



Westside Community Schools Request for Proposals – Precast Concrete Material Supply Westside High School October 6, 2025

Westside Community Schools is accepting proposals for Environmental Services at Westgate Elementary School building located at 7802 Hascall Street, Omaha, NE 68124 until October 16, 2025 at 3:00 PM (CDT).

All responses to the Request for Proposals for Environmental Services must be submitted to Matt Herzog, Westside Community Schools representative at the ABC Building, 909 South 76th Street, Omaha Nebraska 68114 via email to matt@project-advocates.com. Each response shall include one (1) electronic copy of the Bid.

Proposals will be evaluated by the District.

Questions or requests for clarification MUST be submitted in writing to Matt Herzog, Westside Community Schools representative, 909 South 76th Street, Omaha Nebraska 68114, and/or may be e-mailed directly to matt@project-advocates.com.

REQUEST FOR PROPOSALS FOR PRECAST CONCRETE MATERIAL SUPPLY

Westside Community Schools ("the District") is requesting proposals from interested Contractors for the PRECAST CONCRETE MATERIAL SUPPLY at Westside High School for the Westside Facilities Master Plan Phase II Implementation Program. Project Advocates has been retained by the District as the Owner Program Manager to implement Phase II of the 2015 Facilities Master Plan.

1 Project Scope

- 1.1 Supply of Architectural concrete precast
- 1.2 Shop Drawings
- 1.3 Patching of pick points permanently exposed to view
- 1.4 Repair of panels damaged during shipping
- 1.5 Wood blocking at openings within panels
- 1.6 Embed supply and design
- 1.7 Coordinate work with the Construction Manager that will be selected at a later date.

2 Project Schedule

- 2.1 The work associated with the project to be completed per the schedule below:
 - 2.1.1 Goal to award Construction Manager by December 9th, 2025
 - 2.1.2 Brick has been ordered with Endicott for an early February availability
 - 2.1.3 Precast ready for erection by March 16th, 2026
 - 2.1.4 Project Substantial Completion on July 1st, 2026

3 Request for Proposals Instructions

- 3.1 Proposing Contractors are requested to provide the following information as part of their Proposal: Please provide one (1) electronic copy of the Bid emailed to matt@project-advocates.com in PDF format.
- 3.2 The Proposal shall conform to the requirements as specified in this RFP.

4 Proposal Requirements

- 4.1 Insurance: Provide a copy of current standard general liability, auto, workers compensation, umbrella, and professional liability insurance coverage issued by your Contractor's carrier(s).
- 4.2 Material Payment and Performance Bond

5 Proposal Schedule

5.1 RFP distributed for responses October 6, 2025

5.2 Proposals due October 16, 2025 3:00 PM

5.3 Award of Contract November 3, 20255.4 Board Approval of Award November 3, 2025

6 Fee Proposal Breakdown

- 6.1 The proposal shall state a proposed lump sum fixed fee, which shall include all of the Contractor's expenses.
- 6.2 Contractor will be performing services and assuming project responsibilities as generally described in AIA A152-2019 with appropriate modifications and additions to ensure that the District fully discharges its responsibility in providing for facilities and the expenditure of public funds. A copy of the proposed contract modifications and additions is attached hereto as Attachment "B"

7 Selection Criteria and Process

- 7.1 The District will use the following criteria to rate the proposing Contractors:
 - 7.1.1 Demonstrated ability to meet schedule
 - 7.1.2 Capacity of proposing Contractor to provide resources necessary to meet schedule
 - 7.1.3 Fee

8 General Terms and Conditions

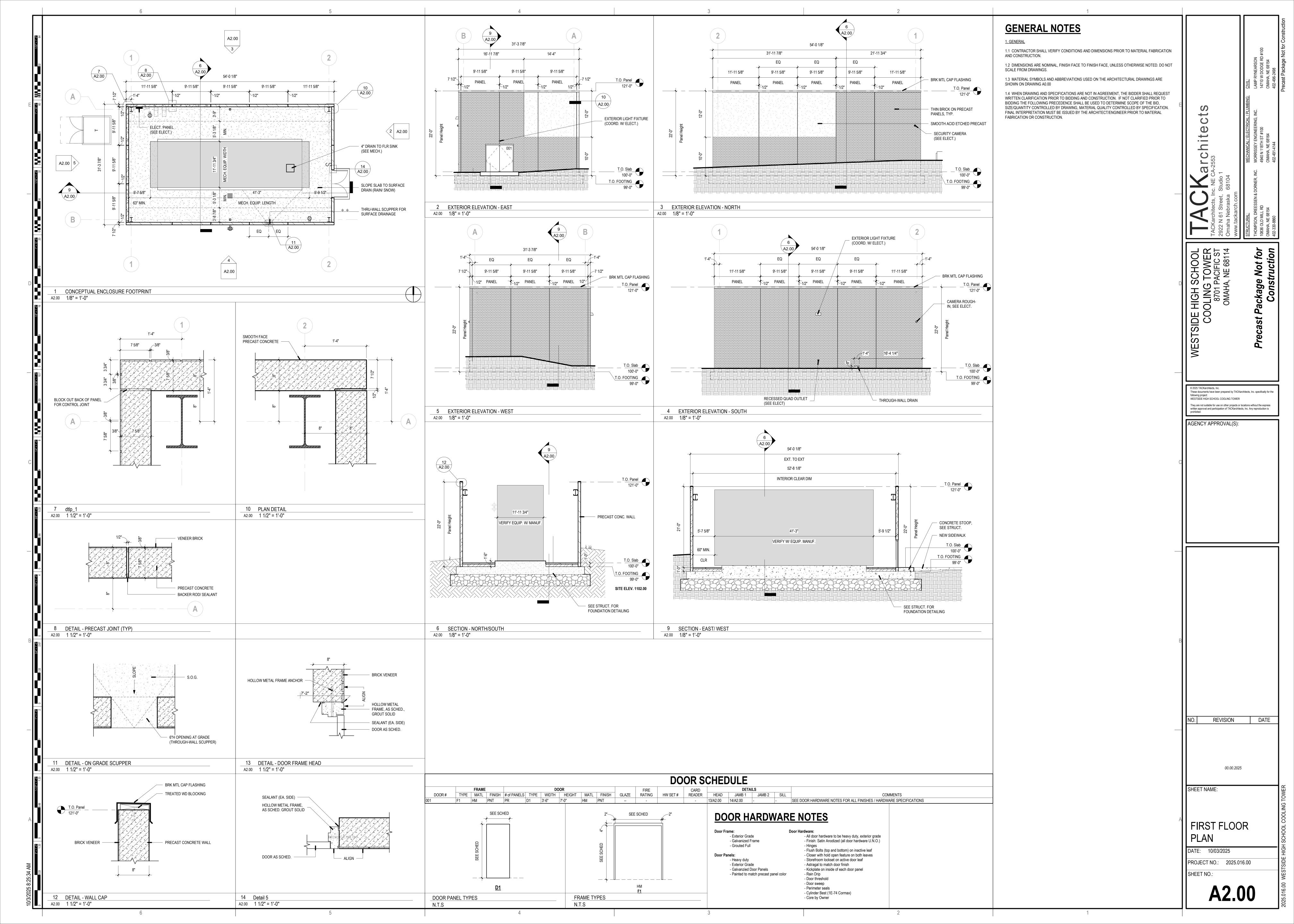
- 8.1 The District will be requiring the utilization of One Source background check/verification for all personnel on the project including sub trades and vendors. The cost for verification checks shall be included in the proposal.
- 8.2 Any proposal submitted after the time specified for receipt will not be considered and will be returned unopened.
- 8.3 No proposal may be altered, amended or withdrawn after the specified time for opening proposals.
- 8.4 By submitting a response to the RFP, the proposing Contractor and all of its Subcontracts agree to follow and comply with all District policies, regulations, written staff directives, and practices, as well as information management, purchasing, and accounting requirements.
- 8.5 Certification of Valid Licensure: To be considered responsive to the requirements of this Request for Proposals, all Contractors and their subcontractors shall provide verifiable evidence of the following:
 - 8.5.1 Release of References: Contractor and Subcontracts, for the Contractor and their employees, must affirmatively agree to the following:

"By submitting this response to the RFP, our company, and all employees thereof, individually and corporately, hereby release, discharge and agree to hold harmless the Westside Community School District, its board members, administrators, officers, employees, agents and contractors, and any third-parties who provide any information to the Westside Community School District, as well as any assignees, from any and all claims for damages for libel, slander, defamation, invasion of privacy, false light, tortious interference with business expectancy or any other claim based on any investigation of the background, references, credentials, history, experience and abilities of the submitting Contractor and their Subcontracts and any statements, comments, records, documents, or publications, not maliciously made, in any form, made by or received by the Westside Community School District, and any third-parties providing requested information about the Contractor and their Subcontracts' background, history, credentials and/or abilities to provide the services identified in this RFP."

8.6 The District reserves the right to reject any and all proposals, and to reject any proposals that are non-responsive or not responsive, and to waive technicalities and formalities.

ATTACHMENTS

- A- Precast Concrete Drawings and specifications Westside High School Cooling Tower prepared by TACK Architects and dated 10/3/2025
- B- AIA Documents A152-2019 with modifications



STRUCTURAL NOTES, GENERAL

1. CODE: References to the "code" in each section shall be as follows:

Building Code: IBC 2018 with local amendments Risk Category: Other Applicable Codes as Referenced in the Building Code:
Concrete Code: ACI 318, ACI 301 Concrete Code: Steel Code: AISC 360, Specification for steel buildings, AISC 341 Seismic Provisions Minimum Design Loads for Building:

2. STRUCTURAL DESIGN LOADS:

Ground Snow Load: 25 PSF Flat-Roof Snow Load (Pf): 20 PSF Rain on snow surcharge $C_{E} = 1.0$ Snow Exposure Factor: Thermal Factor: I = 1.0Importance Factor:

111 MPH Wind Speed (Ultimate): Exposure Category: Spectral Response Accelerations: $S_S = 0.076$; $S_1 = 0.045$

Site Class: $S_{DS} = 0.081 S_{D1} = 0.071$ Design Spectral Response Accelerations: Importance Factor: Seismic Design Category:

FOUNDATION DESIGN CRITERIA:

Foundation design based on the Report of Geothenical Exploration completed by TD2, Omaha, NE. dated September 29, 2025 [TD2 Job No.: 2421-171

- Mat Footings: 1,500 PSF

1. EXCAVATION AND BACKFILL:

- A. All earthwork operations shall be completed in accordance with the Report of Geothenical Exploration.
- B. Protect all excavations from damage due to water or freezing temperatures.
- C. Overexcavation subgrade shall be inspected and approved by the Geotechnical Engineer prior to
- D. Mat foundation subgrade shall be inspected and approved by the Geotechnical Engineer prior to placing concrete.
- E. See Civil Drawings for additional requirements.
- GENERAL NOTES:
- A. All work shall comply with requirements of the Building Code, with recommendations of manufacturers, and with recognized workmanship and material standards.
- B. Comply with all applicable codes, ordinances, and regulations including those promulgated and enforced by OSHA. The structural design represented by the drawings and specifications is based on interaction of the various components, materials, and systems shown or required by the drawings and specifications. The contractor shall determine the need for and provide all required bracing, shoring, or other means to ensure stability and safety until all work required by the contract documents is complete. When and where necessary to comply with these requirements, the contractor shall provide appropriate additional temporary or permanent connections, shoring, and/or bracing or, in the alternative, shall make appropriate modifications of specified connections and/or members. Where additions to or modifications of specified requirements are proposed, they shall be submitted to the Architect for review and approval. Such review and approval will be only for compliance with the structural and architectural design intent for the work. The adequacy for construction phase stability and safety is the responsibility of the contractor.
- C. Adapt requirements of details, sections, plans, and notes at all locations of which conditions are similar. D. The structural drawings are to be read in view of all other drawings and all specifications. Coordinate all
- work shown with all other work. E. Shop drawings for any part of the work shall show the interface with and provisions for related other
- work including such adaptations of requirements given as may be necessary. F. Contractor shall cross check dimensions and elevations between architectural, mechanical, and

structural plans and notify Architect of any variance before contractor begins work.

- 3. SPECIAL INSPECTION:
- A. Special Inspection in accordance with the Building Code will be performed per the special inspection
- B. Special Inspections shall be hired and paid for by the owner. Retest expenses for failed inspections will be charged to the contractor.
- C. The Contractor shall provide the Special Inspector sufficient notification to allow the required inspections to be made without delaying the construction schedule. The Contractor shall confirm that all inspections have been completed and approved by the Special Inspector prior to proceeding with Work.

PRECAST CONCRETE

PRECAST WALL PANELS:

A. GENERAL:

- 1. Wall thicknesses are shown on the drawings. See the architectural elevations and mechanical drawings for wall layout and joint details and opening locations. Provide joint locations specifically where noted on the drawings. Lateral tie backs shall occur at the floor and/or roof diaphragm. Connections to the bottom flange of the floor or roof beam shall be braced. Brace is to be designed by precast engineer.
- 2. All openings in walls whether cast in the panel or permitted to be made in the field shall be taken into consideration in the design and fabrication of wall panels. All openings shall be shown on the shop drawings. In general, openings shall be formed in the panel. Openings may be made in the field provided the procedures for making such openings are clearly noted on the shop drawings. The shop drawings shall be reviewed by the mechanical and electrical contractors to indicate that they have reviewed the opening sizes and locations required for their work.
- 3. Shop drawings and calculations signed and sealed by a professional engineer registered in the state where the project is located shall be submitted for all precast wall panels and connections.
- 4. Precast units shall be fabricated in a Plant certified in the appropriate product groups and categories by the Precast/Prestressed Concrete Institutes (PCI) Plant Certification Program.
- B. PRECAST CONCRETE WALL DESIGN CRITERIA:
- 1. The precast concrete supplier is responsible for the design of the wall panels and connections to resist all loads which act upon the panel. The panel design loads include but are not limited to the
- a. VERTICAL LOADS:
- 1. Weight of panel, weight of building materials supported by precast panel. 2. Load from structure bearing on and attached to the panels. Loads from beams are shown at the ends of beams on the plans in kips. Working gravity loads are provided on the
- b. LATERAL LOADS: Lateral support for walls is provided by foundation and steel girt at top of wall, and locations specifically described as a support on the structural plans and details.

1. Wind Loads: All wind loads indicated are <u>ultimate</u> unless otherwise noted.

- a. <u>In-plane wind loads</u>: Forces applied to the walls are shown on the plans thus: "WL:". Out-of-plane wind loads: Forces shall be calculated in accordance with ASCE 7
- 2. Earth Loads: All earth loads indicated are <u>unfactored</u> unless otherwise noted.
- a. Out-of-plane earth loads: 55 PCF acting inward; coordinate height of grade with civil
- c. FABRICATION & ERECTION FORCES
- d. TEMPERATURE AND SHRINKAGE FORCES

C. CONNECTIONS:

1. Connect all panels at their base with:

- a. A minimum of (2) connections per panel to the foundation or foundation wall. b. Provide a solid grout bed below the panel, U.N.O on the plan or in the details.
- 2. Connections are only shown schematically on the drawings with restricted dimensions and spacings noted. Unless noted otherwise on the drawings, each connection shall be considered "pinned" at the connection point shown on the details.
- 3. Galvanize embedded steel items that will be directly exposed to the weather or earth in the completed construction. Shop prime surfaces of embedded steel items which will be exposed to
- the weather during construction to prevent rust stains on architectural precast concrete.
- 4. Provide panel to panel connections as follows:
- a. Unless noted otherwise, connect panels together with a minimum of (2) connections per panel. More than (2) connection per panel may be used if required by precast design.

CAST-IN-PLACE CONCRETE WORK

1. MATERIALS:

Concrete:

Location:	28-Day Strength	Slump (*)	Max. Aggregate	Air Entrainment	Design Density
Footings and all other concrete not noted below.		4"-6"	1"	5%-7%	N.W.

(*) Slump may be increased as needed to make installation easier provided the increased slump is due to the use of proper admixture selection. All submitted concrete mixes shall indicate the use of such admixtures. Water may not be added in the field.

ASTM A706 Grade 60, deformed.

Other Materials: Reinforcing Bars: ASTM A615 Grade 60, deformed. Deformed Bar Anchors: ASTM A496, with a minimum tensile strength of 80 ksi. ASTM A1064, flat sheet type. Welded Wire Fabric: Anchor Bolts: ASTM F1554 [GR. 55] fully-threaded with hot-dipped galvanized finish placed in HILTI RE-500 V3 adhesive. Install per HILTI instructions.

CONTINUITY:

Weldable Reinforcing Bars:

All reinforcing shall be continuous unless noted otherwise. Continuity at corners and intersections shall be achieved using corner bars and contact lap splices; see typical detail. Continuity at other locations may be achieved using contact lap splices shown on approved shop drawings. Location of lap splices shall be shown on the shop drawings. Unless noted otherwise, the following lap splices shall be used: (All lap splices are class B splices)

4000 & 4500 PSI Concrete:

Mechanical connections may be used in lieu of lap splices provided approval is obtained from the Architect/Engineer. Connections shall develop in tension 125 percent of the specified yield strength of the bar. All mechanical connections shall be shown on the shop drawings and be installed in accordance with the manufacturer's written instructions and the product's ICC-ES report. Submit the product's ICC-ES report for mechanical splice products with shop drawings.

GENERAL:

- A. Coordinate work with all other work.
- B. All reinforcing shall be continous; see notes above. All reinforcing, anchor bolts, and other embedded items shall be secured in place prior to placing concrete.
- C. Construction joints shall be keyed joints, unless noted otherwise, with reinforcing continuous through the joint. Construction joints shall be located in a manner not to affect the strength of the concrete. Concrete on one side of construction joints shall not be placed less than 24 hours after placement of concrete on the opposite side of the construction joint.
- D. Straight dowels may be 'wet set' in plastic concrete and vibrated if continous special inspection is provided. Dowels with hooks must be secured before pouring concrete.
- E. Minimum clear cover from reinforcing to surfaces of concrete shall be as follows:
- 1. Concrete cast against and permanently exposed to earth: 3" 2. Concrete exposed to earth or weather: 1 1/2" (#5 and smaller) 2" (#6 and larger)
- 3. Concrete not exposed to weather or in contact with earth: 3/4" Clear distance between parallel bars in a layer shall be as shown on the plans with minimum of 2 1/2".
- 4. FOOTING WORK:
- A. Pipes and other work which require trenching adjacent to pad footings and parallel to continuous footings shall not be located below lines extending downward from the bottom edges of the footing at a 45-degree angle from the horizontal. Pipes and other work perpendicular to continuous footings may be located beneath the footing. Footing elevations may be lowered if approved on the footing shop
- 5. SLAB-ON-GRADE WORK:
- A. Coordinate slab-on-grade work with all other work. Provide thickened slabs, depressed slabs, equipment pads, blockouts, etc. as needed. See Arch. plans for elevations and locations.
- B. Saw cut control joints in slab to a depth equal to 1/3 the slab thickness.
- C. Slabs-on-grade Requirements U.N.O. on the plans:
- 1. Thickness: 4" Minimum
- Reinforcing: 6x6-W1.4xW1.4 W.W.F (flat sheet only; rolled sheet not permitted) 3. Control Joints: 10'-0"o.c. maximum each way, unless noted otherwise.
- D. Separate S.O.G. w/ 3/8" expansion joint material from all columns and walls. Differential movement could occur between foundations and slab-on-grade.

STRUCTURAL STEEL WORK

MATERIALS:

Wide Flange Beams and Tee Shapes: ASTM A992, Grade 50 ASTM A992, Grade 50 Channels: ASTM A572, Grade 50 ASTM A572, Grade 50 Plates and Bars: ASTM A500, Grade C Steel Tubes: Steel Pipes: ASTM A53. Type E or S. Grade B ASTM A108, Grade 1015 Headed Studs: Anchor Bolts: ASTM F1554 [Gr. 36], Headed Type, U.N.O. Non-High Strength Bolts: ASTM A307 ASTM F3125 [Gr. A325] bearing type connections, U.N.O. High Strength Bolts: Welding Electrodes:

ASTM A496, with a minimum tensile strength of 80 ksi. Deformed Bar Anchors: 2. STRUCTURAL STEEL:

A. All steel work shall comply with the Building Code and Steel Code.

- B. Provide structural steel work as shown on the drawings and submit shop drawings for the same. Where the design of members or connections are not specifically noted, provide such in accordance with the latest AISC specifications and submit the design with the shop drawings for approval.
- C. Steel shall be fabricated to achieve the elevations, slopes, and geometry shown on the Architectural and Structural Drawings. Structural steel shall provide a uniform surface for the attachment of metal deck.
- D. All structural steel shapes, plates, bolts, etc. exposed to weather shall be galvanized.
- 1. Touch-up all field welding work of galvanized members w/ ZRC Cold Galvanizing.
- E. All bolted connections shall be "snug-tight" unless noted otherwise on structural details.

2018 IBC TABLE 1705.6 REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS CONTINUOUS PERIODIC Verify materials below shallow foundations are adequate to achieve the design bearing capacity. Verify excavations are extended to proper depth and have reached proper material. Perform classification and testing of compacted fill materials. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared

	TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD	IBC REFERENCE
1.	Inspect reinforcement, including prestressing tendons, and verify placement.		Х	ACI 318 Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2.	Inspect anchors cast in concrete.		X	ACI 318: 17.8.2	
3.	Inspect anchors post-installed in hardened concrete members. (b) a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. b. Mechanical anchors and adhesive anchors not defined in 4.a.	X	Х	ACI 318: 17.8.2.4 ACI 318: 17.8.2	
4.	Verify use of required design mix.		Х	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
5.	Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	х		ASTM C172 ASTM C31 ACI 318: 26.4, 26.12	1908.10
6.	Verify maintenance of specified curing temperature and techniques.		Х	ACI 318: 26.5.3-26.5.5	1908.9
7.	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	ACI 318: 26.11.2	
8.	Inspect formwork for shape, location and dimensions of the concrete member being		Х	ACI 318: 26.11.1.2(b)	

For SI: 1 inch = 25.4 mm. (a) Where applicable, see also Section 1705.12, Special inspections for seismic resistance. (b) Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with 17.8.2 in ACI 318, or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

Inspection Tasks Prior to Welding	QC	QA
Welder qualification records and continuity records	Р	0
WPS available	Р	Р
Manufacturer certifications for welding consumables available	Р	Р
Material identification (type/grade)	0	0
Welder identifications system (1)	0	0
Fit-up of groove welds (including joint geometry) - Joint preperation - Dimensions (alignment, root opening, root face, bevel) - Cleanliness (condition of steel surfaces) - Backing type and fit (if applicable)	0	0
Fit-up of CJP groove welds of HSS T-, Y- and K-joints without backing (Including joint geometry) - Joint preparations - Dimensions (alignment, root opening, root face, bevel) - Cleanliness (condition of steel surfaces) - Tacking (tack weld quality and location)	Р	0
Configuration and finish of access holes	0	0
Fit-up of fillet welds - Dimensions (alignment, gaps at root) - Cleanliness (condition of steel surfaces) - Tacking (tack weld quality and location)	0	0
Check welding equipment	0	

2016 AISC 360 TABLE N5.6-1 Inspection Tasks Pri	ior to Bol	ting
Inspection Tasks Prior to Bolting	QC	QA
anufacturer's certifications available for fastener materials.	0	Р
steners marked in accordance with ASTM requirements.	0	0
rrect fasteners selected for the joint detail (grade, type, bolt length hreads are to be excluded from shear plane)	0	0
rrect bolting procedure selected for joint detail.	0	0
nnecting elements, including the appropriate faying surface ndition and hole preparation, if specified, meet applicable quirements.	0	0
e-installation verification testing by installation personnel observed d documented for fastener assemblies and methods used.	Р	0
otected storage provided for bolts, nuts, washers and other stener components.	0	0

Inpsection Tasks During Welding	QC	
Control and handling of welding consumables - Packaging - Exposure control	0	
No welding over cracked tack welds	0	
Environmental conditions - Wind speed within limits - Precipitation and temperature	0	
WPS followed - Settings on welding equipment - Travel speed - Selected welding materials - Shielding gas type/flow rate - Preheat applied - Interpass temperature maintained (min./max.) - Proper position (F, V, H, OH)	0	
Welding techniques - Interpass and final cleaning - Each pass within profile limitations - Each pass meets quality requirements	0	
Placement and installation of steel headed stud anchors	Р	T

Inspection Tasks During Bolting	QC	QA
ner assemblies, of suitable condition, placed in all holes and ers (if required) are positioned as required	0	0
prought to the snug-tight condition prior to the pretensioning tion	0	0
ner component not turned by the wrench prevented from g	0	0
ners are pretensioned in accordance with the RCSC fication progressing systematically from the most rigid point of the free edges	0	0

N5.6-2 Inspection Tasks D	uring Bol	ting	2016 AISC 360 TABLE N5.6-3 Inspection Tasks	After Bol
During Bolting	QC	QA	Inspection Tasks After Bolting	QC
ondition, placed in all holes and I as required	0	0	Document acceptance or rejection of bolted connections	Р
lition prior to the pretensioning	0	0		
the wrench prevented from	0	0		
ordance with the RCSC	0	0		

Welds cleaned

Crack prohibition

Weld profiles Weld size Undercut Porosity

Arc strikes

Repair activities

- Weld/base-metal fusion

· Crater cross section

Size, length and location of welds

Welds meet visual acceptance criteria

Backing removed and weld tabs removed (if required)

Document acceptance or rejection of welded joint or member

are welded, visually inspect the weld access hole for cracks.

No prohibited welds have been added without the approval of the EQR

(a) When welding of doubler plates, continuity plates or stiffeners has been performed in the k-area, visually inspect the web k-area for cracks within 3 in. (75 mm) of the weld.

b) After rolled heavy shapes (see Section A3.1c) and built-up heavy shapes (see Section A3.1d)

2016 AISC 360 TABLE N5.4-3 Inspection Tasks After Welding

Inspection Tasks After Welding

AISC SPECIAL INSPECTION NOTES: O - Observe these items on a random basis. Operations need not be delayed pending these inspections. P - Perform these tasks for each steel element. QC - Quality Control performed by the Steel Fabricator and Erector. QA - Quaility Assurance performed by the Special Inspector.

Γhompson, Dreessen & Dorner, Inc. 10836 Old Mill Rd Omaha, NE 68154 102.330.8860 www.td2co.com TD2 Project #1696-250 NE CA-0199

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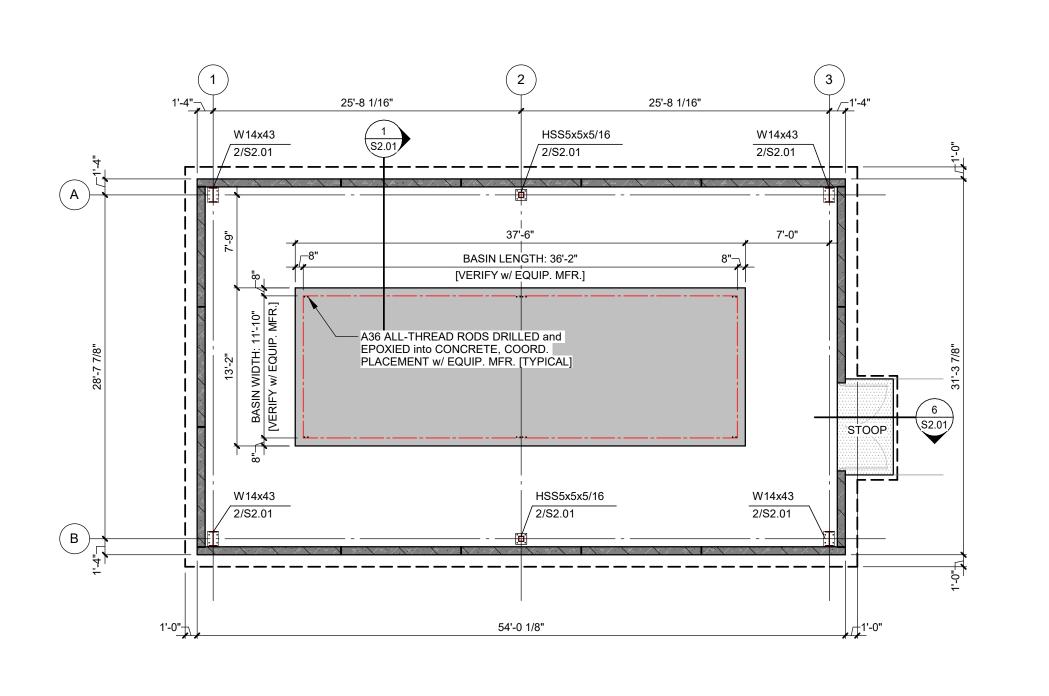
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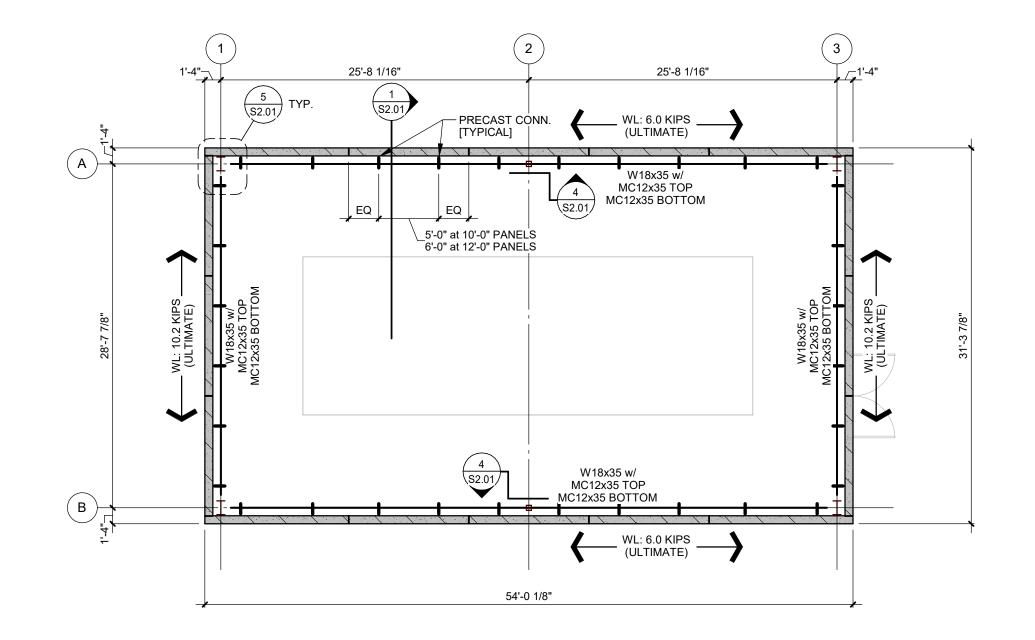
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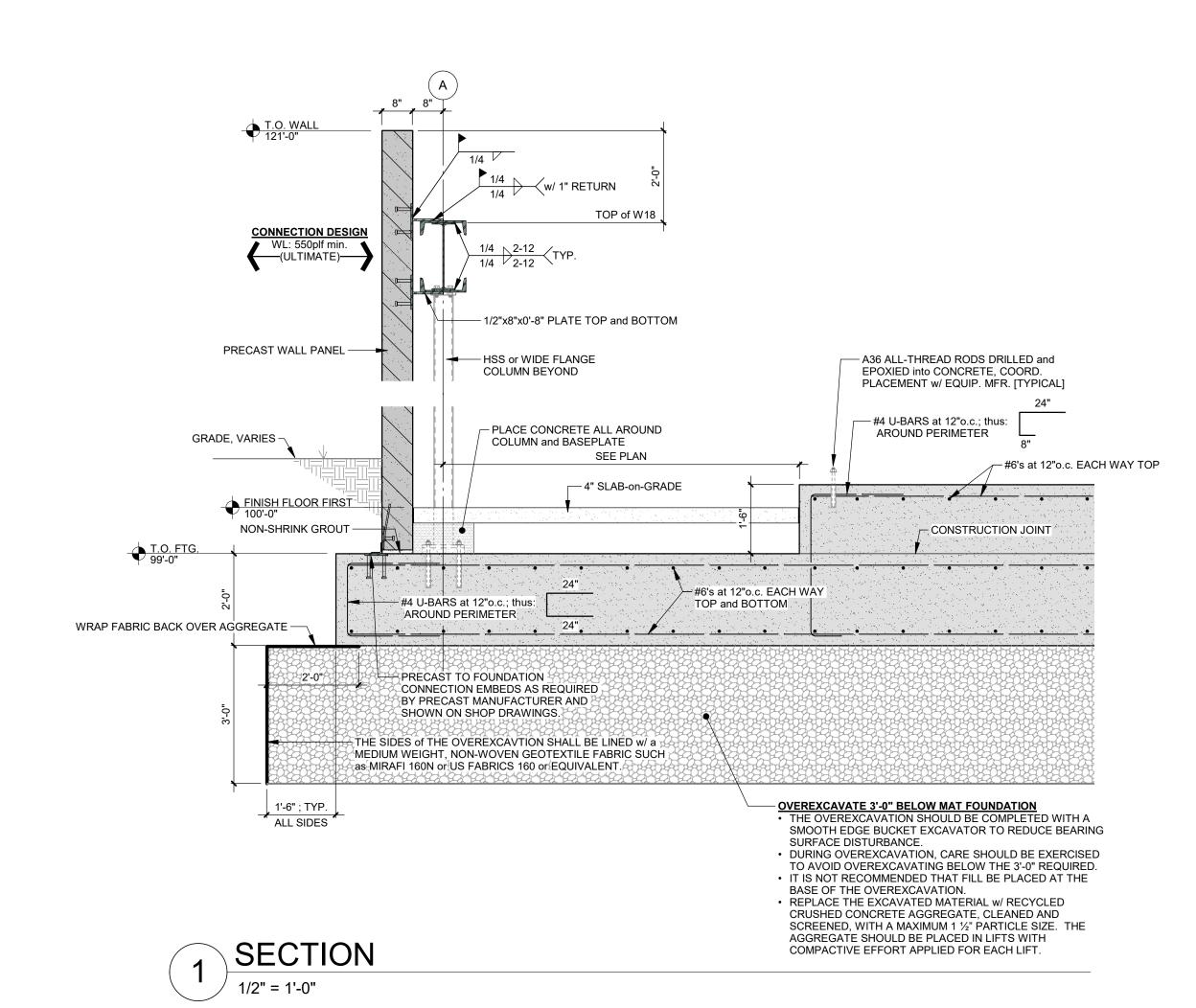
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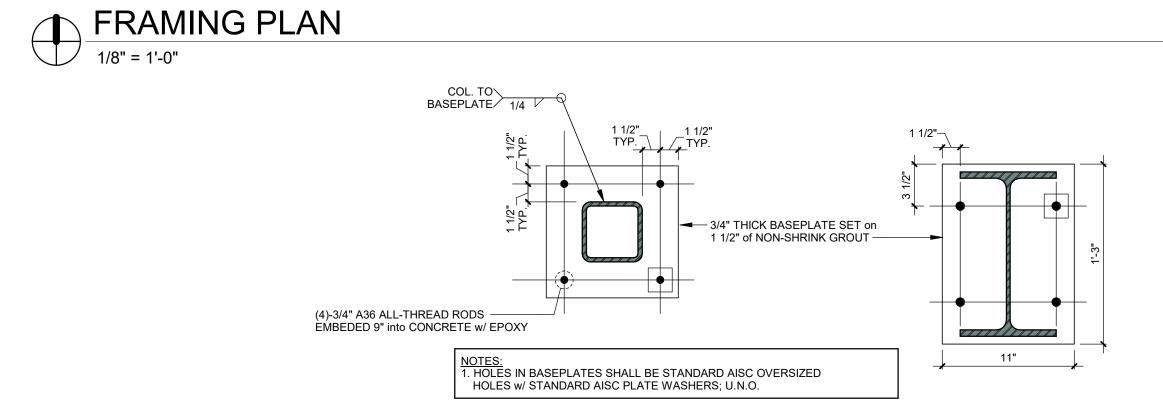
DATE: 10/03/2025 PROJECT NO.: 2025.016.00



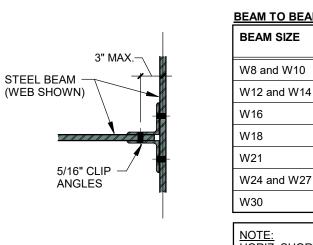


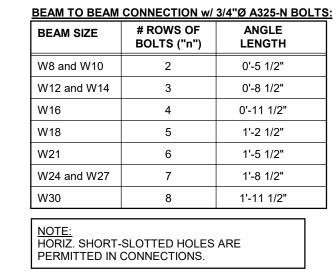




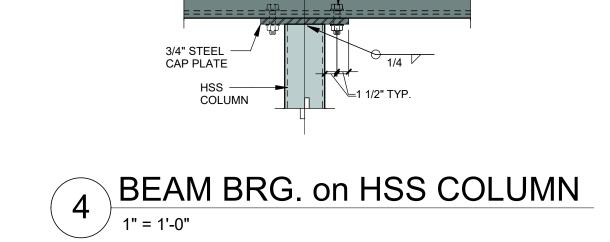


2 BASEPLATE DETAILS 1 1/2" = 1'-0"





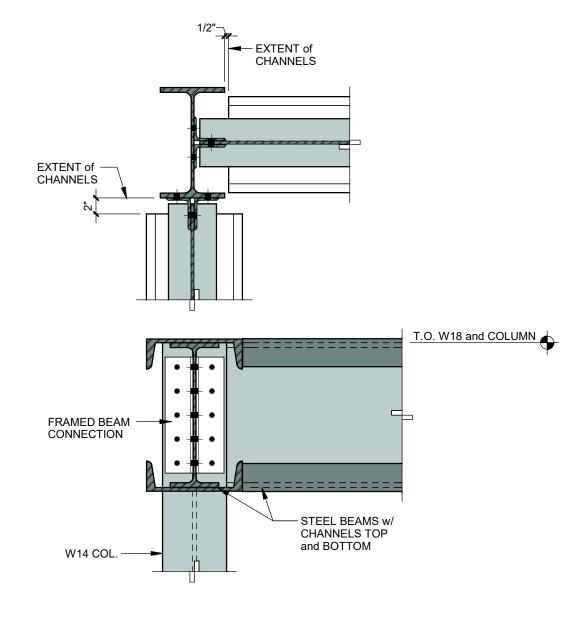
FRAMED BEAM CONNECTION



CONTINUOUS -STEEL BEAM COLUMN CENTERLINE

(2)- 3/4"Ø A325-N BOLTS EACH

SIDE OF BEAM WEB, TYP.



5 BEAM to W14 COLUMN

1" = 1'-0"

SIDEWALK OR SITE ———	ARCHITECTURA 2. FOR EXACT LO	ERIFY SIZE OF STOOPS w/ AL and/or CIVIL DRAWINGS. CATION OF SIDEWALKS OR RCH. or CIVIL DRAWINGS.	STRUCTURAL STOOP SLAB	8" 8" 3	CH.
#4 AT 12"o.c. EACH WAY [EPOXY-COATED]	3'-0"	4" EXP. JT. #4x4 COA	SLOPE SLOPE FELT PAPE VAPOR BAI	ER OR RRIER	T.O. FTG. 99'-0"
4" BIODEGRADABI 6 STOOP S 3/4" = 1'-0"			BTWN. SLA	AB AND FTG.	

Thompson, Dreessen & Dorner, Inc. 10836 Old Mill Rd Omaha, NE 68154 402.330.8860 www.td2co.com

TD2 Project #1696-250 NE CA-0199

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WESTSIDE HIGH SCHOOL COOLING TOWER They are not suitable for use on other projects or locations without the express written approval and participation of TACKarchitects, Inc. Any reproduction is prohibited. AGENCY APPROVAL(S): NOT FOR CONSTRUCTION REVISION DATE 00.00.2025 FRAMING PLANS DATE: 10/03/2025 PROJECT NO.: 2025.016.00

SECTION 034500 - PRECAST ARCHITECTURAL CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Architectural precast concrete load-bearing units.

1.2 DEFINITIONS

A. Design Reference Sample: Sample of approved architectural precast concrete color, finish and texture, preapproved by Architect.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each precast concrete mixture. Include compressive strength and water-absorption tests.
- C. Shop Drawings:
 - 1. Detail fabrication and installation of architectural precast concrete units.
 - 2. Indicate locations, plans, elevations, dimensions, shapes, and cross sections of each unit.
 - 3. Indicate joints, reveals, drips, chamfers, and extent and location of each surface finish.
 - 4. Indicate details at building corners.
- D. Samples: Design reference samples for initial verification of design intent, for each type of finish indicated on exposed surfaces of architectural precast concrete units, in sets of three, representative of finish, color, and texture variations expected; approximately 12 by 12 by 2 inches. Include one sample with smooth finish and one with the brick inlay.
- E. Delegated-Design Submittal: For architectural precast concrete indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.5 INFORMATIONAL SUBMITTALS

- Welding certificates.
- B. Material certificates.
- C. Material Test Reports: For aggregates.

D. Field quality-control and special inspection reports.

1.6 QUALITY ASSURANCE

- A. Fabricator Qualifications: A firm that assumes responsibility for engineering architectural precast concrete units to comply with performance requirements. This responsibility includes preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer.
 - 1. Designated as a PCI-certified plant for Group A, Category A1 Architectural Cladding and Load Bearing Units or designated as an APA-certified plant for production of architectural precast concrete products.
- B. Quality-Control Standard: For manufacturing procedures and testing requirements, quality-control recommendations, and dimensional tolerances for types of units required, comply with PCI MNL 117, "Manual for Quality Control for Plants and Production of Architectural Precast Concrete Products."
- C. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D.1.1M, "Structural Welding Code Steel"; and AWS D1.4/D1.4M, "Structural Welding Code Reinforcing Steel."

1.7 COORDINATION

A. Furnish loose connection hardware and anchorage items to be embedded in or attached to other construction without delaying the Work. Provide locations, setting diagrams, templates, instructions, and directions, as required, for installation.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer to design architectural precast concrete units.
- B. Design Standards: Comply with ACI 318 and design recommendations of PCI MNL 120, "PCI Design Handbook Precast and Prestressed Concrete," applicable to types of architectural precast concrete units indicated.
- C. Structural Performance: Provide architectural precast concrete units and connections capable of withstanding design loads indicated within limits and under conditions indicated.

2.2 REINFORCING MATERIALS

- A. Reinforcing Bars: ASTM A615/A615M, Grade 60, deformed.
- B. Low-Alloy-Steel Reinforcing Bars: ASTM A706/A706M, deformed.
- C. Plain-Steel Welded Wire Reinforcement: ASTM A185/A185M, fabricated fromgalvanized-steel wire into flat sheets.
- D. Deformed-Steel Welded Wire Reinforcement: ASTM A497/A497M, flat sheet.
- E. Supports: Suspend reinforcement from back of mold or use bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place according to PCI MNL 117.

2.3 PRESTRESSING TENDONS

- A. Prestressing Strand: ASTM A416/A416M, Grade 270, uncoated, seven-wire, low-relaxation strand.
 - 1. Coat unbonded post-tensioning strand with post-tensioning coating complying with ACI 423.7 and sheath with polypropylene tendon sheathing complying with ACI 423.7. Include anchorage devices and coupler assemblies.

2.4 CONCRETE MATERIALS

- A. Portland Cement: ASTM C150/C150M, Type I or Type III, gray, unless otherwise indicated.
 - For surfaces exposed to view in finished structure, use gray or white cement, of same type, brand, and mill source.
- B. Supplementary Cementitious Materials:
 - Metakaolin: ASTM C618, Class N.
 - 2. Silica Fume: ASTM C1240, with optional chemical and physical requirement.
 - 3. Ground Granulated Blast-Furnace Slag: ASTM C989, Grade 100 or 120.
- C. Normal-Weight Aggregates: Except as modified by PCI MNL 117, ASTM C33/C33M, with coarse aggregates complying with Class 5S. Stockpile fine and coarse aggregates for each type of exposed finish from a single source (pit or quarry) for Project.
 - 1. Face-Mixture-Coarse Aggregates: Selected, hard, and durable; free of material that reacts with cement or causes staining; to match selected finish sample.
 - a. Gradation: To match design reference sample.
 - 2. Face-Mixture-Fine Aggregates: Selected, natural or manufactured sand compatible with coarse aggregate; to match approved finish sample.
- D. Coloring Admixture: ASTM C979/C979M, synthetic or natural mineral-oxide pigments or colored water-reducing admixtures, temperature stable, and nonfading.
- E. Water: Potable; free from deleterious material that may affect color stability, setting, or strength of concrete and complying with chemical limits of PCI MNL 117.
- F. Air-Entraining Admixture: ASTM C260, certified by manufacturer to be compatible with other required admixtures.
- G. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and to not contain calcium chloride, or more than 0.15 percent chloride ions or other salts by weight of admixture.

2.5 STEEL CONNECTION MATERIALS

- A. Carbon-Steel Shapes and Plates: ASTM A36/A36M.
- B. Carbon-Steel-Headed Studs: ASTM A108, AISI 1018 through AISI 1020, cold finished, AWS D1.1/D1.1M, Type A or Type B, with arc shields and with minimum mechanical properties of PCI MNL 117, Table 3.2.3.
- C. Carbon-Steel Plate: ASTM A283/A283M, Grade C.
- D. Malleable Iron Castings: ASTM A47/A47M, Grade 32510 or Grade 35028.

- E. Carbon-Steel Castings: ASTM A27/A27M, Grade 60-30.
- F. High-Strength, Low-Alloy Structural Steel: ASTM A572/A572M.
- G. Carbon-Steel Structural Tubing: ASTM A500/A500M, Grade B or Grade C.
- H. Wrought Carbon-Steel Bars: ASTM A675/A675M, Grade 65.
- Deformed-Steel Wire or Bar Anchors: ASTM A496/A496M or ASTM A706/A706M.
- J. Carbon-Steel Bolts and Studs: ASTM A307, Grade A or ASTM F1554, Grade 36; carbon-steel, hex-head bolts and studs; carbon-steel nuts, ASTM A563; and flat, unhardened steel washers, ASTM F844.
- K. High-Strength Bolts, Nuts, and Washers: ASTM F3125/F3125M, Grade A325 Type 1, heavy-hex steel structural bolts; ASTM A563, Grade DH, heavy-hex carbon-steel nuts; and ASTM F436/F436M, Type 1, hardened carbon-steel washers.
- L. Zinc-Coated Finish: For exterior steel items, steel in exterior walls, and items indicated for galvanizing, apply zinc coating by hot-dip process according to ASTM A123/A123M or ASTM A153/A153M.
 - 1. Galvanizing Repair Paint: High-zinc-dust-content paint with dry film containing not less than 94 percent zinc dust by weight, and complying with DOD-P-21035B or SSPC-Paint 20.

2.6 GROUT MATERIALS

- A. Sand-Cement Grout: Portland cement, ASTM C150/C150M, Type I, and clean, natural sand, ASTM C144 or ASTM C404. Mix at ratio of 1 part cement to 2-1/2 to 3 parts sand, by volume, with minimum water required for placement and hydration. Water-soluble chloride ion content less than 0.06 percent by weight of cement when tested according to ASTM C1218/C1218M.
- B. Nonmetallic, Nonshrink Grout: Packaged, nonmetallic, noncorrosive, nonstaining grout containing selected silica sands, portland cement, shrinkage-compensating agents, plasticizing and water-reducing agents, complying with ASTM C1107/C1107M, Grade A for drypack and Grades B and C for flowable grout and of consistency suitable for application within a 30-minute working time. Water-soluble chloride ion content less than 0.06 percent by weight of cement when tested according to ASTM C1218/C1218M.
- C. Epoxy-Resin Grout: Two-component, mineral-filled epoxy resin; ASTM C881/C881M, of type, grade, and class to suit requirements.

2.7 CONCRETE MIXTURES

- A. Prepare design mixtures for each type of precast concrete required.
- B. Limit use of fly ash and ground granulated blast-furnace slag to 20 percent of portland cement by weight; limit metakaolin and silica fume to 10 percent of portland cement by weight.
- C. Design mixtures may be prepared by a qualified independent testing agency or by qualified precast plant personnel at architectural precast concrete fabricator's option.
- D. Limit water-soluble chloride ions to maximum percentage by weight of cement permitted by ACI 318 or PCI MNL 117 when tested according to ASTM C1218/C1218M.

- E. Normal-Weight Concrete Mixtures: Proportion mixtures by either laboratory trial batch or field test data methods according to ACI 211.1, with materials to be used on Project, to provide normal-weight concrete with the following properties:
 - 1. Compressive Strength (28 Days): 5000 psi minimum.
- F. Water Absorption: 6 percent by weight or 14 percent by volume, tested according to ASTM C642, except for boiling requirement.
- G. Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content complying with PCI MNL 117.
- H. When included in design mixtures, add other admixtures to concrete mixtures according to manufacturer's written instructions.

2.8 FABRICATION

- A. Cast-in Anchors, Inserts, Plates, Angles, and Other Anchorage Hardware: Fabricate anchorage hardware with sufficient anchorage and embedment to comply with design requirements. Accurately position for attachment of loose hardware, and secure in place during precasting operations. Locate anchorage hardware where it does not affect position of main reinforcement or concrete placement.
 - 1. Weld-headed studs and deformed bar anchors used for anchorage according to AWS D1.1/D1.1M and AWS C5.4, "Recommended Practices for Stud Welding."
- B. Furnish loose hardware items including steel plates, clip angles, seat angles, anchors, dowels, cramps, hangers, and other hardware shapes for securing architectural precast concrete units to supporting and adjacent construction.
- C. Cast-in reglets, slots, holes, and other accessories in architectural precast concrete units as indicated on the Contract Drawings.
- D. Reinforcement: Comply with recommendations in PCI MNL 117 for fabricating, placing, and supporting reinforcement.
- E. Reinforce architectural precast concrete units to resist handling, transportation, and erection stresses and specified in-place loads.
- F. Prestress tendons for architectural precast concrete units by either pretensioning or post-tensioning methods. Comply with PCI MNL 117.
- G. Comply with requirements in PCI MNL 117 and requirements in this Section for measuring, mixing, transporting, and placing concrete. After concrete batching, no additional water may be added.
- H. Place concrete in a continuous operation to prevent cold joints or planes of weakness from forming in precast concrete units.
 - 1. Place backup concrete mixture to ensure bond with face-mixture concrete.
- I. Thoroughly consolidate placed concrete by internal and external vibration without dislocating or damaging reinforcement and built-in items, and minimize pour lines, honeycombing, or entrapped air voids on surfaces. Use equipment and procedures complying with PCI MNL 117.

- 1. Place self-consolidating concrete without vibration according to PCI TR-6, "Interim Guidelines for the Use of Self-Consolidating Concrete in Precast/Prestressed Concrete Institute Member Plants." Ensure adequate bond between face and backup concrete, if used.
- J. Comply with PCI MNL 117 for hot- and cold-weather concrete placement.
- K. Identify pickup points of architectural precast concrete units and orientation in structure with permanent markings, complying with markings indicated on Shop Drawings. Imprint or permanently mark casting date on each architectural precast concrete unit on a surface that does not show in finished structure.
- L. Cure concrete, according to requirements in PCI MNL 117, by moisture retention without heat or by accelerated heat curing using low-pressure live steam or radiant heat and moisture. Cure units until compressive strength is high enough to ensure that stripping does not have an effect on performance or appearance of final product.
- M. Discard and replace architectural precast concrete units that do not comply with requirements, including structural, manufacturing tolerance, and appearance, unless repairs meet requirements in PCI MNL 117 and Architect's approval.

2.9 FABRICATION TOLERANCES

A. Fabricate architectural precast concrete units to shapes, lines, and dimensions indicated so each finished unit complies with PCI MNL 117 product tolerances as well as position tolerances for cast-in items.

2.10 FINISHES

- A. Exposed faces shall be free of joint marks, grain, and other obvious defects. Corners, including false joints shall be uniform, straight, and sharp. Finish exposed-face surfaces of architectural precast concrete units to match approved design reference sample and as follows:
 - 1. Design Reference Sample: Coreslab Structures 9-9-21A, Acid Etch.
 - a. Sample image for reference.



- As-Cast Surface Finish: Provide surfaces to match approved sample for acceptable surface, air voids, sand streaks, and honeycomb.
- 4. Acid-Etched Finish: Use acid and hot-water solution, equipment, application techniques, and cleaning procedures to expose aggregate and surrounding matrix surfaces. Protect hardware, connections, and insulation from acid attach.
- B. Finish exposed back surfaces of architectural precast concrete units with smooth, steel-trowel finish.

2.11 CLAY FACING MATERIALS

- A. Thin Brick: ASTM C 1088, Type TBX or TBS, tested in accordance with ASTM C67, not less than ½ inch or more than 1inch, and as follows:
 - 1. Products: Subject to compliance with requirements, provide the following:
 - a. Manufacturer: Endicott Thin Brick, LLC.
 - 1) Blended to match the following colors:
 - a) 40% Golden Buff
 - b) 30% Copper Canyon
 - c) 20% Desert Ironspot Light
 - d) 10% Desert Irenspot Dark
 - 2) Velour texture
 - 3) Modular thin brick
 - Thin Brick Sample Panel Image, for visual reference only.



- 2. Dimensional Tolerances: Plus 0 inches or minus 1/16" for any dimension 8 inches or less and plus 0 inches or minus 3/32 inch for any dimension more than 8 inches.
- 3. Out-of-Square Tolerance: Plus or minus 1/16 inch.
- 4. Warpage Tolerance: Not more than 1/16 inch either concave or convex from consistent plane.
- 5. Variation of Shape from Specified Angle: Plus or minus one degree.
- 6. Modulus of Rupture: Not less than 250 psi when tested in accordance with ASTM C67/C67M.
- 7. Tensile Bond Strength: Not less than 150 psi when tested before and after freeze-thaw test in accordance with ASTM E488/E488M as modified: Adhere a steel plate with welded rod on a single think-brick face with epoxy for each test.
- 8. 24-Hour Cold Water Absorption: Not more than 6 percent when tested in accordance with ASTM C67/C67M
- 9. Freeze-Thaw Resistance: No detectable disintegration or separation after 300 cycles when tested in accordance with ASTM C666/C666M, Method A or B.
- 10. Chemical Resistance: Tested in accordance with ASTM C650 and rated "not affected."
- 11. Efflorescence: Tested in accordance with C67/C67M and rated "not effloresced."
- 12. Back Surface Texture: Scored, combed, wire roughened, ribbed, keybacked, or dovetailed,
- 13. Closure Face Size: 3-5/8 inches high by 7-5/8 inches long.
- 14. Special Shapes: Include corners, edge corners, and end edge corners.

2.12 SOURCE QUALITY CONTROL

- A. Quality-Control Testing: Test and inspect precast concrete according to PCI MNL 117 requirements. If using self-consolidating concrete, also test and inspect according to PCI TR-6, ASTM C1610/C1610M, ASTM C1611/C1611M, ASTM C1621/C1621M, and ASTM C1712.
- B. Owner will employ an independent testing agency to evaluate architectural precast concrete fabricator's quality-control and testing methods.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install clips, hangers, bearing pads, and other accessories required for connecting architectural precast concrete units to supporting members and backup materials.
- B. Erect architectural precast concrete level, plumb, and square within specified allowable tolerances. Provide temporary supports and bracing as required to maintain position, stability, and alignment of units until permanent connections are completed.
 - 1. Maintain horizontal and vertical joint alignment and uniform joint width as erection progresses.
 - 2. Unless otherwise indicated, maintain uniform joint widths of 3/4 inch.
- C. Connect architectural precast concrete units in position by bolting, welding, grouting, or as otherwise indicated on Shop Drawings. Remove temporary shims, wedges, and spacers as soon as practical after connecting and grouting are completed.
- D. Welding: Comply with applicable requirements in AWS D1.1/D1.1M and AWS D1.4/D1.4M for welding, welding electrodes, appearance, quality of welds, and methods used in correcting welding work.
- E. At bolted connections, use lock washers, tack welding, or other approved means to prevent loosening of nuts after final adjustment.
- F. Grouting or Dry-Packing Connections and Joints: Grout connections where required or indicated. Retain flowable grout in place until hard enough to support itself. Alternatively, pack spaces with stiff dry-pack grout material, tamping until voids are completely filled. Place grout and finish smooth, level, and plumb with adjacent concrete surfaces. Promptly remove grout material from exposed surfaces before it affects finishes or hardens. Keep grouted joints damp for not less than 24 hours after initial set.

3.2 ERECTION TOLERANCES

A. Erect architectural precast concrete units level, plumb, square, and in alignment without exceeding the noncumulative erection tolerances of PCI MNL 117, Appendix I.

3.3 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections and prepare reports:
 - 1. Erection of loadbearing precast concrete members.
- B. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections and prepare test reports.
- C. Visually inspect field welds and test according to ASTM E165 or to ASTM E709 and ASTM E1444. High-strength bolted connections are subject to inspections.
- D. Testing agency will report test results promptly and in writing to Contractor and Architect.
- E. Repair or remove and replace work where tests and inspections indicate that it does not comply with specified requirements.

F. Additional testing and inspecting, at Contractor's expense, shall be performed to determine compliance of replaced or additional work with specified requirements.

3.4 REPAIRS

- A. Repair architectural precast concrete units if permitted by Architect. Architect reserves the right to reject repaired units that do not comply with requirements.
- B. Mix patching materials and repair units so cured patches blend with color, texture, and uniformity of adjacent exposed surfaces and show no apparent line of demarcation between original and repaired work, when viewed in typical daylight illumination from a distance of 20 feet.
- C. Prepare and repair damaged galvanized coatings with galvanizing repair paint according to ASTM A780/A780M.
- D. Wire brush, clean, and paint damaged prime-painted components with same type of shop primer.
- E. Remove and replace damaged architectural precast concrete units when repairs do not comply with requirements.

3.5 CLEANING

- A. Clean surfaces of precast concrete units exposed to view.
- B. Clean mortar, plaster, fireproofing, weld slag, and other deleterious material from concrete surfaces and adjacent materials immediately.
- C. Clean exposed surfaces of precast concrete units after erection and completion of joint treatment to remove weld marks, other markings, dirt, and stains.
 - 1. Perform cleaning procedures, if necessary, according to precast concrete fabricator's recommendations. Protect other work from staining or damage due to cleaning operations.
 - 2. Do not use cleaning materials or processes that could change the appearance of exposed concrete finishes or damage adjacent materials.

END OF SECTION 034500

AIA Document A152 - 2019

Purchase Order

PURCHASER : (name and address)
Douglas County School District 28-
0066 a/k/a Westside Community

PURCHASE ORDER INFORMATION:

Schools.

909 South 76th Street Omaha, NE 68114-4599

Number: WCSHS-002

Date: October 20, 2025

DELIVER TO: (name and address)

VENDOR: (name and address)

C/O - Chris Bilau 402-507-0844

Westside High School

ARCHITECT: (name and address)

TACK Architects

2922 N. 61st St Studion 1 Omaha, NE 68104

PROJECT: (name and address) Westsid ehigh School Fluid Cooler

8701 Pacific Street Omaha, NE 68114

IDENTIFICATION OF GOODS

The Vendor agrees to provide the following goods to the Purchaser:

(Insert a list of goods to be provided by the Vendor, including details for identification and quantities for each, or identify a *separate exhibit that includes such information.)*

PRICE

The Purchaser shall pay the Vendor the following amount for the goods provided under this Purchase Order: (Insert the price the Purchaser is to pay the Vendor, including amounts for taxes, duties, tariffs, handling charges, delivery, and incidental services. Identify unit prices, if applicable.)

PAYMENTS

The Purchaser shall pay the Vendor according to the following payment terms: (Insert payment terms, such as payment due dates, deposit requirements, and discounts, if any.)

DELIVERY

The Vendor shall deliver the goods to the "Deliver To" address above. The Vendor's additional delivery requirements are: (Insert additional delivery requirements, such as delivery date or range of dates, hours of delivery, split delivery, inside delivery, unpackaging requirements, or receiving instructions.) Contact Chris Bilau 402-507-0844

OTHER REQUIREMENTS OR TERMS

CONTRACT DOCUMENTS

The Contract Documents consist of:

- .1 This Purchase Order and all documents or exhibits referenced herein
- .2 AIA Document A152TM-2019, Exhibit A - Terms and Conditions
- .3 Other: Exhibit A - Westside Community Schools Westside High School Fluid Cooler Precast Package, prepared by TACK Architects. and dated October 3, 2025

SIGNATURE of the Purchaser's Authorized Representative	SIGNATURE of the Vendor's Authorized Representative		
Purchaser's Authorized Representative (Print Name and Title)	Vendor's Authorized Representative (Print Name and Title)		
DATE	DATE		

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