EAST TOWN CROSSING LOT 2 COMMERCIAL



PRCNC20231714

The applicant shall request a sediment control and erosion inspection with a City Engineering Inspector through the CityView portal at least 48 hours in advance of job start

Sediment control and erosion procedures shall be practiced eliminating and preventing off site damage. Stormwater runoff originating upgrade of exposed areas shall be controlled to reduce erosion and sediment loss during the period of exposure. See civil permit PRCCP20230970 for specifications

Roof downspout control is required. Steps shall be taken to prevent drainage onto adjacent lots. See civil permit PRCCP20230970 for specifications

Call Before You Dig. It's the law. Locate all utilities prior to starting work Dial 811 or call 1-800-424-5555.

Refer to and follow all requirements of the Stormwater Report that was approved under civil permit PRCCP20230970

The applicant is responsible to schedule all utility inspections prior to backfilling.

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.

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SEPARATE SUBMITTALS

FIRE SPRINKLER
FIRE ALARM SYSTEM
01

PROJECT TEAM

OWNER'S:
ASH DEVELOPMENT, LLC
PUYALLUP, WA
c/io: GREG HELLE
253-318-5711
greg.helle@absherco.com

ARCHITECT :
SYNTHESIS 9, LLC
TACOMA, WA
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253-468-4117
blindsay@synthesis9.com

CIVIL ENGINEER:
AHBL, INC.
TACOMA, WA
c/o:TODD SAWIN
253-383-2422
tsawin@ahbl.com

STRUCTURAL ENGINEER:
PIERUCCIONI E&C,, LLC
TACOMA, WA
c/o: CHON PIERUCCINI
206-949-7866
pieruccioniengineering@gmail.com

LANDSCAPE ARCHITECT:
LYON LANDSCAPE ARCHITECTS
c/: ERIC J. WILLIAMS
TACOMA, WA
253-678-4173
eric@lyonla.com

PLUMBING & MECHANICAL & LIGHTING
ROBISON ENGINEERING INC.
LYNNWOOD, WA 98036
c/o: JON ROBISON
206-364-3343
jrobison@robisonengineering.com

FIRE SPRINKLERS
SPRINX FIRE PROTECTION, INC.
c/o: JOE FAULKNER
253-853-7780
joe@sprinxfire.com

City of Puyallup
Building
REVIEWED FOR COMPLIANCE
BSnowden
05/13/2024
10:00:08 AM

PROJECT SCOPE

THE OVERALL ARCHITECTURAL SCOPE OF THIS PROJECT IS CONSTRUCT ONE COMMERCIAL SHELL BUILDING WITH 3 FUTURE TENANTS AND RELATED SITE DEVELOPMENT.

REFER TO THE FOLLOWING APPLICATION NUMBER:
SITE DEVELOPMENT: **PRCCP20230970**

GENERAL PROJECT NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH THE CONTENT OF THESE DRAWINGS PRIOR TO PROCEEDING WITH THE WORK. DO NOT SCALE THE DRAWINGS.
2. IN THE EVENT THE CONTRACTOR FINDS A CONFLICT OR DISCREPANCY WITH THESE DRAWINGS, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY IN WRITING. SHOULD THE CONTRACTOR PROCEED WITHOUT NOTIFYING THE ARCHITECT OF SUCH CONFLICT, THE CONTRACTOR SHALL BE PROCEEDING AT HIS OWN RISK & ASSOCIATED LIABILITY.
3. THESE DRAWINGS SERVE TO REPRESENT DESIGN INTENT AS DIRECTED BY THE OWNER & COMPLIANT WITH GOVERNING JURISDICTIONAL LAW. IN NO WAY SHALL THESE DRAWINGS SERVE TO DICTATE METHODS OF CONSTRUCTION RELATIVE TO ADHERENCE TO EITHER. IT IS THE CONTRACTOR'S & OWNER'S RESPONSIBILITY TO WORK WITHIN THE PARAMETERS OF THE AGENCY APPROVED DOCUMENTS TO MAINTAIN THE INTEGRITY OF THE DESIGN INTENT AND AGENCY COMPLIANCE. ANY ERRORS, OMISSIONS OR NONCOMPLIANCE WITH GOVERNING CODES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.
4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY. CHANGES, OMISSIONS OR SUBSTITUTIONS ARE NOT PERMITTED WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
5. THE DESIGN, ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND HAS NOT BEEN CONSIDERED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE PRIOR TO THE COMPLETION OF ALL SHEAR WALLS, ROOF AND FLOOR DIAPHRAGMS AND FINISHED MATERIALS. THE CONTRACTOR SHALL PROVIDE THE NECESSARY BRACING TO PROVIDE STABILITY PRIOR TO THE APPLICATION OF THE ABOVE MENTIONED COMPONENTS.
6. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF THE INTERNATIONAL RESIDENTIAL CODE (IRC).
7. SPECIAL INSPECTION SHALL BE PROVIDED BY AND INDEPENDENT TESTING LABORATORY PER THE REQUIREMENTS OF IBC CHAPTER 17 AND THE LOCAL BUILDING OFFICIAL OR APPLICABLE JURISDICTION AND CONTRACT DOCUMENTS. THE SPECIAL INSPECTOR SHALL SUBMIT INSPECTION REPORTS AND A FINAL SIGNED REPORT TO THE BUILDING OFFICIAL FOR THE ITEMS LISTED IN THE QUALITY ASSURANCE/SPECIAL INSPECTION SECTION:
8. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS REQUIRED FOR ALL EQUIPMENT, APPLIANCES, FIXTURES, CABINETS, DUCTWORK AND OPENINGS BEFORE FRAMING BEGINS. THE CONTRACTOR SHALL COORDINATE WITH THE SUBCONTRACTORS OF ALL TRADES TO VERIFY THE SIZES ABD LOCATIONS OF OPENINGS THROUGH THE FLOORS, WALLS, CEILINGS AND ROOFS FOR DUCTS, PIPES, CONDUITS AND EQUIPMENT. THE CONTRACTOR SHALL COORDINATE THE LOCATION AND INSTALLATION OF WOOD BACKING, BLOCKING, FURRING AND STRIPPING AS REQUIRED FOR THE INSTALLATION AND ATTACHMENT OF WORK OF ALL TRADES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SYSTEMS, INCLUDING, BUT NOT LIMITED TO, MECHANICAL, PLUMBING, ELECTRICAL WORK. WORK SHOWN IN THE DRAWINGS IS INTENDED TO ILLUSTRATE THE GENERAL DESIGN INTENT, SCOPE AND LOCATION OF WORK. ALL WORK NOT SPECIFICALLY DRAWN, BUT REQUIRED FOR A COMPLETE,LEGAL AND FUNCTIONING SYSTEM, SHALL BE PROVIDED AS PART OF THE WORK.
10. SAFEGUARDS DURING CONSTRUCTION SHALL COMPLY WITH CHAPTER 33 OF THE INTERNATIONAL BUILDING CODE.

SYMBOL LEGEND

DETAIL SYMBOL
1 / A2.0 — DETAIL NO. OR LETTER / SHEET

SECTION SYMBOL
1 / A2.0 — DETAIL NO. OR LETTER / SHEET

INTERIOR ELEVATION SYMBOL
2 / A4.0 / 3 / 4 — DRAWING NUMBER / SHEET

DOOR I.D. SYMBOL
100A — DOOR NUMBER REFER TO SHEET A4.0.

ROOM I.D. SYMBOL
ROOM / 100 — ROOM NAME / ROOM NUMBER

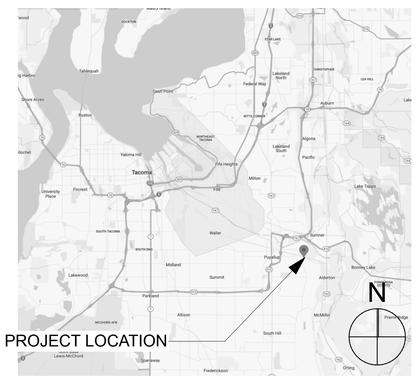
WALL TYPE SYMBOL
1A — WALL TYPE NO. REFER TO SHEET A2.0

FLOOR - CEILING ASSEMBLY TYPE SYMBOL
Z-# — ASSEMBLY TYPE NO. REFER TO SHEET AG.03

EXTERIOR WINDOW TYPE SYMBOL
— WINDOW TYPE NUMBER

BUILDING REFERENCE NOTE SYMBOL
— REFERENCE TYPE NUMBER

VICINITY MAP (NOT TO SCALE)



SYNTHESIS 9, LLC
523 N. D ST.
TACOMA, WA 98403

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REGISTERED ARCHITECT
9251
BRETT A. LINDSAY
STATE OF WASHINGTON

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

EAST TOWN CROSSING
LOT 2 COMMERCIAL
PIONEER & SHAW PUYALLUP

01	RESPONSE TO 1st ROUND OF REVIEW

REVISIONS

DRAWN BY:	CM / BL
CHECKED BY:	BL
DATE:	2024.04.12
TITLE:	COVER SHEET
PROJECT # :	2016L2
SHEET:	AG1.0

AGENCY REVIEW - REVISION No.1 | 2024.04.12

PRCNC20231714

W.S.E.C. ENVELOPE COMPLIANCE SUMMARY (01)

ENVELOPE COMPLIANCE SUMMARY

2018 WSEC Compliance Forms for Commercial Buildings including Group R2, R3 & R4 over 3 stories and all R1

Administered by: ©2023 NEEA, All rights reserved

Project & Applicant Information	Project Title	East Town Crossing - Lot Two - 2018 WSEC	For Building Department Use:	Date: Dec 05, 2023
	Project Address	Pioneer & Shaw Puyallup, WA 98372		
	Applicant Name	Brett Lindsay		
	Applicant Phone	253-468-4117		
	Applicant Email	blindsay@synthesis9.com		

For questions about this report, contact WSEC Commercial Technical Support at 360-539-5300 or via email at com.techsupport@waenergycodes.com

General Occupancy	All Commercial	General Building Use Type(s)	Office, Other	Building Cond. Floor Area	6,216
Project Scope	Shell & Core	Space Conditioning Categories	Fully Conditioned	Project Cond. Floor Area	6,216
				Floors Above Grade	2
				Compliance Method	Compliance Method 1 - General
Envelope Project Description	Commercial shell building for three potential tenants				

Envelope Compliance Scope and Method	Scope	Space Conditioning Category	Compliance Method	WWR/SRR per Category	UA Calculation Adjustment	Fenestration Alternates	Compliance Verification
	Shell & Core	Fully Conditioned	Prescriptive	38.90% / 0%	No Calculation Adjustments allowed	High performance fenestration U-factor and SHGC per C402.4.1.3	COMPLIES

Air Barrier Testing	Air barrier testing included in project scope	Air Barrier Comments	

Project Title	East Town Crossing - Lot Two - 2018 WSEC			Date	Dec 05, 2023
Scope & Space Conditioning	SHELL & CORE - FULLY CONDITIONED		Compliance Verification	COMPLIES	
Window-to-wall Ratio	38.90%	Skylight-to-roof-ratio	0%	Vertical Fenestration Alternate	High performance fenestration U-factor and SHGC per C402.4.1.3

Opaque Envelope Assemblies

				Insulation R-Values				
Roof/Ceiling	Location in Documents	Assembly ID	Assembly Location	Cavity	Continuous (% penetration)	2nd Layer (MB Roof)	U-Factor	Net Area (SF)
Insulation entirely above deck	A3.0	Roof	Exterior		R-38 (< 0.04%)		U-0.027	5,514
	U-Factor Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Walls	Location in Documents	Assembly ID	Assembly Location	Cavity	Continuous (% penetration)	Insulated Wall Furring	U-Factor	Net Area (SF)
Wood-framed and other - Commercial	AG1.1	A	Exterior	R-21	R-0 (< 0.04%)		U-0.054	3,292
	Which insulation code target does wall comply with?: R-21 Cavity + Intermediate Framing			U-Factor Source:				
	U-Factor Source Description:			Wall Framing Type (Standard, Inter., Advanced): Intermediate				
	Framing Depth:			Framing Spacing:				
	Is this assembly exterior or interior?: Exterior							
Slab-on-grade Floors	Location in Documents	Assembly ID	Assembly Location	Slab Edge	Under Slab		F-Factor	Perimeter Length (SF)
Unheated slab	A3.0	FLOOR	At grade level	R-10			F-0.54	346
	Slab Insulation Method: 2 ft vertical (from top of slab downward)			F-Factor Source:				
	F-Factor Source Description:							

Fenestration & Opaque Door Assemblies

				Insulation R-Values				
Vertical Fenestration	Location in Documents	Assembly ID	Assembly Location	Shading (PF)	Fenestration SHGC	Fenestration U-Factor	Rough Opening (SF)	
Fixed - Class AW or site built	A4.0	1	Exterior		PF < 0.2	SHGC-0.46	U-0.34	156
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	1	Exterior		PF < 0.2	SHGC-0.46	U-0.34	156
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	2	Exterior		PF < 0.2	SHGC-0.35	U-0.34	102
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	2	Exterior		PF < 0.2	SHGC-0.35	U-0.34	102
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	3	Exterior		PF < 0.2	SHGC-0.35	U-0.34	86
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	3	Exterior		PF < 0.2	SHGC-0.35	U-0.34	86
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	3	Exterior		PF < 0.2	SHGC-0.35	U-0.34	86
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	3	Exterior		PF < 0.2	SHGC-0.35	U-0.34	86
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	3	Exterior		PF < 0.2	SHGC-0.35	U-0.34	86
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	4	Exterior		PF < 0.2	SHGC-0.35	U-0.34	124
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	4	Exterior		PF < 0.2	SHGC-0.35	U-0.34	124
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	5	Exterior		PF < 0.2	SHGC-0.35	U-0.34	108
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	5	Exterior		PF < 0.2	SHGC-0.35	U-0.34	108
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	6	Exterior		PF < 0.2	SHGC-0.35	U-0.34	74
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	7	Exterior		PF < 0.2	SHGC-0.35	U-0.34	74
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	7	Exterior		PF < 0.2	SHGC-0.35	U-0.34	74
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	7	Exterior		PF < 0.2	SHGC-0.35	U-0.34	74
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	8	Exterior		PF < 0.2	SHGC-0.35	U-0.34	18
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	8	Exterior		PF < 0.2	SHGC-0.35	U-0.34	18
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	8	Exterior		PF < 0.2	SHGC-0.35	U-0.34	18
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	9	Exterior		PF < 0.2	SHGC-0.35	U-0.34	31
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	10	Exterior		PF < 0.2	SHGC-0.35	U-0.34	38
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	9	Exterior		PF < 0.2	SHGC-0.35	U-0.34	31
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Fixed - Class AW or site built	A4.0	9	Exterior		PF < 0.2	SHGC-0.35	U-0.34	31
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Operable - Class AW or site built	A4.0	A	Exterior		PF < 0.2	SHGC-0.35	U-0.36	67
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Operable - Class AW or site built	A4.0	B	Exterior		PF < 0.2	SHGC-0.35	U-0.36	67
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							
Operable - Class AW or site built	A4.0	B	Exterior		PF < 0.2	SHGC-0.35	U-0.36	67
	U-Factor & SHGC Source:			U-Factor Source Description:				
	Is this assembly exterior or interior?: Exterior							

W.S.E.C. BUILDING ENVELOPE SUMMARY

ZONE	4C - MARINE
PATH	PRESCRIPTIVE
ROOFS - ATTIC AND OTHER	R-VALUE = 38
FENESTRATION	U-FACTOR = PER A4.0
FENESTRATION SHGC	PER A4.0
SKYLIGHTS	U-FACTOR = N/A
WOOD FRAMED WALLS	R-VALUE = 21 INT
MASS WALL R-VALUE	N/A
FLOOR	R-VALUE: 30
SLAB, R-VALUE & DEPTH	10, 2-FT

APPLICABLE 2018 WSEC BUILDING ENVELOPE NOTES :

1. AN IDENTIFICATION MARK SHALL BE APPLIED TO ALL INSULATION MATERIALS PER C303.1.
2. ALL FENESTRATION PRODUCTS SHALL BE LABELED WITH RATED U-FACTOR, SHGC, VT, LEAKAGE RATING PER C303.1.3 AND C402.4.3.
3. PROJECT CLOSE OUT DOCUMENTATION IS REQUIRED INCLUDING APPLICABLE CALCULATIONS, WSEC ENVELOPE COMPLIANCE REPORTS, AND FENESTRATION NFRC RATING CERTIFICATES PER C103.6.3.

BUILDING ENCLOSURE AIR LEAKAGE TEST:

Building enclosure air leakage testing shall be performed per ASTM C779 (or equivalent method approved by the code official) and the target leakage rate is 0.25 cfm/ft2 (1.5 L/s*m2) at 0.3 in. wg (75 Pa).

(1) Submit building enclosure air leakage test reports to jurisdiction and owner;
(2) If initial test result exceeds 0.25 cfm/ft2 (1.5 L/s*m2), indicate that inspection and all practical corrective actions be completed and documented in the air leakage test report;
(3) If initial test result exceeds 0.40 cfm/ft2 (2.0 L/s*m2), indicate that corrective actions shall also include re-testing;
(4) Indicate that corrective measures and retesting must be repeated until the test result is 0.40 cfm/ft2 (2.0 L/s*m2) or less; (4) Include air barrier test report in project close out documentation provided to building owner.

LAND USE SUMMARY

P/N: 0420264021, LOT 2

JURISDICTION: CITY OF PUYALLUP

ZONING DESIGNATION:
CG - GENERAL COMMERCIAL
SHAW-EAST PIONEER OVERLAY

PARCEL AREA: 50,886 sq ft

SURROUNDING PARCELS: CG TO THE SOUTH AND EAST, CB ACROSS SHAW TO THE WEST, CMX ACROSS PIONEER TO THE NORTH

USE: RESTAURANT & RETAIL (PERMITTED)
MINIMUM LOT AREA: NONE
MINIMUM LOT WIDTH: 50 FT
MINIMUM LOT DEPTH: 100 FT
MINIMUM SETBACKS: 12 FT STREET, 0 FT SIDE, 0 FT REAR
MAXIMUM SETBACK: 20 FT WITH PLAZA
MAXIMUM HEIGHT: 50 FT (FOUR STORIES)
MAXIMUM FLOOR AREA: F.A.R. 4.0
MAXIMUM LOT COVERAGE: 75%

VEHICLE PARKING ANALYSIS FOR BOTH COMMERCIAL LOTS

STALL DIMENSIONS:
STANDARD: ~~9' x 20'~~ 8' x 18'
COMPACT: ~~8' x 17'~~ 7' x 15'

REQUIRED:
1 STALL PER 300 sq ft GROSS RETAIL
1 STALL PER 100 sq ft GROSS RESTAURANT

LOT 1:
5,000 sq ft/ 300 = 17

LOT 2:
1,713 sq ft/300 = 6
1,982 sq ft/100 = 20
1,832 sq ft/100 = 18

TOTAL REQUIRED: 60
ON-SITE VEHICLE STALLS PROVIDED: 63

COMPACT MIN.: 30% OF REQUIRED (63 x 0.3 = 19)
COMPACT MAX.: 50% (63 x 0.5 = 32)
COMPACT STALLS PROVIDED: 19

ACCESSIBLE STALLS REQ'D: 3
ACCESSIBLE STALLS PROVIDED: 4

WAC 51-50-0429 ELECTRIC VEHICLE CHARGING INFRASTRUCTURE:
REQUIRED: 10 PERCENT = 6
PROVIDED: 6 (01)
PROPOSED FUTURE EV STALLS: 6

BICYCLE PARKING ANALYSIS
SHORT-TERM BICYCLE PARKING:
REQUIRED: 5 STALLS
PROVIDED: 5

BUILDING SUMMARY

OCCUPANCY: A2: ASSEMBLY / B: OFFICE / M: MERCANTILE
TYPE OF CONSTRUCTION: VB
SEPARATED OCCUPANCIES: NO
FIRE SPRINKLERS: YES
FIRE ALARM SYSTEM AND SMOKE ALARM: YES
ELEVATOR: NO
NUMBER OF TENANT SPACES: 3

'A2' OCCUPANCY (ASSUMED FOR SUITE #1)
BASE ALLOWABLE BUILDING AREAS, HEIGHT AND STORIES:
('A2' OCCUPANCY MOST RESTRICTIVE)

ALLOWABLE AREA PER FLOOR: 24,000 sq ft (01)
ALLOWABLE MAXIMUM HEIGHT: 60 ft
ALLOWABLE STORIES: 2

'B' OCCUPANCY (ASSUMED FOR SUITE #2)
BASE ALLOWABLE BUILDING AREAS, HEIGHT AND STORIES:

ALLOWABLE AREA PER FLOOR: 36,000 sq ft
ALLOWABLE MAXIMUM HEIGHT: 60 ft
ALLOWABLE STORIES: 3

'M' OCCUPANCY (ASSUMED FOR SUITE #3)
BASE ALLOWABLE BUILDING AREAS, HEIGHT AND STORIES:

ALLOWABLE AREA PER FLOOR: 18,000 sq ft
ALLOWABLE MAXIMUM HEIGHT: 60 ft
ALLOWABLE STORIES: 2

PROPOSED BUILDING AREAS, HEIGHT AND STORIES:

PROPOSED AREA PER FLOOR:
LEVEL 1: 5,790 sq ft
LEVEL 2: N/A
PROPOSED HEIGHT: 25.5 ft
PROPOSED STORIES: 1

CONDITIONED AREAS: (01)
SUITE 1: 1,791 sq ft
SUITE 2: 2,079 sq ft
SUITE 3: 1,918 sq ft

GROSS AREAS:
SUITE 1: 1,804 sq ft
SUITE 2: 2,068 sq ft
SUITE 3: 1,918 sq ft
RISER ROOM: 57 sq ft

TOTAL:
LEVEL 1: 5,790 sq ft

OCCUPANT LOAD (01)
*****BASED ON ASSUMPTION. EACH TENANT WILL PROVIDE SEPARATE PERMIT DOCUMENTS.**

SUITE 1 (A2):
OCCUPANT LOAD FACTOR: 15 NET (UNCONCENTRATED TABLE & CHAIRS)
OCCUPANT LOAD: 114 (1703/15)

SUITE 2 (B):
OCCUPANT LOAD FACTOR: 150 GROSS (BUSINESS)
OCCUPANT LOAD: 13 (1982 sq ft/150)

SUITE 3 (M):
OCCUPANT LOAD FACTOR: 60 GROSS (MERCANTILE)
OCCUPANT LOAD: 31 (1832 sq ft/60)

EGRESS
SUITE 1 (A2):
NUMBER OF EXITS REQUIRED: 2
MAXIMUM EXIT ACCESS TRAVEL DISTANCE with SPRINKLERS: 250-ft
MAXIMUM COMMON PATH OF TRAVEL: 75-ft

SUITE 2 (B):
NUMBER OF EXITS REQUIRED: 1
MAXIMUM EXIT ACCESS TRAVEL DISTANCE with SPRINKLERS: 100-ft
MAXIMUM COMMON PATH OF TRAVEL: 100-ft

SUITE 3 (M):
NUMBER OF EXITS REQUIRED: 1
MAXIMUM EXIT ACCESS TRAVEL DISTANCE with SPRINKLERS: 75-ft
MAXIMUM COMMON PATH OF TRAVEL: 75-ft

FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS PER IBC (2018) TABLES 601 AND 602:

PRIMARY STRUCTURAL FRAME:
EXTERIOR BEARING WALLS: 0-HR

INTERIOR BEARING WALLS: 0-HR
NONBEARING EXTERIOR WALL AND PARTITIONS: 0-HR
NONBEARING INTERIOR WALL AND PARTITIONS: 0-HR
FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS: 0-HR
ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS: 0-HR

PLUMBING FIXTURE REQUIREMENTS (01)

SUITE	OCCUPANCY	OCCUPANT LOAD	MALE WC	FEMALE WC	MALE LAV	FEMALE LAV
1	A-2	100 BASED ON ASSUMED NET AREA	1 PER 100		1 PER 100	
			1	1	1	1
2	B	14	1 per 25 for first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for first 80 and 1 per 80 for remainder exceeding 80	
			1	1	1	1
3	M	13	1 per 25 for first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for first 80 and 1 per 80 for remainder exceeding 80	
			1	1	1	1

PLUMBING FIXTURE SUMMARY

2902.5.1 Drinking fountain number. Occupant loads over 30 shall have one drinking fountain for the first 150 occupants, then one per each additional 500 occupants.
** NONE REQUIRED.

EXCEPTION: A drinking fountain need not be provided in a drinking or dining establishment.

2902.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.
EXCEPTIONS: 1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or less.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or less.
4. Separate facilities shall not be required in spaces primarily used for drinking or dining with a total occupant load, including both employees and customers, of 30 or fewer.
5. Separate facilities shall not be required when gender-neutral facilities are provided in accordance with Section 2902.2.2.

2902.2.2 Gender-neutral facilities. Gender-neutral toilet facilities, when provided, shall be in accordance with the following:
1. There is no reduction in the number of fixtures required to be provided for male and female in the type of occupancy and in the minimum number shown in Table 2902.1.
2. Gender-neutral multiuser toilet rooms shall have water closets and urinals located in toilet compartments in accordance with ICC A117.1.
3. Gender-neutral multiuser toilet room water closet and urinal compartments shall have full-height walls and a door enclosing the fixture to ensure privacy.
4. Gender-neutral toilet room water closet and urinal compartment doors shall be securable from within the compartment.
5. Gender-neutral toilet rooms provided for the use of multiple occupants, the egress door from the room shall not be lockable from the inside of the room.
6. Compartments shall not be required in a single-occupant toilet room with a lockable door.

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STATE OF WASHINGTON

City of Puyallup
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EAST TOWN CROSSING
LOT 2 COMMERCIAL
PIONEER & SHAW PUYALLUP

01	RESPONSE TO 1st ROUND OF REVIEW

REVISIONS

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DATE:	2024.04.12
TITLE:	PROJECT INFORMATION
PROJECT # :	2016L2
SHEET:	AG1.1

PRCNC20231714

The applicant shall request a sediment control and erosion inspection with a City Engineering Inspector through the CityView portal at least 48 hours in advance of job start

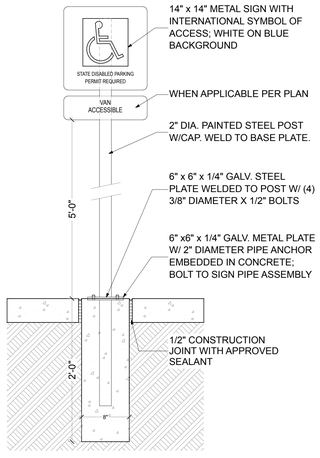
Sediment control and erosion procedures shall be practiced eliminating and preventing off site damage. Stormwater runoff originating upgrade of exposed areas shall be controlled to reduce erosion and sediment loss during the period of exposure. See civil permit PRCCP20230970 for specifications

Roof downspout control is required. Steps shall be taken to prevent drainage onto adjacent lots. See civil permit PRCCP20230970 for specifications

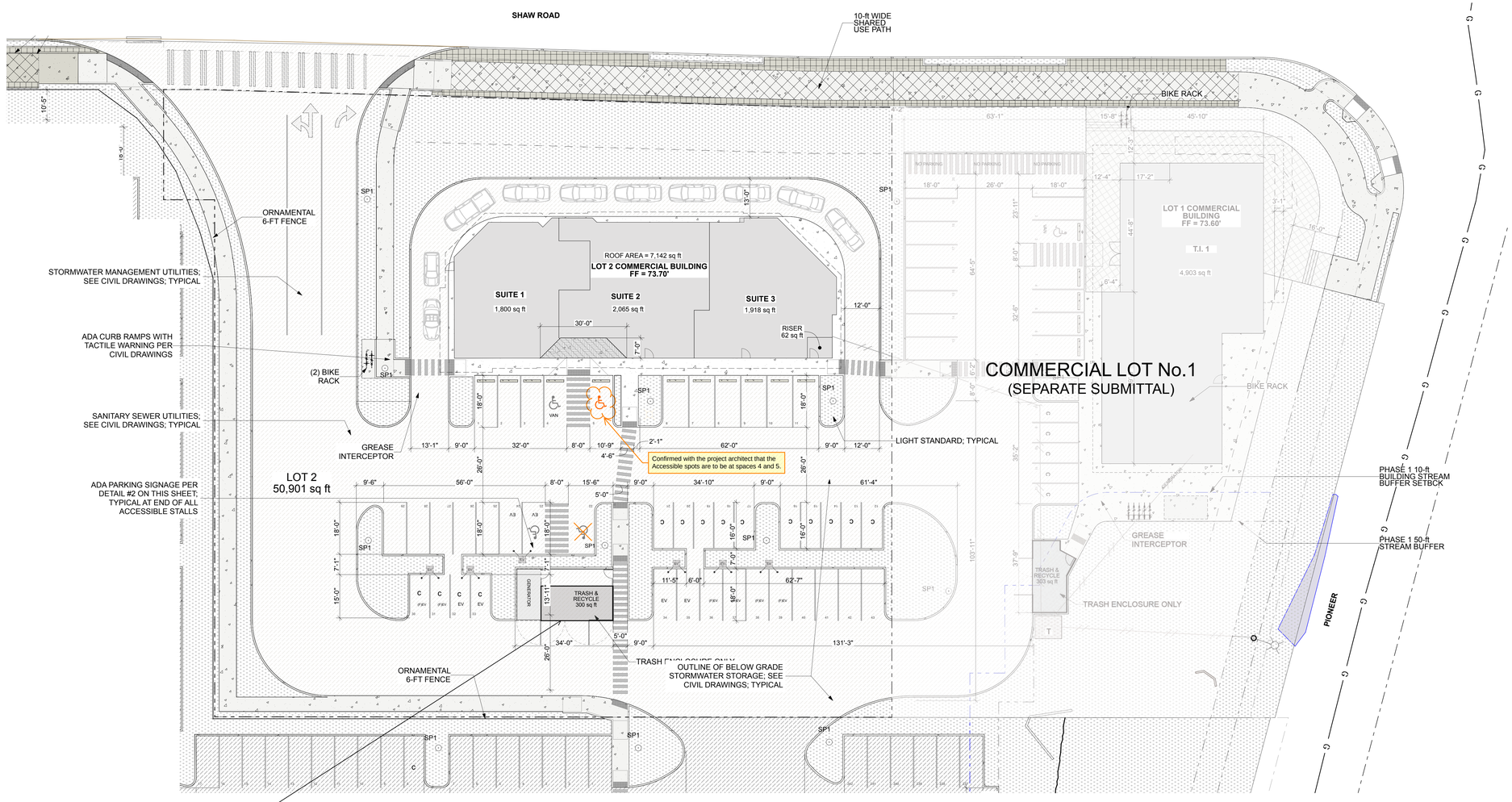
Call Before You Dig. It's the law. Locate all utilities prior to starting work Dial 811 or call 1-800-424-5555.

Refer to and follow all requirements of the Stormwater Report that was approved under civil permit PRCCP20230970

The applicant is responsible to schedule all utility inspections prior to backfilling.



2 SITE SIGNAGE
SCALE: 1" = 1'-0"



1 COMMERCIAL LOT SITE PLAN
SCALE: 1" = 20'

The proposed trash enclosure must be submitted for review under a separate building permit application.

Trash enclosure will adhere to City Standard 208 Pollution Prevention, attached in CityView under the construction plan set tab.

The floor of the trash enclosure shall slope towards the point of sanitary sewer floor drain. The interior Type 1 Catch Basin drains to the onsite sewer system

Multiple Site Plans were submitted. The Building inspector must be provided with the Site Plan that has the Planning Department's stamp during inspection.

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Fire	Traffic

EAST TOWN CROSSING
LOT 2 COMMERCIAL
PIONEER & SHAW PUYALLUP

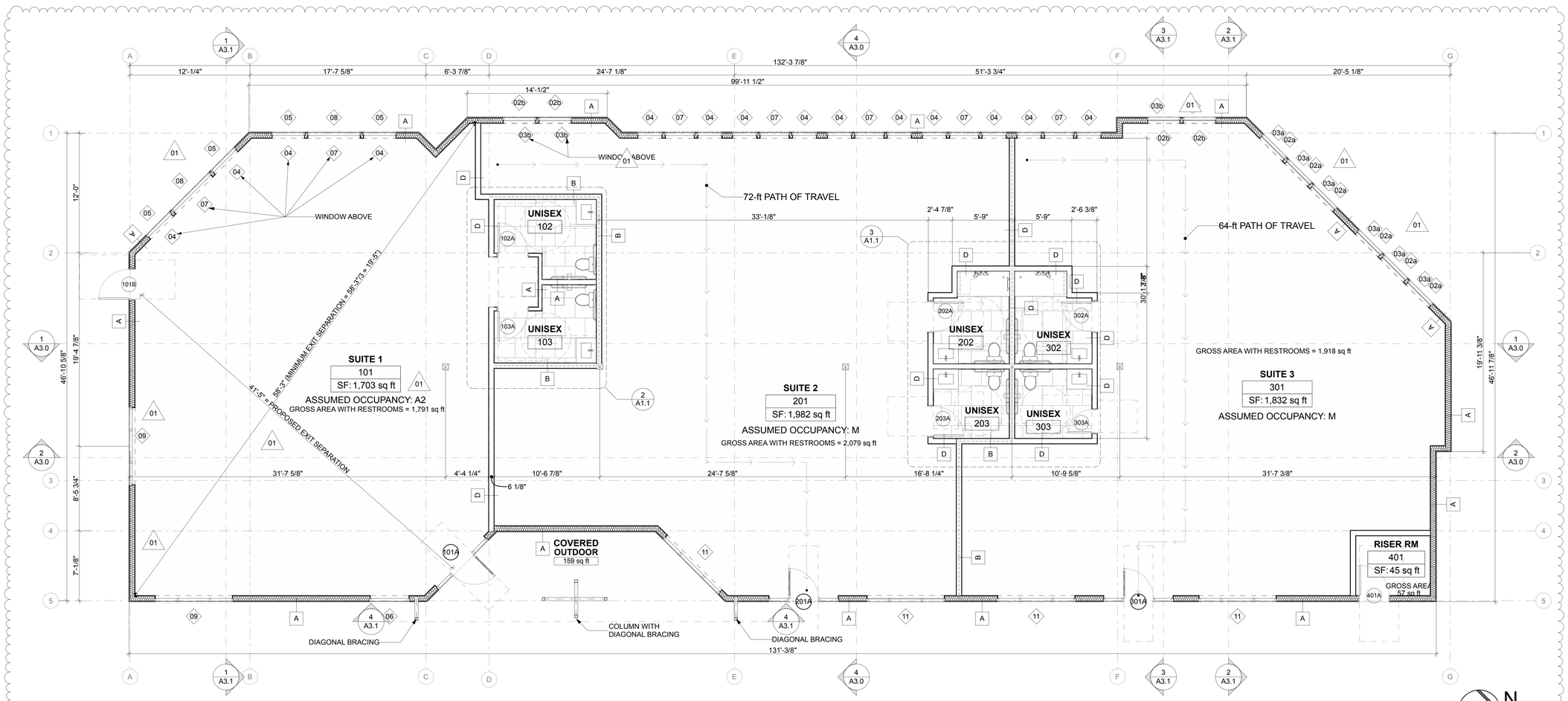
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PROJECT # :	2016L2
SHEET:	AS1.0

AGENCY REVIEW - REVISION No.1 | 2024.04.12

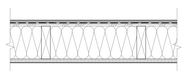
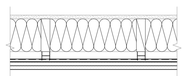
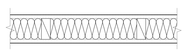
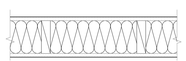
PRCNC20231714



1 LEVEL 1 FLOOR PLAN
SCALE: 3/16" = 1'-0"

508.3.1 Occupancy classification.
Nonseparated occupancies shall be individually classified in accordance with Section 302.1. The requirements of this code shall apply to each portion of the building based on the occupancy classification of that space. In addition, the most restrictive provisions of Chapter 9 that apply to the nonseparated occupancies shall apply to the total nonseparated occupancy area.

WALL TYPES

A		CLADDING WATER RESISTANT BARRIER 1/2" SHEATHING, PER STRUCTURAL 2 X 6 WOOD STUDS @ 16" O.C. WITH R-21 BATT INSULATION 5/8" TYPE "X" GWB (W.R. IN WET AREAS) VAPOR BARRIER PAINT
B		WALL EXTENDS FROM TOP OF CONCRETE SLAB TO BOTTOM OF ROOF DECK ABOVE 5/8" TYPE "X" GWB (W.R. @ WET AREAS) 2 x 6 WOOD STUDS @ 16" O.C. PER STRUCTURAL SOUND BATTS RESILIENT ISOLATION CLIPS (PC-INTL RSIC-1 or equivalent) FURRING CHANNEL (2) LAYERS 5/8" TYPE "X" GWB (W.R. @ WET AREAS)
C		WALL EXTENDS FROM TOP OF CONCRETE SLAB TO BOTTOM OF ROOF DECK ABOVE 5/8" TYPE "X" GWB (W.R. @ WET AREAS) 2 x 4 WOOD STUDS @ 16" O.C. PER STRUCTURAL 3-1/2" SOUND BATTS 5/8" TYPE "X" GWB (W.R. @ WET AREAS)
D		WALL EXTENDS FROM TOP OF CONCRETE SLAB TO BOTTOM OF FLOOR DECK ABOVE 5/8" TYPE "X" GWB (W.R. @ WET AREAS) 2 x 6 WOOD STUDS @ 16" O.C. PER STRUCTURAL 3-1/2" SOUND BATTS 5/8" TYPE "X" GWB (W.R. @ WET AREAS)

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BRETT L. LINDSAY
STATE OF WASHINGTON
9251

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Building	Planning
Engineering	Public Works
Fire	Traffic

EAST TOWN CROSSING
LOT 2 COMMERCIAL
PIONEER & SHAW PUYALLUP

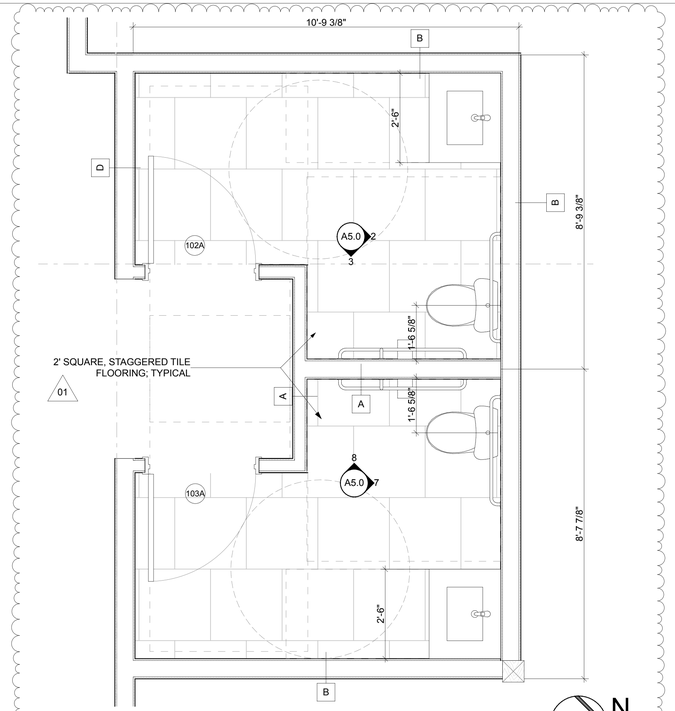
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PROJECT # :	2016L2
SHEET:	A1.0

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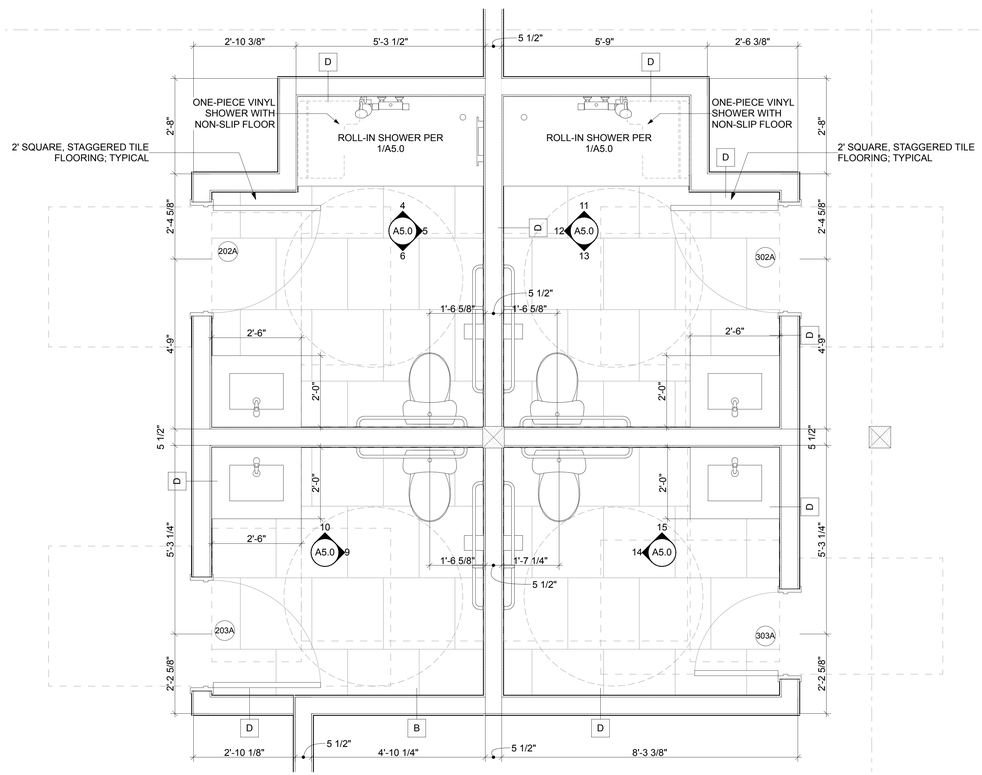
2 LEVEL 1 ENLARGED PLAN
SCALE: 1/2" = 1'-0"

01

NOT USED

1 LEVEL 2 FLOOR PLAN
SCALE: 3/16" = 1'-0"

N



3 LEVEL 1 ENLARGED PLAN
SCALE: 1/2" = 1'-0"

N

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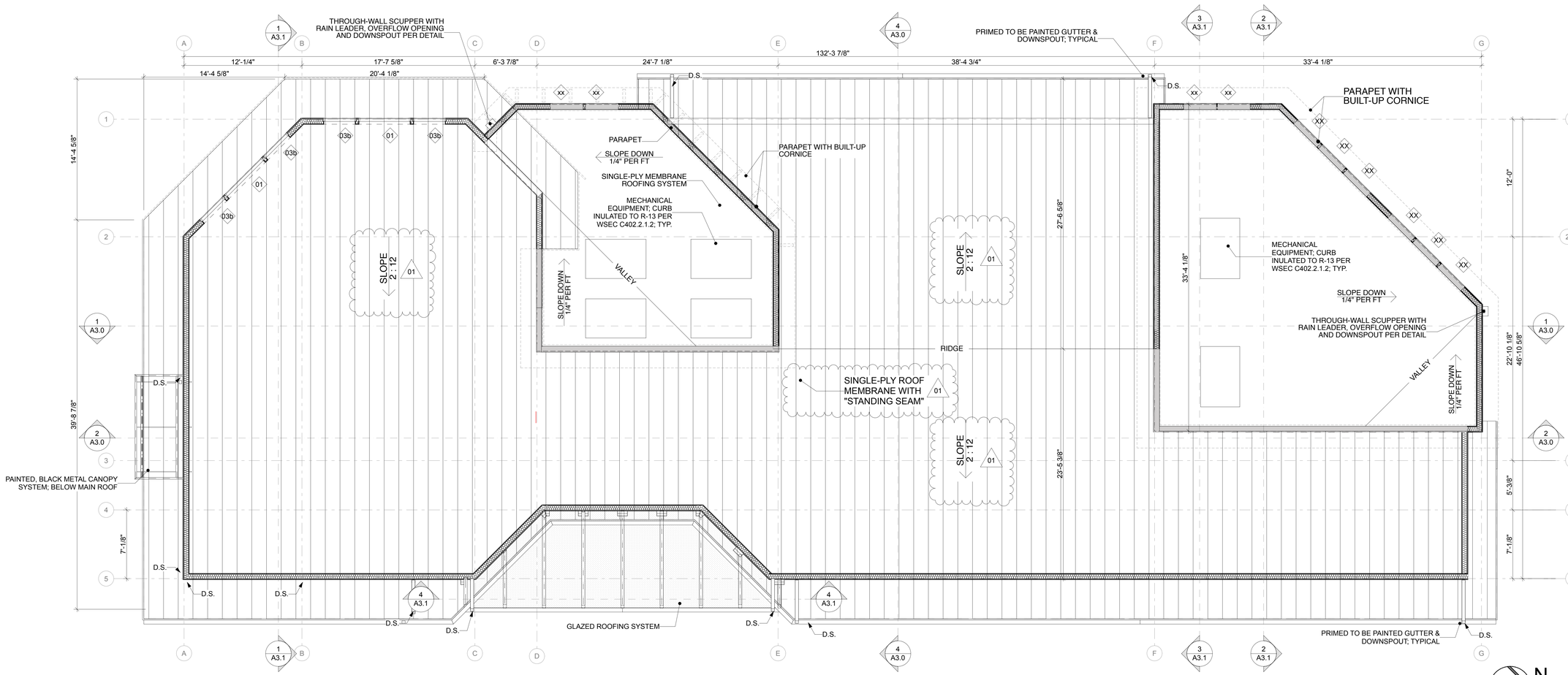
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PROJECT # :	2016L2
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1 ROOF PLAN

SCALE: 3/16" = 1'-0"

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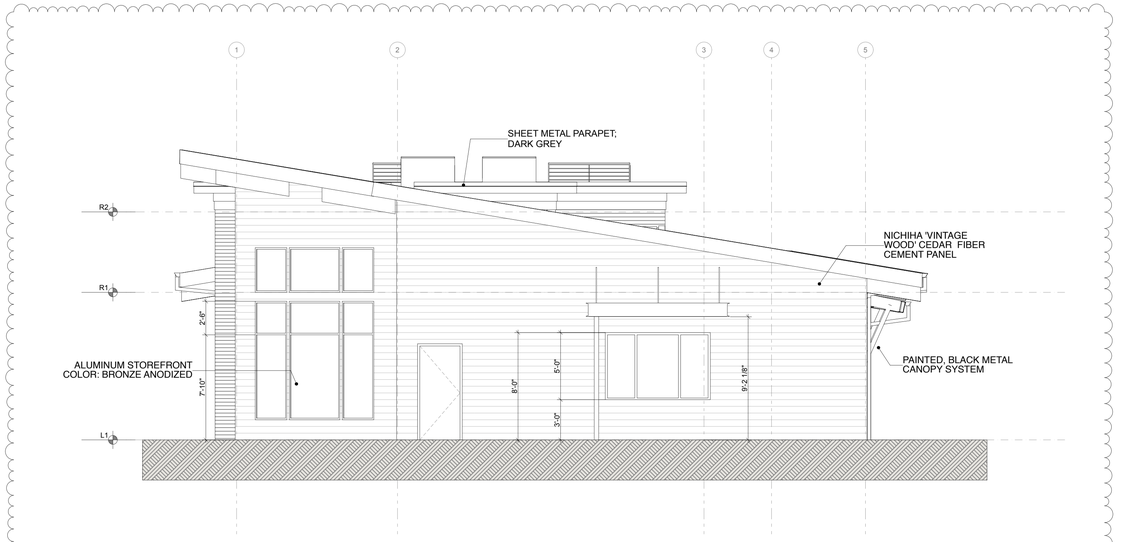
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DATE:	2024.04.12
TITLE:	ROOF PLAN
PROJECT # :	2016L2
SHEET:	A1.2

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1 EAST ELEVATION

SCALE: 3/16" = 1'-0"



2 SOUTH ELEVATION 01

SCALE: 3/16" = 1'-0"

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EAST TOWN CROSSING
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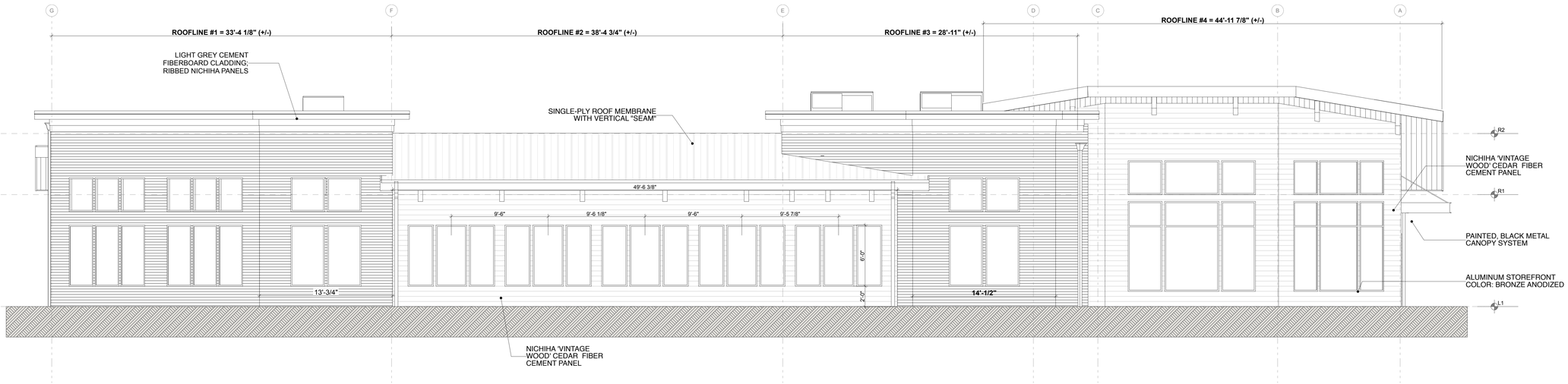
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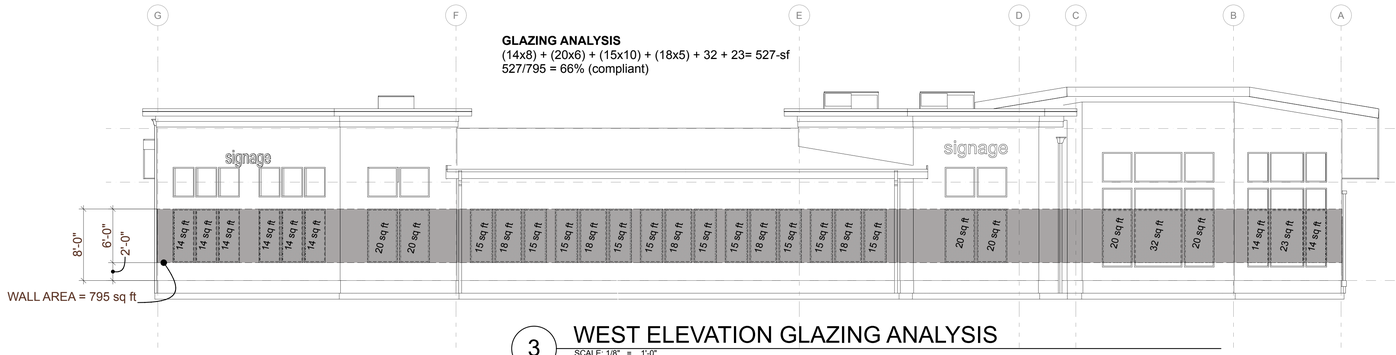
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PROJECT # :	2016L2
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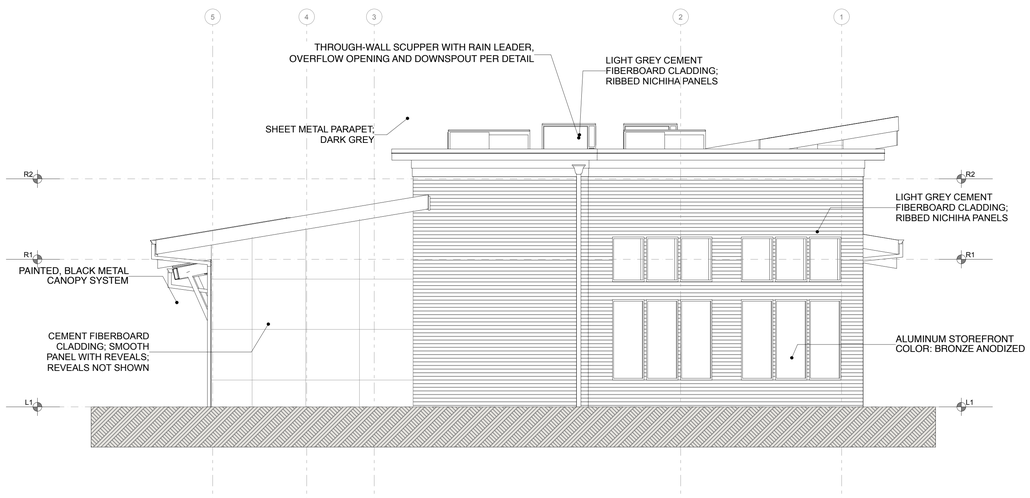
2 WEST ELEVATION

SCALE: 3/16" = 1'-0"



3 WEST ELEVATION GLAZING ANALYSIS

SCALE: 1/8" = 1'-0"



1 NORTH ELEVATION

SCALE: 3/16" = 1'-0"

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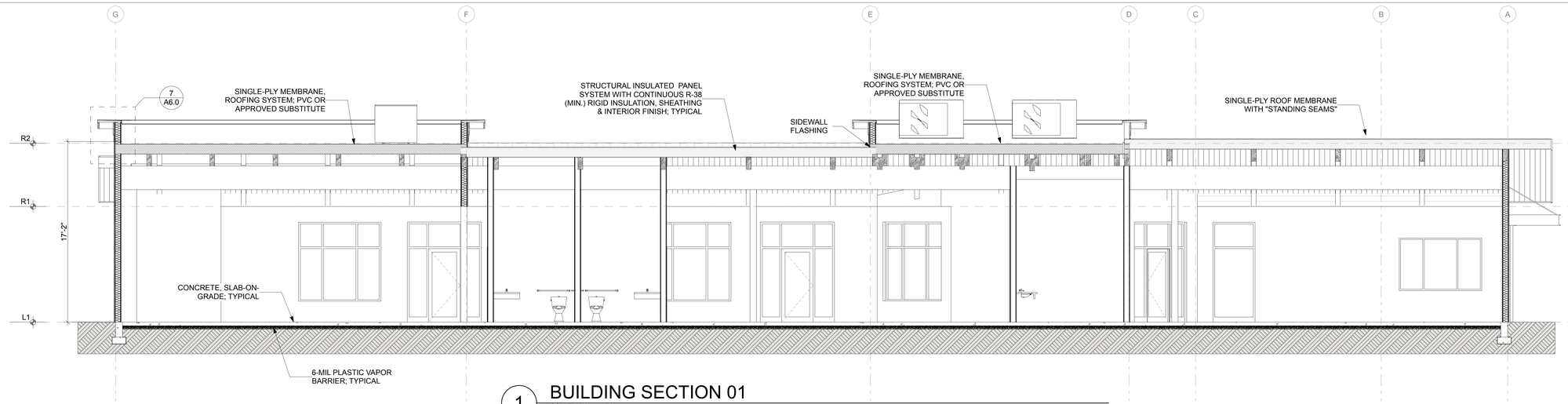
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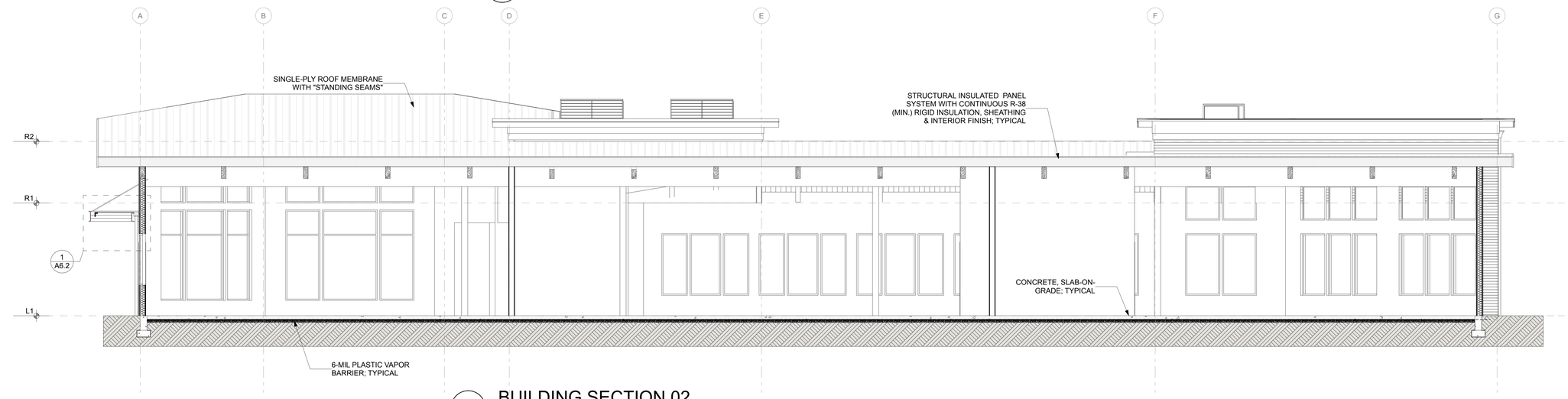
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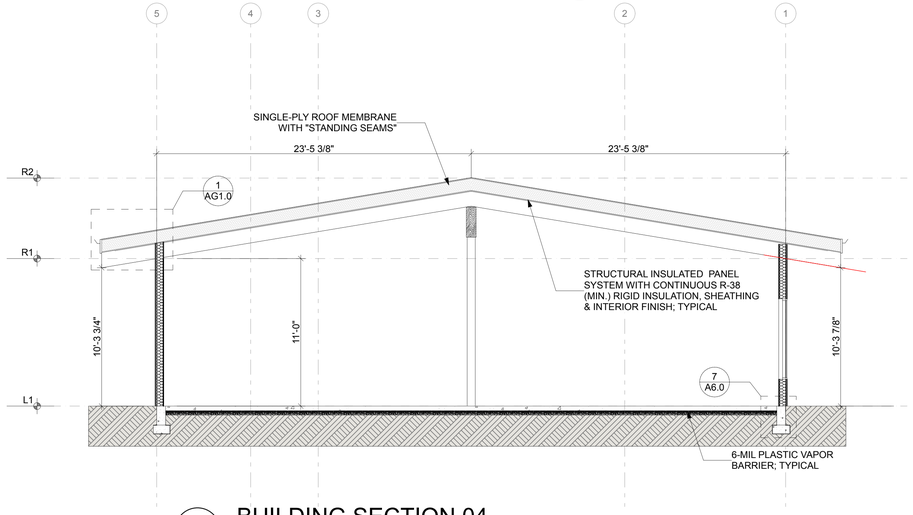
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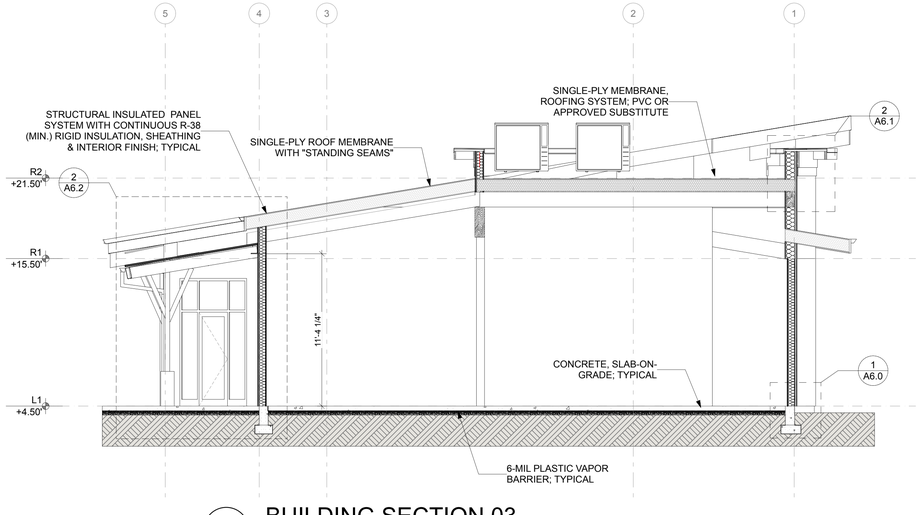
1 BUILDING SECTION 01
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2 BUILDING SECTION 02
SCALE: 3/16" = 1'-0"



4 BUILDING SECTION 04
SCALE: 3/16" = 1'-0"



3 BUILDING SECTION 03
SCALE: 3/16" = 1'-0"

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9251

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EAST TOWN CROSSING
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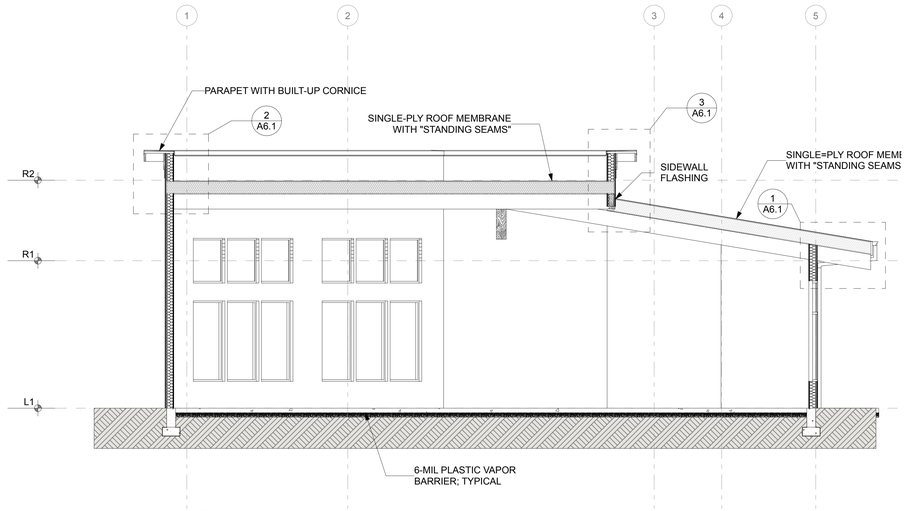
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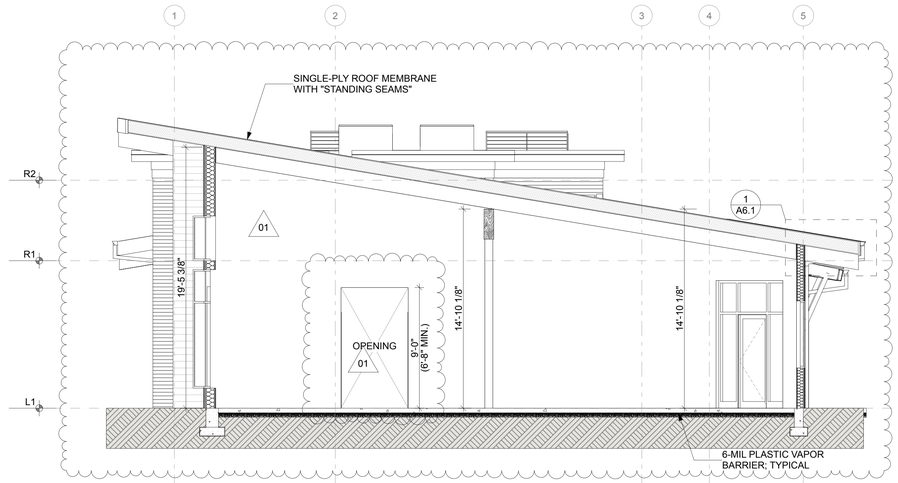
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PROJECT # :	2016L2
SHEET:	A3.0

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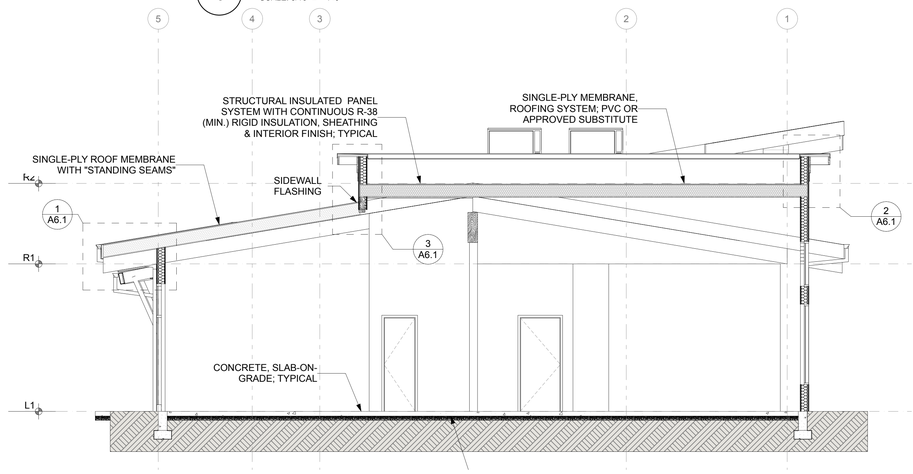
2 BUILDING SECTION 06

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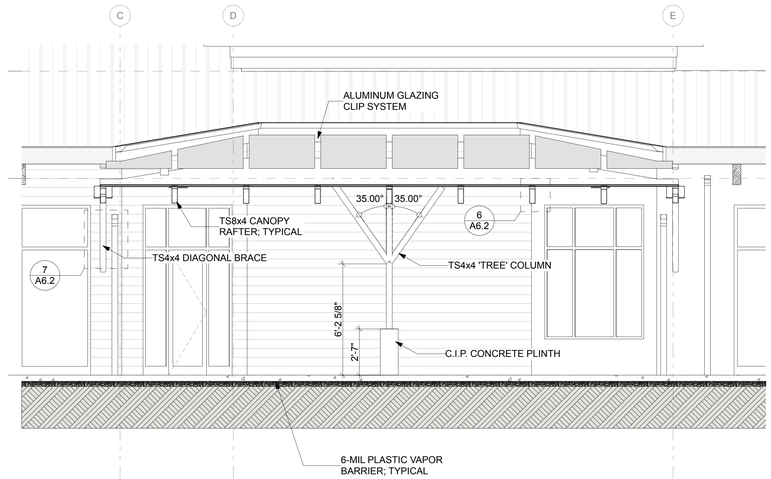
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3 BUILDING SECTION 07

SCALE: 3/16" = 1'-0"



4 BUILDING SECTION 08

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

01

NOT USED

5 BUILDING SECTION 09

SCALE: 1/2" = 1'-0"

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LOT 2 COMMERCIAL
PIONEER & SHAW PUYALLUP

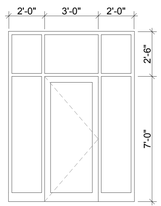
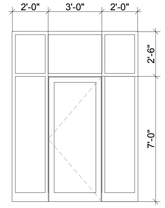
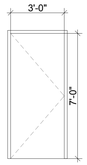
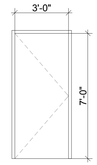
01	RESPONSE TO 1st ROUND OF REVIEW

REVISIONS

DRAWN BY:	CM / BL
CHECKED BY:	BL
DATE:	2024.04.12
TITLE:	BUILDING SECTIONS
PROJECT # :	2016L2
SHEET:	A3.1

AGENCY REVIEW - REVISION No.1 | 2024.04.12

DOOR TYPES

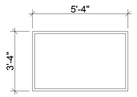
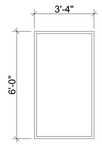
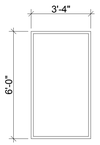
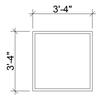
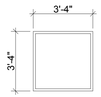
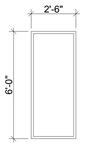
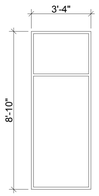
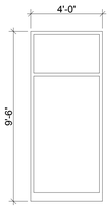
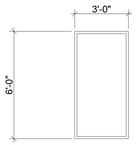
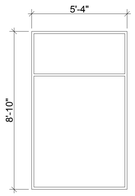
ELEVATION				
TYPE	A	B	C	D
QUANTITY	1	2	2	6
FRAME	BLACK ANODIZED ALUM. STOREFRONT	BLACK ANODIZED ALUM. STOREFRONT	HOLLOW METAL	WOOD FRAME
PANEL	SAFETY GLAZED	SAFETY GLAZED	SOLID CORE METAL	HOLLOW CORE WOOD
U-VALUE	0.60	0.60	0.37	N/A
SHGC	0.35	0.35	N/A	N/A
NOTES	SAFETY GLAZED SITELIGHTS	SAFETY GLAZED SITELIGHTS	EXTERIOR	INTERIOR

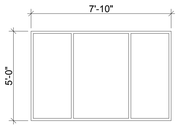
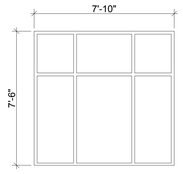
DOOR SCHEDULE

DOOR NUMBER	TYPE	ROOM	DOOR W x HT	NOTES
101A	A	SUITE 1	3'-0"I 7'-0"	PANIC HARDWARE
101B	C	SUITE 1	3'-0"I 7'-0"	PANIC HARDWARE; EMERGENCY EGRESS ONLY
102A	D	UNISEX 102	3'-0"I 7'-0"	PRIVACY LOCKSET; PANIC HARDWARE
103A	D	UNISEX 103	3'-0"I 7'-0"	PRIVACY LOCKSET; PANIC HARDWARE
201A	B	SUITE 2	3'-0"I 7'-0"	PANIC HARDWARE
202A	D	UNISEX 202	3'-0"I 7'-0"	PRIVACY LOCKSET; PANIC HARDWARE
203A	D	UNISEX 203	3'-0"I 7'-0"	PRIVACY LOCKSET; PANIC HARDWARE
301A	B	SUITE 3	3'-0"I 7'-0"	PANIC HARDWARE
302A	D	UNISEX 302	3'-0"I 7'-0"	PRIVACY LOCKSET; PANIC HARDWARE
303A	D	UNISEX 303	2'-4"I 7'-0"	PRIVACY LOCKSET; PANIC HARDWARE
401A	C	RISER ROOM	3'-0"I 7'-0"	PANIC HARDWARE

[2018 Washington State Building Code, section 1010.1.9.4]
Locks and Latches, item #2
In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in places of religious worship, the main door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
1. The locking device is readily distinguishable as locked.
2. A readily visible and durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background and;
3. The use of the key-operated locking device is revocable by the building official for due cause.

WINDOW TYPES

ELEVATION										
TYPE	01	02a	02b	03a	03b	04	05	06	07	08
SIZE (W x H)	5'-4"I 3'-4"	3'-4"I 6'-0"	3'-4"I 6'-0"	3'-4"I 3'-4"	3'-4"I 3'-4"	2'-6"I 6'-0"	3'-4"I 8'-10"	4'-0"I 9'-6"	3'-0"I 6'-0"	5'-4"I 8'-10"
QUANTITY	2	6	4	6	8	10	4	1	5	2
U-VALUE	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
SHGC	0.35	0.46	0.35	0.46	0.35	0.35	0.35	0.35	0.35	0.35
NOTES	BLACK ANODIZED ALUM. STOREFRONT;	BLACK ANODIZED ALUM. STOREFRONT;	BLACK ANODIZED ALUM. STOREFRONT;	BLACK ANODIZED ALUM. STOREFRONT;	BLACK ANODIZED ALUM. STOREFRONT;	BLACK ANODIZED ALUM. STOREFRONT;	BLACK ANODIZED ALUM. STOREFRONT;	BLACK ANODIZED ALUM. STOREFRONT;	BLACK ANODIZED ALUM. STOREFRONT;	BLACK ANODIZED ALUM. STOREFRONT;

ELEVATION		
TYPE	09	11
SIZE (W x H)	7'-10"I 5'-0"	7'-10"I 7'-6"
QUANTITY	2	4
U-VALUE	0.34	0.34
SHGC	0.35	0.35
NOTES	BLACK ANODIZED ALUM. STOREFRONT;	BLACK ANODIZED ALUM. STOREFRONT;

[2018 Washington State Building Code, section 2403.1]
General Requirements for Glass - Identification.
Each pane shall bear the manufacturer's mark designating the type and thickness of the glass or glazing material. The identification shall not be omitted unless approved and an affidavit is furnished by the glazing contractor certifying that each light is glazed in accordance with approved construction documents that comply with the provisions of this chapter. Safety glazing shall be identified in accordance with Section 2406.3.

Each pane of tempered glass, except tempered spandrel glass, shall be permanently identified by the manufacturer. The identification mark shall be acid etched, sand blasted, ceramic fired, laser etched, embossed or of a type that, once applied, cannot be removed without being destroyed.

Tempered spandrel glass shall be provided with a removable paper marking by the manufacturer.

DOOR SCHEDULE NOTES:

DOOR OPERATIONS PER 1010.1.9 - EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

DOOR HARDWARE PER 1010.1.9.1 - DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE BY CHAPTER 11 SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE.

HARDWARE HEIGHT PER 1010.1.9.2 - DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES SHALL BE INSTALLED 34 INCHES MINIMUM AND 48 INCHES MAXIMUM ABOVE THE FINISHED FLOOR. LOCKS USED ONLY FOR SECURITY PURPOSES AND NOT USED FOR NORMAL OPERATION ARE PERMITTED AT ANY HEIGHT.

ACCESSIBLE THRESHOLDS PER ICC A117.1-2009 SECTION 303 - THRESHOLDS AT DOORWAYS SHALL BE 1/2" MAXIMUM IN HEIGHT.

DOOR CLOSERS PER ICC A117.1-2009 - DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THROUGH THE DOOR TO AN OPEN POSITION OF 12 DEGREES SHALL BE 5 SECONDS.

DOOR-OPENING FORCE PER ICC A117.1-2009 - THE FORCE FOR PUSHING OR PULLING OPEN DOORS SHALL BE 10.0 POUNDS MAXIMUM PER WASHINGTON STATE AMMENDMENT.

DOOR HARDWARE LOCKSETS and DEFINITIONS

SECURITY LOCKSET - THE LATCHBOLT IS RETRACTED BY THE GRIP ON EITHER SIDE UNLESS THE OUTSIDE GRIP IS LOCKED BY THE OUTSIDE KEY. OPERATING THE INSIDE GRIP ALWAYS RETRACTS THE LATCHBOLT.

ACCESSIBLE SECURITY LOCKSET - THE LATCHBOLT IS RETRACTED BY THE GRIP ON EITHER SIDE UNLESS THE OUTSIDE GRIP IS LOCKED BY EITHER THE INSIDE KEY OR THE OUTSIDE KEY. OPERATING THE INSIDE GRIP ALWAYS RETRACTS THE LATCHBOLT. ALL COMPONENTS OF THE DOOR HARDWARE TO MEET ACCESSIBILITY REQUIREMENTS OF SECTION 1010.1.9 OF THE 2018 IBC.

OFFICE LOCKSET - THE LATCHBOLT IS RETRACTED BY THE GRIP ON EITHER SIDE UNLESS THE OUTSIDE GRIP IS LOCKED BY THE TOGGLE OR OUTSIDE KEY. OPERATING THE INSIDE GRIP DOES NOT UNLOCK THE OUTSIDE GRIP.

PASSAGE LOCKSET - THE LATCHBOLT IS ALWAYS RETRACTED BY THE GRIP ON EITHER SIDE. BOTH GRIPS ARE ALWAYS FREE.

PRIVACY LOCKSET - THE LATCHBOLT IS RETRACTED BY THE GRIP ON EITHER SIDE UNLESS THE OUTSIDE GRIP IS LOCKED BY THE INSIDE THUMB-TURN, BUTTON OR KEY. OPERATING THE INSIDE GRIP UNLOCKS THE OUTSIDE GRIP. AN EMERGENCY RELEASE TOOL UNLOCKS THE OUTSIDE GRIP. THE OUTSIDE GRIP IS ALSO UNLOCKED WHEN THE DOOR IS CLOSED. DOOR CAN ONLY BE LOCKED FROM THE INSIDE WHEN THE DOOR IS CLOSED.

PUBLIC RESTROOM LOCKSET - THE LATCHBOLT IS RETRACTED BY THE INSIDE GRIP OR AN OUTSIDE KEY. THE LATCHBOLT IS RETRACTED BY THE OUTSIDE GRIP INLESS THE GRIP IS LOCKED BY A KEY FROM THE INSIDE. THE LATCHBOLT / OUSIDE GRIP CANNOT BE LOCKET BY A KEY FROM THE OUTSIDE. ALL COMPONENTS OF THE DOOR HARDWARE GROUP TO MEET ACCESSIBILITY REQUIREMENTS OF SECTION 1010.1.9 OF THE 2018 IBC.

STOREROOM LOCKSET - THE LATCHBOLT IS RETRACTED BY THE INSIDE GRIP OR OUTSIDE KEY.

CLOSET LOCKSET - THE LATCHBOLT IS RETRACTED BY THE OUTSIDE AND THE INSIDE GRIP AND THE GRIP CANNOT BE LOCKED.

GLAZING NOTES:

1. GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BIFOLD DOORS SHALL BE CONSIDERED HAZARDOUS LOCATIONS.

2. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE OF THE GLAZING IS WITHIN A 24-INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAT 60 INCHES ABOVE THE WALKING SURFACE SHALL BE CONSIDERED A HAZARDOUS LOCATION.

3. GLAZING IN INDIVIDUAL FIXED OR OPERABLE PANEL OF A WINDOW THAT MEETS ALL OF THE FOLLOWING FOUR CONDITIONS SHALL BE CONSIDERED A HAZARDOUS LOCATION: 1. THE EXPOSED AREA OF AN INDIVIDUAL PANE IS GREATER THAN 9 SQAURE FEET; 2. THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES ABOVE THE FLOOR; 3. THE TOP EDGE OF THE GLAZING IS GREATER THAN 36 INCHES ABOVE THE FLOOR; AND 4. ONE OR MORE WALKING SURFACE(S) ARE WITHIN 36 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE PLANE OF THE GLAZING

PRCNC20231714

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REGISTERED ARCHITECT
BRIAN LEE LAWSON
STATE OF WASHINGTON
9251

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

EAST TOWN CROSSING
LOT 2 COMMERCIAL
PIONEER & SHAW PUYALLUP

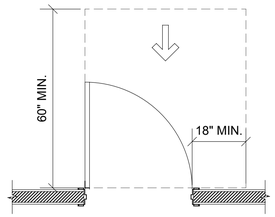
AGENCY REVIEW - REVISION No.1 | 2024.04.12

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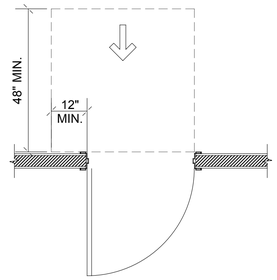
REVISIONS

DRAWN BY:	CM / BL
CHECKED BY:	BL
DATE:	2024.04.12
TITLE:	DOORS & WINDOWS
PROJECT # :	2016L2
SHEET:	A4.0

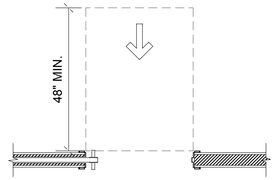
PRCNC20231714



FRONT APPROACH, PULL SIDE



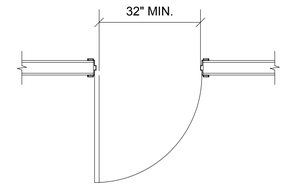
FRONT APPROACH, PUSH SIDE



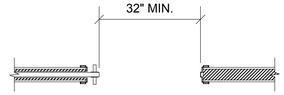
FRONT APPROACH, POCKET

402.2.2 CLEAR WIDTH
DOORWAYS SHALL HAVE A CLEAR OPENING WIDTH OF 32 INCHES MINIMUM. CLEAR OPENING WIDTH OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND STOP, WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAN 24 INCHES IN DEPTH AT DOORS AND DOORWAYS WITHOUT DOORS SHALL PROVIDE A CLEAR OPENING WIDTH OF 36 INCHES MINIMUM. THERE SHALL BE NO PROJECTIONS INTO THE CLEAR OPENING WIDTH LOWER THAN 34 INCHES ABOVE THE FLOOR. PROJECTIONS INTO THE CLEAR OPENING WIDTH BETWEEN 34 INCHES AND 80 INCHES ABOVE THE FLOOR SHALL NOT EXCEED 4 INCHES.

EXCEPTIONS:
1. DOOR CLOSERS AND DOOR STOPS SHALL BE PERMITTED TO BE 78 INCHES MINIMUM ABOVE THE FLOOR.
2. IN ALTERATIONS, A PROJECTION OF 5/8" MAXIMUM INTO THE REQUIRED CLEAR OPENING WIDTH SHALL BE PERMITTED FROM THE LATCH SIDE STOP.

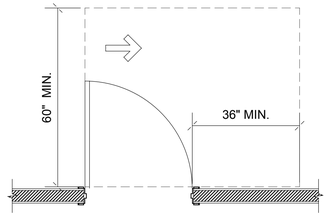


(A) HINGE DOOR

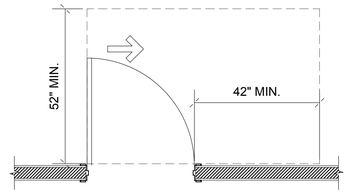


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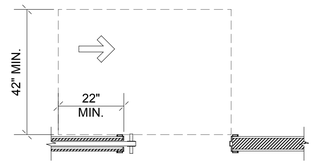
CLEAR WIDTH OF OPENINGS



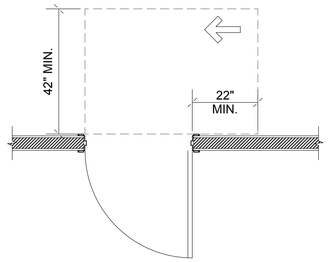
HINGE APPROACH, PULL SIDE



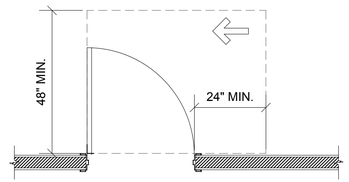
HINGE APPROACH, PULL SIDE



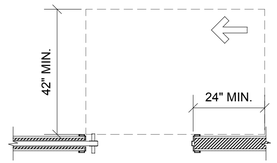
POCKET OR HINGE APPROACH



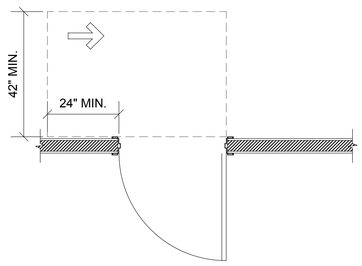
HINGE APPROACH, PUSH SIDE



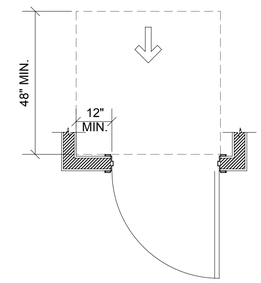
LATCH APPROACH, PULL SIDE



STOP OR LATCH APPROACH



LATCH APPROACH, PUSH SIDE



PUSH SIDE, W/ CLOSER & LATCH

1 ACCESSIBLE DOOR CLEARANCE
SCALE: 1/2" = 1'-0"

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REGISTERED ARCHITECT
BRETT L. LINDSAY
STATE OF WASHINGTON
9251

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

EAST TOWN CROSSING
LOT 2 COMMERCIAL
PIONEER & SHAW PUYALLUP

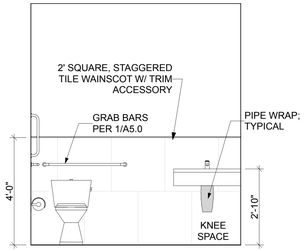
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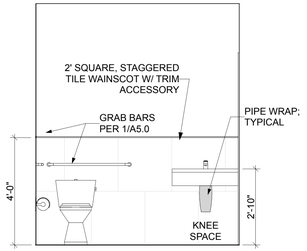
REVISIONS

DRAWN BY:	CM / BL
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PROJECT # :	2016L2
SHEET:	A4.1

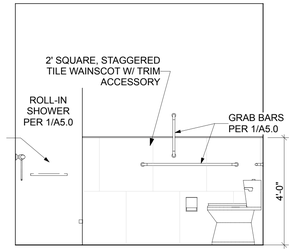
PRCNC20231714



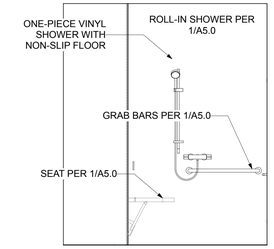
7 UNISEX 103
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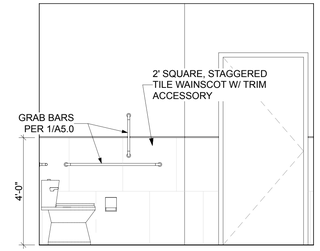
6 UNISEX 202
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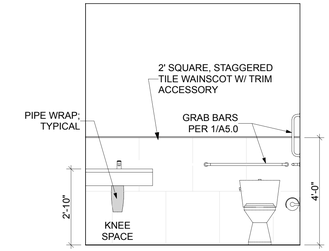
5 UNISEX 202
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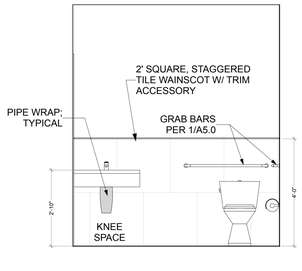
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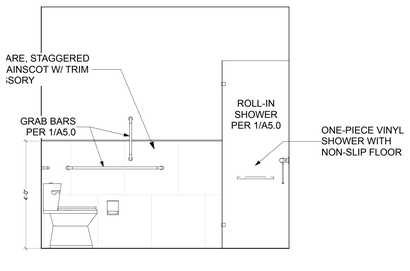
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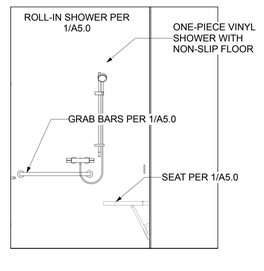
2 UNISEX 102
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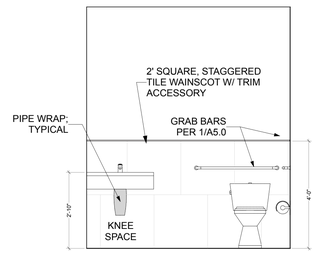
13 UNISEX 302
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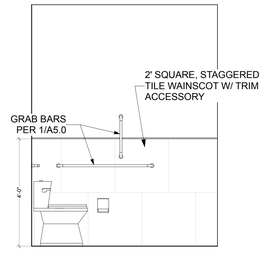
12 UNISEX 302
SCALE: 3/8" = 1'-0"



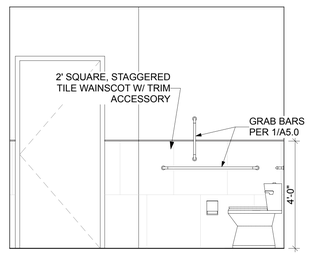
11 UNISEX 302
SCALE: 3/8" = 1'-0"



10 UNISEX 203
SCALE: 3/8" = 1'-0"



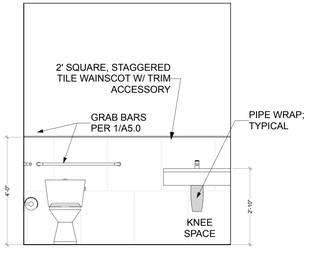
9 UNISEX 203
SCALE: 3/8" = 1'-0"



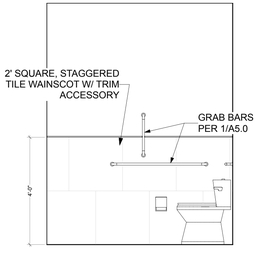
8 UNISEX 103
SCALE: 3/8" = 1'-0"

[2018 Washington State Building Code, section 1209.2.1]
Floors and wall bases.
In other than dwelling units, toilet, bathing and shower room floor finish materials shall have a smooth, hard, nonabsorbent surface. The intersections of such floors with walls shall have a smooth, hard, nonabsorbent vertical base that extends upward onto the walls not less than 4 inches (102 mm).

[2018 Washington State Building Code, section 1209.2.2]
Walls and partitions
Walls and partitions within 2 feet (610 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet (1219 mm) above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.
-
Exception: This section does not apply to the following buildings and spaces:
1.Dwelling units and sleeping units.
2.Toilet rooms that are not accessible to the public and that have not more than one water closet.
-
Accessories such as grab bars, towel bars, paper dispensers and soap dishes, provided on or within walls, shall be installed and sealed to protect structural elements from moisture.

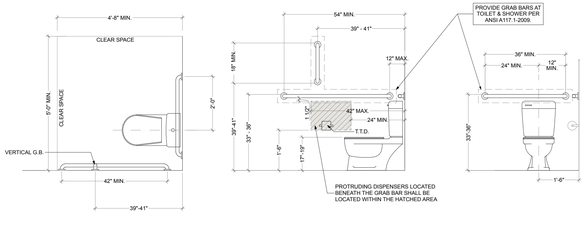


15 UNISEX 303
SCALE: 3/8" = 1'-0"

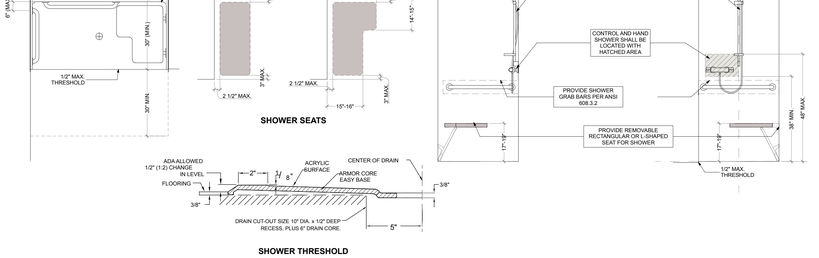


14 UNISEX 303
SCALE: 3/8" = 1'-0"

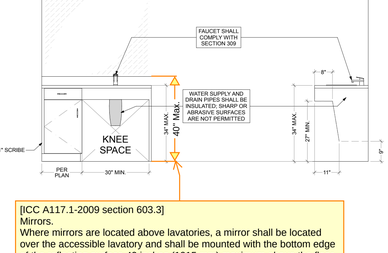
ACCESSIBLE TOILET



ROLL-IN SHOWER



ACCESSIBLE SINK



[ICC A117.1-2009 section 603.3]
Mirrors.
Where mirrors are located above lavatories, a mirror shall be located over the accessible lavatory and shall be mounted with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the floor. Where mirrors are located above counters that do not contain lavatories, the mirror shall be mounted with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the floor.

1 ACCESSIBLE FIXTURES FIXTURES
SCALE: 3/8" = 1'-0"

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REGISTERED ARCHITECT
BRETT L. LINDSAY
STATE OF WASHINGTON
9251

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

EAST TOWN CROSSING
LOT 2 COMMERCIAL
PIONEER & SHAW PUYALLUP

AGENCY REVIEW - REVISION No.1 | 2024.04.12

01	RESPONSE TO 1st ROUND OF REVIEW

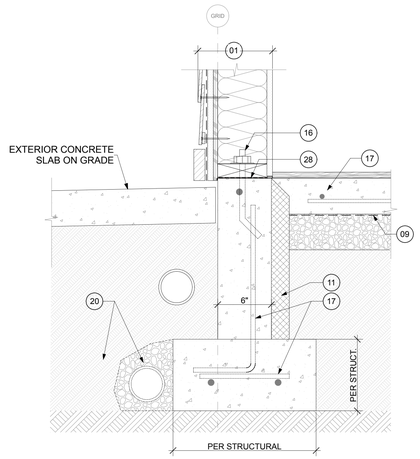
REVISIONS

DRAWN BY:	CM / BL
CHECKED BY:	BL
DATE:	2024.04.12
TITLE:	INTERIOR ELEVATIONS
PROJECT # :	2016L2
SHEET:	A5.0

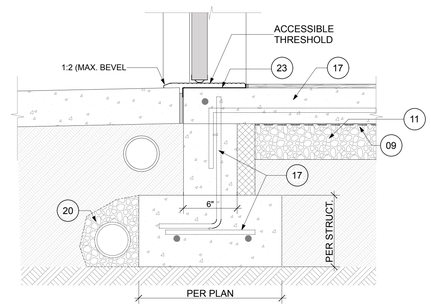
PRCNC20231714

FOUNDATION DETAIL REFERENCE NOTES

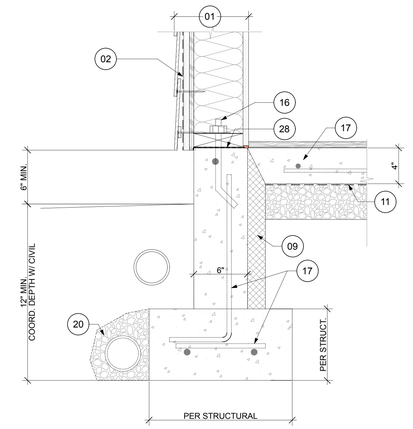
01	WALL PER PLAN
02	VAPOR PERMEABLE AIR BARRIER / W.R.B. FIELD MEMBRANE
03	CONTINUOUS, SELF-ADHERED MEMBRANE (S.A.M.) ALONG TOP EDGE OF METAL FLASHING
04	BELOW GRADE WATER-PROOFING SYSTEM W/ DRAINAGE MAT AND FILTER FABRIC PROTECTION LAYER
05	22 GAUGE, SHEET METAL FLASHING, W/ HEMMED EDGE; SET ON SEALANT & EXTEND 6" UP UNDER W.R.B. OR TO WINDOW OPENING
06	FILTER FABRIC OVER MINIMUM 1/2-INCH DRAINAGE MATRIX
07	METAL LATHE WITH BOND & SCRATCH COAT
08	NOT USED
09	6 MIL PLASTIC VAPOR BARRIER
10	NOT USED
11	R-10 POLYISO INSULATION; UNDER ENTIRE SLAB AT CONDITIONED AREAS AND CONFIGURED AS SHOWN TO TOP OF FOOTING OR 2-FT IN LENGTH.
12	NOT USED
13	CEMENT FIBERBOARD PANEL OR LAP-SIDING SIDING - HARDIE PANEL OR APPROVED SUBSTITUTE
14	NOT USED
15	NOT USED
16	ANCHOR BOLT & TREATED SILL PLATE(S) PER STRUCTURAL
17	CONCRETE & REINFORCING PER STRUCTURAL (TYPICAL)
18	12-INCH WIDE GRACE VYCOR SILL PAN / FLASHING W/ END DAMS. AT EACH SILL CORNER, INSTALL VYCORNERS AND CORNER PATCHES PER THE MFR'S RECOMMENDATIONS; WRAP UP THE STEEL ANGLE TO CREATE A DAM.
19	CONT. BACK DAM ANGLE, MIN. 1-INCH TALL WITH VINYL ASSEMBLY FASTENED THROUGH ANGLE PER MFR. RECOMMENDATIONS.
20	4" PERF. FOOTING DRAIN AND 4" TIGHT-LINE DRAIN; SET IN DRAIN ROCK AND WRAP IN FILTER FABRIC; SEE CIVIL DRAWINGS FOR RELATED INFORMATION
21	3/8" SEALANT JOINT WITH BACKER ROD.
22	PRIMED COUNTER-FLASHING ABOVE TRIM; PROVIDE 1/4-INCH PER FOOT SLOPE TO HEMMED EDGE
23	GALV. METAL SILL PAN AT ANY DOOR WITH A THRESHOLD
24	VINYL WINDOW FRAME W/ FLANGE
25	PRIMED COUNTER-FLASHING ABOVE TRIM; PROVIDE 1/4-INCH PER FOOT SLOPE TO HEMMED EDGE
26	INSTALL PLASTIC HORSESHOE SHIMS @ EACH SILL FLANGE FASTENER
27	1/4-INCH WITH CAULK (ONE PART URETHANE SEALANT)
28	VYCOR-PLUS BY GRACE AT MUD SILL W/ 1-INCH DOWNTURN ON EXTERIOR SIDE WHEN FEASIBLE



3 FOUNDATION DETAIL - 03
SCALE: 1 1/2"= 1'-0"



2 FOUNDATION DETAIL - 02
SCALE: 1 1/2"= 1'-0"



1 FOUNDATION DETAIL - 01
SCALE: 1 1/2"= 1'-0"

01 NOT USED

7 STAIR AT WALL DETAIL
SCALE: 3" = 1'-0"

01 NOT USED

6 STAIR DETAIL - TOP
SCALE: 3" = 1'-0"

01 NOT USED

5 STAIR DETAIL - BOTTOM
SCALE: 3" = 1'-0"

01 NOT USED

4 TYPICAL HANDRAIL PLAN & SECTION
SCALE: 3" = 1'-0"

S9
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Building	Planning
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EAST TOWN CROSSING
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PIONEER & SHAW PUYALLUP

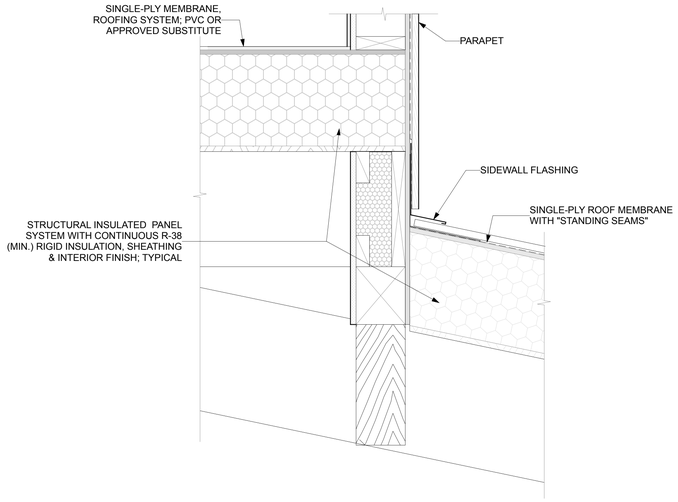
AGENCY REVIEW - REVISION No.1 | 2024.04.12

01	RESPONSE TO 1st ROUND OF REVIEW

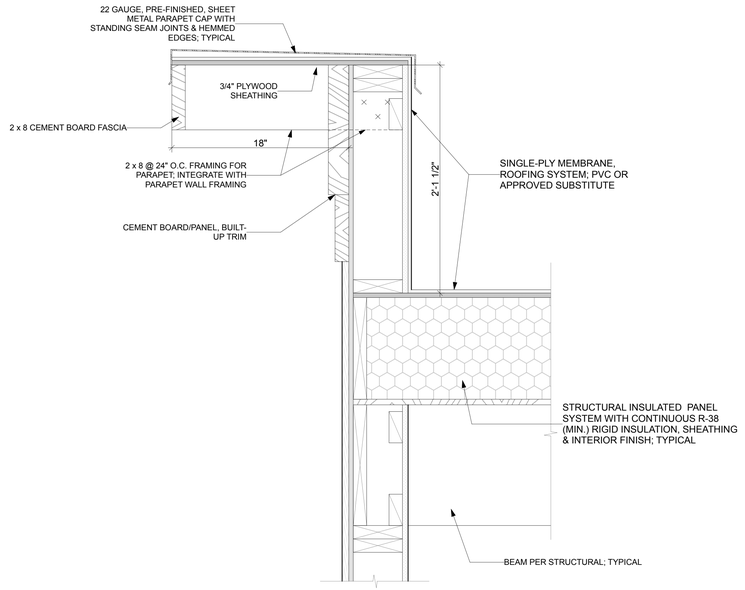
REVISIONS

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CHECKED BY:	BL
DATE:	2024.04.12
TITLE:	DETAILS
PROJECT # :	2016L2
SHEET:	A6.0

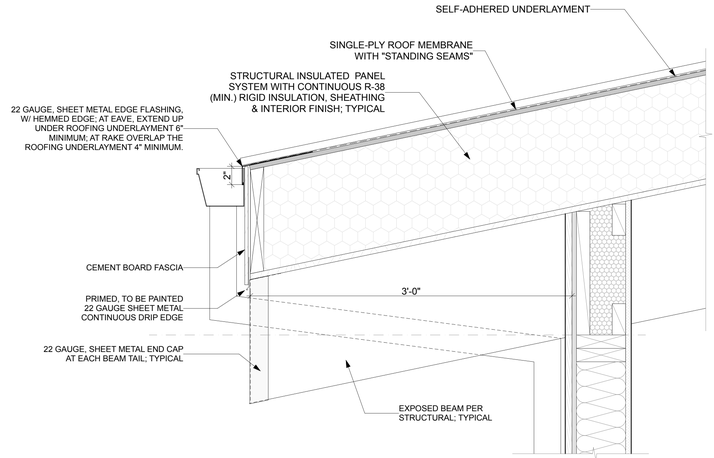
PRCNC20231714



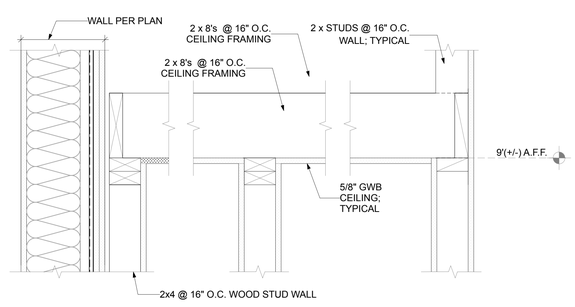
3 ROOF TRANSITION DETAIL
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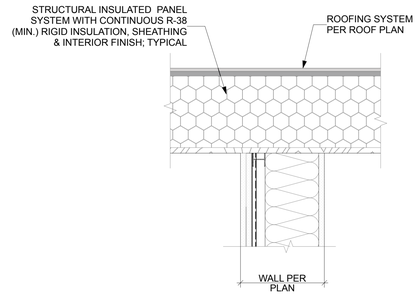
2 TYPICAL PARAPET
SCALE: 1 1/2"= 1'-0"



1 TYPICAL EAVE
SCALE: 1 1/2"= 1'-0"



5 RESTROOM CEILING FRAMING
SCALE: 1 1/2"= 1'-0"



4 DEMISING WALL DETAIL
SCALE: 1 1/2"= 1'-0"

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REGISTERED ARCHITECT 9251 BRIAN M. LEVIN STATE OF WASHINGTON

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

EAST TOWN CROSSING
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PIONEER & SHAW PUYALLUP

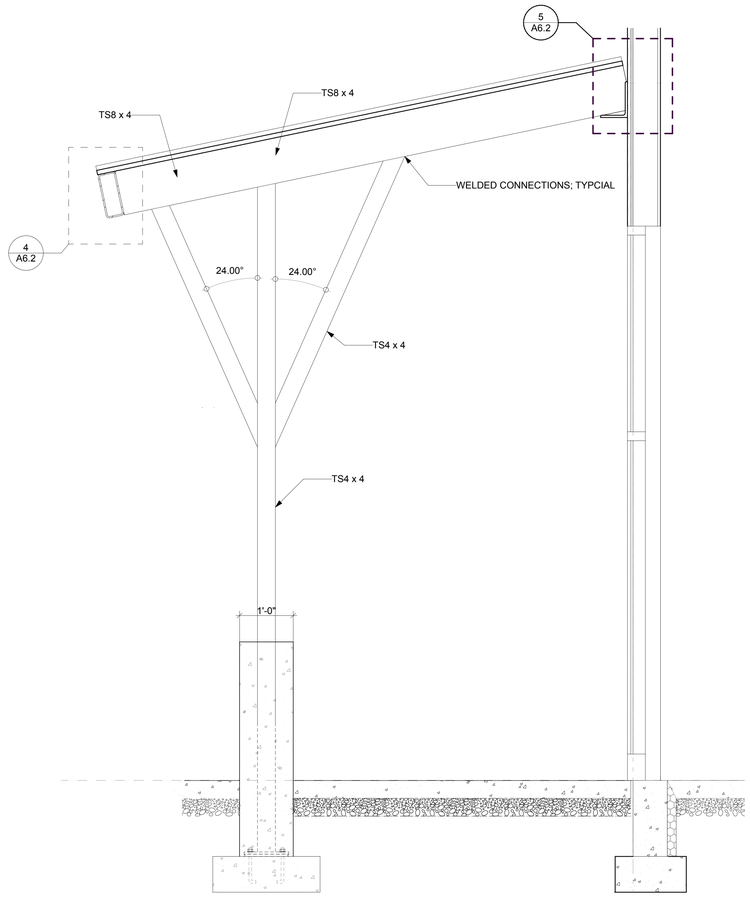
01	RESPONSE TO 1st ROUND OF REVIEW

REVISIONS

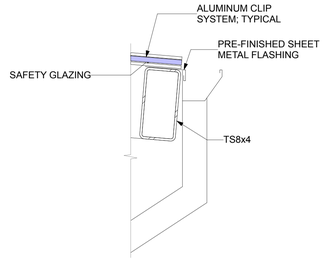
DRAWN BY:	CM / BL
CHECKED BY:	BL
DATE:	2024.04.12
TITLE:	DETAILS
PROJECT # :	2016L2
SHEET:	A6.1

AGENCY REVIEW - REVISION No.1 | 2024.04.12

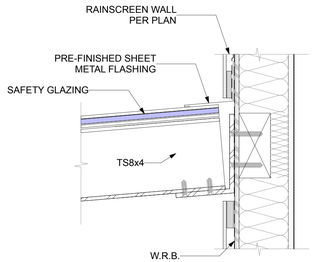
PRCNC20231714



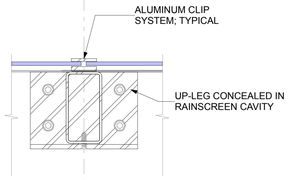
2 GLAZED CANOPY DETAIL
SCALE: 3/4" = 1'-0"



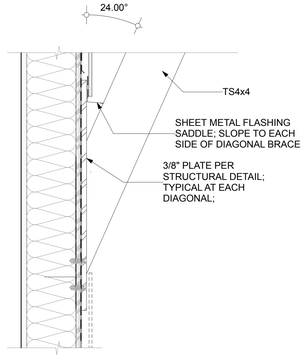
4 GLAZED CANOPY DETAIL
SCALE: 1 1/2"= 1'-0"



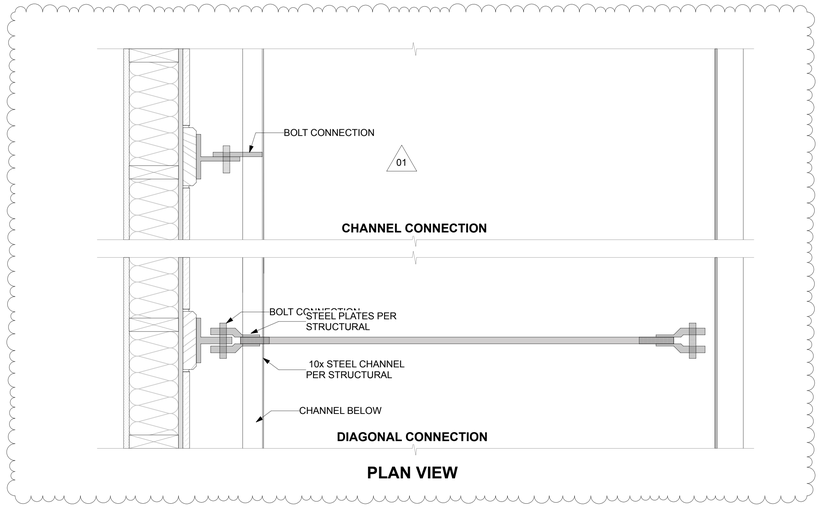
5 GLAZED CANOPY DETAIL
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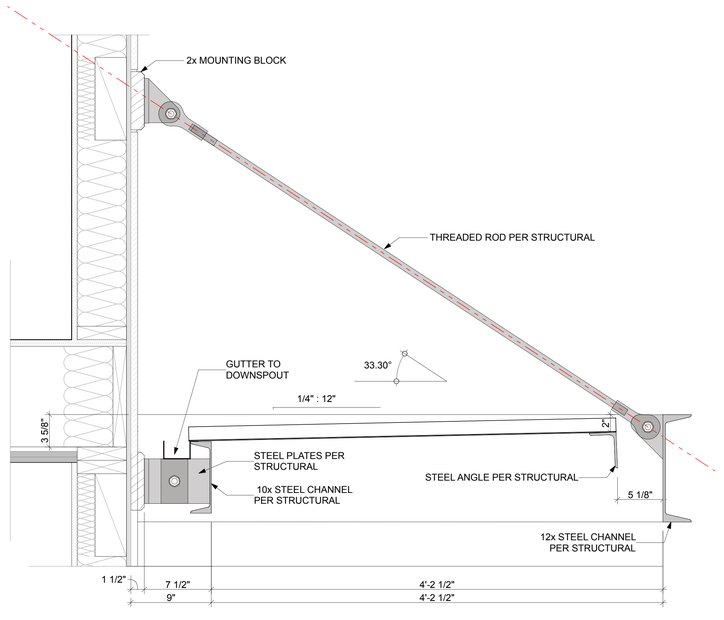


6 GLAZED CANOPY DETAIL
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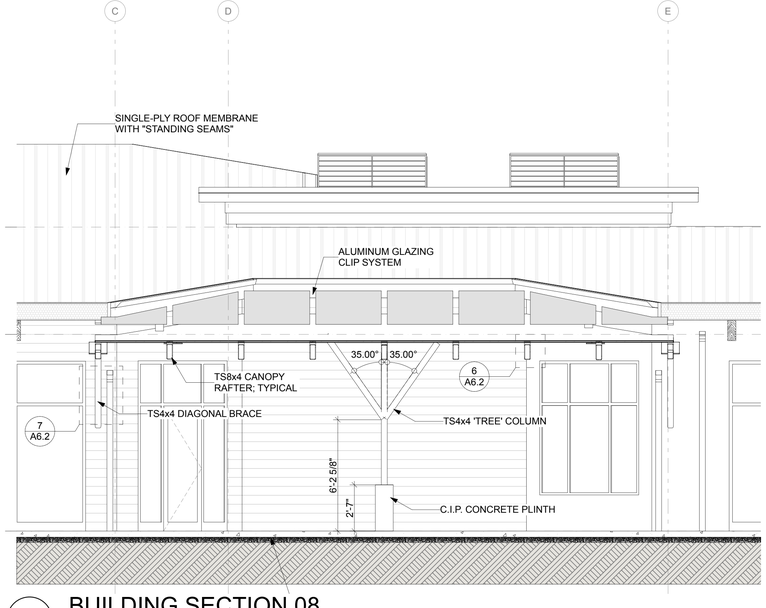


7 GLAZED CANOPY DETAIL
SCALE: 1 1/2"= 1'-0"





1 CANOPY DETAIL
SCALE: 1 1/2"= 1'-0"



3 BUILDING SECTION 08
SCALE: 1/4" = 1'-0"

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9251

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EAST TOWN CROSSING
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REVISIONS

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DATE:	2024.04.12
TITLE:	DETAILS
PROJECT # :	2016L2
SHEET:	A6.2

PRCNC20231714

DESIGN CRITERIA

BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE LOCAL JURISDICTION.
VERTICAL LOADS

ROOF LIVE LOAD:	25 PSF (SNOW)
ROOF DEAD LOAD:	20 PSF
RESTAURANT FLOOR LIVE LOAD:	100 PSF (REDUCIBLE)
FLOOR DEAD LOAD:	15 PSF

SNOW DESIGN DATA (ASCE 7-16)	WIND DESIGN DATA (ASCE 7-16)
FLAT SNOW LOAD: N/A	BASIC WIND SPEED (ASD) V= 85MPH
SNOW EXPOSURE FACTOR, Ce=1.0,	ULTIMATE WIND SPEED V= 110MPH
SNOW IMPORTANCE FACTOR, Is=1.0,	RISK CATEGORY: II EXPOSURE: B
THERMAL FACTOR, Ct=1.1	IMPORTANCE FACTOR, Iw= 1.0
	TOPOGRAPHIC FACTOR, Kzt= 1.0

SEISMIC DESIGN DATA (ASCE7-16)
SEISMIC RESPONSE SYSTEM: WOOD SHEARWALLS
EQUIVALENT LATERAL FORCE PROCEDURE (ASCE 7-16)
RISK CATEGORY: II SEISMIC IMPORTANCE FACTOR, Ie= 1.0
MAPPED SPECTRAL RESPONSE ACCELERATION: Ss=1.42, S1=1.43
DESIGN SPECTRAL RESPONSE ACCELERATION: Sds=1.03, Sd1=0.61
SITE CLASS: D SEISMIC DESIGN CATEGORY: D
SEISMIC RESPONSE COEFFICIENT: Cs= 0.113
DESIGN BASE SHEAR: 20,374#
SOIL PROPERTIES:
BEARING CAPACITY: 2,000 PSF
LATERAL CAPACITY: 250 PSF/FT

GENERAL REQUIREMENTS

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER PROJECT DRAWINGS BY OTHER DISCIPLINES. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CODES LISTED ABOVE.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS RELATING TO EXISTING CONDITIONS BY MAKING FIELD SURVEYS AND MEASUREMENTS PRIOR TO COMMENCING FABRICATION OR CONSTRUCTION.
3. THE GENERAL CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION METHODS USED WILL NOT CAUSE DAMAGE TO ADJACENT BUILDINGS, UTILITIES, OR OTHER PROPERTY. THIS REQUIREMENT IS PARTICULARLY IMPORTANT DURING FOUNDATION INSTALLATION.
4. THE GENERAL CONTRACTOR IS ADVISED TO CONSIDER PERFORMING PHOTOGRAPHIC SURVEYS AND OTHER DOCUMENTATION OF THE CONDITION OF ADJACENT BUILDINGS AND OTHER STRUCTURES BEFORE THE START OF CONSTRUCTION.
5. THE GENERAL CONTRACTOR SHALL OBTAIN COPIES OF THE LATEST CONTRACT DOCUMENTS, INCLUDING ALL ADDENDA, AND PROVIDE THE RELEVANT PORTIONS TO ALL SUB-CONTRACTORS AND SUPPLIERS PRIOR TO SUBMITTAL OF SHOP DRAWINGS AND FABRICATION AND ERECTION OF STRUCTURAL MEMBERS.
6. THE GENERAL CONTRACTOR SHALL COMPARE AND COORDINATE THE DRAWINGS OF ALL DISCIPLINES AND REPORT ANY DISCREPANCIES BETWEEN THE DRAWINGS TO THE ARCHITECT AND ENGINEER.
7. DETAILS LABELED "TYPICAL" SHALL APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SEE DETAIL TITLES FOR APPLICABILITY OF A PARTICULAR DETAIL. TYPICAL DETAILS SHALL APPLY WHETHER OR NOT THEY ARE SPECIFICALLY KEYED AT EACH LOCATION. THE ENGINEER SHALL HAVE FINAL AUTHORITY TO DETERMINE APPLICABILITY OF TYPICAL DETAILS.
8. WHERE CONFLICTS EXIST BETWEEN STRUCTURAL DOCUMENTS THE STRICTEST REQUIREMENTS, AS INDICATED BY THE STRUCTURAL ENGINEER SHALL GOVERN.
9. THE GENERAL CONTRACTOR SHALL REVIEW AND DETERMINE THAT DIMENSIONS ARE COORDINATED BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO FABRICATION OR START OF CONSTRUCTION.
10. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED OR OTHERWISE REDUCED IN STRENGTH UNLESS APPROVED BY THE STRUCTURAL ENGINEER.
11. THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS. NOTIFY THE ARCHITECT / ENGINEER OF ANY DISCREPANCIES.

CONSTRUCTION RESPONSIBILITY

1. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE COMPLETED STRUCTURE, AND ARE NOT INTENDED TO INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, SEQUENCES, AND FOR JOB SAFETY.
2. THE ENGINEER DOES NOT HAVE CONTROL OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. PERIODIC SITE OBSERVATION VISITS MAY BE PROVIDED BY THE STRUCTURAL ENGINEER. THE SOLE PURPOSE OF THESE OBSERVATIONS IS TO REVIEW THE GENERAL CONFORMANCE OF THE CONSTRUCTION WITH THE STRUCTURAL CONTRACT DOCUMENTS. THESE LIMITED OBSERVATIONS SHOULD NOT BE CONSTRUED AS CONTINUOUS OR EXHAUSTIVE TO VERIFY THAT ALL CONSTRUCTION IS IN COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ALL WORK IN COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS.

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR		
CLR.	CLEAR	N.T.S.	NOT TO SCALE
℄	CENTERLINE	O.C.	ON CENTER
CONC.	CONCRETE	PT	PRESSURE TREATED
CONT.	CONTINUOUS	REINF.	REINFORCEMENT
C.J.	CONTROL JOINT	SIM	SIMILAR
E.W.	EACH WAY	SF	SQUARE FEET
GLB	GLULAM BEAM	S.O.G.	SLAB ON GRADE
LBW	LOAD BEARING WALL	STL.	STEEL
HD	HOLD DOWN	T&G	TONGUE AND GROOVE
MFR.	MANUFACTURER	TYP.	TYPICAL
MIN.	MINIMUM	U.N.O.	UNLESS NOTED OTHERWISE
MTL.	METAL	W/	WITH
N.T.S.	NOT TO SCALE		

DEFERRED SUBMITTALS

THE FOLLOWING IS A LIST OF ITEMS THAT ARE NOT INCLUDED IN THIS PLAN AND SHOULD BE PROVIDED BY THE BUILDER AT TIME OF APPLICATION FOR PERMIT OR AS A DEFERRED SUBMITTAL ITEM:

- ALTERNATIVE I-JOIST/BEAM MANUFACTURER PLANS
- PRE-ENGINEERED TRUSS DESIGNS AND LAYOUTS

SITE WORK

PER KRAZAN & ASSOCIATES, INC. REPORT DATED APRIL 11, 2019, FOUNDATION DESIGN IS BASED ON AN ASSUMED AVERAGE SOIL BEARING OF 2,000 PSF. EXTERIOR FOOTINGS SHALL BEAR 18" & INTERIOR FOOTINGS SHALL BEAR 12" (MINIMUM) BELOW FINISHED GRADE. STRIP FOOTINGS SHALL BE A MINIMUM OF 16" WIDE AND COLUMNS 24" WIDE. ALL FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS OR ON STRUCTURAL FILL PER THE GEOTECHS RECOMMENDATIONS.

SPECIAL INSPECTIONS

SOILS (PER IBC 1705.6):
CONTINUOUS SPECIAL INSPECTION SHALL BE REQUIRED FOR MATERIAL, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED STRUCTURAL FILL AND
PERIODIC SPECIAL INSPECTION IS REQUIRED TO VERIFY SHALLOW FOUNDATIONS BEARING MATERIAL MEETS DESIGNED BEARING CAPACITY, VERIFYING EXCAVATION ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL, PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIAL AND TO INSPECT SUBGRADE MATERIAL PRIOR TO COMPACTED FILL PLACEMENT TO VERIFY THE SITE HAS BEEN PREPARED PROPERLY.

WOOD CONSTRUCTION (PER IBC 1705.5) AND WIND RESISTANCE (PER IBC 1705.11):
PERIODIC SPECIAL INSPECTION IS REQUIRED TO VERIFY NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF SHEAR WALLS WITH NAIL SPACING 4" AND LESS, DRAG STRUTS, BRACES AND HOLD DOWNS.

CONCRETE

ITEM	DESIGN f'c (PSI)	MAX. W/C RATIO	MAX. AGGREGATE SIZE	MIN. CEMENT (SACKS/YARD)
FOUNDATIONS	2,500 @28 DAYS	0.45	3/4"	5 1/2
STEM WALLS	3,000 @28 DAYS	0.45	3/4"	5 1/2
SLAB ON GRADE	3,000 @28 DAYS	0.45	3/4"	5 1/2

- REINFORCING STEEL SHALL BE ASTM A615 GRADE 40 FOR #4 BARS AND SMALLER AND GRADE 60 FOR #5 BARS AND LARGER.
- MINIMUM SPLICE LENGTHS SHALL BE: 24" FOR #4, 30" FOR #5, 42" FOR #6
- CONCRETE COVER SHALL BE: 3" CAST AGAINST EARTH, 2" EXPOSED TO EARTH/WEATHER, 3/4" NOT EXPOSED TO EARTH/WEATHER.
- CORNER BARS ARE REQUIRED FOR ALL HORIZONTAL BARS IN FOOTINGS AND WALLS.
- All CONCRETE HAS BEEN DESIGNED FOR 2,500 PSI CONCRETE SO NO SPECIAL INSPECTION IS REQUIRED.

FRAMING

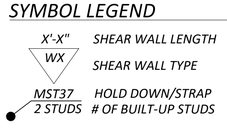
- ALL NAILING TO COMPLY WITH REQUIREMENTS OF IBC 2303.6 AND FASTENED PER TABLE 2304.10.1.
- ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED. FIELD CUT ENDS, NOTCHES, AND DRILLED HOLES OF PRESSURE TREATED LUMBER SHALL BE RETREATED IN THE FIELD IN ACCORDANCE WITH AWPA M4.
- FASTENERS FOR PRESSURE PRESERVATIVE AND FIRE RETARDANT TREATED WOOD SHALL BE OF HOT-DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER.
- MAINTAIN 8" MINIMUM CLEARANCE BETWEEN WOOD AND EARTH.
- MAINTAIN 12" MINIMUM CLEARANCE BETWEEN FLOOR BEAMS AND EARTH.
- MAINTAIN 18" MINIMUM CLEARANCE BETWEEN FLOOR JOISTS AND EARTH.

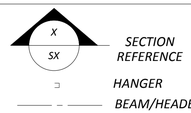
LUMBER GRADES

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN PRODUCTS ASSOCIATION OR THE WEST COAST LUMBER INSPECTION BUREAU. ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY AND SHALL HAVE THE FOLLOWING UNADJUSTED DESIGN MINIMUM PROPERTIES:

JOISTS:	WOOD TYPE:
2X4	HF #2 - Fb=850 PSI, FV=75 PSI, Fc=1300 PSI, E=1200000 PSI
2X6 OR LARGER	HF #2 - Fb=850 PSI, Fv=75 PSI, Fc=1300 PSI, E=1200000 PSI
BEAMS:	WOOD TYPE:
4X	DF-L#2 - Fb=900 PSI, FV=95 PSI, Fc=1350 PSI, E=1600000 PSI
6X OR LARGER	DF-L #2 - Fb=875 PSI, Fv=85 PSI, Fc=600 PSI, E=1300000 PSI
STUDS:	WOOD TYPE:
2X4	HF #2 - Fb=850 PSI, FV=75 PSI, Fc=1300 PSI, E=1200000 PSI
2X6 OR LARGER	HF #2 - Fb=850 PSI, Fv=75 PSI, Fc=1300 PSI, E=1200000 PSI
POSTS:	WOOD TYPE:
4X4	HF #2 - Fb=900 PSI, FV=95 PSI, Fc=1350 PSI, E=1600000 PSI
4X6 OR LARGER	HF #2 - FB=900 PSI, FV=95 PSI, FC=1350 PSI, E=1600000 PSI
6X6 OR LARGER	DF-L #1 - FB=700 PSI, FV=85 PSI, FC=475 PSI, E=1300000 PSI
6X6 OR LARGER	DF-L #2 - FB=700 PSI, FV=85 PSI, FC=475 PSI, E=1300000 PSI

SYMBOL LEGEND





FASTENERS

ALL NAILS SPECIFIED ON THIS PLAN SHALL BE COMMON OR GALVANIZED BOX (UNLESS NOTED OTHERWISE) OF THE DIAMETER AND LENGTH LISTED BELOW OR AS PER APPENDIX L OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS).

- 8D COMMON (0.131" DIA., 2-1/2" LENGTH
- 8D BOX (0.113" DIA., 2-1/2" LENGTH
- 10D COMMON (0.148" DIA., 3" LENGTH
- 10D BOX (0.128" DIA., 3" LENGTH
- 16D COMMON (0.162" DIA., 3-1/2" LENGTH
- 16D SINKER (0.148" DIA., 3-1/4" LENGTH
- 5D COOLER (0.086" DIA., 1-5/8" LENGTH
- 6D COOLER (0.092" DIA., 1-7/8" LENGTH

SHEATHING

TYPICAL WALL AND ROOF SHEATHING SHALL BE 7/16" SHEATHING MINIMUM UNLESS OTHERWISE SPECIFIED. MINIMUM NAILING SHALL BE 8d COMMON @ 6" O.C. @ PANEL EDGES AND 12" O.C. IN FIELD U.N.O. ON SHEAR WALL SCHEDULE. SPAN INDEX SHALL BE 24/0 FOR WALLS AND 24/16 FOR ROOF. FLOOR SHEATHING SHALL BE 3/4" T&G SHEATHING, UNLESS SPECIFIED OTHERWISE. MINIMUM NAILING SHALL BE 8d COMMON @ 6" O.C. @ PANEL EDGES AND 12" O.C. IN FIELD. SPAN INDEX SHALL BE 40/20 UNLESS NOTED OTHERWISE. STAGGER END LAPS AT ROOF AND FLOOR SHEATHING.

GLULAM BEAMS (GLB)

GLULAM BEAMS SHALL BE 24F-V4 FOR SINGLE SPANS AND 24F-V8 FOR CONTINUOUS OR CANTILEVER SPANS WITH THE FOLLOWING MINIMUM PROPERTIES:
Fb=2400 PSI, Fv=240 PSI, Fc=650 PSI (PERPENDICULAR), E=1,800,000 PSI.

ENGINEERED WOOD BEAMS AND I-JOIST

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SPECIFICATIONS FOR APPROVAL BY BUILDING OFFICIAL. DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH THE LATEST ICC EVALUATION REPORT.
BEAMS DESIGNATED AS "PSL" SHALL HAVE THE MINIMUM PROPERTIES:
Fb=2900 PSI, Fv=290 PSI, Fc=750 PSI (PERPENDICULAR), E=2,000,000 PSI.
BEAMS DESIGNATED AS "LVL" SHALL HAVE THE MINIMUM PROPERTIES:
Fb=2600 PSI, Fv=285 PSI, Fc=750 PSI (PERPENDICULAR), E=1,900,000 PSI.
BEAMS DESIGNATED AS "LSL" SHALL HAVE THE MINIMUM PROPERTIES:
Fb=1700 PSI, Fv=400 PSI, Fc=680 PSI (PERPENDICULAR), E=1,300,000 PSI.

STRUCTURAL STEEL

1. SEE NOTES ON PRIMARY CODES AND SPECIFICATIONS.
2. MATERIALS:
   - W-SHAPES & WT-SHAPES..... ASTM A992
   - S-SHAPES, M-SHAPES, HP-SHAPES..... ASTM A36
   - ST-SHAPES & MT-SHAPES..... ASTM A36
   - C-SHAPES & MC-SHAPES..... ASTM A36
   - ANGLES & PLATES..... ASTM A36
   - HSS SHAPES..... ASTM A500, GRADE B
   - STEEL PIPE..... ASTM A53 (TYPE E OR S), GRADE B
   - HIGH STRENGTH BOLTS..... ASTM A325
   - MACHINE BOLTS..... ASTM A307
   - ANCHOR RODS.....ASTM F1554, GRADE 55 TYPE S1(UNO)
   - WELDED HEADED STUDS..... ASTM A108
   - DEFORMED BAR ANCHORS..... ASTM A496
   - WELDING ELECTRODES..... AWS D1.1, E70 SERIES
3. NON-SHRINK, NON-METALLIC GROUT WITH A 28 DAY STRENGTH OF 5000 PSI SHALL BE USED UNDER BASE PLATES AND SHALL CONFORM TO CORPS OF ENGINEERS CRD-C621, FACTORY PREMIX GROUT. SEE SPECIFICATIONS FOR TESTING REQUIREMENTS.
4. ENGINEER SHALL BE CONTACTED FOR APPROVAL OF ANY FIELD MODIFICATIONS OF ANCHOR BOLTS OR RODS AND COLUMN BASE PLATES (PER OSHA).
5. TEMPORARY BRACING OF STRUCTURAL STEEL ELEMENTS IS THE RESPONSIBILITY OF THE CONTRACTOR. STRUCTURAL STABILITY SHALL BE MAINTAINED AT ALL TIMES DURING THE ERECTION PROCESS.
   CONTRACTOR MUST PROVIDE NOTIFICATION TO THE ERECTOR THAT, BY TESTING, THE FOUNDATION AND SUPPORTING WALLS HAVE ATTAINED SUFFICIENT STRENGTH TO SUPPORT THE STEEL TO BE ERECTED BEFORE ERECTING STRUCTURAL STEEL.
6. PROVIDE ONE SHOP COAT OF PRIMER (TT-P-636) ON ALL STEEL EXCEPT FOR ITEMS TO BE HOT DIPPED GALVANIZED OR SPRAY FIREPROOFED. DO NOT PAINT PORTIONS EMBEDDED IN CONCRETE.
7. FRAMING CONNECTIONS NOT DETAILED, OR CONNECTIONS THAT ARE MODIFIED FROM THOSE DETAILED, SHALL BE DESIGNED BY SUPPLIER FOR THE END REACTION SHOWN ON THE PLAN. IF NO REACTION IS PROVIDED, DESIGN FOR 1/2 THE BEAM MAXIMUM UNIFORM LOAD PER AISC MANUAL FOR STEEL CONSTRUCTION. SUBMIT SIGNED AND SEALED CALCULATIONS.
8. ALL WELD OPERATORS SHALL BE CURRENTLY AWS QUALIFIED.
9. SHOP CONNECTIONS SHALL BE WELDED OR HIGH STRENGTH BOLTED. USE 3/16" FILLET WELD MINIMUM.
10. FIELD CONNECTIONS SHALL BE WELDED OR HIGH STRENGTH BOLTED AS DETAILED. NO FIELD WELDING OF HOT DIPPED GALVANIZED MEMBERS WILL BE ALLOWED. USE 3/16" FILLET WELD MINIMUM.
11. DURING THE ERECTION OF STEEL BEAMS AND DIAGONAL BRACING, ALL BOLTING AND FIELD WELDING SHALL BE COMPLETE BEFORE RELEASING HOISTING CABLES.
12. SUBMIT FOR REVIEW SHOP DRAWINGS OF STEEL DETAILS PRIOR TO FABRICATING STRUCTURAL STEEL.
13. ALL EXTERIOR ELEMENTS AND THOSE ELEMENTS NOTED TO BE GALVANIZED SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AFTER SANDBLAST CLEANING PER SSPC-SP10. USE ASTM A325 BOLTS HOT DIPPED GALVANIZED WITH GALVANIZED HARDENED WASHERS AND GALVANIZED HEAVY HEX NUTS FOR BOLTING OF GALVANIZED ITEMS.
14. STEEL COLUMNS, BASE PLATES AND ALL STEEL BELOW GRADE SHALL HAVE A MINIMUM 3" CONCRETE COVER PROTECTION.
15. MEMBERS NOTED AS "CONTINUOUS" SHALL BE FULLY WELDED AT ALL BUTT SPLICES OR CONNECTIONS SHALL BE DETAILED TO PROVIDE CONTINUITY.

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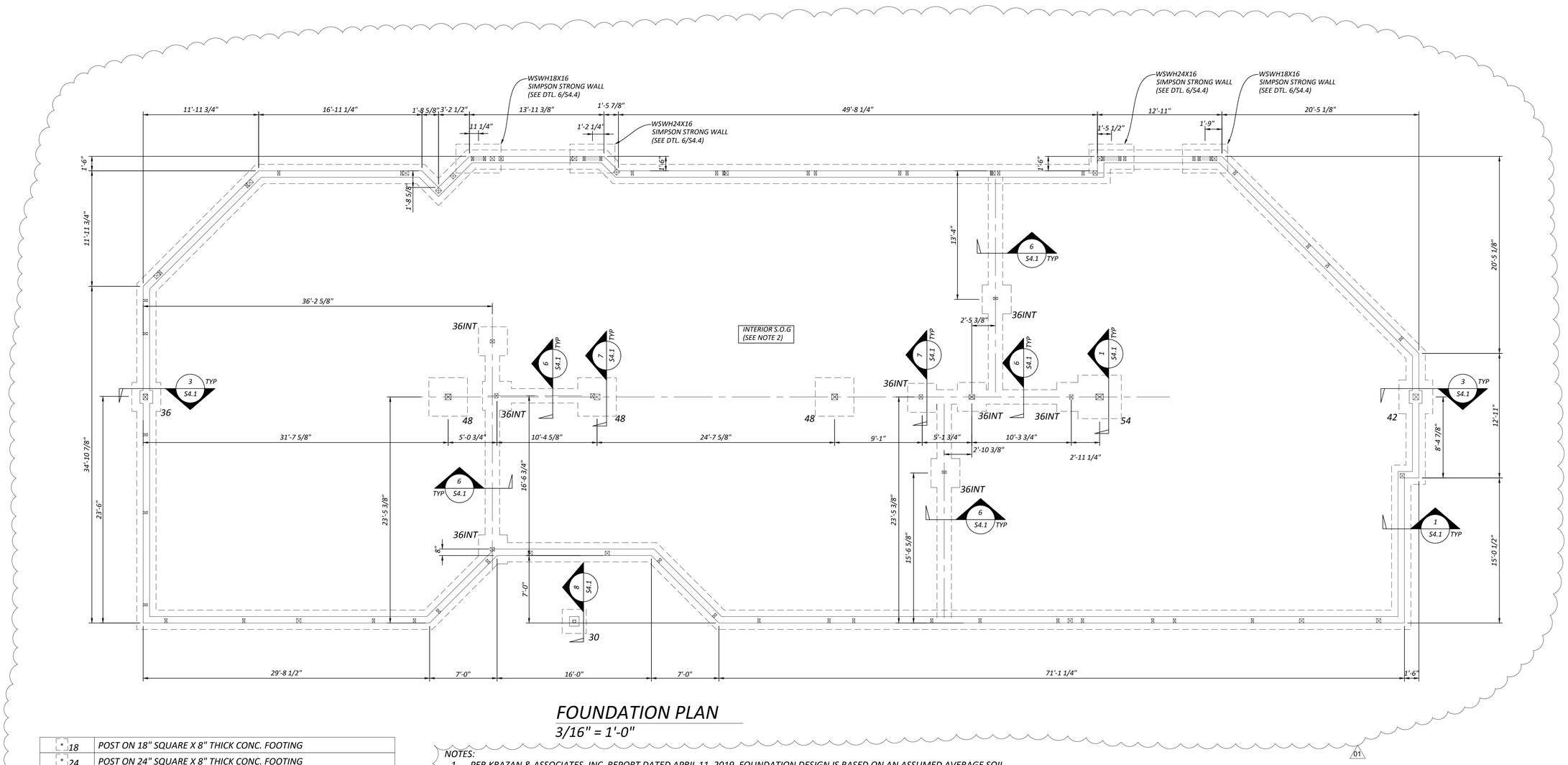
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FOUNDATION PLAN

3/16" = 1'-0"

18	POST ON 18" SQUARE X 8" THICK CONC. FOOTING
24	POST ON 24" SQUARE X 8" THICK CONC. FOOTING
30	POST ON 30" SQUARE X 8" THICK CONC. FOOTING W/ 3-#4 BAR E.W.
36	POST ON 36" SQUARE X 8" THICK CONC. FOOTING W/ 4-#4 BARS E.W.
36INT	POST ON 36" SQUARE X 15" THICK CONC. FOOTING W/ 4-#4 BARS E.W.
42	POST ON 42" SQUARE X 10" THICK CONC. FOOTING W/ 4-#4 BARS E.W.
48	POST ON 48" SQUARE X 10" THICK CONC. FOOTING W/ 5-#5 BARS E.W.
54	POST ON 54" SQUARE X 10" THICK CONC. FOOTING W/ 5-#5 BARS E.W.

NOTES:
1. USE MIN. 6" WIDE POST BELOW BEAM SPLICES
2. USE 4X4 POST BELOW 4X BEAMS, U.N.O.
3 USE 6X6 POST BELOW 6X BEAMS, U.N.O.
4. PT POST SHALL BE USED IN EXTERIOR CONDITIONS

NOTES:
1. PER KRAZAN & ASSOCIATES, INC. REPORT DATED APRIL 11, 2019, FOUNDATION DESIGN IS BASED ON AN ASSUMED AVERAGE SOIL BEARING OF 2,000 PSF. EXTERIOR FOOTINGS SHALL BEAR 18" & INTERIOR FOOTINGS SHALL BEAR 12" (MINIMUM) BELOW FINISHED GRADE. STRIP FOOTINGS SHALL BE A MINIMUM OF 16" WIDE AND COLUMNS 24" WIDE. ALL FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS OR ON STRUCTURAL FILL PER THE GEOTECHS RECOMMENDATIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT THE SITE SOILS PROVIDE THIS MINIMUM BEARING CAPACITY.
2. INTERIOR S.O.G. SHALL BE 6" THICK SLAB ON GRADE OVER INSULATION (PER ARCH.), OVER VAPOR BARRIER (PER ARCH.) OVER 4" COMPACTED SAND OR GRAVEL. SLAB SHALL BE REINFORCED WITH 6X6 W2.9XW2.9 WELDED WIRE, #3 BARS @ 24" O.C., OR HELIX FABRIC (5# PER CUBIC YARD).
3. SEE DETAIL SHEET S4.4 FOR WSWH STRONG WALL DETAILS.

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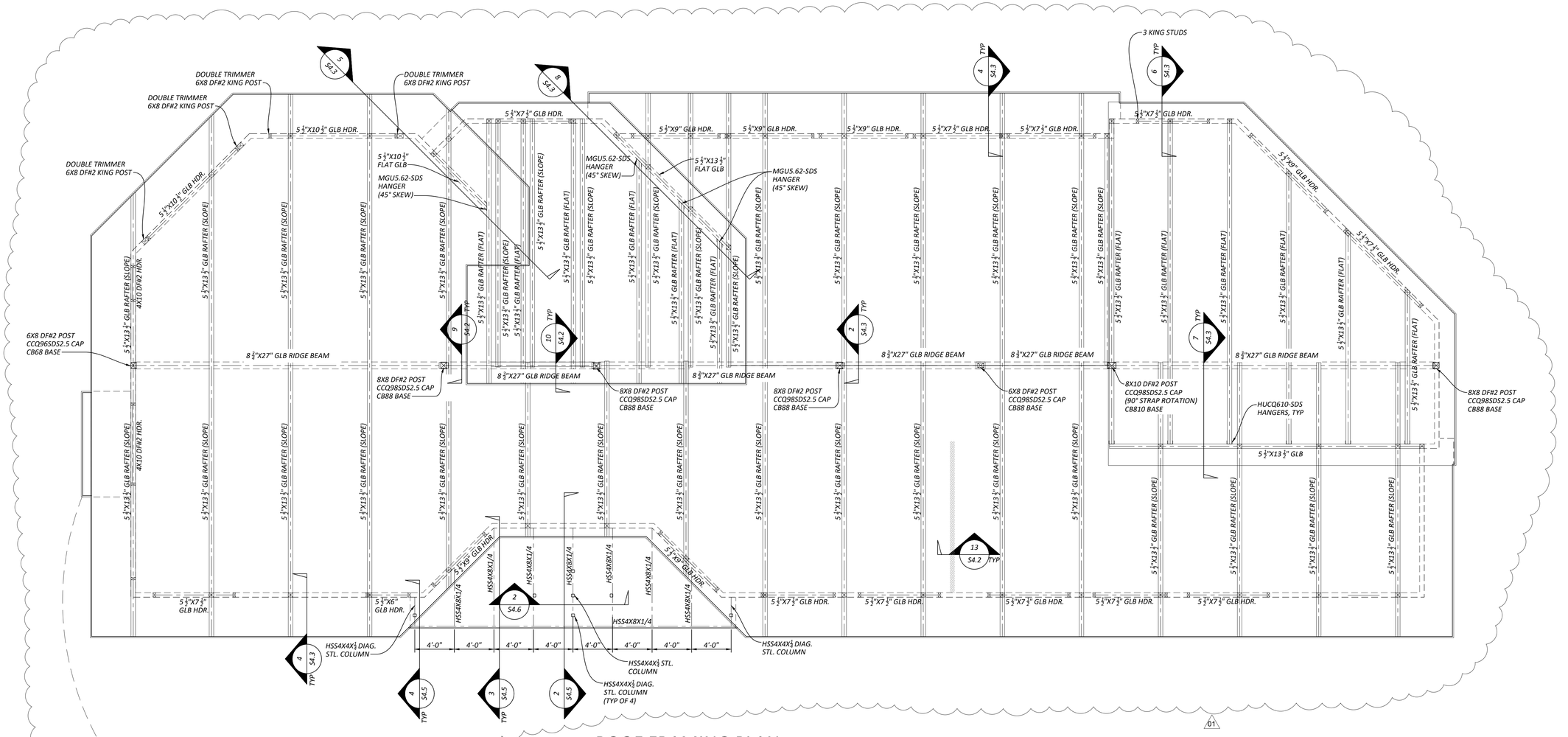
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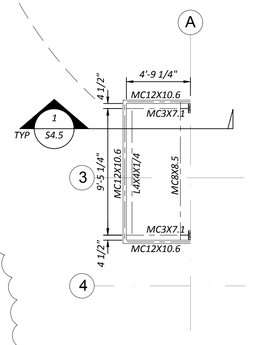
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ROOF FRAMING PLAN

3/16" = 1'-0"



SIDE AWNING FRAMING PLAN

3/16" = 1'-0"

NOTES:

1. ALL COLUMNS NOT SPECIFIED OR OTHERWISE NOTED ON THE PLANS ARE LAMINATED TOGETHER PER "TYPICAL BUILT-COLUMN DETAIL" ON SHEET S4.2. SOLID WOOD COLUMNS MAY BE SUBSTITUTED FOR BUILT-UP COLUMNS BY PROVIDING AN EQUIVALENT CROSS SECTIONAL AREA.
2. ALL HEADERS SHALL HAVE DOUBLE TRIMMERS AND TRIPLE FULL HEIGHT KING STUDS, UNLESS NOTED OTHERWISE.
3. ROOF SHEATHING SHALL BE 10 ¼" PREMIER SIPS (STRUCTURAL INSULATED PANELS).

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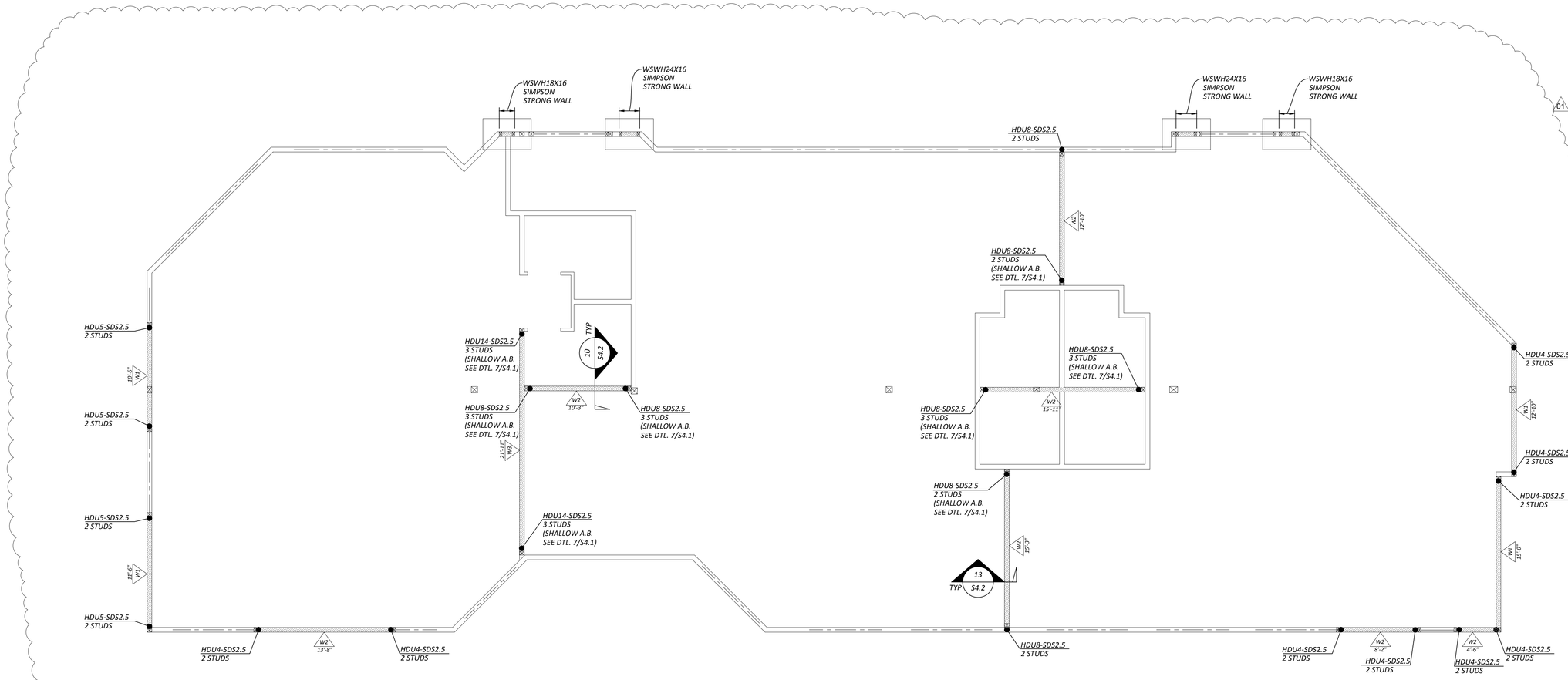
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ROOF SHEAR WALL PLAN

3/16" = 1'-0"

NOTES:

1. UNLESS SPECIFIED ON PLANS, ALL EXTERIOR WALL SHALL BE SHEAR WALL W1, SEE SHEAR WALL TABLE ON THIS SHEET.
2. WSWH24X20 STRONG WALLS SHALL BE TRIMMED DOWN TO FIT ACTUAL PLATE HEIGHT. FIELD VERIFY PLATE HEIGHTS BEFORE ORDERING WALLS.
3. SEE DETAIL SHEET S4.4 FOR WSWH STRONG WALL DETAILS.

HOLD DOWN SCHEDULE

SIMPSON PRODUCT	FASTENERS		ANCHOR BOLTS
	SCREWS OR BOLTS	NAILS	
HDU4-SDS2.5	(10) $\frac{1}{4}$" X 2 $\frac{1}{2}$" SDS INTO POST PER PLAN	--	SB $\frac{5}{8}$X24 (18" EMBED)
HDU5-SDS2.5	(14) $\frac{1}{4}$" X 2 $\frac{1}{2}$" SDS INTO POST PER PLAN	--	SB $\frac{5}{8}$X24 (18" EMBED)
HDU8-SDS2.5	(20) $\frac{1}{4}$" X 2 $\frac{1}{2}$" SDS INTO POST PER PLAN	--	(a) SB $\frac{5}{8}$X24 (18" EMBED)
HDU11-SDS2.5	(30) $\frac{1}{4}$" X 2 $\frac{1}{2}$" SDS INTO POST PER PLAN	--	SB 1X30 (24" EMBED)
HDU14-SDS2.5	(36) $\frac{1}{4}$" X 2 $\frac{1}{2}$" SDS INTO POST PER PLAN	--	(b) SB 1X30 (24" EMBED)

(a) HDU8-SDS2.5 ANCHORS LOCATED IN THICKENED SLAB SECTIONS SHALL USE PAB7X18 ANCHOR BOLTS W/ 9" MIN. EMBED (SEE DETAIL 7/S4.1)

(b) HDU14-SDS2.5 ANCHORS LOCATED IN THICKENED SLAB SECTIONS SHALL USE PAB8X18 ANCHOR BOLTS W/ 11" MIN. EMBED (SEE DETAIL 7/S4.1)

SPECIAL INSPECTIONS ARE REQUIRED FOR SHEAR WALLS: W2 W3

SHEAR WALL AND ANCHOR TABLE

WALL TYPE	APA RATED SHEATHING (b), (c)	MINIMUM NOMINAL THICKNESS (IN)	MINIMUM NAIL PENTRATION IN FRAMING (IN) (i)	STUD & BLOCKING SIZE @ ADJOINING EDGES (k)	REQUIRED RIM JOIST THICKNESS	EDGE NAIL SIZE AND SPACING, COMMON OR GALV. BOX (d)	RIM JOIST OR BLOCK CONNECTION TO TOP PLATE (e), (f)	2x BOTTOM PLATE ATTACHMENT TO WOOD BELOW (g), (i)	ANCHOR BOLT SILL PLATE ATTACHMENT TO CONCRETE BELOW (h)	CAPACITY (PLF) SEISMIC/WIND
W1	OSB	7/16 (j)	1 3/8	2x	2x OR 1 $\frac{1}{4}$"LSL	8d@6" O.C. EDGE 8d@12" O.C. FIELD	LTP4 @ 20" O.C. OR A35 @ 16" O.C.	(1) 16d @ 8" O.C.	$\frac{5}{8}$" @ 48" O.C.	242/339
W2	OSB	7/16 (j)	1 3/8	2x	2x OR 1 $\frac{1}{4}$"LSL	8d@4" O.C. EDGE 8d@12" O.C. FIELD	LTP4 @14" O.C. OR A35 @ 11" O.C	(1) 16d @ 6" O.C.	$\frac{5}{8}$" @ 36" O.C.	353/495
W3	OSB	7/16 (j)	1 3/8	2x	2x OR 1 $\frac{1}{4}$"LSL	8d@3"O.C. EDGE 8d@12" O.C. FIELD	LTP4 @11" O.C. OR A35 @ 8" O.C	(1) 16d @ 4" O.C.	$\frac{5}{8}$" @ 24" O.C.	456/637

(a) FRAMING AT ADJACENT PANELS SHALL BE 3" NOMINAL OR GREATER AND NAILS SHALL BE STAGGERED.

(b) WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS ON 2x FRAMING SHALL BE STAGGERED SO THAT JOINTS ON THE OPPOSITE SIDE ARE NOT LOCATED ON THE SAME STUDS.

(c) BLOCKING IS REQUIRED AT ALL PANEL EDGES

(d) 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 EXTERIOR OF THE BUILDING, CORRIDORS, WINDOW, OR DOORWAYS OR AS DESIGNATED ON THE PLANS. SEE PLANS FOR HOLD DOWN POSTS. 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.

(e) BASED ON 0.131X 1 $\frac{1}{4}$" LONG NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 0.131x 2 $\frac{1}{2}$" NAILS WHERE INSTALLED OVER SHEATHING. USE A35 OR RBC CLIPS IN LIEU OF LTP'S FOR ROOF BLOCKING TO TOP PLATE.

(f) LTP4'S NOT REQUIRED WHERE RIM SHEATHING IS SPLICED OVER THE SECOND FLOOR BOTTOM PLATE. LTP4'S MAY BE SUBSTITUTED W/ A35'S.

(g) CONTINUOUS SHEATHING IS REQUIRE OVER THE BOTTOM PLATE TO THE BOTTOM OF THE RIM JOIST OR SILL PLATE WITH EDGE NAILING AT EACH. WHERE TWO ROWS OF NAILING ARE REQUIRED AT RAISED FLOORS, PROVIDE BLOCKING PER PLAN, AND ATTACH WITH LTP4 PER SCHEDULE.

(h) ANCHOR BOLTS SHALL BE PROVIDED WITH STEEL PLATE WASHERS 0.229"x3"x3". EMBED ANCHOR BOLTS MINIMUM 7" INTO THE CONCRETE. PLATE WASHERS SHALL EXTEND TO WITHIN $\frac{1}{2}$" OF THE SILL PLATE EDGE ON THE SHEATHED WALL FACE.

(i) PRESSURE TREATED MATERIALS CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTROPLATING IS NOT ACCEPTABLE) NAILS AND CONNECTOR PLATES (FRAMING ANGLES, ETC.) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS.

(j) ALL SHEAR WALL STUDS MUST BE SPACED NO MORE THAN 16" O.C.

(k) 3X MEMBERS MAY BE SUBSTITUTED WITH 2 STUDS NAILED TOGETHER PER TYPICAL BUILT-UP COLUMN DETAIL (SEE DETAILS).

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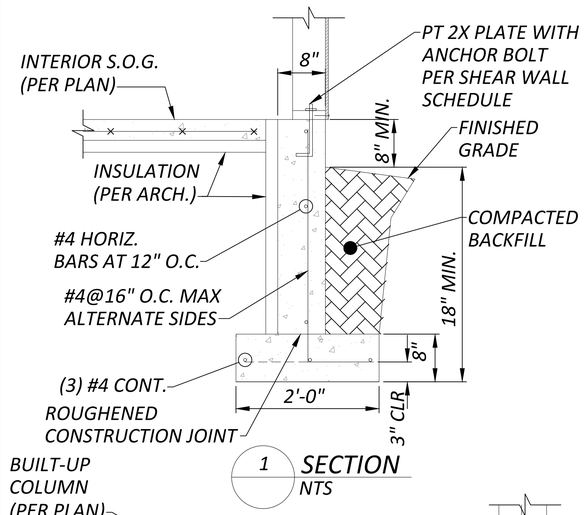
EASTTOWN CROSSING
LOT TWO COMMERCIAL
PIONEER & SHAW PUYALLUP

REVISIONS	
01	REVIEW 1 2024.03.19

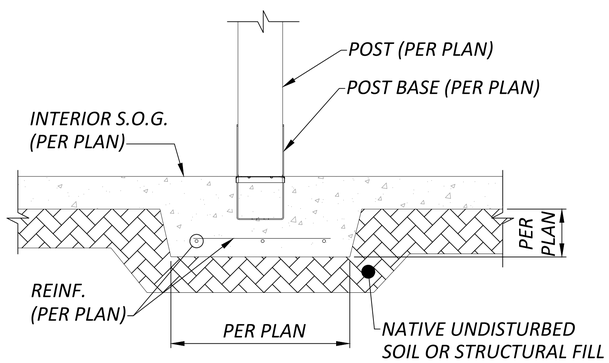
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PROJECT # :	----
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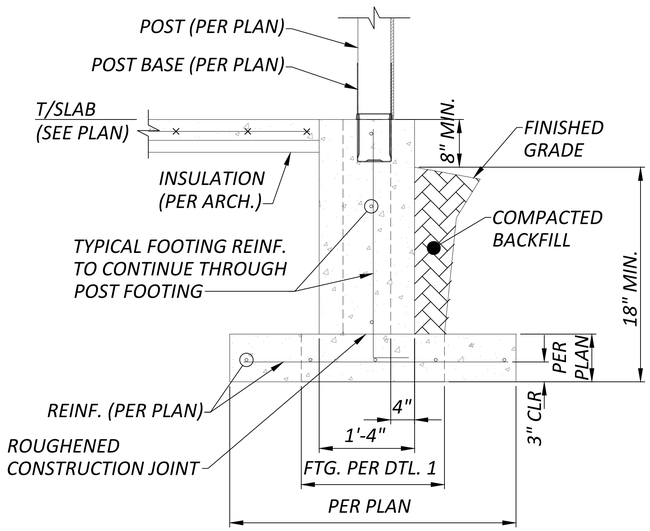
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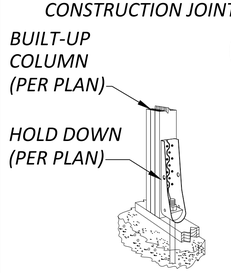
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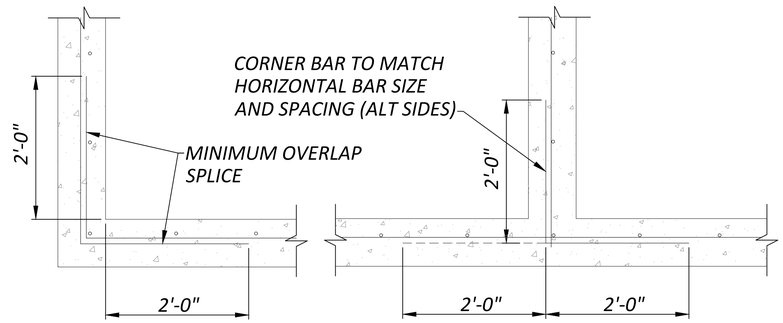
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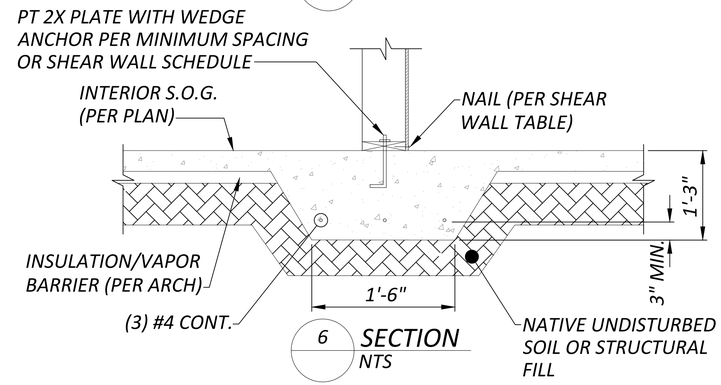


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HDU2,4,5,8,11 -SDS2.5

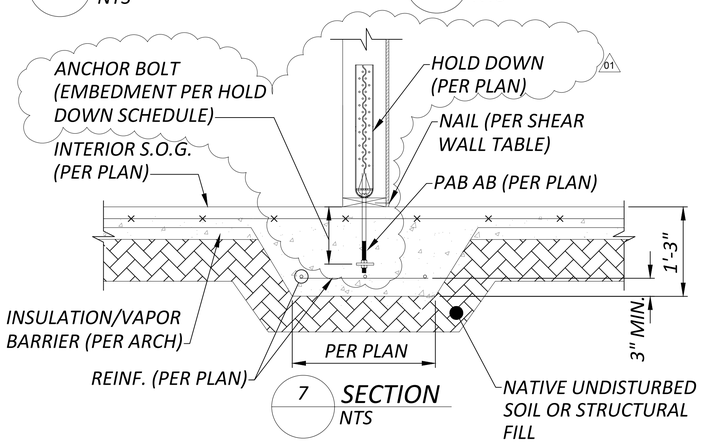




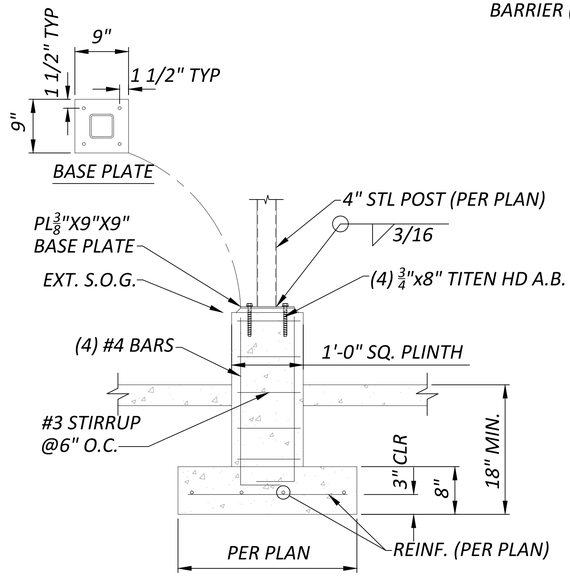
6 SECTION
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4 TYPICAL FOUNDATION
HOLDDOWN DETAIL
NTS

5 TYPICAL FOUNDATION CORNER & INTERSECTION DETAIL
NTS



7 SECTION
NTS



8 SECTION
1" = 1'-0"

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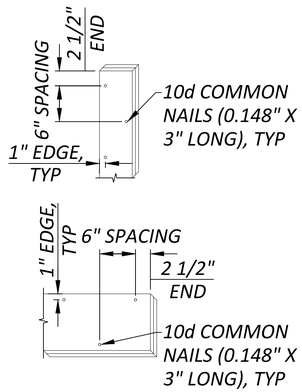
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01	REVIEW 1 2024.03.19

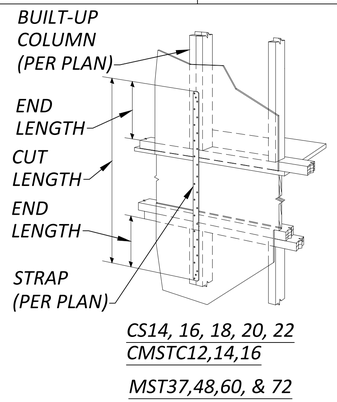
REVISIONS

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CHECKED BY: CP
DATE: 2023.11.15
TITLE: FOUNDATION DETAILS
PROJECT # : ----
SHEET:

S4.1

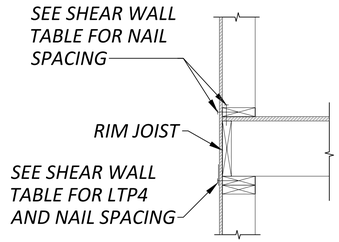


1 TYPICAL BUILT-UP COLUMN/BEAM DETAIL
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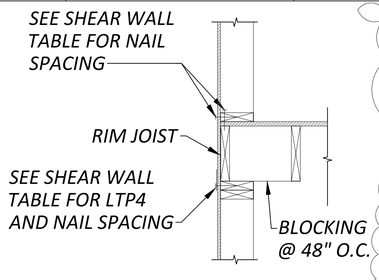


CS14, 16, 18, 20, 22
CMSTC12,14,16
MST37,48,60, & 72

2 TYPICAL STRAP HOLDDOWN DETAIL
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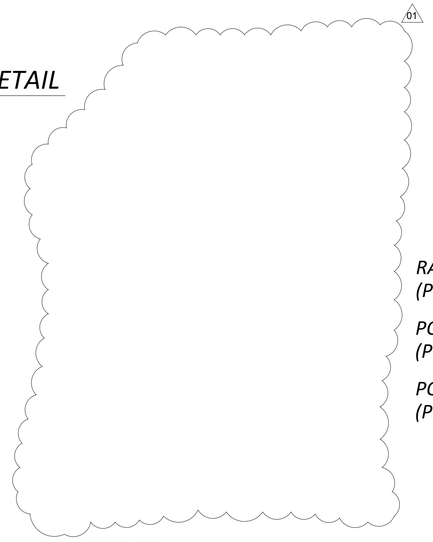


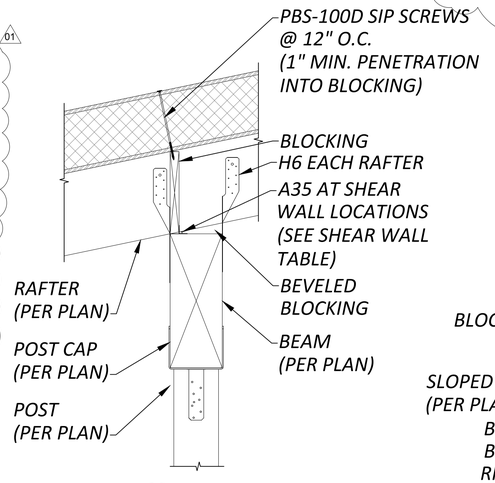
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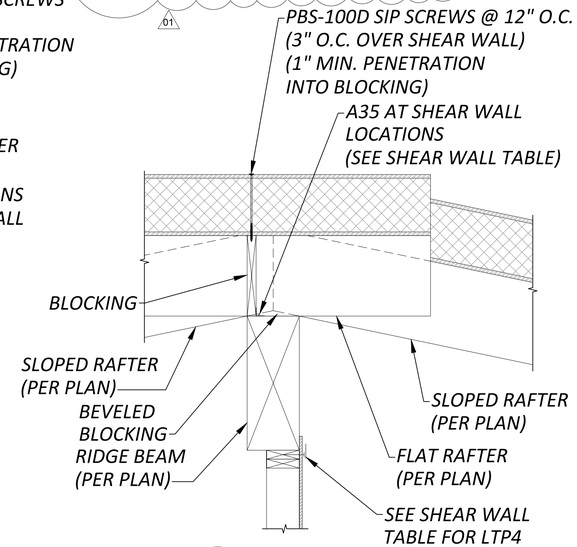
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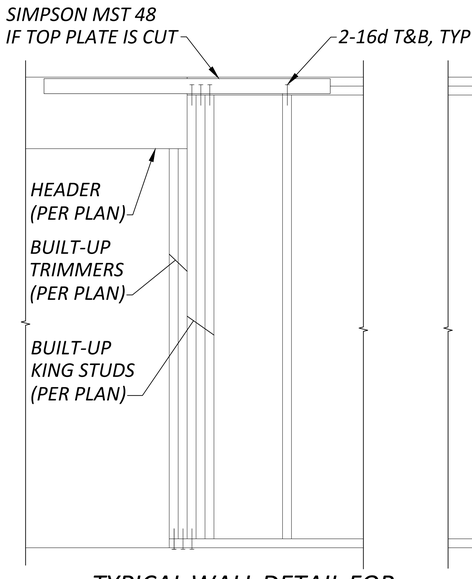




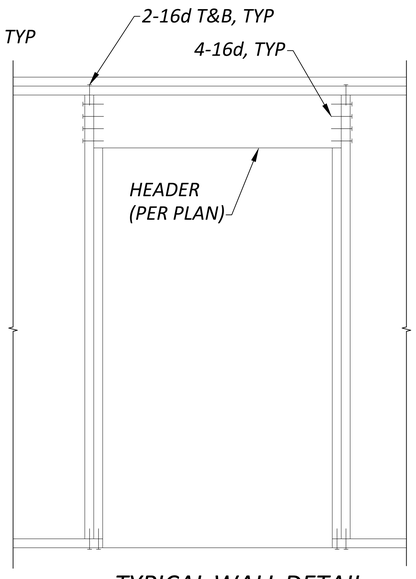
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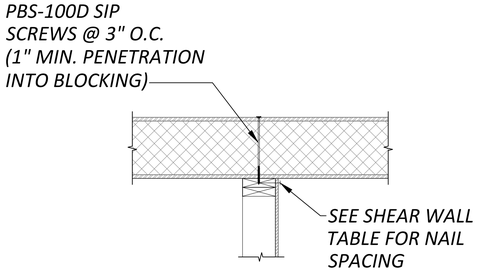
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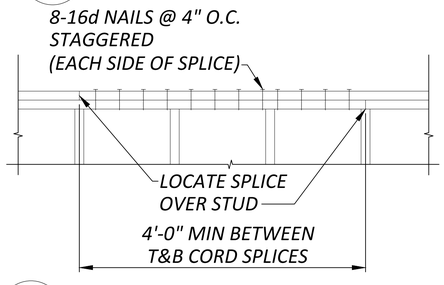
6 TYPICAL WALL DETAIL FOR OPENINGS 5' AND GREATER
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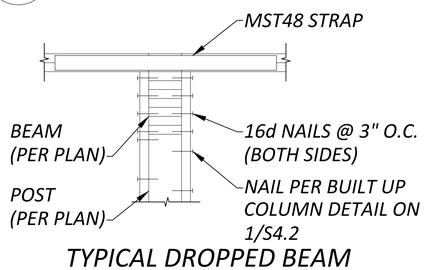
7 TYPICAL WALL DETAIL FOR DOOR OPENINGS
NTS



13 SECTION
NTS



11 TYPICAL TOP PLATE SPLICE DETAIL
NTS



12 TYPICAL DROPPED BEAM @ PLATE BREAK
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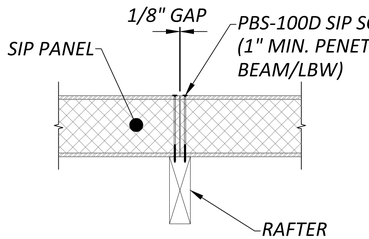
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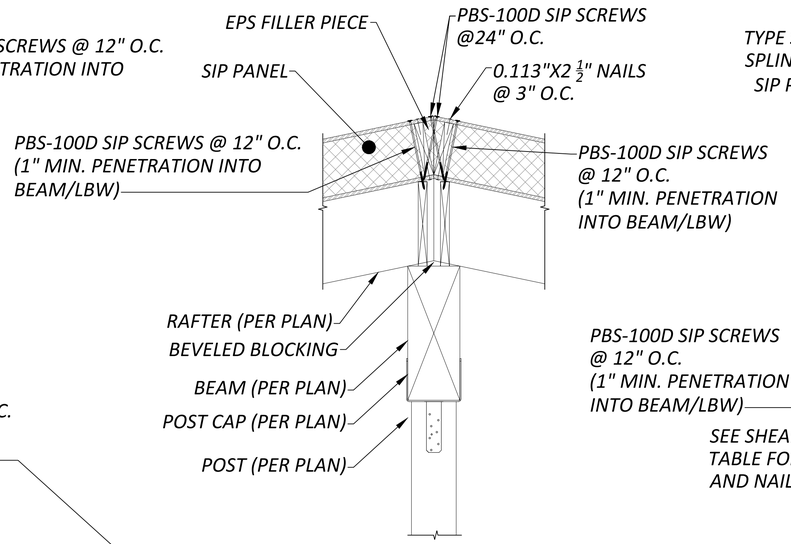
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PROJECT # :	----
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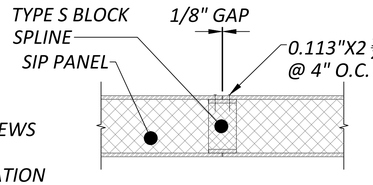
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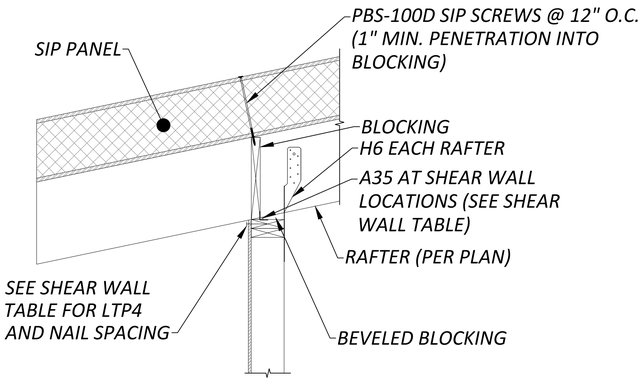
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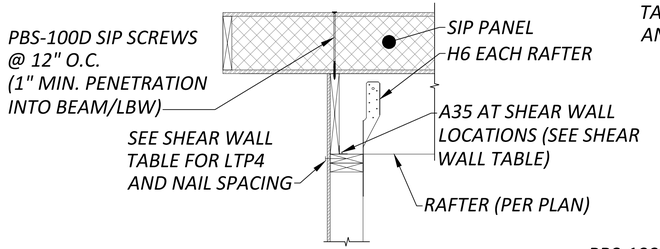
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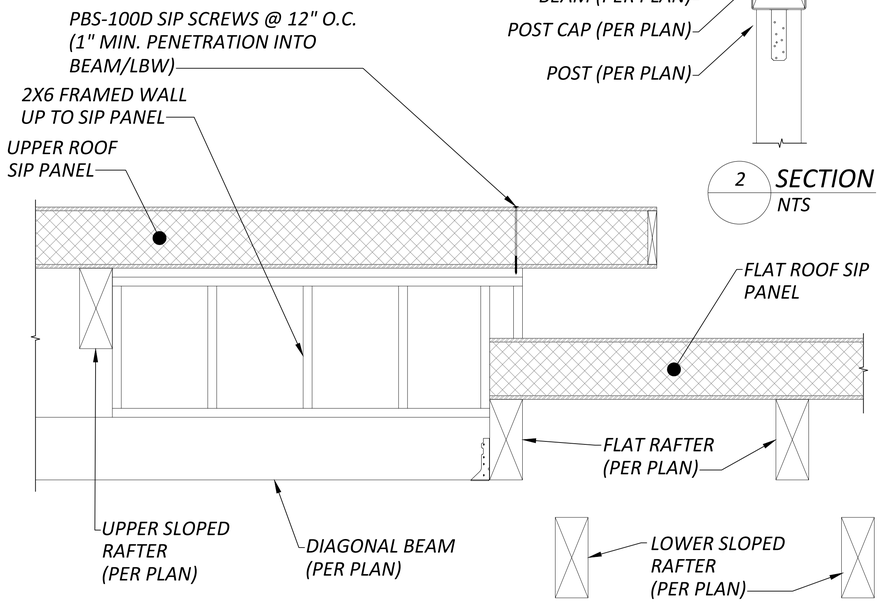
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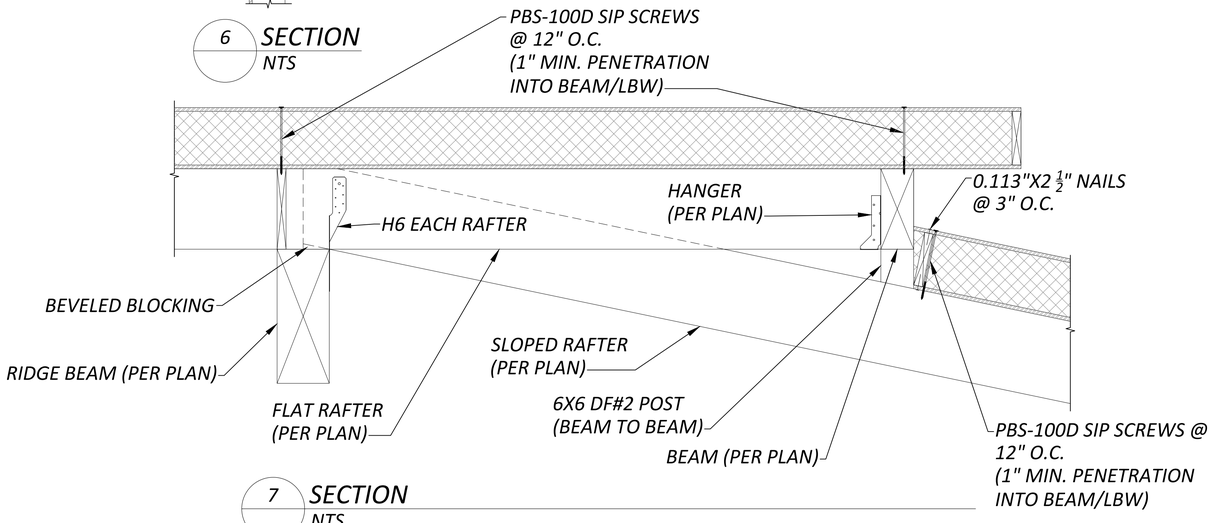
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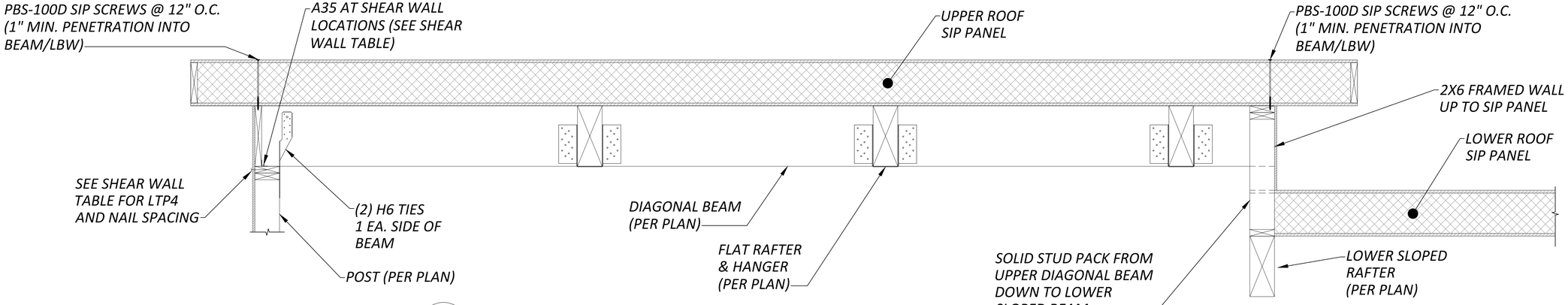
6 SECTION
NTS



5 SECTION
NTS



7 SECTION
NTS



8 SECTION
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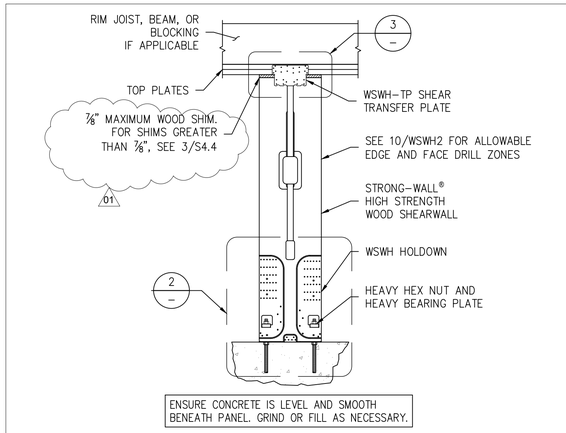
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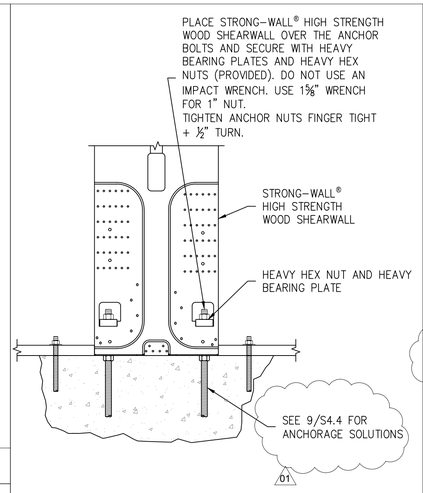
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PRCNC20231714

SINGLE STORY WSWH ON CONCRETE | 1

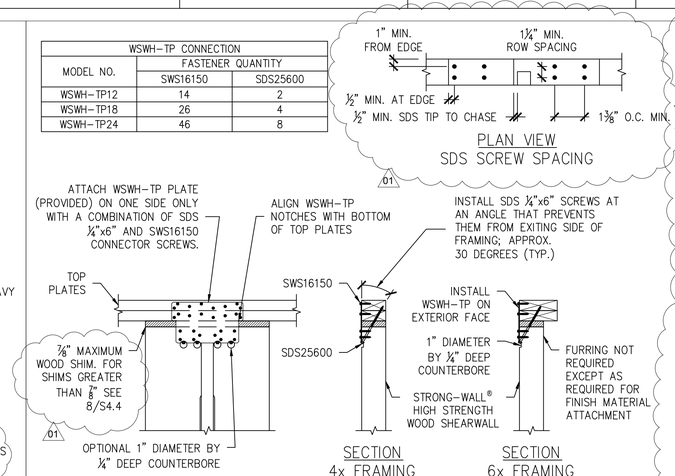


STANDARD INSTALLATION BASE CONNECTION | 2

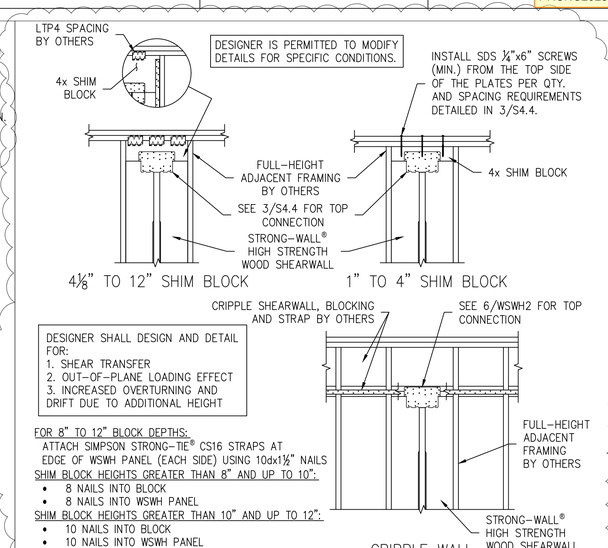


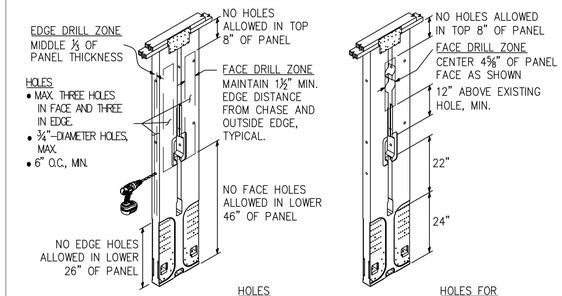
TOP CONNECTION | 3

WSWH-TP CONNECTION		
MODEL NO.	FASTENER QUANTITY	
	SWS16150	SDS25600
WSWH-TP12	14	2
WSWH-TP18	26	4
WSWH-TP24	46	8

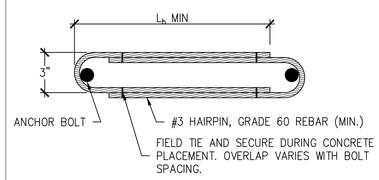


TOP OF WALL HEIGHT ADJUSTMENTS | 8

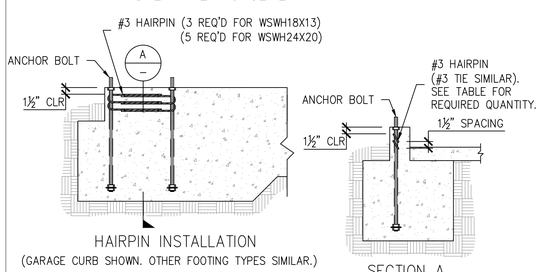




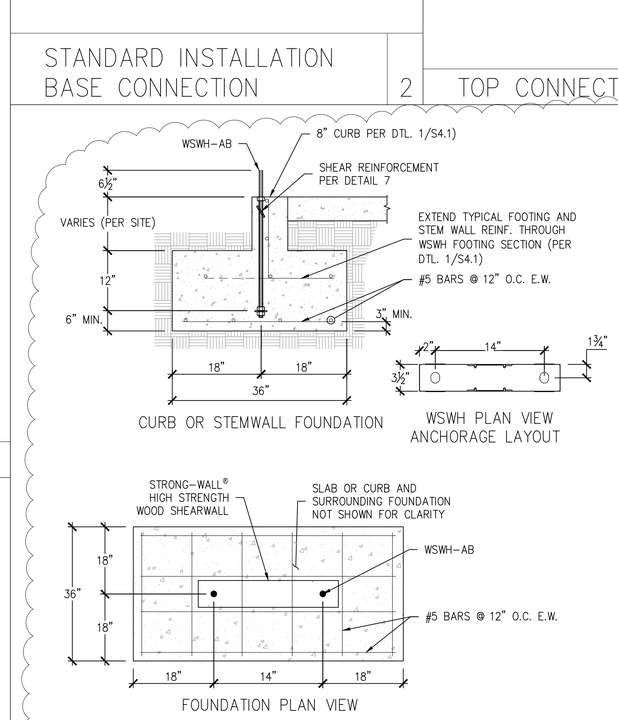
TRIM ZONE AND ALLOWABLE HOLES | 4



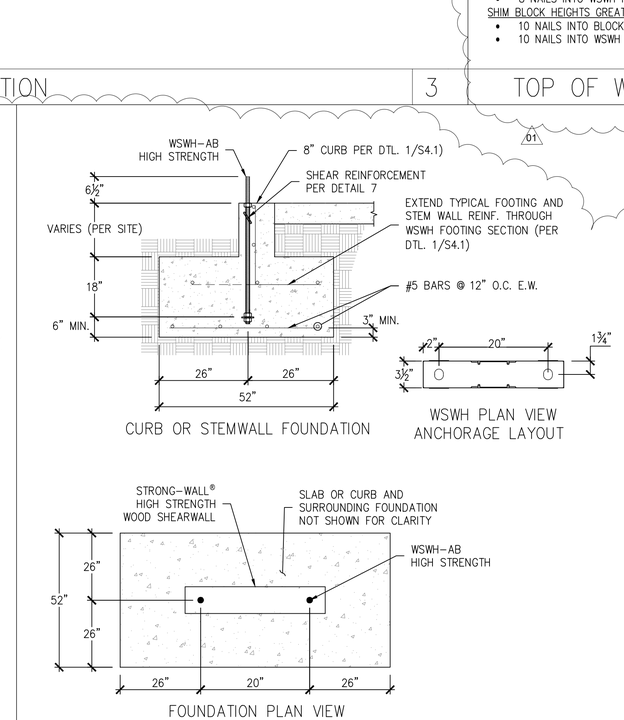
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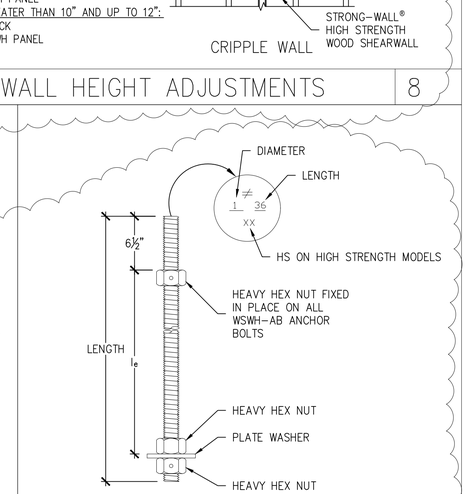
TRIM ZONE AND ALLOWABLE HOLES | 7



WSWH18X16 FOUNDATION | 5



WSWH24X16 FOUNDATION | 6



WSWH PANEL MODEL	MODEL NO.	DIAMETER	LENGTH	l_e
WSWH12, WSWH18 AND WSWH24	WSWH-AB1x24	1"	24"	15½"
	WSWH-AB1x24HS	1"	24"	15½"
	WSWH-AB1x30	1"	30"	21½"
	WSWH-AB1x30HS	1"	30"	21½"
	WSWH-AB1x36	1"	36"	27½"
	WSWH-AB1x36HS	1"	36"	27½"
	WSWH-AB1x42	1"	42"	33½"
	WSWH-AB1x42HS	1"	42"	33½"
	WSWH-AB1x48	1"	48"	39½"
	WSWH-AB1x48HS	1"	48"	39½"

WSWH ANCHOR BOLTS | 9

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TACOMA, WA 98407

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Fire	Traffic

EASTTOWN CROSSING
LOT TWO COMMERCIAL
PIONEER & SHAW PUYALLUP

REVISIONS

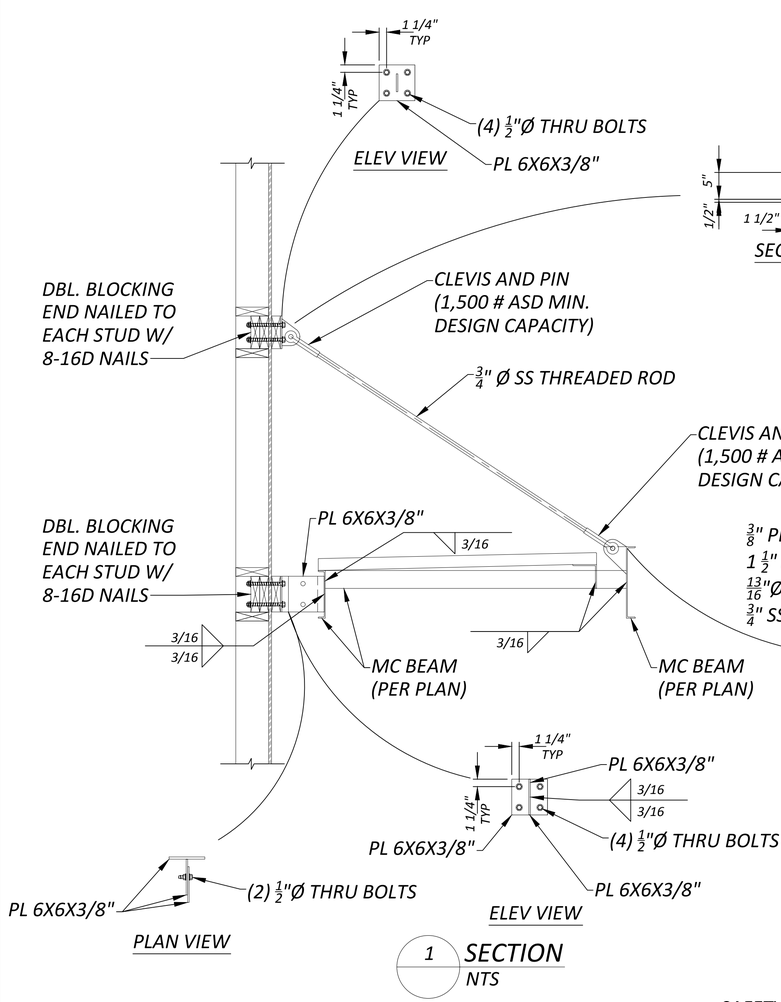
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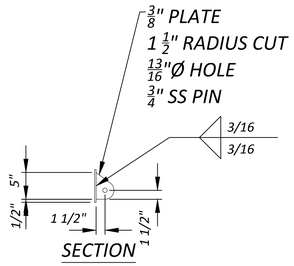
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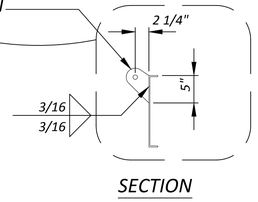
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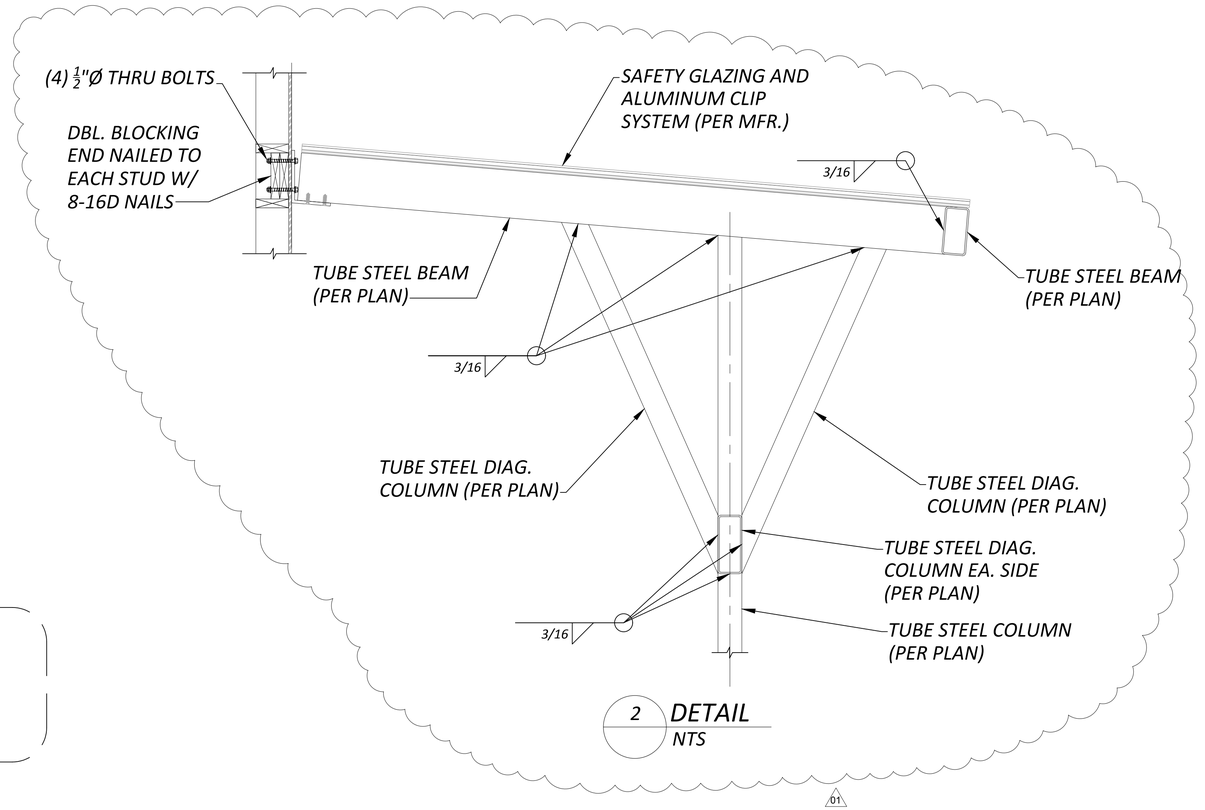
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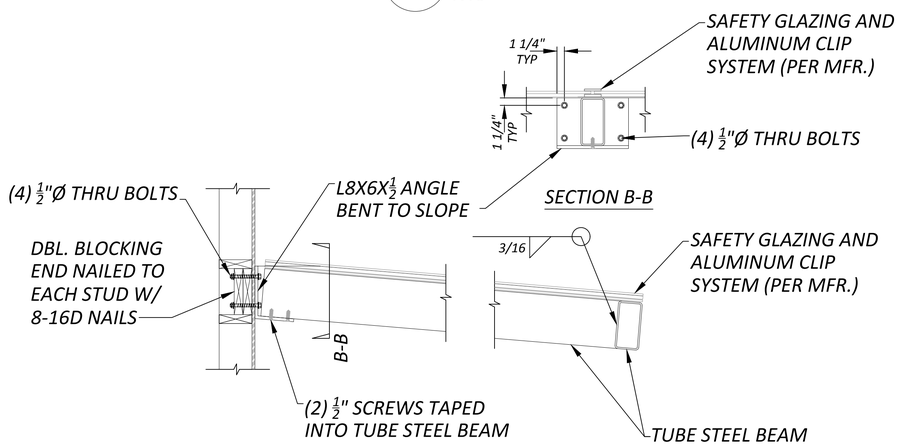


1 SECTION
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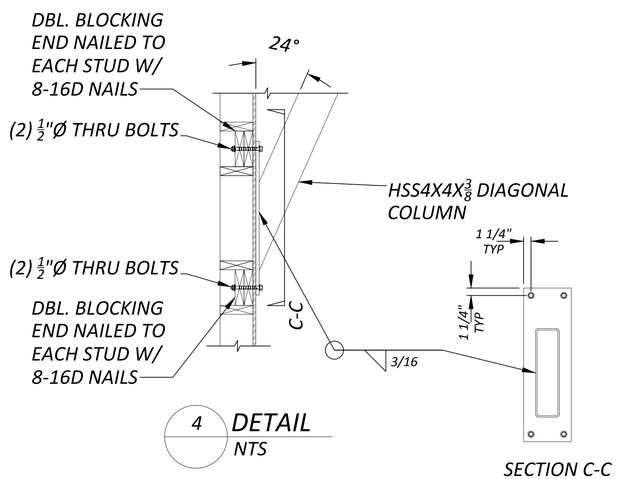


2 DETAIL
NTS

Welding to be done by an individual or fabricator who is WABO certified or approved by the Building Official to perform the work. All welds must be inspected and approved by a WABO certified special inspector.



3 DETAIL
NTS



4 DETAIL
NTS

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Fire	Traffic

EASTTOWN CROSSING
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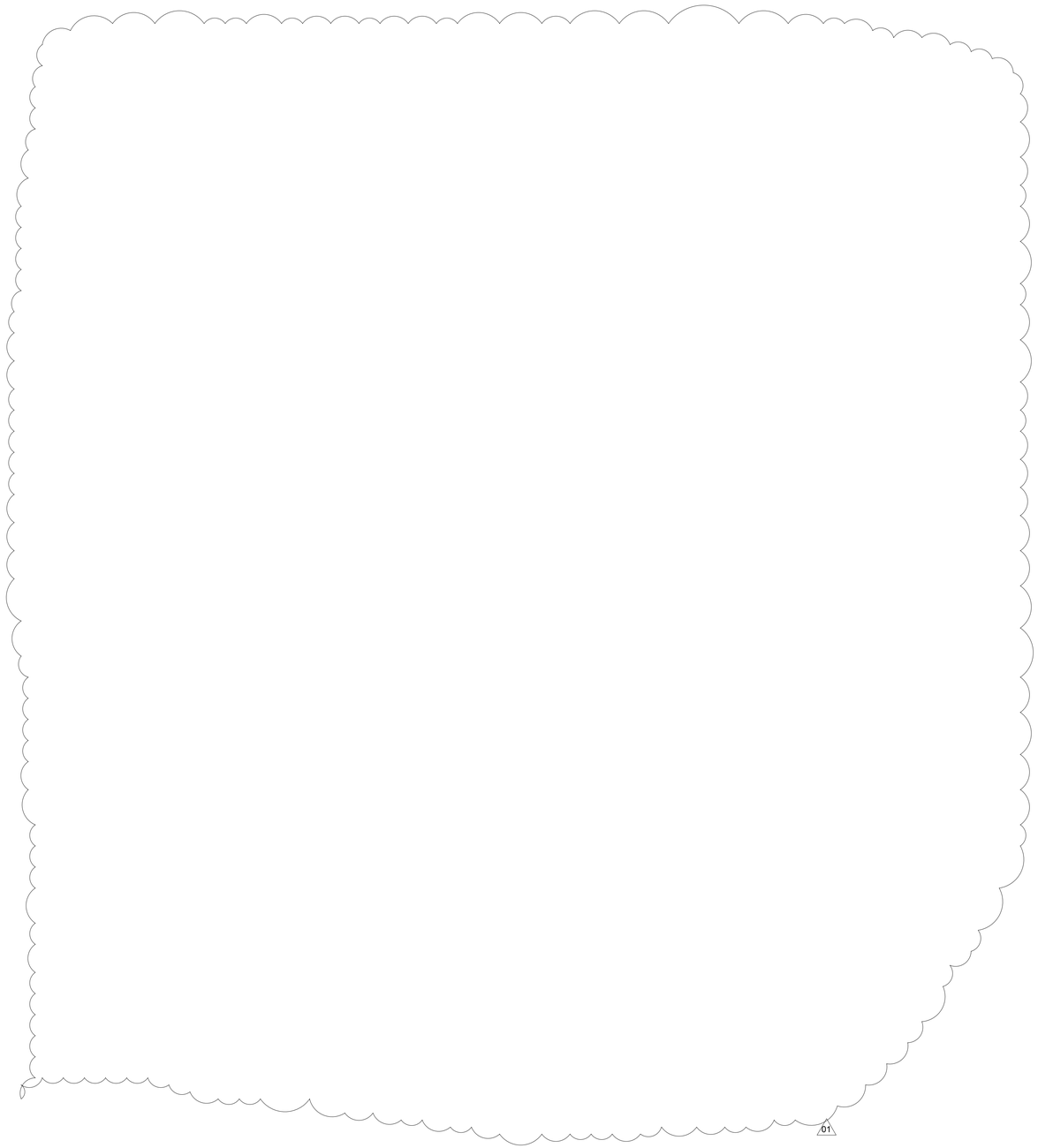
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PRCNC20231714



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GENERAL NOTES

GENERAL NOTES – MECHANICAL

1. REFERENCE TO RELATED WORK: "REF" INDICATIONS DENOTE WORK COVERED ELSEWHERE (ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL, LANDSCAPE, OR KITCHEN), OR ITEM BASED ON A SPECIFIC MANUFACTURER'S DIMENSIONS (VERIFY).

2. ELECTRICAL CHARACTERISTICS: REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS (VOLTAGES, ETC. OF MECHANICAL EQUIPMENT, UNLESS OTHERWISE INDICATED.

3. CODES: COMPLETE INSTALLATION OF THE MECHANICAL SYSTEM SHALL BE PER THE APPLICABLE BUILDING, MECHANICAL, ENERGY, PLUMBING, FIRE, AND HEALTH CODES AND REGULATIONS AS ADOPTED BY THE LOCAL AHJ.

4. PREPARE AND SUBMIT FOR REVIEW A SHOP DRAWING BASED ON FINAL STRUCTURAL SHOP DRAWINGS FOR LOCATING AND ROUTING ALL DUCTWORK, DAMPERS, EQUIPMENT, PIPING, ETC.
   A. COORDINATE FLOOR AND BEAM PENETRATIONS WITH STRUCTURAL.
   B. COORDINATE FINAL LOCATION AND ROUTING WITH CEILING, LIGHTS, WALLS, FIRE SPRINKLER PIPING, AND OTHER TRADES WORK.
   C. INCLUDE ADDITIONAL OFFSETS, ELBOWS, ROUTING, EQUIVALENT DUCT SIZING EXCHANGE, RELOCATING, ETC. AS REQUIRED FOR A COMPLETE OPERATING MECHANICAL SYSTEM.
   D. PROVIDE SHOP DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.

5. MECHANICAL CONTRACTOR SHALL LOCATE AND COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITHIN THE STRUCTURE.

6. ACCESS DOORS: COORDINATE WITH ARCHITECT AND LOCATE ALL ACCESS DOORS ON SHOP DRAWINGS PRIOR TO BEGINNING OF CONSTRUCTION. ACCESS DOORS IN FIRE RATED STRUCTURE SHALL BE FIRE RATED. VERIFY ACCESS DOOR LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO BIDDING.

7. RATED PENETRATION: DUCT PENETRATIONS THROUGH RATED ENCLOSURES SHALL BE FIRE/SMOKE DAMPERED PER THE LATEST EDITION OF THE UNDERWRITERS LABORATORIES(UL) FIRE RESISTANCE WITH HOURLY RATINGS FOR THROUGH–PENETRATION FIRE STOPS SYSTEM VOLUME #2, OR SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S UL LISTINGS (3M OR EQUIVALENT). DETERMINE REQUIREMENTS WITH GENERAL CONTRACTOR PRIOR TO BID.

8. EXHAUST OUTLETS: SOURCE–SPECIFIC FANS SHALL BE VENTED TO OUTDOORS WITH A MINIMUM 3' CLEARANCE BETWEEN VENT OUTLETS AND BUILDING OPENINGS, AND 10' MINIMUM BETWEEN VENT OUTLETS AND MECHANICAL AIR INTAKES.

9. ROOF PENETRATIONS: SEE ARCHITECTURAL DRAWINGS FOR ROOF CAP, ROOF CURB, ROOF DRAIN, AND VTR DETAILS.

10. EXPOSED PIPING: PROVIDE CHROME PLATING FOR EXPOSED PIPING IN FINISHED ROOMS.

11. PENETRATIONS: PROVIDE ESCUTCHEON PLATES FOR EXPOSED PIPING PENETRATIONS AND SHEET METAL FLASHING FOR EXPOSED DUCTWORK PENETRATIONS.

12. SHAFT AND PLENUM CONNECTIONS: SEAL CONNECTIONS TO AIR SHAFTS AIRTIGHT. PROVIDE AIRTIGHT SEAL AROUND PENETRATIONS IN AIR PLENUMS.

13. LIGHT FIXTURE CLEARANCE: COORDINATE LOCATIONS OF MECHANICAL WORK TO PROVIDE CLEARANCES OVER LIGHTING FIXTURES FOR REMOVAL AND REPLACEMENT.

14. MOTORS: COMPLY WITH ENERGY CODE ENFORCED BY AHJ FOR MINIMUM EFFICIENCIES UNDER FULL LOAD.

15. ACCESS CLEARANCES FOR MAINTENANCE AND REPLACEMENT: VERIFY PHYSICAL DIMENSIONS OF EQUIPMENT TO ENSURE THAT ACCESS CLEARANCES CAN BE MET. COORDINATE LOCATIONS OF MECHANICAL WORK AND WORK OF OTHER TRADES TO PROVIDE ACCESS CLEARANCES FOR SERVICE AND MAINTENANCE.

COORDINATION REQUIREMENTS

1. PIPING: COORDINATE WITH STRUCTURAL FOR EXACT LOCATION OF ALL STRUCTURAL FRAMING AND FOOTINGS AND FINALIZE THE EXACT ROUTING OF ALL PIPES WITH STRUCTURAL AND AT THE SITE PRIOR AND DURING THE CONSTRUCTION.

2. DUCTWORK: LOCATE AND COORDINATE THE EXACT LOCATION OF DUCTWORK WITH STRUCTURAL PLANS AND WITH THE GENERAL CONTRACTOR PRIOR TO INSTALLATION OF ANY STRUCTURE OR EQUIPMENT. COORDINATE WITH FRAMING CONTRACTOR TO ASSURE JOIST SPACES LINE UP WHEN DUCTWORK MUST PASS THROUGH DIFFERENT JOIST SPACES.

3. ADJUSTMENTS: ALL EQUIPMENT, MOTORS, FANS GAS BURNERS, IGNITION DEVICES, DRIVES, ETC. SHALL BE ADJUSTED AND BALANCED TO OPERATE AT SPECIFIED RATINGS AS REQUIRED FOR THIS PROJECT SITE AND ACCOUNTING FOR ELEVATION ABOVE SEA LEVEL.

4. APPROVALS: MECHANICAL AND PLUMBING EQUIPMENT SHALL BE APPROVED FOR INSTALLATION IN THE PROJECT LOCATION AND SHALL HAVE ALL CERTIFICATIONS AND RATINGS TO MEET ALL ENERGY, POLLUTION, ENVIRONMENTAL, SEISMIC, ETC. CODES AND REGULATIONS. THE CONTRACTOR SHALL COORDINATE WITH HIS MANUFACTURE SUPPLIERS AND SHALL INCLUDE ALL COSTS REQUIRED TO MEET THESE REQUIREMENTS IN HIS BID.

5. FIRE PROTECTION: CONTRACTOR SHALL PROVIDE A FULLY DESIGNED FIRE PROTECTION SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA AND LOCAL CODES. PROVIDE DESIGN, PERMITS, MATERIALS, INSTALLATION, TESTING AND ALL OTHER FOR A FULLY OPERATIONAL SYSTEM. LOCATION OF ALL PIPING TO BE COORDINATED WITH OTHER TRADES.

PIPING NOTES

1. DISASSEMBLY PROVISIONS: PROVIDE UNIONS OR FLANGES AT PIPING CONNECTIONS TO EQUIPMENT, COILS, TRAPS, CONTROL VALVES, AND OTHER COMPONENTS TO ALLOW DISASSEMBLY FOR MAINTENANCE.

2. REDUCERS: PROVIDE AS REQUIRED FROM LINE PIPE SIZE TO EQUIPMENT, TRAP, COIL, AND CONTROL VALVE CONNECTION SIZES.

3. OFFSETS: PROVIDE FOR BRANCH LINES TO EQUIPMENT.

4. DIELECTRIC UNIONS: PROVIDE AT CONNECTIONS OF DISSIMILAR PIPE.

5. REFRIGERANT PIPING: PROVIDE SIZING & INSTALLATION IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

6. CONDENSATE DRAIN: PROVIDE A P–TRAP FOR EACH HVAC UNIT CONDENSATE PAN WITH PLUG TEES FOR CLEANING. CONDENSATE DRAINS SHALL BE DISCHARGED TO AN INDIRECT WASTE OR OUTSIDE.

INSULATION/LINING NOTES

1. ENERGY CODE: AS A MINIMUM, COMPLY WITH THICKNESSES AND TYPES LISTED IN ENERGY CODE ENFORCED BY AHJ.

2. EXTENT OF INTERNAL DUCT LINING:
   A. GRILLE AND DIFFUSER BOXES AND BOOTS.
   B. TRANSFER DUCTS.
   C. THE FIRST 10 FEET OF SUPPLY AND RETURN DUCTWORK FROM THE AIR HANDLER.

3. EXTENT OF EXTERNAL DUCT INSULATION:
   A. SUPPLY AND RETURN AIR IN UNCONDITIONED SPACES, MECHANICAL ROOMS, ELECTRICAL ROOMS, AND EQUIPMENT ROOMS NOT SPECIFIED TO BE INTERNALLY LINED.
   B. SUPPLY AIR ABOVE CEILINGS OR EXPOSED NOT SPECIFIED TO BE INTERNALLY LINED.
   C. OUTDOOR AIR INTAKE.

4. MISCELLANEOUS DUCT FITTINGS (CONICAL TAKEOFFS, ETC.): WRAP WITH INSULATION FOR CONDENSATION CONTROL.

PLAN NOTES

1. DUCTWORK SHALL BE METALLIC DUCTWORK

2. TEST AND BALANCE WORK SHALL BE PERFORMED BY AN INDEPENDENT TEST AND BALANCE AGENCY. PROVIDE (3) COPIES OF TEST AND BALANCE REPORT TO OWNER.

3. COORDINATE DUCTWORK WITH MISCELLANEOUS OBSTRUCTIONS IN CEILING SPACE.

4. RESTROOM EXHAUST SHALL BE A MINIMUM OF 10' FROM ANY MECHANICAL OUTSIDE AIR INTAKES.

5. ROUTE DUCTWORK UNDERNEATH JOISTS UON.

6. TRANSITION DUCT UNDER BEAMS AND DUCTS. FIELD VERIFY AVAILABLE CEILING CAVITY DIMENSIONS.

7. COORDINATE MOUNTING HEIGHT OF DIFFUSERS WITH ARCHITECTURAL PLANS.

SHEET METAL NOTES

1. REFERENCE: SMACNA HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE, CURRENT EDITION.

2. CLEARANCE: COORDINATE DUCTWORK WITH MISCELLANEOUS OBSTRUCTIONS IN CEILING SPACE.

3. ROUND ELBOWS AND OFFSETS: FULL RADIUS (R/D = 1.5), 5–PIECE SEGMENTED OR STAMPED. REFER TO SMACNA HVAC FIG 2–7, 3–3. DO NOT USE ANGLED OFFSET (TYPE 1). MITERED OFFSET (TYPE 2) MAY BE USED UP TO 30 DEGREE OFFSET ANGLE.

4. ROUND TEES AND LATERALS: CONICAL TEE PER SMACNA HVAC FIG 3–5; DO NOT USE STRAIGHT TEE; DO NOT USE CONICAL SADDLE TAP FOR EXPOSED DUCTWORK IN FINISHED SPACES. 90–DEGREE TEE WITH OVAL TO ROUND TAP, LATERAL, AND 45–DEGREE RECTANGULAR LEAD–IN PER SMACNA HVAC FIG 3–4.

5. RECTANGULAR ELBOWS AND OFFSETS: FULL RADIUS WHERE SPACE PERMITS, R/W = 1.5; OTHERWISE USE SQUARE CORNER ELBOW WITH TURNING VANES.

6. RECTANGULAR DIVIDED FLOW FITTINGS: USE GENERALLY, EXCEPT BRANCHES TO TERMINALS; SMACNA HVAC FIG 2–5, TYPES 1, 2, 4A, AND 4B. DO NOT USE TYPE 3.

7. TURNING VANES: H.E.P. MANUFACTURER OR APPROVED HIGH EFFICIENCY PROFILE AIRFOIL TYPE FOR RECTANGULAR SQUARE THROAT ELBOWS. ACOUSTICAL TYPE FOR RETURN AIR MITERED ELBOWS.

8. TAKEOFFS TO OPENINGS: CONICAL TYPE WITH VOLUME DAMPER FOR ROUND DUCT BRANCHES PER SMACNA HVAC FIG 2–6, MINIMUM DIAMETER 2 INCHES LARGER THAN DUCT SIZE. 45 DEGREE ENTRY FITTING FOR RECTANGULAR DUCT BRANCHES PER SMACNA HVAC FIG 2–6.

9. FLEXIBLE CONNECTIONS: PROVIDE AT EACH DUCT CONNECTION TO FANS, PACKAGED HVAC EQUIPMENT, EXTERNALLY ISOLATED AIR HANDLING UNITS, FAN COIL UNITS, AND SIMILAR EQUIPMENT. EXCEPTION: EQUIPMENT IN CORRIDOR CEILING SPACES WHERE FIRE RATING IS REQUIRED.

10. ALL DUCT WORK SHALL BE CLASSIFIED FOR LOW PRESSURE SYSTEMS PER IMC SECTION 603.

11. ALL DUCTS AND JOINTS SHALL BE SEALED PER IMC SECTION 603.

HVAC NOTES

1. ATTACHMENTS: AIR DISTRIBUTION OUTLETS AND LOUVERS SHALL HAVE ALL REQUIRED ACCESSORIES AND ATTACHMENTS FOR A COMPLETE CONNECTION TO THE SPECIFIC TYPE OF STRUCTURE THAT THEY ARE BEING ATTACHED TO. THIS INCLUDES, BUT IS NOT LIMITED TO, EXTERIOR BRICKS, GWB WALLS, GWB CEILING, ETC.

2. DUCTWORK: DUCTWORK SHALL BE SMOOTH SHEET METAL (CLASS–1). DUCTWORK THROUGH FIRE RATED STRUCTURE AND FLOOR SHALL BE MIN. 26 GA. STEEL. MAXIMUM LENGTH OF FLEXIBLE DUCTS SHALL BE 5'–0", UNLESS OTHERWISE NOTED ON DRAWINGS. DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS.

3. SEISMIC: PROVIDE SEISMIC RESTRAINTS FOR MECHANICAL EQUIPMENT, PIPING, AND DUCTWORK PER SMACNA AND LOCAL REGULATIONS.

4. FILTER CLEARANCE: PROVIDE ADEQUATE CLEARANCE FOR CHANGING AIR FILTERS.

5. DUCTWORK AND PIPING OUTSIDE OF MECHANICAL ROOMS SHALL BE CONCEALED, COORDINATE WITH THE GENERAL CONTRACTOR TO FUR–OUT AS REQUIRED.

6. FIRE RATINGS: RATED FLOOR/CEILING JOINT SPACES HAVING DUCTWORK INSIDE THEM SHALL BE FIRE/SMOKE PROTECTED TO MAINTAIN THE 1–HOUR FLOOR/CEILING RATING PER LOCAL JURISDICTIONS. EXHAUST DUCTWORK PENETRATING THE 1–HOUR ROOF/CEILING OR FLOOR/CEILING ASSEMBLY SHALL HAVE ACCESSIBLE CEILING FIRE DAMPERS. ALTERNATIVELY, THE EXHAUST DUCTWORK SHALL BE ROUTED INSIDE A RATED SHAFT TO PROTECT THE CEILING/ROOF RATING PER THE LOCAL JURISDICTIONS.

7. FIRESTOP: PIPE, DUCT AND CONDUIT PENETRATIONS THROUGH RATED ASSEMBLIES SHALL BE FIRE AND SMOKE STOPPED PER CODE.

8. DUCTWORK: DUCTWORK SHALL BE SMOOTH SHEET METAL (CLASS–1). DUCTWORK THROUGH FIRE RATED STRUCTURE AND FLOOR SHALL BE MIN. 26 GA. STEEL. MAXIMUM LENGTH OF FLEXIBLE DUCTS SHALL BE 5'–0" UNLESS OTHERWISE NOTED ON DRAWINGS. DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS.

9. VOLUME DAMPERS: PROVIDE AN ACCESSIBLE MANUAL VOLUME DAMPER FOR EACH SUPPLY, RETURN, OSA AND EXHAUST OPENING, LOCATED AS FAR UPSTREAM AS POSSIBLE FROM THE OPENING. PROVIDE A MANUAL VOLUME DAMPER FOR BRANCH MAINS SERVING MORE THAN ONE OPENING. VOLUME DAMPERS IN NON–ACCESSIBLE CEILING SHALL HAVE A CONTROL ARM EXTENDED TO AN ACCESSIBLE LOCATION. PROVIDE "YOUNG" REGULATOR OR EQUAL. EXACT LOCATION OF CONTROL DEVICES VISIBLE IN FINISHED SPACES SHALL BE COORDINATED WITH THE ARCHITECT.

10. CORRIDOR THERMOSTAT: PROVIDE TAMPERPROOF THERMOSTATS IN CORRIDORS. DO NOT PROVIDE PLASTIC GUARDS TO MAKE THE THERMOSTATS TAMPERPROOF. PROVIDE BLANK SECURABLE THERMOSTAT COVERS.

APPLICABLE CODE

1

BUILDING CODE:

2018 WASHINGTON STATE ENERGY CODE–RESIDENTIAL BY WASHINGTON ADMINSTRATIVE CODE CHAP 51–50 (WSEC)

2018 INTERNATIONAL RESIDENTIAL CODE WITH ADMINISTRATIVE CODE CHAP 51–51 (WSRC)

2018 INTERNATIONAL MECHANICAL CODE WITH ADMINISTRATIVE CODE CHAP 51–52 (WSMC)

DRAWINGS ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.

PRE-CON MEETING NOTES

CONTRACTORS SHALL ATTEND A PRE–CONSTRUCTION MEETING WITH THE ENGINEER FOR THE PURPOSE OF REVIEWING THE WORK PRIOR TO ORDERING ANY EQUIPMENT OR PERFORMING ANY WORK. THE MEETING SHALL BE LOCATED AT THE PROJECT SITE ON A DATE AND TIME TO BE MUTUALLY AGREED. THE MEETING WILL BE A WORKING SESSION. THE MEETING WILL BE FACILITATED BY THE ENGINEER AND THE AGENDA WILL INCLUDE A DETAILED REVIEW OF THE PLANS AND SPECIFICATIONS, CROSS CHECK WITH OTHER TRADES FOR COORDINATION ISSUES, REVIEW OF PROPOSED PRODUCTS, REVIEW OF PLANNED MEANS AND METHODS,AND ON–SITE INVESTIGATION OF FIELD CONDITIONS RELATIVE TO EXISTING CONDITIONS THAT COULD AFFECT THE WORK. PERSONS ATTENDING THE MEETING SHALL BE KNOWLEDGEABLE OF THE PROJECT AND SHALL BE THE SPECIFIC PERSONS INTENDED TO CONTINUE WITH THE PROJECT THROUGH TO COMPLETION. IF REQUIRED, REVISED PLANS WILL BE ISSUED THROUGH OFFICIAL CHANNELS. CHANGES IN THE BID PRICE WILL BE DISCUSSED, BUT NO CHANGE ORDERS WILL BE ISSUED UNLESS PROCESSED THOUGH OFFICIAL CHANNELS. IT SHALL BE UNDERSTOOD THAT THE ENGINEER HAS NO AUTHORITY TO ISSUE CHANGE ORDERS.

THE FOLLOWING TRADES SHALL BE REPRESENTED FOR THE MINIMUM TIME INDICATED:

MECHANICAL SHEET METAL	4 HOURS
PLUMBING/PIPING	4 HOURS
ELECTRICAL	4 HOURS
SPRINKLER	2 HOURS
GENERAL CONTRACTOR	ALL SESSIONS

ANNOTATIONS

ACU	AIR CONDITIONING UNIT
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
BDD	BACKDRAFT DAMPER
BHP	BRAKE HORSEPOWER
BTUH	BRITISH THERMAL UNIT PER HOUR
C	COMMON
CAP	CAPACITY
CC	COOLING COIL
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CLG	CEILING, COOLING
CO	CLEANOUT
COMB	COMBUSTION
CONT	CONTINUE, CONTROL
CONTR	CONTRACTOR
COP	COEFFICIENT OF PERFORMANCE
CWS	CHILLED WATER SUPPLY
CWR	CHILLED WATER RETURN
D	DIAMETER
DB	DRY BULB, DECIBEL
DEG	DEGREE
DIM	DIMENSION
DISCH	DISCHARGE
DN	DOWN
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EFF	EFFICIENCY
EG	EXHAUST GRILLE, ENGINE GENERATOR
ELEC	ELECTRIC
EQUIV	EQUIVALENT
ESP	EXTERNAL STATIC PRESSURE
EXH	EXHAUST
EXT	EXTERIOR, EXTERNAL
F	FAHRENHEIT
FD	FIRE DAMPER
FCU	FAN COIL UNIT
FLR	FLOOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FSD	FIRE/SMOKE DAMPER
G	GAS
GRD	GRILLES, REGISTERS, AND DIFFUSERS
GWB	GYPSUM WALLBOARD
HORIZ	HORIZONTAL
HP	HORSEPOWER, HEAT PUMP
HRU	HEAT RECOVERY UNIT
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
HVU	HEATING AND VENTILATION UNIT
HWR	HIGH WALL RETURN, HOT WATER RETURN
HWS	HIGH WALL SUPPLY, HOT WATER SUPPLY
HX	HEAT EXCHANGER
ID	INDIRECT DRAIN, INSIDE DIAMETER
IN	INCH
KW	KILOWATT
L	LONG, LENGTH
LB	POUND
LWR	LOW WALL RETURN
LWS	LOW WALL SUPPLY
MBH	THOUSAND BTU PER HOUR
MECH	MECHANICAL
MCA	MINIMUM CIRCUIT AMPACITY
MOCP	MAXIMUM OVER CURRENT PROTECTION
MTD	MOUNTED
OSA	OUTDOOR AIR
OBD	OPPOSED BLADE DAMPER
OD	OUTSIDE DIMENSION OR DIAMETER
OPNG	OPENING
P	PUMP
PD	PRESSURE DROP
POC	POINT OF CONNECTION
PRV	PRESSURE REDUCING VALVE
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
REF	REFERENCE
RF	RELIEF FAN
RG	RETURN GRILLE
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SCH	SCHEDULE
SF	SUPPLY FAN, SQUARE FOOT
SENS	SENSIBLE
SG	SUPPLY GRILLE
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
SO	SCREENED OPENING
SP	STATIC PRESSURE
SS	STAINLESS STEEL, SANITARY SEWER
SQ	SQUARE
TG	TRANSFER GRILLE
TYP	TYPICAL
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
V	VENT
VENT	VENTILATION, VENTILATOR
VTR	VENT THRU ROOF
W	WASTE, WATT, WIDE
WB	WET BULB (TEMPERATURE)

SYMBOLS

DUCTWORK

- 18x12 — DUCT (1ST FIGURE = SIDE SHOWN, 2ND FIGURE = SIDE NOT SHOWN)
- UP / DOWN — DUCT SECTION, POSITIVE PRESSURE
- UP / DOWN — DUCT SECTION, NEGATIVE PRESSURE
- UP / DOWN — ROUND DUCT SECTION
- UP / UP / UP — DUCT PENETRATION THRU FLOOR OR ROOF
- VOLUME DAMPER
- FSD / FSD — FIRE/SMOKE DAMPER (–––◀ = HORIZ DUCT, ––◆– = VERT DUCT), 2–HR RATED, UON
- FD / FD — FIRE DAMPER (–––◀ = HORIZ DUCT, ––◆– = VERT DUCT), 2–HR RATED, UON
- 90° ELBOW, R/D OR R/W=1.5
- SQUARE CORNER ELBOW WITH TURNING VANES
- 90° TAKE–OFF OR TEE
- 90° CONICAL TAKE–OFF
- 45° LATERAL TAKE–OFF
- TRANSITION OR REDUCER (FOT = FLAT ON TOP, FOB = FLAT ON BOTTOM)
- WYE FITTING
- 90° RECTANGULAR TAKE–OFF WITH 45° TAPER
- 90° DIVERGING RECTANGULAR TEE, EITHER RADIUS OR TURNING VANES
- PARALLEL FLOW BRANCH CONNECTION, EITHER RADIUS OR TURNING VANES
- FLEXIBLE DUCT
- Ø — ROUND DUCT INDICATOR

EQUIPMENT

- EF–1 — TYPICAL EQUIPMENT DESIGNATION (EXHAUST FAN SHOWN)
- DSD — DUCT SMOKE DETECTOR
- T — ROOM THERMOSTAT OR TEMPERATURE TRANSMITTER
- H — ROOM HUMIDISTAT OR HUMIDITY TRANSMITTER
- CO — CARBON MONOXIDE SENSOR
- SD — SMOKE DETECTOR

TERMINALS

- CD–12x12 OR 400 / CD–1 400 — DIFFUSER/GRILLE TYPE, AND NUMBER OR SIZE; DESIGN CFM (WHERE APPLICABLE) CEILING DIFFUSER (FLOW ARROWS SHOWN FOR NON SYMMETRICAL AIRFLOW)
- CEILING RETURN/EXHAUST GRILLE
- LINEAR DIFFUSER, CEILING OR WALL MOUNTED (FLOW ARROWS SHOWN FOR NON SYMMETRICAL AIRFLOW)
- WALL SUPPLY GRILLE (SG)
- WALL RETURN/EXHAUST GRILLE (RG, EG)
- 50 — TRANSFER GRILLE (TG), DUCT CONNECTED, WALL MOUNTED W/ OPTIONAL CFM SHOWN TRANSFER GRILLE, CEILING MOUNTED WITH FULL–SIZED LINED DUCT CONNECTION

DRAWING INDEX

Sheet List Table

Sheet Number	Sheet Title	REVIEW SET 11/30/2023	PERMIT RESUBMITTAL1 SET 04/09/2024				
M0.0	LEGEND, GENERAL NOTES, & DRAWING INDEX	X	X				
M0.1	MECHANCIAL SCHEDULES	X	X				
M2.0	LEVEL 1 PLAN	X	X				
M2.1	ROOF PLAN	X	X				

City of Puyallup Development & Permitting Services: ISSUED PERMIT
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PRCNC20231714

REVISIONS

NO.	DESCRIPTION	DATE

ROBISON ENGINEERING, INC
19401 40TH AVE W, SUITE 302
LYNNWOOD, WA 98036
(206) 364-3343 FAX

JOSHUA J. OBRIEN — STATE OF WASHINGTON — 23011 — REGISTERED PROFESSIONAL ENGINEER — 4/9/24

DRAWN: OP | DESIGNED: ABE | CHECKED: PR | APPROVED: JMR

PROJECT: EAST TOWN CROSSING COMMERCIAL LOT 2
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
19401 40TH AVE W, SUITE 302
LYNNWOOD, WA 98036
PHONE(206)364-3343
REI PROJECT NO.: 810010
CONTACT: ARIK ESPINELI

DATE: 4/9/2024

SHEET TITLE: LEGEND, GENERAL NOTES, & DRAWING INDEX

SHEET NO. M0.0

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SCHEDULES

ROOFTOP HVAC UNIT SCHEDULE (ELEC COOL/GAS HEAT)

EQUIP NO.	SERVICE	DISCHARGE	SUPPLY FAN			PROVIDE 100% OSA ECONOMIZER?	COOLING		HEATING				ELECTRICAL			DIMENSIONS, INCHES			WEIGHT, LBS	BASIS OF DESIGN (1)
			AIRFLOW, CFM	ESP, IN WG	MOTOR BHP		CAPACITY, MBH	SEER2/ EER2	INTPUT, MBH	OUTPUT, MBH	STAGES	AFUE %	VOLTAGE	MCA	MOCP	LENGTH	WIDTH	HEIGHT		
RTU-1	SUITE 1	VERTICAL	2101	0.6	2.3	YES	58.89	16.2/11.9	115.0	93.2	1	81.0%	208V/3P	30.6	45	73 3/8	47 5/8	43 1/2	801	DAIKIN DRG0603WM00144C
RTU-2	SUITE 1	VERTICAL	2101	0.6	2.3	YES	58.89	16.2/11.9	115.0	93.2	1	81.0%	208V/3P	30.6	45	73 3/8	47 5/8	43 1/2	801	DAIKIN DRG0603WM00144C
RTU-3	SUITE 2	VERTICAL	2101	0.6	2.3	YES	58.89	16.2/11.9	115.0	93.2	1	81.0%	208V/3P	30.6	45	73 3/8	47 5/8	43 1/2	801	DAIKIN DRG0603WM00144C
RTU-4	SUITE 2	VERTICAL	2568	0.6	2.3	YES	72.92	17.1/12.1	125.0	101.3	1	81.0%	208V/3P	31.7	45	73 3/8	47 5/8	53 1/2	847	DAIKIN DRG0723WM00114C
RTU-5	SUITE 3	VERTICAL	2568	0.6	2.3	YES	72.92	17.1/12.1	125.0	101.3	1	81.0%	208V/3P	31.7	45	73 3/8	47 5/8	53 1/2	847	DAIKIN DRG0723WM00114C
RTU-6	SUITE 3	VERTICAL	2568	0.6	2.3	YES	72.92	17.1/12.1	125.0	101.3	1	81.0%	208V/3P	31.7	45	73 3/8	47 5/8	53 1/2	847	DAIKIN DRG0723WM00114C

NOTES: (1) PROVIDE CONDENSATE PUMP

City of Puyallup
Development & Permitting Services
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STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
4/9/24

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DESIGNED: ABE
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APPROVED: JMR

PROJECT: EAST TOWN CROSSING COMMERCIAL LOT 2
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

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DATE: 4/9/2024

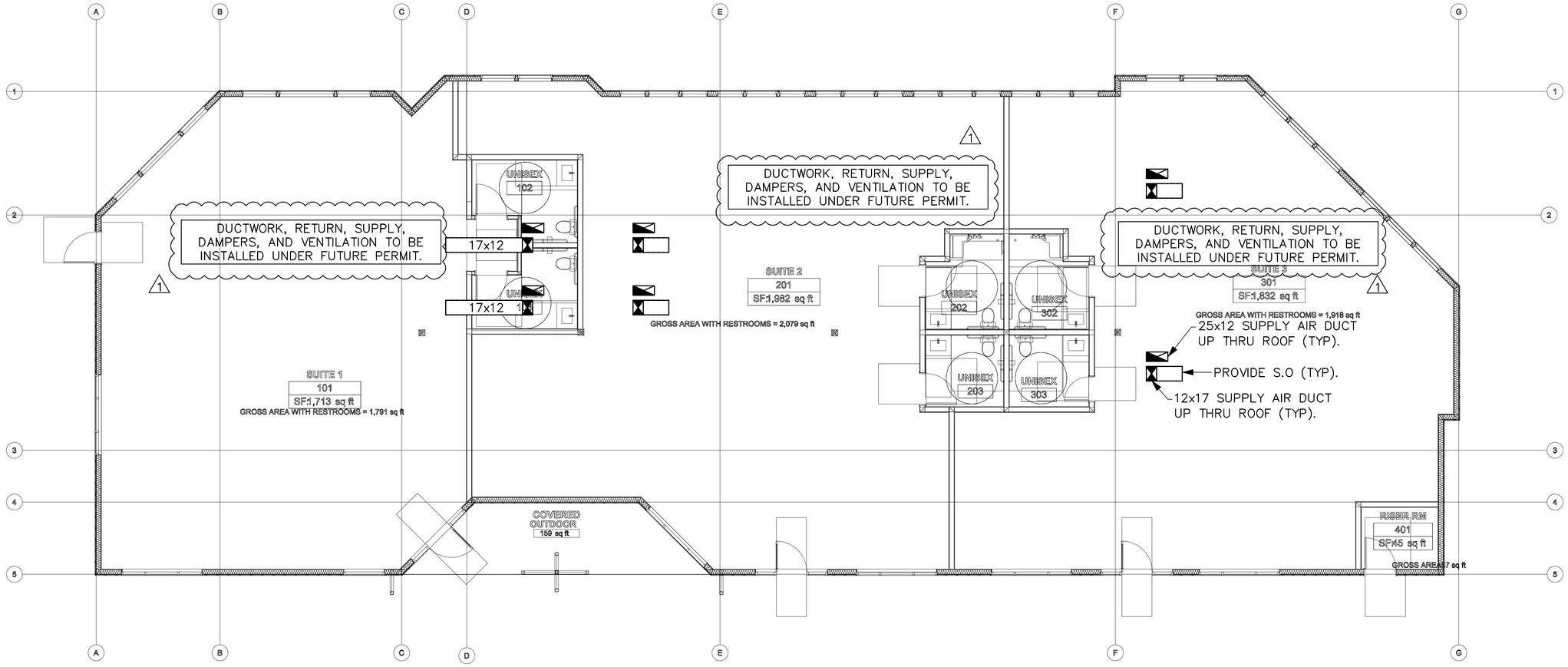
SHEET TITLE: MECHANICAL SCHEDULES

SHEET NO. MO.1

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HVAC PLAN
LEVEL 1

SCALE: 3/16" = 1'-0"

NO.	DATE	REVISIONS

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REI PROJECT NO.: 8100010
CONTACT: ARIK ESPINELI

DATE: 4/9/2024

SHEET TITLE: HVAC PLAN - LEVEL 1

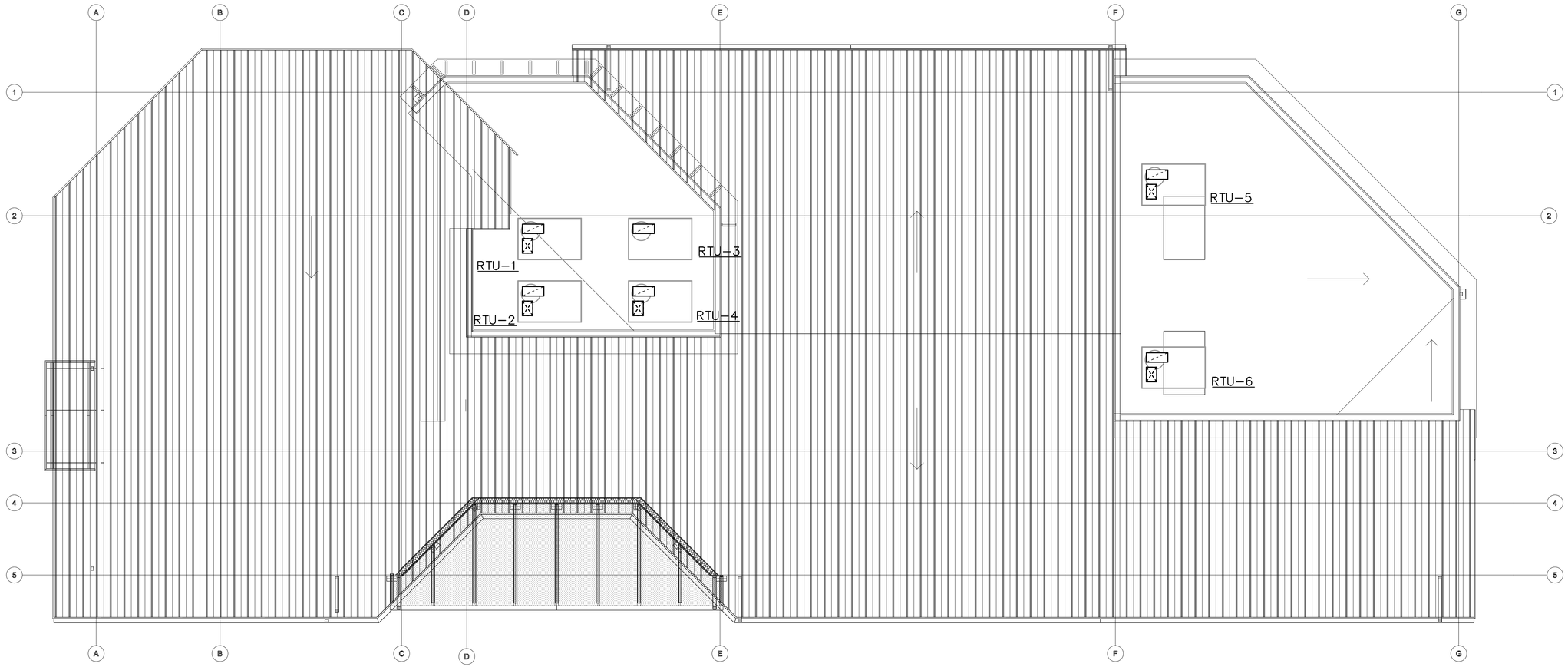
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HVAC PLAN
ROOF

SCALE: 3/16" = 1'-0"

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DATE: 4/9/2024

SHEET TITLE: HVAC PLAN - ROOF

SHEET NO. M2.1

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GENERAL NOTES

1. REFERENCE TO RELATED WORK: "REF" INDICATIONS DENOTE WORK COVERED ELSEWHERE (ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL, LANDSCAPE, OR KITCHEN), OR ITEM BASED ON A SPECIFIC MANUFACTURER'S DIMENSIONS (VERIFY).
2. ELECTRICAL CHARACTERISTICS: REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS (VOLTAGES, ETC. OF MECHANICAL EQUIPMENT, UNLESS OTHERWISE INDICATED.
3. CODES: COMPLETE INSTALLATION OF THE PLUMBING SYSTEM SHALL BE PER THE APPLICABLE BUILDING, MECHANICAL, ENERGY, PLUMBING, FIRE, AND HEALTH CODES AND REGULATIONS AS ADOPTED BY THE LOCAL AHJ.
4. PREPARE AND SUBMIT FOR REVIEW A SHOP DRAWING BASED ON FINAL STRUCTURAL SHOP DRAWINGS FOR LOCATING AND ROUTING ALL EQUIPMENT, PIPING, ETC.
   A. COORDINATE FLOOR AND BEAM PENETRATIONS WITH STRUCTURAL.
   B. COORDINATE FINAL LOCATION AND ROUTING WITH CEILING, LIGHTS, WALLS, FIRE SPRINKLER PIPING, AND OTHER TRADES WORK.
   C. INCLUDE ADDITIONAL OFFSETS, ELBOWS, ROUTING, EQUIVALENT DUCT SIZING EXCHANGE, RELOCATING, ETC. AS REQUIRED FOR A COMPLETE OPERATING MECHANICAL SYSTEM.
   D. PROVIDE SHOP DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.
5. PLUMBING CONTRACTOR SHALL LOCATE AND COORDINATE EXACT LOCATION OF ALL PLUMBING EQUIPMENT WITHIN THE STRUCTURE.
6. ACCESS DOORS: COORDINATE WITH ARCHITECT AND LOCATE ALL ACCESS DOORS ON SHOP DRAWINGS PRIOR TO BEGINNING OF CONSTRUCTION. ACCESS DOORS IN FIRE RATED STRUCTURE SHALL BE FIRE RATED. VERIFY ACCESS DOOR LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO BIDDING.
7. ROOF PENETRATIONS: SEE ARCHITECTURAL DRAWINGS FOR ROOF CAP, ROOF CURB, ROOF DRAIN, OVERFLOW DRAINS AND VTR DETAILS.
8. EXPOSED PIPING: PROVIDE CHROME PLATING FOR EXPOSED PIPING IN FINISHED ROOMS.
9. PENETRATIONS; PROVIDE ESCUTCHEON PLATES FOR EXPOSED PIPING PENETRATIONS AND SHEET METAL FLASHING FOR EXPOSED DUCTWORK PENETRATIONS.
10. SHAFT AND PLENUM CONNECTIONS: SEAL CONNECTIONS TO AIR SHAFTS AIRTIGHT. PROVIDE AIRTIGHT SEAL AROUND PENETRATIONS IN AIR PLENUMS.
11. LIGHT FIXTURE CLEARANCE: COORDINATE LOCATIONS OF MECHANICAL WORK TO PROVIDE CLEARANCES OVER LIGHTING FIXTURES FOR REMOVAL AND REPLACEMENT.
12. CABLE TRAYS: PIPING INSTALLED ADJACENT TO ELECTRICAL CABLE TRAYS SHALL ALLOW MINIMUM ACCESS OF 6" ABOVE AND TO THE SIDE OF CABLE TRAYS.
13. MOTORS: COMPLY WITH ENERGY CODE ENFORCED BY AHJ FOR MINIMUM EFFICIENCIES UNDER FULL LOAD.
14. ACCESS CLEARANCES FOR MAINTENANCE AND REPLACEMENT: VERIFY PHYSICAL DIMENSIONS OF EQUIPMENT TO ENSURE THAT ACCESS CLEARANCES CAN BE MET. COORDINATE LOCATIONS OF MECHANICAL WORK AND WORK OF OTHER TRADES TO PROVIDE ACCESS CLEARANCES FOR SERVICE AND MAINTENANCE.

COORDINATION REQUIREMENTS

1. IRRIGATION SYSTEM: COORDINATE IRRIGATION WATER DEMAND, MINIMUM WATER PRESSURE REQUIREMENTS & CONTROL CABINET LOCATIONS WITH IRRIGATION CONTRACTOR.
2. GAS: CONTRACTOR/GAS COMPANY SHALL FINALIZE GAS METER AND GAS SERVICE LOCATIONS. INSTALL SEISMIC GAS SHUT OFF VALVE PER GAS COMPANY REGULATIONS.
3. UTILITIES: COORDINATE WITH SITE UTILITY CONTRACTOR AND CIVIL DRAWINGS FOR UTILITY CONNECTIONS AND EXTENSIONS.
4. ROOF DRAINAGE: COORDINATE WITH GENERAL CONTRACTOR FOR ROOF DRAIN AND OVERFLOWS, SCUPPER DRAINS, AND CONDENSATE DRAINS.
5. PLUMBING FIXTURES & EQUIPMENT: COORDINATE EXACT LOCATION OF ALL PLUMBING FIXTURES & EQUIPMENT WITH ARCHITECTURAL AND OTHER TRADES DOCUMENTS.
6. PIPING: COORDINATE EXACT LOCATION OF ALL STRUCTURAL FRAMING & FOOTINGS AND FINALIZE THE EXACT ROUTING OF ALL PIPES WITH STRUCTURAL ENGINEER AT THE SITE PRIOR TO AND DURING THE CONSTRUCTION. COORDINATE UNDER GRADE PIPING & FOUNDATION DRAINAGE PIPING WITH CIVIL ENGINEER.
7. ADJUSTMENTS: ALL EQUIPMENT, MOTORS, FANS GAS BURNERS, IGNITION DEVICES, DRIVES, ETC. SHALL BE ADJUSTED AND BALANCED TO OPERATE AT SPECIFIED RATINGS AS REQUIRED FOR THIS PROJECT SITE AND ACCOUNTING FOR ELEVATION ABOVE SEA LEVEL.
8. APPROVALS: MECHANICAL AND PLUMBING EQUIPMENT SHALL BE APPROVED FOR INSTALLATION IN THE PROJECT LOCATION AND SHALL HAVE ALL CERTIFICATIONS AND RATINGS TO MEET ALL ENERGY, POLLUTION, ENVIRONMENTAL, SEISMIC, APPLICABLE CODES AND REGULATIONS. THE CONTRACTOR SHALL COORDINATE WITH MANUFACTURE SUPPLIERS AND SHALL INCLUDE ALL COSTS REQUIRED TO MEET THE BID DOCUMENTS.
9. FIRE PROTECTION: CONTRACTOR SHALL PROVIDE A FULLY DESIGNED FIRE PROTECTION SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA AND LOCAL CODES. PROVIDE DESIGN, PERMITS, MATERIALS, INSTALLATION, TESTING AND ALL OTHER FOR A FULLY OPERATIONAL SYSTEM. LOCATION OF ALL PIPING TO BE COORDINATED WITH OTHER TRADES.
10. PRIOR TO PIPING INSTALLATION: PLUMBING CONTRACTOR TO COORDINATE PIPING LAYOUT WITH ALL OTHER TRADES.
11. ACCESS: COORDINATE ALL ACCESS LOCATIONS WITH GENERAL CONTRACTOR AND ARCHITECT TO ENSURE ALL REQUIRED ACCESS HATCHES, ACCESS PANELS & ACCESS COVERS ARE PROVIDED.
12. PROVIDE WATER TIGHT SEALS FOR ANY PIPING PENETRATING THE EXTERIOR FOUNDATION WALLS OR SLABS.
13. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT IMMEDIATELY.
14. PROVIDE FIRE PROOFING FOR ALL PIPING PENETRATING FIRE BARRIER WALLS OR FLOOR SLABS.

DISINFECTION OF POTABLE WATER SYSTEM REQUIREMENTS

1. NEW OR REPAIRED POTABLE WATER SUPPLY SYSTEMS SHALL BE DISINFECTED PRIOR TO USE.
2. INITIAL COLIFORM SAMPLE IS REQUIRED PRIOR TO ADMINISTERING WATER-CHLORINE SOLUTION.
3. SECTION 609.9 ITEMS #2 OR #3 CAN BE USED PRECEDED BY AND FOLLOWED BY ITEM #1.
   3.1. NOTE FILL PORT TO ADD CHLORINE MUST BE WHERE WATER SUPPLY ENTERS BUILDING AND A FLOW METER TO MEASURE SOLUTION.
4. AFTER WATERCHLORINE SOLUTION IS INCORPORATED INTO THE NEW OR REPAIRED WATER SUPPLY SYSTEM A 48 HOUR WAITING PERIOD MUST BE OBSERVED PRIOR TO BACTERIOLOGICAL TEST.
5. BACTERIOLOGICAL TEST SHALL BE CONDUCTED BY A LABORATORY CERTIFIED FOR DRINKING WATER IN WASHINGTON STATE AFFIRMING WATER QUALITY CONTAINS NO COLIFORM BY SAMPLE TESTING THE FURTHEST FIXTURE FROM PUBLIC WATER SOURCE AND NOT LESS THAN TWO OTHER LOCATIONS PART OF THE WATER SUPPLY SYSTEM.
6. CHLORINE LEVEL IN THE NEW OR REPAIRED WATER SUPPLY SYSTEM SHALL NOT BE LESS THAN THE MEAN AVERAGE OF THE AREA IN RELATIONSHIP FROM THE WATER PURVEYOR SOURCE.
7. WARNING: IN CASE A WATER SOFTENER IS PART OF THE COLD WATER SYSTEM, CONTRACTOR TO ENSURE THE WATER SOFTENER IS CONNECTED AND OPERATIONAL BEFORE STARTING THE DISINFECTION PROCESS. FAILURE TO FOLLOW THE INSTRUCTIONS WILL VOID THE WATER HEATER OR HEAT PUMP WARRANTY.

SYMBOLS

GENERAL

- ARCHITECTURAL BACKGROUND (THIN LINE)
- NEW PIPING (HEAVY LINE)
- EXISTING PIPING (THIN LINE)
- EXISTING WORK TO BE REMOVED
- MATCHLINE OR PROPERTY LINE
- CONNECTION TO EXISTING

SECTION IDENTIFICATION

- INDICATES DIRECTION OF CUTTING PLANE
- LETTER INDICATES SECTION (NO. INDICATES DETAIL)
- SHEET NUMBER WHERE SECTION IS DRAWN
- SHEET NUMBER WHERE SECTION IS TAKEN

DETAIL IDENTIFICATION

- DETAIL NUMBER
- DRAWING/SHEET NUMBER

EQUIPMENT

- TYPICAL EQUIPMENT DESIGNATION

PIPING

- W — WASTE BELOW GRADE
- W — WASTE ABOVE GRADE
- PW — PUMPED WASTE
- IW — INDIRECT WASTE
- SS — SANITARY SEWER BELOW GRADE
- SS — SANITARY SEWER ABOVE GRADE
- PSS — PUMPED SANITARY SEWER
- V — VENT
- SD — STORM DRAIN
- OD — OVERFLOW STORM DRAIN
- PSD — PUMPED STORM DRAIN
- CD — CONDENSATE DRAIN
- PCD — PUMPED CONDENSATE DRAIN
- CW — COLD WATER (CW)
- HW — HOT WATER (HW), POTABLE, 120°F
- 140 — HOT WATER, POTABLE, TEMPERATURE OTHER THAN 120°F
- HWC — HOT WATER CIRCULATING (HWC), POTABLE, 120°F
- 140 — HOT WATER CIRCULATING, POTABLE, TEMPERATURE OTHER THAN 120°F
- FOF — FUEL OIL FILL
- FOS — FUEL OIL SUPPLY
- FOR — FUEL OIL RETURN
- FOV — FUEL OIL VENT
- RV — RELIEF VENT
- G — ~~LOW PRE~~SSURE NATURAL GAS
- MPG — ~~MEDIUM~~ PRESSURE NATURAL GAS
- IRR — IRRIGATION (NON POTABLE)
- F — FIRE MAIN

PIPE SYMBOLS

- TOP PIPE CONNECTION
- BOTTOM PIPE CONNECTION
- PIPE TURNING UP
- PIPE TURNING DOWN/DROP
- PIPE CAP
- PIPE PLUG
- UNION
- FLANGE
- WYE STRAINER
- WYE STRAINER WITH CAPPED HOSE END BLOWDOWN VALVE
- BALL VALVE
- BALL VALVE
- GLOBE VALVE
- CHECK VALVE
- BALANCING OR PLUG VALVE
- BUTTERFLY VALVE
- FLEXIBLE CONNECTION IN PIPING
- PRV — PRESSURE REDUCING VALVE (PRV)
- AUTOMATIC CONTROL VALVE, 2-WAY
- AUTOMATIC CONTROL VALVE, 3-WAY
- ID — RELIEF VALVE
- BV — BALANCING/METERING VALVE
- REDUCER

- DIRECTION OF FLOW
- A — PIPE ANCHOR
- PIPE ALIGNMENT GUIDE
- PS — PIPE SUPPORT
- VALVE STATION OR ASSEMBLY
- ID — INDIRECT DRAIN, PIPE TO DRAIN
- POINT OF CONNECTION
- RD OD — ROOF DRAIN, OVERFLOW DRAIN
- FLOOR DRAIN
- HOSE BIBB
- BREAK IN PIPING OR DUCTWORK
- GM — GAS METER
- M — INLINE WATER METER
- PUMP
- PRESSURE GAUGE
- THERMOMETER
- P/T — PRESSURE/TEMPERATURE TEST PORT
- RPBP — REDUCED PRESSURE BACKFLOW PREVENTER
- DCVA — DOUBLE CHECK VALVE ASSEMBLY
- CATCH BASIN - SAND/OIL INTERCEPTOR
- TRENCH DRAIN
- EMERGENCY GAS SHUT-OFF VALVE
- SEISMIC GAS SHUT-OFF VALVE
- WASHER BOX
- GREASE INTERCEPTOR

ABBREVIATIONS

ABV	ABOVE
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
BFF	BELOW FINISHED FLOOR
BFP	BACKFLOW PREVENTER
BOH	BACK OF HOUSE
BP	BOOSTER PUMP
BT	BATHTUB
BTUH	BRITISH THERMAL UNIT PER HOUR
BV	BALANCING VALVE
C	COMMON
CAP	CAPACITY
CB	CATCH BASIN
CD	CONDENSATE DRAIN
CFF	CAPPED FOR FUTURE
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CLG	CEILING, COOLING
CLW	CLOTHES WASHER
CO	CLEANOUTS
COMB	COMBUSTION
CONT	CONTINUE, CONTROL
CONTR	CONTRACTOR
COTG	CLEANOUTS TO GRADE
CP	CIRCULATING PUMP
CV	CHECK VALVE
CW	COLD WATER
D	DIAMETER
DB	DRY BULB, DECIBEL
DF	DRINKING FOUNTAIN
DFU	DRAIN FIXTURE UNITS
DI	DUCTILE IRON
DIM	DIMENSION
DN	DOWN
DS	DOWN SPOUT
DWG	DRAWING
(E)	EXISTING
EFF	EFFICIENCY
ELEC	ELECTRIC
EQUIV	EQUIVALENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXT	EXTERIOR, EXTERNAL
F	FAHRENHEIT
FCO	FLOOR CLEANOUTS
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR
FLR	FLOOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FT	FEET
FU	FIXTURE UNITS
G	GAS (LOW PRESSURE)
GAL	GALLONS
GD	GARAGE DRAIN
GM	GAS METER
GPG	GRAINS PER GALLON
GPM	GALLONS PER MINUTE
GV	GATE VALVE
GWB	GYPSUM WALLBOARD
GWH	GAS WATER HEATER
HB	HOSE BIBB
HD	HEAD
HDR	HUB DRAIN
HEDV	HOSE END DRAIN VALVE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPCW	HIGH PRESSURE COLD WATER
HW	HOT WATER
HWC	HOT WATER RE-CIRCULATION
HWCP	HOT WATER CIRCULATION PUMP
HWR	HOT WATER RETURN
HWST	HOT WATER STORAGE TANK
HX	HEAT EXCHANGER
ICW	INDUSTRIAL COLD WATER
ID	INDIRECT DRAIN, INSIDE DIAMETER
IE	INVERT ELEVATION
IHW	INDUSTRIAL HOT WATER
IN	INCH
KS	KITCHEN SINK
KW	KILOWATT
L	LONG, LENGTH
LAV	LAVATORY
LB	POUND
M	WATER METER
MBH	THOUSAND BTU PER HOUR
MECH	MECHANICAL
MCA	MIN. CIRCUIT AMPACITY
MOCP	MAX. OVER CURRENT PROTECTION
MPG	MEDIUM PRESSURE GAS
MTD	MOUNTED
(N)	NEW
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OD	OUTSIDE DIMENSION/DIAMETER
	OVERFLOW DRAIN/DECK DRAIN
OPD	OVER PRESSURE DEVICE
OPNG	OPENING
P	PUMP
PD	PRESSURE DROP, PLANTER DRAIN
POC	POINT OF CONNECTION
PRV	PRESSURE REDUCING VALVE
	PRESSURE RELIEF VALVE
PS	PUMPED STORM DRAINAGE
PSIG	POUNDS PER SQUARE INCH GAUGE
PSD	PUMPED STORM DRAINAGE
PSS	PUMPED SANITARY SEWER
PSW	PUMPED SANITARY WASTE
PW	PUMPED WASTE
RD	ROOF DRAIN
REF	REFERENCE
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
S	SINK
SCH	SCHEDULE
SCW	SOFTENED COLD WATER
SD	STORM DRAIN
SEP	SEWAGE EJECTOR PUMP
SF	SQUARE FOOT
SGSV	SEISMIC GAS SHUT-OFF VALVE
SH	SHOWER
SO	STORM OVERFLOW
SP	STATIC PRESSURE/SUMP PUMP
SR	SUDS RELIEF
SS	STAINLESS STEEL/SANITARY SEWER
SSS	SIDE SANITARY SEWER
STD	STANDARD
SQ	SQUARE
TD	TRENCH DRAIN
TMV	THERMOSTATIC MIXING VALVE
TP	TRAP PRIMER
TYP	TYPICAL
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
UR	URINAL
V	VENT
VTR	VENT THRU ROOF
W	WASTE, WATT, WIDE
WC	WATER CLOSET
WCO	WALL CLEANOUTS
WHD	WALL HYDRANT
WM	WASHING MACHINE
WSFU	WATER SUPPLY FIXTURE UNITS

CONTRACTOR SUBSTITUTIONS & REVISIONS

PLEASE SUBMIT PROPOSALS FOR SUBSTITUTIONS OR REVISIONS FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIAL OR DOING WORK. FOR EQUIPMENT THAT IS SCHEDULED BY MANUFACTURER'S NAME AND CATALOG DESIGNATIONS, THE MANUFACTURER'S PUBLISHED DATA AND/OR SPECIFICATION FOR THAT ITEM ARE CONSIDERED PART OF SPECIFICATION. ENGINEERING COSTS FOR REVISING MEP PLANS SHALL BE ADDRESSED IN THE COST ANALYSIS OF THE SUBSTITUTION PROPOSAL. CONTRACTOR TO COORDINATE WITH ENGINEER AND DETERMINE ASSOCIATED DESIGN AND PERMITTING COSTS. CONTRACTOR SHALL BE RESPONSIBLE FOR OTHER COSTS ASSOCIATED WITH UNFORESEEN ISSUES RESULTING FROM SUBSTITUTIONS OR REVISIONS.

PRCNC20231714

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

APPLICABLE CODES

THE FOLLOWING PROJECT DESIGN IS BASED ON THE FOLLOWING CODES:

-2018 INTERNATIONAL STATE BUILDING CODE (IBC) WITH WASHINGTON STATE AMENDMENTS
-2018 INTERNATIONAL MECHANICAL CODE (CMC) WITH WASHINGTON STATE AMENDMENTS
-2018 UNIFORM PLUMBING CODE (UPC) WITH WASHINGTON STATE AMENDMENTS
-2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)

NOTE TO CONTRACTOR

DRAWINGS ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.

Sheet List Table

Sheet Number	Sheet Title
P0.00	LENGEND, GENERAL NOTES, AND DRAWING INDEX
P0.01	PLUMBING NOTES AND TABLES
P0.02	PLUMBING CALCULATIONS
P0.03	PLUMBING SCHEDULES
P2.00	UNDERSLAB PLUMBING PLANS
P2.01	LEVEL 1 PLUMBING PLANS
P2.02	LOFT PLUMBING PLANS
P2.03	ROOF PLUMBING PLANS
P4.00	DETAILS
P4.01	DETAILS

NO.	DATE	REVISIONS
1	4/9/24	PERMIT RE-SUBMITTAL

ROBISON ENGINEERING, INC
19401 40TH AVE W, SUITE 302
LYNNWOOD, WA 98036
206.364.3343 TEL
CONTACT: XXX

REED JACKSON — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 04/09/2024

DRAWN: JM | DESIGNED: JM | CHECKED: RJ | APPROVED: RJ

PROJECT: **EAST TOWN CROSSING**
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
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LYNNWOOD, WA 98036
PHONE:(206)364-3343

PERMIT PLANS

04/09/2024

SHEET TITLE:
LEGEND, GENERAL NOTES, AND DRAWING INDEX

SHEET NO.
P0.00

PLUMBING TABLES

PIPE MATERIALS

PIPE TYPE	MATERIAL	JOINT	NOTES
UNDERGROUND WATER SERVICE ENTRANCE PIPING	STAINLESS	THREADED, WELDED OR PROPRESS	2
WATER DISTRIBUTION PIPING - MAIN DISTRIBUTION PIPING	SCHEDULE 80 CPVC	SOLVENT CEMENT	4
UNDERGROUND WASTE AND VENT PIPING	SCHEDULE 40 SOLID WALL PVC	SOLVENT CEMENT	
ABOVE GROUND WASTE AND VENT PIPING	SCHEDULE 40 ABS OR PVC	SOLVENT CEMENT	
CONDENSATE DRAIN PIPING	COPPER, TYPE M	SOLDERED	3

NOTES:

1. ALL SANITARY SYSTEM MATERIALS SHALL BE LISTED BY AN APPROVED LISTING AGENCY.
2. PLASTIC WRAP UNDERGROUND WATER SUPPLY PIPING TO PREVENT CORROSION.
3. CPVC IS ACCEPTABLE FOR CONDENSATE PIPING IN LIEU OF COPPER IF APPROVED BY AHJ.
4. PROVIDE THERMAL EXPANSION LOOPS FOR ALL WATER PIPING PER MANUFACTURER REQUIREMENTS.

PIPE INSULATION SCHEDULE

SERVICE	INSULATION		VAPOR RETARDER REQUIRED	NOTES
	CONDUCTIVITY (Btu*in./(h*ft²*°F)	THICKNESS		
DOMESTIC COLD WATER, IRRIGATION WATER, CONDENSATE DRAINS, STORM DRAIN (IN CONDITIONED SPACE)	0.21-0.27	<1" PIPE: 0.5" ALL OTHER SIZES: 1"	YES	12,13
DOMESTIC COLD WATER, IRRIGATION WATER, CONDENSATE DRAINS, WASTE (OUTSIDE THE CONDITIONED SPACE)	0.21-0.27	<1½" PIPE: 1" ALL OTHER SIZES: 1.5"	YES	1,7,8,10
DOMESTIC HOT WATER AND RECIRCULATED HOT WATER (OUTSIDE THE CONDITIONED SPACE)	0.21-0.28	<1½" PIPE: 1" ALL OTHER SIZES: 1.5"	NO	1,2
EXPOSED SANITARY DRAINS AND DOMESTIC WATER SUPPLIES AND STOPS FOR ADA FIXTURES.	TRUEBRO LAV-GUARD	N/A	NO	11

NOTES:

1. PIPING INSULATION EXPOSED TO THE WEATHER SHALL BE PROTECTED FROM DAMAGE. CONTRACTOR SHALL PROVIDE ALUMINUM JACKET SHIELDING FROM SOLAR RADIATION THAT CAN CAUSE DEGRADATION OF THE MATERIAL. ADHESIVE TAPE SHALL NOT BE PERMITTED.
2. PER 2018 WSEC SECTION R403.5.3 (RESIDENTIAL) INSULATION FOR HOT WATER PIPE SHALL HAVE A MINIMUM R-VALUE OF R-3.
3. PIPING FROM WATER HEATER TO THE TERMINATION OF HEATED WATER SUPPLY PIPE SHALL BE INSULATED IN ACCORDANCE WITH TABLE C403.2.9.
4. ON BOTH THE INLET AND OUTLET PIPING OF A STORAGE HOT WATER HEATER, THE FIRST 8 FEET OF PIPING OR PIPING FROM WATER HEATER TO HEAT TRAP SHALL BE INSULATED.
5. HEAT TRACED PIPING SHALL BE INSULATED IN THE SAME MANNER AS NON HEAT TRACED PIPING OR PER THE HEAT TRACE MANUFACTURER'S INSTRUCTIONS.
6. TUBULAR PIPING INSULATION SHALL NOT BE REQUIRED FOR THE FOLLOWING:
   - 6.1. THE TUBING FROM THE CONNECTION AT THE TERMINATION OF THE FIXTURE SUPPLY PIPING TO A PLUMBING FIXTURE OR PLUMBING APPLIANCE.
   - 6.2. VALVES, PUMPS, STRAINERS, AND THREADED UNIONS IN PIPING THAT IS 1 INCH OR LESS IN NOMINAL DIAMETER.
   - 6.3. PIPING FROM USER-CONTROLLED SHOWER AND BATH MIXING VALVES TO THE WATER OUTLETS.
   - 6.4. COLD WATER PIPING OF A DEMAND RECIRCULATION WATER SYSTEM.
   - 6.5. TUBING FROM A HOT DRINKING-WATER HEATING UNIT TO THE WATER OUTLET.
   - 6.6. PIPING AT LOCATIONS WHERE A VERTICAL SUPPORT OF THE PIPING IS INSTALLED.
   - 6.7. PIPING SURROUNDED BY BUILDING INSULATION WITH A THERMAL RESISTANCE (R-VALUE) OF NOT LESS THAN R-3.
   - 6.8. HOT WATER PIPING THAT IS PART OF THE FINAL PIPE RUN TO THE PLUMBING FIXTURE AND IS NOT PART OF THE HEATED-WATER CIRCULATION SYSTEM CIRCULATION PATH IS NOT REQUIRED TO MEET THE MINIMUM INSULATION REQUIREMENTS OF C404.6.
7. PER 2018 UPC SECTION 312.6 NO WATER, SOIL, OR WASTE PIPE SHALL BE INSTALLED OR PERMITTED OUTSIDE OF A BUILDING, IN ATTICS OR CRAWL SPACES, OR IN AN EXTERIOR WALL UNLESS, WHERE NECESSARY, ADEQUATE PROVISION IS MADE TO PROTECT SUCH PIPE FROM FREEZING. ALL HOT AND COLD WATER PIPES OUTSIDE THE CONDITIONED SPACE SHALL BE PROVIDED WITH INSULATION WITH A MINIMUM R-VALUE OF R-3.
8. HEAT TRACING SHALL BE PROVIDED FOR COLD WATER AND IRRIGATION WATER IN UNCONDITIONED SPACES. CONTACT ENGINEERING IF NECESSARY. PER 2018 WSEC SECTION C403.12.3 FREEZE PROTECTION SYSTEMS, SUCH AS HEAT TRACING OF OUTDOOR PIPING, SHALL INCLUDE AUTOMATIC CONTROLS CONFIGURED TO SHUT OFF THE SYSTEMS WHEN OUTDOOR AIR TEMPERATURES ARE ABOVE 40°F.
9. PER 2018 WSEC TABLE C403.2.9 INSULATION FOR HOT WATER AND HOT WATER RECIRCULATION SHALL HAVE A THERMAL CONDUCTIVITY OF 0.21-0.28 (BTU INCH.FT².°F) AT OPERATING TEMPERATURE.
10. INSULATION R-VALUE SHALL MEET THE MINIMUM REQUIREMENT. THICKNESS IS BASED ON GRAINGER SAMPLE DATA FOR K-FLEX(PVC/NBR) AND OWENS CORNING(FIBER GLASS).
11. ALL ADA P-TRAPS, HOT WATER SUPPLY TUBING, AND SHUT-OFF COCKS SHALL BE PROTECTED WITH APPROVED COVERS TO PREVENT SCALDING.
12. REQUIRED BY ENGINEERING BASED ON BEST PRACTICE.
13. INSULATION IS NOT REQUIRED ON PLASTIC COLD WATER PIPING.

HANGER SPACING FOR WATER PIPING

ALL SUSPENDED WATER SUPPLY PIPE SHALL BE SUPPORTED AS FOLLOWS PER 2018 UPC TABLE 313.3:

	MAX. HORIZONTAL SPACING	MAX. VERTICAL SPACING
CPVC PIPE <1"	3 FT.	10 FT.
CPVC PIPE ≥1¼"	4 FT.	10 FT.
STEEL GAS ½"	6 FT.	6 FT.
STEEL GAS ¾"-1"	8 FT.	8 FT.
STEEL GAS > 1½"	10 FT.	10 FT.
PEX < 1"	32 IN.	10 FT.
PEX ≥ 1½"	4 FT.	10 FT.

HANGER SPACING FOR WASTE AND VENT PIPING

ALL SUSPENDED SANITARY AND VENT PIPE SHALL BE SUPPORTED AS FOLLOWS PER 2018 UPC TABLE 313.3:

	MAX. HORIZ. SPACING	MAX. VERT. SPACING
ABS	4 FT.	10 FT.
PVC (TYPE DWV)	4 FT.	10 FT.
CAST-IRON HUBLESS*	EVERY OTHER JOINT	15 FT.

*CAST-IRON OVER 4' SHALL BE SUPPORTED AT EVERY JOINT

PLUMBING FIXTURE FLOW RATES PER 2018 UPC CH. 4

FIXTURE TYPE	FLOW RATE	MAXIMUM FLOW RATE AT ≥ 20 PERCENT REDUCTION	NOTES
SHOWERHEADS	2.5 GPM @ 80 PSI	1.8 GPM @ 80 PSI	
LAVATORY FAUCETS, RESIDENTIAL	2.2 GPM @ 60 PSI	0.5 GPM @ 60 PSI	1
LAVATORY FAUCETS, NON-RESIDENTIAL	0.5 GPM @ 60 PSI	0.5 GPM @ 60 PSI	2
KITCHEN FAUCETS	2.2 GPM @ 60 PSI	1.8 GPM @ 60 PSI	3
GRAVITY TANK-TYPE WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH	4
FLUSHOMETER TANK WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH	4
FLUSHOMETER VALVE WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH	4
ELECTROMECHANICAL HYDRAULIC WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH	4
URINALS	1.0 GALLONS/FLUSH	0.5 GALLONS/FLUSH	

NOTES:

1. LAVATORY FAUCETS SHALL NOT HAVE A FLOW RATE LESS THAN 0.8 GPM AT 20 PSI.
2. WHERE COMPLYING FAUCETS ARE UNAVAILABLE, AERATORS RATED AT 0.35 GPM OR OTHER MEANS MAY BE USED TO ACHIEVE REDUCTION.
3. KITCHEN FAUCETS MAY TEMPORARILY INCREASE FLOW ABOVE THE MAXIMUM RATE, BUT NOT ABOVE 2.2 GPM @ 60 PSI AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GPM @ 60 PSI.
4. INCLUDES SINGLE AND DUAL FLUSH WATER CLOSETS WITH AN EFFECTIVE FLUSH OF 1.6 GALLONS OR LESS. SINGLE FLUSH TOILETS - THE EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 1.6 GALLONS. THE EFFECTIVE FLUSH VOLUME IS THE AVERAGE FLUSH VOLUME WHEN TESTED IN ACCORDANCE WITH ASME A112.19.2 DUAL FLUSH TOILETS - THE EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 1.6 GALLONS. THE EFFECTIVE FLUSH VOLUME IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH. FLUSH VOLUMES WILL BE TESTED IN ACCORDANCE WITH ASME A112.19.2 AND ASME A112.19.14.

PLUMBING NOTES

PRCNC20231714

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

1. CONNECTIONS: PROVIDE PLUMBING FIXTURE CONNECTIONS TO BUILDING WASTE, VENT, COLD WATER, AND HOT WATER SYSTEM IN ACCORDANCE WITH DRAWINGS, MANUFACTURER'S RECOMMENDATIONS, AND LOCAL CODES. CONNECT TO EACH FIXTURE, EQUIPMENT, ETC. WITH ALL ACCESSORIES, VALVES, VACUUM BREAKERS, REGULATORS, UNIONS, ETC. AS REQUIRED AND AS RECOMMENDED BY THE MANUFACTURERS. REFER TO PLUMBING FIXTURE CONNECTION SCHEDULE ON PLANS.
2. HOT AND COLD: WATER PIPING CONNECTION TO EACH FIXTURE SHALL BE COLD WATER ON THE RIGHT HAND SIDE AND HOT WATER ON THE LEFT HAND SIDE.
3. HOT WATER: NON-CIRCULATING HOT WATER PIPE SHALL NOT EXCEED 10' UNLESS OTHERWISE SHOWN ON DRAWINGS.
4. VENT STACKS: COORDINATE VENT STACK WITH HVAC EQUIPMENT TO MAINTAIN MINIMUM 10' CLEARANCE FROM OUTSIDE AIR INTAKES.
5. CLEANOUTS: PROVIDE CLEANOUTS PER CURRENT UPC AND AS REQUIRED BY LOCAL JURISDICTIONS. CLEANOUTS SHALL BE LOCATED IN WALLS/FLOORS WHERE THEY ARE NOT HIGHLY VISIBLE. FLOOR CLEANOUTS IN CARPETED AREAS TO BE FITTED WITH CARPET INSERTS. LOCATIONS SHALL BE SUBMITTED TO ARCHITECT FOR APPROVAL. NOTE: NOT ALL CLEANOUTS ARE SHOWN ON THE PLUMBING DRAWINGS.
6. SUDS RELIEF: PROVIDE SUDS RELIEF IN ACCORDANCE WITH 2018 UPC SECTION 711.0, STATE AND LOCAL CODES.
7. SHUT-OFFS: PROVIDE 1/4 TURN BALL VALVE ANGLE STOP SHUT-OFF VALVES AND BRAIDED STAINLESS STEEL FLEX CONNECTORS AT HOT AND COLD WATER SUPPLY TO EACH FIXTURE. EXCEPTION: PROVIDE SCREWDRIVER STOPS AT BATH/SHOWERS.
8. TUB SPOUTS SHALL BE THREADED (NO PUSH-ON FITTINGS).
9. TRAP ARMS: PROVIDE TRAP ARMS SUCH THAT THE MAXIMUM LENGTH WILL NOT EXCEED CODE REQUIREMENTS.
10. ADA INSULATION: AT PLUMBING PIPING EXPOSED UNDER LAVATORIES, INSULATE THE EXPOSED PIPING AND TRAPS WITH PRODUCT SPECIFICALLY DESIGNED FOR THIS APPLICATION MEETING ADA REQUIREMENTS. PROVIDE HANDI-LAV GUARD OR EQUIVALENT. OFFSET P-TRAPS TO CLEAR WHEELCHAIR ACCESS.
11. GAS EQUIPMENT: GAS EQUIPMENT SHALL BE INSTALLED PER EQUIPMENT LISTINGS, APPLICABLE SFGC, SPC, LOCAL CODES & NFPA STANDARDS.
12. GAS CONNECTIONS: INSTALL FLEXIBLE QUICK DISCONNECT ASSEMBLIES FOR ALL GAS FIRED KITCHEN EQUIPMENT PER APPLICABLE SFGC, SPC, LOCAL CODES & NFPA STANDARDS. PROVIDE LOCKABLE GAS SHUT-OFF VALVES FOR FIREPLACES & BBQS IN UNATTENDED PUBLIC LOCATIONS IN THE BUILDING.
13. GAS PIPING CONNECTIONS TO WATER HEATERS, BOILERS AND FURNACES SHALL HAVE DIRT LEGS AND UNIONS PROVIDED ON APPLIANCE SIDE OF SHUTOFF VALVE.
14. GAS PIPING INSTALLATION: STEEL OR MALLEABLE IRON FUEL LINES 2" OR SMALLER SHALL BE ASSEMBLED USING THREAD SEALANT SUITABLE FOR NATURAL GAS. GAS PIPING LARGER THAN 2" SHALL HAVE WELDED FITTINGS.
15. GAS PIPING UNDERGROUND: WHERE INSTALLED BELOW GRADE THROUGH THE OUTER FOUNDATION OR BASEMENT WALL OF A BUILDING, SHALL BE ENCASED IN A PROTECTIVE PIPE SLEEVE. THE ANNULAR SPACE BETWEEN THE GAS PIPING AND THE SLEEVE SHALL BE SEALED.
16. GAS PIPING ABOVE GROUND: WHERE PASSING THROUGH AN OUTSIDE WALL, GAS PIPING SHALL BE PROTECTED AGAINST CORROSION BY COATING OR WRAPPING WITH AN INERT MATERIAL. WHERE PIPING IS ENCASED IN A PROTECTIVE PIPE SLEEVE, THE ANNULAR SPACE BETWEEN THE PIPING AND THE SLEEVE SHALL BE SEALED.
17. GAS PIPE SUPPORT: FUEL LINES SHALL BE SUPPORTED OR STRAPPED, AND SHALL BE PLUMB AND SQUARE.
18. GAS PIPING ON ROOFTOPS SHALL BE SUPPORTED AND ANCHORED TO THE ROOF.
19. GAS PIPING SHALL NOT BE BURIED UNDER A BUILDING, SLAB OR OTHER STRUCTURE.
20. GAS PIPING PROTECTIVE COATING: PAINT ALL EXTERIOR EXPOSED GAS PIPING WITH TWO COATS OF RUST INHIBITIVE PAINT. COLOR: GRAY.
21. WATER HAMMER ARRESTORS: PROVIDE AT THE END OF HOT AND COLD WATER LINES SERVING TWO OR MORE FIXTURES; SIZE IN ACCORDANCE WITH PLUMBING AND DRAINAGE INSTITUTE (PDI) REQUIREMENTS. WATER HAMMER ARRESTORS ARE REQUIRED FOR QUICK CLOSING VALVES, SUCH AS LAUNDRY WASHERS, FLUSH VALVES (PUBLIC TOILETS), ETC.
22. TRAP PRIMERS AS SPECIFIED: PROVIDE TRAP PRIMERS AND PIPING FOR FLOOR DRAINS, FLOOR SINKS, AREA DRAINS & HUB DRAINS. ARRANGE PIPING TO ACHIEVE EQUAL FLOW TO EACH DRAIN AND FLOOR SINK FOR TRAP PRIMERS SERVING MULTIPLE DRAINS AND FLOOR SINKS. COORDINATE EXACT LOCATIONS WITH ARCHITECT & ELECTRICAL ENGINEER.
23. P-TRAPS: ALL EXPOSED P-TRAPS SHALL BE CHROME-PLATED BRASS. P-TRAPS SERVING HANDICAPPED COUNTER TOP LAVATORIES SHALL BE INSULATED.
24. THROUGHOUT THE PROJECT PROVIDE BALL VALVES. GATE VALVES SHALL NOT BE USED. NO EXCEPTIONS.
25. HOT WATER RECIRCULATING BALANCING VALVES SHOULD BE BELL & GOSSETT CIRCUIT SETTER (WATTS OR EQUAL) WITH INTEGRAL READOUT PORTS, ADJUSTMENT KNOB, DRAIN CONNECTION, AND POSITIVE SHUTOFF.
26. DISASSEMBLY PROVISIONS: PROVIDE UNIONS OR FLANGES AT PIPING CONNECTIONS TO EQUIPMENT, COILS, TRAPS, CONTROL VALVES, AND OTHER COMPONENTS TO ALLOW DISASSEMBLY FOR MAINTENANCE.
27. REDUCERS: PROVIDE AS REQUIRED FROM LINE PIPE SIZE TO EQUIPMENT, TRAP, COIL, AND CONTROL VALVE CONNECTION SIZES.
28. VALVE TAGS: PROVIDE VALVE TAGS PER SPECIFICATIONS TO IDENTIFY VALVE AND THE AREA IT SERVES.
29. OFFSETS: PROVIDE FOR BRANCH LINES TO EQUIPMENT.
30. ALL TEMPERATURE MIXING VALVES SHALL COMPLY WITH ASSE-1070 SAFETY STANDARDS.
31. PROVIDE PIPE MARKER WITH DIRECTION OF FLOW. LABEL "NON-POTABLE WATER DO NOT DRINK" CLEARLY ON NON-POTABLE WATER PIPING.
32. PROVIDE EXPANSION LOOPS/EXPANSION JOINTS IN PIPING PER 2018 UPC TABLE 313.3 AND MANUFACTURER INSTALLATION INSTRUCTIONS.
33. PROVIDE APPROVED PIPE HANGERS & PIPE SUPPORTS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND 2018 UPC TABLES 313.3 & 313.6. SUBMIT FOR APPROVAL.
34. DIELECTRIC UNIONS: PROVIDE AT CONNECTIONS OF DISSIMILAR PIPE.
35. REFRIGERANT PIPING: PROVIDE SIZING & INSTALLATION IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
36. CONDENSATE DRAIN: PROVIDE A P-TRAP FOR EACH HVAC UNIT CONDENSATE PAN WITH PLUG TEES FOR CLEANING. CONDENSATE DRAINS SHALL BE DISCHARGED TO AN INDIRECT WASTE OR OUTSIDE.
37. PIPING & EQUIPMENT SUPPORTS/HANGERS & SEISMIC RESTRAINTS TO BE DESIGNED BY DESIGN BUILT CONTRACTOR.
38. IF NEEDED, PROVIDE VACUUM BREAKERS AT ALL HOSE BIBBS.
39. FLOOR DRAINS OR SIMILAR TRAPS DIRECTLY CONNECTED TO THE DRAINAGE AND SUBJECT TO INFREQUENT USE SHALL BE PROVIDED WITH AN APPROVED AUTOMATIC MEANS OF MAINTAINING THEIR WATER SEALS IN ACCORDANCE WITH 2018 UPC 1007.0.
40. INSULATION MATERIAL SHALL MEET CITY OF PUYALLUP QUALITY STANDARDS.
41. ALL PIPING AND DUCTWORK SHALL BE INSULATED CONSISTENT WITH THE 2018 WASHINGTON STATE ENERGY CODE.
42. BUILDING DRAIN AND VENT PIPING MATERIALS SHALL COMPLY WITH 2018 UPC 701.0 AND 903.0.
43. ALL SANITARY SYSTEM MATERIAL SHALL BE LISTED BY AN APPROVED LISTING AGENCY.
44. ALL STORAGE WATER HEATING EQUIPMENT SHALL BE PROVIDED WITH AN APPROVED, LISTED EXPANSION TANK OR OTHER DEVICE DESIGNED FOR INTERMITTENT OPERATION FOR THERMAL EXPANSION CONTROL PER 2018 UPC 608.3.
45. WATER HEATERS SHALL BE ANCHORED OR STRAPPED TO RESIST HORIZONTAL DISPLACEMENTS DUE TO SEISMIC MOTION PER 2018 UMC 507.2.
46. MATERIAL EXPOSED WITHIN A DUCT OR PLENUM SHALL COMPLY WITH 2018 IMC 602.2.1.
47. HVAC EQUIPMENT AND WATER HEATERS SHALL COMPLY WITH 2018 IMC CHAPTER 3.
48. BOILERS SHALL COMPLY WITH ALL THE REQUIREMENTS OF 2018 UPC 505.4.
49. PROVIDE EXPANSION TANKS FOR BOILERS PER 2018 UPC SECTION 608.3.
50. SHOWERS AND TUB/SHOWER COMBINATIONS SHALL BE PROVIDED WITH MIXING VALVES PER 2018 UPC 408.0.
51. PLUMBING FIXTURES AND FITTINGS SHALL COMPLY WITH CITY OF PUYALLUPWATER CONSERVATION STANDARDS.
52. CONTRACTOR SHALL PROVIDE FIRESTOPPING AT PENETRATIONS AS NECESSARY TO RETAIN THE FIRE RATING OF ALL ASSEMBLIES. ALL WORK SHALL BE IN COMPLIANCE WITH CODE REQUIREMENTS FOR THE BUILDING CONSTRUCTION TYPE.
53. ALL GARAGE DRAINS, TRASH ROOMS DRAINS & GARAGE TRENCH DRAINS SHALL BE TAKEN TO SAND/OIL INTERCEPTOR(S) BEFORE CONNECTING TO THE SANITARY SEWER SYSTEM.
54. PLUMBING CONTRACTOR SHALL PROVIDE REDUCED PRESSURE BACKFLOW PREVENTERS OR OTHER APPROVED BACKFLOW PREVENTION DEVICE WHERE REQUIRED BY HEALTH AUTHORITIES, FOOD SERVICE DRAWINGS, APPLIANCE MANUFACTURER INSTRUCTIONS AND BY CODE.

PROVIDE REQUIRED & PROPER BACK FLOW PREVENTERS AS SPECIFIED FOR THE APPLIANCES INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:

a. ICE MACHINES AND ICE MAKERS
b. CARBONATED BEVERAGE DISPENSING SYSTEMS
c. COFFEE BREWERS
d. ESPRESSO MACHINES
e. WATER FILTERS
f. STEAM OR HOT WATER BOILERS
g. IRRIGATION SYSTEM
h. FIRE PROTECTION SYSTEM
i. CHEMICAL TREATMENT SYSTEM
j. SOAP/CHEMICAL DISPENSER SYSTEM
k. COMMERCIAL WASHER

NO.	DATE	REVISIONS DESCRIPTION
1	4/9/24	PERMIT RE-SUBMITTAL

ROBISON ENGINEERING, INC
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CONTACT: XXX

REED JACKSON — STATE OF WASHINGTON — 22011 — REGISTERED PROFESSIONAL ENGINEER — 04/09/2024

DRAWN:	DESIGNED:	CHECKED:	APPROVED:
JM	JM	RJ	RJ

PROJECT: EAST TOWN CROSSING
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

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PHONE:(206)364-3343

PERMIT PLANS

04/09/2024

SHEET TITLE:
PLUMBING NOTES AND TABLES

SHEET NO.
P0.01

PLUMBING CALCULATIONS

PRCNC20231714

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

DOMESTIC WATER PRESSURE CALCULATIONS

BASED ON 2018 UPC APPENDIX A

		PRESSURE CHANGE (PSI)	RESIDUAL PRESSURE (PSI)
(PVC) WATER ENTRY TO BOOSTER PUMP			
STREET PRESSURE, PSI,			55
PER CALL WITH PUYALLUP WATER DIVISION, PRESSURE RANGE IS 55-60 PSI.			
HIGH-FLOW PRESSURE LOSS ALLOWANCE		-4	51
EQUIPMENT LOSSES, PSI			
CIVIL WATER METER		-5	46
CIVIL BACKFLOW PREVENTER		-12	34
SITE SERVICE LINE FRICTION LOSSES(ESTIMATE)			
PIPING SYSTEM LENGTH, FEET	60		
FITTING ALLOWANCE, FEET	20		
AVERAGE FRICTION LOSS FACTOR, PSI/100'	7.0		
TOTAL PIPING FRICTION LOSS		-5.6	28.4
STATIC HEAD, PSI			
TOTAL ELEVATION GAIN, FEET	3	-1.299	27.1
FROM UNDERGROUND WATER SERVICE TO BUILDING WATER ENTRY POINT			
MIN. PRESSURE AT BOOSTER PUMP INLET			27.1
(CPVC) BOOSTER PUMP TO FURTHEST TENANT SUB-METER			
BOOSTER PUMP GAIN			
MINIMUM PRESSURE AT BOOSTER PUMP INLET, PSI			27.1
BOOSTER PUMP PRESSURE GAIN, PSI			52.9
BOOSTER PUMP DISCHARGE PRESSURE, PSI			80.0
STATIC HEAD, PSI			
TOTAL ELEVATION GAIN, FEET	8	-3.464	76.5
PIPING FRICTION LOSSES			
PIPING SYSTEM LENGTH, FEET	110		
FITTING ALLOWANCE, FEET	27.5		
AVERAGE FRICTION LOSS FACTOR, PSI/100'	7.0		
PIPING FRICTION LOSS		-9.625	66.9
MIN. PRESSURE AT FURTHERST UNIT SUB-METER			66.9
(CPVC) FURTHEST ANTICIPATED FIXTURE IN TI			
EQUIPMENT LOSSES PSI			
TENANT SUB-METER		-5	61.9
PEX PIPING FRICTION LOSSES			
PIPING SYSTEM LENGTH, FEET	100		
FITTING ALLOWANCE, FEET	25		
ZONE FRICTION LOSS FACTOR, PSI/100'	7.0		
PIPING FRICTION LOSS		-8.75	53.2
MINIMUM PRESSURE AT FURTHEST FIXTURE, PSI			53.2

FIXTURE UNIT CALCULATIONS - LOT 2

CALCULATIONS BASED ON 2018 UPC TABLES A103.1 AND 702.1.

PUBLIC SPACES / MISC.

FIXTURE	FIXTURE UNITS				FLOOR		TOTAL QTY OF FIXTURES	TOTAL FIXTURE UNITS			
	TOTAL	CW	HW	W/V	1	R		SERVICE	CW ONLY	HW ONLY	W/V ONLY
SUITE 1 COMMERCIAL	30	30	0	40	1	0	1	30	30	0	40
SUITE 2 COMMERCIAL	30	30	0	40	1	0	1	30	30	0	40
SUITE 3 COMMERCIAL	30	30	0	40	1	0	1	30	30	0	40
ROLL IN SHOWER	2	1.5	1.5	2	2	0	2	4	3	3	4
LAVATORY	1	0.75	0.75	1	6	0	6	6	4.5	4.5	6
WATER CLOSET (FLUSH VALVE)	5	5	0	4	6	0	6	30	30	0	24
FLOOR DRAIN - 2"	0	0	0	4	6	0	6	0	0	0	24
HOSE BIB	2.5/1	2.5/1	0	0	2	0	2	3.5	3.5	0	0
								133.5	131	7.5	178

	TOTAL	CW	HW	W/V
TOTAL FIXTURE UNITS:	133.5	131	7.5	178
DOEMSTIC WATER PEAK FLOW:	76.8 GPM			

REQUIRED SERVICE SIZES IN BUILDING:

DOMESTIC WATER	SEWER SIZE
SERVICE SIZE: 3"	4"
	1/4" PER FT

REVISIONS

NO.	DATE	DESCRIPTION
1	4/9/24	PERMIT RE-SUBMITTAL

ROBISON ENGINEERING, INC
19401 40TH AVE W, SUITE 302
LYNNWOOD, WA 98036
206-364-3343 TEL
CONTACT: XXX

REED JACKSON
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
04/09/2024

DRAWN: JM | DESIGNED: JM | CHECKED: RJ | APPROVED: RJ

PROJECT:
EAST TOWN CROSSING
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
19401 40TH AVE W. SUITE 302
LYNNWOOD, WA 98036
PHONE:(206)364-3343

PERMIT PLANS

04/09/2024

SHEET TITLE:
PLUMBING CALCULATIONS

SHEET NO.
P0.02

PLUMBING SCHEDULES

PRCNC20231714

City of Puyallup
DEVELOPMENT & PERMITTING SERVICES
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Building | Planning
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SUPPLY PIPE SIZING SCHEDULE - CPVC

PIPE SIZE	COLD WATER, FLUSH TANK			COLD WATER, FLUSH VALVE			HOT WATER			FRICTION LOSS FACTOR: 7.0 PSI/100 FT HOT WATER RECIRCULATION	
	FIXTURE UNITS	FLOW, GPM	VELOCITY, FPS	FIXTURE UNITS	FLOW, GPM	VELOCITY, FPS	FIXTURE UNITS	FLOW, GPM	VELOCITY, FPS	FLOW, GPM	VELOCITY, FPS
1/2"	3.0	2.94	4.30	---	---	---	3.0	2.94	4.30	1.03	1.50
3/4"	8.0	6.73	5.24	---	---	---	7.0	6.43	5.00	2.35	1.83
1"	18.0	13.17	6.15	---	---	---	14.0	10.73	5.00	4.61	2.15
1-1/4"	50.0	28.60	7.41	12	28.60	7.41	29.0	19.36	5.00	10.00	2.59
1-1/2"	98.0	42.78	8.00	33	42.78	8.00	45.0	26.73	5.00	15.28	2.87
2"	235.0	71.86	8.00	115.0	71.86	8.00	107.0	44.91	5.00	26.95	3.00
2-1/2"	395.0	102.89	8.00	259.0	102.89	8.00	197.0	64.31	5.00	38.58	3.00
3"	698.0	161.08	8.00	639.0	161.08	8.00	384.0	100.68	5.00	60.41	3.00
4"	1596.0	281.51	8.00	1596.0	281.51	8.00	784.0	175.94	5.00	--	--
6"	4842.0	640.18	8.00	4842.0	640.18	8.00	2671.0	400.11	5.00	--	--

ELECTRIC WATER HEATER

EQUIP NO.	SERVICE	GPH RECOVERY AT 100°F TR	STORAGE (GAL)	INLET/OUTLET CONNECTION	OPERATING WEIGHT (LBS)	ELECTRICAL		BASIS OF DESIGN	NOTES
						VOLTAGE	HEATER KW		
WH-1,2,3	COMMERCIAL RESTROOMS	21	30	¾"	346	208V/1P	4.5	A.O. SMITH ENS-30	1,2

NOTES:
1. ~~ELECTRICAL REQUIREMENTS ARE BASED ON NON-SIMULTANEOUS OPERATION.~~
2. FOR WATER HEATER PIPING DIAGRAM SEE DETAIL 1/P4.0.

EXPANSION TANK

EQUIP NO.	SERVICE	CAPACITY (GAL)	TANK SIZE		OPERATING WEIGHT (LBS)	BASIS OF DESIGN	NOTES
			DIAMETER (INCHES)	HEIGHT (INCHES)			
ET-1,2,3	HOT WATER SERVICE	4.5	11	15	9	THERM-X-TROL ST-12	1,2
ET-4	BOOSTER PUMP	53	24	45	734	AMTROL WX-447C	1,2

NOTES:
1. INSTALL IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.
2. ALL DOMESTIC WATER EQUIPMENT SHALL BE NSF-61 LISTED.

GREASE INTERCEPTOR

EQUIP NO.	SERVICE	LIQUID CAPACITY (GAL)	BASIS OF DESIGN	NOTES
GI-1	COMMERCIAL SPACES	277	SCHIER GB-250	1,2

NOTES:
1. PROVIDE TRAFFIC RATED COVER AND CLEAN OUT OUTSIDE OF INTERCEPTOR.
2. PROVIDE HEAT TRACE FOR ALL EXPOSED GREASE WASTE PIPING.

PACKAGED BOOSTER PUMP

EQUIP NO.	SERVICE	TYPE	FLOW PER PUMP, GPM	TOTAL FLOW, GPM	SUCTION PRESSURE / DISCHARGE PRESSURE (PSI)	MOTOR HP (PER PUMP)	ELECTRICAL	WEIGHT, LBS	BASIS OF DESIGN	NOTES
BP-1	DOMESTIC WATER	TRIPLEX	25.6	76.8	27 / 80	2	208V/15.3A	860	FLOWTHERM FMV3-1 NW	1,2,3,4,5

NOTES:
1. SINGLE POINT CONNECTION.
2. PROVIDE ALL REQUIRED VALVES, PIPING, CONTROLS, ETC. FOR A COMPLETE SYSTEM.
3. PROVIDE VFD'S FOR EACH PUMP.
4. ALL CLEAR WATER PUMPS OVER 2 HORSEPOWER SHALL COMPLY WITH US DEPARTMENT OF ENERGY (DOE) PUMP EFFICIENCY REQUIREMENTS. APPLICABLE PUMPS SHALL BEAR A PUMP EFFICIENCY INDEX (PEI) LABEL.
5. INSTALL PER MANUFACTURER'S RECOMMENDATION AND STATE AND LOCAL AHJ REQUIREMENTS.

HOT WATER CIRCULATION PUMP

EQUIP NO.	SERVICE	TYPE	FLOW, GPM	HEAD, FT	PUMP RPM	ELECTRICAL		WEIGHT, LBS	BASIS OF DESIGN	NOTES
						VOLTAGE	HP			
HWCP-1,2,3	DOMESTIC HOT WATER	INLINE	0.5	10	VARIABLE	208/1P	2	40	ECOCIRC 20-18	1,2

NOTES:
1. STAINLESS STEEL, SUITABLE FOR POTABLE WATER APPLICATION.
2. ALL DOMESTIC WATER EQUIPMENT SHALL BE NSF-61 LISTED.

NO.	DATE	REVISIONS DESCRIPTION
1	4/9/24	PERMIT RE-SUBMITTAL

ROBISON ENGINEERING, INC
19401 40TH AVE W, SUITE 302
LYNNWOOD, WA 98036
206.364.3343 TEL
CONTACT: XXX

REED JACKSON
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
04/09/2024

DRAWN: JM
DESIGNED: JM
CHECKED: RJ
APPROVED: RJ

PROJECT: EAST TOWN CROSSING
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
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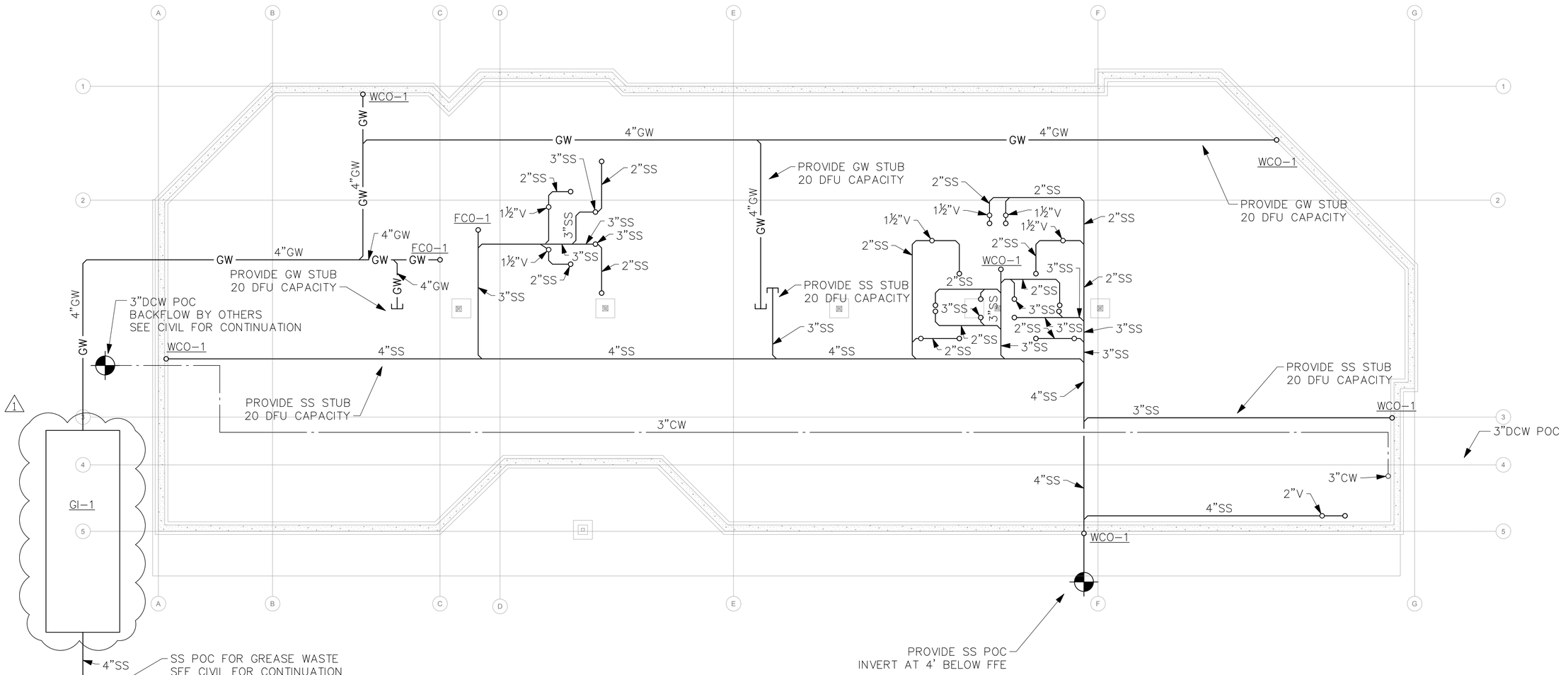
PERMIT PLANS
04/09/2024

SHEET TITLE:
PLUMBING SCHEDULES

SHEET NO.
P0.03

PRCNC20231714

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



GENERAL NOTES

1. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS AND HUB DRAINS PER 2018 UPC 1007.1.
2. WASTE & VENT SIZING: WASTE & VENT PIPING IS SIZED PER 2018 UPC TABLE 703.2. DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2%. WHERE IT IS IMPRACTICAL TO OBTAIN A SLOPE OF 2% DUE TO THE DEPTH OF THE STREET SEWER OR TO STRUCTURAL FEATURES OF THE BUILDING, DRAINAGE PIPING MAY BE SLOPED AT 1/8" PER FOOT OR 1% WITH APPROVAL FROM THE AHJ.

PIPE SIZE	VERTICAL	HORIZONTAL	VENT
1½"	2 DFU	1 DFU	8 DFU
2"	16 DFU	8 DFU	24 DFU
3"	48 DFU	35 DFU	84 DFU
4"	256 DFU	172 DFU	256 DFU
6"	1,380 DFU	576 DFU	1,380 DFU
8"	3,600 DFU	2,112 DFU	3,600 DFU

3. PROVIDE EXPANSION LOOPS FOR ALL WATER PIPING PER THE MANUFACTURER'S INSTRUCTIONS.

1 CLEANOUT LOCATIONS ADDED TO PLANS

UNDERSLAB PLUMBING PLAN

SCALE: 3/16" = 1'–0"

REVISIONS

NO.	DATE	DESCRIPTION
1	4/9/24	PERMIT RE–SUBMITTAL

ROBISON ENGINEERING, INC
19401 40TH AVE W., SUITE 302
LYNNWOOD, WA 98036
206-364-3343 TEL
CONTACT: XXX

REED JACKSON
STATE OF WASHINGTON
21605
REGISTERED
PROFESSIONAL ENGINEER
04/09/2024

DRAWN: JM
DESIGNED: JM
CHECKED: RJ
APPROVED: RJ

PROJECT: **EAST TOWN CROSSING**
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
19401 40TH AVE W. SUITE 302
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PERMIT PLANS

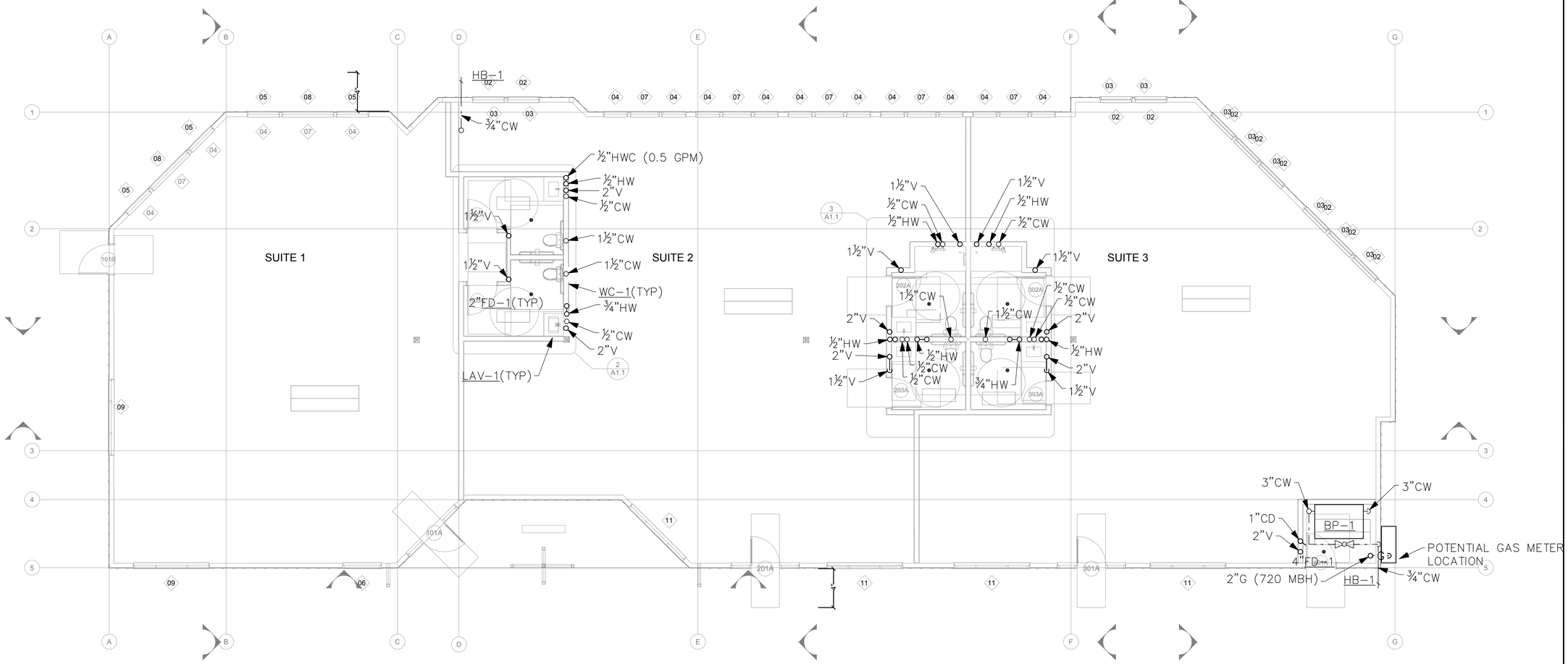
04/09/2024

SHEET TITLE:
LOT 2 – UNDERSLAB PLUMBING PLAN

SHEET NO.
P2.00

PRCNC20231714

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



Water Hammer Arresters shall be installed as close as possible to quick-acting valves or, where listed mechanical devices are used, follow the manufacturer's specifications as to location and method of installation.

Provide cross connection in accordance with the 2018 Uniform Plumbing Code w/ Washington State amendments for all applicable water connections

GENERAL NOTES

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8"	3,600 DFU	2,112 DFU	3,600 DFU

3. PROVIDE EXPANSION LOOPS FOR ALL WATER PIPING PER THE MANUFACTURER'S INSTRUCTIONS.

LEVEL 1 PLUMBING PLAN

SCALE: 3/16" = 1'–0"

NO.	DATE	DESCRIPTION
1	4/9/24	PERMIT RE–SUBMITTAL

ROBISON ENGINEERING, INC
19401 40TH AVE W., SUITE 302
LYNNWOOD, WA 98036
206-364-3343 TEL
CONTACT: XXX

REED JACKSON
STATE OF WASHINGTON
21809
REGISTERED
PROFESSIONAL ENGINEER
04/09/2024

DRAWN: JM
DESIGNED: JM
CHECKED: RJ
APPROVED: RJ

PROJECT: **EAST TOWN CROSSING**
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
19401 40TH AVE W. SUITE 302
LYNNWOOD, WA 98036
PHONE:(206)364-3343

PERMIT PLANS

04/09/2024

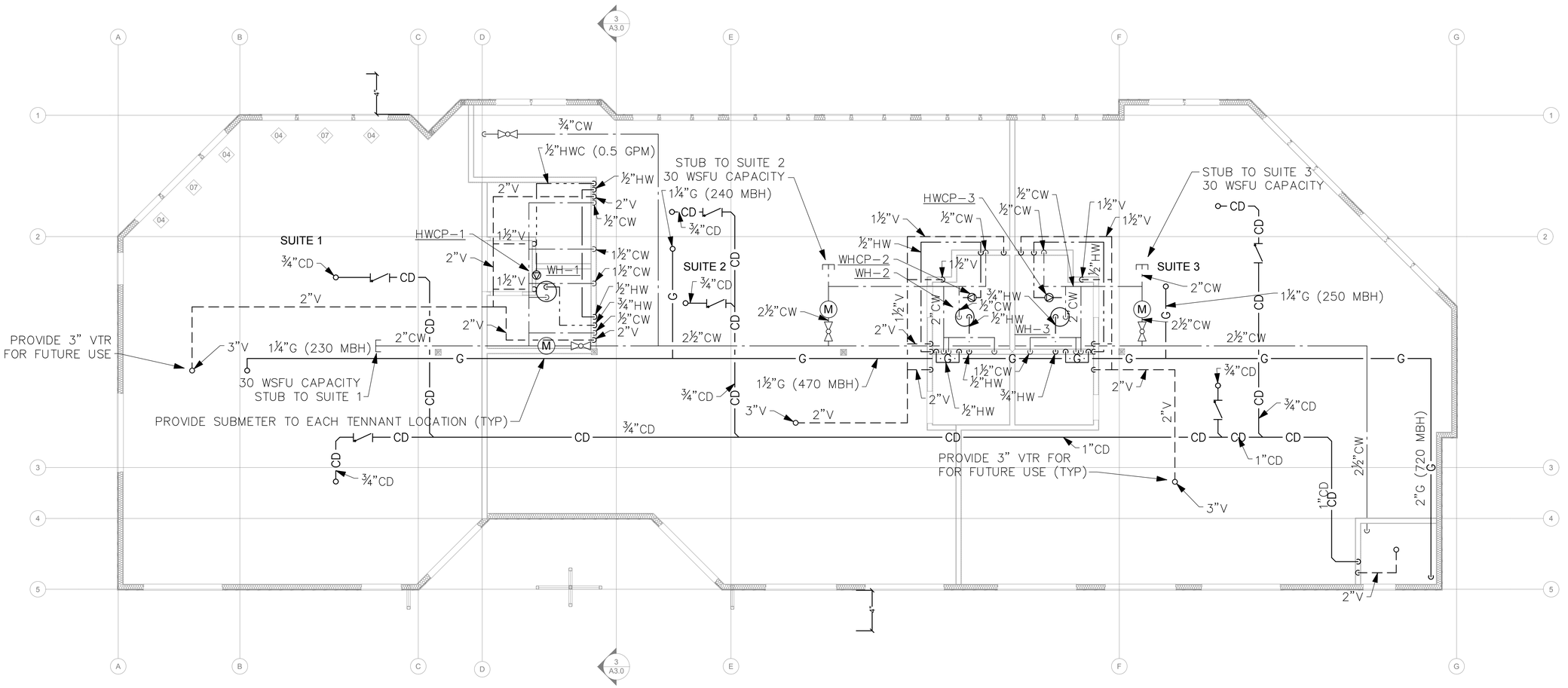
SHEET TITLE:
LOT 2 – LEVEL 1 PLUMBING PLAN

SHEET NO.
P2.01

PRCNC20231714

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

NO.	DATE	REVISIONS DESCRIPTION
1	4/9/24	PERMIT RE-SUBMITTAL



GENERAL NOTES

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3. PROVIDE EXPANSION LOOPS FOR ALL WATER PIPING PER THE MANUFACTURER'S INSTRUCTIONS.

LOFT PLUMBING PLAN

SCALE: 3/16" = 1'-0"

ROBISON ENGINEERING, INC
19401 40TH AVE W., SUITE 302
LYNNWOOD, WA 98036
206.364.3343 TEL
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REED JACKSON
STATE OF WASHINGTON
21809
REGISTERED
PROFESSIONAL ENGINEER
04/09/2024

DRAWN: JM
DESIGNED: JM
CHECKED: RJ
APPROVED: RJ

PROJECT: **EAST TOWN CROSSING**
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

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19401 40TH AVE W. SUITE 302
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PHONE:(206)364-3343

PERMIT PLANS

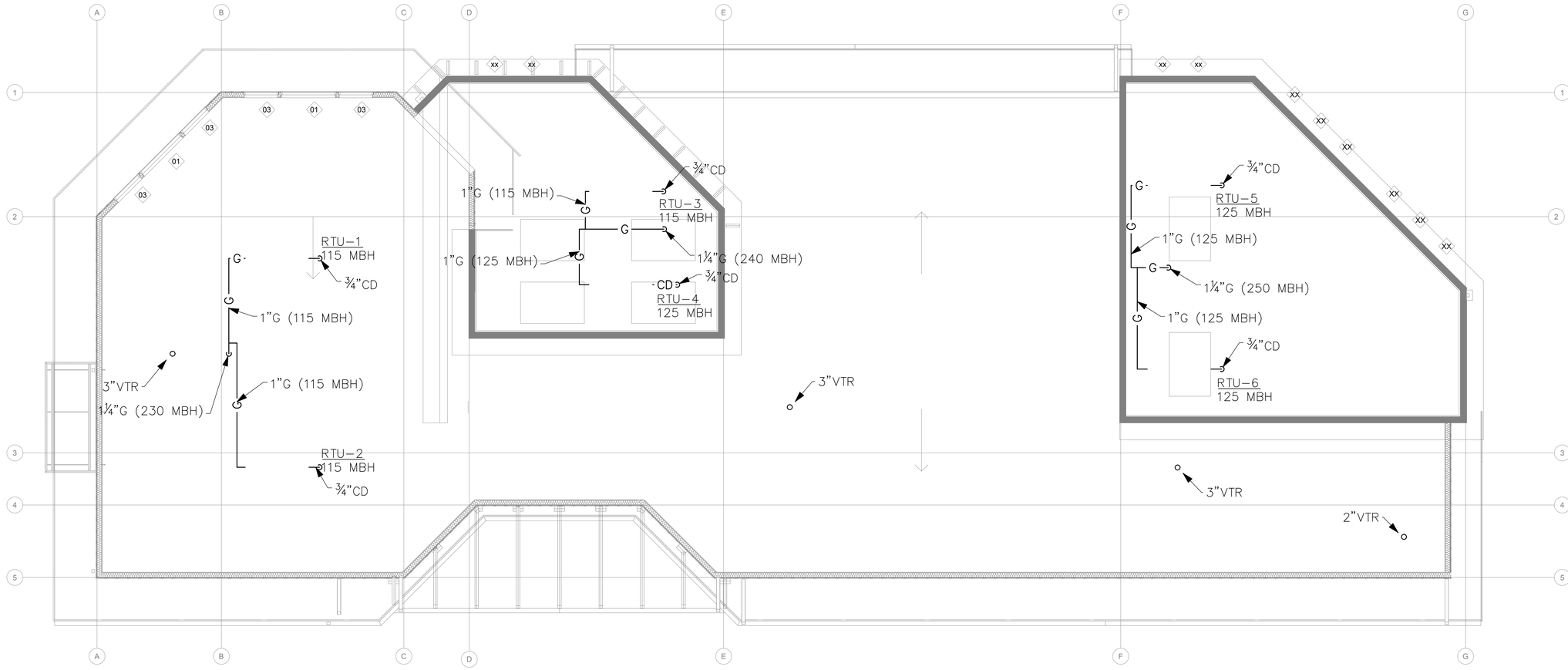
04/09/2024

SHEET TITLE:
LOT 2 – LOFT PLUMBING PLAN

SHEET NO.
P2.02

PRCNC20231714

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



GENERAL NOTES

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3. PROVIDE EXPANSION LOOPS FOR ALL WATER PIPING PER THE MANUFACTURER'S INSTRUCTIONS.

ROOF PLUMBING PLAN

SCALE: 3/16" = 1'-0"

3
A3.0

NO.	DATE	DESCRIPTION
1	4/9/24	PERMIT RE-SUBMITTAL

ROBISON ENGINEERING, INC
19401 40TH AVE W., SUITE 302
LYNNWOOD, WA 98036
206.364.3343 TEL
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REED JACKSON
STATE OF WASHINGTON
22005
REGISTERED
PROFESSIONAL ENGINEER
04/09/2024

DRAWN: JM
DESIGNED: JM
CHECKED: RJ
APPROVED: RJ

PROJECT: **EAST TOWN CROSSING**
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
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PERMIT PLANS

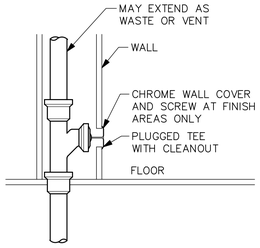
04/09/2024

SHEET TITLE:
LOT 2 – ROOF PLUMBING PLAN

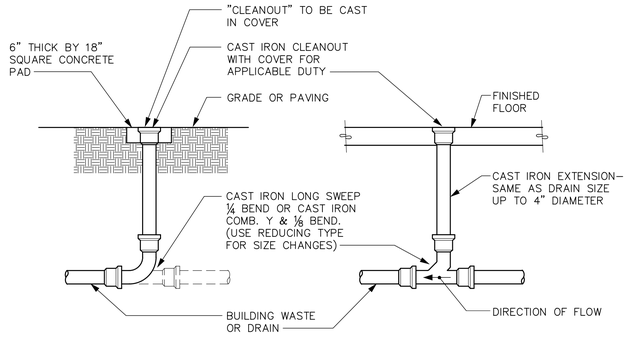
SHEET NO.
P2.03

PRCNC20231714

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



INTERIOR WALL CLEANOUT (WCO)



EXTERIOR CLEANOUT TO GRADE (COTG)
(LIGHT TRAFFIC AREA)

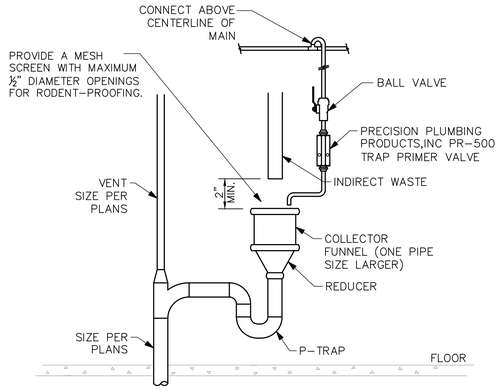
INTERIOR FLOOR CLEANOUT (FCO)

CLEANOUTS

DETAIL

SCALE: NONE

6
P4.00

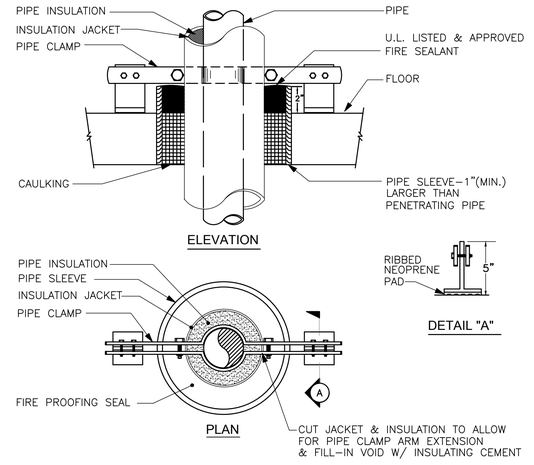


HUB DRAIN

DETAIL

SCALE: NONE

5
P4.00

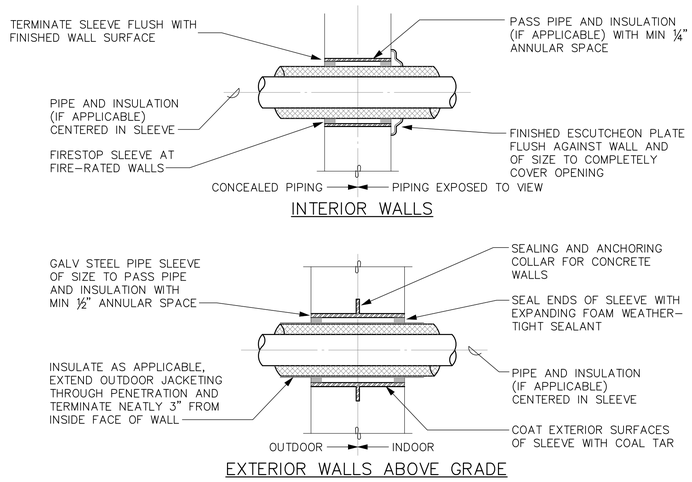


RISER PIPE SUPPORT

DETAIL

SCALE: NONE

4
P4.00

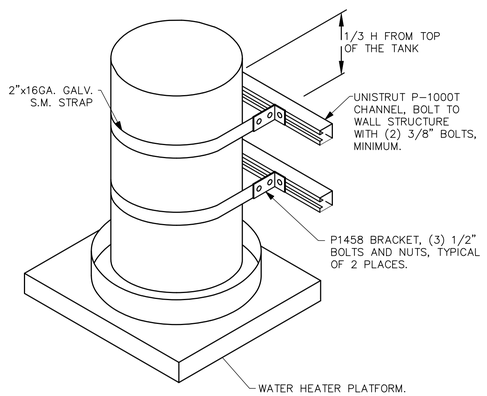


PIPE SLEEVES THROUGH WALLS

DETAIL

SCALE: NONE

3
P4.00

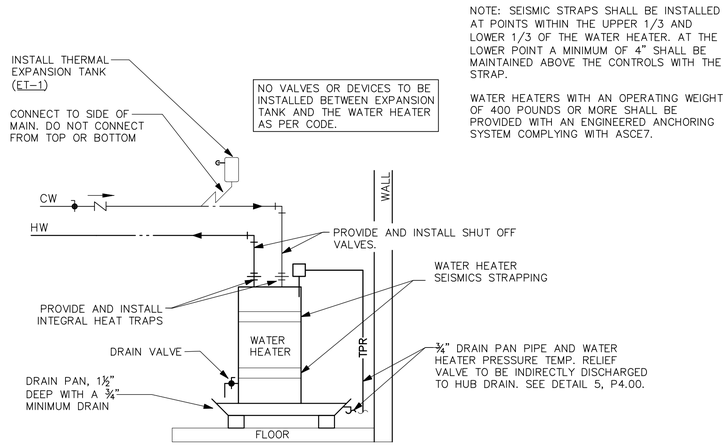


WATER HEATER SEISMIC STRAPPING

DETAIL

SCALE: NONE

2
P4.00



TYPICAL UNIT WATER HEATER

DETAIL

SCALE: NONE

1
P4.00

NO.	DATE	REVISIONS DESCRIPTION
1	4/9/24	PERMIT RE–SUBMITTAL

ROBISON ENGINEERING, INC
19401 40TH AVE W, SUITE 302
LYNNWOOD, WA 98036
206.364.3343 TEL
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REED JACKSON
STATE OF WASHINGTON
21605
REGISTERED
PROFESSIONAL ENGINEER
04/09/2024

DRAWN:	DESIGNED:	CHECKED:	APPROVED:
JM	JM	RJ	RJ

PROJECT: **EAST TOWN CROSSING**
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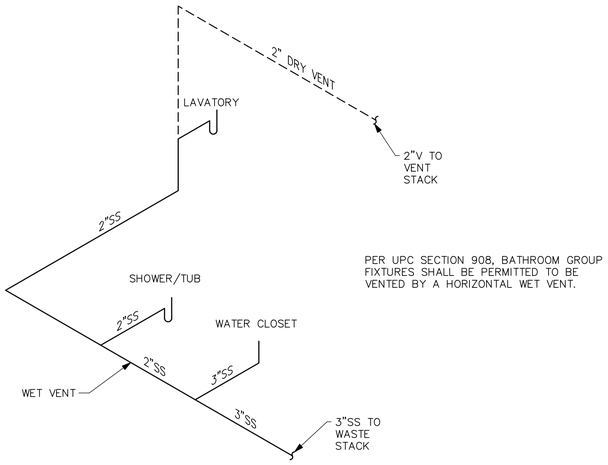
PERMIT PLANS
04/09/2024

SHEET TITLE:
DETAILS

SHEET NO.
P4.00

PRCNC20231714

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
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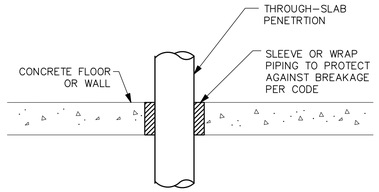
PER UPC SECTION 908, BATHROOM GROUP FIXTURES SHALL BE PERMITTED TO BE VENTED BY A HORIZONTAL WET VENT.

PRIVATE BATHROOM WET VENTING

DETAIL

SCALE: NONE

6 P4.01

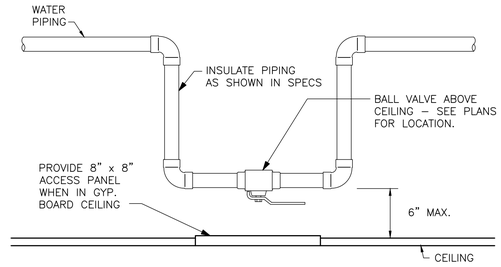


PIPE SLAB PENETRATION

DETAIL

SCALE: NONE

5 P4.01

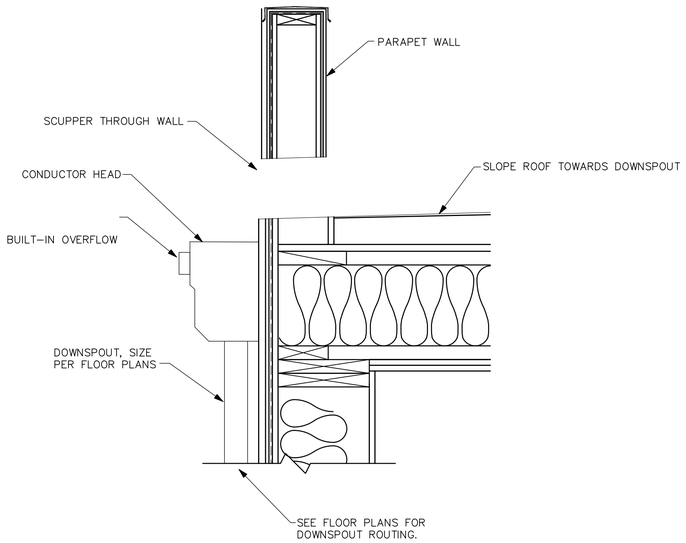


TYPICAL VALVE PLACEMENT

DETAIL

SCALE: NONE

4 P4.01

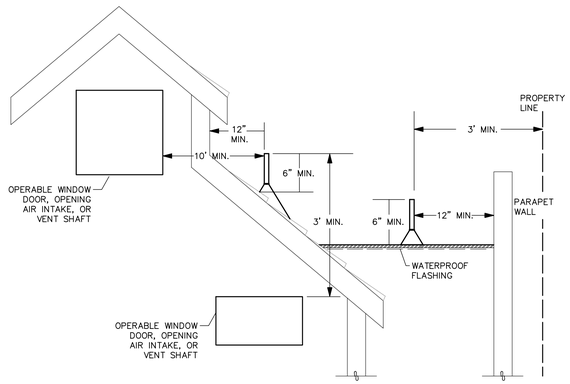


VENT TERMINATION

DETAIL

SCALE: NONE

3 P4.01

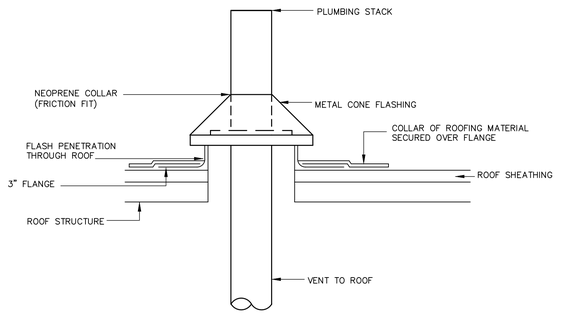


VENT TERMINATION

DETAIL

SCALE: NONE

2 P4.01



VENT THROUGH ROOF

DETAIL

SCALE: NONE

1 P4.01

REVISIONS			
NO.	DATE	DESCRIPTION	
1	4/9/24	PERMIT RE-SUBMITTAL	

ROBISON ENGINEERING, INC
19401 40TH AVE W, SUITE 302
LYNNWOOD, WA 98036
206-364-3343 TEL
CONTACT: XXX

REED JACKSON
STATE OF WASHINGTON
21605
REGISTERED
PROFESSIONAL ENGINEER
04/09/2024

DRAWN: JM
DESIGNED: JM
CHECKED: RJ
APPROVED: RJ

PROJECT:
EAST TOWN CROSSING
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
19401 40TH AVE W, SUITE 302
LYNNWOOD, WA 98036
PHONE:(206)364-3343

PERMIT PLANS

04/09/2024

SHEET TITLE:
DETAILS

SHEET NO.
P4.01

SYMBOLS

GENERAL

LIGHT LINE INDICATES NON–ELECTRICAL OR BACKGROUND (THIS IS NOT CONTRACTUAL DEFINITION OF WORK)

HEAVY LINE INDICATES NEW WORK (THIS IS NOT CONTRACTUAL DEFINITION OF WORK)

DETAIL IDENTIFICATION

SYMBOL	NAME
1	FLAG NOTE
	REVISION NOTE
	REVISION DEFINITION, AREA ENCIRCLED CONTAINS DRAWING CHANGES MADE SUBSEQUENT TO PREVIOUS ISSUE

SWITCHES

S_S	SWITCH, SINGLE POLE; WITH SWITCHING SUBSCRIPT
S_{OS}	OCCUPANCY SENSOR SWITCH
	SWITCH, SINGLE POLE; WITH SWITCHING SUBSCRIPT "D" INDICATES WALLBOX DIMMER
OS	CEILING MOUNTED OCCUPANCY SENSOR
S_T	SWITCH, TIMER.
S_3	SWITCH, THREE WAY.

RECEPTACLES

	SINGLE RECEPTACLE
	DUPLEX RECEPTACLE: WALL MOUNTED, +18" AFF
G	CONTROLLED AND NON CONTROLLED DUPLEX RECEPTACLE (SPLIT WIRED RECEPTACLE)
	DUPLEX RECEPTACLE – ABOVE COUNTER
GFCI	DUPLEX GFCI ABOVE COUNTER
GFCI	DUPLEX GFCI
+42"	DUPLEX RECEPTACLE, WITH HEIGHT ABOVE FINISHED FLOOR INDICATED
	CEILING MOUNTED DUPLEX RECEPTACLE
	DOUBLE DUPLEX RECEPTACLE: WALL MOUNTED, +18" AFF
	FLOOR BOX ONE DUPLEX RECEPTACLE
	FLOOR BOX ONE DUPLEX RECEPTACLE + ONE DATA
	FLOOR BOX ONE DUPLEX RECEPTACLE + ONE DATA + ONE VOICE
	SPECIAL PURPOSE RECEPTACLE, AS NOTED

MISCELLANEOUS

	JUNCTION BOX: 4SQ MOUNTED
	JUNCTION BOX: 4SQ WALL MOUNTED
J	JUNCTION BOX: 4SQ TRACK
	CONNECTION FOR LIGHTED MIRROR COORDINATE LOCATION AND ELEVATION WITH ARCHITECT PRIOR TO ROUGH–IN
T	THERMOSTAT

SIGNAL/COMMUNICATION

	DATA OUTLET: WALL MOUNTED @ +18" AFF U.O.N.
	TELEPHONE/DATA OUTLET: WALL MOUNTED @ +18" AFF U.O.N.
TV	TELEVISION OUTLET: WALL MOUNTED @ +18" AFF U.O.N.

POWER

	PANELBOARD
WP	NON–FUSED DISCONNECT SWITCH (WP = NEMA 3R WHERE APPROPRIATE)
	FUSED DISCONNECT SWITCH
MAU–1,5HP,480,3	MOTOR CONNECTION (EQUIPMENT NAME, HORSEPOWER, VOLTAGE, AND PHASE INDICATED)
EF–1,12KVA,208,1	EQUIPMENT CONNECTION (EQUIPMENT NAME, LOAD, VOLTAGE, AND PHASE INDICATED)
T	TRANSFORMER, DRY TYPE, SHOWN TO SCALE
M	KW METER AND BASE

PART OF THE DESIGN/BUILD FIRE ALARM SYSTEM

FACP	FIRE ALARM SYSTEM CONTROL PANEL
P	FIRE ALARM SYSTEM PULL STATION
FA	FIRE ALARM SYSTEM STROBE/SPEAKER
SD	FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR AND SPEAKER.
	FIRE ALARM COMBINATION PHOTOELECTRIC SMOKE DETECTOR, CARBON MONOXIDE DETECTOR, AND SPEAKER, GUESTROOM.
CO	CARBON MONOXIDE DETECTOR.
	ELECTRO–MAGNETIC DOOR HOLDER
DSD	DUCT SMOKE DETECTOR

ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT, ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AIC	AMPS INTERRUPTING CAPACITY
AL	ALUMINUM
AMP	AMPERE
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
BLDG	BUILDING
C	COIL or CONDUIT
CKT	CIRCUIT
CO	CONDUIT/RACEWAY ONLY
CT	CURRENT TRANSFORMER
Cu	COPPER
CW	COOL WHITE
D	DIMMER
DED	DEDICATED
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
EXIST	EXISTING
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FLUOR	FLUORESCENT
GC	GENERAL CONRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRS	GALVANIZED RIGID STEEL
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
IG	ISOLATED GROUND
KCMIL	THOUSAND CIRCULAR MILLS
KVA	KILOVOLT AMPERES
KW	KILOWATT
LTG	LIGHTING
LV	LOW VOLTAGE
MFR	MANUFACTURER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
N	NEUTRAL
NEC	NATIONAL ELECTRICAL CODE (NFPA–70)
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NTS	NOT TO SCALE
PNL	PANEL
POC	POINT OF CONNECTION
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CLORIDE
PWR	POWER
QTY	QUANTITY
RECEPT	RECEPTACLE
REF	REFERENCE
RI	ROUGH–IN
RM	ROOM
RO	RACEWAY ONLY
SHT	SHEET
SPEC	SPECIFICATIONS
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
V	VOLTS
W	WATTS
WW	WARM WHITE
WP	WEATHERPROOF
W/	WITH
W/O	WITHOUT
XFMR	TRANSFORMER
XFR	TRANSFER
Z	IMPEDANCE OR ZONE

GENERAL NOTES

PRCNC20231714
City of Puyallup Development & Permitting Services
ISSUED PERMIT
Building | Plumbing
Engineering | Public Works
Fire | Traffic

GENERAL

1. PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH THE GOVERNING ELECTRICAL CODE, LOCAL CODES, ORDINANCES AND REQUIREMENTS OF UTILITY COMPANIES FURNISHING SERVICES TO INSTALLATION.
2. PROVIDE ALL WORK AND ITEMS NECESSARY FOR COMPLETE AND FUNCTIONAL ELECTRICAL SYSTEMS. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY SHOW EVERY CONDUIT, BOX, CONDUCTOR OR SIMILAR ITEMS FOR A COMPLETE INSTALLATION.
3. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID AND DETERMINE CONDITIONS WHICH MAY AFFECT BID. ANY ITEMS NOT FULLY UNDERSTOOD SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING.
4. "REF" INDICATIONS DENOTE WORK COVERED ELSEWHERE (ARCHITECTURAL, STRUCTURAL, OR MECHANICAL).
5. REFERENCE ARCHITECTURAL DRAWING FOR EXACT LOCATION OF DEVICES. QUESTIONS CONCERNING THE LOCATION OF DEVICES AND EQUIPMENT SHALL BE DIRECTED TO THE ARCHITECT. FAILURE TO COORDINATE REQUIREMENTS SHALL IN NO WAY RESULT IN ADDITIONAL COMPENSATION BEING PROVIDED TO THE CONTRACTOR.
6. WHEREVER THE WORD "PROVIDE" IS USED, IT MEANS, "FURNISH AND INSTALL COMPLETE AND READY FOR USE."
7. COORDINATE LOCATION OF ELECTRICAL WITH OTHER TRADES.
8. REFER TO EQUIPMENT DRAWINGS FOR MECHANICAL CHARACTERISTICS (SIZE, LOCATION, ETC.) OF MECHANICAL EQUIPMENT, UNLESS OTHERWISE INDICATED. COORDINATE INSTALLATION AND LOCATION OF ALL EQUIPMENT WITH MECHANICAL CONTRACTOR. VERIFY ALL FUSE RATINGS, WIRE SIZES AND DISCONNECT SIZES PRIOR TO INSTALLATION.

MATERIALS AND METHODS

1. PROVIDE RACEWAY AND WIRING ROUTED CONCEALED WITHIN BUILDING STRUCTURE WHERE POSSIBLE. WHERE RACEWAY CANNOT BE CONCEALED, IT SHALL BE INSTALLED PER PROJECT MANAGER'S DIRECTION. ALL CONDUIT SHALL BE INSTALLED IN NEAT SYMMETRICAL LINES HORIZONTAL OR PERPENDICULAR TO BUILDING COLUMNS AND ROOF LINES. CONDUITS SHALL BE GROUPED ON COMMON SUPPORTS WHEREVER POSSIBLE.
2. EXPOSED CONDUIT ROUTING: CONDUITS MAY BE ROUTED EXPOSED IN MECHANICAL AND ELECTRICAL ROOMS ONLY. EXPOSED CONDUITS SHALL BE SECURED A MINIMUM OF 6" ABOVE FLOOR.
3. OUTDOOR EXPOSED CONDUIT ROUTING: CONDUITS ROUTED ON ROOF OR EXPOSED TO WEATHER SHALL BE GRC, PVC OR LIQUID–TIGHT FLEX. PROVIDE WATER–TIGHT CONNECTIONS AND FITTINGS.
4. CLEARANCES: VERIFY PHYSICAL DIMENSIONS OF EQUIPMENT TO ENSURE THAT ACCESS CLEARANCES CAN BE MET.
5. CONNECTIONS: PROVIDE GRS, METALLIC FLEX, OR LIQUIDTITE FLEX CONDUITS FOR CONNECTIONS TO MOTORS OR MOTORIZED EQUIPMENT.
6. WIRING: PROVIDE MINIMUM #12 AWG WIRE SIZE. IF CONDUIT IS TO BE USED MINIMUM IS TO BE 1/2". FLEXIBLE CONDUIT AND FLEXIBLE CABLE IS PERMISSIBLE THROUGHOUT THE BUILDING.
7. WIRING: PROVIDE MINIMUM #10 AWG COPPER CONDUCTOR SIZE IN 120V BRANCH CIRCUIT RUNS OVER 75' IN LENGTH.

SITE ELECTRICAL

1. TRENCHING: COORDINATE ALL TRENCHING WORK WITH OTHER UTILITY LOCATIONS AND DRAINAGE TRENCHES.
2. UNDERGROUND CONDUITS: PROVIDE PVC, SCHEDULE 40, 3/4" MINIMUM. PROVIDE GRC CONDUIT TRANSITION ELBOW WHEN TURNING UP TO ABOVE GRADE.
3. DIRECT–BURIED CONDUITS: CONDUIT FOR BRANCH CIRCUITS OUTSIDE BUILDINGS NOT BENEATH DRIVEWAYS OR PARKING AREAS SHALL BE DIRECTLY BURIED WITHOUT CONCRETE ENCASEMENT. THE DEPTH TO THE TOP OF BURIED CONDUITS SHALL BE 36". PROVIDE MARKER TAPE 12" BELOW GRADE.
4. BELOW SLAB: CONDUIT ROUTED BELOW ON–GRADE FLOOR SLABS SHALL BE INSTALLED PRIOR TO FLOOR SLAB POUR. ROUTE CONDUITS BELOW SLAB AS STRAIGHT AS POSSIBLE TO MINIMIZE BENDS.
5. ALL CONDUITS PENETRATING THE BUILDING ENVELOPE BELOW GRADE SHALL FOLLOW WATERPROOFING REQUIREMENTS IN THE ARCHITECTURAL DRAWINGS.

NEUTRALS

1. AT CONTRACTORS OPTION, NEUTRALS MAY BE SHARED ON COMBINED HOMERUNS UNLESS THE CIRCUIT HAS A GFCI BREAKER, AN ISOLATED GROUND, OR IS FROM A PANEL WITH TVSS PROTECTION. ANY NEUTRAL DOWNSTREAM FROM A DIMMER SHALL BE DEDICATED TO THE DIMMED LOAD.
2. NEUTRAL WIRES SHOWN FOR TWO AND THREE POLE MECHANICAL AND KITCHEN EQUIPMENT MAY BE OMITTED UPON VERIFICATION THAT THEY ARE NOT REQUIRED EITHER FOR OPERATION OR CONTROL CIRCUITS PER MANUFACTURER'S SPECIFICATIONS.

LIGHTING

1. PROVIDE LIGHT FIXTURES WITH PROPER FITTING FLANGES, MOUNTING SUPPORTS, AND ACCESSORY ITEMS, UL LISTED FOR CONDITIONS OF USE.

LOW VOLTAGE LIGHTING

1. PROVIDE LOW VOLTAGE TRANSFORMERS IN NEARBY ACCESSIBLE CEILING SPACE.
2. PROVIDE LOW VOLTAGE CONDUCTORS SIZED PER MANUFACTURER'S GUIDELINES TO MINIMIZE VOLTAGE DROP.

LIGHTING CONTROL

1. THE MAXIMUM LIGHTING POWER THAT MAY BE CONTROLLED FROM A SINGLE SWITCH OR AUTOMATIC CONTROL SHALL NOT EXCEED THAT WHICH IS PROVIDED BY A TWENTY AMPERE CIRCUIT LOADED TO NOT MORE THAN EIGHTY PERCENT. A MASTER CONTROL MAY BE INSTALLED PROVIDED THE INDIVIDUAL SWITCHES RETAIN THEIR CAPABILITY TO FUNCTION INDEPENDENTLY.
2. EMERGENCY FIXTURES: EMERGENCY BATTERY/CHARGER SHALL BE CONNECTED TO AN UNSWITCHED LEG OF THE DESIGNATED CIRCUIT.

GENERAL REQUIREMENTS

1. DRAWINGS ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED.
2. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT.
3. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
4. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS.
5. PROVIDE CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.

CONTRACTOR SUBSTITUTIONS & REVISIONS

1. PLEASE SUBMIT PROPOSALS FOR SUBSTITUTIONS OR REVISIONS FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIAL OR DOING WORK.
2. FOR EQUIPMENT THAT IS SCHEDULED BY MANUFACTURER'S NAME AND CATALOG DESIGNATIONS, THE MANUFACTURER'S PUBLISHED DATA AND/OR SPECIFICATION FOR THAT ITEM ARE CONSIDERED PART OF SPECIFICATION.
3. ENGINEERING COSTS FOR REVISING MEP PLANS SHALL BE ADDRESSED IN THE COST ANALYSIS OF THE SUBSTITUTION PROPOSAL.
4. CONTRACTOR TO COORDINATE WITH ENGINEER AND DETERMINE ASSOCIATED DESIGN AND PERMITTING COSTS. CONTRACTOR SHALL BE RESPONSIBLE FOR OTHER COSTS ASSOCIATED WITH UNFORESEEN ISSUES RESULTING FROM SUBSTITUTIONS OR REVISIONS.

PRE-CON MEETING NOTES

CONTRACTORS SHALL ATTEND A PRE–CONSTRUCTION MEETING WITH THE ENGINEER FOR THE PURPOSE OF REVIEWING THE WORK PRIOR TO ORDERING ANY EQUIPMENT OR PERFORMING ANY WORK. THE MEETING SHALL BE LOCATED AT THE PROJECT SITE ON A DATE AND TIME TO BE MUTUALLY AGREED. THE MEETING WILL BE A WORKING SESSION. THE MEETING WILL BE FACILITATED BY THE ENGINEER AND THE AGENDA WILL INCLUDE A DETAILED REVIEW OF THE PLANS AND SPECIFICATIONS, CROSS CHECK WITH OTHER TRADES FOR COORDINATION ISSUES, REVIEW OF PROPOSED PRODUCTS, REVIEW OF PLANNED MEANS AND METHODS,AND ON–SITE INVESTIGATION OF FIELD CONDITIONS RELATIVE TO EXISTING CONDITIONS THAT COULD AFFECT THE WORK. PERSONS ATTENDING THE MEETING SHALL BE KNOWLEDGEABLE OF THE PROJECT AND SHALL BE THE SPECIFIC PERSONS INTENDED TO CONTINUE WITH THE PROJECT THROUGH TO COMPLETION. IF REQUIRED, REVISED PLANS WILL BE ISSUED THROUGH OFFICIAL CHANNELS. CHANGES IN THE BID PRICE WILL BE DISCUSSED, BUT NO CHANGE ORDERS WILL BE ISSUED UNLESS PROCESSED THOUGH OFFICIAL CHANNELS. IT SHALL BE UNDERSTOOD THAT THE ENGINEER HAS NO AUTHORITY TO ISSUE CHANGE ORDERS.

THE FOLLOWING TRADES SHALL BE REPRESENTED FOR THE MINIMUM TIME INDICATED:

MECHANICAL SHEET METAL	4 HOURS
PLUMBING/PIPING	4 HOURS
ELECTRICAL	4 HOURS
SPRINKLER	2 HOURS
GENERAL CONTRACTOR	ALL SESSIONS

DRAWING INDEX

		INCLUDED IN SET								
		PERMIT SET 12/06/23	PERMIT RESUBMITTAL SET 04/09/24							
DWG	DESCRIPTION									
E0.0	LEGEND, GENERAL NOTES, DRAWING INDEX	X	X							
E0.1	ONE–LINE DIAGRAM, FEEDER & FAULT SCHEDULES	X	X							
E0.2	PANEL SCHEDULES	X	X							
E0.3	PANEL SCHEDULES	X	X							
E0.4	LIGHTING NOTES & SCHEDULE	X	X							
E1.0	SITE PLAN – ELECTRICAL	X	X							
E3.0	LEVEL 1 POWER & LIGHTING	X	X							
E3.1	LEVEL 2/ROOF POWER & LIGHTING	X	X							

REVISIONS

NO.	DATE	DESCRIPTION

ROBISON ENGINEERING, INC
19401 40TH AVE W., SUITE 302
LYNNWOOD, WA 98036
206-364-3343 TEL

MARK STEINKE STATE OF WASHINGTON 20183 REGISTERED PROFESSIONAL ENGINEER
04/11/2024

DRAWN: | DESIGNED: | CHECKED: STEINKE M. | APPROVED: STEINKE M.

PROJECT: EAST TOWN CROSSING
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
19401 40TH AVE W. SUITE 302
LYNNWOOD, WA 98036
PHONE:(206)364-3343

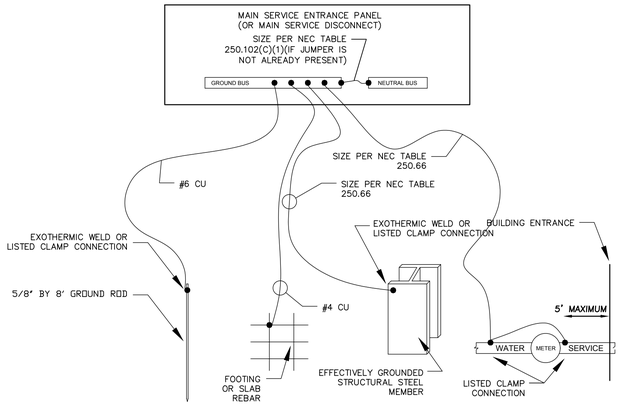
DATE: 04-11-2024

SHEET TITLE: LEGEND,GENERAL NOTES & DRAWING INDEX

SHEET NO. E0.0

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PRCNC20231714



GEC DIAGRAM

Xref F:\810 SYNTHESIS 9\810-010 East Town Crossing\Dwg\Electrical\TI Spaces\xr_schedules.dwg

FEEDER SCHEDULE

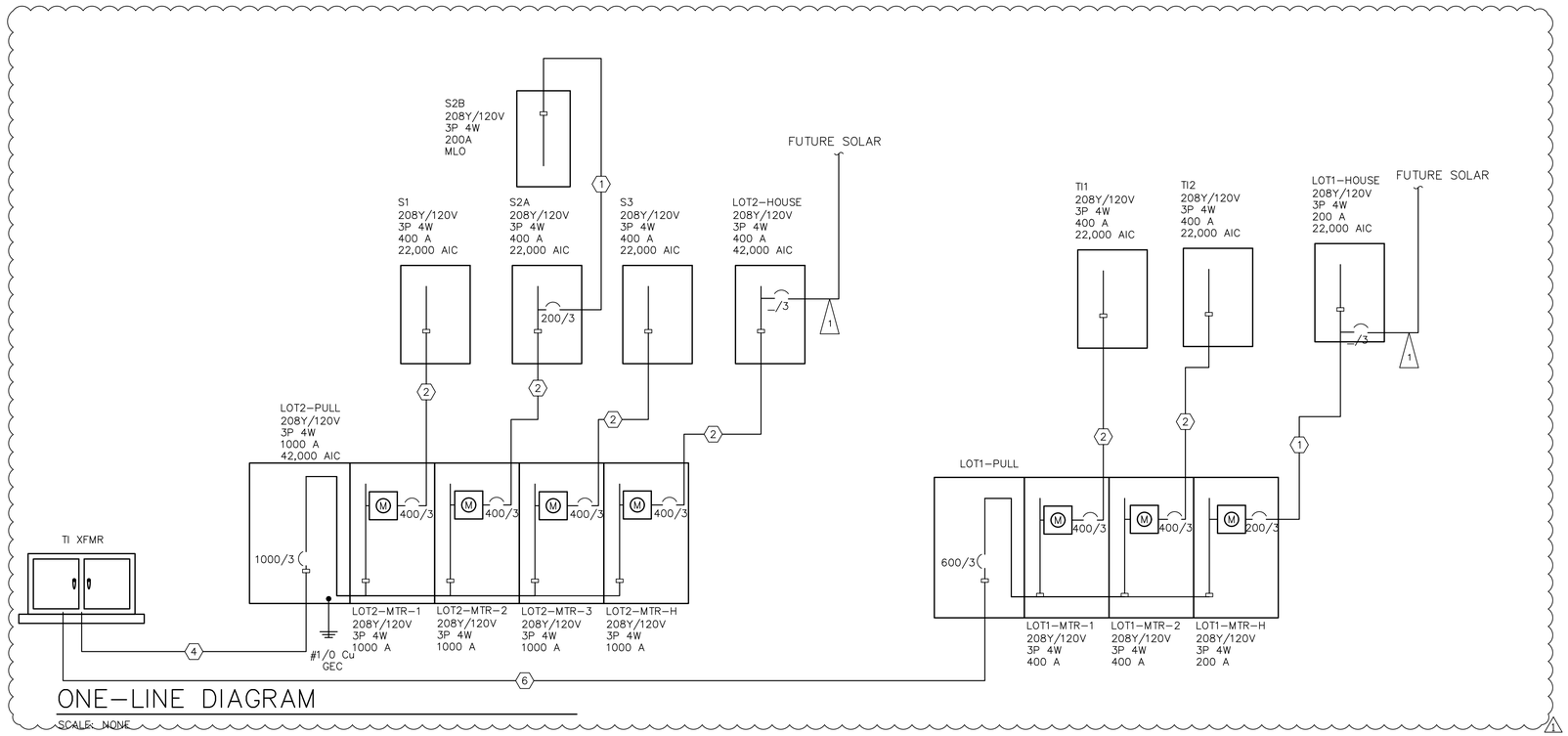
ID	FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
1	200	2-1/2"C,3#250kcmil AL,#250kcmil AL N,#4 AL G	LOT1-HOUSE, S2B
2	400	(2)2-1/2"C,3#250kcmil AL,#250kcmil AL N,#1 AL G	LOT1-TI1, LOT1-TI2, LOT2-HOUSE, S1, S2A, S3
4	1000	(4)3"C,3#350kcmil AL,#350kcmil AL N	LOT2-PULL
6	600	(3)2-1/2"C,3#250kcmil AL,#250kcmil AL N	LOT1-PULL

SIZING METHOD: COPPER, 60°C #12 THROUGH #1, 75°C 1/0 AND ABOVE

FAULT CURRENT SCHEDULE

DEVICE	FAULT	AIC RATING	L-N VOLTS	UTILITY FAULT	FED FROM DEVICE	FED FROM FAULT	FEEDER SIZE	FEEDER LENGTH	TOTAL MOTOR FAULT
TI XFMR	35,672	42,000	120V	34,717					955
LOT2-PULL	25,055	42,000	120V	24,089	TI XFMR	34,717	(4)#350kcmil AL	104'	966
LOT2-MTR-1	25,038	42,000	120V	24,089	LOT2-PULL	24,089		13'	949
S1	10,422	22,000	120V	10,050	LOT2-MTR-1	24,089	(2)#250kcmil AL	143'	372
LOT2-MTR-2	25,039	42,000	120V	24,089	LOT2-PULL	24,089		16'	950
S2A	10,875	22,000	120V	10,492	LOT2-MTR-2	24,089	(2)#250kcmil AL	133'	383
S2B	9,161	22,000	120V	8,919	S2A	10,492	#250kcmil AL	22'	242
LOT2-MTR-3	25,039	42,000	120V	24,089	LOT2-PULL	24,089		19'	950
S3	13,932	22,000	120V	13,455	LOT2-MTR-3	24,089	(2)#250kcmil AL	84'	477
LOT2-MTR-H	25,038	42,000	120V	24,089	LOT2-PULL	24,089		22'	949
LOT2-HOUSE	22,331	42,000	120V	21,524	LOT2-MTR-H	24,089	(2)#250kcmil AL	14'	807

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



ONE-LINE DIAGRAM

SCALE: NONE

FLAG NOTES

1. PROVISIONAL BREAKER SPACE AND CONDUIT FOR FUTURE PV SYSTEM. LOCATE BREAKER SPACE AT OPPOSITE END OF BUS AS MAIN POWER SOURCE.
2. CONTRACTOR SHALL VERIFY AVAILABLE FAULT CURRENT WITH PSE SERVICE LETTER PRIOR TO ORDERING EQUIPMENT.

GROUNDING NOTES AND REQUIREMENTS:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR, POWER COMPANY, PHONE COMPANY, INTERNET COMPANY, CABLE TV COMPANY, AND THE SATELLITE TV COMPANY TO ENSURE REQUIRED GROUNDING IS INSTALLED FOR EACH SYSTEM.

THIS SHALL BE DONE PRIOR TO AND DURING INSTALLATION OF FOUNDATION RE-BAR AND CONTINUE DURING THE CONSTRUCTION PHASES, TO ENSURE EACH SYSTEM HAS IT'S REQUIRED GROUNDING INSTALLED FOR PROPER OPERATION OF THE SYSTEM.

1. THE ELECTRICAL CONTRACTOR SHALL COORDINATE AND PROVIDE WHAT IS REQUIRED TO DO THE FOLLOWING:
2. FOOTING GROUND RE-BAR COMES UP IN THE ELECTRICAL ROOM AND THE RE-BAR IS SNUGLY SECURED TO THE FOOTING RE-BAR PER OWNER DETAIL.
3. THE MC GROUNDING TIES TO THE FOOTING RE-BAR, COUNTERPOISE, BUILDING STEEL, AND WATER PIPING.
4. THE GROUND WIRE FOR THE COUNTERPOISE SHALL BE STRANDED, INSULATED WIRE IN CONDUIT UNTIL IT REACHES THE FIRST BAR OF THE COUNTERPOISE. BETWEEN THE COUNTERPOISE BARS IT SHALL BE A STRANDED BARE COPPER WIRE.

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

REVISIONS

NO.	DATE	DESCRIPTION

ROBISON ENGINEERING, INC
19401 40TH AVE W, SUITE 302
LYNNWOOD, WA 98036
206-364-3343 TEL

MARK STEINKE
STATE OF WASHINGTON
20183
REGISTERED
PROFESSIONAL ENGINEER
04/11/2024

DRAWN:
DESIGNED:
CHECKED: STEINKE M.
APPROVED: STEINKE M.

PROJECT: EAST TOWN CROSSING
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
19401 40TH AVE W. SUITE 302
LYNNWOOD, WA 98036
PHONE:(206)364-3343

DATE:
04-11-2024

SHEET TITLE:
ONE-LINE DIAGRAM, FEEDER & FAULT SCHEDULES

SHEET NO.
E0.1

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LOT1–PULL

ROOM
MOUNTING **FLOOR**
FED FROM **TI XFMR**
NOTE

VOLTS **208Y/120V 3P 4W**
BUS AMPS **600**
NEUTRAL **100%**

AIC **42,000**
MAIN BKR **600**
LUGS **STANDARD**
ISO GND BUS

CKT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	FEEDER RACEWAY AND CONDUCTORS
1	–/3	METER CENTER LOT1–MTR–1	20.8	20.8	20.8	N/A
2	–/3	METER CENTER LOT1–MTR–2	20.8	20.8	20.8	N/A
3	–/3	METER CENTER LOT1–MTR–H	0.517	0.18	1	N/A
		TOTAL CONNECTED KVA BY PHASE	42.2	41.8	42.7	

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	1.02	1.27	(125%)	RECEPTACLES	0.68	0.68	(50%>10)
				NONCONTINUOUS	125	125	(100%)
				TOTAL LOAD		127	
				BALANCED 3–PHASE LOAD		352 A	

LOT1–MTR–1

ROOM
MOUNTING **SURFACE**
FED FROM **LOT1–PULL**
NOTE

VOLTS **208Y/120V 3P 4W**
BUS AMPS **400**
NEUTRAL **100%**

AIC **42,000**
MAIN BKR **MLO**
LUGS **STANDARD**

CKT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	FEEDER RACEWAY AND CONDUCTORS
1	400/3	PANEL T11	20.8	20.8	20.8	(2)2–1/2"C,3#250kcmil AL,#250kcmil AL N,#1 AL G
		TOTAL CONNECTED KVA BY PHASE	20.8	20.8	20.8	

	CONN KVA	CALC KVA			CALC KVA
NONCONTINUOUS	62.5	62.5	(100%)	TOTAL LOAD	62.5
				BALANCED 3–PHASE LOAD	173 A

LOT1–MTR–2

ROOM
MOUNTING **SURFACE**
FED FROM **LOT1–PULL**
NOTE

VOLTS **208Y/120V 3P 4W**
BUS AMPS **400**
NEUTRAL **100%**

AIC **42,000**
MAIN BKR **MLO**
LUGS **STANDARD**

CKT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	FEEDER RACEWAY AND CONDUCTORS
1	400/3	PANEL T12	20.8	20.8	20.8	(2)2–1/2"C,3#250kcmil AL,#250kcmil AL N,#1 AL G
		TOTAL CONNECTED KVA BY PHASE	20.8	20.8	20.8	

	CONN KVA	CALC KVA			CALC KVA
NONCONTINUOUS	62.5	62.5	(100%)	TOTAL LOAD	62.5
				BALANCED 3–PHASE LOAD	173 A

LOT1–MTR–H

ROOM
MOUNTING **SURFACE**
FED FROM **LOT1–PULL**
NOTE

VOLTS **208Y/120V 3P 4W**
BUS AMPS **200**
NEUTRAL **100%**

AIC **42,000**
MAIN BKR **MLO**
LUGS **STANDARD**

CKT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	FEEDER RACEWAY AND CONDUCTORS
1	200/3	PANEL LOT1–HOUSE	1	0.517	0.18	2–1/2"C,3#250kcmil AL,#250kcmil AL N,#4 AL G
		TOTAL CONNECTED KVA BY PHASE	1	0.517	0.18	

	CONN KVA	CALC KVA			CALC KVA
LIGHTING	1.02	1.27	(125%)	TOTAL LOAD	1.95
RECEPTACLES	0.68	0.68	(50%>10)	BALANCED 3–PHASE LOAD	5.42 A

LOT2–MTR–H

ROOM
MOUNTING **FLOOR**
FED FROM **LOT2–PULL**
NOTE

VOLTS **208Y/120V 3P 4W**
BUS AMPS **1000**
NEUTRAL **100%**

AIC **42,000**
MAIN BKR **MLO**
LUGS **STANDARD**

CKT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	FEEDER RACEWAY AND CONDUCTORS
1	400/3	PANEL LOT2–HOUSE	35.1	35.1	29.9	(2)2–1/2"C,3#250kcmil AL,#250kcmil AL N,#1 AL G
2	–/3	SPARE	0	0	0	
		TOTAL CONNECTED KVA BY PHASE	35.1	35.1	29.9	

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	1	1.25	(125%)	MOTORS	18.6	18.6	(100%)
LARGEST MOTOR	10	2.5	(25%)	RECEPTACLES	1.24	1.24	(50%>10)
				EV	79.2	99	(125%)
				TOTAL LOAD		123	
				BALANCED 3–PHASE LOAD		340 A	

LOT2–PULL

PRCNC20231714

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ROOM
MOUNTING **FLOOR**
FED FROM **TI XFMR**
NOTE

VOLTS **208Y/120V 3P 4W**
BUS AMPS **1000**
NEUTRAL **100%**

AIC **42,000**
MAIN BKR **1000**
LUGS **STANDARD**
ISO GND BUS

CKT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	FEEDER RACEWAY AND CONDUCTORS
1	–/3	SWITCHBOARD LOT2–MTR–1	18.7	19.8	19	N/A
2	–/3	SWITCHBOARD LOT2–MTR–2	20.1	19.5	20.7	N/A
3	–/3	SWITCHBOARD LOT2–MTR–3	19.7	19.7	19.2	N/A
4	–/3	SWITCHBOARD LOT2–MTR–H	35.1	35.1	29.9	N/A
		TOTAL CONNECTED KVA BY PHASE	93.6	94.1	88.8	

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	1.38	1.73	(125%)	EV	79.2	99	(125%)
LARGEST MOTOR	11.4	2.86	(25%)	CONTINUOUS	4.8	6	(125%)
MOTORS	20.6	20.6	(100%)	NONCONTINUOUS	86.8	86.8	(100%)
RECEPTACLES	3.22	3.22	(50%>10)	HEATING	80.4	80.4	(100%)
				COOLING	66.9	0	(0%)
				TOTAL LOAD		301	
				BALANCED 3–PHASE LOAD		835 A	

LOT2–MTR–1

ROOM
MOUNTING **FLOOR**
FED FROM **LOT2–PULL**
NOTE

VOLTS **208Y/120V 3P 4W**
BUS AMPS **1000**
NEUTRAL **100%**

AIC **42,000**
MAIN BKR **MLO**
LUGS **STANDARD**

CKT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	FEEDER RACEWAY AND CONDUCTORS
1	400/3	PANEL S1	18.7	19.8	19	(2)2–1/2"C,3#250kcmil AL,#250kcmil AL N,#1 AL G
2	–/3	SPARE	0	0	0	
		TOTAL CONNECTED KVA BY PHASE	18.7	19.8	19	

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	0.144	0.18	(125%)	CONTINUOUS	2.4	3	(125%)
LARGEST MOTOR	11	2.76	(25%)	NONCONTINUOUS	27	27	(100%)
MOTORS	0.728	0.728	(100%)	HEATING	26.5	26.5	(100%)
RECEPTACLES	0.72	0.72	(50%>10)	COOLING	22	0	(0%)
				TOTAL LOAD		60.9	
				BALANCED 3–PHASE LOAD		169 A	

LOT2–MTR–2

ROOM
MOUNTING **FLOOR**
FED FROM **LOT2–PULL**
NOTE

VOLTS **208Y/120V 3P 4W**
BUS AMPS **1000**
NEUTRAL **100%**

AIC **42,000**
MAIN BKR **MLO**
LUGS **STANDARD**

CKT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	FEEDER RACEWAY AND CONDUCTORS
1	400/3	PANEL S2A	19.5	20.7	20.1	(2)2–1/2"C,3#250kcmil AL,#250kcmil AL N,#1 AL G
2	–/3	SPARE	0	0	0	
		TOTAL CONNECTED KVA BY PHASE	19.5	20.7	20.1	

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	0.129	0.161	(125%)	CONTINUOUS	1.2	1.5	(125%)
LARGEST MOTOR	11	2.76	(25%)	NONCONTINUOUS	31	31	(100%)
MOTORS	0.628	0.628	(100%)	HEATING	26.5	26.5	(100%)
RECEPTACLES	0.72	0.72	(50%>10)	COOLING	22	0	(0%)
				TOTAL LOAD		63.3	
				BALANCED 3–PHASE LOAD		176 A	

LOT2–MTR–3

ROOM
MOUNTING **FLOOR**
FED FROM **LOT2–PULL**
NOTE

VOLTS **208Y/120V 3P 4W**
BUS AMPS **1000**
NEUTRAL **100%**

AIC **42,000**
MAIN BKR **MLO**
LUGS **STANDARD**

CKT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	FEEDER RACEWAY AND CONDUCTORS
1	400/3	PANEL S3	19.2	19.7	19.7	(2)2–1/2"C,3#250kcmil AL,#250kcmil AL N,#1 AL G
2	–/3	SPARE	0	0	0	
		TOTAL CONNECTED KVA BY PHASE	19.2	19.7	19.7	

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	0.11	0.138	(125%)	CONTINUOUS	1.2	1.5	(125%)
LARGEST MOTOR	11.4	2.86	(25%)	NONCONTINUOUS	28.8	28.8	(100%)
MOTORS	0.628	0.628	(100%)	HEATING	27.3	27.3	(100%)
RECEPTACLES	0.54	0.54	(50%>10)	COOLING	22.8	0	(0%)
				TOTAL LOAD		61.8	
				BALANCED 3–PHASE LOAD		172 A	

REVISIONS		
NO.	DATE	DESCRIPTION

ROBISON ENGINEERING, INC
19401 40TH AVE W, SUITE 302
LYNNWOOD, WA 98036
206-364-3343 TEL

MARK STEINKE
STATE OF WASHINGTON
20183
REGISTERED
PROFESSIONAL ENGINEER
04/11/2024

DRAWN:
DESIGNED:
CHECKED: STEINKE M.
APPROVED: STEINKE M.

PROJECT: **EAST TOWN CROSSING**
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
19401 40TH AVE W. SUITE 302
LYNNWOOD, WA 98036
PHONE:(206)364-3343

DATE:
04-11-2024

SHEET TITLE:
PANEL SCHEDULES

SHEET NO.
E0.2

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PRCNC20231714

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Panel **T1** — ROOM — MOUNTING **FLUSH** — FED FROM **LOT1-MTR-1** — NOTE — VOLTS **208Y/120V 3P 4W** — BUS AMPS **400** — NEUTRAL **100%** — AIC **22,000** — MAIN BKR **MLO** — LUGS **STANDARD**

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	-/3	62.5	pressumed electrical load	a	2	-/1	0	SPARE
3	|			b	4	-/1	0	SPARE
5	|			c	6	-/1	0	SPARE
7	-/1	0	SPARE	a	8	-/1	0	SPARE
9	-/1	0	SPARE	b	10	-/1	0	SPARE
11	-/1	0	SPARE	c	12	-/1	0	SPARE
13	-/1	0	SPARE	a	14	-/1	0	SPARE
15	-/1	0	SPARE	b	16	-/1	0	SPARE
17	-/1	0	SPARE	c	18	-/1	0	SPARE
19	-/1	0	SPARE	a	20	-/1	0	SPARE
21	-/1	0	SPARE	b	22	-/1	0	SPARE
23	-/1	0	SPARE	c	24	-/1	0	SPARE
25	-/1	0	SPARE	a	26	-/1	0	SPARE
27	-/1	0	SPARE	b	28	-/1	0	SPARE
29	-/1	0	SPARE	c	30	-/1	0	SPARE
31	-/1	0	SPARE	a	32	-/1	0	SPARE
33	-/1	0	SPARE	b	34	-/1	0	SPARE
35	-/1	0	SPARE	c	36	-/1	0	SPARE
37	-/1	0	SPARE	a	38	-/3	0	SOLAR BREAKER
39	-/1	0	SPARE	b	40	|		
41	-/1	0	SPARE	c	42	|		

	CONN KVA	CALC KVA			CALC KVA
NONCONTINUOUS	62.5	62.5	(100%)	TOTAL LOAD	62.5
				BALANCED 3-PHASE LOAD	173 A
				PHASE A	100%
				PHASE B	100%
				PHASE C	100%

Panel **T2** — ROOM — MOUNTING **FLUSH** — FED FROM **LOT1-MTR-2** — NOTE — VOLTS **208Y/120V 3P 4W** — BUS AMPS **400** — NEUTRAL **100%** — AIC **22,000** — MAIN BKR **MLO** — LUGS **STANDARD**

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	-/3	62.5	pressumed electrical load	a	2	-/1	0	SPARE
3	|			b	4	-/1	0	SPARE
5	|			c	6	-/1	0	SPARE
7	-/1	0	SPARE	a	8	-/1	0	SPARE
9	-/1	0	SPARE	b	10	-/1	0	SPARE
11	-/1	0	SPARE	c	12	-/1	0	SPARE
13	-/1	0	SPARE	a	14	-/1	0	SPARE
15	-/1	0	SPARE	b	16	-/1	0	SPARE
17	-/1	0	SPARE	c	18	-/1	0	SPARE
19	-/1	0	SPARE	a	20	-/1	0	SPARE
21	-/1	0	SPARE	b	22	-/1	0	SPARE
23	-/1	0	SPARE	c	24	-/1	0	SPARE
25	-/1	0	SPARE	a	26	-/1	0	SPARE
27	-/1	0	SPARE	b	28	-/1	0	SPARE
29	-/1	0	SPARE	c	30	-/1	0	SPARE
31	-/1	0	SPARE	a	32	-/1	0	SPARE
33	-/1	0	SPARE	b	34	-/1	0	SPARE
35	-/1	0	SPARE	c	36	-/1	0	SPARE
37	-/1	0	SPARE	a	38	-/3	0	SOLAR BREAKER
39	-/1	0	SPARE	b	40	|		
41	-/1	0	SPARE	c	42	|		

	CONN KVA	CALC KVA			CALC KVA
NONCONTINUOUS	62.5	62.5	(100%)	TOTAL LOAD	62.5
				BALANCED 3-PHASE LOAD	173 A
				PHASE A	100%
				PHASE B	100%
				PHASE C	100%

Panel **LOT1-HOUSE** — ROOM — MOUNTING ~~FLUSH~~ — FED FROM **LOT1-MTR-H** — NOTE — VOLTS **208Y/120V 3P 4W** — BUS AMPS **200** — NEUTRAL **100%** — AIC **22,000** — MAIN BKR **MLO** — LUGS **STANDARD**

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	20/1	0.5	SITE LIGHTING	a	2	-/1	0	SPARE
3	20/1	0.5	SITE LIGHTING	b	4	-/1	0	SPARE
5	20/1	0.18	RECEPTACLE	c	6	-/1	0	SPARE
7	20/1	0.5	FACP	a	8	-/1	0	SPARE
9	20/1	0.017	LIGHTING	b	10	-/1	0	SPARE
11	-/1	0	SPARE	c	12	-/1	0	SPARE
13	-/1	0	SPARE	a	14	-/1	0	SPARE
15	-/1	0	SPARE	b	16	-/1	0	SPARE
17	-/1	0	SPARE	c	18	-/1	0	SPARE
19	-/1	0	SPARE	a	20	-/1	0	SPARE
21	-/1	0	SPARE	b	22	-/1	0	SPARE
23	-/1	0	SPARE	c	24	-/1	0	SPARE

	CONN KVA	CALC KVA			CALC KVA
LIGHTING	1.02	1.27	(125%)	TOTAL LOAD	1.95
RECEPTACLES	0.68	0.68	(50%>10)	BALANCED 3-PHASE LOAD	5.42 A
				PHASE A	177%
				PHASE B	91.4%
				PHASE C	31.8%

Panel **LOT2-HOUSE** — ROOM — MOUNTING **SURFACE** — FED FROM **LOT2-MTR-H** — NOTE — VOLTS **208Y/120V 3P 4W** — BUS AMPS **400** — NEUTRAL **100%** — AIC **42,000** — MAIN BKR **MLO** — LUGS **STANDARD**

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	40/2	6.6	DUAL EV CHARGER	a	2	40/2	6.6	(F) DUAL EV
3	|			b	4	|		
5	40/2	6.6	DUAL EV CHARGER	c	6	40/2	6.6	(F) DUAL EV
7	|			a	8	|		
9	40/2	6.6	DUAL EV CHARGER	b	10	40/2	6.6	(F) DUAL EV
11	|			c	12	|		
13	40/2	6.6	DUAL EV CHARGER	a	14	40/2	6.6	(F) DUAL EV
15	|			b	16	|		
17	40/2	6.6	DUAL EV CHARGER	c	18	40/2	6.6	(F) DUAL EV
19	|			a	20	|		
21	40/2	6.6	DUAL EV CHARGER	b	22	40/2	6.6	(F) DUAL EV
23	|			c	24	|		
25	20/1	0.5	SITE LIGHTING	a	26	60/2	8.64	BP-1
27	20/1	0.5	SITE LIGHTING	b	28	|		
29	20/1	0.2	FIRE RISER ROOM	c	30	40/3	10	TRASH COMPACTOR
31	20/1	0.5	FIRE RISER ROOM	a	32	|		
33	20/1	0.54	RECEPTACLE	b	34	|		
35	-/1	0	SPARE	c	36	-/1	0	SPARE
37	-/1	0	SPARE	a	38	-/3	0	FUTURE SOLAR
39	-/1	0	SPARE	b	40	|		
41	-/1	0	SPARE	c	42	|		

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	1	1.25	(125%)	MOTORS	18.6	18.6	(100%)
LARGEST MOTOR	10	2.5	(25%)	RECEPTACLES	1.24	1.24	(50%>10)
				EV	79.2	99	(125%)
				TOTAL LOAD		123	
				BALANCED 3-PHASE LOAD		340 A	
				PHASE A		105%	
				PHASE B		105%	
				PHASE C		89.6%	

Panel **S2A** — ROOM — MOUNTING **SURFACE** — FED FROM **LOT2-MTR-2** — NOTE — VOLTS **208Y/120V 3P 4W** — BUS AMPS **400** — NEUTRAL **100%** — AIC **22,000** — MAIN BKR **MLO** — LUGS **STANDARD**

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	20/1	0.18	RECEPTACLE	a	2	20/1	0.18	RECEPTACLE
3	45/3	11	RTU-3	b	4	20/1	0.46	EXHAUST FAN, RECEPTACLE
5	|			c	6	20/1	0.129	LIGHTING
7	|			a	8	20/2	0.528	HWCP-1
9	45/3	11	RTU-4	b	10	|		
11	|			c	12	-/1	0	SPARE
13	|			a	14	-/1	0	SPARE
15	30/2	4.5	EWH	b	16	-/1	0	SPARE
17	|			c	18	-/1	0	SPARE
19	20/1	1.2	SIGN	a	20	-/1	0	SPARE
21	-/1	0	SPARE	b	22	-/1	0	SPARE
23	-/1	0	SPARE	c	24	-/1	0	SPARE
25	-/1	0	SPARE	a	26	-/1	0	SPARE
27	-/1	0	SPARE	b	28	-/1	0	SPARE
29	-/1	0	SPARE	c	30	-/1	0	SPARE
31	-/1	0	SPARE	a	32	-/1	0	SPARE
33	-/1	0	SPARE	b	34	-/1	0	SPARE
35	-/1	0	SPARE	c	36	-/1	0	SPARE
37	-/3	31	additional pressumed load	a	38	200/3	0	PANEL S2B
39	|			b	40	|		
41	|			c	42	|		

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	0.129	0.161	(125%)	RECEPTACLES	0.72	0.72	(50%>10)
LARGEST MOTOR	11	2.76	(25%)	CONTINUOUS	1.2	1.5	(125%)
MOTORS	0.628	0.628	(100%)	NONCONTINUOUS	31	31	(100%)
				HEATING	26.5	26.5	(100%)
				COOLING	22	0	(0%)
				TOTAL LOAD		63.3	
				BALANCED 3-PHASE LOAD		176 A	
				PHASE A		97.1%	
				PHASE B		103%	
				PHASE C		100%	

Panel **S1** — ROOM — MOUNTING **SURFACE** — FED FROM **LOT2-MTR-1** — NOTE — VOLTS **208Y/120V 3P 4W** — BUS AMPS **400** — NEUTRAL **100%** — AIC **22,000** — MAIN BKR **MLO** — LUGS **STANDARD**

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	20/1	0.18	RECEPTACLE	a	2	20/1	0.18	RECEPTACLE
3	45/3	11	RTU-1	b	4	-/1	0	SPARE
5	|			c	6	20/1	0.144	LIGHTING
7	|			a	8	20/1	0.56	EXHAUST FAN, RECEPTACLE
9	45/3	11	RTU-2	b	10	-/3	27	additional pressumed load
11	|			c	12	|		
13	|			a	14	|		
15	30/2	4.5	EWH	b	16	-/1	0	SPARE
17	|			c	18	-/1	0	SPARE
19	20/1	1.2	SIGN	a	20	-/1	0	SPARE
21	20/1	1.2	SIGN	b	22	-/1	0	SPARE
23	20/2	0.528	HWCP-1	c	24	-/1	0	SPARE
25	|			a	26	-/1	0	SPARE
27	-/1	0	SPARE	b	28	-/1	0	SPARE
29	-/1	0	SPARE	c	30	-/1	0	SPARE
31	-/1	0	SPARE	a	32	-/1	0	SPARE
33	-/1	0	SPARE	b	34	-/1	0	SPARE
35	-/1	0	SPARE	c	36	-/1	0	SPARE
37	-/1	0	SPARE	a	38	-/1	0	SPARE
39	-/1	0	SPARE	b	40	-/1	0	SPARE
41	-/1	0	SPARE	c	42	-/1	0	SPARE

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	0.144	0.18	(125%)	RECEPTACLES	0.72	0.72	(50%>10)
LARGEST MOTOR	11	2.76	(25%)	CONTINUOUS	2.4	3	(125%)
MOTORS	0.728	0.728	(100%)	NONCONTINUOUS	27	27	(100%)
				HEATING	26.5	26.5	(100%)
				COOLING	22	0	(0%)
				TOTAL LOAD		60.9	
				BALANCED 3-PHASE LOAD		169 A	
				PHASE A		97.5%	
				PHASE B		103%	
				PHASE C		99.1%	

Panel **S3** — ROOM — MOUNTING **SURFACE** — FED FROM **LOT2-MTR-3** — NOTE — VOLTS **208Y/120V 3P 4W** — BUS AMPS **400** — NEUTRAL **100%** — AIC **22,000** — MAIN BKR **MLO** — LUGS **STANDARD**

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION		CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	20/1	0.46	EXHAUST FAN, RECEPTACLE	a	2	20/1	0.18	RECEPTACLE
3	-/2	0	SPARE	b	4	20/2	0.528	HWCP-1
5	|			c	6	|		
7	20/1	0.11	LIGHTING	a	8	-/1	0	SPARE
9	45/3	11.4	RTU-5	b	10	-/1	0	SPARE
11	|			c	12	-/1	0	SPARE
13	|			a	14	-/1	0	SPARE
15	45/3	11.4	RTU-6	b	16	-/1	0	SPARE
17	|			c	18	-/1	0	SPARE
19	|			a	20	-/1	0	SPARE
21	30/2	4.5	EWH	b	22	-/1	0	SPARE
23	|			c	24	-/1	0	SPARE
25	20/1	1.2	SIGN	a	26	-/1	0	SPARE
27	-/1	0	SPARE	b	28	-/1	0	SPARE
29	-/1	0	SPARE	c	30	-/1	0	SPARE
31	-/1	0	SPARE	a	32	-/1	0	SPARE
33	-/1	0	SPARE	b	34	-/1	0	SPARE
35	-/1	0	SPARE	c	36	-/1	0	SPARE
37	-/3	28.8	additional pressumed load	a	38	-/1	0	SPARE
39	|			b	40	-/1	0	SPARE
41	|			c	42	-/1	0	SPARE

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	0.11	0.138	(125%)	RECEPTACLES	0.54	0.54	(50%>10)
LARGEST MOTOR	11.4	2.86	(25%)	CONTINUOUS	1.2	1.5	(125%)
MOTORS	0.628	0.628	(100%)	NONCONTINUOUS	28.8	28.8	(100%)
				HEATING	27.3	27.3	(100%)
				COOLING	22.8	0	(0%)
				TOTAL LOAD		61.8	
				BALANCED 3-PHASE LOAD		172 A	
				PHASE A		97.9%	
				PHASE B		101%	
				PHASE C		101%	

REVISIONS

NO.	DATE	DESCRIPTION

ROBISON ENGINEERING, INC
19401 40TH AVE W., SUITE 302
LYNNWOOD, WA 98036
206-364-3343 TEL

MARK STEINKE — STATE OF WASHINGTON — 20183 — REGISTERED PROFESSIONAL ENGINEER
04/11/2024

DRAWN:
DESIGNED:
CHECKED: STEINKE M.
APPROVED: STEINKE M.

PROJECT: **EAST TOWN CROSSING**
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
19401 40TH AVE W. SUITE 302
LYNNWOOD, WA 98036
PHONE:(206)364-3343

DATE: 04-11-2024

SHEET TITLE: PANEL SCHEDULES

SHEET NO. E0.3

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RETAIL INTERIOR LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	INPUT VA	VOLTS
C1E	●	(1) 17W LED	8" SURFACE DOWNLIGHT – CORRIDORS – EMERGENCY DRIVER BACKUP	0–10V DIMMING	SURFACE	DMF: DRDHNJ015OSEMS / DRD5S8R159300A	17	120V 1P 2W
S1	▬	(1) 19W LED	4' LED LINEAR STRIP	0–10V DIMMING	SURFACE	LITHONIA: CLX L48 3000LM HEF RDL 120 GZ10 35K 80CRI WH	19	120V 1P 2W
X1	⊗	(1) 5W EM	EXIT SIGN – EMERGENCY BATTERY BACKUP – HATCH INDICATES LIT FACE	EM	SURFACE	LSI: EMS WB SERIES (OR EQUAL)	5	MULTIPLE

GENERAL LIGHTING NOTES

1. LIGHTING CONTROLS SHALL BE INSTALLED WHICH MEET ALL REQUIREMENTS OF LOCAL ENERGY CODES.
2. EMERGENCY LIGHT FIXTURES: PROVIDE UNSWITCHED HOT.
3. LOCATIONS OF OCCUPANCY SENSORS, PHOTO SENSORS, DIMMERS (FOR COMMON AREA INTERIOR LUMINAIRES ONLY), AND SWITCHES ARE DIAGRAMMATIC. CONTRACTOR TO FIELD–IDENTIFY OPTIMAL LOCATIONS AND QUANTITIES.
4. ASSURE COMPATIBILITY OF DIMMERS WITH CONTROLLED LUMINAIRES PRIOR TO PURCHASING.
5. AUTOMATIC LIGHTING SHUT–OFF CONTROLS SHALL BE PROVIDED BY LOCAL OCCUPANCY SENSORS UNLESS OTHERWISE NOTED. PUBLIC SPACES ARE ACTIVE 24/7 AND THEREFORE EXEMPT FROM AUTOMATIC LIGHTING SHUT–OFF REQUIREMENTS.
6. DAYLIGHT ZONES ARE REFERRED TO AS 'PRIMARY' AND 'SECONDARY' ON PLANS AND DENOTED BY DASHED LINES.
7. FOR CUSTOM FF&E FIXTURES, IT IS THE MANUFACTURER'S RESPONSIBILITY TO FURNISH PRODUCTS WHICH ARE COMPLIANT WITH ALL REQUIREMENTS OF LOCAL ENERGY CODES, AS WELL AS MATCH THE ELECTRICAL SPECIFICATIONS PROVIDED IN THE LUMINAIRE SCHEDULES. PROVIDE SUBMITTAL SHOP DRAWINGS WITHIN 30 DAYS OF RECEIVING FIXTURE ORDER. SUBMITTALS SHALL CLEARLY INDICATE LAMPING AND MAXIMUM WATTAGE RATING OF LAMP SOCKETS. NON–COMPLIANT FIXTURES REJECTED BY ELECTRICAL INSPECTOR SHALL BE RETURNED TO THE MANUFACTURER FOR REWORKING AND/OR RE–LABELING.
8. ALL FIXTURES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
9. CONTRACTOR SHALL BE RESPONSIBLE TO ORDER ALL NECESSARY HARDWARE, ELECTRICAL CABLE, TIMERS, TRANSFORMERS, ETC., AS REQUIRED FOR COMPLETION OF INSTALLATION OF A FULLY FUNCTIONING SYSTEM.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR EQUIPPING ALL FIXTURES WITH THE EXACT LAMPS SPECIFIED IN THE FIXTURE SCHEDULE.
11. WHERE FIXTURES REQUIRE REMOTE TRANSFORMERS OR BALLASTS, THE CONTRACTOR SHALL DETERMINE LOCATIONS AS REQUIRED FOR EVEN LOAD DISTRIBUTION, SERVICE ACCESS, AND VENTILATION.
12. THE CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL ENGINEER FOR EXACT LOCATIONS OF TIMERS AND/OR PHOTO CELLS, IF ANY.
13. (FOR COMMON AREA INTERIOR LUMINAIRES ONLY) THE CONTRACTOR SHALL VERIFY THE COMPATIBILITY OF DIMMING AND CONTROL MODULES WITH THE FIXTURE TYPES PRIOR TO INSTALLATION.
14. WHERE APPLICABLE, THE CONTRACTOR SHALL AIM AND ADJUST LIGHTING FIXTURES AS DIRECTED BY THE LIGHTING DESIGNER UPON COMPLETION OF THE INSTALLATION.

SPECIAL NOTE TO THE CONTRACTOR:

1. FIXTURE SUBMITTALS THAT DO NOT INCLUDE LAMP SPECIFICATIONS WILL BE CONSIDERED INCOMPLETE AND WILL NOT BE REVIEWED.

EXTERIOR & SITE LIGHTING CONTROL SYSTEM REQUIREMENTS

1. CONTRACTOR TO PROVIDE A FULLY OPERATIONAL LIGHTING CONTROL SYSTEM.
2. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH A LIGHTING CONTROLS VENDOR TO OBTAIN LIGHTING CONTROL SYSTEM PACKAGE COMPLETE WITH DEVICES, WIRING DIAGRAMS, ANNOTATED PLANS INDICATING WHICH DEVICE TO BE USED IN EACH LOCATION, CONNECTION REQUIREMENTS, SET UP INSTRUCTIONS, COMMISSIONING AND CHECK–OUT FOLLOWING COMPLETION. PROVIDE ALL LOW VOLTAGE WIRING AS REQUIRED FOR CONTROL DEVICE INTERCONNECTIONS.
3. INSTALLER QUALIFICATIONS: TECHNICIAN INSTALLING AND WIRING THE LIGHTING CONTROL SYSTEM SHALL HAVE INSTALLED THIS SAME SYSTEM AT LEAST ONCE PREVIOUSLY. TECHNICIAN SHALL HAVE RECEIVED TRAINING BY FACTORY REPRESENTATIVE ON THE SYSTEM BEING INSTALLED.
4. PROVIDE LIGHTING CONTROL SYSTEM TO PERFORM THE FUNCTIONS DESCRIBED BELOW:
   - 4.1. CONTROL EXTERIOR LIGHTING BASED ON ASTRONOMIC TIME–CLOCK SCHEDULING OR PHOTOCELL DETECTION.
5. DURING EMERGENCY CONDITIONS EMERGENCY LIGHTING CIRCUITS SHALL BYPASS ALL LIGHTING CONTROLS IN ORDER TO ENERGIZE ALL CONNECTED LUMINAIRES AT FULL CAPACITY. PROVIDE UL924 RELAYS AS REQUIRED TO BYPASS AREA CONTROLS.
6. CONTRACTOR SHALL VERIFY THE COMPATIBILITY OF CONTROL MODULES WITH FIXTURE TYPES PRIOR TO INSTALLATION.

REVISIONS

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PROJECT: EAST TOWN CROSSING
MULTIFAMILY DEVELOPMENT
PIONEER WAY & SHAW RD. PUYALLUP, WA

ROBISON ENGINEERING, INC
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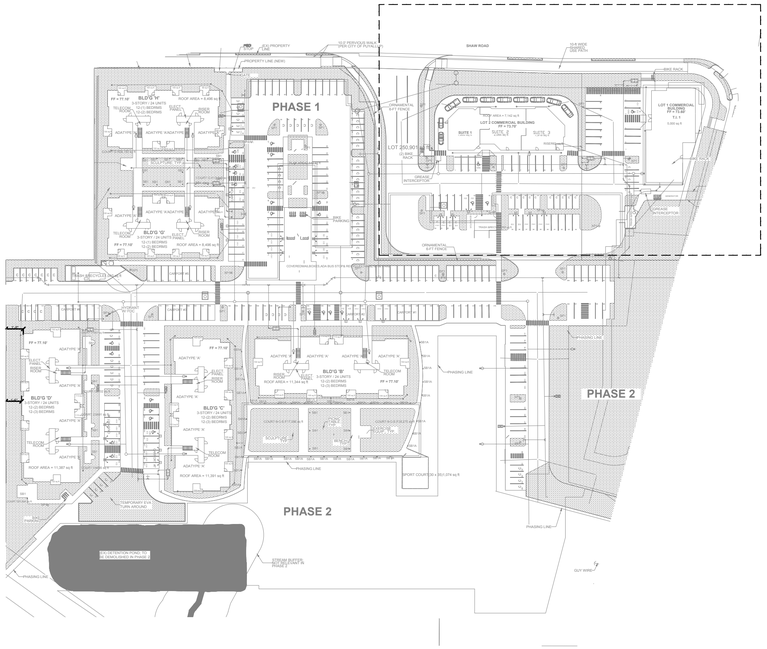
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SHEET NO. E0.4

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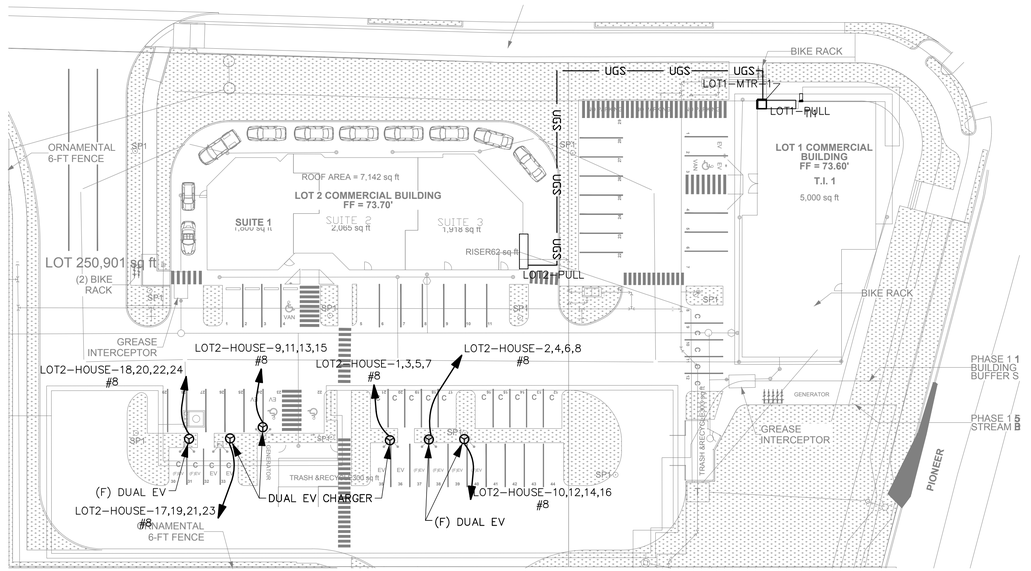
PRCNC20231714

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TI SITE LIGHTING PLAN

SCALE: 1" = 30'



TI SITE POWER PLAN

SCALE: 1" = 30'

NO.	DATE	DESCRIPTION
		REVISIONS

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DRAWN:	DESIGNED:	CHECKED: STEINKE M.	APPROVED: STEINKE M.

PROJECT: **EAST TOWN CROSSING**
MULTIFAMILY DEVELOPMENT
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ROBISON ENGINEERING, INC
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04-11-2024

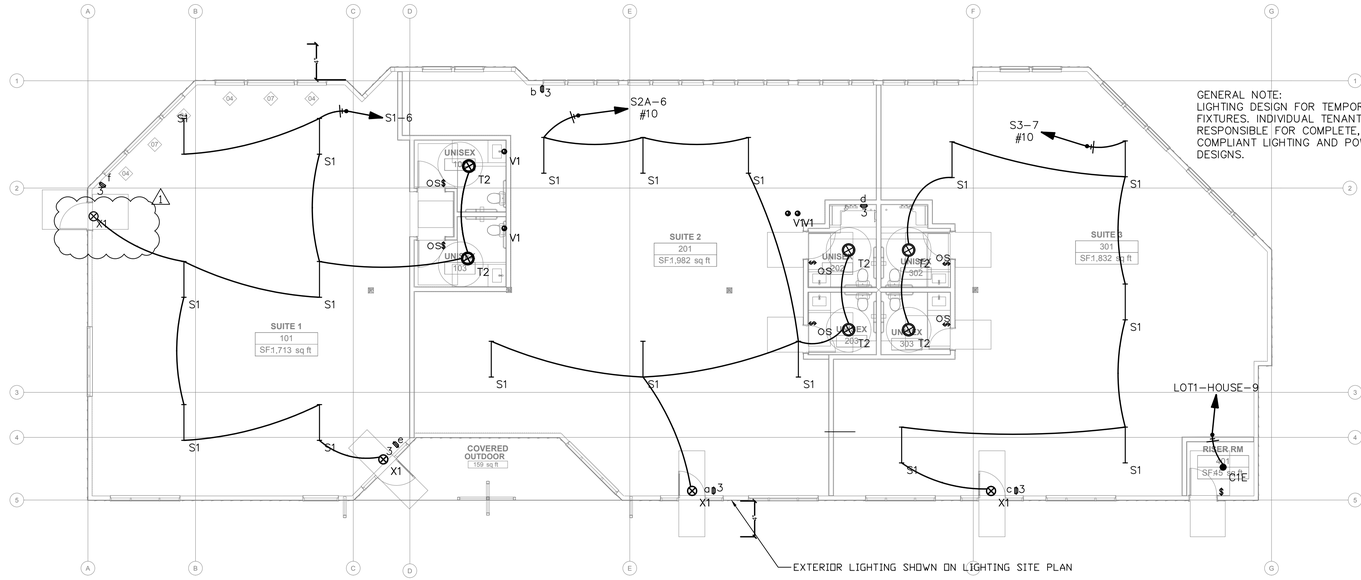
SHEET TITLE:
TI SITE LIGHTING AND POWER PLAN

SHEET NO.
E1.0

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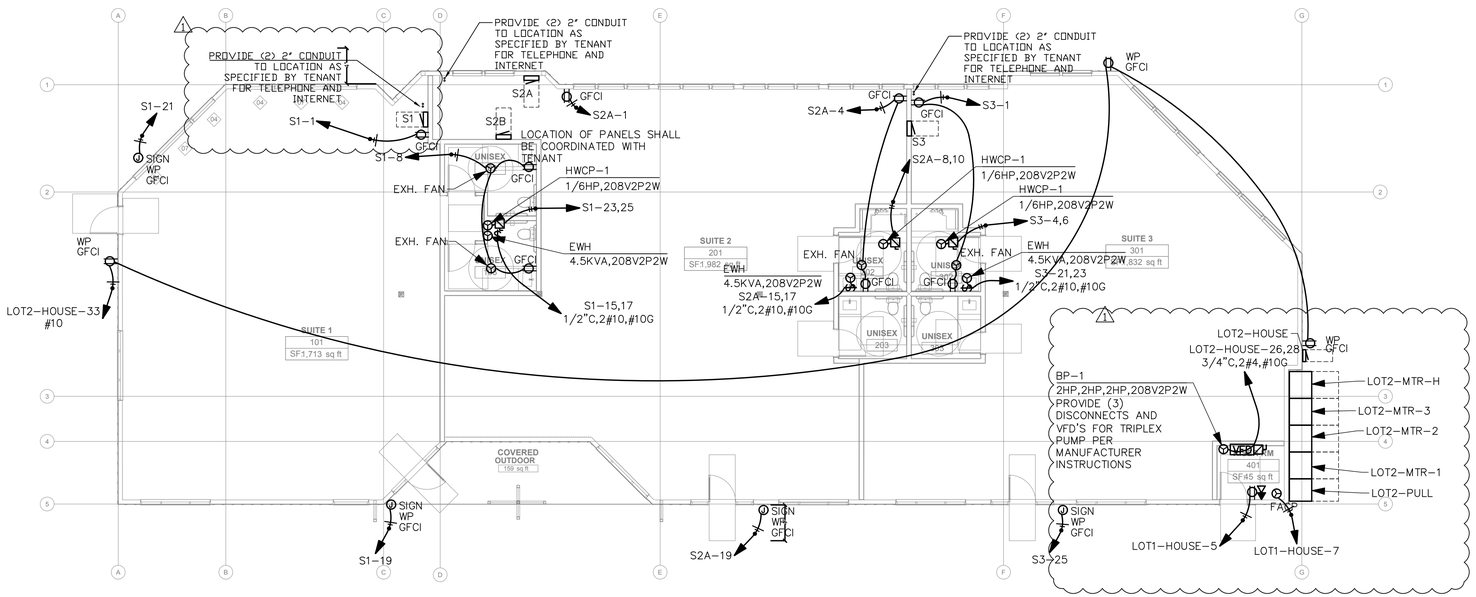
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LEVEL 1 POWER & LIGHTING PLAN

SCALE: 1/8"=1'-0"



NO.	DATE	REVISIONS DESCRIPTION

ROBISON ENGINEERING, INC
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MARK STEINKE STATE OF WASHINGTON 20183 REGISTERED PROFESSIONAL ENGINEER
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PHONE:(206)364-3343

DATE: 04-11-2024

SHEET TITLE: LEVEL 1 LIGHTING AND POWER

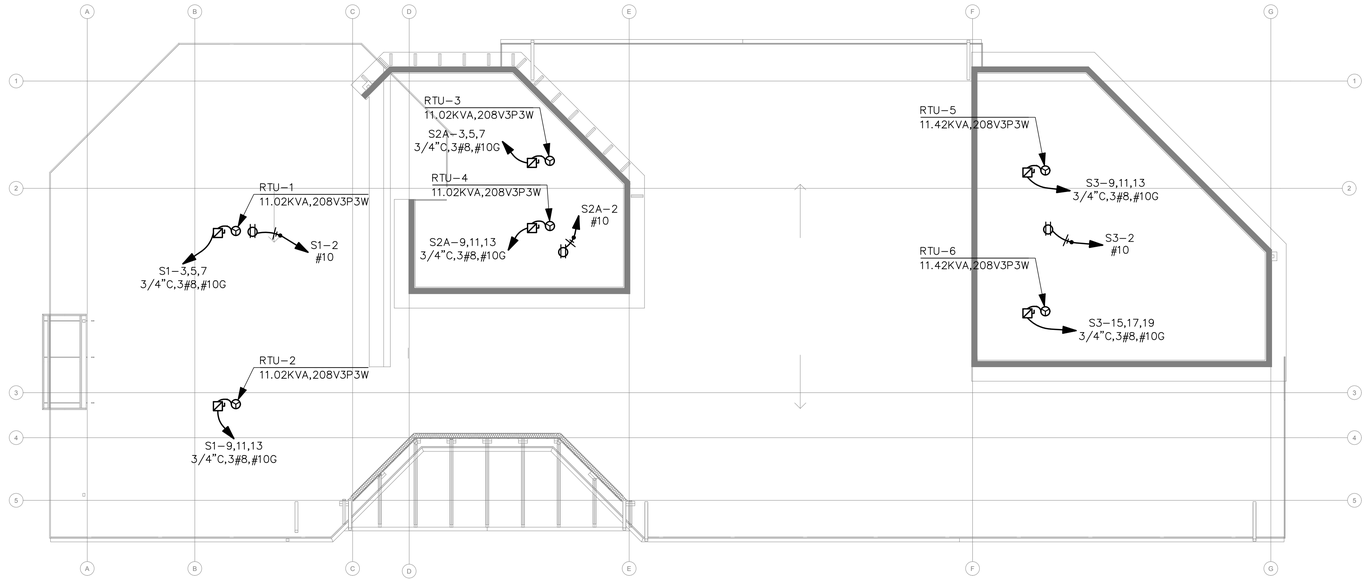
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ROOF POWER & LIGHTING PLAN

SCALE: 1/8"=1'-0"

NO.	DATE	REVISIONS

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MARK STEINKE
STATE OF WASHINGTON
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APPROVED: STEINKE M.

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DATE:
04-11-2024

SHEET TITLE:
LEVEL 2/ ROOF POWER AND LIGHTING

SHEET NO.
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