ii) Signed and Sealed Letter from Own Inc. dated July 15, 2024 regarding use of Rammed Aggregate Piers as a foundation

McClure Engineering Company (McClure, MEC) is the Structural Engineer of Record (EOR) responsible for the documentation of structural design criteria, strength and stability of the primary vertical and lateral load-carrying systems in their completed form, and conformance of the structural design to the applicable building codes. These drawings produced by McClure convey the structural

engineering design for the project, which includes the following components and systems:

(a. Foundations consisting of concrete frost walls, pedestals, and footings supported by rammed aggregate piers.)

(b. Stabs-On-Grade. Residential Building Framing:

Load-bearing wood wall and opening framing – Level 2 and above.

Plywood sheathing on dimensional lumber wood floor and roof joists – Level 3 and roof. Elevated concrete floor slab with composite steel deck on composite steel framing – Level 2

Steel framed balconies with non-composite deck. Structural steel framing identified on the drawings.

e. The lateral force resisting system of the structure consisting of sheathed wood structural walls, gypsum sheathed wood walls, masonry shear walls, composite deck diaphragms and wood sheathing diaphragms.

2. The following items are Deferred Submittals. Framing intent and additional requirements for these structural components are

a. Structural steel connections – see general notes section "Structural Steel". b. Wood roof/floor trusses – see general notes section "Wood Framing and Fastening" / see S001 and S002 for applicable

All premanufactured canopy and awning framing including connections to the structure. Handrails at balconies – see S001 "Design Criteria" for applicable loading.

e. Cold-formed steel wall framing and miscellaneous Cold-formed steel framing. * Reference section "D. Submittal Requirements." Coordinate requirements of these drawings with those of other design consultant

drawings and the Project Specifications.

3. The following items are specifically excluded from McClure's design scope as represented on these drawings:

a. Requirements for fire rating of assemblies or fire protection of structural members. b. Global stability of soil mass.

c. Any exterior slabs, bollards, curbs, and any enclosures not shown on these drawings.

d. Interior non-load-bearing wood framed walls or furring. e. Shoring design, formwork design, temporary bracing, and other means and methods items. f. Cold-formed steel framing below the Level 2 structural steel framing.

C. GENERAL NOTES

engineer and resolved before proceeding with the work.

1. All construction shall conform to the Design Codes in Section "A. Design Criteria," including all applicable standards and documents

eferenced within those codes . Plan and detail notes provided on specific sheets within these drawings supplement information in these General Notes. Always coordinate

the requirements of these notes with what is shown within the drawings 3. Unless noted specifically on a plan, all floor plans show framing for the floor indicated and vertical framing (walls, openings, posts, columns) . Structural steel floor plan shows the floor framing for that level and the supporting columns.

a. The drawings contained herein are intended to be utilized in conjunction with other design consultant's drawings (architectural, civil, mechanical, etc.). It is the responsibility of the Contractor to coordinate the requirements of the drawings into their shop drawings and

Refer to the Project Specifications issued as part of the contract documents for information supplemental to these drawings. Should conflicts between these drawings and the Specifications exist, the Contractor shall bring them to the attention of the structural engineer for clarification.

. Refer to the architectural, mechanical, electrical, and civil drawings for location and size of block outs, inserts, openings, curbs, bases & pads, and dimensions not shown on these drawings.

Refer to the architectural drawings for size and location of doors and window openings, exterior wall assemblies, and floor, wall, and roof finishes. Refer to the mechanical and electrical drawings for additional information including locations of mechanical units, d. Omissions or conflicts between various elements of the drawings, notes and details shall be brought to the attention of the structural

Use of Drawings in Construction: a. The Contractor shall verify all dimensions and conditions at the job site before commencing work and shall report any discrepancies to the engineer responsible for the design of that work. b. Do not use scaled dimensions; use written dimensions or, where no dimension is provided, consult the structural engineer for

clarification before proceeding with the work. Where member locations are not specifically dimensioned, members are either located on columns lines or are equally spaced between located members

Details and keynotes shown shall be incorporated into the project at all appropriate locations, whether specifically called out or not. McClure may provide the contractor with electronic files for their convenience and use in the preparation of shop drawings. These electronic files are not construction documents; the contractor is not relieved of his/her duty to fully comply with the contract documents, ncluding the need to confirm and coordinate all dimensions and details, take field measurements, verify field conditions, and coordinate the contractor's work with that of other contractors for the project.

6. Changes During Construction: a. Openings shall not be cut or otherwise made in any structural member unless that opening is specifically shown on these drawings. The Contractor shall seek approval in writing from the structural engineer for any design incorporating additional openings.

b. Support details shown for Architectural, Mechanical, Electrical, and Plumbing equipment as well as elevators is based upon available information from the manufacturer (if any). The Contractor shall coordinate requirements of actual equipment supplied with details and shall provide any additional framing required.

c. The Contractor has the responsibility to notify the structural engineer of any architectural, mechanical, electrical, or plumbing load imposed on the structure that is not documented on the Contract Documents or differs from what is originally shown. Provide documentation of location, load, size, and anchorage of all undocumented loads in excess of 250 lbs. 7. Construction Sequence and Methods:

a. These drawings and the related Specifications represent the finished structure and, except where specifically shown, do not indicate the method or means of construction. Loads on the structure during construction shall not exceed the design loads indicated in Section "A. Design Criteria" as a maximum. The Contractor shall supervise and direct the work and shall be solely responsible for all construction means, methods, procedures, techniques, and sequence.

a. The Contractor is responsible for compliance with all applicable job-related safety standards proceeding from governing organizations b. It is the responsibility of the Contractor to ensure the stability of the structural elements during construction as a result of means and sequence by providing shoring, bracing, etc. as required.

Stability considerations should include all applicable temporary construction and environmental loads per ASCE 37 which may Temporary bracing shall remain in place until positive connection is made between the floor/roof diaphragm and the lateral force resisting elements. This is a means and methods item.

The Contractor shall consider the effects of thermal movements due to hot or cold weather construction and the potential for extreme temperature variations before the structure is complete. d. The Contractor is responsible for the protection and repair of any adjacent existing structures, surfaces, and areas which may be

D. SUBMITTAL REQUIREMENTS

 Submittal Procedures a. The Contractor shall provide all submittals in PDF format unless otherwise requested or indicated otherwise in the Project

b. All submittals must be reviewed by the Contractor prior to McClure's review. The Contractor is responsible for reviewing each submittal for basic coordination with these drawings and to verify that all the required components of the submittal are incorporated. The submittal must bear the electronic review stamp of the Contractor before McClure will proceed with the review.

Incomplete submittals or submittals not meeting the requirements of this section will not be reviewed. McClure will notify the contractor that the submittal is incomplete or unacceptable and that resubmission is required. Submittals requiring engineering calculations for all or a portion of the work are considered incomplete without the sealed calculations and will not be reviewed.

Shop Drawings shall be original drawings. Submissions incorporating any portion or reproduction of the contract documents will not

Deferred Submittals not meeting the seal requirements of section D.2.b are considered incomplete and will not be reviewed. Resubmittals with comments from a previous review left unaddressed or without any response will not be reviewed.

Allow two weeks for review of all submittals unless an agreement for expedited review is made in writing by McClure. McClure's submittal review scope of work includes a single submittal review and one review of the revised submittal if required (two reviews total of the same submittal). Time required for more than two reviews of a submittal is considered an additional service and will be billed hourly. McClure reserves the right to withhold review of a submittal surpassing this allowance until proper billing to the

responsible party can be established. Submittals must be returned to the Contractor by McCure bearing a stamp marked "Reviewed No Exception Taken" or "Reviewed With Comments/Exceptions" prior to proceeding with the work. Submittals marked "Reject/Resubmit" must be revised according to the comments provided prior to commencing with the respective scope of work.

Deferred Submittals: a. See Section "B. Structural Engineering Design Narrative" for the list of items considered Deferred Submittals.

Deferred Submittals shall bear the seal of a professional engineer licensed in the state where the project is located. If the project requires a licensed Structural Engineer (S.E.) as the Engineer of Record according to state laws, the same qualification level applies to the engineer sealing the Deferred Submittals. c. Deferred Submittal items shall not be installed until the Deferred Submittal documents have been approved by the Building Officia 3. Submittal List:

Submittal Name	Items Required:					
	Product Data	Shop Drawings	Test Records	Engineering Drawings	Engineering Calculation	
Concrete Mix Designs	X		X			
Concrete Break Reports			Χ			
Concrete Reinforcing Layout		X				
Concrete Anchor Bolts & Embedded Plates	Х	Х				
Concrete & CMU Anchors (Post-Installed)	Х					
6. Post-Installed Anchor Substitutions	Х				Х	
. Post-Installed Connection	X			X	X	
Geometry Alteration	h					
B. Rammed Aggregate Piers			X	X	X	
Structural Steel Framing		$\sim\sim$				
Structural Steel Framing		X			X	
Connections						
11. Steel Floor Deck	X	X				
12. Exterior Non-Load-Bearing Cold-Formed Steel Framing	Х			X	Х	
13. Metal Railings & Connections	X	X			X	
14. Metal Ladders & Connections	X	X			X	
15. Fall Arrest Systems	X	X			X	
16. Wood Framing Materials	X					
7. Wood Floor & Roof Trusses incl. Reactions				X	Х	
18. Wood Truss Connections to Supporting Structure				X	Х	
19. Specialty Wood Fasteners	X					
20. Manufactured Wood Shear	X					
	1	1		1	l .	

b. "Product Data" may indicate mill certifications, material data sheets, Evaluation Service Reports (ESRs), etc. See requirements of each material section of the general notes for further information. Where "Engineering Drawings" and/or "Engineering Calculations" are indicated, the submittal must comply with the requirements of

item "2. Deferred Submittals" above. Submittals For Record: a. The following items impact the structural design and therefore must be submitted to the engineer; however, they do not require review.

They will be returned stamped as "Received for Record". Elevator Shop Drawings with Loads to Structure

Mechanical Equipment Shop Drawings with Weight

E. CONCRETE

1. Reinforced concrete shall have the following minimum 28 day compressive strengths:

a. Slab on grade, unless noted otherwise 4000 psi normal weight Foundations 5000 psi normal weigh

Slabs on non-composite metal deck 4000 psi normal weight Slabs on composite metal deck 4000 psi lightweight

All concrete exposed to weather shall have 6% (+- 1%) air entrainment. 3. Submit mix designs for all concrete mixes prior to placement. All submittals shall include the following: Batch quantities including admixture dosage rates.

Strength test results for trial mixes. Cured unit weight results (for lightweight concrete mixes only).

Aggregate source(s) and gradation(s). Product data for cement, fly ash and other cementitious materials. Product data for all admixtures.

4. Provide protection for reinforcing bars as follows: a. Cast-in-place concrete Concrete cast against and permanently exposed to earth: 3" Concrete exposed to earth and weather (formed)

1. #5 and smaller #6 and larger iii. Concrete not exposed to weather and not in contact with ground: Slabs and walls

Beams and columns 1-1/2" Provide construction or control joints in slab on grade as shown on plans. If joint pattern is not shown, provide joints at 10'-0" x 10'-0" and at locations to conform to bay spacing wherever possible (at column centerlines, half bays, third bays, etc.). 6. Interface of all slab and beam construction joints shall be roughened with 1/4" amplitude. Surface of construction joints shall be clean and

free of laitance. Immediately before new concrete is placed, construction joints shall be wetted and standing water removed. Construction joints in walls shall be keyed and placed at locations approved by the Architect and Structural Engineer.

Provide control joints in all retaining walls at 15 ft to 20 ft intervals.

Elevator pit walls shall not have control joints as they are part of the lateral system.

 Provide PVC waterstops in all below grade construction joints and at other locations as shown 11. Provide compressible filler and sealant in all slab-on-grade and wall and column interfaces that are not doweled together

12. All column pockets shall be filled with concrete after column is erected. 13. Sleeves and openings in slabs not shown on structural drawings or outside the parameters of typical sleeve details are not permitted, unless approved by the Structural Engineer.

14. Conduit and pipes embedded in slabs, walls, or grade beams shall be no larger in outside dimension than 1/3 the overall member thickness and shall be placed no closer than 3 diameters or widths on center. 15. Conduits and pipes shall not be permitted in concrete pilasters or columns.

16. See "G. Foundations" section 5 for requirements at slab on grade. . Bond break material for slip joints shall be 1/8" thick tempered wood particleboard, 1/8" thick high-density plastic elastomeric strips, two layers of 10mil polyethylene sheeting or equivalent. 18. Provide concrete housekeeping pads under all mechanical, plumbing, fire protection, and electrical equipment per plans. Pads shall extend

bevond equipment a nominal 6" on all sides. Provide reinforcing per details. 19. At floor drains, locally slope floor towards drain. See architectural and plumbing drawings for drain locations. 20. Foundation walls shall be temporarily braced until positive attachment is made to floor framing per details. This is a means and methods

F. REINFORCING FOR CONCRETE

a. All reinforcing steel to be ASTM A615, Grade 60, deformed bars, unless noted otherwise.

Any reinforcing to be welded shall be ASTM A706 and welded with E80 electrodes. Alternatively, ASTM A615 reinforcing may be welded with E90 electrodes and proper preheat according to AWS D1.4. iii. E70 electrodes are not permitted for welding rebar.

b. Welded wire fabric shall be ASTM A185. Welded wire fabric shall be in flat sheets.

c. All reinforcing bars to be detailed and placed in accordance with the ACI "Manual of Standard Practice for Detailing Reinforced Concrete Structures" specifications d. All reinforcing, including dowels, shall be securely tied and cast with the lower member. Placing reinforcing after concrete has been

placed will not be permitted e. Field bending of reinforcing partially embedded in concrete will not be allowed unless specifically noted on the drawings or approved by

the Structural Engineer. f. All reinforcing bars shall be contact lap spliced or doweled as follows, unless noted otherwise:

	Tension	Developm	ent and S	plice Length	ns for f'c =	5,000psi	
	Devel	opment	Class "	B" Splice	Stand	ard 90 deg	ı. Hook
Bar Size	Top Bar	Other Bar	Top Bar	Other Bar	Embed	Leg Length	Bend Dia.
#3	17	13	22	17	6	6	2-1/4
#4	22	17	29	22	6	8	3
#5	28	22	36	28	8	10	3-3/4
#6	33	26	43	33	9	12	4-1/2
#7	49	37	63	49	11	14	5-1/4
#8	55	43	72	55	12	16	6
#9	63	48	81	63	14	19	9-1/2
#10	70	54	91	70	15	22	10-3/4
#11	78	60	101	78	17	24	12
#14	94	72			29	31	18-1/4
#18	125	96			39	41	24
Tension Development and Splice Lengths for f'c = 4,000psi							
	Devel	opment	Class "	B" Splice	Stand	ard 90 deg	ı. Hook
Bar	Тор	Other	Top	Other	Embed	Leg	Bend
Size	Bar	Bar	Bar	Bar		Length	Dia.
#3	19	15	24	19	6	6	2-1/4
#4	25	19	32	25	7	8	3
#5	31	24	40	31	9	10	3-3/4
#6	37	29	48	37	10	12	4-1/2
#7	54	42	70	54	12	14	5-1/4
#8	62	48	80	62	14	16	6
#9	70	54	91	70	15	19	9-1/2
#10	79	61	102	79	17	22	10-3/4
#11	87	67	113	87	19	24	12
#14	105	81			32	31	18-1/4
#18	139	107			43	41	24
uncoa ≥ 2*d _t as no	ated bars as with ties o transverse	ssuming cen r stirrups, ar reinforcing	ter-to-cente nd bar clear are both as:	ce lengths sher bar spacing cover ≥ 1.0* sumed. gths are base	g ≥ 3*d _b with d _b Normal w	nout ties or s reight concr	stirrups or ete as well

All tension splices shall be Class "B" splices unless noted otherwise on plans

bar end cover ≥ 2" without ties around hook.

g. All welded wire fabric shall be lapped 12" or 48 wire diameters, whichever is greater. h. Provide (2) #5 x 6'-0" diagonals at all corners of openings and re-entrant corners, unless noted otherwise. i. Dowels between foundation and walls shall be installed and shall be the same grade, size, and spacing as the vertical wall reinforcing,

For special seismic considerations, refer to ACI 318 Code Chapter 21.

unless noted otherwise. Provide corner bars to match longitudinal reinforcing in all footings. Provide (2) corner bars at tee intersections. k. Provide 500 pounds of miscellaneous straight bar reinforcing (#4 & #5) to be used in field for special conditions. Labor for placing same

Slabs and Slabs-on-Grade a. All slabs on grade to be reinforced with 6x6 – W2.9xW2.9 welded wire fabric, unless noted otherwise.

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Foundation design is based on the following to be considered part of the construction documents: a. Geotechnical Report prepared by Olsson, dated Aug. 10, 2023

Signed and Sealed Letter from Own Inc. dated July 15, 2024 regarding use of Rammed Aggregate Piers as a foundation option. Signed Letter from Ground Improvement Engineering by Vaughn Rupnow, PE, dated May 31, 2024 confirming Rammed Aggregate Piers as a viable foundation option with allowable subgrade bearing pressure of 6,000 psf.

It is the Owner's decision to proceed with Rammed Aggregate Piers.

A geotechnical representative shall be retained on site for all construction activity to verify that all proper requirements have been met to meet the design requirements outlined in the geotechnical report. Representative shall be Olsson Engineers or someone familiar with all documents of the geotechnical investigation provided for the project.

4. The Contractor shall provide dewatering of excavations from surface water and ground water. Do not place concrete if water is present at Rammed Aggregate Piers

The Rammed Aggregate Pier system shall be designed in accordance with locally accepted engineering practices. Allowable bearing pressure for footings supported by RAP reinforced soils shall be 6,000 psf. Total settlement shall be limited to 1" or less.

6. Slab on Grade a. Slabs shall be constructed as shown on the plans. b. Parking slab-on-grade shall be placed on subgrade prepared in accordance with the requirements of the geotechnical report and the details in these construction documents.

geotechnical report for additional information regarding the installation of the vapor retarder. Slab-on-grade shall be founded on 6" deep 3/4" clean aggregate base. e. The upper 24" of subgrade extending 5' beyond the footprint of the building shall consist of low volume change material such as rollstone or wastelime. Granular fill shall be compacted to a minimum of 95% of the ASTM D698 maximum dry Standard Proctor density. The 6" aggregate base shall be included in the 24" depth required for the low volume change layer. f. Provide joints at 30 x slab thickness (+/-) in both directions and located to conform to bay spacing wherever possible (at column

c. A 10mil minimum vapor retarder shall be installed under all slabs on grade in occupied or conditioned spaces per the drawings. See the

centerlines, half bays, third bays, etc.). Submit control joint layout for approval by the Structural Engineer. g. Saw cut control joints shall be done late enough to prevent raveling of the cut edges and early enough to prevent racking of the slab ahead of the saw blade. h. Plumbing and utilities passing through the slab on grade shall be constructed with flexible fittings to allow for slab movement. The expected slab movement for the parking slab shall be considered up to 2" minimum for fittings. i. Concrete slab to be cured according to ACI Standards. Concrete slab cure to be compatible with any sealer, grout, or adhesive that

may be used in the floor later. Locally slope floor towards any floor drains. See architectural and plumbing drawings for drain locations.

a. If the geotechnical representative on site takes exception to anything in the Geotechnical Report and requires additional field investigation to clarify those exceptions, the cost of such investigation shall be included in the additional fee for field quality control and testing and identified as such. All other exceptions shall be documented and approved by the geotechnical engineer. b. The geotechnical representative must have read all documents pertaining to the geotechnical report for the project and have

understood and accepted the criteria contained in the report. c. The geotechnical representative must understand and be able to make decisions affecting the work for field observations and conditions described in the report during construction. The representative must be capable of advising the owner or contractor for procedures regarding, but not limited to, sub-grade preparation, dewatering activities, and other construction considerations. See notes on sheets and details for additional information.

H. POST-INSTALLED ANCHORS TO CONCRETE AND MASONRY

Post installed anchors shall be expansion, adhesive, or screw anchors as indicated in the details, unless noted otherwise. Only use the

anchor type indicated. All anchors on the project of each type must be by the same manufacturer, see below for substitution requirements. a. Expansion anchors:

i. Concrete:

c. Screw anchors:

Hilti Kwik Bolt TZ (ICC-ES ESR1917). Simpson Strong-Bolt 2 (ICC-ES ESR3037) DeWalt Power-Stud+ SD2 (ICC-ES ESR2502).

ii. Grout-filled Concrete Masonry Hilti Kwik Bolt 3 (ICC-ES ESR1385). Simpson Strong-Bolt 2 (UES ER0240 DeWalt Power-Stud+ SD1 (ICC-ES ESR2966).

b. Adhesive anchors (threaded rods shall be ASTM A193 B7 for all anchors):

i. Concrete: Hilti HIT RE 500-SD (ICC-ES ESR2322) or Hilti HIT-HY 200 (ICC-ES ESR3187). Simpson AT-XP (UES ER263), SET-XP (ICC-ES ESR2508) or ET-HP (ICC-ES ESR3372) DeWalt Pure 110+ (ICC-ES ESR3298), PE1000+ (ICC-ES ESR2583), Pure 50+ (ICC-ES ESR3576), AC 200+ (ICC-ES

ESR4027), or AC100+ Gold (ICC-ES ESR2582) Solid grouted concrete masonry: Hilti HIT-HY 70 anchor adhesive (ICC-ES ESR3342).

Simpson AT-XP (UES ER0281), SET-XP (UES ER0265) or ET-HP (UES ER0241) DeWalt AC100+ Gold (ICC-ES ESR3200)

Hollow concrete or multi-wythe clay masonry Hilti HIT-HY 70 with screen tubes (ICC-ES ESR3342). Simpson SET-XP (UES ER0265) DeWalt AC100+ Gold with screen tubes (ICC-ES ESR3200)

i. Concrete: Hilti Kwik HUS EZ (ICC-ES ESR3027) Simpson Titen HD (ICC-ES ESR2713 DeWalt Screw-Bolt+ (ICC-ES ESR2526) ii. Grout-filled concrete masonr

Hilti Kwik HUS EZ (ICC-ES ESR3056)

Simpson Titen HD (ICC-ES ESR1056) DeWalt Screw-Bolt+ (ICC-ES ESR1678) 2. Post-installed anchors shall only be used where specified in the drawings. The Contractor shall obtain approval from the engineer prior to

using post-installed anchors for missing or misplaced cast-in-place anchors All personnel installing anchors shall be trained and certified by the anchoring system manufacturer or by ACI. Contractor shall submit current certifications for all personnel. ACI certification required for all personnel installing adhesive anchors in horizontal or overhead conditions. If a failure occurs at any time during testing or construction, personnel shall be retrained and recertified.

a. Do not cut existing reinforcing. The hole through the supported steel member shall be 1/16" larger in diameter (1/8" for screw anchors) than the anchor unless noted otherwise. Use plate washers with a standard size hole welded to steel members where oversized holes must be used.

Holes shall be drilled per the manufacturer's written instructions as outlined in the ESR. Where applicable, installation shall follow cleaning procedure indicated in the ESR. Holes shall be made with a hammer drill. Use of a core drill is not allowed. Special inspection shall be provided for all post installed anchors as required by the building code and/or ICC-ES report. Written special

inspection reports shall be submitted to the registered design professional in responsible charge by the special inspector. The reports shall

record and report the following as a minimum: a. One of every ten anchors installed by each technician in locations listed below shall be randomly tested in direct tension. At least one anchor shall be tested on each day that anchors are installed i. Test anchors in the following locations:

Shear wall hold down anchors. Shear wall sill plate anchors. Anchors supporting dead or live loads in tension. ii. Test anchor to twice the allowable tension load as provided in the ESR. Test load shall not exceed 80 percent of the yield strength

of the anchor $(0.8 \times A_{se} \times f_{ya})$. Post-installed anchors shall not be tested using a torque wrench If any anchor fails quality control testing, all anchors of the same type shall be randomly tested until (10) consecutive anchors pass. Resume normal frequency after this with approval of the engineer. The failed anchor(s) shall be removed and the affected area patched per engineer's direction. Consult the engineer for anchor replacement instructions. The cost for additional work and testing required due to anchor failure is the responsibility of the installing contractor

Prior to and during installation of anchors, inspection and report shall include Installer shall have reviewed manufacturer's ESR report and written installation procedures and has been certified by the manufacturer or ACI.

General concrete or CMU block conditions (cracked or un-cracked, wet or dry, grouted or hollow, etc). Whether manufacturer's written procedures for preparation of hole were followed. Indicate if hole is wet or dry.

Whether hole was made with a hammer drill Whether manufacturer's written procedures for anchor installation were followed.

Embedment depth and concrete or block thickness. vii. Anchor diameter, length and type c. After installing anchors, inspection and report shall include:

All test locations. Anchor size and/or type

Applied load, loading procedure, load increments and rate of loading. Mode of failure.

Photographs of test equipment and typical failures. Substitution requests for products other than those listed above shall be submitted to the engineer with calculations that are prepared and sealed by a registered structural engineer at least two weeks prior to scheduled installations. Calculations shall demonstrate that the substituted product will achieve an equivalent capacity using the appropriate design procedure required by the building code. Product ICC-ES code reports shall be included with the submittal package.

O. COLD FORMED STRUCTURAL STUD FRAMING

1. Any dimensional information shown is included for engineering purposes only. It is the responsibility of the contractor to verify building

2. All materials shall have 33 ksi minimum yield strength, except studs and track of 16 gauge or heavier shall have a minimum yield strength of 3. All material properties, fabrication, and erection shall be in accordance the latest edition of the AISI "Specifications for the Design of Cold-

Formed Structural Members. 4. Any proprietary connectors shown have been selected based on specifications and capacities published by the manufacturer. Weld design values have been based on the latest edition of the AISI "Specifications for the Design of Cold-Formed Structural Members." Any deviance from the brand, type, size or quantity of connectors indicated on these drawings must be approved by the engineer prior to construction. 5. All framing components shall be cut squarely or at an angle to fit squarely against abutting members. Splicing of axially loaded members shall not be permitted. Members shall be held firmly in place until properly fastened. Attachments of similar components shall be by

welding, screw attachment, or bolting. Wire tying of components is not permitted. All field cutting of members shall be done by sawing, drilling, or shearing. Torching is not permitted

Special anchorage requirements required for wind and seismic bracing shall be as shown on the plans. Members shall not be spliced other than at the locations indicated on the drawings. All splices shall conform to the details in the drawings. The Contractor shall verify sizes and locations of structural components where members attach. 10. All load bearing joists shall have blocking with a maximum spacing of 8'-0" on center, attached per details

11. CFS wall studs have been designed to support floor/roof load tributary to them. Masonry veneer is assumed to be self-supported and transferred to the foundation/podium. CFS framing has been designed to laterally support veneer where applicable. 12. No notching or coping of any framing member is allowed, unless stated within this drawing package. 13. Per AISI standard for cold-formed framing- wall design, the maximum allowable gap (measured between the web of the stud and of the

track) for a stud seated in a track is 1/4" for non-axial load bearing conditions and 1/8" for axial load bearing conditions (U.N.O.) Pressure should be applied to nest the studs into the tracks until the tolerances listed above are achieved. Failure to do so could result in serviceability problems in the future. 14. CFS wall studs have been designed to support floor/roof load tributary to them. Masonry veneer is assumed to be self-supported and

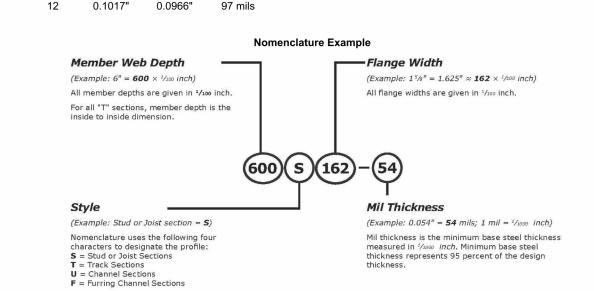
transferred to the foundation/podium. CFS framing has been designed to laterally support veneer where applicable. 15. Product Identification: a. The designations of the Steel Stud Manufacturer Association are used in this package. Any Manufacturer whose product geometry

meets or exceeds SSMA standards is acceptable. See below for SSMA nomenclature. b. The Last Two Numbers Indicate the Steel Thickness: <u>Design</u> <u>Minimum</u> <u>SSMA</u> 0.0346" 0.0329" 33 mils 33 mils 0.0451" 0.0428" 43 mils 0.0566" 0.0538" 54 mils 0.0713" 0.0677" 68 mils

0.0798"

84 mils

0.0840"



O.1. COLD FORMED CONNECTIONS

1. All fasteners are to be installed per the manufacturer's recommendations. Do not substitute fasteners without written permission from

PAF point must penetrate through full base steel thickness. Notify PAF manufacturer for instructions where full penetration is not achieved. 3. If required, all welded connections are to be performed in accordance with the latest version of AWS D1.3 Structural Welding Code – Sheet Steel. Consult AWS D19.0 Welding Zinc Coated Steel & ANSI Standard Z49.1 for information regarding safe welding procedures.

Minimum weld throat thickness (t) must match or exceed the base steel thickness of the thinnest connected part unless noted otherwise. 5. In welding, the zinc coating on steel framing will be burned away; therefore, a zinc rich paint must be applied to the weld area to provide

All screw connections are based on AISI S100 Section J4, which outlines the AISI Specification provisions for screw connections. Screw penetration through joined materials shall not be less than three exposed threads For screws, a minimum of 1.5 x screw diameter clearance must be maintained from all edges of the steel members. A minimum of 3.0 x screw diameter on-center spacing must be maintained between adjacent screws.

Power driven fastener systems, expansion anchor systems, masonry screw systems, & adhesive anchor systems connections are based on literature for fastener requirements (e.g. spacing, edge distance, base material thickness, etc.) Alternate manufacturer's fasteners of equivalent specifications & load capacities are acceptable.

9. All Tracks shall be fastened to each stud with #8 screws at each flange (min.).

As Noted on Plans Review

RELEASED FOR CONSTRUCTION

PRINTS ISSUED

11/01/23 - CITY SUBMITTAL

2 1/19/2024 ADDENDUM #2

REVISIONS: 1 12/21/2023 RESPONSE TO CITY COMMENTS

3 3/06/2024 IN RESPONSE TO GC COMMENTS 4 9/20/2024 FOUNDATION

Columbia, MO 65203

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NO. E-2006023253

EXPIRES: DECEMBER 31, 2024



SHEET TITLE **GENERAL NOTES**

PROJECT NUMBER: 2023000333

SHEET NUMBER:

i. Beam shear connections shall be designed for the actual reactions indicated on the drawings. Connection forces shown on

iii. Columns have not been checked for local effects at connections. Fabricator shall verify if stiffener or web doubler plates are

iv. Connection loads indicated on the drawings include compensation for Code permitted stress increases and load reductions for

Slip critical connections shall be used for bracing members, moment-resisting connections, cantilevers, and as indicated on the

The fabricator is responsible for verifying the tensile capacity of axially loaded members with the presence of bolt holes. Increase

iii. All non-slip-critical connections shall be typical bearing type. Oversized or slotted holes are not permitted unless indicated on the

It is the responsibility of the contractor to ensure that structure is maintained in a safe, stable configuration at all times.

Splicing of steel members not specifically shown on the drawings is prohibited without prior approval from the engineer.

required and provide as necessary. Column size may also be increased with approval of the Structural Engineer.

ii. Connections indicated on the drawings as moment-resisting shall be designed for the moment shown. If moment is not indicated

All plate dimensions and grades (minimum plate thickness shall be 3/8").

drawings are envelope reactions based on ASD load combinations.

on the drawings, connection shall be designed to develop the full capacity of the member.

drawings. Standard oversized and long-slotted holes are permitted for friction-type connections.

All fillet welds shall be sized according to AISC minimums, but never less than 3/16" (UNO).

1. Lintel sizes are based on 27 psf brick weight with 6'-0" max height of brick above the lintel.

Lintel sizes are based on 56 psf masonry weight with 6'-0" max height of brick above the lintel.

e. All double angle lintels back-to-back shall be bolted at 32" o.c. maximum spacing, with 5/8" diameter A307 bolts, a minimum of two

a. All structural steel to be fabricated and erected in accordance with latest AISC specifications.

Any shoring required shall be submitted with engineering calculations for approval.

All welds shall be performed in accordance with the latest edition of the AWS Structural Welding Code.

All weld sizes, lengths, pitches and returns.

iii. Number and type of bolts.

connection design.

Minimum bolt diameter shall be 3/4".

member size; add plates (etc) as required.

c. All beams shall be installed with the mill camber up.

Lintels shall bear 8" minimum each end.

Lintels carrying masonry shall be galvanized.

a. Loose lintels for King Brick Masonry at all openings shall be the following:

L 5 x 3 x 3/8 for spans between 6'-5" and 8'-3"

iii. L 6 x 3-1/2 x 3/8 for spans between 8'-4" and 10'-0"

iv. L 7 x 4 x 7/16 for spans between 10'-1" and 12'-1"

b. Loose lintels for Large Format Masonry at all openings shall be the following:

vi. L 7 x 4 x 3/8 for spans between 6'-4" and 9'-3"

vii. L 8 x 4 x 7/16 for spans between 9'-4" and 11'-0"

viii. L 8 x 4 x 5/8 for spans between 11'-1" and 12'-1"

ix. L 8 x 4 x 1 for spans between 12'-2" and 13'-11"

f. See architectural and mechanical drawings for opening sizes and locations.

L 3-1/2 x 2-1/2 x 1/2 for spans less than 6'-4"

v. L 5 x 3-1/2 x 5/16 for spans less than 6'-3"

d. Bolted Connections:

Welded Connections

Steel Lintels:

c. Connection design forces:

K. WOOD FRAMING AND CONNECTIONS . Install rough carpentry according to the American Institute of Timber Construction Manual. It is the responsibility of the contractor to verify all dimensions prior to erection . Material: Sawn lumber Sawn lumber shall be grade stamped and visually graded with maximum 19% moisture content. All members shall meet strength requirements in NDS "National Design Specification for Wood Construction" Joists, rafters, and nailers with nominal depth 8" or less shall be Southern Pine (SP) or Douglas Fir-Larch (DFL), No. 2 or better, iv. Joists, rafters, and nailers with nominal depth greater than 8" shall be Southern Pine (SP) or Douglas Fir-Larch (DFL), No. 1 or better, UNO. v. All members used as columns or beams (including headers) shall be void of any significant defects (ie. Checking, warping, etc.) at the time of erection. All exterior posts shall be Western Red Cedar No. 2 or better. Bearing and shear wall studs, and wall plates, shall be Douglas Fir-Larch (DFL), No. 2 or better. b. Structural Composite Lumber SCL shall meet material specifications in ASTM D5456 SCL shall include laminated veneer lumber (LVL), laminated strand lumber (LSL), oriented strand lumber (OSL) and parallel strand iii. All SCL materials shall be graded as indicated on the plans. c. Glued-laminated timber (GluLam) shall be manufactured and identified as required in ANSI/AITC A-190.1 and ASTM D3737. GluLam shall be graded as indicated on the plans. Structural Panels i. All plywood or oriented strand board (OSB) panels shall meet the strength requirements in Department of Commerce (DOC) PS 1 and PS 2 or ANSI/APA PRP 210. All structural panels (walls, floor and roof) shall meet the Structural 1 grading standard. e. Connectors and Fasteners Metal connectors and associated fasteners used for the applications indicated shall meet the following minimum standards: Untreated Lumber ..ASTM A653 G90 a. Connectors b. Bolts and Anchor RodsASTM F1554 Gr36ASTM F1667 Nails and Staples 2. Sodium Borate (SBX) Pressure Treated Lumber a. ConnectorsASTM A653 G90 b. Bolts ASTM A307 Anchor Rods ASTM F1554 Gr 55 Nails and Staples ...ASTM F1667 with A153 Hot Dipped Galvanized 3. All Other Pressure Treated Lumber (e.g. ACQ-C, ACQ-D, CA-B, CBA-A, ACZA) ...AISI SS Type 304 or 316 a. Connectors b. Bolts ...ASTM A193, GrB7 Anchor Rods ..ASTM A193, GrB7

.....ASTM F1667 using AISI Type 304 or 316 Stainless Steel

Fastener installation whether power driven or otherwise shall be in accordance with the Building Code and the manufacturer's

a. All light framed wood construction shall be fastened as indicated on the plans. Connections not detailed shall be fastened in

e. All framing in direct contact with water, soil, concrete, masonry, or permanently exposed to weather shall be preservative treated

All wood denoted as requiring fire-resistive treatment shall be pressure treated according to AWPA Standard requirements.

Use 4x4, 4x6 and 6x6 columns as shown on plans. Built-up sections of 2x studs shall not be substituted for timber posts.

Wood joists shall bear on the full width of supporting members (stud walls, beams, nailers, etc.) unless noted otherwise.

All framing indicated to be fire-retardant treated or fire resistive on the drawings (Architectural or Structural) shall comply with AWPA U1

All wood shall be stored on site and protected from the elements to prevent warping, cupping, bowing, crooking and twisting. Use only

Standard cut washers shall be used under bolt heads and nuts bearing against wood, unless noted otherwise per shear wall anchorage

m. Wall studs are designed based on being fully braced by sheathing. Design of temporary or permanent blocking or bridging for support

Subject to compliance with the project requirements, wood connectors, joist hangers, post caps and bases, hold downs, and related

All beams and joists not bearing on supporting members shall be framed with Simpson joist hangers. Use joist hangers per schedule

and details. The joist hangers shall be installed using nails or screws supplied by the hanger manufacturer as required for the hanger

a maximum of 1'-0" from corners, ends of walls and sill plate splices. Provide (2) anchors minimum in each sill plate segment Refer to

Nailers shall be anchored to steel beams and columns with 1/2" diameter A307 bolts with required washers at a maximum spacing of

q. Sill plates of all bearing walls on concrete shall be anchored with anchors as shown on the drawings. Sill plate anchors shall be located

Wall studs, jamb studs, and beam support studs shall have adequate vertical blocking installed to transfer all vertical loads to the

a. Provide wood trusses capable of withstanding the design loads within the limits and under the conditions indicated. Truss design shall

be in accordance with the Building Code and TPI-1 Nation Design Standard for Metal Plate Connected Wood Truss Construction.

In addition to the loads indicated in section "A. Design Criteria", wood trusses shall be designed for all applicable wind, seismic, and

proiect is located. Submittals shall be signed and sealed and include comprehensive truss layout plans and design calculations that

The manufacturer shall provide all open web trusses and accessories as shown on the structural and architectural drawings and as

h. All truss-to-truss connections and truss to supporting member connections shall be designed and detailed by the truss supplier and the

All temporary and permanent bracing shall be in accordance with the TPI standards for bracing. The bracing shall be furnished and

size and type of connectors included in the sealed shop drawing submittal. Coordinate size, species, and grade of supporting chord and

Girder trusses shown on drawings shall be designed to carry concentrated reactions from supported members. Girder trusses shall not

Any damage to the trusses shall be brought to the immediate attention of the Structural Engineer and truss supplier. Field repair and

modification of trusses shall not be made without prior written approval from the supplier, except for nominal trimming to correct length

TC SL = 20 psf C&C TC WL = +24/-48 psf

C&C BC WL = ±5 psf

End/Parapet C&C WL = +89/-60 psf

MWCRS BC WL = ±5 psf

e. Truss design and shop drawing preparation shall be supervised by a registered professional engineer licensed in the state where the

f. Fabricator shall determine truss diagonal locations. Truss configurations shown on drawings are diagrammatic only. Bearing points

shall coincide with intersections of diagonals and chords. All dimensions shall be determined by the truss manufacturer. The manufacturer and contractor shall coordinate all architectural and MEP components with the truss layout and profile.

required for a complete project. This includes all blocking, bridging, bracing, and drag components required for construction.

k. Wood trusses shall be handled and erected in accordance with TPI HIB-91. Trusses shall be unloaded and stored in bundles in an

Other manufacturers may be acceptable. Submit substitution request demonstrating that the proposed hardware has the same or

Plywood/OSBS wall, floor or roof sheathing shall be fastened per the requirements shown on the drawings.

recommendations. In general fastener heads shall be installed nominally flush with the outer ply of the connection. Sheathing and

d. Nails and Staples

accordance with the table below.

General:

Fasteners utilizing dissimilar materials are prohibited.

Power driven fasteners shall comply with NES NER-272.

Sill plates shall be anchored to the foundation as shown on the drawings.

Splicing of structural members is not permitted under any circumstances.

lumber in accordance with the AWPA Standard U1 and M4

All multi-ply beams, joists and headers shall be fastened together.

Fasten structural composite lumber per manufacturer's literature.

of construction loads by unsheathed walls is the responsibility of the contractor.

greater capacity for each connection. Allow two weeks for review.

hardware shall be manufactured by Simpson Strong-Tie Company, Inc. or approved equal.

Contractor shall follow the manufacturer's latest recommendations for installation of connectors.

Metal gusset plates shall be designed, manufactured, and approved according to IBCO requirements.

indicate species and grades of lumber, design stresses, size and type of connector plates used.

installed by the Contractor. Do not use ceilings as uplift bracing at truss bottom chord.

Balanced TC SL = 14psf Drift Surcharge TC SL = 36 psf Drift Width = 17'-3"

BC LL = ± 5 psf

be located directly above openings unless coordinated with the Structural Engineer.

upright position out of contact with the ground until ready for installation.

where such trimming will not impair the load carrying capacity of the truss

TC DL = 17 psf + 15psf partition dead load $TC LL^* = 40/100/125 psf$

*(Coordinate LL with Architectural plans and general note section "A. Design Criteria"

L/360

1.5"

L/360

L/480

Wood trusses shall be of sawn lumber with 2x nominal thickness. Minimum grade for any truss member shall be #2.

Fasten sawn lumber members per schedule below.

plans and details for shear wall anchorage requirements.

24" on center (alternate sides), unless noted otherwise.

uding drift) loads required by Building Cod

web members with the truss hanger selected.

Roof trusses shall be designed for the following: TC DL = 10 psf TC LL = 20 psf

6. Floor trusses shall be designed for the following loads:

BC DL = 10 psf BC LL = N/A

Snow Drift Snow Load:

BC DL = 10 psf

Total Load:

Total Load:

Live Load:

Roof Live or Snow Load:

Absolute Maximum:

Absolute Maximum:

7. The allowable deflection is:

a. Roof Trusses

b. Floor Trusses

4. Wood Floor and Roof Trusses:

support framing damaged by overdriven fasteners shall be removed and replaced.

UCFA, Type A or ICC-ES ESR 2645 and shall have UL FR-S surface burning characteristics.

material that is straight. All stored wood shall be held off the ground with sacrificial dunnage blocks.

Wood connectors shall be installed to prevent wood from splitting or otherwise damaging either member.

v. Aluminum fasteners and flashing shall not be in contact with pressure treated lumber.

L. WOOD SHRINKAGE 1. IBC 2304.3.3 requires that architectural, mechanical, electrical, and plumbing systems be designed to accommodate movement due to shrinkage. McClure Engineering Co. takes no responsibility for the naturally occurring shrinking that will occur. 2. Estimated values are based upon the following moisture content: a. At installation (MC) = 19%

b. At equilibrium (EMC) = 8% 3. The following recommendations are intended to minimize the potential issues associated with wood shrinkage. Implementation and liability

are ultimately up to the contractor or design professional responsible for the impacted trade. a. Mechanical, Electrical, Plumbing i. Allow construction gaps in the wood framing to close by delaying installation of MEP as long as possible to allow for additional dead load to be installed.

Provide oversized or long slotted holes at pipe penetrations. Holes must be within conformance of typical penetration details. iii. Rigid connections shall be adjusted before closing of wall and ceiling assemblies. iv. All vertical sheet metal down spouts shall have intermediate slip joints. Roof Drains shall utilize adjustable fittings. Fittings must be adjusted at the completion of construction and then as required to

maintain proper drainage. b. Architectural Considerations Stucco, EIFS and brittle finishes shall have horizontal expansion joints, slip joints with appropriate waterproofing.

ii. Brick and stone finishes shall have ties that accommodate differential movement. iii. Provide adjustable thresholds or transitions at rigid transitions such as CMU or concrete stair and elevator shafts. c. Construction tolerance Limit shortening due to nesting by cutting all studs level square and tight against plates. ii. Structural wood panels shall have ½" relief gaps at each floor to limit bulging.

iii. Floor sheathing shall have 1/8" gaps on all sides during installation to accommodate movement. iv. Shear wall hold downs shall be check and retightened immediately prior to sheathing walls. v. Delay gyp topping around concrete and CMU stair or elevator shafts until competition of construction. d. Material storage Stored materials shall be covered and elevated to provide protection from the elements.

ii. Do not allow water to pond on floor sheathing. Provide drain holes if required to allow water to quickly drain if water does temporarily pond. e. Post occupancy i. McClure recommends a review of roof drains every 3 months for the first 24 months of occupancy and then annually. Adjust drains

as required to maintain watertight integrity. McClure recommends review of joints at exterior doors, windows and finish transitions. Waterproof as needed where original joints

fail per the architect's recommendations. iii. Remedial self-leveling work may be required around concrete or CMU stair and elevator towers to accommodate shrinkage

M. STEEL FLOOR AND ROOF DECK

a. Install steel deck according to procedures outlined in the latest edition of the "SDI Manual of Construction with Steel Deck" published by the Steel Deck Institute. One copy shall be maintained on site. b. All steel roof deck shall be welded to supporting beams and joists and erected in accordance with manufacturer's latest

c. Deck shall be continuous over 3 spans, unless noted otherwise. d. Provide welds or screws at parallel edges equal to specified fastening as supports. Fasten to all parallel supports – both at edges and in the field of the deck. Raise steel supports or provide shims at weld points if the deck valley does not engage the support.

 Provide welding washers as required by manufacturer's recommendations f. All miscellaneous accessories -- pour stops, column closures, etc. -- will be installed in accordance with manufacturer ecommendations and the Steel Deck Institute. Pour stops shall be A36 steel angles (1/4") to finish floor height unless otherwise noted.

Composite deck has been designed for a uniform construction live load of 20 psf and concentrated construction live load of 150 lbs. These loads are considered adequate for typical construction that consists of concrete transport and placement by hose and concrete finishing using hand tools. Bulk dumping of concrete using buckets, chutes, or handcarts, and the use of motorized finishing equipment (such as power screeds) may require design for larger construction live loads and the addition of deck shoring during concrete placement. Requests for approval to use concrete placement or finishing methods requiring analysis using increased loading must be made by the contractor to the engineer prior to submittal of deck and supporting structure shop drawings to be considered. Concrete placed on steel deck shall have a constant thickness. Thickness shall be maintained by probing the deck at supports and at

mid-span between supports. It is not permissible to finish the deck to be flat unless a design is submitted demonstrating that the deck and supporting structure can support the additional concrete weight. 2. Roof Deck @ Canopy: a. Roof deck properties shall be as follows based on deck type indicated on plans: 1 1/2" wide rib 22 Ga. t_{min} = .0295", I=0.155 in⁴/ft, S_p =0.186 in³/ft, S_n =0.192 in³/ft, and F_y =33 ksi

 Boof deck shall be G90 Galvanized unless noted otherwise. c. Roof deck shall be fastened to supports with X-HSN24 PAF and fastened at sidelaps with #10 screws as follows: 1.5B: 36/4 fastener pattern w/ (1) sidelap fastener per span

Refer to general notes section "P. Power-Actuated Fasteners" for spacing and edge distance requirements of PAFs. b. Floor Deck: Floor deck properties shall be as follows based on deck type indicated on plans: i. Main Floor Slab: 5 1/2" Total Depth Lightweight Concrete with 3" Composite Deck 6x6-W1.4xW1.4 Welded Wire Mesh

a. Reinforcing: 3" Composite 20 Ga: b. Deck: $I_{min} = 0.0358$ ", $I_p = 0.919 \text{ in}^4/\text{ft}$ $I_n = 0.6921 \text{ in}^4/\text{ft}$, $S_p = 0.512 \text{ in}^3/\text{ft}$, $S_n = 0.539 \text{ in}^3/\text{ft}$, $F_v = 50 \text{ksi}$, c. Maximum Unshored Spans: Single Span = 12'-2", Double Span = 13'-1", Triple Span = 13'-7"

ii. Levels 3 and 4 Balcony Structural Slabs: 2 1/2" Total Depth Light Weight Concrete With 9/16" form deck 6x6-W1.4xW.14 Welded Wire Mesh b. Deck: 9/16" non-composite 28 Ga.: $t_{min} = .0149$ ", $I_p = 0.012$ in^4/ft $I_p = 0.012$ in^4/ft, $S_p = 0.035$ in^3/ft, $S_p = 0.036$ in^3/ft, $F_v = 60$ ksi, c. Floor deck shall be fastened to supports with X- ENP-19 L15 w/ (5) fasteners per rib & (1) @ 2" o.c. along edge of panel, with sidelap

fasteners at 36" o.c. within 30ft of CMU. When not within 30ft of CMU, fasten to supports w X-ENP-19 L15 PAFs w/ (1) fastener per rib & (1) @ 36" o.c. along edge of panel with sidelap fasteners at 36" o.c. Refer to general notes section "P. Power-Actuated Fasteners" for spacing and edge distance requirements of PAFs.

(5) X-ENP-19 L15 PAFs may be replaced with (1) ¾"Ø HAS welded to the support through the deck, along the edge of a panel the PAFs may be replaced by (1) ¾"Ø HAS welded to the support through the deck @ 12" o.c. Alternatively, floor deck may be fastened to supports (At embed plate at CMU) with 5/8"Ø puddle welds (2) per rib + (1) every other rib & (1) weld @ 4" o.c. along edge of panel, with sidelap fasteners at 36" o.c. within 30ft of CMU. When not within 30ft of CMU, fasten to supports w/ (1) 5/8"Ø puddle weld per rib & (1) weld @ 36" o.c. along edge of panel with sidelap fasteners at

4. Sidelap fasteners may be #10 screws or button punch interchangeably d. Non-composite floor deck at Balconies shall be fastened to supports with X-ENP-19 L15 PAFs w/ 30/4 pattern, with 0 sidelap fasteners. Refer to general notes section "P. Power-Actuated Fasteners" for spacing and edge distance requirements of PAFs. Metal floor deck shall be galvanized in accordance with the requirements of ASTM A653-94 G60.

Metal floor deck exposed to weather (at balconies) shall be galvanized in accordance with the requirements of ASTM A653-94 G90.

Schedule of minimum nailing for standard connections Number, or spacing, of fasteners required per connectior Nail lengths are minimum, nominal lengths, in inches. Connection^{2, 3} Nail shank diameters are minimum, nominal diameters, in inches. 3½ x | 3 x | 3¼ x | 3 x | 2½ x | 3¼ x | 3 x | 2¾ x | 2 x | 2¼ x | 2¼ x
 0.162
 0.148
 0.131
 0.131
 0.131
 0.120
 0.120
 0.113
 0.113
 0.105
 0.099

 16d
 10d
 8d
 6d
 6d
 6d
 Equiv. Common Nail Floor Framing 5 N/A Joist to band joist Ledger strip Joist to sill or girder Blocking between joist or rafter to top plate 3 3 3 4 3 4 4 N/A N/A N/A N/A
 N/A
 N/A
 N/A
 N/A
 2
 3
 3
 3
 4
 3
 4

 8" o.c.
 6" o.c.
 6" o.c.
 6" o.c.
 6" o.c.
 4" o.c.
 6" o.c.
 3" o.c.
 3" o.c.
 3" o.c.
 Bridging to joist Rim joist to top plate 24" o.c. 24" o.c. 24" o.c. 24" o.c. 16" o.c. 16" o.c. 16" o.c. N/A N/A N/A Built-up Girders & Beams Spacing along edges, # at ends & splices Ceiling joists to plate Ceiling joists, laps over partitions Ceiling joist to parallel rafter Collar tie to rafter Jack rafter to hip, toe-nailed Jack rafter to hip, face nailed Roof rafter to plate Roof rafter to 2-by ridge beam (driven through beam into end of ridge) Roof rafter to 2-by ridge beam (toe-nail rafter to beam) Top or sole plate to stud 2 | 3 | 3 | 5 | 4 | 4 | N/A | N/A | N/A | N/A (End nailed) Stud to top or sole plate (toe-nailed) Cap/top plate laps and intersections (each side of lap) Diagonal bracing Sole plate to joist or blocking @ braced panels (number per 16" joist space) Sole plate to joist or blocking Double top plate | 2" o.c. | 12" o.c. | 8" o.c. | 8" o.c. | 6" o.c. | 8" o.c. | 8" o.c. | N/A Double studs

 1 This fastening schedule applies to framing members having an actual thickness of 1 $\frac{1}{2}$ "(Nominal "2-by" lumber) 2Fastenings listed above may also be used for other connections that are not listed but that have the same configuration and the same code requirement for fastener quantity/spacing and fastener size (pennyweight and style, e.g., 8d common, "8-penny common nail"). ³Fastening schedule only applies to buildings of conventional wood frame construction. Connections of shear walls and floor and roof diaphragms shall be as shown on the drawings.

24" o.c.|16" o.c.|16" o.c.|16" o.c.| 8" o.c. |12" o.c.|12" o.c.| N/A

N. CONCRETE MASONRY

1. All construction shall comply with applicable provisions of the following latest ACI standards: a. ACI 530/ASCE 52/TMS 402 – Building Code Requirements for Masonry Structures. ACI 530.1/ASCE 6/TMS 602- Specifications for Masonry Structures.

IBC Chapter 21 Masonry 2. Concrete block units shall conform to the requirements for Grade N Type 1, load-bearing normal-weight units per ASTM C-90. Use Grade S blocks below grade. All below grade block shall be solid grouted.

Net area compressive strength of masonry, $f'_m = 2,000 \text{ psi}$. 4. Standard units shall have nominal face dimensions of 16 long x 8 inches high & waterproofed x 8 inches wide. The minimum compressive strength of the masonry units shall be as follows

Net Area Net Area Compressive Strength Of Concrete Masonry Compressive Strength Of Units (psi) Masonry (f'_m psi) Type M or S

5. Mortar for unit masonry shall be proportioned per ASTM C270. The minimum mortar compressive strength is as follows:

Type M: 2,500 psi 6. Grout for unit masonry shall be proportioned per ASTM C476. The minimum grout compressive strength is the larger of 2,000 psi or f_m.

Maximum coarse aggregate size is 3/8". 8. Reinforce all CMU walls with vertical rebar full height, centered in cell as shown on the drawings. Grout reinforced cells solid. a. When reinforcing is not specified, provide #5 @ 48" o.c., minimum. 9. All vertical cells to be filled shall have vertical alignment to maintain an unobstructed cell area not less than 2 in. x 3 in.

a. Provide bent dowels at all wall intersections - one per bond beam at corners, and two at tee intersections. 11. Provide bond beams at all walls supporting roof and floors. 12. Grout jambs solid under all beams and lintels for full height of wall.

13. All masonry walls shall have ladder type horizontal joint reinforcement with two 9 gage wires spaced at 16" o.c. vertically, unless noted a. All wall intersections shall be reinforced with prefabricated tee or corner units.

14. Use low lift method of grouting. Maximum grout lift = 5'-0". Alternative methods of grouting may be acceptable. Submit method for approval two weeks in advance. 15. Masonry reinforcing lap lengths shall be as follow

1. Development length is based on 2½" masonry cover for all bars. Use bar spacers to maintain cover.

16. Brace all masonry walls until floor and roof framing and metal deck are installed . Design and installation of bracing is the responsibility of the masonry contractor. Submit bracing plan for review.

17. When grouting is stopped for more than one hour, horizontal construction joints shall be formed by stopping the pour of grout 1-1/2" below the top of the uppermost course. 18. Provide control vertical joints in wall every 40 ft. Provide vertical reinforcing in first cell each side of control joint. Do not locate control

ioint within 2'-0" of end or opening. 19. Conduit pipes and sleeves in masonry shall not displace more than 2 percent of the net cross-sectional area and shall be placed no closer than 3 diameters or widths on center.

20. The Contractor shall include in his bid an allowance of 300 lbs of reinforcing steel "in place" to be used in the field as the architect or structural engineer may direct.

P. POWER-ACTUATED FASTENERS (PAFS)

10. All bond beams shall be grouted solid and reinforced.

1. This section applies to all driven pin installation methods (e.g. powder, pneumatic, electric), regardless of terminology employed. All PAFs shall be of the brand, size, and quantity indicated in the sections or details.

All PAFs shall be Hilti 0.157"Ø X-U, U.N.O

4. PAF length is dependent on installation penetration requirement in base material: a. For concrete: PAFs shall have an embedment of 1-1/2".

b. For steel, the required penetration is dependent on the thickness of the steel substrate. The contractor shall select a PAF that satisfies the following requirements:

i. For steel 1/2"thickness or less, PAFs must penetrate through the full base steel thickness. ii. For steel thickness greater than 1/2", PAFs must penetrate the steel to a depth of at least 1/2" and the head of the PAF shall be flush with the surface.

c. For concrete masonry units (CMU): The PAF must penetrate 1" into the substrate. d. The contractor must consider the thickness of the component attached to the substrate material to ensure adequate penetration or embedment. A PAF that is equal in length to the specified penetration or embedment is inadequate to comply

with this requirement. . Refer to PAF spacing and edge distance general details for minimum spacing and edge distance requirements in all base materials.

Notify the manufacturer for instructions if PAFs are not driven flush to surface.

Do not re-drive PAFs if they do not drive completely on the first charge. Remove and replace the PAF in question or contact the manufacturer for specific alternative instructions.

8. PAFs shall not be installed into concrete until the concrete has achieved the minimum compressive strength listed in the concrete

requirements of the structural general notes. PAFs shall not be driven into steel that is 3/16" thick or less. Notify McClure for alternate connection options.

10. PAFs driven into existing concrete may cause damage. The contractor is responsible for ensuring anchors do not damage existing structure. Notify McClure if alternate anchorage requirements are needed to protect existing concrete.

11. PAFs have limited use in seismic applications. Additional anchorage may be required as indicated in the details. Deferred submittals shall fully consider the most restrictive implications of ASCE 7 Section 13.1.4. and the manufacturer's product ESR for use of PAFs to resist

seismic loads 12. PAF installers must be certified by the manufacturer of the PAFs being installed

13. PAFs shall not be substituted without the written approval of McClure prior to fabrication. Requests after installation may incur additional

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PRINTS ISSUED

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2 1/19/2024 ADDENDUM #2

4 9/20/2024 FOUNDATION

1 12/21/2023 RESPONSE TO CITY

3 3/06/2024 IN RESPONSE TO GC

COMMENTS

COMMENTS

Columbia, MO 65203

P 573-814-1568

NOTICE:

McClure Engineering Co. is not

responsible or liable for any issues,

claims, damages, or losses (collectively,

"Losses") which arise from failure to follow

these Plans, Specifications, and the

engineering intent they convey, or for

Losses which arise from failure to obtain

and/or follow the engineers' or surveyors'

guidance with respect to any alleged

errors, omissions, inconsistencies,

ambiguities, or conflicts contained within

the Plans or Specifications.

MISSOURI CERTIFICATE OF AUTHORITY

NO. E-2006023253

EXPIRES: DECEMBER 31, 2024

SHEET TITLE **GENERAL NOTES**

PROJECT NUMBER: 2023000333

SHEET NUMBER:

STRUCTURAL STATEMENT OF SPECIAL INSPECTIONS

Project Name: Discovery Park Lee's Summit Lot Address: 1901 NE Discovery Ave, Lee's Summit, MO 64064

1. This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Special Inspector to be retained for conducting these...

2. The Special Inspector shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Registered Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

3. Interim reports shall be submitted to the Building Official and the Registered Design Professional in Responsible...

4. A Final Report of Special Inspections documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use an...

5. Job site safety and means and methods of construction are solely the responsibility of the Contractor. This Statement of Special Inspections includes the following building systems:

x Fabricators

x Cast-In-Place Foundations Elements o Helical Pile Foundations

x Soils x Rammed Aggregate Piers o Cast-In-Place Deep Foundation Elements x Masonry Construction - Level 1 x Structural Steel Construction

o Masonry Construction - Level 2 o Steel Construction Other than Structural Steel x Wood Construction x Seismic Resistance

x Wind Resistance 6. The following components are wind-resisting components or part of the main wind-force resisting system and are

subject to special inspections in accordance with the Special Inspection Schedule - Wind Resistance: Wood Shear Walls with Structural Plywood or Gypsum Board Sheathing

Masonry Walls

x Concrete Construction

7. The following components are designated seismic systems or part of the seismic-force resisting system that are subject to special inspections in accordance with the Special Inspection Schedule - Seismic Resistance:

Wood Shear Walls with Structural Plywood or Gypsum Board Sheathing

Masonry Walls

Special Inspection Schedu	le: Fabricators		
Verification And	Applicable To	Frequency	
Inspection Task	This Project?	Continuous	Periodic
Verify fabrication and implementation procedures:		1	
a. Steel Construction	X	-	Х
b. Concrete Construction (including rebar fabrication)	X	-	Х
c. Masonry Construction	-	-	X
d. Wood Construction	X	-	Х
e. Cold Formed Metal Construction	-	-	Х
f. Other Construction	-	-	Х

Special Inspection Schedule: Soils	S		
Verification And	Applicable To	Freque	ncy
Inspection Task This Project? Continuous			Periodic
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Х	-	Х
2. Verify excavations are extended to proper depth and have reached proper material.	X	-	Х
3. Perform classification and testing of compacted fill materials.	X	-	Х
4. Verify use of proper materials, densities and lift thickness during placement and compaction of compacted fill.	X	X	-
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	Х	-	Х

Special Inspection Schedule: Cast-In-Place Found	dation Elements		
Verification And	Applicable To	<u> </u>	
Inspection Task	This Project?		
1. Special Inspections and verifications for concrete foundation construction in accordance with the Special Inspection Schedule: Cast-In-Place Concrete for the following foundation elements:			
a. Isolated spread concrete footings.	X	-	X
b. Continuous concrete footings supporting walls.	Х	-	Х
c. Concrete foundation walls.	Х	Х	-

Special Inspection Schedule: Aggregate	e Piers		
Verification And	Applicable To	Freque	ncy
Inspection Task	This Project?	Continuous	Periodic
Observe installation operations and maintain complete and accurate records for each element.	Х	X	-
2. Verify placement locations, pre-auger diameter and soil conditions encountered during drilling (if applicable), aggregate pier lengths, and planned and actual aggregate pier elevations at the top and bottom of the aggregate pier.	Х	X	-
3. Verify average lift thickness of each aggregate pier, volume of aggregate used in each aggregate pier, any unusual conditions encountered.	X	X	-
4. Verify type and size of densification equipment used.	X	X	-

Verification And	Applicable To	Freque	ency
Inspection Task	This Project?	Continuous	Periodic
Inspect reinforcing steel, including prestressing tendons and placement.	X	-	Х
2. Inspect reinforcing steel welding in accordance with the Special Inspection Schedule: Steel Construction (other than Item 3).	Х	-	-
3. Inspect anchors cast in concrete where allowable loads have been increased or where strength design is used.	Х	-	Х
4. Inspect anchors post-installed in hardened concrete members.	X	-	Х
5. Verify use of required design mix.	X	-	Х
6. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests and record the temperature of the concrete.	Х	X	-
7. Inspect concrete and shotcrete placement for proper application techniques.	Х	Х	-
8. Inspect for maintenance of specified curing temperature and techniques.	X	-	Х
9. Inspection of Prestressed Concrete:			
Observe application of prestressing forces.	-	Х	-
b. Observe grouting of bonded prestressing tendons in the seismic force resisting system.	-	X	-
10. Inspect erection of precast concrete members.	-	-	Х
11. Verify in-situ concrete strength prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	-	-	Х
12. Inspect formwork for shape, location, and dimensions of the concrete member being formed.	Х	-	Х

Special Inspection Schedule: Structural Stee				
Verification And	Applicable To	Freque	ency	
Inspection Task	This Project?	Continuous	Periodi	
Material verification of high-strength bolts, nuts and washers:				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	X	-	Х	
b. Manufacturer's certificate of compliance required.	X	-	Х	
2. Inspection of high-strength bolting:				
a. Snug-tight joints.	Χ	-	Х	
b. Pretensioned and slip-critical joints using turn-of-nut with match marking, twist-off bolt, or direct tension indicator methods of installation.	-	-	Х	
c. Pretensioned and slip-critical joints using turn-of-nut without match marking or calibrated wrench methods of installation.	-	X	-	
3. Material verification of structural steel:				
a. Identification markings to conform to ASTM standards specified in the approved Construction Documents and AISC 360.	Х	-	Х	
b. Manufacturer's certified test reports.	X	-	Х	
4. Material verification of weld filler materials:				
a. Identification markings to conform to AWS specification in the approved Construction Documents.	Х	-	Х	
b. Manufacturer's certificate of compliance required.	X	-	Х	
5. Inspection of welding, structural steel:				
a. Complete and partial penetration groove welds.	X	X	-	
b. Multi-pass fillet welds.	Х	X	-	
c. Single-pass fillet welds > 5/16".	X	X	-	
d. Single-pass fillet welds < 5/16".	X	-	Х	
6. Inspection of steel frame joint details for compliance with approved Construction Documents:				
a. Details such as bracing and stiffening.	X	-	Х	
b. Member locations.	X	-	Х	
c. Application of joint details at each connection.	Х	-	Х	

Special Inspection Schedule: Wood Cor	nstruction		
Verification And	Applicable To	Frequency	
Inspection Task This Project? Continu			Periodic
1. Inspection of high-load diaphragms:			
a. Verify wood structural panel sheathing is of the grade and thickness shown on the Construction Documents.	X	-	Х
b. Verify nominal size of framing members at adjoining panel edges agrees with the Construction Documents.	X	-	Х
c. Verify fastener diameter and length, number of fastener lines, the spacing of the fasteners, and the edge margins agree with the Construction Documents.	X	-	Х
2. Inspection of metal-plate-connected wood trusses spanning 60 feet or greater:			
a. Verify temporary installation restraint/bracing are installed in accordance with approved truss submittal package.	-	-	X
b. Verify permanent individual truss member restraint/bracing are installed in accordance with approved truss submittal package.	-	-	Х

	uction - Level 1		
Verification And	Applicable To	Freque	ency
Inspection Task	This Project?	Continuous	Periodio
Compliance with required inspection provisions of the Construction	X	_	Х
Documents and the approved submittals shall be verified.			
2. Verify f'm and f'aac prior to construction except where specifically	X	_	X
exempted by the building code.			
3. Verify slump flow and Visual Stability Index as delivered to the site for self-consolidating grout.	X	X	-
4. As masonry construction begins, the following shall be verified to ensure			<u> </u>
compliance:			
a. Proportions of site-prepared mortar.	Χ	-	Х
b. Construction of mortar joints.	Х	-	Х
c. Location of reinforcement, connectors, prestressing tendons, and	Χ	_	X
anchorages.			V
d. Prestressing technique.	-	-	X
e. Grade and size of prestressing tendons and anchorages. 5. During construction, the inspection program shall verify:	-	-	^
a. Size and location of structural elements.	X	_	Х
b. Type, size, and location of anchors, including other details of			
anchorage of masonry to structural members, frames, or other construction.	X	-	X
c. Specified size, grade, and type of reinforcement, anchor bolts,			
prestressing tendons, and anchorages.	X	-	X
d. Welding of reinforcing bars.	-	X	-
e. Preparation, construction, and protection of masonry during cold	Х	_	Х
weather (temperature < 40°f) or hot weather (temperature > 90°f).		_	, , , , , , , , , , , , , , , , , , ,
f. Application and measurement of prestressing force.	-	X	_
6. Prior to grouting, the following shall be verified to ensure compliance:	V		
a. Grout space is clean.	X	-	X
b. Placement of reinforcement, connectors, prestressing tendons, and anchorages.	Χ	-	X
c. Proportions of site-prepared grout and prestressing grout for bonded			
tendons.	X	-	X
d. Construction of mortar joints.	X	_	X
7. Grout placement shall be verified to ensure compliance with Building			I
Code and Construction Document provisions.			
a. Grouting of prestressing bonded tendons.	-	X	-
8. Preparation of any required grout specimens, mortar specimens, and/or prisms shall be observed.	X	_	X
Inspection Task 1. Roof cladding and roof framing connections.	This Project?	Continuous -	Period -
Wall connections to roof and floor diaphragms and framing.	X	-	X
3. Roof and floor diaphragm systems including collectors, drag struts, and	X	_	X
boundary elements.			
4. Vertical wind force resisting systems including braced frames, moment frames, and shear walls.	X	-	X
5. Wind force resisting system connections to the foundation.	X	_	X
6. Fabrication and installation of systems or components required to meet			V
impact-resistant requirements.	<u>-</u>	-	X
7. Inspection of structural wood:			1
a. Inspect field gluing operations of elements of the main wind force	X	X	_
resisting system. b. Inspect nailing, bolting, anchoring, and other fastening of components			
within the main wind force resisting system including wood shear walls, wood	X	_	X
diaphragms, drag struts, braces, and hold downs.	~		
8. Inspection of cold-formed steel light frame construction:			l
a. Inspection of welding operations of elements of the main wind force			
resisting system.	-	-	-
b. Inspection of screw attachment, bolting, anchoring, and other fastening			
of other components within the main wind force resisting system including	-	-	-
shear walls, braces, diaphragms, collectors (drag struts), and hold downs.			
0. Wind registant systems and components:	Х		
	Α	-	-
a. Roof cladding		. -	_
	X		
a. Roof cladding b. Wall cladding	X		
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Re	×	Eroquo	anov.
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Re Verification And	X esistance Applicable To	Freque	
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Re Verification And Inspection Task	×	Freque Continuous	
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Re Verification And Inspection Task 1. Inspection of pier foundations:	X esistance Applicable To This Project?	Continuous	Period
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Re Verification And Inspection Task 1. Inspection of pier foundations: a. Inspect placement of reinforcement.	X esistance Applicable To This Project?		Period
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Reversification And Inspection Task 1. Inspection of pier foundations: a. Inspect placement of reinforcement. b. Inspect placement of concrete.	X esistance Applicable To This Project?	Continuous	Period
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Reversification And Inspection Task 1. Inspection of pier foundations: a. Inspect placement of reinforcement. b. Inspect placement of concrete.	X esistance Applicable To This Project? X X	Continuous	Period X X
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Reversification And Inspection Task 1. Inspection of pier foundations: a. Inspect placement of reinforcement. b. Inspect placement of concrete. 2. Inspection of concrete reinforcement: a. Verify certified mill test reports comply with ACI 318 Chapter 21	X esistance Applicable To This Project?	Continuous	Period
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Reversification And Inspection Task 1. Inspection of pier foundations: a. Inspect placement of reinforcement. b. Inspect placement of concrete. 2. Inspection of concrete reinforcement: a. Verify certified mill test reports comply with ACI 318 Chapter 21 requirements. b. Where reinforcing complying with ASTM A615 is to be welded,	X esistance Applicable To This Project? X X	Continuous	Period X X X
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a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Reversification And Inspection Task 1. Inspection of pier foundations: a. Inspect placement of reinforcement. b. Inspect placement of concrete. 2. Inspection of concrete reinforcement: a. Verify certified mill test reports comply with ACI 318 Chapter 21 requirements. b. Where reinforcing complying with ASTM A615 is to be welded, chemical tests shall be performed to determine weldability. 3. Inspection of structural steel. a. Inspections shall be in accordance with the quality assurance plan requirements of AISC 341.	X esistance Applicable To This Project? X X X	Continuous	Periodi X X X
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Reverification And Inspection Task 1. Inspection of pier foundations: a. Inspect placement of reinforcement. b. Inspect placement of concrete. 2. Inspection of concrete reinforcement: a. Verify certified mill test reports comply with ACI 318 Chapter 21 requirements. b. Where reinforcing complying with ASTM A615 is to be welded, chemical tests shall be performed to determine weldability. 3. Inspection of structural steel. a. Inspections shall be in accordance with the quality assurance plan requirements of AISC 341. 4. Inspection of cold-formed steel framing:	X esistance Applicable To This Project? X X X	Continuous	Periodi X X X
a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Re Verification And Inspection Task 1. Inspection of pier foundations: a. Inspect placement of reinforcement. b. Inspect placement of concrete. 2. Inspection of concrete reinforcement: a. Verify certified mill test reports comply with ACI 318 Chapter 21 requirements. b. Where reinforcing complying with ASTM A615 is to be welded, chemical tests shall be performed to determine weldability. 3. Inspection of structural steel. a. Inspections shall be in accordance with the quality assurance plan requirements of AISC 341. 4. Inspection of cold-formed steel framing: a. Inspect welding operations of elements of the seismic force resisting	X esistance Applicable To This Project? X X X	Continuous	Periodi X X X
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a. Roof cladding b. Wall cladding Special Inspection Schedule: Seismic Re Verification And Inspection Task 1. Inspection of pier foundations: a. Inspect placement of reinforcement. b. Inspect placement of concrete. 2. Inspection of concrete reinforcement: a. Verify certified mill test reports comply with ACI 318 Chapter 21 requirements. b. Where reinforcing complying with ASTM A615 is to be welded, chemical tests shall be performed to determine weldability. 3. Inspection of structural steel. a. Inspections shall be in accordance with the quality assurance plan requirements of AISC 341. 4. Inspection of cold-formed steel framing: a. Inspect welding operations of elements of the seismic force resisting system. b. Inspect screw attachment, bolting, anchoring, and other fastening of components within the seismic force resisting system including shear walls, braces, diaphragms, collectors (drag struts), and hold downs.	X esistance Applicable To This Project? X X X X X	Continuous	X X X X X X
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Special Inspection Schedule: Seismic Re Verification And Inspection Task 1. Inspection of pier foundations: a. Inspect placement of reinforcement. b. Inspect placement of concrete. 2. Inspection of concrete reinforcement: a. Verify certified mill test reports comply with ACI 318 Chapter 21 requirements. b. Where reinforcing complying with ASTM A615 is to be welded, chemical tests shall be performed to determine weldability. 3. Inspection of structural steel. a. Inspections shall be in accordance with the quality assurance plan requirements of AISC 341. 4. Inspection of cold-formed steel framing: a. Inspect welding operations of elements of the seismic force resisting system. b. Inspect screw attachment, bolting, anchoring, and other fastening of components within the seismic force resisting system including shear walls, braces, diaphragms, collectors (drag struts), and hold downs. 5. Inspect field gluing operations of elements of the seismic force resisting system.	X esistance Applicable To This Project? X X X X X	Continuous	X X X X X X
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a. Inspect anchorage of storage racks 8 feet or greater in height.

c. Inspect erection and fastening of interior and exterior veneer.

b. Inspect erection and fastening of interior and exterior nonbearing walls.

a. Verify label, anchorage, or mounting conforms to the certificate of

a. Inspect the fabrication and installation of isolator units and energy

dissipation devices that are part of the seismic isolation system.

a. Inspect erection and fastening of exterior cladding.

7. Inspection of architectural components:

d. Inspect anchorage of access floors. 8. Inspection of designated seismic systems:

9. Inspection of seismic isolation systems:

CONSTRUCTION As Noted on Plans Review

PRINTS ISSUED

11/01/23 - CITY SUBMITTAL

REVISIONS: 1 12/21/2023 RESPONSE TO CITY COMMENTS

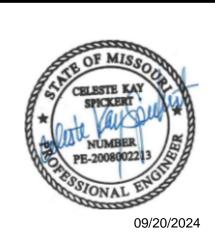
2 1/19/2024 ADDENDUM #2 3 3/06/2024 IN RESPONSE TO GC COMMENTS

4 9/20/2024 FOUNDATION



McClure Engineering Co. is not responsible or liable for any issues, claims, damages, or losses (collectively, "Losses") which arise from failure to follow these Plans, Specifications, and the engineering intent they convey, or for Losses which arise from failure to obtain and/or follow the engineers' or surveyors' guidance with respect to any alleged errors, omissions, inconsistencies, ambiguities, or conflicts contained within the Plans or Specifications.

MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253 EXPIRES: DECEMBER 31, 2024



SHEET TITLE SPECIAL INSPECTIONS

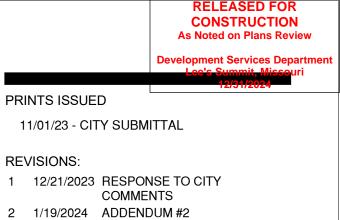
SHEET NUMBER:

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PROJECT NUMBER: 2023000333



2001 W Broadway Columbia, MO 65203 P 573-814-1568

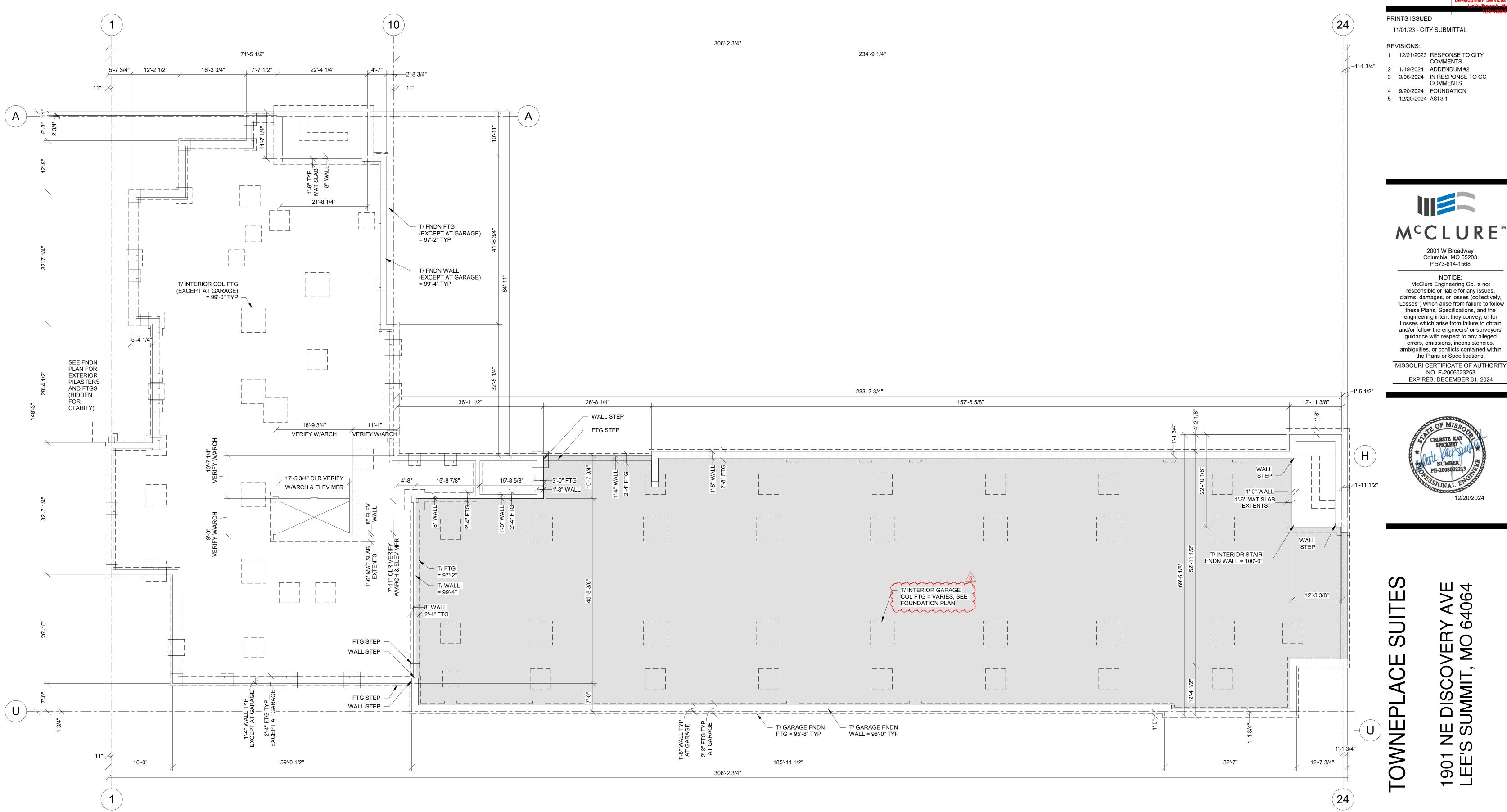
McClure Engineering Co. is not

responsible or liable for any issues,

the Plans or Specifications.

NO. E-2006023253

EXPIRES: DECEMBER 31, 2024



SHEET TITLE FOUNDATION WALL DIMENSION

PROJECT NUMBER: 2023000333

SHEET NUMBER:

\1______

1901 NE DISCOVERY AVE LEE'S SUMMIT, MO 64064

1 FOUNDATION WALL DIMENSION PLAN 3/32" = 1'-0"

WHOLE SHEET FOUNDATION

REVISIONS

PRINTS ISSUED

11/01/23 - CITY SUBMITTAL

REVISIONS: 1 12/21/2023 RESPONSE TO CITY

5 12/20/2024 ASI 3.1

STRUCTURAL COLUMN SCHEDULE

Type

HSS4X4X1/4 HSS5X5X3/16

HSS5X5X1/4

HSS5X5X5/16 HSS5X5X3/8 HSS5X5X1/2

HSS6X6X1/2

HSS8X8X3/8

<varies>

Type Mark

(22)

12'-4 3/4"

12'-11 3/8"

S501

BP5 C3

12'-7 3/4"

12'-4 3/4" 1'-1 3/4"

WHOLE SHEET **FOUNDATION** REVISIONS

17'-5 1/4"

∖S503 *∫*

C6

2 \P12

S502 / BP5

C6

THICKENED SLAB, TYP.

T/SLAB EL = 95'-8"

TOF 96'-6"

∖S502*∫*

17'-5 1/4"

10 3/4"

(22)

16" THICK REINFORCED MAT SLAB BELOW STAIR

TOWERS W/#6 BARS @ 12" O.C. TOP & BOTTOM, EA.

CLEAN AGGREGATE BASE TOP LAYER & W/ 18" LVC

TOF 97'-0"

P13

13'-1 1/4"

TOF 97'-0" TOF 96'-8"

1'-1 3/4"

28'-0"

14'-10 3/4"

WAY OVER 10 MIL VAPOR BARRIER & 6" DEEP, 3/4"

FILL COMPACTED PER GEOTECHNICAL REPORT

(24" LOW VOLUME CHANGE (LVC) LAYER TOTAL).

COMMENTS 2 1/19/2024 ADDENDUM #2 4 9/20/2024 FOUNDATION

> Columbia, MO 65203 P 573-814-1568

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MISSOURI CERTIFICATE OF AUTHORITY

NO. E-2006023253

EXPIRES: DECEMBER 31, 2024

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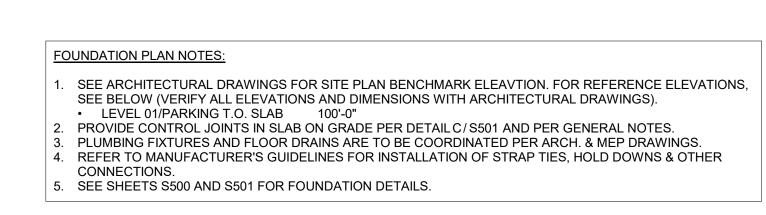
SHEET TITLE FOUNDATION PLAN

OWNE

PROJECT NUMBER: 2023000333

SHEET NUMBER:

′1______



	FOUNDATION PLAN LEGEND
F#.#	FOOTING TYPE
P#	PEDESTAL TYPE
BP#	BASE PLATE TYPE (SEE SHEET S503 FOR BASE PLATE AND ANCHOR DETAILS)
	CMU WALL ABOVE

FOOTING SCHEDULE				
Mark	Size	Reinforcing		
F3.0	3'-0"x3'-0"x1'-0"	(3) #5 bars, bottom each way		
F4.0	4'-0"x4'-0"x1'-0"	(4) #5 bars, bottom each way		
F5.0	5'-0"x5'-0"x1'-0"	(5) #5 bars, bottom each way		
F6.0	6'-0"x6'-0"x1'-4"	(6) #5 bars, bottom each way		

28'-0"

EXTERIOR FACE OF

BUILDING JOG ABOVE

C6

F6.0

BP1

F5.0

EXTERIOR FACE OF

28'-0"

BUILDING JOG ABOVE

19

P1

BP1

S502

1. All footings must be centered on walls and columns U.N.O.

FLOOR SLAB AT STAIR TOWER

28'-0"

P12

TOF 97'-0" TOF 96'-8"

13'-1 1/4"

14'-10 3/4"

IS LEVEL. T/SLAB = 100'-0"

DEEP, 3/4" CLEAN AGGREGATE BASE TOP LAYER & W/ 18" LVC FILL COMPACTED PER GEOTECHNICAL REPORT (24" LOW VOLUME CHANGE(LVC)

LAYER TOTAL)CENTER WELDED WIRE FABRIC IN SLAB, REINFORCE REENTRANT CORNERS PER DETAIL A/S501. REFERENCE GEOTECHNICAL REPORT FOR MORE INFORMATION

4" SLAB ON GRADE W/ 6X6-W2.9XW2.9 WWF OVER 10 MIL VAPOR BARRIER & 6"

C3 BP2 C3 F5.0 BP1 F3.0 P3 BP2 C3 F4.0 BP2 P3 C5 F3.0 P3 BP1 C6 BP2 F5.0 P7 BP2 C3 9'-6 1/2" 9'-1" 3'-0 1/2" 22'-1 1/2" P4 F3.0 P3 _BP2 C3 BP2

F5.0

F4.0

2'-9 1/4"

-∖ S502*∫*

ELEVATOR

9'-0"

F4.0

3'-4 3/4" 15'-6"

74'-10 1/2"

C3

BP1

S501 /

INTERIOR

11'-4 1/4"

S503/

P4

| BP3 | C2

S501 /

BP2 C3

F3.0

__ F5.0

P14

S502 C3

12'-5" 3 3/4" 8'-10 1/2"

69'-7 1/2"

13'-0 1/2" 3'-3 1/4" 6'-6" 9'-3 1/2"

5'-7 1/2" 5'-4 1/2" 6'-10 1/4"

C3

C2/

∖S503 */*

F5.0 P15

BP6

S503 /

FTG

97'-2" HERE

ONLY -

∖ S501 /

BP3

C2

P3

C2

BP2

C6

10 3/4" THIS

WALL ONLY

P4 SIM

15'-11 3/4"

C8

S503

F5.0 P15 BP6

C8

(K.3)

(K.6)

BASEPLATE &

CAST IN PLACE

ANCHORS PER DETAIL 1/S505

T/ EXT FTG = 96'-10"

BP3 C4

C6

T/ EXT PED = 98'-8'' F6.0

F4.0 L __ _

F4.0

16" THICK REINFORCED MAT SLAB BELOW STAIR

TOWERS W/#6 BARS @ 12" O.C. TOP & BOTTOM, EA.

CLEAN AGGREGATE BASE TOP LAYER & W/ 18" LVC

WAY OVER 10 MIL VAPOR BARRIER & 6" DEEP, 3/4"

FILL COMPACTED PER GEOTECHNICAL REPORT

(24" LOW VOLUME CHANGE (LVC) LAYER TOTAL).

T/SLAB EL = 97'-2"

28'-5 1/2" WALL STEP FOOTING **ABOVE** STEP

BP1

P12

F6.0

BP1□

S502 /

T/ GARAGE COL

FTG = 97'-6" TYP

TYP., T.O. PEDESTAL = 102'-0"

S502

@ POSTS

28'-5 1/2"

EXTERIOR FACE OF BUILDING JOG ABOVE -

EXTERIOR FACE OF BUILDING JOG

F6.0

BP1

PEDESTAL IN GARAGE PER 5/S502 | MORE INFORMATION

P2

¬ BP1

15

— - | | | - --- - - -- | | | | --- - - | | | | --- - - | | | | --- - - - | | | | --- - - - - | | | | --- - - - | | | | --- - - - - | | | --- - - - - | | | --- - - - - | | | --- - - - - | | | --- - - - - | | --- - - - - | | --- - - - | | --- - - - | | --- - - | --- - | | --- - - | --- - | | --- - - | | --- - - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | --- - | | | --- - | | | --- - | | --- - | | | --- - | | | --- - |

28'-0"

BP1 F6.0 BP1 C6 P2

BP1 C6

28'-0"

5'-10 3/4"

P2

5'-10 3/4" C3

P12

17'-11 1/4"

- P2 BP1 6" SLAB ON GRADE W/ 6X6-W2.9XW2.9 WWF OVER 6" C7 DEEP, 3/4" CLEAN AGGREGATE BASE TOP LAYER & W/ 18" LVC FILL COMPACTED PER GEOTECHNICAL REPORT (24" LOW VOLUME CHANGE (LVC) LAYER TOTAL), CENTER WELDED WIRE FABRIC IN SLAB. REINFORCE REENTRANT CORNERS PER DETAIL A/S501 REFERENCE GEOTECHNICAL REPORT FOR

4'-2 1/8", 8'-2 1/4"

TOP OF INTERIOR FOOTING 2 C7 ELEVATIONS BASED ON SLAB SLOPES, SEE ARCH. DRAWINGS

198'-3 1/2"

19'-9 3/4"

28'-0"

P12

BP5

C3

GARAGE SLAB GRADES ON CIVIL DWG CE3.3 W/REV 1 DATE BP1

18

F5.0 L

C6

F6.0

P2

BP1

08/02/2024

\S502

P12 22'-1 1/4" 8'-2 1/4" 19'-9 3/4" 28'-0" 229'-3 1/2"

(17)

PER MANUFACTURER, LOCATION TYPE 5 BASEPLATES

HSS5X5X3/8 @ 4'-0" O.C. W/ T.O STEEL PER ARCH TO SUPPORT SCREEN WALL PENDING COORDINATION W/ SCREEN WALL MANUFACTURER. POST-INSTALL

CMU KNEE WALL,

T.O.W. = 102'-0"

28'-0"

304'-2"

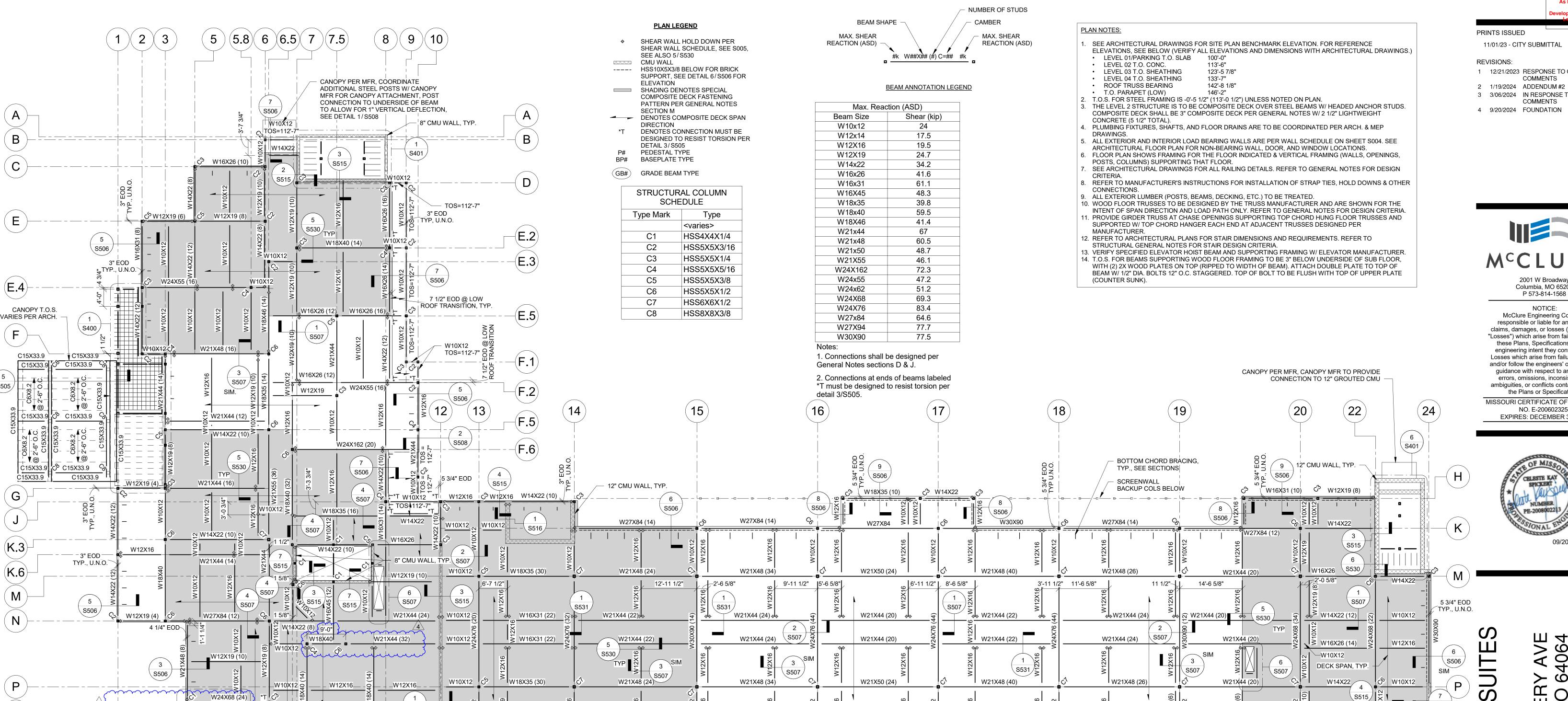
THICKNESS WITH EQUIPMENT AND TRENCH DRAIN REQUIREMENTS. REINFORCE W/ #4 @ 12" O.C. EACH WAY TOP. PLACE OVER 10 MIL VAPOR BARRIER & 6" DEEP, 3/4" CLEAN AGGREGATE BASE TOP LAYER & W/ 18" LVC FILL COMPACTED PER GEOTECHNICAL REPORT (24" LOW VOLUME CHANGE(LVC) LAYER TOTAL).

CONCRETE PAD W/ TRENCH DRAIN BELOW COMMERCIAL WASHERS.

TOP OF PAD TO BE FLUSH WITH TOP OF SLAB. COORDINATE SIZE AND

19'-1 3/4"

1 \ FOUNDATION PLAN S101/ 3/32" = 1'-0"



W27X84 (14)

S511

@ LOW

HSS

(15)

S506

W27X84

S506 /

W27X84 (12)

W30X90

(18)

_5 3/4" EOD TYP U.N.O.

W27X84 (14)

S506

W27X84 (12)©

14'-10 3/4"

S506

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1 12/21/2023 RESPONSE TO CITY COMMENTS

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I NE DISCOV'S SUMMIT,

W14X22 (12)

W14X22

(22)

24

W30X90 (14)

(20)

SHEET TITLE LEVEL 2 FRAMING PLAN

PROJECT NUMBER: 2023000333

SHEET NUMBER:

S102



\S505

1 LEVEL 2 STEEL & PODIUM PLAN S102 3/32" = 1'-0"

FRAME W24 OVER

TOP OF COL

S400

₩10X12 TOS=112'-6 1/2" S516 /

S515

W14X22 (10)

W14X22 (12)

CANOPY PER MFR, COORDINATE

ATTACHMENT, POST CONNECTION

TO UNDERSIDE OF BEAM TO ALLOW FOR 1" VERTICAL DEFLECTION, SEE

ADDITIONAL STEEL POSTS W/

CANOPY MFR FOR CANOPY

DETAIL 1/S508

(6.6)(6.9)(7)(7.1)(7.9)(8)

W10X12 ්ර

රි

\S515

S506

12" CMU WALL, TYP.

W18X35 (30)

W21X48 (12)

(14)

W27X84 (14)

PRINTS ISSUED

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EXPIRES: DECEMBER 31, 2024

and/or follow the engineers' or surveyors' guidance with respect to any alleged

SUITE

OWNEPL

Sills*

All Levels

(if applicable)

(1) 2x6

(1) 2x6

(1) 2x6

(1) 2x6

(1) 2x4

Level 4

(1) 2x6

(1) 2x6

(1) 2x6

(1) 2x6

(1) 2x4

Kings

(1) 2x6

(2) 2x6

(2) 2x6

(1) 2x6

(1) 2x4

SHEET TITLE LEVEL 3 FRAMING PLAN

PROJECT NUMBER: 2023000333

SHEET NUMBER:

PLAN NOTES: Level 4 SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE (3) 2x6 ELEVATIONS, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS.) LEVEL 01/PARKING T.O. SLAB ---LEVEL 02 T.O. CONC.

WOOD POST SCHEDULE Mark Level 2 Level 1 Level 3 WP1 (3) 2x6(3) 2x6(3) 2x6WP2 6X6 ------WP3 (2) 2x4 (2) 2x4(2) 2x4

2. Exterior columns supporting canopy to be Western Cedar or Redwood Grade 1 or better

1. All exterior columns are to be pressure treated UNO

• KOOF JOISTS, TRUSSES & BEAWS					
───── WALLS, HEADERS, JAMBS & SHEAR WALLS					
FRAMED ABOVE LEVEL 4 & BELOW ROOF					
(SEE "LEVEL 4" IN SCHEDULES)	WOOD BEAM SCHEDULE				
LEVEL 4 FRAMING S104	Mark	Max. Span (ft-in)	Beam Size	Simpson Strong-Tie Hanger	
LEVEL 4 FLOOR JOISTS, TRUSSES & BEAMS	B1	7'-3"	(3) 2x10	HHUS210-3	
└- WALLS, HEADERS, JAMBS & SHEAR WALLS FRAMED ABOVE LEVEL 3 & BELOW LEVEL 4	B2	9'-0"	(3) 2x8	HGUS26-3	
(SEE "LEVEL 3" IN SCHEDULES)	В3	7'-3"	(3) 2x12	HHUS210-3	
LEVEL 3 FRAMING	B4	15'-3"	(2) 1 3/4"x11 7/8" LVL	HUCQ210-2-SDS*	
	B5	5'-3"	(2) 2x10	DGHT3.62/9.25**	
S103 • LEVEL 3 FLOOR JOISTS, TRUSSES & BEAMS	В6	11'-9"	(3) 1 3/4"x11 7/8" LVL		
• WALLS, HEADERS, JAMBS & SHEAR WALLS	Notes:				

ROOF FRAMING

ROOF JOISTS, TRUSSES & BEAMS

FRAMED ABOVE LEVEL 2 & BELOW LEVEL 3

(SEE "LEVEL 2" IN SCHEDULES)

FRAMING KEY

(E.5)

(F.2)

(F.6)

LEVEL 2 COMPOSITE DECK & STEEL

1. All exterior beams are to be pressure treated.

2. All LVL shall be stress class 2.0E-2500F

3. * Indicates that weld to steel plate is required for beam support (See 10/S511)

4. ** Indicates that beam hanger switches to LGUM210-2-SDS at Masonry.

PLAN LEGEND

(COUNTER SUNK).

LEVEL 03 T.O. SHEATHING

LEVEL 04 T.O. SHEATHING

POSTS, COLUMNS) SUPPORTING THAT FLOOR.

ROOF TRUSS BEARING

T.O. PARAPET (LOW)

CONNECTIONS.

(W#) WOOD WALL, PER SCHEDULE

SHEAR WALL, PER SCHEDULE

100'-0"

113'-6"

133'-7"

146'-2"

ALL EXTERIOR LUMBER (POSTS, BEAMS, DECKING, ETC.) TO BE TREATED.

STRUCTURAL GENERAL NOTES FOR STAIR DESIGN CRITERIA.

123'-5 7/8"

142'-8 1/8"

SHEATHING IS TO BE TOPPED WITH 1/4" SOUND MAT & 1" GYPCRETE TOPPING PER ARCH.

ARCHITECTURAL FLOOR PLAN FOR NON-BEARING WALL, DOOR, AND WINDOW LOCATIONS.

2. FLOOR SHEATHING IS TO BE 3/4" PLYWOOD FASTENED TO FRAMING PER SCHEDULE ON SHEET S004.

PLUMBING FIXTURES, SHAFTS, AND FLOOR DRAINS ARE TO BE COORDINATED PER ARCH. & MEP

ALL EXTERIOR AND INTERIOR LOAD BEARING WALLS ARE PER WALL SCHEDULE ON SHEET S004. SEE

FLOOR PLAN SHOWS FRAMING FOR THE FLOOR INDICATED & VERTICAL FRAMING (WALLS, OPENINGS,

REFER TO MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF STRAP TIES, HOLD DOWNS & OTHER

INTENT OF SPAN DIRECTION AND LOAD PATH ONLY. REFER TO GENERAL NOTES FOR DESIGN CRITERIA.

10. PROVIDE FLOOR TRUSS HEADER AT CHASE OPENINGS SUPPORTING TOP CHORD HUNG FLOOR TRUSSES

12. VERIFY SPECIFIED ELEVATOR HOIST BEAM AND SUPPORTING FRAMING W/ ELEVATOR MANUFACTURER.

WITH (2) 2X WOOD PLATES ON TOP (RIPPED TO WIDTH OF BEAM). ATTACH DOUBLE PLATE TO TOP OF BEAM W/ 1/2"Ø BOLTS 12" O.C. STAGGERED. TOP OF BOLT TO BE FLUSH WITH TOP OF UPPER PLATE

13. T.O.S. FOR BEAMS SUPPORTING WOOD FLOOR FRAMING TO BE 3" BELOW UNDERSIDE OF SUB FLOOR,

6. SEE ARCHITECTURAL DRAWINGS FOR ALL RAILING DETAILS. REFER TO GENERAL NOTES FOR DESIGN

9. WOOD FLOOR TRUSSES TO BE DESIGNED BY THE TRUSS MANUFACTURER AND ARE SHOWN FOR THE

AND SUPPORTED W/ TOP CHORD HANGER EACH END AT ADJACENT TRUSSES DESIGNED PER

11. REFER TO ARCHITECTURAL PLANS FOR STAIR DIMENSIONS AND REQUIREMENTS. REFER TO

HEADER TYPE, PER SCHEDULE

WOOD POST, PER SCHEDULE STEEL COLUMN PER SCHEDULE

				□□□□□ WOOD INDICA WOOD	COLUMN, PER SCHEDULE FRAMING SUPPORTING THE FED FLOOR SHEAR WALL SUPPORTING DICATED FLOOR		
	(15)	16)	(17)	(18)	(19)	(20) (22)	24)
WA	TH3 SWC WB H3 WANTER THE STATE OF THE STATE	TRUSS H3 WB TRUSS H3	TRUSS MFR N WEB TRUSS H3 H3 SS H3 H3 H3 H3 H3 H3	WA WEB TRUSS MFR TRUSS MFR WAM WAS MFR WAS WELL WAS WE	WEB TRUSS WANTER		5 S401 W12X65 W12X65 K
SWE		2 W	SWE	┘+ <i>~</i> ₩+ ₩ + <i>~</i> ₩	SSUE SER TRICKS SWE SWE SWE SWE SWE SWE SWE SWE SWE SW	SWE 12 12 13 14 15 15 15 15 15 15 15	2 S510
	H1 H1 H1	H1 2x6 H1 @ 16" O.C.	SWD WC H1 H1 SWD WC H1	H1 H1	H1 H1 H1	H1 kg	5 S511
	SWE WAS MFR TRUSS MFR WAS NEW WAS NEW WAS MFR WAS MFR WAS MFR WAS MFR WAS MFR WAS WE TRUSS MFR WAS	SWE WA SWE TRUSS WEB TRUSS WA SWE TRUSS WA SWE TRUSS WA SWE TRUSS WAS TRUSS		SWE SWE WAS MFR WAS WE WAS WE WAS WE WAS WE WAS WERE WAS WERE WAS WE WAS WAS WE WANT WAS WE WAS WAS WE WANT WAS WE WANT WAS WANT WAS WE WANT WAS WE WANT WAS WE WANT WAS WE	12" OPEN WEB TRUSS SWE SWE WA 12" OPEN WEB TRUSS PER TRUSS MFR SWE WA SWE WA SWE WA SWE WA SWE WA SWE SWE	SS UN LE STATE OPEN WEB PER TRUSS WAN WA WAN WAN WAN WAN WAN WAN WAN WAN	TRUSS P Q Q WB
	H3 SWC WB H3	H3	(H3		H3 1 S510		
	15	16	17)	18	19	20 (22	2) (24)

WOOD WALL SCHEDULE Mark Level 2 Level 3 Level 4 WA (2) 2x4(1) 2x4 (1) 2x4 WB (1) 2x6(1) 2x6(1) 2x6WC (1) 2x6 (1) 2x6(1) 2x6(2) 2x4* (1) 2x4 (1) 2x4

(7.5)(7.9)(8)(9)(10)

(WB)

S510 /

12" OPEN WEB TRUSS

PER TRUSS MFR

(WA)」

12" OPEN WEB TRUSS

PER TRUSS MFR

(SWE)(WA)

(SWE)(WA)

12" OPEN WEB TRUSS

PER TRUSS MFR

(SWE)(WA)

(SWE)(WA)

12" OPEN WEB TRU\$S

BY OTHERS

(SWE)(WA)

0 12" OPEN WEB TRUSS

(SWD)(WB)

PER TRUSS MFR

\S511,

WA SWE B1 WB

(WA)(SWE)

12" OPEN WEB TRUSS

PER TRUSS MFR

(SWE)(WA)

(SWE) WA)

(SWE)(WA)

(SWE)(WA)

(SWE)(WA)

12" OPEN WEB TRUSS PER TRUSS MFR

12" OPEN WEB TRUSS PER TRUSS MFR

(SWE)(WA)

(SWE)(WA)

12" OPEN WEB TRUSS

PER TRUSS MFR

12"OPEN WEB TRUSS | 工|

(SWE) WA \\ S510/

PER TRUSS MFR

(WB)

∖S510 */*

S510 /

1 LEVEL 3 FRAMING PLAN

S103 3/32" = 1'-0"

G

S401

1. All wall studs are 16" o.c. U.N.O. on plans or followed by an * (see note 8).

H3 SWC WB

2. Bottom sill plates at Level 2 Podium to be fastened w/ 3/8"Ø x 3-1/2" Hilti Kwik HUS EZ Bolts @ 48" o.c. U.N.O.

3. Bottom sill plate connections shall have a 3"x3"x1/4" steel plate washer at each anchor bolt on shear walls only.

4. Bottom and top plates at all other levels to be fastened w/ (2) 16d nails @ 16" o.c. U.N.O.

6. Non-load bearing walls not shown, refer to architectural drawings.

8. * Indicates studs or stud pack at 12" o.c.

7. All top plates are to be continuous. Splice per 3/S500.

H = An opening which requires a header 1. See S500 for typical opening framing.

Level 4

(3) 2x8

(3) 2x8

Header Top Plates*

(1) 2x6

(1) 2x6

(1) 2x6

(1) 2x4

4. Cripple studs should match the adjacent wall framing.

5. * Header top plates and sills shall match the adjacent wall studs.

Jacks

(1) 2x6

(1) 2x6

(1) 2x6

(1) 2x6

(1) 2x4

H1 3'-3" (3) 2x8 H2 6'-3" (3) 2x10 Н3 6'-3" (3) 2x8 H4 6'-4" (3) 2x8

3'-3"

(2) 2x8

Header Max. Span

H5

(3) 2x8(3) 2x8 (3) 2x8(3) 2x8 (2) 2x8(2) 2x8

Header

Level 3

(3) 2x8

(3) 2x10

Kings

(1) 2x6

(2) 2x6

(2) 2x6

(1) 2x6

(3) 2x4

TYPICAL WALL HEADER SCHEDULE (STACKED OPENINGS)

Level 2

2. All openings shall stack. 3. Coordinate all dimensions and elevations with architectural drawings.

Kings & Jacks

(1) 2x6

(1) 2x6

(1) 2x6

(1) 2x6

(1) 2x4

Kings

(1) 2x6

(2) 2x6

(2) 2x6

(1) 2x6

(2) 2x4

(6.5)(6.9)(7.1)

5. Shear walls shall be sheathed per shear wall schedule

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guidance with respect to any alleged

errors, omissions, inconsistencies,

TOWNEP

Sills*

All Levels

(if applicable)

(1) 2x6

(1) 2x6

PROJECT NUMBER: 2023000333

SHEET NUMBER:

LEVEL 4 FRAMING PLAN

SHEET TITLE

GIRDER TRUSS BY OTHERS 12" OPEN WEB TRUSS S511

(22)(20) (19) TYPICAL WALL HEADER SCHEDULE (STACKED OPENINGS) Kings & Jacks Header Header Top Plates* Level 4 Level 2 Level 3 Level 2 Level 4 Level 3 Kings Jacks Kings Kings All Levels (3) 2x8(1) 2x6 (3) 2x8(3) 2x8(1) 2x6 (1) 2x6(1) 2x6(1) 2x6(1) 2x6(1) 2x6 (3) 2x10 (3) 2x10 (3) 2x8 (2) 2x6(2) 2x6(1) 2x6 (1) 2x6 (2) 2x6(1) 2x6(1) 2x6

WOOD WALL SCHEDULE Mark Level 2 Level 3 Level 4 (1) 2x4 WA (2) 2x4(1) 2x4 WB (1) 2x6 (1) 2x6 (1) 2x6WC (1) 2x6 (1) 2x6(1) 2x6WD (2) 2x4* (1) 2x4 (1) 2x4

2. Bottom sill plates at Level 2 Podium to be fastened w/ 3/8"Ø x 3-1/2" Hilti Kwik HUS EZ Bolts @ 48" o.c. U.N.O.

3. Bottom sill plate connections shall have a 3"x3"x1/4" steel plate washer at each anchor bolt on shear walls only.

4. Bottom and top plates at all other levels to be fastened w/ (2) 16d nails @ 16" o.c. U.N.O.

6. Non-load bearing walls not shown, refer to architectural drawings.

8. * Indicates studs or stud pack at 12" o.c.

7. All top plates are to be continuous. Splice per 3/S500.

Header Max. Span

(ft-in)

3'-3"

6'-3"

Mark

H1

H2

Н3 6'-3" (3) 2x8(3) 2x8 (1) 2x6 (3) 2x8 (1) 2x6 (2) 2x6 (1) 2x6(2) 2x6(1) 2x6(2) 2x6(1) 2x6H4 (3) 2x8(3) 2x8(1) 2x6(1) 2x6 6'-4" (3) 2x8(1) 2x6 (1) 2x6 (1) 2x6(1) 2x6(1) 2x6(1) 2x6 1. All wall studs are 16" o.c. U.N.O. on plans or followed by an * (see note 8). H5 3'-3" (2) 2x8(2) 2x8 (2) 2x8 (1) 2x4 (3) 2x4 (1) 2x4 (2) 2x4(1) 2x4 (1) 2x4 (1) 2x4 (1) 2x4 H = An opening which requires a header 1. See S500 for typical opening framing. 2. All openings shall stack. 5. Shear walls shall be sheathed per shear wall schedule 3. Coordinate all dimensions and elevations with architectural drawings.

4. Cripple studs should match the adjacent wall framing. 5. * Header top plates and sills shall match the adjacent wall studs.

S400 H3 (SWC) (WB) (H3) (H3)(WB) (SWG) (WB) PER TRUSS MFR S510 **∖** S510 ∕− H3 SWC H3 SWC WB (WB) (WB) (1 S510) (15) (24) (6.5)(6.9)(7.1)(13)

+ GIRDER TRUSS PER TRUSS MFR

(SWC)(WB)

(**F.2**)

1. All exterior columns are to be pressure treated UNO ROOF FRAMING 2. Exterior columns supporting canopy to be Western Cedar or Redwood Grade 1 or better ROOF JOISTS, TRUSSES & BEAMS └- WALLS, HEADERS, JAMBS & SHEAR WALLS FRAMED ABOVE LEVEL 4 & BELOW ROOF (SEE "LEVEL 4" IN SCHEDULES) LEVEL 4 FRAMING

FRAMED ABOVE LEVEL 3 & BELOW LEVEL 4 (SEE "LEVEL 3" IN SCHEDULES)

WALLS, HEADERS, JAMBS & SHEAR WALLS

(SEE "LEVEL 2" IN SCHEDULES) LEVEL 2 COMPOSITE DECK & STEEL

 LEVEL 4 FLOOR JOISTS, TRUSSES & BEAMS WALLS, HEADERS, JAMBS & SHEAR WALLS

• LEVEL 3 FLOOR JOISTS, TRUSSES & BEAMS

7'-3" (3) 2x10 B2 9'-0" (3) 2x8B3 7'-3" (3) 2x12 15'-3" (2) 1 3/4"x11 7/8" LVL 5'-3" DGHT3.62/9.25** (2) 2x10 B6 11'-9" (3) 1 3/4"x11 7/8" LVL

Level 1

(3) 2x6

6X6

1. All exterior beams are to be pressure treated.

2. All LVL shall be stress class 2.0E-2500F

WOOD BEAM SCHEDULE Max. Span Beam Size Simpson Strong-Tie Hanger (ft-in) HHUS210-3 HGUS26-3 HHUS210-3 HUCQ210-2-SDS*

WOOD POST SCHEDULE

Level 2

(3) 2x6

(2) 2x4

Mark

WP1

WP2

WP3

Notes:

(SWD)(WC)

HEADER TYPE, PER SCHEDULE

(COUNTER SUNK).

(W#)

PLAN NOTES:

LEVEL 01/PARKING T.O. SLAB

POSTS, COLUMNS) SUPPORTING THAT FLOOR.

LEVEL 03 T.O. SHEATHING

LEVEL 04 T.O. SHEATHING

ROOF TRUSS BEARING

T.O. PARAPET (LOW)

CONNECTIONS.

LEVEL 02 T.O. CONC.

Level 4

(3) 2x6

(2) 2x4

Level 3

(3) 2x6

(2) 2x4

STEEL COLUMN, PER SCHEDULE WOOD FRAMING SUPPORTING THE INDICATED FLOOR

WOOD WALL, PER SCHEDULE

SHEAR WALL, PER SCHEDULE

PLAN LEGEND

THE INDICATED FLOOR

(H3) (SWC) (WB)

(SWC)(WB)

TITLE (SWD) (WC) TITLE (SWD) (WC)

∖S510*├*

S511

S510 $_{\text{H3}}$ (SWC)(WB) $_{\text{H3}}$

15

FRAMING KEY

(E.5)

(E.2)

(13)

FRAMED ABOVE LEVEL 2 & BELOW LEVEL 3

LEVEL 3 FRAMING

3. * Indicates that weld to steel plate is required for beam support (See 10/S511) 4. ** Indicates that beam hanger switches to LGUM210-2-SDS at Masonry.

WOOD POST, PER SCHEDULE

WOOD SHEAR WALL SUPPORTING

20 (22)

SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE

100'-0"

113'-6"

133'-7"

146'-2"

ALL EXTERIOR LUMBER (POSTS, BEAMS, DECKING, ETC.) TO BE TREATED.

STRUCTURAL GENERAL NOTES FOR STAIR DESIGN CRITERIA.

123'-5 7/8"

142'-8 1/8"

SHEATHING IS TO BE TOPPED WITH 1/4" SOUND MAT & 1" GYPCRETE TOPPING PER ARCH.

ARCHITECTURAL FLOOR PLAN FOR NON-BEARING WALL, DOOR, AND WINDOW LOCATIONS.

ELEVATIONS, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS.)

FLOOR SHEATHING IS TO BE 3/4" PLYWOOD FASTENED TO FRAMING PER SCHEDULE ON SHEET S004.

ALL EXTERIOR AND INTERIOR LOAD BEARING WALLS ARE PER WALL SCHEDULE ON SHEET S004. SEE

FLOOR PLAN SHOWS FRAMING FOR THE FLOOR INDICATED & VERTICAL FRAMING (WALLS, OPENINGS,

REFER TO MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF STRAP TIES, HOLD DOWNS & OTHER

6. SEE ARCHITECTURAL DRAWINGS FOR ALL RAILING DETAILS. REFER TO GENERAL NOTES FOR DESIGN

9. WOOD FLOOR TRUSSES TO BE DESIGNED BY THE TRUSS MANUFACTURER AND ARE SHOWN FOR THE INTENT OF SPAN DIRECTION AND LOAD PATH ONLY. REFER TO GENERAL NOTES FOR DESIGN CRITERIA.

AND SUPPORTED W/ TOP CHORD HANGER EACH END AT ADJACENT TRUSSES DESIGNED PER

11. REFER TO ARCHITECTURAL PLANS FOR STAIR DIMENSIONS AND REQUIREMENTS. REFER TO

10. PROVIDE FLOOR TRUSS HEADER AT CHASE OPENINGS SUPPORTING TOP CHORD HUNG FLOOR TRUSSES

12. VERIFY SPECIFIED ELEVATOR HOIST BEAM AND SUPPORTING FRAMING W/ ELEVATOR MANUFACTURER.

WITH (2) 2X WOOD PLATES ON TOP (RIPPED TO WIDTH OF BEAM). ATTACH DOUBLE PLATE TO TOP OF

BEAM W/ 1/2"Ø BOLTS 12" O.C. STAGGERED. TOP OF BOLT TO BE FLUSH WITH TOP OF UPPER PLATE

13. T.O.S. FOR BEAMS SUPPORTING WOOD FLOOR FRAMING TO BE 3" BELOW UNDERSIDE OF SUB FLOOR,

PLUMBING FIXTURES, SHAFTS, AND FLOOR DRAINS ARE TO BE COORDINATED PER ARCH. & MEP

(SWC)(WB) (H3)

24

NE DISCOVIS SUMMIT,

(7.5)(7.9)(8)(9)(10)

₩B-

12" OPEN WEB TRUSS

PER TRUSS MFR

(WA)

(SWE)(WA)

(SWE)(WA)

(SWE)(WA)

(SWE)(WA)

12" OPEN WEB TRU\$S

PER TRUSS MFR

 (WB)

\S510 /

(SWE)(WA)

(SWE)(WA)

2X6 @ 16" O.C. I

12" OPEN WEB TRUSS PER TRUSS MFR

S511

\ S510 ∕

<u>H3</u> WB \ ≥

SWE) WA)

12" OPEN WEB TRUSS

PER TRUSS MFR

(SWE)(WA)

(SWE)(WA)

12" OPEN WEB TRUSS

PER TRUSS MFR_

(SWE)(WA)

(SWE)(WA)

(SWE) WA)

| 12¦" OPEN|WEB TRUSS | PER TRUSS MFR

(SWE)(WA)

S511

(SWE) (WA) \S510/

S510 /

ackslash S510 $ar{J}$

(WB)

(WB)

1 LEVEL 4 FRAMING PLAN

S104 3/32" = 1'-0"

G

 (M)

(N)

(SWE) WA)

PRINTS ISSUED

REVISIONS:

11/01/23 - CITY SUBMITTAL

2 1/19/2024 ADDENDUM #2

4 9/20/2024 FOUNDATION

1 12/21/2023 RESPONSE TO CITY

3 3/06/2024 IN RESPONSE TO GC

COMMENTS

COMMENTS

ROOF PLAN NOTES:

SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE ELEVATIONS, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS.)

 LEVEL 01/PARKING T.O. SLAB 100'-0" LEVEL 02 T.O. CONC. 113'-6" LEVEL 03 T.O. GYPCRETE 123'-7 1/8"

133'-8 1/4" LEVEL 04 T.O. GYPCRETE ROOF TRUSS BEARING 142'-8 1/8" T.O. PARAPET (LOW) 144'-10 1/8"

ROOF TRUSS MANUFACTURER TO DHESIGN TRUSSES TO BE AS SHALLOW AS POSSIBLE. TRUSS TO BE DESIGNED & MANUFACTURED TO INCLUDE PARAPET.

ROOF SHEATHING IS TO BE 3/4" PLYWOOD FASTENED TO FRAMING PER SCHEDULE ON SHEET S004. SHEATHING IS TO BE TOPPED WITH SLOPED RIGID INSULATION PER ARCH. RTU PENETRATIONS TO BE COORDINATED PER ARCH. & MEP DRAWINGS.

MANUFACTURER. SEE ARCHITECTURAL DRAWINGS FOR ALL RAILING DETAILS. REFER TO GENERAL NOTES FOR DESIGN

5. PARAPET FRAMING IS TO BE PER DETAILS PART OF THE ROOF TRUSSES DESIGNED BY THE TRUSS

REFER TO MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF STRAP TIES, HOLD DOWNS & OTHER

CONNECTIONS. 8. ALL EXTERIOR LUMBER (POSTS, BEAMS, DECKING, ETC.) TO BE TREATED. 9. WOOD ROOF TRUSSES TO BE DESIGNED BY THE TRUSS MANUFACTURER AND ARE SHOWN FOR THE

INTENT OF SPAN DIRECTION AND LOAD PATH ONLY. REFER TO GENERAL NOTES FOR DESIGN CRITERIA. 10. PROVIDE ROOF TRUSS HEADER AT CHASE OPENINGS SUPORTING TOP CHORD HUNG ROOF TRUSSES AND SUPPORTED W/ TOP CHORD HANGER EACH END AT ADJACENT TRUSSES DESIGNED PER

I. REFER TO ARCHITECTURAL PLANS FOR STAIR DIMENSIONS AND REQUIREMENTS. REFER TO STRUCTURAL GENERAL NOTES FOR STAIR DESIGN CRITERIA.

12. VERIFY SPECIFIED ELEVATOR HOIST BEAM AND SUPPORTING FRAMING W/ ELEVATOR MANUFACTURER. 13. T.O.S. FOR STEEL FRAMING IS TO MATCH TOP OF ROOF FRAMING UNLESS SPECIFCALLY NOTED ON PLAN.

20

(WB)

20

7 S520

S520 SWC WB H3

OPEN WEB TRUSS

(SWC)

(22)

(24)

PLAN LEGEND

MANUFACTURER.

(WB)

(WB)

_\S520

(19)

ALIGN TRUSS WITH OR PROVIDE

ADDITIONAL DRAG TRUSS OVER

EVERY SHEAR WALL PARALLEL TO ROOF TRUSSES, TYP.

(H3)

(W#) WOOD WALL, PER SCHEDULE

SHEAR WALL, PER SCHEDULE

HEADER TYPE, PER SCHEDULE

WOOD POST, PER SCHEDULE

STEEL COLUMN, PER SCHEDULE WOOD FRAMING SUPPORTING THE INDICATED FLOOR

19

SHADING INDICATES

WIDE ROOF PARAPET,

SEE ARCH. DRAWINGS

(H3)

WOOD SHEAR WALL SUPPORTING THE INDICATED FLOOR

MCCLURETM

S520

Columbia, MO 65203 P 573-814-1568

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these Plans, Specifications, and the

the Plans or Specifications. MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253 EXPIRES: DECEMBER 31, 2024



NE DISCOVIS SUMMIT,

SHEET TITLE ROOF FRAMING PLAN

TOWNEP

PROJECT NUMBER: 2023000333

SHEET NUMBER:

WOOD POST SCHEDULE Mark Level 2 Level 4 Level 1 Level 3 WP1 (3) 2x6(3) 2x6(3) 2x6(3) 2x6 WP2 6X6 ---------WP3 (2) 2x4(2) 2x4(2) 2x4

Simpson Strong-Tie Hanger

HHUS210-3

HGUS26-3

HHUS210-3

HUCQ210-2-SDS*

DGHT3.62/9.25**

2. Exterior columns supporting canopy to be Western Cedar or Redwood Grade 1 or better

WOOD BEAM SCHEDULE

Beam Size

(3) 2x10

(3) 2x8

(3) 2x12

(2) 2x10

(3) 1 3/4"x11 7/8" LVL

(2) 1 3/4"x11 7/8" LVL

B2

B3

B6

1. All exterior columns are to be pressure treated UNO

Max. Span

(ft-in)

7'-3"

9'-0"

7'-3"

15'-3"

5'-3"

11'-9"

2. All LVL shall be stress class 2.0E-2500F

1. All exterior beams are to be pressure treated.

↓ WALLS, HEADERS, JAMBS & SHEAR WALLS FRAMED ABOVE LEVEL 4 & BELOW ROOF (SEE "LEVEL 4" IN SCHEDULES) LEVEL 4 FRAMING LEVEL 4 FLOOR JOISTS, TRUSSES & BEAMS WALLS, HEADERS, JAMBS & SHEAR WALLS FRAMED ABOVE LEVEL 3 & BELOW LEVEL 4 (SEE "LEVEL 3" IN SCHEDULES)

ROOF FRAMING

ROOF JOISTS, TRUSSES & BEAMS

LEVEL 3 FRAMING • LEVEL 3 FLOOR JOISTS, TRUSSES & BEAMS WALLS, HEADERS, JAMBS & SHEAR WALLS

FRAMED ABOVE LEVEL 2 & BELOW LEVEL 3

(SEE "LEVEL 2" IN SCHEDULES) LEVEL 2 COMPOSITE DECK & STEEL

3. * Indicates that weld to steel plate is required for beam support (See 10/S511)

4. ** Indicates that beam hanger switches to LGUM210-2-SDS at Masonry.

SWD WC

H3 (SWC) (WB)

S520 /

H1 SWD WC H1

2x6 H1

H = An opening which requires a header

| H1 @ 24" O.C. H1

S520

FRAMING KEY

ALIGN TRUSS WITH OR PROVIDE ADDITIONAL DRAG TRUSS OVER

EVERY SHEAR WALL PARALLEL

TO ROOF TRUSSES, TYP.

SHADING INDICATES

WIDE ROOF PARAPET,

SEE ARCH. DRAWINGS

(E.5)

(F.6)

S520

ALIGN TRUSS WITH OR PROVIDE

ADDITIONAL DRAG TRUSS OVER

EVERY SHEAR WALL PARALLEL

TO ROOF TRUSSES, TYP.

S520

(SWC) (WB)

S520 / 규 ' 添-

(H1)

(15)



1 ROOF FRAMING PLAN S105 3/32" = 1'-0"

S520 /

(SWE)(WA)

OPEN WEB TRUSS

BY OTHERS

(SWE)(WA)

(SWE) WA

OPEN WEB TRUSS

BY OTHERS

(SWE)(WA)

(SWE)(WA)

(SWE) WA

OPEN WEB TRUSS

_ਜ਼|ਫ਼(wB)

<u>↓</u> S520

\S520 /

S520

S520

G

(N)

WOOD WALL SCHEDULE Mark Level 2 Level 3 Level 4 WA (2) 2x4(1) 2x4 (1) 2x4 WB (1) 2x6(1) 2x6(1) 2x6WC (1) 2x6 (1) 2x6(1) 2x6WD (2) 2x4* (1) 2x4 (1) 2x4

(7.5)(7.9)(8)(9)(10)

OPEN WEB TRUSS

(SWE)(WA)

(SWE)(WA)

(SWE)(WA)

OPEN WEB TRUSS

BY OTHERS

(SWE)(WA)

(SWE)(WA)

2x6 |@ 24" O.C. |

 $\overline{\text{H3}}$ (WB)

(6.5)(6.9)

S520

(SWE)

▶ \ S520 /

(WB)

H3 SWC WB

(H3)

2. Bottom sill plates at Level 2 Podium to be fastened w/ 3/8"Ø x 3-1/2" Hilti Kwik HUS EZ Bolts @ 48" o.c. U.N.O.

4. Bottom and top plates at all other levels to be fastened w/ (2) 16d nails @ 16" o.c. U.N.O. 5. Shear walls shall be sheathed per shear wall schedule

8. * Indicates studs or stud pack at 12" o.c.

1. All wall studs are 16" o.c. U.N.O. on plans or followed by an * (see note 8).

3. Bottom sill plate connections shall have a 3"x3"x1/4" steel plate washer at each anchor bolt on shear walls only.

7. All top plates are to be continuous. Splice per 3/S500.

Sills* Kings & Jacks Header Header Max. Span All Levels Header Top Plates* Level 2 Level 3 Level 4 Mark (ft-in) Level 2 Level 3 Level 4 (if applicable) Jacks Kings Kings All Levels Kings H1 (3) 2x8 3'-3" (3) 2x8(1) 2x6 (1) 2x6(1) 2x6(1) 2x6 (1) 2x6(1) 2x6 (3) 2x8 (1) 2x6 (1) 2x6H2 (3) 2x10 (3) 2x8 (2) 2x6(1) 2x6 6'-3" (3) 2x10 (1) 2x6 (2) 2x6 (1) 2x6(2) 2x6(1) 2x6(1) 2x6 Н3 6'-3" (3) 2x8(3) 2x8(2) 2x6(1) 2x6 (3) 2x8 (1) 2x6 (2) 2x6 (1) 2x6(1) 2x6 (2) 2x6 (1) 2x6 H4 (1) 2x6 6'-4" (3) 2x8(3) 2x8(3) 2x8 (1) 2x6 (1) 2x6 (1) 2x6(1) 2x6(1) 2x6(1) 2x6(1) 2x6 H5 (2) 2x8 (2) 2x8 (1) 2x4 (3) 2x4 (1) 2x4 (2) 2x4(1) 2x4 (1) 2x4 3'-3" (2) 2x8(1) 2x4(1) 2x4

TYPICAL WALL HEADER SCHEDULE (STACKED OPENINGS)

1. See S500 for typical opening framing.

2. All openings shall stack.

3. Coordinate all dimensions and elevations with architectural drawings.

4. Cripple studs should match the adjacent wall framing.

5. * Header top plates and sills shall match the adjacent wall studs.

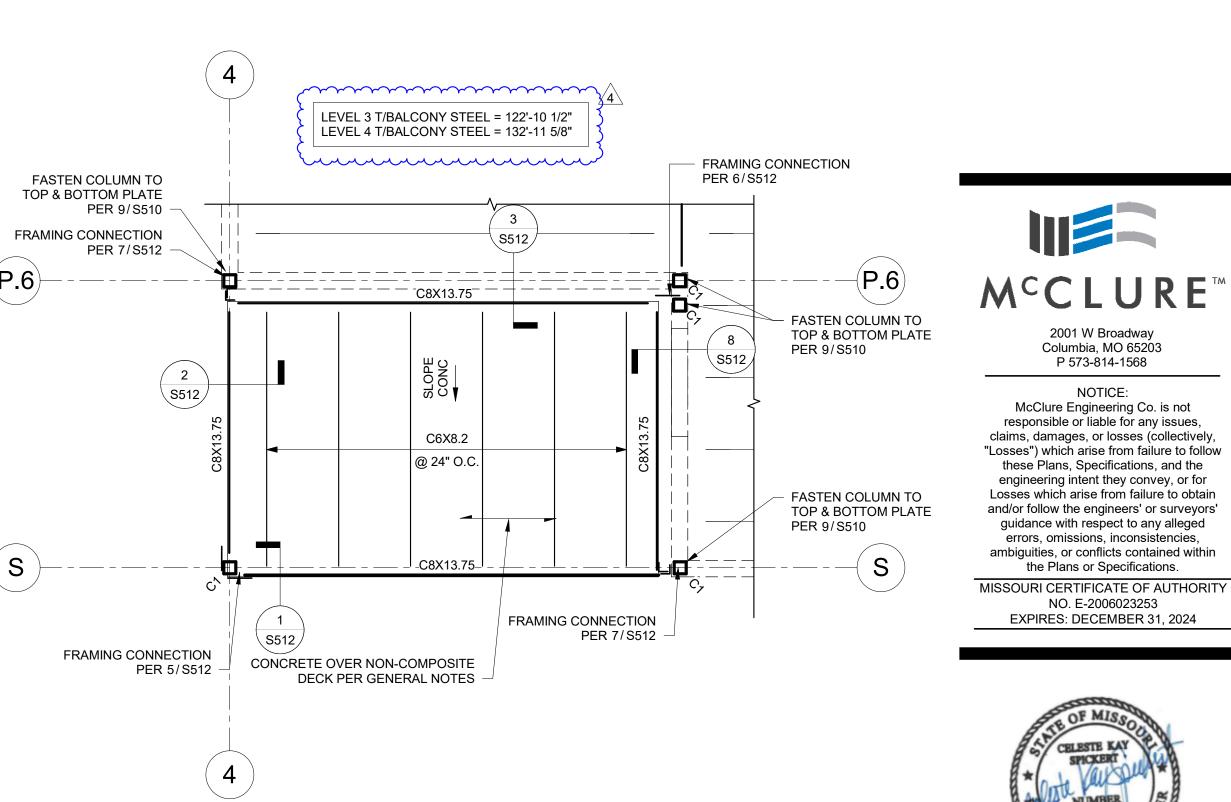
6. Non-load bearing walls not shown, refer to architectural drawings.

4 9/20/2024 FOUNDATION

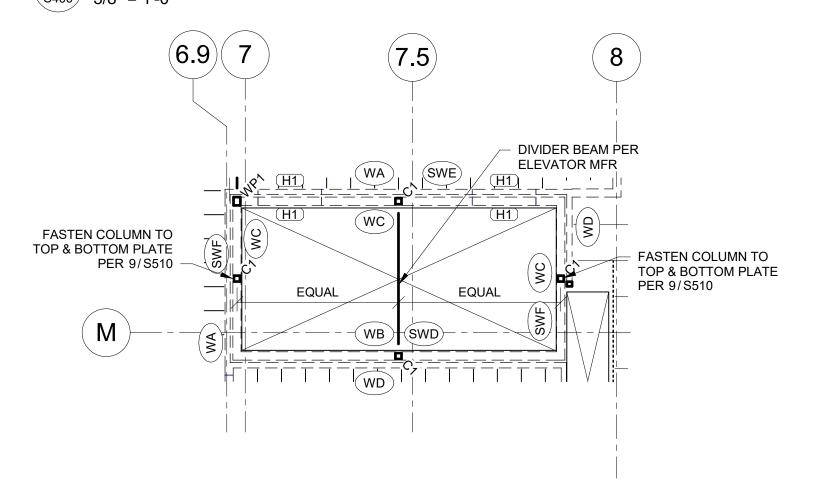
2001 W Broadway Columbia, MO 65203 P 573-814-1568

1 12/21/2023 RESPONSE TO CITY COMMENTS

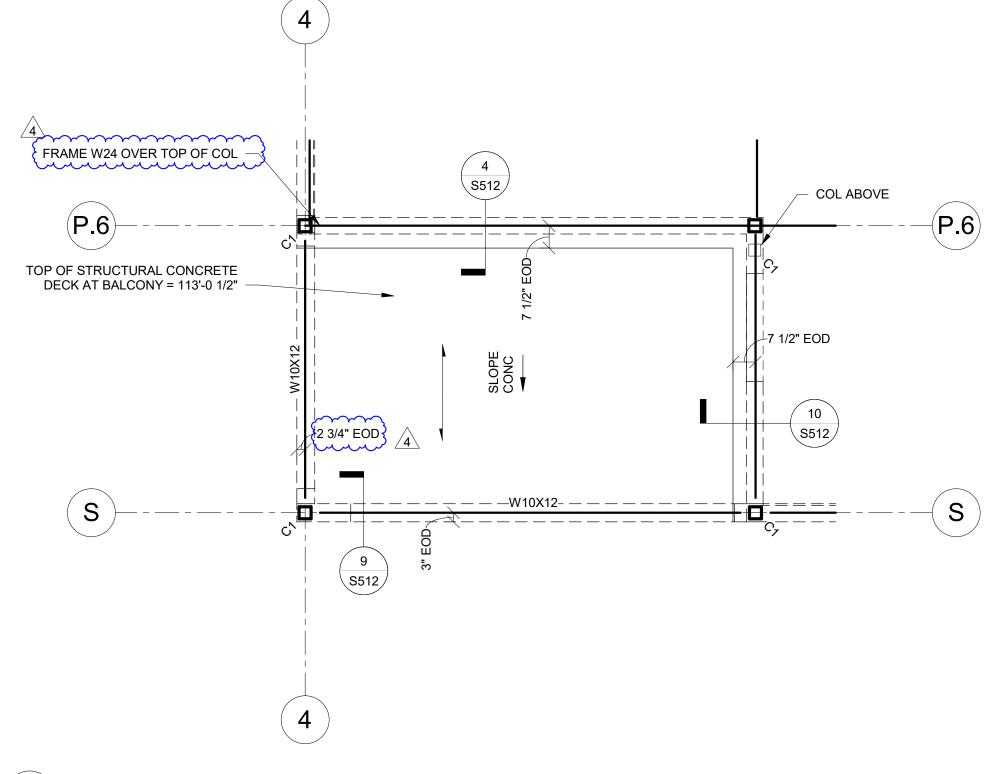
3 3/06/2024 IN RESPONSE TO GC COMMENTS



3 LEVELS 3 & 4 BALCONY FRAMING PLAN S400 3/8" = 1'-0"



5 ENLARGED ELEVATOR PLAN - L4 3/16" = 1'-0"



4 ENLARGED ELEVATOR PLAN - L3 3/16" = 1'-0"

1 ENLARGED PERGOLA PLAN 1/4" = 1'-0"

SHEET TITLE **ENLARGED VIEWS**

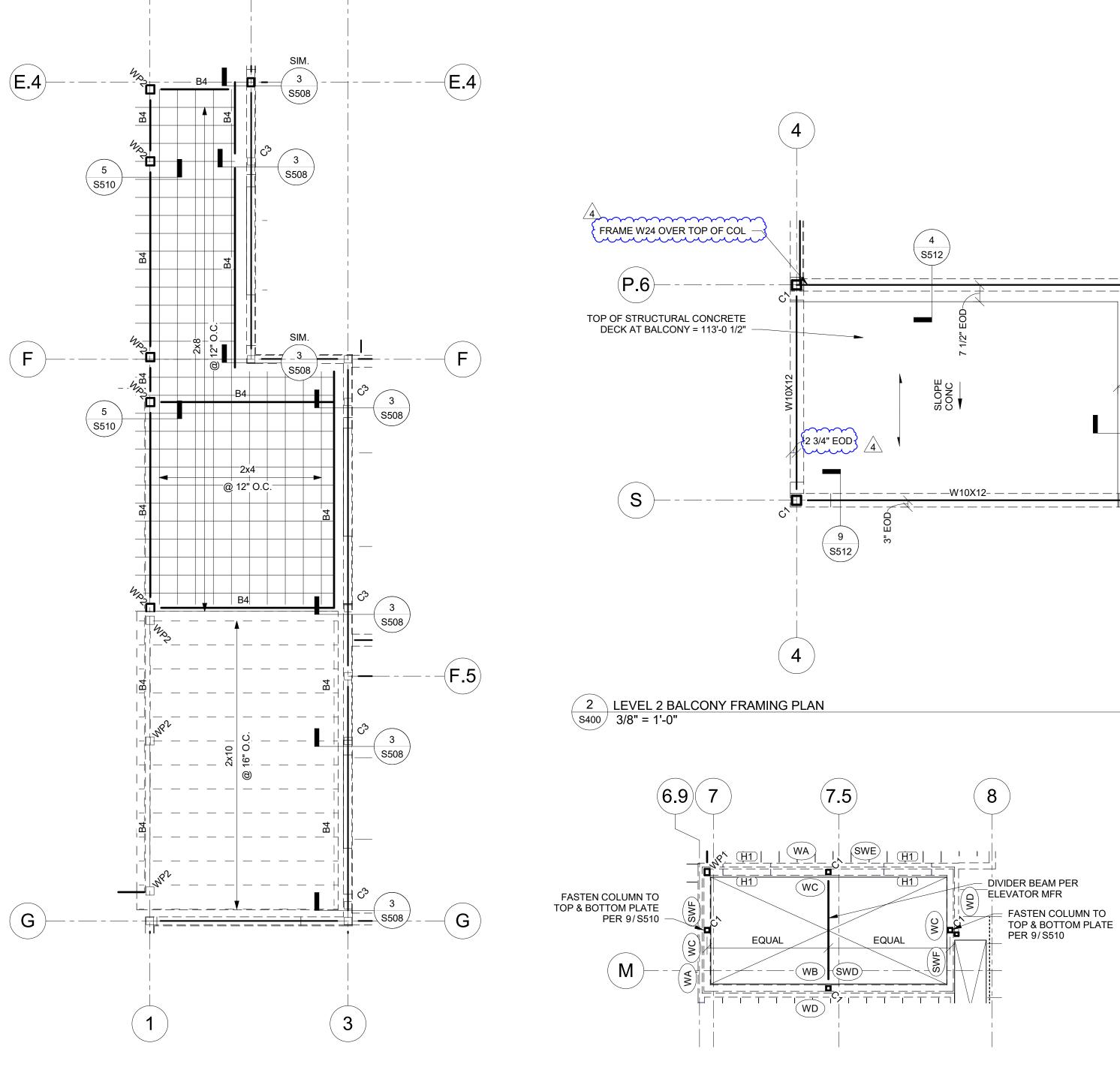
SUITES

TOWNEPL

PROJECT NUMBER: 2023000333

SHEET NUMBER:

1901 NE DISCOVERY AVE LEE'S SUMMIT, MO 64064



11/01/23 - CITY SUBMITTAL

REVISIONS:

1 12/21/2023 RESPONSE TO CITY COMMENTS 2 1/19/2024 ADDENDUM #2

MCLURETM

2001 W Broadway Columbia, MO 65203

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and/or follow the engineers' or surveyors'

guidance with respect to any alleged

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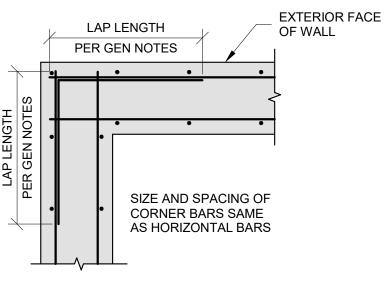
MISSOURI CERTIFICATE OF AUTHORITY

NO. E-2006023253

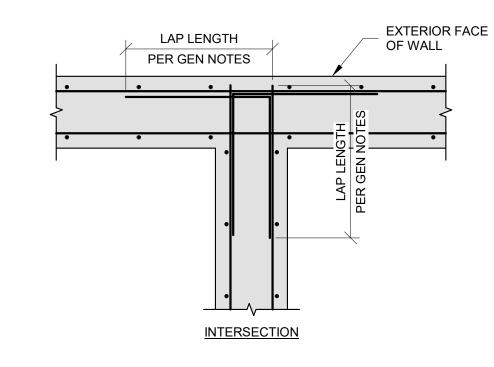
EXPIRES: DECEMBER 31, 2024

ambiguities, or conflicts contained within

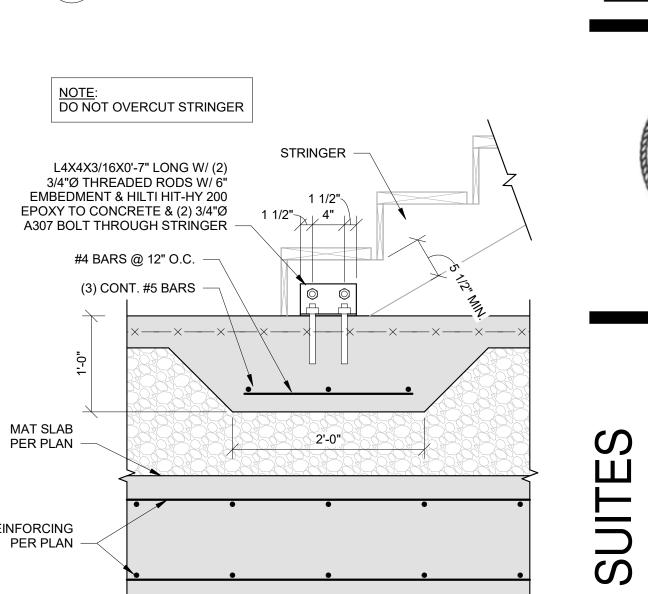
3 3/06/2024 IN RESPONSE TO GC COMMENTS 4 9/20/2024 FOUNDATION

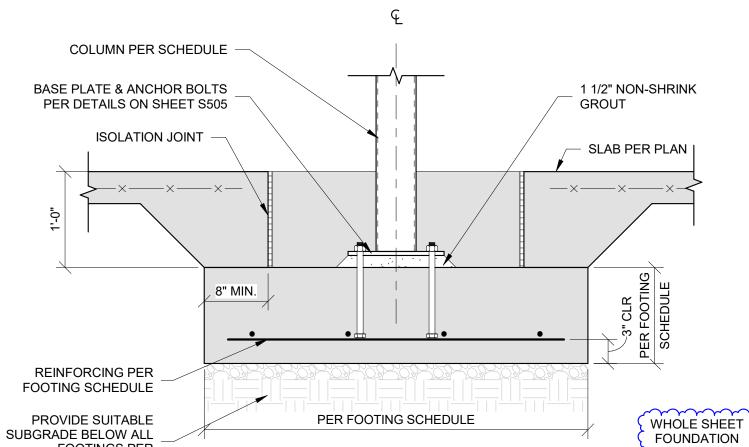


EXTERIOR CORNER



D CORNER BAR DETAIL ∖s501 / 3/4" = 1'-0"





SHEET TITLE FOUNDATION DETAILS

REVISIONS

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回 C E D

PROJECT NUMBER: 2023000333 SHEET NUMBER:

NE S SI

901 EE

CONTRACTION CONSTRUCTION ISOLATION JOINT JOINT JOINT 1/8" SAWN OR PREFORMED JOINT SEE NOTE 1 1/2" FULL DEPTH R=1/8" MAX. JOINT FILLER 6" GRAVEL LAYER PER PLAN/GENERAL NOTES 18" LVC LAYER PER PLAN/GENERAL NOTES NOTES:

1. LOCATE CONSTRUCTION JOINTS AT SAW JOINT LOCATIONS.

MATCH SAW JOINT PROFILE. ALL CONSTRUCTION JOINT

AND APPROVED BY ER PRIOR LOCATIONS TO BE REVIEWED AND APPROVED BY ER PRIOR

4. DO NOT PLACE DOWELS WITHIN 12" OF A SLAB CORNER.

Stirrup & Tie Hook Schedule 90° Hook D A Or G A Or G (IN.) TO CONSTRUCTION.
. MAXIMUM SPACING BETWEEN SAW JOINTS = 15'-0" FOR 6" 4 2 1/2 #4 2 4 1/2 4 1/2 SLABS & 10'-0" FOR 4" SLABS. SEE PLAN FOR LOCATIONS. 5 1/2 3 3/4 CONTINUE SLAB ON GRADE REINFORCING, UNO. PROVIDE TENSION LAP SPLICE AS REQUIRED.

C TYPICAL SLAB ON GRADE JOINTS
1" = 1'-0"

2 PEDESTAL (NOT AT PARKING GARAGE)

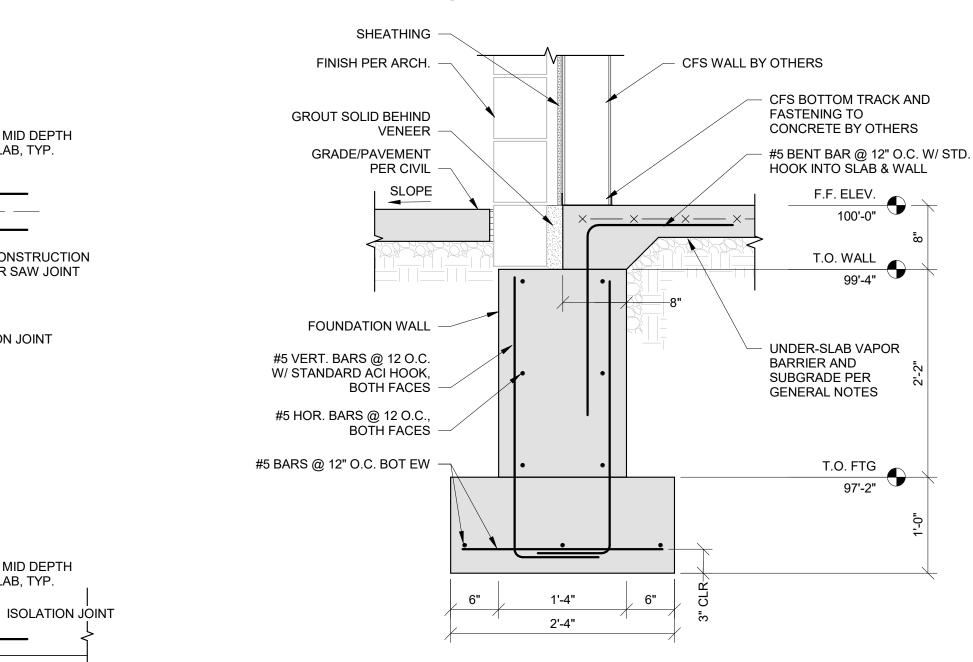
D=Inside Diameter Of Bend #3 THRU #8 D = 4db #9 THRU #11 D = 5db #14 THRU #18 D = 6db

(IN.)

#3 1 1/2 4

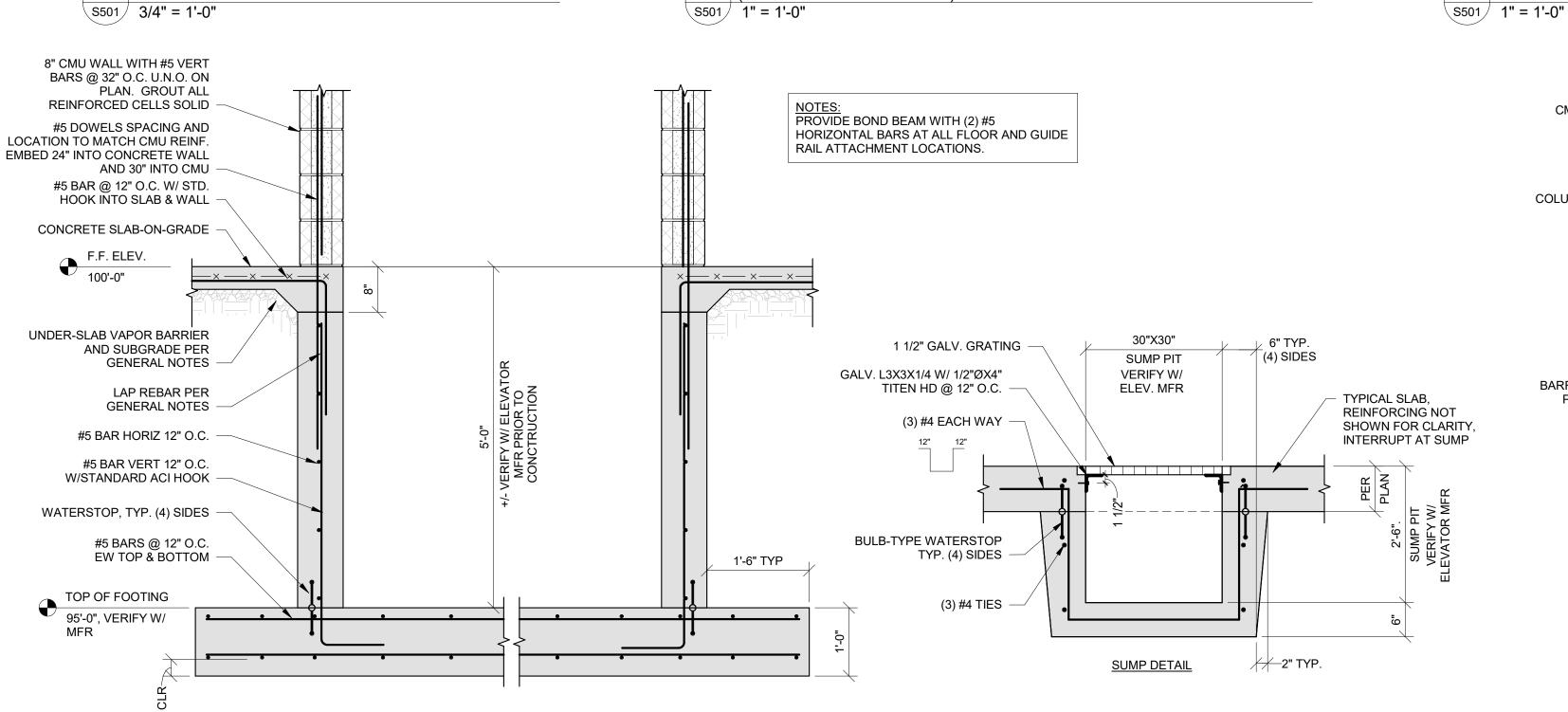
#5 2 1/2 6

B STIRRUP AND TIE BAR BENDING DETAIL S501 NTS



90° Hook Stirrup or Ties

FOUNDATION SECTION - EXTERIOR WALL (NOT AT PARKING GARAGE)



DOOR WIDTH

(2) #4X4'-0", 3/4" CLEAR FROM T.O. SLAB

THRESHOLDS

(2) #4X4'-0", 3/4" CLEAR

(1) #4 MID DEPTH

CONSTRUCTION

OR SAW JOINT

ISOLATION JOINT

(1) #4 MID DEPTH ÒF SLAB, TYP.

OF SLAB, TYP.

FROM T.O. SLAB

EDGE OF SLAB

RE-ENTRANT CORNERS

A ADDITIONAL REINFORCING IN SLABS
3/4" = 1'-0"

CONCRETE INFILL

INTERIOR

CONSTRUCTION OR SAW JOINT -

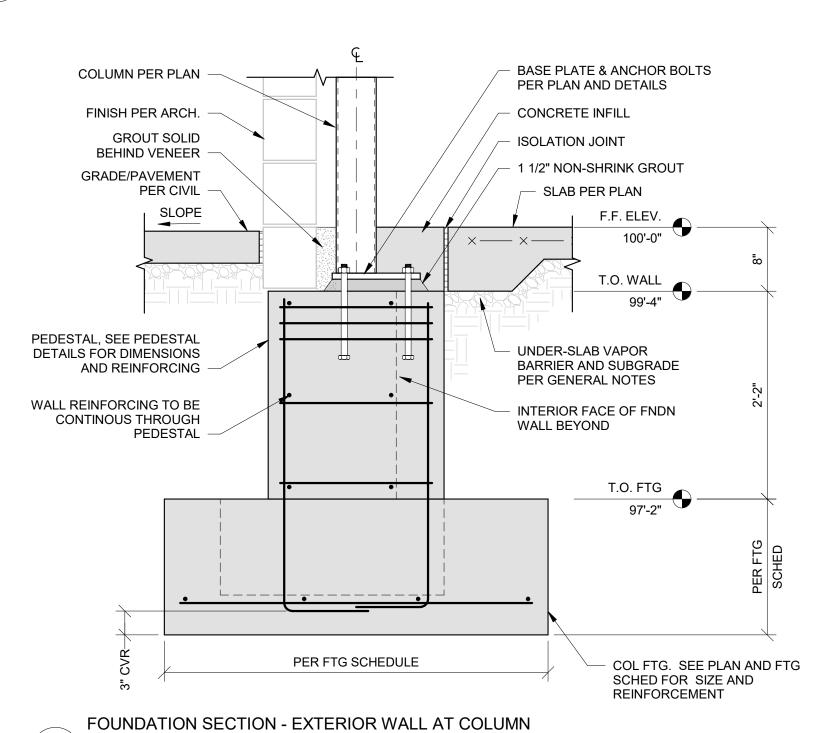
4 ELEVATOR PIT DETAIL 8501 3/4" = 1'-0"

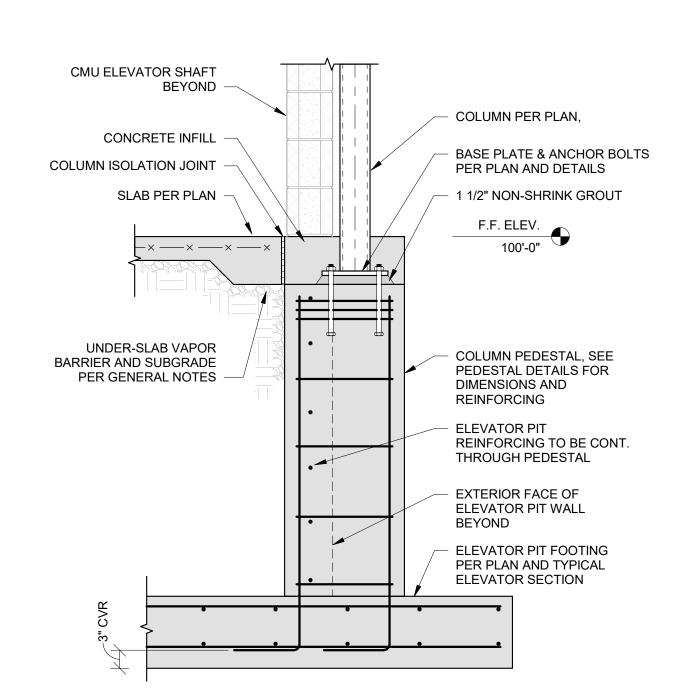
SLAB ON GRADE ISOLATION JOINT AT COLUMNS

CONCRETE INFILL

INTERIOR

EXTERIOR





5 FOUNDATION SECTION - COLUMN PEDESTAL AT ELEVATOR

S501 3/4" = 1'-0"

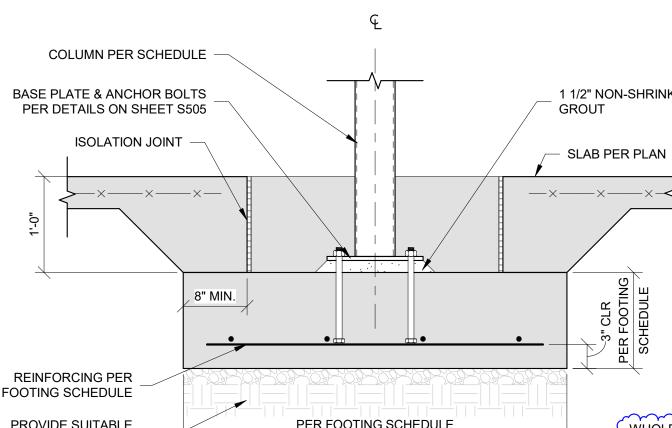
3 STAIR TO THICKENED SLAB S501 1" = 1'-0"

SUBGRADE PER

PLAN/GENERAL NOTES

REINFORCING

PER PLAN



6 TYPICAL INTERIOR COLUMN FOOTING S501 1" = 1'-0"

FOOTINGS PER

GEOTECH REPORT

PRINTS ISSUED

11/01/23 - CITY SUBMITTAL

REVISIONS: 1 12/21/2023 RESPONSE TO CITY COMMENTS

2 1/19/2024 ADDENDUM #2 3 3/06/2024 IN RESPONSE TO GC COMMENTS

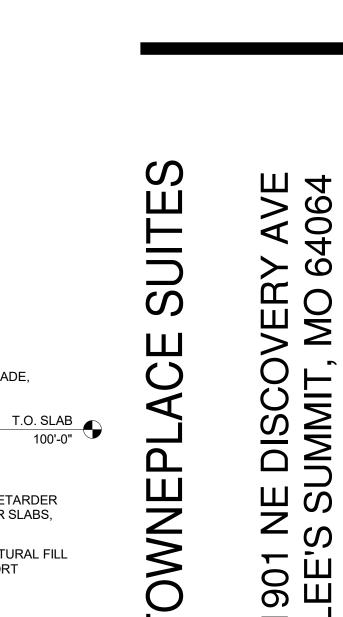
4 9/20/2024 FOUNDATION 5 12/20/2024 ASI 3.1

MCLURETM 2001 W Broadway Columbia, MO 65203

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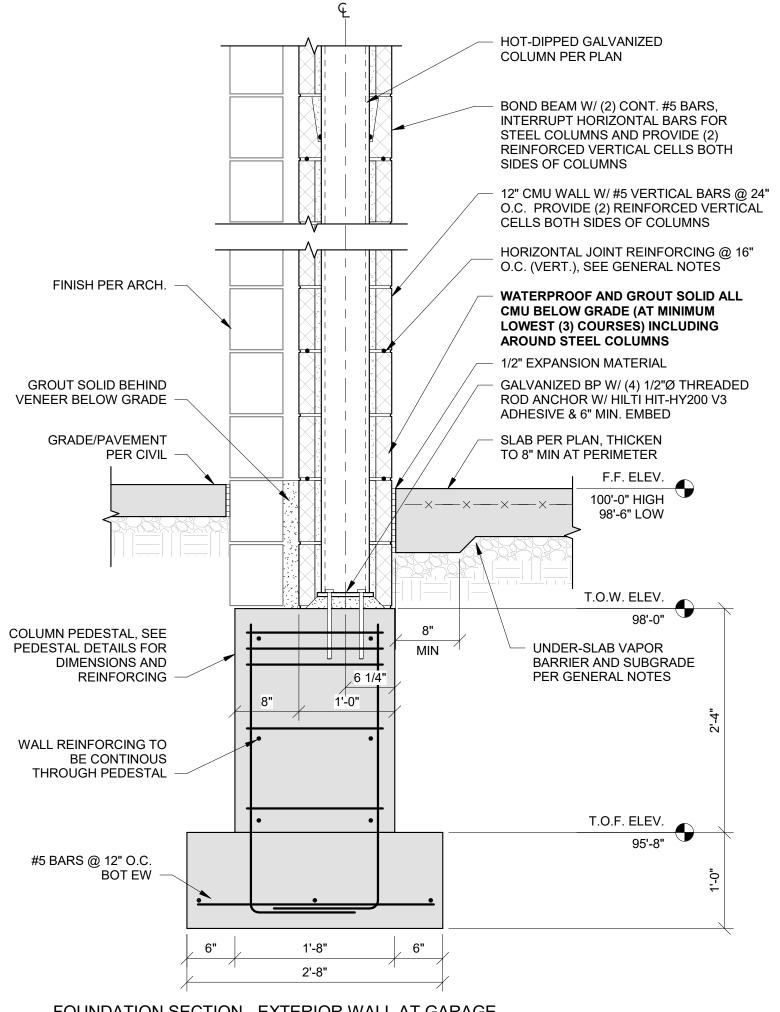
ambiguities, or conflicts contained within the Plans or Specifications. MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253 EXPIRES: DECEMBER 31, 2024

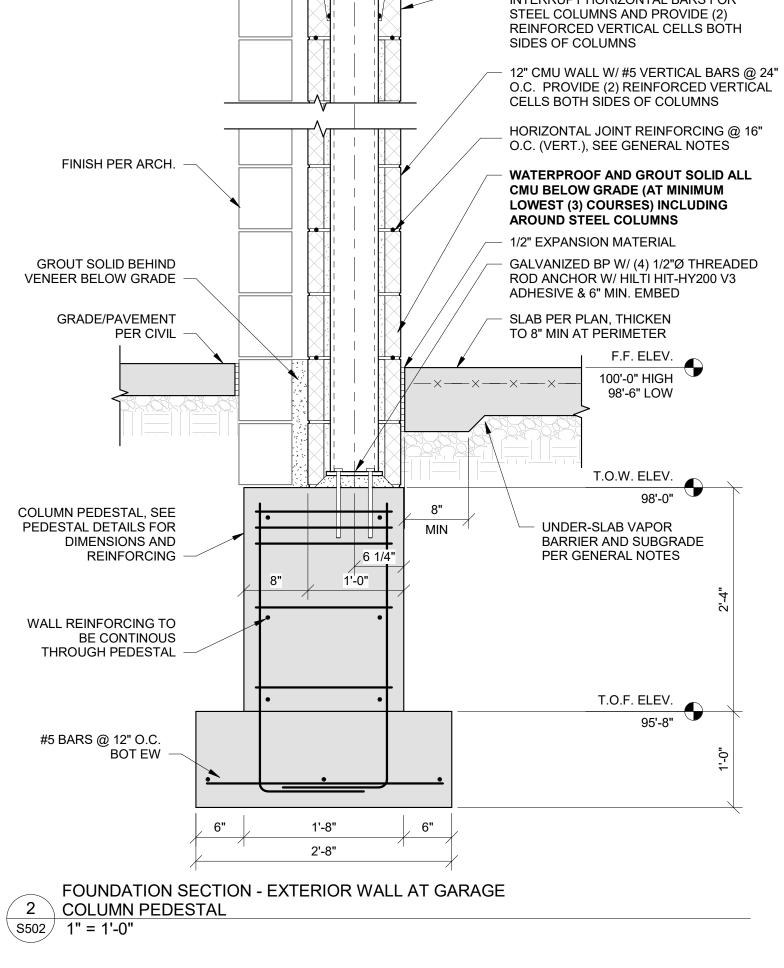


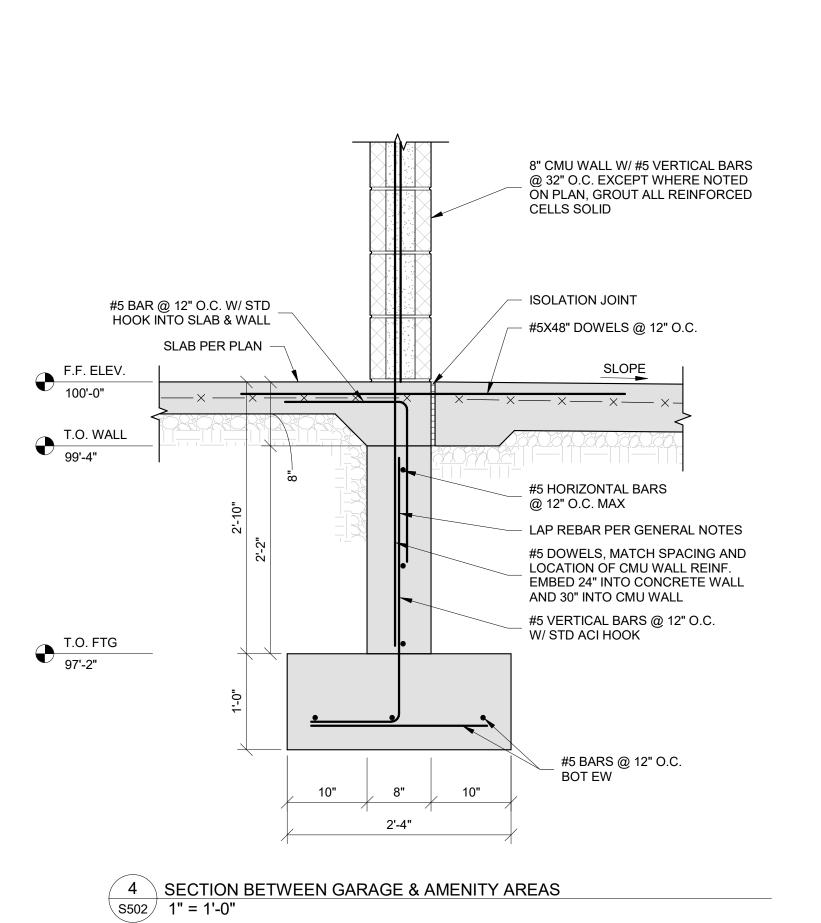


SHEET TITLE FOUNDATION DETAILS

PROJECT NUMBER: 2023000333







2'-8"

1 FOUNDATION SECTION - EXTERIOR WALL AT GARAGE

SCREEN WALL PER

MANUFACTURER

FINISH PER ARCH.

GROUT SOLID

BEHIND VENEER

GRADE/PAVEMENT

FOUNDATION WALL -

BOTH FACES

BOTH FACES

EACH WAY

#5 VERT. BARS @ 12 O.C.

W/ STANDARD ACI HOOK,

#5 HOR. BARS @ 12 O.C.,

#5 BARS @ 12" O.C. BOT

S502 1" = 1'-0"

BELOW GRADE

PER CIVIL

2" GAP-

BOND BEAM W/ (2) CONT. #5 BARS,

INTERRUPT HORIZONTAL BARS FOR

STEEL COLUMNS AND PROVIDE (2)

SIDES OF COLUMNS

T.O.W. ELEV.

COLUMN PER PLAN,

HORIZONTAL JOINT

12" CMU WALL W/ #5 VERTICAL

BARS @ 24" O.C. PROVIDE (2)

REINFORCING @ 16" O.C. (VERT.), SEE GENERAL NOTES

1/2" EXPANSION MATERIAL

LOWEST (3) COURSES)

SLAB PER PLAN, THICKEN

TO 8" MIN AT PERIMETER

UNDER-SLAB VAPOR

ACI HOOK @ 24" O.C.

MATCH SPACING AND

PER GENERAL NOTES

BARRIER AND SUBGRADE

#5 DOWELS W/ STANDARD

EMBED 30" INTO CMU WALL.

LOCATION WITH CMU REINF

REINFORCED VERTICAL CELLS

BOTH SIDES OF EMBEDDED STEEL

WATERPROOF AND GROUT SOLID ALL

F.F. ELEV. 100'-0" HIGH

98'-6" LOW

T.O.W. ELEV.

98'-0"

T.O.F. ELEV. 95'-8"

CMU BELOW GRADE (AT MINIMUM

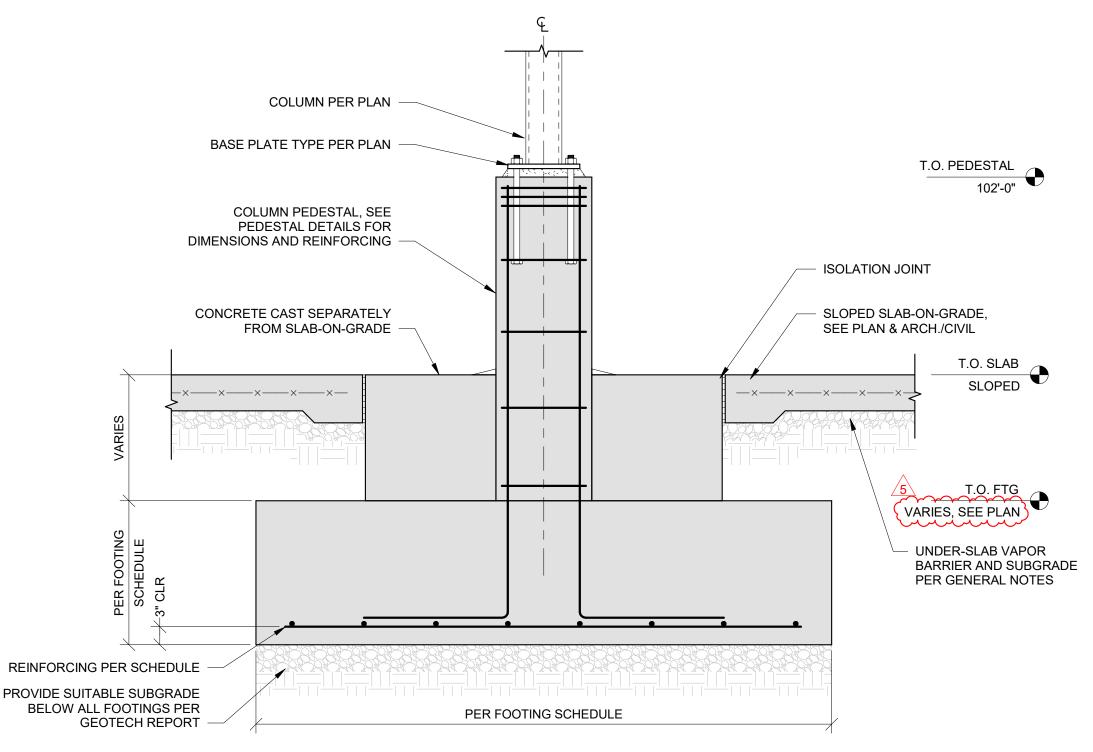
BEYOND

COLUMNS

__×___×___×_

8" MIN

REINFORCED VERTICAL CELLS BOTH





5 GARAGE COLUMN PEDESTAL SECTION

WHOLE SHEET

FOUNDATION REVISIONS

S502 3/4" = 1'-0"

WATERPROOF AND GROUT SOLID ALL CMU BELOW GRADE (AT MINIMUM

1/2" EXPANSION MATERIAL

GRADE/PAVEMENT PER CIVIL

3/8" CAP PLATE

HOT-DIPPED

GALVANIZED COLUMN

PER PLAN @ 4'-0" O.C.

CMU WALL BEYOND

PER PLAN

LOWEST (3) COURSES) INCLUDING

AROUND STEEL COLUMNS DIMENSIONS AND REINFORCING -

• 1 1 . COLUMN PEDESTAL, SEE PEDESTAL DETAILS FOR WALL REINFORCING TO

BE CONTINOUS THROUGH PEDESTAL

T.O.F. ELEV. #5 BARS @ 12" O.C. BOT EW

8" MIN

T.O. COLUMN

PER PLAN

T.O.W. ELEV. 102'-0"

BOND BEAM W/ (2) CONT. #5 BARS,

BOTH SIDES OF COLUMNS

1/2" EXPANSION MATERIAL

ADHESIVE & 6" MIN. EMBED

SLAB PER PLAN, THICKEN

UNDER-SLAB VAPOR

BARRIER AND SUBGRADE

PER GENERAL NOTES

TO 8" MIN AT PERIMETER

<u>/</u>x----x---x---x--

INTERRUPT HORIZONTAL BARS FOR STEEL

COLUMNS AND PROVIDE (2) REINFORCED

VERTICAL CELLS BOTH SIDES OF COLUMNS

12" CMU WALL W/ #5 VERTICAL BARS @ 24" O.C. PROVIDE (2) REINFORCED VERTICAL CELLS

HORIZONTAL JOINT REINFORCING @ 16" O.C. (VERT.), SEE GENERAL NOTES

F.F. ELEV.

98'-6" LOW

T.O.W. ELEV.

98'-0"

95'-8"

COMMERCIAL WASHER

#5 BARS @ 12" O.C. EW WITHIN TOP 4" OF PAD

1" RIGID INSULATION

SEE PLAN

4" CONCRETE SLAB ON GRADE, SEE PLAN

MOISTURE VAPOR RETARDER

COMPACTED STRUCTURAL FILL

PER GEOTECH REPORT

BELOW ALL INTERIOR SLABS,

ISOLATION JOINT

GALVANIZED BP5 W/ (4) 1/2"Ø THREADED

ROD ANCHORS W/ HILTI HIT-HY200 V3

2'-8"

FOUNDATION SECTION AT CANTILEVERED COLUMN IN 3 SCREEN WALL

S502 1" = 1'-0"

TRENCH, SEE ARCH. & PLUMBING DRAWINGS -

S502 3/4" = 1'-0"

1'-0" MIN.

6 SECTION AT COMMERCIAL WASHER

SHEET NUMBER:

11/01/23 - CITY SUBMITTAL

75.4010N0

REVISIONS:

1 12/21/2023 RESPONSE TO CITY COMMENTS

2 1/19/2024 ADDENDUM #2
 3 3/06/2024 IN RESPONSE TO GC COMMENTS

COMMENTS
4 9/20/2024 FOUNDATION

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P 573-814-1568

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MISSOURI CERTIFICATE OF AUTHORITY
NO. E-2006023253
EXPIRES: DECEMBER 31, 2024



TOWNEPLACE SUITES 1901 NE DISCOVERY AVE LEE'S SUMMIT, MO 64064

12" CMU WALL WITH #5 VERTICAL BARS @ 32" O.C. EXCEPT WHERE

ALL REINFORCED CELLS SOLID

INTO CMU WALL

NOTED OTHERWISE ON PLAN, GROUT

#5 DOWELS AT SAME SPACING AND LOCATIONS AS CMU REINF. EMBED 24" INTO CONCRETE WALL AND 30"

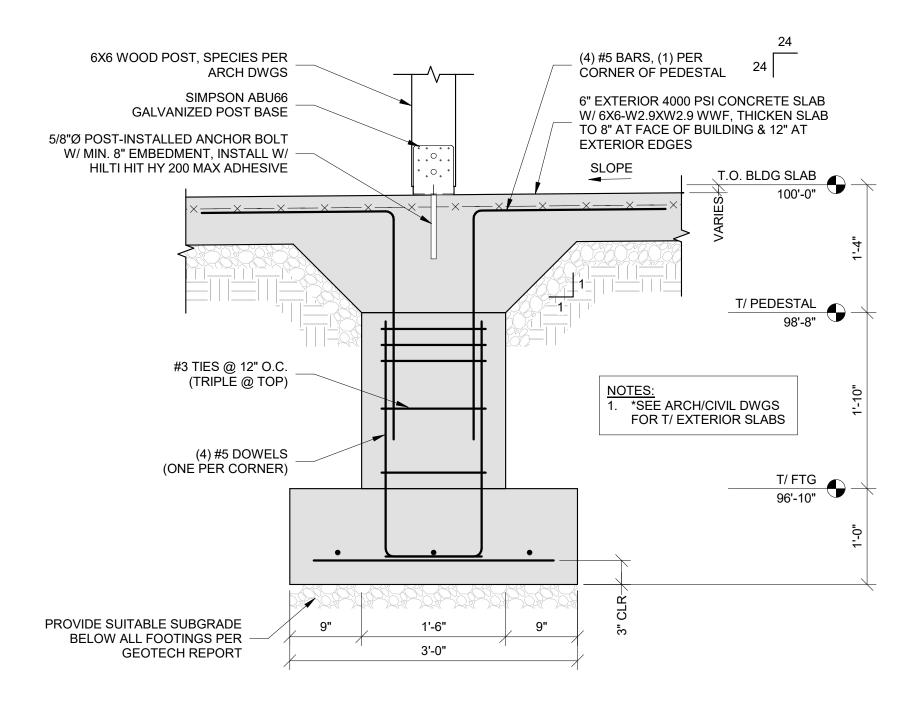
SHEET TITLE
FOUNDATION DETAILS

PROJECT NUMBER: 2023000333

SHEET NUMBER:

4 SECTION AT EAST STAIR FOUNDATION 5503 1" = 1'-0"

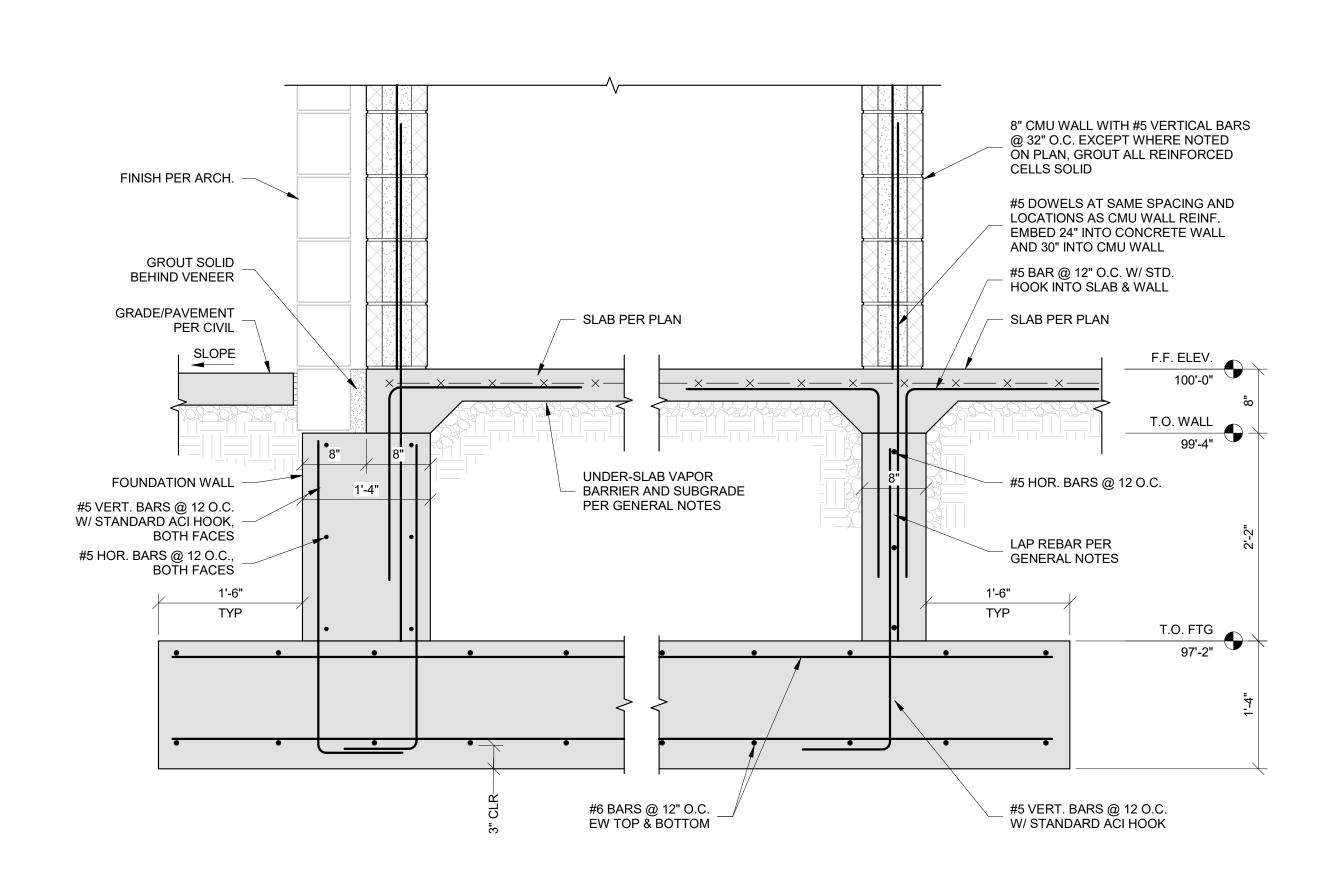
FINISH PER ARCH.

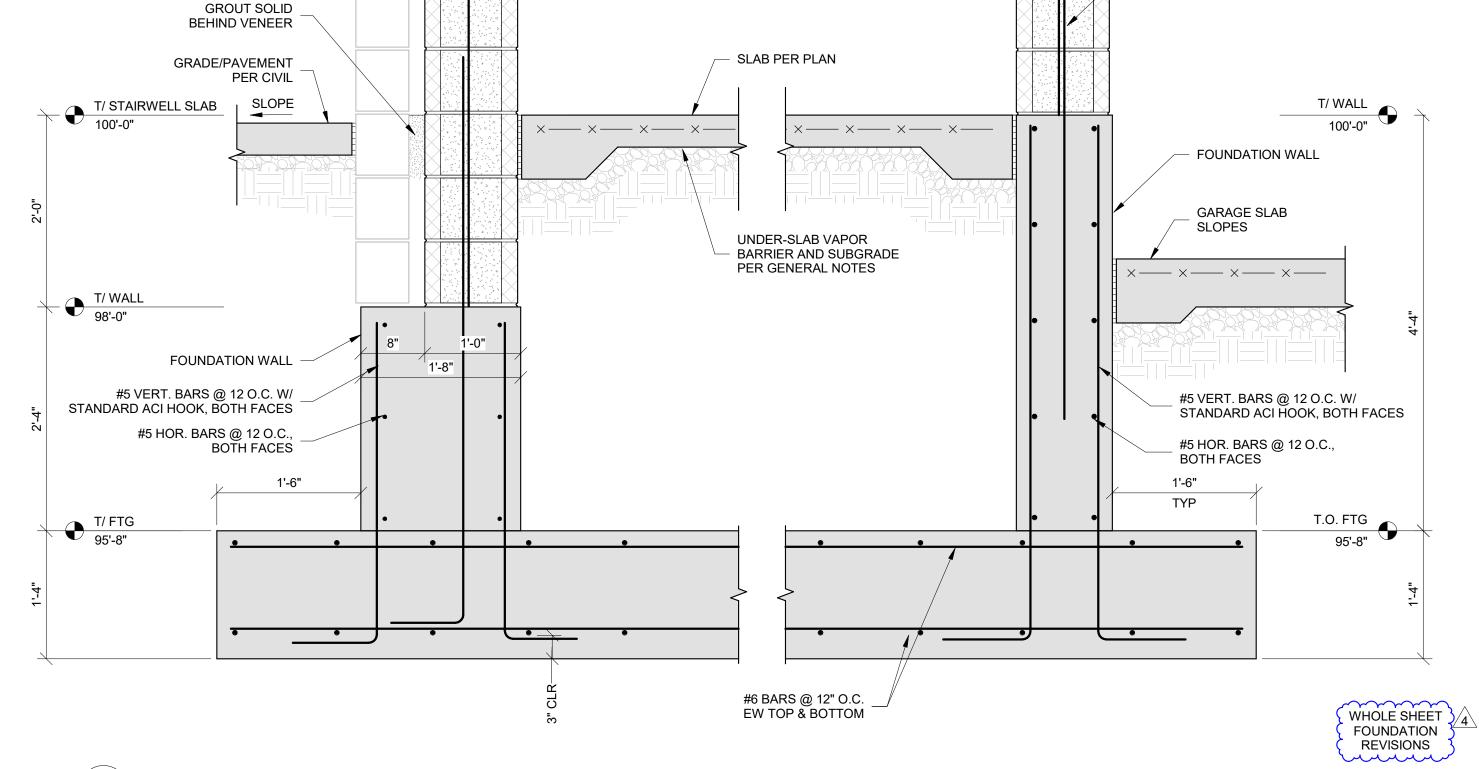


1 WOOD CANOPY COLUMN BASE CONNECTION
1" = 1'-0"

(4) #5 BARS, (1) PER - PEDESTAL CORNER 24 GALVANIZED COLUMN (BEYOND) PER PLAN ISOLATION JOINT 6" EXTERIOR 4000 PSI CONCRETE SLAB W/ 6X6-W2.9XW2.9 WWF, THICKEN SLAB BASE PLATE & ANCHOR BOLTS TO 8" AT FACE OF BUILDING & 12" AT PER DETAILS ON SHEET S510 EXTERIOR EDGES T.O. BLDG SLAB 1 1/2" NON-SHRINK GROUT 100'-0" __x__x__x__ ×---×---×---×--T/ PEDESTAL 98'-8" NOTES:
1. *SEE ARCH/CIVIL DWGS PEDESTAL, SEE PEDESTAL FOR T/SLAB DETAILS FOR DIMENSIONS AND REINFORCING 7/ FTG 96'-10" PROVIDE SUITABLE SUBGRADE BELOW ALL FOOTINGS PER PER FTG SCHED GEOTECH REPORT

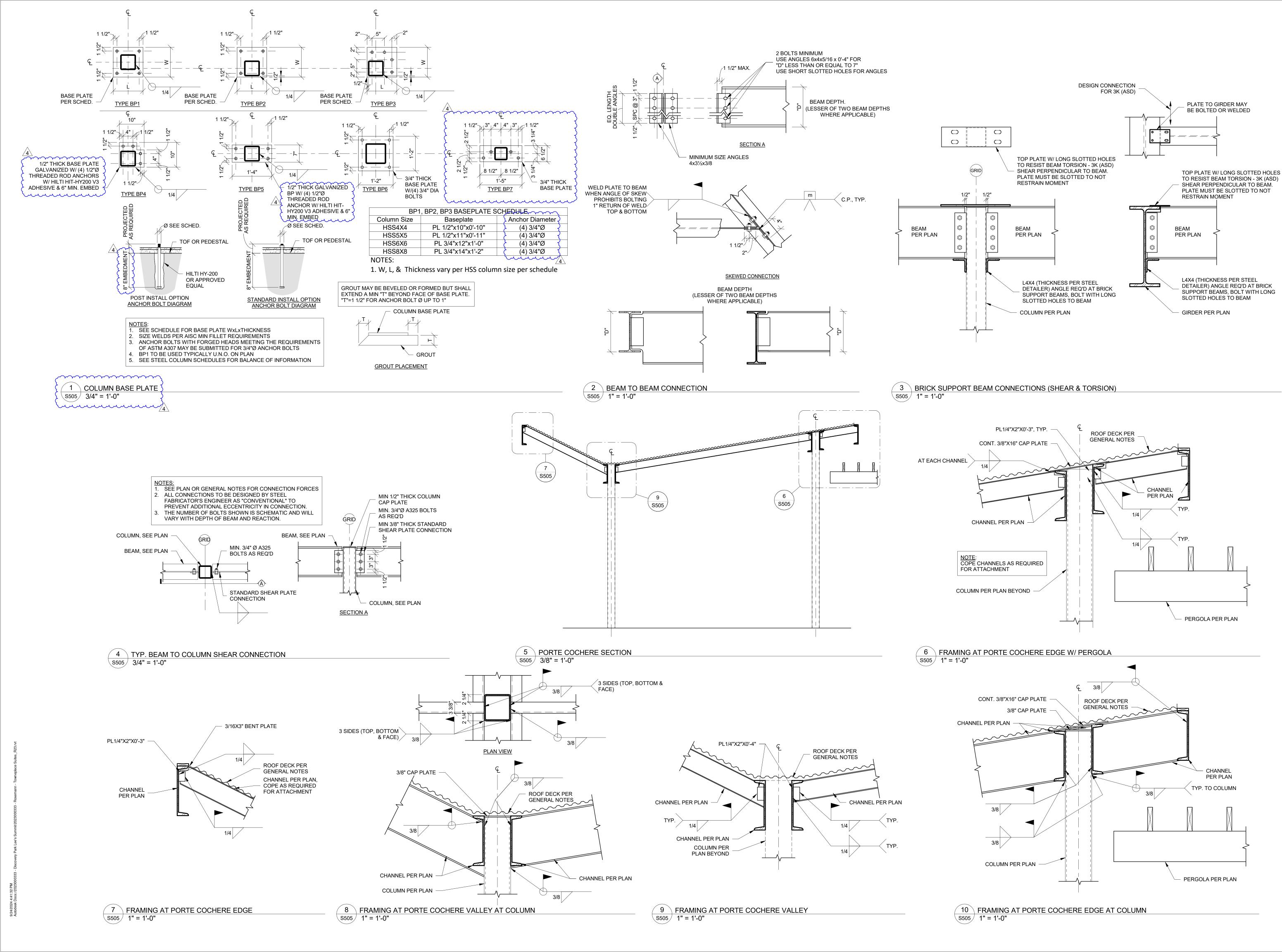
2 STEEL COLUMN AT PEDESTAL S503 1" = 1'-0"





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CONSTRUCTION
As Noted on Plans Review

PRINTS ISSUED



CONSTRUCTION As Noted on Plans Review

PRINTS ISSUED

11/01/23 - CITY SUBMITTAL

REVISIONS:

1 12/21/2023 RESPONSE TO CITY COMMENTS

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3 3/06/2024 IN RESPONSE TO GC COMMENTS 4 9/20/2024 FOUNDATION

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Columbia, MO 65203 P 573-814-1568

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NO. E-2006023253 EXPIRES: DECEMBER 31, 2024



I NE DISCC 'S SUMMIT 1901 LEE'

SUITE

ACE

OWNEPL

SHEET TITLE STEEL DETAILS

PROJECT NUMBER: 2023000333

SHEET NUMBER:

S505

WALL PER SCHEDULE

DECK EDGE FASTENING

PER GENERAL NOTES

COMPOSITE DECK PER PLAN/GENERAL NOTES

PER SCHEDULE

BEAM PER PLAN

1/8" STAINLESS STEEL BENT PLATE. LAP

FINISHED FLOOR AND BALCONY SLAB A

TOPPING W/ STAINLESS STEEL SCREWS

MIN 3". FASTEN TO BALCONY CONRETE

GYPCRETE. SCREW HEADS MUST BE

@ 6" O.C. DO NOT FASTEN TO

FLAT WITH TOP OF PLATE

FLOOR PER SCHEDULE

WALL PER SCHEDULE

FLÓOR TRUSS

PER MFR

NOTE: ALL BALCONY STEEL TO BE

HOT-DIPPED GALVANIZED

 \cdots

SILL PLATE & CONNECTION

T.O. LEVEL 2 SLAB
SEE PLAN



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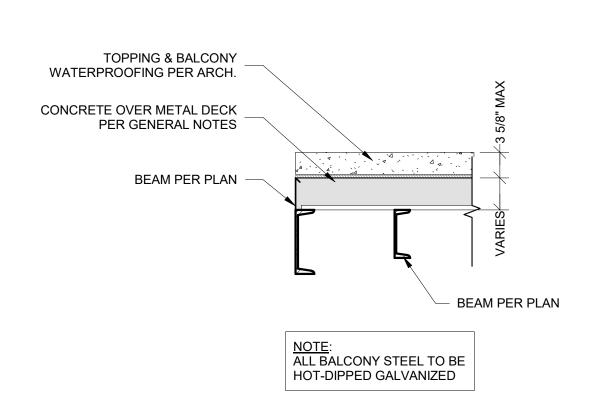


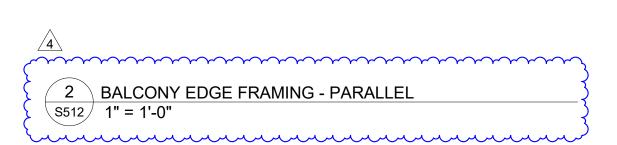
SHEET TITLE **BALCONY DETAILS**

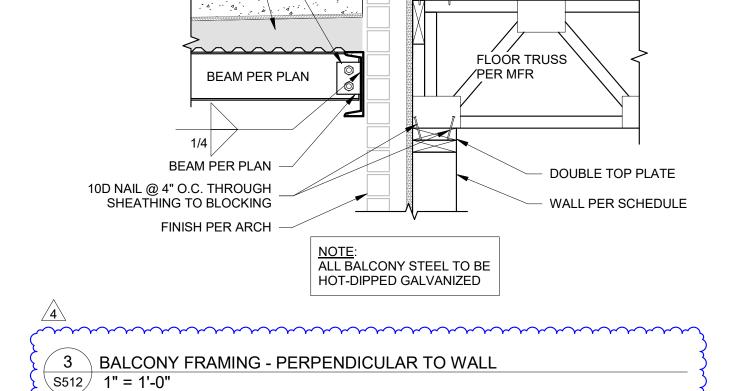
OWNEPL

PROJECT NUMBER: 2023000333

SHEET NUMBER:







TOPPING & BALCONY

WATERPROOFING PER ARCH

HOLES FOR 5/8"Ø A325N BOLTS

CONCRETE OVER METAL DECK PER GENERAL NOTES

PL3/8"X3"X0'-4" W/ (2) STD

FINISH PER ARCH.

EDGE REINFORCING PER

SEE ARCH DWGS FOR GAP

FILLER & WATERPROOFING

COMPOSITE DECK PER PLAN/GENERAL NOTES

CONT. 5 1/2"X7"X3/8" (LLH)

BENT PLATE POUR STOP

DECK EDGE FASTENING PER GENERAL NOTES

\S512 \ 1" = 1'-0"

TOPPING & BALCONY WATERPROOFING PER ARCH

PER GENERAL NOTES

BEAM PER PLAN

BEAM PER PLAN

FINISH PER ARCH

S512 | 1" = 1'-0"

8 BALCONY EDGE FRAMING AT DOOR THRESHOLD

CONCRETE OVER METAL DECK

CONT. L3X3X1/4 -

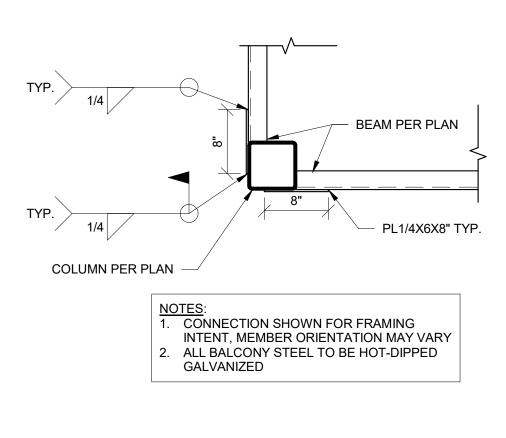
1/4 1-12

4 BALCONY FRAMING - PERPENDICULAR TO BEAM

REINFORCING PLAN

REQUIREMENTS

EOD PER PLAN-



NOTE: ALL BALCONY STEEL TO BE

HOT-DIPPED GALVANIZED

 \cdot

✓ 1 \ BALCONY EDGE FRAMING - PERPENDICULAR

TOPPING & BALCONY

BEAM PER PLAN -

BEAM PER PLAN

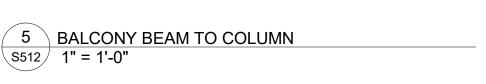
PL3/8"X3"X0'-4" W/ (2) STD

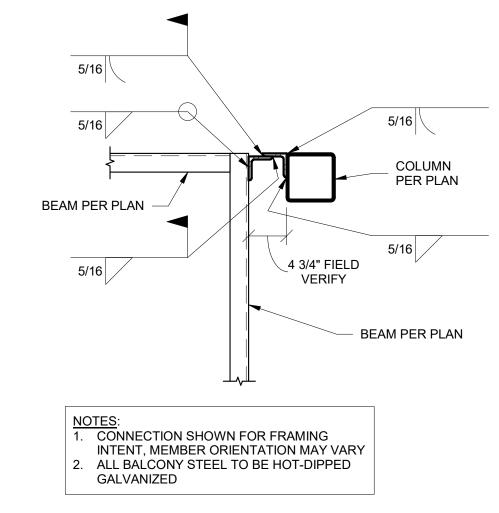
HOLES FOR 5/8"Ø À325N BOLTS

WATERPROOFING PER ARCH

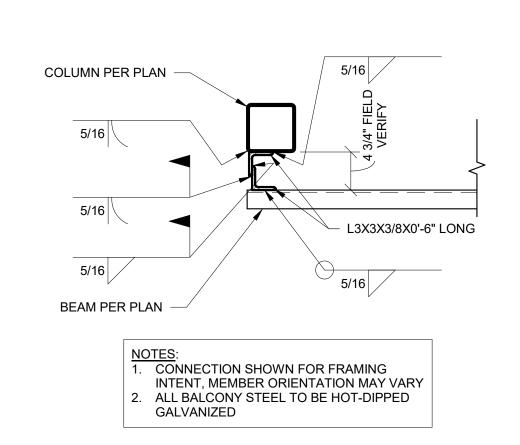
CONCRETE OVER METAL DECK PER GENERAL NOTES

\S512 \ 1" = 1'-0"

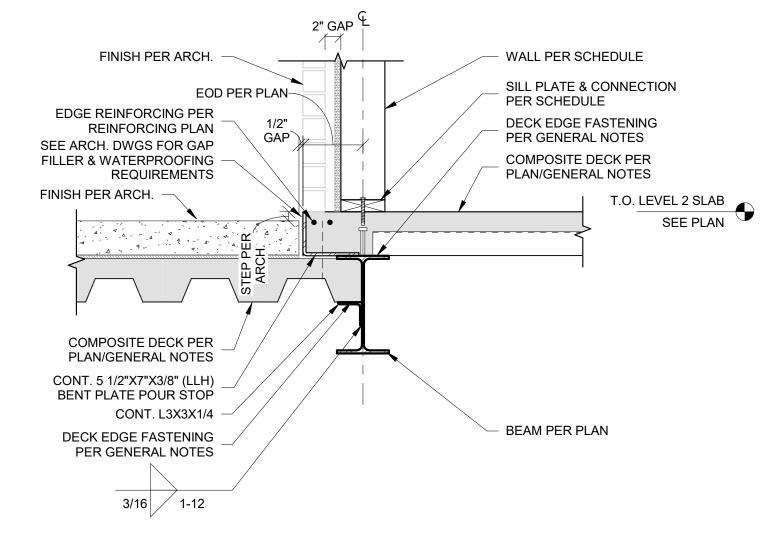


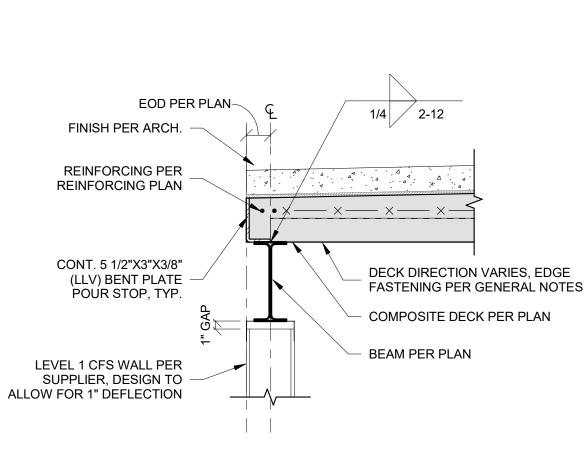


6 BALCONY BEAM TO COLUMN WITH PLATE S512 1" = 1'-0"

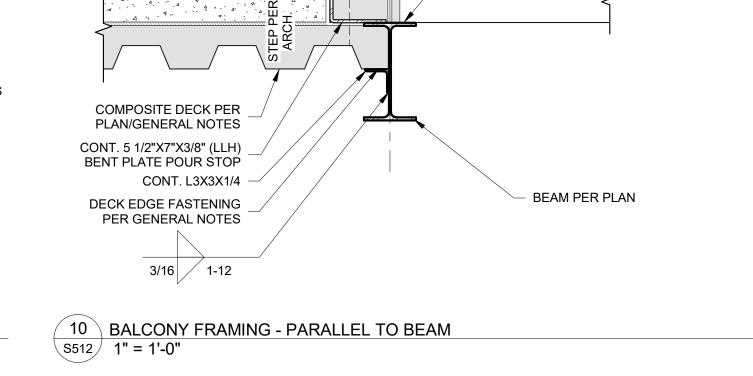






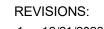






CONSTRUCTION

COMMENTS



1 12/21/2023 RESPONSE TO CITY 2 1/19/2024 ADDENDUM #2 3 3/06/2024 IN RESPONSE TO GC

4 9/20/2024 FOUNDATION



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ambiguities, or conflicts contained within the Plans or Specifications. MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253 EXPIRES: DECEMBER 31, 2024



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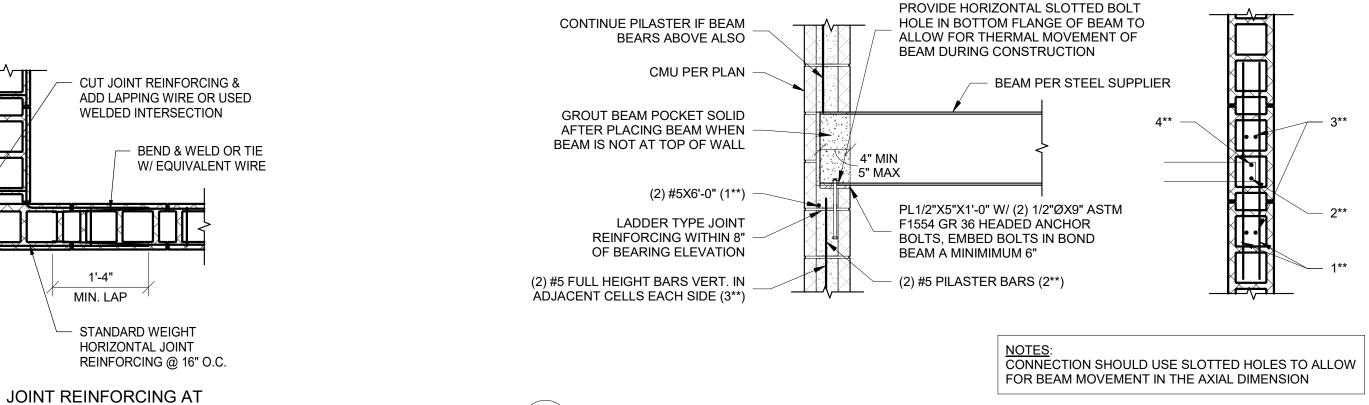
SHEET TITLE

MASONRY DETAILS

SHEET NUMBER:

OWNEP

PROJECT NUMBER: 2023000333



S515 3/4" = 1'-0"

3 BEAM CONNECTION TO MASONRY WALL - MID WALL

1 SECTION AT STAIRS AT LEVEL 2 S515 1" = 1'-0"

JOIST HANGER SCHEDULE

1. Hangers to be installed with

typical fasteners per manufacturer

2. All exterior members are to be

LUS24

LUS26

LUS26

LUS28

Joist Size

2x4

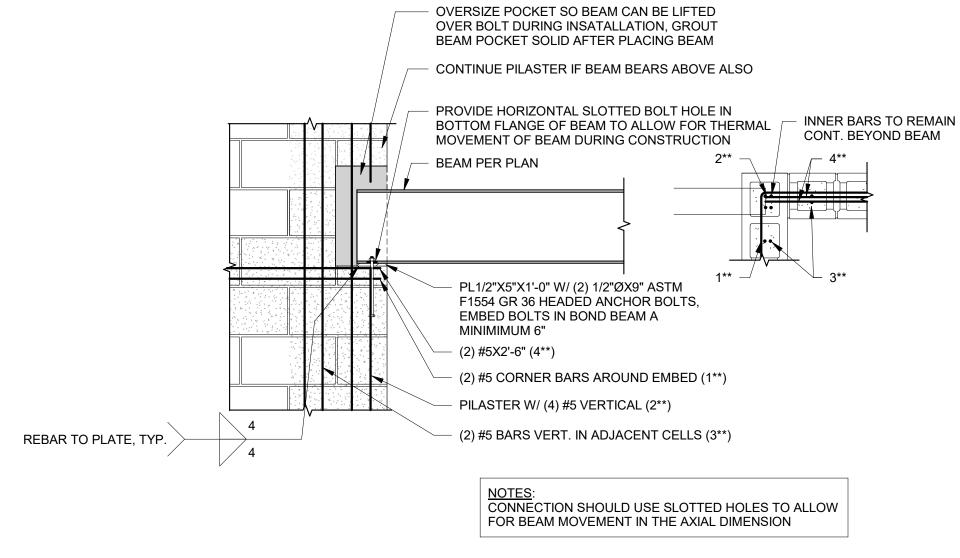
2x6

2x8

2x10

product data

pressure treated



SIMPSON HANGER

STAIRS FRAMING PER PLAN, SPAN

2X LEDGER TO MATCH JOIST DEPTH,

FASTEN LEDGER TO CMU W/ 3/8"Ø

W/ 2 1/2" EMBEDMENT @ 8" O.C.

HILTI KWIK HUS-EZ SCREW ANCHOR

DIRECTION VARIES PER PLAN

PER SCHEDULE

BOND BEAMS

CMU WALL PER PLAN

WALL PER SCHEDULE

COMPOSITE DECK PER

PLAN/GENERAL NOTES

REINFORCING PER

UNO ON PLAN

DETAIL

SPAN DIRECTION VARIES

CONT. L6X4X5/8" (LLV) W/ 3/4"Ø

EMBEDMENT @ 8" O.C. TO CMU

HILTI KWIK HUS-EZ W/ 6 1/4"

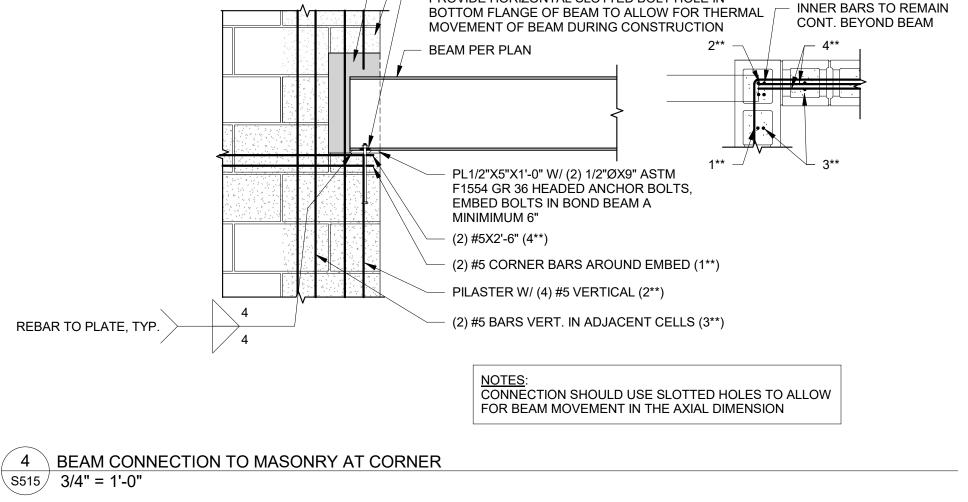
BRG

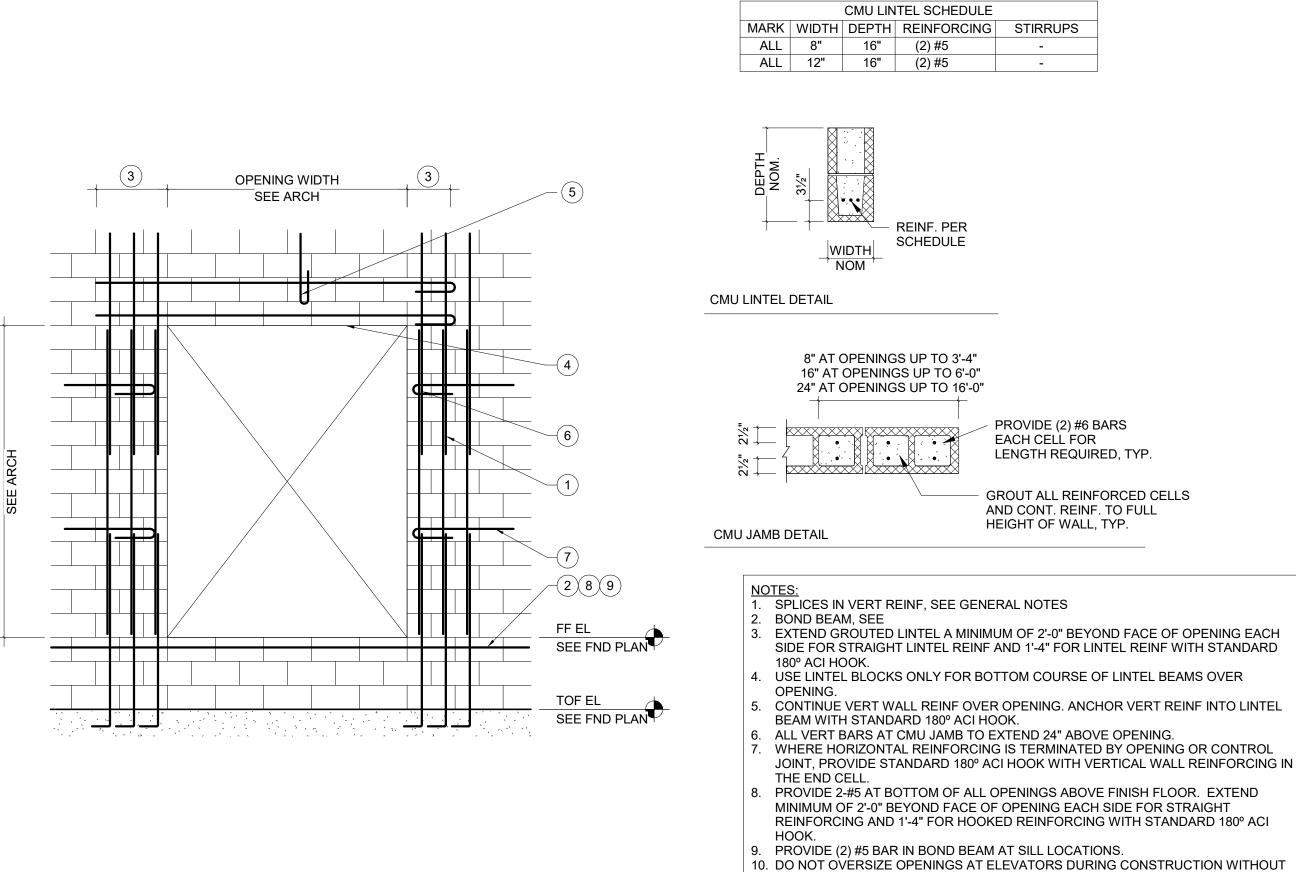
T.O. LEVEL 2 SLAB

SEE PLAN

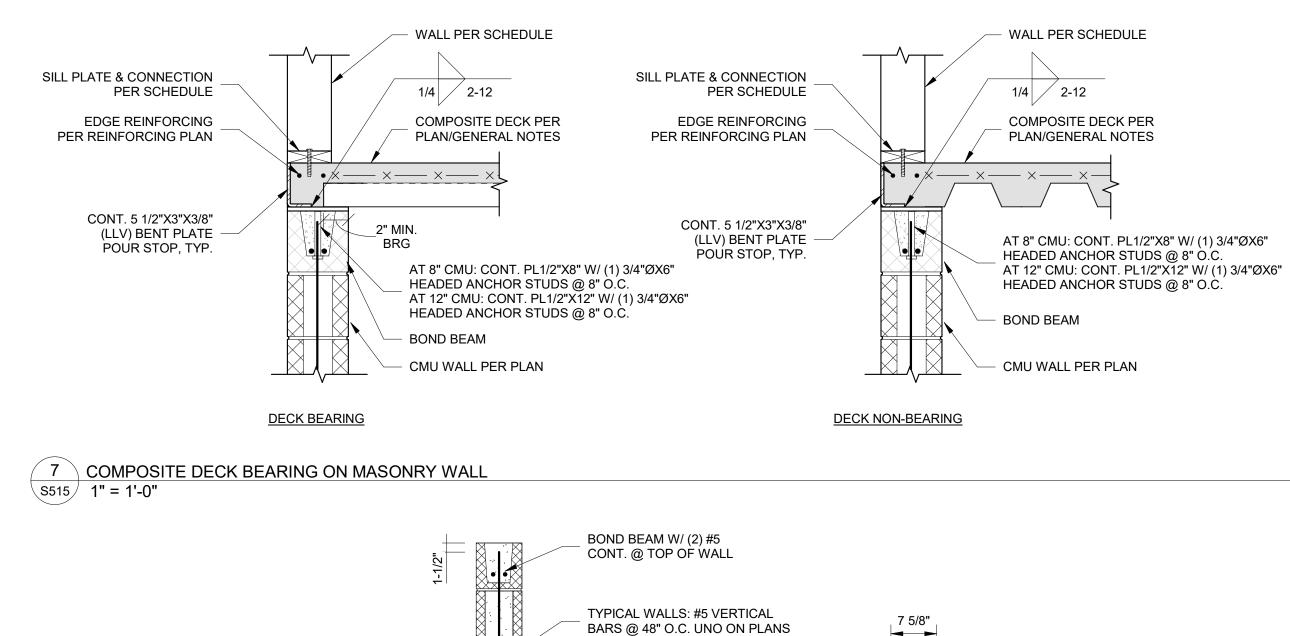
2 INTERSECTING CMU WALLS

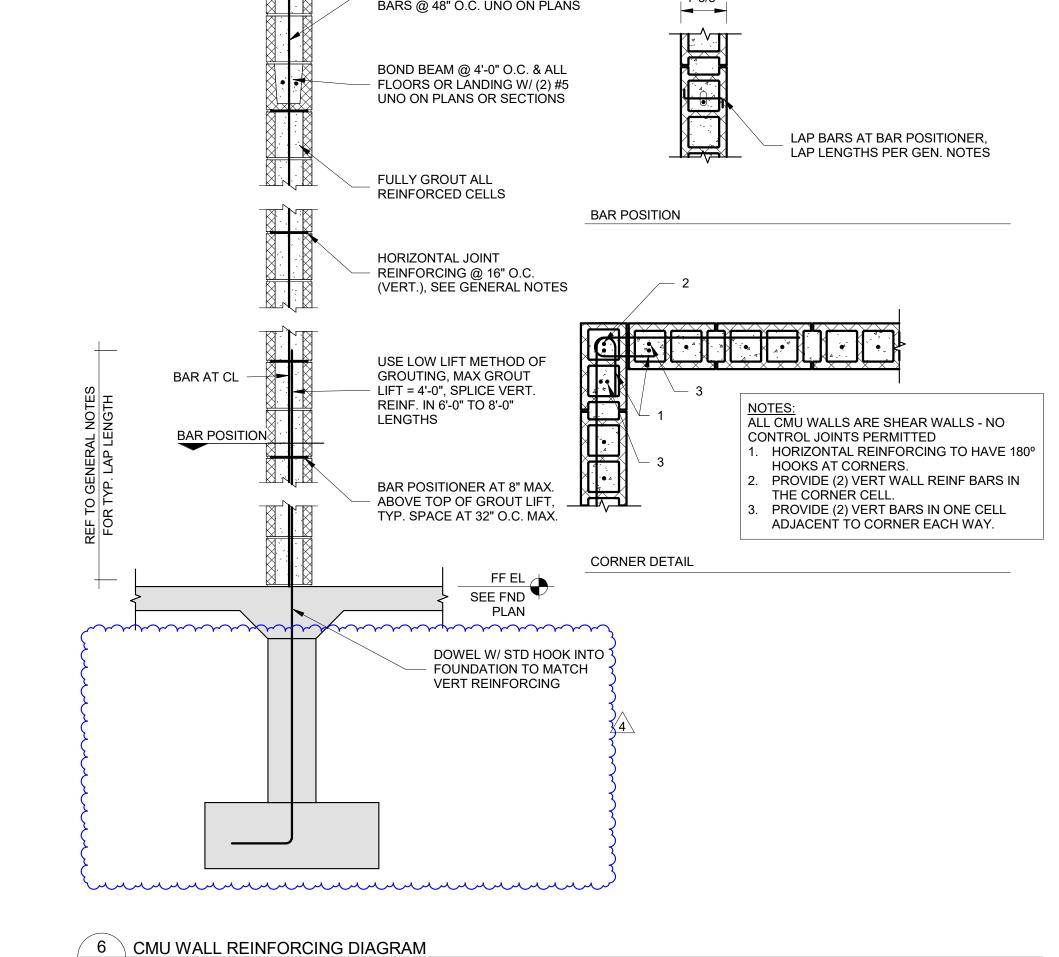
\S515 / 3/4" = 1'-0"





EXPLICIT PERMISSION FROM MEC

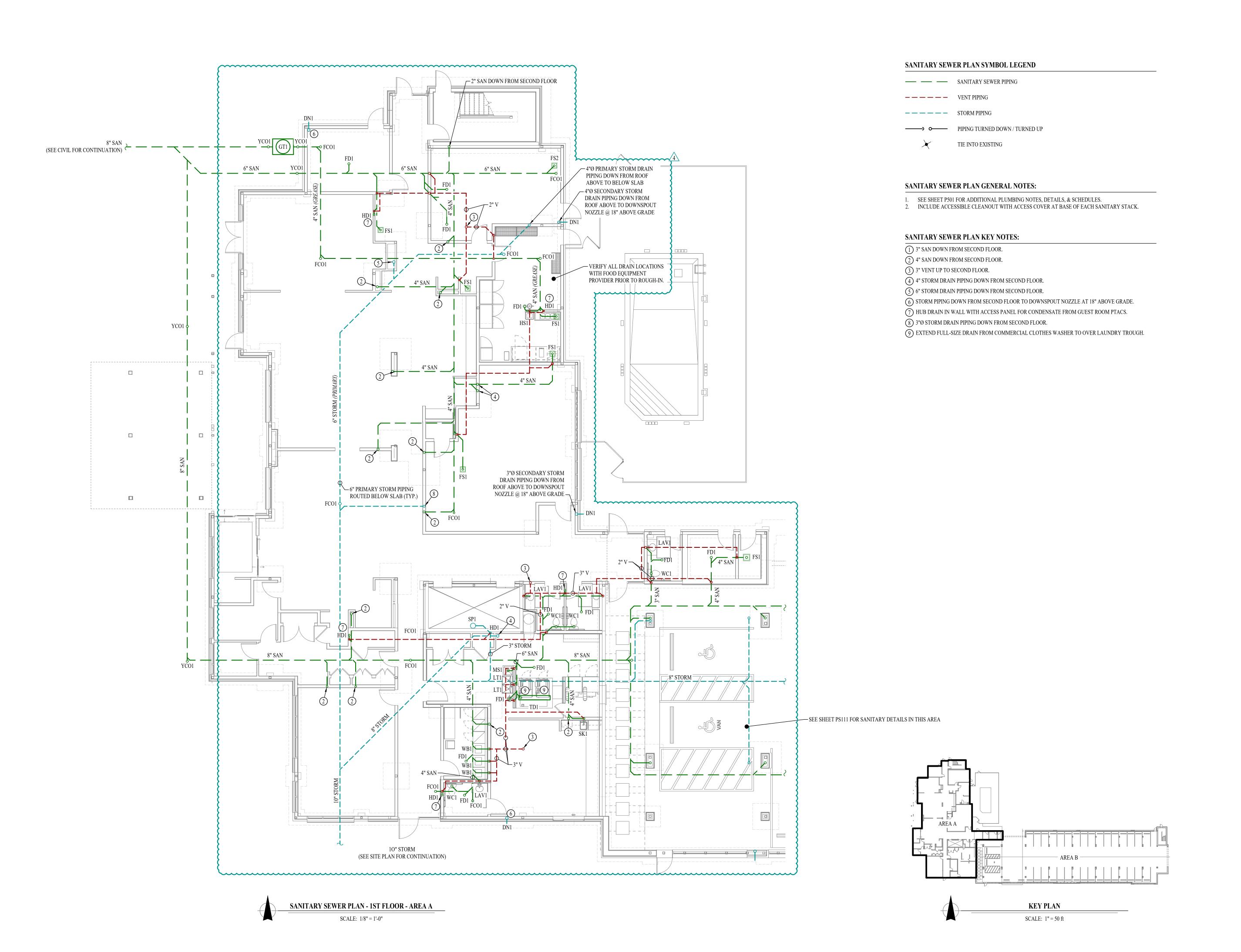




S515 3/4" = 1'-0"

5 TYPICAL MASONRY OPENING DIAGRAM & SCHEDULE

S515 3/4" = 1'-0"



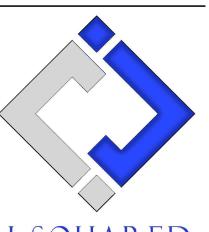
RELEASED FOR
CONSTRUCTION
As Noted on Plans Review

Decemoly Services Department
OLectory Surfact, Missouri
Poly 2024

JAMES P.
WATSON

WATSON

James Watson, P.E. September 20, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



J-SQUARED

2400 Bluff Creek Drive, Suite 101 Columbia, Missouri 65201 573 - 234 - 4492 phone www.j-squaredeng.com

J2 PROJECT No:	J21006		
J2 DESIGN:	ACW		
	_		
ISSUE TITLE	DATE		
CITY SUBMISSION	11 / 01 / 2023		
REVISION 1	12 / 22 / 2023		
REVISION 4	09 / 20 / 2024		

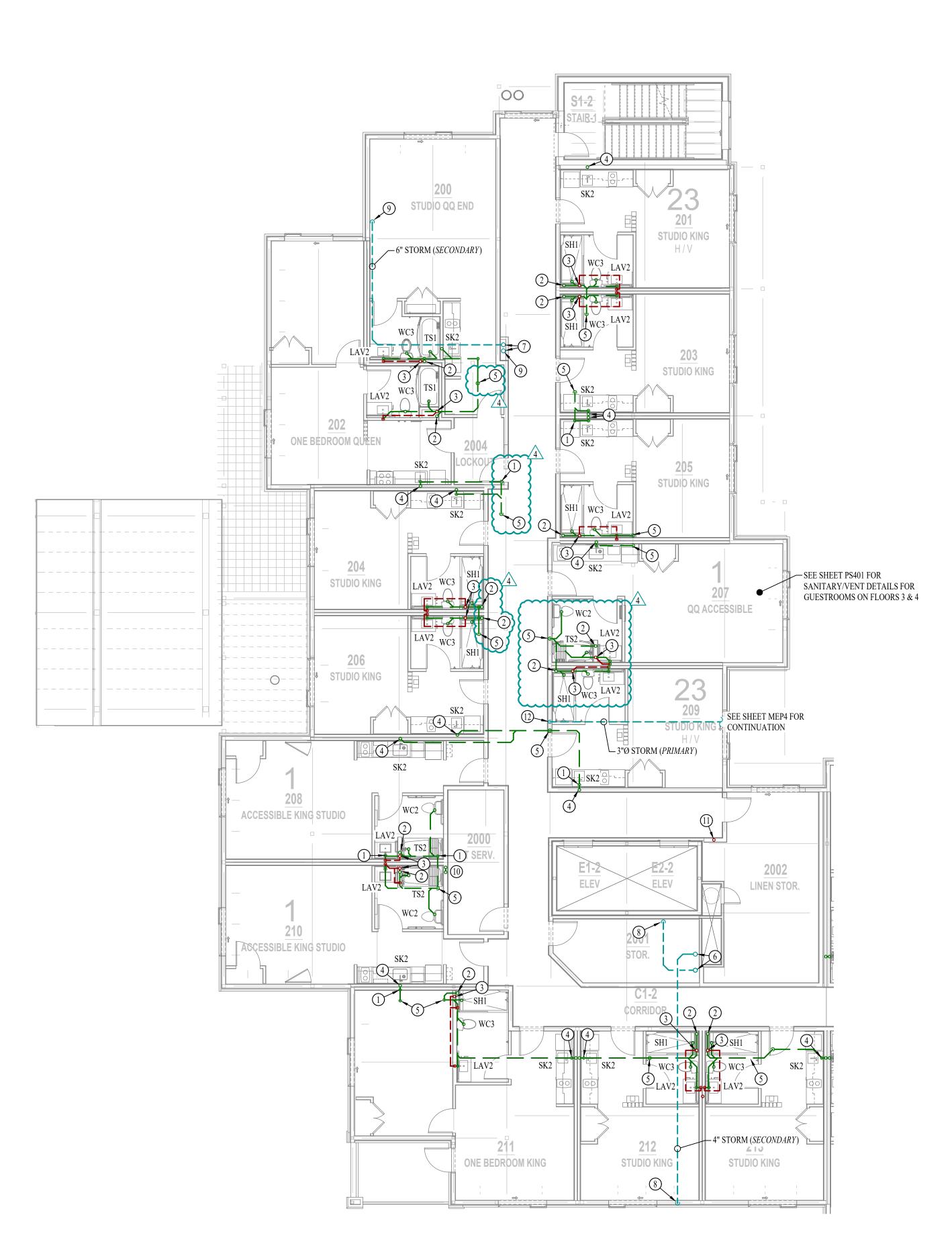


AHJ APPROVAL STAMP

SHEET TITLE

SANITARY SEWER PLAN -1ST FLOOR -AREA A

SHEET NUMBER





SANITARY SEWER PLAN SYMBOL LEGEND

PIPING TURNED DOWN / TURNED UP

— — SANITARY SEWER PIPING **————** VENT PIPING

———— STORM PIPING

TIE INTO EXISTING

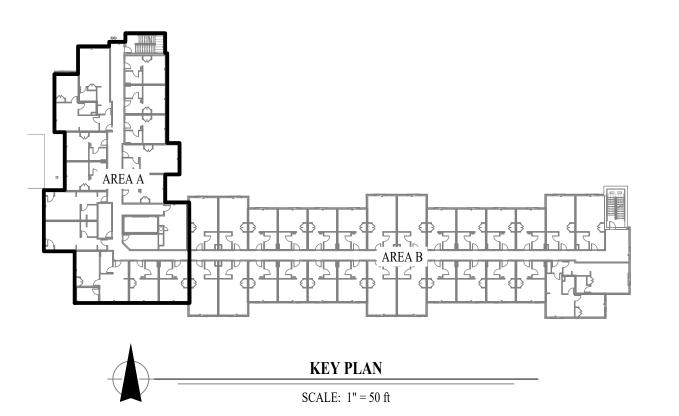
SANITARY SEWER PLAN GENERAL NOTES:

1. SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

(1) PLUMBING DROP TO OFFSET AROUND STRUCTURAL MEMBER.

- 4) 2" COMBINATION DRAIN / VENT STACK DOWN FROM THIRD FLOOR.
- (5) 4" SANITARY DOWN TO FIRST FLOOR; SEE SHEET PS102 FOR CONTINUATION.

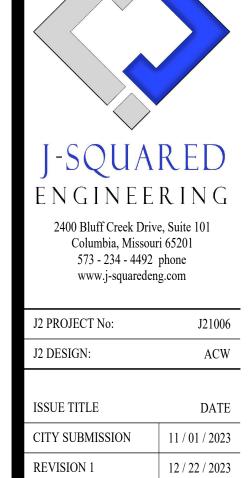
- 8) 4" STORM DRAIN PIPING DOWN TO FIRST FLOOR.



SANITARY SEWER PLAN KEY NOTES:

- (2) 3" SANITARY STACK DOWN FROM THIRD FLOOR; SEE SHEET PS401 FOR THIRD AND FOURTH FLOOR SANITARY PLANS.
- (3) 3" VENT STACK UP TO THIRD FLOOR; SEE SHEET PS401 FOR THIRD AND FOURTH FLOOR VENT PIPING PLANS.

- 6 4" STORM DRAIN PIPING DOWN FROM ROOF.
- (7) 6" STORM DRAIN PIPING DOWN FROM ROOF.
- 9 6" STORM DRAIN PIPING DOWN TO FIRST FLOOR.
- 1" SANITARY STACK UP IN I.T. CLOSET WALL TO HUB DRAINS (WITH ACCESS PANELS) ON FLOORS 2,3,&4 FOR I.T. MINI SPLIT.
- 11) 3" VENT UP FROM BELOW; CONTINUES UP TO 3" VTR.
- (12) 3"Ø STORM DRAIN PIPING DOWN TO FIRST FLOOR.



09 / 20 / 2024

REVISION 4

James Watson, P.E. September 20, 2024 PE-2015017071 MO Certificate of Authority # 2018029680

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CONSTRUCTION
As Noted on Plans Review



AHJ APPROVAL STAMP

SHEET TITLE

SANITARY SEWER PLAN - 2ND FLOOR -AREA A

SHEET NUMBER

SANITARY SEWER PLAN SYMBOL LEGEND

SANITARY SEWER PLAN GENERAL NOTES:

SANITARY SEWER PLAN GENERAL NOTES:

SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

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SANITARY SEWER PLAN KEY NOTES:

SANITARY SEWER PLAN KEY NOTES:

1 4" SANITARY DOWN FROM SECOND FLOOR NEXT TO COLUMN.

SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

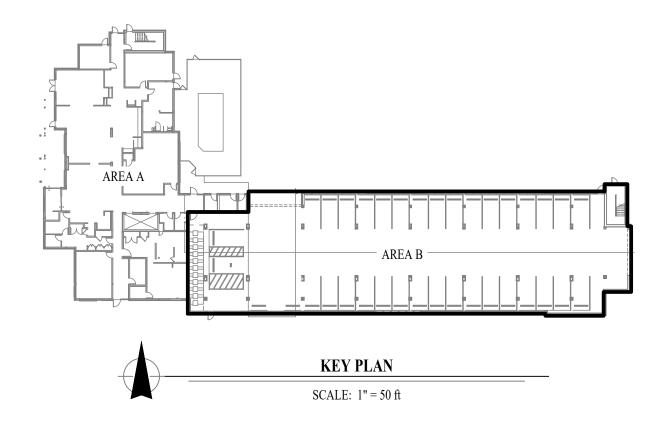
SANITARY SEWER PLAN KEY NOTES:

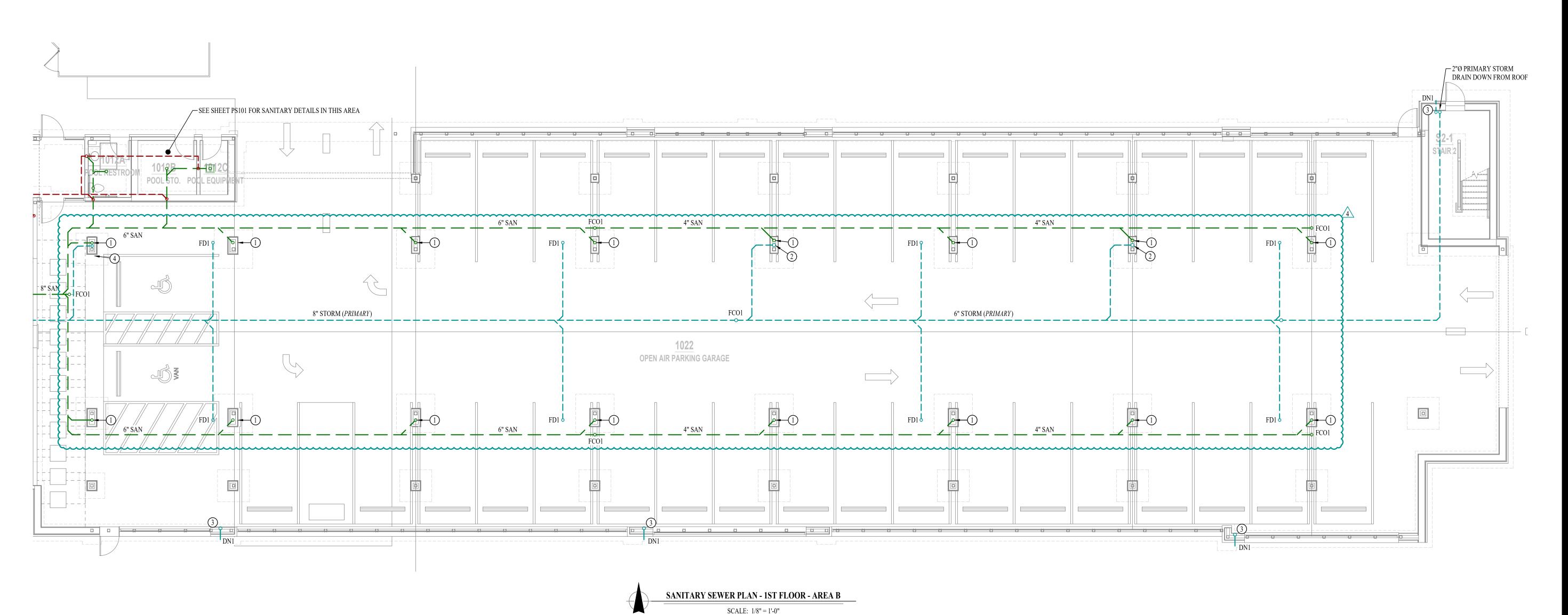
SANITARY SEWER PLAN KEY NOTES:

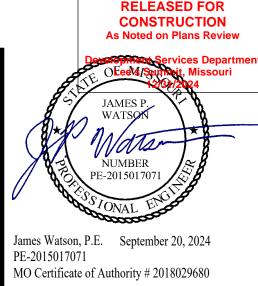
1 5" SOURM PROM SECOND FLOOR NEXT TO COLUMN.

SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

(4) 4" STORM DRAIN PIPING DOWN FROM ABOVE.







PE-2015017071
MO Certificate of Authority # 2018029680

I-SOLIAR ED

2400 Bluff Creek Drive, Suite 101 Columbia, Missouri 65201 573 - 234 - 4492 phone www.j-squaredeng.com

J2 PROJECT No: J21006

J2 DESIGN: ACW

ISSUE TITLE DATE

CITY SUBMISSION 11/01/2023

CITY SUBMISSION 11 / 01 / 2023

REVISION 1 12 / 22 / 2023

REVISION 4 09 / 20 / 2024

Mechanical - Electrical - Plumbing Design Drawings for Towneplace Suites By Marriott

AHJ APPROVAL STAMP

SHEET TITLE

SANITARY SEWER PLAN -1ST FLOOR -AREA B

SHEET NUMBER

— — SANITARY SEWER PIPING

VENT PIPING

STORM PIPING

PIPING TURNED DOWN / TURNED UP

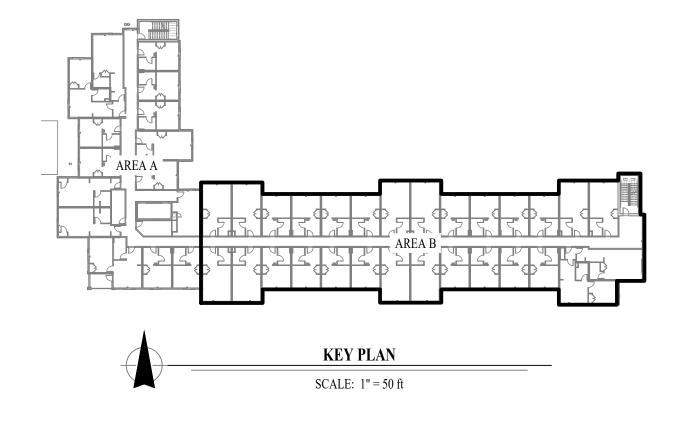
TIE INTO EXISTING

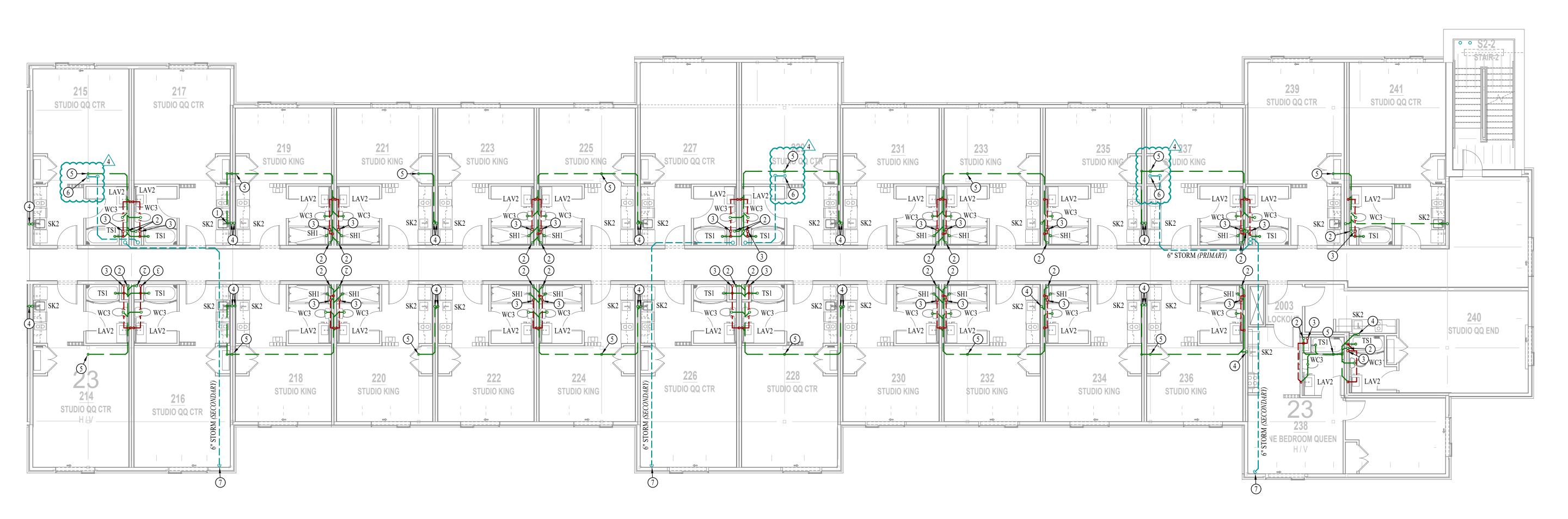
SANITARY SEWER PLAN GENERAL NOTES:

1. SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

SANITARY SEWER PLAN KEY NOTES:

- 1) NOT USED
- (2) 3" SANITARY STACK DOWN FROM THIRD FLOOR; SEE SHEET PS401 FOR THIRD AND FOURTH FLOOR SANITARY PLANS.
- 3 3" VENT STACK UP TO THIRD FLOOR; SEE SHEET PS401 FOR THIRD AND FOURTH FLOOR VENT PIPING
- 4) 2" COMBINATION DRAIN / VENT STACK DOWN FROM THIRD FLOOR.
- (5) 4" SANITARY DOWN TO FIRST FLOOR; SEE SHEET PS102 FOR CONTINUATION.
- (6) 6" PRIMARY STORM DRAIN ROUTED DOWN NEXT TO COLUMN ON 1ST FLOOR.
- (7) 6" SECONDARY STORM DRAIN DOWN TO DOWNSPOUT NOZZLE 'DN1' ON 1ST FLOOR.







James Watson, P.E. September 20, 2024

RELEASED FOR

James Watson, P.E. September 20, 2024 PE-2015017071 MO Certificate of Authority # 2018029680

ENGINEERING

2400 Bluff Creek Drive, Suite 101 Columbia, Missouri 65201 573 - 234 - 4492 phone www.j-squaredeng.com

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Drawings for y Marriott

Towneplace Suites By M

AHJ APPROVAL STAMP

SHEET TITLE

SANITARY SEWER PLAN - 2ND FLOOR -AREA B

SHEET NUMBER