

ADDENDUM #2

REQUEST FOR PROPOSALS: GENERAL CONTRACTOR SERVICES FOR THE PUBLIC WORKS COMPLEX

The following changes are hereby made to the Contract Documents for the above referenced Request for Proposals:

- 1. **PROPOSAL DUE DATE CHANGE:** Proposals are due by <u>**Tuesday, April 23, 2024**</u> @ <u>**3:00pm**</u>. All other dates are to remain unchanged as shown in Addendum #1.
- 2. Any clarifications provided in the Pre-Proposal Meeting Minutes (dated March 28, 2024) are herein incorporated and made part of the proposal requirements.
- 3. The 14-month maximum listed in the RFP is eliminated. Contractors are expected to create and propose their own schedule beginning on the estimated Notice to Proceed date of May 22, 2024. The proposed schedule is part of the proposal evaluation criteria.
- Attachment D Section 1 Operations Building (Project Drawings) have been updated and a copy is attached. The following sheets have been revised and shall replace the original sheets: Sheets A311, A312, A313, A601, S002, S101A, S101B, S101C, S111A, S111B, S121A, S121B, S121C, S511, S521, S522, S601, S602, and S603. Changes have been clouded.
- 5. Attachment D Section 2 Vehicle Storage Building (Project Drawings) have been updated and a copy is attached. The following sheets have been revised and shall replace the original sheets: Sheets S101, S601, and S602. Changes have been clouded.
- 6. Attachment D Section 3 Site Civil (Project Drawings) have been updated and a copy is attached. The following sheets have been revised: Sheets C4.0, C5.1 and C6.0. Changes have been clouded and include extending the sidewalk by the main entrance into the site to provide a walkway path to the existing building, adding an ADA ramp, crosswalk striping, and striping to add a van accessible ADA parking stall.
- The cost for Section 3: Site Civil shall include all conduit and wiring for power and communications between the Operations Building and Vehicle Storage Building to all other site components (e.g. yard lights, gate opener, gate motor, etc.). Use 1-1/2" conduit where not specified otherwise.
- 8. A 5% Bid Bond of the Total Project Cost submitted in the revised **Attachment B** is required as part of the submitted proposal (electronic version is acceptable).
- 9. Material Substitution Request: MasterLife 300 is approved as equal to Xypex Admix C-1000 as a waterproofing admixture wherever listed in **Attachment D** (all sections).
- 10. **Change in Scope**. If a change in the scope of the project is required due to inadequate funding for the entire project, the city will determine the process for proceeding



forward based on the magnitude of the change in scope required. The following are options that the city may implement:

- a. If the needed change in scope is relatively small and Value Engineering (VE) suggestions were included with the proposal, the city may request an exact cost for each VE item identified. If accepted by the city, the cost savings would be applied, thus adjusting the contractor's bid amount. The Project Bid portion of the evaluation criteria would then be re-evaluated, and scoring adjusted accordingly. If selected, the contractor would be required to honor the VE cost savings proposed. A concurrent change order for the new bid amount would accompany the recommendation to award.
- b. If the needed change in scope is significant, the city will use the evaluation criteria and scoring to select the top 2 or 3 contractors based on their original proposals. A total "not to exceed" amount will be given and the contractors will be expected to propose a new adjusted scope of work that could be completed for the amount given. The city will then determine which revised scope of work is the most advantageous and make their recommended selection accordingly. A concurrent change order for the new bid amount would accompany the recommendation to award.
- 11. The cost for the entrance fencing, gates, gate opening system, and gate opener should <u>NOT</u> be included in the bid. The selected contractor will provide material options and costs for these items for the city to review and approve after the contract has been awarded. Proceeding with a selected option will be handled as a change order.
- 12. Section 4.03I (page 40 of Attachment D, Section 3) indicates that all costs associated with the testing required by the specifications for the site civil work items is the responsibility of the contractor. This is being revised, as follows: All costs associated with the testing required by the specifications for the site civil work items is the responsibility of the city. The contractor is still responsible for quality control and all costs associated with that effort, as deemed necessary. The costs for video inspection of all new or relocated gravity lines (sewer, storm drain, and land drain) is still the responsibility of the contractor.
- 13. Material Substitution Request: Draper FlexShade NEXD is approved as an equal for the Manual Roller Shade as specified in Division 12 Furnishings, Section 12 2413, Page 3, Paragraph 2.2 Products.
- 14. Material Substitution Request: The Westcoat Specialty Coating System, Dubro System with an added layer of EC-44 Flex Epoxy is an acceptable substitution for the specified FL-05 Floor System.
- 15. Material Substitution Request: DKS Doors and Frames is an acceptable substitution for the specified doors and frames identified in Specification Section 08 1113.
- 16. Attachment B Bid Form has been *revised* to include a total for the Construction



Management and a total for the Project. This version of the form must be included in the submitted proposal.

This Addendum is hereby attached to and made part of the Request for Proposals documents and each Proposer shall acknowledge receipt of this Addendum on the response.

DocuSigned by:

adam Favero

_____ April 16, 2024

Adam Favero – Public Works Director

ATTACHMENT B BID FORM

Company: _____

CONSTRUCTION MANAGEMENT (CM) BID (Lump Sum)

ltem	Cost \$	Cost Written*
Construction Management	\$	
Cost of Bonds	\$	
Construction Supervision	\$	
Total CM	\$	

Fee Percentage			
Overhead and Profit Fee			
Percentage on Self-Performance	%	percent	
(will not be made public)			
Overhead and Profit Fee			
Percentage on Subcontractors /	%	percent	
Procurement			
(will not be made public)			

BUILDING CONSTRUCTION & SITE CIVIL BID (Lump Sum)

Contractor <u>MUST</u> also submit a separate Schedule of Values for EACH Section.

Item	Cost	Cost Written*
Section 1: Operations Building	\$	
Section 2: Vehicle Storage Building	\$	
Section 3: Site Civil (including Decant and Material Storage Structures)	\$	
Total Construction	\$	

TOTAL PROJECT \$_____ ____

*In case of discrepancy, written amount shall govern.

**Performance, payment, and warranty bonds shall be required for the entire Project. Example bonds can be found in Attachment C.

Clearfield <u>City</u>

BIDDER:	Submittal Date:
(Indicate correct name of bidding entity)	License Number:
ВҮ:	-
	Signature:
Title:	
ATTEST:	-
	Signature:
Title:	_
(If Bidder is a corporation, a limited liability company	y, a partnership, or a joint venture, attach evidence of authority to sign.)
Address for Giving Notices:	
Phone:	
PO	INT OF CONTACT FOR PROJECT
Name:	
Title:	
Email:	
Phone:	
<i>Is the Point of Contact authorized to sign doc</i> <i>behalf of the Bidding Entity?</i>	uments on • YES • NO (If no, please complete information below)
	AUTHORIZED SIGNATORY
(If differ	rent from the point of contact listed above)
Name:	Email:
Title:	





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Architecture Interior Design Landscape Architecture Land Planning Construction Management

7927 So. Highpoint Parkway, Suite 300 Sandy, Utah 84094

ph. 801.269.0055 fax 801.269.1425 www.thinkaec.com

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These drawings are available for limited review and evaluation by clients, consultants, contractors, government agencies, vendors, and office personnel only in accordance with this notice.









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STAIR PLAN GENERAL NOTES

STAIR PLAN KEYNOTES (ST)

	KEYNOTES - STAIRS
ST-01	SCHEDULED WALL TYPE
ST-02	SCHEDULE CEILING
ST-03	SCHEDULED DOOR
ST-04	FLOOR STRUCTURE
ST-05	42" HIGH GUARDRAIL, ON OPEN SIDE OF STAIRS - PAINTED
ST-06	36" HIGH HANDRAIL, ON BOTH SIDES OF STATIRS - PAINTED
ST-07	HSS 12" X 3" X 1/4" STEEL STAIR STRINGER - PAINTED
ST-08	RETURN HANDRAIL TO FLOOR, GUARD OR WALL.
ST-09	40" (VIF) X 12" 11 GUAGE PRE-GALVANIZED STEEL TREAD W/ TRACTION-TREAD NON-SLIP SURFACE
ST-10	40" (VIF) X 12" 11 GUAGE PRE-GALVANIZED STEEL LANDING PLANKS W/ TRACTION-TREAD NON-SLIP SURFAC
ST-11	27" HIGH PROTECTION RAIL BENEATH STAIR
ST-12	PRE-GALVANIZED PERFORATED METAL RISER
ST-13	LIGHT FIXTURE
ST-14	SCHEDULE FINISH FLOOR
-	



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		DOOR TYPES
MARK SIZE MATERIAL TYPE FINISH	FRAME FRAME DETAILS MATERIAL TYPE FINISH FIRE RATING GROUP #	
100A	13/A602	FRAME AND GLAZING
101B 3-0 7-0 13/4 WOOD D6 STAIN 14, 101C 3'-0" 7'-0" 13/4" METAL D3 PAINT 4/ 103A	502 20/A602 - HM F2 PAINT 45 MIN. T1 02 10/A602 - HM F1 PAINT 45 MIN. 14 502 -20/A602 - - HM F2 PAINT 45 MIN. 14	E SCHEDULE
104A 3-0 7-0 1 3/4 GLASS D8 CLEAR 17 104B 3-0" 7-0" 1 3/4" WOOD D6 PAINT 4/ 105A 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 3/ 105B 14'0" 0" 0" NETAL D1 PAINT 5/	02 7/A602 - HM F3 PAINT NON-RATED 11 3 02 10/A602 - - - - - - - - 02 9/A602 11/A602 HM F1 PAINT NON-RATED 4 IN 02 9/A602 11/A602 HM F1 PAINT NON-RATED 4 IN	
05B 14-0 2 METAL D12 PRE-FINISH 5/ 05C 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 5/ 05D 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 5/ 05D 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 5/ 05E 2''O'' 12'A'' METAL D12 PRE-FINISH 5/	02 11/A602 - METAL - - NON-RATED MFG. 6 INV. 02 11/A602 - METAL - - NON-RATED MFG. 6 INV. 02 11/A602 - METAL - - NON-RATED MFG. 6 INV. 02 11/A602 - METAL - - NON-RATED MFG. 6 INV.	ISULATED ISULATED ISULATED
105E 3-0 7-0 13/4 METAL D1 FAINT 3/ 105F 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 3/ 05G 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 5/ 105H 14'-0" 2" METAL D12 PRE-FINISH 5/	02 77A02 117A02 117A02 <th17a02< th=""> <th17a02< th=""></th17a02<></th17a02<>	ISULATED ISU
IOSH I4*0 I2 METAL D12 PRE-FINISH 5/ 105J 14*0" 2" METAL D12 PRE-FINISH 5/ 105K 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 3, 106A 3'-8" 7'-0" 1 3/4" METAL D1 PAINT 3,	NO. NO. <td>HOLLOW METAL - F1 OR F2 FRAME ISULATED ISULATED ISULATED ISULATED ISULATED ISULATED ISULATED</td>	HOLLOW METAL - F1 OR F2 FRAME ISULATED ISULATED ISULATED ISULATED ISULATED ISULATED ISULATED
106B 6'-4" 7'-0" 1 3/4" METAL D4 PAINT 2/ 108A 6'-4" 7'-0" 1 3/4" METAL D4 PAINT 2/ 109A 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 3	02 8/A602 - HM F1 PAINT 45 MIN. 5 02 8/A602 - HM F1 PAINT 45 MIN. 12 02 9/A602 11/A602 HM F1 PAINT NON-RATED 3 IN	
110A 8'-0" 2" METAL D13 PRE-FINISH 5/ 110B 2'-3" 2'-11" 1 3/4" METAL D11 PAINT 3/ 111A 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 2	02 11/A602 - METAL - PAINT NON-RATED MFG. 6 IN 02 9/A602 - METAL F5 PAINT NON-RATED 4 02 8/A602 - HM F1 PAINT NON-RATED 13	ISULATED E E E E E E E E E E E E E E E E E E
111B 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 2/ 112A 3'-0" 7'-0" 1 3/4" METAL D3 PAINT 2/ 112B 3'-0" 7'-0" 1 3/4" METAL D3 PAINT 2/	02 8/A602 - HM F1 PAINT NON-RATED 13 02 8/A602 - HM F1 PAINT 45 MIN. 11 02 8/A602 - HM F1 PAINT 45 MIN. 11 02 8/A602 - HM F1 PAINT 45 MIN. 11	
114A 3'-0" 7'-0" 1 3/4" WOOD D5 STAIN 14, 115A 3'-0" 7'-0" 1 3/4" WOOD D5 STAIN 14, 117A 3'-0" 7'-0" 1 3/4" WOOD D5 STAIN 14,	602 20/A602 12/A602 HM F2 PAINT NON-RATED 9 602 20/A602 - HM F2 PAINT NON-RATED 7 602 20/A602 12/A602 HM F2 PAINT NON-RATED 7 602 20/A602 12/A602 HM F2 PAINT NON-RATED 9	LE SCHEDIN LE SCHEDIN
118A 2'-2" 7'-0" 1 3/4" WOOD D5 STAIN 14, 119A 2'-2" 7'-0" 1 3/4" WOOD D5 STAIN 14, 120A 2'-2" 7'-0" 1 3/4" WOOD D5 STAIN 14,	602 20/A602 12/A602 HM F2 PAINT NON-RATED 9	
123A 3'-0" 7'-0" 1 3/4" WOOD D5 STAIN 4/ 124A 3'-0" 7'-0" 1 3/4" WOOD D5 STAIN 4/ 125A 3'-0" 7'-0" 1 3/4" WOOD D5 STAIN 4/ 125A 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 2	02 10/A602 - HM F1 PAINT NON-RATED 13 02 10/A602 - HM F1 PAINT NON-RATED 11 02 8/A602 - HM F1 PAINT NON-RATED 11	
126A 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 3/ 126B 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 6/ 126C 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 6/	02 9/A602 11/A602 HM F1 PAINT NON-RATED 4 IN 02 11/A602 - METAL - PAINT NON-RATED MFG. 6 IN 02 11/A602 - METAL - PAINT NON-RATED MFG. 6 IN 02 11/A602 - METAL - PAINT NON-RATED MFG. 6 IN	ISULATED ISU
26D 14'-0" 2" METAL D12 PRE-FINISH 6/ 26E 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 6/ 26F 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 6/ 26F 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 6/	02 11/A602 - METAL - PAINT NON-RATED MFG. 6 IN 02 11/A602 - METAL - PAINT NON-RATED MFG. 6 IN 02 11/A602 - METAL - PAINT NON-RATED MFG. 6 IN 02 11/A602 - METAL - PAINT NON-RATED MFG. 6 IN	ISULATED ISULATED
6G 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 3/ 6H 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 3/ 6H 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 3/ 6J 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 6.	02 9/A602 11/A602 HM F1 PAINT NON-RATED 4 IN 02 9/A602 11/A602 HM F1 PAINT NON-RATED 4 IN 02 11/A602 - METAL - PAINT NON-RATED MFG. 6 IN	ISULATED SEE SCHEDULE
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26N 14'-0" 14'-0" 2" METAL D12 PRE-FINISH 6/ 26P 3'-0" 7'-0" 1 3/4" METAL D1 PAINT 3/ 27A 6'-4" 7'-0" 1 3/4" METAL D4 PAINT 2,	02 11/A602 - METAL - PAINT NON-RATED MFG. 6 INV. 02 9/A602 11/A602 HM F1 PAINT NON-RATED 4 Inv. Inv. 02 8/A602 - HM F1 PAINT 45 MIN. 5 Inv.	ISULATED ISULATED
128A 6'-4" 7'-0" 1 3/4" METAL D4 PAINT 2/ 200A 3'-0" 7'-0" 1 3/4" METAL D3 PAINT 14 202A 3'-0" 7'-0" 1 3/4" METAL D3 PAINT 14	02 8/A602 - HM F1 PAINT 45 MIN. 5 602 20/A602 - HM F2 PAINT 45 MIN. 11 602 20/A602 - HM F2 PAINT 45 MIN. 7	
203A 3'-0" 7'-0" 1 3/4" METAL D3 PAINT 14, 204A 3'-0" 7'-0" 1 3/4" METAL D3 PAINT 14, 205A 6'-4" 7'-0" 1 3/4" METAL D3 PAINT 14, 205A 6'-4" 7'-0" 1 3/4" METAL D4 PAINT 14,	602 20/A602 - HM F2 PAINT 45 MIN. 10 602 20/A602 - HM F2 PAINT 45 MIN. 10 602 20/A602 - HM F2 PAINT 45 MIN. 10 602 20/A602 - HM F2 PAINT 45 MIN. 5	
		ш
		Image: state sta
OOR SCHEDULE GENERAL NOTES	HARDWARE GROUPS	
see sheet a601 for door and frame types. Contractor shall field verify all door openings prior to ordering all doors.	H1 MECHANICAL ROOM - PAIR SPRING HINGES - SMOKE SEAL	
CONTRACTOR SHALL SUBMIT COMPLETE DOOR AND HARDWARE SHOP DRAWINGS AND SUBMITTALS FOR APPROVAL FOR EACH BUILDING PRIOR TO ORDERING AND TAKING RECEIPT OF DOOR ORDER. ARCHITECT SHALL REVIEW ALL DOORS FOR COMPLIANCE SPECIFICATIONS AND BUILDING CODE.	- I PASSAGE SET <u>H2</u> OVERHAEAD GARAGE DOORS - GARAGE ENTRY PROVIDED BY	
ALL DOORS REQUIRED TO BE RATED SHALL HAVE APPROPRIATE U.L. RATING AS INDICATED IN DOOR SCHEDULE AND SPECIFICATION. ALL DOORS SHALL HAVE LABEL ON DOOR AND FRAME FOR INSPECTION ON SITE, AND	OVERHEAD DOOR MANUFACTURER H3 SECONDARY ENTRY DOOR A DAILS SEDENIC HINCES	DOOR: GARAGE
ALL DOORS SHALL BE INSTALLED SO AS NOT TO HAVE MORE THAN 1/2" THRESHOLD AT EACH DOOR.	 S FAIR SERING HINGES 1 SMOKE SEAL 1 LOCKSET 1 DEADBOLT 	INSULATED 2" THICK TYPF D12
see specs for hardware schedule. Refer to interior designer for correct door styles, species, and finishes.	- 1 THRESHOLD <u>H4</u> GARAGE/ HOUSE 3 RAIR HINGES	
OPENINGS BETWEEN GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOOR NOT LESS THAN 1 3/8 INCHES THICK, SOLID HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8 INCHES THICK, OR 20 MINUTE FIRE RATED DOORS. SEE I.R.C. SECTION R302.5.1.	- 1 WEATHER STRIP - 1 LOCKSET - 1 DEADBOLT	FRAME TYPES
	H5 INTERIOR DOOR - 3 PAIR HINGES - 1 PASSAGE SEL	2" SCHEDULED DOOR 2" 2" SCHEDULED DOOR 2"
	H6 INTERIOR BARN DOOR	
	H7 INTERIOR DOUBLE BARN DOOR	
OOR GLAZING	H8 INTERIOR DOOR - 3 PAIR HINGES - 1 PRIVACY SET	
	H9 INTERIOR DOUBLE DOOR - 6 PAIR HINGES - 2 KNOBS (SINGLE SIDE ONLY)	
1 1/4" GLASS	H10 ENTRY DOOR - 1 WEATHER STRIP	
2 1" INSULATED GLASS	- 1 THRESHOLD - 1 LOCKSET - 1 DEADBOLT - 1 PIVOT HINGE (TOP AND BOTTOM)	HOLLOW METAL - LOCATED IN CMU WALL HOLLOW METAL - NON CMU WALL
3 INSULATED GALSS	H11 INTERIOR DOUBLE DOOR - 6 PAIR HINGES	MAY BE SINGLE OR DOUBLE DOOR MAY BE SINGLE OR DOUBLE DOOR PAINTED FINISH PAINTED FINISH TVDE E1 TVDE E2
T TEMPERED	H12 POCKET DOOR	

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- d. Use E-70 XX (58 ksi yield, 70 ksi tensile) unless noted otherwise. E60 XX may be used for welding steel
- e. All intersecting steel shapes which are not bolted shall be connected by a fillet weld all around, unless noted otherwise. Where fillet weld sizes are not shown they shall be 1/16" less than the thinnest of the
- connected parts for thicknesses 1/4" and larger. Fillet welds on plates less than 1/4" shall be of the same size as the thinnest of the connected part. f. Reinforcing Bars: Do not weld rebar. Do not substitute reinforcing bars for deformed bar anchors (DBAs),
- machine bolts, or headed stud anchors (HSAs). g. Do not weld anchor bolts, including "tack" welds.
- h. Headed Stud Anchors (HSAs) welding and deformed bar anchor welding shall conform to the manufacturer's specifications.

4. Bolted Connections:

square washers are acceptable:

- a. Use bolts for steel-to-steel connections, as noted herein or as noted on the drawings. Bolts shall be used in connections for simple span framing and beam (or girder) to bearing plate connections. Tighten bolts to a snug tight condition. See bolted connections schedule in drawings. Use hardened washers beneath the turned element of all bolts or nuts. Use hardened beveled washers, to compensate for the lack of parallelism, where the outer face of the bolted parts has a slope greater than one in twenty with respect to the plane normal to the bolt axis. At oversized holes hardened washers or plates shall conform with ASTM F-436 and shall completely cover the slot after installation.
- b. Where a steel-to-steel beam connection is not shown, provide a standard AISC framed connection for one half the total uniform load capacity of the beam for the span and steel specified. c. Bolts, nuts, and washers shall not be reused.

5. Provide baseplate anchor rod connections to concrete elements that correlate with ACI 117. Circular or

ANCHOR ROD	HOLE	WASHER	
DIAMETER	DIAMETER	SIZE	
3/4"	1.5/16"	2"	
7/8"	1.9/16''	2.1/2"	
1"	1.7/8"	3"	
1.1/4"	2.1/8"	3.1/2"	
1.1/2"	2.3/8"	4"	
1.3/4"	2.7/8"	4.1/2"	
2"	3.1/4"	5"	
2.1/2"	3.3/4"	5.1/2"	

6. Provide full-depth web-stiffener plates at each side of all beams at all bearing points. Stiffener plates shall be the thickness called out below unless noted otherwise and shall be welded both sides with fillet welds all around:

FLANGE WIDTH	STIFFENER THICKNESS	WEL
Less than 8.1/4"	1/4''	
8.1/4" to 12.1/4"	3/8''	
12.1/4" to 16.1/2"	1/2"	
16.1/2" to 20.3/4"	5/8"	

COMPOSITE STEEL BEAMS

- 1. Headed Stud Anchors:
- a. Headed stud anchors shall 3/4" diameter and shall extend 1.1/2" above the top of the steel deck after welding. Headed stud anchors shall be welded through the metal deck to the top flange of the steel section or welded directly to the steel section.
- b. Anchors for composite steel beams are marked on the framing plans as "(x)". Locate anchors on composite steel beams (or segments of a beam) based on the following criteria: i. The number inside the brackets indicates the quantity of headed studs for the beam or segment of beam. When only one set of brackets is indicated, the headed studs shall be spaced uniformly over the entire beam length. For multiple sets of brackets, the headed studs shall be spaced uniformly over the segment of a beam associated with that set of brackets. Beam segments are delineated by adjoining framing members.
- ii. For steel beams perpendicular to deck corrugations: Place anchors in bottom of deck flutes. Where the number of uniformly placed anchors requires more than 1 anchor per deck corrugation, the first row shall be a complete uniform row with the remainder of the anchors placed in a second row equally at each end of the beam/segment.
- iii. For steel beams parallel to deck corrugations: Place anchors uniformly along beam the entire beam length/segment. The minimum center-to-center spacing of anchors shall be 4.1/2". Where the number of uniformly placed anchors is spaced at less than 4.1/2" o.c., the first row shall be a complete uniform row at 4.1/2" o.c. with the remainder of the anchors placed in a second row equally at each end of the beam/segment.
- iv. Anchors shall be placed in a single row within 1/4" of the center of the steel beam web. Where two rows of anchors are required, provide 3" center-to-center spacing between rows of anchors transverse to the steel beam web.
- v. The maximum center to center spacing shall not exceed 36".
- 2. Camber: a. Specific composite beams shall be precambered at the mid span. c= x" on the plans denotes precamber dimension (upward) in inches. b. Where a camber is not indicated at a steel beam, assume that c=0".

OPEN WEB STEEL JOISTS AND GIRDERS

- 1. All open web steel joist and girders shall be fabricated and erected in accordance with the latest edition of Steel Joist Institute (SJI), "Standard Specifications and Code of Standard Practice".
- 2. At the completion of fabrication, the steel joist manufacturer shall submit to the building official a certificate of compliance in accordance with IBC Section 1704.2.5 stating if the work was performed in accordance with approved construction documents and with SJI standard specifications.
- 3. Joists or girders with slopes greater than 1/2" per foot shall be designed to meet or exceed the load capacities, listed in the SJI load tables, of the joist or girder sizes indicated on the framing plan, as if the joists or girders were installed level.
- 4. Provide special bearing ends to accommodate slopes from sloped joists, sloped girders, or sloped bearing conditions.
- 5. Modifications to any joist or girder, including holes through the top and bottom chords, without the written consent and direction from the manufacturer are not allowed.
- 6. Joist and girder loads called out in the drawings are allowable stress design (ASD) loads. 7. Open web joist deflection shall be limited to L/180 for total loads and L/240 for roof live loads (or snow
- total load deflection requirements.
- 8. Camber joist and girder per typical SJI requirements, unless noted otherwise on plans. 9. Joist bridging shown on plans is for schematic purposes only; actual size, quantity and location of bridging shall be determined by the joist supplier per SJI. Coordinate bridging locations to avoid interference with mechanical, electrical and fire protection equipment and skylights.

METAL DECKING

- 1. Steel deck shall comply with the latest requirements of the Steel Deck Institute.
- 2. All deck shall be 3-span continuous minimum. In areas where 3-span conditions are not possible, the contractor shall provide heavier gage deck as required to provide the equivalent loading of the deck under a three-span condition.
- 3. Steel roof deck shall not be used to support loads from plumbing, HVAC ducts, light fixtures, architectural elements, or equipment of any kind, unless specifically noted. Light weight suspended acoustical ceilings with a total weight of 50 lbs per attachment may be hung from roof deck. The hangers shall be staggered to distribute the loads over multiple deck flutes.
- 4. Conduits are permitted in composite deck slabs subject to local code requirements and fire rating considerations. Conduits other than electrical or communication conduits shall not be permitted. When conduits are installed in the slab, the diameter shall be the lesser of 1" or 1/3 times the depth of concrete cover over the metal deck.
- a. No crossover of conduits shall occur. b. Conduit shall be spaced a minimum of 18" apart.
- c. The minimum clearance between conduit and the metal deck shall be 1".



ELD SIZE 3/16" 1/4"

5/16'' 3/8"

loads), unless noted otherwise on plans. The SJI required camber can be subtracted when considering the

5. All deck supporting members shall be dry before welding.

6. Clinch seams before welding interlocking seams.

7. Where deck is to receive sprayed-on fire proofing, painted deck shall be coated with special paint that will allow the sprayed-on fire proofing to adhere to the painted deck

Steel Floor Deck a. Steel floor deck shall be 3" deep X 20 gage minimum phosphatized/painted composite type "W" deck with interlocking side seams with the following properties: 20 Gage 19 Gage 18 Gage 16 Gage

		<u>20 Oage</u>	<u>10 Oage</u>	<u>10 Oage</u>	<u>10 Oage</u>
	Minimum S (in³/ _{ft}) =	0.528	0.652	0.768	0.966
\wedge	Minimum I (in4/ _{ft}) =	0.907	1.067	1.213	1.516
$\xrightarrow{/1}$	Beck-shall-be-galvanized (G	60) when	used below	<i>in</i> meehani	icaLesuipment rooms.
ς b.	<u>Where a deck span exceeds ^</u>	10', see pla	<u>an, use 18</u>	gage mini	imum. }
C-Steel deck with 8.1/2" bick (6.1/2" over all morenal weight concrete slab shall have a minimum allowable					
	diaphragm shear capacity of <i>´</i>	l,100 lbs/fl	t for a 10'-6	6" deck sp	an

d. Fasten deck to supporting framing members with powder-driven fasteners. Powder-driven fasteners shall be as indicated below based on the steel framing thicknesses:

Stool Examina		ICC-ESR or
Steer Framing	Fastener	IAPMO reno

	Thickness	Fastener	IAPMO report		
	THICKNESS		number		
	0.125" to 0.375"	Hilti X-HSN-24	ICC-ESR 2776		
	0.25" and up	Hilti X-ENP-19 L15	ICC-ESR 2776		
	0.113" to 0.155"	Pneutek SDK61075	ICC-ESR 2941		
	0.155" to 0.250"	Pneutek SDK63075	ICC-ESR 2941		
	0.188" to 0.312"	Pneutek K64062	ICC-ESR 2941		
	0.281" and up	Pneutek K66062	ICC-ESR 2941		
shall be placed at the following spacings (Closer spacings may be use					

e. Fasteners shall be placed at the following spacings (Closer spacings may be used to develop minimum shear requirements): vi. 12" o.c. to supports perpendicular to deck corrugations (4 fasteners per 36" wide sheet).

vii. 12" o.c. to all supports parallel to deck corrugations. f. In lieu or mechanical fasteners, contractor may weld deck to supporting framing members with 3/4" diameter puddle welds at the same spacing for deck pins as indicated above.

- g. Attach interlocking seams with one of the following.
- i. 1.1/2" long top seam welds at 4" o.c. maximum
- ii. Verco PunchLok II System at 4" o.c. maximum iii. ASC Delta Grip System at 4" o.c maximum
- Closer spacing may be used to develop minimum shear requirements.

h. Provide a 2" minimum bearing at supports.

Steel Roof Deck i. Steel roof deck shall be 1.1/2" deep X 18 gage minimum painted, type "B" wide rib deck with interlocking side seams with the following properties:

	<u>18 Gage</u>	16 Gag	e
/linimum S (in³/ _{ft}) =	0.331	0.410	
$I (in^4/_{ft}) =$	0.306	0.381	
ing 16 gage minimum	in areas of s	nowdrift	<u>م</u>

- Using 16 gage minimum in areas of snowdrift, see plan. k. Minimum allowable deck diaphragm shear values shall be 900 lbs/ft for a 8'-0" deck span.
- I. Fasten deck to supporting framing members with powderdriven lasteners. Powderdriven fasteners shall be as indicated below based on the steel framing thicknesses:

an	caled below based o	n the steel hanning th	ICKI 163363.
	Stool Framing		ICC-ESR or
		Fastener	IAPMO report
	THICKNess		number
	0.125" to 0.375"	Hilti X-HSN-24	ICC-ESR 2776
	0.25" and up	Hilti X-ENP-19 L15	ICC-ESR 2776
	0.113" to 0.155"	Pneutek SDK61075	ICC-ESR 2941
	0.155" to 0.250"	Pneutek SDK63075	ICC-ESR 2941
	0.188" to 0.312"	Pneutek K64062	ICC-ESR 2941

m. Fasteners shall be placed at the following spacings (Closer spacings may be used to develop minimum shear requirements):

- i. 6" o.c. to all supports perpendicular to deck corrugations (7 fasteners per 36" sheet).
- ii. 6" o.c. to all supports parallel to deck corrugations. n. In lieu or mechanical fasteners, contractor may weld deck to supporting framing members with 3/4"
- diameter puddle welds at the same spacing for deck pins as indicated above.
- o. Attach interlocking seams with one of the following: i. 1.1/2" long top seam welds at 6" o.c. maximum
- ii. Verco PunchLok II System at 6" o.c. maximum
- iii. ASC Delta Grip System at 6" o.c maximum Closer spacing may be used to develop minimum shear requirements. A standard button punch may **not** be used in place of Verco PunchLok or DeltaGrip.
- p. Provide a 2" minimum bearing and a 4" lap at the splice points.

COLD-FORMED STEEL

1. All cold-formed steel shall meet the requirements of "Specifications for the Design of Cold-Formed Steel Structural Members" by American Iron and Steel Institute (AISI).

- 2. All cold-formed steel connectors shall be provided by The Steel Network. If the contractor elects to substitute for another manufacturer, the contractor shall submit a revised connector list, prior to construction, that includes the following information:
- a. Specified connector indicated on these plans
- b. Requested substitution connector c. Allowable capacity of the requested substitution connector
- 3. Light Gauge Steel Framing:
- a. Galvanized steel shall meet the minimum requirements of ASTM A653 (Fy = 50 ksi) for 97 mil (12 gauge), 68 mil (14 gauge) and 54 mil (16 gauge). For 43 mil (18 gauge) and lighter galvanized steel shall meet and ASTM A653 (Fy = 33 ksi). Galvanized coatings must meet the ASTM A924. b. Follow all manufacturers' recommendations for the use of these products.
- c. Unless noted otherwise, all welded connections shall be done according to AWS standards. d. All interior non-bearing steel-stud walls that extend above the ceiling but do not attach to the structure above shall be brace with diagonal metal-stud braces (45 degrees). The kl/r ratio of the brace shall not exceed 200 and shall not be spaced further apart than 10'-0" o.c. Connect diagonal braces to the top of the steel stud walls and to the top flange of the steel beams with two #10 tek screws minimum. Where a concrete deck occurs above, use two powder-driven fasteners per diagonal brace. Other approved methods may be used.

4. Wood Sheathing

a. Wood sheathing shall meet the minimum performance criteria given in APA PRP-108, Performance Standards and Policies for Structural-Use Panels, Form E445, Voluntary Product Standard PS 1 & PS 2 and Performance Standard for Wood-Based Structural-Use Panels, Form S350, and Structural Plywood, Form H860.

0.25" and up	Hilti X-ENP-19 L15	ICC-ESR 2776
0.113" to 0.155"	Pneutek SDK61075	ICC-ESR 2941
0.155" to 0.250"	Pneutek SDK63075	ICC-ESR 2941
0.188" to 0.312"	Pneutek K64062	ICC-ESR 2941
0.281" and up	Pneutek K66062	ICC-ESR 2941





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¬ FOOTING AND FOUNDATION PLAN - AREA B 3/16" = 1'-0" 0" 4'-0" 8'-<u>0</u>" 16'-0"



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13 TYP \$511 YP \$511 ML-16A

LEVEL 2 FLOOR FRAMING PLAN - AREA B 3/16" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

	FLOOR FRAMING DESIGN LOADS
<u>Fl</u> Dł LI	LOOR LOADS EAD LOAD 75psf VE LOAD 250psf DTAL LOAD 325psf
	FLOOR FRAMING PLAN NOTES
1 2 3 4 5 6 7 8 9 1	 VERIFY ALL FLOOR OPENINGS FOR MECHANICAL SHAFTS, STAIRS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. SEE DETAILS 1/S511 AND 2/S511 FOR FRAMING AROUND MISCELLANEOUS FLOOR OPENINGS. COORDINATE SIZE AND LOCATION OF ALL MECHANICAL OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. CAMBER JOISTS FOR DEADLOAD DEFLECTION. SEE DETAIL 7/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS. SEE DETAIL 8/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS. SEE DETAIL 9/S501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS. SEE DETAIL 10/S501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS. SEE DETAIL 13/S501 FOR ANCHORAGE OF HOUSEKEEPING PADS. SEE DETAIL 7/S511 FOR STEEL BRACE CONNECTIONS AND LOCATIONS. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.

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➢ ∕HSS5x5x3/16 —

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\$8:⁶⁹

(1) (S522)

	ROOF FRAMING DESIGN LOADS
ROC DEA SNO TOT	F LOADS D LOAD 25psf W LOAD 32psf_+ DRIFT AL LOAD 57psf
1.	
	ROOF FRAMIING FLAN NOTES
1.	VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND
2.	MECHANICAL DRAWINGS. JOIST SUPPLIER SHALL DESIGN ALL ROOF JOIST BEARING ENDS AT MASONRY WALLS TO TRANSFER 8,000# (ALLOWABLE) AXIAL LOAD FOR 10" CMU WALLS AND 4,000# (ALLOWABLE) AXIAL LOAD FOR 8" CMU WALLS THROUGH JOIST BEARING SHOE.
3. 4.	ALL JOISTS SHALL HAVE 5" DEEP BEARING ENDS (UNO). ALL ROOF OPENINGS GREATER THAN, OR EQUAL TO, 12" x 12" SHALL BE FRAMED AS INDICATED IN DETAILS 1/S521 AND 2/S521. FOR OPENINGS WHICH CUT LESS THAN TWO DECK FLUTES, SEE DETAIL 3/S521.
5.	SEE DETAIL 4/S521 WHEN CONCENTRATED LOADS ARE LOCATED MORE THAN 6" FROM JOIST OR JOIST GIRDER PANEL POINT.
3. 7.	SEE DETAIL 5/S521 WHEN MECHANICAL UNITS ARE HUNG BELOW JOISTS. VERIFY SIZE, WEIGHT, AND LOCATION OF ALL ROOF TOP MECHANICAL UNITS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. SEE DETAIL 6/S521 FOR STEEL FRAMES AT ALL ROOF TOP EQUIPMENT. COORDINATE OPENINGS WITH MECHANICAL, ELECTRICAL, AND GENERAL CONTRACTORS.
8. 9.	LOCATE MISCELLANEOUS MECHANICAL OPENINGS BETWEEN JOISTS, <u>NOT</u> UNDERNEATH THEM. OPEN WEB STEEL JOISTS AND JOIST GIRDERS SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE MECHANICAL AND LATERAL LOADS SHOWN ON THE ROOF FRAMING PLANS IN ADDITION TO THE UNIFORM AND POINT LOADS SHOWN.
10.	JOIST BRIDGING SHOWN ON PLANS IS FOR REPRESENTATION ONLY; ACTUAL SIZE, QUANTITY, AND LOCATION WILL BE DETERMINED BY THE JOIST SUPPLIER PER 'SJI' REQUIREMENTS. ALL BRIDGING AND BRIDGING ANCHORS NEED TO BE IN PLACE BEFORE APPLYING ANY LOADS. WHERE SKYLIGHT OR MECHANICAL UNITS/DUCTS INTERRUPT HORIZONTAL BRIDGING, PROVIDE CROSS BRIDGING AT JOIST SPACES ON EACH SIDE OF THE OPENING. WHERE DIAGONAL BRIDGING CONFLICTS WITH MECHANICAL DUCTS, REMOVE DIAGONAL BRIDGING AND REPLACE WITH HORIZONTAL BRIDGING AFTER ROOF DECK IS IN PLACE
11.	JOIST DESIGNER SHALL DESIGN JOISTS AND GIRDERS AND SUPPLY ADDITIONAL BRIDGING AS REQUIRED FOR UPLIFT DUE TO WIND. ASSUME: • 0.6DL = 12psf
12.	<u>U.OVVL = ZOPSI (UPLIF I)</u> 13psf NET UPLIFT (ASD) NO 1/3 STRESS INCREASE ALLOWED. SEE DETAIL 7/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
13. 14. 15.	SEE DETAIL 8/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS. SEE DETAIL 9/S501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS. SEE DETAIL 10/S501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.
16. 17.	STAL MIXED VERE THAN'S TO RED THE DITING AND THE STALL STALL CONVERTS. PROVIDE HSS5x5x3/16xCONT BLOCKING OVER BEAM. BRACE BOTTOM FLANGE OF BEAM PER DETAIL 7/S511 AT 6'-0" O.C. MAX. BEAM RUNS CONTINUOUS OVER MASONRY WALL.

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AL AND RANSFER 8,000# 3" CMU WALLS

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ROOF FRAMING DESIGN LOADS	
ROOF LOADS	
SNOW LOAD 25pst SNOW LOAD 32psf + DRIFT	
TOTAL LOAD 57psf	
1. AT OVERHANGS, INCREASE SNOW LOADING BY A FACTOR OF 2.4.	
ROOF FRAMING PLAN NOTES	
1. VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND	
2. JOIST SUPPLIER SHALL DESIGN ALL ROOF JOIST BEARING ENDS AT MASONRY WALLS TO TRANSFER	8.000
(ALLOWABLE) AXIAL LOAD FOR 10" CMU WALLS AND 4,000# (ALLOWABLE) AXIAL LOAD FOR 8" CMU WA	ALLS
 ALL JOISTS SHALL HAVE S' DEEP BEARING ENDS (UNO). ALL ROOF OPENINGS GREATER THAN. OR EQUAL TO, 12" x 12" SHALL BE FRAMED AS INDICATED IN 	
DETAILS 1/S521 AND 2/S521. FOR OPENINGS WHICH CUT LESS THAN TWO DECK FLUTES, SEE DETAIL	-
3/8521.	от
 SEE DETAIL 4/S521 WHEN CONCENTRATED LOADS ARE LOCATED MORE THAN 6" FROM JOIST OR JOIS GIRDER PANEL POINT 	51
6. SEE DETAIL 5/S521 WHEN MECHANICAL UNITS ARE HUNG BELOW JOISTS.	
7. VERIFY SIZE, WEIGHT, AND LOCATION OF ALL ROOF TOP MECHANICAL UNITS WITH ARCHITECTURAL	AND
MECHANICAL DRAWINGS. SEE DETAIL 6/S521 FOR STEEL FRAMES AT ALL ROOF TOP EQUIPMENT.	
8 LOCATE MISCELLANEOUS WITH MECHANICAL, ELECTRICAL, AND GENERAL CONTRACTORS.	
 OPEN WEB STEEL JOISTS AND JOIST GIRDERS SHALL BE DESIGNED BY THE MANUFACTURER TO SUF 	PPOR
THE MECHANICAL AND LATERAL LOADS SHOWN ON THE ROOF FRAMING PLANS IN ADDITION TO THE	
UNIFORM AND POINT LOADS SHOWN.	
10. JOIST BRIDGING SHOWN ON PLANS IS FOR REPRESENTATION ONLY; ACTUAL SIZE, QUANTITY, AND	
BRIDGING ANCHORS NEED TO BE IN PLACE BEFORE APPLYING ANY LOADS. WHERE SKYLIGHT OR	
MECHANICAL UNITS/DUCTS INTERRUPT HORIZONTAL BRIDGING, PROVIDE CROSS BRIDGING AT JOIS	Т
SPACES ON EACH SIDE OF THE OPENING. WHERE DIAGONAL BRIDGING CONFLICTS WITH MECHANIC	CAL
DUCTS, REMOVE DIAGONAL BRIDGING AND REPLACE WITH HORIZONTAL BRIDGING AFTER ROOF DEC	CKIS
IN PLACE. 11 IOIST DESIGNER SHALL DESIGN IOISTS AND GIRDERS AND SUPPLY ADDITIONAL BRIDGING AS REOLI	IRED
FOR UPLIFT DUE TO WIND. ASSUME:	
• 0.6DL = 12psf	
• $0.6WL = 25psf(UPLIFT)$	
13pst NET UPLIFT (ASD) NO 1/2 STRESS INCREASE ALLOWED	
12. SEE DETAIL 7/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WAL	IS.
13. SEE DETAIL 8/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS.	
14. SEE DETAIL 9/S501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.	
15. SEE DETAIL 10/S501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.	
10. SEE AKUMITEUTUKAL PLANS FUR DIMENSIONS TO ALL STEEL COLUMNS. 17. PROVIDE HSS5y5y3/16yCONT BLOCKING OVER REAM IRRACE ROTTOM FLANGE OF REAM DER DETAIL	
7/S511 AT 6'-0" O C. MAX REAM RUNS CONTINUOUS OVER MASONRY WALL	

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NO SCALE

NO SCAL

(PLAN VIEW)

WHERE MECH UNIT

SPACES, TRIM HORIZ

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SPANS TWO JOIST

LEG OF L6x4s

L3x3x1/4 AROUND DUCT

OPENING

SEE ARCH/MECH

3/16

6 TYPICAL ROOF TOP MECHANICAL UNIT SUPPORT DETAIL [PLAN VIEW]

TYPICAL JOIST CHORD TIE/DRAG STRUT DETAIL NO SCAL

STEEL BEAM AT STEEL JOIST

TYPICAL JOIST BEARING AT STEEL BEAM

TYPICAL JOIST BEARING AT MASONRY WALL

NO SCAL

TYPICAL DECK BEARING WITH BRIDGING ATTACHMENT 8" MASONRY WALLS NO SCALE

NOTE: AT HOLDOWN, WELD THREADED STUD TO CHANNEL WITH 1/4" FILLET WELD ALL AROUND METAL STUD WALL, WALL SHEATHING, SEE SCHEDULE EDGE FASTENER, SEE SCHEDULE

METAL STUD WALL AT ROOF STRUCTURE

VO SCALE

NO SCALE

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TEEL FRAMING DETAIL

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							JULAD		UNG	JUITEL		וכ
				RE	INFOR	CING CROS	SWISE	R	EINFOR	CING LENG	THWISE	
MARK	WIDTH	LENGTH	DEPTH	No.	SIZE	LENGTH	SPACING	i No.	SIZE	LENGTH	SPACING	COMMENTS
FTS2.0	2' - 0"	CONT	12"	-	#4	1' - 6"	48"	3	#4	CONT	EQ	
			CO	NCRE	TE C	ONTINL	JOUS F	OOTI	NG S	CHEDL	ILE (FC)	
				D			e/wiee	D				
			DEDTU									
MARK	WIDTH	LENGIH	DEPTH	NO.	SIZE	LENGIH	SPACING	i NO.	SIZE	LENGI	SPACING	COMMENTS
FC2.0	2' - 0"	CONT	12"	-	#4	1' - 6"	48"	3	#4		EQ	
FC2.5	2' - 6"		12"	-	#5	2' - 0"	14"	3	#5		EQ	
EC2 0	ייחיפי			\sim		ᡊᢇᡃᢆᢇ		ᡝᢩᡣ				
				- T	1 15	2' - 6"	1.7.		πn	('()))]		
FC3.0A		CONT		لبن			$-12^{-12^{-12^{-12^{-12^{-12^{-12^{-12^{$	\checkmark			سېتىر	REINFORCE TOP AND BOTTOM
FC3.0A FC4.0		CONT	14" 14"	لبنا	≁ #5 ★₩5			4		CONT	ᡔ᠊ᢩᢡᠵᢩᡕ	
FC3.0A FC4.0		CONT	14"	لبنا	≁ #5 ≁ ₩5	2'-6"		44		SONT	ૡ૿ૡ	
FC3.0A FC4.0		CONT	14"		مرینی CRF1			م ممً	SCHF		بر المحمد (FS)	
FC3.0A FC4.0			14"	نبن CON	~∰√ CRE1	1E SPO	T FOOT	TING S	SCHE		مریکی کر (FS	
FC3.0A FC4.0			14"	CON		TE SPO	T FOOT	TING (FS)	
FC3.0A FC4.0 MARK	WIDTH	LENGTH	DEPTH	CON RE No.		TE SPO CING CROS LENGTH	T FOOT SWISE	TING (R	SCHE EINFOR SIZE		FS) THWISE	
FC3.0A FC3.0A FC4.0 MARK FS3.0	WIDTH 3' - 0"	LENGTH 3'- 0"	DEPTH 12"	CON RE No. 3		TE SPO CING CROS LENGTH 2'-6"	T FOOT SWISE SPACING EQ	TING S R No. 3	SCHE EINFOR SIZE #5	EDULE (CING LENC LENGTH 2'-6"	FS) THWISE	
FC3.0A FC3.0A FO4.0 MARK FS3.0 FS4.0	WIDTH 3' - 0" 4' - 0"	LENGTH 3' - 0" 4' - 0"	DEPTH 12"	CON RE No. 3 4	CRE1 CRE1 SIZE #5 #5	2'-6" TE SPO CING CROS LENGTH 2'-6" 3'-6"	T FOOT SWISE SPACING EQ EQ	TING \$ R No. 3 4	SCHE EINFOR SIZE #5 #5	EDULE (CING LENGTH 2' - 6" 3' - 6"	FS) THWISE	
FC3.0A FC3.0A FC4.0 FC4.0 FC4.0 FC4.0 FS4.0 FS4.0 FS4.5	WIDTH 3' - 0" 4' - 0" 4' - 0" 4' - 6"	LENGTH 3' - 0" 4' - 6"	DEPTH 12" 12" 12"	CON RE No. 3 4 4	*5 CRET INFORC SIZE #5 #5 #5	2'-6" TE SPO CING CROS LENGTH 2'-6" 3'-6" 4'-0"	T FOOT SWISE SPACING EQ EQ EQ	TING \$	SCHE EINFOR SIZE #5 #5 #5	EDULE (CING LENGTH 2'-6" 3'-6" 4'-0"	FS) THWISE SPACING EQ EQ EQ	
FC3.0A FC3.0A FC4.0 FC4.0 FS3.0 FS4.0 FS4.0 FS4.5 FS5.0 FS5.0	WIDTH 3' - 0" 4' - 0" 4' - 0" 4' - 6" 5' - 0"	LENGTH 3'-0" 4'-0" 4'-6" 5'-0"	DEPTH 12" 12" 12" 12" 12"	CON RE No. 3 4 4 5	**5 CRET EINFORC SIZE #5 #5 #5 #5 #5	2'-6" TE SPO CING CROS LENGTH 2'-6" 3'-6" 4'-0" 4'-6"	T FOOT SWISE SPACING EQ EQ EQ EQ	ING R No. 3 4 4 5	SCHE EINFOR SIZE #5 #5 #5	EDULE (CING LENC 2' - 6" 3' - 6" 4' - 0" 4' - 6"	FS) THWISE SPACING EQ EQ EQ EQ	
MARK FS3.0 FS3.0 FS4.0 FS4.0 FS4.0 FS4.5 FS5.0 FS6.0 FS6.0	WIDTH 3'-0" 4'-0" 4'-0" 4'-6" 5'-0" 6'-0"	LENGTH 3' - 0" 4' - 0" 4' - 6" 5' - 0" 6' - 0"	DEPTH 12" 12" 12" 12" 12" 12"	CON RE No. 3 4 4 5 6	*5 CRET SIZE #5 #5 #5 #5 #5	2'-6" TE SPO CING CROS LENGTH 2'-6" 3'-6" 4'-0" 4'-6" 5'-6"	T FOOT SWISE SPACING EQ EQ EQ EQ	ING R B No. 3 4 4 4 5 6	SCHE EINFOR SIZE #5 #5 #5 #5	EDULE (CING LENGTH 2' - 6" 3' - 6" 4' - 0" 4' - 6" 5' - 6"	FS) THWISE SPACING EQ EQ EQ EQ EQ	
FC3.0A FC3.0A FC4.0 FC4.0 FC4.0 FS4.0 FS4.0 FS4.5 FS5.0 FS6.0 FS6.0 FS6.0 FS6.0	3' - 0" 3' - 0" 4' - 0" 4' - 0" 4' - 0" 4' - 0" 6' - 0" 8' - 0" 6' - 0"	LENGTH 3' - 0" 4' - 0" 4' - 0" 6' - 0" 8' - 0"	DEPTH 12" 12" 12" 12" 12" 12" 12" 12" 12"	CON RE No. 3 4 4 5 6 6 6	*5 CRET INFORC SIZE #5 #5 #5 #5 #5 #6	2' - 6" TE SPO CING CROS LENGTH 2' - 6" 3' - 6" 4' - 0" 4' - 6" 5' - 6" 7' - 6"	T FOOT SWISE SPACING EQ EQ EQ EQ EQ	NO. 3 4 4 5 6 6 6	SCHE EINFOR SIZE #5 #5 #5 #5 #5 #6	EDULE (CING LENC LENGTH 2' - 6" 3' - 6" 4' - 0" 4' - 0" 4' - 6" 5' - 6" 7' - 6"	FS) THWISE SPACING EQ EQ EQ EQ EQ EQ	

			CONC	RETE	THIC	KENED) SLAB	FOOT	TING S	SCHEDI	JLE (FTS)				(CONCRETE PIEF	SCHEDULE	
				RE	INFORCI	NG CROS	SWISE	R	EINFORC	ING LENG	THWISE			PIER SIZE	RE	INFORCING		
MARK	WIDTH	LENGTH	DEPTH	No.	SIZE	LENGTH	SPACING	No.	SIZE	LENGTH	SPACING	COMMENTS	MARK	W x L	VERTICAL	TIES	TYPE	(
FTS2.0	2' - 0"	CONT	12"	-	#4	1' - 6"	48"	3	#4	CONT	EQ		CP-16A	WT x 16"	(4) #5	(1) #3 AT 8" O.C.	В	
													CP-16B	16" x 16"	(7) #5	(2) #3 AT 8" O.C.	C	
													CP-24A	24" x 24"	(8) #6	(3) #3 AT 8" O.C.		
			CO	NCRE	TE CC	ONTINU	JOUS F	OOTII	NG SC	CHEDUI	LE (FC)			TEQ				
				RE		NG CROS	SWISE	R	EINFORC	ING LENG	THWISE		1. INSTALL (3) SETS	S OF TIES WITHIN TOP 5	" of all Piers (UNO).			
MARK	WIDTH	I ENGTH	DEPTH	No	SIZE	I ENGTH	SPACING	No.	SIZE	I FNGTH	SPACING	COMMENTS	2. RUN HORIZONTA	AL CONCRETE WALL RE	INFORCING CONTINUOUS THROUG	GH PIER WHEN PIER IS POURED MON	OLITHICALLY WITH CONCRETE WAL	LL.
				110.		1' - 6"							SEE GENERAL S	IRUCIURAL NOTES FO	R ADDITIONAL REQUIREMENTS.			
	/ - ! !	CONT	1.2"	_			40		π/1	CONT	FO						1	
FC2.0	2 - 0	CONT	12" 12"	-	#5	2' - 0"	40 14"	3	#4	CONT	EQ FQ							
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FC2.0 FC2.5	2' - 6" 2' - 6" 3' - 0"		$ \begin{array}{r}12^{"}\\12^{"}\\12^{"}\\14^{"}\end{array} $		#5 #5 #5	2' - 0" 2' - 6"	40 14" 14" 12"	3 3 3	#4 #5 7 #5 #5					<u>ئ</u> ا ب				
FC2.0 FC2.5 FC3.0A FC3.0A FC4.0	2 - 0 2' - 6" 3' - 0" 4 - 0		12" $12"$ $12"$ $12"$ $12"$ $12"$		#5 #5 #5 #5	2' - 0" -2' - 6" -2' - 6" -3' - 6"	$\begin{array}{c} 40 \\ 14" \\ 12" \\ 12" \\ 14 \end{array}$	3 3 3 4 4	#4 #5 #5 #5 #5			INFORCE TOP AND BOTTOM						
FC2.0 FC2.5 FC3.0A FC4.0	2 - 0 2' - 6" 3' - 0" 4 - 0		12" 12" 14" 14"	CON		2' - 0" 2' - 6" 2' - 6" 2' - 6" 	40 14" 12" 12" T FOOT SWISE	3 3 3 3 4 4 FING S	#4 #5 #5 #5 SCHEI			INFORCE TOP AND BOTTOM INFORCE TOP AND BOTTOM						
FC2.0 FC2.5 FC3.0A FC3.0A FC4.0	2 - 0 2' - 6" 3' - 0" 3' - 0"			CON		2'-0" 2'-6" 2'-6" E SPO NG CROS	T FOOT SWISE	TING S	#4 #5 #5 **5 CHEI EINFORC		EQ EQ EQ REI EQ REI FS) THWISE	INFORCE TOP AND BOTTOM INFORCE TOP AND BOTTOM			TYPE "B"		<u>E" C</u>	
FC2.0 FC2.5 FC3.0A FC4.0 MARK FS3.0	2' - 6" 2' - 6" 3' - 0" 4' - 0	CONT CONT CONT CONT CONT CONT	12" 12" 14" 14" 14" 12"	CON RE No.	The second secon	2' - 0" 2' - 6" 2' - 6" 2' - 6" E SPO NG CROS LENGTH 2' - 6"	T FOOT SWISE SPACING	TING S RE No.	The second secon			INFORCE TOP AND BOTTOM INFORCE TOP AND BOTTOM NFORCE TOP AND BOTTOM COMMENTS			E WALL, WHERE SEE PLAN		<u>E" C</u>	
FC2.0 FC2.5 FC3.0A FC3.0A FC4.0 FS3.0 FS3.0 FS4.0	2' - 0" 2' - 6" 3' - 0" 4' - 0"	CONT CONT CONT CONT CONT CONT CONT CONT	12" 12" 12" 14" 14" 12" 12" 12" 12" 12" 12" 12" 12	CON RE No. 3 4	CRET SIZE #5 SIZE #5 #5	2' - 0" 2' - 6" 2' - 6" 2' - 6" 3 - 6" E SPO NG CROS LENGTH 2' - 6" 3' - 6"	TFOOT SWISE SPACING EQ EQ	3 3 3 4 7 1NG S RE 6 No. 3 4	#4 #5 #5 **5 CHEI EINFORC SIZE #5 #5	CONT CONT CONT CONT CONT CONT CONT CONT	EQ EQ EQ EQ REI FS) THWISE SPACING EQ EQ	INFORCE TOP AND BOTTOM INFORCE TOP AND BOTTOM INFORCE TOP AND BOTTOM COMMENTS			TYPE "B" E WALL, WHERE SEE PLAN		<u>E" C</u>	
FC2.0 FC2.5 FC3.0A FC3.0A FC4.0 FS3.0 FS4.0 FS4.0 FS4.5	2 - 0 2' - 6" 3' - 0" 4' - 0" 4' - 0" 4' - 0"	CONT CONT CONT CONT CONT CONT CONT CONT	12" 12" 14" 14" 14" 12" 12" 12" 12"	- - - CON RE No. 3 4 4	#5 #5 CRETI EINFORCI SIZE #5 #5 #5	2' - 0" 2' - 6" 2' - 6" E SPO NG CROS LENGTH 2' - 6" 3' - 6" 4' - 0"	TFOOT SWISE EQ EQ EQ EQ	3 3 3 3 4 5 NO. 3 4 4 4	#4 #5 #5 #5 CHEI EINFORC SIZE #5 #5 #5 #5	CONT CONT CONT CONT CONT CONT CONT CONT	EQ EQ EQ EQ EQ REI FS) THWISE SPACING EQ EQ EQ EQ	INFORCE TOP AND BOTTOM INFORCE TOP AND BOTTOM COMMENTS			TYPE "B" E WALL, WHERE SEE PLAN		<u>E" C</u>	
FC2.0 FC2.5 FC3.0A FC4.0 FC4.0 FS3.0 FS4.0 FS4.0 FS4.5 FS5.0	2 - 0 2' - 6" 3' - 0" 4 - 0 WIDTH 3' - 0" 4' - 0" 4' - 0" 4' - 0" 4' - 0"	CONT CONT CONT CONT CONT CONT CONT CONT	12" 12" 14" 14" 14" 12" 12" 12" 12" 12"	- - - - - - - - - - - - - - - - - - -	#5 #5 #5 #5 #5 #5 #5 #5 #5	2' - 0" 2' - 6" 2' - 6" 2' - 6" 2' - 6" 3' - 6" 4' - 0" 4' - 6"	TFOOT SWISE EQ EQ EQ EQ EQ EQ	3 3 3 3 4 5 No. 3 4 4 5	#4 #5 #5 #5 CHEI EINFORC SIZE #5 #5 #5 #5	CONT CONT CONT CONT CONT CONT CONT CONT	EQ EQ EQ EQ EQ REI FS) THWISE SPACING EQ EQ EQ EQ EQ	INFORCE TOP AND BOTTOM INFORCE TOP AND BOTTOM COMMENTS			E WALL, WHERE SEE PLAN		<u>E" C</u>	
FC2.0 FC2.5 FC3.0A FC3.0A FC4.0 FS4.0 FS4.0 FS4.0 FS4.5 FS5.0 FS5.0 FS6.0	2' - 6" 2' - 6" 3' - 0" 4' - 0" 4' - 0" 4' - 6" 5' - 0" 6' - 0"	CONT CONT CONT CONT CONT CONT CONT CONT	12" 12" 12" 14" 14" 12" 12" 12" 12" 12" 12" 12" 12	- - - - - - - - - - - - - - - - - - -	#5 #5 #5 #5 EINFORCI SIZE #5 #5 #5 #5 #5	2' - 0" 2' - 6" 2' - 6" 2' - 6" 2' - 6" 3' - 6" 3' - 6" 3' - 6" 4' - 0" 4' - 0" 4' - 6" 5' - 6"	TFOOT SWISE SPACING EQ EQ EQ EQ EQ EQ	3 3 3 4 7 1NG S RE 6 No. 3 4 4 4 5 6	#4 #5 #5 #5 EINFORC SIZE #5 #5 #5 #5 #5 #5	CONT CONT CONT CONT CONT CONT CONT CONT	EQ EQ EQ EQ EQ REI FS) THWISE SPACING EQ EQ EQ EQ EQ EQ EQ EQ	INFORCE TOP AND BOTTOM INFORCE TOP AND BOTTOM INFORCE TOP AND BOTTOM COMMENTS			TYPE "B" E WALL, WHERE SEE PLAN		<u>E" C</u>	
FC2.0 FC2.5 FC3.0A FC3.0A FC3.0A FC4.0 FS3.0 FS4.0 FS4.0 FS4.5 FS5.0 FS6.0 FS6.0 FS8.0	2 - 0 2' - 6" 3' - 0" 4' - 0 4' - 0" 4' - 0" 4' - 0" 4' - 0" 4' - 0" 6' - 0" 8' - 0"	CONT CONT CONT CONT CONT CONT CONT CONT	12" 12" 12" 14" 14" 12" 12" 12" 12" 12" 12" 12" 12	- - - - - - - - - - - - - - - - - - -	#5 #5 #5 #5 EINFORCI SIZE #5 #5 #5 #5 #5 #5 #6	2' - 0" 2' - 6" 2' - 6" 2' - 6" 2' - 6" 2' - 6" 3' - 6" 2' - 6" 3' - 6" 4' - 0" 4' - 6" 5' - 6" 7' - 6"	TFOOT SWISE EQ EQ EQ EQ EQ EQ EQ EQ	3 3 3 4 5 No. 3 4 4 5 6 6 6	#4 #5 #5 #5 EINFORC SIZE #5 #5 #5 #5 #5 #5 #6	CONT CONT CONT CONT CONT CONT CONT CONT	EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ E	INFORCE TOP AND BOTTOM INFORCE TOP AND BOTTOM COMMENTS			E WALL, WHERE SEE PLAN		<u>E"C</u>	

			CONCR	ETE TH	ICKENE) SLAB F	FOOTI	ING SC	CHEDUL	E (FTS)						CONCRET	FE PIER S	SCHEDULE	
				REINFO		SWISE	REI		G LENGTHV	/ISE				PIER SIZE	F	REINFORCING			
MARK	WIDTH	LENGIH	DEPTH	NO. SIZ	: LENGIH	SPACING	NO.	SIZE I	LENGIH S	PACING	COMMENTS		MARK	W X L	VERTICAL		TIES	IYPE	
FTS2.0	2' - 0"	CONT	12"	- #4	1'-6"	48"	3	#4	CONT	EQ			CP-16A	10" x 16"	(4) #5	(1) #	43 AT 8" O.C.	B	
													CP-10B	10 X 10 24" x 24"	(7) #5	(2) #	13 AT 8" O.C.	- Č	
			CON	CRETE	CONTIN	JOUS F(OOTIN	IG SCH	HEDULE	(FC)					(0)#0	(0) #	5 AT 0 0.0.		
				DEINEC			DEI						CONCRETE PIER NOTE	<u>ES:</u> OF THES WITHIN TOD F					
							KEI						2. RUN HORIZONTAL	L CONCRETE WALL RE	INFORCING CONTINUOUS THR	ROUGH PIER WHEN PIER I	S POURED MONOLITI	HICALLY WITH CONCRETE	E WALL.
MARK	WIDTH	LENGIH	DEPTH	NO. SIZ	LENGIH	SPACING	NO.	SIZE	_ENGIH S	PACING	COMMENIS				R ADDITIONAL REQUIREMENTS	<u>^</u>			
FC2.0	2' 0"												3. SEE GENERAL STR	RUCTURAL NOTES FO		5.			
500 5	2 - 0	CONT	12"	- #4	1' - 6"	48"	3	#4	CONT	EQ			3. SEE GENERAL STF	RUCTURAL NOTES FO		5.	4		
FC2.5	2'-6"	CONT	12" 12"	- #4 - #5	<u> </u>	48"	3	#4 #5	CONT CONT	EQ EQ EQ EQ			3. SEE GENERAL STF			δ.			
FC2.5	2'- 6" 2'- 6"		12" 12" 12" 14"	- #4 - #5 - $+5 +5$	<u>1' - 6"</u> <u>2' - 0"</u> <u>2' - 6"</u> <u>2' - 6"</u>	48" 14" 14"	3 3 7	#4 #5 ~ #5					3. SEE GENERAL STF			5.			
FC2.5 FC3.0A FC3.0A FC4.0	2'- 6" 2'- 6" 3'- 0" 4'- 0		12" 12" 12" 14"	- #4 - #5 - #5 - #5 - #5 - #5 - #5	1'-6" 2'-0" 2'-6" 2'-6"	48" 14" 14" 12" 12"	3 3 3 4	#4 #5 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	CONT CONT CONT CONT CONT	EQ EQ EQ EQ REINFOR EQ REINFOR	RCE TOP AND BOTTOM RCE TOP AND BOTTOM	<u>{</u> [-	3. SEE GENERAL STF						
FC2.5 FC3.0 FC3.0A FC4.0	2 - 0 2' - 6" 3' 0" 3' - 0" 4' - 0			- #4 - #5 - #5 - #5 - #5 - #5 - #5 - #5 - #6	1'-6" 2'-0" 2'-6" 2'-6" 2'-6" ETE SPO	48" 14" 14" 12" T FOOTI	3 3 3 3 4 1 NG S(#4 #5 \$ \$ \$ #5 \$ \$ \$ CHED			RCE TOP AND BOTTOM RCE TOP AND BOTTOM		3. SEE GENERAL STF						
FC2.5 FC3.0A FC3.0A FC4.0	2 - 0 2' - 6" 3' - 0" 4 - 0		12" 12" 14" 14" 14" 14" 14" (DEPTH	- #4 - #5 - #5 - #5 - #5 - #5 - #5 - #5 - #5	1'-6" 2'-0" 2'-6" 2'-6" 2'-6" 2'-6" ETE SPO RCING CROS	48" 14" 14" 12" T FOOTI SWISE SPACING	3 3 3 3 4 1NG S(REI No.	#4 #5 \$ \$ \$ #5 \$ \$ \$ \$ CHED \$ INFORCIN SIZE 1			CE TOP AND BOTTOM RCE TOP AND BOTTOM COMMENTS		3. SEE GENERAL STF		TYPE "B"	₹ 4 4 4 4 4 4 4 4 4 4 4 4 4			
FC2.5 FC3.0 FC3.0A FC4.0 MARK FS3.0	2 - 0 2' - 6" 3' 0" 3' - 0" 4' - 0	LENGTH 3'- 0"	12" 12" 12" 14" 14" (DEPTH 12"	- #4 - #5 - #5 - #5 #5 	1'-6" 2'-0" 2'-6" ETE SPO RCING CROS LENGTH 2'-6"	48" 14" 14" 12" 12" 12" 12" 14 T FOOTI SWISE SPACING EQ	3 3 4 ING SO REI No. 3	#4 #5 #5 #5 #5 CHEDI INFORCIN SIZE I #5	CONT CONT CONT CONT SONT SONT SONT SONT SONT SONT SONT S		RCE TOP AND BOTTOM RCE TOP AND BOTTOM COMMENTS		3. SEE GENERAL STF		E WALL, WHERE SEE PLAN				
FC2.5 FC3.0A FC4.0 FC4.0 FC4.0 FS3.0 FS3.0 FS4.0	2 - 0 2' - 6" 3' - 0" 4 - 0 WIDTH 3' - 0" 4' - 0"	LENGTH	12" 12" 14" 14" 12" 12" (DEPTH 12" 12"	- #4 - #5 - #5 - #5 - #5 - #5 - #5 - #5 - #5	1'-6" 2'-0" 2'-6" 2'-6" ETE SPO RCING CROS E LENGTH 2'-6" 3'-6"	48" 14" 14" 12" 12" 14 T FOOTI SWISE SPACING EQ EQ	3 3 4 ING S(REI No. 3 4	#4 #5 #5 #5 #5 CHEDI INFORCIN SIZE I #5 #5	CONT CONT CONT CONT CONT CONT CONT CONT		RCE TOP AND BOTTOM RCE TOP AND BOTTOM COMMENTS		3. SEE GENERAL STF		TYPE "B" E WALL, WHERE SEE PLAN	₹	<u>түре " (</u>		
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FC2.5 FC3.0A FC3.0A FC4.0 FS4.0 FS4.0 FS4.0 FS4.5 FS5.0	2 - 0 2' - 6" 3' - 0" 4' - 0" 4' - 0" 4' - 6" 5' - 0"	LENGTH 3'-0" 4'-6" 5'-0"	12" 12" 12" 14" 14" 12" 12" 12" 12" 12" 12"	- #4 - #5 - #5 - #5 	1'-6" 2'-0" 2'-6" 2'-6" 3'-6" ETE SPC RCING CROS E LENGTH 2'-6" 3'-6" 4'-0" 4'-6"	48" 14" 14" 12" 12" 12" 12" 12" 12" 12" 12	3 3 4 1NG S REI No. 3 4 4 5	#4 #5 #5 #5 #5 #5 #5 #5 #5	CONT CONT CONT CONT CONT CONT CONT CONT	EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ E	RCE TOP AND BOTTOM RCE TOP AND BOTTOM COMMENTS		3. SEE GENERAL STF		E WALL, WHERE SEE PLAN				
FC2.5 FC3.0A FC4.0 FC4.0 FS3.0 FS4.0 FS4.0 FS4.5 FS5.0 FS5.0 FS6.0	2 - 0 2' - 6" 3' - 0" 4' - 0 WIDTH 3' - 0" 4' - 0" 4' - 0" 4' - 0" 6' - 0"	LENGTH 3' - 0" 4' - 6" 5' - 0" 6' - 0"	12" 12" 14" 14" 14" 12" 12" 12" 12" 12" 12" 12" 12	- #4 - #5 - #5 - #5 - #5 - #5 #5 	1' - 6" 2' - 0" 2' - 6" 2' - 6" 2' - 6" ETE SPO RCING CROS E LENGTH 2' - 6" 3' - 6" 4' - 0" 4' - 6" 5' - 6"	48" 14" 14" 12" 12" 14" 12" 14" 12" 14" 12" 14" 12" 14" 12" 14" 12" 14" 12" 14" 12" 14" 14" 12" 14" 14" 14" 14" 14" 14" 14" 14	3 3 4 ING S(REI No. 3 4 4 5 6	#4 #5 #5 #5 #5 ECHEDI INFORCIN SIZE I #5 #5 #5 #5 #5 #5	CONT CONT CONT CONT CONT CONT CONT CONT	EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ EQ E	CE TOP AND BOTTOM RCE TOP AND BOTTOM COMMENTS		3. SEE GENERAL STF		TYPE "B" E WALL, WHERE SEE PLAN	₹ 4 4 4 4 4 4 4 4 4 4 4 4 4	TYPE " C		
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4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS. 5. SOME SCHEDULED FOOTINGS MAY NOT BE USED, SEE FOOTING AND FOUNDATION PLAN FOR FOOTING MARKS.

CONCRETE FOOTING SCHEDULE (C4000-S3000)

		CON	CRET	E RE	INFO	RCIN	G BA	r laf	P SP	LICE	SCH	IEDU	JLE			
	f'c = 3000psi & f'c = 3500 psi				f'c = 4	f'c = 4000psi & f'c = 4500 psi				f'c = 5000psi				f'c = 6	000psi	
	REG	ULAR	т	OP	REG	ULAR	т	OP	REG	JLAR	т)P	REGULAR CLASS		TOP CLASS	
BAR SIZE	CL	ASS	CL	ASS	CL	ASS	CL	ASS	CL	ASS	CL	ASS				
	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
#3	17"	22"	22"	28"	15"	19"	19"	24"	13"	17"	17"	22"	12"	16"	15"	20"
#4	22"	29"	29"	37"	19"	25"	25"	32"	17"	22"	22"	29"	16"	20"	20"	27"
#5	28"	36"	36"	47"	24"	31"	31"	40"	22"	28"	28"	36"	20"	26"	26"	33"
#6	33"	43"	43"	56"	29"	37"	37"	48"	26"	33"	33"	43"	24"	31"	31"	40"
#7	48"	63"	63"	81"	42"	54"	54"	70"	37"	49"	49"	63"	34"	44"	44"	58"
#8	55"	72"	72"	93"	48"	62"	62"	80"	43"	56"	55"	72"	39"	51"	51"	66"
#9	62"	81"	81"	105"	54"	70"	70"	91"	48"	63"	63"	81"	44"	57"	57"	74"
#10	70"	91"	91"	118"	61"	79"	79"	102"	54"	70"	70"	91"	50"	64"	64"	83"
#11	78"	101"	101"	131"	67"	87"	87"	113"	60"	78"	78"	101"	55"	71"	71"	93"

TABULATED VALUES ARE FOR CASE 1 REINFORCEMENT, WHERE THE REQUIREMENTS OF TABLE BELOW ARE MET. WHERE THESE CONDITIONS ARE NOT MET, MULTIPLY THE LAP LENGTHS (^{fd}) BY 1.5.

REQUIF	REQUIREMENT FOR CASE 1 LAP LENGTHS db = BAR								
BAR CLEAR SPACING	CLEAR COVER	STIRRUPS OR TIES							
>=db	>=db	>=CODE FOR MINIMUM THROUGHOUT ^{fd}							
>=2db	>=db	NO REQUIREMENT							
CONCRETE REINFORCI 1. THIS SCHEDULE SH 2. CLASS 'A' SPLICES I	NG BAR LAP SPLIC ALL BE USED FOR MAY BE USED ONL	ZE NOTES: ALL BAR SPLICES IN CONCRETE WALLS, UNLESS NOTED OTHERWISE. Y IN CASES WHERE 50% OR LESS OF THE BARS ARE SPLICED WITHIN TH	E LAP SPLICE LENGTH.						

3. CLASS 'B' SPLICES SHALL BE USED FOR ALL SPLICES UNLESS THE REQUIREMENTS OF NOTE No. 2 ABOVE ARE MET. 4. TIES AND STIRRUPS SHALL NOT BE SPLICED.

5. DO NOT SPLICE VERTICAL BARS IN RETAINING WALLS UNLESS SPECIFICALLY SHOWN. 6. THE VALUES TABULATED IN SCHEDULE ARE FOR GRADE 60 REINFORCING BARS. FOR GRADE 75, MULTIPLY LAP LENGTHS BY 1.25 AND FOR GRADE 80, MULTIPLY BY 1.33. 7. THE VALUES TABULATED IN SCHEDULE ARE MINIMUM REQUIREMENTS. LONGER LENGTHS MAY BE USED FOR CONSTRUCTIBILITY.

8. LAP SPLICES ARE NOT ALLOWED FOR BARS GREATER THAN #11 BAR. THE LENGTHS IN SCHEDULE ARE FOR TENSION DEVELOPMENT LENGTH. 9. TOP BARS ARE CLASSIFIED AS HORIZONTAL BARS WHERE 12", OR MORE, OF FRESH CONCRETE IS CAST BELOW THE REINFORCING BAR.

10. FOR EPOXY-COATED OR ZINC AND EPOXY DUAL-COATED BARS WITH CLEAR COVER < 3db OR CLEAR SPACING <6db , MULTIPLY LAP LENGTHS BY 1.5. FOR ALL OTHER CASES MULTIPLY BY 1.2 11. FOR LIGHT WEIGHT CONCRETE, MULTIPLY LAP LENGTHS BY 1.33 UNLESS THE AVERAGE SPLITTING TENSILE STRENGTH (Fct) IS SPECIFIED. FOR LIGHT WEIGHT CONCRETE WHERE Fct IS SPECIFIED, REFER TO ACI318-14 SECTION 19.2.4.3 12. SPLICES FOR BUNDLED BARS:

- A. FOR BUNDLED BARS OF THREE OR LESS, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.2. B. FOR BUNDLED BARS OF FOUR OR MORE, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.33.C. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.
- D. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED. 13. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

CONCRETE REINFORCING 01

CONCRETE WALL SCHEDULES									
		R	EINFORCING						
MARK	THICKNESS	VERTICAL	HORIZONTAL	TOP AND BOTTOM	WALL TYPE	COMMENTS			
CW-8A	8"	#4 AT 16" O.C.	#4 AT 12" O.C.	(1) #4	A				
CW-8B	8"	#4 AT 32" O.C. (NOTE 2)	#4 AT 12" O.C.	(1) #4	A				
CW-8C	8"	VERTICAL MASONRY DOWELS	#4 AT 12" O.C.	(1) #4	A				
CW-8D	8"	VERTICAL MASONRY DOWELS	#4 AT 12" O.C.	(1) #4	A				
CW-10B	10"	4# AT 24" O.C. (NOTE 2)	#5 AT 15" O.C.	(1) #5	A				
CW-14A	14"	#4 AT 32" O.C. I.F. (NOTE 2) #4 AT 16" O.C. O.F.	#4 AT 12" O.C. E.F.	(2) #4	A				

CONCRETE FOUNDATION WALL NOTES: 1. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

2. STAGGER CONCRETE VERTICAL REINFORCING WITH MASONRY VERTICAL DOWELS. NET SPACING OF VERTICAL REINFORCING SHALL BE SPECIFIED SPACING DIVIDED BY HALF.

WALLS NO	OT DESIGNATED IN PLAN
THICKNESS	REINFORCING

THICKNESS	VERTICAL	HORIZONTAL			
6"	#4 BARS AT 18" O.C.	#4 BARS AT 16" O.C.			
8"	#4 BARS AT 18" O.C.	#4 BARS AT 12" O.C.			
10"	#4 BARS AT 16" O.C.	#5 BARS AT 15" O.C.			
12"	#4 BARS AT 18" O.C. E.F.	#4 BARS AT 16" O.C. E.F.			

WALL REINFORCING PLACEMENT TYPES:

ABBREVIATIONS: EACH FACE E.F. INSIDE FACE I.F.

OUTSIDE FACE O.F.

(4) CONCRETE PIER SCHEDULE

STANDARD ADHESIVE EMBEDMENT SCHEDULE								
REBAR DOWEL (THREADED ROD SIZE)	MIN EMBEDMENT INTO CONCRETE OR GROUTED MASONRY							
#3 (3/8")	3 3/8"							
#4 (1/2")	4 1/2"							
#5 (5/8")	5 5/8"							
#6 (3/4")	6 3/4"							

HOLE PREPARATION. PROVIDE A 3" MINIMUM EDGE DISTANCE TO CENTER OF HOLE.
 CONTACT STRUCTURAL ENGINEER IF MINIMUM EMBEDMENTS INDICATED ABOVE ARE NOT ACHIEVABLE. 5. SEE "POST INSTALLED ANCHORS" SECTION OF GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

STANDARD ADHESIVE EMBEDMENT NOTES: 1. SPECIFIC EMBEDMENTS, NOTES AND DETAILS IN DRAWINGS SHALL GOVERN OVER THIS SCHEDULE.

2. HOLE DIAMETER SHALL BE DOWEL/ROD DIAMETER PLUS 1/8". FOLLOW MANUFACTURER'S INSTRUCTIONS FOR

5 STANDARD ADHESIVE EMBEDMENT SCHEDULE

				•••••			
	BEA	M	SIZE	REI	NFORCING		
3D	Н	X	W	LENGTHWISE	TIES	TYPE	COMMENTS
GB-18A	18"		12"	(6) #6	(2) #3 TIES AT 6" O.C.	A	

CONCRETE GRADE BEAM NOTES: 1. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

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Architecture Interior Design Landscape Architecture Land Planning Construction Management 7927 So. Highpoint Parkway, Suite 300 Sandy, Utah 84094 ph. 801.269.0055 fax 801.269.1425 www.thinkaec.com The designs shown and described herein including all technical drawings, graphic representation & models thereof, are proprietary & can not be copied, duplicated, or commercially exploited in whole or in part without the sole and express written permission from THINK Architecture, inc. These drawings are available for limited review and evaluation by clients, consultants, contractors, government agencies, vendors, and office

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BHB PROJECT NO. 230074 DATE: APRIL 15, 2024 **REVISIONS:**

NO SCALE

	METAL STUD SHEARWALL WITH WOOD SHEATHING SCHEDULE												
	WALL FRAMING						WALL SHEATHING						
MARK	METAL STUDS	TOP TRACK	BOTTOM TRACK	BOTTOM TRACK FASTENERS	THICKNESS	SCREW SIZE	EDGE FASTENER	FIELD FASTENER	COMMENTS				
MSW-6A	600S162-43 AT 16" O.C.	600T125-54	600T125-54	5/8" 🗆 x 4" AT 32" O.C.	7/16"	#8	6" O.C.	12" O.C.					
METAL STUD 1. BOTTO 2. SCREW 3. SCREW	ETAL STUD SHEARWALL NOTES: BOTTOM TRACK FASTENERS TO BE CONCRETE SCREW ANCHOR OR CONCRETE WEDGE ANCHOR SUITABLE FOR CRACKED CONCRETE. SCREWS SHALL HAVE A MINIMUM HEAD DIAMETER OF .292", IN ACCORDANCE WITH SAE J78.												

SCREWS SHALL PENETRATE THROUGH FRAMING MEMBER WITH AT LEAST THREE THREADS. STUDS SHALL BE A MINIMUM OF 1.5/8" WIDE WITH A 3/8" MINIMUM RETURN LIP. TRACKS SHALL BE A MINIMUM OF 1.1/4" WIDE.

FOR STUD AND TRACK THICKNESSES GREATER THAN 43 MIL. USE Fy=50 KSI STEEL, OTHERWISE USE Fy=33 KSI STEEL. HORIZONTAL BLOCKING SHALL BE PROVIDED AT 4'-0" O.C. MAX.

SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS. 9. WEB PUNCH OUTS LESS THAN 1'-0" AWAY FROM EITHER END OF STUD SHALL BE REINFORCED PER DETAIL 5/S522.

EDGE FASTENERS, TYP

METAL STUD SHEARWALL WITH WOOD SHEATHING SCHEDULE [ELEVATION VIEW]

METAL STUD HOLDOWN SCHEDULE									
SIMPSON HOLDOWN	BOUNDARY MEMBER	BOUNDARY MEMBER FASTENERS	DETAIL	COMMENTS					
S/HDU4	(2)600S162-54	(6)#14 SCREWS	20/S521	-					
	-								

HOLDOWN NOTES: 1. ALL HOLDOWNS SPECIFIED ARE "SIMPSON - STRONG TIE", SEE GENERAL STRUCTURAL NOTES FOR SUBSTITUTIONS.

2. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

METAL STUD HOLDOWN SCHEDULE

NO SCALE

NO SCALE

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BHB PROJECT NO. 230074 DATE: APRIL 15, 2024 **REVISIONS:**

2 MASONRY LINTEL SCHEDULE

7. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING. 8. DOWEL VERTICAL REINFORCING OF WALL ABOVE LINTEL INTO THE FULL DEPTH OF LINTEL OR 48 BAR DIAMETERS, WHICHEVER IS LESS.

5. EXTEND ALL HORIZONTAL REINFORCING 48 BAR DIAMETERS MINIMUM BEYOND THE EDGE OF ALL OPENINGS. IF HORIZONTAL REINFORCING CANNOT EXTEND 48 BAR DIAMETERS BEYOND EDGE OF OPENING, PROVIDE 90° STANDARD HOOK. 6. SPLICE TOP BARS AT MIDSPAN OF LINTEL ONLY AND BOTTOM BARS OVER SUPPORTS ONLY.

I. LINTEL WIDTH AND MATERIAL TYPE SHALL BE THE SAME AS THE WALL IN WHICH THE LINTEL IS CONSTRUCTED.

- SPAN GREATER THAN 10'-0". 4. MASONRY LINTELS ML-8A, ML-16A, ML-24A, AND ML-32A SHALL NOT BE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS UNLESS NOTED OTHERWISE ON THE PLANS. JOISTS SHALL NOT BEAR ON ANY LINTEL LESS THAN 16" DEEP. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SHOWN ON THE PLANS WHICH ARE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS.
- 2. GROUT MASONRY LINTELS MONOLITHICALLY WITH THE SUPPORT WALL OR COLUMN AT EACH END. 3. MASONRY LINTELS ML-8A, ML-16A, ML-24A, AND ML-32A SHALL BE USED OVER OPENINGS IN MASONRY WALLS WHEN A SPECIFIC MASONRY LINTEL IS NOT OTHERWISE SPECIFIED. WHEN A LINTEL IS SPECIFIED ON THE PLANS, THE MAXIMUM SPAN AS NOTED IN THIS SCHEDULE SHALL NOT APPLY. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SPECIFIED ON THE PLANS WHICH HAVE A

Maule	Donth	امما يرامم مامم مرا ا		-	Commonto
Wark	Deptn	Openings	Horizontal	Stirrups	Comments
ML-16A	16"	4'-0"	(1) #6 x CONT TOP AND BOTTOM	NONE	
ML-24A	24"	4'-0"	(1) #6 x CONT TOP AND BOTTOM	#4 AT 8" O.C.	
ML-32A	32"	8'-0"	(1) #7 x CONT TOP AND BOTTOM	#4 AT 8" O.C.	
ML-40A	40"	8'-0"	(1) #7 x CONT TOP AND BOTTOM	#4 AT 8" O.C.	
1 ML-40B		16'-0"	(5) #7 x CONT	#4 AT 8" O.C.	
ML-48A	48"	8'-0"	(1) #7 x CONT TOP AND BOTTOM	#4 AT 8" O.C.	
ML-56A	56"	14'-0"	(1) #7 x CONT TOP AND BOTTOM	#4 AT 8" O.C.	

MASONRY WALL SCHEDULE

MASONRY LINTEL NOTES:

INDICATES SCHEDULED MASONRY WALL, PIER,

----- INDICATES ADDITIONAL REINFORCING AS

REQUIRED PER MASONRY WALL SECTION

INDICATES LENGTH OF WALL SECTION

INDICATES HEIGHT OF WALL SECTION

OR LINTEL REINFORCING

REINFORCING TABLE

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(1) CONT BAR AT BASE OF										-	/			\backslash													$\overline{\mathbf{X}}$	- REINFORCING PER TABLE
WALL OPENINGS TO MATCH	H	₽																								k _∔	4	RELOW
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HEIGHT OR LENGTH

H OR L < 4'-0"

4'-0" < H OR L < 6'-0"

6'-0" < H OR L < 8'-0"

8'-0" < H OR L < 10'-0"

10'-0" < H OR L < <u>12</u>'-0"

H OR L > 12'-0"

1. ADDITIONAL VERTICAL AND HORIZONTAL

INDICATED IN TABLE ABOVE.

REINFORCING SHALL MATCH BAR SIZE OF

2. WHERE 8" SPACING IS REQUIRED, #3 BAR MAY BE

USED FOR HORIZONTAL REINFORCING.

SCHEDULED WALL REINFORCING AT SPACING

NOTES:

MAXIMUM SPACING

8" O.C.

24" O.C.

32" O.C.

40" O.C.

48" O C

16" O.C.

HORIZONTAL REINFORCING AT DECK/FLOOR BEARING, SEE DETAILS

MASONRY WALLS NOT DESIGNATED IN PLAN REINFORCING HORIZONTAL HORIZONTAL HICKNES VERTICAL (NOT SOLID GROUTED) (SOLID GROUTED) #4 AT 48" O.C. #4 AT 24" O.C. #5 AT 32" O.C. #5 AT 32" O.C. #5 AT 48" O.C. #4 AT 24" O.C. 8" 10" #5 AT 24" O.C. #6 AT 48" O.C. #5 AT 24" O.C.

(2) #5 AT 48" O.C.

8. HORIZONTAL WALL REINFORCING SHALL BE PLACED BETWEEN DOUBLE LAYER OF VERTICAL MASONRY REINFORCING, WHERE OCCURS.

11. IN CONCRETE FOUNDATION WALL BELOW, ALTERNATE VERTICAL CONCRETE WALL REINFORCING WITH VERTICAL MASONRY REINFORCING.

#5 AT 24" O.C.

4. SOLID GROUT ALL MASONRY COURSES BELOW GRADE.

TABLE BELOW FOR LOCATIONS WHERE TIGHTER SPACING IS REQUIRED.

5. SINGLE LAYER OF VERTICAL REINFORCING SHALL BE CENTERED IN WALL (UNO).

7. PROVIDE TWO VERTICAL BARS (MIN) AT ALL CORNERS AND END OF WALLS.

OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.

12. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

2. COORDINATE WALL FINISHES, MATERIALS, COURSING, ETC. WITH ARCHITECTURAL DRAWINGS.

WALL REINFORCING SHALL DOWEL 3'-0" MINIMUM INTO THE FOUNDATION WALL (UNO).

10. SEE DETAILS 10/S501 FOR WHERE HORIZONTAL REINFORCING TERMINATES AT EDGE OF OPENINGS.

3. DO NOT SOLID GROUT WALLS UNLESS REQUIRED BY SCHEDULE, NOTES, OR DETAILS.

MASONRY WALL NOTES:

MASONRY WALL SCHEDULE										
MARK THICK	TUICKNESS		SOLID	TYPICAL REINFORG	CING (SEE NOTE 1)	COMMENTS				
	THURNESS		GROUT	VERTICAL	HORIZONTAL	COMMENTS				
MW-8A	8"	SEE ARCH	YES	#5 AT 24" O.C.	#4 AT 24" O.C.	SEE NOTE 11				
MW-8B	8"	SEE ARCH	YES	#4 AT 8" O.C.	#3 AT 8" O.C.	SEE NOTE 11				
MW-8C		SEE ARCH	- XES	#5AU8"06		SEE NOIE 41				
MW-8D	8"	SEE ARCH	YES	#5 AT 24" O.C.	#5 AT 16" O.C.	SEE NOTE 11				
MW-10A		SEE ARCH		#5 AT 18" O.C.	₩ <u>₩5₩724"0.0.</u>	SEENOTE 11				

1. SPACING OF MASONRY WALL REINFORCING SHALL NOT EXCEED TYPICAL SCHEDULED REINFORCING. SEE ELEVATION AND MASONRY WALL SECTION REINFORCING

6. VERTICAL REINFORCING SHALL EXTEND INTO FOOTINGS AND TERMINATE WITH STANDARD HOOK. FOR CONCRETE FOUNDATION WALLS 4'-0" OR TALLER, VERTICAL

9. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING

(2) #4 AT 24" O.C.

MASONRY REINFORCING LAP SPLICE SCHEDULE									
	8" MAS	SONRY	10" MA	SONRY	12" MASONRY				
BAR SIZE	(1) BAR PER CELL	(2) BARS PER CELL	(1) BAR PER CELL	(2) BARS PER CELL	(1) BAR PER CELL	(2) BARS PER CELL			
#3	12"	12"	12"	12"	12"	12"			
#4	13"	21"	12"	20"	12"	20"			
#5	20"	35"	16"	32"	13"	32"			
#6	38"	SEE NOTE 1	29"	60"	24"	60"			
#7	52"	SEE NOTE 1	40"	SEE NOTE 1	33"	63"			
#8	SEE NOTE 1	SEE NOTE 1	61"	SEE NOTE 1	50"	SEE NOTE 1			
NOTES						2018 IBC			

1. WHERE INDICATED, USE MECHANICAL SPLICE COUPLER. SEE GSN FOR REQUIREMENTS. 2. WHERE VERTICAL BARS HAVE A SPECIFIED LAP SPLICE GREATER THAN THE HEIGHT OF THE GROUT POUR, USE MECHANICAL SPLICE COUPLER.

SONRY REINFORCING LAP SPLICE SCHEDULE (f'm=2000psi)

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(3)	
SCHED_MAS_	_REINF=01

	MASONRY PIER SCHEDULE											
MARK	SIZE	VERTICAL REINFORCING	VERTICAL REINFORCING SCHEMATIC	COMMENTS								
MP-16A	WT x 16"	(2) #5										
MP-16B	WT x 16"	(4) #5										
MP-24A	WT x 24"	(3) #5										
MP-32A	WT x 32"	(4) #5										
MP-32B	WT x 32"	(8) #5										
MP-40B	WT x 40"	(10) #5										
MP-48B	WT x 48"	(12) #5										
MP-56A	WT x 56"	(7) #4										
MP-64A	WT x 64"	(8) #5										
MP-64B	WT x 64"	(16) #5										

MASONRY PIER NOTES: SEE MASONRY WALL SCHEDULE FOR HORIZONTAL REINFORCING REQUIREMENTS FOR ALL PIERS. 2. VERTICAL REINFORCING AND TIES SHALL EXTEND FULL HEIGHT OF WALL (UNO).

3. VERTICAL MASONRY PIER REINFORCING SHALL EXTEND INTO THE FOOTING AND TERMINATE WITH A STANDARD 90° HOOK. FOR CONCRETE FOUNDATION WALLS 4'-0" OR TALLER, VERTICAL PIER REINFORCING SHALL DOWEL 3'-0" MINIMUM INTO THE FOUNDATION WALL (UNO).

4. IN CONCRETE FOUNDATION WALLS, VERTICAL REINFORCING AT TYPE 'B' MASONRY PIERS SHALL BE TIED WITH #3 TIES AT TOP AND BOTTOM OF FOUNDATION WALL, SEE DETAILS. 5. HORIZONTAL REINFORCING OF ADJACENT WALLS SHALL RUN CONTINUOUS THROUGH MASONRY PIERS.

6. WHERE HORIZONTAL REINFORCING TERMINATES AT PIER, PROVIDE 180° HOOK, SEE SCHEMATICS BELOW. 7. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

8. PROVIDE #3 TIES AT 8" O.C. WHERE MASONRY PIERS SUPPORT GIRDER TRUSSES.

CONI	NECTION SC	HEDULE
BEAM DEPTH	EMBED PLATE	ANCHORS
W10	PL 1/2"x16"x1'-0"	(3) ROWS OF (2) 3/4"DIA x 5" HSA ((6) TOTAL)
W12, W14	PL 1/2"x21"x1'-0"	(4) ROWS OF (2) 3/4"DIA x 5" HSA ((8) TOTAL)
W16	PL 1/2"x27"x1'-0"	(5) ROWS OF (2) 3/4"DIA x 5" HSA ((10) TOTAL)
W18	PL 1/2"x27"x1'-9"	(5) ROWS OF (3) 3/4"DIA x 5" HSA ((15) TOTAL)
W21	PL 1/2"x33"x1'-9"	(6) ROWS OF (3) 3/4"DIA x 5" HSA ((18) TOTAL)
CONNECTION NOTI 1. ALL MASON ANCHORS S	<u>ES:</u> IRY CELLS WITH ANCHC SHALL BE GROUTED SO	ORS AND ADJACENT TO LID, TYP.

5 TYPICAL EMBED PLATE CONNECTION SCHEDULE FOR MASONRY WALLS

mun

NO SCALE

These drawings are available for limited review and evaluation by clients, consultants, contractors, government agencies, vendors, and office personnel only in accordance with this notice.

BHB PROJECT NO. 230074 DATE: APRIL 15, 2024 **REVISIONS:**

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FOOTING AND FOUNDATION PLAN NOTES

- COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. 2. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS,
- 3. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS. 4. ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO). 5. SEE DETAILS 1/S501 AND 2/S501 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND
- PERPENDICULAR TO FOOTINGS. 6. SEE DETAIL 6/S501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE. 7. SEE DETAIL 8/S501 FOR SLAB REINFORCING WHERE CONTROL JOINTS ARE DISCONTINUOUS. 8. SEE DETAIL 9/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN CONCRETE WALLS.
- 9. SEE DETAIL 10/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS. 10. SEE DETAIL 11/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS. 11. SEE DETAIL 12/S501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS. 12. SEE DETAIL 13/S501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS. 13. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.

DATE: APRIL 15, 2024 REVISIONS:

	CONCRETE CONTINUOUS FOOTING SCHEDULE (FC)												
				R	EINFOR	CING CROS	SWISE	REINFORCING LENGTHWISE					
MARK	WIDTH	LENGTH	DEPTH	No.	SIZE	LENGTH	SPACING	No.	SIZE	LENGTH	SPACING		
FC2.0	2' - 0"	CONT	12"	-	#4	1' - 6"	48"	3	#4	CONT	EQ		
FC3.0	3' - 0"	CONT	18"	- #6 2'-6" 12" 3 #6 CONT									
				CON	ICRE ⁻	TE SPO	T FOOTI	NG S	CHE	DULE (F	S)		
				R	EINFOR	CING CROS	SWISE	RE	INFORC	ING LENGT	HWISE		
MARK	WIDTH	Length	DEPTH	No. SIZE		LENGTH	SPACING	No.	SIZE	LENGTH	SPACING		
FS7.0	7' - 0"	7' - 0"	18"	7	#6	6' - 6"	EQ	7	#6	6' - 6"	EQ		

CONCRETE FOOTING NOTES: 1. PLACE ALL FOOTING REINFORCING IN THE BOTTOM OF THE FOOTING WITH 3" CLEAR CONCRETE COVER (UNO). 2. TOP REINFORCING, WHERE OCCURS, SHALL BE PLACED IN THE TOP OF THE FOOTING WITH 2" MINIMUM CONCRETE COVER. 3. IF FOOTINGS ARE EARTH-FORMED, FOOTINGS SHALL BE 6" LONGER AND WIDER THAN SCHEDULED.

4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS. 5. SOME SCHEDULED FOOTINGS MAY NOT BE USED, SEE FOOTING AND FOUNDATION PLAN FOR FOOTING MARKS.

CONCRETE FOOTING SCHEDULE (C3000-S2000) 2" = 1'-0"

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		CON	CRET	E RE	INFO	RCIN	G BA	r laf	P SP	LICE	SCH	IEDL	JLE			
	f'c = 3	000psi 8	& f'c = 3	500 psi	f'c = 4		f'c = 5	000psi	f'c = 6000psi							
	IZE REGULAR TOP CLASS CLASS		OP	REGULAR TOP			REG	ULAR	ТОР		REG	JLAR	ТОР			
BAR SIZE			ASS	CL	ASS	CL/	ASS	CL	ASS	CL	ASS	CL	CLASS			
	Α	В	Α	В	Α	В	A	В	Α	В	Α	В	Α	В	Α	
#3	17"	22"	22"	28"	15"	19"	19"	24"	13"	17"	17"	22"	12"	16"	15"	2
#4	22"	29"	29"	37"	19"	25"	25"	32"	17"	22"	22"	29"	16"	20"	20"	2
#5	28"	36"	36"	47"	24"	31"	31"	40"	22"	28"	28"	36"	20"	26"	26"	3
#6	33"	43"	43"	56"	29"	37"	37"	48"	26"	33"	33"	43"	24"	31"	31"	4
#7	48"	63"	63"	81"	42"	54"	54"	70"	37"	49"	49"	63"	34"	44"	44"	5
#8	55"	72"	72"	93"	48"	62"	62"	80"	43"	56"	55"	72"	39"	51"	51"	6
#9	62"	81"	81"	105"	54"	70"	70"	91"	48"	63"	63"	81"	44"	57"	57"	7
#10	70"	91"	91"	118"	61"	79"	79"	102"	54"	70"	70"	91"	50"	64"	64"	8
#11	78"	101"	101"	131"	67"	87"	87"	113"	60"	78"	78"	101"	55"	71"	71"	9

TABULATED VALUES ARE FOR CASE 1 REINFORCEMENT, WHERE THE REQUIREMENTS OF TABLE BELOW ARE MET. WHERE THESE CONDITIONS ARE NOT MET, MULTIPLY THE LAP LENGTHS (^{fd}) BY 1.5.

REQUIF	REQUIREMENT FOR CASE 1 LAP LENGTHS								
BAR CLEAR SPACING	CLEAR COVER	STIRRUPS OR TIES							
>=db	>=db	>=CODE FOR MINIMUM THROUGHOUT ^{fd}							
>=2db	>=2db >=db NO REQUIREMENT								

CONCRETE REINFORCING BAR LAP SPLICE NOTES: 1. THIS SCHEDULE SHALL BE USED FOR ALL BAR SPLICES IN CONCRETE WALLS, UNLESS NOTED OTHERWISE. 2. CLASS 'A' SPLICES MAY BE USED ONLY IN CASES WHERE 50% OR LESS OF THE BARS ARE SPLICED WITHIN THE LAP SPLICE LENGTH.

- 3. CLASS 'B' SPLICES SHALL BE USED FOR ALL SPLICES UNLESS THE REQUIREMENTS OF NOTE No. 2 ABOVE ARE MET.
- 4. TIES AND STIRRUPS SHALL NOT BE SPLICED.
- THE VALUES TABULATED IN SCHEDULE ARE FOR GRADE 60 REINFORCING BARS. FOR GRADE 75, MULTIPLY LAP LENGTHS BY 1.25 AND FOR GRADE 80, MULTIPLY BY 1.33.
 THE VALUES TABULATED IN SCHEDULE ARE FOR GRADE 60 REINFORCING BARS. FOR GRADE 75, MULTIPLY LAP LENGTHS BY 1.25 AND FOR GRADE 80, MULTIPLY BY 1.33. 7. THE VALUES TABULATED IN SCHEDULE ARE MINIMUM REQUIREMENTS. LONGER LENGTHS MAY BE USED FOR CONSTRUCTIBILITY.
- 8. LAP SPLICES ARE NOT ALLOWED FOR BARS GREATER THAN #11 BAR. THE LENGTHS IN SCHEDULE ARE FOR TENSION DEVELOPMENT LENGTH. 9. TOP BARS ARE CLASSIFIED AS HORIZONTAL BARS WHERE 12", OR MORE, OF FRESH CONCRETE IS CAST BELOW THE REINFORCING BAR.
- 10. FOR EPOXY-COATED OR ZINC AND EPOXY DUAL-COATED BARS WITH CLEAR COVER < 3db OR CLEAR SPACING <6db , MULTIPLY LAP LENGTHS BY 1.5. FOR ALL OTHER CASES MULTIPLY BY 1.2 11. SPLICES FOR BUNDLED BARS:
- A. FOR BUNDLED BARS OF THREE OR LESS, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.2 B. FOR BUNDLED BARS OF FOUR OR MORE, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.33.
- C. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP. D. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.
- 12. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

2 CONCRETE REINFORCING BAR LAP SPLICE SCHEDULE

CONCRETE WALL SCHEDULES												
			REINFORCING									
MARK	THICKNESS	VERTICAL	HORIZONTAL	WALL TYPE		COMN						
CW-10A	10"	#4 AT 24" O.C.	#5 AT 15" O.C.	#5	A	SEE NOTE 2						

CONCRETE FOUNDATION WALL NOTES: 1. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS. 2. STAGGER CONCRETE VERTICAL REINFORCING WITH MASONRY VERTICAL DOWELS. NET SPACING OF VERTICAL REINFORCING SHALL BE SPECIFIED SPACING DIVIDED BY HALF.

WALLS NOT DESIGNATED IN PLAN

TUICKNESS	REINFORCING										
THICKNESS	VERTICAL	HORIZONTAL									
6"	#4 BARS AT 18" O.C.	#4 BARS AT 16" O.C.									
8"	#4 BARS AT 18" O.C.	#4 BARS AT 12" O.C.									
10"	#4 BARS AT 16" O.C.	#5 BARS AT 15" O.C.									
12"	#4 BARS AT 18" O.C. E.F.	#4 BARS AT 16" O.C. E.F.									

WALL REINFORCING PLACEMENT TYPES:

COMMENTS	
COMMENTS	

EPOXY DOWEL EMBED SCHEDULE										
Dowel Size	Min Embedment Into Existing Concrete									
#4	6.1/2"									
#5	7.1/2"									
#6	10"									
#7	1'-1"									
#8	1'-4"									

4 EPOXY DOWEL EMBED SCHEDULE

TYPE

Α

LENGTHWISE

(8) #6

MARK

CONCRETE GRADE BEAM NOTES:

GB-18A

BEAM SIZE

H X W

18" x 18"

1. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

CONCRETE GRADE BEAM SCHEDULE

TIES

(3) #3 TIES AT 6" O.C.

REINFORCING

6 CONCRETE GRADE BEAM SCHEDULE

		CC	NCRETE PIER SO	CHEDULE	
	PIER SIZE	REINF	ORCING		
MARK	W x L	VERTICAL	TIES	TYPE	COMME
CP-24A	24" x 24"	(8) #6	(3) #3 AT 8" O.C.	A	

CONCRETE PIER NOTES: 1. INSTALL (3) SETS OF TIES WITHIN TOP 5" OF ALL PIERS (UNO). 2. RUN HORIZONTAL CONCRETE WALL REINFORCING CONTINUOUS THROUGH PIER WHEN PIER IS POURED MONOLITHICALLY WITH CONCRETE WALL. 3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

CONCRETE PIER SCHEDULE 3/4" = 1'-0"

CRW	' FOOT	ING			CONCRETE RETAINING WALL SCHEDULE											
	DIMS						V		Н		Т		С		D	
MARK	'A'	TF	'B'	НТ	ΤW	SIZE	SPACE	COMMENTS								
CRW-10A	3'-0"	18"	5'-0"	9' - 4"	10"	#7	10"	#5	12"	#7	14"	#5	12"	#7	12"	

CONCRETE RETAINING WALL NOTES: 1. V' BARS SHALL NOT BE SPLICED BELOW MID-HEIGHT OF WALL.

2. PROVIDE VERTICAL CONTRACTION JOINTS AT 20'-0" O.C. MAXIMUM. SEE ARCHITECTURAL DRAWINGS AND GENERAL STRUCTURAL NOTES. 3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

COMMENTS

ENTS

801-355-5656

bhb@bhbengineers.com

DATE: APRIL 15, 2024 **REVISIONS:**

				Ν
			SOLI	D TYPICAL R
MARK	THICKNESS	MATERIAL	GROU	IT VERTICA
MW-10A	10"	CMU	No	#5 AT 24" O.0
	MAS	SONRY WA	ALLS N	OT DESIGNAT
				REINFORCING
	THICKNES	SVERTI	CAL	HORIZONTAL (NOT SOLID GROUT
	6"	#5 AT 32"	0.0	#4 AT 48" O C

#5 AT 32" O.C.

#5 AT 24" O.C.

#5 AT 24" O.C.

5. SINGLE LAYER OF VERTICAL REINFORCING SHALL BE CENTERED IN WALL (UNO).

4. SOLID GROUT ALL MASONRY COURSES BELOW GRADE.

8"

10"

12"

#5 AT 48" O.C.

#6 AT 48" O.C.

 PROVIDE TWO HORIZONTAL V HORIZONTAL V REINFORCING SEE DETAIL 13 IN CONCRETE SEE GENERAL 	VAL VAL OC /S5 FO ST	IL RE LL RE CUR 01 FC UND/ RUC	INF INF INF OR OR TUF	BAR For(For(The Whe On V Ral I	s (M Cing Cing San San Pall Noti	IN) A SHA IE C HOR BEL ES F	ALL B ALL C OUR: IZON LOW, OR A	e pl Ont Se, u Tal Alt	ACED INUE T JSE TH REINF(ERNAT FIONAL	S ANI BETW THRO E LAF ORCIN TE VE . REQ) Enl /EEN UGH RGER NG TE RTIC/ UIRE	DOF W DOUB MASOI REINF REINF RMIN/ AL COM MENTS	ALLS. LE LAY NRY LII ORCIN ATES A ICRET 5.	'ER C NTEL IG. IT ED E WA)f vef S. WH Ige of Ll Re
HORIZONTAL REINFORCING AT DECK/FLOOR BEARING, SEE DETAIL	s ⁻		\mathbb{Z}	Ň											
			Ì		Π	1								\Box	
MASONRY LINTEL, SEE							• <u> </u>								
MASONRY VERTICAL PIER REINFORCING, SEE PLAN AND SCHEDULE		,						OF	PEN	/	/	4 4 4		 	
														┙	
OPENINGS TO MATCH - HORIZTONAL WALL REINFORCING															
ADDITIONAL VERTICAL REINFORCING PER TABLE BELOW							T								
CONC FOUNDATION WALL, WHERE OCCURS, SEE		· ↓ ↓ ↓ · · · ↓ · · ·	× 4	(, ,) () () () () () () () ()	Δ', ' Υ			4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		4.4	₹`	× 4	,	· · · · · · · · · · · · · · · · · · ·	4 · · · · · · · · · · · · · · · · · · ·
CONCRETE FOOTING, SEE		(A Þ	4	, , , , , , , , , , , , , , , , , , ,		-	, 'A	ά.	4	· · · · ·			۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲	À. N	× 4
						Γ	M	٩F	RKS	S A	٨N	DS	SYN	ME	30
										 (NDIC Or Li	ATES S NTEL F	SCHED	ULE[)RCIN) MAS Ig

MARKS	AND SYMBOL
	INDICATES SCHEDULED MASC OR LINTEL REINFORCING
	INDICATES ADDITIONAL REINF REQUIRED PER MASONRY WA REINFORCING TABLE
L	INDICATES LENGTH OF WALL
Н	INDICATES HEIGHT OF WALL S

1 MASONRY WALL SCHEDULE

2. WHERE 8" SPACING IS REQUIRED, #3 BAR MAY BE USED FOR

3. WHERE SPACING OF SCHEDULED WALL REINFORCING IS LESS

THAN TABLE ABOVE, SCHEDULED SPACING SHALL GOVERN.

HORIZONTAL REINFORCING.

		PIER	SIZE	
	MARK	'WT' x	L	F
	MP-16A		16"	
	MP-24B		24"	
	MP-48B		48"	
	MP-48x48A	48"	48"	
<u>M</u> 1 2 3 4 5 6 7	IASONRY PIER NOTES: SEE MASONRY WALL VERTICAL REINFORC FOUNDATION WALLS IN CONCRETE FOUNE FOUNDATION WALL, HORIZONTAL REINFO WHERE HORIZONTAL SEE GENERAL STRUC	SCHEDULE ING AND TIE PIER REINF 4'-0" OR TA AATION WAI SEE DETAIL REINFORC CTURAL NO	FOR HORIZG S SHALL EX ORCING SHA LLER, VERTICA S. ADJACENT W ING TERMINA TES FOR ADI	DNTAL RE TEND FUL LL EXTEN CAL PIER F L REINFO ALLS SHA ATES AT P DITIONAL F
V R H R M S	VERTICAL PIER REINFORCING			
		BE	ELOW OR AB	OVE OPEN
V			~	
R R M S	IORIZONTAL REINFORCING, SEE MASONRY WALL ICHEDULE	BE		OVE OPEN
(2)	MASONRY P 3/4" = 1'-0"	IER S	CHEDL	JLE

3 MASONRY LINTEL SCHEDULE

	Ν	ΛA
	8" MA	SO
BAR SIZE	(1) BAR PER CELL	(2)
#3	12"	
#4	13"	
#5	20"	
#6	38"	
#7	52"	

2018 IBC

MASONRY LIN	NTEL SCHEI	DULE NEV	V
REINFORCING			
HORIZONTAL	STIRRUPS	TYPE	COMMENTS
X CONT TOP AND BOTTOM	NONE	A	
X CONT TOP AND BOTTOM	#4 AT 8" O.C.	A	

MAXIMUM SPAN AS NOTED IN THIS SCHEDULE SHALL NOT APPLY. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SPECIFIED ON THE PLANS WHICH HAVE A SPAN GREATERTHAN 3'-4". 4. MASONRY LINTEL ML-8A SHALL NOT BE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS UNLESS NOTED OTHERWISE ON THE PLANS. JOISTS SHALL NOT BEAR ON ANY LINTEL LESS THAN 16" DEEP. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SHOWN ON THE PLANS WHICH ARE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS. 5. EXTEND ALL HORIZONTAL REINFORCING 48 BAR DIAMETERS MINIMUM BEYOND THE EDGE OF ALL OPENINGS. IF HORIZONTAL REINFORCING CANNOT EXTEND 48 BAR DIAMETERS BEYOND EDGE OF

7. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE

ASONRY REINFORCING LAP SPLICE SCHEDULE 10" MASONRY 12" MASONRY NRY) BARS PER CELL | (1) BAR PER CELL | (2) BARS PER CELL | (1) BAR PER CELL | (2) BARS PER CELL 16" - 13" SEE NOTE 1 60" 60" 24" SEE NOTE 1 SEE NOTE 1 63" 40" SEE NOTE 1 SEE NOTE 1 SEE NOTE 1 61" 50"

OUPLER. SEE GSN FOR REQUIREMENTS. 2. WHERE VERTICAL BARS HAVE A SPECIFIED LAP SPLICE GREATER THAN THE HEIGHT OF THE GROUT POUR, USE MECHANICAL SPLICE COUPLER.

Interior Design Landscape Architecture Land Planning Construction Managemen 7927 So. Highpoint Parkway, Suite 300 Sandy, Utah 84094 ph. 801.269.0055 fax 801.269.1425 www.thinkaec.com The designs shown and described herein including all technical drawings, graphic representation & models thereof, are proprietary & can not be copied, duplicated, or commercially exploited in whole or in part without the sole and express written permission from THINK Architecture, inc. These drawings are available for limited review and evaluation by clients, consultants, contractors, government agencies, vendors, and office personnel only in accordance with this notice. BHB STRUCTURAL 2766 South Main Street Salt Lake City, Utah 84115 801-355-5656 bhb@bhbengineers.com

BHB PROJECT NO. 230674 DATE: APRIL 15, 2024 **REVISIONS:**

4" HMA OVER 12" UTBC	CONTRACTION JOINTS AT 10' SPACING (MIN, DEPTH FOR SLIP FORM CUTS $1-1/2^{\circ}$) f_{0}°
WWF 6x6 - W1.4xW1.4 (OVERLAP 12" AND THE EVERY INTERSECTION, BOTH DIRECTIONS - TYP.) FINISHED GRADE 6" THICK CONCRETE 6" THICK ROADBASE	s" THICK "B" THICK "
REINFORCED BUILDING PAPER (STEGO WRAP 15-MIL VAPOR BARRIER – OR APPROVED EQUAL) REINFORCED CONCRETE APRON SECTION N.T.S.	NOTE: WHEN REPLACING CURB DUE TO CONSTRUCTION ACTIVITY, NEW CURB M EXTERND 5' BEYOND TRENCH ON EITHEN SPACING (MIN, DEPTH FOR SLIP FORM CUTS 1-1/2') 1-4" 1-4" 1-4"
$\begin{array}{c} & & & & \\ & & & & \\ AS \text{ APPROVED} & & & & \\ & & & & \\ & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & &$	B" THICK UTBC
8" THICK UTBC REQ'D I L#4 BARS @ 24" O.C. 5-#5 @ 1'-0" O.C. (TYP.) CROSS DRAIN SECTION	24" RELEASE CURB AND GUTTER SECTION
	* HAM OVER 12" UTEC Image: Control of the c

