MINI PET MART New Retail Store

Project Location

Address: 974 W 6th Ave, Eugene, OR 97402
Map: 17-03-31-22 Lot: 8800 & 8900

Project Contacts

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Building Code Summary

Chapter 1: Administration
Project Address:
974 W 6th Ave
Eugene, OR 97402
Code Jurisdiction:
City of Eugene
Project Description:
New Retail Store To Replace Retail Store To Be Demolished

Chapter 3: Use and Occupancy Classification
Occupancy: Mercantile Group M (Per Section 309)

Chapter 5: General Building Heights and Areas
Allowable Building Area Per Table 506.2: Group M = 9,000 sf
Building Area: Group M = 8,534 sf
Retail Floor Space = 6,463 sf
Dog Wash = 312 sf
Storage = 983 sf
Covered Walkway = 776 sf
Allowable Stories Per Table 504.4: Group M = 1
Building Stories: Group M = 1
Allowable Building Height Per Table 504.3: Group M = 40'
Building Height: Group M = 21'

Chapter 6: Types of Construction
Construction Type: V-B
Fire-Resistance Rating Requirements For Building Elements (Hours) Per Table 601
Primary structural frame: 0
Bearing Walls:
Exterior: 0
Interior: 0
Nonbearing Walls And Partitions:
Exterior: Per Table 602
Interior: 0
Floor Construction: 0
Roof Construction: 0

Fire-Resistance Rating Requirements For Exterior Walls Based on Fire Separation Distance Per Table 602
Walls Greater Than 10' Separation Distance; Exterior Wall Rating Requirement: 0
Walls Less Than 10' Separation Distance; Exterior Wall Rating Requirement: 1

Chapter 10: Means of Egress
Occupant Load Factors: (Per Table 1004.5)
Retail: 60
Storage: 300
Building Occupant Load:
Retail / Dog Wash: 6,775 / 60 = 113
Storage: 983 / 300 = 4
Total Occupants = 117
Egress Width: (Per 2019 OSSC 1005, ICC A117.1-2009 403.5)
Stairs: 0.3" per 100 occupant*
Other egress components: 0.2" per 100 occupants*
* 36" min width typical, unless noted otherwise
Exits Required: (Per 1006.2.1)
(2) Exits Required
Exit Access Travel Distance: (Per 1017)
M Occupancy: 200' (Per table 1017.2)

Chapter 29: Plumbing Systems
Fixture Calculations Per 2902.1.1

Building Envelope Per ASHRAE Standard 90.1-2019
Conditioned Space To Comply With Table 5.5-4 Zone 4 (C)
Attic Insulation: R-49
Mass Walls: U-0.073 (Per NCMA Thermal Catalog)
Unheated Slab On Grade: R-15 For A Min Depth of 24" Below Floor
Swinging Opaque Doors: U-0.370
Nonswinging Opaque Doors: U-0.310
Fenestration Requirements:
Fixed: U-0.36, SHGC 0.36, VT/SHGC = 1
Operable: U-0.45, SHGC 0.33, VT/SHGC = 1

Structural Criteria

GENERAL:
RISK CATEGORY: II

WIND:
BASIC DESIGN SPEED = 98 MPH
ALLOWABLE STRESS DESIGN SPEED = 76 MPH
EXPOSURE = B
INTERNAL PRESSURE COEFFICIENT = +/- 0.18

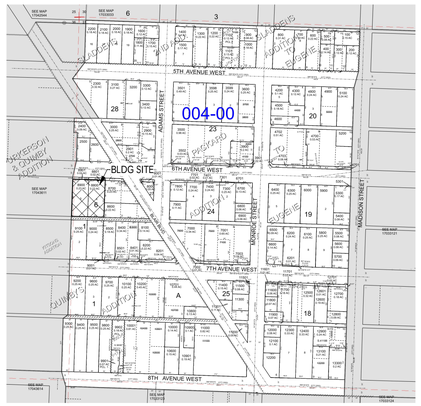
SEISMIC:
IMPORTANCE FACTOR = 1.0
SS = 0.71
S1 = 0.41
SITE CLASS: D
SDS = 0.58
SD1 = N/A
SEISMIC DESIGN CATEGORY: 'D'
SEISMIC FORCE-RESISTING SYSTEM(S)
SPECIAL REINFORCED MASONRY SHEAR WALLS
DESIGN BASE SHEAR = 45.6 K
CS = 0.12
R = 5.0
METHOD = EQUIVALENT LATERAL FORCE RESISTANCE

VERTICAL
ROOF:
DEAD = 20 PSF
SNOW = 25 PSF

SOILS:
SOIL BEARING CAPACITY = 1500 PSF*
* BASED ON BEARING PER GEOTECHNICAL REPORT AS WELL AS 'SOIL AND FILL NOTES' ON SHEET S101

Deferred Submittals [Per OSSC 107.3.4.1]

- Plumbing
- Electrical
- Mechanical
- Pre-Manufactured Truss Engineering
- Lighting COMcheck



1 Vicinity Map
N.T.S.

Statement of Special Inspections

Post Installed Anchors:
• Simpson Titen HD (Periodic, ICC-ES ESR-1056)

Steel: Fabrication Not Performed In Shop Approved Per 2019 OSSC Section 1704.2.5.1
Shall Require Special Inspection Per 2019 OSSC Section 1705.2 (UNO on approved plans)
• Material verification of structural steel (Periodic)
• Material verification of weld filler materials (Periodic)
• Welding: Single pass fillet welds & V Groove CJP Welds (Periodic)
• Reinforcing steel in walls (Periodic)
• High Strength Bolts (Periodic)

Soils:
• Verify materials below foundation are adequate to achieve the design bearing (Periodic)
• Verify excavations are extended to proper depth and have reached proper material (Periodic)
• Perform classification and testing of compacted fill materials (Periodic)
• Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill (Continuous)
• Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly (Periodic)

Masonry: Level B Quality Assurance
• Compliance with approved submittals (Periodic)
• Site-prepared mortar, mortar joints, location of reinforcement and anchors (Periodic)
• Grout space; grade, type, size of reinforcement (Periodic)
• Placement of grout (Continuous)

List of Abbreviations

A		**D**		**F**		**I**		**P**		**T**	
ACT	Acoustic Ceiling Tile	DBL	Double	FD	Floor Drain or Fire Department	ILO	In Lieu Of	PCC	Pre-Cast Concrete	T&G	Tongue And Groove
AD	Area Drain	DEMO	Demolish or Demolition	FEC	Fire Extinguisher Cabinet	INSUL	Insulated or Insulation	PLUMB	Plumbing	TBD	To Be Determined
AFF	Above Finished Floor	DIA	Diameter	FIXT	Fixture	INT	Interior	PLYD	Plywood	TELE	Telephone
ALUM	Aluminum	DIM	Dimension	FLR	Floor	**L**		PT	Pressure Treated	TLT	Toilet
ANOD	Anodized	DIMS	Dimensions	FT	Feet	LE	Length	PNT	Paint or Painted	TO	Top Of
ARCH	Architect	DN	Down	FTG	Footing	LO	Low	PVC	Polyvinyl Chloride	TOC	Top Of Concrete
B		DR	Door	FND	Foundation	**M**		**R**		TOS	Top Of Steel
BSMT	Basement	DWG	Drawing	FFE	Finish Floor Elevation	MAX	Maximum	RBR	Rubber	TPD	Toilet Paper Dispenser
BRG	Bearing	**E**		**G**		MO	Masonry Opening	RCP	Reflected Ceiling Plan	T/D	Telephone/Data
BYND	Beyond	EA	Each	GA	Gauge	MECH	Mechanical	RD	Roof Drain	TYP	Typical
BOTT	Bottom	EJ	Expansion Joint	GALV	Galvanized	MEMBR	Membrane	REINF	Reinforcement	**U**	
BLDG	Building	EL	Elevation	GLB	Glulam Beam	MIN	Minimum	REQD	Required	UNO	Unless Noted Otherwise
C		ELEC	Electrical	GWB	Gypsum Wall Board	MTL	Metal	RM	Room	U/S	Underside
CIP	Cast In Place	ELEV	Elevator or Elevation	**H**		**N**		**S**		**V**	
CHNL	Channel	EQ	Equal	HC	Hollow Core	NIC	Not In Contract	SCHED	Schedule	VIF	Verify In Field
CJ	Control Joint	EXIST	Existing	HI	High	NO	Number	SIM	Similar	VP	Vision Panel
CLG	Ceiling	(E)	Existing	HM	Hollow Metal	NOM	Nominal	SPEC	Specified OR Specification	**W**	
CLR	Clear	EXP JT	Expansion Joint	HP	High Point	(N)	New	SF	Square Foot	W/	With
CMU	Concrete Masonry Unit	EXT	Exterior	HR	Hour	N.T.S.	Not To Scale	SSTL	Stainless Steel	WD	Wood
COL	Column	EW	Each Way	HVAC	Heating, Ventilating, And Air Conditioning	**O**		STC	Sound Transmission Coefficient		
COMPR	Compressible					OC	On Center	STL	Steel		
CONC	Concrete					OH	Opposite Hand	STRUCT	Structure or Structural		
CONT	Continuous					OZ	Ounce				
CPT	Carpet										
CT	Ceramic Tile										
CTYD	Courtyard										

Building Specifications

Division 0100 – General

101 Code - All work to comply with all local and state codes, including:
- 2019 Oregon Structural Specialty Code
- 2019 Oregon Mechanical Specialty Code
- 2021 Oregon Plumbing Specialty Code
- 2021 Electrical Specialty Code
- 2019 Oregon Fire Code
- 2021 Oregon Energy Efficiency Specialty Code; ANSI/ASHRAE/IES Standard 90.1-2019
- ICC / ANSI A117.1-2009

102 Permits and Fees:
A. The owner will provide and pay for all permits and fees except where provided by contract.

103 Coordination:
A. The contractor is responsible for the coordination of all sub contractors and trades.

Division 0200 – Site Work

201 Earthwork:
A. Excavation or fills shall be so constructed or protected that they do not endanger life or property.
B. Remove trash, rubbish and other obstructions from the site prior to starting of earthwork.
C. Excavate to provide for the indicated construction and conform to the finish grades. Remove excess materials from the site.

Division 0300 – Concrete

301 General Requirements:
A. Concrete design, components, storage, mixture, placement and reinforcement shall conform to chapter 19 of the building code.
B. Protect all concrete from damage and use special care on all exposed concrete to prevent staining or discoloration.
C. Concrete is to be ready mixed, air entrained ASTM C-94 & ASTM C-260. The minimum 28 day strength is to be 3000 psi. Special inspection as required. Do not air entrain interior slabs which are to be smooth, dense, and hardtroweled finished.

302 Formwork:
A. Forms shall be substantial, sufficiently tight, and properly braced to prevent leakage and maintain position and shape.
B. Forms and shoring shall not be removed until the structure has sufficient strength to support safely its weight and all loads placed thereon.

303 Reinforcement:
A. Grade 40 minimum for #3 bars and smaller. Grade 60 for all others unless noted otherwise. ASTM A615. Place per ACI code and standards. Lap continuous bars 30" minimum unless noted otherwise.

304 Cast-in-Place Concrete:
A. Exterior slabs and walkways are to have a light broom finish. Slope a minimum of ¼" per ft. away from structure for drainage.

Division 0400 – Masonry

401 General Requirements:
A. 6", 8", or 12" Nominal Thickness
B. Grout to be 2500 psi.
C. Mortar to be Type S – 2000 psi. minimum
D. CMU Masonry to have minimum compressive strength of 1500 psi.

402 Reinforcement:
A. Grade 40 minimum for #3 bars and smaller. Grade 60 for all others unless noted otherwise. ASTM A615. Place per ACI code and standards. Lap continuous bars 30" minimum unless noted otherwise.

Division 0500 – Metal

501 Bolts: ASTM A307, A325, or A490 as specified on the plans.
502 Welding: E70 (FEXX = 70 ksi)
503 Hot Rolled Steel: C, MC, L sections – ASTM A36; W sections – ASTM A992;
HSS sections – ASTM A500 GR. B; Steel Pipe – ASTM A53 GR. B
Plates, Bars - ASTM A36

504 Cold Formed Steel: To conform with AISI S100 and the material strengths and sizes specified on the plans.
505 Miscellaneous Sheet Metal:
506 Fasteners:
A. Nails: ASTM F1667; Use ASTM A153 if in contact with pressure treated wood or exposed to weather. 8d: .131"x2 ½"; 10d: .148"x3"; 16d: .162"x3½"
B. Wood Screws: Simpson Strong-Tie SD or SDS (or equivalent); Screws are to be in compliance with ASTM B695 Class 55 if in contact with pressure treated wood or exposed to weather.
C. Lag Bolts (or Lag Screws): ANSI/ASME Standard B18.2.1; hot dip galvanize if exposed to weather.

507 Anchors:
A. Prefabricated anchors are to be Simpson Strong-Tie or equal.
B. ½" or 5/8" anchors per ASTM A307; ¾" or larger per ASTM F1554
C. Threaded rods: ASTM A36
D. Expansion Bolts: Concrete: Simpson Strong-Tie Strong Bolt 2 (or equal for cracked and uncracked concrete); Masonry: Simpson Strong-Tie Wedge Anchors or equal. Install per ICC report.
E. PAF's (Power Actuated Fasteners): ITW Ramset 1500 Series (ICC ESR-1799) or equal; .145" diameter minimum
F. Epoxy: Concrete: Simpson Strong-Tie SET-XP Epoxy (or equal for cracked or uncracked concrete); Masonry: Simpson Strong-Tie SET Epoxy. Install per ICC report
G. Titen HD: Simpson Strong-Tie, Install per ICC-ES ESR-2713 (Concrete), ESR-1056 (CMU)

Division 0600 – Wood, Plastics, and Composites

601 General: Woods construction is to conform to chapter 23 of the code
602 Solid Sawn Lumber:
A. Evidence of grade: Grade mark of an approved grading organization having jurisdiction must appear on each piece of material.
B. Framing Lumber: DF-L, S4S, to standard dimensions
2x4Stud: Stud Grade (or better)
2x6 Stud: #2 (or better)
2x Framing: #2 (or better)
4x Framing: #2 (or better)
6x Framing: #1 (or better)
Furring or Blocking: #3 (or better)

603 Laminated Lumber:
A. Evidence of grade: Grade mark of an approved grading organization having jurisdiction must appear on each piece of material.
B. Beams: DF/DF, to specified dimensions
Supported at each end: 24F-V4
More than two supports, or cantilevered: 24F-V8
C. Columns: DF/DF, to specified dimensions: 24F-V4

604 Structural Composite Lumber:
A. LVL (Laminated Veneer Lumber) 1.9E – Trus Joist Microllam or equal
B. PSL (Parallel Strand Lumber) 2.0E – Trus Joist Parallam or equal
C. LSL (Laminated Sheet Lumber) 1.55E Structural – Trus Joist TimberStrand or equal
D. LSL (Laminated Sheet Lumber) 1.3E Non-Structural – Trus Joist TimberStrand or equal
E. I-Joists – Trus Joist TJI or equal

605 Trusses:
A. Pre-Fabricated Trusses: Design by fabricator to fit dimensions indicated on plans. Design is to comply with TPI-85. Fabricator is responsible for designing necessary bridging and bracing. Contractor responsible for bracing required during erection. Submit shop drawings signed and sealed by a licensed engineer to project engineer.

606 Sheathing:
A. Roof Sheathing: APA rated sheathing, exposure 1. Minimum panel span rating of 32/16 with a minimum thickness of 7/16". Grade mark by APA or other approved agency. Minimum attachment to supporting members: 8d nails, 6"o.c. at panel edges, 12"o.c. at interior of panel.
B. Floor Sheathing: APA rated sheathing. Minimum panel span rating 48/24 with a minimum thickness of ¾". Grade mark by APA or other approved agency. Minimum attachment to supporting members: 10d nails, 6"o.c. at panel edges, 12"o.c. at interior of panel.
C. Wall Sheathing: APA rated sheathing, exposure 1. Minimum panel span rating of 24/0 with a minimum thickness of 7/16". Grade mark of APA or other approved agency. Minimum attachment to supporting members: 8d nails, 6"o.c. at panel edges, 12"o.c. at interior of panel.

607 Pressure Treated Lumber:
A. Sill plates and foundation plates in contact with concrete - #3 Hem, PT to comply with AWPB LP-2 Stamp .25#/ft.^3 specifications and conform to ICC standards.
B. All purpose construction lumber and timbers - #2 & BTR Hem, PT to comply with with AWPB LP-22 Stamp .40#/ft.^3 specifications and conform to ICC standards.

608 Trim:
A. Furnish and install necessary trim and molding including miscellaneous hardware.

Division 0800 – Openings

801 Doors:
A. Door sizes shall be as noted on plans, with type, finishes, and hardware as selected by owner. All egress doors shall be readily openable from the side which egress is to be made without the use of a key or special knowledge or effort.
B. Opaque door envelope assembly requirements (U-Value Per NFRC 100):
Swinging door = U-0.370
Nonswiging door = U-0.310
C. Entrance Door: U-0.63, SHGC 0.33, VT 1.10
D. All thermal envelope doors shall be 1¾" thick minimum and be weather-stripped (do not use sticky back foam).

802 Windows:
A. Window brand and style shall be as directed by owner. Sizes shall be as noted on plans. Sizes shown on plans are nominal only. Verify rough opening before framing.
B. Envelope assembly requirements (U-Value Per NFRC 100):
Fixed = U-0.36, SHGC 0.36, VT 1.10
Operable = U-0.45, SHGC 0.33, VT 1.10
Skylights = U-0.50, SHGC 0.40
C. Windows shall be set onto a bead of caulking.
D. Glass doors and enclosures for showers, hot tubs, whirlpools, saunas, steam rooms, and bathtubs, fixed, swinging or sliding glazing in doors and storm doors, and all glazing and mirrors within 24" of doors or within 18" of floors, and all glazing in railings and glazing used in barriers around swimming pools and spas shall be tempered and permanently marked per the code. See code exceptions.

803 General Fenestration & Doors:
A. Air leakage per ASHRAE 90.1-2019 section 5.8.3. See Table 5.8.3.1 & 5.8.3.2
B. The U-factor, SHGC, VT, and air leakage rate for all manufactured fenestration products shall be determined by a laboratory accredited by a nationally recognized accreditation organization, such as the National Fenestration Rating Council.

All manufactured and site-built fenestration and door products shall be labeled, or a signed and dated certificate shall be provided, by the manufacturer, listing the U-factor, SHGC, VT, and air leakage rate. Exception: Doors with less than 25% glazing are not required to list SHGC and VT.

C. U-factors shall be determined in accordance with NFRC 100.
D. SHGC for the overall fenestration area shall be determined in accordance with NFRC 200.
E. VT shall be determined in accordance with NFRC 200. VT shall be verified and certified by the manufacturer.

Table 5.8.3.1 Maximum Air Leakage for Materials and Assemblies

Continuous Air Barrier	Maximum Air Leakage, cfm/ft²	Minimum Test Pressure, psf	Test Method
Materials [a]	0.004	1.57	ASTM E2178
Assemblies [b]	0.04	1.57	ASTM E2357, ASTM E1677, ASTM E1680, ASTM E283

a. The following materials comply with the requirements in Table 5.8.3.1:
1. Plywood—minimum 3/8 in.
2. Oriented strand board—minimum 3/8 in.
3. Extruded polystyrene insulation board—minimum 1/2 in.
4. Foil-faced polyisocyanurate insulation board—minimum 1/2 in.
5. Exterior gypsum sheathing or interior gypsum board—minimum 1/2 in.
6. Cement board—minimum 1/2 in.
7. Built-up roofing membrane
8. Modified bituminous *roof* membrane
9. Single-ply *roof* membrane
10. A Portland cement/sand parge, stucco, or gypsum plaster—minimum 1/2 in. thick
11. Cast-in-place and precast concrete
12. Sheet metal
13. Closed-cell 2 lb/ft^3 nominal density spray polyurethane foam—minimum 1 in.

b. The following assemblies comply with the requirements in Table 5.8.3.1:
1. Concrete masonry *walls* that are
(a) fully grouted or
(b) painted to fill the pores
2. Shale or clay masonry units that are assembled as a solid *wall* without weeps, with nominal width of 4 in. or more, and with Type S mortar

Table 5.8.3.2 Maximum Air Leakage for *Fenestration* and *Doors*

Fenestration and *Door* Products	Maximum Air Leakage, cfm/ft²	Minimum Test Pressure, psf	Test Methods
Glazed swinging *entrance doors*, glazed power-operating sliding *entrance doors*, glazed power-operated folding *entrance doors*, and revolving *doors*	1.0	1.57	AAMA/WDMA/CSA 101/I.S.2/A440, NFRC 400, or ASTM E283;
Curtainwall and storefront glazing	0.06	1.57	NRFC 400 or ASTM 283
Unit *skylights* having condensation weepage openings	0.3	1.57	AAMA/WDMA/CSA 101/I.S.2/A440 or NFRC 400
	OR		
	0.5	6.24	AAMA/WDMA/CSA 101/I.S.2/A440
Nonswinging doors intended for vehicular access and material transportation, with a minimum opening rate of 32 in./s	1.3	1.57	ANSI/DASMA 105, NFRC 400, or ASTM E283
Other *opaque nonswinging doors*, glazed *sectional garage doors*, and upward acting glazed *nonswinging*	0.4	1.57	ANSI/DASMA 105, NFRC 400, or ASTM E283
All other products	0.2	1.57	AAMA/WDMA/CSA 101/I.S.2/A440 or NFRC 400
	OR		
	0.3	6.24	AAMA/WDMA/CSA 101/I.S.2/A440

BUILDING ENVELOPE NOTES (ASHRAE 90.1-2019)
- PER 5.8.1.7 - EXTERIOR INSULATION SHALL BE PROTECTED AGAINST DAMAGE FROM:
1. SUNLIGHT
2. MOISTURE
3. WIND
4. LANDSCAPING
5. EQUIPMENT MAINENANCE
- Per 5.8.1.7.3 - INSULATION IN CONTACT WITH THE GROUND HAS <=0.3% WATER ABSORPTION RATE PER ASTM C272
- All INSULATION TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS
- PER 5.8.1.4 EAVES TO BE BAFFLED TO DEFLECT AIR ABOVE INSULATION
- PER 5.8.1.5 INSULATION TO BE INSTALLED IN SUBSTANTIAL CONTACT WITH THE INSIDE SURFACE SEPARATING CONDITIONED FROM UNCONDITIONED SPACE
- PER 5.8.1.7.1 - ACCESS TO ATTIC TO BE PROVIDED IN MANNER THAT PROTECTS THE INSULATION FROM BEING COMPRESSED OR DAMAGED
- ENTRY DOORS TO RETAIL SPACE TO BE PROVIDED WITH AIR CURTAIN PER ASHRAE 90.1-2019 SECTION 10.4.5 AS REQUIRED BY ASHRAE 90.1-2019 SECTION 5.4.3.3.3 EXCEPTION 9
- CONTINUOUS AIR BARRIER TO BE INSTALLED PER 5.4.3.1:
1. SEE AIR BARRIER DETAILS ON SHT A301

PROPOSED BUILDING ENVELOPE VALUES (SEE COMCHECK)
- ROOF (ATTIC AND OTHER) = U-0.017
1. R-10 CONT RIGID INSULATION OVER ROOF SHTG
2. R-49 BLOWN IN BATT INSULATION
- WALLS (MASS) = U-0.075
1. 8" FULLY GROUTED NORMAL WEIGHT CMU WALL
2. 2x4 STUD WALL W/ STUDS 24"o.c. & R-13 BATT INSULATION
- UNHEATED SLAB = PERIMETER R-15 FOR 24"
- SWINGING DOORS <50% GLAZING = U-0.370
- NONSWINGING DOORS = U-0.310
- FENESTRATION:
1. FIXED = U-0.36, SHGC 0.36
2. OPERABLE = U-0.45, SHGC 0.33
- FENESTRATION VT = 1.00

SHEET INDEX

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STRUCTURAL REGISTERED PROFESSIONAL ENGINEER
86970PE
DIGITALLY SIGNED
OREGON
DECEMBER 9, 2012
PETER KELLY DEGNER
EXPIRES 12/31/23

PIONEER ENGINEERING LLC
PHONE: 541-746-5841
pioneerengr.com
200 E 11th Ave. Suite 270
Eugene, OR 97401

Mini Pet Mart
974 W 6th Ave
Eugene, OR 97402

Project Information

REV. #	DATE	REVISION	CHKD
			DWN

DESIGNED BY: DKC
DRAWN BY: DKC
CHKD BY: PKD
SCALE: AS NOTED
DATE: 09/15/2022
W.O. NUMBER: 21-029
Drawing File: C:\Users\David\OneDrive - Pioneer Engineering\2021\029 Mini Pet Mart\drawings\21-029 08.22.22.rvt
9/15/2022 2:08:55 PM

G100

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FASTENING TABLE PER OSSC 2304.10.1

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
Roof		
1. Blocking between ceiling joists, rafters or trusses to top plate or other framing below	3-8d common ($2^1/_2$" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, $^7/_{16}$" crown	Each end, toenail
Blocking between rafters or truss not at the wall top plate, to rafter or truss	2-8d common ($2^1/_2$" × 0.131") 2-3" × 0.131" nails 2-3" 14 gage staples	Each end, toenail
	2-16 d common ($3^1/_2$" × 0.162") 3-3" × 0.131" nails 3-3" 14 gage staples	End nail
Flat blocking to truss and web filler	16d common ($3^1/_2$" × 0.162") @ 6" o.c. 3" × 0.131" nails @ 6" o.c. 3" × 14 gage staples @ 6" o.c	Face nail
2. Ceiling joists to top plate	3-8d common ($2^1/_2$" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, $^7/_{16}$" crown	Each joist, toenail
3. Ceiling joist not attached to parallel rafter, laps over partitions (no thrust) (see Section 2308.7.3.1, Table 2308.7.3.1)	3-16d common ($3^1/_2$" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, $^7/_{16}$" crown	Face nail
4. Ceiling joist attached to parallel rafter (heel joint) (see Section 2308.7.3.1, Table 2308.7.3.1)	Per Table 2308.7.3.1	Face nail
5. Collar tie to rafter	3-10d common (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, $^7/_{16}$" crown	Face nail
6. Rafter or roof truss to top plate (See Section 2308.7.5, Table 2308.7.5)	3-10 common (3" × 0.148"); or 3-16d box ($3^1/_2$" × 0.135"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131 nails; or 4-3" 14 gage staples, $^7/_{16}$" crown	Toenail[c]
7. Roof rafters to ridge valley or hip rafters; or roof rafter to 2-inch ridge beam	2-16d common ($3^1/_2$" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, $^7/_{16}$" crown; or	End nail
	3-10d common (3" × 0.148"); or 4-16d box ($3^1/_2$" × 0.135"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, $^7/_{16}$" crown	Toenail

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
Wall		
8. Stud to stud (not at braced wall panels)	16d common ($3^1/_2$" × 0.162");	24" o.c. face nail
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3-3" 14 gage staples, $^7/_{16}$" crown	16" o.c. face nail
9. Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d common ($3^1/_2$" × 0.162"); or	16" o.c. face nail
	16d box ($3^1/_2$" × 0.135"); or	12" o.c. face nail
	3" × 0.131" nails; or 3-3" 14 gage staples, $^7/_{16}$" crown	12" o.c. face nail
10. Built-up header (2" to 2" header)	16d common ($3^1/_2$" × 0.162"); or	16" o.c. each edge, face nail
	16d box ($3^1/_2$" × 0.135")	12" o.c. each edge, face nail
11. Continuous header to stud	4-8d common ($2^1/_2$" × 0.131"); or 4-10d box (3" × 0.128")	Toenail
12. Top plate to top plate	16d common ($3^1/_2$" × 0.162"); or	16" o.c. face nail
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, $^7/_{16}$" crown	12" o.c. face nail
13. Top plate to top plate, at end joints	8-16d common ($3^1/_2$" × 0.162"); or 12-10d box (3" × 0.128"); or 12-3" × 0.131" nails; or 12-3" 14 gage staples, $^7/_{16}$" crown	Each side of end joint, face nail (minimum 24" lap splice length each side of end joint)
14. Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common ($3^1/_2$" × 0.162"); or	16" o.c. face nail
	16d box ($3^1/_2$" × 0.135"); or 3" × 0.131" nails; or 3" 14 gage staples, $^7/_{16}$" crown	12" o.c. face nail
15. Bottom plate to joist, rim joist, band joist or blocking at braced wall panels	2-16d common ($3^1/_2$" × 0.162"); or 3-16d box ($3^1/_2$" × 0.135"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, $^7/_{16}$" crown	16" o.c. face nail
16. Stud to top or bottom plate	4-8d common ($2^1/_2$" × 0.131"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, $^7/_{16}$" crown; or	Toenail
	2-16d common ($3^1/_2$" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, $^7/_{16}$" crown	End nail
17. Top plates, laps at corners and intersections	2-16d common ($3^1/_2$" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, $^7/_{16}$" crown	Face nail

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
Wall		
18. 1" brace to each stud and plate	2-8d common ($2^1/_2$" × 0.131"); or 2-10d box (3" × 0.128"); or 2-3" × 0.131" nails; or 2-3" 14 gage staples, $^7/_{16}$" crown	Face nail
19. 1" × 6" sheathing to each bearing	2-8d common ($2^1/_2$" × 0.131"); or 2-10d box (3" × 0.128")	Face nail
20. 1" × 8" and wider sheathing to each bearing	3-8d common ($2^1/_2$" × 0.131"); or 3-10d box (3" × 0.128")	Face nail
Floor		
21. Joist to sill, top plate, or girder	3-8d common ($2^1/_2$" × 0.131"); or floor 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, $^7/_{16}$" crown	Toenail
22. Rim joist, band joist, or blocking to top plate, sill or other framing below	8d common ($2^1/_2$" × 0.131"); or 10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, $^7/_{16}$" crown	6" o.c., toenail
23. 1" × 6" subfloor or less to each joist	2-8d common ($2^1/_2$" × 0.131"); or 2-10d box (3" × 0.128")	Face nail
24. 2" subfloor to joist or girder	2-16d common ($3^1/_2$" × 0.162")	Face nail
25. 2" planks (plank & beam – floor & roof)	2-16d common ($3^1/_2$" × 0.162")	Each bearing, face nail
26. Built-up girders and beams, 2" lumber layers	20d common (4" × 0.192")	32" o.c., face nail at top and bottom staggered on opposite sides
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, $^7/_{16}$" crown	24" o.c. face nail at top and bottom staggered on opposite sides
	And: 2-20d common (4" × 0.192"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, $^7/_{16}$" crown	Ends and at each splice, face nail
27. Ledger strip supporting joists or rafters	3-16d common ($3^1/_2$" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, $^7/_{16}$" crown	Each joist or rafter, face nail
28. Joist to band joist or rim joist	3-16d common ($3^1/_2$" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, $^7/_{16}$" crown	End nail
29. Bridging or blocking to joist, rafter or truss	2-8d common ($2^1/_2$" × 0.131"); or 2-10d box (3" × 0.128"); or 2-3" × 0.131" nails; or 2-3" 14 gage staples, $^7/_{16}$" crown	Each end, toenail

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION	
		Edges (inches)	Intermediate supports (inches)
Wood structural panels (WSP), subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing[a]			
30. $^3/_8$" – $^1/_2$"	6d common or deformed (2" × 0.113") (subfloor and wall)	6	12
	8d common or deformed ($2^1/_2$" × 0.131") (roof) or RSRS-01 ($2^3/_4$" × 0.113") nail (roof)[d]	6	12
	$2^3/_8$" × 0.113" nail (subfloor and wall)	6	12
	$1^3/_8$" 16 gage staple, $^7/_{16}$" crown (subfloor and wall)	4	8
	$2^3/_8$" × 0.113" nail (roof)	4	8
	$1^3/_4$" 16 gage staple, $^7/_{16}$" crown (roof)	3	6
31. $^{19}/_{32}$" – $^3/_4$"	8d common ($2^1/_2$" × 0.131"); or 6d deformed (2" × 0.113") (subfloor and wall)	6	12
	8d common or deformed ($2^1/_2$" × 0.131") (roof) or RSRS-01 ($2^1/_4$" × 0.113") nail (roof)[d]	6	12
	$2^3/_8$" × 0.113" nail; or 2" 16 gage staple, $^7/_{16}$" crown	4	8
32. $^7/_8$" – $1^1/_4$"	10d common (3" × 0.148"); or 8d deformed ($2^1/_2$" × 0.131")	6	12
Other exterior wall sheathing			
33. $^1/_2$" fiberboard sheathing[b]	$1^1/_2$" galvanized roofing nail ($^7/_{16}$" head diameter); or $1^1/_4$" 16 gage staple with $^7/_{16}$" or 1" crown	3	6
34. $^{25}/_{32}$" fiberboard sheathing[b]	$1^1/_4$" galvanized roofing nail ($^7/_{16}$" diameter head); or $1^1/_2$" 16 gage staple with $^7/_{16}$" or 1" crown	3	6
Wood structural panels, combination subfloor underlayment to framing			
35. $^3/_4$" and less	8d common ($2^1/_2$" × 0.131"); or 6d deformed (2" × 0.113")	6	12
36. $^7/_8$" – 1"	8d common ($2^1/_2$" × 0.131"); or 8d deformed ($2^1/_2$" × 0.131")	6	12
37. $1^1/_8$" – $1^1/_4$"	10d common (3" × 0.148"); or 8d deformed ($2^1/_2$" × 0.131")	6	12
Panel siding to framing			
38. $^1/_2$" or less	6d corrosion-resistant siding ($1^3/_4$" × 0.106"); or 6d corrosion-resistant casing (2" × 0.099")	6	12
39. $^5/_8$"	8d corrosion-resistant siding ($2^1/_2$" × 0.128"); or 8d corrosion-resistant casing ($2^1/_4$" × 0.113")	6	12

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION	
		Edges (inches)	Intermediate supports (inches)
Wood structural panels (WSP), subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing[a]			
Interior paneling			
40. $^1/_4$"	4d casing ($1^1/_2$" × 0.080"); or 4d finish ($1^1/_2$" × 0.072")	6	12
41. $^3/_8$"	6d casing (2" × 0.099"); or 6d finish (Panel supports at 24 inches)	6	12

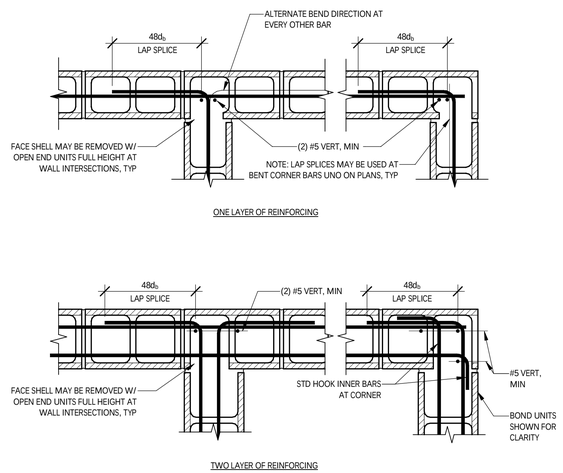
For SI: 1 inch = 25.4 mm.

a. Nails spaced at 6 inches at intermediate supports where spans are 48 inches or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing.

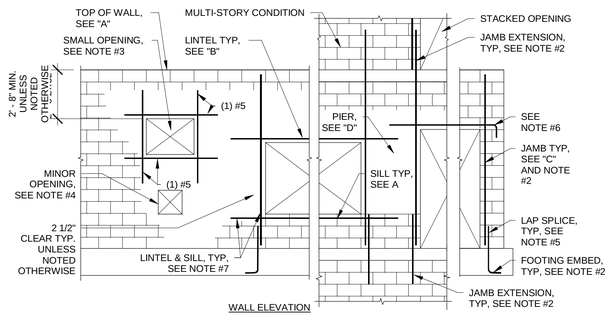
b. Spacing shall be 6 inches on center on the edges and 12 inches on center at intermediate supports for nonstructural applications. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked).

c. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule and the ceiling joist is fastened to the top plate in accordance with this schedule, the number of toenails in the rafter shall be permitted to be reduced by one nail.

d. RSRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.

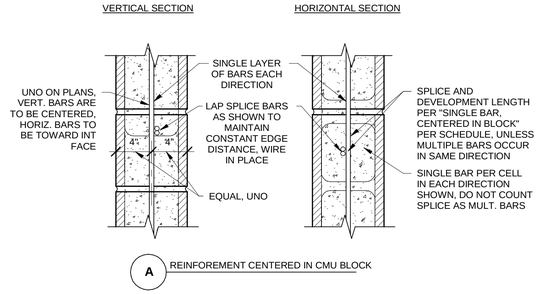


1 CMU Typ Reinf At Corners - UNO
N.T.S.

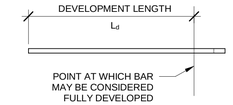


NOTES:
1. SEE PLANS FOR TYP AND ADDITIONAL REINFORCEMENT
2. FOR OPENINGS 3' - 0" OR LARGER IN WIDTH USE FULL HEIGHT JAMB BARS, EXTEND TO TOP OF WALL AT UPPER/SINGLE STORY, 48d MIN PAST FLOOR AND INTO FOOTING
3. AT OPENINGS LESS THAN 3' - 0" IN WIDTH, EXTEND JAMB BARS 48d PAST EDGE OF OPENING
4. FOR MINOR OPENINGS THAT DO NOT INTERRUPT TYP REINFORCING, ARE NO LARGER THAN 24" SQUARE, AND ARE AT LEAST 24" FROM ADJACENT OPENINGS OR WALL EDGE, NO ADDITIONAL REINFORCING IS REQUIRED UNLESS NOTED OTHERWISE ON PLANS
5. USE A TYP LAP SPLICE UNLESS NOTED OTHERWISE ON PLANS
6. WHERE FULL EXTENSION IS NOT POSSIBLE, EXTEND BARS AS FAR AS POSSIBLE AND USE A STD HOOK
7. EXTEND LINTEL AND SILL BARS 48d MIN PAST EDGE OF OPENING
8. AT FULL HEIGHT JAMB BARS, THE WEB AND SHELL MAY BE REMOVED TO FACILITATE INSTALLATION. THE CONTRACTOR SHALL ENSURE THAT GROUTING WILL NOT BE COMPROMISED IF THIS OPTION IS USED

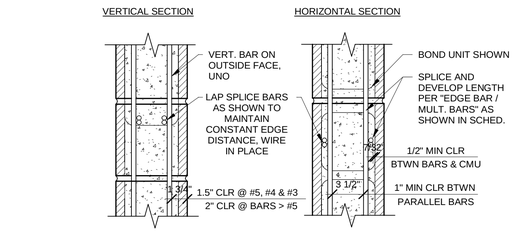
3 Typ CMU Wall Openings
N.T.S.



A REINFOREMENT CENTERED IN CMU BLOCK

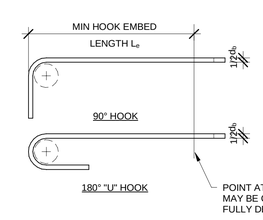


D STRAIGHT DEVELOPMENT



B REINFORCEMENT AT EDGE OF CMU BLOCK / MULTIPLE BARS

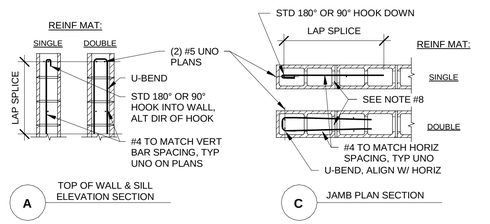
	BAR SIZE	STD HOOK L_e (in)	$48d_b$ (in)	$72d_b$ (in)	LAP SPLICE & DEVELOP LENGTH L_d (in) UNO: EDGE BAR / MULT. BARS	LAP SPLICE & DEVELOP LENGTH L_d (in) UNO: SINGLE BAR, CENTERED
ALL CMU	#3	5	18	27	18	18
	#4	7	24	36	36	24
	#5	8	30	45	45	30
	#6	10	36	54	54	36
	#7	12	42	63	63	63
	#8	13	48	72	72	72
	#9	15	54	81	81	81



C STANDARD HOOKS

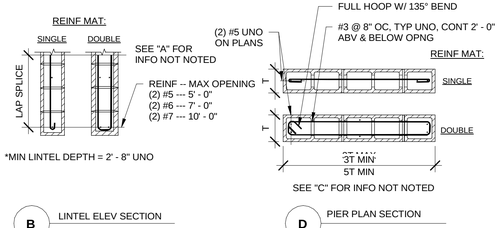
NOTES:
1. VALUES SHOWN ARE FOR GRADE 60 REINF. DEVELOPED IN CMU
2. REFER TO TYP REINF. DETAILS FOR INFO NOT SHOWN, AND FOR DEVELOPMENT IN CONC
3. LAP SPLICES OF REINF. WITH WORKING STRESS LEVELS HIGHER THAN 80% Fs SHALL BE $72d_b$ LONG, OTHERWISE $48d_b$ MAY BE USED. LAP SPLICES SHOWN ON THIS SCHED. AND THESE PLANS ARE BASED ON THIS RULE.

2 CMU Wall Reinf - Typ
N.T.S.



A TOP OF WALL & SILL ELEVATION SECTION

C JAMB PLAN SECTION



B LINTEL ELEV SECTION

D PIER PLAN SECTION

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STRUCTURAL
REGISTERED PROFESSIONAL ENGINEER
86970PE
DIGITALLY SIGNED
OREGON
DECEMBER 31, 2012
PETER KELLY DEGNER
EXPIRES 12/31/23

PIONEER ENGINEERING LLC
200 E 11th Ave. Suite 270
Eugene, OR 97401
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Mini Pet Mart

974 W 6th Ave
Eugene, OR 97402

Structural Information

REV. #	DATE	REVISION	DWN	CHK'D

DESIGNED BY: DKC
DRAWN BY: DKC
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 09/15/2022
W.O. NUMBER: 21-029

S100

Drawing File: C:\Users\David\OneDrive - Pioneer Engineering\2021\029 Mini Pet Mart\drawings\s21-029 08.22.22.rvt
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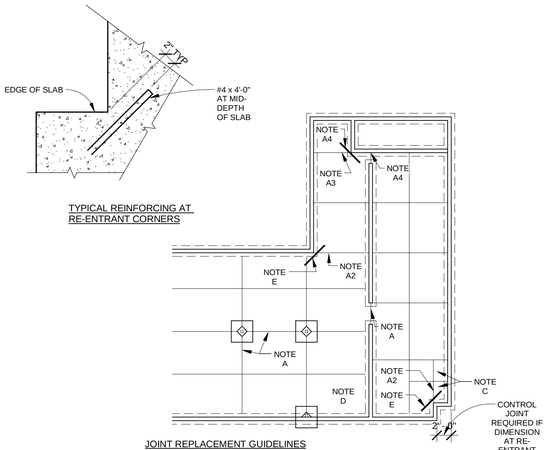
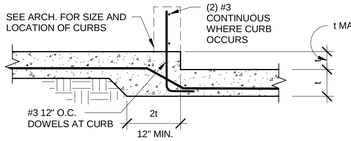


TYPICAL REINFORCING AT RE-ENTRANT CORNERS

JOINT REPLACEMENT GUIDELINES

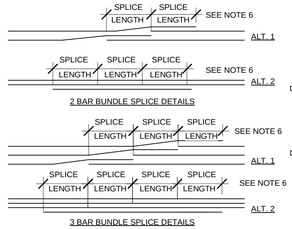
A. LOCATE CONTROL JOINTS AND/OR CONSTRUCTION JOINTS AT
   1. COLUMN CENTERLINES
   2. RE-ENTRANT CORNERS OF BUILDING
   3. AT CORNERS OF INTERIOR MASONRY WALLS AND FOOTINGS
   4. AT OPENINGS IN MASONRY WALLS WITH FOOTINGS
B. SPACE JOINTS NO MORE THAN THE FOLLOWING: 10' o.c. EA. WAY
C. SUBDIVIDE SLAB AREAS TO LIMIT LENGTH TO WIDTH RATIO OF SLAB AREA TO 3 TO 1 MAXIMUM. PROVIDE SQUARE SLAB AREAS WHERE PRACTICAL
D. PROVIDE DIAMOND SHAPED JOINT PATTERN AROUND COLUMNS
E. PROVIDE (2) #4 BARS AT RE-ENTRANT CORNERS OF SLAB PER TYPICAL DETAIL

1 Typ. Slab on Grade Joint Layout
N.T.S.



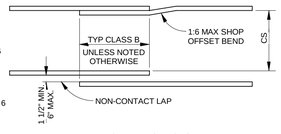
1. NOTES FOR SLAB ON GRADE THICKNESS, REINF. AND SUBGRADE PREP. SEE PLAN
2. FOR LOCATION OF EXPANSION JOINTS SEE ARCH.

5 Slab on Grade: Curb and Slab Depression
N.T.S.

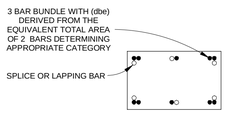


BUNDLED LAP SPLICES

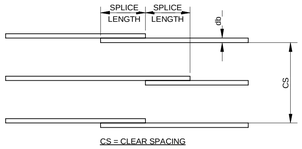
NOTE: BARS SHALL BE BUNDLED WITH NO MORE THAN TWO BARS IN THE SAME PLANE (. . .)



TYPICAL LAP SPLICES



BAR SPACING



CS = CLEAR SPACING

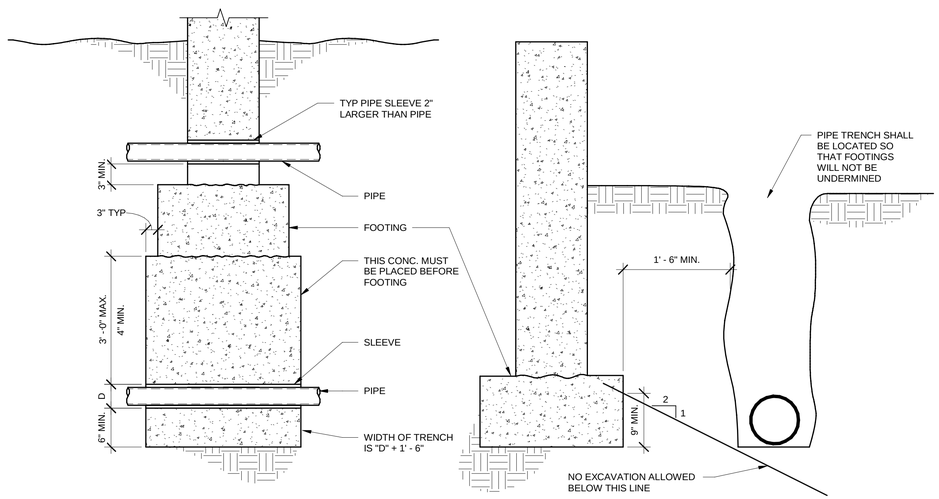
STAGGERED SPLICING

BAR			AREA (SQ. IN.)	0.11		0.20		0.31		0.44		0.60		0.79		1.00		1.27		1.56	
			DIAMETER db	0.375		0.500		0.625		0.750		0.875		1.000		1.128		1.270		1.410	
LAP CLASS	CATEGORY	DESCRIPTION	NORMAL WEIGHT CONCRETE f'c PSI	#3		#4		#5		#6		#7		#8		#9		#10		#11	
				TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.
CLASS B	1	COVER ≥ 2db AND CLEAR SPACING ≥ 4db	3000	21	16	23	18	28	22	34	26	49	38	56	43	63	49	71	55	79	61
			4000	21	16	21	16	25	19	29	23	43	33	49	37	55	42	?	47	68	53
			5000	21	16	21	16	22	17	26	20	38	29	44	34	49	38	55	43	61	47
			6000	21	16	21	16	21	16	24	19	35	27	40	31	45	34	50	39	56	43
	2	ALL OTHERS	3000	28	22	38	29	47	36	56	43	81	63	93	72	105	49	118	91	131	101
			4000	25	19	33	25	41	31	49	37	71	54	81	62	91	42	102	79	114	87
			5000	22	17	29	23	36	28	44	34	63	49	72	56	81	38	92	71	102	78
			6000	21	16	27	21	33	26	40	31	58	45	66	51	74	34	84	64	93	71
	3	COVER <db OR CLEAR SPACING ≥db	3000					70	54	84	64	122	94	139	107	157	49	177	136	196	151
			4000					61	47	73	56	106	81	121	93	136	42	153	118	170	131
			5000					54	42	65	50	95	73	108	83	121	38	137	105	152	117
			6000					50	36	59	46	86	67	99	76	111	85	125	96	139	107

REINFORCING EMBEDMENT NOTES

1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.
2. BOTTOM BARS ARE ALL VERTICAL BARS AND HORIZONTAL BARS WITH LESS THAN 12" OF CONCRETE CAST BELOW HORIZONTAL BARS.
3. FOR LIGHTWEIGHT CONCRETE MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.3
4. FOR GRADE 75 REINFORCING MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.25
5. FOR 3 BAR BUNDLE MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.20. FOR 4 BAR BUNDLE MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.33.
6. FOR BUNDLED BARS, AN EFFECTIVE BAR DIAMETER SHALL BE USED FOR DETERMINING COVER AND SPACING LIMITATIONS.
   A. FOR 2 BAR BUNDLE dbe = 1.60 (√BAR AREA)
   B. FOR 3 BAR BUNDLE dbe = 1.95 (√BAR AREA)
   C. FOR 4 BAR BUNDLE dbe = 2.26 (√BAR AREA)

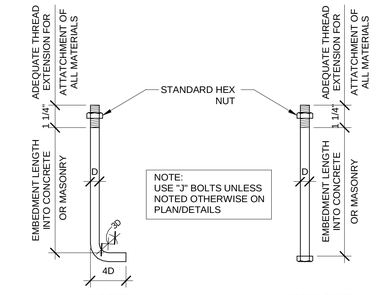
2 Typ. Reinf. Grade 60 Splice Sched.
N.T.S.



PIPES THROUGH FOUNDATION

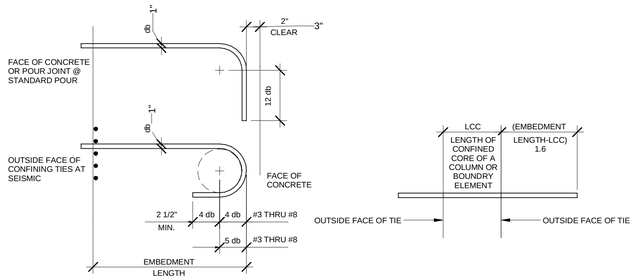
PIPE AND TRENCH AT FOUNDATION

6 Typ Pipe Thru Foundation Details (ORIG)
N.T.S.



BOLT DIAMETER "D"	MINIMUM EMBEDMENT	
	VERTICAL ANCHOR BOLTS	HORIZONTAL ANCHOR BOLTS
1/2"	7"	5"
5/8"	7"	5"
3/4"	7"	5"
7/8"	8"	6"
1"	9"	7"
1 1/8"	10"	8"

3 Typ Anchor Bolts
N.T.S.

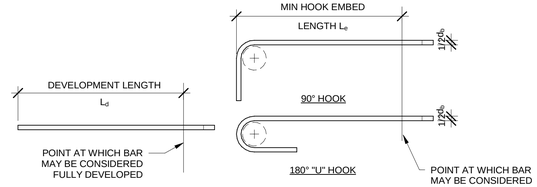


STANDARD HOOK NOTES:

1. ALL HOOKED BARS SHALL EXTEND AS FAR AS POSSIBLE TO THE OPPOSITE FACE WITH A MINIMUM OF 2" END COVER AND EMBEDMENT NOT LESS THAN SCHEDULE
2. MINIMUM SIDE COVER = 2 1/2"
3. Ø = 6 db (FOR #3 THROUGH #8)
   Ø = 8 db (FOR #9, #10 AND #11)
   Ø = 10 db (FOR #14 AND #18)

STRAIGHT BARS AT A JOINT NOTES:

1. STRAIGHT BARS TERMINATED AT A JOINT SHALL PASS THROUGH THE CONFINED CORE OF A SEISMIC COLUMN OR SHEAR WALL BOUNDARY ELEMENT. ANY PORTION OF THE STRAIGHT EMBEDMENT NOT WITHIN THE CONFINED CORE SHALL BE INCREASED BY A FACTOR OF 1.6



STRAIGHT DEVELOPMENT

STANDARD HOOKS

	BAR SIZE	STD HOOK L_e (in)	$48d_b$ (in)	$72d_b$ (in)	LAP SPLICE & DEVELOP LENGTH L_d (in) UNO	
					EDGE BAR / MULT. BARS	SINGLE BAR, CENTERED
ALL CMU	#3	5	18	27	18	18
	#4	7	24	36	36	24
	#5	8	30	45	45	30
	#6	10	36	54	54	36
	#7	12	42	63	63	63
	#8	13	48	72	72	72
	#9	15	54	81	81	81

NOTES:

1. VALUES SHOWN ARE FOR GRADE 60 REINF. DEVELOPED IN CMU
2. REFER TO TYP REINF. DETAILS FOR INFO NOT SHOWN, AND FOR DEVELOPMENT IN CONC.
3. LAP SPLICES OF REINF. WITH WORKING STRESS LEVELS HIGHER THAN 80% Fs SHALL BE $72d_b$ LONG, OTHERWISE $48d_b$ MAY BE USED. LAP SPLICES SHOWN ON THIS SCHED. AND THESE PLANS ARE BASED ON THIS RULE.

4 Rebar Development Lengths
N.T.S.

BAR			AREA (SQ. IN.)	0.11		0.20		0.31		0.44		0.60		0.79		1.00		1.27		1.56	
			DIAMETER db	0.375		0.500		0.625		0.750		0.875		1.000		1.128		1.270		1.410	
DEVELOPMENT TYP	CATEGORY	DESCRIPTION	NORMAL WEIGHT CONCRETE f'c PSI	#3		#4		#5		#6		#7		#8		#9		#10		#11	
				TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.	TOP	BOT.
STRAIGHT TENSION EMBEDMENT (CLASS A)	1	COVER ≥ 2db AND CLEAR SPACING ≥ 4db	3000	16	12	18	14	22	17	26	20	38	29	43	33	49	37	55	42	61	47
			4000	16	12	16	12	19	15	23	18	33	25	37	29	42	33	47	37	53	41
			5000	16	12	16	12	17	13	20	16	29	23	34	26	38	29	43	55	47	36
			6000	16	12	16	12	16	12	19	24	27	21	31	24	34	27	39	30	43	33
	2	ALL OTHERS	3000	22	17	29	22	36	28	43	33	63	48	72	55	81	62	91	70	101	78
			4000	19	15	25	19	31	24	37	29	54	42	62	48	70	54	79	61	87	67
			5000	17	13	23	17	28	22	34	26	49	38	56	43	63	48	71	54	78	60
			6000	16	12	21	16	26	20	31	24	45	34	51	39	57	44	64	50	71	55
	3	COVER <db OR CLEAR SPACING ≥db	3000					54	42	65	50	94	72	107	33	121	93	136	105	151	116
			4000					47	36	56	43	81	63	93	72	105	81	118	91	131	101
			5000					42	32	50	39	73	56	83	64	94	72	106	81	117	90
			6000					16	12	19	24	27	51	76	59	85	66	96	74	107	83
	SEISMIC	STRAIGHT BAR ANCHORED IN SEISMIC FRAME COLUMN	3000	23	16	30	22	37	27	45	32	52	37	59	43	67	48	75	54	84	60
			4000	21	15	26	19	32	23	39	28	45	32	52	37	58	42	65	47	73	52
			5000	21	15	23	17	29	21	35	25	40	29	46	33	52	37	59	42	65	47
			6000	21	15	21	15	27	19	32	23	37	27	42	30	47	34	53	38	59	43
HOOK EMBEDMENT	STANDARD	ALL OTHERS	3000	6		8		10		12		14		16		18		20		22	
			4000	6		7		9		10		12		14		16		17		19	
			5000	6		6		8		9		11		12		14		16		17	
			6000	6		6		7		9		10		11		13		14		16	
	SEISMIC	HOOK ANCHORED IN SEISMIC FRAME COLUMN	3000	7		9		11		13		15		17		19		22		24	
			4000	6		8		10		11		13		15		17		19		21	
			5000	6		7		9		10		12		14		15		17		19	
			6000	6		6		8		9		11		12		14		16		17	

REINFORCING SPLICE NOTES

1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS
2. BOTTOM BARS ARE ALL VERTICAL BARS AND HORIZONTAL BARS WITH LESS THAN 12" OF CONCRETE CAST BELOW HORIZONTAL BARS
3. FOR LIGHTWEIGHT CONCRETE MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.3
4. FOR GRADE 75 REINFORCING MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.25
5. FOR 2 BAR BUNDLE MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.20. FOR 3 BAR BUNDLE MULTIPLY THE LENGTHS IN THE SCHDULE BY 1.33
6. FOR BUNDLED BARS, AN EFFECTIVE BAR DIAMTER SHALL BE USED FOR DETERMINING COVER AND SPACING LIMITATIONS
   A. FOR 2 BAR BUNDLE dbe = 1.60 (√BAR AREA)
   B. FOR 3 BAR BUNDLE dbe = 1.95 (√BAR AREA)

7 Typ Straight and Hooked Embedment Length Schedule
N.T.S.

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STRUCTURAL
REGISTERED PROFESSIONAL ENGINEER
86970PE
DIGITALLY SIGNED
OREGON
DECEMBER 9, 2022
PETER KELLY DEGNER
EXPIRES 12/31/23

PIONEER ENGINEERING LLC
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Eugene, OR 97401

Mini Pet Mart

974 W 6th Ave
Eugene, OR 97402

Structural Information

REV. #	DATE	REVISION	DWN	CHKD

DESIGNED BY: DKC
DRAWN BY: DKC
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 09/15/2022
W.O. NUMBER: 21-029

S101

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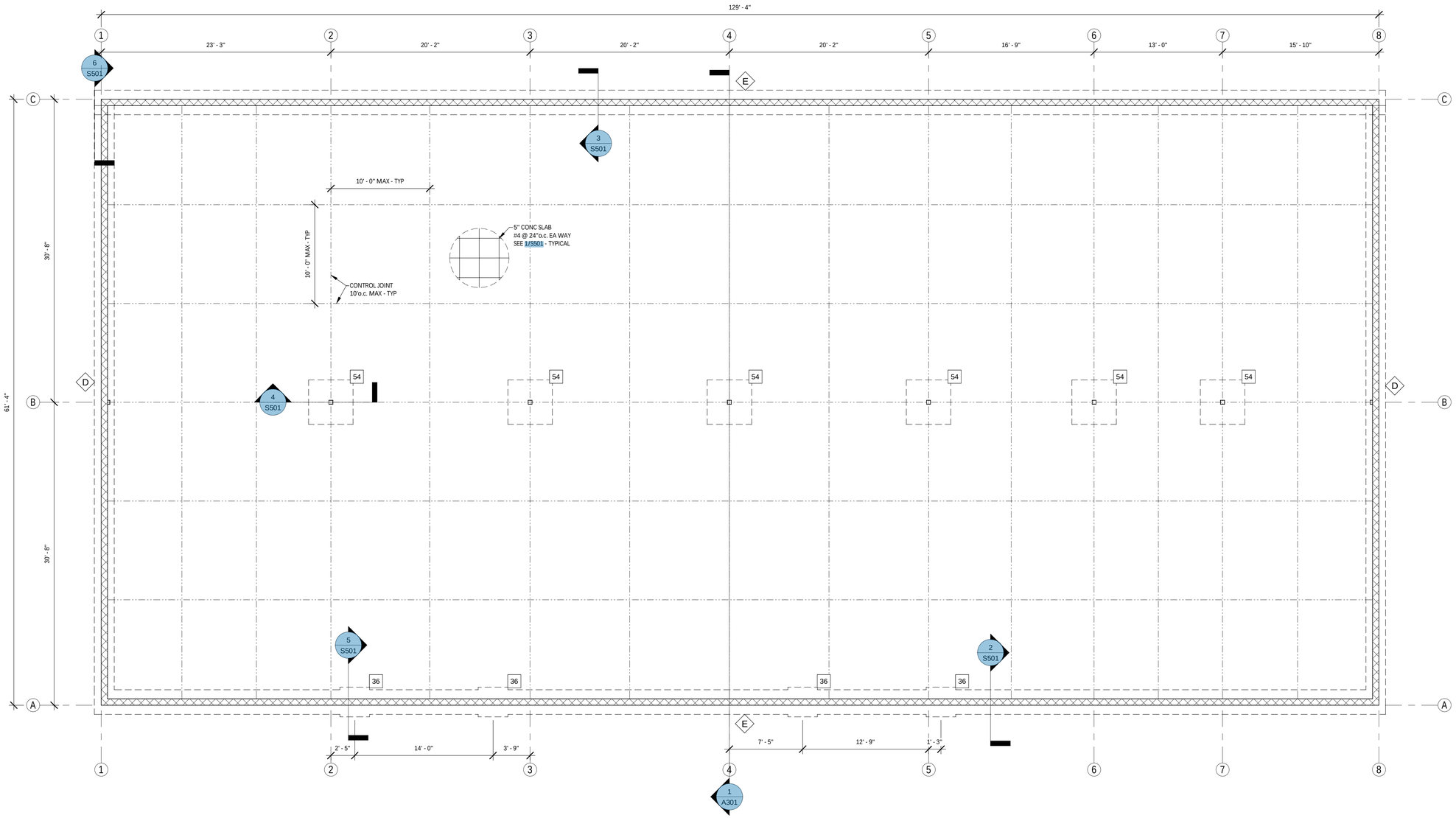

1 Foundation Plan
3/16" = 1'-0"

SOIL AND FILL NOTES

1. ALLOWABLE BEARING PRESSURE AND FILL NOTES BASED ON BRANCH ENGINEERING GEOTECHNICAL ENGINEERING INVESTIGATION REPORT DATED 07/02/2021.
2. ALL FOOTING SUBGRADE SHOULD BE EVALUATED BY THE PROJECT GEOTECHNICAL ENGINEER OR THEIR REPRESENTATIVE TO EVALUATE BEARING CONDITIONS. OBSERVATIONS SHOULD DETERMINE WHETHER ALL LOOSE OR SOFT MATERIAL, ORGANICS, UNSUITABLE FILL, PRIOR TOPSOIL ZONES, AND SOFTENED SUBGRADES (IF PRESENT) HAVE BEEN REMOVED. LOCALIZED DEEPENING OF FOOTING EXCAVATION MAY BE REQUIRED TO PENETRATE UNSUITABLE MATERIAL.
3. 12" OF COMPACTED AGGREGATE TO BE PLACED OVER APPROVED SUBGRADE; COMPACTION PER GEOTECH.
4. ALLOWABLE BEARING PRESSURE OF 1500 PSF FOR FOUNDATION PER GEOTECHNICAL INVESTIGATION WHEN ALL RECOMMENDATIONS ARE FOLLOWED.
5. BRANCH ENGINEERING TO INSPECT AND APPROVE ALL EXCAVATIONS AND COMPACTED FILL.

FOUNDATION LEGEND

- = 8x8x16 FULLY GROUTED CMU WALL; RUNNING BOND
  #5 VERT @ 24"o.c. W/ STANDARD HOOK INTO FOOTING
  #5 HORIZONTAL @ 32"o.c.
- = NON-BEARING WALL
- = CONTROL JOINT
- = HSS COLUMN

SPREAD FOOTING SCHEDULE

MARK	WIDTH	LENGTH	DEPTH	TOP REINFORCEMENT	BOTTOM REINFORCEMENT
36	3' - 0"	3' - 0"	12"	#4 8"o.c. EA WAY	#4 8"o.c. EA WAY
54	4' - 6"	4' - 6"	15"	#4 8"o.c. EA WAY	#5 12"o.c. EA WAY

SYMBOL	GENERAL NOTES:
X	• TOP & BOTTOM REINFORCEMENT TYPICAL UNO • 3" CLEAR DIM FROM SOIL TO FTG REINF - TYPICAL

CONTINUOUS FOOTING SCHEDULE

MARK	WIDTH	DEPTH	CONT REINFORCEMENT
D	24"	12"	(2) #4
E	30"	12"	(3) #4

SYMBOL	GENERAL NOTES:
X	• CONT REINFORCEMENT TYPICAL • 3" CLEAR DIM FROM SOIL TO FTG REINF - TYPICAL

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER
86970PE
DIGITALLY SIGNED
OREGON
DECEMBER 9, 2012
PETER KELLY DEGNER
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Mini Pet Mart

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Eugene, OR 97402

Foundation Plan

REV. #	DATE	REVISION	DWN	CHKD

DESIGNED BY: DKC
DRAWN BY: DKC
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 09/15/2022
W.O. NUMBER: 21-029

Drawing File: C:\Users\David\OneDrive - Pioneer Engineering\2021\029 Mini Pet Mart\drawings\21-029 08.22.22.rvt
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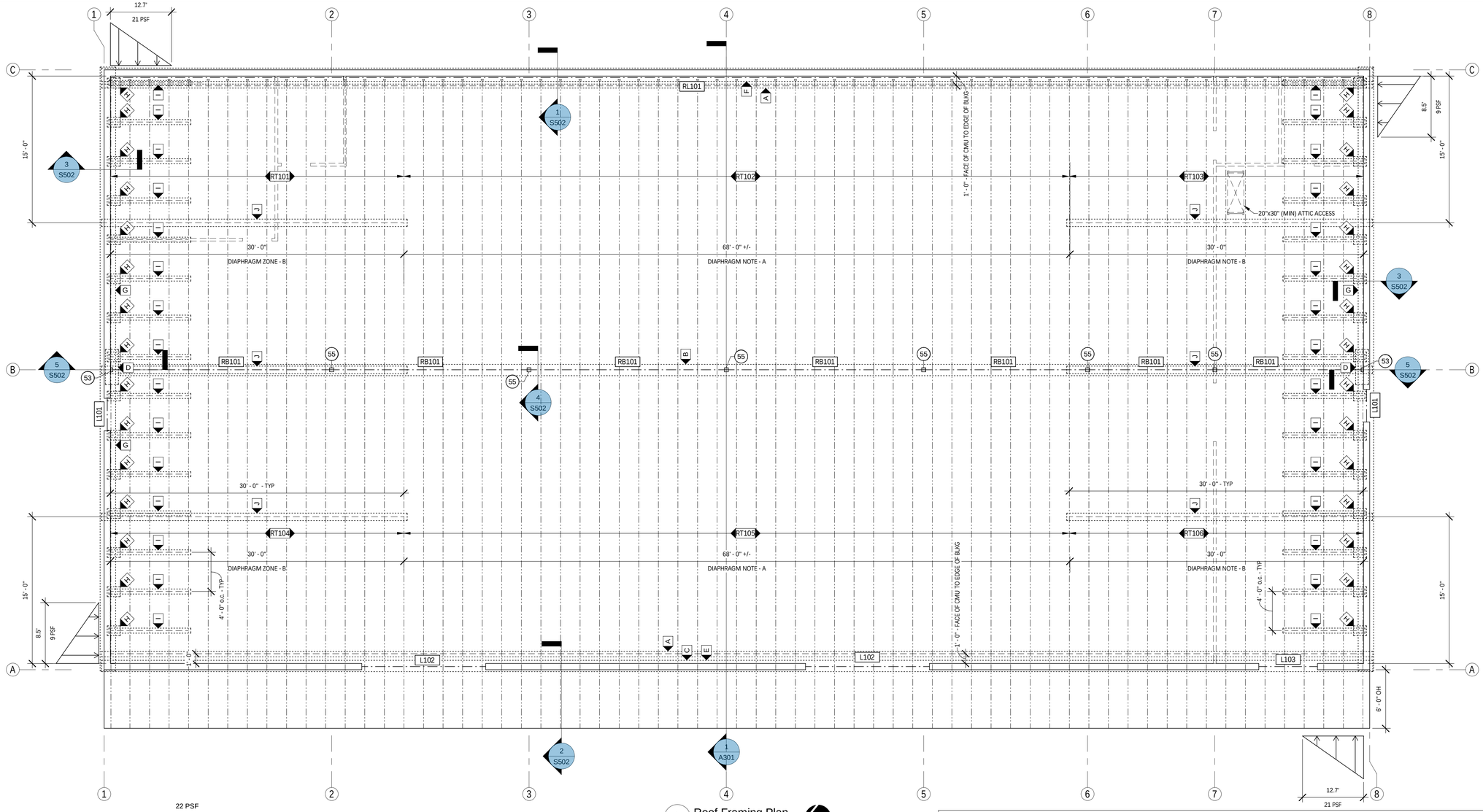


1 Roof Framing Plan
3/16" = 1'-0"

FRAMING PLAN LEGEND

- = BEARING WALL
- = NON-BEARING WALL
- = BEAM/HEADER (SEE BEAM SCHEDULE)
- = FRAMING MEMBER (SEE FRAMING SCHEDULE)
- = DIAPHRAGM NOTE LOCATION (SEE DIAPHRAGM NOTES)

COLUMN SCHEDULE

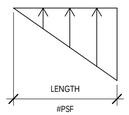
MARK	TYPE	SIZE	BASE		CAP		NOTES
			BASE	DTL	TYPE	DTL	
53s	HSS	5x3x1/4	N/A	N/A	ECC06	5/S502	
55s	HSS	5x5x1/4	PL3/4x12x1'-0"	4/S501	CCO	4/S502	

SYMBOL: (##S)

GENERAL NOTES:
- (2) 2x #2-D.F. MIN. AT ALL BEAMS & 2-PLY OR LARGER TRUSSES, UNLESS NOTED OTHERWISE
- HEADER SUPPORT: 2x TRIMMER W/ 2x KING STUD - TYPICAL, UNLESS NOTED OTHERWISE
- CAP & BASE NOT REQUIRED WHERE COLUMN OCCURS WITHIN A FRAMED STUD WALL
- CAP & BASE INDICATED IN SCHEDULE ARE TYPICAL - UNO ELSEWHERE ON PLANS

SNOW DRIFT NOTES

- MAXIMUM & MINIMUM DRIFT ON UNIFORM SNOW LOAD SHOWN FOR WALL LINE
- LENGTH OF DRIFT PERPENDICULAR TO WALL SHOWN



LINTEL SCHEDULE

- L101 = (2) #5 HORIZ @ COARSE ABOVE OPENING; EXTEND 32" BEYOND OPENING
- L102 = (2) #5 HORIZ @ COARSE ABOVE OPENING; EXTEND 32" BEYOND OPENING
  PL1/2x7 5/8"xFULL LENGHTH OF OPENING; 1/2"x6" NELSON HEADED STUDS @ 2'-0"o.c. & WITHIN 4" OF EA END
  SEE DETAIL 6/S502
- L103 = (2) #5 HORIZ @ COARSE ABOVE OPENING; EXTEND 32" BEYOND OPENING

ROOF DIAPHRAGM NOTES

MARK	DESCRIPTION	Detail
A	6x6 BLOCKING BETWEEN EACH TRUSS TOP CHORD W/ CMST12 STRAP OVER SHEATHING, (2)16d COMMON AT 6" OC, FULL LENGTH OF DIAPHRAGM; L=130'-0"; AT STRAP ENDS, LAP SPLICE CMST12 30" AND SECURE THE LAP W/ (20) 16d COMMON, TYP ALL SPLICE LOCATIONS	7/S502
B	CS16 TRUSS TO TRUSS 48"o.c.; L = 60"; STRAP ON SIDE OR TOP OF TRUSS TOP CHORD, (2) 8d 6"o.c.	4/S502
C	A35 CLIP SILL PLATE TO SIDE OF EACH TRUSS BOTTOM CHORD	9/S502
D	CS16 TRUSS TO TRUSS; L = 60"; STRAP ON SIDE OR TOP OF TRUSS TOP CHORD, (2) 8d 6"o.c.	N/A
E	FULL HEIGHT TRUSS BLOCKING BETWEEN TRUSSES W/ A35 CLIP AT 48" OC TO PLATE	9/S502
F	DTT22 TO SIDE OF TOP CHORD OF TRUSS W/ 2X6 BLOCKING BETWEEN TRUSSES AT WALL W/ 1/2" DIA TITEN-HD EMBED 4" INTO CMU AT 48" OC	8/S502
G	1/2" DIA TITEN-HD TOP CHORD OF TRUSS EMBED 4" INTO CMU AT 48" OC	10/S502
H	LTTP2 W/ (12) 0.148x2.5 NAILS AND 3/4" DIA TITEN-HD EMBED 5.5" INTO CMU AT 4'-0" OC	10/S502
I	4X6 BLOCKING BETWEEN TRUSSES FOR 8'-0" W/ CS16 STRAP L=8'-0" W/(10) 8d EACH END AND (2)8d AT 6" OC IN FIELD	10/S502
J	4X6 BLOCKING BETWEEN TRUSSES FOR 30'-0" W/ CMST14 STRAP L=30'-0" W/(25) 0.148"x2.5" NAILS EACH END AND (2) 0.148"x2.5" NAILS AT 6" OC IN FIELD	N/A

SYMBOL: (X)

DIAPHRAGM ZONES

A = SEE ZONE PLYWOOD AND NAILING REQUIREMENTS IN ROOF FRAMING SCHEDULE
B = SEE ZONE PLYWOOD AND NAILING REQUIREMENTS IN ROOF FRAMING SCHEDULE

ROOF FRAMING SCHEDULE

MARK	ROOF TRUSSES					ROOF SHEATHING	NAILING & BLOCKING				NOTES
	TYPE	SIZE	SPACING	HANGER	DETAIL		NAILS	EDGE	FIELD	EDGE BLKG	
RT101	PRE-MANUF TRUSS	N/A	24"o.c.	HUS26	N/A	15/32" PLY	8d	4"	12"	2x	
RT102	PRE-MANUF TRUSS	N/A	24"o.c.	HUS26	N/A	15/32" PLY	8d	6"	12"	NONE	
RT103	PRE-MANUF TRUSS	N/A	24"o.c.	HUS26	N/A	15/32" PLY	8d	4"	12"	2x	
RT104	PRE-MANUF TRUSS	N/A	24"o.c.	N/A	N/A	15/32" PLY	8d	4"	12"	2x	
RT105	PRE-MANUF TRUSS	N/A	24"o.c.	N/A	N/A	15/32" PLY	8d	6"	12"	NONE	
RT106	PRE-MANUF TRUSS	N/A	24"o.c.	N/A	N/A	15/32" PLY	8d	4"	12"	2x	

SYMBOL: (XX###)

GENERAL NOTES:
- (1) SIMPSON H2.5A OR EQUIVALENT EA. END OF EA. TRUSS TO WALL/BEAM, UNLESS NOTED OTHERWISE
- ℄ = HANGER; SEE FRAMING PLAN FOR LOCATIONS; HANGERS AT FLUSH BEAMS AND LEDGERS - TYPICAL
- 8d NAILS: 0.131" x 2.5", 1 1/4" MIN EMBEDMENT

ROOF BEAM SCHEDULE

MARK	TYPE	SIZE	HANGER	LOCATION	DETAIL	NOTES
RB101	24F-V4 GLB	5 1/2x24"	N/A	DROP BEAM	4/S502	SIMPLE SPANS - TYP

SYMBOL: (XX###)

GENERAL NOTES:
- HEADERS 4x8 #2-D.F - U.N.O.
- (3) 10d BOX NAILS TOE NAIL BEAM/HEADER TO DBL TOP PL/POST - U.N.O.

LEDGER SCHEDULE

MARK	TYPE	SIZE	ATTACHMENT	DETAIL	NOTES
RL101	D.F. #2	4x12	(2) 5/8" DIA TITEN-HD EMBED 4.5" INTO CMU @ 16" o.c., SPACED VERTICALLY 6" APART	1/S502	

SYMBOL: (XX###)

GENERAL NOTES:
-
-

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER
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DECEMBER 9, 2012
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Eugene, OR 97401
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Mini Pet Mart

974 W 6th Ave
Eugene, OR 97402

Roof Framing Plan

REV. #	DATE	REVISION	DWN	CHK'D

DESIGNED BY: DKC
DRAWN BY: DKC
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 09/15/2022
W.O. NUMBER: 21-029

S103

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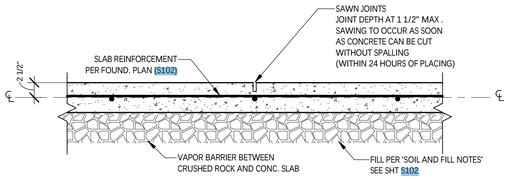
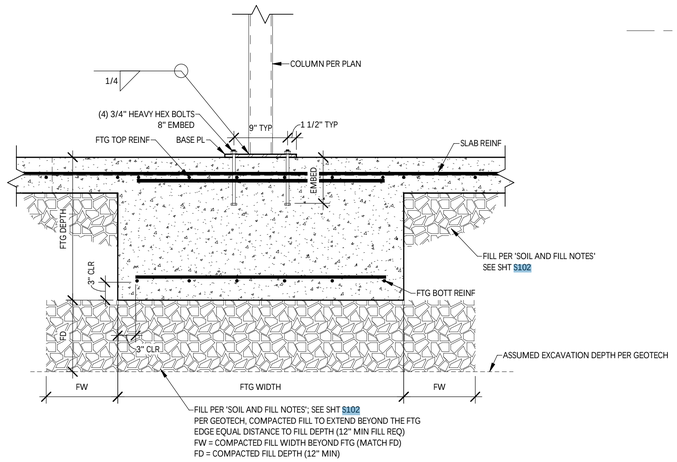
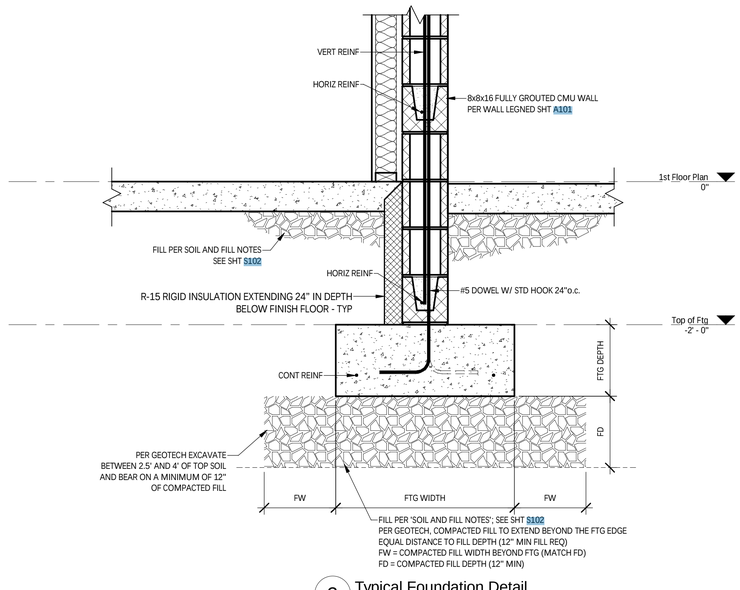


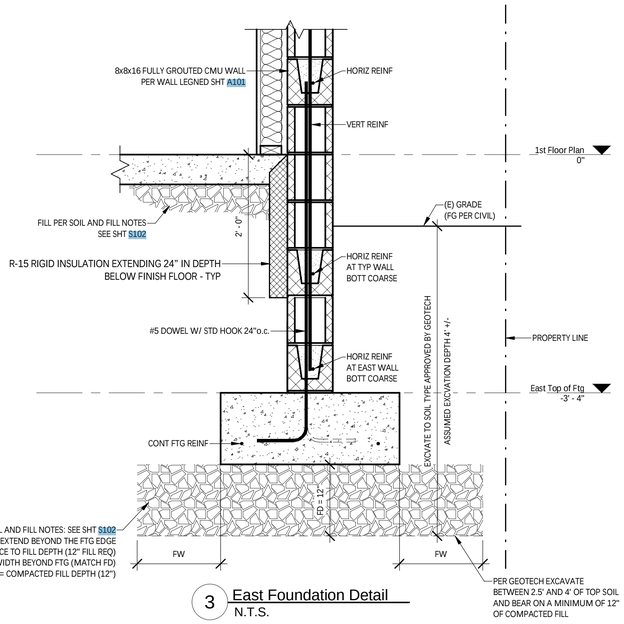
1 Concrete Slab - Typ
N.T.S.



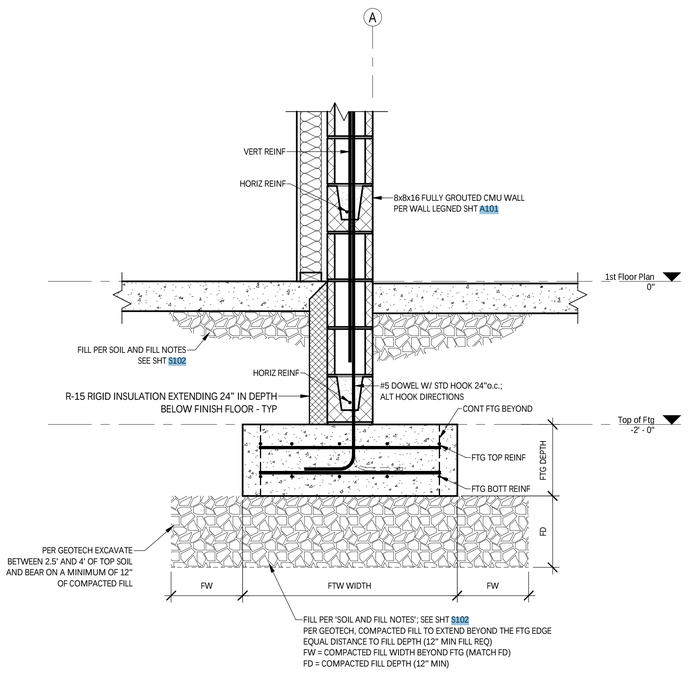
4 Interior Footing
N.T.S.



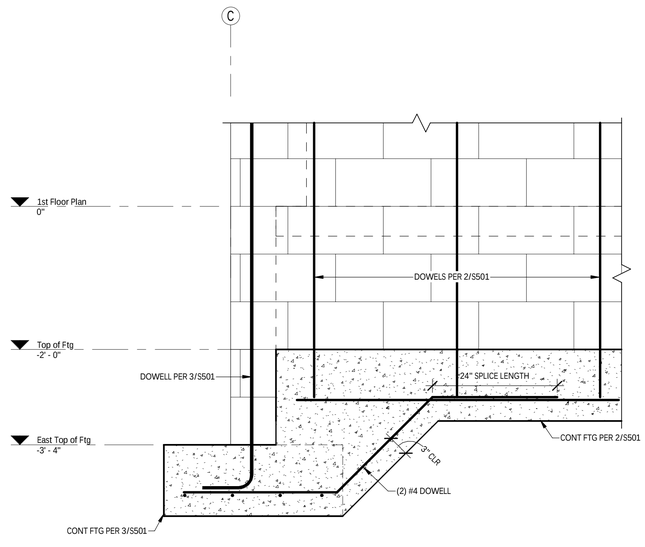
2 Typical Foundation Detail
N.T.S.



3 East Foundation Detail
N.T.S.



5 Typical Foundation at Spread Ftg
N.T.S.



6 Corner Foundation
N.T.S.

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DECEMBER 20, 2022
PETER KELLY DEGNER
EXPIRES 12/31/23

PIONEER ENGINEERING LLC
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pioneerengr.com
200 E 11th Ave. Suite 270
Eugene, OR 97401

Mini Pet Mart

974 W 6th Ave
Eugene, OR 97402

Foundation Details

REV. #	DATE	REVISION	DWN	CHKD

DESIGNED BY: DKC
DRAWN BY: DKC
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 09/15/2022
W.O. NUMBER: 21-029

Drawing File: C:\Users\David\OneDrive - Pioneer Engineering\2021\029 Mini Pet Mart\drawings\21-029 08.22.22.rvt
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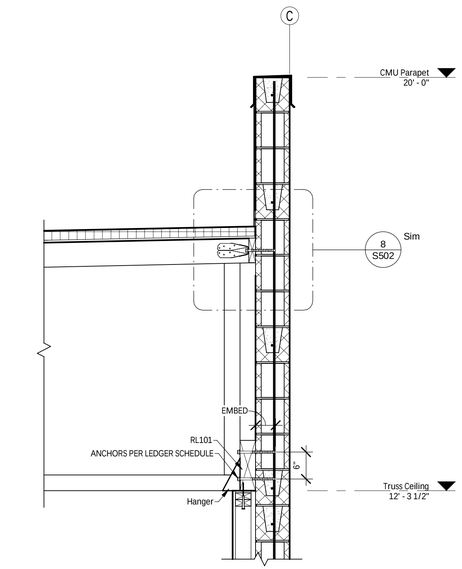
S501



1 East Wall and Parapet
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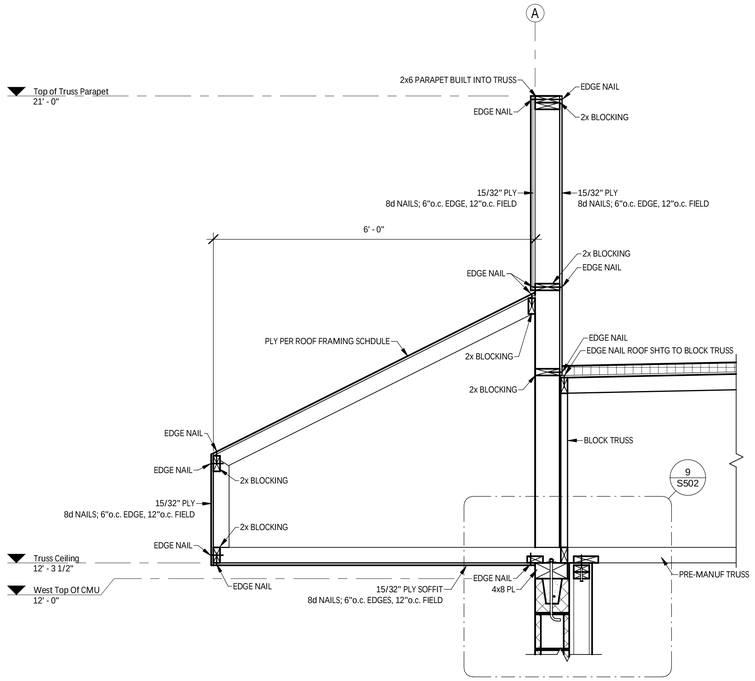

2 West Wall Parapet
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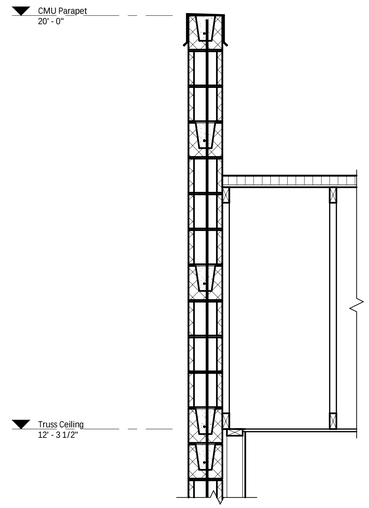

3 North and South Wall Parapet
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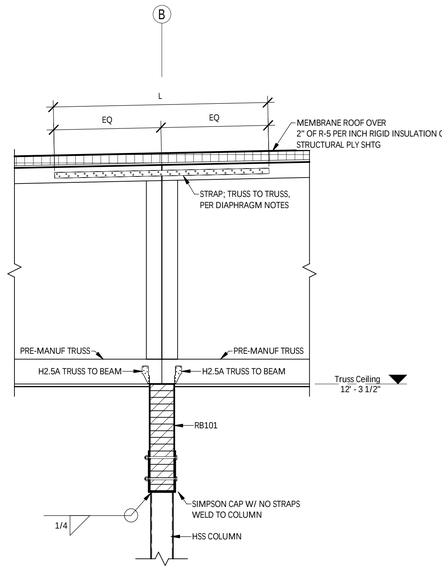

4 Trusses To Beam
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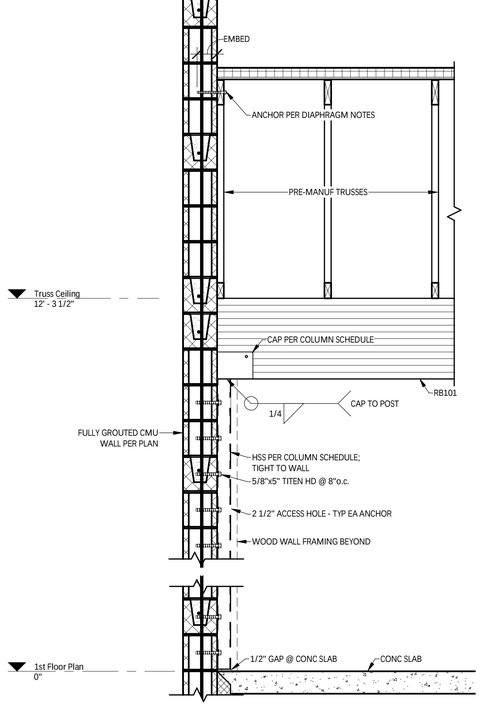

5 Beam To Wall
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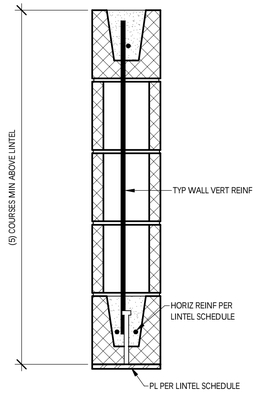
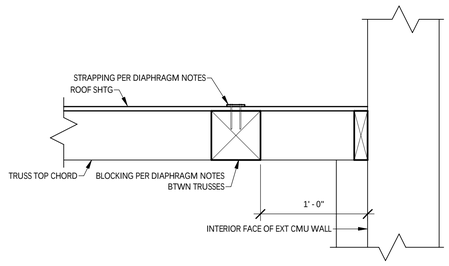
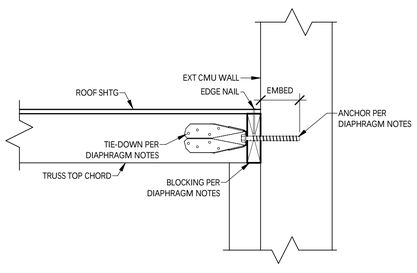


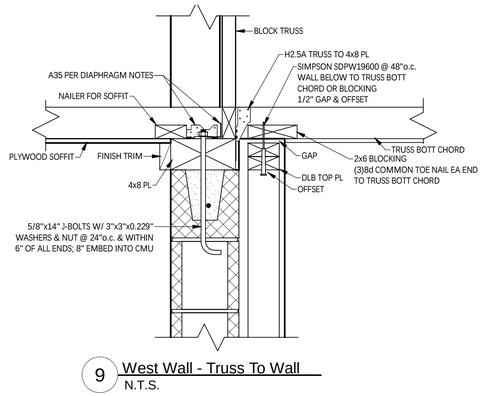
6 L102 Lintel Detail
N.T.S.



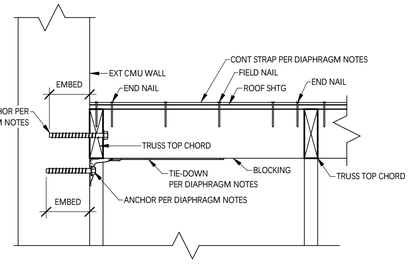
7 Cont Strapping & Blocking
N.T.S.



8 Tie-Down To Wall
N.T.S.



9 West Wall - Truss To Wall
N.T.S.



10 Roof Framing To Wall
N.T.S.

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STRUCTURAL
REGISTERED PROFESSIONAL ENGINEER
86970PE
DIGITALLY SIGNED
OREGON
DECEMBER 31, 2012
PETER KELLY DEGNER
EXPIRES 12/31/23

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