = 1'-0"

WHITLEY EVERGREEN INC.
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14218 SMOKEY POINT BLVD. MARYSVILLE, WA 98271
PHONE: (360) 653-5780 FAX: (360) 659-7755

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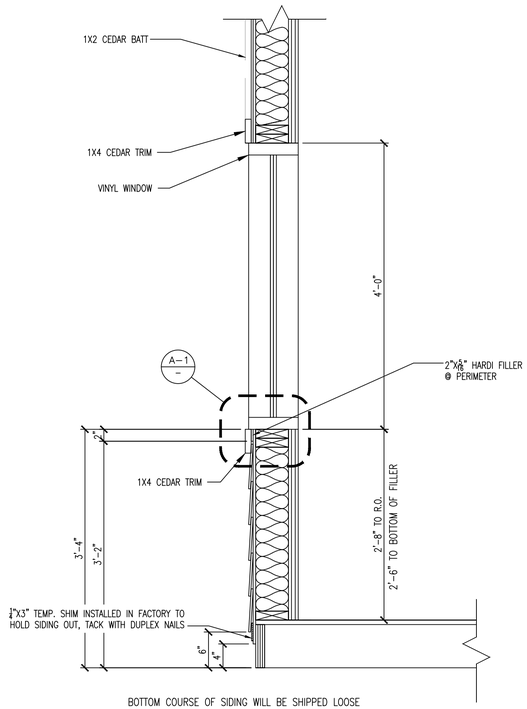
RELEASE LEVEL:	CUSTOMER		
DRAWN BY:	MDP	REV. BY:	###
REV. BY:	###	CHK. BY:	###
CHK. BY:	###		

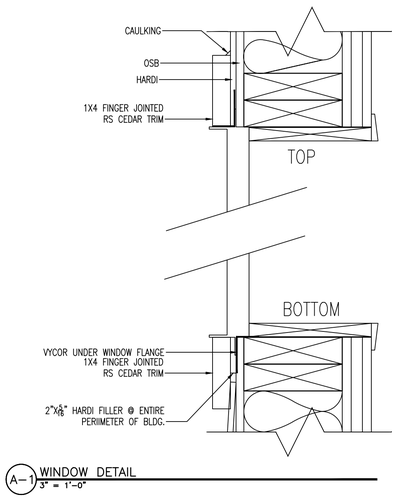
JOB NAME: RIVERVIEW STOCK 2016
DESCRIPTION: ---
SHEET TITLE: MECHANICAL PLAN
STD PLAN NO: ---
S/N: TBD

JOB NO: TBD
SHT. M-1.0
DATE: 1-17-17



BOTTOM COURSE OF SIDING WILL BE SHIPPED LOOSE (NOT SHOWN IN THIS DETAIL)

A WALL DETAIL AT WINDOW
1" = 1'-0"



A-1 WINDOW DETAIL
3" = 1'-0"

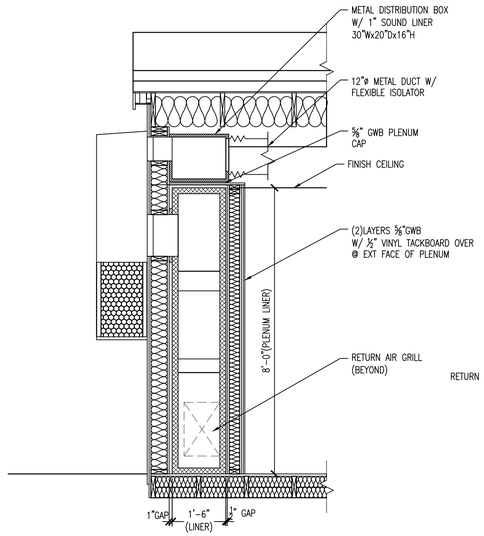
AIR BARRIER SYSTEM

ROOF: GRIP RITE E BUILDING WRAP AT UNDER SIDE OF RAFTERS, (SEAL TO LVL & RIM W/ GRIP RITE TAPE. APPLY SILL SEAL OR CAULKING BETWEEN TOP PLATE OF WALL & UNDERSIDE OF ROOF.

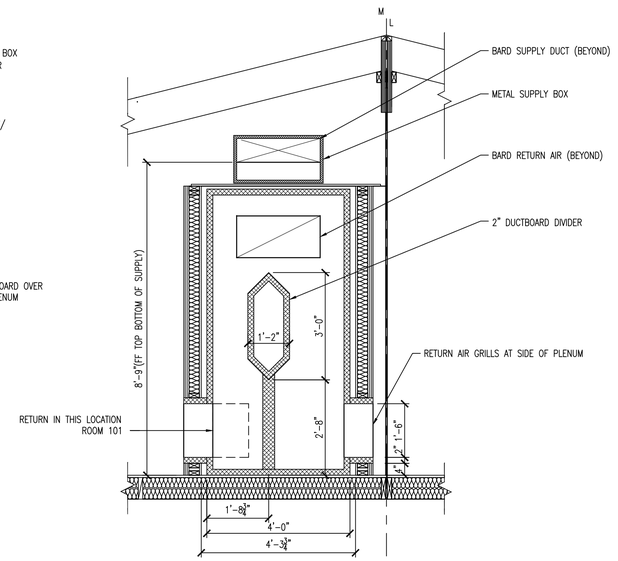
WALLS: GRIP RITE "E" BUILDING WRAP AT EXTERIOR FACE OF WALL, SEAL TO WINDOW, DOOR, AND EXTERIOR PENETRATIONS PER MANUFACTURES INSTRUCTIONS. EXTEND BUILDING WRAP AROUND CORNERS AND SEAL WITH SEAM TAPE.

FLOOR: TONGUE AND GROOVE 3/4" OSB PLYWOOD AT TOP SIDE OF FLOOR JOISTS (APPLY CAULKING OR SILL SEAL AT UNDERSIDE OF EXTERIOR WALL SILL PLATES)

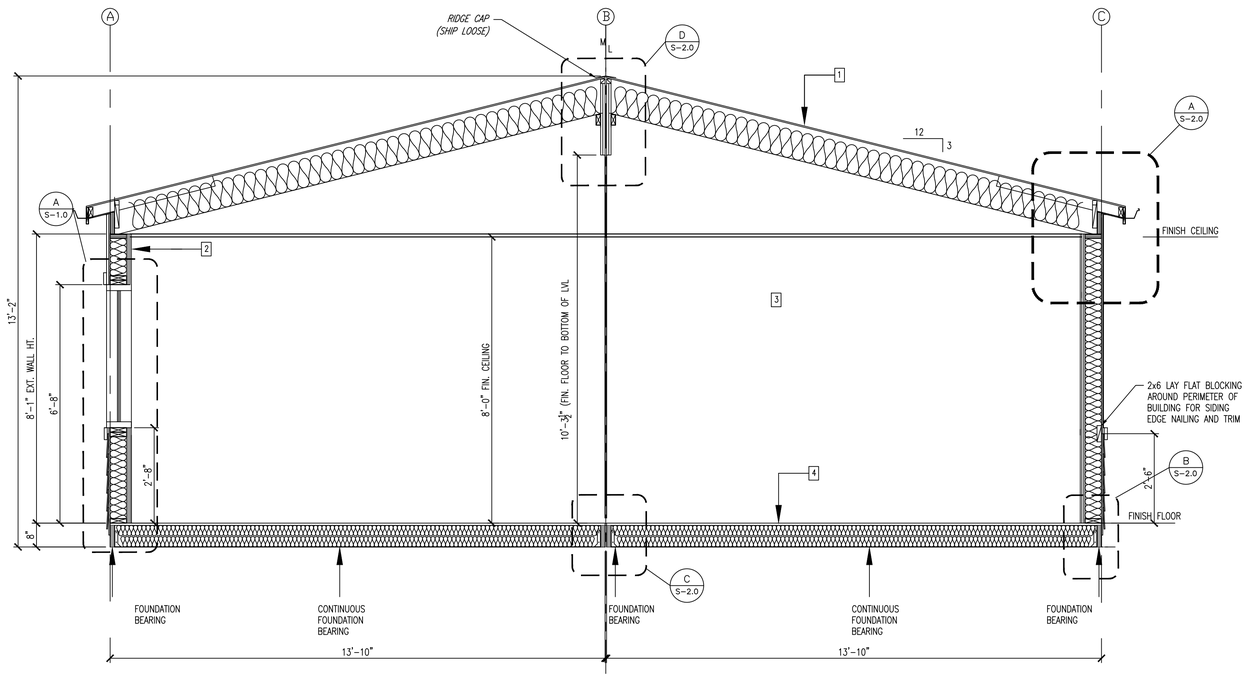
NOTE: SHIP LOOSE SEAM TAPE, AND SEALING MATERIALS FOR SITE CREW TO PROPERLY SEAL AIR BARRIER AT BUILDING MATELINES.
- APPLY SEAM TAPE TO FACE OF BUILDING WRAP AT VERTICAL MATE LINES AT BUILDING ENDS
- SEAL AND GASKET MATE LINE GAP AT FLOOR RIM JOISTS.
- SEAL UNDERSIDE OF CEILING AT MATELINE (LVL TO LVL)



B PLENUM SECTION
1/2" = 1'-0"

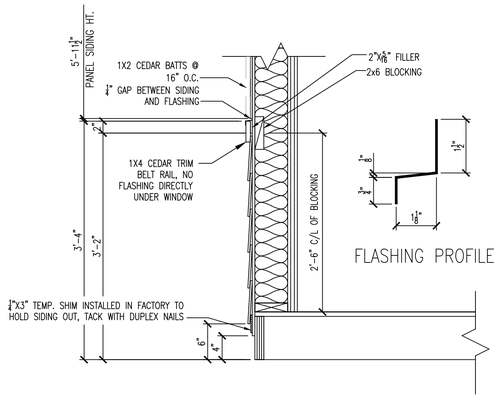


C PLENUM SECTION
1/2" = 1'-0"



TRANSVERSE BUILDING SECTION
1/2" = 1'-0"

NOTE: CRAWL SPACE VAPOR BARRIER TO BE INSTALLED ON SITE BY OTHERS. VAPOR BARRIER TO BE MIN. 6 MIL BLACK POLY W/ SEAMS OVERLAPPED MIN. 12" OR MIN. 3-1/2" CONCRETE SLAB. WSEC 1313.5 (N.L.E.A.)



4" FROM BASE OF MOD TO BOTTOM OF SHEATHING, 6" FROM BASE OF MOD TO BOTTOM OF FIRST ROW OF LAP SIDING IN FACTORY, SHIP LOOSE BOTTOM ROW OF LAP SIDING.

D BELT RAIL BLOCKING AND FLASHING
1" = 1'-0"

1 ROOF/CEILING ASSY
ROOFING: PABCO "PREMIER " ARCHITECTURAL SHINGLES OVER (2) LAYERS 15# FELT, HIGH WIND APPLICATION (ICE AND WATER SHIELD AT PERIMETER)
SHEATHING: 7/16" OSB
RIDGEBEAM: 1.5"X24"X64'-0" LVL
FRAMING: 2x12 HF#2 @ 24"O.C.-6" OVERHANG WITH CLOSED SOFFITS
INSULATION: R38C FIBERGLASS UNFACED BATTS W/ MIN 1" CLEAR AIR SPACE ABOVE
AIR BARRIER: GRIPRITE HOUSEWRAP "E"
CEILING: 2" X 4" SUSPENDED T-BAR GRID (INSTALLED PER 2015 IBC 803.9.1.1 & IBC 2506.2.1, ASTM C635 & C636 & ASCE 7 SECTION 13.5.6) INSTALL ARMSTRONG 7/8" WALL ANGLE SEISMIC Rx SUSPENSION SYSTEM (ICC-ESR-1308)
FASCIA: 1X6 FINGER JOINTED CEDAR
GUTTERS AND (4) 2" DOWNSPOUTS INSTALLED IN FACTORY

2 EXTERIOR WALL ASSY
COVERING: 1/2" VINYL WRAP TACK BOARD "CALCUTTA TAN" RELIEF CUT OVER DOORS AND WINDOWS. W/ VINYL WRAPPED CORNER TRIM. AND BATTS OVER RELIEF CUTS. (VAPOR BARRIER)
SHEATHING: 5/8" TYPE X GYPSUM WALLBOARD
INSULATION: 1" POLYISOCYANURATE (R-3) (INT. FACE OF STUDS), R-21 UNFACED FIBERGLASS INSULATION BATTS.
FRAMING: 2X6 HF STUD GRADE @ 16" O.C. W/ SINGLE 2X6 BOTTOM PLATE & SINGLE LVL TOP PLATE
INSTALL 2X12 BLOCKING IN SIDEWALL OVER DOORS FOR FUTURE CANOPY, 2X6 BLOCK AT EXT. WALL PERIMETER FOR SIDING AND HORIZ. TRIM NAILING, DOUBLE STUDS AT HARDIPANEL SIDING JOINTS AND FLAT BACKING AT ALL EXT. TRIM FOR LAP SIDING END NAILING
SHEATHING: 7/16" OSB
BUILDING WRAP: GRIP RITE "E" BLDG. WRAP
UPPER SIDING: FIBER CEMENT PANELS (CEDAR MILL) EMBOSSED (FINGER JOINTED) BATTS @ 16" O.C.
LOWER SIDING: FIBER CEMENT LAP W/ 6" EXPOSURE
TRIM: FINGER JOINTED CEDAR (REFER TO ELEVATIONS FOR SIZES)
FLASHING: 2x2 GALV FLASHING OVER SIDING AND UNDER CORNER TRIM.

3 INTERIOR WALL ASSY
COVERING: 1/2" VINYL WRAP TACK BOARD
SHEATHING: ⅝" TYPE X GWB
FRAMING: 2x4 HF STUD GRADE @ 16"O.C. FULL HEIGHT TO FRAMING ABOVE (EXCEPT WHERE NOTED ON FLOOR PLAN.)
INSULATION: R-11 UNFACED FIBERGLASS
SHEATHING: 5/8" TYPE X GWB
COVERING: 1/2" VINYL WRAP TACK BOARD
PLENUM WALLS: SOUND RATE TO NC-35-INSULATED AND SHEET ROCKED

4 FLOOR ASSY
COVERING: ON SITE BY OTHERS
DECKING: 3/4" OSB T&G STURD-I-FLOOR SUB-FLOOR, 1 PERM MAX. VAPOR BARRIER, GLUED AND NAILED
FRAMING: 2X8 HF#2 JOISTS AT 16" O.C. W/ SIMPSON LUS28 JOIST HANGER EACH END.
RIM JOIST: SINGLE 1-1/2"x 7-1/4" LVL
MOISTURE BARRIER: MOIST-STOP WATER BARRIER APPLIED BOTTOM 12" OF GYP SHEATHING, PERIMETER RIMS AND END JOISTS
INSULATION: (2)LAYERS R-15 FIBERGLASS INSULATION BATTS, HELD IN SUBSTANTIAL CONTACT W/ FLOOR SHEATHING
UNDERCLOSURE: MOBILEFLEX

MARK	REVISION	DATE

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	CUSTOMER	1-17-17

RELEASE LEVEL: CUSTOMER
DRAWN BY: MDP ####
REV. BY: ####
CHK. BY: - ####

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RIVERVIEW STOCK 2016
JOB NAME: ---
DESCRIPTION:
BUILDING SECTION
STD PLAN NO. ---
SHEET TITLE:
S.N. TBD

WHITLEY EVERGREEN INC.
mobile and modular buildings
14218 SMOKEY POINT BLVD. MARYSVILLE, WA 98271
PHONE: (360) 653-5700 FAX: (360) 659-7735

JOB NO: TBD
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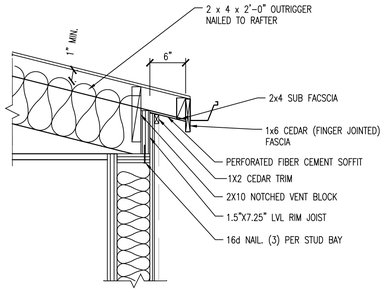
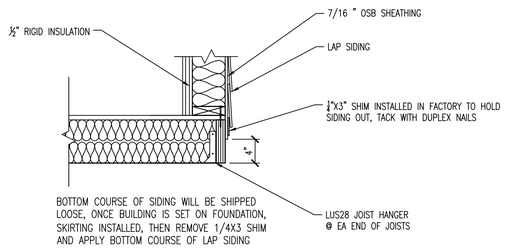
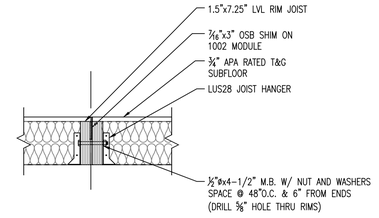


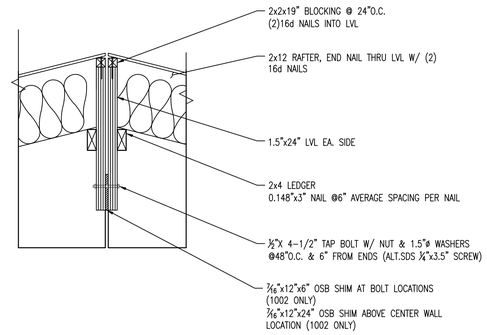
A EAVE DETAIL
1"=1'-0"



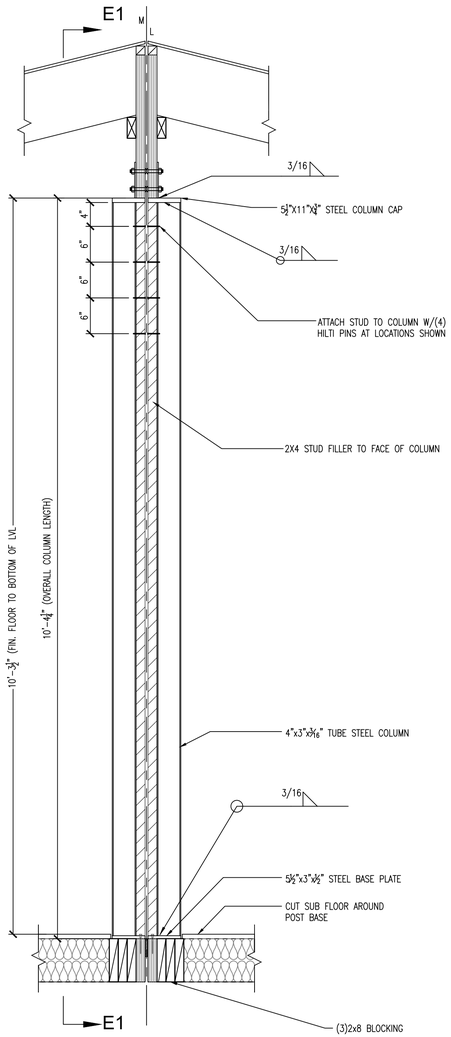
B FLOOR – WALL DETAIL
1"=1'-0"



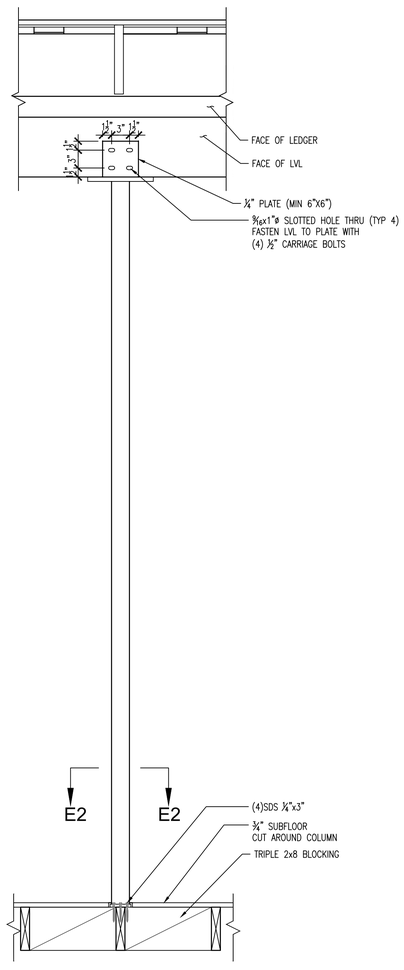
C FLOOR MATE–LINE DETAIL
1"=1'-0"



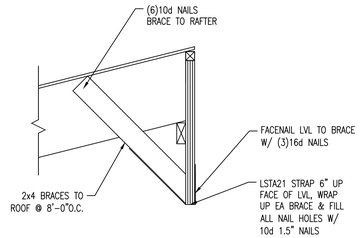
D ROOF MATE–LINE DETAIL
1" = 1'-0"



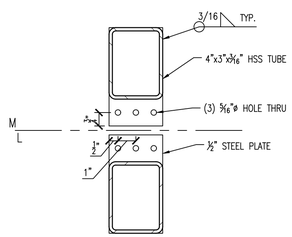
E COLUMN DETAIL
NTS



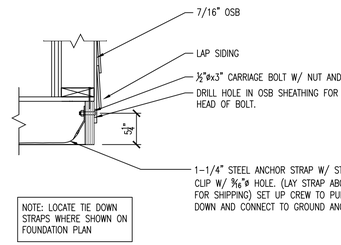
SECTION E1



D1 LVL BRACING DETAIL
1" = 1'-0"

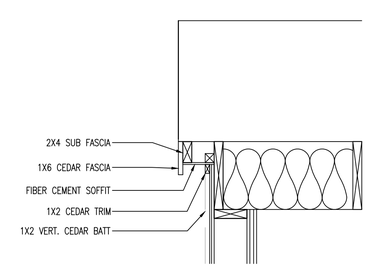


SECTION E2

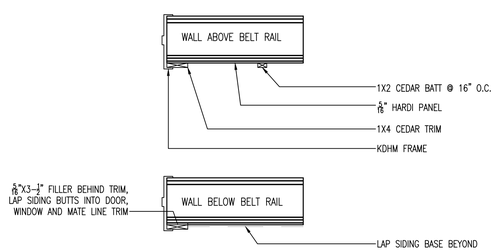


NOTE: LOCATE TIE DOWN STRAPS WHERE SHOWN ON FOUNDATION PLAN

F ANCHOR STRAP INSTALLATION DETAIL
1" = 1'-0"



G EAVE DETAIL
1" = 1'-0"



H DOOR TRIM TYP.
1" = 1'-0"

MARK	REVISION	DATE
A		
A		
A		
A		

MARK	REVISION	DATE
A	CUSTOMER	1-17-17
A		
A		
A		

RELEASE LEVEL: CUSTOMER
DRAWN BY: MDP ####
REV. BY: ####
CHK. BY: ####

JOB NAME: RIVERVIEW STOCK 2016
DESCRIPTION: ---
SHEET TITLE: STRUCTURAL DETAILS
STD PLAN NO: ---
S/N: TBD

PLOT STAMP: 1/18/2017 11:09 AM

WHITLEY EVERGREEN INC.
mobile and modular buildings
14219 SIMONDS POINT BLVD. MARYSVILLE, WA 98271
PHONE: (360) 653-3190 FAX: (360) 659-7753

JOB NO: TBD
SHT. S-2.0
DATE: 1-17-17

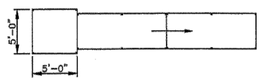
ALUMINUM MODULAR RAMP & STAIR SYSTEM CONFIGURATION OPTIONS

TYPICAL COMPONENT SIZES

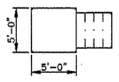
- LANDINGS: 5'x5', 5'x6' OR 7'x7'; CAN BE BOLTED TOGETHER FOR LARGER PLATFORMS
- RAMPS: 4', 8' OR 10' LONG x 48" WIDE; CAN BE BOLTED TOGETHER TO FORM A MAXIMUM 30' RAMP RUN
- STAIRS: MAX. 7" RISE x 12" TREAD x 48" WIDE

NOTE: WHERE DOOR CLEARANCE ALLOWS, STAIRS CAN BE ADDED TO ANY/ALL OF THE CONFIGURATIONS SHOWN BELOW.

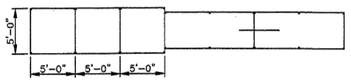
☐ A TYPICAL SINGLE DOOR CONFIGURATION
RAMP LENGTH VARIES; MAX. 30' RUN



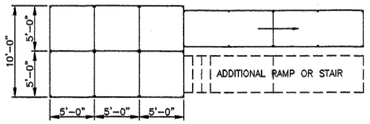
☐ B TYPICAL SINGLE DOOR CONFIGURATION
NUMBER OF RISERS/TREADS VARIES



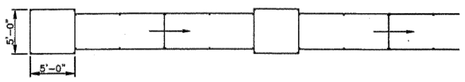
☐ C TYPICAL DOUBLE DOOR CONFIGURATION
RAMP LENGTH VARIES; MAX. 30' RUN



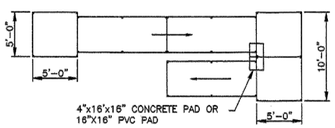
☐ D TYPICAL TWO-BUILDING COMMON LANDING CONFIGURATION
RAMP LENGTH VARIES; MAX. 30' RUN



☐ E TYPICAL INTERMEDIATE LANDING CONFIGURATION
RAMP LENGTH VARIES; MAX. 30' RUN



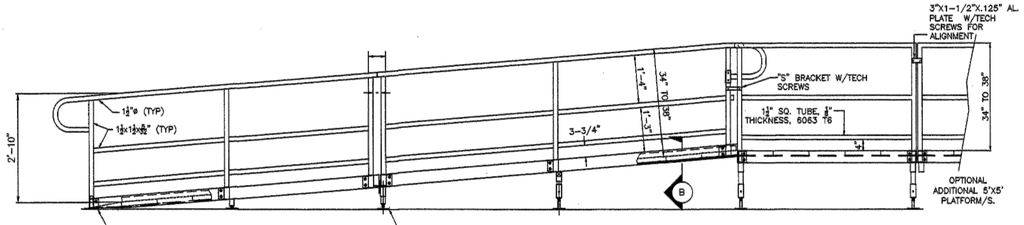
☐ F TYPICAL SWITCHBACK CONFIGURATION
RAMP LENGTH VARIES; MAX. 30' RUN



☐ G CUSTOM CONFIGURATION
SEE ATTACHED SHEET

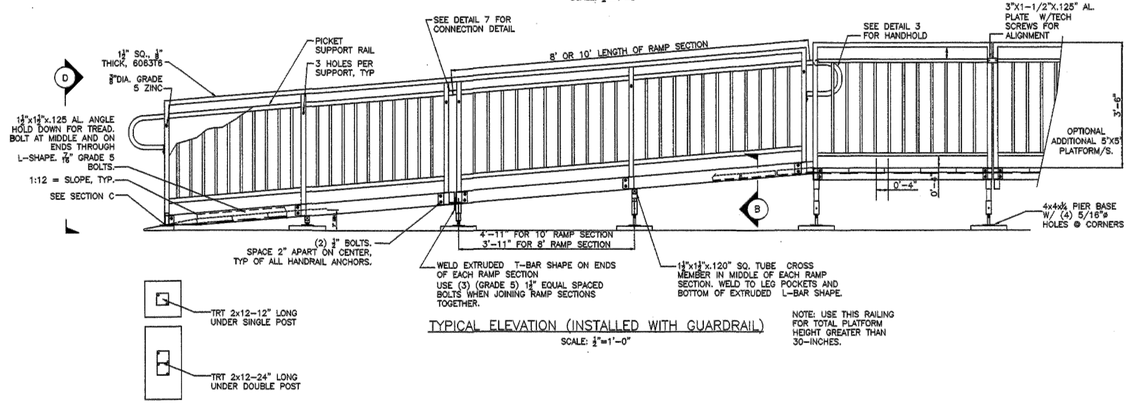
2012 IBC COMPLIANT

1. ANSI A117.1-2009 COMPLIANT
2. RAMP SLOPE, MAX.RISE = 1:12 (VERT/HORZ)
3. CROSS SLOPE, MAX. = 2%
4. STAIR RISE = 7" MAX., 4" MIN.
5. DESIGN LOADING:
   - 5.1. DECK/RAMP 100 PSF
   - 5.2. STAIR TREAD 300 LBS./TREAD
   - 5.3. RAILING 50 PLF/200 LBS. CONC.
6. DOOR CLEARANCE PER IBC
7. STANDARD 3 LINE RAIL FOR COMPONENTS 30" OR LESS FROM GRADE TO WALKING SURFACE OF RAMP, LANDING, OR STAIR.
8. 42" VERTICAL PICKET GUARDRAIL FOR COMPONENTS OVER 30"FROM GRADE TO WALKING SURFACE OF RAMP, LANDING, OR STAIR.
9. GRASPABLE CONTINUOUS HANDRAIL AT 34" TO 38" OFF RAMP, PLATFORM, OR STAIR NOSING.
10. HANDRAILS TO EXTEND 12" HORIZONTALLY OVER WALKING SURFACE AND RETURN TO WALL OR RAIL COLUMN.
11. RAMP AND RAILINGS TO HAVE CURBS WHICH DO NOT ALLOW PASSAGE OF 4" SPHERE WHERE ORIGINAL POSITION OF SPHERE IS WITHIN 4" OF THE WALKING SURFACE
12. FOOTING INFORMATION:
    2"x12"x12" P.T. WOOD PAD REQUIRED UNDER ALL ADJUSTABLE LEGS EXCEPT AT THE "U" IN THE SWITCHBACK CONFIGURATION WHERE A 4"x16"x16" CONCRETE PAD -OR- 16"x16" POLYVULC. PVC PAD IS REQUIRED (SEE CONFIGURATION "F")



TYPICAL ELEVATION (WITH STANDARD RAIL)
SCALE: ½"=1'-0"

NOTE: USE THIS RAILING FOR 30-INCH OR LOWER TOTAL PLATFORM HEIGHT.



TYPICAL ELEVATION (INSTALLED WITH GUARDRAIL)
SCALE: ½"=1'-0"

NOTE: USE THIS RAILING FOR TOTAL PLATFORM HEIGHT GREATER THAN 30-INCHES.

Welcome Ramp Systems, Inc.

Component Aluminum Ramp System for Safe, User-Friendly Building Access.

www.welcomerampsystems.com

GENERAL NOTES AND SPECIFICATIONS

1. THESE PLANS AND SPECIFICATIONS ARE NOT VALID FOR ANY OTHER THAN WELCOME RAMP SYSTEMS, INC. PRODUCT PRODUCED THE STANDARDS SET FORTH IN THESE DRAWINGS AND ACCOMPANYING DESIGN.
2. THE RAMP SYSTEM, STAIRS AND PLATFORM HAVE BEEN DESIGNED TO MEET IBC REQUIREMENTS. THE DESIGN LOADING CRITERIA IS 100 PSF LIVE LOAD.
3. RAMP DESIGN LIMITS: THE SLOPE SHALL BE 1:12. THE MAXIMUM CROSS SLOPE SHALL BE 2%. THE MAXIMUM RUN SHALL BE 30'. THE MAXIMUM HEIGHT WITHOUT ADDITIONAL ENGINEERING JUSTIFICATION SHALL BE 48" FROM THE PLATFORM TO FINISHED GRADE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH ALL OSHA AND STATE LABOR AND INDUSTRIES STANDARDS. CONTRACTOR ASSUMES FULL RESPONSIBILITY AS TO THE CONDITION OF THE STRUCTURE AND RELATED SYSTEMS.
5. WELCOME RAMPS, PLATFORMS, AND STAIRS ARE DESIGNED TO BE FREE STANDING.

PLANKING:
- THIS DESIGN IS LIMITED TO GS METALS PLANKING MATERIALS.
- RAMP: ALL PLANKING SHALL BE 13 GA. 12"W x 1 1/2" DEEP.
- PLATFORM: ALL PLANKING SHALL BE 13 GA. 12" W x 1-1/2" D. SEE PLAN FOR LENGTH.
- STAIRS: ALL PLANKING SHALL BE 11 GA. 12"W x 2" DEEP.

LEGS:
- LEVELING FEET ASSUMED TO BE PLACED ON SUITABLE FIRM BEARING GROUND.
- LEG MATERIAL SHALL BE 1-1/2" SQ.X .120" AL.TUBING.
- LEG POCKETS SHALL BE 1.781" SQ X .125" AL. TUBING.
- ADJUSTING BOLT – 3/8" X 2-1/4" GRADE 5 CAP SCREW W/NYLON LOCK NUT, ZINC PLATED

ALUMINUM:
- THE 1-1/2" AL. HANDRAIL SHALL BE 6063-T5 WITH A YIELD STRESS OF 16 KSI.
- ALL OTHER ALUMINUM PARTS SHALL BE 6061-T6 ALUMINUM WITH A YIELD STRESS OF 35 KSI.

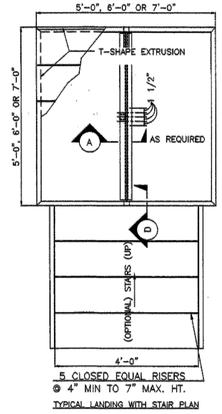
HAND RAILS:
- STAIRS AND RAMPS: USE 1-1/2" SQ. X 5/32" THICK WALLED TUBING FOR POSTS AND HORIZONTAL RAILS EXCEPT THE TOP 1-1/2" ROUND HAND RAIL.
- STANDARD HANDRAIL (W/O PICKETS) IS ALLOWED ON FINISHED PLATFORM HEIGHTS OF 30" AND LESS. ALL PLATFORM HEIGHTS ABOVE 30" SHALL USE PICKET STYLE HANDRAILS.
- PLATFORM: USE 1-1/2 SQ. X 5/32" THICK WALLED TUBING FOR POSTS AND ALL HORIZONTAL RAILS.
- HEIGHT: TOP OF GRIPPING SURFACES OF HANDRAILS SHALL BE 34 INCHES MINIMUM AND 38 INCHES MAXIMUM VERTICALLY ABOVE WALKING SURFACES.

WELDING:
- FABRICATION PLANT WELDING BY WELDERS CERTIFIED BY A THIRD PARY INSPECTOR AND IN ACCORDANCE WITH ANSI/AWS D1.2 CODE.
- WELD SIZES ARE EQUAL OR LARGER THAN THE ELEMENT BEING WELDED.
- WELDING IS ALL AROUND UNLESS OTHERWISE NOTED. CARE IS TAKEN TO AVOID EXCESS WARPING OF WELDED ELEMENTS.
- FABRICATOR TO CERTIFY ASSEMBLED PART ARE PER THE DRAWINGS PER IBC 1704.2.2.

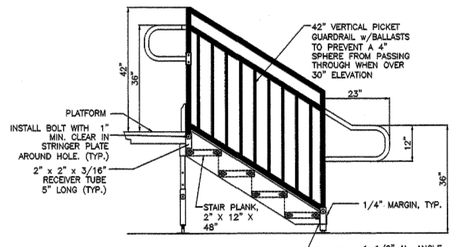
BOLTS:
- ALL BOLTS SHALL BE ASTM A325 OR GRADE 5 ZINC PLATED, UNLESS OTHERWISE SPECIFIED. PROVIDE LOCKING WASHERS UNDER ALL NUTS AND ANCHOR BOLTS UNLESS OTHERWISE SPECIFIED.
- HIGH STRENGTH BOLTS ARE DESIGNED AT LESS THAN 50% CAPACITY FOR ADDITIONAL FACTOR OF SAFETY AND DO NOT REQUIRE SPECIAL INSPECTION.

TECH SCREWS:
- ZINC PLATED #10x½", SELF TAPPING.

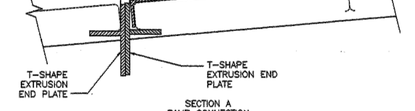
SHOP DRAWINGS:
- IT IS RECOMMENDED THAT SHOP DRAWINGS BE PREPARED BY OR APPROVED BY THE LIFE SAFETY PROFESSIONAL OF RECORD.



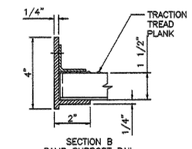
5 CLOSED EQUAL RISERS @ 4" MIN TO 7" MAX. HT.
TYPICAL LANDING WITH STAIR PLAN



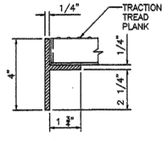
DETAIL 1 – STAIR HAND RAIL
SCALE: 1/2"=1'



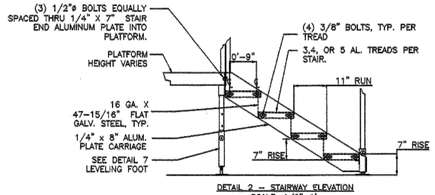
SECTION A
RAMP CONNECTION
SCALE: 3"=1'



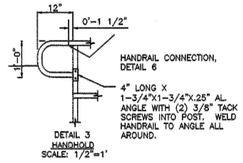
SECTION B
RAMP SUPPORT RAIL
SCALE: 3"=1'



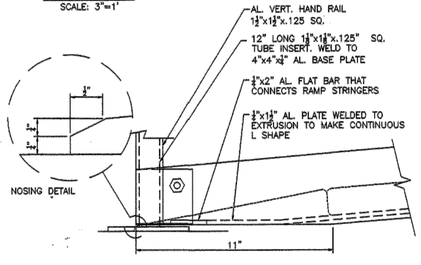
SECTION D
PLATFORM SUPPORT RAIL
SCALE: 3"=1'



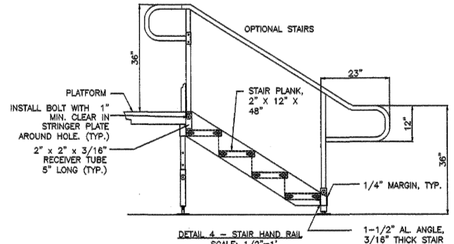
DETAIL 2 – STAIRWAY ELEVATION
SCALE: 1/2"=1'



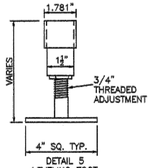
DETAIL 3
HANDHOLD
SCALE: 1/2"=1'



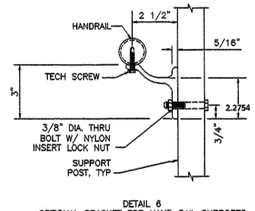
SECTION C
RAMP END TRANSITION END LEG
SCALE: 3"=1'



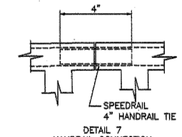
DETAIL 4 – STAIR HAND RAIL
SCALE: 1/2"=1'



DETAIL 5
LEVELING FOOT
SCALE: 3"=1'



DETAIL 6
OPTIONAL BRACKET FOR HAND RAIL SUPPORTS
SCALE: 3"=1'



DETAIL 7
HANDRAIL CONNECTION
SCALE: 3"=1'

WELCOME RAMP SYSTEMS, INC.

DEAN W. BRIGGS, PE
BRIGGS
SERVING THE WESTERN UNITED STATES
PO BOX 148553, GARDISEN CITY, ID 83714 - (208) 871-0300

DEAN W. BRIGGS
STATE OF WASHINGTON
19578
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
RENEWS: 09/27/2015

PROJECT NAME:
STANDARD PLANS & DETAILS

DATE: 09/27/2013
BY: DB/TG
JOB NUMBER: 201310.19
SHEET 1 OF 1

WELCOME RAMP SYSTEMS INC.
ACCESS RAMPS & STAIRS
STANDARD PLANS/DETAILS/NOTES

R-1