

3 EXTERIOR PERSPECTIVE FROM SOUTHEAST



2 INTERIOR PERSPECTIVE IN NAVE

HOLY TRINITY CATHOLIC CHURCH 355 OREGON AVE SE, BANDON, OR 97411

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ABBREVIATIONS

@ AB AC ACC ACT AD ADD ADJ AFF AHU AL ALT AP APPROX ARCH ASPH	ANGLE AT ANCHOR BOLT ACOUSTIC ACCESS ACOUSTIC CEILING TILE ACOUSTIC CEILING PANEL AREA DRAIN ADDITIONAL ADJUSTABLE ABOVE FINISH FLOOR AIR HANDLING UNIT ALUMINUM ALTERNATE ACCESS PANEL APPROXIMATE ARCHITECTURAL ASPHALT
BB BD BF BFC BG BIT BLDG BLKG BLKT BM BLK BOT BRG BRKR BRK BRKT BS BSMT BTWN	BOND BEAM BOARD BOTH FACES BELOW FINISH CEILING BUMPER GUARD BITUMINOUS BUILDING BLOCKING BLANKET BEAM/BENCH MARK BLOCK BOTTOM BEARING BREAKER BRICK BRACKET BACK SPLASH BASEMENT BETWEEN
CAB CER CFCI CG CH CIP CJ CLG CLO CLR COL CONB CMU CONF CONT CONT CONT CONT CONT CONT CONT CONT	CABINET CERAMIC CONTRACTOR FURNISHED, CONTRACTOR INSTALLED CORNER GUARD COAT HOOK CAST IN PLACE CONTROL JOINT/CONSTRUCTION JOINT CEILING CLOSET/CLOSURE CLEAR COLUMN COMBINATION CONCRETE MASONRY UNIT CONCRETE CONFERENCE CONFERENCE CONFERENCE CONFERENCE CONTRACTION CONTINUOUS CONTRACTOR CARPET CARD READER CASING CERAMIC TILE CENTER/COUNTER COUNTERSUNK CABINET UNIT HEATER CLEAR VERTICAL GRAIN COLD WATER
D DBL DET DF DIA DIAG DIM DIR DIV DM DN DO DR DR DR DR DR DR DR DR DR DR DR DR DR	DEPTH DOUBLE DETAIL DRINKING FOUNTAIN DIAMETER DIAGONAL DIMENSION DIRECTION DIVISION DE-MOUNTABLE PARTITION DOWN DITTO DOOR DRAWER DOWNSPOUT DRAWING DOWEL DEFORMED WELDED STUD
(E) EA EC EF EH EJ ELEC ELEV EMBED ENT EQUIP ES ESR ETR EVC EW EWC EXC EXP EXPD EXPF EXT	EXISTING EACH ELECTRICAL CONTRACTOR EACH FACE ELECTRICAL HEATER/EXHAUST HOOD EXPANSION JOINT ELEVATION ELEVATION ELECTRICAL ELEVATOR/ELEVATION EMBEDDED EMERGENCY ENTRANCE EQUAL EQUIPMENT EMERGENCY SHOWER ELASTOMERIC SHEET ROOFING EXISTING TO REMAIN ELASTIC VINYL COATING EACH WAY ELECTRIC WATER COOLER EXCAVATE EXPANSION EXPOSED EXPLOSION PROOF EXTERIOR
FA FV FDN FE FEC FF FHC FIN FIX FLEX	FIELD ADJUSTABLE FIELD VERIFY FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FINISH FLOOR FIRE HOSE CABINET FINISH FIXTURE FLEXIBLE

	ABBREVIAT
GA GALV GB GC GEN GFCI GFGI GFRG GL GLB GWB GYP	GAUGE GALLON GALVANIZED GRAB BAR GENERAL CONTRACTOR GENERAL GOVERNMENT FURNISHED, CONTRACTOR INSTALLED GOVERNMENT FURNISHED, GOVERNMENT INSTALLED GLASS FIBER REINFORCED CONCRETE GLASS FIBER REINFORCED GYPSUM GLASS GLUE LAM BEAM GLAZED MASONRY UNIT GYPSUM WALL BOARD GYPSUM
H HDBD HDCP HDWD HDWE HK HM HP HR HT HT HVAC HWS	HEIGHT HARDBOARD HANDICAPPED HARDWOOD HARDWARE HOOK HOLLOW METAL HIGH POINT HANDRAIL HEIGHT HEATING VENTILATION AND AIR CONDITIONING HEAD WELDED STUDS
ID IMP INFO INFO INSUL INT IPW IRF	INSIDE DIAMETER INSULATED METAL PANEL INCHES INFORMATION INSULATION INTERIOR INSULATED PLENUM WALL INSULATED ROOF FILL
JAN JS JST JT	JANITOR JANITOR SINK JOIST JOINT
KD KO	KNOCKED DOWN KNOCK-OUT / KNEE OPENING
L LAB LAM LB LDG LDG LGT LGT LKR LLH LLV LONG LP LSH LTG LVR LWC	LENGTH LABORATORY LAMINATED POUND POUNDS LINEAR DIFFUSER LANDING LINEAR FOOT LONG LIGHT LOCKER LONG LEG HORIZONTAL LONG LEG VERTICAL LONG LEG VERTICAL LONG SLOTTED HOLE LIGHTING LOUVER LIGHTWEIGHT CONCRETE
MACH MAN MAR MAS MATL MAX MB MBW MC MDO MECH MEMB MET MEZZ MFR MIN MIR MISC MK ML MISC MK ML MLDG MO MP MS MTD MTD MTG	MACHINE MANUAL MARBLE MASONRY MATERIAL MAXIMUM MACHINE BOLT MASONRY BEARING WALL MECHANICAL CONTRACTOR MEDIUM DENSITY OVERLAY MECHANICAL MEMBRANE METAL MEZZANINE MANUFACTURER MINIMUM MIRROR MISCELLANEOUS MARK METAL LATH MOLDING MASONRY OPENING METAL PARTITION MACHINE SCREW MOUNTED MOUNTING
NA NIC NO NOM NS NTS NWC	NOT APPLICABLE NOT IN CONTRACT NUMBER NOMINAL NON-SHRINK NOT TO SCALE NORMAL WEIGHT CONCRETE
O/ OA OC OD OFCI OFF OPNG OPP OZ	OVER OVERALL ON CENTER OUTSIDE DIAMETER/OVERFLOW DRAIN OWNER FURNISHED, CONTRACTOR INSTALLED OFFICE OPENING OPPOSITE OUNCE
PART PC PCC PCPL PDWR PH PLAM PLAS PLBG PLSWD PM PNL PNLG PNL PNLG POL PR PRE FAB PRE FAB PRE FIN PSF PSI PT	PARTITION PIECE PRECAST CONCRETE PORTLAND CEMENT PLASTER PAPER TOWEL DISPENSER & WASTE RECEPTACLE PHILLIPS HEAD/PHASE PLATE/PROPERTY LINE PLASTIC LAMINATE PLASTER PLUMBING PLYWOOD PROTECTED METAL PANEL PANEL PANEL PAIR PREFABRICATED PRE-FINISHED POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH POINT/PAINT PAINT TO MATCH

POLYVINYL CHLORIDE

PVC

FLR FLOOR

FLOORING

FEET FTG FOOTING

FURG FURRING

FACE OF STUD

FIRE RETARDANT FULL SIZE/FULL SCALE

FIREPROOF/FIRE PROTECTION

FLRG

FOS

FP

FR

FS FT QT

QTY

RAD

RAH

RB

RC

RD

RCP

REC

REF

REL

REM REQD

RES

RET

RI

RM

RO RT

SA

SB

SC

SCF

SD

SE

SF

SG

SGL SH

SHD

SHT SIM

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WRB

WP

TWS

TYP

TFC

TEMP TER

SYMMETRICAL

SV

SM

SECT

SCHD

SAM

SAMF SAT

SAWRB

RUB

REINF

TIONS BELOW ARE FOR ARCHITECTURAL SHEETS ONLY

QUARRY TILE

QUANTITY

RADIUS ROOFTOP AIR HANDLING UNIT RUBBER BASE REINFORCED CONCRETE REFLECTED CEILING PLAN ROOF DRAIN RECESSED REFERENCE REINFORCING RELOCATE REMAINDER REQUIRED RESILIENT RETURN **ROUGH IN** ROOM ROUGH OPENING RUBBER TILE RUBBER

SELF ADHERED SELF ADHERED MEMBRANE SELF ADHERED MEMBRANE FLASHING STANDARD AGGREGATE TOPPING SELF ADHERED WATER RESISTIVE BARRIER SOIL BEARING SEAMLESS COATING SPECIAL CONCRETE FINISH SCHEDULE SOAP DISPENSER SHELF EDGE SECTION SAND FLOAT SUPPLY AIR GRILLE SINGLE SHELF SHOWER DOOR SHEET SIMILAR STEEL JOIST SHORT LEG VERTICAL SMOOTH SANITARY NAPKIN DISPENSER SANITARY NAPKIN VENDER SLAB ON GRADE SPECIFICATION SPRINKLER SQUARE SHOWER ROD STAINLESS STEEL STREET STANDARD STEEL STORAGE STRUCTURAL/STRUCTURE SUSPENDED SHEET VINYL

TOP AND BOTTOM TACKBOARD/TOWEL BAR TO BE REMOVED THIN COAT PLASTER TOWEL DISPENSER TOWEL DISPENSER AND WASTE TEMPERATURE/TEMPERED TERRAZZO TEXTURE TROWELED FLOOR COVERING TONGUE AND GROOVE THICK TOP OF BEAM TOP OF CURB/TOP OF CONCRETE TOP OF DECK/TOP OF DUCT ELEVATION TOP OF FOOTING TOP OF GRATE TOP OF JOIST TOP OF PIPE ELEVATION TOP OF SLAB/TOP OF STEEL TOP OF WALL TOPPING TOILET PAPER HOLDER TRANSOM TRANS TRANSVERSE TUBE STEEL THREADED WELDED STUD TYPICAL

> UNDERGROUND UNLESS NOTED OTHERWISE URINAL

VINYL VINYL BASE VINYL COMPOSITION TILE VERTICAL VESTIBULE VOLUME VWC VINYL WALL COVERING

WIDE FLANGE STEEL BEAM WITH WELDED ANGLE FRAME WATER CLOSET WOOD WINDOW WIDE FLANGE WIRE GLASS WITHOUT WEATHERPROOF WPFG WATERPROOFING

WASTE RECEPTACLE WATER RESISTIVE BARRIER

WSCT WAINSCOT WSTP WEATHERSTRIP

WTR WATER WWF WELDED WIRE FABRIC



INTERIOR WALL TYPES 1" = 1'-0"

OCCUPANCY SCHEDULE						
ROOM NAME	AREA	TYPE	OLF	OCC. LOAD	EXITS	
CHAPEL	495 SF	A-3		32	1	
ENTRY	132 SF	A-3	15	9	1	
NARTHEX	428 SF	A-3	15	28	1	
MECH. / JAN.	145 SF	A-3	300	1	1	
CRY ROOM	95 SF	A-3	150	1	1	
PRIEST SACRISTY	163 SF	A-3	300	1	1	
CONFESS.	28 SF	A-3	150	1	1	
CONFESS.	27 SF	A-3	150	1	1	
NAVE	1790 SF	A-3		174	2	
CHOIR	104 SF	A-3		9	1	
WEST SACRISTY	152 SF	A-3	300	1	1	
SANCTUARY	479 SF	A-3	15	29	1	
EAST SACRISTY	72 SF	A-3	300	1	1	
	CHAPEL ENTRY NARTHEX MECH. / JAN. CRY ROOM PRIEST SACRISTY CONFESS. CONFESS. NAVE CHOIR WEST SACRISTY SANCTUARY EAST SACRISTY	OCCUPAROOM NAMEAREACHAPEL495 SFENTRY132 SFNARTHEX428 SFMECH. / JAN.145 SFCRY ROOM95 SFPRIEST SACRISTY163 SFCONFESS.28 SFCONFESS.27 SFNAVE1790 SFCHOIR104 SFWEST SACRISTY152 SFSANCTUARY479 SFEAST SACRISTY72 SF	ROOM NAMEAREATYPECHAPEL495 SFA-3ENTRY132 SFA-3NARTHEX428 SFA-3MECH. / JAN.145 SFA-3CRY ROOM95 SFA-3PRIEST SACRISTY163 SFA-3CONFESS.28 SFA-3CONFESS.27 SFA-3NAVE1790 SFA-3CHOIR104 SFA-3WEST SACRISTY152 SFA-3SANCTUARY479 SFA-3EAST SACRISTY72 SFA-3	ROOM NAMEAREATYPEOLFCHAPEL495 SFA-315ENTRY132 SFA-315NARTHEX428 SFA-315MECH. / JAN.145 SFA-3300CRY ROOM95 SFA-3150PRIEST SACRISTY163 SFA-3300CONFESS.27 SFA-3150NAVE1790 SFA-3150NAVE128 SFA-3150SANCTUARY479 SFA-3300SANCTUARY479 SFA-315EAST SACRISTY72 SFA-3300	OCCUPANCY SCHEDULEROOM NAMEAREATYPEOLFOCC. LOADCHAPEL495 SFA-332ENTRY132 SFA-3159NARTHEX428 SFA-31528MECH. / JAN.145 SFA-33001CRY ROOM95 SFA-31501PRIEST SACRISTY163 SFA-33001CONFESS.28 SFA-31501CONFESS.27 SFA-31501NAVE1790 SFA-31501CHOIR104 SFA-399WEST SACRISTY152 SFA-33001SANCTUARY479 SFA-31529EAST SACRISTY72 SFA-33001	



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4100	BUILDING	AREA OF	AREA OF	AREA OF	PERVIOUS AREA (VEGETATION,	CHURCH / PARISH HALL	RECTORY
FT ²)	AREA (FT ²)	PAVERS (FT ²)	DECK (FT ²)	ASPHALT (FT ²)	GRASS, ETC.) (FT ²)	PARKING	PARKING
.20	9,274.83	4,512.41	554.08	25,684.44	24,757.44	57 STD. / 2 PARALLEL / 2 ADA	2 SPACES



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LEGEND

<u>SYMBOL</u>
· · ·
151
OHP OHP
\bigcirc
\sim
د ^{ره} (۲) در ۲) در ۲)
\square

W M

WATER VALVE

WATER METER



TIONS	MAP



NOTES:

- OWNER TO REMOVE EXISTING CHURCH BUILDING, INCLUDING FOUNDATION.
 CONTRACTOR TO PROVIDE OWNER ACCESS TO RECTORY AND
- 2. CONTRACTOR TO PROVIDE OWNER ACCESS TO RECTORY AND PARISH HALL THROUGHOUT CONSTRUCTION.



1 SITE DEMO PLAN A1.1 SCALE: 1" = 20'



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LEGEND

<u>SYMBOL</u>
· · ·
151
150
T T T T
OHP OHP
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

DESCRIPTION	
PROPERTY BOUNDARY PROPERTY LINES	
1' CONTOUR	
5' CONTOUR	
RETAINING WALL BURRIED UTILITY/TELECOM LINES OVERHEAD UTILITY LINES FENCE	
VEGETATION/LANDSCAPING	3
PARKING STRIPING	
BUILDING	
ASPHALT	
SIDEWALK/PAVERS	
DECK	
BENCH	
SIGN	
WHEEL STOP MONUMENT AS NOTED	
LIGHT POLE	
UTILITY POLE	
EXISTING TREE	
FIRE HYDRANT	
WATER VALVE	

WATER METER







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WV WV

W M

PROPERTY BOUNDARY
PROPERTY LINES
1' CONTOUR
5' CONTOUR
RETAINING WALL BURRIED UTILITY/TELECOM LINES OVERHEAD UTILITY LINES
PARKING STRIPING
BUILDING
ASPHALT
SIDEWALK/PAVERS
DECK
BENCH
SIGN
WHEEL STOP
MONUMENT AS NOTED
LIGHT POLE
UTILITY POLE
EXISTING TREE
FIRE HYDRANT
WATER VALVE
WATER METER

DESCRIPTION



SITE LAYOUT PLAN



			$\sim$
L	от		[
			[
			[
	63 (2)	spaces existing	[
	61	net spaces	
	30	spaces required	
	2	spaces required	
a be ai	fello [;] fore re nc	wship hall related or after church ot used	
20	r na	rking space	
	19	spaces required	

2 spaces required Sub-total 59 spaces required

59 spaces





![](_page_7_Figure_0.jpeg)

![](_page_8_Figure_0.jpeg)

5/2024 3:24:52 PM C:\Users\Konrad\Documents\Holy Trinity Catholic Church_kstuebgenRPAB9.rvt

![](_page_9_Figure_0.jpeg)

**2 ROOF PLAN** 1/8" = 1'-0"

![](_page_9_Picture_3.jpeg)

![](_page_10_Figure_0.jpeg)

![](_page_11_Figure_0.jpeg)

15/2024 3:24:57 PM C:\Users\Konrad\Documents\Holy Trinity Catholic Church_kstuebgenRPAB9.rvt

![](_page_11_Figure_2.jpeg)

![](_page_12_Figure_0.jpeg)

![](_page_13_Figure_0.jpeg)

3/2024 3:25:05 PM C:\Users\Konrad\Documents\Holy Trinity Catholic Church kstuebgenRPAB9.rv

![](_page_14_Figure_0.jpeg)

![](_page_15_Figure_0.jpeg)

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![](_page_16_Figure_0.jpeg)

3/15/2024 3:25:17 PM C:\Users\Konrad\Documents\Holy Trinity Catholic Church_kstuebgenRPAB9.rvt

![](_page_17_Figure_0.jpeg)

## 8 WINDOW SILL @ SANCTUARY

![](_page_17_Figure_15.jpeg)

![](_page_18_Figure_0.jpeg)

![](_page_18_Figure_1.jpeg)

![](_page_18_Figure_2.jpeg)

![](_page_18_Picture_3.jpeg)

![](_page_19_Figure_0.jpeg)

![](_page_19_Figure_1.jpeg)

![](_page_20_Figure_0.jpeg)

![](_page_21_Figure_0.jpeg)

8/15/2024 3:25:32 PM C:\Users\Konrad\Documents\Holy Trinity Catholic Church kstuebgenRPAB9.rv

![](_page_22_Figure_1.jpeg)

![](_page_22_Figure_2.jpeg)

SURFACE MOUNT LIGHTING (2) WALL-MOUNTED WATER HEATER SEE PLUMBING

SHELVES MOP HOLDER

UTILITY SINK -FRP MOP SINK

![](_page_22_Figure_6.jpeg)

![](_page_23_Figure_1.jpeg)

	ROOM FINISH SCHEDULE									
ROOM NAME	ROOM NO.	FLOOR FINISH	BASE	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	CEILING FINISH	CEILING HGT	NOTES
CHAPEL	01	CPT	WD	LEP	LEP	LEP	LEP	LEP/AC PANELS	VARIES	
ENTRY	02	WOT	WD	LEP	LEP	LEP	LEP	LEP	41'	BELL TOWER
NARTHEX	03	CPT	WD	LEP	LEP	LEP	LEP	GYP. BD. / ACT	VARIES	
SERVICE HALL	4	LVT	WD	LEP		LEP	LEP	SUS. AC.	9'-0"	
MECH. / JAN.	05	RES	RBR	LEP	LEP/PLY	LEP	LEP	LEP / RES. CHANNEL / INSUL.	11'-6"	
WOMEN	06	RES	COVE	TILE	TILE	TILE	TILE	LEP	8'-0"	
MEN	07	RES	COVE	TILE	TILE	TILE	TILE	LEP	8'-0"	
CRY ROOM	08	CPT	WD	LEP	LEP	LEP	LEP	SUS. AC.	9'-0"	
PRIEST SACRISTY	09	CPT	WD	LEP	LEP	LEP	LEP	SUS. AC.	9'-0"	
CONFESS.	10	CPT	WD	LEP	LEP	LEP	LEP	LEP	8'-0"	
CONFESS.	11	CPT	WD	LEP	LEP	LEP	LEP	LEP	8'-0"	
NAVE	12	CPT	WD	LEP	LEP	LEP / AC. PANELS	LEP	AC. WD PANEL / LEP	VARIES	CPT ON RAMPS/LANDING
CHOIR	12A	CPT	WD	LEP		LEP	LEP	LEP	10'-0"	
EAST EXIT	12B									
WEST SACRISTY	13	LVT	RBR	LEP	LEP	LEP	LEP	SUS. AC.	8'-0"	
SANCTUARY	14	TILE	WD	LEP/WD PANEL	LEP	-	LEP	LEP	VARIES	
EAST SACRISTY	15	LVT	RBR	LEP	LEP	LEP	LEP	SUS. AC.	8'-0"	

## FINISH ABBREVIATIONS

LATEX ENAMEL PAINT LEP PORCELAIN/CERAMIC/QUARRY TILE

- LEP TILE CPT WOT RES LVT RBR WD COVE SUS. AC. CARPET WALK-OFF CARPET TILE
- RESILIENT SHEET FLOORING RESILIENT TILE (LUXURY VINYL TILE)
- RESILIENT BASE, RUBBER
- WOOD
- COVE BASE
- SUSPENDED ACOUSTICAL CEILING PLY T&G PRE-PAINTED, FIRE TREATED PLYWOOD CVG DOUGLAS FIR TONGUE & GROOVE

	DOOR SCHEDULE									
DOOR			ТУРЕ	DOOR	DOOR FRAME		DETAILS (SHEET A5.4)			NOTEO
NO.			ITPE	MATERIAL	MATERIAL	GROUP	HEAD	JAMB	THRESHOLD	NOTES
01	CHAPEL	3' - 0" X 7' - 0"	В	WD / GLASS	WD	HW-20	11	11	-	
2A	ENTRY	7' - 0" X 8' - 6"	А	WD	WD	HW-17	10	9	14	PAIR, EXTERIOR DOORS
3A	NAVE	6' - 0" X 8' - 0"	В	WD / GLASS	WD	HW-11A	8	8	-	PAIR, SOUND DOORS, INSULATED GLASS
5	MECH. / JAN.	3' - 0" X 7' - 0"	А	WD	WD	HW-20A	8	8	-	SOUND DOOR
6	WOMEN	3' - 0" X 7' - 0"	А	WD	WD	HW-1D	8	8	-	
7	MEN	3' - 0" X 7' - 0"	A	WD	WD	HW-5	8	8	-	
8	CRY ROOM	3' - 0" X 7' - 0"	В	WD / GLASS	WD	HW-9	8	8	-	SOUND DOOR, INSULATED GLASS
9A	PRIEST SACRISTY	3' - 0" X 7' - 0"	А	WD	WD	HW-10	8	8	-	
9B	CONFESS.	3' - 0" X 7' - 0"	А	WD	WD	HW-2	8	8	-	
9C	PRIEST SACRISTY	5' - 0" X 6' - 8"	А	WD	WD	-	4	4	-	1-3/8"-THICK BI-PARTING SLIDING CLOSET DOOR, PROVIDE TRACK & PULL HARDWARE
9D	PRIEST SACRISTY	5' - 0" X 6' - 8"	А	WD	WD	-	4	4	-	1-3/8"-THICK BI-PARTING SLIDING CLOSET DOOR, PROVIDE TRACK & PULL HARDWARE
11	CONFESS.	3' - 0" X 8' - 0"	А	WD	WD	HW-9	8	8	-	SOUND DOOR
12B	EAST EXIT	3' - 0" X 8' - 0"	A	WD	WD	HW-15	12	13	14	EXTERIOR DOOR
13A	WEST SACRISTY	3' - 0" X 7' - 0"	A	WD	WD	HW-20	8	8	-	
15A	EAST SACRISTY	3' - 0" X 7' - 0"	A	WD	WD	HW-20	8	8	-	
15B	EAST SACRISTY	4' - 0" X 7' - 0"	A	WD	WD	-	4	4	-	1-3/8"-THICK BI-PARTING SLIDING CLOSET DOOR, PROVIDE TRACK & PULL HARDWARE

![](_page_23_Figure_13.jpeg)

**CLERESTORY MUNTIN** 

NOTE: ALL DOORS TO BE RAIL & STILE TYPE.

![](_page_23_Figure_15.jpeg)

![](_page_23_Picture_16.jpeg)

![](_page_23_Figure_18.jpeg)

![](_page_23_Figure_19.jpeg)

			v	VINDOW SCHEDULE	
MARK	SIZE (WxH)	COUNT	ТҮРЕ	NOTES	
Α	5' - 4" x 2' - 6"	1	FIXED, WOOD CLAD	GOTHIC ARCHED WINDOW, W/ GOTHIC CONFIGURED GRIDS, SEE ELEVATION	
В	5' - 0" x 7' - 6"	1	FIXED, WOOD CLAD	GRIDS AS SHOWN	
С	2' - 0" x 8' - 6"	6	FIXED, VINYL	GOTHIC CONFIGURED GRIDS, SEE ELEVATION	, F
D	2' - 0" x 5' - 0"	13	FIXED, VINYL	GOTHIC CONFIGURED GRIDS, SEE ELEVATION. NO MUNTIN @ TOWER, TEMPERED AT RAMP	
E	2' - 0" x 6' - 0"	3	FIXED, VINYL		
G	2' - 4 1/2" x 6' - 6"	2	FIXED, VINYL		
Н	2' - 4 1/2" x 7' - 0"	2			
I	2' - 4 1/2" x 3' - 6"	2	FIXED, VINYL		
J	6' - 0" x 6' - 0"	1	FIXED, VINYL	ROSE WINDOW	
K	2' - 0" x 4' - 0"	2	FIXED, VINYL	GOTHIC CONFIGURED GRIDS, SEE ELEVATION	
L	2' - 0" x 2' - 9"	18	FIXED, VINYL	CLERESTORY WINDOWS. GOTHIC CONFIGURED GRIDS, SEE ELEVATION	
М	2' - 10" x 5' - 6"	7	FIXED, VINYL	INTERIOR SOUND WINDOWS	
N	2' - 0" x 5' - 0"	2	CASEMENT, VINYL	GOTHIC CONFIGURED GRIDS, SEE ELEVATION	
0	2' - 0" x 4' - 0"	1	CASEMENT, VINYL	GOTHIC CONFIGURED GRIDS, SEE ELEVATION	
Р	2' - 0" x 6' - 0"	1	CASEMENT, VINYL		
Q	2' - 0" x 5' - 0"	2	CASEMENT, VINYL	GOTHIC CONFIGURED GRIDS, SEE ELEVATION	
R	2' - 0" x 4' - 0"	1	CASEMENT, VINYL	GOTHIC CONFIGURED GRIDS, SEE ELEVATION	
S	2' - 0" x 6' - 0"	1	CASEMENT, VINYL	GOTHIC CONFIGURED GRIDS, SEE ELEVATION	

**1 TYP. EXTERIOR TRIM & MUNTIN** 

![](_page_23_Figure_22.jpeg)

A. DOORS SHOWN ADJACENT TO FLANKING WALL OR OTHER FIXED OBSTRUCTION, SHALL BE LOCATED AS SHOWN ABOVE B. OTHER LOCATIONS SHALL BE ON CENTERLINE OF ROOM OR AS SPECIFICALLY DIMENSIONED

## DOOR PLACEMENT DIMENSIONS

![](_page_23_Figure_25.jpeg)

## DOOR LEGEND

1/4" = 1'-0"

![](_page_23_Picture_28.jpeg)

333 S. 4TH STREET COOS BAY, OR 97420 P: 541.269.1166 general@hge1.com www.hge1.com

![](_page_23_Picture_30.jpeg)

![](_page_23_Figure_31.jpeg)

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## **STRUCTURAL - GENERAL NOTES**

### GENERAL REQUIREMENTS

GOVERNING CODE: The design and construction of this project is governed by the "Oregon Structural Specialty Code (OSSC)", 2022 Edition, hereafter referred to as the OSSC, as adopted and modified by the City of Bandon, OR understood to be the Authority Having Jurisdiction (AHJ).

REFERENCE STANDARDS: Refer to Chapter 35 of 2022 OSSC. Where other Standards are noted in the drawings, use the latest edition of the standard unless a specific date is indicated. Reference to a specific section in a code does not relieve the contractor from compliance with the entire standard.

**DEFINITIONS**: The following definitions cover the meanings of certain terms used in these notes:

- (1) "Architect/Engineer" The Architect of Record and the Structural Engineer of Record.
- (2) "Structural Engineer of Record" (SER) The structural engineer who is licensed to stamp & sign the structural documents for the project. The SER is responsible for the design of the Primary Structural Sys-
- (3) "Submit for review" Submit to the Architect/SER for review prior to fabrication or construction. (4) "Per Plan" – Indicates references to the structural plans, elevations and structural general notes.
- (5) "Seismic Force Resisting System (SFRS)" A recognized structural system of components (beams, braces, drags, struts, collectors, diaphragms, columns, walls, etc) of the primary structure that are specially designed and proportioned to resist earthquake-induced ground motions and maintain stability of the structure. Fabrication and installation of components designated as part of the SFRS require the general contractor, subcontractor, or supplier who is responsible for any portion of SFRS fabrication or installation to comply with special requirements (including, but not limited to, material control, compliance certifications, personnel qualifications, documentation, reporting requirements, etc) and to provide the required Quality Control including the required coordination of Special Inspections (Quality Assurance - QA). Special provisions apply to any member designated as part of the SFRS. Refer to plans, elevations, details, Design Criteria and Symbols and Legends for applicable members and connections.
- (6) "Specialty Structural Engineer" (SSE) A professional engineer (PE or SE), licensed in the State where the project is located, (typically not the SER), who performs specialty structural engineering services for selected specialty-engineered elements identified in the Contract Documents, and who has experience and training in the Specialty. Documents stamped and signed by the SSE shall be completed by or under the direct supervision of the SSE.
- (7) "Bidder-designed" Components of the structure that require the general contractor, subcontractor, or supplier who is responsible for the design, fabrication and installation of specialty-engineered elements identified in the Contract Documents to retain the services of an SSE. Submittals of "Bidder-designed" elements shall be stamped and signed by the SSE.

SPECIFICATIONS: Refer to the project specifications issued as part of the contract documents for information supplemental to these drawings.

**<u>OTHER DRAWINGS</u>**: Refer to the architectural, mechanical, electrical, civil and plumbing drawings for additional information including but not limited to dimensions, elevations, slopes, door and window openings, non-bearing walls, stairs, finishes, drains, waterproofing, railings, mechanical unit locations, and other nonstructural items.

STRUCTURAL DETAILS: The structural drawings are intended to show the general character and extent of the project and are not intended to show all details of the work. Use entire detail sheets and specific details referenced in the plans as "typical" wherever they apply. Similarly, use details on entire sheets with "typical" in the name wherever they apply.

STRUCTURAL RESPONSIBILITIES: The structural engineer (SER) is responsible for the strength and stability of the primary structure in its completed form.

**COORDINATION:** The Contractor is responsible for coordinating details and accuracy of the work; for confirming and correlating all quantities and dimensions; for selecting fabrication processes; for techniques of assembly; and for performing work in a safe and secure manner.

MEANS, METHODS and SAFETY REQUIREMENTS: The contractor is responsible for the means and methods of construction and all job-related safety standards such as OSHA and DOSH (Department of Occupational Safety and Health). The contractor is responsible for means and methods of construction related to the intermediate structural conditions (i.e., movement of the structure due to moisture and thermal effects; construction sequence; temporary bracing, etc.).

BRACING/SHORING DESIGN ENGINEER: The contractor shall at their discretion employ an SSE, a registered professional engineer for the design of any temporary bracing and shoring.

TEMPORARY SHORING. BRACING: The contractor is responsible for the strength and stability of the structure during construction and shall provide temporary shoring, bracing and other elements required to maintain stability until the structure is complete. It is the contractor's responsibility to be familiar with the work required in the construction documents and the requirements for executing it properly.

**CONSTRUCTION LOADS**: Loads on the structure during construction shall not exceed the design loads as noted in DESIGN CRITERIA & LOADS below or the capacity of partially completed construction as determined by the Contractor's SSE for Bracing/Shoring.

CHANGES IN LOADING: The contractor has the responsibility to notify the SER of any architectural, mechanical, electrical, or plumbing load imposed onto the structure that differs from, or that is not documented on the original Contract Documents (architectural / structural / mechanical / electrical or plumbing drawings). Provide documentation of location, load, size and anchorage of all undocumented loads in excess of **400** pounds. Provide marked-up structural plan indicating locations of any new equipment or loads. Submit plans to the Architect/Engineer for review prior to installation.

NOTE PRIORITIES: Plan and detail notes and specific loading data provided on individual plans and detail drawings supplements information in the Structural General Notes.

DISCREPANCIES: In case of discrepancies between the General Notes, Specifications, Plans/Details or Reference Standards, the Architect/Engineer shall determine which shall govern. Discrepancies shall be brought to the attention of the Architect/Engineer before proceeding with the work. Should any discrepancy be found in the Contract Documents, the Contractor will be deemed to have included in the price the most expensive way of completing the work, unless prior to the submission of the price, the Contractor asks for a decision from the Architect as to which shall govern. Accordingly, any conflict in or between the Contract Documents shall not be a basis for adjustment in the Contract Price.

SITE VERIFICATION: The contractor shall verify all dimensions and conditions at the site. Conflicts between the drawings and actual site conditions shall be brought to the attention of the Architect/Engineer before proceeding with the work.

ADJACENT UTILITIES: The contractor shall determine the location of all adjacent underground utilities prior to earthwork, foundations, shoring, and excavation. Any utility information shown on the drawings and details is approximate and not necessarily complete.

ALTERNATES: Alternate products of similar strength, nature and form for specified items may be submitted with adequate technical documentation (proper test report, etc.) to the Architect/Engineer for review. Alternate materials that are submitted without adequate technical documentation or that significantly deviate from the design intent of materials specified may be returned without review. Alternates that require substantial effort to review will not be reviewed unless authorized by the Owner.

### DESIGN CRITERIA AND LOADS

OCCUPANCY:	Risk Category of Building per 2022 OSSC Table 1604.5 =			
WIND DESIGN:	MAIN WIND FORCE RESISTING SYSTEM			
	Ultimate Design Wind Speed, $V_{ULT}$ (MPH)	120		
	Exposure Category	в		
	Internal Pressure Coefficient Cpi =	+/- 0.18		
	Topographic Factor <b>Kzt =</b>	1.0		
	Wind Analysis procedure used:	Directional Er	ivelope	

SEISMIC	Seismic Design Category: SDC =	D
DESIGN:		
	Basic Structural System	Bearing Wall
	Seismic Force Resisting System	Shear Walls
	Response Modification Factor: R =	6.5
	System Over Strength Factor Omega =	3
	Deflection Amplification Factor Cd =	4
	Site Classification per OSSC 1613.3.2 & ASCE 7-16, Ch. 20 Site Class =	D
	Seismic Importance Factor per ASCE 7-16 Table 1.5-2 le =	1.0
	Spectral Response Acceleration (Short Period) $S_s =$	2.028 g
	Spectral Response Acceleration (1-Second Period) $S_1 =$	0.965 g
	Spectral Design Response Coefficient (Short Period) $S_{DS}$ =	1.622 g
	Spectral Design Response Coefficient (1-Second Period) $S_{DI}$ =	g
	Seismic response coefficient(s) Cs =	0.249
	Redundancy Factor (North/South Direction) N/S rho=	1.0
	Redundancy Factor (East / West Direction) E/W rho=	1.0
	Design Base Shear (North/South Direction) (KIPS)	21.6 (ASD)
	Design Base Shear (East / West Direction) (KIPS)	44.8 (ASD)
	Base shear governed by:	Wind
	Seismic Analysis procedure used:	Equivalent Lateral Force (ELF)

SNOW LOAD: (1)	Flat Roof Snow Load, (PSF) p =	<b>25</b> ⁽²⁾
	Snow Drift Loading required by Authority Having Jurisdiction?	Yes
	Snow Load Importance Factor I _s =	1.0 ⁽³⁾
	Ground Snow Load, (PSF) $p_g =$	20
	Snow Exposure Factor C $_{\rm e}$ =	В
	Thermal Factor $C_t =$	1.0
	See Roof Plan for Drift Loading	

(1) Snow Load is <u>un-reducible</u> and includes 5 psf rain-on-snow surcharge where ground snow load is greater than zero and 20 psf or less per ASCE 7-16 Section 7.10. (2) Snow Load based on ASCE Fig 7-1.

(3) Snow Load Importance Factor per ASCE 7-16 Table 1.5-2.

DESIGN LIVE LOADS	AREA	LIVE LOADS (PSF) UNO	REMARKS & FOOT- NOTES (2)
	Handrails & Pedestrian Guardrails	50 PLF or 200 LB	(1)
	Lobbies	100	2000 lbs
	Offices	50	2000 lbs
	Fixed-seat Church	60	
	Platforms (Assembly)	100	
	Roofs	20 PSF or 300 LB	Area load is reducible. Point load per note (2), see above for Snow Load
	Live load in unoccupied landscaped roofs	20	Per OSSC 1607.12.3.1

- considered separately with worst case used for design.
- load effects on structural members.

DESIGN DEAD LOADS	BIDDER DESIGN	DEAD LOADS (PSF) UNO	REMARKS & FOOTNOTES
	Roof Dead Load, Total Top Chord Bottom Chord	20 PSF 10 PSF 10 PSF	For Prefabricated Wood Truss design,

### SUBMITTALS

SUBMIT FOR REVIEW: SUBMITTALS of shop drawings, and product data are required for items noted in the individual materials sections and for *bidder designed* elements.

SUBMITTAL REVIEW PERIOD: Submittals shall be made in time to provide a minimum of TWO WEEKS or 10 WORKING DAYS for review by the Architect/Engineer prior to the onset of fabrication.

GENERAL CONTRACTOR'S PRIOR REVIEW: Prior to submission to the Architect/Engineer, the Contractor shall review the submittal for completeness. Dimensions and quantities are not reviewed by the SER, and therefore, must be verified by the General Contractor. Contractor shall provide any necessary dimensional details requested by the Detailer and provide the Contractor's review stamp and signature before forwarding to the Architect/ Engineer.

SHOP DRAWING REVIEW: Once the contractor has completed their review, the SER will review the submittal for general conformance with the design concept and the contract documents of the building and will stamp the submittal accordingly. Markings or comments shall not be construed as relieving the contractor from compliance with the project plans and specifications, nor departures there from. The SER will return submittals in the form they are submitted in (either hard copy or electronic). For hard copy submittals, the contractor is responsible for submitting the required number of copies to the SER for review.

SHOP DRAWING DEVIATIONS: When shop drawings (component design drawings) differ from or add to the requirements of the structural drawings they shall be designed and stamped by the responsible SSE.

## DEFERRED SUBMITTALS

BIDDER-DESIGNED ELEMENTS Submit "Bidder-Designed" deferred submittals to the Architect and SER for review. The deferred submittals shall also be submitted to the city for approval, if required by the city. Design of prefabricated, "bidder designed", manufactured, pre-engineered, or other fabricated products shall com-

- ply with the following requirements:
  - (3) Design shall conform to the specifications and reference standards of the governing code.
  - (4) Submittal shall include:

    - provals as applicable.

(1) Top rail shall be designed to resist 50 PLF line load or 200 lb point load applied in any direction at any point. Intermediate rails (all those except the handrail), balusters and panel fillers shall be designed to withstand a horizontally applied normal load of 50 LB on an area not to exceed 1 ft square. These three loads are to be (2) Unless otherwise noted, point loads to be distributed over a 2.5ft x 2.5ft area and located to produce maximum

(1) Design considers tributary dead, live, wind and earthquake loads in combinations required by OSSC. (2) Design within the Deflection Limits noted herein and as specified or referenced in the OSSC.

a. Calculations prepared, stamped and signed by the SSE demonstrating code conformance. b. Engineered component design drawings are prepared, stamped and signed by the SSE. c. Product data, technical information and manufacturer's written requirements and Agency ap-

d. SSE may submit to the Architect/Engineer, a request to utilize relevant alternate design criteria of similar nature and generally equivalency which is recognized by the Code and acceptable to the Authority Having Jurisdiction. Submit adequate documentation of design.

DEFLECTION	VERTICAL	LIMIT
LIMITS FOR SSE / BIDDER	Roof Members, Dead + Live or Snow or Wind, Total Load (TL) Deflection	L / 240, where (L is span length,inches)
DESIGNED	Roof, Live or Snow or Wind Load (RLL)	L / 360

(1) Wind Load is reducible to 0.42 times the Component and Cladding Loads per Table 1604.3 footnote f.

GENERAL CONTRACTOR'S PRIOR REVIEW: Once the contractor has completed their review of the SSE component drawings, the SER will review the submittal for general conformance with the design of the building and will stamp the submittal accordingly. Review of the Specialty Structural Engineer's (SSE) shop drawings (component design drawings) is for compliance with design criteria and compatibility with the design of the primary structure and does not relieve the SSE of responsibility for that design. All necessary bracing, ties, anchorage, proprietary products shall be furnished and installed per manufacturer's instructions or the SSE's design drawings and calculations. These elements include but are not limited to:

- (1) Prefabricated Wood Roof Trusses
- (2) Mechanical, Electrical, Plumbing & Sprinkler Hanger Plans
- (3) Anchorage and Attachment of Mechanical Equipment

### INSPECTIONS, QUALITY ASSURANCE VERIFICATIONS AND TEST REQUIREMENTS

INSPECTIONS: Foundations, footings, under slab systems and framing are subject to inspection by the Building Official in accordance with OSSC 110.3. Contractor shall coordinate all required inspections with the Building Official.

SPECIAL INSPECTIONS, VERIFICATIONS and TESTS: Special Inspections, Verifications and Testing shall be done in accordance with OSSC Chapter 17, the STATEMENT AND SCHEDULES OF SPECIAL INSPECTIONS listed in these drawings.

STRUCTURAL OBSERVATION: per OSSC Section 1704.6

Structural Observation is the visual observation of the structural system by a registered design professional for general conformance to the approved construction documents. It is not always required on a project, does not include or waive the responsibility for the special inspections and tests required by a Special Inspector per OSSC Chapter 17, is not continuous, and does not certify conformance with the approved construction documents.

Structural Observation for this project is not required per OSSC Section 1704.6.

CONTRACTOR RESPONSIBILITY: Prior to issuance of the building permit, the Contractor is required to provide the Authority Having Jurisdiction a signed, written acknowledgement of the Contractor's responsibilities associated with the above Statement of Special Inspections addressing the requirements listed in OSSC Section 1704.4. Contractor is referred to OSSC Sections 1705.12.5 and 1705.12.6 for architectural and MEP building systems that may be subject to additional inspections (based on the building's designated Seismic Design Category listed in the CRI-TERIA), including anchorage of HVAC ductwork containing hazardous materials, piping systems and mechanical units containing flammable, combustible or highly toxic materials, electrical equipment used for emergency or standby power, exterior wall panels and suspended ceiling systems.

### SOILS AND FOUNDATION

REFERENCE STANDARDS: Conform to OSSC Chapter 18 "Soils and Foundations."

GEOTECHNICAL REPORT: Recommendations contained in Geotechnical Evaluation of Proposed Church Site by Terra Firma Geologic Services dated February 17, 2012 were used for design.

CONTRACTOR'S RESPONSIBILITIES: Contractor shall be responsible to review the Geotechnical Report and shall follow the recommendations specified therein including, but not limited to, subgrade preparations, pile installation procedures, ground water management and steep slope Best Management Practices.'

GEOTECHNICAL SUBGRADE INSPECTION: The Geotechnical Engineer shall inspect all sub-grades and prepared soil bearing surfaces, prior to placement of foundation reinforcing steel and concrete. Geotechnical Engineers shall provide a letter to the owner stating that soils are adequate to support the "Allowable Foundation Bearing Pressure(s)" shown below.

### DESIGN SOIL VALUES

Safety Factor per Soils Report. 1.5 Allowable Foundation Bearing Pressure..... 1500 PSF

FOUNDATIONS and FOOTINGS: Foundations shall bear on either on competent native soil or compacted structural fill as per the geotechnical report. Exterior perimeter footings shall bear not less than 18 inches below finish grade, unless otherwise specified by the geotechnical engineer and/or the building official.

FOOTING DEPTH: Tops of footings shall be as shown on plans with vertical changes as indicated with steps in the footings; locations of steps shown as approximate and shall be coordinated with the civil grading plans.

SLABS-ON-GRADE: All slabs-on-grade shall bear on compacted structural fill or competent native soil per the geotechnical report. All moisture sensitive slabs-on-grade or those subject to receive moisture sensitive coatings/ covering shall be provided with an appropriate capillary break and vapor barrier/retardant over the subgrade prepared and installed as noted in the geotechnical report, barrier manufacturer's written recommendations and coordinated with the finishes specified by the Architect.

### CAST-IN-PLACE CONCRETE

- REFERENCE STANDARDS: Conform to:
- ACI 301-20 "Specifications for Structural Concrete"
- (2) OSSC Chapter 19 "Concrete" (3) ACI 318-19 "Building Code Requirements for Structural Concrete"
- (4) ACI 117-10 "Specifications for Tolerances for Concrete Construction and Materials"

FIELD REFERENCE: The contractor shall keep a copy of ACI Field Reference manual, SP-15, "Standard Specifications for Structural Concrete (ACI 301) with Selected ACI and ASTM References."

CONCRETE MIXTURES: Conform to ACI 301 Section 4 "Concrete Mixtures" and OSSC Section 1904.1.

MATERIALS: Conform to ACI 301 Section 4.2.1 "Materials" for requirements for cementitious materials, aggregates, mixing water and admixtures.

### SUBMITTALS

(1) Provide all submittals required by ACI 301 Section 4.1.2. Submit mix designs for each mix in the table below. Substantiating strength results from past tests shall not be older than 24 months per ACI 318 Section 26.4.3.1 (b).

### TABLE OF MIX DESIGN REQUIREMENTS

Member Type/Location	Strength f'c (psi)	Test Age (days)	Nominal Maximum Aggregate	Exposure Class	Max W/C Ratio	Air Con- tent	Notes (1 to 10 Typical UNO)
Footings	4000	28	1"	-	-	-	-
Interior Slabs on Grade	3000	28	1"	-	-	-	-

DRAWING LEGEND							
MARK		DESCR	IPTION		MARK	[	DESCRIPTION
F2.0		FOOTING SYMBOL ( FOOTING SCHEDULE	REFER TO S E)	PREAD	I	INDICATES W	IDE FLANGE COLUMN
(P1)		PILE CAP SYMBOL (F PILE CAP SCHEDULE	REFER TO			INDICATES HO SECTION (HSS TUBE STEEL (	DLLOW STRUCTURAL 6) COLUMN OR TS) COLUMN
1		TILT-UP/PRECAST CONCRETE WALL CONNECTION SYMBOL (REFER TO CONNECTION DETAIL)			0	INDICATES HO SECTION (HSS STEEL PIPE CO	DLLOW STRUCTURAL 6) COLUMN OR DLUMN
2W4		SHEAR WALL SYMBOL (REFER TO SHEAR WALL SCHEDULE)				INDICATES W	OOD POST
BELOO		REVISION TRIANGLE				INDICATES BU	JNDLED STUDS
1		TILT-UP/PRECAST CC PANEL NUMBER (RE PRECAST CONCRETE	DNCRETE W. FER TO TILT E WALL ELE	ALL ⁻ -UP/ VATIONS)		INDICATES CC	DNCRETE COLUMN
$\langle 1 \rangle$		CMU WALL REINFOR (REFER TO CMU WA	RCING SYME	BOL ICING		INDICATES PR CONCRETE CO	RECAST DLUMN
8"		CONTINUITY PLATE I (REFER TO TYPICAL	LENGTH DETAIL)			INDICATES MO	OMENT FRAME
DS		INDICATES DOUBLE CONNECTION (REFE SHEAR PLATE CONN	SHEAR R TO THE DO IECTIONS DI	OUBLE ETAIL)		INDICATES PA MOMENT FRA	ARTIALLY RESTRAINED
00TB		INDICATES REINFOR (REFER TO THE REIN SCHEDULE)	CING TYPE			INDICATES CA CONNECTION	ANTILEVER
(SR_)	)	INDICATES NUMBER REQUIRED AT COLU STUD RAIL DETAILS)	OF STUD R	AIL TO	•	INDICATES DF	RAG CONNECTION
		ROOF/FLOOR DIAPH SYMBOL (REFER TO NAILING SCHEDULE;	IRAGM NAIL DIAPHRAGN )	ING M	<u>→ →</u>	INDICATES A	LEDGER
C1 COLUMN S	] IZE	STEEL/CONCRETE C SYMBOL (REFER TO COLUMN SCHEDULE	OLUMN STEEL E)		÷•••••	INDICATES W BEARING WAI PER KEY ON S	OOD OR STEEL STUD LL LINE SHEET
T/FTG = X	('-X"	ELEVATION SYMBOL TO COMPONENT TH ELEVATION REFEREI	_ (T/ REFERS AT THE NCES)	;		INDICATES W SHEAR WALL PER KEY ON S	OOD OR STEEL STUD LINE AND HOLD-DOWNS SHEET
3		STUD BUBBLE (INDI OF STUDS REQUIRE NUMBER SPECIFIED	CATES NUM D IF EXCEED IN PLAN NO	BER DS DTE)	\$ <u>77777</u> \$	INDICATES M	ASONRY/CMU WALL
	-	INDICATES STEP IN FOOTING (REFER TO TYPICAL STEP IN FOOTING DETAIL)				INDICATES CO CONCRETE W	DNCRETE/TILT-UP /ALL
X SX.X		DETAILS OR SECTION CUT (DETAIL NUMBER/SHEET NUMBER)			\$\$	INDICATES BE	ARING WALL BELOW
	00 00 00 00 00 00 00 00 00 00			↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	INDICATES EX	ISTING WALL	
XX/SXX.X	X	WALLS, SHEAR WALLS OR BRACED			<b></b>	POST-TENSIO	N DEAD END (PLAN)
	STRUCTURAL EXTENT SYMBOL SINGLE ARROW - END OF EXTENT DOUBLE ARROW - CONTINUOUS EXTENT ALONG THE ELEMENT LINE			<b>→</b>	POST-TENSIO	N STRESSING END (PLAN)	
		UNTIL THE ELEMENT	IS INTERRU	JPTED		(IN INCHES)	
		INDICATES DIRECTIC		BDEV			E STRESSING (PLAN)
L	Anc	ıle	EXCAV	Excavatio		PJP	Partial Joint Penetration
AB ADDL ADH	And Add	hor Bolt litional	FB FD FDN	Factory-E Floor Dra	Built ain	PREFAB PSF PSI	Prefabricated Pounds per Square Foot Pounds Per Square Inch
ALT ARCH	Alte	ernate hitectural	FIN FLR	Finish Floor		PSL P-T	Parallel Strand Lumber Post-Tensioned
B or BOT B/	Bot Bot	tom tom Of ding	FRP FRT	Fiberglas Fire Reta	s Reinforced Plas Irdant Treated	tic PT R	Pressure Treated Radius Reaf Drain
BLKG	Bloo	ang cking ck Masonny Unit	F/ GA	Footing Face of Gage		RD REF BEINE	Roof Drain Refer/Reference Beinforcing
BP BRBF	Bas Buc	eplate kling Restrained	GALV GEOTECH	Galvanize Geotech	ed nical	REQD	Required
BRG	Bra Bea	ced Frame Iring	GL GWB	Glue Lan Gypsum	ninated Timber Wall Board	SB SCBF	Site-Built Special Concentric
BTWN C	Bet Can	ween nber	HDR HF	Header Hem-Fir		SCHED	Braced Frame Schedule
CB C'BORE	Cas Cou	tellated Beam Interbore	HGR HD	Hanger Hold-dov	vn	SER	Structural Engineer of Record
CL or 6 CLT	Cer Cro	iterline ss-Laminated Timber	HORIZ HP	Horizont High Poi	al nt	SFRS	Seismic Force- Resisting System
CIP CFS	Cas	t in Place d Formed Steel	HSS = IS IBC	(Hollow S	Structural Section) onal Building Code	SHIHG SIM	Sheathing Similar
	Cor	istruction of Itrol Joint	IE IE	Invert Ele	ameter evation	SLRR SME	Short Leg Back-to-Back Special Moment Frame
CLR	Pen	etration ar	INT k	Interior Kips		SP SP	Southern Pine
CLG	Ceil	ing Icrete Masonny Lloit	KSF I F	Kips Per	Square Foot	SQ SQ SR	Square Studrail
	Cor	umn umn	LI LL I I RR		d 1 Back-to Back	SF SF	Square Foot
CONN	Cor	inection			Horizontal	STAGG STAGG	Stagger/Staggered
CONT	Cor	itinuous intersink		Low Poir	nt inal	STIFF	Stiffener Steel
CTRD	Cer	itered	LSL	Laminate	ed Strand Lumber	STRUCT	Structural Solid Web Wood Joist
DB DBA	Dro Dro	p Beam ormed Bar Apphor	MAS MAX	Masonry		SYM T	Symmetrical Top
DBL	Dou	ible nolish	MECH	Mechani	cal cal, Electrical	T/ T&B	Top Of Top & Bottom
DEV DF	Dev Dov	velopment Iglas Fir	MEZZ	Plumbing	) 10	TC AX LD TCX	Top Chord Axial Load Top Chord Extension
DIAG DIST	Diag	gonal tributed	MFR MIN	Manufac	turer n	TDS T&G	Tie Down System Tongue & Groove
DL DN	Dea	nd Load vn	MISC NIC	Miscella Not In C	neous ontract	THKND THRD	Thickened Threaded
DO DP	Ditt Der	o oth/Deep	NLT NTS	Nail-Lam	inated Timber cale	THRU	Through Transverse
DWG (E)	Dra Exis	wing sting	OC OCBF	On Cent Ordinary	er Concentric Brace	TYP d UNO	Typical Unless Noted Otherwise
EA EF	Eac	h h Face	OD	Frame	Diameter	URM	Unreinforced Masonry Unit
EL ELFC	Elev	vation ctrical	OF OPNG	Outside	Face	VERT W	Vertical Wide
ELEV FMRFD	Elev	vator bedment	OPP OW/SI		eh Steel loist	Ŵ/ W/O	With
	Equ	al ipment	OWWJ PI	Open W Open W	eb Wood Joist	WHS W/P	Welded Headed Stud
EW	Equ Eac	h Way	PAF	Powder A	Actuated Fastener	WWF	Welded Wire Fabric
EXP JT FXT	⊑xp Exp Ev+/	ansion Joint		Perpendi	cular	±	TIUS OF IVIITIUS

![](_page_24_Picture_93.jpeg)

PERMI or shall not use these

### Table of Mix Design Requirements Notes:

(1) W/C Ratio: Water-cementitious material ratios shall be based on the total weight of cementitious materials. Maximum ratios are controlled by strength noted in the Table of Mix Design Requirements and durability requirements given in ACI 318 Section 19.3. W/C ratios may be exceeded with approval of SER as long as potential shrinkage impacts are accounted for.

(2) Cementitious Materials:

- a. DCI encourages the reduction of cement content and/or the use of alternate cementitious materials. Where requirements of this section prohibit inclusion of any of these mixes, contact DCI for further coordination.
- Cementitious materials shall conform to the relevant ASTM standards listed in ACI 318 Section 26.4.1.1.1(a).
- For concrete used in elevated floors, minimum cementitious-materials content shall conform to ACI 301 Table 4.2.1.1.(b) Acceptance of lower cement content is contingent on providing supporting data to the SER for review and acceptance.
- The use of fly ash, other pozzolans, silica fume, or slag shall conform to ACI 318 Sections 19.3.2 and 26.4.2.2. Supplemental cementitious material (SCM) quantities shall meet requirements outlined in the table below. Approaching maximum cement replacement limits may affect concrete setting time and strength gain. Contractor and supplier shall coordinate on mix designs with regard to schedule, workability, shrinkage and finishability requirements. Where SCM quantities do not meet the following requirements, submit for SER approval. Concerns by the construction team with the mix design provided herein shall be brought to the SER's attention in the mix design submittal prior to pouring concrete.
- (3) General contractor shall coordinate means and methods necessary to support extended test ages including, but not limited to, delayed strength gain, shoring sequencing, modulus of elasticity requirements, deflection, and appearance.
- (4) Air Content: Conform to ACI 318 Section 19.3.3.1. Minimum standards for exposure class are noted in the table. If freezing and thawing class is not noted, air content given is that required by the SER. Tolerance is ±1-1/2%. Air content shall be measured at point of placement.
- (5) Aggregates shall conform to ASTM C33.
- (6) Slump: Conform to ACI 301 Section 4.2.2.1. Slump shall be determined at point of placement.
- (7) Chloride Content: Conform to ACI 318 Table 19.3.2.1.
- (8) Non- chloride accelerator: Non-chloride accelerating admixture may be used in concrete placed at ambient temperatures below 50°F at the contractor's option.
- (9) ACI 318, Section 19.3.1.1 exposure classes shall be assumed to be F0, S0, W0, and C0 unless different exposure classes are listed in the Table of Mix Design Requirements that modify these base requirements.
- (10)Recycled carbon dioxide (CO2) is permissible to be injected into the mix as an ingredient during mixing, such that CO2 is chemically mineralized into concrete. Carbon dioxide injected into the mix must be post-industrial CO2 sourced from an emitter.

MEASURING, MIXING, AND DELIVERY: Conform to ACI 301 Section 4.3.

HANDLING, PLACING, CONSTRUCTING AND CURING: Conform to ACI 301 Section 5. In addition, hot weather concreting shall conform to ACI 305R-20 and cold weather concreting shall conform to ACI 306R-16.

CONSTRUCTION JOINTS: Conform to ACI 301 Sections. 2.2.2.5 and 5.3.2.6. Construction joints shall be located and detailed as on the construction drawings. Submit alternate locations per ACI 301 Section 5.1.2.3(a) for review and approval by the SER two weeks minimum prior to forming. Use of an acceptable adhesive, surface retardant, portland cement grout or roughening the surface is not required unless specifically noted on the drawings.

POST-INSTALLED ANCHORS to CONCRETE: Anchor location, type, diameter and embedment shall be as indicated on drawings. Reference the POST INSTALLED ANCHORS section for applicable Post-Installed Anchor Adhesives. Anchors shall be installed and inspected in strict accordance with the applicable ICC-Evaluation Service Report (ESR). Special inspection shall be per the TESTS and INSPECTIONS section.

FLOOR FINISHES: The contractor must provide and correctly install an isolation membrane and properly detailed expansion joints to help minimize cracking of finishes with cementitious setting beds or finish properties (tile, stone, terrazzo, concrete topping, etc). The expansion joints shall be sized for an expected shortening movement of 0.01 inches per foot.

STRENGTH TESTING AND ACCEPTANCE:

Testing: Obtain samples and conduct tests in accordance with ACI 301 Section 1.7.3.3. Additional samples may be required to obtain concrete strengths at alternate intervals than shown below and should be standard cured per ACI Section 26.5.3.2.

- (1) Cure 4 cylinders for 28-day test age. Test 1 cylinder at 7 days, test 2 cylinders at 28 days, and hold 1 cylinder in reserve for use as the Engineer directs. After 56 days, unless notified by the Engineer to the contrary, the reserve cylinder may be discarded without being tested for specimens meeting 28-day strength requirements.
- (2) The number of cylinders indicated above reference 6 by 12 in cylinders. If 4 by 8 in cylinders are to be used, additional cylinders must be cured for testing of 3 cylinders at test age per the table of mix design requirements.

### Acceptance. Strength is satisfactory when:

- (1) The averages of all sets of 3 consecutive tests equal or exceed the specified strength.
- (2) No individual test falls below the specified strength by more than 500 psi.
- A "test" for acceptance is the average strength of two 6 by 12 in. cylinders or three 4 by 8 in. cylinders tested at the specified test age.

CONCRETE PLACEMENT TOLERANCE: Conform to ACI 117-10 for concrete placement tolerance.

FLOOR FLATNESS and FLOOR LEVELNESS: Minimum values of flatness, F(F) 30; and of levelness, F(L) 20; with minimum local values of flatness, F(F) 24; and of levelness, F(L) 15; for slabs-on-grade are required. Overall minimum values of flatness, F(F) 30; with minimum local values of flatness, F(F) 24; for suspended slabs are required. Concrete slabs that will receive wood flooring shall have a minimum F(F) 35. The preceding values are minimums unless specifications require higher values. Measured values shall be in accordance with ACI 117.

### CONCRETE REINFORCEMENT

REFERENCE STANDARDS: Conform to:

(1) ACI 301-20 "Standard Specifications for Structural Concrete", Section 3 "Reinforcement and Reinforcement Supports."

- (2) ACI SP-66(04) "ACI Detailing Manual" (3) CRSI MSP-09, 28th Edition, "Manual of Standard Practice."
- (4) ANSI/AWS D1.4: 2005, "Structural Welding Code Reinforcing Steel."
- (5) OSSC Chapter 19-Concrete.
- (6) ACI 318-19 "Building Code Requirements for Structural Concrete." (7) ACI 117-10 "Specifications for Tolerances for Concrete Construction and Materials"

## SUBMITTALS:

(1) Conform to ACI 301 Section 3.1.2 "Submittals." Submit placing drawings showing fabrication dimensions and placement locations of reinforcement and reinforcement supports.

MATERIALS:

Reinforcing Bars	ASTM A615, Grade 60, deformed bars.
_	ASTM A706, Grade 60, deformed bars.
Bar Supports	CRSI MSP-09, Chapter 3 "Bar Supports."
Tie Wire	16 gage or heavier, black annealed.

FABRICATION: Conform to ACI 301, Section 3.2.2. "Fabrication", and ACI SP-66 "ACI Detailing Manual."

WELDING: Bars shall not be welded unless authorized. When authorized, conform to ACI 301, Section 3.2.2.2. "Welding", AWS D1.4, and provide ASTM A706, grade 60 reinforcement.

PLACING: Conform to ACI 301, Section 3.3.2 "Placing." Placing tolerances shall conform to ACI 117.

<u>CONCRETE COVER</u>: Conform to the following cover requirements unless noted otherwise in the drawings. rete cast against earth

Concrete cast against earth	
Concrete exposed to earth or weather	.2"
Bars in slabs	3/4"
Bars in walls	.3⁄4"

SPLICES: Conform to ACI 301, Section 3.3.2.7, "Splices". Refer to "Typical Lap Splice and Development Length Schedule" for typical reinforcement splices. Splices indicated on individual sheets shall control over the schedule. Mechanical connections may be used when approved by the SER.

Bars shall not be bent past 45 degrees.

### POST-INSTALLED ANCHORS (INTO CONCRETE AND MASONRY)

- **REFERENCE STANDARDS:** Conform to:
- OSSC Chapter 19 "Concrete"
- (2) ACI 318-19 "Building Code Requirements for Structural Concrete" (3) OSSC Chapter 21 "Masonry"

POST-INSTALLED ANCHORS: Install only where specifically shown in the details or allowed by SER. All post-Installed anchors types and locations shall be approved by the SER and shall have a current ICC-Evaluation Service Report that provides relevant design values necessary to validate the available strength exceeds the required strength. Submit current manufacturer's data and ICC ESR report to SER for approval regardless of whether or not it is a pre-approved anchor. Anchors shall be installed in strict accordance with ICC-ESR and the manufacturer's printed installation instructions (MPII) in conjunction with edge distance, spacing and embedment depth as indicated on the drawings. The contractor shall arrange for a manufacturer's field representative to provide installation training for all products to be used, prior to the commencement of work. Only trained installer shall perform post installed anchor installation. A record of training shall be kept on site and be made available to the SER as reguested. Adhesive anchors installed in horizontally or upwardly inclined orientation shall be performed by a certified adhesive anchor installer (AAI) as certified through ACI/CRSI or approved equivalent. Proof of current certification shall be submitted to the engineer for approval prior to commencement of installation. No reinforcing bars shall be damaged during installation of post-installed anchors. Special inspection shall be per the TESTS and IN-SPECTIONS section. Anchor type, diameter and embedment shall be as indicated on drawings.

### STRUCTURAL STEEL

### REFERENCE STANDARDS: Conform to:

- (1) OSSC Chapter 22 "Steel"
- (3) AISC "Manual of Steel Construction", Fifteenth Edition (2016)

- MATERIALS: not limited to:
- Structural Plate (PL) .. Anchor Rods (Anchor Bolts, typical).... Mild Threaded Rods

### FABRICATION:

- Conform to AISC 360 Section M2 "Fabrication" and AISC 303 Section 6 "Shop Fabrication". (2) Quality Control (QC) shall conform to:
- a. AISC 360 Chapter N "Quality Control and Quality Assurance" and
  - AISC 303 Section 8 "Quality Control".
  - AISC 360 section N3.
  - ments and the Applicable Building Code.
  - of the workmanship expected by the Special Inspector.

### WOOD FRAMING

REFERENCE STANDARDS: Conform to:

- (1) OSSC Chapter 23 "WOOD" plement"
- (3) ANSI/AWC SDPWS-2022: Special Design Provisions for Wind and Seismic
- (4) APA PDS 20: "Panel Design Specification"
- (6) BCSI B1 "Guide to Good Practice for Handling, Installing, Restraining & Bracing of Trusses"
- (7) DSB-89 "Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Truss-
- Loads" (9) APA Report TT-061C "1-5/16 Inch-Thick I-Joist Flanges and Diaphragm Nail Penetration

## SUBMITTALS:

- bolts and other fasteners. Supply shop drawings for the following:

### a. Glued laminated members b. LSL members

DEFERRED SUBMITTALS: Submit product data and proof of ICC approval for framing members and fasteners that have been designed not by DCI. Submit calculations prepared by the SSE in the state of Oregon for all members and connections designed not by DCI along with shop drawings. All necessary bridging, blocking, blocking panels and web stiffeners shall be detailed and furnished by the supplier. Temporary and permanent bridging shall be installed in conformance with the manufacturer's specifications. Deflection limits shall be as noted under DEF-FERRED SUBMITTLALS section specific details. Products included are:

## certificate of inspection issued by the certifying agency.

MATERIALS:

(1) Sawn Lumber: Conform to grading rules of WWPA, WCLIB or NLGA and Table below. Finger jointed studs acceptable at interior walls only.

FIELD BENDING: Conform to ACI 301 Section 3.3.2.8. "Field Bending or Straightening." Bar sizes #3 through #5 may be field bent cold the first time. Subsequent bends and other bar sizes require preheating. Do not twist bars.

### (4) TMS 402-16 "Building Code Requirements for Masonry Structures"

(1) <u>SCREW ANCHORS</u>: The following Screw type anchor is pre-approved for anchorage to CONCRETE or MASONRY in accordance with corresponding current ICC ESR report:

a. SIMPSON "TITEN HD" – ICC ESR-2713 for CARBON STEEL to CONCRETE

## (2) ANSI/AISC 303-16 – "Code of Standard Practice for Steel Buildings & Bridges"

(4) ANSI/AISC 360-16 – "Specification for Structural Steel Buildings"

SUBMITTALS: Submit the following documents to the SER for review:

(1) SHOP DRAWINGS complying with AISC 360 Sections M1and N3 and AISC 303 Section 4.

Structural steel materials shall conform to materials and requirements listed in AISC 360 section A3 including, but

..ASTM A36, Fy = 36 ksi ..ASTM F1554, Gr. 36 ...ASTM A36, Fy = 36 ksi

c. Fabricator and Erector shall establish and maintain written Quality Control (QC) procedures per d. Fabricator shall perform self-inspections per AISC 360 section N5 to ensure that their work is per-

formed in accordance with Code of Standard Practice, the AISC Specification, Contract Docue. QC inspections may be coordinated with Quality Assurance inspections per Section N5.3 where

fabricators QA procedures provide the necessary basis for material control, inspection, and control

(2) ANSI/AWC NDS - 2018: "National Design Specification (NDS) for Wood Construction - with 2018 NDS Sup-

(5) TPI 1-2014 "National Design Standard for Metal-Plate-Connected Wood Truss Construction"

(8) APA Report TT-045B "Minimum Nail Penetration for Wood Structural Panel Connections Subject to Lateral

(1) Submit shop drawings to the Architect/Engineer for review. Shop drawings shall include member size, spacing, camber, material type, grade, shop and field assembly details and connections. types and location of

(1) Metal plate connected trusses (prefabricated trusses) Conform to OSSC Section 2303.4. Truss Supplier to provide design and materials for all permanent truss bracing. Shop drawings shall provide for shapes, bearing points, intersections, hips, and valleys shown on the drawings. The manufacturer shall provide special hip, valley and intersection areas (step down trusses, jack trusses and girder trusses) unless specifically indicated on the plans. Provide all truss-to-truss and truss-to -support connection details and required connection materials. Specify temporary and permanent bracing and connections on the shop drawings. Provide all truss reactions on shop drawings.

IDENTIFICATION: All sawn lumber and pre-manufactured wood products shall be identified by the grade mark or a

### TABLE of SOLID SAWN LUMBER

Member Use	Size	Species	Grade
Wall Stud/ Top & Bot- tom Plates	2x4, 3x4, 2x6, 3x6	Doug Fir Larch	No. 2
Sill Plate (at concrete)	2x4, 3x4, 2x6, 3x6	PT Doug Fir Larch	No. 2
Post	4x4, 4x6, 4x8	Doug Fir Larch	No. 2
Floor or Roof Joist	2x6 through 2x12	Doug Fir Larch	No. 2
Beam	4x8 through 4x12	Doug Fir Larch	No. 2
Beam	6x8 through 6x12	Doug Fir Larch	No. 1
Post or Timber	6x6, 8x8	Doug-Fir Larch	No. 1

(2) Glued Laminated Timber: Conform to ANSI 117-2020 "Standard Specifications for Structural Glued laminated Timber of Softwood Species, Manufacturing and Design" and ANSI A190.1 "Structural Glued Laminated Timber." Camber all glued laminated beams, except cantilevered and continuous beams, to 3000' radius, unless shown otherwise on the plans. Fabricate cantilevered and continuous beams flat, unless shown otherwise on plans.

TABLE of GLULAM and GRADE

Member	Sizes	Species	Comb. Sym- bol	Uses
Beams	All	DF/DF	24F–V4	Simple Spans

(3) Wood Structural Sheathing (Plywood): Wood APA-rated structural sheathing includes: all veneer plywood, oriented strand board, waferboard, particleboard, T1-11 siding, and composites of veneer and wood-based material with T&G joint. Architect may disallow OSB. Confirm with Architect. Conform to "Structural Plywood" based on Product Standard PS 1-19 by the U.S. Dept. of Commerce. and "Performance Standard for Wood Structural Panels" based on Product Standard PS 2-18 by the U.S. Dept. of Commerce and "Panel Design Specification" based on APA D510 by the Engineered Wood Association. Unless noted otherwise, sheathing shall comply with the following table:

TABLE of SHEATHING - Use, Minimum Thickness and Minimum APA Rating

Location	Thickness	Span Rating	Plywood Grade	Exposure
Roof	19/32"	40/20	C-D	1
Floor	1 1/8" T&G	48 OC	STURD-I-FLOOR	1
Walls	15/32"	32/16	C-D	1

Unless noted otherwise on drawings, install roof and floor panels with long dimension across supports and with panel continuous over two or more spans. End joints shall occur over supports.

(1) <u>Timber Connectors</u>: Shall be "Strong Tie" by Simpson Company as specified in their latest catalog. Alternate connectors by other manufacturers may be substituted provided they have current ICC approval for equivalent or greater load capacities and are reviewed and approved by the SER prior to ordering. Connectors shall be installed per the manufacturer's instructions. Where connector straps connect two members, place onehalf of the nails or bolts in each member. Where connectors are in exposed exterior applications in contact with preservative treated wood (PT) other than CCA, connectors shall be either batch hot-dipped galvanized (HDG), mechanically galvanized (ASTM B695, Class 55 minimum) stainless steel, or provided with 1.85 oz/ sf of zinc galvanizing equal to or better than Simpson ZMAX finish.

Where straps are used as hold-downs, nail straps to wood framing just prior to drywall application, as late as possible in the framing process to allow the wood to shrink and the building to settle. Premature nailing of the strap may lead to strap buckling and potential finish damage.

Fasteners (nails, bolts, screws, etc) attaching timber connectors (joist hangers, post caps and bases, etc) to PT wood shall have similar corrosion resistance properties (matching protective treatments) as the protected connector. Fasteners (nails, bolts, screws, etc) attaching sawn timber members or sheathing (shear walls) to PT wood shall be corrosion resistant; nails and lag bolts shall be either HDG (ASTM A153) or stainless steel. Verify the suitability of the fastener protection/coating with the wood treatment chemical manufacturer/ supplier.

Provide washers under the heads and nuts of all bolts and lag screws bearing on wood.

- (1) Lag Screws/Bolts: Conform to ASTM A307 and NDS Chapter 12.
- Lag screw installation shall conform to NDS Section 12.1.4, including required drilled lead and/or clearance holes
- (2) Nails and Staples: Conform to ASTM F1667 and OSSC Sections 2303.6 and 2304.10.
- (3) Engineered Wood Products (TrusJoist): The following materials are based on lumber manufactured by TrusJoist and were used for the design as shown on the plans. Alternate products by other manufacturers may be substituted provided they have current ICC approval for equivalent or greater load and stiffness properties and are reviewed and approved by the Structural Engineer prior to ordering.
- a. Laminated Strand Lumber (LSL): Conform to ICC ES Report No. ESR-1387 or CCMC Report No.

### TABLE of ENGINEERED WOOD Requirements

Туре	Use	Widths	E(10 ⁶ )	Fb	Fv	Fc//
			PSI	PSI	PSI	PSI
LSL Rimboard	Rimboard or Stair Stringer	1 ½"	1.3E	1,700	425	1,835

NAILING REQUIREMENTS: Conform to OSSC Section 2304.10 "Connectors and fasteners." Unless noted on plans, nail per Table 2304.10.2. Nailing for roof/floor diaphragms/shear walls shall be per drawings. Nails shall be driven flush and shall not fracture the surface of sheathing. Alternate nails may be used but are subject to review and approval by the Structural Engineer. Substitution of staples for the nailing of rated sheathing is subject to review by the structural engineer prior to construction.

STANDARD LIGHT-FRAME CONSTRUCTION: Unless noted on the plans, construction shall conform to OSSC Section 2308 "Conventional Light-Frame Construction."

NAILERS ON STEEL COLUMNS and BEAMS: Wood 3x nailers are generally required on all HSS columns and steel beams abutting or embedded within wood framing. Unless noted otherwise, attach with 5/8" diameter bolts or welded studs at 16" on centers. Unless noted otherwise, wood nailers on beams supporting joist hangers shall not overhang the beam flange by more than 1/4".

WOOD SHRINKAGE AND EXPANSION: Wood materials will expand, or contract based on relative changes in moisture. The contractor is responsible for means and methods of construction related to mitigating and managing the effects of changes in moisture.

MOISTURE CONTENT: The contractor shall make provisions during handling and construction to prevent the structural wood members from exceeding the appropriate moisture content limits. The moisture content for solid sawn wood material used for this project shall not exceed 19%. The moisture content for engineered wood products, laminated lumber and sheathing shall not exceed the limits required by the manufacturer or 12%, whichever is less. The moisture content limits may be more stringent for particular product requirements (e.g., finishes, cladding, insulation systems, etc.). The contractor shall refer to the Architect's drawings, project specifications, or installer/product requirements for additional requirements.

SHRINKAGE COMPENSATION FOR MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS: MEP systems, including ductwork, pipes, and other elements that run continuously between levels shall be installed/designed in such a manner to accommodate shrinkage in the wood framing. Wood shrinkage amounts will vary depending on the construction process and materials used. The anticipated shrinkage under typical conditions is expected to range between 1/8" and 1/4" per floor.

CLADDING COMPATIBILITY: The Architect/Owner and contractor shall review the cladding, finishes, insulation systems, other non-structural components and construction procedures proposed for the project with respect to their performance over wood framing. EIFS systems should be avoided on wood-framed projects due to problems with moisture proofing. Note that DCI is not responsible for the attachment of the cladding to the wood studs which needs to be verified and provided by the cladding supplier.

If using preservative treatments other than CCA or sodium borate, fasteners must be hot dipped galvanized or stainless steel. Wood treated with Alkaline Copper Quaternary (ACQ) requires steel components in contact with the wood to be stainless (nails, bolts, screws, washers & lag screws). Fasteners (nails, bolts, screws, washers & lag screws) attaching timber connectors (joist hangers, post caps and bases, etc) to PT wood shall have similar corrosion resistance properties (matching protective treatments) as the protected connector; that is, use hot dipped galvanized or stainless-steel fasteners. Fasteners (nails, bolts, screws, washers & lag screws) attaching sawn timber members or sheathing (shear walls) to Pressure Treated wood shall be corrosion resistant (hot dipped galvanized or stainless steel). Always verify the suitability of the fastener protection/coating with the wood treatment chemical manufacturer/ supplier

STORAGE & HANDLING: All storage and handling is to be a means and methods provided by the contractor. The contractor is to determine the best practices in order to avoid damage to the members during storage, such as fungal growth, exposure to weather conditions. The following are suggestions to aid the contractor. All materials should be stored level on site and must be raised off the ground a minimum of 6" by means of blocking and separating spacers. It is recommended that the materials are covered with an additional opaque waterproof material (i.e. good quality tarpaulin). When members are wrapped in poly or another material which may inhibit air flow, the material should have slots in the material or perforations to allow for air flow and prevent the accumulation of water and or condensation. Ensure that all exposed members are protective material from exposure should be removed only after the roof or structure providing cover is installed. Members should be constantly protected from weather during transportation, storage, and erection.

For interior glulam members the heat in the building should be gradually increased over a two-to-three-week period in order to provide a gradual change in moisture content. Do not direct any forced air heating systems onto the glulam members. It is recommended to apply the final finish to the glulam member before heat is applied.

Members that are to be exposed to view in the finished structure should be handled using nylon or fabric slings to prevent surface damage. The contractor should also use means to protect corners of members to prevent "crushing" during transportation, storage and erection. All bolts should be galvanized, or make sure that they are free of oil to prevent staining. Glulam members should be treated and stained per the architect of records recommendations. The following are provided in order to help guide the contractor in the best practices to preserve the quality of wood products. These notes are not intended to be comprehensive and an end all solution and should be taken under consideration by the contractor and supplemented as necessary.

PRESERVATIVE TREATMENT (PT): Wood materials that are required to be "treated wood" in accordance with OSSC Section 2304.12. "Protection Against Decay and Termite" shall conform to the appropriate standards of the American Wood Protection Association (AWPA) for sawn lumber, glued laminated timber, round poles, wood piles and marine piles. Follow American Lumber Standards Committee (ALSC) quality assurance procedures. Products shall bear the appropriate mark. Fasteners or anchors in treated wood shall be of stainless steel or hot-dipped galvanized or as per OSSC 2304.10.6.

Mud sill plates in normally dry interior applications may be treated with Sodium Borate (DOT - Disodium Octaborate Tetrahydrate) as recent studies have noted less connector corrosion potential than other available wood treatments or the original CCA treated sill plates. Wood treated with Sodium Borate shall be protected during shipment. storage and installation to minimize leaching of the water-soluble preservative from the lumber. Sodium borate pressure treated plates do not require hot-dipped galvanized connectors.

![](_page_25_Figure_156.jpeg)

333 S. 4TH STREET COOS BAY, OR 97420 P: 541.269.1166 general@hge1.com www.hgel.com

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## SPECIAL INSPECTIONS

The following Statement and Schedules of Inspections are those Special Inspections and Tests that shall be performed for this project. Special Inspectors shall reference these plans and OSSC Chapter 17 for all special inspection requirements.

The owner shall retain an "approved agency" per OSSC 1703 to provide special inspections for this project. Special Inspectors shall be qualified persons per OSSC 1704.2.1.

Special inspection reports shall be provided on a weekly basis. Submit copies of all inspection reports to the Architect/Engineer and the Authority Having Jurisdiction for review. In addition to special inspection reports and tests, submit reports and certificates noted in OSSC 1704.5 to the Authority Having Jurisdiction. Final special inspection reports will be required by each special inspection firm per OSSC 1704.2.4.

### STATEMENT OF SPECIAL INSPECTIONS:

This statement of Special Inspections has been written with the understanding that the Building Official will:

- Review and approve the qualifications of the Special Inspectors
   Monitor the special inspection activity on the project site to assure that Special Inspectors are
- qualified and performing their duty as state within this statement.
- Review all Special Inspection Reports submitted to them by the Special Inspector
   Perform inspections as required by OSSC Section 110.3.

The following Special Inspections are applicable to this project:

- Special Inspections for Standard Buildings (per OSSC 1705.1)
   Special Inspections for Seismic Resistance (per OSSC 1705.13)
- Testing for Seismic Resistance (per OSSC 1705.14)
- Special Inspections for Wind Resistance (per OSSC 1705.12)

REQUIRED REQUIRED NOT REQUIRED

REQUIRED

### SPECIAL INSPECTION OF SHOP FABRICATED GRAVITY LOAD-BEARING MEMBERS AND ASSEMBLIES:

Special Inspection of shop fabricated Gravity Load Bearing Members & Assemblies shall be verified by the Special Inspector as stated in Section 1704.2.5 which includes the following:

- Prior to the start of fabrication: Special Inspector(s), representing the Owner, shall visit the Fabricator's shop(s) where the work is to be performed, and verifies that the Fabricator maintains detailed Fabrication and Quality Control procedures that provide a basis for inspection, control of workmanship, material control, and fabricator's ability to conform to approved Construction Documents and referenced Standards.
- Fabricator shall have available for Inspector's review, detailed procedures for material control that
  demonstrates the fabricator's ability to maintain suitable records and procedures such that, at any time
  during the fabrication process, the material specification, grade and applicable test reports for primary
  load-carrying members, are capable of being determined.

<u>POST-INSTALLED ANCHORS TO CONCRETE AND MASONRY:</u> shall comply with OSSC Section 1703. Inspections shall be in accordance with the requirements set forth in the approved ICC Evaluation Report and as indicated by the design requirements specified on the drawings. Refer to the POST INSTALLED ANCHORS section of these notes for anchors that are the basis of the design. Special inspector shall verify anchors are as specified in the POST INSTALLED ANCHORS section of these notes or as otherwise specified on the drawings. Substitutions require approval by the SER and require substantiating calculations and current 2021 OSSC recognized ICC Evaluation Services (ES) Report. Special Inspector shall document in their Special Inspection Report compliance with each of the elements required within the applicable ICC Evaluation Services (ES) Report.

PREFABRICATED CONSTRUCTION: All prefabricated construction shall conform to OSSC Section 1703.

## SCHEDULES OF SPECIAL INSPECTIONS:

TABLE 1705.6 - REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS

SERIAL NUMBER	TYPE	CONTINUOUS SPECIAL IN- SPECTION	PERIODIC SPECIAL IN- SPECTION
1.	Verify materials below shallow foun- dations are adequate to achieve the design bearing capacity	-	Х
2.	Verify excavations are extended to proper depth and have reach proper material	-	Х
3.	Perform classification and testing of compacted fill materials	-	Х
4.	During fill placement, verify use of proper materials and procedures in accordance with the provisions of the approved geotechnical report. Verify densities and lift thicknesses during placement and compaction of com- pacted fill.	x	-
5.	Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly	-	х

## TABLE 1705.3 - REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

SERIAL NUMBER     TYPE       1.     Inspection, reinforcement, and verify placement.		CONTINUOUS SPECIAL IN- SPECTION	PERIODIC SPE- CIAL INSPEC- TION	REFERENCED STANDARD	OSSC REF- ERENCE	
		-	х	ACI 318 Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	-	
	3.	Inspect anchors cast in concrete	-	х	ACI 318: 17.8.2	-
	4.	Inspect anchors post- installed in hardened con- crete members:				
		a. Adhesive anchors installed in horizon- tally or upwardly inclined orientations to resist sustained tension loads	х	-	ACI 318: 17.8.2.4	-
		<ul> <li>b. Mechanical an- chors and adhesive anchors not defined in 4.a</li> </ul>	-	х	ACI 318: 17.8.2	
	5.	Verify use of required de- sign mix	-	х	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2
	6.	Prior to concrete place- ment, fabricate specimens for strength tests, perform slump and air content tests, and determine the temper- ature of the concrete	х	-	ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	-
	7.	Inspect concrete placement for proper application tech- niques	х	-	ACI 318: 26.5	-
	8.	Verify maintenance of specified curing tempera- ture and techniques	-	Х	ACI 318 :26.5.3 – 26.5.5	-
	14.	Inspect formwork for shape, location and dimen- sions of the concrete mem- ber being formed	-	×	ACI 318: 26.11.1.2 (b)	-

SERIAL NUMBER         TYPE         CONTINUOUS SPECIAL IN- SPECTION         PERIODIC SPE- CIAL INSPEC- TION         REFERENCED STANDA           3.         Shear Walls (where fastener spacing of the sheathing is 4 inches or less on center)         a.         OSSC Section 1705.13.1           a. Anchor Bolts including proper bottom plate siz- es (2x and 3x) and plate washers         -         X         OSSC Section 1705.13.1           b. Hold-downs (HD) and Continuous Rod Tie- Down Systems (TDS) including squash blocks and anchors to concrete         -         X         -           c. A35 and LPT shear con- nectors         -         X         -         X           d. Strap Connectors         -         X         -         X           g. Boundary Edge Nailing g. Blocking         -         X         -         X           5.         Moisture Content of wood studs, plates, beams, decking, and joists         -         -         As directed by the Contractor meets	QUIRED SPECIAL INSPECTIONS OF WOOD CONSTRUCTION					
3.       Shear Walls (where fastener spacing of the sheathing is 4 inches or less on center)       oSSC Section 1705.13.         a. Anchor Bolts including proper bottom plate siz- es (2x and 3x) and plate washers       -       X         b. Hold-downs (HD) and Continuous Rod Tie- Down Systems (TDS) including squash blocks and anchors to concrete       -       X         c. A35 and LPT shear connectors       -       X         d. Strap Connectors       -       X         e. Boundary Edge Nailing       -       X         f. Plate Nailing and Panel Edge Nailing for size and spacing       -       X         g. Blocking       -       X       As directed by the Contractor meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract meet moisture content required is to space the contract the contract meet moisture content required is tot space the contract the contract the contract the contract the co	SERIAL NUMBER	TYPE	CONTINUOUS SPECIAL IN- SPECTION	PERIODIC SPE- CIAL INSPEC- TION	REFERENCED STANDARD	
a. Anchor Bolts including proper bottom plate siz- es (2x and 3x) and plate washers       -       X         b. Hold-downs (HD) and Continuous Rod Tie- Down Systems (TDS) including squash blocks and anchors to concrete       -       X         c. A35 and LPT shear con- nectors       -       X         d. Strap Connectors       -       X         e. Boundary Edge Nailing f. Plate Nailing and Panel Edge Nailing for size and spacing       -       X         5.       Moisture Content of wood studs, plates, beams, decking, and joists       -       X	3.	Shear Walls (where fastener spacing of the sheathing is 4 inches or less on center)			OSSC Section 1705.13.2	
b. Hold-downs (HD) and Continuous Rod Tie- Down Systems (TDS) including squash blocks and anchors to concreteXc. A35 and LPT shear con- nectors-Xd. Strap Connectors-Xe. Boundary Edge Nailing Edge Nailing for size and spacing-Xf. Plate Nailing and Panel Edge Nailing for size and spacing-X5.Moisture Content of wood studs, plates, beams, decking, and joists-As directed by the Contractor meet moisture content requirements		a. Anchor Bolts including proper bottom plate siz- es (2x and 3x) and plate washers	-	х		
c. A35 and LPT shear connectors       -       X         d. Strap Connectors       -       X         e. Boundary Edge Nailing       -       X         f. Plate Nailing and Panel       -       X         Edge Nailing for size       -       X         g. Blocking       -       X         5.       Moisture Content of wood       -       X         studs, plates, beams, decking, and joists       -       As directed by the Contractor meet moisture content requirements		<ul> <li>b. Hold-downs (HD) and Continuous Rod Tie- Down Systems (TDS) including squash blocks and anchors to concrete</li> </ul>	-	х		
d. Strap Connectors       -       X         e. Boundary Edge Nailing       -       X         f. Plate Nailing and Panel       -       X         Edge Nailing for size       -       X         g. Blocking       -       X         5.       Moisture Content of wood       -       X         studs, plates, beams, decking, and joists       -       As directed by the Contractor meet moisture content requirements		c. A35 and LPT shear con- nectors	-	х		
e. Boundary Edge Nailing       -       X         f. Plate Nailing and Panel       -       X         Edge Nailing for size       -       X         g. Blocking       -       X         5.       Moisture Content of wood       -       X         studs, plates, beams, decking, and joists       -       As directed by the Contractor meet moisture content requirements		d. Strap Connectors	-	х		
f. Plate Nailing and Panel Edge Nailing for size and spacing       -       X         g. Blocking       -       X         5.       Moisture Content of wood studs, plates, beams, decking, and joists       -       X		e. Boundary Edge Nailing	-	х		
g. Blocking - X 5. Moisture Content of wood studs, plates, beams, decking, and joists - X As directed by the Contractor meet moisture content requirements		f. Plate Nailing and Panel Edge Nailing for size and spacing	-	х		
5. Moisture Content of wood studs, plates, beams, decking, and joists As directed by the Contractor meet moisture content requirements		g. Blocking	-	х		
	5.	Moisture Content of wood studs, plates, beams, decking, and joists	-		As directed by the Contractor to meet moisture content require- ments	
6. Roof truss 'hurricane clips' - X	6.	Roof truss 'hurricane clips'	-	х		

![](_page_26_Picture_27.jpeg)

![](_page_27_Figure_0.jpeg)

![](_page_28_Figure_0.jpeg)

![](_page_29_Figure_0.jpeg)

![](_page_30_Figure_0.jpeg)

01400		GRADE 60 REINFORCING			
BAR	MISCE	MISCELLANEOUS BARS		P BARS e note #5)	HOOKED BARS
SIZE	Ld	Splice	Ld	Splice	Ldh
f'c = 3000	Opsi				
#4	22	29	29	38	12
#5	28	36	36	47	16
f'c = 4000	Opsi				
#3	15	19	19	25	6
#4	19	25	25	33	6
#5	24	31	31	41	8
#6	29	37	37	49	10
#7	42	54	54	71	13
#8	48	62	62	81	15
#9	54	70	70	91	18
#10	61	79	79	102	22
#11	67	87	87	114	26
#14	81	N/A	105	N/A	33
#18	108		1/10	Ν/Δ	51

![](_page_30_Figure_3.jpeg)

![](_page_30_Figure_4.jpeg)

![](_page_30_Figure_5.jpeg)

![](_page_30_Figure_6.jpeg)

![](_page_31_Figure_0.jpeg)

![](_page_32_Figure_0.jpeg)

![](_page_32_Figure_7.jpeg)

![](_page_32_Figure_8.jpeg)

![](_page_32_Figure_10.jpeg)

![](_page_32_Figure_11.jpeg)

![](_page_33_Figure_0.jpeg)

YPICAL ANCHOR BOLT SCHEDULE							
T-IN-PLACE (PRE-AUTHORIZE	DRILL-IN OPTIONS (SUBMITTAL REQUIRED) [3]						
ADED THREADED CHOR ROD ANCHOR	SIMPSON "SSTB" ANCHOR BOLT	ADHESIVE EXPANSION ANCHOR ANCHOR					
₩		 					
	PER MFR	NOT ALLOWED AT P-T SLAB					
5/8"Ø THRU 2 1/2"Ø	FOR WOOD FRAME ONLY	5/8"Ø THRU 1"Ø					
A = ANCHOR BOLT DIAMETER (NOMINAL)							

![](_page_34_Figure_0.jpeg)

SCALE: 1" = 1'-0"

(01420)

### SHEAR WALL SCHEDULE W6 FOR 0.148"Øx 2 1/2" NAILS IN DOUG-FIR LARCH (2018 IBC) [16] SOME SHEAR WALL TYPES NOTED MAY NOT RELISED

ON THIS PROJECT.							
NAIL SIZE & SPACING	<b>BLOCKING &amp; STUD</b>	RIM JOIST OR BLOCKING	2x PLATE ATTACHMENT	SILL PLATE A	ATTACHMENT		
AT ALL PANEL EDGES	SIZE AT ADJOINING	CONN TO TOP PLATE	NAILING TO WOOD RIM JOIST	ANCHOR BOLT TO	SILL PLATE AT		
[4, 5]	PANEL EDGES [3, 6, 13]	BELOW [7, 8]	OR BLOCKING BELOW	CONCRETE BELOW [10]	FOUNDATION [11]		
0.148"Øx2 1/2" @ 6"OC	2x	CLIP @ 16"OC	0.148"Øx3 1/4" @ 6"OC	5/8"Ø @ 48"OC	2x	310	
0.148"Øx2 1/2" @ 4"OC	27		0.149"0,2.1/4" @ 4"00	5/8"Ø @ 32"OC	2x	460	
STAGGERED	38	CEII @ 12 OC 0.140 0x3 1/4 @ 4 OC		5/8"Ø @ 48"OC	3x [15]	400	
0.148"Øx2 1/2" @ 3"OC	3×	CLIP @ 16"OC	0.148"Øx3 1/4" @ 6"OC	5/8"Ø @ 24"OC	2x	600	
STAGGERED	58	EACH SIDE	(2) ROWS [9]	5/8"Ø @ 32"OC	3x [15]	000	
0.148"Øx2 1/2" @ 2"OC	3×	CLIP @ 16"OC	0.148"Øx3 1/4" @ 4"OC	5/8"Ø@16"OC	2x	770	
STAGGERED	58	EACH SIDE	(2) ROWS [9]	5/8"Ø@24"OC	3x [15]	770	

[1] INSTALL PANELS EITHER HORIZONTALLY OR VERTICALLY.

[2] WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS ON 2x FRAMING SHALL BE STAGGERED SO THAT JOINTS ON THE OPPOSITE SIDES ARE NOT LOCATED ON

[4] PROVIDE SHEAR WALL SHEATHING AND NAILING FOR THE ENTIRE LENGTH OF THE WALLS INDICATED ON THE PLANS. ENDS OF FULL HEIGHT WALLS ARE DESIGNATED BY WINDOWS OR DOORWAYS OR AS DESIGNATED ON PLANS. HOLD-DOWN REQUIREMENTS PER PLANS. (ALTERNATE NOTE: WALLS SHOWN WITH HORIZONTAL STRAPS BELOW AND/OR ABOVE OPENINGS REQUIRE SHEATHING, SHEAR WALL NAILING, ETC ABOVE AND BELOW ALL OPENINGS).

[5] SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLD-DOWN POSTS. EDGE NAILING MAY ALSO BE REQUIRED TO EACH STUD USED IN BUILT-UP HOLD-DOWN POSTS. ADDITIONAL

[6] INTERMEDIATE FRAMING TO BE 2x MINIMUM MEMBERS. ATTACH SHEATHING TO INTERMEDIATE FRAMING WITH 0.148"Øx2 1/2" NAILS AT 12"OC WHERE STUDS ARE SPACED AT 16"OC AND 0.148"Øx2 1/2" NAILS AT 6"OC WHERE STUDS ARE SPACED AT 24"OC.

[7] BASED ON 0.131"Øx1 1/2" NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 0.131"Øx2 1/2" NAILS WHERE INSTALLED OVER SHEATHING.

[8] FRAMING CLIPS: A35 OR LTP5 OR APPROVED EQUIVALENT.

[9] WHERE BOTTOM PLATE ATTACHMENT SPECIFIES (2) ROWS OF NAILS OR SCREWS, PROVIDE DOUBLE JOIST, RIM JOIST OR EQUAL BELOW. STAGGER NAILS/SCREWS IN ROWS 1 1/2" APART

[10] ANCHOR BOLTS SHALL BE PROVIDED WITH HOT-DIPPED GALVANIZED STEEL PLATE WASHERS 0.229"x3"x3" MINIMUM. THE HOLE IN THE PLATE WASHER MAY BE DIAGONALLY SLOTTED 13/16"x1 3/4" PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND NUT. PLATE WASHER TO EXTEND TO WITHIN 1/2" OF THE EDGE OF THE SILL PLATE ON THE SIDE(S) WITH SHEATHING. AT 2x6 WALLS WITH SHEATHING ON BOTH SIDES USE PLATE WASHER 0.229"x4 1/2"x4 1/2" MINIMUM. EMBED ANCHOR BOLTS 7" MINIMUM INTO THE CONCRETE

[11] PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTRO-PLATING IS NOT ACCEPTABLE) NAILS AND CONNECTOR PLATES (FRAMING ANGLES, ETC) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS. ADDITIONAL INFORMATION PER STRUCTURAL GENERAL NOTES.

[12] WHERE WOOD SHEATHING (W) IS APPLIED OVER GYPSUM SHEATHING (G), CONTACT THE ENGINEER OF RECORD FOR ALTERNATE NAILING REQUIREMENTS.

[13] AT ADJOINING PANEL EDGES, (2) 2x STUDS NAILED TOGETHER MAY BE USED IN PLACE OF SINGLE 3x STUD. DOUBLE 2x STUDS SHALL BE CONNECTED TOGETHER BY NAILING THE STUDS TOGETHER WITH 3" LONG NAILS OF THE SAME SPACING AND DIAMETER AS THE PLATE NAILING, PER SECTION.

[14] CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVES TO CAST-IN-PLACE ANCHOR BOLTS. SPECIAL INSPECTION MAY BE REQUIRED.

[15] NAIL STUDS TO 3x SILL PLATES WITH EITHER (2) 0.148"Øx4" END NAILS OR (4) 0.131"Øx2 1/2" TOENAILS.

[16] WX WHERE "W" INDICATES WOOD SHEATHING AND "X" INDICATES EDGE NAIL SPACING.

[17] EDGE NAILS SHALL BE LOCATED 3/8" FROM PANEL EDGES.

![](_page_34_Figure_24.jpeg)

## **SHEAR WALL SCHEDULE - DOUG-FIR LARCH**

[1] SOME HOLD-DOWN TYPES MAY NOT BE USED ON THIS PROJECT. [2] TYPICAL HOLD-DOWN DETAILS PER 1/S5.3. ANCHOR REINFORCEMENT REQUIRED AT STEMWALLS. [3] PROVIDE PANEL EDGE NAILING PER SHEAR WALL SCHEDULE AT HOLD-DOWN STUDS/POSTS. [4] BASED ON MINIMUM f'c = 3000 PSI CONCRETE.

[5] STEMWALLS SHALL BE 6" WIDE x 18" TALL MINIMUM.

[6] CAST-IN-PLACE (CIP) TYPE THREADED RODS AT HOLD-DOWNS SHALL HAVE TWO HEX HEAD NUTS WITH OVERSIZED WASHERS.

7] INCLUDES 1.6 LOAD DURATION INCREASE FOR WOOD.

8] TOTAL NAILS SPECIFIED, USE HALF THE NAILS AT THE STUDS ABOVE AND BELOW LEVEL BEING CONNECTED.

[9] AT PRESSURE TREATED SILLS, USE HOT DIPPED GALVANIZED BOLTS.

[10] POST INSTALLED HOLD-DOWN OPTIONS MAY BE AVAILABLE AT SOME CONDITIONS. CONTACT ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

[11] NAIL LAMINATE MULTIPLE 2x STUDS WITH PLATE NAILING PER SHEAR WALL SCHEDULE.

[12] MIDWALL/CORNER WALL END

[13] STUD WALLS SHALL BE 2x6, CENTER HOLD-DOWN IN STUD WALL.

![](_page_34_Figure_36.jpeg)

**ROOF JOIST AT MID SPAN** SCALE: 1" = 1'-0"

![](_page_34_Figure_38.jpeg)

A)	ABANDON IN PLACE		
AFF AP	ABOVE FINISHED FLOOR	$\langle x \rangle$	KEYED NOTE
AP &	ACCESS PANEL AND	XX	DEMOLISH
A @	AQUASTAT, ARCHITECT, ANCHOR, AMPHERE AT		
BFP			EXISTING WORK
BTUH	BRITISH THERMAL UNITS PER HOUR		
BLDG CV	BUILDING CHECK VALVE		
CO		— <i>/</i> — <i>/</i> —	PIPE OR CONDUIT BELOW GRADE
CD	CONDENSATE DRAIN		
CONT. CFH	CONTINUATION CUBIC FEET PER HOUR		CONTINUATION
CFS	CUBIC FEET PER SECOND	•	EXTENT OF DEMOLITION
DW	DISHWASHER, DOMESTIC WATER		
DET DCVA	DOMESTIC EXPANSION TANK DOUBLE CHECK VALVE ASSEMBLY	lacksquare	POINT OF CONNECTION
DN	DOWN	X	FIXTURE TAG (LEVEL BELOW FIXTURE)
DS	DOWNSPOUT NOZZLE		
D DFU	DRAIN DRAINAGE FIXTURE UNIT	XXX-X	HVAC EQUIPMENT IDENTIFICATION (REF. ONLY)
DWV	DRAINAGE, WASTE AND VENT	×x-x	
EWC	ELECTRIC WATER COOLER		PLUMBING EQUIPMENT IDENTIFICATION
EWH (E)	ELECTRIC WATER HEATER EXISTING	Piping Fitting	<u>gs</u>
FT			ACCESS PANEL
FFE	FINISHED FLOOR ELEVATION FIRE, FAHRENHEIT		
FL FCO	FLOOR FLOOR CLEANOUT	<u> </u>	AQUASTAT
FD	FLOOR DRAIN		BLIND FLANGE
FV '	FLUSH VALVE FOOT, FEET		
(F) GPM			CAP
GWH	GAS WATER HEATER	Ф сота	CLEANOUT TO GRADE
HVAC HZ	HEATING, VENTILATING AND AIR CONDITIONING HERTZ		
HB	HOSE BIBB	<b>⊅</b>	CONCENTRIC REDUCER
HWFU	HOT WATER FIXTURE UNIT	DSN	
HWR IN, "	HOT WATER RETURN INCHES		DOWNOI OUT NOZZEL
IW INIV	INDIRECT WASTE	<u> </u>	ECCENTRIC REDUCER
L	LAVATORY		
MIN MX	MINIMUM MIXING VALVE		FLOOR CLEANOUT
MS			FLOOR DRAIN
(N) N	NORTH		
NIC NTS	NOT IN CONTRACT NOT TO SCALE	× ^{FS}	FLOOR SINK
#	NUMBER	<b>_</b>	FLOW DIRECTION
NO. OD	OVERFLOW DRAIN, OUTSIDE DIAMETER		
OFCI OFOI	OWNER FURNISHED, CONTRACTOR INSTALLED OWNER FURNISHED. OWNER INSTALLED	<del> </del> +	HOSE BIBB / WALL HYDRANT
PLBG			
POC	POINT OF CONNECTION	۲	
PSI PD	POUNDS PER SQUARE INCH PRESSURE DROP, PLUMBING DEMOLITION, PUMPED DISCHARGE	>	PIPE DROP
PRV	PRESSURE REDUCING VALVE		
RWL	RAINWATER LEADER	o	PIPE RISE
RPBP (R)	REDUCED PRESSURE BACKFLOW PREVENTER RELOCATE / RELOCATED LOCATION	©	PUMP
RD	ROOF DRAIN		
SB	SERVICE BOX	$\bigcirc$ $\frac{kD}{N}$	ROOF DRAIN
SHT SA	SHEET SHOCK ARRESTOR	<b></b>	SHOCK ABSORBER / WATER HAMMER ARRESTOR
SOV	SHUT OFF VALVE		
S, SK SF	SINK SQUARE FEET	— <del>7</del> —	STRAINER
SD SP	STORM DRAIN SUMP PUMP. STATIC PRESSURE	<i>λ</i> η.	
TEMP		¥	TAP RELIEF VALVE WITH PIPE TO DRAIN
TYP	TYPICAL	<del>2</del>	TEE DOWN ON PIPE
U, UR V	URINAL VACUUM. VENT. VOLT		
VTR	VENT THRU ROOF		TEE UP ON PIPE
WCO W	WALL CLEANOUT WASTE		VENT THROUGH ROOF
WC WHA	WATER COLUMN, WATER CLOSET		
WH	WATER HEATER, WALL HYDRANT		WALL CLEANOUT
WSFU W/	WATER SUPPLY FIXTURE UNIT	Piping Syste	<u>ms</u>
			COLD WATER PIPING
		D	CONDENSATE / INDIRECT DRAIN PIPING
			HOT WATER PIPING
			HOT WATER RETURN PIPING
		2#G	NATURAL GAS PIPING, 2 LB
		G	NATURAL GAS PIPING, 7" WC PRESSURE
		OD	OVERFLOW DRAIN PIPING ABOVE GRADE OR FINISHED
			SANITARY VENT PIPING

## PLUMBING SYMBOL LIST

![](_page_35_Picture_4.jpeg)

FLOOR

## **GENERAL PLUMBING NOTES**

- A. ALL WORK UNDER THIS CONTRACT SHALL CONFORM TO: 2023 OREGON PLUMBING SPECIALTY CODE
  - 2. OAR OREGON ADMINISTRATIVE RULES (CHAPTER
- 333, DIVISION 535. 3. 2023 - OREGON ELECTRICAL SPECIALTY CODE
- 4. 2019 OREGON FIRE CODE 5. 2022 - OREGON MECHANICAL SPECIALTY CODE
- 6. 2022 OREGON STRUCTURAL SPECIALTY CODE
- 7. 2021 OREGON ENERGY EFFICIENCY SPECIALTY CODE
- B. CONDITIONS SHOW ON THE PLANS RELATIVE TO THE WORK TO BE PERFORMED ARE BASED ON THE BEST INFORMATION AVAILABLE AND SUBJECT TO VERIFICATION. VERIFY LOCATIONS AND ELEVATIONS OF UTILITIES TO BE CROSSED OR CONNECTED. CORRECT DEFICIENCIES CAUSED BY FAILURE TO PERFORM SUCH VERIFICATIONS AT NO EXPENSE TO OWNER. IMMEDIATELY NOTIFY ARCHITECT AND ENGINEER OF CONDITION IN CONFLICT WITH THE DETAILS/PLANS.
- C. COORDINATE INSTALLATION OF PIPING, FIXTURES, EQUIPMENT AND THE LIKE BELOW AND ABOVE GRADE WITH STRUCTURAL COMPONENTS AND OTHER SYSTEMS INSTALLATION.
- D. COORDINATE FIXTURES, EQUIPMENT, PIPE ROUGH-IN/CONNECTION LOCATIONS AND DRAIN LOCATIONS WITH ARCHITECTURAL DRAWINGS.
- E. LOCATE VALVES FOR SERVICE ACCESSIBILITY. VALVES INSTALLED ABOVE CEILING SHALL BE WITHIN 18" OF CEILING.
- F. ALL WASTE PIPING 4" AND LARGER SHALL BE ROUTED AT A 1% SLOPE. ALL WASTE PIPING 3" AND SMALLER SHALL BE ROUTED AT A 2% SLOPE. ALL STORM DRAINAGE PIPING SHALL BE ROUTED AT A 1% SLOPE.
- G. ALL FLOOR DRAINS, FLOOR SINKS, AND OTHER INDIRECT WASTE RECEPTORS DIRECTLY CONNECTED TO THE DRAINAGE SYSTEM SHALL BE PROVIDED WITH AN AUTOMATIC TRAP PRIMER.
- H. PERMANENT VACUUM BREAKERS SHALL BE INCLUDED ON ALL WALL HYDRANTS.
- I. SEWER VENTS SHALL TERMINATE AT LEAST 10 FEET HORIZONTALLY FROM AND AT LEAST 3 FEET ABOVE OPERABLE WINDOW, DOOR OPENING, AIR INTAKE OR VENT SHAFT. VENT MUST BE AT LEAST 3 FEET FROM PROPERTY LINE.
- J. PRIOR TO BEING CONCEALED, PIPING PENETRATIONS AT THE FIRE RESISTIVE ASSEMBLIES SHALL BE INSPECTED TO VERIFY COMPLIANCE WITH THE FIRE RESISTANCE RATING.
- K. INDIRECT WASTE SHALL DISCHARGE TO THE BUILDING DRAINAGE THROUGH AN APPROVED AIR GAP OR AIR BREAK WITH A MINIMUM 1" DISTANCE FROM THE LOWEST POINT OF INDIRECT PIPE TO THE FLOOD LEVEL RIM OF THE RECEPTOR.
- ISOLATE/SEPARATE VERTICAL PIPING WITH PADDING AND SECURE 1 THE BRACING OVER THE PADDING TO AVOID VIBRATION AND SOUND TRANSMISSION.

## **SHEET INDEX**

- P0.1 SYMBOL LIST AND GENERAL NOTES PLUMBING P0.2 SCHEDULES - PLUMBING
- P0.3 SCHEDULES PLUMBING
- PU2.0 UNDERGROUND FLOOR PLAN PLUMBING
- P2.0 FIRST FLOOR PLAN PLUMBING
- P5.1 DETAILS PLUMBING

![](_page_35_Picture_31.jpeg)

WW.

EXPIRES: 12/31/25

![](_page_35_Picture_32.jpeg)

SYMBOL EWH-1 EWH-2 NOTES:

				<b>PLUM</b>	<b>BING FIXTURE SCHED</b>	DULE					
			BASIS C	F DESIGN			CC	NNECTION			
SYMBOL	FIXTURE TYPE	DESCRIPTION	MFR	MODEL	ACCESSORIES	W	V	CW	HW	ELECTRICAL	COMMENTS
DF-1	DRINKING FOUNTAI	N DRINKING FOUNTAIN - DUAL STATION, SURFACE MOUNTED, FILTERED, BOTTLE FILLING STATION, ADA COMPLIANT, STAINLESS STEEL FINISH, VANDAL RESISTANT, FRONT PUSHBUTTON	ELKAY	LZSTLDDWSV RSK	IN-WALL CARRIER SYSTEM - ELKAY MODEL MLP200	1-1/2"	1-1/2"	1/2"		120V	SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT AND RIGHT HAND OR LEFT HAND LOW BOWL CONFIGURATION.
FD-1	FLOOR DRAIN	CAST IRON BODY, FLASHING COLLAR, 8-1/2-INCH ROUND ADJUSTABLE TOP, BAR GRATE, SEDIMENT BUCKET, TRAP PRIMER CONNECTION	JR SMITH	2350Y-P050		SEE DWG	S SEE DWG	6 PRIMER CONN.			
FS-1	FLOOR SINK	12-1/2" TOP, CAST IRON FLANGED RECEPTOR, SEEPAGE HOLES, ACID RESISTANT COATED INTERIOR, NICKEL BRONZE RIM, LESS GRATE, ALUMINUM DOME BOTTOM STRAINER, 6-INCH DEEP, NO-HUB OUTLET	JR SMITH	3140Y		3"	1-1/2"	PRIMER CONN.			
L-1	LAVATORY	WALL MOUNTED, VITREOUS CHINA, 3-HOLE PUNCH, 4-INCH CENTERS, FRONT OVERFLOW	AMERICAN STANDARD	355.012	FAUCET (GOOSENECK WRISTBLADE): CHICAGO 895-317E2805-5ABCP. PROVIDE THERMOSTATIC MIXING VALVE, ASSE 1070 COMPLIANT, INTEGRAL CHECK VALVES, LEAD FREE: WATTS LFMMV.	1-1/2"	1-1/2"	1/2"	1/2"		MOUNT LAVATORY AT ADA COMPLIANT HEIGHT, SEE ARCHITECTURAL PLANS FOR HEIGHT AND LOCATION. SEE SPECIFICATION SECTION 224000 FOR FLOOR MOUNTED CARRIER, TRAP COVERS, SUPPLY STOPS AND ADDITIONAL ACCESSORIES
L-2	LAVATORY	COUNTERTOP, SELF-RIMMING, ADA COMPLIANT, ROUND, 19-1/8" DIA.,VITREOUS CHINA, SINGLE-HOLE PUNCH, FRONT OVERFLOW	AMERICAN STANDARD	0490.156	DECK MOUNTED, METERING FAUCET, SINGLE HOLE, SINGLE-SUPPLY, 0.20 MAX. GALLON/CYCLE, VANDAL RESISTANT; CHICAGO FAUCETS MODEL 3500-E2805ABCP; ASSE 1070 COMPLIANT MIXING VALVE, INTEGRAL CHECK VALVES, WATTS MODEL LFMMV (SET DISCHARGE TEMPERATURE AT 110 DEG. F.)	, 1-1/2"	1-1/2"	1/2"	1/2"		SEE SPECIFICATION SECTION 224000 FOR TRAP COVERS, SUPPLY STOPS AND ADDITIONAL ACCESSORIES
LS-1	LAUNDRY SINK	FLOOR MOUNTED, FAUCET MOUNTING DECK (4-INCH CENTERS), ONE PIECE MOLDED STRUCTURAL THERMOPLASTIC RESIN, STEEL LEGS, 20-INCHES X 24-INCHES X 13 INCHES DEEP TUB	MUSTEE	19F	DECK MOUNTED, MANUAL FAUCET, 4-INCH CENTERS, 8" RIGID/SWING SPOUT, ATMOSPHERIC VACUUM BREAKER, WRISTBLADE HANDLES, 2.2 GPM; CHICAGO FAUCETS MODEL 895-317-GN8BVBE3MAB; 3/8" OFFSET INLET SUPPLY ARM WITH INTEGRAL CHECK; CHICAGO FAUCETS MODEL GCJKABCP	2"	1-1/2"	1/2"	1/2"		SEE SPECIFICATION SECTION 224000 FOR SUPPLY STOPS AND ADDITIONAL ACCESSORIES.
MS-1	MOP SINK	FLOOR MOUNTED, TERRAZZO, 24-INCHES X 24-INCHES X 10-INCHES, WITH OPTIONAL (A-20) ALUMINUM BUMPER GUARDS AND (BP) SPLASH PANELS	STERN WILLIAMS	MTB-2424	WALL HUNG, MOP SINK FAUCET, 8-INCH CENTERS, LEVER HANDLES, PAIL HOOK, CHROME PLATED, ATMOSPHERIC VACUUM BREAKER, 3/4" THREADED HOSE OUTLET AND WALL FLANGE; CHICAGO FAUCETS MODEL 540-LD897SWXFABCP; 3/8" OFFSET INLET SUPPLY ARM WITH INTEGRAL CHECK; CHICAGO FAUCETS MODEL GCJKABCP	3"	2"	1/2"	1/2"		
S-1	SINK	DROP-IN, SINGLE BOWL, 18 GAUGE STAINLESS STEEL, 15-INCHES X 17-1/2-INCHES X 7-5/8-INCHES DEEP, 18-INCH MINIMUM CABINET SIZE, 3-HOLE PUNCH	ELKAY	LR1517	DECK MOUNTED FAUCET, 5-1/4-INCH RIGID/SWING GOOSENECK, 4" WRISTBLADE HANDLES, 8-INCH FIXED CENTERS, 2.2 GPM AERATED FLOW RATE; CHICAGO FAUCETS MODEL 201-AGN2AE3-317AB	2"	1-1/2"	1/2"	1/2"		SEE SPECIFICATION SECTION 224000 FOR SUPPLY STOPS AND ADDITIONAL ACCESSORIES.
S-2	SACRARIUM SINK	DROP-IN, SINGLE BOWL, 18 GAUGE STAINLESS STEEL, 13-INCHES X 15-1/4-INCHES X 6-INCHES DEEP,	RELIGIOUS SUPPLY CENTER	31SCM62-A		2"	1-1/2"				SEE SPECIFICATION SECTION 224000 FOR SUPPLY STOPS AND ADDITIONAL ACCESSORIES.
UR-1	URINAL	VITEROUS CHINA HYBRID URINAL.	SLOAN	HYB-1000	2" NPT OUTLET FLANGE & UNI-COUPLER KIT; TOUGH-FREE, HYGENIEC OPERATION,	2"	1-1/2"	1/2"		120V to 24V	MOUNT URINAL AT ADA COMPLIANT HEIGHT, SEE ARCHITECTURAL PLANS FOR HEIGHT AND LOCATION. SEE SPECIFICATION SECTION 224000 FOR FLOOR MOUNTED CARRIER AND ADDITIONAL ACCESSORIES. COORDINATE ELECTRICAL POWEF AND LOW VOLTAGE REQUIREMENS WITH DIVISION 26.
WC-1	WATER CLOSET	FLOOR MOUNTED, FLOOR OUTLET, GRAVITY TANK TYPE, VITREOUS CHINA, STANDARD HEIGHT, ELONGATED, 1.28 GPF, 12" ROUGH-IN	SLOAN	WETS-4009.40 10	SEAT - ELONGATED, PLASTIC, SELF-SUSTAINING CHECK HINGES WITH NON-CORRODING STAINLESS STEEL POSTS; BEMIS MODEL 1955SSCT	3"	2"	1/2"			SEE ARCHITECTURAL PLANS FOR LOCATION. SEE SPECIFICATION SECTION 224000 FOR ADDITIONAL ACCESSORIES.
WC-2	WATER CLOSET	FLOOR MOUNTED, FLOOR OUTLET, GRAVITY TANK TYPE, VITREOUS CHINA, ADA HEIGHT, ELONGATED, 1.28 GPF, 12" ROUGH-IN	SLOAN	WETS-4029.40 10	SEAT - ELONGATED, PLASTIC, SELF-SUSTAINING CHECK HINGES WITH NON-CORRODING STAINLESS STEEL POSTS; BEMIS MODEL 1955SSCT	3"	2"	1/2"			SEE ARCHITECTURAL PLANS FOR LOCATION. SEE SPECIFICATION SECTION 224000 FOR ADDITIONAL ACCESSORIES.
WH-1	WALL HYDRANT	ENCASED (RECTANGULAR BOX), NON-FREEZE, ANTI-SIPHON, AUTOMATIC DRAINING, CHROME PLATED BOX/DOOR ASSEMBLY, DOUBLE CHECK BACKFLOW PREVENTER, LOOSE TEE KEY OPERATION	WOODFORD	B67				1/2"			

ELECTRIC WATER HEATER SCHEDULE - TANK TYPE												
BASIS OF I	DESIGN	TANK	RECOVERY		ELI	ECTRICAL		MAX				
		CAPACITY	RATE @ 100F RISE					WT				
MFR	MODEL	(GALLONS)	(GPH)	VOLTS	PH	KW	ELEMENTS	(LBS)	COMMENTS			
BRADFORD WHITE	LE240LN3-3	37	98	208	1	5	2 (2,500 KW EACH)					
 EEMAX	EMT2.5	2.5	21	120	1	1.44	1					

	ELECTRIC WATER HEATER SCHEDULE - TANK TYPE												
		BASIS OF I	DESIGN	TANK	RECOVERY		ELI	ECTRICAL		MAX			
EQUIPMENT TYPE	LOCATION / SERVING	MFR	MODEL	CAPACITY (GALLONS)	RATE @ 100F RISE (GPH)	VOLTS	PH	KW	ELEMENTS	WT (LBS)	COMMENTS		
ELECTRIC WATER HEATER	MECH/ JAN. RM 5 / HOT WATER SYSTEM	BRADFORD WHITE	LE240LN3-3	37	98	208	1	5	2 (2,500 KW EACH)				
LECTRIC TANKLESS WATER HEATER	WEST SACRISTY/ RM 13 / REMOTE SINK	EEMAX	EMT2.5	2.5	21	120	1	1.44	1				
				•	•								

	PLUMBING DEVICES SCHEDULE												
		BASIS OF DESIGN CONNECTION (")						WEIGHT					
MARK	DESCRIPTION	SYSTEM	CAPACITIES	MANUFACTURER	MODEL	W	CW	HW	TW	(LBS)	COMMENTS		
DET-1	DOMESTIC WATER EXPANSION TANK - IAPMO	DOMESTIC HOT WATER	3.5 GALLON CAPACITY, WELDED STEEL CONSTRUCTION, DIAPHRAGM TYPE, SEPARATE WATER RESERVOIR, PRE-PRESSURIZED, IAPMO CERTIFIED.	WATTS	DETA-5			3/4"		28	ACCEPTANCE VOLUME = 3.3 GALLONS		
RPBP-1	REDUCED PRESSURE ZONE BACKFLOW PREVENTER	DOMESTIC HOT WATER	BRONZE BODY, SILICONE RUBBER DISC	WATTS	009		1-1/2"				ROUTE AIR GAP DRAIN PIPING TO NEAREST FLOOR SINK. LEAD FREE.		

	PUMP SCHEDULE												
			BASIS OF	DESIGN						ELECTRICA			
SYMBOL	EQUIPMENT TYPE	LOCATION / SERVING	MFR	MODEL	FLOW RATE (GPM)	HEAD (FT H2O)	RPM	VOLTS	PH	AMPS	WATTS	HP	COMMENTS
CP-1	DOMESTIC HOT WATER CIRCULATING PUMP	MECH/ JAN. RM 5 / HOT WATER SYSTEM	BELL & GOSSETT	XL N 20-35	3 GPM	15		115	1			1/12	STAINLESS STEEL BODY, IN-LINE PUMP. PROVIDE AQUASTAT.
NOTES:													

![](_page_36_Figure_8.jpeg)

FIX	TURE QUANT	'ITY					
	PUBLIC			PRIVATE	PUBLIC		
DWELLING	USE	ASSEMBLY	DESCRIPTION	DWELLING	USE	ASSEMBLY	UNITS
0	0	0		1.00	0.00	0.00	0.00
0	0	0		0.00	2.00	0.00	0.00
0	0	0		2.00	2.00	0.00	0.00
0	0	0		1.00	0.00	0.00	0.00
0	0	0		0.00	6.00	6.00	0.00
0	0	0		3.00	3.00	3.00	0.00
0	0	0		0.00	1.00	1.00	0.00
0	0	0	DISHWASHER, COMMERCIAL, INDEPENDENT DRAIN	9.00	9.00	9.00	0.00
0	1	0		0.50	0.50	1.00	0.00
0	1	0		0.00	2 00	1.00	2.00
0	0	0	WATER SOFTENERS/SAND FILTER	0.00	140.00	3.00	0.00
0	1	0	FLOOR DRAIN. EMERGENCY	0.00	0.00	0.00	0.00
0	0	0	BREAK ROOM SINK, DOMESTIC W/ONE 1 1/2" TRAP	2.00	2.00	0.00	0.00
0	0	0	KITCHEN SINK, DOMESTIC	2.00	2.00	0.00	0.00
0	0	0	KITCHEN SINK, DOMESTIC, W/DISHWASHER	2.00	2.00	0.00	0.00
0	0	0	KITCHEN SINK, DOM. W/GRINDER & DISHWASHER	2.00	2.00	0.00	0.00
0	1	0	LAUNDRY SINK, ONE OR TWO COMPARTMENTS	2.00	2.00	2.00	2.00
0	0	0	LAUNDRY SINK, W/DISCH. FROM CLOTHES WASH	2 00	2 00	2 00	0.00
0	3	0	LAVATORY, SINGLE	1.00	1.00	1.00	3.00
0	0	0	LAVATORY, SETS OF 2 OR 3	2.00	2.00	2.00	0.00
0	0	0	MOBILE HOME. TRAP	12.00	0.00	0.00	0.00
0	0	0	RECEPTOR, IND, WASTE, 1 1/2" TRAP SEF	0.00	1 00	1.00	0.00
0	0	0	RECEPTOR, IND. WASTE, 2" TRAP TABLE	0.00	2 00	2 00	0.00
0	0	0	RECEPTOR, INC. WASTE, 3" TRAP 7-4	0.00	4 00	4 00	0.00
0	0	0	SERVICE SINK OR MOP BASIN, 2" TRAP	0.00	3 00	0.00	0.00
0	1	0	SERVICE SINK OR MOP BASIN, 3" TRAP	0.00	3 00	0.00	3.00
0	0	0	SHOWER, STALL, 2" TRAP	2 00	2 00	2 00	0.00
0	0	0	SHOWER, GROUP, PER HEAD, CONTINUOUS	0.00	5.00	0.00	0.00
0	0	0	SINK, COMMERCIAL, 1 1/2" TRAP, W/GRINDER	0.00	3.00	3.00	0.00
0	0	0	SINK. SERVICE. FLUSHING RIM	0.00	6.00	0.00	0.00
0	1	0	SINK, GENERAL, 1 1/2" TRAP	2 00	3.00	3.00	3.00
0	0	0	SINK, GENERAL, 2" TRAP	3.00	4 00	4 00	0.00
0	0	0	SINK. TRIPLE COMPARTMENT	0.00	6.00	6.00	0.00
0	0	0	URINAL 1.0 GPF	2.00	2 00	5.00	0.00
0	0	0	URINAL, GREATER THAN 1.0 GPF	2.00	2.00	6.00	0.00
0	0	0	URINAL, 1 1/2" TRAP	2.00	2.00	5.00	0.00
0	0	0	WASHFOUNTAIN, 1 1/2" TRAP	0.00	2.00	2.00	0.00
0	0	0	WASHFOUNTAIN 2" TRAP	0.00	3.00	3.00	0.00
0	0	0	WASHUP SINK FACH SET OF FAUCETS	0.00	2.00	2.00	0.00
0	3	0	WATER CLOSET, 1.6 GPE, GRAVITY TANK	3.00	4 00	6.00	12.00
0	0	0	WATER CLOSET, 1.6 GPF, FI USHOMFTER TANK	3.00	4.00	6.00	0.00
<u> </u>	0	0	WATER CLOSET, 16 GPF, FLUSHOMETER VALVE	3.00	4.00	00.0	0.00
0	0	0	WATER CLOSET 3.5 GPF GRAVITY TANK	4.00	4.00 6.00	8.00	0.00
0	0	0	WATER CLOSET 35 GPE FLUSHOMETER VALVE	4.00	6.00	0.00	0.00
U		0		4.00	0.00	0.00	0.00

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FIX	TURE QUANT	ITY		APPE	NDIX 'A' - TABL	E A-2	TOTAL FIXTURE UNITS		
PRIVATE NDIVIDUAL DWELLING	PUBLIC GENERAL USE	PUBLIC HEAVY USE ASSEMBLY	DESCRIPTION	PRIVATE INDIVIDUAL DWELLING	PUBLIC GENERAL USE	PUBLIC HEAVY-USE ASSEMBLY	COLD WATER	(.75) HOT WATER	
0	0	0	BAR SINK	1.00	2.00	0.00	0.00	0.00	
0	0	0	BATHTUB OR COMB. BATH/SHOWER	4.00	4.00	0.00	0.00	0.00	
0	0	0	BATHTUB OR COMB. BATH/SHOWER - 3/4" FILL	10.00	10.00	0.00	0.00	0.00	
0	0	0	BIDET	1.00	0.00	0.00	0.00	0.00	
0	0	0	CLINIC SINK	0.00	8.00	0.00	0.00	0.00	
0	0	0	CLOTHESWASHER, DOMESTIC	4.00	4.00	0.00	0.00	0.00	
0	0	0	DENTAL UNIT OR CUSPIDOR	0.00	1.00	0.00	0.00	0.00	
0	0	0	DISHWASHER, DOMESTIC	1.50	1.50	0.00	0.00	0.00	
0	1	0	DRINKING FOUNTAIN OR WATER COOLER	0.00	0.50	0.75	0.50		
0	1	0	HOSE BIBB	2.50	2.50	0.00	2.50		
0	2	0	HOSE BIBB, EACH ADDITIONAL	1.00	1.00	0.00	2.00		
0	2	0	KITCHEN SINK, DOMESTIC	1.50	0.00	3.00	2.25		
0	1	0	LAUNDRY SINK	1.50	1.50	1.13			
0	3	0	LAVATORY	1.00 1.00 1.00			3.00	2.25	
0	0	0	LAWN SPRINKLER, EACH HEAD	1.00 1.00 0.00		0.00			
0	0	0	MOBIL HOME, EACH	12.00		0.00	0.00	0.00	
0	1	0	SERVICE SINK OR MOP BASIN	1.50 3.00 0.00		0.00	3.00	2.25	
0	0	0	SHOWER, EACH HEAD	2.00	2.00	0.00	0.00	0.00	
0	0	0	SHOWER, CONTINUOUS USE	0.00	5.00	0.00	0.00	0.00	
0	1	0	URINAL, 1.0 GPF	3.00	4.00	5.00	4.00		
0	0	0	URINAL, GREATER THAN 1.0 GPF	4.00	5.00	6.00	0.00		
0	0	0	URINAL, FLUSH TANK	2.00	2.00	3.00	0.00		
0	0	0	WASHFOUNTAIN, CIRCULAR SPRAY	0.00	4 00	0.00	0.00	0.00	
0	0	0	WASHUP SINK, EACH SET OF FAUCETS	0.00	2 00	0.00	0.00	0.00	
0	0	0	WATER CLOSET, 1.6 GPF, GRAVITY TANK	2.50	2.50	3 50	0.00		
0	0	0	WATER CLOSET, 1.6 GPF, FLUSHOMETER TANK	2.50	2.50	3.50	0.00		
0	0	0	WATER CLOSET, 1.6 GPF, FLUSHOMETER VALVE	5.00	5.00	8.00	0.00		
0	3	0	WATER CLOSET, 3.5 GPF, GRAVITY TANK	3.00	5.50	7.00	16.50		
0	0	0	WATER CLOSET, 3.5 GPF, FLUSHOMFTFR VAI VF	7.00	8.00	10.00	0.00		
0	0	0		⊿ ∩∩	0.00	0.00	0.00	0.00	
U		<u>_</u>		7.00	0.00	0.00	0.00	0.00	
			TOTAL				36.00	7.88	
			FLOW IN GPM				26	7	
			IRRIGATION FLOW IN GPM				0		
			TOTAL GPM REQUIRED				26		
							4.4.0		

![](_page_37_Picture_4.jpeg)

![](_page_38_Figure_0.jpeg)

8/2024 11:16:39 AM C:\Users\jeffersonv\Documents\Holly Trinity Chrch MEP Central v2024 jeffersonv@interfaceeng.com.r

![](_page_39_Figure_0.jpeg)

![](_page_40_Figure_1.jpeg)

![](_page_40_Figure_2.jpeg)

![](_page_40_Figure_3.jpeg)

![](_page_40_Figure_5.jpeg)

NO SCALE

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NOTE: This is a st	andard symbol list and not all items listed may be used.		
Abbreviatio	ons	Dampers	
AFF	ABOVE FINISHED FLOOR		
AD A/C	ACCESS DOOR AIR CONDITION(ED)		FIRI
AHU	AIR HANDLING UNIT		FIRI
BDD BFP	BACKDRAFT DAMPER BACKELOW PREVENTER	-(ESD(ESD)	
BFF	BELOW FINISHED FLOOR		MO
B BHP	BOILER BRAKE HORSEPOWER	<u> </u>	
CD			SMO
CV	CHECK VALVE		VOL
CH			
CW	COLD WATER	Diffusers and	Gr
CD CU	CONDENSATE DRAIN CONDENSING UNIT	<u>12×12</u> CD-1 100	DIFI
CONT.		$\bowtie$	EXF
DB	DECIBEL		LA
DP DIA	DEW POINT, DIFFERENTIAL PRESSURE DIAMETER	$\square \oslash$	RET
DX	DIRECT EXPANSION		
DG D	DOOR GRILLE DROP	$\bowtie$	SUF
DB	DRY BULB	Ductwork Fit	ting
ELECT	ELECTRICAL	·	ACC
EL FFR	ELEVATION ENERGY EFFICIENCY RATING		
EAT	ENTERING AIR TEMPERATURE		BEL
EWT EXH	ENTERING WATER TEMPERATURE EXHAUST		00
EF	EXHAUST FAN		COI
(E) FA	EXISTING FACE AREA		CON
F			
FT	FEET		ECC
FPM FPS	FEET PER MINUTE	L	
FPI	FINS PER INCH	ŢŢ	
FD FC	FIRE DAMPER FLEXIBLE CONNECTOR		NON
FLA	FULL LOAD AMPS		
GPH	GALLONS PER HOUR		REC
GPM HD	GALLONS PER MINUTE HEAD		REC
HP			
HTR	HEATER	<del>ب تر</del> ب از ب	REC
HP	HORSEPOWER		
IN	INCHES		REC
ID IE	INSIDE DIAMETER INVERT ELEVATION		REC
KW			
LAT	LEAVING AIR TEMPERATURE		REC
LWT MW	LEAVING WATER TEMPERATURE MAKE-UP WATER		ROI
MAX	MAXIMUM		NOC
MIN MA	MINIMUM MIXED AIR	§	ROI
MS	MOTOR STARTER		
MH	MOUNTING HEIGHT		ROI
(N) NC	NEW NOISE CRITERIA		ROL
N/A	NOT APPLICABLE	× *	
NIC	NOT IN CONTRACT NOT TO SCALE		SYN
NO. OC	NUMBER ON CENTER	Ĩ <b>⊨</b> ‡47	міт
OBD	OPPOSED BLADE DAMPER		
OA OD	OUTSIDE AIR OUTSIDE DIAMETER		RAD
PH	PHASE	General	
PSI	POUNDS POUNDS PER SQUARE INCH		
PD PRV	PRESSURE DROP PRESSURE REDUCING VALVE	×	DEI
P		XX-X	EQL
REF	REFRIGERANT	LOCATION	
RL RS	REFRIGERANT LIQUID REFRIGERANT SUCTION	$\langle x \rangle$	KEY
RH	RELATIVE HUMIDITY		SEC
RLD (R)	RELIEF DAMPER RELOCATE/RELOCATED LOCATION		
RET		30X16	REC
RPM	REVOLUTIONS PER MINUTE		
R SEFR	RISE SEASONAL ENERGY EFFICIENCY RATING		
SH	SENSIBLE HEAT		
SOV	SQUARE FEET		
SP SA	STATIC PRESSURE SUPPLY AIR		
T, TEMP	TEMPERATURE		
TD MBH	IEMPERATURE DIFFERENCE THOUSAND BTU'S PER HOUR		
ТН тр	TOTAL HEAT		
UD	UNDERCUT DOOR		

<b>Dampers</b>	
	FIRE DAMPER
	FIRE/SMOKE DAMPER
	MOTORIZED DAMPER
	SMOKE DAMPER
	VOLUME DAMPER
Diffusers and	<u>I Grilles</u>
12×12 CD-1 100	DIFFUSER OR GRILLE IDENTIFICATION
$\boxtimes$ $\otimes$	EXHAUST AIR
$\square \oslash$	RETURN AIR
$\boxtimes \otimes$	SUPPLY AIR
Ductwork Fit	tings
·	ACOUSTICALLY LINED DUCT (SIZES SHOWN ARE NET INSIDE)
┝┰┙╞┯┙	BELLMOUTH
	CONCENTRIC SQUARE TO ROUND
	CONCENTRIC TRANSITION, RECTANGULAR OR ROUND
	ECCENTRIC TRANSITION, RECTANGULAR OR ROUND
	FLEXIBLE CONNECTION
	NON-SYMMETRICAL WYE
	RECTANGULAR DUCT DROP
	RECTANGULAR DUCT RISER
┝┯╤╡┝┯	RECTANGULAR MAIN WITH RECTANGULAR BRANCH
	RECTANGULAR MAIN WITH ROUND BRANCH
	RECTANGULAR OFFSET LESS THAN 15%%d
	RECTANGULAR OFFSET MORE THAN 15%%d
	ROUND DUCT DROP
⊗—, ⊗ <u></u>	ROUND DUCT RISER
, Т., ( <u>С</u>	ROUND DUCT WITH ROUND BRANCH
${\longrightarrow} \square $	ROUND WYE
	SYMMETRICAL WYE
,] <del> </del>	MITERED ELBOW WITH TURNING VANES
	RADIUSED ELBOW
General	
$\begin{pmatrix} x \\ x \end{pmatrix}$	DETAIL NUMBER AND SHEET LOCATION
	EQUIPMENT IDENTIFICATION
$\langle \mathbf{x} \rangle$	KEYED NOTE
A XXX	SECTION NUMBER AND SHEET LOCATION
30X16	RECTANGULAR DUCT SIZING

VARIABLE AIR VOLUME

WATER COLUMN

VOLUME DAMPER (HAND OPERATOR)

VELOCITY

VOLT

WATT

WITH

WET BULB

VAV

VEL

V

VD

WC

W

WB

W/

## **MECHANICAL SYMBOL LIST**

30"Ø	ROUND DUCT SIZING	— — HWR— —	HEATING WATER RETURN
Piping Fitting	gs, Appurtenances and Equipment	Hws	HEATING WATER SUPPLY
S	AIR SEPARATOR	RL	REFRIGERANT LIQUID
	AUTOMATIC AIR VENT		REFRIGERANT SUCTION
EFP	BACKFLOW PREVENTER	Piping Valves	5
	CAP		BALANCING VALVE
	CONTINUATION	<u> </u>	CHECK VALVE
EJ	EXPANSION JOINT	——————————————————————————————————————	CONTROL VALVE
	EXPANSION LOOP	——ズ·——	GATE VALVE
ET	EXPANSION TANK		GLOBE VALVE
E	FLOW SWITCH		PRESSURE REDUCING VALVE
HE	HEAT EXCHANGER		QUARTER TURN VALVE
<u> </u> +	HOSE BIBB		VALVE, GENERAL
	MANUAL AIR VENT		
<i></i>	PIPE BELOW GRADE		
>	PIPE DROP		
<u> </u>	PIPE REMOVED IN DEMOLITION		
o	PIPE RISE		
Ĩ	PIPE TO DRAIN		
Ŷ	PRESSURE GAUGE WITH COCK		
	PRESSURE RELIEF VALVE		
P	PRESSURE SENSOR		
—Ø—	PUMP		
§	SHOCK ABSORBER		
Å	T&P RELIEF VALVE WITH PIPE TO DRAIN		
<del></del>	TEE DOWN ON PIPE		
o	TEE UP ON PIPE		
Ţ	TEMPERATURE SENSOR		
T	TEST PORT (PETE'S PLUG OR EQUAL)		
P	THERMOMETER		
1	VENT TO ATMOSPHERE		
M	WATER METER		
Piping Syste	<u>ms</u>		
— -CHWR- —	CHILLED WATER RETURN		
——CHWS——	CHILLED WATER SUPPLY		
— — CWR— —	CONDENSER WATER RETURN		

-----cws-------------------------CONDENSER WATER SUPPLY

## **GENERAL MECHANICAL NOTES**

- A. THE INTENT OF THESE DRAWINGS IS TO PROVIDE A COMPLETE AND WORKABLE FACILITY WITH COMPLETE SYSTEMS AS SHOWN, SPECIFIED AND REQUIRED BY APPLICABLE CODES. INCLUDE ALL WORK SPECIFIED AND SHOWN ON THE ACCOMPANYING DRAWINGS, INCLUDING APPURTENANCES, CONNECTIONS, ETC., IN THE FINISHED JOB.
- B. ALL WORK AND MATERIALS SHALL CONFORM TO THE LOCAL AND STATE CODES, AND ALL FEDERAL, STATE AND OTHER APPLICABLE LAWS AND REGULATIONS.
- C. CONTRACTOR RESPONSIBLE FOR OBTAINING AND PAYMENT FOR ALL PERMITS, LICENSES, AND INSPECTION CERTIFICATES REQUIRED IN ACCORDANCE WITH PROVISIONS OF CONTRACT DOCUMENTS.
- D. THESE PLANS ARE DIAGRAMMATIC IN NATURE, CONTRACTORS SHALL INCLUDE APPROPRIATE ALLOWANCES FOR OFFSETS AS REQUIRED TO ACCOMMODATE VERTICAL AND HORIZONTAL VARIATIONS IN THE LOCATIONS AND ELEVATIONS OF DUCTWORK, PIPING AND OTHER EQUIPMENT.
- E. MATERIALS AND EQUIPMENT SHALL BE NEW. WORK SHALL BE OF GOOD QUALITY, FREE OF FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
- F. COORDINATE DEMOLITION, CUTTING, PATCHING, ETC. WITH EXISTING FIELD CONDITIONS. ALL NEW OR EXISTING WORK CUT OR DAMAGED SHALL BE RESTORED TO ITS ORIGINAL CONDITION.
- G. CONDITIONS SHOWN ON THE PLANS RELATIVE TO THE WORK TO BE PERFORMED ARE BASED ON THE BEST INFORMATION AVAILABLE BUT ARE SUBJECT TO VERIFICATION. VERIFY LOCATIONS AND ELEVATIONS OF DUCTWORK AND UTILITIES TO BE CROSSED OR CONNECTED.
- H. PROVIDE CEILING ACCESS PANELS FOR COMPONENTS LOCATED ABOVE INACCESSIBLE CEILING SYSTEMS. MAINTAIN FIRE RATINGS WHERE REQUIRED.
- I. SEAL ALL EXISTING AND NEW FIRE RATED PIPE AND DUCTWORK PENETRATIONS WITH UL LISTED AND FIRE MARSHAL APPROVED FIRE RETARDANT MATERIALS AND METHODS.
- J. CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS STEEL AND COMPONENTS REQUIRED TO SUPPORT DUCT, PIPE, MECHANICAL EQUIPMENT, AND ELECTRICAL/CONTROL PANELS RELATED TO MECHANICAL EQUIPMENT. PROVIDE FLOOR SUPPORT COMPONENTS, HANGERS AND SEISMIC RESTRAINTS AS REQUIRED.

![](_page_41_Picture_18.jpeg)

![](_page_41_Picture_19.jpeg)

![](_page_41_Picture_20.jpeg)

- M0.1 SYMBOL LIST AND GENERAL NOTES MECHANICAL
- M0.2 SCHEDULES MECHANICAL
- M2.1 FIRST FLOOR PLAN MECHANICAL
- M4.1 ENLARGED PLANS AND SECTIONS MECHANICAL
- M6.1 DETAILS MECHANICAL

M0.1

	FAN SCHEDULE																	
	BASIS OF DESIGN ELECTRICAL MAX																	
		AREA					<b>AIR FLOW</b>	ESP	MAX	SOUNDS					WT			
SYMBOL	LOCATION	SERVED	MFR	MODEL	TYPE	DRIVE	(CFM)	(IN H20)	RPM	SONES	VOLTS	PH	BHP	MHP	(LBS)	COMMENTS		
EF-1	MECH ROOM	MECH ROOM	GREENHECK	SP-A200	EXHAUST FAN	DIRECT	200	0.3	900	3.1	120	1	.03	0.07	24	1		
EF-2	WOMENS	WOMENS	GREENHECK	SP-A200	EXHAUST FAN	DIRECT	160	0.4	900	3.7	120	1	.03	0.07	24	1		
EF-3	MENS	MENS	GREENHECK	SP-A125	EXHAUST FAN	DIRECT	90	0.3	1100	1.3	120	1	.01	0.03	17	1		
EF-4	SERVICE HALL	CHURCH	GREENHECK	SQ-15-M2	INLINE FAN	DIRECT	4000	0.4	1750	19.5	120	1	0.83	1	92	2		

NOTES:

PROVIDE WITH SPEED CONTROL AND BACKDRAFT DAMPER AT FAN.
 PROVIDE WITH VFD LOCATED IN MECHANICAL ROOM FOR BALANCING AND VOLUME CONTROL.

						ŀ		/P S	SCH	ED	ULE						
			BASIS OF	DESIGN			AIR SOURCE CO	NDENS	ER		E	LECT	RICAL				
									AMB						APPROX	MAX	
		AREA			RELATED	NOM	QTY OF	CAP	TEMP	MIN					DIMS	WT	
SYMBOL	LOCATION	SERVED	MFR	MODEL	FAN	TONS	COMPRESSORS	(MBH)	(°F)	EFF	VOLTS	PH	MCA	MOCP	(LxWxH)	(LBS)	COMMENTS
CU-1	OUTSIDE	CHURCH	TRANE	TWA-1804	FC-1	12.5	2	160.0	80	11.9	208	3	65.0	80	94x45x45	750	1
CU-2	OUTSIDE	CHAPEL	TRANE	4TWR-5030	FC-2	2.5	1	30.0	80	15	208	1	15.0	20	32x30x28	170	1
NOTEO.																	

NOTES:

1. PROVIDE COIL COATING FOR COASTAL APPLICATION.

	FAN COIL SCHEDULE															
			BASIS O	DESIGN	SI	JPPLY	FAN				ELEC	TRICA	L			
						MIN		FAN	AUX							
					TOTAL	OSA	FAN ESP	MOTOR	HTG					ECM	MAX WT	
SYMBOL I	LOCATION	SERVING	MFR	MODEL	(CFM)	(CFM)	(IN H2O)	HP	(KW)	VOLTS	PH	MCA	MOCP	MOTOR	(LBS)	COMMENTS
FC-1	MECH ROOM	CHURCH	TRANE	TWE185041B	5500	2500	0.85	5	30	240	1	161.0	175	Y	690	1,2
FC-2	MECH ROOM	CHAPEL	TRANE	TAM9A0B30	1000	250	0.4	1.5	7.7	240	1	45.0	45	Y	140	1

NOTES:

MOUNT ON 1 INCH ISOLATION PADS. SEE SPECIFICATIONS.
 PROVIDE COIL COATING FOR COASTAL APPLICATION.

	DIFFUSER, REGISTER AND GRILLE SCHEDULE							
						BASIS OF	DESIGN	
SYMBOL	TYPE	FACE	FRAME	DAMPER	FINISH	MFR.	MODEL	COMMENTS
CD-1	CEILING SUPPLY DIFFUSER	LOUVERED	LAY-IN	NONE	WHITE	TITUS	TMS	
CRG-1	CEILING RETURN GRILLE	PERFORATED	LAY-IN	NONE	WHITE	TITUS	PAR	
RG-1	RETURN WALL GRILLE	LOUVERED	SURFACE	NONE	WHITE	TITUS	350RL	
SG-1	SUPPLY WALL GRILLE	LOUVERED	SURFACE	OBD	WHITE	TITUS	300R	

![](_page_42_Picture_12.jpeg)

![](_page_43_Figure_0.jpeg)

![](_page_44_Picture_0.jpeg)

![](_page_44_Picture_1.jpeg)

- 8'

![](_page_44_Picture_2.jpeg)

![](_page_44_Picture_3.jpeg)

![](_page_44_Picture_4.jpeg)

![](_page_44_Picture_5.jpeg)

![](_page_44_Figure_7.jpeg)

![](_page_44_Figure_8.jpeg)

PLUS 2".

CEILING.

CEILING. –

![](_page_45_Figure_10.jpeg)

![](_page_45_Picture_11.jpeg)

## ELECTRICAL SYMBOL LIST

eviat	ions
FC	ABOVE FINISHED CEILING
FF	ABOVE FINISHED FLOOR
G	ABOVE FINISHED GRADE
С	ALTERNATING CURRENT, AIR CONDITIONER
VG	AMERICAN WIRE GAUGE
	AMPERES
IJ	
AI C	
	COPPER
CT	CURRENT TRANSFORMER
dB	DECIBEL
(X)	DEMOLISH
EMT	ELECTRICAL METALLIC TUBING
EM	EMERGENCY LIGHT
(E)	EXISTING
ACP	FIRE ALARM CONTROL PANEL
MC	FLEXIBLE METAL CONDUIT
GND	GROUND
FCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTION
KV	KILOVOLI
OCP	MAXIMUM OVERCUBRENT PROTECTION
/CA	MINIMUM CIRCUIT AMPS
NEC	NATIONAL ELECTRIC CODE
EMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
Ν	NEUTRAL
(N)	NEW
NC	NORMALLY CLOSED
SC	OCCUPANCY SENSOR
FCI	OWNER FURNISHED, CONTRACTOR INSTALLED
FOI	OWNER FURNISHED, OWNER INSTALLED
'nН	PHASE
VC	POLY-VINYL-CHLORIDE
RFI NAC	
	TELECOMMUNICATIONS GROUNDING BUS BAR
IF IG	
,0 II	
/FD	
V	VOLTS VOLTAGE
wн	WATER HEATER
NP	WEATHERPROOF
 \\/	WIRE WHITE

<u>Connections</u>	<u>/ Equipment</u>
F	HEAVY DUTY FUSED DISCONNECT SWITCH
Ń	MOTOR CONNECTION
C	NON-FUSED DISCONNECT SWITCH
R _{UL}	RELAY (UL 924)
DRI	REMOTE DRIVER FOR LED LUMINAIRES
(1)	UTILITY METER BASE
J	CEILING MOUNTED JUNCTION BOX
IJ	FLOOR MOUNTED JUNCTION BOX
<u> </u>	WALL-MOUNTED JUNCTION BOX
<u>General</u>	
$\begin{pmatrix} x \\ x \end{pmatrix}$	DETAIL NUMBER AND SHEET LOCATION
XX-X LOCATION	EQUIPMENT IDENTIFICATION
$\langle 1 \rangle$	KEYED NOTE
XX	DEMOLISH
	NEW WORK
Lighting	
8	SHOWN
₹	EXIT SIGN WALL MOUNTED, ARROW(S) INDICATES DIRECTION IF SHOWN
<u>+</u>	LUMINAIRE RECESSED IN WALL
	RECESSED 2' X 4' LUMINAIRE
Ø	RECESSED LUMINAIRE
	RECESSED LUMINAIRE CONNECTED TO EMERGENCY/LIFE SAFETY CIRCUIT
4	SURFACE MOUNTED ADJUSTABLE LUMINAIRE
0	SURFACE OR PENDANT MOUNTED LUMINAIRE
	SURFACE OR PENDANT MOUNTED STRIPLIGHT
	TRACKLIGHT WITH LUMINAIRE(S)
ŢĴŢ	WALL MOUNTED 6" WIDE LUMINAIRE
오	WALL MOUNTED LUMINAIRE
•-□	AREA LUMINAIRE ARM MOUNTED WITH POLE AND CONCRETE BASE. NUMBER OF HEADS AND CONFIGURATION INDICATED ON PLANS.
0	AREA LUMINAIRE POLE TOP MOUNTED WITH POLE AND CONCRETE BASE.
<u>Miscellaneou</u>	
#10 ━₩₩₩₩ B-27,29,31.	PANEL WITH CIRCUITS AS NOTED. WIRE SIZE IS #12 AWG MINIMUM UNLESS NOTED OTHERWISE. SHORT TICK MARKS INDICATE PHASE CONDUCTORS. LONG TICK MARKS INDICATE NEUTRAL CONDUCTORS. A SINGLE CURVED TICK MARK INDICATES INSULATED GREEN GROUND CONDUCTOR. SECOND CURVED TICK MARK INDICATES "ISOLATED GROUND" (GREEN INSULATION WITH YELLOW STRIPE) CONDUCTOR.
	BRANCH PANEL
	CIRCUIT BREAKER
$\uparrow$	CURRENT TRANSFORMER
$\bigcirc$	EQUIPMENT CONNECTION ITEM. REFER TO SCHEDULE
€ M	METER WITH CONNECTION
PP	POWER UTILITY POLE

SURFACE MOUNT EQUIPMENT ENCLOSURE AS NOTED  $\sim$ 

TELEPHONE UTILITY POLE

O

## **TECHNOLOGY SYMBOL LIST**

<u>Raceways</u>		Audio/Video
-EOP-	EXISTING OVERHEAD PRIMARY SERVICE	F ⑨ A S
—s—	UNDERGROUND SECONDARY SERVICE	₩ C
	CONDUIT CONCEALED IN WALL OR CEILING SPACE	VC A
	CONDUIT ROUTED BELOW FLOOR / GRADE	Equipment
•	CONDUIT ELLED DOWN	
0	CONDUIT ELLED UP	
	CONDUIT/WIRING CONTINUATION	S F
~~~~~	FLEXIBLE CONDUIT	1 E ▼ V
witches an	d Receptacles	7
	DUPLEX RECEPTACLE (MULTIPLE LETTERS INDICATE MULTIPLE OPTIONS) A = ABOVE COUNTER	V S
Φ	C = FLUSH CEILING MOUNTED G = GROUND FAULT CIRCUIT INTERRUPTER T = TAMPER RESISTANT SHUTTERED RECEPTACLE U = USB PORT(S) W = WEATHERPROOF CONTINUOUS USE COVER, GFCI PROTECTED, WITH WEATHER RESISTANT RECEPTACLE	v F ▼ 1 N
\square	DUPLEX RECEPTACLE, FLUSH FLOOR	
#	DOUBLE DUPLEX RECEPTACLE. SEE LETTER CODE LIST AT DUPLEX RECEPTACLE FOR OPTIONS	
۲	EQUIPMENT ELECTRICAL CONNECTION	
\odot	SPECIAL PURPOSE RECEPTACLE. LETTER CODE DENOTES RECEPTACLE CONFIGURATION LX-XXR = NEMA CONFIGURATION TWIST-LOCK RECEPTACLE X-XXR = NEMA CONFIGURATION STRAIGHT BLADE RECEPTACLE P = PENDANT MOUNT WITH CORD GRIPS. VERIFY PENDANT LENGTH X = COORDINATE RECEPTACLE CONFIGURATION WITH EQUIPMENT BEING SUPPLIED	
os	CEILING MOUNTED OCCUPANCY SENSOR P = PASSIVE INFRARED D = DUAL TECHNOLOGY U = ULTRASONIC, 360 DEG RANGE H = ULTRASONIC, HALLWAY PATTERN v (LOWERCASE) = VACANCY CONTROL DESIGNATION	
<u>os</u> –	WALL MOUNTED OCCUPANCY SENSOR P = PASSIVE INFRARED D = DUAL TECHNOLOGY v (LOWERCASE) = VACANCY CONTROL DESIGNATION	
ssH	WALL MOUNTED OCCUPANCY SENSOR/SWITCH S = PASSIVE INFRARED WITH INTEGRAL "OFF" SWITCH T = DUAL RELAY PASSIVE INFRARED WITH TWO INTEGRAL "OFF" SWITCHES	

D = PASSIVE INFRARED WITH INTEGRAL DIMMER TO OFF. v (LOWERCASE) = VACANCY CONTROL DESIGNATION

Ŷ	FLUSH MOUNTED WALL SPEAKER WITH 1" CONDUIT TO ACCESSIBLE CEILING SPACE AND CABLING PER SPECIFICATIONS. HEIGHT AS INDICATED
\mathbb{M}	MICROPHONE DEVICE WITH 1" CONDUIT TO ACCESSIBLE CEILING AND CABLING PER SPECIFICATIONS
VC	VOLUME CONTROL. PROVIDE 5S BOX WITH SINGLE GANG ADAPTER RING AND 1.25" CONDUIT WITH PROTECTIVE BUSHING, STUBBED TO NEAREST ACCESSIBLE CEILING SPACE

MAJOR EQUIPMENT, CABINETS OR PANELS

cations

- CEILING MOUNTED TELECOM OUTLET MOUNTED ON CEILING WITH ONE CATEGORY 6A CABLE. PROVIDE 5S BOX WITH SINGLE GANG ADAPTER RING AND 1-1/4" CONDUIT WITH PROTECTIVE BUSHING STUBBED TO NEAREST ACCESSIBLE CEILING SPACE
- TELECOM OUTLET WITH ONE CATEGORY 6 CABLE. PROVIDE 5S BOX WITH SINGLE GANG ADAPTER RING AND 1-1/4" CONDUIT WITH PROTECTIVE BUSHING STUBBED TO NEAREST ACCESSIBLE CEILING SPACE. MOUNTED AT +18", UON.
- TELECOM OUTLET WITH TWO CATEGORY 6 CABLES. PROVIDE 5S BOX WITH SINGLE GANG ADAPTER RING AND 1-1/4" CONDUIT WITH PROTECTIVE BUSHING STUBBED TO NEAREST ACCESSIBLE CEILING SPACE. MOUNTED AT +18", UON.
- WALL PHONE OUTLET WITH ONE CATEGORY 6 CABLE. PROVIDE 5S BOX WITH SINGLE GANG ADAPTER RING AND 1-1/4" CONDUIT WITH PROTECTIVE BUSHING STUBBED TO NEAREST ACCESSIBLE CEILING SPACE. MOUNTED AT +42" AFF

CRETE

'IMUM 'HASE

SHEET INDEX

- E0.1 SYMBOL LIST AND GENERAL NOTES ELECTRICAL E0.2 SCHEDULES - LIGHTING
- E1.1 SITE PLAN ELECTRICAL
- E2.1 FIRST FLOOR PLAN LIGHTING
- E3.1 FIRST FLOOR PLAN POWER & SIGNAL
- E4.1 ENLARGED PLANS AND SECTIONS ELECTRICAL
- E5.1 SINGLE LINE DIAGRAM ELECTRICAL
- E6.1 SCHEDULES ELECTRICAL

			L	UMINAI	RE SCI	HEDUL	E				
TYPE	DESCRIPTION	HOUSING	SHIELDING	MOUNTING	FINISH	UL/IP RATING	DRIVER/POW	LIGHT SOURCE	INPUT WATTS	MFG/CATALOG #	NOTES
'A1'	DECORATIVE LED CYLINDER PENDANT	31-INCH TALL BY 11.5-INCH DIAMETER SPUN ALUMINUM	EXTRUDED WHITE ACRYLIC DIFFUSER	PENDANT	BRUSHED ALUMINUM		INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 3796 LUMENS, 3500K CCT, 80 CRI LED	40.0	MANNING LIGHTING COLUMN RAIL PENDANT OR APPROVED.	
'A2'	DECORATIVE LED CYLINDER PENDANT	22.5-INCH TALL BY 9.25-INCH DIAMETER SPUN ALUMINUM	EXTRUDED WHITE ACRYLIC DIFFUSER	PENDANT	BRUSHED ALUMINUM		INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 2730 LUMENS, 3500K CCT, 80 CRI LED	27.0	MANNING LIGHTING COLUMN RAIL PENDANT OR APPROVED.	
'B1'	DECORATIVE LED WALL SCONCE	16-INCH TALL BY 10-INCH WIDE BY 6-INCH DEEP METAL PAN WITH CROSS ACCENT	WHITE ACYRLIC DIFFUSER	WALL	ALUMINUM		INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 1350 LUMENS, 3500K CCT, 80 CRI	15.0	CAMMAN LIGHTING W600 OR APPROVED.	
'B2'	WALL MOUNT DIRECT/INDIRECT LED CYLINDER	8-INCH TALL BY 4-INCH DIAMETER EXTRUDED ALUMINUM	SOFT DIFFUSED LENS, WIDE FLOOR FOR BOTH DIRECT AND INDIRECT BEAN	WALL	MATTE WHITE		INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 1538 LUMENS DIRECT, 2146 LUMENS INDIRECT, 3500K CCT, 80 CRI	34.0	LUMENWERX AERA 4" CYLINDER OR APPROVED.	
'B3'	DECORATIVE LED WALL SCONCE	12-INCH TALL BY 10-INCH TALL BY 4-INCH DEEP WITH METAL ACCENTS	WHITE ACRYLIC DIFFUSER	WALL	ALUMINUM		INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 1150 LUMENS, 3500K CCT, 80 CRI LED	15.0	CAMMAN LIGHTING W210 LYCOMING OR APPROVED.	
'C1'	2-FOOT BY 4-FOOT RECESSED VOLUMETRIC TROFFER	24-INCH WIDE BY 48-INCH LONG BY 4-INCH TALL	CURVED ACRYLIC LENS	RECESSED	WHITE		INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 3000 LUMENS, 3500K CCT, 80 CRI LED	23.0	LITHONIA ENVEX OR APPROVED.	
'D1'	RECESSED 4-INCH DIAMETER DOWNLIGHT	8.5-INCH WIDE BY 13-INCH LONG BY 6-INCH TALL STEEL		RECESSED	MATTE WHITE BAFFLE		INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 2146 LUMENS, 3500K CCT, 80 CRI LED	20.0	LUMENWERX AERA 4, GOTHAM, PORTFOLIO	PROVIDE WITH WIDE FLOOD BEAM OPTIC
'D2'	RECESSED 2-INCH DIAMETER DOWNLIGHT	6-INCH WIDE BY 13-INCH LONG BY 4-INCH TALL STEEL		RECESSED	MATTE WHITE BAFFLE		INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 961 LUMENS, 3500K CCT, 80 CRI LED	10.0	LUMENWERX AERA 4, GOTHAM, PORTFOLIO	
'F1'	4-INCH DIAMETER CYLINDER TRACK HEAD	4.75-INCH WIDE BY 7-INCH LONG DIE-CAST ALUMINUM	PROVIDE FLOOD BEAM SPREAD LENS	TRACK MOUNTED	BLACK TEXTURE		CONSTANT CURRENT LED DRIVER	NOMINAL 2014 LUMENS, 3500K CCT, 80 CRI LED	21.0	AMERLUX SPEQ-M WITH GES204 TRACK OR APPROVED.	PROVIDE WITH GLOBAL SINGLE CIRCUIT TRACK BLACK FINISH, 44-INCH LONG, MOUNTED TO VERTICAL FACE OF TRUSS
'F2'	4-INCH DIAMETER CYLINDER MONOPOINT	4.75-INCH WIDE BY 7-INCH LONG DIE-CAST ALUMINUM	PROVIDE NARROW FLOOD SPREAD LENS	SUSPENDED MONOPOINT	BLACK TEXTURE		CONSTANT CURRENT LED DRIVER	NOMINAL 2014 LUMENS, 3500K CCT, 80 CRI LED	21.0	AMERLUX SPEQ-M OR APPROVED.	
'G1'	DECORATIVE ROUND SURFACE LED LUMINAIRE	18-INCH WIDE BY 6-INCH TALL	WHITE ACYRLIC DIFFUSER	SURFACE	ALUMINUM		INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 1350 LUMENS, 3500K CCT, 80 CRI LED	25.0	CAMMAN LIGHTING C5305 MORGAN OR APPROVED.	
'R1'	LED VANITY	27-INCH WIDE BY 4.75-INCH TALL BY 3.4-INCH DEEP WITH STEEL MOUNTING	MATTE WHITE ACRYLIC DIFFUSER	WALL	SATIN NICKEL		INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 1872 LUMENS, 3500K CCT, 80 CRI	29.0	OXYGEN MAGENTA OR APPROVED.	
'T1'	SURFACE MOUNTED LED TAPE LIGHT W/ CORNER BENDING FOR HORIZONTAL BENDS	N/A	N/A	SURFACE MOUNTED WITHIN STATUE NICHE	NA		REMOTE DRIVER, REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS; 0-10V DIMMING	NOMINAL 163 LUMENS PER FOOT, 3500K CCT, 90 CRI	39.2	KELVIX JAGGER SERIES OR APPROVED.	2.2 WATTS/FT
'X'	THIN PROFILE UNIVERSAL MOUNT EXIT SIGN	NOMINAL 12"W x 8.5"H x 0.5"D; DIE CAST ALUMINUM HOUSING; CONTRACTOR TO VERIFY BACKBOX REQUIREMENTS DURING ROUGH-IN	NA	REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING CONDITIONS		UL DAMP	INTEGRAL DRIVER		2.0	EVENLITE RAZOR SERIES; ISOLITE, PATHWAY, SURE-LITES TPX, BARRON LIGHTING, OR APPROVED	
'Z1'	LED STRIP LIGHT	48-INCH LONG BY 3-INCH TALL BY 3-INCH WIDE STEEL	FROSTED CURVED LENS	SURFACE	WHITE		INTEGRAL ELECTRONIC DRIVER	NOMINAL 3600 LUMENS, 3500K CCT, 80 CRI	27.0	COLUMBIA MPS, LITHONIA, METALUX	
'SA'	POLE MOUNTED AREA LUMINAIRE	14-INCH WIDE BY 26" LONG BY 7.5-INCH TALL DIE-CAST ALUMINUM HOUSING	SILICONE LENSES	POLE MOUNTED (PROVIDE ROUND POLE MOUNTING ADAPTER)	BLACK	WET	INTEGRAL ELECTRONIC DRIVER		171.0	LITHONIA DSXO SERIES OR APPROVED.	PROVIDE WITH FULL BACKLIGHT CONTROL OPTION AND POLE ADAPTER FOR INSTALLATION ON EXISTING POLE.
'SB'	EXTERIOR WALL SCONCE	9-INCH WIDE BY 8-INCH TALL BY 5.5-INCH DEEP DIE-CAST ALUMINUM HOUSING	GASKETED LENS ITH VIAL COMFORT WIDE OPTICS	WALL	DARK BRONZE	WET	INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 2000 LUMENS, 3000K CCT, 80 CRI LED	15.0	LITHONIA WDGE1 OR APPROVED.	PROVIDE WITH CORROSIVE RESISTANT FINISH.
'SC'	RECESSED 4-INCH DIAMETER DOWNLIGHT	8.5-INCH WIDE BY 13-INCH LONG BY 4-INCH TALL STEEL	GASKETED TRIM WITH WITH WIDE FLOOD OPTICS	RECESSED	MATTE WHITE BAFFLE	WET	INTEGRAL 0-10V DIMMING DRIVER	NOMINAL 1501 LUMENS, 3000K CCT, 80 CRI LED	14.0	LUMENWERX VOILA SEAL, GOTHAM, PORTFOLIO.	PROVIDE WITH CORROSIVE RESISTANT FINISH.
IOTES 1	THIS LUMINAIRE SCHEDULE IS NOT COMPLETE	WITHOUT A COPY OF THE PROJECT MANUAL CONT	AINING THE ELECTRICAL SPECIFICATIONS								

PROVIDE +/- 12 INCH ADJUSTABILITY IN AIRCRAFT CABLE LENGTH WHERE USED. 3

4 COORDINATE ALL CEILING TYPES WITH LUMINAIRE LOCATIONS PRIOR TO ORDERING LUMINAIRES. COORDINATE INSTALLATION WITH REFLECTED CEILING PLAN.

5 SPECIFIED MANUFACTURERS ARE APPROVED TO SUBMIT BID. INCLUSION DOES NOT RELIEVE MANUFACTURER FROM SUPPLYING PRODUCT AS DESCRIBED.

6 PROVIDE SUBMITTALS THAT INCLUDE THE LUMINAIRE, LAMP AND DIMMABLE LED DRIVER INFORMATION OF EACH LUMINAIRE, WITH APPLICABLE OPTIONS CLEARLY CHECKED OR HIGHLIGHTED. SUBMITTALS NOT INCLUDING THIS INFORMATION WILL BE RETURNED AS REJECTED BY THE ENGINEER OF RECORD

7 REMOTE DRIVERS: UL LISTED FOR THEIR APPLICATION. DRIVERS MARKED AS UL RECOGNIZED COMPONENT BUT NOT UL LISTED ARE SUBJECT TO REMOVAL AND REPLACEMENT AT NO COST TO OWNER.

	LIGHTING C	ONTROL MATR	IX OF OPERATIONS: HOLY TRINITY	CHURCH	
SPACE TYPE	OCCUPANCY SENSOR TYPE	ALL LUMINAIRES CONFIGURED FOR CONTINUOUS DIMMING	CONTROL FUNCTIONS	OVERRIDES	REMARKS
ENTRY, CHAPEL, SERVICE HALL, NARTHEX	ULTRASONIC	YES	MANUAL ON WITH WALL SWITCH. AUTO OFF AFTER 20 MINUTES OF UNOCCUPANCY.	POWER LOSS FOR EMERGENCY LUMINAIRES, SWITCH OFF	
RESTROOMS	DUAL TECH, SENSOR SWITCH	NO	AUTO ON WITH SENSOR. AUTO OFF AFTER 20 MINUTES OF UNOCCUPANCY.	POWER LOSS FOR EMERGENCY LUMINAIRES	
MECH / JAN	NONE	NO	MANUAL ON/OFF WITH WALL SWITCH.	POWER LOSS FOR EMERGENCY LUMINAIRES	
CRY ROOM, PRIEST SACRISTY, EAST SACRISTY, WEST SACRISTY	DUAL TECH	YES	MANUAL ON WITH WALL SWITCH. AUTO OFF AFTER 20 MINUTES OF UNOCCUPANCY.		
CONFESSIONALS	SENSOR SWITCH	YES	MANUAL ON WITH SENSOR SWITCH, AUTO OFF AFTER 20 MINUTES OF UNOCCUPANCY.		
NAVE, SANCTUARY	NONE	YES	MANUAL ON/OFF WITH WALL SWITCH.	POWER LOSS FOR EMERGENCY LUMINAIRES	
EXTERIOR	NONE	YES	AUTO ON/OFF WITH ASTRONOMICAL TIMECLOCK.		PROVIDE STANDALONE ROOM CONTROLLER TIMECLOCK
CRY ROOM, PRIEST SACRISTY, EAST SACRISTY, WEST SACRISTY CONFESSIONALS NAVE, SANCTUARY EXTERIOR	DUAL TECH SENSOR SWITCH NONE NONE	YES YES YES YES	MANUAL ON WITH WALL SWITCH. AUTO OFF AFTER 20 MINUTES OF UNOCCUPANCY. MANUAL ON WITH SENSOR SWITCH, AUTO OFF AFTER 20 MINUTES OF UNOCCUPANCY. MANUAL ON/OFF WITH WALL SWITCH. AUTO ON/OFF WITH ASTRONOMICAL TIMECLOCK.	POWER LOSS FOR EMERGENCY LUMINAIRES	PROVIDE STANDALO ROOM CONTROLLE TIMECLOCK

<u>GENERAL NUTES.</u>

1. EMERGENCY LIGHTING DIMS / ON-OFF WITH NORMAL LIGHTING UNLESS NORMAL POWER IS LOST THEN EMERGENCY LUMINAIRES ARE TO TURN ON AND GO TO FULL BRIGHTNESS. 2. EXIT SIGNS TO BE UN-SWITCHED AND ON AT ALL TIMES.

3. COORDINATE CONTROL FUNCTION, TIMING, AND LIGHT LEVELS WITH OWNER PRIOR TO COMMISSIONING.

4. LIGHT LEVELS AND TIMINGS ARE TO COMPLY WITH LOCAL JURISDICTION ENERGY CODES.

5. PROVIDE ALL COMPONENTS REQUIRED FOR A FULLY FUNCTIONAL LIGHTING CONTROL SYSTEM AS LISTED ABOVE. 6. PROVIDE LOW VOLTAGE LIGHITNG CONTROL, UNLESS OTHERWISE NOTED.

7. LIGHTING SYSTEM TESTING: SCOPE OF WORK INCLUDES BOTH INITAL PROGRAMMING OF DEVICES BASED ON THIS SCHEDULE AND/OR SPECIFICATIONS, TESTING OF CONTROLS, AND ADJUSTING OF PROGRAMMED SETPOINTS BASED ON OWNER FEEDBACK AT SUBSTANTIAL COMPLETION. FINAL CALIBRATION OF ALL SENSOR AND DIMMING SETTINGS TO OCCUR AFTER FURNITURE AND FINAL FINISHES HAVE BEEN INSTALLED. 8. LIGHTING CONTROLS TO COMPLY WITH OEESC 2021 - ASHRAE 2019.

2 DIMMING CONTROL PROTOCOL (0-10VDC, LINE VOLTAGE, DALI, ETC.) COMPATIBLE WITH LIGHTING CONTROL SYSTEM AS SPECIFIED AND SHOWN ON DRAWINGS.

○ SHEET KEYNOTES

- 1. LOCATION OF NEW BUILDING MOUNTED UTILITY METER BASE AND INCOMING SERVICE DISCONNECT. SEE SHEET E3.1 AND SINGLE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
- CITY OF BANDON ELECTRICAL DEPARTMENT TO SET NEW PADMOUNTED UTILITY TRANSFORMER AT LOCATION OF EXISTING PULLBOX.
- 3. EXISTING UTILITY POLE AND ASSOCIATED TRANSFORMER (ALONG WITH EXISTING OVERHEAD PRIMARY FEEDER) TO BE REMOVED BY CITY OF BANDON ELECTRICAL DEPARTMENT.
- 4. PROVIDE NEW 3"C. FROM EXISTING CITY OF BANDON ELECTRICAL DEPARTMENT PULLBOX NEAR INTERSECTION OF OREGON AVENUE AND 4TH STREET. PROVIDE TRENCHING AND SAWCUTTING OF PARKING LOT AS REQUIRED.
- EXISTING SITE LIGHTING POLE TO BE RELOCATED TO THE NORTHEAST. (2) EXISTING AREA LUMINAIRES AND BULLHORN SUPPORT TO BE REMOVED FROM TOP OF POLE FOR REPLACEMENT WITH SINGLE, NEW AREA LUMINAIRE.
- 6. NEW LOCATION OF EXISTING SITE LIGHTING POLE. PROVIDE NEW CAST-IN-PLACE REINFORCED CONCRETE BASE. CONTRACTOR TO PROVIDE POLE BASE DESIGN, STAMPED AND SIGNED BY STRUCTURAL PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL.
- INTERCEPT AND EXTEND EXISTING SITE LIGHTING CIRCUIT TO NEW POLE LOCATION AND NEW ASSOCIATED AREA LUMINAIRE.
- 8. EXISTING SITE LIGHTING POLE TO REMAIN. (3) EXISTING AREA LUMINAIRES AND BULLHORN SUPPORT TO BE REMOVED FROM TOP OF POLE FOR REPLACEMENT WITH SINGLE, NEW AREA LUMINAIRE.
- 9. NEW UNDERGROUND PRIMARY ELECTRICAL SERVICE TO BE EXTENDED FROM EXISTING POWER PULLBOX W00496.
- 10. PROVIDE NEW 2" BELOW GRADE TELECOM SERVICE CONDUIT (IN SHARED TRENCH, WITH MINIMUM 12" SPACING FROM POWER UTILITY CONDUIT) FROM EXISTING PROVIDER FACILITY TO EXISTING PEDESTAL ON SITE.
- 11. PROVIDE NEW 2"C. BELOW GRADE FROM TELECOM UTILITY PEDESTAL TO NEW WALL-MOUNTED RACK LOCATION IN BUILDING.

SITE PLAN -ELECTRICAL

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GENERAL SHEET NOTES

○ <u>SHEET KEYNOTES</u>

1 TYPICAL NICHE TAPE LIGHTING

0' <u>4' 8' 16'</u> 1/4" = 1'-0"

1 SINGLE-LINE DIAGRAM - ELECTRICAL NO SCALE

S=Service secondary X=Seperately derived system
600C TWO 3" DIAMETER EMPTY CONDUIT WITH PULL CORD
6003 2 SETS OF (3 -350 kcmil CU, 1 #1 CU GND., IN 2 1/2" C.)

○ <u>SHEET KEYNOTES</u>

- 1. CURRENT TRANSFORMER/TERMINAL CABINET PER POWER COMPANY REQUIREMENTS
- PROVIDE 750VA EMERGENCY LIGHTING INVERTER, 120V INPUT / 120V OUTPUT, WITH (4) DISTRIBUTION BREAKERS. BASIS OF DESIGN: MYERS ILLUMINATOR EM.

Incoming Electrical Service Division of Responsibility

	Contractor	<u>Utility</u>	Contacts:
Primary Conduit	х		Power Utility Jim Wickstro
Primary Conductors		Х	City of Bando PO Box 67
Trenching and Backfill	х		Bandon, OR Phone:(541)
Transformer		Х	Email: electr
Transformer Pad / Vault	х		
Bollards	х		
Transformer Connections		Х	
Secondary Conduit	х		
Secondary Conductors		Х	
C/T Enclosure	х		
C/T's		Х	
Meter Base	х		
Meter		Х	
Electric Room Door Lock Box (obtain from power company)	х		
Reported Fault Current at Transformer		Х	
Notes:	1		•

1. Contact and coordinate all requirements and responsibilities with serving utility companies prior to submitting bid.

2. All service installation work shall be in strict compliance with the requirements of the serving utilities.

Disclaimer: Interface Engineering, Inc. has contacted the utilities but has not received in writing the final requirements from the power utility. These drawings indicate our best estimation of their requirements. Prior to bid, contact the utility and obtain in writing their requirements.

Battery Inverter: INV Location: MECH / JAN 05 Service: 120 Supply From: A СКТ **Circuit Description** 1 L - EGRESS 2 SPARE BREAKER 3 SPARE BREAKER 4 SPARE BREAKER

97411 1) 347-2437 x 233 tric@cityofbandon.org

V, 1 PH, 2 WIRE	A.I.C. Rating: 0 A Rating: 1000 kVA							
	Туре	C.B. A/Pole	Note	Load				
	L	20 A/1		575.0				
		20 A/1		0.0				
		20 A/1		0.0				
		20 A/1		0.0				
	Pa	anel Conne	ected Load:	575.0				
			Amps	5 A				
		Total Don	nand Load	718.8				

MECHANICAL EQUIPMENT CONNECTION SCHEDULE												
					LOAD(CIRCUIT	WIRE /		
SYMBOL	DESCRIPTION	LOCATION	VOLTS	PH	VA) `	HP	MCA	MOCP	NUMBER	CONDUIT	NOTES	
CU-1	CONDENSING UNIT	EXTERIOR	240	1	23520.0			175	A-39,41	1502		
CU-2	CONDENSING UNIT	EXTERIOR	240	1	3600.0			20	A-11,13	202		
EF-1	EXHAUST FAN	MECH ROOM	120	1	96.0	1/12		15	A-7	202		
EF-2	EXHAUST FAN	WOMEN'S RESTROOM	120	1	96.0	1/12		15	A-7	202		
EF-3	EXHAUST FAN	MEN'S RESTROOM	120	1	96.0	1/12		15	A-7	202		
EF-4	EXHAUST FAN	SERVICE HALL	120	1	1800.0	1		30	A-9	202		
EWH-1	ELECTRIC WATER HEATER	MECH ROOM	240	1	5040.0			30	A-1,3	302		
EWH-2	ELECTRIC WATER HEATER	WEST SACRISTY	120	1	1440.0			20	A-5	502		
FC-1	FAN COIL	MECH ROOM	240	1	38640.0			200	A-40,42	1502		
FC-2	FAN COIL	MECH ROOM	240	1	8400.0			45	A-15,17	402		
SENERAL MECHANICAL EQUIPMENT CONNECTION NOTE:												
	A THE ADOVE INFORMATION IS FOR A SPECIFIC MANUFACTURED ACTUAL MANUFACTURED FOR FOURMENT MAY BE DIFFERENT COORDINATE WITH MECHANICAL FOURDMENT											

A. THE ABOVE INFORMATION IS FOR A SPECIFIC MANUFACTURER. ACTUAL MANUFACTURER FOR EQUIPMENT MAY BE DIFFERENT. COORDINATE WITH MECHANICAL EQUIPMENT SUBMITTALS FOR LOADS AND OVER CURRENT PROTECTION REQUIREMENTS PRIOR TO INSTALLATION OF WIRING.

B. MOCP = MAXIMUM OVER CURRENT PROTECTION. MCA = MINIMUM CIRCUIT AMPACITY

C. PROVIDE DISCONNECTING MEANS FOR EACH ITEM OF EQUIPMENT LISTED IN THE SCHEDULE ABOVE, EXCEPT AS SPECIFICALLY NOTED OTHERWISE IN SCHEDULE NOTES, BELOW.

MECHANICAL EQUIPMENT CONNECTION SCHEDULE NOTES

1 XX 2 XX

WIRE/CONDUIT SCHEDULE

202	2 #12 CU, 1 #12 CU GND., IN 3/4" C.
302	2 #10 CU, 1 #10 CU GND., IN 3/4" C.
402	2 #8 CU, 1 #10 CU GND., IN 3/4" C.
500	

502 2 #6 CU, 1 #10 CU GND., IN 3/4" C.

1502 2 #1/0 CU, 1 #6 CU GND., IN 1-1/2" C.

MAIN LUG ONLY BUS AMPACITY: 600 A EQUIPMENT RATING: 120/240 V, 1PH, 3 WIR FOR AIC RATING SEE ONE-LINE DIAGRA			VIRE RAM	MOUNTING: SURFACE Accessories: ENCLOSURE: TYPE 1 E LOCATION: M SUPPLIED FROM:											
							Load	d (VA)							
скт	Description/Location	Туре	С.В.	Pole	Note	A	в	A	в	Note	Pole	C.B.	Туре	Description/Location	скт
1	EWH-1	Н	30 A	2		2,520		540			1	20 A	R	R - SANCTUARY, PULPIT	2
3							2,520		540		1	20 A	R	R - SANCTUARY, ALTAR	4
5	EWH-2	Н	20 A	1		1,440		360			1	20 A	R	R - EAST SACRISTY	6
7	EF-1, EF-2, EF-3	Motor	15 A	1			288		540		1	20 A	R	R - WEST SACRISTY	8
9	EF-4	Motor	30 A	1		1,800		180			1	20 A	R	R - SPEAKER HEAD END	10
11	CU-2	Motor	20 A	2			1,800		575		1	20 A	Spare	BATTERY INVERTER 'INV'	12
13						1,800		797			1	20 A	L	L - SOUTH	14
15	FC-2	Н	45 A	2			4,200		1,245		1	20 A	L	L - NORTH	16
17						4,200		360			1	20 A	R	R - CEILING PROJECTORS	18
19	R - CHAPEL	R	20 A	1			900		900		1	20 A	R	R - TRUSS LIGHTING	20
21	R - RESTROOMS, MECH, CRY	R;	20 A	1		1,080		0			1	20 A		SPARE BREAKER	22
23	R - IT RACK	R	20 A	1			360		0		1	20 A		SPARE BREAKER	24
25	R - MECH RM	R	20 A	1		360		0			1	20 A		SPARE BREAKER	26
27	R - DRINKING FOUNTAIN	R	20 A	1			180		0		1	20 A		SPARE BREAKER	28
29	R - ENTRY, NARTHEX	R	20 A	1		720		0			1	20 A		SPARE BREAKER	30
31	R - SACRISTY, CONFESS	R	20 A	1			900				1			BUSSED SPACE	32
33	R - NAVE EAST	R	20 A	1		1,080					1			BUSSED SPACE	34
35	R - NAVE WEST	R	20 A	1			720				1			BUSSED SPACE	36
37	R - CHOIR	R	20 A	1		180					1			BUSSED SPACE	38
39	CU-1	Motor	175 A	2			11,760		19,320		2	175 A	Н	FC-1	40
41						11,760		19,320							42
	Total Connected load Ph. A					404 A		Par	nel	95.2 k	VA			396.9 A	
	Total Connected load Ph. B					390 A		Total D	emand	101.8	kVA			424.1 A	
	Total Connected load Ph. C			-		0 A					_				
Notes:	Definition of														
Load T Motor (ype Definitions: 125% largest Motor + 100% remainin	g motors)		K = Ki	tchen (I	Demand	as per N	IEC Tabl	e	C = C	Continu	ous Load	(125%)	X = X-Rays (Demand per NEC 660.6)	
R = Receptacles (to 10kVA100%, over 10 kVA 50%)				G = G	eneral l	_oad (No	n-contin	uous) (1	00%)	L	L = Lighting (125%) $H = Heating (100%)$				
E = Exis	sting Load 30-day metered (125%)		ī	EL = E	levator	(Deman	d as per	NEC Ta	able	W =	Water	r Heater (125%)	EV = Electric Vehicle Changer	
Load Type Connected Load			NEC Demand Factor NEC Deman					emand L	oad	d Panel Totals					

ΙN	otes:	
1		

Load Type Definition	IS:		· ·					
Motor (125% largest M	/lotor + 100% remaining motors)	K = Kitchen (Demand as p	C = Con	tinuous Load (125%)	X = X-Rays (Demand per NEC 660.6)			
R = Receptacles (to 10	0kVA100%, over 10 kVA 50%)	G = General Load (Non-co	ontinuous) (100%)	L =	Lighting (125%)	H = Heating (Η = Heating (100%)	
E = Existing Load 30-c	day metered (125%)	EL = Elevator (Demand as	s per NEC Table	W = W	/ater Heater (125%)	Vehicle Changer		
Load Type	Connected Load	NEC Demand Factor	NEC Demand	Load	Panel Totals		otals	
Н	53520.0	100.00%	53520.0					
L	2617.4	125.00%	3271.7		Total Con	nected Load:	95245.4 VA	
Motor	29208.0	120.13%	35088.0		Total N	NEC Demand:	101779.7 VA	
R	9900.0	100.00%	9900.0		Total Conne	cted Current:	396.9 A	
Power	0.0	0.00%	0.0		Total NEC Den	nand Current:	424.1 A	

