GREEN VALLEY ACADEMY STORAGE BUILDING EXTENSION

9091 EAST 100 SOUTH WEBER COUNTY, UTAH

DRAWING INDEX

T1.1 COVER SHEET ARCHITECTURAL DRAWINGS A1.1 FLOOR PLANS A2.1 ELEVATIONS A3.1 BUILDING SECTION A6.1 DETAILS STRUCTURAL DRAWINGS S1.1 STRUCTURAL PLANS

ELECTRICAL DRAWINGS SCHEDULES AND DETAILS LIGHTING AND POWER PLAN PANELS AND ONE LINE DEAGRAM

S1.2 STRUCTURAL NOTES AND SPECS

CODE SUMMARY

CHAPTER 3: USE AND OCCUPANCY CLASSIFICATION 302 - GROUP E - GYMNASIUM

SECTION 503 - BUILDING AREA A-3 AREA SCHEDULE 1510 SF

CHAPTER 6: TYPE OF CONSTRUCTION TYPE V-B SPRINKLED - NFPA 13

CHAPTER 5: BUILDING AREA

CHAPTER 10: MEANS OF EGRESS 1004.1.1 - DESIGN OCCUPANT LOAD 1,507 SF / 50 = 31 OCCUPANTS 1005.1 - EGRESS WIDTH: 36" 1014.3 - COMMON PATH OF EGRESS TRAVEL = <75'

> 1 EXITS REQUIRED 1016.1 - EXIT ACCESS TRAVEL DISTANCE - 200' OK

1015.1 - EXIT OR EXIT ACCESS DOORWAYS REQUIRED:

PROJECT DIRECTORY

OWNER DR. JARED BALLMER 1166 SUNSET DR KAYSVILLE, UT 84037 801-698-7702

ARCHITECT JZW ARCHITECTS 135 E. CENTER ST. NORTH SALT LAKE, UT 84054 (801) 936-1343 FAX (801) 936-0180

CIVIL ENGINEER REEVE AND ASSOCIATES 4155 S. HARRISON BLVD. SUITE 310 OGDEN, UTAH 84403 801-621-3100

FAX 801-621-2666

STRUCTURAL ENGINEER 4D ENGINEERS 483 WEST 30 NORTH AMERICAN FORK, UTAH 84003 435-785-6083 RUSS@4DENGINERS.COM

ELECTRICAL ENGINEER PROFESSIONAL ENGINEERING SERVICES 3440 WEST 7260 SOUTH WEST JORDAN, UTAH 84084 (801) 601-1179 FAX (801) 601-1179

DESIGN CRITERIA

APPLICABLE CODE: 2012 INTERNATIONAL BUILDING CODE. (I.B.C.) 2012 INTERNATIONAL MECHANICAL CODE 2012 INTERNATIONAL PLUMBING CODE 2012 INTERNATIONAL FIRE CODE 2012 INTERNATIONAL ENERGY CONSERVATION CODE 2011 NATIONAL ELECTRIC CODE

ACCESSIBILITY I.B.C. A.N.S.I. 117.1 - 2009

PROJECT INFORMATION

PROJECT #: 13047 PROJECT DATE OF ISSUE: AUGUST 7, 2013

THESE DRAWINGS ARE PART OF A SET OF CONSTRUCTION DOCUMENTS. THE CONSTRUCTION DOCUMENTS CONSIST OF ONE OR MORE OF THE FOLLOWING ELEMENTS:

CONSTRUCTION DRAWINGS SPECIFICATIONS STRUCTURAL CALCULATIONS CONTRACT FORMS AND CONDITIONS ADDENDA MODIFICATIONS AND REVISIONS

CONTRACTORS, SUBCONTRACTORS, AND OTHERS WHO PROVIDE LABOR AND/OR MATERIALS REFERENCING THESE DRAWINGS ARE RESPONSIBLE FOR OBTAINING AND REVIEWING ALL CURRENT CONSTRUCTION DOCUMENTS.

CONTRACTORS, SUBCONTRACTORS, AND OTHERS ARE TO REPORT ANY DISCREPANCIES OR ERRORS TO PRW ARCHITECTURE, INC. IMMEDIATELY. ANY CHANGES TO THE PROJECT WILL BE VERIFIED WITH THE OWNER BY THE ARCHITECT AND REVISIONS WILL BE ISSUED BY ARCHITECT. CONTRACTORS ARE NOT TO MAKE ALTERATIONS OF ANY KIND WITHOUT THE PRIOR WRITTEN CONSENT OF ARCHITECT. DISCREPANCIES NOT REPORTED IMMEDIATELY ARE RESPONSIBILITY OF CONTRACTOR.

CONTRACTORS SHALL NOT SCALE FROM DRAWINGS. DIMENSIONS ARE PROVIDED TO ALLOW FOR ACCURATE CONSTRUCTION OF BUILDING. QUESTIONS ARISING FROM DIMENSIONS SHOULD BE RESOLVED BY CONTACTING ARCHITECT.

REVISIONS:

ISSUE DATE: AUGUST 7, 2013 PROJECT NUMBER

13047



FAX: (801) 936-0180 135 EAST CENTER STREET, NORTH SALT LAKE, UTAH 84054 DOOR SCHEDULE

1 3/4"

EXERCIZE

__1 1432 SF

 (E)

FLOOR PLAN

E

DOOR #

6'-0" X 6'-8" WOOD CLAD

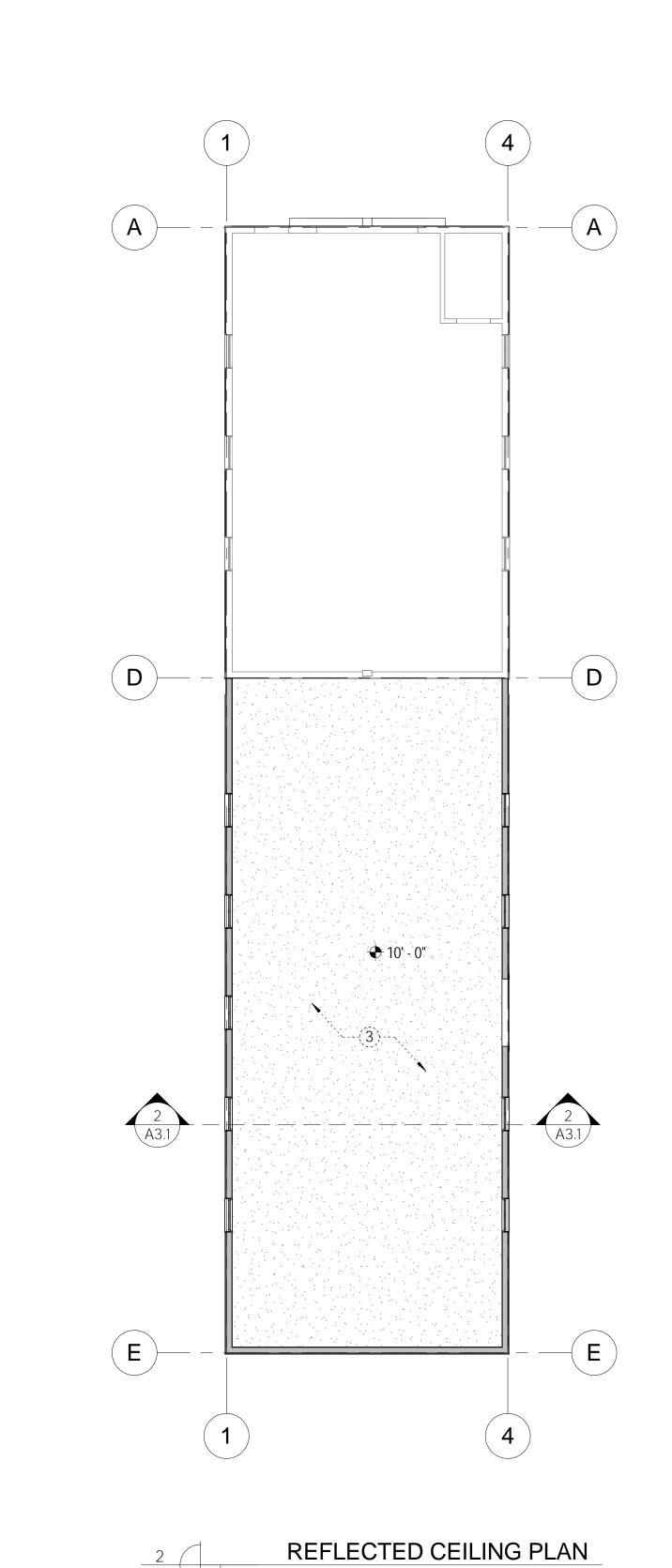
FRAME SIZE TYPE THICKNESS | DOOR FINISH | FRAME | FINSIH REMARKS

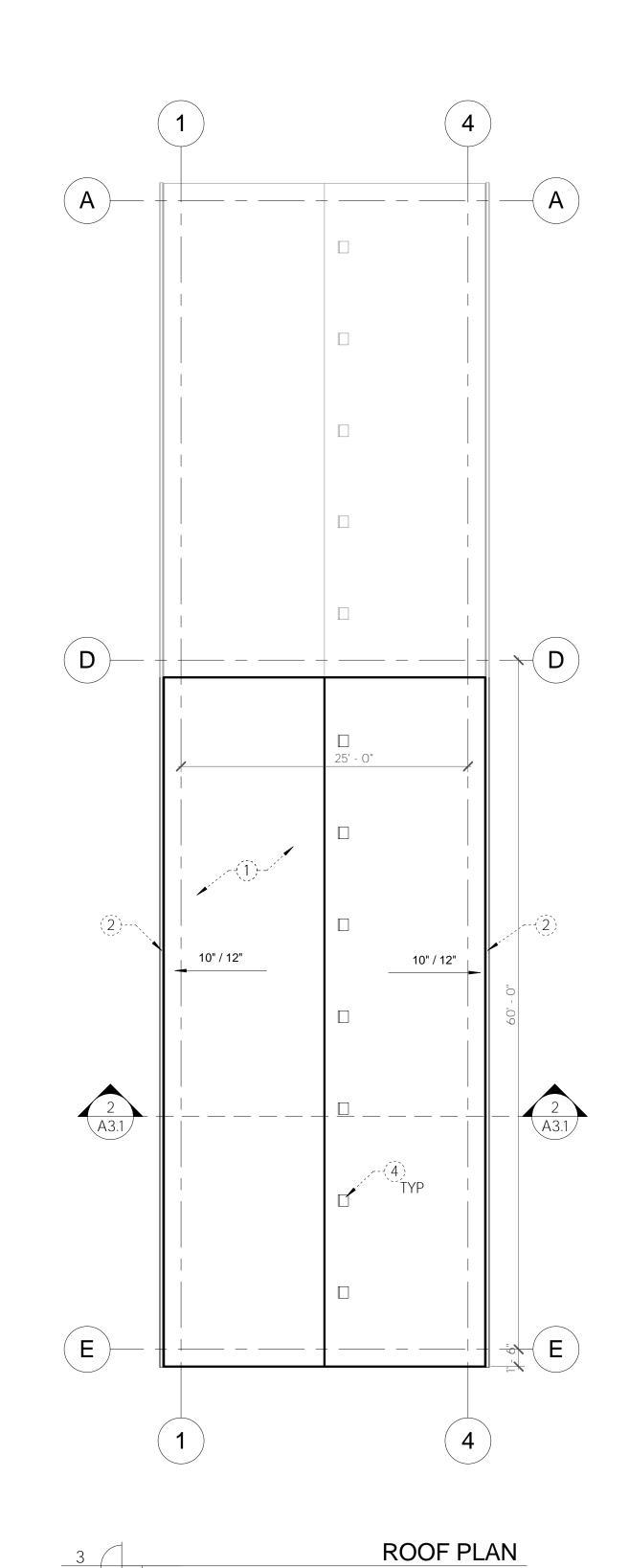
WOOD PAINT

(2) 3'-0" DOORS (PAIR)

WINDOW SCHEDULE

WINDOW WIDTH HEIGHT TYPE HEAD HEIGHT REMARKS 3' - 0" 4' - O" SLIDER 6' - 8"





GENERAL NOTES

—(A) SEE GENERAL NOTES ON SHEET T1.2 FOR ADDITIONAL REQUIREMENTS.

B) DIMENSIONS TO DOORS AND WINDOWS ARE TO CENTER OF FRAMED OPENING UNLESS NOTED

—(C) SEE STRUCTURAL DRAWINGS AND CALCULATIONS FOR ALL STRUCTURAL REQUIREMENTS, INCLUDING FOUNDATION WALL SPECIFICATIONS, AND SHEARWALL AND HOLDDOWN

PROVIDE SOUND BATT INSULATION IN ALL WALLS AROUND BATHROOMS.

(E) COORDINATE ALL WINDOW HEAD HEIGHTS AND SIZES WITH ELEVATIONS AND WINDOW

KEYED NOTES

----(1) GAF-ELK PREMIUM SHINGLES. 40 YEAR ARCHITECTURAL GRADE WITH UL LISTED WIND RESISTANCE AND CLASS "A" FIRE RATING OVER 30# FELT. PROVIDE ICE AND WATER SHIELD AT EACH VALLEY (4'-0" EACH SIDE AND 4'-0" AT ROOF PERIMETER)

--(2) PRE-FINISHED RAIN GUTTERS WITH DOWN SPOUTS, CONNECT TO STORM DRAIN SYSTEM

--(3) GYPSUM BOARD CEILING

--(4) TURLE VENTS, PROVIDE MIN. 4 SF AT RIDGE AND 4 SF AT SOFFIT

-----(5) Gas fired unit heater - 45,000 btu - Ceiling hung with all mounting hardware -EXHAUST AN COMBUSTION AIR PER MAUNUFACTURES RECOMMENDATION - INSTALL CLEARANCES PER MANUFACTURERS SPECIFICATIONS.

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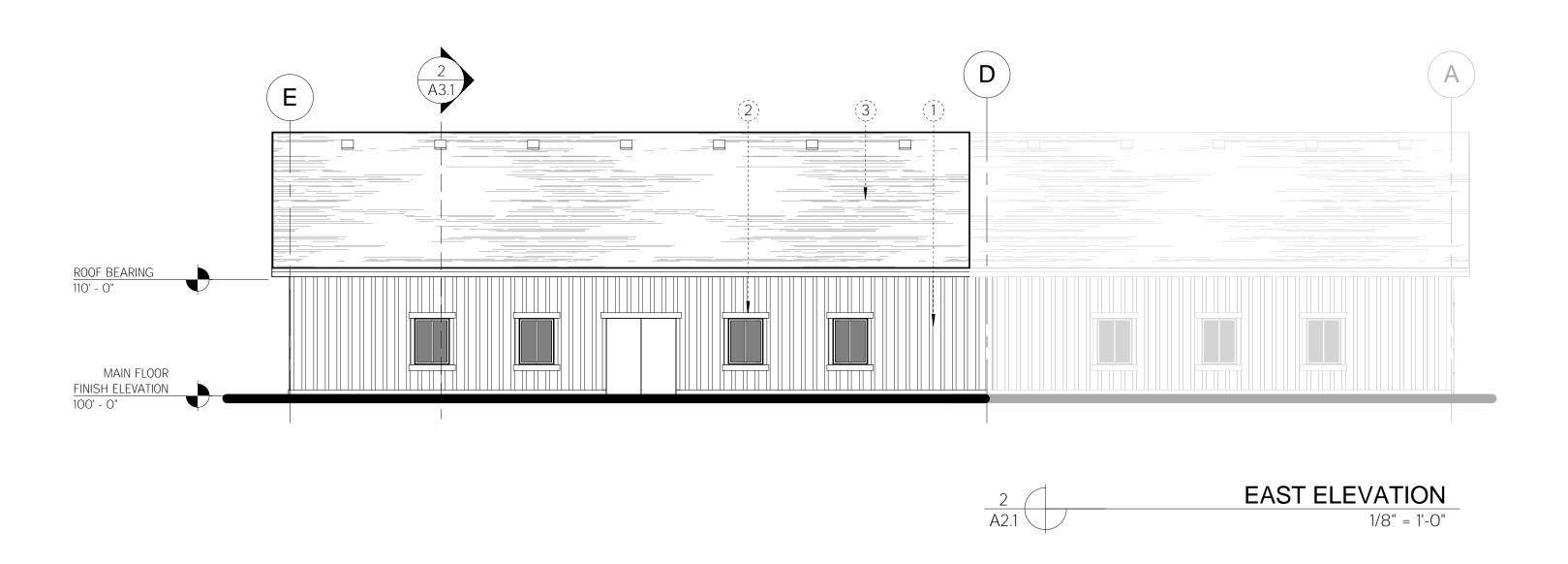
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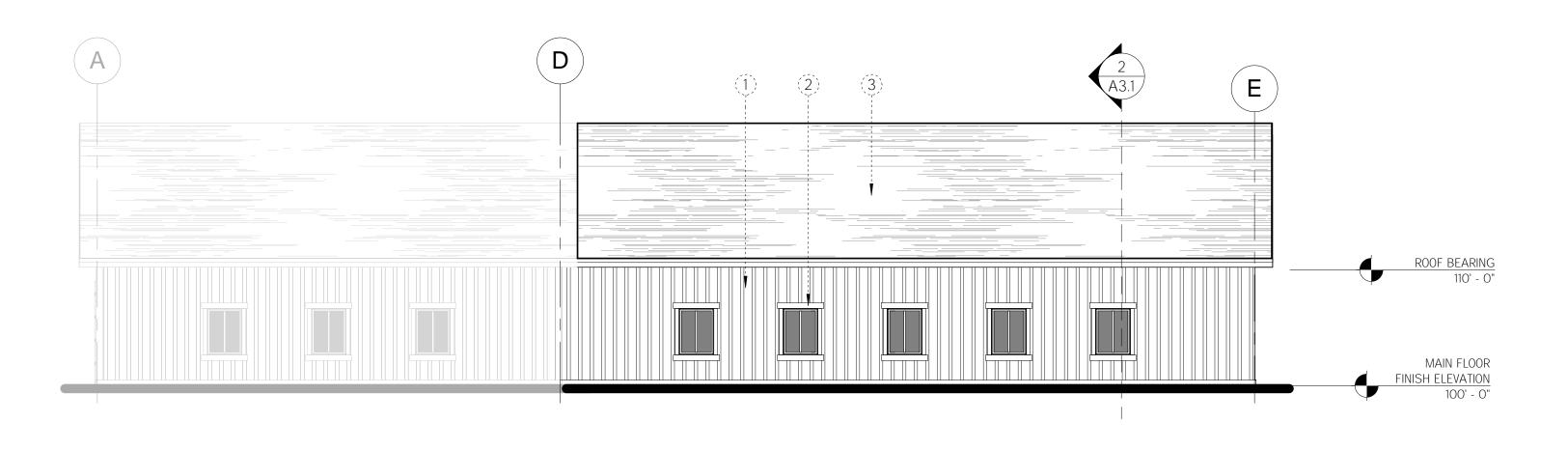
REVISIONS:

STORAGE GREEN

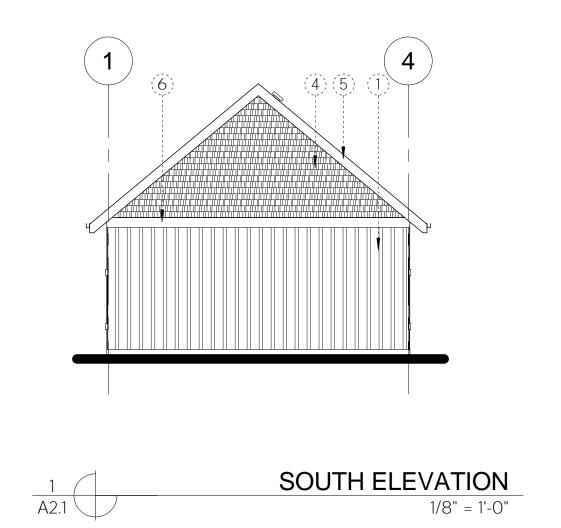
OR

A1.1









FAX: (801) 936-0180

...KEYED NOTES... HARDIE BOARD - BOARD AND BATT SIDING - CEDARMILL - PAINT COLOR BY OWNER HARDIE TRIM AROUND WINDOWS AND DOORS - 6" HORIZONTAL - 4" VERIDICAL - PAINT COLOR BY OWNER ---(3) ASPHALT ROOFING - REFER TO ROOF PLAN HARDIE BOARD - HARDIESHINGLE STAGGERED EDGE NOTCHED PANEL - PAINT COLOR BY OWNER PREFINISHED METAL FASCIA AND SOFFIT - COLOR BY OWNER HARDIE TRIM 10" - PAINT COLOR BY OWNER

PROJECT NUMBER 13047

> **ISSUE DATE: AUGUST 7, 2013**

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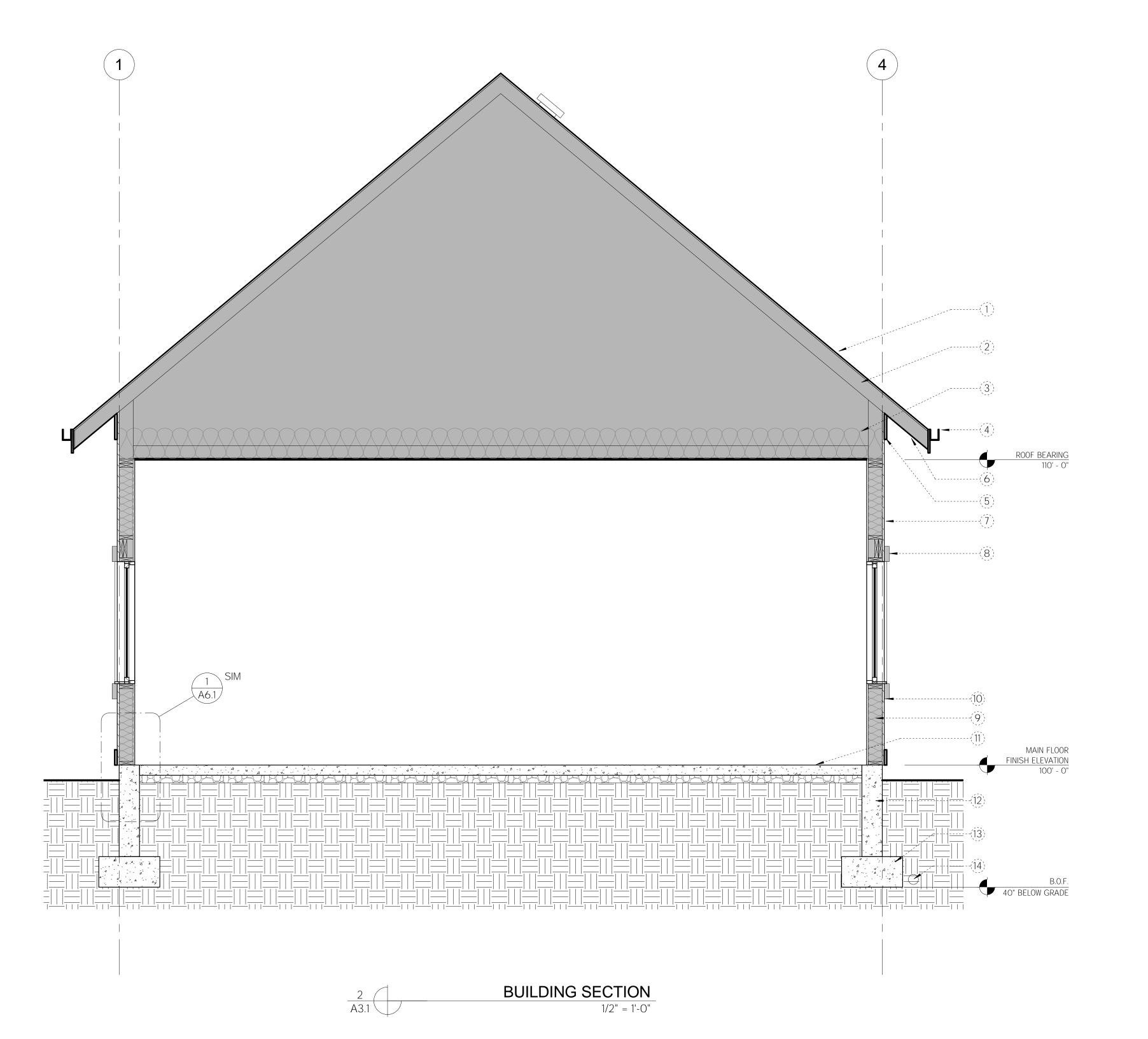
Date

CADEMY STORAGE EXTENSION GREEN

ELEVATIONS

A2.1





<u> 135 EAST CENTIER STREET, NORTH SALT LAKE, UTAH 84054</u>

FAX: (801) 936-0180

GENERAL NOTES

(A) SEE GENERAL NOTES ON SHEET T1.2 FOR ADDITIONAL REQUIREMENTS.

B REVIEW ALL STRUCTURAL PLANS AND SPECIFICATIONS AS WELL AS STRUCTURAL CALCULATIONS FOR ALL STRUCTURAL REQUIREMENTS.

REFER TO ELEVATION DRAWINGS FOR ALL EXTERIOR FINISHES.

______D ALL WINDOWS AND DOORS TO BE AS INDICATED IN FLOOR PLANS ELEVATIONS AND WINDOW/DOOR SCHEDULES.

F) ALL EXTERIOR MATERIALS TO BE AS INDICATED ON ELEVATION DRAWINGS.

E) ALL INSULATION, VAPOR BARRIERS, BUILDING PAPER, ETC... AS INDICATED IN GENERAL NOTES.

...KEYED-NOTES..

ASPHALT SHINGLES - REFER TO ROOF PLAN

---(2) ROOF TRUSSES - REFER TO STRUCTURAL

R-40 ATTIC INSULATION

PRE-FINISHED RAIN GUTTERS WITH DOWN SPOUTS, CONNECT TO STORM DRAIN SYSTEM

---(5) HARDIE TRIM 10" - PAINT COLOR BY OWNER

PREFINISHED METAL FASCIA AND SOFFIT - COLOR BY OWNER

HARDIE BOARD - BOARD AND BATT SIDING - CEDARMILL - PAINT COLOR BY OWNER

+ HARDIE TRIM AROUND WINDOWS AND DOORS - 6" HORIZONTAL - 4" VERIDICAL - PAINT COLOR BY

R-19 WALL INSULATION

...(10) BUILDING WRAP

(11) CONCRETE SLAB ON GRADE - REFER TO STRUCTURAL FOR REINFORCING REQUIREMENTS -REFER TO GEOTECHNICAL FOR GROUND PREPARATION AND VAPOR BARRIER REQUIREMENTS

...(12) CONCRETE FOUNDATION - REFER TO STRUCTURAL

2.2/13, CONCRETE FOOTING - REFER TO STRUCTURAL

PERIMETER DRAIN AS REQUIRED BY GEOTECHNICAL REPORT

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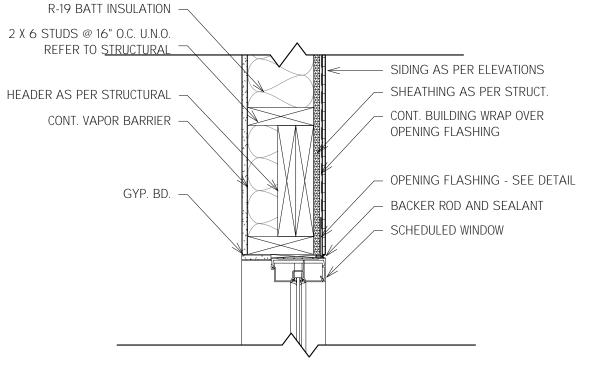
Date

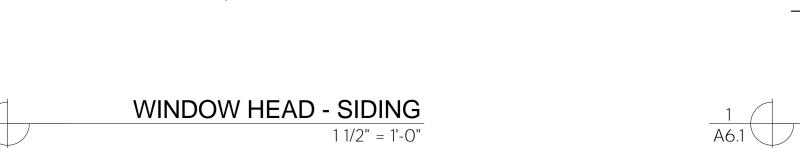
GREEN

BUILDINGSECTION

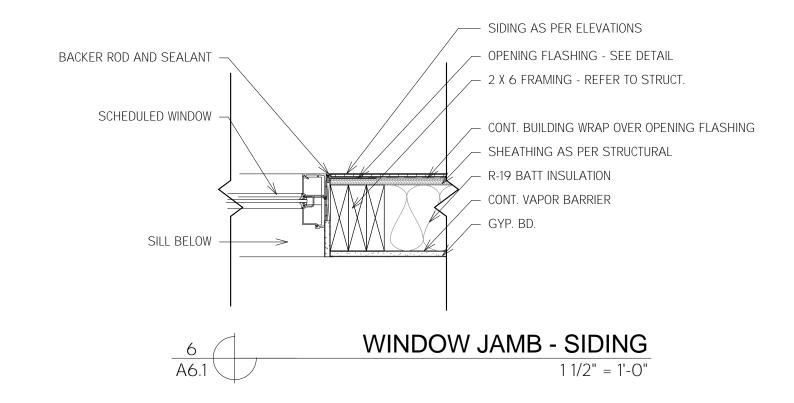
A3.1

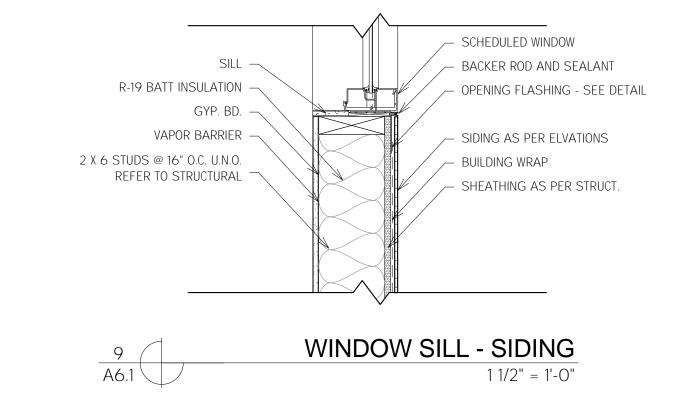


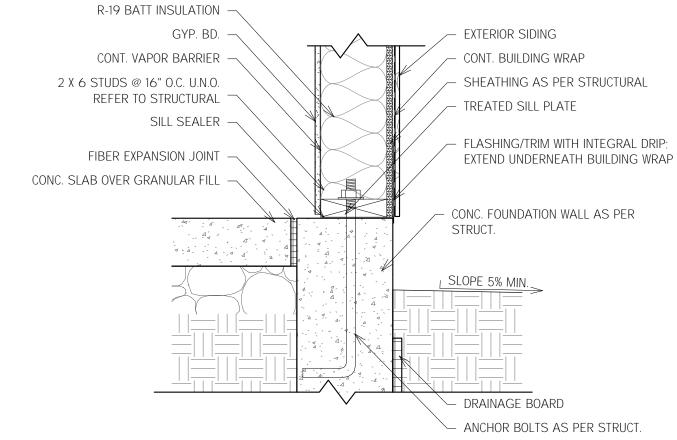


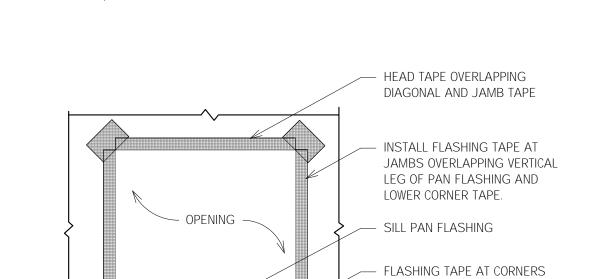


1 1/2" = 1'-0"







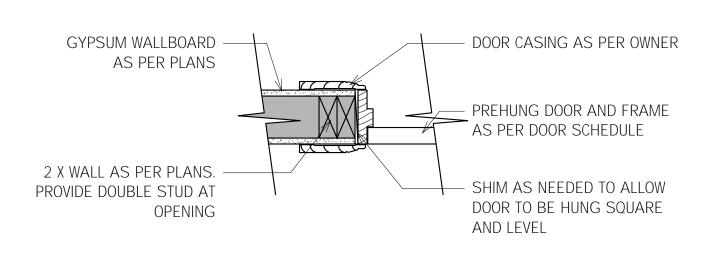


TOP OF FOUNDATION - STONE

1 1/2" = 1'-0"

OVERLAPPING SILL TAPE







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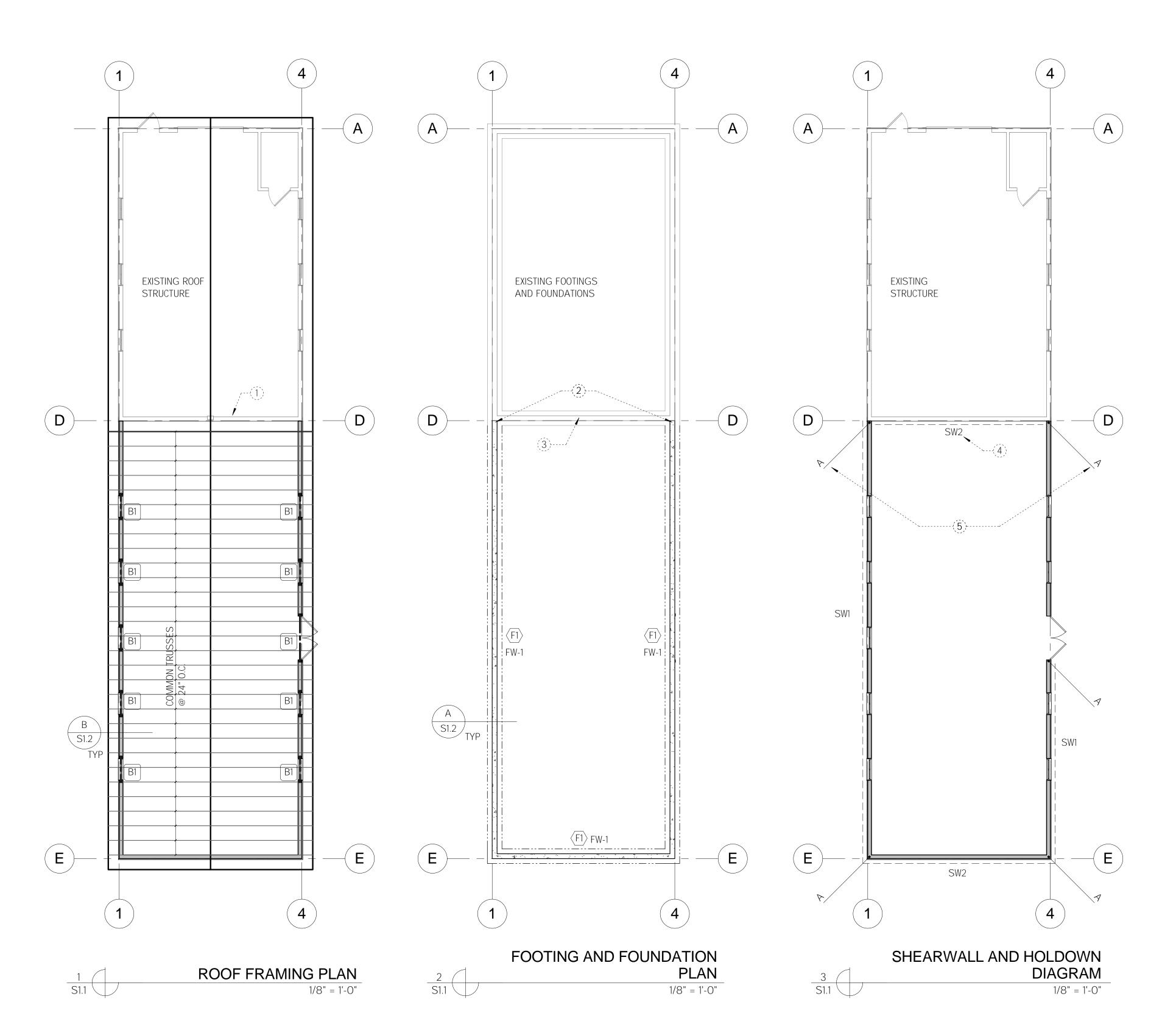
Date

STORAGE GREEN

DETAIL

A6.1





B1 (2) 2 X 10 DF #2

F1 20" X 10" X CONT. W/ (2) #4

FW-1 8" X 4'-0" (MAX) FOUNDATION W/ #4 @ 16" VERT. AND 12" HORZ.

KEYED NOTES

TIE NEW ROOF SHEATHING INTO TOP OF SW2

 $-\sqrt{2}$ EPOXY EMBED HORIZONTAL TOOTING AND FOUNDATION REBAR 6" INTO EXISTING CONCRETE.

PROVIDE 1/2" DIAM. X 10" A-BOLTS @ 32" O.C. THIS WALL W/ 3"X3" WASHERS. UPGRADE EXISTING AS NEEDED.

---(4) UPGRADE EXISTING WALL TO MEET SW2 REQUIREMENTS

THESE "A" HOLDDOWNS MAY BE EXISTING. FIELD VERIFY.

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A00001 1, 2010

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Date

GREEN VALLEY ACADEMY STORAG BUILDING EXTENSION 9091 EAST 100 SOUTH WEBER

S1.1



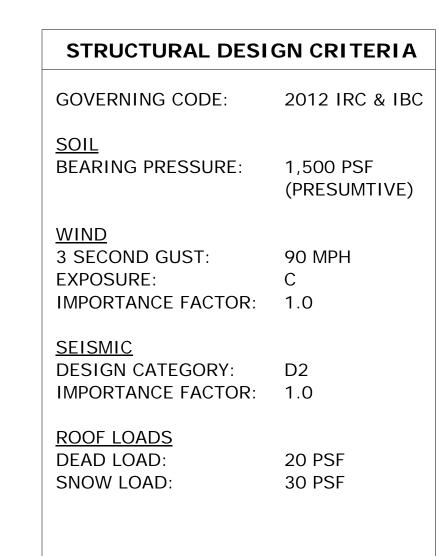
24" OC

SPACE PER DETAILS BELOW, NAIL THROUGH TRUSS WEB TO BLKNG w/ 16d NAILS AT 8" OC

7. (4) 16d TOENAILS EA BLOCK AS ALTERNATE TO A35 ANCHOR 8. 7/16" OSB w/ 8d NAILS AT 4" OC OVER 2x4

PERIMETER BLOCKING (SHEATHING MAY APPLIED CONTINUOUS OVER BLOCKING AND TRUSSES AND SHEAR WALL BELOW) 9. HOLD DOWN EVERY FOURTH BLOCK 1-1/2" FOR

Opt RAISED HEEL TRUSS CONNECTION



					SHEAR WALL SCHEDULE									
MARK SI	HEATHING	SHEATH BOTH SIDES	NAILS	EDGE SPACING	NOTES									
SW1 7	7/16" OSB	NO	8d	6" OC	1-3									
SW2 7	7/16" OSB	NO	8d	4" OC	1-3									

NOTES:

- 1. USE COMMON OR GALVANIZED BOX NAILS. FIELD NAIL AT 12" OC
- 2. BLOCK ALL PANEL EDGES
- 3. PROVIDE 3"x3"x0.229" PLATE WASHERS WITH DIAGONAL SLOTTED HOLE AND STANDARD CUT WASHER TO BE PLACED BETWEEN THE 3"x3"x0.229" WASHER AND NUT ON ANCHOR BOLTS (TYPICAL)

HOLDOWN & STRAP SCHEDULE								
MARK	ANCHOR	NOTES (1,2)						
А	STHD10	3						

NOTES:

- ALL ANCHORS ARE SIMPSON STRONG TIE OR EQUIVALENT.
- INSTALL PER MANUFACTURER'S SPECIFICATIONS. USE RIM JOIST MODELS (RJ) WHEN INSTALLED AT RIMBOARD/JOIST.
- 3. RETROFIT OPTION:

HDU4 - PROVIDE 5/8" DIA A307 ATR EPOXIED 12" INTO CONCRETE.

ANCHOR BOLTS AND SILL PLATE

1/2" DIAMETER x 10" LONG ANCHOR BOLTS EMBEDDED 7" MINIMUM AT 32" OC W/ 2x TREATED SILL PLATE, TYPICAL EXCEPT WHEN SPECIFICALLY NOTED ON FOUNDATION PLAN.

ALL ANCHOR BOLTS FOR SHEAR WALLS REQUIRE 3"x3"x0.229" PLATE WASHERS WITH DIAGONAL SLOTTED HOLE. PLACE EDGE OF WASHER MAX 1/2" FROM INSIDE FACE OF WALL SHEATHING. PROVIDE STANDARD CUT WASHER BETWEEN 3"x3"x0.229" WASHER AND NUT.

FOUNDATION FIELD CHANGES

ANY CHANGES TO FOOTING AND FOUNDATION HEIGHTS AND STEPS SHOWN ON THE PLAN REQUIRE ENGINEER'S APPROVAL PRIOR TO POURING.

ALLOW ENGINEER ONE WEEK FOR REDESIGN

WALL FRAMING

- EXTERIOR WALLS TO BE 2x6 DF STUDS AT 16"
- USE THREE STUDS MINIMUM AT ALL CORNERS UNLESS NOTED OTHERWISE
- PROVIDE 1T1K AT ENDS OF ALL BEAMS UNLESS
 NOTED OTHERWISE
- T = TRIMMER (JACK) STUD SUPPORTING HEADER OR BEAM
 - K = FULL HEIGHT KING STUD FACE NAILED TO TRIMMERS AND HEADER OR BEAM
- I.E. 2T2K = 2 TRIMMERS, 2 KING STUDS W/ WIDTH TO MATCH ADJACENT WALL FRAMING UNLESS NOTED OTHERWISE

ROOF SHEATHING

7/16" APA RATED OSB SHEATHING NAILED
 W/ 8d COMMON AT 6" OC AT PANEL EDGES,
 OVER SHEAR WALLS AND BLOCKING AND 6"
 OC IN THE FIELD, PROVIDE GAPS BETWEEN
 SHTS PER MANU REQ.

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PROJECT NUMBER

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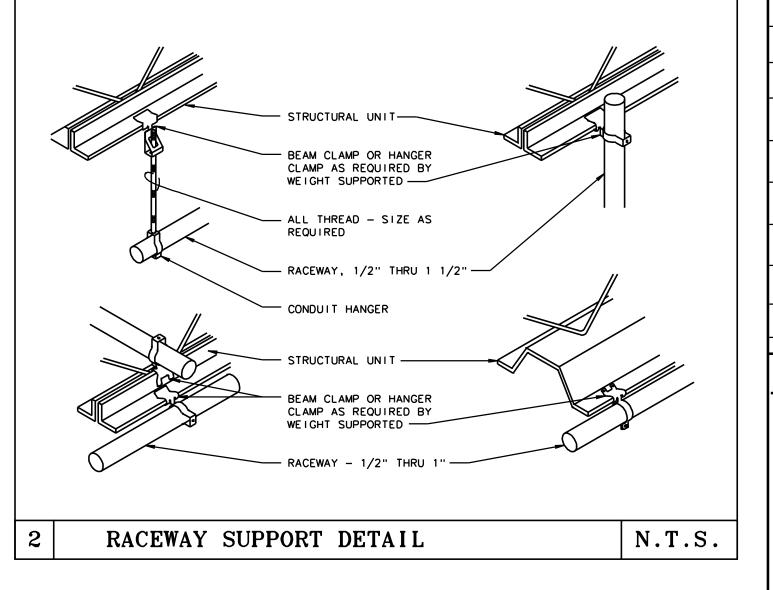
S1.2



HVAC	EQUIPMENT DATA				STARTER DATA					DISCONNECT			CONTROLS		LS								
EQUIPMENT SCHEDULE					טאַס -	CONDUCTORS	ΤΙ				GE	HD.							W/STARTER		ī		ION BY
NAME OF EQUIPMENT	EQUIPMENT NO.	HORSEPOWER	VOLTAGE	PHASE	AMPS	SIZE OF CONDU	SIZE OF CONDUIT	BREAKER	NEMA SIZE	NO. OF SPEEDS	I =	SELECTOR SWITCH	PUSHBUTTON	11-1	O. CONTACT	N.C. CONTACTS	SIZE	WP	COMBINATION W	FUSED AT	INTERLOCK WITH	CONTROL	FINAL CONNECTION
JNIT HEATER	UH-1	37W	120	1	2 1.7	12		20	FE								20			NF		T	ELECT
OWN-OWNER ELEC-ELECTRICAL CONTO MAN MANUAL STA F.E FURNISHED N/R NOT REQUIRE NMC NON-METALLI CABLE	ARTER W\EQUIF ED			0.0 0.0	A	HA ON - OFF	L VITCH ((ND-OFF- OFF - AUTOM	-AUTON			H VEN	NT, L	.OW .OW (COOL	_)		; 	ST, PNL.		TH	OP NTROI ERMO	STAT	IEL &

		LIGHT	'ING FIXTURE SCHEDU	JLE	
	SYMBOL	CATALOG No.	& DESCRIPTION	MOUNTING	LAMPS
	E	NORA LIGHTING NHIC6-LEDAT-30-W-W	6" LED DOWNLIGHT U.L. LISTED FOR THRU WIRING AND WET LABEL W/WHITE TRIM AND WHITE BAFFLE.	RECESSED	FURNISHED W/ FIXTURE
CT	EX	NORA LIGHTING NHIC6-LEDAT-30-W-W-EM	6" LED DOWNLIGHT U.L. LISTED FOR THRU WIRING AND WET LABEL W/WHITE TRIM, WHITE BAFFLE, BATTERY PACK & CHARGER	RECESSED	FURNISHED W/ FIXTURE
		DAYBRITE TT 232 120 1/2 EB	8FT FLUORESCENT STRIP 2 LAMPS WIDE	SURFACE	(4)F32T8/835
	ΙX	DAYBRITE TT 232 120 1/2 EB E5	SAME AS "I" EXCEPT W/INTEGRAL BATTERY PACK AND CHARGER.	SURFACE	(4)F32T8/835
& TS	Χ1	McPHILBEN CXXL 3G W	6" LED EXIT SIGN W/INTEGRAL BATTERY PACK UNIVERSAL MOUNT AND GREEN LETTERS.	SURFACE	FURNISHED W/FIXTURE

	SUPPORT REQUIREMENTS PROVIDE STEEL CITY TYPICAL FOR BOTH WOOD BOX OCCURS AT CENTER OF STUD AND METAL STUDS ALL CONDUITS SHALL BE SUPPORTED PER NEC
--	--



ELECTRICAL SYMBOL SCHEDULE 1 CIRCUIT-2WIRE HOME RUN TO PANEL 2 CIRCUIT-3 WIRE-COMMON NEUTRAL HOME 3 CIRCUIT-4 WIRE-COMMON NEUTRAL HOME RUN CONDUIT RUN IN WALL OR CEILING ---- CONDUIT RUN IN FLOOR OR GROUND CONDUIT UP CONDUIT DOWN MOUNT ING HEIGHT SYMBOL DESCRIPTION NOTES 0 CEILING LIGHT FIXTURE CEILING (1),(2) Ю AS NOTED WALL LIGHT FIXTURE \bigcirc RECESSED INCANDESCENT OR HID. FIXTURE CEILING FLUORESCENT LIGHT FIXTURE AS NOTED $>\!\!<$ FLUORESCENT EGRESS LIGHT AS NOTED UNSWITCHED (1),(2)(1),(2) CEILING MOUNTED EXIT LIGHT CEILING (1),(2),(4) WALL MOUNTED EXIT LIGHT AS NOTED SINGLE POLE SWITCH +42" (3),(4) (4) THREE WAY SWITCH +42" SWITCH & PILOT LIGHT +42" SINGLE POLE SWITCH CEILING (4) THERMAL OVERLOAD SWITCH & PILOT LIGHT +42" +1'-4" QUADRAPLEX OUTLET ISOLATED GROUND QUADRAPLEX +1'-4" +1'-4" ISOLATED GROUND DUPLEX OUTLET DUPLEX RECEPTACLE MOUNTED ABOVE STANDARD $A \Longrightarrow$ +4'-4" (4) DUPLEX OUTLET W/GROUND FAULT INTERRUPTER +1'-4" \Rightarrow DUPLEX RECEPTACLE +1'-4" ₩P WEATHERPROOF RECEPTACLE +2'-0" STUB 3/4" CONDUIT ABOVE CEILING TELEPHONE OUTLET +1'-4" STUB 3/4" CONDUIT ABOVE CEILING TELEPHONE/DATA OUTLET +1'-4" STUB 3/4" CONDUIT **(** DATA OUTLET +1'-4" ABOVE CEILING \odot JUNCTION BOX AS NOTED MOTOR OUTLET SUIT EQUIP TOP @6'-6" PANELBOARD +5'-0" SEE DETAIL IME CLOCK MAIN DISTRIBUTION PANEL DISCONNECT SWITCH ('F' FUSED) +5'-0" SIZE TO EQUIP. MAGNETIC STARTER +5'-0" +5'-0" MAGNETIC STARTER/DISC TELEPHONE TERMINAL BOARD FLOOR SEE NOTE FLOOR OUTLET WITH POWER/DATA TOP @6'-6" PANELBOARD THERMOSTAT ARCHITECTURAL ROOM NO. EQUIPMENT NO. FOR HVAC EQUIPMENT SEE LIGHTING \bigcirc LIGHT FIXTURE TYPE FIXTURE SCHEDULE ABOVE SEE NOTE X — X — PLUGMOLD MULTI-CIRCUIT COUNTER +4'-0" F FIRE ALARM MANUAL STATION FIRE ALARM COMBINATION HORN/STROBE ' BELOW CLC SMOKE DETECTOR CEILING TOP AT TIRE ALARM CONTROL PANEL +6'-0" FIRE ALARM MINI STROBE BELOW CLC

PROJECT NUMBER 13024

ISSUE DATE: JUNE 19, 2013

Date

REVISIONS:

Professional Engineering 3440 West 7260 South West Jordon, Utoh 84084 Ph: (801) 601-1178 Fox: (801) 601-1179 EMAIL: pro.eng@comcost.net ESE DOCUMENTS SHALL BE PERMITTED UNLESS AUTHORIZED ITING BY PROFESSIONAL ENGINEERING SERVICES M PROPRIATE COMPENSATION. COPYRIGHT © 2

> EN VALLEY ACADEMY
> TORAGE BUILDING
> 991 E. 100 S.
> WEBER COUNTY, UTAH GREE

E0.1

No.164251 GREGORY B. MENDENHALL

SYMBOL SCHEDULE NOTES

- (1) SEE FIXTURE SCHEDULE
- PROVIDE JUNCTION BOX ADJACENT TO FIXTURE -PROVIDE WIRING TO FIXTURE
- (3) SUPERSCRIPT INDICATES FIXTURES CONTROLLED BY SWITCH
- (4) MOUNTING HEIGHT IS TO BOTTOM OF BOX

GENERAL NOTES

1- CO-ORDINATE EXACT LOCATIONS AND QUANTITIES OF LIGHTING FIXTURES WITH

3- CHECK SHOP DRAWINGS FOR ROUGH-IN LOCATIONS OF ALL EQUIPMENT.

PROVIDE SIMULTANEOUS DISCONNECTING MEANS PER NEC 240.4(B).

4- CO-ORDINATE WITH THE MECHANICAL SUB-CONTRACTORS SO THAT NO PIPING,

2- VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS BEFORE BEGINNING ROUGH-IN.

DUCTS, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL SYSTEM SHALL BE PERMITTED TO BE INSTALLED IN, ENTERM OR PASS THROUGH ELECTRICAL

5- SEAL ALL PENETRATIONS OF FIRE RATED FLOORS, WALLS, AND CEILINGS WITH

7- MULTIWIRE BRANCH CIRCUITS SHALL BE GROUPED IN PANEL PER NEC 210.4(D).

APPROVED MATERIAL TO MAINTAIN FIRE RATING OF SURFACE PENETRATED.

ROOMS OR SPACES; OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN OTHER AREAS.

CONSULT ALL APPLICABLE DRAWINGS AND SHOP DRAWINGS TO INSURE NEC REQUIRED

ARCHITECTURAL REFLECTED CEILING PLANS.

6- ALL WORK SHALL COMPLY WITH 2008 N.E.C.

CLEARANCES ADJACENT TO ELECTRICAL EQUIPMENT.

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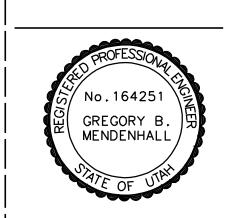
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STORAGE BUILDING
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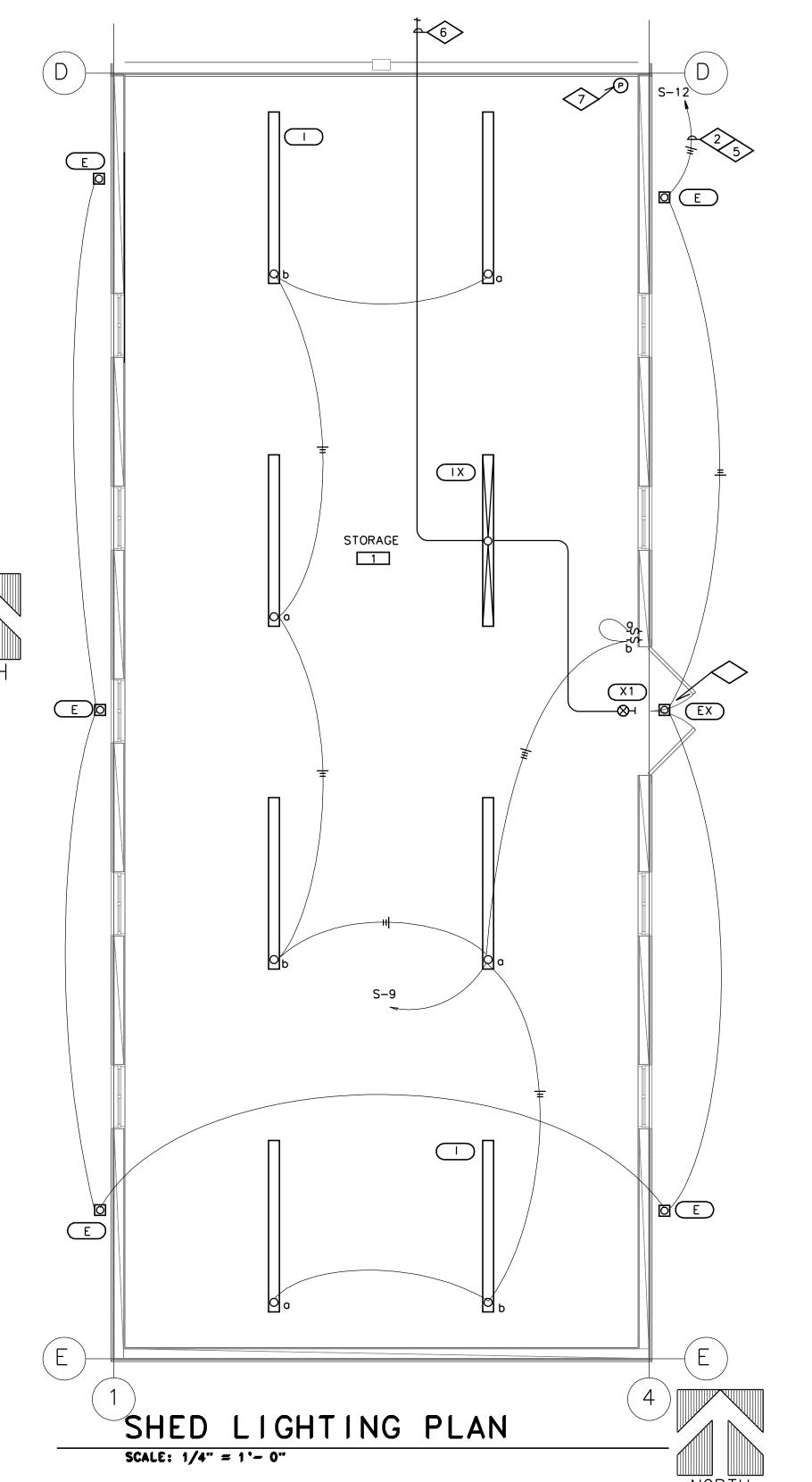
SHED LIGHTING AND POWER PLAN

E1.1



A EXIST PANEL STORAGE

EXISTING SHED PLAN
SCALE: 1/4" = 1'- 0"



S-25,27,29 S-27 S-31,33,35 S-25,27 S-31,33<u></u>↓ ∮ S-25 S-31 S-19,21,23 S-18,20,22 STORAGE 1 S-18,20 S-19 S-18 S-13,15,17 S-32,34,36 √S-13,15 S-32,34 √ S-13 S-39 S-32 [™] (E)SHED POWER PLAN
SCALE: 1/4" = 1'- 0"

 $\left(\mathsf{D}\right)$

FAX: (801) 936-0180

135 EAST CENTER STREET, NORTH SALT LAKE, UTAH 84054

PHONE: (801) 936-1343



2012 IECC

Weber County, UT

Section 1: Project Information

Project Type: Addition Project Title: Green Valley Academy Shed Addition Exterior Lighting Zone: 2 (Residentially zoned area)

Construction Site: 9091 East 100 South

Designer/Contractor: Greg B Mendenhall Professional Engineering Services 3440 West 7260 South West Jordan, UT 84084 801-601-1178

Section 2: Exterior Lighting Area/Surface Power Calculation

Owner/Agent:

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	E Allowed Watts (B x C)	F Proposed Watts	
Main entry	6 ft of door width	20	Yes	120	14
Illuminated length of facade wall or surface	ce 116 ft 2.5 N o				70
		Total Tradable Watts* =			14
Total Allowed Watts =				410	
	Total Allowe	Total Allowed Supplemental Watte** =			

* Wattage tradeoffs are only allowed between tradable areas/surfaces. ** A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Section 3: Exterior Lighting Fixture Schedule

A Fixture ID:Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	(C X D)
Main entry (6 ft of door width): Tradable Wattage				
LED 1: EX: 6" Downlight: LED Other Fixture Unit 13W:	1	1	14	14
Illuminated length of facade wall or surface (116 ft): Non-tradable Wattage				
LED 2: E: 6" Downlight: LED Other Fixture Unit 13W:	1	5	14	70
	Total Tradab	Total Tradable Proposed Watts =		

Section 4: Requirements Checklist

Lighting Wattage:

1. Within each non-tradable area/surface, total proposed watts must be less than or equal to total allowed watts. Across all tradable areas/surfaces, total proposed watts must be less than or equal to total allowed watts.

Controls, Switching, and Wiring:

☐ 2. All exemption claims are associated with fixtures that have a control device independent of the control of the nonexempt lighting. 3. Lighting not designated for dusk-to-dawn operation is controlled by either a a photosensor (with time switch), or an astronomical time

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4. Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photosensor.

___ 5. All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours. Exterior Lighting Efficacy:

☐ 6. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 60 lumen/watt. Exceptions:

☐ Lighting that has been claimed as exempt and is identified as such in Section 3 table above. Lighting that is specifically designated as required by a health or life safety statue, ordinance, or regulation.

☐ Emergency lighting that is automatically off during normal building operation. ☐ Lighting that is controlled by motion sensor.

Section 5: Compliance Statement

Project Title: Green Valley Academy Shed Addition

Data filename: G:\\225034 Green Valley Shed.cck

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2012 IECC requirements in COMcheck Version 3.9.2 and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title	Signature	Date



2012 IECC

Section 1: Project Information

Project Type: Addition Project Title: Green Valley Academy Shed Addition

Construction Site: Owner/Agent 9091 East 100 South Weber County, UT

Designer/Contractor: Greg B Mendenhall Professional Engineering Services 3440 West 7260 South West Jordan, UT 84084 801-601-1178

Section 2: Interior Lighting and Power Calculation

Area Category	Floor Area (ft2)	Allowed Watts / ft2	Allowed Watts (B x C)
Common Space Types:Storage	1525	0.8	1220
	То	tal Allowed Watts =	1220
Section 3: Interior Lighting Fixture Schedule			

Fixture ID: Description / Lamp / Wattage Per Lamp / Ballast

Lamps/ # of Fixture (C X D) Fixture Fixtures Watt. Common Space Types:Storage (1525 sq.ft.) Linear Fluorescent 1: I, IX: 4 ft Strip: 48" T8 32W: Electronic: 4 8 110 Total Proposed Watts =

Section 4: Requirements Checklist

Lighting Wattage:

1. Total proposed watts must be less than or equal to total allowed watts. Allowed Wattage: 1220 Proposed Wattage: 880 Complies: YES

Mandatory Requirements:

2. Dwelling units (complete independent living facilities) within commercial buildings are not required to comply with interior lighting equirements of this code provided that >=75 percent of the permanently installed fixtures other than low voltage lighting contain only

🔲 3. Manual Controls: Each enclosed space has manual lighting control. Remotely located manual controls are labelled for area of service and indicate on/off status. Exception(s).

- Security/emergency areas with 24-hour operation.
- Stairways/corridors that are means of egress. 1. Light Reduction Controls: Each space required to have a manual control also allows for reducing the connected lighting load by at least 50 percent by either controlling all luminaires, dual switching of alternate rows of luminaires, alternate luminaires, or alternate lamps, switching the middle lamp luminaires independently of other lamps, or switching each luminaire or each lamp.
- Only one luminaire (lamp < 100 W) in space.</p> An occupant-sensing device controls the area.

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- The area is a corridor, equipment/store rooms, restrooms, public lobby, elec./mech. room, or sleeping unit.
- ☐ Areas that use < 0.6 Watts/sq.ft.</p>
- Daylight spaces having automatic daylighting controls.
- 5. Automatic time switching controls are installed and have an override switching device. The override switching device allows for <= 2 connected lights are visible or communicated to the switch. Exception(s).
- Sleeping units, patient care areas; and spaces where automatic shutoff would endanger safety or security or where lighting is intended for 24-hour operation.
- Emergency egress lighting.
- Spaces where lighting is controlled with occupancy sensors.
- Malls, arcades, auditoriums, single tenant retail spaces, industrial facilities and arenas that are <= 20,000 sq.ft. are permitted exceed the 2-hour operation cycle limit when a captive key device override switch is installed.
- 🗖 6. Occupant sensors are installed in the following spaces and automatically turn lighting off within 30 minutes of all occupants leaving the space: Classrooms, conference/meeting/training rooms, employee lunch and break rooms, private offices, storage/janitorial rooms, restrooms, and other spaces <= 300 sq.ft. Automatic-on sensors set power on <50 percent power.
- Full power automatic-on controls are permitted where manual-on operation would endanger the safety or security of the room or building occupants.
- 7. Daylight zones have either individual lighting controls independent from that of the general area lighting that are either manual or automatic and serve zones <= 2,500 sq.ft. Zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.
- Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.
- Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.
- 8. Automatic daylight zone controls are capable of reducing power to < 35 percent using continuous dimming ballasts and daylight-sensing controls OR, are capable of automatic power reduction using step-dimming multi-level switching and daylight-sensing controls having at least two control channels per zone and at least one control step in the 50 - 70 percent range and another <= 35 percent of design power.
- 9. Medical task lighting or art/history display lighting claimed to be exempt from compliance has a control device independent of the control of the nonexempt lighting. 10. Separate control device for display/accent lighting, case lighting, task lighting, nonvisual lighting, under-shelf/cabinent lighting, lighting
- for sale, and demonstration lighting. 11. Hotel/motel sleeping units and guest suites have control device(s) at the entry door that control all permanent luminaires and switched receptacles.
- 12. Exit signs 5 Watts or less per sign. ☐ 13. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).
- Exception(s):
- Electronic high-frequency ballasts.

Section 5: Compliance Statement

- Luminaires not on same switch.
- Recessed luminaires 10 ft. apart or surface/pendant not continuous.

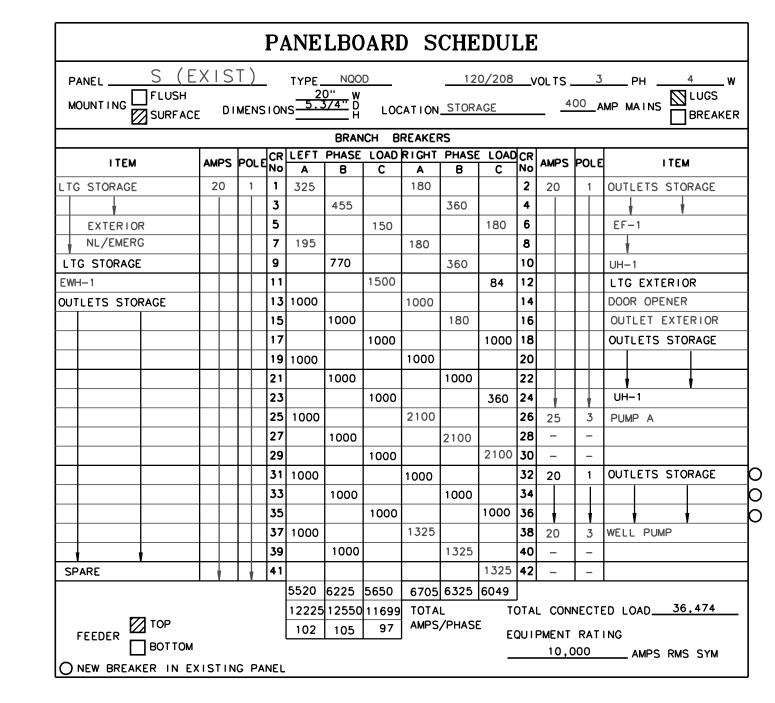
Luminaires on emergency circuits nterior Lighting PASSES: Design 28% better than code.

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2012 IECC requirements in COMcheck Version 3.9.2 and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title

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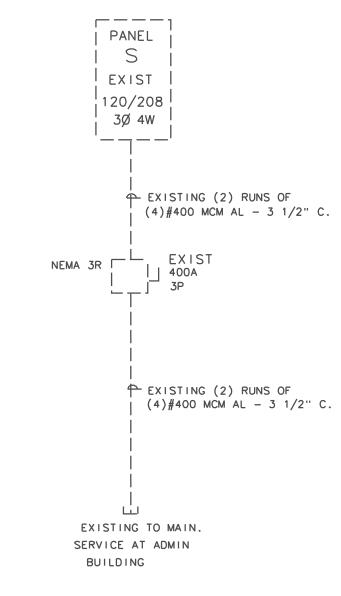
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ELECTRICAL LOAD CALCULATION

PANEL "S" = 36,474

36,474/360 = 101A ON A 400A SERVICE



EXISTING ONE LINE DIAGRAM

PROJECT NUMBER 13024

> **ISSUE DATE: JUNE 19, 2013**

REVISIONS:

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