

# Hobpton High School Replacement CM Clarification #01

Date: April 24, 2026

Project: **Sampson County Schools – Hobpton High School Replacement**

The following items modify, add to, or delete from the Bid Documents (Plans & Project Manual) dated March 27, 2026, as prepared by SfL+a Architects and its consultants, and the Bid Manual dated April 13, 2026, for this project. Acknowledge receipt of this CM Clarification in your proposal. Failure to do so may result in the disqualification of your bid. Wherein this Clarification varies or is in conflict with the Bid Documents, the requirements of this Clarification shall govern. In all other particulars, the requirements of the original Project Manual and Bid Documents, including any previous Addenda or Clarifications, shall govern.

This clarification consists of 21 items, 03 attachments, 55 sheets (8.5x11) and 00 sheets (24 x 36)

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## **GENERAL and CLARIFICATION:**

### Item 1: **Pre-Bid Meeting**

Pre-Bid Meeting was held on Wednesday, 04/22. Presentation and attendance sheets are attached. Meeting attendance was **not** mandatory.

### Item 2: **Bid Date Confirmation**

**Bids are due Tuesday, May 12 at 3:00 PM at Sampson County Schools (Building A – Auditorium), 437 Rowan Road, Clinton, NC 28328**

Bids may also be received **up to Noon, 12 PM** in the Raleigh office of **TA Loving, 3600 Glenwood Avenue, Suite 150, Raleigh, NC 27612**

### Item 3: **Addenda**

One (1) addendum has been issued to date; please acknowledge on your Bid Form

### Item 4: **Miscellaneous Admin**

**Scope Inquiry:** Please advise any Liquidated Damages that may apply  
**CM Response:** \$1,000 to Substantial Completion; \$1,000 to Final Completion

**Scope Inquiry:** Please advise retainage amount  
**CM Response:** 5% retainage

**Scope Inquiry:** Please advise if Alternate 6 is to be bid  
**CM Response:** Alternate #6 is not being bid at this time. Certain bid scopes have **base bid** requirements for underground rough-in of future services to these structures (water, sewer, site, electrical). Services are to installed from building to beyond all hardscapes (drives & sidewalks) thereby avoiding major disruption and rework when Alternate #6 is constructed.

**Scope Inquiry:** BIM Execution Plan  
**CM Response:** Attached Plan provided as supplemental information on the BIM requirements

**Item 5: Prequalified Bidders**

The following bidder has been prequalified to bid:

Net Planner

BP-2700 Integrated Communications & AV

**Item 6: Various Trades**

**Scope Inquiry:** Please confirm which trade is responsible for the prefinished metal sill flashing in details 2/A-507, 5 & 8/A-508, 2/A-504, and similar details

**CM Response:** Trades are responsible for flashings associated with their work  
BP-0750 Metal Panels (2/A-504); BP-2300 HVAC (2/A-507); BP-0840 Glazed Systems (5&8/A-508)

**Scope Inquiry:** Please advise if it is acceptable to use press fittings on copper pipe sizes under 2" inside pump rooms

**CM Response:** Press fittings are acceptable for schedule condensate and make-up water copper piping 2" and under.

**Scope Inquiry:** Please clarify temporary water location

**CM Response:** Intent is for BP-3100 to install the stand-alone fire hydrant at earliest opportunity to provide temporary water via hydrant & meter. A second option is to utilize the existing fire hydrant at the water tank adjacent to the project

**Scope Inquiry:** Please confirm which trade is responsible for the 3"x3" metal angle and insulation between double CMU wall on details 2 & 3/A-504

**CM Response:** BP-0500 furnishes & installs metal angle (scope item 2.b.vii); insulation by BP-0400 Masonry; all depicted wood blocking by BP-0700 Roofing

**Item 7: BP-0300 Concrete**

**Scope Inquiry:** Spec 033000 and Drawing S-001 do not indicate mix design strength for housekeeping pads and pan stair infill; please advise

**CM Response:** 4000 psi for each

**Scope Inquiry:** Spec 033000-3.5.G, indicates F Numbers for athletic floor areas only; straightedges are no longer accepted for measurements and assessment of floor surfaces. Please provide F Numbers for slabs not receiving sports and wood flooring finishes

**CM Response:** SOV FF=25, FL=20; MLV FF=17, FL=1536

**Scope Inquiry:** Please clarify scope requirement for temporary shoring of SOMD

**CM Response:** Temporary shoring is **not** required; Building Concrete – Scope Item C.iv.1, will be deleted and the amended Scope issued post-bid as part of the Subcontract

**Item 8: BP-0300 Concrete & BP-0400 Masonry**

**Scope Inquiry:** Please provide bar size and spacing for Elevation 1/S-316 on Drawing S-100C-M CMU Reinforcing Plan for Area C

**CM Response:** #5 @ 48" OC

**Item 9: BP-0400 Masonry**

**Scope Inquiry:** Please clarify conflicts between Drawings A-211 thru A-215 Material Legend and Spec 04200-2.2.B.8 regarding brick color, blend, and grout

**CM Response:** Comply with drawings (BRK-3 Palmetto Whitestone Wirecut & BRK-2 Glen-Gery Black Pearl; BRK-1 Blend – Platinum Grey 60%, Pewter Grey 40%)

**Scope Inquiry:** Spec 042000 indicates Basis of Design Color for mortar to be Mapei: Ivory 39; however, Mapei Ivory 39 is grout material used for tile. Please clarify and amend specs

**CM Response:** Comply with drawings per Addendum 01 updates

**Item 10: BP-0400 Masonry & BP-0500 Steel**

**Scope Inquiry:** Please confirm which trade is responsible for the 6"x6" & 3.5"x3.5" metal angles shown in details 1/A-501, 4/A-501 & 6/A-503 and similar details

**CM Response:** BP-0500 furnishes & installs the metal angle

**Scope Inquiry:** Please confirm which trade is responsible for the 3"x3"x1/4" metal angle in details 4/A-503

**CM Response:** BP-0500 furnishes & installs this metal angle

**Item 11: BP-0400 Masonry & BP-0790 Caulk & Sealants**

**Scope Inquiry:** Please confirm which trade is responsible for the Building Interior Expansion Joint Details at CMU walls (1/A-510), Fire-retardant impregnated foam-2hr rated with polyurethane sealant band (1/A-541), and wall expansion joint cover (2/A-541).

**CM Response:** BP-0790 has caulking & aluminum EJ cover (1/A-510 and 2/A-541)  
BP-0790 provides the EMSEAL product; install by BP-0400

**Item 12: BP-0750 Architectural Metal Panels**

**Scope Inquiry:** Please confirm which trade is responsible for the flashings behind metal panels

**CM Response:** BP-0750

**Item 13: BP-0790 Caulking, Sealants, and Waterproofing**

**Scope Inquiry:** Please provide spec for SFRM

**CM Response:** Spec 078123 Intumescent Fire Protection was issued as part of Addendum 01

**Item 14: BP-0800 Doors & Hardware**

**Scope Inquiry:** Please provide spec for the dual action door 1321C

**CM Response:** Spec 083800 Traffic Doors was issued as part of Addendum 01  
This traffic door is to be incorporated in BP-0800 Scope of Work

**Item 15: BP-0925 Drywall**

**Scope Inquiry:** Please confirm which trade is responsible for the wood blocking in details 5,6,7 & 8/A-508 & similar details

**CM Response:** BP-0925 will furnish & install this wood blocking

**Item 16: BP-1022 Operable Partitions**

**Scope Inquiry:** Please clarify the following requirements: 1.1.A.2 Electric Operation, 2.2.E Pass

**CM Response:** Doors, and 2.2.F Pocket Storage Doors  
Partitions will be electrically operated; pass doors and pocket storage doors are not required

Item 17: **BP-2300 HVAC**

**Scope Inquiry:** HVAC Insulation Spec 23 07 00 -3.18.B.4 indicates the geothermal/condenser water supply and return piping are not to be insulated. Please confirm this applies to both interior piping and branch lines to the WWHP units.

**CM Response:** Correct, no insulation on condenser water piping for both interior and branch connections as per schedule on 230700 HVAC Insulation

**Scope Inquiry:** Please clarify requirements for temporary HVAC

**CM Response:** Project intends to utilize the new HVAC system to provide conditioned air to complete the interior build-out (finishes, casework, etc.) of the project. Refer to bid scope for temporary filters, filter media, and other requirements.

Item 18: **BP-2600 Electrical**

**Scope Inquiry:** Scope Clarification—Base Bid requirement for athletic field transformer

**CM Response:** Install conduit ductbank from street to transformer location serving the proposed athletic fields and Concession Stand (E-010, Keynote #14); transformer and pad will be installed under Alternate #1

**Scope Inquiry:** Detail 4/A-414 indicates location of Recirc Range Hood controls; however, this is not indicated on electrical drawings. Please clarify requirements

**CM Response:** BP-2600 is to provide In-wall rough-in (conduit, box, cover, pull string) for low-voltage wiring & cabling, whether shown or not, for this and similar equipment. Please review Architectural drawings

Item 19: **BP-2700 Integrated Communications & AV**

**Scope Inquiry:** **Product Substitution:** Pathways for Communications Systems, 270536-2.3  
Cable Runway Tray

**CM Response:** Chatsworth Products Inc cable runway system, model 10250-71B and related accessories have been approved for use on this project

**Scope Inquiry:** **Product Substitution:** Communications Horizontal Cabling, 271513-2.4-Twisted Pair Cable Hardware

**CM Response:** Leviton Atlas-X1 CAT6A system and jacks (6AUJK-RL6), panels, faceplates, cords, etc. have been approved for use on this project

Item 20: **BP-3100 Sitework**

**Scope Inquiry:** Please provide a CAD file for use in earthwork computations

**CM Response:** **File will be provided upon receipt of executed waiver**  
**Contact Cliff (cmerrill@taloving.com)**

**Scope Inquiry:** Please clarify base bid requirements for alternates

**CM Response:** As discussed at the Pre-Bid Meeting, all underground utility work (W, SS, SD, IW) is to be installed for future connection. All fields are to be left at proposed plan

grade, graded for drainage, and final seeded (by BP-3290 Landscaping). Grading of these fields is an integral part of the overall earthwork cut/fill balance on this project.

Excavation and on-site disposal of soils associated with track and field events will be part of the alternate bid

Sidewalk from parking lot to football field is part of Alternate #1; sidewalks which extend to BB and SB fields are part of the respective alternate.

**Item 21: BP-3163 Foundation Improvements**

**Scope Inquiry:** Please provide an Excel file of the CPT data

**CM Response:** File is available upon request; contact Cliff Merrill ([cmerrill@taloving.com](mailto:cmerrill@taloving.com))

***End of CM Clarification No.1***

# Hobbs High School

Pre-Bid Meeting

Building Excellence Together | April 22, 2026 | T. A. Loving Company



**100**  
YEARS  
Est. ★ 1925

MEETING AGENDA

# Today's Discussion

- 01 **Team Introduction**
- 02 **Project Overview**
- 03 **Bid Packages**
- 04 **Unique Features**
- 05 **Alternates**
- 06 **Bid Procedures**
- 07 **Closing**



# T. A. Loving Company

## Executive Summary



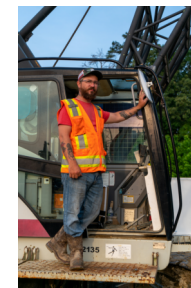
Founded in 1925

One hundred years of construction excellence and proven performance in North Carolina



Headquartered in Goldsboro

Satellite offices Raleigh, Greenville, Fayetteville, and Wilmington



440 Employees

Skilled workforce delivering quality across all project types

### Project Types

#### Building

- K-12, Higher Ed, Healthcare, Athletics, Municipality

#### Civil Conveyance

- Water, Sewer, Storm, Force Main

#### Pipeline Utilities

- Site and Utility Contractor

#### Civil Infrastructure

- Plants- Water and Wastewater

### Significant CMAR Experience

# 100+

CMAR Projects with proven expertise in preconstruction and construction. The company also provides Design-Build services

### North Carolina-Based Contractor

Strong relationships with North Carolina-based subcontractor ensuring local expertise and accountability

# Our Team



**100**  
YEARS  
Est. ★ 1925



Russ Gurganus



Tim McCarty



Tommy Rutledge



James Wood



Cliff Merrill



Manny Castillo

James Wood, Project Executive

[jwood@taloving.com](mailto:jwood@taloving.com)

Russ Gurganus, Sr. PM

[rgurganus@taloving.com](mailto:rgurganus@taloving.com)

Tim McCarty, Project Manager

[tmccarty@taloving.com](mailto:tmccarty@taloving.com)

Tommy Rutledge, Superintendent

[trutledge@taloving.com](mailto:trutledge@taloving.com)

Cliff Merrill, Preconstruction Manager

[cmerrill@taloving.com](mailto:cmerrill@taloving.com)

Manuel Castillo, Subcontractor Coordination

[mcastillo@taloving.com](mailto:mcastillo@taloving.com)

# Owner and Design Team



## Design Consultants:

- Structural Engineer: Bennett & Pless
- PME, FP, FA Engineer: Optima Engineering
- Civil Engineer: Crawford Design Co
- Food Service Designer: Foodesign



# Project Overview

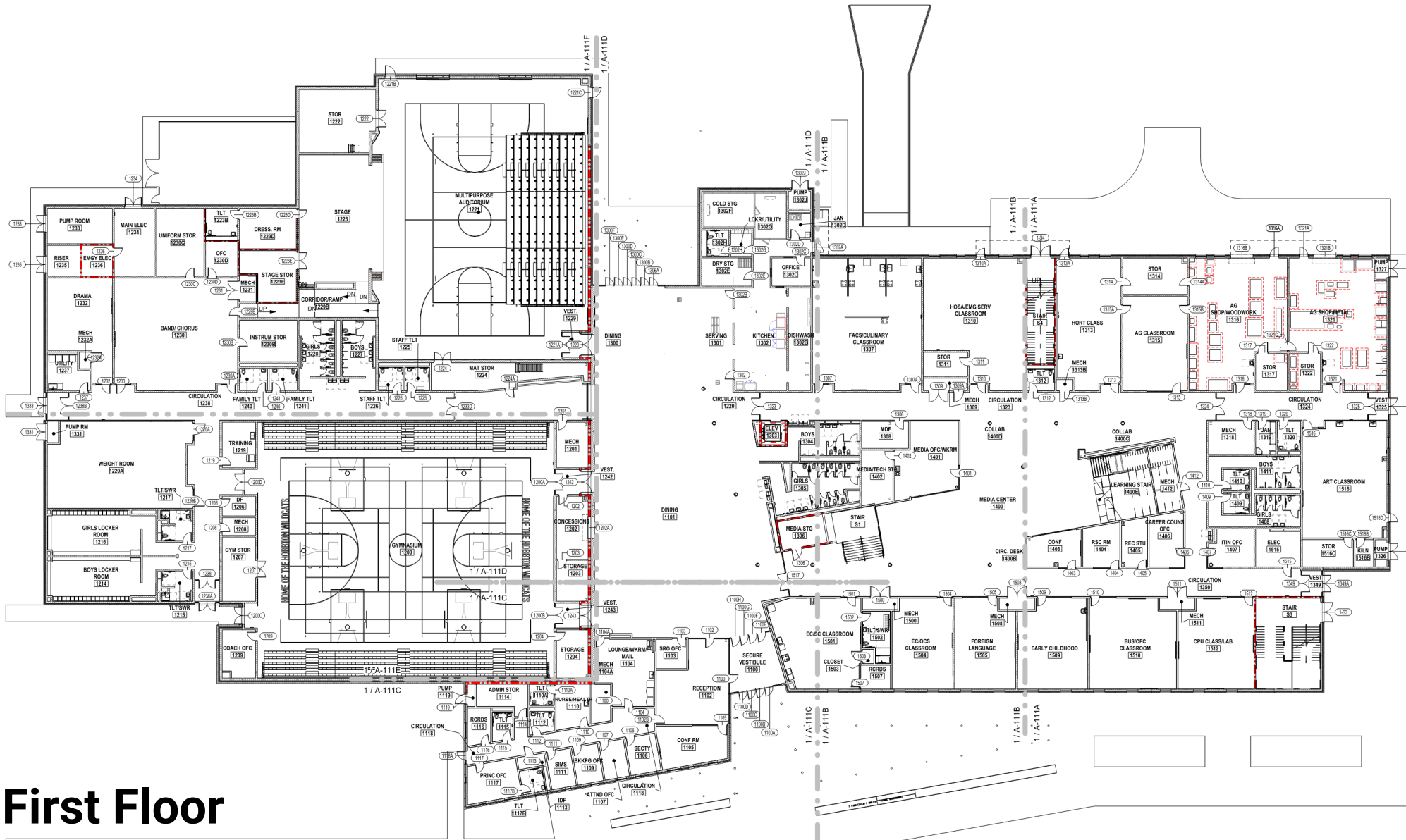


# Project Overview

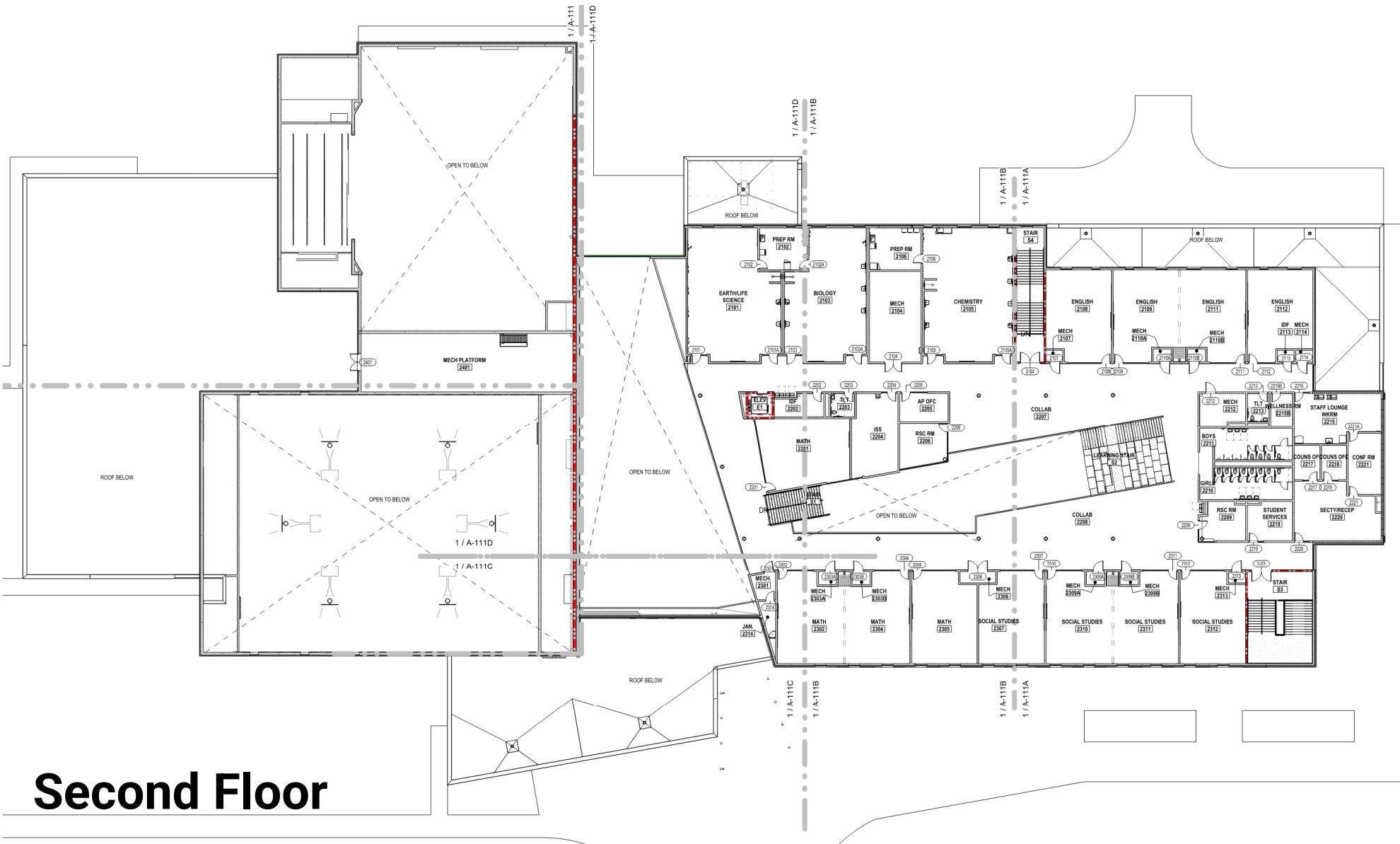
Two-story, 117,215 SF High School



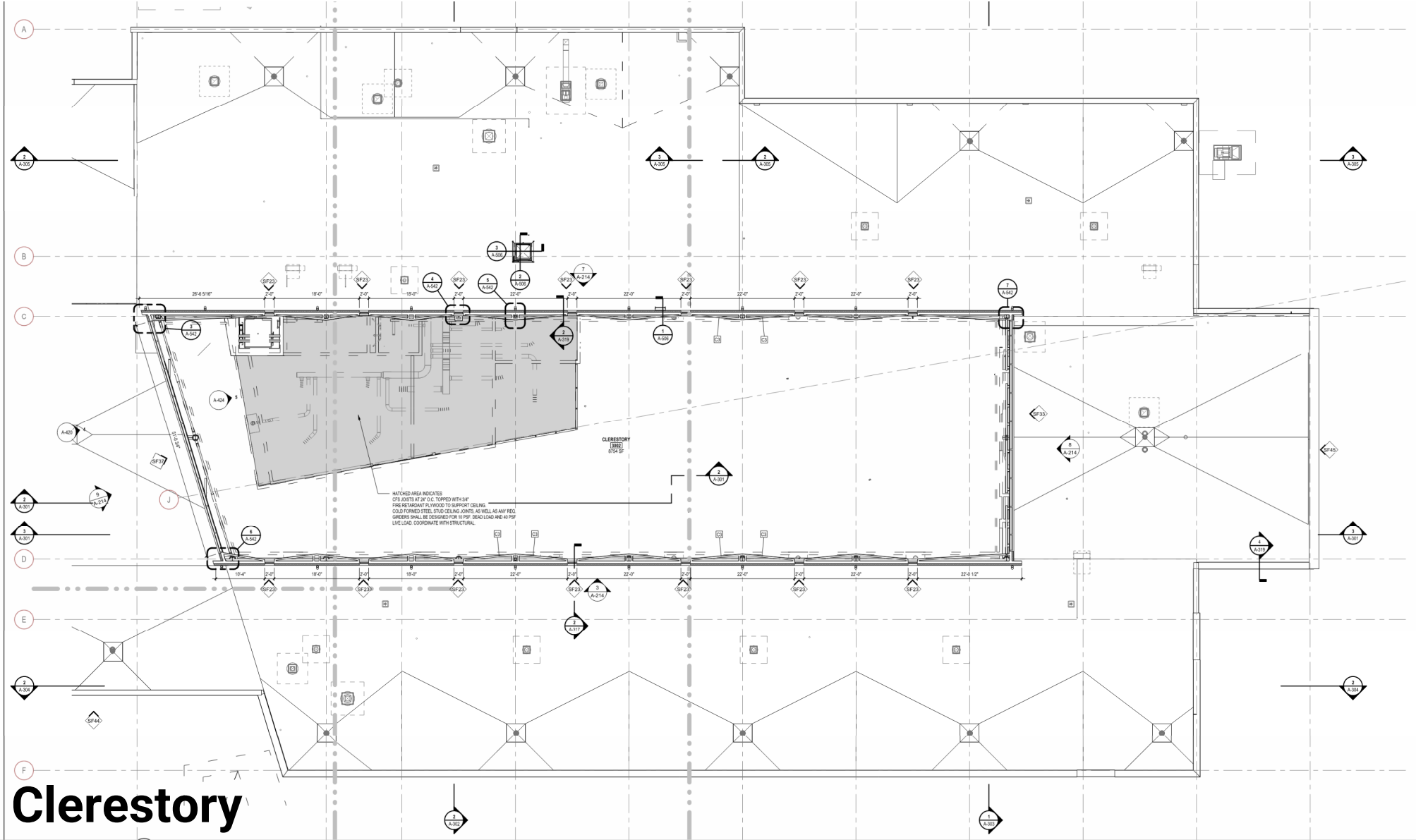
- Structural
  - Aggregate piers
  - Spread foundations
  - Conventional load-bearing masonry and structural steel
- Envelope
  - Brick veneer
  - Architectural metal panels
  - Storefront
- Roof
  - 60-mil TPO
- Systems
  - Fire protection
  - Plumbing
  - Mechanical (WSHP & geothermal)
  - Electrical (2000A service)
  - Fire alarm
  - Communication
  - Security



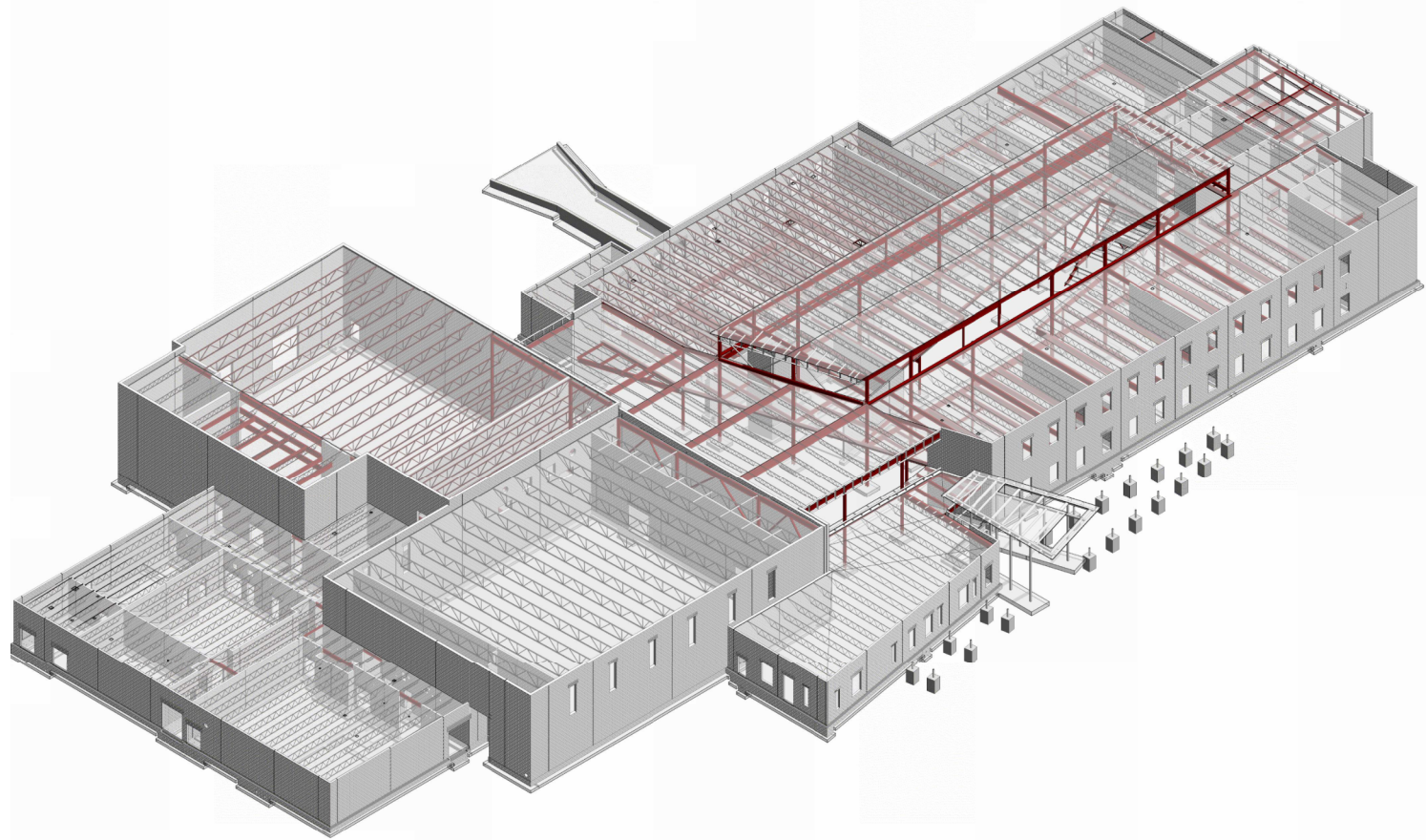
# First Floor



# Second Floor

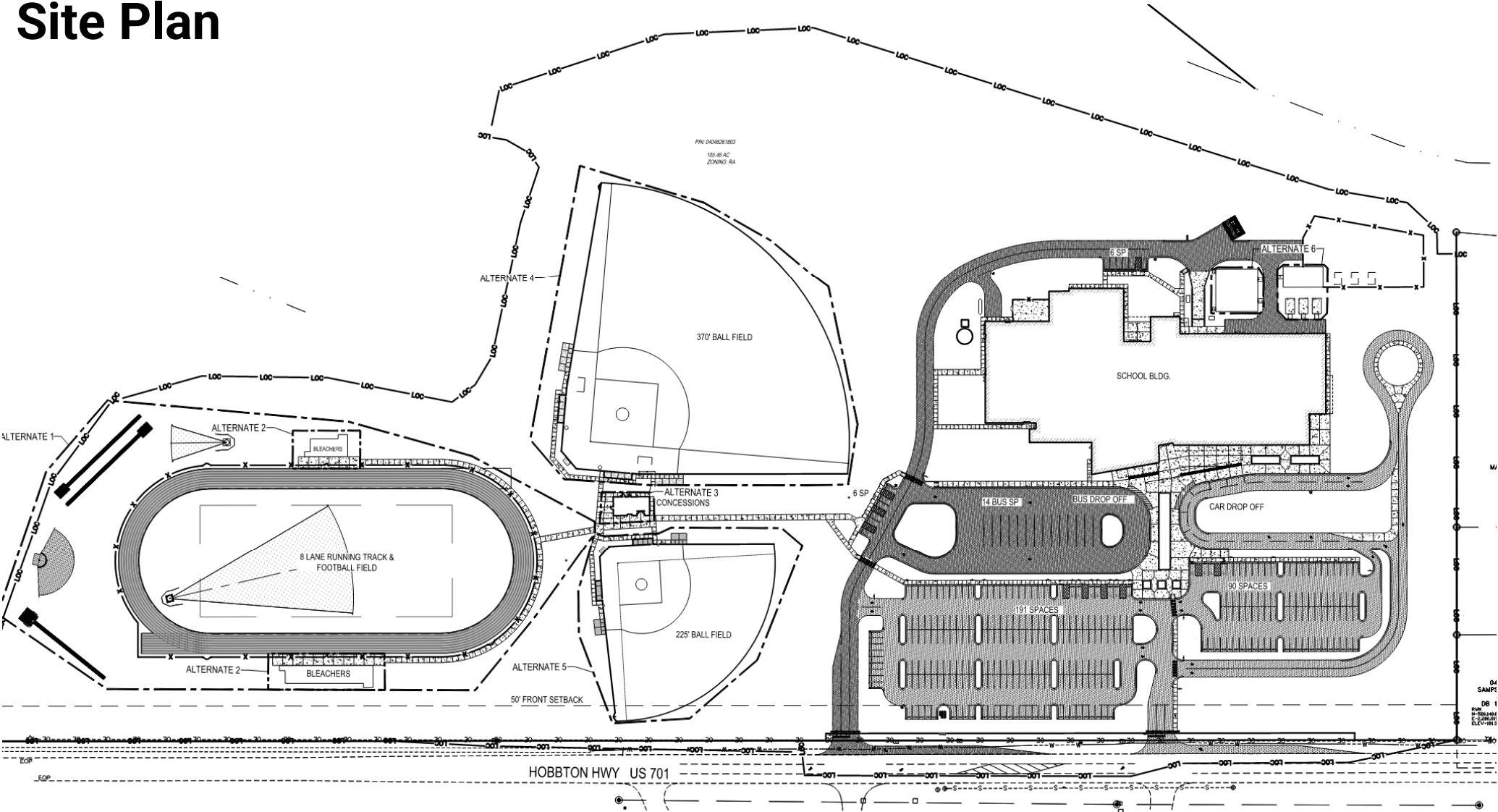


# Clerestory



**Structural Isometric**
















# Site Plan



04  
SAMP:  
DB 1  
PIN: 0406281803  
105.46 AC  
ZONING: RA

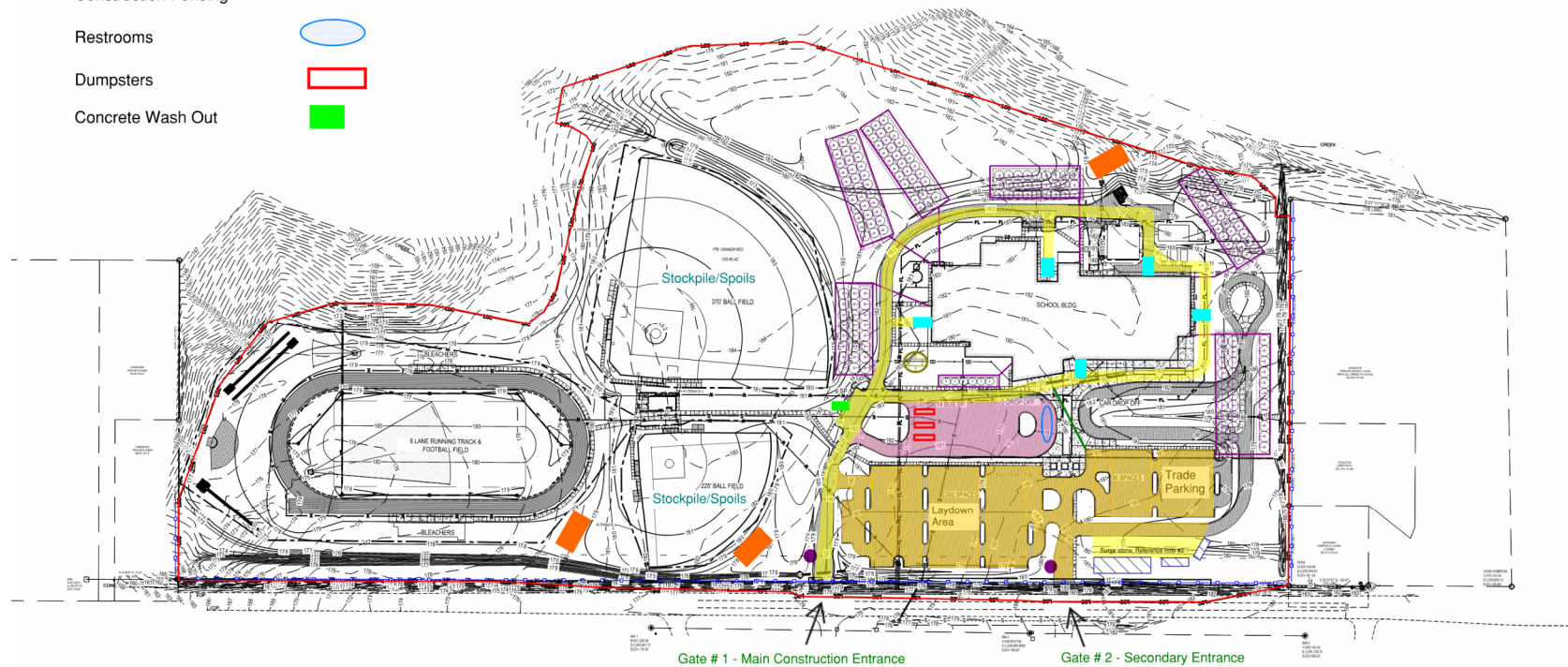
# Site Logistics

## Legend

Well Fields		Crane Pad	
Sediment Trap		Temp Road	
Binder Course (Heavy Duty)		Mortar Mix Area	
Binder Course (Standard)		Walk Path	
Office Trailers		Vehicle Wash Down	
Limits of Construction			
Construction Fencing			
Restrooms			
Dumpsters			
Concrete Wash Out			

## General Notes

- 1) Crane Pads: 25' x 40', 12" depth of No. 2 surge stone with geotextile fabric
- 2) Temp Roads: 8" of No. 2 surge stone with geotextile fabric typical width of 20'
- 3) Reference C-502 for Heavy Duty & Standard Asphalt Pavement Details



# Bid Packages

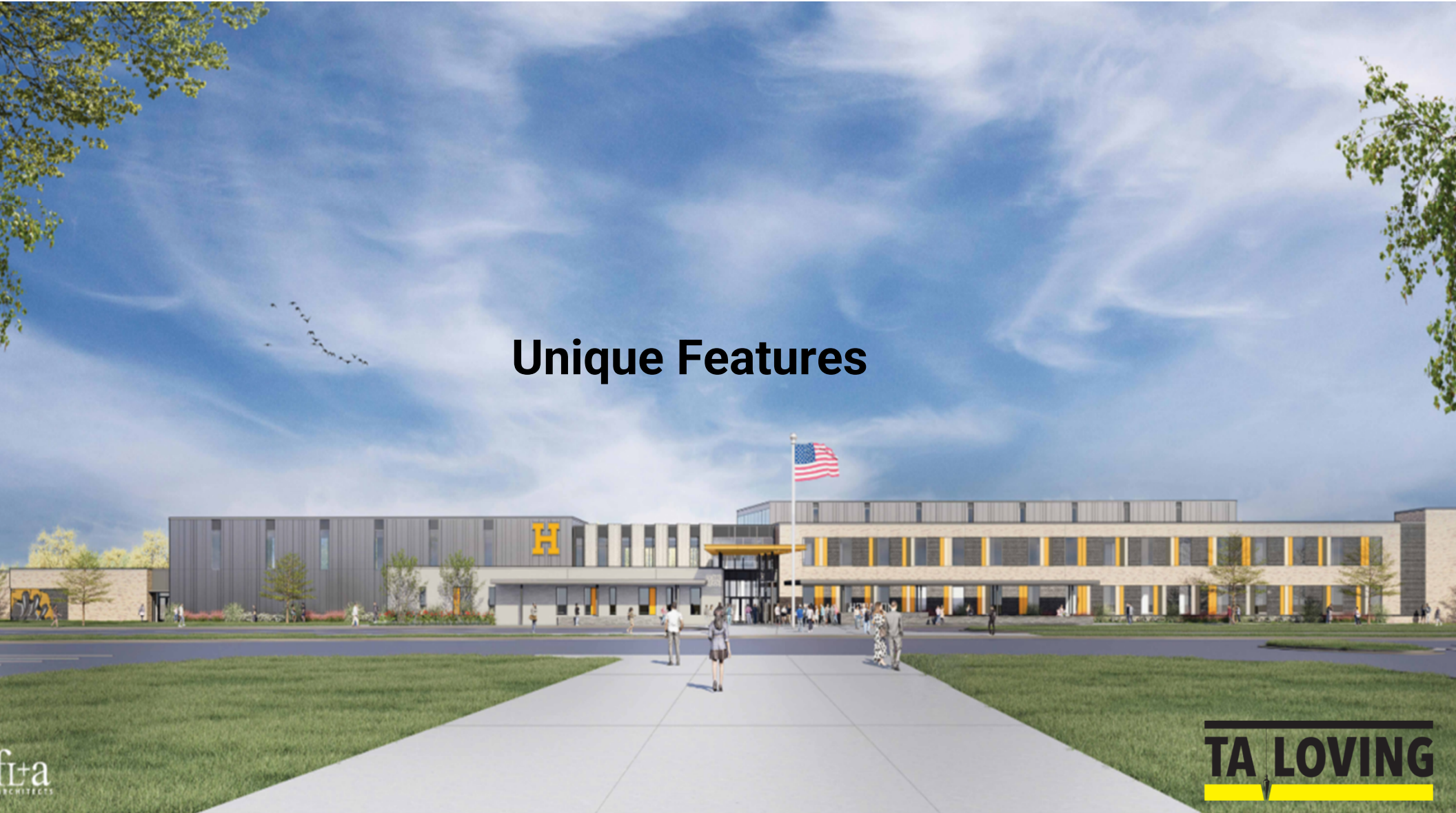


# Bid Packages



- 0150 – General Trades
- 0175 – Final Cleaning
- ~~0200 – Demolition & Abatement~~
- 0300 – Concrete
- 0400 – Turnkey Masonry
- 0500 – Structural & Miscellaneous Steel
- 0600 – Casework & Lab Equipment
- 0700 – Roofing
- 0720 – Sprayed Foam Insulation
- 0740 – Architectural Metal Wall Panels
- 0790 – Caulk, Sealants & Waterproofing
- 0800 – Doors and Hardware
- 0834 – Overhead Doors
- 0840 – Glazed Assemblies
- 0925 – Drywall Assemblies
- 0930 – Hard Tile
- 0960 – Soft Flooring
- 0963 – Resin Matrix Terrazzo
- 0964 – Resinous Flooring
- 0980 – Acoustic Ceilings & Treatments
- 0990 – Painting
- 1000 – Specialties
- 1014 – Signage
- 1022 – Operable Partitions
- 1140 – Foodservice Equipment
- 1161 – Theater & Stage Equipment
- 1165 – Athletic Equipment
- 1168 – Outdoor Athletic Equipment
- 1220 – Window Treatments
- 1400 – Elevators
- 2100 – Fire Protection
- 2200 – Plumbing
- 2300 – HVAC / Mechanical
- 2305 – HVAC Testing & Balancing
- ~~2309 – HVAC Controls~~
- 2600 – Electrical
- 2700 – Integrated Communications & AV
- ~~2713 – Structured Cabling~~
- 2813 – Security & Access Controls
- 2831 – Fire Alarm System
- 3100 – Sitework
- 3164 – Foundation Improvements
- 3220 – Geothermal Well Drilling
- 3231 – Fencing
- 3290 – Landscaping

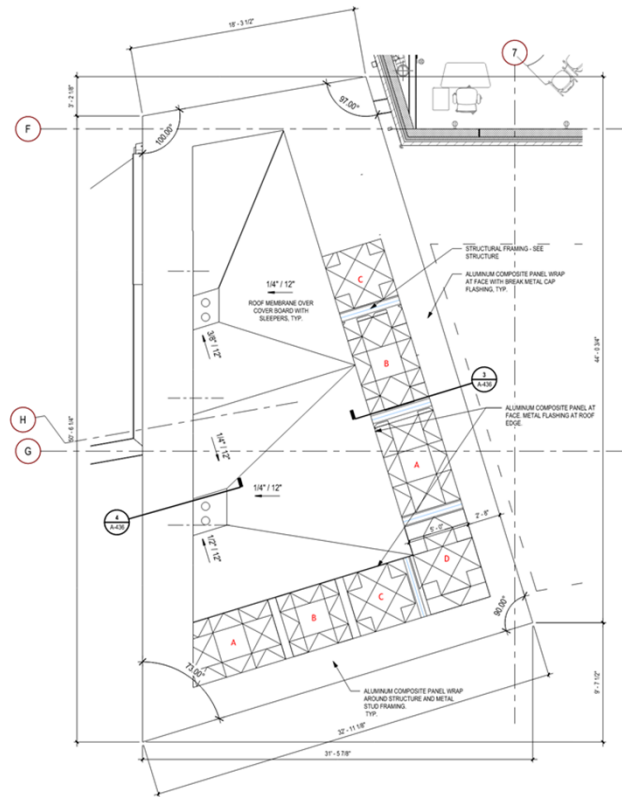
# Unique Features



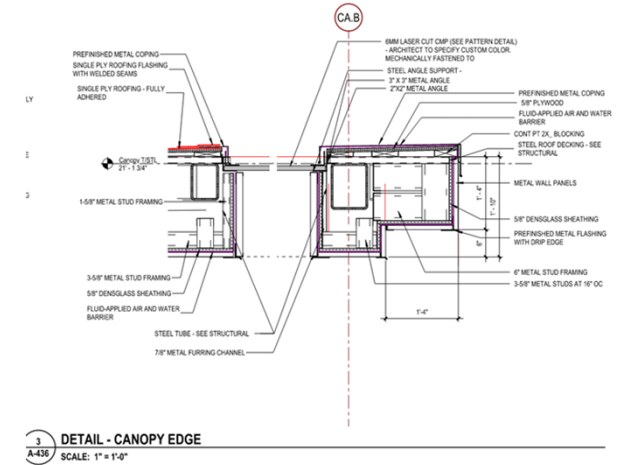
# Entrance Canopy



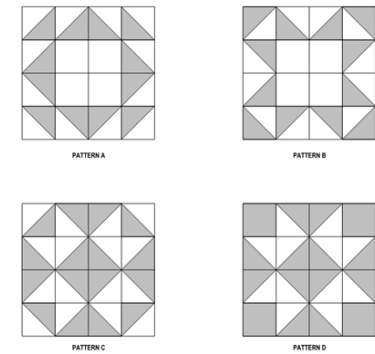
1 CANOPY ROOF FRAMING PLAN  
SCALE: 1/4" = 1'-0"



1 ENLARGED PLAN - ENTRANCE CANOPY ROOF PLAN  
SCALE: 1/4" = 1'-0"

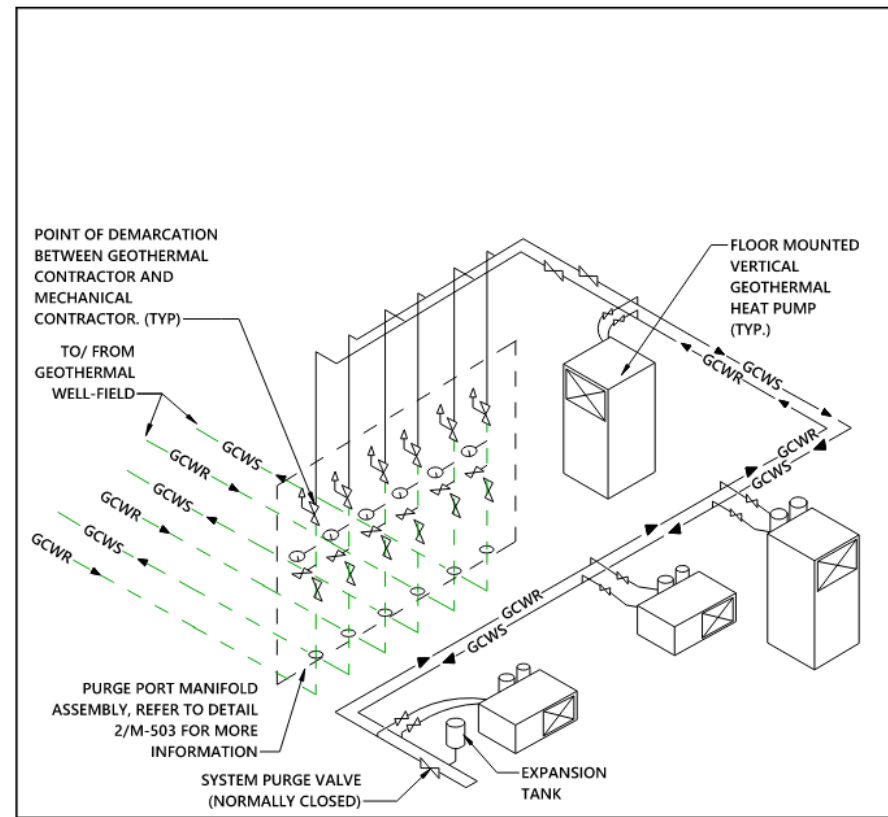
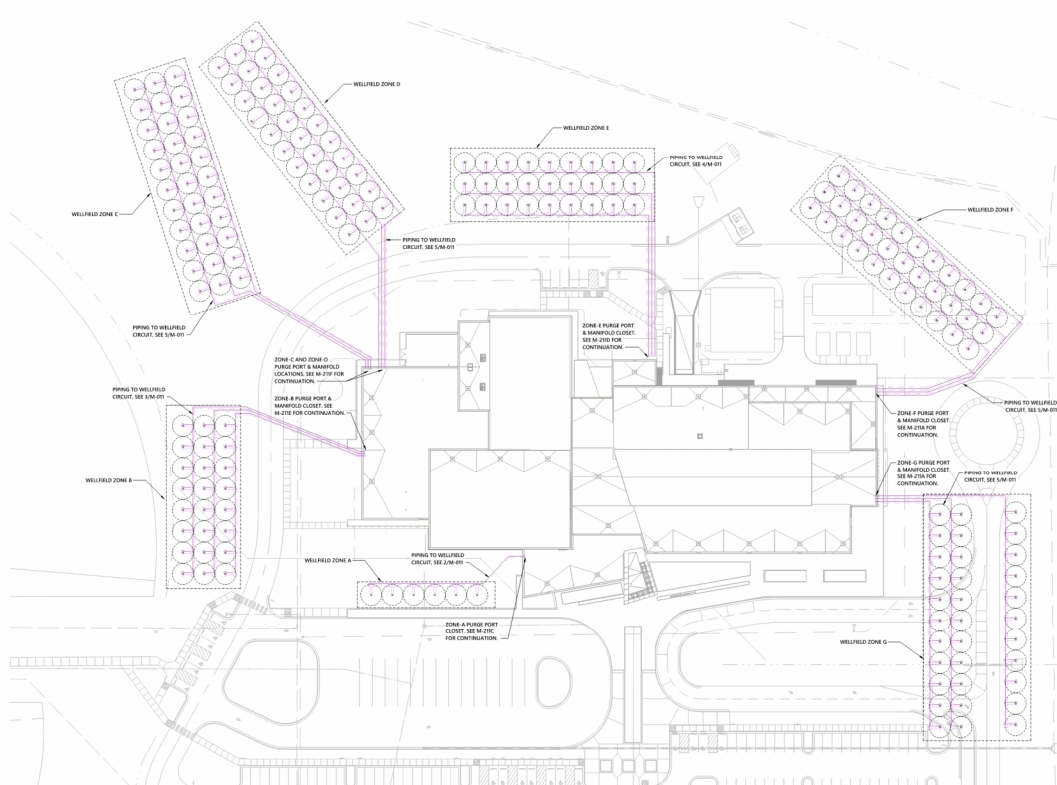


3 DETAIL - CANOPY EDGE  
SCALE: 1" = 1'-0"



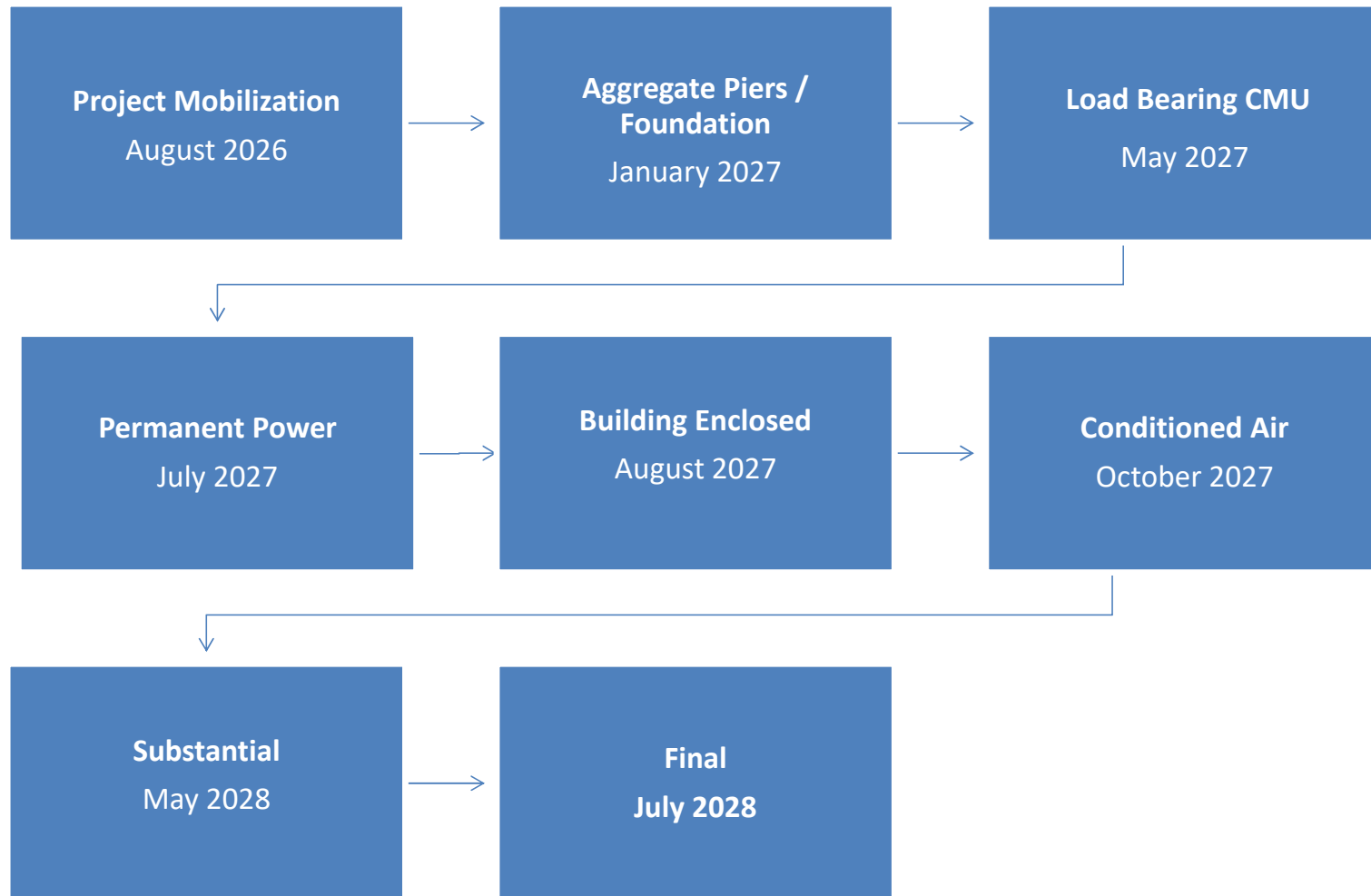
2 ENTRANCE CANOPY PATTERNS  
SCALE: 1/2" = 1'-0"

# Geothermal Wells



**8 BUILDING GEOTHERMAL PIPING DIAGRAM**  
NOT TO SCALE

# Major Schedule Milestones



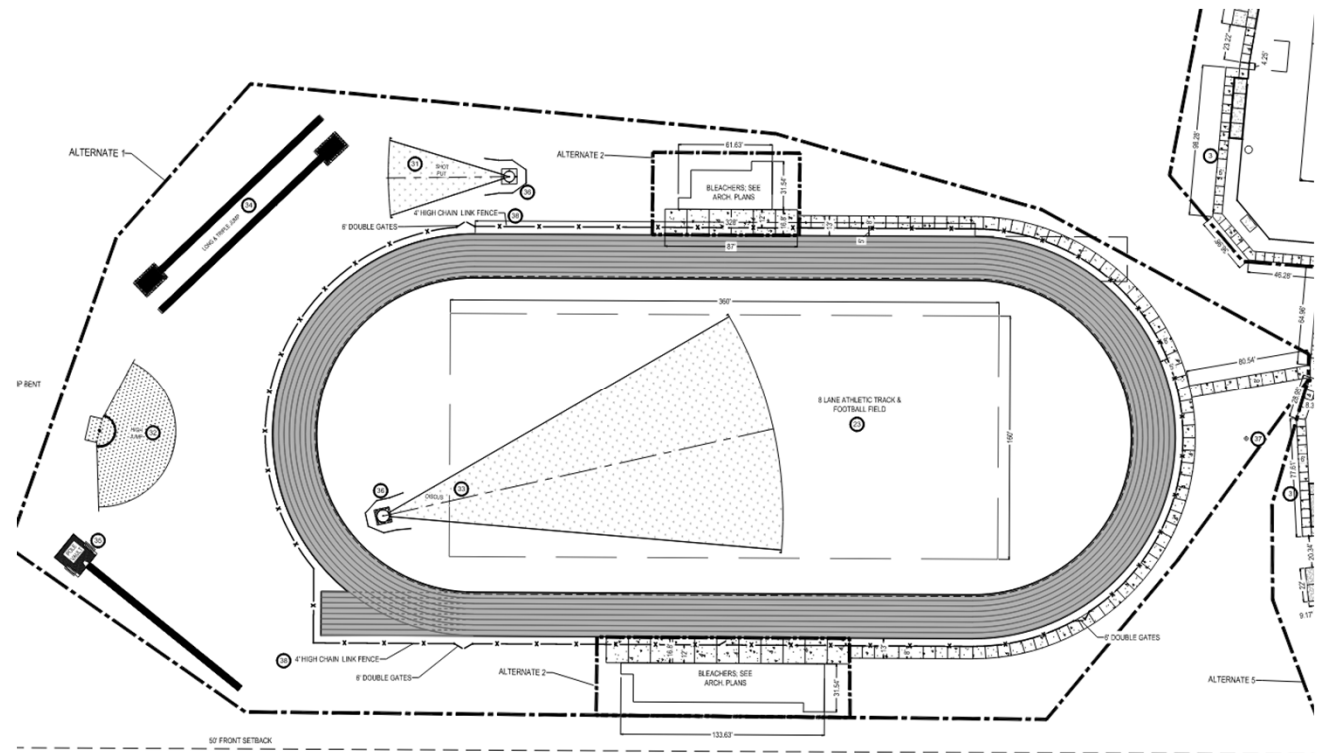
# Alternates



# Alternates – Football Field



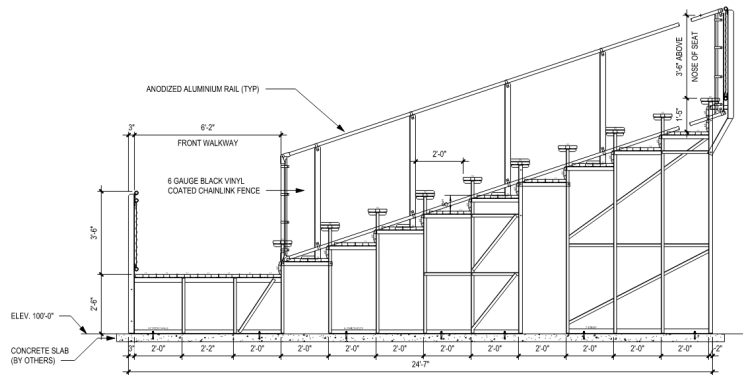
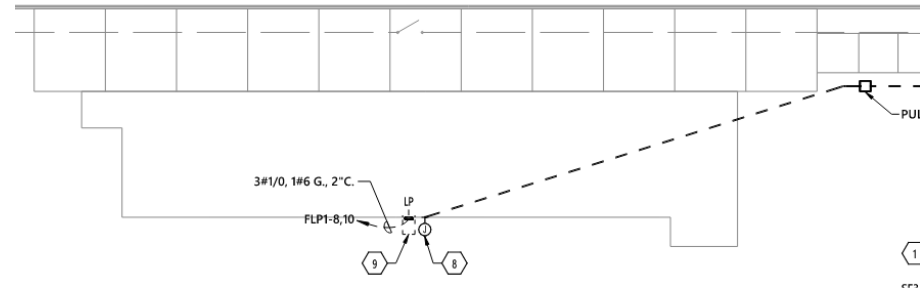
- Landscaping
- Track and Field
- Fences
- Electrical
- Athletic Equipment
- Site Concrete



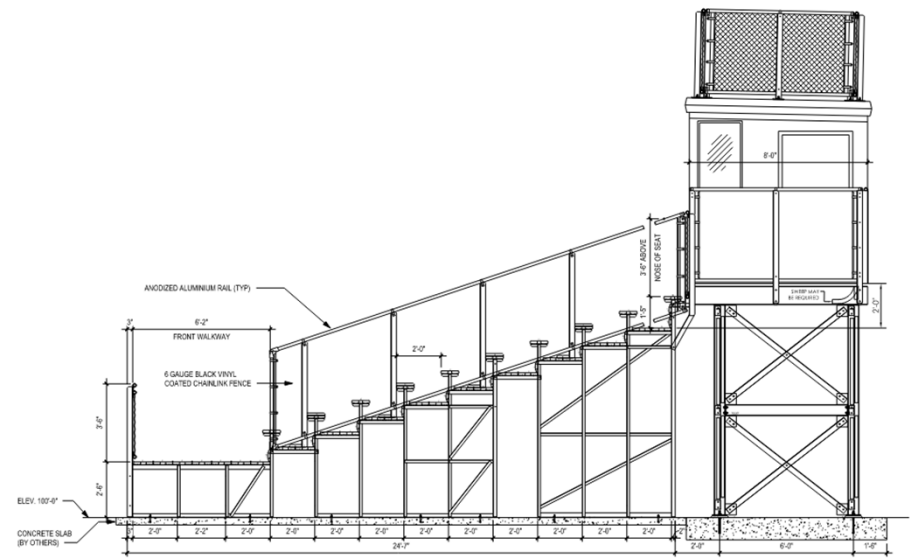
# Alternates – Grandstands



- Foundations
- Sidewalk
- Electrical
- Grandstand & Press Box



4 SECTION VIEW -10 ROW ELEVATED - VISITOR GRAND STAND  
SCALE: 3/8" = 1'-0"

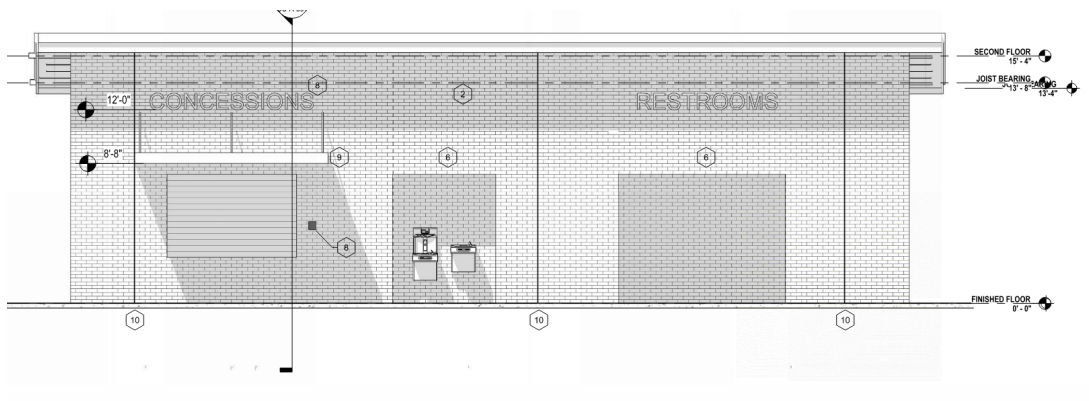
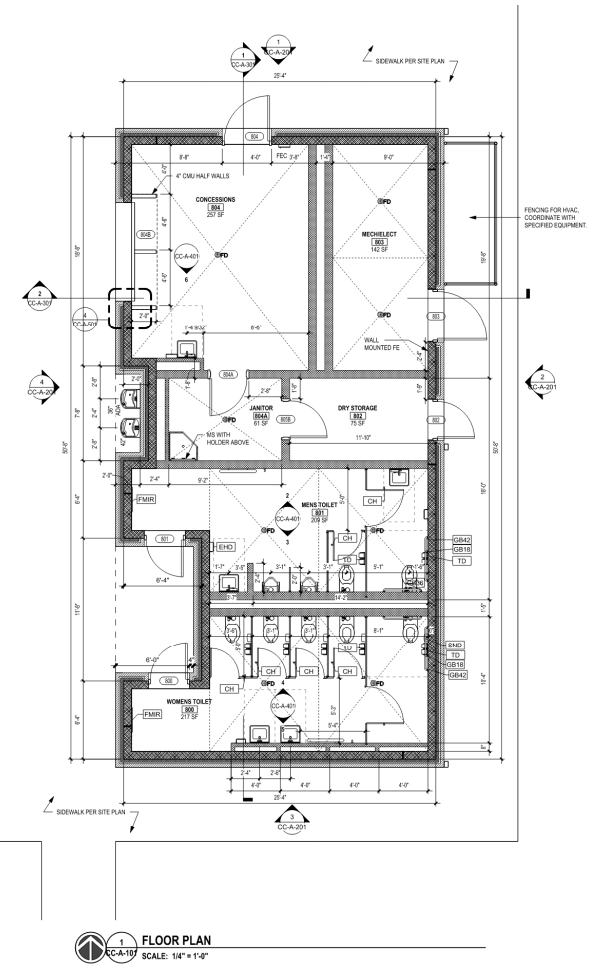
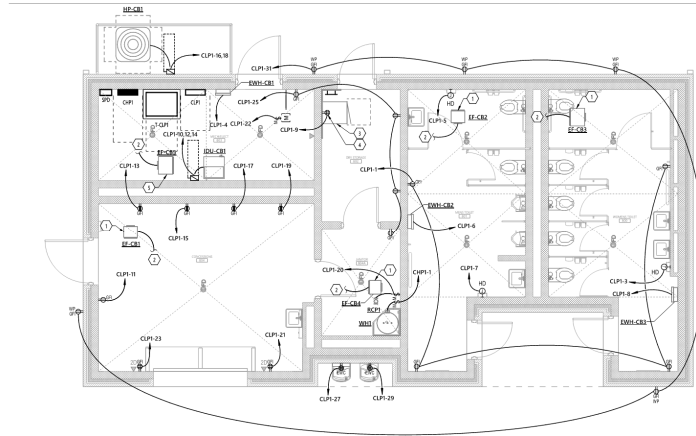


51 SECTION VIEW -10 ROW ELEVATED - HOME GRAND STAND  
SCALE: 3/8" = 1'-0"

# Alternates – Concessions Stand

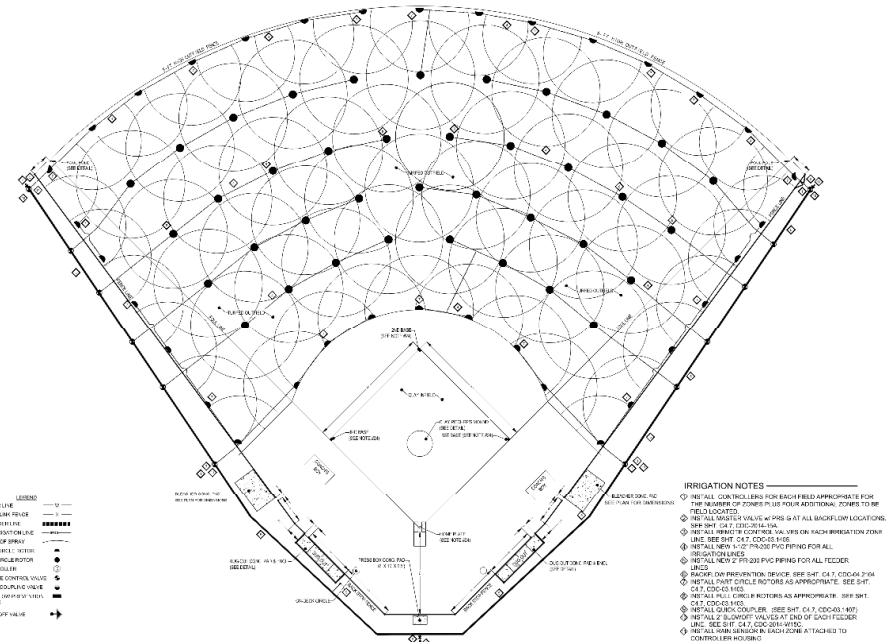


- Sidewalks
- Complete Building



# Alternates – Baseball & Softball Fields

- Dugouts
- Bleachers & Field Equipment
- Sidewalks
- Landscaping
- Electrical
- Fence

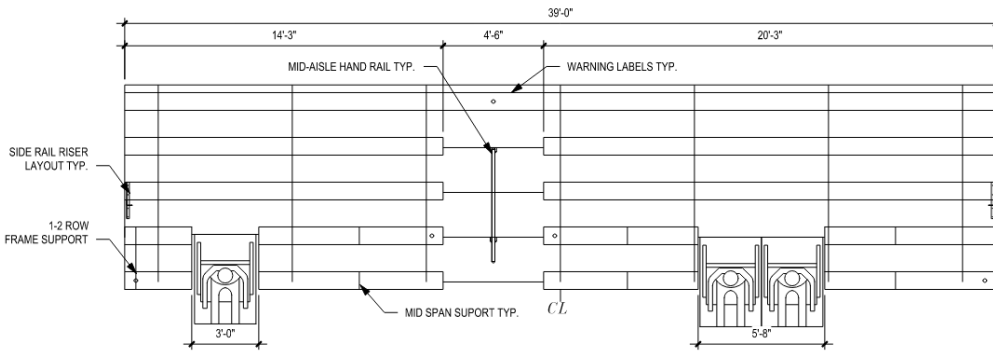


**LEGEND**

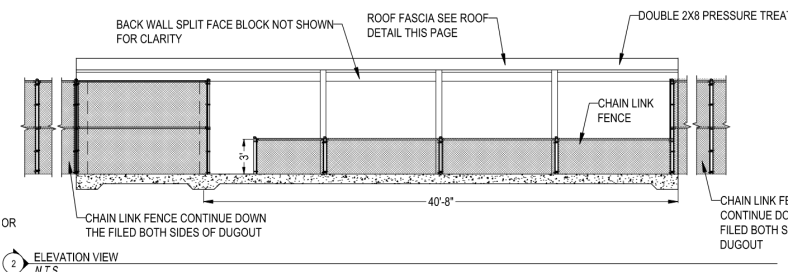
WATER LINE	---
DRINK LINE / FENCE	---
PROPOSED FENCE	---
EXISTING FENCE	---
LINE OF SIGHT	---
FIELD LIGHTS / STREET	●
PULL CIRCULAR ROTOR CONTROLLER	○
REMOTE CONTROL VALVE	○
QUICK COUPLER VALVE	○
PACKED SLIP IN VALVE SERVICE	○
BLOW OFF VALVE	○

**IRRIGATION NOTES**

- 1. INSTALL CON TROLLERS FOR EACH FIELD APPROPRIATE FOR THE NUMBER OF ZONES TO BE IRRIGATED. ZONES TO BE IRRIGATED.
- 2. INSTALL MASTER VALVE AT PIP AS AT ALL BACKFLOW LOCATIONS.
- 3. INSTALL REMOTE CONTROL VALVE ON EACH IRRIGATION ZONE. SEE SHT. C-17, C-18 & C-19.
- 4. INSTALL NEW 1/2" PIP FOR ALL IRRIGATION LOCATIONS.
- 5. INSTALL NEW 1/2" PIP FOR ALL IRRIGATION LOCATIONS.
- 6. INSTALL QUICK COUPLER. SEE SHT. C-17, C-18 & C-19.
- 7. INSTALL REMOTE CONTROL VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 8. INSTALL 2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 9. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 10. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 11. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 12. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 13. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 14. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 15. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 16. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 17. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 18. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 19. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.
- 20. INSTALL 1/2" BLOW OFF VALVE AT EACH IRRIGATION LOC. SEE SHT. C-17, C-18 & C-19.



**1** TYPICAL SEATING LAYOUT - BASEBALL  
 BB-A-10 SCALE: 1/4" = 1'-0"



**2** ELEVATION VIEW  
 M.T.C.

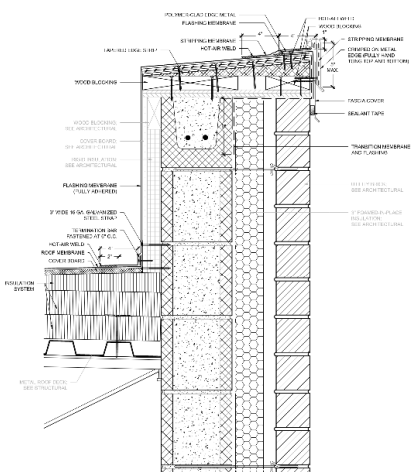
## Alternates – Owner Preferred Brand

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- #8— BAS Controls System—Honeywell
- #11—Door Access Hardware—ASSA Abloy
- #15—Lighting Fixture Types CV, DL3 & DL4

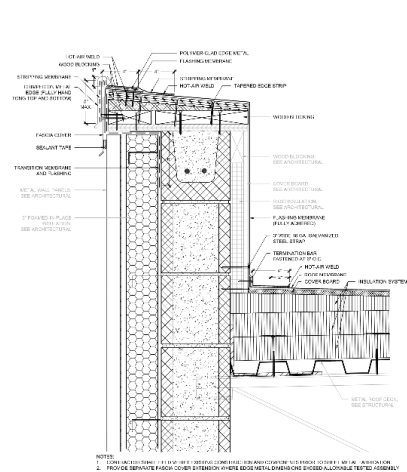
# Alternates – R-50 Roof Insulation

- Add roof insulation
- Adjust parapets for height difference – Air Barrier, Veneer, Wall Backup, etc.



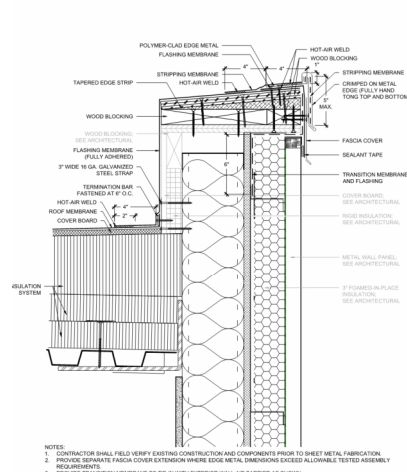
- NOTES:
1. CONTRACTOR SHALL VERIFY EXISTING CONSTRUCTION AND COMPONENTS PRIOR TO SHEET METAL FABRICATION.
  2. PROVIDE SEPARATE FLASH COVER EXTENSION OVER EDGE METAL OVERLAP WHERE EXCESSIVE ALLOWABLE TESTED ASSEMBLY REQUIREMENTS.
  3. PROVIDE TRANSITION MEMBRANE TO TIE-IN WITH EXTERIOR WALL AIR BARRIER AS SHOWN.
  4. PROVIDE SEPARATION FOR NON-COMPATIBLE MATERIALS AT ROOF TO WALL TRANSITION.

33 DETAIL - PARAPET AT BRICK/CMU (REFERENCE ARCHITECTURAL DETAIL 1/A-501)  
SCALE: 3" = 1'-0"



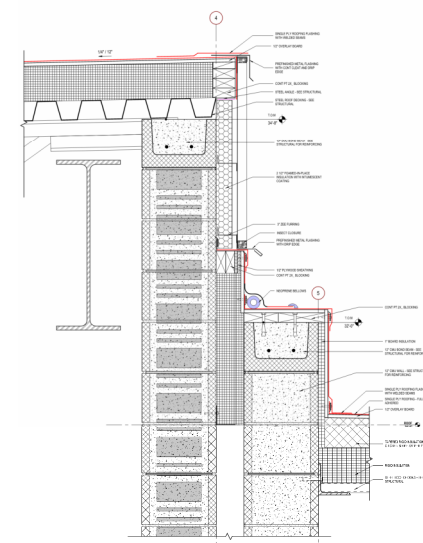
- NOTES:
1. CONTRACTOR SHALL VERIFY EXISTING CONSTRUCTION AND COMPONENTS PRIOR TO SHEET METAL FABRICATION.
  2. PROVIDE SEPARATE FLASH COVER EXTENSION OVER EDGE METAL OVERLAP WHERE EXCESSIVE ALLOWABLE TESTED ASSEMBLY REQUIREMENTS.
  3. PROVIDE TRANSITION MEMBRANE TO TIE-IN WITH EXTERIOR WALL AIR BARRIER AS SHOWN.
  4. PROVIDE SEPARATION FOR NON-COMPATIBLE MATERIALS AT ROOF TO WALL TRANSITION.

53 DETAIL - TYP. CMU WALL WITH METAL WALL PANEL PARAPET (REFERENCE ARCHITECTURAL DETAIL 4/A-501)  
SCALE: 3" = 1'-0"



- NOTES:
1. CONTRACTOR SHALL VERIFY EXISTING CONSTRUCTION AND COMPONENTS PRIOR TO SHEET METAL FABRICATION.
  2. PROVIDE SEPARATE FLASH COVER EXTENSION OVER EDGE METAL OVERLAP WHERE EXCESSIVE ALLOWABLE TESTED ASSEMBLY REQUIREMENTS.
  3. PROVIDE TRANSITION MEMBRANE TO TIE-IN WITH EXTERIOR WALL AIR BARRIER AS SHOWN.
  4. PROVIDE SEPARATION FOR NON-COMPATIBLE MATERIALS AT ROOF TO WALL TRANSITION.

1-833 DETAIL - PARAPET METAL PANEL ON STUD (REFERENCE ARCHITECTURAL DETAIL 2/A-501)  
SCALE: 3" = 1'-0"

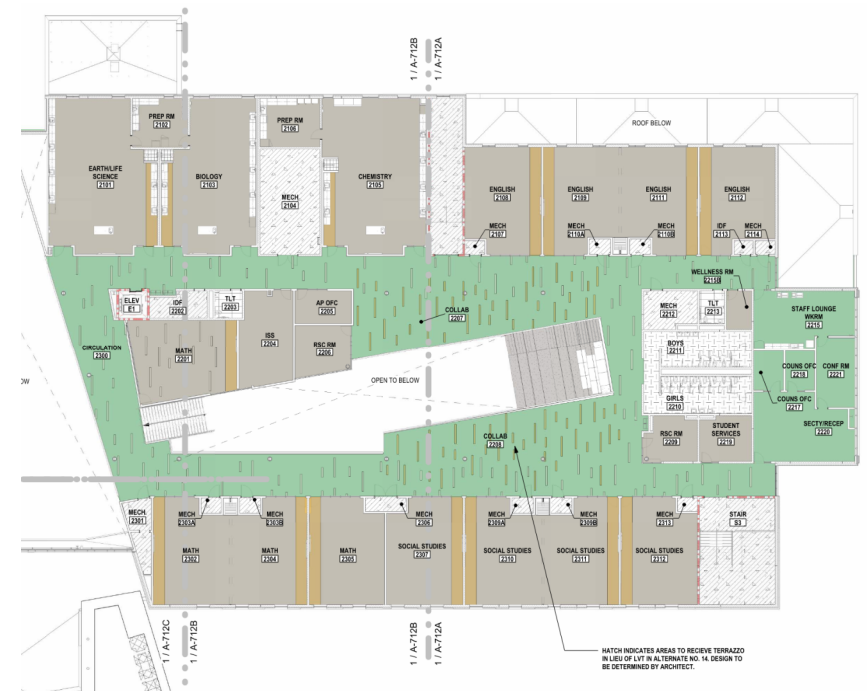
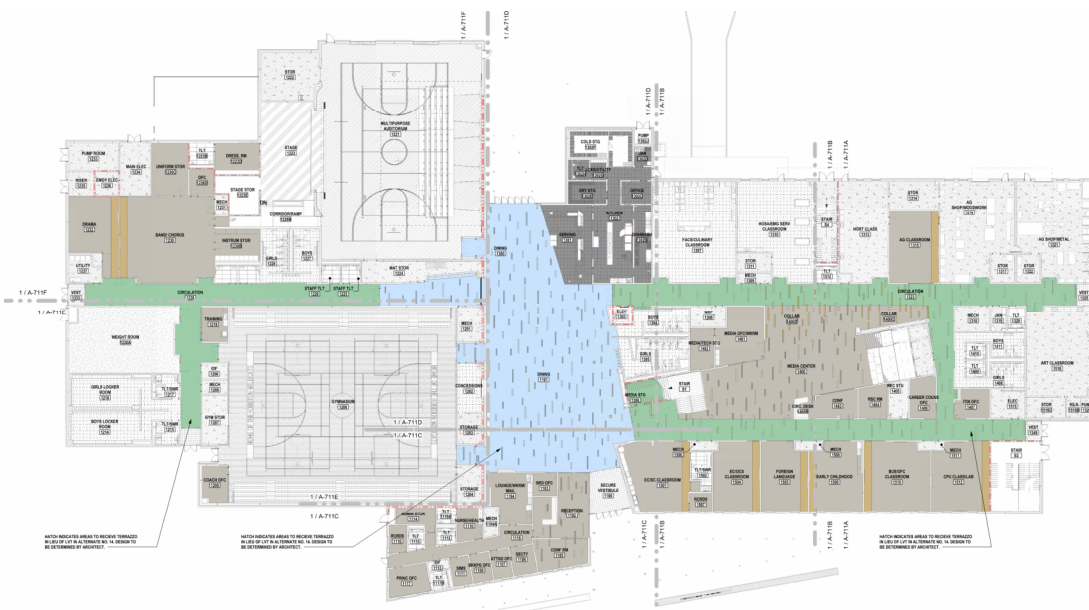


ROOF DET. - FIRE WALL & LOBBY  
SCALE: 3" = 1'-0"

# Alternates – Terrazzo Flooring



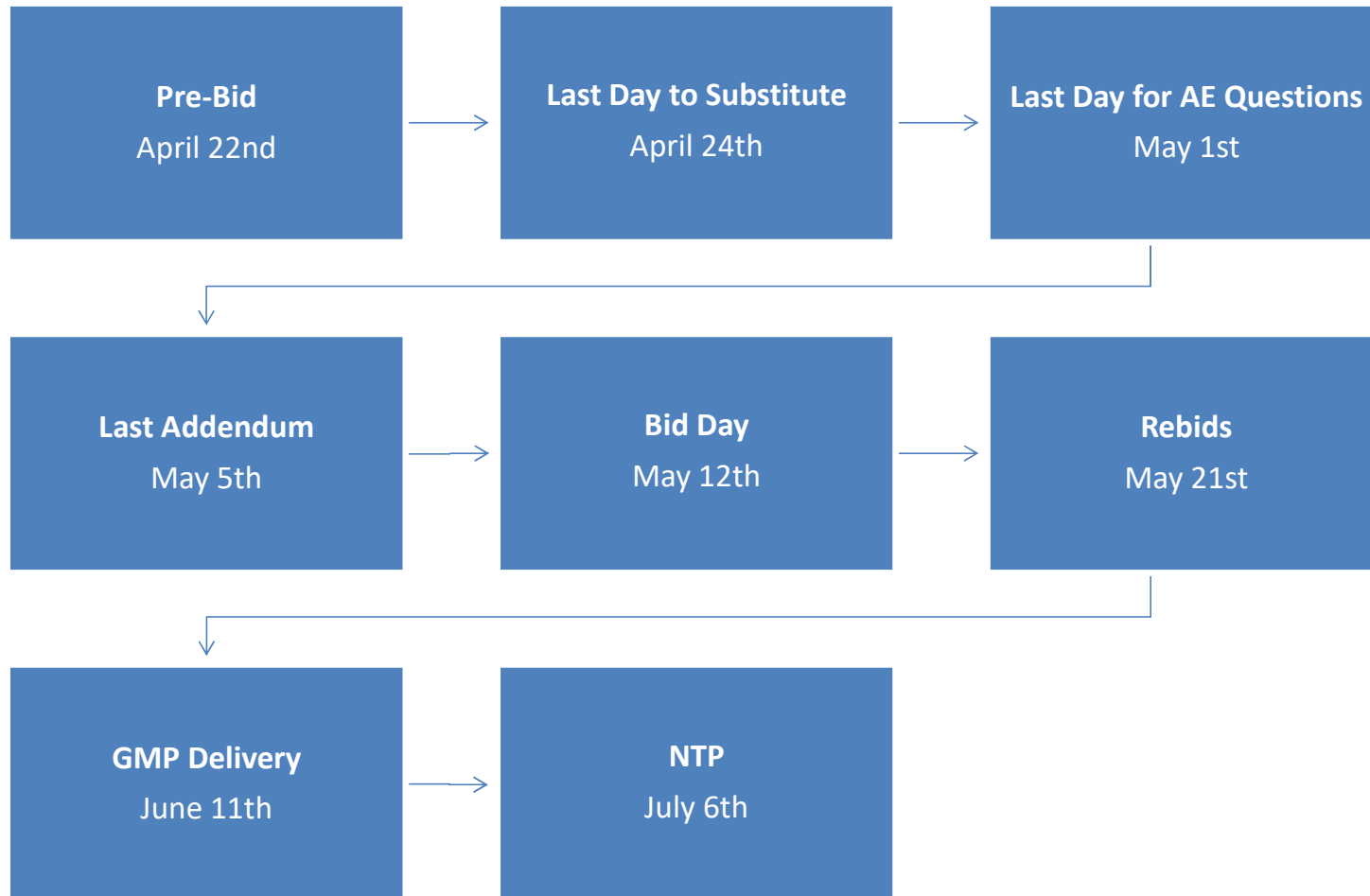
- Replace floor finish & base with terrazzo



# Bid Procedures



# Bid Schedule



# Bid Form - Alternates



- Affected bid packages are listed for each alternate
- Refer to bid scope for more detail
- It's acceptable to leave items not associated with your bid package "blank"

## ALTERNATES

Should any alternate, as described in the contract documents, be accepted, the amount written below shall be the amount to be "added to" the base bid. Alternate price should include all cost of overhead and profit. Construction Manager and Owner expressly reserve the right to accept or reject any or all Alternate Prices in any sequence. Acceptance or rejection of alternates shall not change the contract duration nor relieve the Bidder of timely completion of work within the time periods indicated in the contract documents.

### Alternate #01—Construct Football Field and Track

Bid Packages: **BP-0175, 0790, 1168, 2600, 3100, 3231 & 3290**

Base Bid: Provide grassed field with site utility infrastructure for future ball field as outlined in the project documents and in respective bid packages

Alternate: Provide grading, athletic track surfaces, athletic equipment (goals, scoreboard, team benches, discus protective netting, field markings, scorer's table, etc.), electrical (power distribution, field lighting, etc.), site concrete, fences & gates, sod & irrigation, etc. to construct a complete sports field as outlined in the project documents and in respective bid packages.

Indicate the net cost difference to provide Alternate #01 scope:

(Add) \_\_\_\_\_ Dollars (\$) (figures only)

### Alternate #02—Grandstands and Press Box

Bid Packages: **BP-0175, 0300, 0790, 1168, 2600, 2700, 3100 & 3290**

Base Bid: Provide grassed area for future Grandstand and Press Box

Alternate: Provide grading, concrete foundations, grandstands, and press box, electrical, communications, site concrete, sod & seed, etc. to construct a complete Grandstands and Press Box as outlined in the project documents and in respective bid packages

Indicate the net cost difference to provide Alternate #02 scope:

(Add) \_\_\_\_\_ Dollars (\$) (figures only)

### Alternate #03—Construct Concession Stand & Restrooms

Bid Packages: **BP-0175, 0300, 0400, 0500, 0600, 0700, 0720, 0790, 0800, 0834, 0925, 0960, 0964, 0990, 1000, 1014, 2200, 2300, 2305, 2600, 2700, 2813, 3100, 3231 & 3290**

Base Bid: Provide grassed area with site utility infrastructure for future Concession Stand and Restrooms as outlined in the project documents and in respective bid packages

Alternate: Provide trade specific requirements as outlined in the project documents and in respective bid packages to construct a complete Concession Stand and Restroom building.

Indicate the net cost difference to provide Alternate #03 scope:

(Add) \_\_\_\_\_ Dollars (\$) (figures only)

# Bid Form – Unit Prices



- Allowances are included in base bid
- Allowances are the product of indicated quantity and unit price
- It's acceptable to leave items not associated with your bid package "blank"

all in accordance with the contract documents. Construction Manager reserves the right to reject, negotiate or accept all unit prices prior to contract award.

Base Bid Price shall include all applicable listed allowances and unit prices:

<b>BP-0150 General Trades:</b>	
1. Skilled Labor rate	\$ _____/hour
2. Non-skilled Labor rate	\$ _____/hour
<b>BP-0300 Concrete:</b>	
1. Unsuitable soils (Trench) remove & dispose OFF-SITE	50 CY @ \$ _____/CY = \$ _____.
2. Replacement of unsuitable soils (Trench), select import fill	25 CY @ \$ _____/CY = \$ _____.
3. Replacement of unsuitable soils (Trench) with #57 stone	25 CY @ \$ _____/CY = \$ _____.
4. Crushed Stone (NCDOT ABC)	50 CY @ \$ _____/CY = \$ _____.
<b>BP-0400 Masonry:</b>	
1. Remove & Restore CMU per unit face	100 Each @ \$ _____/EA = \$ _____.
<b>BP-0800 Doors &amp; Hardware:</b>	
1. HM door & frame repair work	80 hours @ \$ _____/Hour = \$ _____.
<b>BP-0925 Drywall Assemblies:</b>	
1. GWB patch & repair	500 hours @ \$ _____/Hour = \$ _____.
2. Access Doors & frames	10 Each @ \$ _____/EA = \$ _____.
<b>BP-0960 Soft Flooring:</b>	
1. Floor Moisture Mitigation	41,150 SF @ \$ _____/SF = \$ _____.
<b>BP-0980 Acoustic Ceilings &amp; Treatments:</b>	
1. Acoustic ceiling assembly repairs	500 hours @ \$ _____/Hour = \$ _____.
<b>BP-0990 Painting:</b>	
1. Additional painting	320 hours @ \$ _____/Hour = \$ _____.
<b>BP-1400 Elevators:</b>	
1. Manual operation of elevator prior to completion	80 hours @ \$ _____/Hour = \$ _____.
<b>BP-2100 Fire Suppression:</b>	
1. Install additional sprinkler heads	5 Each @ \$ _____/EA = \$ _____.
<b>BP-2200 Plumbing:</b>	
1. Unsuitable soils (Trench) remove & dispose OFF-SITE	25 CY @ \$ _____/CY = \$ _____.
2. Replacement of unsuitable soils (Trench), select import fill	25 CY @ \$ _____/CY = \$ _____.
3. Replacement of unsuitable soils (Trench) with #57 stone	25 CY @ \$ _____/CY = \$ _____.

# Bid Form – Signature Page



- Bid form must be fully executed
- Each and all addenda & CM clarifications must be acknowledged

**Proposal Signature Page**

Bidder further agrees that in the case of failure on its part to execute the subcontract agreement and deliver any required bonds within ten (10) consecutive calendar days after being given written notice of the award of contract, the bid surety accompanying this bid proposal shall be paid into the funds of the Construction Manager's account set aside for the project, as liquidated damages for such failure; otherwise the certified check, cash or bid bond accompanying this proposal shall be returned to the undersigned.

Respectfully submitted this, \_\_\_\_\_ Day of \_\_\_\_\_  
(Write the Date of the Month) (Write the Current Month & Year)

\_\_\_\_\_  
(Name of firm or corporation making bid)

**WITNESS:** \_\_\_\_\_ **By:** \_\_\_\_\_  
(Witness Signs here if a Proprietorship or Partnership) (Print Name of Person Signing Bid)

\_\_\_\_\_  
(Signature)

**ATTEST:** \_\_\_\_\_ **Title:** \_\_\_\_\_  
By: \_\_\_\_\_ (Owner, Partner, President, or Vice President)

**Title:** \_\_\_\_\_ **Address:** \_\_\_\_\_  
(Corporate Secretary or Assistant Secretary only)

\_\_\_\_\_  
(CORPORATE SEAL)

**License:** \_\_\_\_\_

**Federal ID No.** \_\_\_\_\_

**Email:** \_\_\_\_\_

Addenda received and used in computing bid. Failure to acknowledge receipt of addenda may result in bid being considered non-responsive: (Initial each as applicable)

Addendum No. 1 \_\_\_\_\_ Addendum No. 2 \_\_\_\_\_ Addendum No. 3 \_\_\_\_\_ Addendum No. 4 \_\_\_\_\_  
Addendum No. 5 \_\_\_\_\_ Addendum No. 6 \_\_\_\_\_ Addendum No. 7 \_\_\_\_\_ Addendum No. 8 \_\_\_\_\_

Construction Manager Clarifications received and used in computing bid. Failure to acknowledge receipt of clarifications may result in bid being considered non-responsive: (Initial each as applicable)

Clarification No. 1 \_\_\_\_\_ Clarification No. 2 \_\_\_\_\_ Clarification No. 3 \_\_\_\_\_ Clarification No. 4 \_\_\_\_\_  
Clarification No. 5 \_\_\_\_\_ Clarification No. 6 \_\_\_\_\_ Clarification No. 7 \_\_\_\_\_ Clarification No. 8 \_\_\_\_\_

# MWBE/HUB Goals



T. A. Loving Company strongly encourages first-tier contractors to use qualified and certified MWBE/HUB contractors and suppliers.

- Minimum project goal for MWBE/HUB participation is 10%

## MWBE/HUB Guidelines

Contractors must be certified in accordance with NC General Statute 143-128 requirements prior to the date of the bid opening.

- All certification details can be obtained at [www.doa.state.nc.us/hub](http://www.doa.state.nc.us/hub).
- All program forms that must be submitted with your bid will be attached to the bid form in the bid manual

# Bid Submission Checklist



- ✓ Bid must be submitted in a sealed envelope on the enclosed Form of Proposal
  - If submitting on multiple packages, submit each as a separate sealed bid
- ✓ All blank spaces on the Form of Proposal must be filled-in (as applicable to your bid package)
- ✓ Bid Proposal Price must include all stated allowances as applicable to your bid package
- ✓ Signature Page must be fully executed
- ✓ Acknowledge receipt of each and all Addenda and CM Clarifications
- ✓ Attach completed Identification of Minority Business Participation form
- ✓ Attach executed State of NC Affidavit A – Listing of Good Faith Efforts or Affidavit B—Intent to Perform Contract with Own Workforce, as applicable
- ✓ Attach executed E-Verify Affidavit, Iran Divestment Act Certification and Non-Collusive and Non-Suspension Affidavit
- ✓ Bid Security is required for all proposals over \$300,000; attach Bid Bond or Cashier's Check in amount of 5% of Bid Proposal Price; company checks will not be accepted

Monitor the [T. A. Loving Planroom](#) daily for updates

Read Bid Manual thoroughly; Bid Proposal includes entire manual requirements.

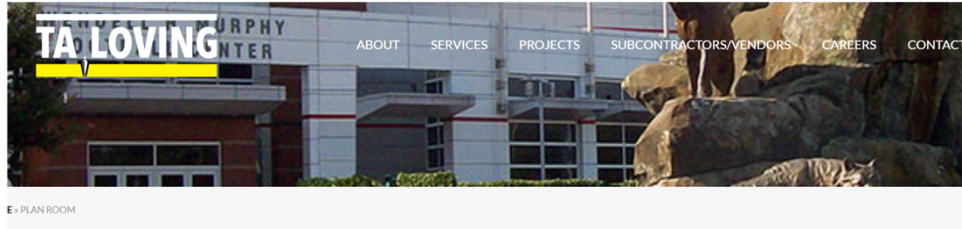
Submit sealed bid by 3:00 on the date of the opening

# Accessing Bid Documents



Access all Bid Documents via [www.talovingplanroom.com](http://www.talovingplanroom.com)

- Drawings and specs
- TA Loving Bid Manual
  - Bid Forms
  - Bid Scopes
- Pre-Bid Addenda and CM Clarifications
- Pre-Bid Meeting presentation



## Plan Room

Project Name	City	State	Bid Date	Office Location	ACCESS KEY/LOGIN	REGISTER
Hobbs High School - 65% CD - Budget Request	Newton Grove	NC	01/09/2026 05:00 PM	Building Central		
Morrisville High School - Phase 4 - 60% CD Budget Request	Morrisville	NC	02/04/2026 05:00 PM	Building Central		
Marshall Road Elementary - Design Development - Budget Request	Wendell	NC	02/11/2026 05:00 PM	Building Central		
Hobbs High School - Prequalification	Newton Grove	NC	02/20/2026 12:00 PM	Building Central		
ECU Jones Hall Renovation	Greenville	NC	02/26/2026 03:00 PM	Building East		
Morrisville High School - Phase 3 & 4 - Prequalification	Morrisville	NC		Building Central		
Morrisville High School - Phase 3A	Morrisville	NC	03/24/2026 03:00 PM	Building Central		

## Registration

Company Info

Company Name:

Title:

Contact Name:

Phone:  Extension:

Cell:

Fax:

Address 1:

Address 2:

City:

State:  Zip:  Country:

Email:

Labor Status:

Certifications:

Minority Status:

For support, contact  
Manny Castillo  
([mcastillo@taloving.com](mailto:mcastillo@taloving.com))

# Final Remarks



- All bidders shall provide appropriate Affidavits (A or B) with Bid Proposal
- All bidders shall perform Good Faith Efforts
- MBE Participation Requirements: 10%
- MBE 1<sup>st</sup> Tier Bidders must comply with Good Faith Efforts documentation
- Review Bidders Manual
  - Bid Form (Section 03)
  - Bid Scopes (Section 04)
  - Site Logistics Plan (Section 05)
  - Pre-Bid Construction Schedule (Section 05)
- Bids are due 3:00 pm May 12<sup>th</sup>
  - Sampson County Schools (Building A)
  - Auditorium located at 437 Rowan Road, Clinton, NC 28328



# Open Discussion



**TA LOVING**

**100**  
YEARS  
Est. ★ 1925











**Construction Key Dates: (Subject to change)**

Activity Description	Start Date	End Date
Grade Pad		
UG MEP Rough In		
Grade Beams		
Footings/Walls		
SOG/CMU Walls		

Add additional information from project schedule as needed.

**Coordination Schedule: (Subject to change)**

Activity Description	Start Date	End Date
UG Model Population		
UG Clash Detection		
UG 2D Install PDFs/CADs for Review		
*Pending RFIs/Submittals need to be noted on drawings and revised and submitted as a coordination revision, clouded, and tagged.	<b>Sign Off/Formal Submission mm/dd</b>	
LV1 Area A-B - Model Population		
LV1 Area A-B - Clash Detection Complete		
LV1 Area A-B - 2D Install PDFs/CADs for Review		
*Pending RFIs/Submittals need to be noted on drawings and revised and submitted as a coordination revision, clouded, and tagged.	<b>Sign Off/Formal Submission mm/dd</b>	
LV1 Area C-D - Model Population		
LV1 Area C-D - Clash Detection Complete		
LV1 Area C-D - 2D Install PDFs/CADs for Review		
*Pending RFIs/Submittals need to be noted on drawings and revised and submitted as a coordination revision, clouded, and tagged.	<b>Sign Off/Formal Submission mm/dd</b>	
LV1 Area E-F - Model Population		
LV1 Area E-F - Clash Detection Complete		
LV1 Area E-F - 2D Install PDFs/CADs for Review		
*Pending RFIs/Submittals need to be noted on drawings and revised and submitted as a coordination revision, clouded, and tagged.	<b>Sign Off/Formal Submission mm/dd</b>	

Add additional information from project schedule as needed.

**Coordination Schedule: (Subject to change)**

Activity Description	Start Date	End Date
LV2 Area A-B - Model Population		
LV2 Area A-B - Clash Detection		
LV2 Area A-B - 2D Install PDFs/CADs for Review		
*Pending RFIs/Submittals need to be noted on drawings and revised and submitted as a coordination revision, clouded, and tagged.	<b>Sign Off/Formal Submission mm/dd</b>	
LV2 Area C-D - Model Population		
LV2 Area C-D - Clash Detection Complete		
LV2 Area C-D - 2D Install PDFs/CADs for Review		
*Pending RFIs/Submittals need to be noted on drawings and revised and submitted as a coordination revision, clouded, and tagged.	<b>Sign Off/Formal Submission mm/dd</b>	
LV2 Area E-F - Model Population		
LV2 Area E-F - Clash Detection Complete		
LV2 Area E-F - 2D Install PDFs/CADs for Review		
*Pending RFIs/Submittals need to be noted on drawings and revised and submitted as a coordination revision, clouded, and tagged.	<b>Sign Off/Formal Submission mm/dd</b>	
Roof Model Population		
Roof Clash Detection Complete		
Roof 2D Install PDFs/CADs for Review		
*Pending RFIs/Submittals need to be noted on drawings and revised and submitted as a coordination revision, clouded, and tagged.	<b>Sign Off/Formal Submission mm/dd</b>	

Add additional information from project schedule as needed.

## Model Information:

- Revit Requirements
  - Revit Version 2026
  - Naming convention for Revit models “ECU-MEC\_System\_CompanyAbbrev.rvt”
    - Ex: ECU-MEC\_MECH\_TALCO.rvt
  - Align models with Architectural project origin to origin
- CAD models will be in 3D (primarily for Fire Protection)
- Models will be posted to T.A. Loving's Revizto Project and Procore Documents
  - Models will be pushed to Revizto (as worked on)
    - Naming convention for Revizto “ECU-MEC\_System\_CompanyAbbrev.rvt”
      - Ex: ECU-MEC\_MECH\_TALCO.rvt
  - All trades are responsible for publishing their updates to Revizto with the correct alignment.
  - Models will be saved to Procore Documents (as an area is completed or as requested by TA Loving team)
    - NWC with colors/materials applied.
    - Push as shared coordinates
    - Naming convention for Procore Documents “ECU-MEC\_System\_CompanyAbbrev.rvt”
      - Ex: ECU-MEC\_MECH\_TALCO.rvt
    - Folder structure for Procore Documents:
      - 01 – BIM Coordination
      - 02 – Coordination Files
        - Trade Coordination File
          - Electrical
          - Fire Protection
          - Mechanical
          - Plumbing
  - Signoff Drawings will be saved to Procore Documents (as an area is completed or as requested by TA Loving team)
    - Signoff drawing will contain:
      - All necessary dimensions needed to complete noted work
      - All necessary Sections needed to complete noted work
      - Floor and wall penetration details showing sleeve sizes and layout dimensions
    - Push as shared coordinates
    - Separate models by UG, LV1, ROOF for submissions
    - Naming convention for Procore Documents “ECU\_System\_CompanyAbbrev\_Area.nwc”
      - Ex: ECU\_MECH\_TALCO\_UG.nwc
    - Folder structure for Procore Documents:
      - 01 – BIM Coordination
      - 03 – Signoff Drawings
        - 00 – Underground
        - 01 – Level 1
        - 02 – Roof

**Requirements:**

- Model coordination and insertion point (0,0,0)
- Model uploads to be completed 24 hrs. prior to coordination meetings and publish daily (as worked on).
- MEP/FP trades are required to attend weekly coordination meetings with project manager/superintendent and model manager in attendance.
- MEP/FP trades are required to create and submit coordination RFI's in Procore.
- Mechanical, Telecom/Electrical, Plumbing to be modeled/coordinated in Revit 2026 per scope required by BIM Execution Plan, perform coordination with other trades using Revizto and Procore, log RFIs per trade, and submit coordinated set of drawings with elevation tags and dimensions, per their shop drawings, for the field teams to install by. This includes elevation tags and dimensions from walls/column lines showing system types and size.
- Fire Protection to be modeled/coordinated by FP trade in Hydro CAD 3D or equivalent per scope below, perform coordination with other trades using Revizto and Procore, log RFIs per trade, and submit coordinated set of drawings with elevation tags and dimensions, per their shop drawings, for the field teams to install by. This includes elevation tags and dimensions from walls/column lines showing system types and size.
- Models to be in Revit 2026 or program that is compatible with Revit 2026 and Revizto.
- Use 30x42 title block with 1/4" or 3/16" scale containing company name, revisions table, and submission dates.
- Models and drawings from all trades must be submitted as a formal submittal in Procore to T.A. Loving for the design team for review and approve before install begins. Stamp drawings "for review only" until approved.
- Tolerances for MEP/FP is 1/16" of actual size and 1/8" of actual location. 2D drawings will be required to represent this information with tags, elevations, and dimensions.
- Procore will house 2D coordination drawings, BIM Execution Plan, and any other documentation for this project.

**Model Elements:**

<b>SITWORK:</b>		
<b>Description</b>	<b>LOD</b>	<b>Details</b>
Water Main	350	Service to be modeled from tap to connection point
Fire Main	350	Service to be modeled from tap to connection point
Sewer Main	350	Service to be modeled from tap to connection point
Storm Water System	350	All piping, manholes, piping specialties, and support devices to be modeled

<b>MECHANICAL SITWORK:</b>		
<b>Description</b>	<b>LOD</b>	<b>Details</b>
Mechanical Site Utility	350	All piping, valves, and insulation both inside and outside of manholes. This includes all chilled water, steam, and condensate piping associated with this bid package to be modeled.
Associated Manholes	350	All associated manholes to be modeled
Piping Specialties	350	All piping specialties to be modeled
Support Devices	350	All support devices to be modeled

<b>STRUCTURAL:</b>		
<b>Description</b>	<b>LOD</b>	<b>Details</b>
Beams and Columns	350	Required for coordination of building systems
Braces and Gusset Plates		Required for coordination of building systems
Seismic Bracing	350	Required for coordination of building systems
Structural Trusses	350	Required for coordination of building systems
Stairs	350	Required for coordination of building systems
Embeds	350	Required for coordination with other building systems
Miscellaneous Support	350	Required for coordination of building systems (e.g., support steel for operable partitions)
Existing Conditions Model	-	The structural contractor will take ownership and verify existing structural elements. Any items unclear will be field verified by the structural contractor.

<b>MECHANICAL:</b>		
<b>Description</b>	<b>LOD</b>	<b>Details</b>
All Corridor Piping – regardless of size	350	$\frac{3}{4}$ " Pipe and smaller to be modeled
Piping Greater than 1-1/2" Diameter & System Loops	350	$\frac{3}{4}$ " Pipe and larger to be modeled
Piping Smaller than 1-1/2" Diameter	350	$\frac{3}{4}$ " Pipe and smaller to be modeled. All piping out to VAV units are to be considered schematic
Pipe Insulation Size	350	All pipe insulation should be modeled according to the design specification.
Mechanical Ductwork – All Sizes	350	All ductwork, fittings, and transitions to be modeled
Ductwork Insulation Size	350	All ductwork insulation should be modeled according to the design specification
Underground Piping	350	All pipe to be modeled up to 5'-0" outside of building and any major equipment
Large Mechanical Equipment – RTU's, Chillers, etc.	350	All large mechanical equipment should be modeled as per the approved equipment submittal
Small Mechanical Equipment – VAV's, Fans, etc.	350	All small mechanical equipment should be modeled as per the approved equipment submittal

Valves & Valve Locations	350	Valves to be shown for all pipe
Fire/ Smoke Dampers & Access	350	All fire and smoke dampers, including the access zones, should be modeled per approved submittal
Equipment Access Zones	350	All equipment access zones should be modeled as per the approved equipment submittal
All Piping and Equipment in Mechanical Rooms	350	All piping and equipment to be modeled per approved submittals and specs
Seismic Requirements	350	N/A unless required
Hanger & Supports	350	All major hangers, supports and any seismic requirements.

**PLUMBING:**

Description	LOD	Details
All Corridor Piping – regardless of size	350	$\frac{3}{4}$ " Pipe and smaller to be modeled
Piping Greater than 1-1/2" Diameter	350	$\frac{3}{4}$ " Pipe and larger to be modeled
Piping Smaller than 1-1/2" Diameter	350	$\frac{3}{4}$ " Pipe and smaller to be modeled
Pipe Insulation Size	350	All pipe insulation should be modeled according to the design specification
Underground Plumbing	350	All pipe to be modeled up to 5'-0" outside of building and to any major equipment or tank
Plumbing Equipment & Fixtures	350	Plumbing Equipment and Fixtures should be modeled as per the approved submittal
Valves & Valve Locations	350	Valves to be shown for all pipe
Pipe Assemblies/ Backflows	350	All to be modeled per approved submittals
All Piping in Shafts – regardless of size	350	All pipe to be modeled in shafts
All Piping and Equipment in Mechanical Rooms	350	All piping and equipment to be modeled per approved submittals and specs
Equipment Access Zones	350	All equipment access zones should be modeled as per the approved submittal
Hanger & Supports	350	All major hangers, supports and any seismic requirements.

**ELECTRICAL:**

Description	LOD	Details
Feeder Conduits – 1 1/4" and greater in diameter	350	All feeder conduits to be modeled
Branch Conduit Racks – more than 6 conduits	350	Anything larger than (4) $\frac{3}{4}$ " conduits in one rack will be modeled. Branch conduits will not be represented.
Cable Tray	350	All cable tray to be modeled. Note if cable tray is to be accessed from top or side. Check clearances to avoid conflicts.

Light Fixtures/ Ceiling Devices	350	Check electrical drawings with architectural RCPs for location accuracy. Coordinate with sprinkler, diffuser, and other ceiling mounted equipment. Check to make sure light fixtures are modeled according to approved submittals with required clearances
Underground Coordination – 2” or larger conduits	350	All underground duct banks will be modeled representing conduit runs up to 5’-0” outside of building and out to equipment yard. All major equipment is to be modeled.
Electrical Panel & Access	350	Label electrical panels with type marks to match design drawings. Check sizes with approved submittals. Model and check access clearances for all electrical panels/ electrical equipment for front and above clearance zones.
Electrical Equipment	350	Equipment may include switchgears, generators, transformers, cracks, etc. Model per approved submittal
Conduit Pull Boxes – Larger than 1x1	350	All conduit pull boxes/access to be modeled
Installation Zone for J-Hooks	350	N/A – Clarify if these are being used on the project
Hangers & Supports	350	All major hangers, supports and any seismic requirements.

<b>FIRE PROTECTION:</b>		
<b>Description</b>	<b>LOD</b>	<b>Details</b>
Fire Protection Pipe – all sizes	350	Mains will be modeled to allocate space for distribution. Subcontractor responsible for design and full modeling of all pipes –all sizes
Sprinkler Head Locations	350	Locations are dictated by approved fire protection shop drawings. Coordinate with lighting, diffuser, and other ceiling mounted equipment. Subcontractor team responsible for coordination
Valves and Valve Locations	350	Valves to be shown for ¾” pipe and smaller. Subcontractor team responsible
Fire Protection Equipment/ Pipe Assemblies	350	All information to be modeled per approved submittals
Underground Coordination – 2” or larger pipes	350	All piping to be modeled
Equipment Access Zones	350	All information to be modeled
Seismic Requirements	350	N/A – unless required on this project
Hanger & Supports	350	All major hangers and supports

<b>SPECIALITY SYSTEMS:</b>		
<b>Description</b>	<b>LOD</b>	<b>Details</b>
Geothermal	350	All piping, valves, and insulation both inside and outside of manholes, piping specialties, and support devices to be modeled.
Integrated Communications and AV		All runs larger than 1” and racks to be modeled along with equipment. All devices and equipment to be modeled with required clearances shown
Fire Alarm	350	All runs larger than 1” and racks to be modeled along with equipment. All devices and equipment to be modeled with required clearances shown

LOD Definitions (Based upon Association of General Contractors BIMForum LOD Specification 2016 Version)

**LOD100:** The Model Element **may be graphically represented** in the Model with a symbol or other generic representation but does not satisfy the requirements for LOD 200. Information related to the Model Element (i.e., cost per square foot, tonnage of HVAC, etc.) can be derived from other Model Elements.

**LOD200:** The Model Element is graphically represented within the Model as a **generic system**, object, or assembly with **approximate** quantities, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element.

**LOD300:** The Model Element is graphically represented within the Model as a **specific system**, object, or assembly in terms of quantity, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element.

**LOD350:** The Model Element is graphically represented within the Model as a **specific system**, object, or assembly in terms of quantity, size, shape, location, orientation, and **interfaces with other building systems**. Non-graphic information may also be attached to the Model Element.

**LOD400:** The Model Element is graphically represented within the Model as a **specific system**, object, or assembly in terms of size, shape, location, quantity, and orientation **with detailing, fabrication, assembly, and installation information**. Non-graphic information may also be attached to the Model Element.

**LOD500:** The Model Element is a **field verified representation** in terms of size, shape, location, quantity, and orientation. Non-graphic information may also be attached to the Model Elements.

Discipline / Trade	Color / System	Layer/System Label
<b>ARCH / OTHER</b>	Architectural	AR
<b>STRUCT</b>	Structural Steel	SS
	Structural Concrete	SC
<b>MECH</b>	Supply Air	SA
	Return Air	RA
	Exhaust Air	EA
	Hydronic/Geothermal Return	HR
	Hydronic/Geothermal Supply	HS
<b>ELEC</b>	Conduit/Equipment	EC
	Lighting	EL
<b>PLUMB</b>	Sanitary/Drainage/Waste/Sewer	SAN
	Storm	STRM
	Vent	VENT
	Domestic Cold Water	CW
	Domestic Hot Water	HW
	Gas	GAS
<b>FP</b>	Fire Water	FW
<b>ALL – No-Fly-Zones</b>	Transparency (50%)	NFZ