ABBREVIATIONS

ABBREV1

NOTE: ABBREVIATIONS MAY OR MAY NOT HAVE PERIODS, BUT SHALL BE READ AS SAME.

A.B.	ANCHOR BOLT
A.B.C.	AGGREGATE BASE COURSE
ACI	AMERICAN CONCRETE INSTITUTE
A/C	AIR CONDITIONER
A.F.F.	ABOVE FINISHED FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ALT.	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APA	AMERICAN PLYWOOD ASSOCIATION
ARCH'L	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
A.W.T.S.	AUTOMATIC WELDED THREADED STUDS
BM	BEAM
B.F.F	BELOW FINISHED FLOOR
BLK	BLOCK
B.O.B.	BOTTOM OF BEAM
B.O.D.	BOTTOM OF DECK
B.O.F.	BOTTOM OF FOOTING
BRG	BEARING
C	CAMBER
C.C.	CENTERLINE TO CENTERLINE
CFS	COLD FORMED STEEL
C.G.	CENTER OF GRAVITY
C.I.P.	CAST IN PLACE
C.L.	CENTERLINE
C.L.B.	CENTERLINE OF BEAM
C.L.C.	CENTERLINE OF COLUMN
C.L.F.	CENTERLINE OF FOOTING
C.L.W.	CENTERLINE OF WALL
CLR	CLEAR
CONC	CONCRETE
CONC C.J.	CONCRETE CONTROL JOINT
CONC S.J.	CONCRETE SAWCUT JOINT
C.M.U.	CONCRETE MASONRY UNIT
CONN	CONNECTION
CONT	CONTINUOUS
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
D.F. (D.F.L.)	DOUGLAS FIR LARCH
DL	DEAD LOAD
DIA	DIAMETER
DN	DOWN
DWG(S)	DRAWING(S)
E.C.	END TO CENTERLINE
E.E.	END TO END
E.O.S.	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
EXP. BOLT (E.B.)	EXPANSION BOLT
EXP. JT (E.J.)	EXPANSION JOINT
E.W.	EACH WAY
(E)	EXISTING
F.F.	FINISHED FLOOR
F.O.M.	FACE OF MEMBER
F.O.S.	FACE OF STEEL
F.O.W.	FACE OF WALL
GA	GAGE (UNIT OF MEASUREMENT)
GALV	GALVANIZED
G.S.N.	GENERAL STRUCTURAL NOTES
GLB (GLULAM)	GLUED-LAMINATED BEAM
H.F.	HEM FIR
HORIZ	HORIZONTAL REINFORCING
H.S.	HEADED STUDS
IBC	INTERNATIONAL BUILDING CODE
ICC	INTERNATIONAL CODE COUNCIL
ICF	INSULATED CONCRETE FORMS
I.F.W.	INSIDE FACE OF WALL
I.O.D.	INTERPRETATION OF DRAWINGS
JST	JOIST
K(KIP)	1000 POUNDS
KLF	KIPS PER LINEAR FOOT
LBS (#)	POUNDS
LGR	LEDGER
LGS	LIGHT GAGE STEEL
LGSEA	LIGHT GAGE STEEL ENGINEERS ASSOCIATION
L.O.D.	LOCATION OF DETAILS
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
MAS	MASONRY
MAS C.J.	MASONRY CONTROL JOINT
MAX	MAXIMUM
MBMA	METAL BUILDING MANUFACTURERS ASSOCIATION
MECH'L	MECHANICAL
MFR'D	MANUFACTURED
MFR('S)	MANUFACTURER('S)
MIN	MINIMUM
N/A	NOT APPLICABLE
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.F.W.	OUTSIDE FACE OF WALL
OPP	OPPOSITE
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PCI	PRECAST/PRESTRESSED CONCRETE INSTITUTE
P.C.	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PLF	POUNDS PER LINEAR FOOT
±	PLUS OR MINUS
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POST-TENSIONED
PTI	POST-TENSIONING INSTITUTE
REINF	REINFORCING
SDI	STEEL DECK INSTITUTE
SLH	SHORT LEG HORIZONTAL
SLV	SHORT LEG VERTICAL
SJI	STEEL JOIST INSTITUTE
SIM	SIMILAR
SQ.	SQUARE
SSMA	STEEL STUD MANUFACTURERS ASSOCIATION
STD	STANDARD
STL	STEEL
TL	TOTAL LOAD
T.O.B.	TOP OF BEAM
T.O.C.T.	TOP OF CONCRETE TOPPING
T.O.D.	TOP OF DECK
T.O.F.	TOP OF FOOTING
T.O.L.	TOP OF LEDGER
T.O.M.	TOP OF MASONRY
T.O.P.	TOP OF PLATE
T.O.P.C.	TOP OF PRECAST CONCRETE
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TPI	TRUSS PLATE INSTITUTE
TYP	TYPICAL
T&G	TONGUE AND GROOVE
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL REINFORCING
WCLA	WEST COAST LUMBER ASSOCIATION
WCLIB	WEST COAST LUMBER INSPECTION BUREAU
W.W.F.	WELDED WIRE FABRIC
WWPA	WESTERN WOOD PRODUCTS ASSOCIATION
W/C	WATER TO CEMENT RATIO
W/O	WITHOUT

GENERAL STRUCTURAL NOTES

Applies unless noted otherwise on drawings

BUILDING CODE:

2021 EDITION OF THE INTERNATIONAL BUILDING CODE AND STANDARDS REFERENCED THEREIN, WITH CITY OF PUYALLUP, WA AMENDMENTS.

LOADS:

ROOFS:

ROOF LIVE LOAD = 20 PSF (NON-REDUCIBLE).
ROOF DEAD LOAD = 18 PSF.
GROUND SNOW LOAD, Pg = 25 PSF.

LATERAL:

WIND:
BASIC DESIGN WIND SPEED (3-SECOND GUST), V(ult) = 110 MPH.
RISK CATEGORY, II.
EXPOSURE C.

SEISMIC:

RISK CATEGORY, II.
SEISMIC IMPORTANCE FACTOR, I = 1.0.
MAPPED SHORT PERIOD SPECTRAL ACCELERATION, Ss = 1.26.
MAPPED ONE SECOND SPECTRAL ACCELERATION, S1 = 0.435.
SOIL SITE CLASS, D.
DESIGN SHORT PERIOD SPECTRAL ACCELERATION, Sds = 1.008.
SEISMIC DESIGN CATEGORY, D.

POST-INSTALLED ANCHORS:

GENERAL:

ALL POST-INSTALLED ANCHORS SHALL UTILIZE THE EXACT ANCHORAGE SYSTEM SPECIFIED IN THE STRUCTURAL DETAILS. WHERE ANCHORAGE "PER GSN" IS SPECIFIED, SEE BELOW. ANCHORAGE PRODUCTS MAY NOT BE SWAPPED BETWEEN MANUFACTURERS WITHOUT APPROVAL OF THE ENGINEER OF RECORD. ALL REQUESTS FOR EQUIVALENT ANCHORAGE PRODUCTS MUST BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO BEING INSTALLED IN THE FIELD.

UNLESS NOTED OTHERWISE POST INSTALLED ANCHORS SHALL NOT BE INSTALLED UNTIL CONCRETE OR MASONRY MATERIAL HAVE REACHED DESIGN STRENGTH AND HAVE BEEN FULLY CURED FOR A MINIMUM OF 21 DAYS.

MANUFACTURER'S INSTALLATION TRAINING AND CERTIFICATE ARE REQUIRED FOR ALL INSTALLERS OF POST-INSTALLED ANCHORS. ALL ANCHORS SHALL BE INSTALLED WITH STEEL WASHERS AT SHORT SLOTTED HOLES IN ACCORDANCE WITH THE MANUFACTURERS PRINTED INSTALLATION INSTRUCTIONS (MPII). ALL ANCHORS SHALL TIGHTENED/TORQUED AS REQUIRED PER MANUFACTURERS INSTRUCTIONS AND EVALUATION REPORTS.

POST-INSTALLED ANCHORS IN MASONRY:

ALL EXPANSION TYPE ANCHORAGE FOR MASONRY INSTALLATION ONLY SHALL BE PER HILTI 'KWIK BOLT-TZ2' EXPANSION ANCHOR PER ICC ESR-4561 OR APPROVED ICC EQUIVALENT. ALL EPOXY ADHESIVE TYPE ANCHORAGE FOR MASONRY INSTALLATION ONLY SHALL BE PER HILTI 'HIT-HY 270' ADHESIVE ANCHOR ICC ESR-4143 OR APPROVED ICC EQUIVALENT. ALL SCREW TYPE ANCHORAGE FOR MASONRY INSTALLATION ONLY SHALL BE PER HILTI 'KWIK HUS-EZ' SCREW ANCHOR PER ICC ESR-3056 OR APPROVED ICC EQUIVALENT.

STRUCTURAL STEEL:

GENERAL:

ALL STEEL CONSTRUCTION SHALL BE PER THE REFERENCED AISC STEEL CONSTRUCTION MANUAL. ALL MISCELLANEOUS STEEL, INCLUDING THREADED ROD STEEL, UNLESS NOTED OTHERWISE SHALL BE ASTM A36 (Fy = 36 KSI).

UNLESS NOTED OTHERWISE, ALL BOLTS SHALL BE ASTM A307. A325 BOLTS MAY BE SUBSTITUTED FOR A307 BOLTS AT THE CONTRACTOR'S OPTION, REVERSE SUBSTITUTION IS NOT PERMITTED. ALL BOLTS SHALL BE INSTALLED WITH STEEL WASHERS AT SHORT SLOTTED HOLES USING SNUG TIGHT INSTALLATION, UNLESS NOTED OTHERWISE.

QUICKFRAMES ADJUSTABLE STEEL ROOF FRAMES:
(ALTERNATE TO TYPICAL STEEL OPENING FRAMES)

UNLESS SPECIFICALLY EXCLUDED ON PLAN, CONTRACTOR MAY PROVIDE SEALED SHOP DRAWINGS AND CALCULATIONS FOR 16, 12 OR 10 GAGE (50 KSI) QUICKFRAMES ADJUSTABLE FRAMES AT THE MECHANICAL ROOFTOP UNITS AND/OR ROOF PENETRATIONS. (NOTE: THIS MUST BE SUBMITTED AS A DEFERRED SUBMITTAL PER REQUIREMENTS BELOW.)

THESE QUICKFRAMES, OR THE OPENING THEY SPAN, SHALL NOT BE PLACED SO AS TO INTERFERE WITH THE REQUIREMENTS OF OTHER STRUCTURAL ELEMENTS (I.E. DRAG STRUTS, BEAMS, PURLINS, SUBPURLINS, ANGLES, ETC.) WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.

FOR ADDITIONAL INFORMATION AT OPENINGS IN STEEL ROOF FRAMING, SEE TYPICAL DETAILS.

QUICKFRAMES ADJUSTABLE FRAMES SHALL BE AS MANUFACTURED BY QUICKFRAMES USA, LLC, MESA, ARIZONA. IT SHALL BE INSTALLED PER ALL MANUFACTURER'S RECOMMENDATIONS.

WOOD:

GENERAL:

WOOD FRAMING MEMBERS SHALL NOT BE NOTCHED OR DRILLED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER THROUGH THE ARCHITECT. STRUCTURAL WOOD FRAMING MEMBERS SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19% WHEN DELIVERED TO THE JOB SITE. ALL NAILING NOT NOTED SHALL BE PER TYPICAL DETAIL AND COMMON NAIL DIAMETER TABLE BELOW. ALL BOLTING SHALL BE PER STRUCTURAL STEEL SECTION. WOOD CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. OR OTHER MANUFACTURER WITH CURRENT AND EQUIVALENT ICC APPROVAL. WHERE "TYPE" OF CONNECTOR IS INDICATED ON THE DRAWINGS, THE CONNECTOR AND ATTACHMENT SHALL BE PER THE MAXIMUM MODEL NUMBER BASED ON THE SIZE OF THE MEMBERS CONNECTED.

NAIL TYPE	REQ'D DIA	REQ'D GA	LENGTH	NAIL TYPE	REQ'D DIA	REQ'D GA	LENGTH
6d	0.113"	11 1/2	2"	12d	0.148"	9	3 1/4"
8d	0.131"	10 1/4	2 1/2"	16d	0.162"	8	3 1/2"
10d	0.148"	9	3"	20d	0.192"	6	4"

SAWN LUMBER:

FRAMING LUMBER SHALL COMPLY WITH THE REFERENCED EDITION OF THE GRADING RULES OF THE WWPA OR THE WCLIB. ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY AND SHALL HAVE MINIMUM PROPERTIES WHICH MEET OR EXCEED THE FOLLOWING WOOD TYPES:

	WOOD TYPE
BEAMS	
- WIDTH 4" OR MORE	D.F.L. #1

GLUED-LAMINATED BEAMS (GLULAM/GLB):

ALL STRUCTURAL GLUED-LAMINATED BEAMS SHALL MEET THE COMBINATION REQUIREMENTS FROM THE REFERENCED AITC-117 OR NATIONAL DESIGN SPECIFICATION.

BEAMS AT SINGLE SPAN CONDITIONS SHALL BE 24F-V4 DF. BEAMS CONTINUOUS OVER SUPPORTS (MULTI SPAN OR CANTILEVERED) SHALL BE 24F-V8 DF WITH THE FOLLOWING MINIMUM PROPERTIES:
- Fb = 2,400 PSI
- Fv = 265 PSI
- Fc (PERPENDICULAR) = 650 PSI
- E = 1,800,000 PSI

ALL BEAMS SHALL BE FABRICATED USING WATERPROOF GLUE. FABRICATION AND HANDLING PER REFERENCED AITC AND WCLA STANDARDS. SUPPLIER SHALL VERIFY WITH ARCHITECT THE GRADE FINISH OF ALL ARCHITECTURALLY EXPOSED FRAMING MEMBERS. BEAMS TO BEAR GRADE STAMP AND AITC STAMP AND CERTIFICATE. CAMBER AS SHOWN ON DRAWINGS. STANDARD CAMBER (STD) IS DEFINED AS RADIUS OF CURVATURE EQUAL TO 3,500 FEET MINIMUM.

ALL STRUCTURAL GLUED-LAMINATED BEAMS RATED FOR FIRE ENDURANCE SHALL MEET THE REQUIREMENTS OF CHAPTER 16 OF THE AF & PA NATIONAL DESIGN SPECIFICATION. MEMBERS RATED FOR 1-HOUR FIRE ENDURANCE SHALL HAVE THE OUTERMOST INTERIOR CORE LAMINATION SUBSTITUTED WITH AN ADDITIONAL TENSION LAMINATION ON THE TENSION SIDE FOR UNBALANCED (SIMPLE SPAN) BEAMS AND ON BOTH SIDES FOR BALANCED (CANTILEVER) BEAMS.

DEFERRED SUBMITTALS:

SHOP DRAWING SUBMITTALS REQUIRED BY THESE GENERAL STRUCTURAL NOTES WHICH CONTAIN DESIGN CALCULATIONS SEALED BY A REGISTERED ENGINEER OTHER THAN THE ENGINEER OF RECORD, SHALL BE SUBMITTED DURING CONSTRUCTION TO THE CITY FIELD INSPECTOR FOR REVIEW. THE DOCUMENTS WILL FIRST BE REVIEWED BY THE ENGINEER OF RECORD AND DETERMINED TO BE IN GENERAL CONFORMANCE WITH THE BUILDING DESIGN. THESE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. THE FOLLOWING ITEMS SHALL BE SUBMITTED PER THIS SECTION:

QUICKFRAMES ADJUSTABLE ROOF FRAMES BELOW ROOF TOP MECHANICAL UNITS OR OPENINGS

SHOP DRAWINGS:

SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS. CONTRACTOR SHALL PROVIDE A MINIMUM OF 2 HARD COPY SUBMITTAL SETS OF EACH ITEM TO CTS FOR REVIEW, UNLESS NOTED OTHERWISE IN ARCHITECTURAL SPECIFICATIONS. ELECTRONIC SUBMITTALS ARE ALSO ACCEPTABLE.

THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTAL. ITEMS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS SHALL BE FLAGGED UPON CONTRACTOR'S REVIEW.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS.

MANUFACTURER OR FABRICATOR SHALL CLOUD ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM CONTRACT DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, APPROVALS AND THE COORDINATION OF THE WORK WITH ALL RELATED TRADES AND SUPPLIERS. ANY OF THE AFOREMENTIONED WHICH ARE NOT CLOUDED OR FLAGGED BY SUBMITTING PARTIES, SHALL NOT BE CONSIDERED APPROVED AFTER ENGINEER'S REVIEW, UNLESS NOTED ACCORDINGLY.

THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW.

THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT SHALL NOT BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ITEMS ARE CONSTRUCTED TO CONTRACT DOCUMENTS.

THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING AUTHORITY.

REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR CORRECTNESS SHALL REST WITH THE CONTRACTOR.

GENERAL NOTES:

THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. EXCEPT WHERE NOTED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS).

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE REFERENCED EDITION AND/OR ADDENDA. ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A REGISTERED ENGINEER RECOGNIZED BY THE BUILDING CODE JURISDICTION OF THIS PROJECT.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS. BUILDING DIMENSIONS AND ELEVATIONS, WHERE SHOWN, WERE PROVIDED BY THE ARCHITECT AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND COORDINATE ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK. ANY DISCREPANCIES SHALL BE RESOLVED THROUGH THE ARCHITECT. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL ITEMS WITH THE APPROPRIATE TRADE DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.

CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

OPTIONS AND SUBSTITUTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF AN OPTION OR SUBSTITUTION IS CHOSEN, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, APPROVALS AND THE COORDINATION OF THE WORK WITH ALL RELATED TRADES AND SUPPLIERS.

SPECIAL INSPECTION – STRUCTURAL ONLY:

SPECIAL INSPECTIONS SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A STATE REGISTERED STRUCTURAL ENGINEER WHO IS FAMILIAR WITH THE STRUCTURAL DESIGN OF THIS PROJECT. THE SUPERVISING STRUCTURAL ENGINEER SHALL SEAL THE SPECIAL INSPECTION CERTIFICATE.

SPECIAL INSPECTION IS TO BE PROVIDED FOR THE ITEMS LISTED BELOW IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE BUILDING JURISDICTION. "SPECIAL STRUCTURAL INSPECTION" SHALL NOT RELIEVE THE OWNER OR THEIR AGENT FROM REQUESTING THE BUILDING JURISDICTION INSPECTIONS REQUIRED BY SECTION 110 OF THE INTERNATIONAL BUILDING CODE. SPECIAL INSPECTION IS REQUIRED PER CHAPTER 17 FOR THE FOLLOWING:

SPECIAL CASES:

1. EXPANSION, EPOXY, ADHESIVE, AND SCREW ANCHORS: DURING THE PLACEMENT OF ALL ANCHORS SHOWN ON STRUCTURAL DRAWINGS. ADDITIONAL INSPECTIONS REQUIRED FOR REPAIR DETAILS SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
A. INSPECTION OF HOLE DIAMETER, HOLE DEPTH AND DRILL BIT CONFORMANCE.
B. INSPECTION OF HOLE CLEANING WITH WIRE BRUSH AND COMPRESSED AIR.
C. INSPECTION OF ANCHOR INSTALLATION USING SPECIFIED PRODUCT AND MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.
D. INSPECTION OF EXPANSION ANCHORS SHALL INCLUDE THE VERIFICATION OF THE TIGHTENING TORQUE THAT IS SPECIFIED BY THE ANCHOR MANUFACTURER.

DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:

A. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATION.
B. THE SPECIAL INSPECTOR IS NOT AUTHORIZED TO APPROVE DEVIATIONS FROM THE DESIGN DRAWINGS OR SPECIFICATIONS, AND ALL DEVIATIONS MUST BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO PROCEEDING WITH THE WORK. ALL REQUESTS FOR DEVIATIONS SHALL BE INITIATED BY THE CONTRACTOR VIA WRITTEN REQUEST FOR INFORMATION (RFI).
C. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE ENGINEER OR ARCHITECT OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.
D. THE CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR ACCESS TO ALL ITEMS REQUIRING SPECIAL INSPECTION. ACCESS SHALL BE PROVIDED BY IN-PLACE LADDERS, SCAFFOLDS, LIFTS AND/OR OTHER EQUIPMENT OPERATED BY THE CONTRACTOR'S PERSONNEL AS REQUIRED FOR SAFE OBSERVATION. THE SPECIAL INSPECTOR IS NOT RESPONSIBLE OR AUTHORIZED TO OPERATE CONTRACTOR'S EQUIPMENT.
E. UPON COMPLETION OF THE ASSIGNED WORK THE ENGINEER OR ARCHITECT IN CHARGE OF SPECIAL INSPECTIONS SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF THEIR KNOWLEDGE THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE.

Approval of submitted plans is not an approval of omissions or oversights by this office or non compliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable codes and regulations of the local government.

The approved construction plans, documents, and all engineering must be posted on the job at all inspections in a visible and readily accessible location.

Full sized legible color plans are required to be provided by the permitee on site for inspection.

Separate Electrical Permit is required with the Washington State Department of Labor & Industries.

https://lni.wa.gov/licensing-permits/electrical/electrical-permits-fees-and-inspections

or call for Licensing Information:
1-800-647-0982

City of Puyallup
Building
REVIEWED
FOR
COMPLIANCE
SKinnear
05/20/2025
1:14:37 PM
CITY OF PUYALLUP · STATE OF WASHINGTON

FOR ADDITIONAL INFORMATION SHOWN BUT NOT NOTED, SEE GENERAL STRUCTURAL NOTES ON SHEET S101 AND TYPICAL DETAIL SHEETS.

THESE DRAWINGS/CALCULATIONS ARE CONSIDERED PRELIMINARY -NOT FOR CONSTRUCTION OR RECORDING UNLESS THE STRUCTURAL ENGINEER OF RECORD'S SEAL IS AFFIXED WITH WRITTEN SIGNATURE.

PROJECT NUMBER	24-1374	PROJECT MANAGER	TRM
PROJECT ENGINEER	JKC	PROJECT DRAFTER	PET

CARUSO TURLEY SCOTT structural engineers
1215 West Rio Salado Parkway
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BELLEVUE, WA 98006
WWW.T-MOBILE.COM

SOUTH MERIDIAN & 43RD AVE SE
4227 S MERIDIAN SUITE E
PUYALLUP, WA 98373

DESIGN TYPE: E1Y
PROJECT TYPE: CORP NEW

8022

PROTOTYPE RELEASE: Q3 2024

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

PRCTI20241902

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Design@FuzionAD.com
www.FuzionAD.com

TROY TURLEY
STATE OF WASHINGTON
05-07-25

##	DESCRIPTION	DATE

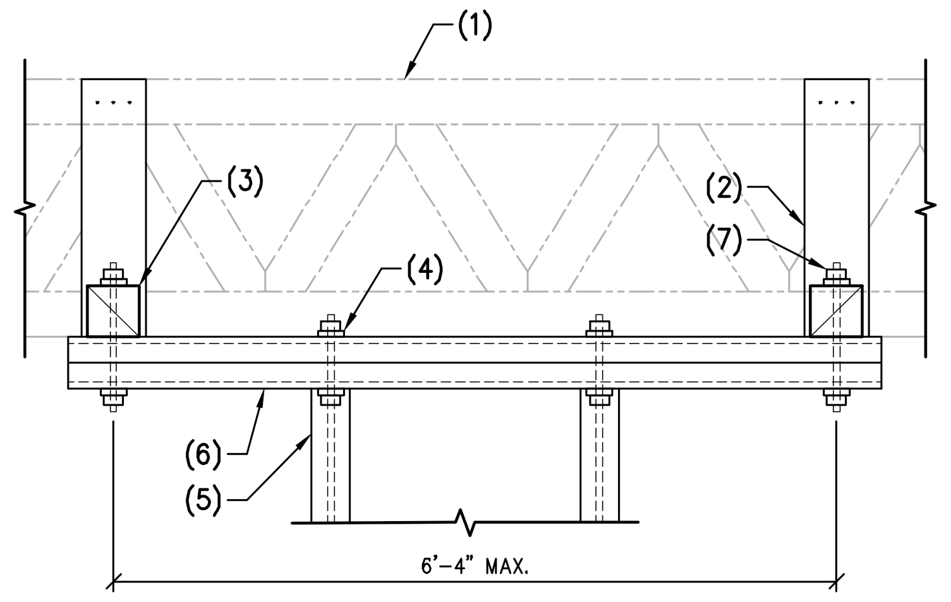
DATE: 11.18.2024
DRAWN BY: PET

G.S.N.

S101

NOTES:

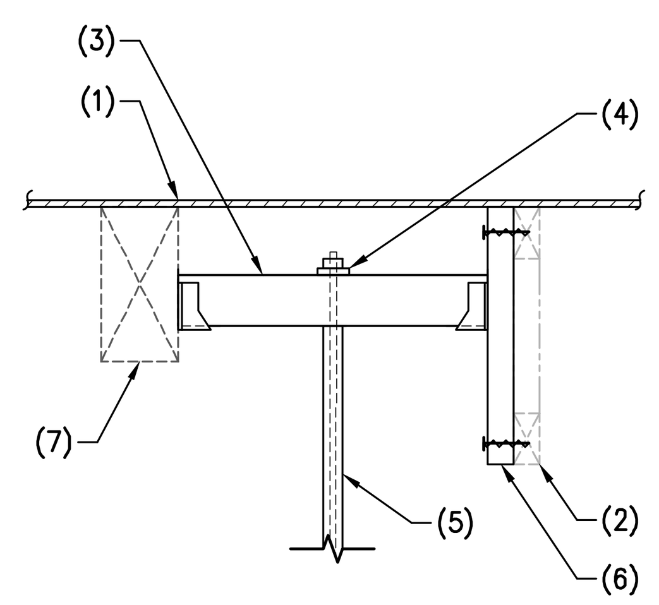
1. EXISTING WOOD TRUSS.
2. 2x6 FLAT PER DETAIL 12.
3. 4x4 WOOD BLOCKING PER DETAIL 12.
4. 1/4"x2"x2" PLATE WASHER AND NUTS TOP AND BOTTOM.
5. THREADED ROD WITH STIFFENER ROD REINFORCEMENT PER DETAIL 04. SEE DETAIL 08 FOR SPLAY WIRE TOP CONNECTION.
6. UNISTRUT P1001.
7. 3/8" DIA. BOLT WITH 1/4"x2"x2" PLATE WASHER AND NUTS TOP AND BOTTOM.



16 ALTERNATIVE THREADED ROD TOP CONNECTION
ISSUED AS SSK1 ON 5/1/25 — 24-1269 — NO SCALE

NOTES:

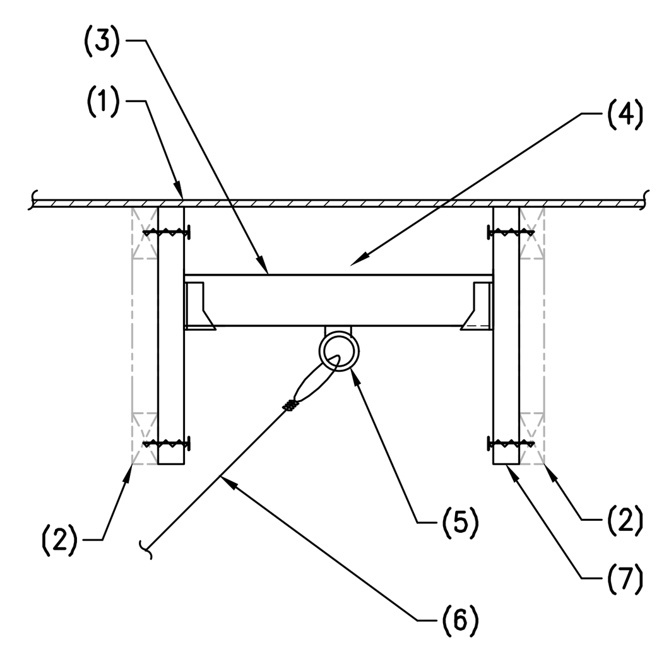
1. EXISTING PLYWOOD SHEATHING.
2. EXISTING WOOD TRUSSES.
3. 4x4 WOOD BLOCKING WITH SIMPSON LUS TYPE HANGER EACH END.
4. 1/4"x2"x2" PLATE WASHER AND NUTS TOP AND BOTTOM.
5. THREADED ROD WITH STIFFENER ROD REINFORCEMENT PER DETAIL 04.
6. 2X6 BLOCK WITH 3 #8 SCREWS TOP AND BOTTOM.
7. WOOD BEAM PER PLAN AS OCCURS.



12 THREADED ROD TOP CONNECTION — 24-1265 — NO SCALE

NOTES:

1. EXISTING PLYWOOD SHEATHING.
2. EXISTING WOOD TRUSSES (ASSUMED).
3. 4x4 WOOD BLOCKING WITH SIMPSON LUS TYPE HANGER EACH END.
4. 1/4"x2"x2" PLATE WASHER AND NUTS TOP AND BOTTOM
5. EYEBOLT.
6. SPLAY WIRE WITH 3 TURNS.
7. 2X6 BLOCK WITH 3 #8 SCREWS TOP AND BOTTOM.

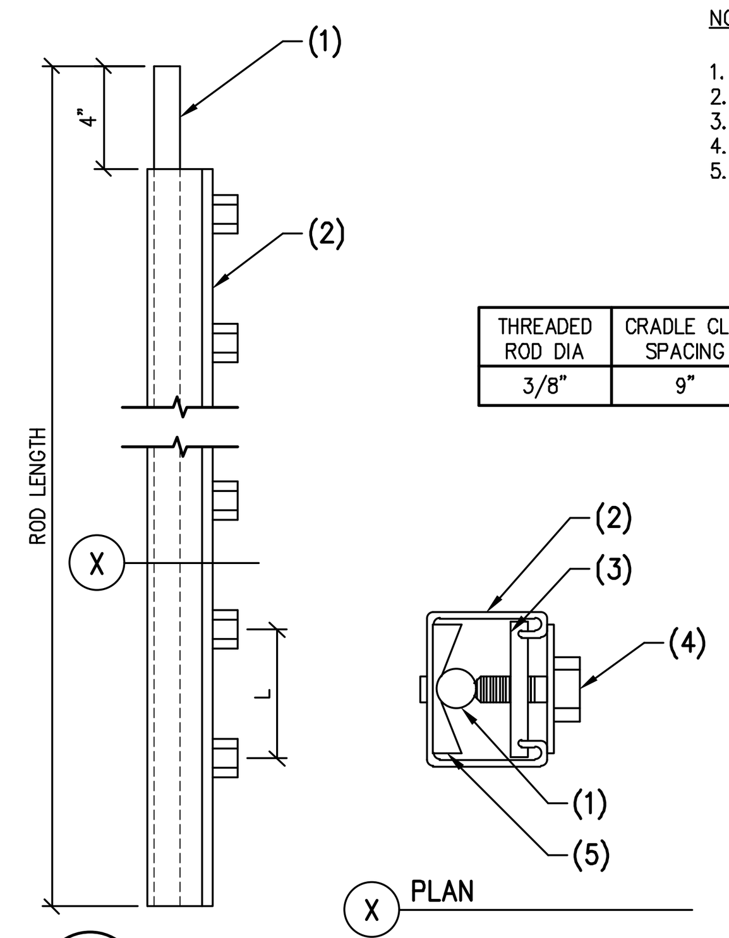


08 SPLAY WIRE TOP CONNECTION — 24-1265 — NO SCALE

NOTES:

1. THREADED HANGER ROD.
2. UNISTRUT P1000T STIFFENER.
3. P3008 NUT.
4. 3/8"x1" HHCS.
5. P2485 CRADLE CLIP.

THREADED ROD DIA	CRADLE CLIP SPACING
3/8"	9"

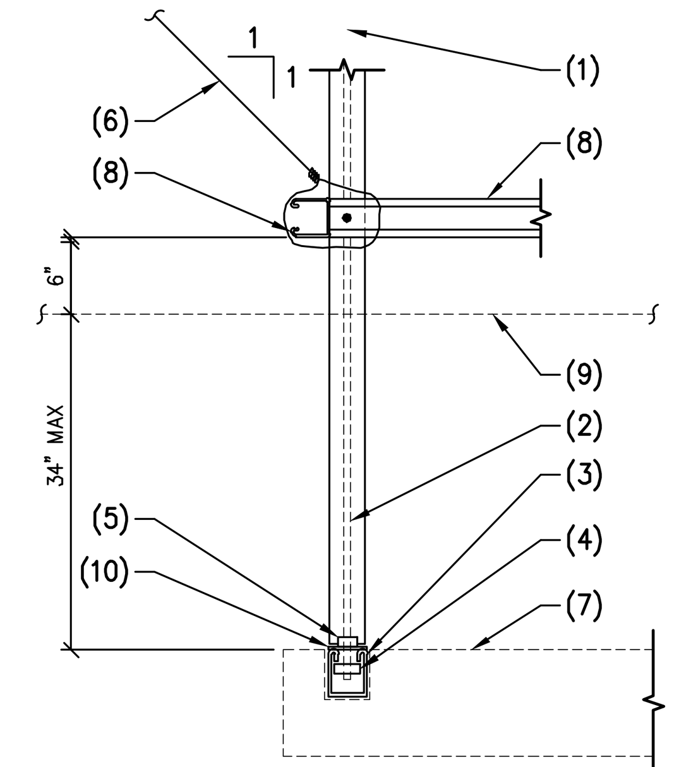


NOTE:
ALL UNISTRUT MATERIALS AND CONNECTIONS SHALL BE INSTALLED WITH STRICT CONFORMANCE TO MFR. RECOMMENDATIONS.

04 HANGER ROD REINFORCEMENT — 24-0257 — NO SCALE

NOTES:

1. TOP CONNECTION PER DETAIL 03.
2. THREADED ROD WITH STIFFENER ROD REINFORCEMENT PER DETAIL 04. REFER TO ARCH'L FOR ROD LOCATIONS.
3. INTEGRAL UNISTRUT PER VENDOR.
4. UNISTRUT CHANNEL NUT.
5. HEX NUT.
6. SPLAY WIRE WITH 3 TURNS. SEE DETAIL 08 FOR TOP CONNECTION.
7. DIGITAL PORTAL BY MFR. 400# MAX.
8. P1000 HORIZONTAL BRACE ALL 4 SIDES.
9. SUSPENDED CEILING AS OCCURS PER ARCH'L.
10. 1/4"x2"x2" STEEL PLATE.

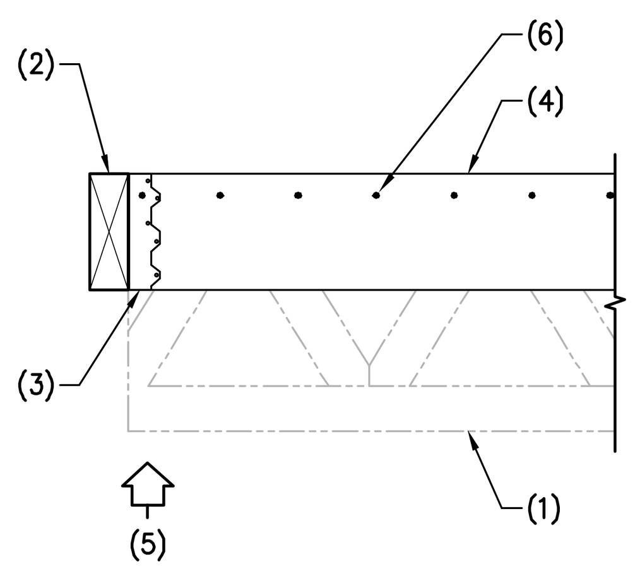


NOTE:
SEE DETAIL 07 FOR HORIZONTAL BRACE TO STIFFENER CONNECTION

01 DIGITAL PORTAL THREADED ROD ATTACHMENT — 24-0257 — NO SCALE

NOTES:

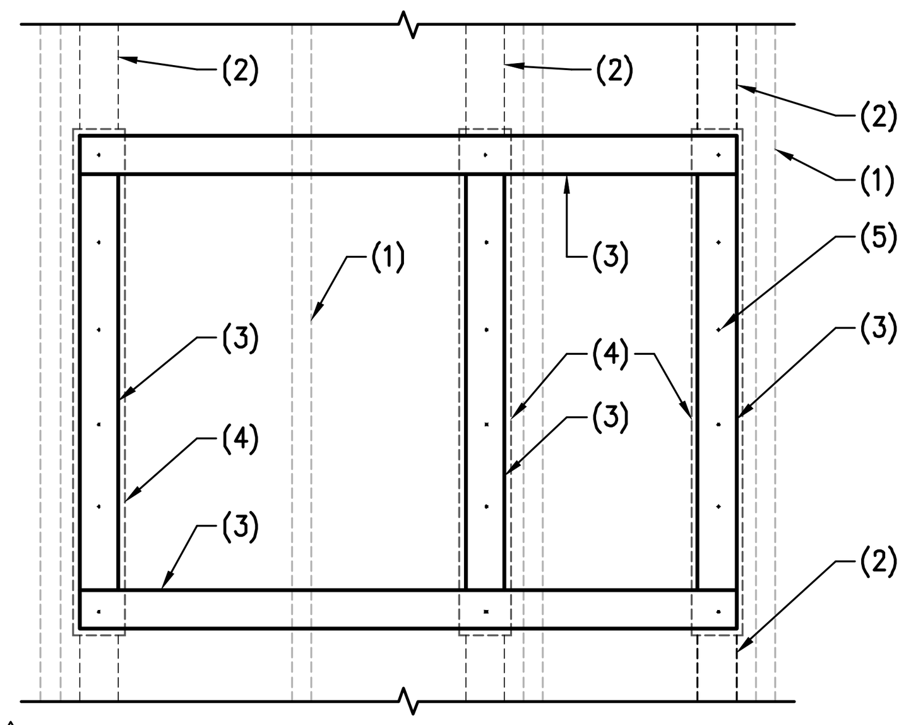
1. EXISTING WOOD TRUSS.
2. WOOD HEADER PER PLAN.
3. SIMPSON L90 HANGER. FILL ALL HOLES WITH #10X3" LONG WOOD SCREWS.
4. WOOD BEAM PER PLAN.
5. TRUSS TO BE SHORED PRIOR TO CUTTING TRUSS.
6. ATTACH WOOD BEAM TO WOOD TRUSS TOP CHORD WITH 10d X 3" LONG NAILS AT 12" O.C.



17 WOOD TRUSS AT WOOD HEADER — 24-1374 — NO SCALE

NOTES:

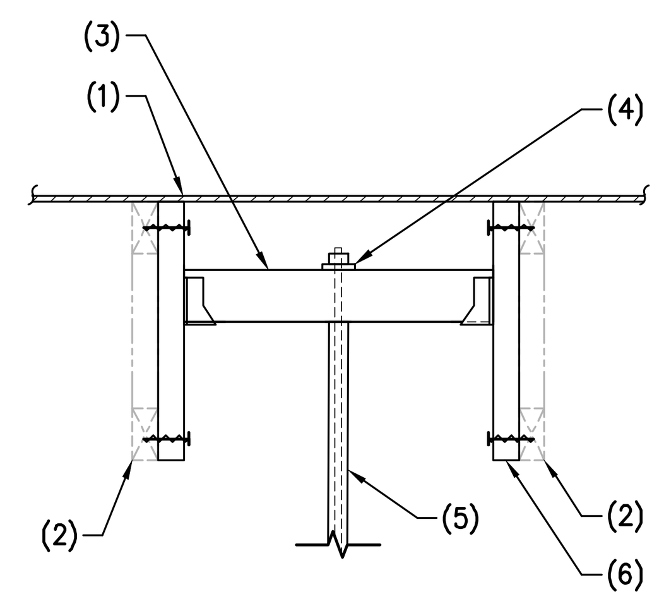
1. EXISTING WOOD TRUSSES.
2. WOOD BEAM PER PLAN.
3. 4x6 FLAT.
4. 2x6 FLAT.
5. #12 x 8" LONG WOOD SCREWS AT 12" O.C.



13 PLAN – PLATFORM SUPPORTING CURB — 25-0073 — NO SCALE

NOTES:

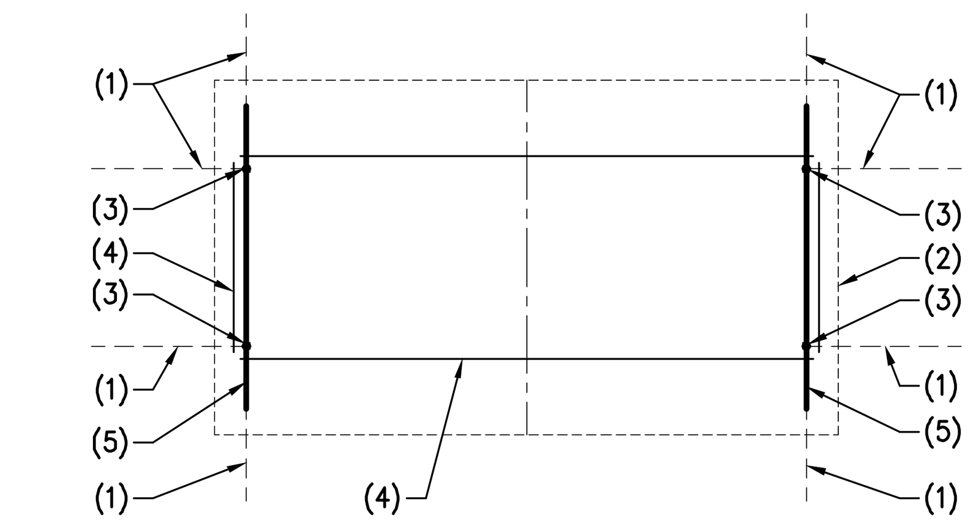
1. EXISTING PLYWOOD SHEATHING.
2. EXISTING WOOD TRUSSES.
3. 4x4 WOOD BLOCKING WITH SIMPSON LUS TYPE HANGER EACH END.
4. 1/4"x2"x2" PLATE WASHER AND NUTS TOP AND BOTTOM.
5. THREADED ROD WITH STIFFENER ROD REINFORCEMENT PER DETAIL 04.
6. 2X6 BLOCK WITH 3 #8 SCREWS TOP AND BOTTOM.



09 THREADED ROD TOP CONNECTION — 24-1265 — NO SCALE

NOTES:

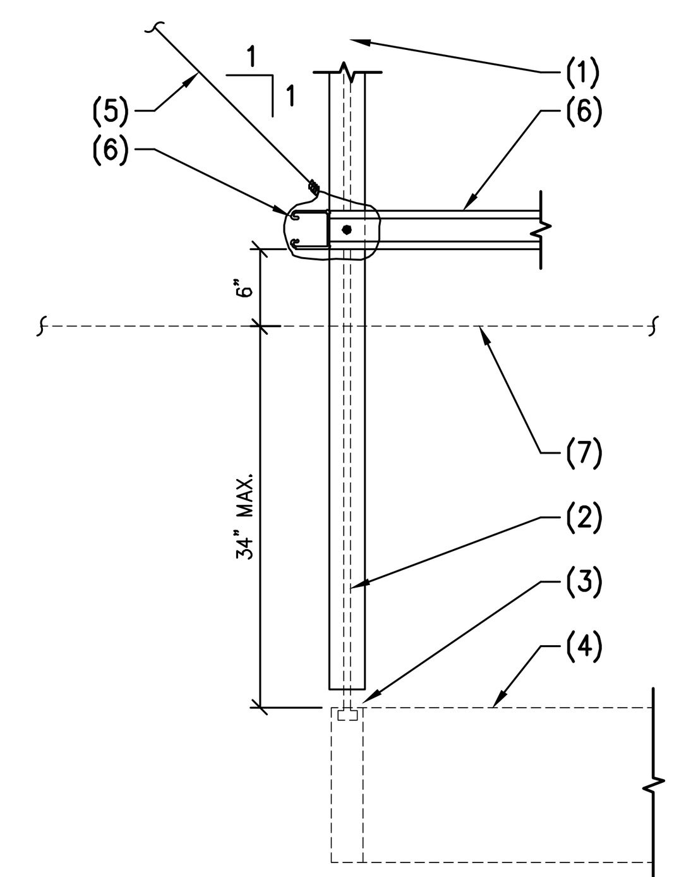
1. #8 SPLAY WIRE EACH SIDE, EACH CORNER – 8 TOTAL PER DETAIL 01.
2. OUTLINE OF DIGITAL PORTAL BY OTHERS.
3. 3/8" DIA. THREADED ROD WITH ROD STIFFENER REINFORCEMENT – 4 TOTAL. REFER TO ARCH'L FOR ROD LOCATIONS. TOP CONNECTION SHALL BE PER DETAIL 03.
4. HORIZONTAL UNISTRUT BRACES ALL 4 SIDES WITH CONNECTIONS PER DETAIL 01 AND 07.
5. INTEGRAL UNISTRUT PER VENDOR.



05 PLAN – SUSPENDED DIGITAL PORTAL — 24-0257 — NO SCALE

NOTES:

1. TOP CONNECTION PER DETAIL 03.
2. THREADED ROD WITH STIFFENER ROD REINFORCEMENT PER DETAIL 04. 3 PER LONG SIDE, 6 TOTAL.
3. CONNECTION PER MFR.
4. DIGITAL CLOUD PER MFR. 650# MAX.
5. SPLAY WIRE WITH 3 TURNS. SEE DETAIL 08 FOR TOP CONNECTION.
6. P1000 HORIZONTAL BRACE ALL 4 SIDES.
7. SUSPENDED CEILING AS OCCURS PER ARCH'L.

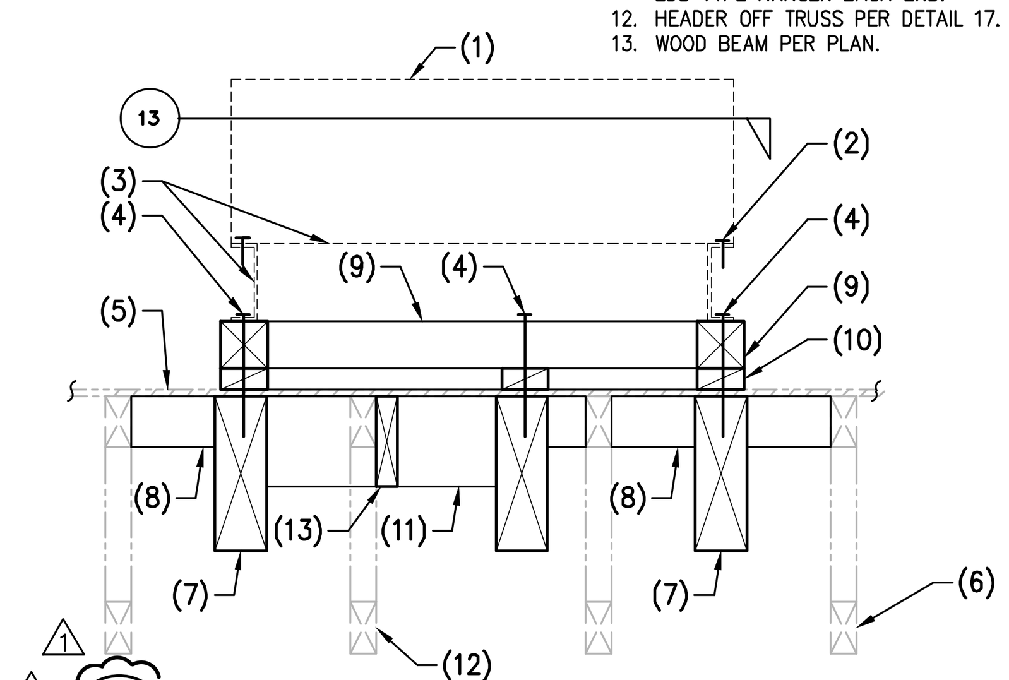


NOTE:
SEE DETAIL 07 FOR HORIZONTAL BRACE TO STIFFENER CONNECTION

02 WELCOME CLOUD THREADED ROD ATTACHMENT — 24-0257 — NO SCALE

NOTES:

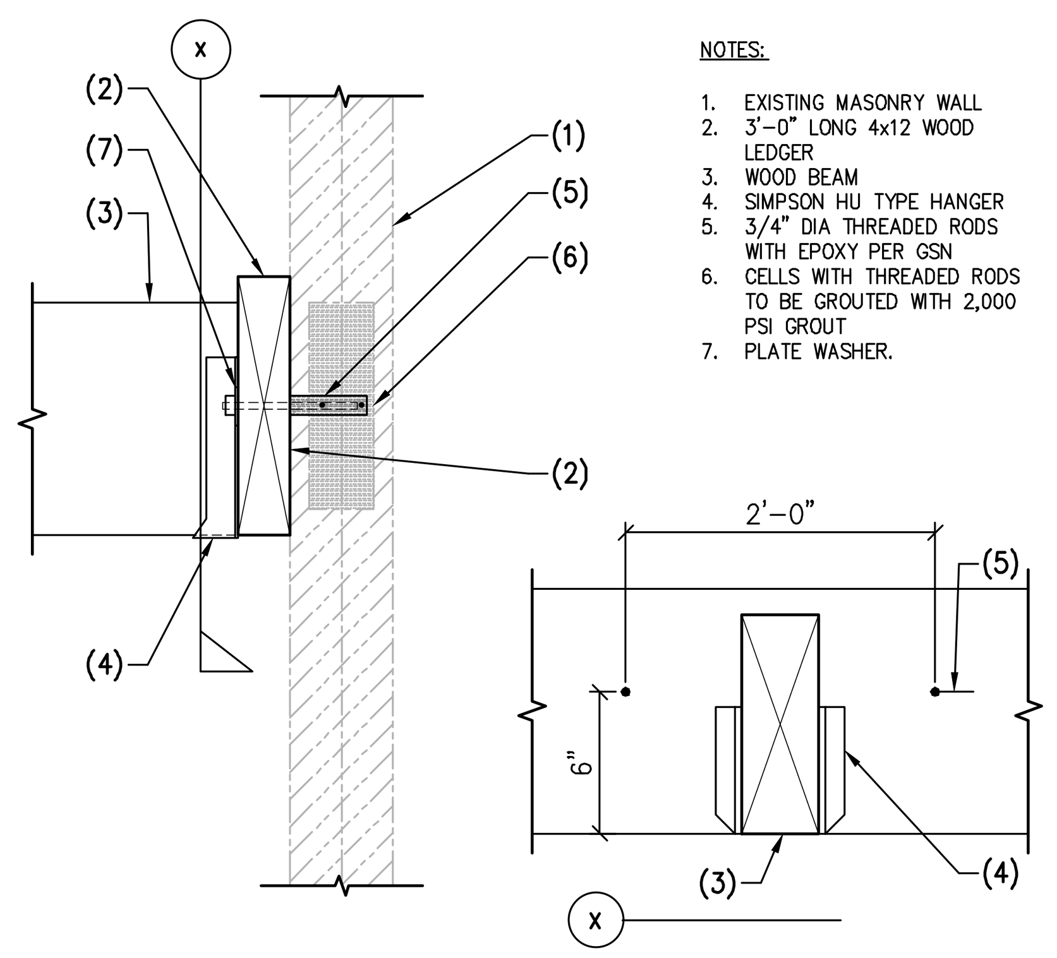
1. MECH'L UNIT BY OTHERS.
2. #12 SCREWS AT 10" O.C. ALL AROUND UNIT.
3. CURB BY OTHERS.
4. SCREWS PER DETAIL 13.
5. EXISTING PLYWOOD SHEATHING.
6. EXISTING PREFAB WOOD TRUSSES.
7. WOOD BEAM PER PLAN.
8. 4x BLOCKING EACH SIDE OF CURB WITH (2) 10d TOENAILS EACH END. DEPTH OF BLOCKING TO MATCH EXISTING TRUSS TOP CHORD DEPTH.
9. 4x6 (FLAT) UNDER PERIMETER OF CURB.
10. 2x6 (FLAT) SPACERS AS SHOWN IN DETAIL 13.
11. WOOD HEADER PER PLAN WITH SIMPSON LUS TYPE HANGER EACH END.
12. HEADER OFF TRUSS PER DETAIL 17.
13. WOOD BEAM PER PLAN.



14 MECHANICAL EQUIPMENT SUPPORT — 24-1374 — NO SCALE

NOTES:

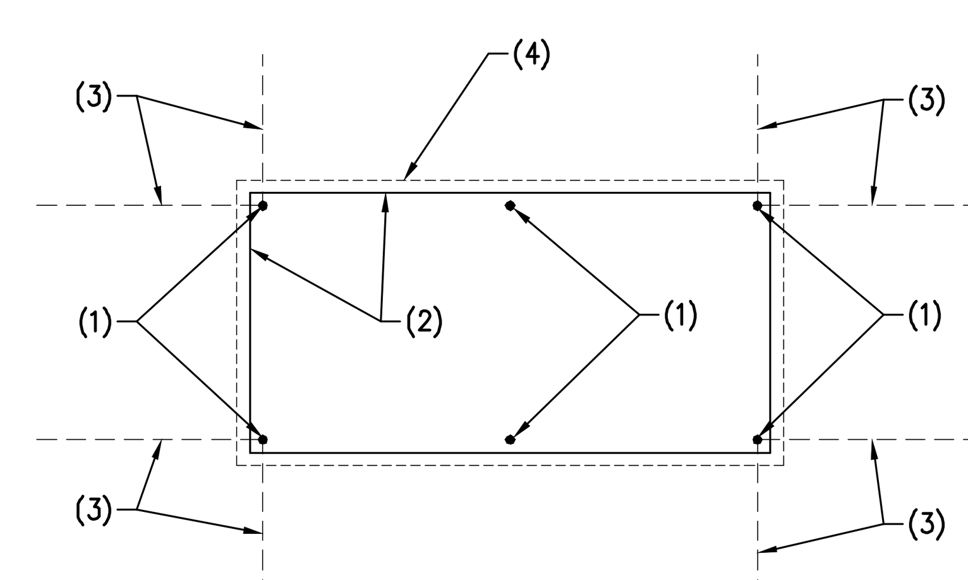
1. EXISTING MASONRY WALL
2. 3'-0" LONG 4x12 WOOD LEDGER
3. WOOD BEAM
4. SIMPSON HU TYPE HANGER
5. 3/4" DIA THREADED RODS WITH EPOXY PER GSN
6. CELLS WITH THREADED RODS TO BE GROUTED WITH 2,000 PSI GROUT
7. PLATE WASHER.



10 WOOD BEAM AT MASONRY WALL — 24-1265 — NO SCALE

NOTES:

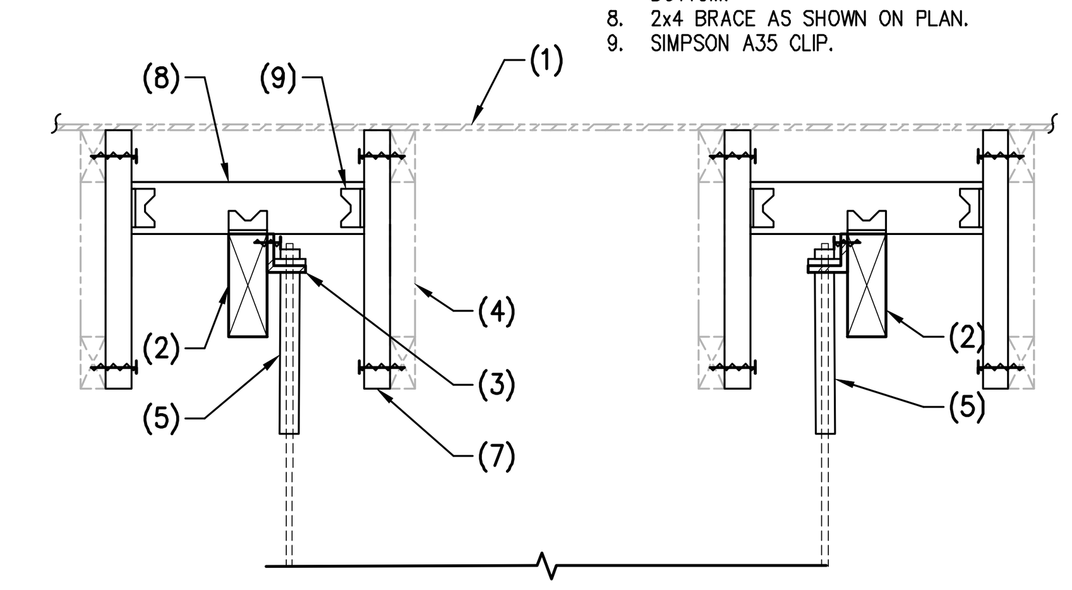
1. 3/8" DIA. THREADED ROD WITH STIFFENER REINFORCEMENT – 3 PER LONG SIDE, 6 TOTAL. REFER TO ARCH'L FOR ROD LOCATIONS.
2. HORIZONTAL UNISTRUT BRACES ALL 4 SIDES WITH CONNECTION PER DETAIL 07.
3. #8 SPLAY WIRE EACH SIDE, EACH CORNER – 8 TOTAL PER DETAIL 02.
4. OUTLINE OF WELCOME CLOUD BY OTHERS.



06 PLAN – SUSPENDED WELCOME CLOUD — 24-0257 — NO SCALE

NOTES:

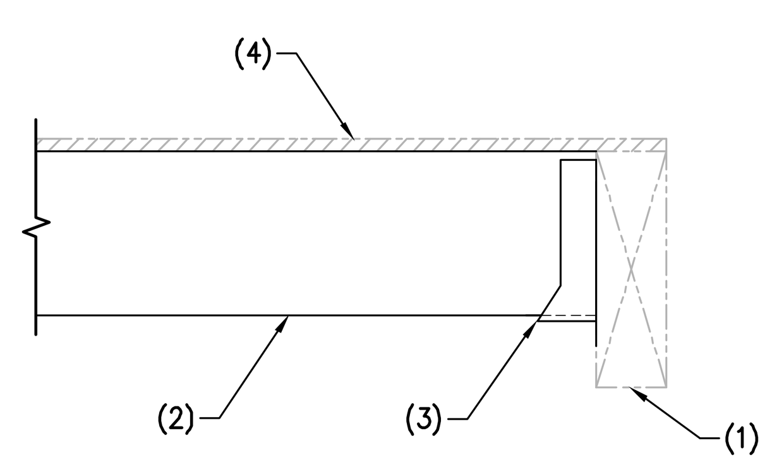
1. EXISTING PLYWOOD SHEATHING.
2. WOOD BEAM. DO NOT POSITIVELY ATTACH NEW BEAM TO WOOD TRUSSES.
3. 3"x3"x1/4" X 4" LONG STEEL ANGLE WITH 10d X 3" LONG NAILS AT 2" O.C.
4. EXISTING ROOF WOOD TRUSSES.
5. THREADED ROD WITH STIFFENER ROD REINFORCEMENT PER DETAIL 04. SEE DETAIL 01 OR 02 FOR BOTTOM CONNECTION.
6. 1/4"x2"x2" PLATE WASHER.
7. 2x6 FLAT WITH 3 #8 SCREWS TOP AND BOTTOM.
8. 2x4 BRACE AS SHOWN ON PLAN.
9. SIMPSON A35 CLIP.



03 THREADED ROD TOP CONNECTION — 24-1265 — NO SCALE

NOTES:

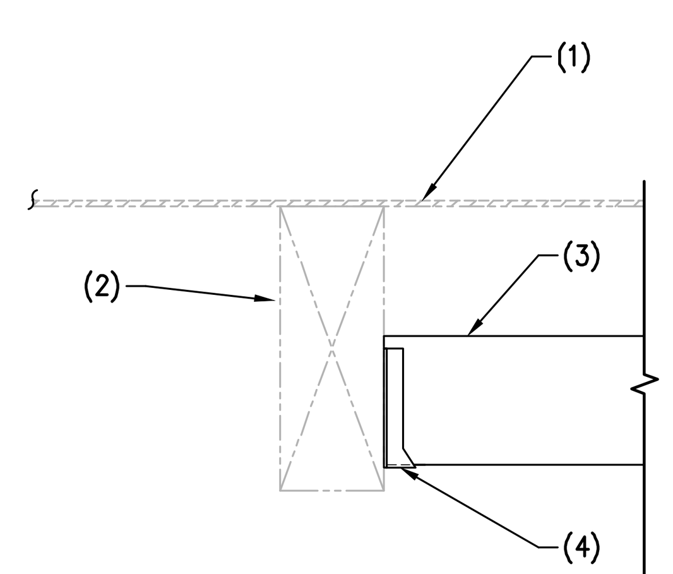
1. EXISTING GLULAM BEAM
2. WOOD BEAM PER PLAN.
3. SIMPSON MGU5.62 SDS HANGER. FILL ALL HOLES WITH 1/4"x 2 1/2" SDS SCREWS.
4. EXISTING PLYWOOD SHEATHING.



15 WOOD BEAM AT EXISTING GIRDER — 24-1374 — NO SCALE

NOTES:

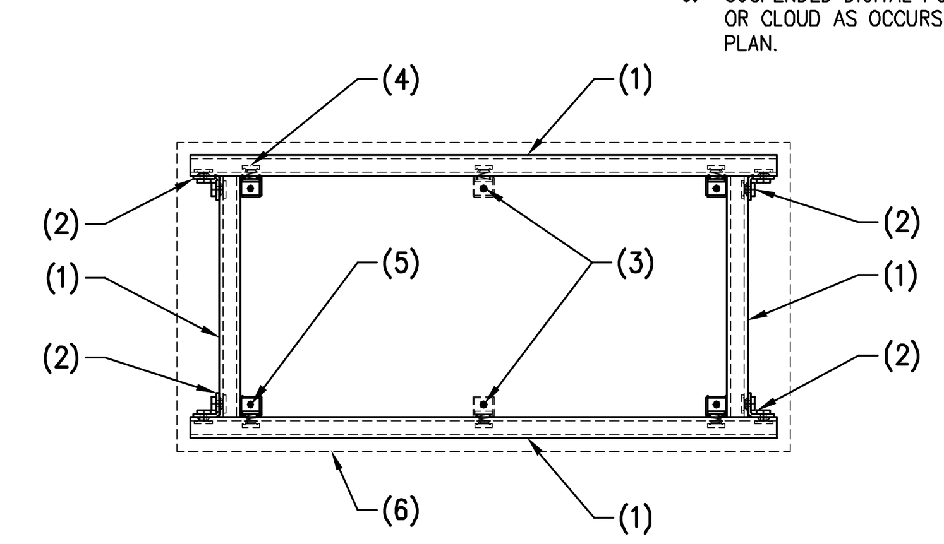
1. EXISTING PLYWOOD SHEATHING
2. EXISTING GLULAM BEAM.
3. WOOD BEAM PER PLAN
4. SIMPSON HGU OR LGU TYPE HANGER. FILL ALL HOLES WITH 1/4" x 3" SDS SCREWS.



11 WOOD BEAM AT DOUBLE WOOD TRUSS — 24-1374 — NO SCALE

NOTES:

1. HORIZONTAL UNISTRUT BRACE.
2. P1026 ANGLE WITH P1006 CHANNEL SPRING NUT AND BOLT EACH BRACE.
3. ROD AT MIDDLE AS OCCURS AT DETAIL 06.
4. P1006 CHANNEL SPRING NUT AND BOLT – TYP.
5. THREADED ROD AND STIFFENER REINFORCEMENT – TYP.
6. SUSPENDED DIGITAL PORTAL OR CLOUD AS OCCURS PER PLAN.



07 PLAN – HORIZONTAL BRACE AT STIFFENER CONNECTION — 24-0257 — NO SCALE

FOR ADDITIONAL INFORMATION SHOWN BUT NOT NOTED, SEE GENERAL STRUCTURAL NOTES ON SHEET S101 AND TYPICAL DETAIL SHEETS.

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PROJECT NUMBER 24–1374	PROJECT MANAGER TRM
PROJECT ENGINEER JKC	PROJECT DRAFTER PET

CARUSO TURLEY SCOTT structural engineers
1215 West Rio Salado Parkway
Suite 200
Tempe, Arizona 85281
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SOUTH MERIDIAN & 43RD AVE SE
4227 S MERIDIAN SUITE E
PUYALLUP, WA 98373

DESIGN TYPE: E1Y

PROJECT TYPE: CORP NEW

8022

PROTOTYPE RELEASE: Q3 2024

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

PRCTI20241902

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SCOTTSDALE, AZ 85255
Design@FuzionAD.com
www.FuzionAD.com

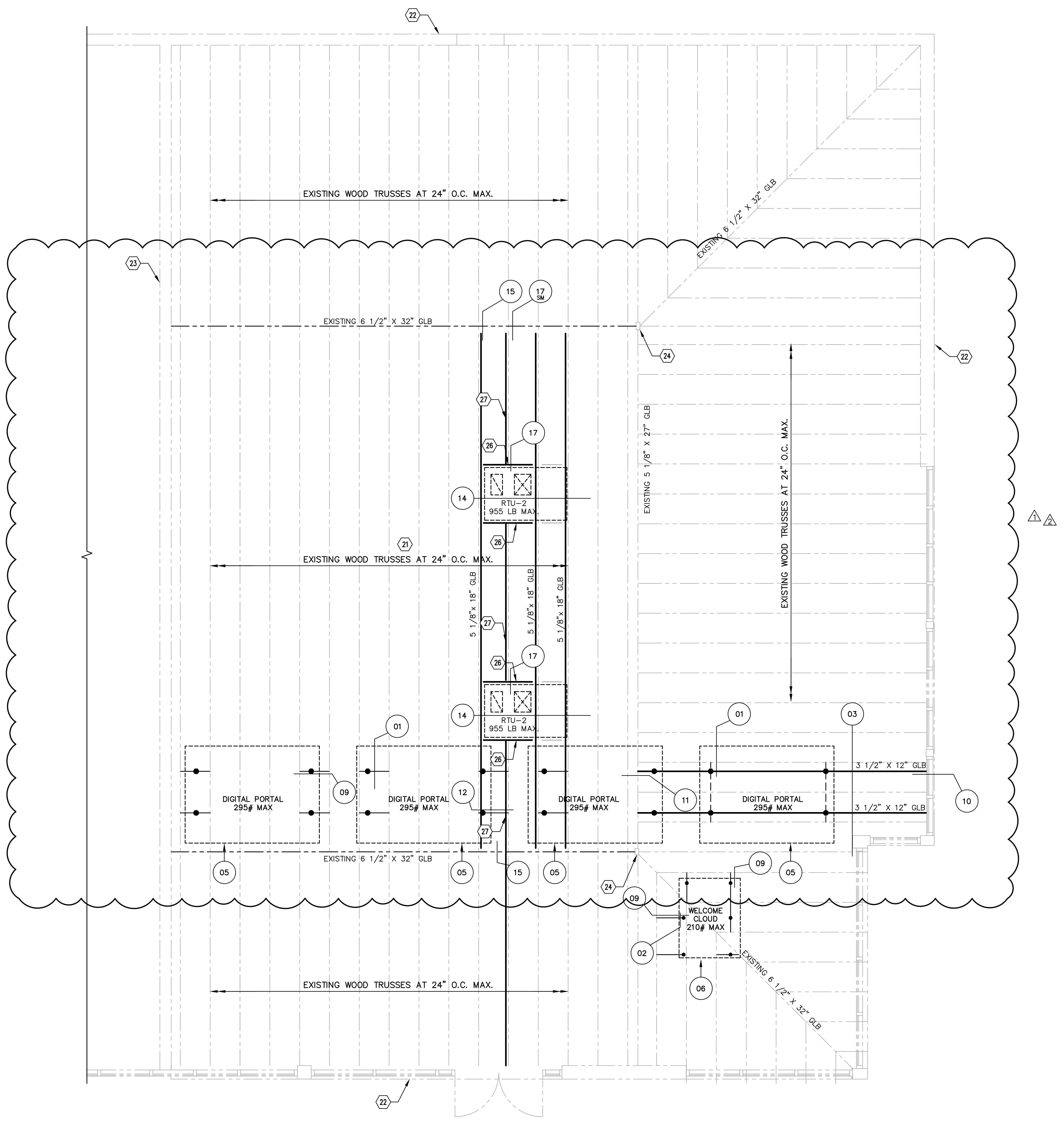
05-07-25

##	DESCRIPTION	DATE
1	STRUCTURAL REVISIONS	4-2-25
2	STRUCTURAL REVISIONS	5-6-25

DATE: 11.18.2024
DRAWN BY: PET

DETAILS

S102



PARTIAL ROOF FRAMING PLAN

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

ROOF FRAMING NOTES – TYP U.N.O.:

1. **VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS. BUILDING DIMENSIONS AND ELEVATIONS, WHERE SHOWN, WERE PROVIDED BY THE ARCHITECT AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND COORDINATE ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK. ANY DISCREPANCIES SHALL BE RESOLVED THROUGH THE ARCHITECT.**
2. FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITIONS. ALL OPENINGS MAY NOT BE SHOWN ON THIS PLAN. FOR EXACT SIZE, NUMBER AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, SPRINKLER AND THEIR RELATED DRAWINGS. FOR FRAMING AT OPENINGS, SEE TYPICAL DETAILS.
3. VERIFY EXACT SIZE, WEIGHT AND LOCATION OF EQUIPMENT AND SUPPORTS INDICATED ON PLAN WITH ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, SPRINKLER AND THEIR RELATED DRAWINGS. EQUIPMENT INDICATED ARE ONLY THOSE THAT EXCEED LOADS SPECIFIED IN THE G.S.N. FOR SUPPORT OF EQUIPMENT, SEE TYPICAL DETAILS AND OTHER TRADES.
4. THE EXISTING CONDITIONS DEPICTED ON THESE DRAWINGS ARE BASED ON APEX TECH SOLUTIONS SURVEY DATA DATED 10/15/2024 AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER IMMEDIATELY.

FRAMING KEYNOTES

940-11

- 21 CONTRACTOR TO VERIFY TRUSSES ARE 35'-10" LONG (MAX). NOTIFY ENGINEER IF OTHERWISE.
- 22 EXISTING EXTERIOR WALL.
- 23 EXISTING INTERIOR DEMISING WALL.
- 24 EXISTING STEEL COLUMN.
- 25 BRACE WOOD BEAM PER DETAIL 12.
- 26 4x12 WOOD HEADER.
- 27 2x12 WOOD BEAM. ATTACH WOOD BEAM TO TRUSS PER DETAIL 17.

FOR ADDITIONAL INFORMATION SHOWN BUT NOT NOTED, SEE GENERAL STRUCTURAL NOTES ON SHEET S101 AND TYPICAL DETAIL SHEETS.

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DESIGN TYPE: **E1Y**

PROJECT TYPE: **CORP NEW**

8022

PROTOTYPE RELEASE: Q3 2024

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

PRCTI20241902

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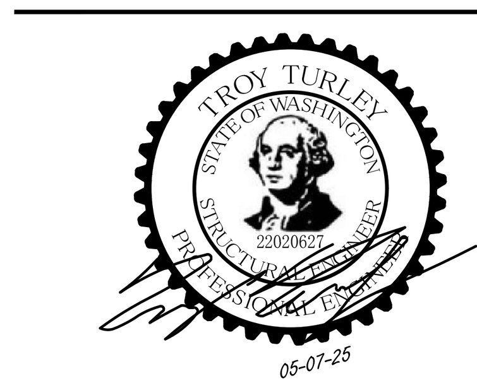

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1	STRUCTURAL REVISIONS	4-2-25
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DRAWN BY: PET

PARTIAL ROOF FRAMING PLAN

S201