

July 2, 2015

Owner: Alberta Technology Center
The City of Tuscaloosa

Owner's Project No: A15-0513

Architect: Ward Scott Architecture, Inc.

This Addendum forms a part of the Contract Documents and modifies the original Bid Documents dated June 22, 2015, as noted below.

Acknowledge receipt of this Addendum in the location provided on the Bid Proposal Form.

1.1 **GENERAL**

A. All civil title sheets to indicate bid set (not 95% construction set).

1.2 SPECIFICATIONS

- A. The following items have been modified:
 - 1. Section 084110 Aluminum-Framed Entrances and Storefronts, 2.1. Add the following note: (Basis of Design: Kawneer Trifab 451T exterior frames, 450 sight line non thermal at interior frames.)
 - 2. Section 087110 Door Hardware
 - 3. Section 108010 Toilet and Bath Accessories.
- B. The following sections have been added:
 - 1. Section 01210 Allowances. Add this section per the attached.

1.3 DRAWINGS

- A. The following sheets have been re-issued:
 - 1. Sheet A402 Interior Elevations
- B. The following sheets have been modified:
 - 1. Refer to Sheet A001 Finish Legend and Schedule, note #2. Delete this note entirely. Insert the following: Note #2: See Elevation 13/A402 for the paint and wink application and trim parameters on the South Wall. Note: all exposed ceilings to receive PT-1.
 - 2. AC01 Overall Site Plan. Note west sidewalk has been adjusted north to work with door exit. East side of site (not in contract) will be used for Contractor lay down space in this project.
 - 3. AC02 Enlarged Site Plan. West area of site to remain open during construction for police department use at all times. Construction Fencing to be installed on feet at existing paved areas.
 - 4. A002 Opening Schedules and Details.
 - a. SF1 to have additional horizontal mullion.
 - b. SF2 overall height reduced by 4".
 - c. SF5 added to include transom over pair of doors.
 - d. Storefront frames have been adjusted to "engineer" brick coursing. Horizontal mullions and cast stone headers have been included at standard heights for typical window assembly in masonry walls.
 - e. Door 123A Hardware Set changed to 8A.
 - 5. A102 Dimension Plan east exterior wall at exit doors has moved east 7" toward coffee bar. Interior wall adjustments are reflected. All exterior dimensions have been updated to reduce fractions.
 - 6. A105 Canopy Plan. Detail 3. Additional horizontal mullion shown in SF1. Height of Gyp soffit reduced by 4". Roofing/reglet flashing info has been added.
 - 7. A111 Enlarged Floor Plans. Detail 2 and 3. Note Accessory E1 has been added showing recessed fixture, whereas E fixture is not recessed. Note dimensions at Doors 103A and 108A have been added for clarity. Note updated dimension (EQ) at Men 117 and Women 118.

- 8. A201 Exterior Elevations. Detail 1 window size adjustments, new door transom and cast stone headers (typical).
- 9. A202 Exterior Elevations. Detail 2 window size adjustments, new door transom and cast stone headers (typical).
- 10. A311 Wall Sections. Note storefront windows in masonry wall to be typical per new detail 5/A311. Wall section at Cast Stone window (Detail 4) has been modified. Details 6, 7, and 8 have been deleted.
- 11. A312 Plan Details.
 - a. Detail 1 indicates, new cast stone profile and sill details.
 - b. Detail 7 indicates additional FAMAB and insulation detailing at intersecting walls.
 - c. Detail 9 shows metal coping at stucco wall.
 - d. Detail 10 indicates new interior framing dimensions.
- 12. A331 Section Details. Detail 4 and 5 have been replaced.
- 13. A332 Typical Details and Profiles. Cast stone profiles have been revised for details 6, 7, 8, 9, and 10. Note Detail 2 for FAMAB compatible sealant.
- 14. Refer to Sheet A501 Reflected Ceiling Plan. (note about painting exposed ceiling area?)
- 15. Structural Addendum notes see attachments.
- 16. Electrical and HVAC addendum notes see attachments
- 17. FS-1 Note food service equipment to be purchased by Owner and Installed by GC.

1.4 ATTACHED TO ADDENDUM

- A. Current Bidder RFI Log, dated July 2, 2015.
- B. Structural Addendum Notes
- C. Architectural drawings included:

AC01

A002

A102

A105

A111

A201

A202

A311

A321

A331

A332

- D. Mechanical and Electrical Addendum Notes
- E. 087110 Door Hardware

END OF ADDENDUM

WS 14-028

Bid Period - June 22 - July 9, 2015

No.	Date	contractor	topic	Question	Response/Action	issued
1	6.24.15	Sto	substitution request - FAMAB	Can Sto, Emerald Coat be considered for fluid applied membrane on this project	yes, per plans and specs, see Addendum #2	Addendum #2
2	6.25.15	A.H. Deveney	Substitution request - Plumbing	Can Scheir GB-75 be substituted for P-7 fixture?	yes, per plans and specs, see Addendum #2	Addendum #2
3	06.29.15	Johns Manville	Substitution request - PVC membrane	Can Johns Manville products be considered	yes, per plans and specs, see Addendum #2	Addendum #2
4	06.29.15	Peachtree Canopies	Substitution request - Peachtree Canopies	Can Peachtree products be considered	no	Addendum #2
5	06.30.15	SunBelt Glass	Storefront	Are you wanting the exterior storefront to be front set or center set, I see details indicating both? Are both SF1 and SF2 to be curtainwall, I would assume so with the height of both. Is the D2 interior frame to get insulated glass as well?	Details for glass location per drawings; SF1 and SF2 will be curtain wall; D2 frame does not receive insulated glass	Addendum #3
6	6.30.15	K&A Builders	Parking Lot Striping	The civil plans call for thermoplastic HC parking lot striping. My striping sub tells me the thermoplastic does not work on brick pavers.	use normal striping material	Addendum #3
7	7.01.15	Hall Taylor	Insulation	Sheet A312 has conflicting notes regarding the insulation. One note calls for 3.5" rigid. Another says to spray foam empty spaces. Please clarify.	spray foam insulation and rigid insulation serve two different purposes at roof applications	Addendum #3
8	7.01.15	Hall Taylor	PreFab Canopies	Who is providing the metal canopies? Drawings say by MFR	See spec section. GC to provide scope.	Addendum #3
9	07.01.15	NCMorgan	Coiling Grille	for the coiling grille 109B, Door schedule on A002 says Grille 109B to be manual; specs call for motor.	manual.	Addendum #3
10	07.02.15	K&A Builders	Paint	several rooms have ceilings that are shown to be exposed, does the exposed structure paint or just the soffits where applicable?	paint exposed areas - see addendum	Addendum #3
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SECTION 01210 - ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
 - Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order
- B. Types of allowances include the following:
 - 1. Lump-sum allowances
- C. Related Requirements:
 - 1. Division 1 Section "Unit Prices" for procedures for using unit prices.
 - 2. Division 1 Section "Quality Requirements" for procedures governing the use of allowances for testing and inspecting.
 - 3. Divisions 2 through 16 Sections for items of Work covered by allowances.

1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.
- D. Costs in Allowances:
 - Allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes less applicable trade discounts.

1.4 ACTION SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

1.5 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.6 COORDINATION

A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.7 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
 - 3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.

ALLOWANCES 01210 - 1

- 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
 - Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
 - 2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Allowance No. 1: The contractor shall place an allowance in his bid in the amount of \$3,710.00 for the water service as per the plans. The contractor shall make a request at the City of Tuscaloosa Water Billing Department for 1 ea. 2" irrigation meter (\$1,750.00) and 1 ea. 1 ½" domestic meter (\$1,960.00). Upon payment the City will make the necessary installation as per the plans for the site located at 2614 University Blvd East, Tuscaloosa, Alabama, upon notification by the contractor. The contractor shall run the service and irrigation lines from the meters to the designated points shown on the plans.

END OF SECTION 01210

2 - 01210 ALLOWANCES

planners

environmental scientists

landscape architects

> structural design

Alberta Technology Center

The City of Tuscaloosa 2600 University Boulevard Easts Tuscaloosa, Alabama City Project No. A15-0513

Addendum No. 3 - Structural Items July 2, 2015

GENERAL CLARIFICATIONS:

- 1. Revised bottom of steel elevation and clarified bottom plate extents on section 14/S002. Reference the attached supplement drawing SD-1.
- 2. Do not extend slab edge at door openings as shown on sheet S101 Foundation and First Floor Plan. Slab edges at door openings shall align with adjacent slab edges.
- 3. Revise all W10x45 beams shown on S102 to W10x30's.
- 4. Eliminate the note reference to wall metal panels on details 1, 2, 8, 9, 10, and 11 on sheet S201. Reference architectural drawings for all wall finishes.

DRAWING RESUBMITTALS:

- I. Sheet S003 Typical Details
 - 1. Revised column schedule. Reference 1/S003.
 - 2. Revised dimension on detail 4/S003.
 - 3. Revised pipe designation on detail 9/S003.

II. Sheet S104 – High Roof Framing Plan

- 1. Revised sign support extents.
- 2. Revised roof-top mechanical equipment locations and added notes for contractor to coordinate the mechanical curb support and locations with the mechanical drawings.

III. Sheet S202 – Sections

1. Added dimensions at curved structural members.

IV. Sheet S203 – Sections

- 1. Revised edge angle locations on section 1/S203.
- 2. Added note to 2/S203 for the contractor to reference the architectural drawings for the size and location of the 1" thick lugs.

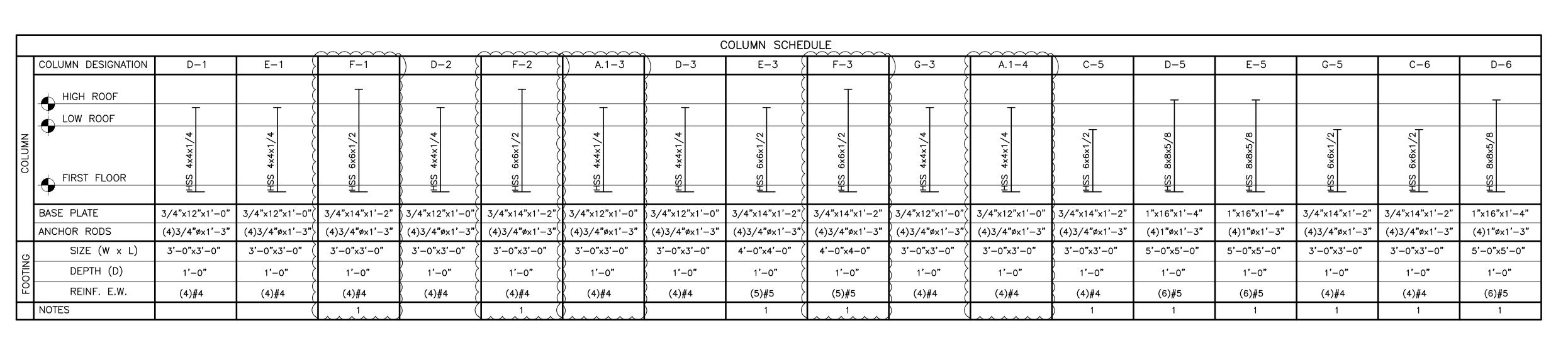
SUBJECT	ALBERTA	TECHNICAL
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JDB ND. 12689.000 SHEET ND. SD-1 BY T. MEYER DATE 07/02/15 CHKD BY S. DOLLAR DATE 07/02/15



COL 10" BEAM (SEE PLAN) BRICK VENEER (SEE 3/8" THICK STIFF PLATES ARCH DWGS) -@ 4'-0" O.C. SEE PLAN FOR BEAM SIZE B.O.S. ELEV. 12'-9" A.F.F. CONT. 3/8" TH PLATE AT BRICK LEDGE (STOP PLATE AT EACH COORDINATE PLATE -EXTENT WITH PRECAST END OF BEAM WHERE BRICK MANUFACTURER DOES NOT OCCUR) **SECTION** S002 SCALE: 3/4"=1'-0"



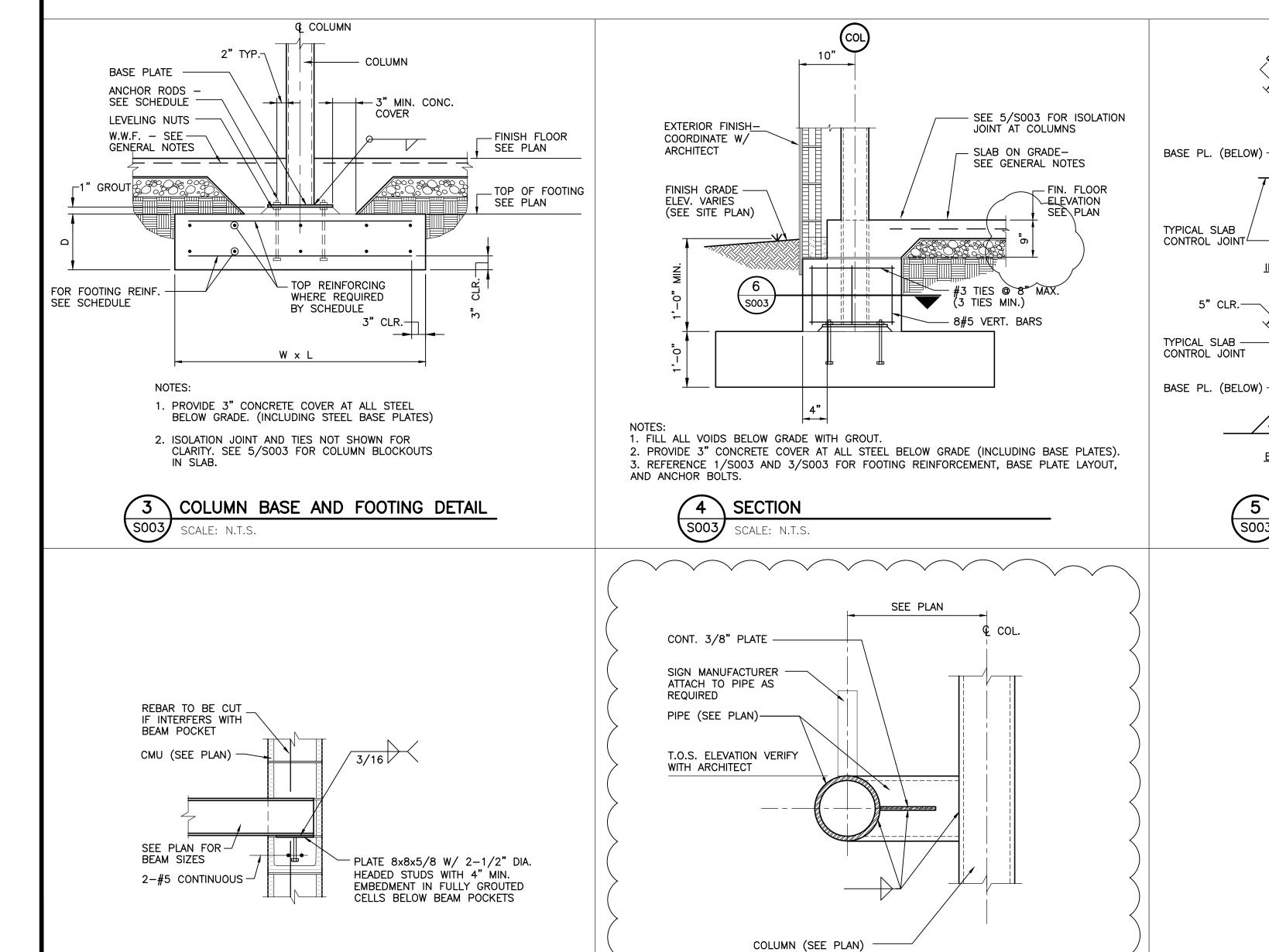
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	LOW ROOF															
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	BASE PLATE	1"x16"x1'-4"	3/4"x14"x1'-2"	3/4"x14"x1'-2"	3/4"x14"x1'-2"	1"x16"x1'-4"	1"x16"x1'-4"	3/4"x14"x1'-2"	3/4"x12"x1'-0"	3/4"×12"×1'-0"						
	ANCHOR RODS	(4)1"øx1'-3"	(4)3/4"øx1'-3"	(4)3/4"øx1'-3"	(4)3/4"øx1'-3"	(4)1"øx1'-3"	(4)1"øx1'-3"	(4)3/4"øx1'-3"								
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Ę	REINF. E.W.	(6)#5	(4)#4	(5)#5	(5)#5	(6)#5	(6)#5	(5)#5	(5)#5	(5)#5	(5)#5	(5)#5	(6)#5	(6)#5	(4)#4	(4)#4
	NOTES	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

8 SECTION

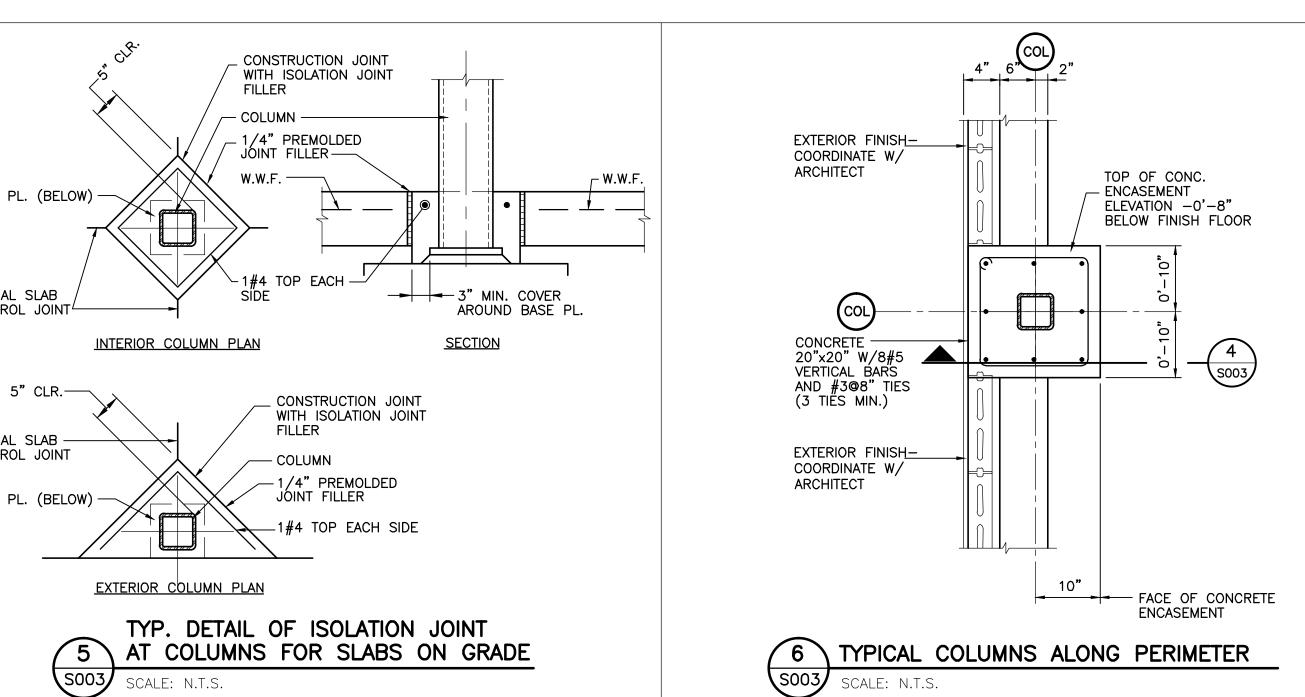
S003 SCALE: 3/4"=1'-0"

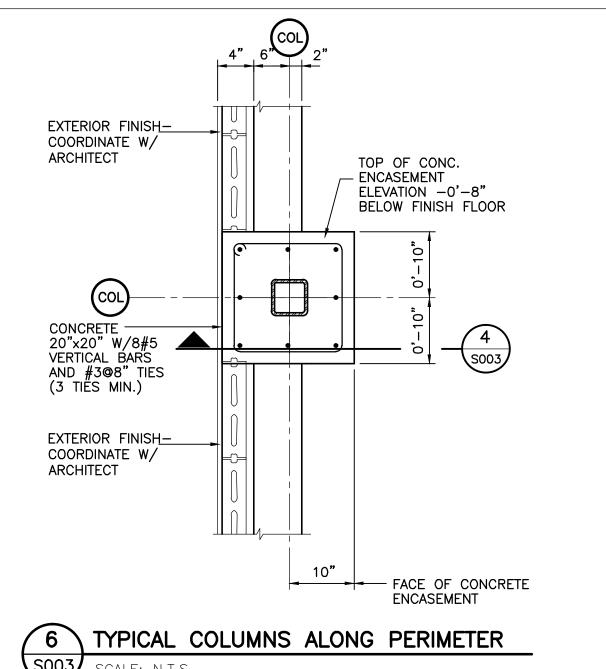
- PROVIDE REINFORCING IN TOP AND BOTTOM OF FOOTING.
- 2. ALL HSS COLUMNS WILL REQUIRE A 3/8" THICK TOP CAP PLATE.
- 3. ALL COLUMNS ARE CENTERED ON FOOTING UNLESS NOTED OTHERWISE. 4. ALL ANCHOR RODS ARE TO PROJECT 6" ABOVE TOP OF FOOTING UNLESS NOTED OTHERWISE.

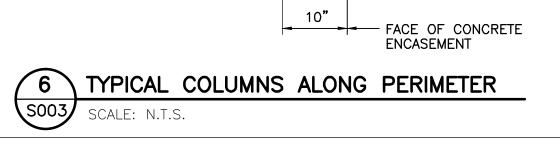


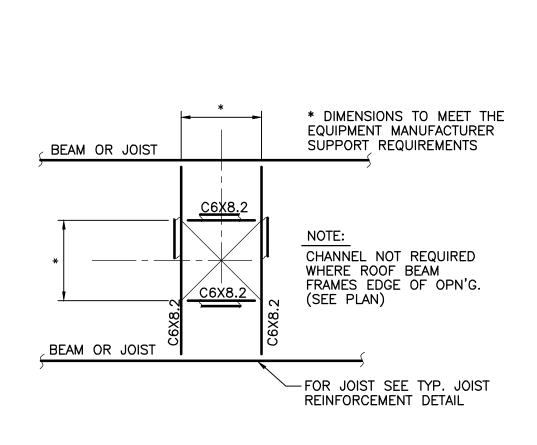


9 SECTION









2 TYP. MOMENT CONNECTIONS

7 TYPICAL ROOF OPENING DETAIL

BID SET

DATE: 06/22/15 PROJ NO: **14-028**

REVISIONS DESC DATE 1 ADDENDUM #3 7/2/15

TYPICAL DETAILS

S003

www.ward-scott.com

2715 Seventh Street Tuscaloosa, AL 35401

NEEL-SCHAFFER
Solutions you can build upon

/ 3/8" THICK CAP PLATE

SEE SCHEDULE

FOR COLUMN SIZE

FOR COLUMN SIZE

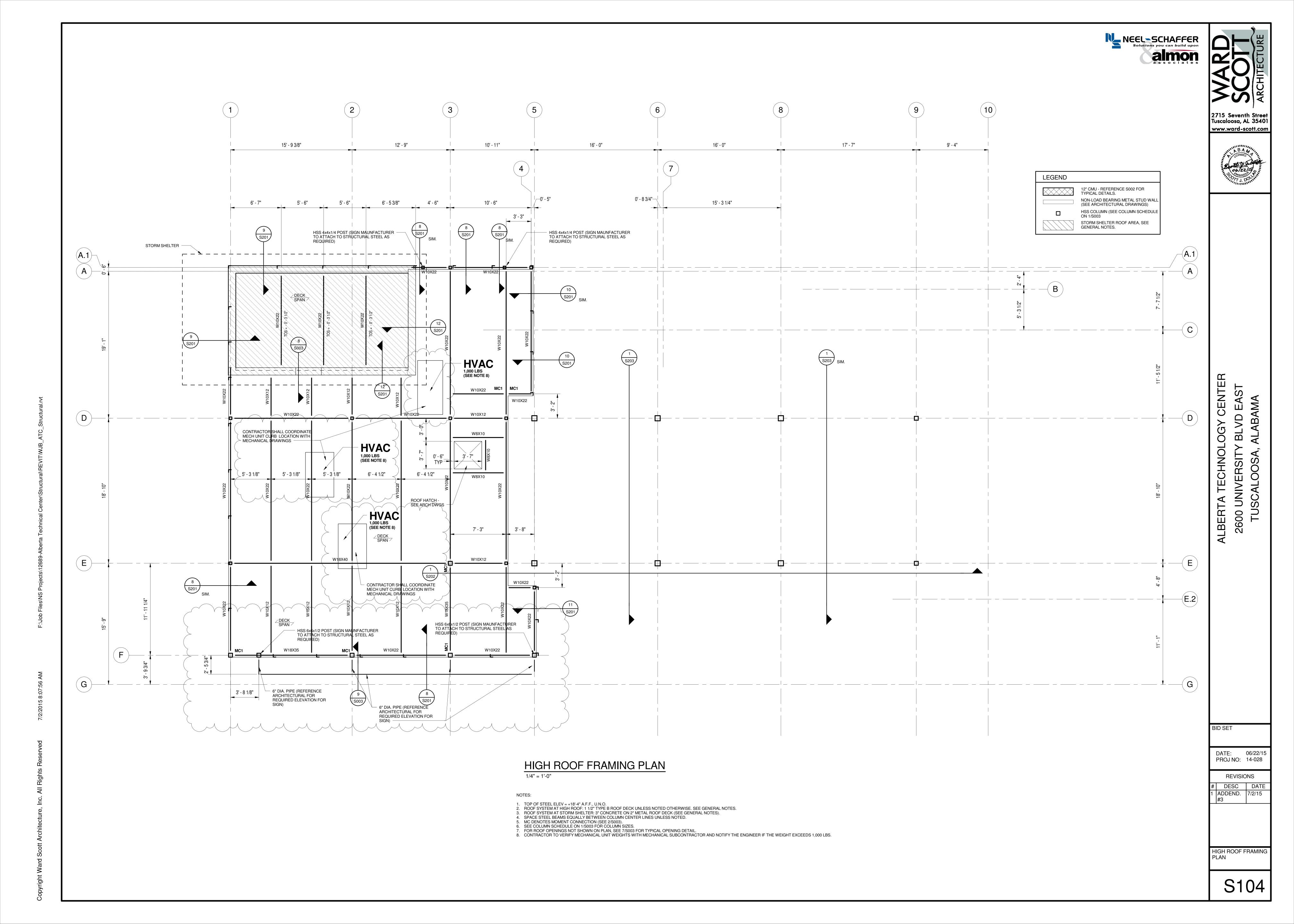
BEAM-SEE PLAN-

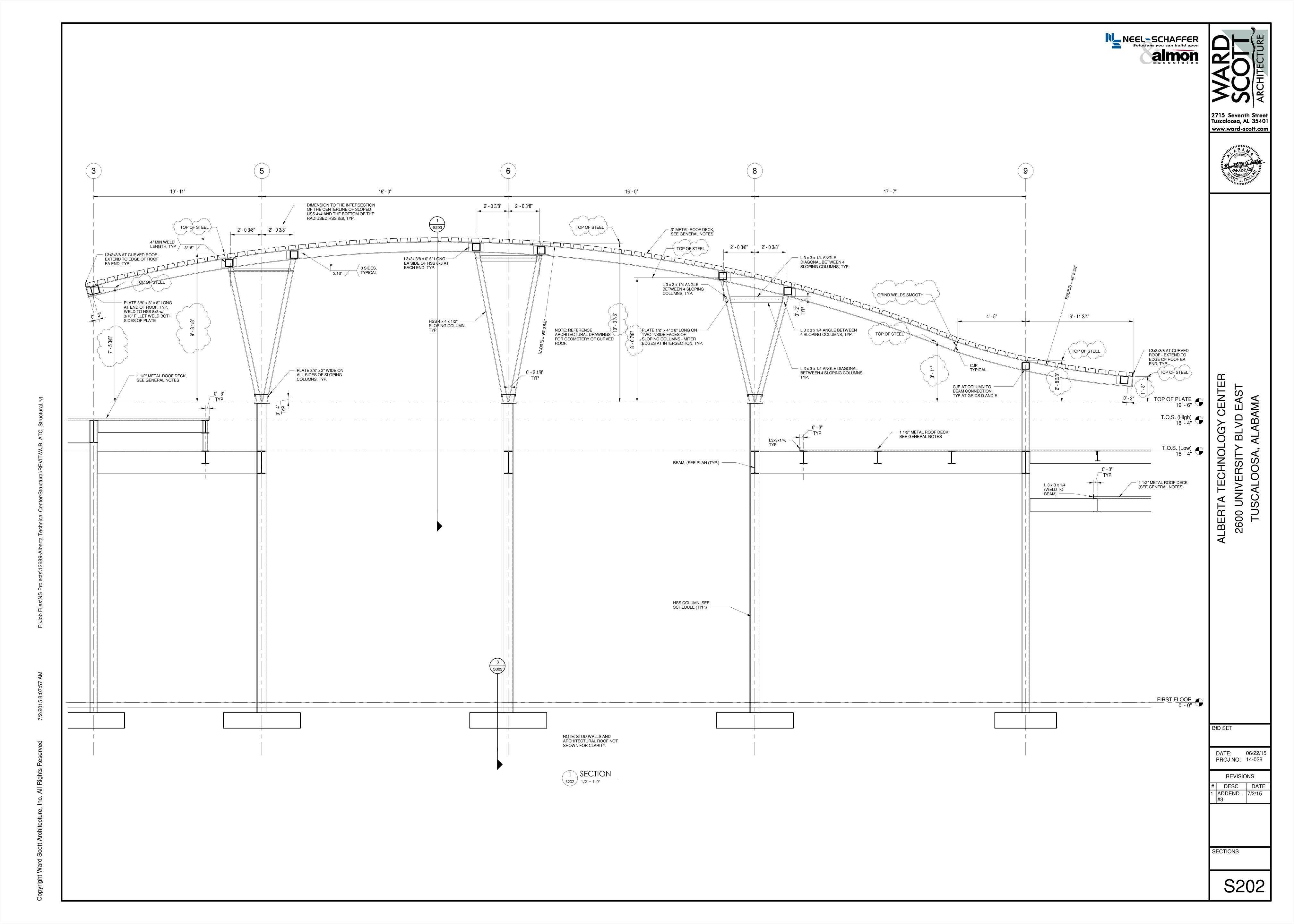
1/2" THICK STIFF. (4 REQUIRED)

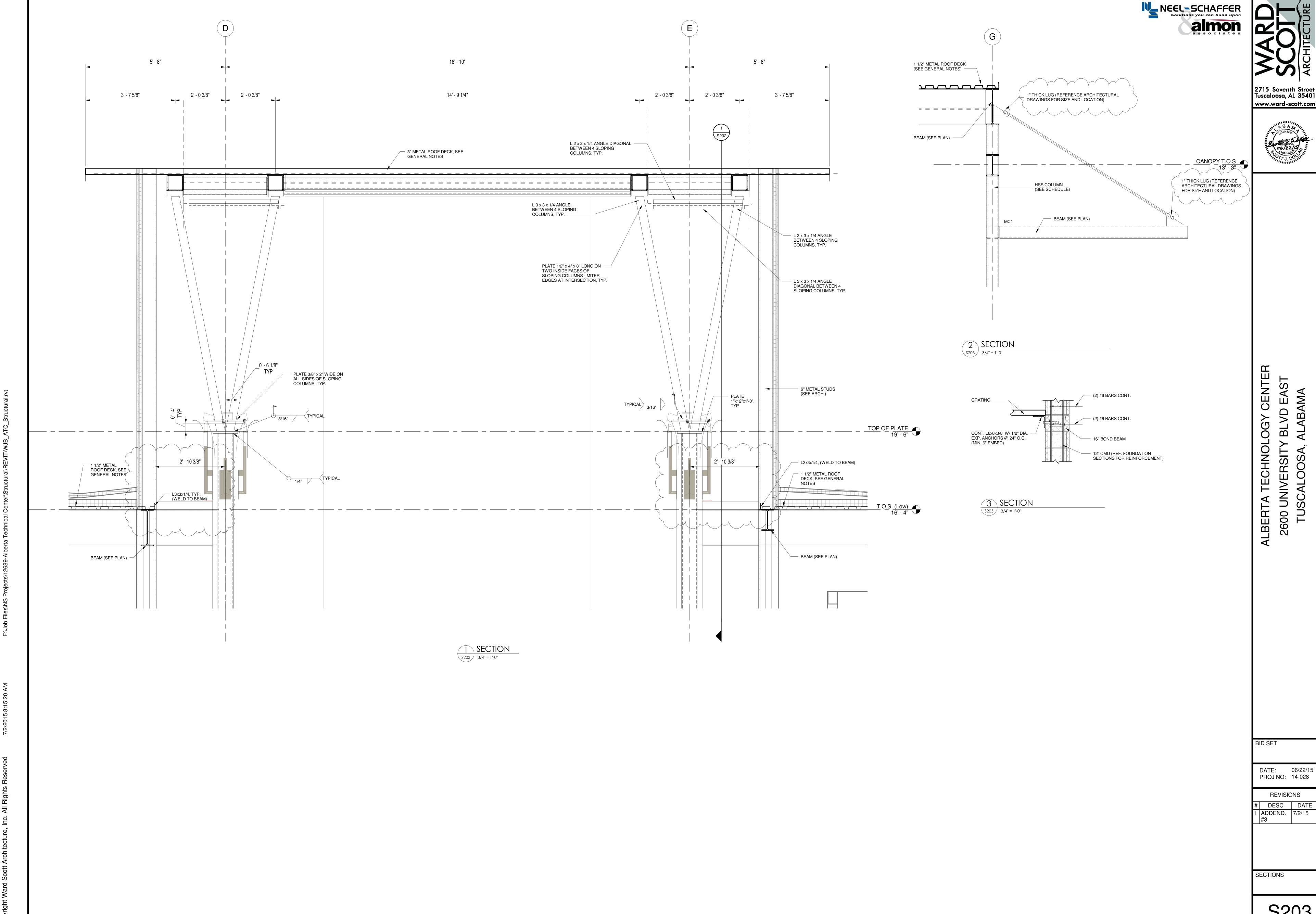
1"ø BOLTS -

almon

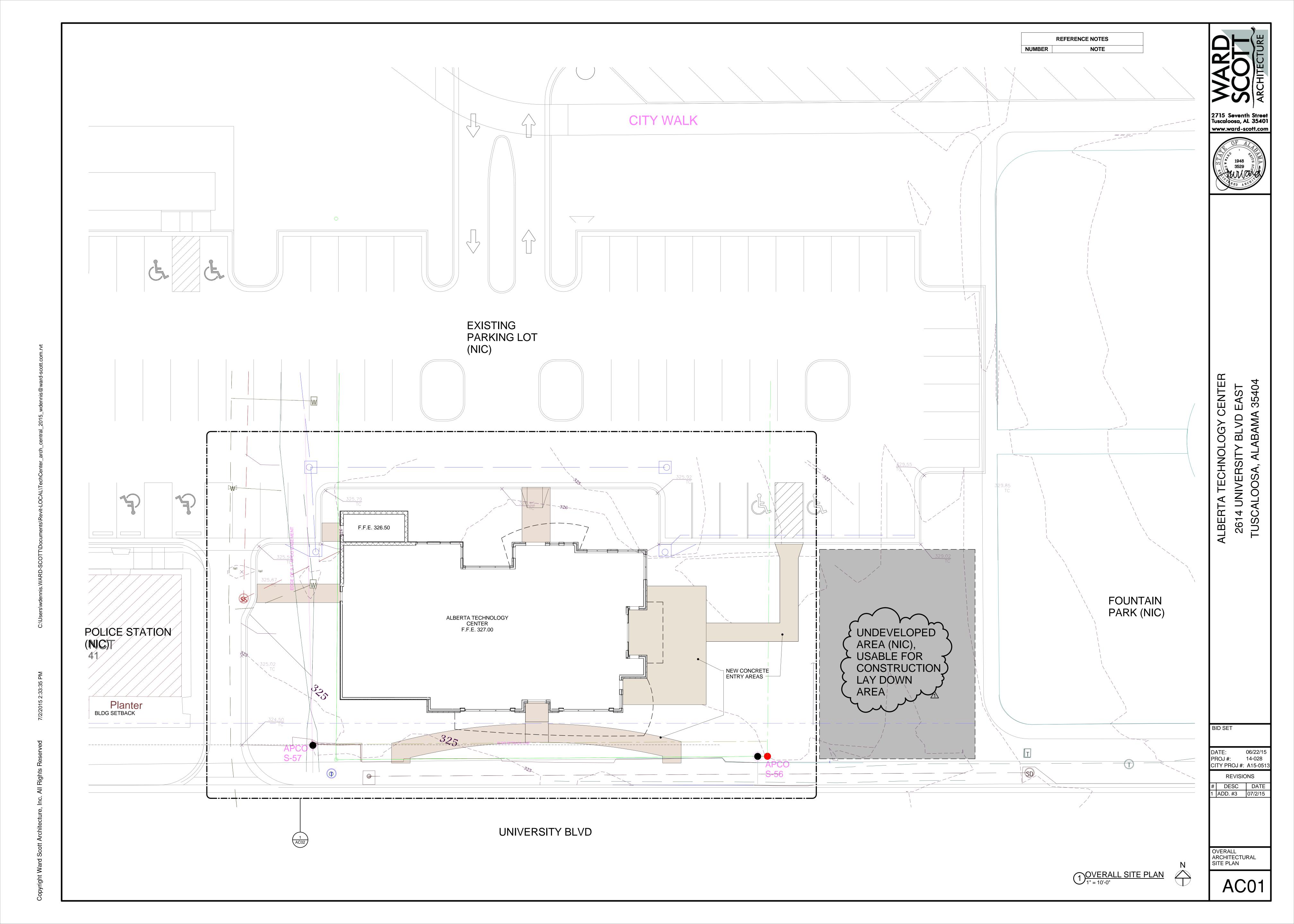
TECHNOLOGY CENT **ABAMA** AL ALBERTA 009

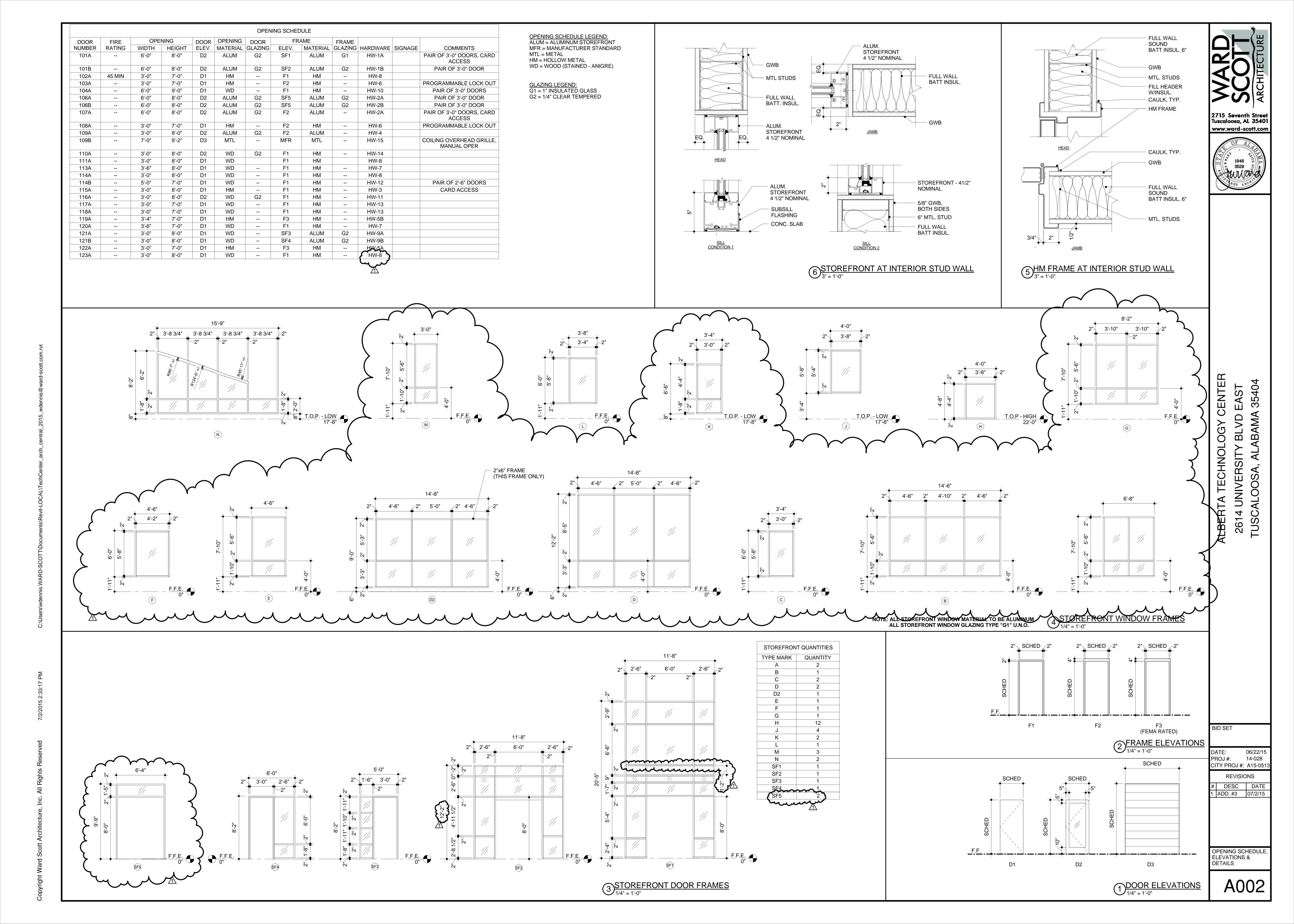


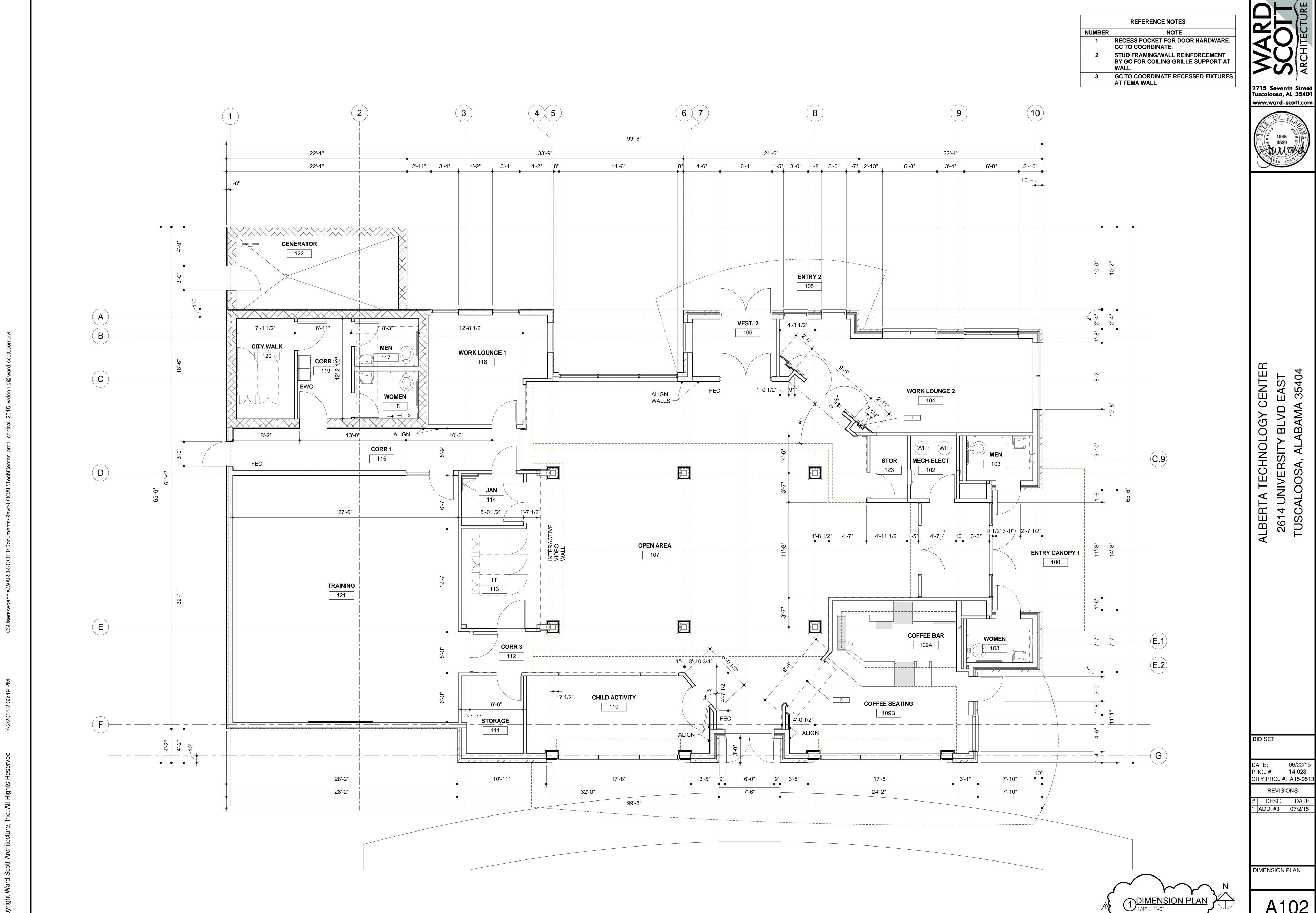




S203



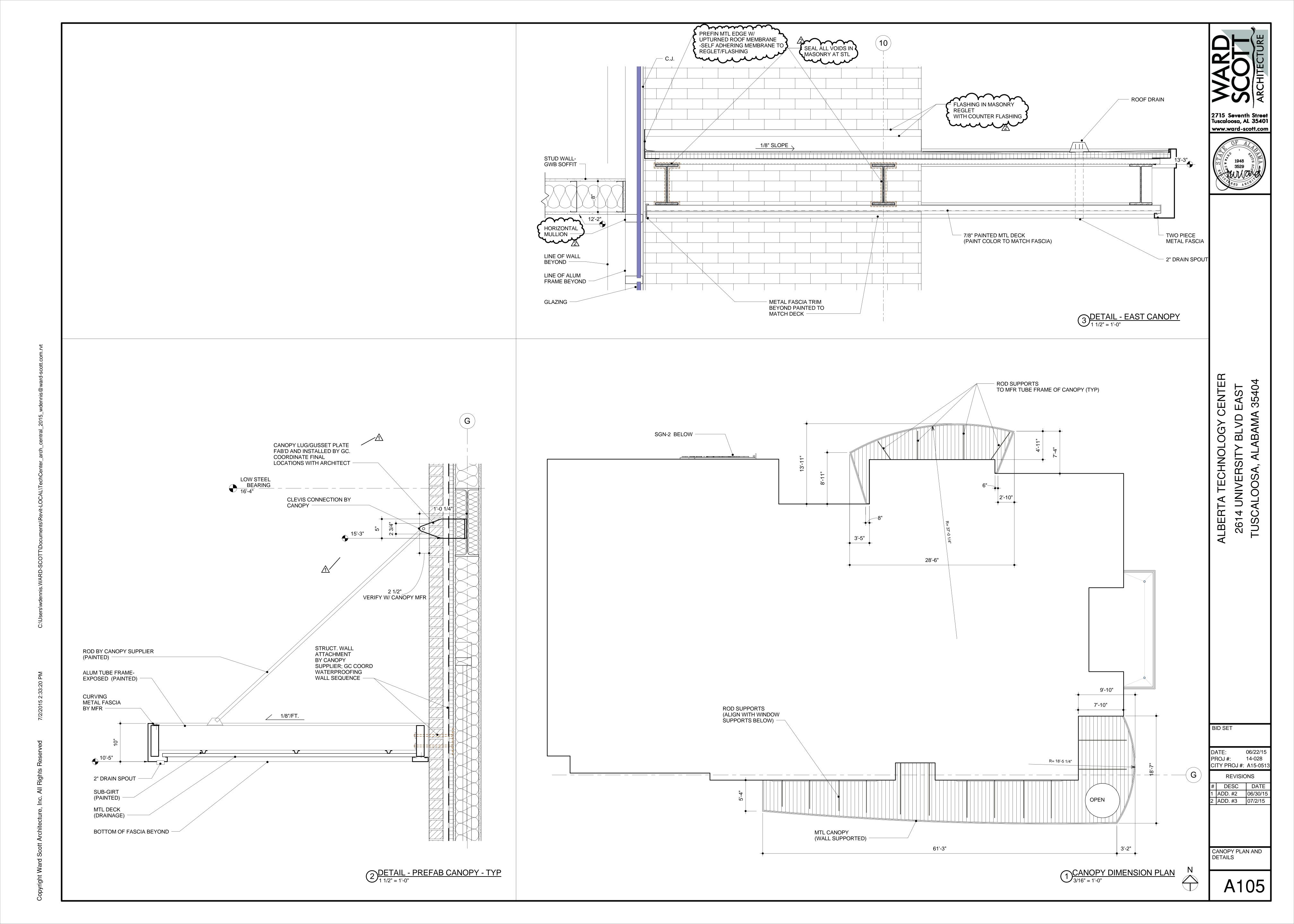


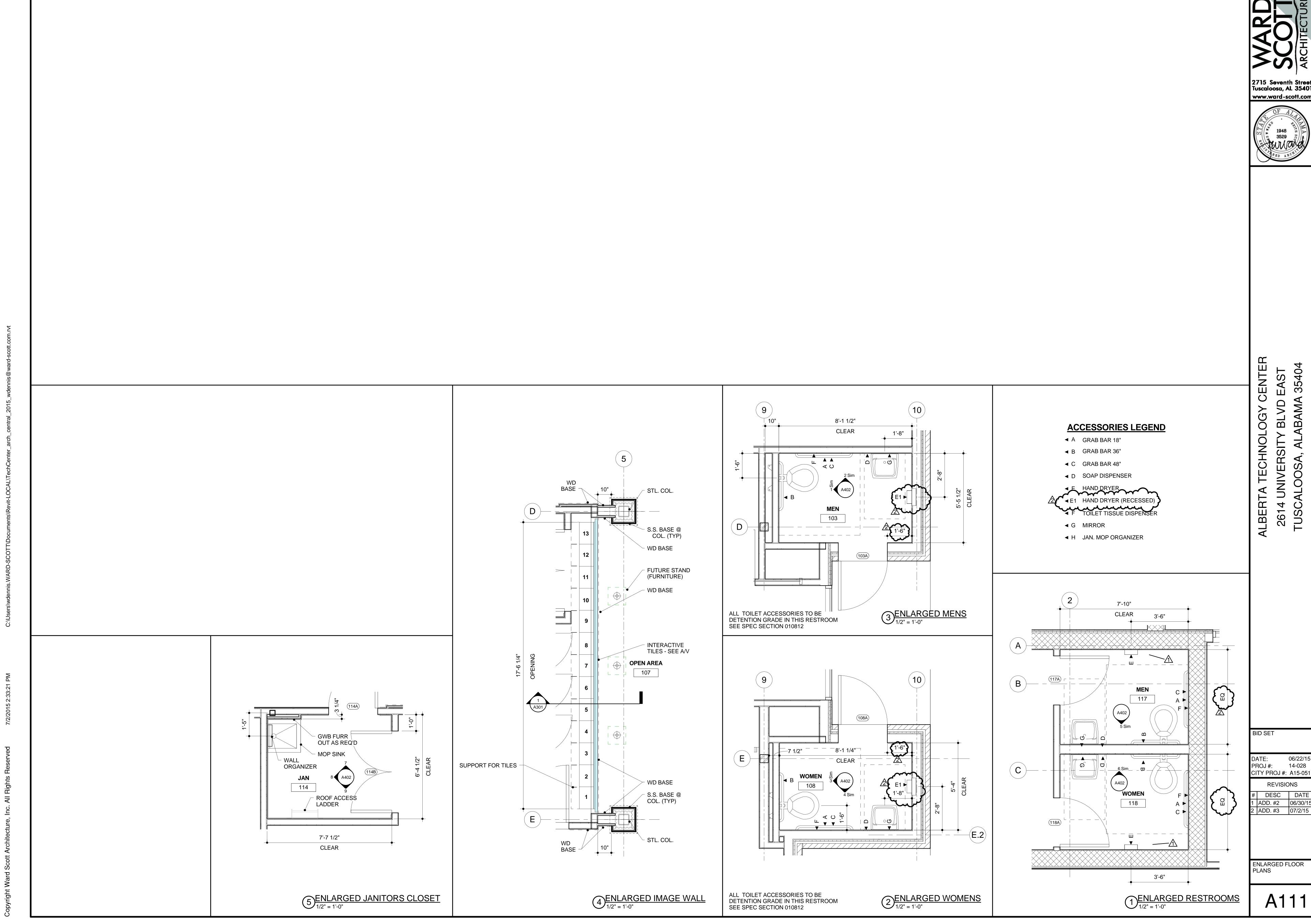


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I ADD. #3 07/2/15





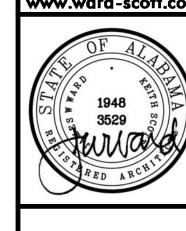
www.ward-scott.com



DATE: 06/22/15 PROJ #: 14-028 CITY PROJ #: A15-0513 # DESC DATE
1 ADD. #2 06/30/15
2 ADD. #3 07/2/15



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CENTER TECHNOLOGY ALBERTA

SOUTH ELEVATION

1/4" = 1'-0"

BID SET

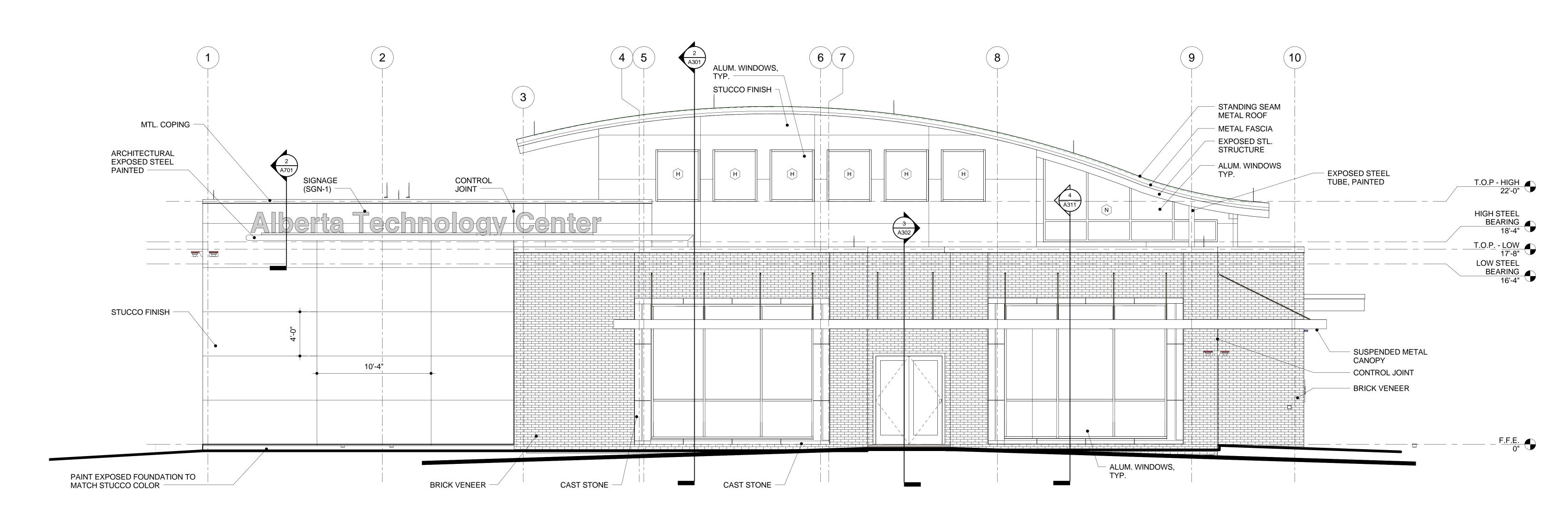
PROJ#: 14-028 CITY PROJ #: A15-0513

REVISIONS DESC DATE 1 ADD. #3 07/2/15

EXTERIOR ELEVATIONS

NORTH ELEVATION

1/4" = 1'-0" A201

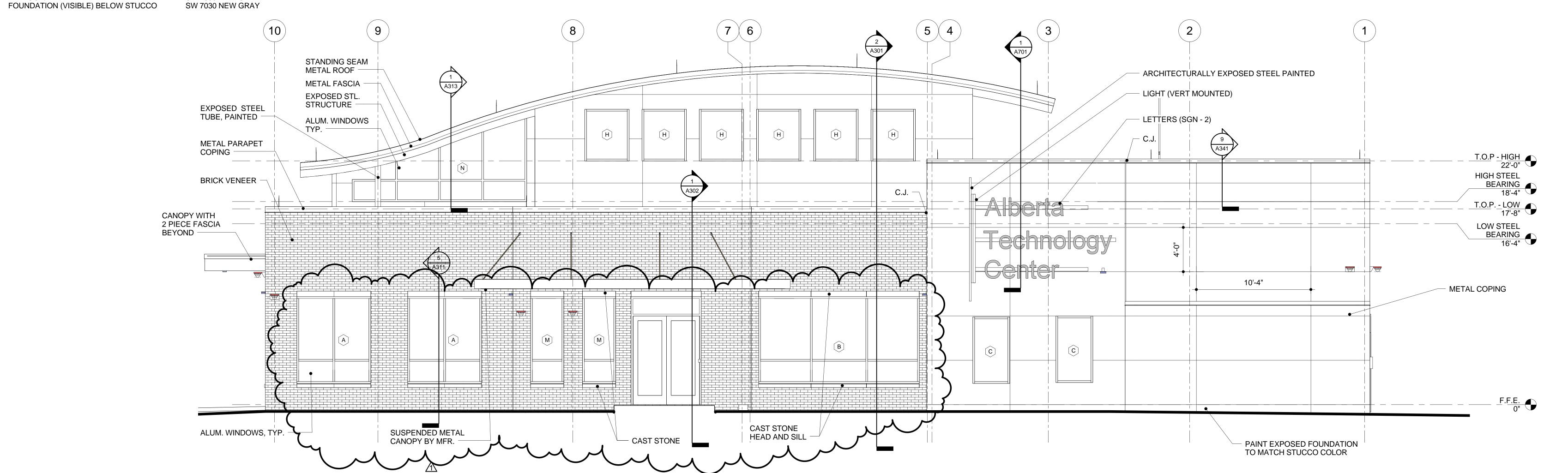


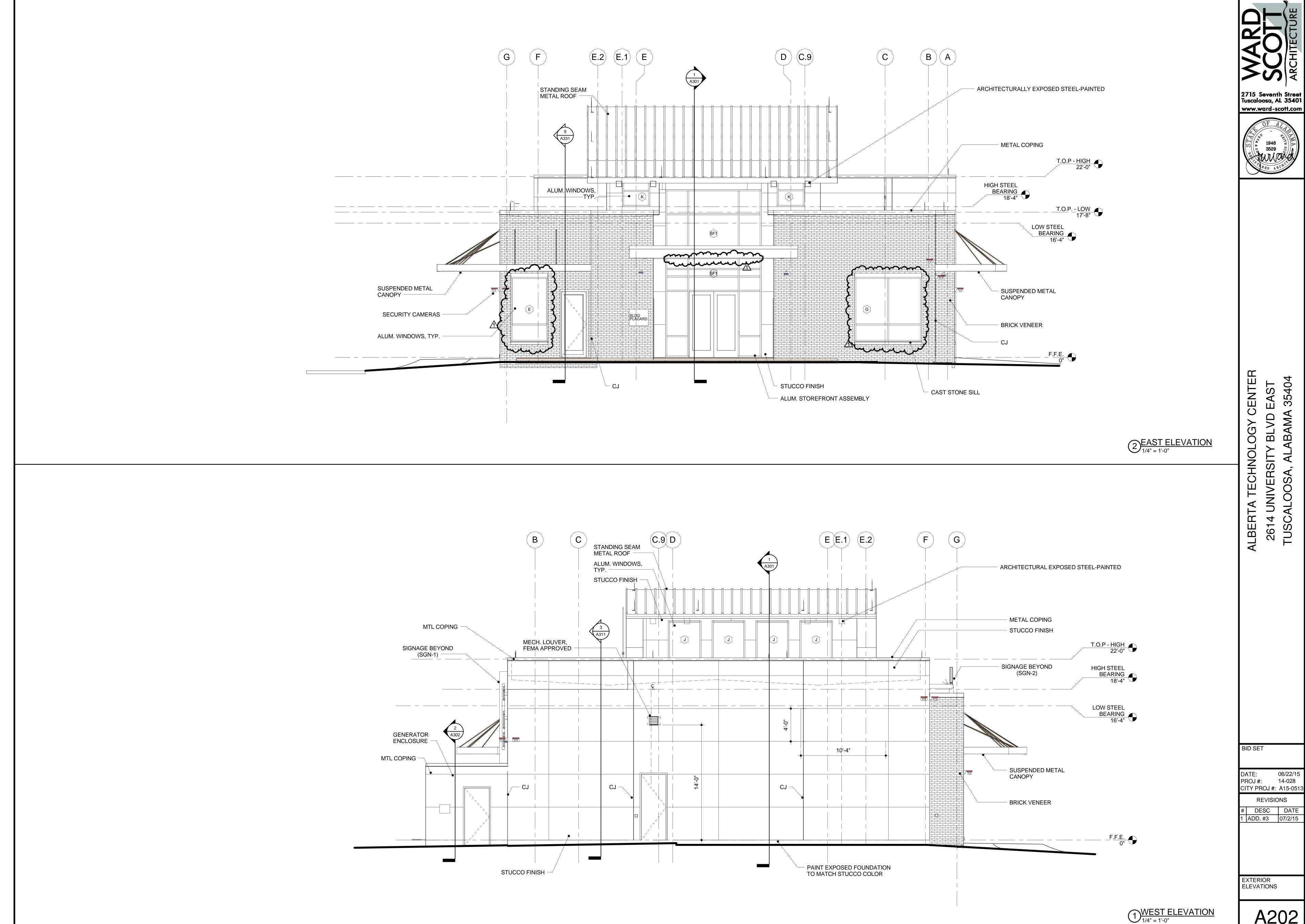
EXTERIOR MATERIAL COLOR SELECTION

MTL CANOPIES, FASCIA AND COPINGS MTL CANOPY - ROD SUPPORTS EXPOSED STEEL TUBES STUCCO EXPOSED SEALANT MECHANICAL LOUVER EXPOSED OUTLETS/GRILLES

HM DOOR/FRAME

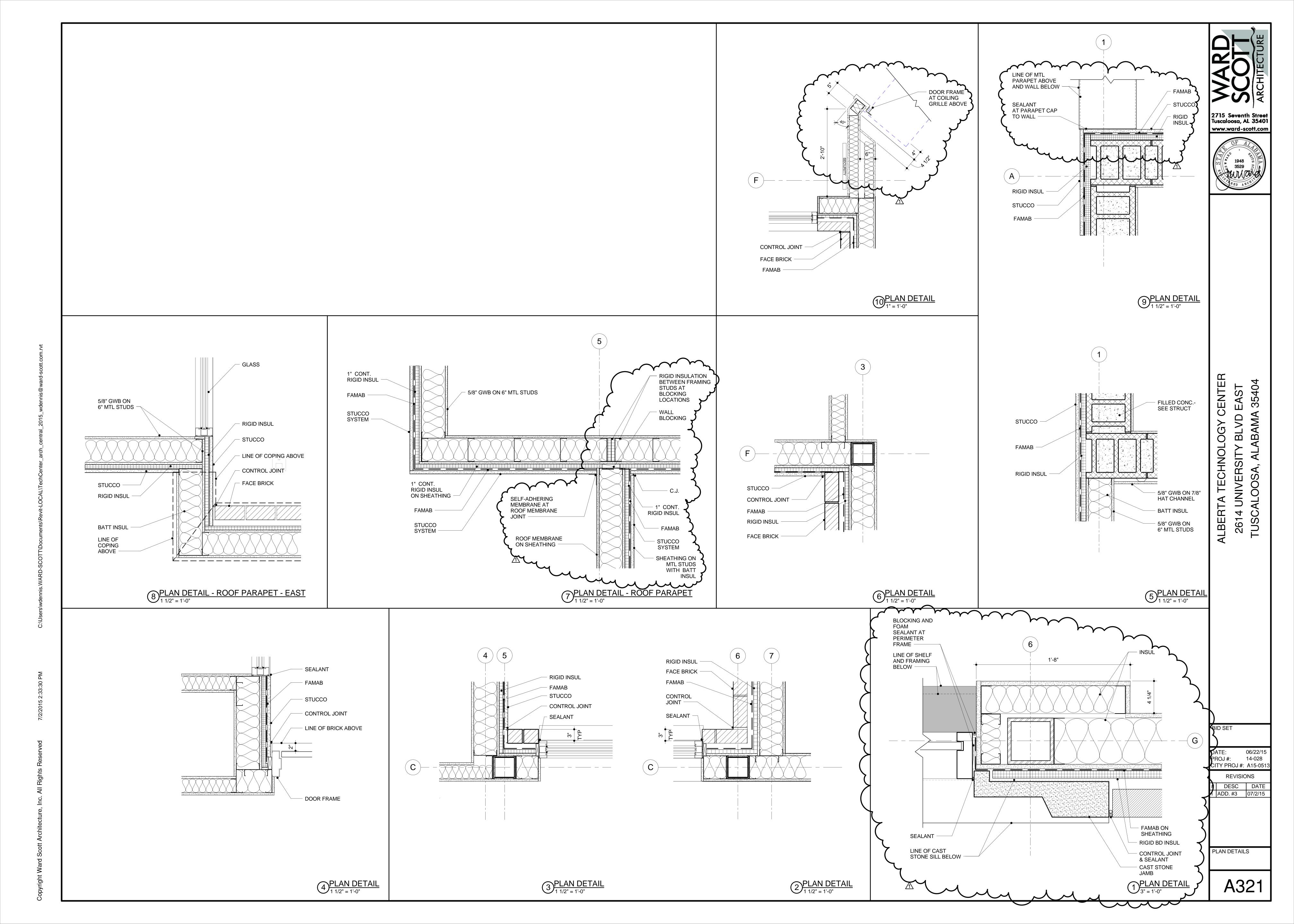
ZINC (KYNAR 500 FINISH)
PNT-2 (HIGH PERFORMANCE COATING)
PNT-2 (HIGH PERFORMANCE COATING) SW 7030 NEW GRAY MATCH TREMCO "OFF-WHITE" SW 7030 NEW GRAY MATCH ADJACENT MATERIAL SW 7030 NEW GRAY

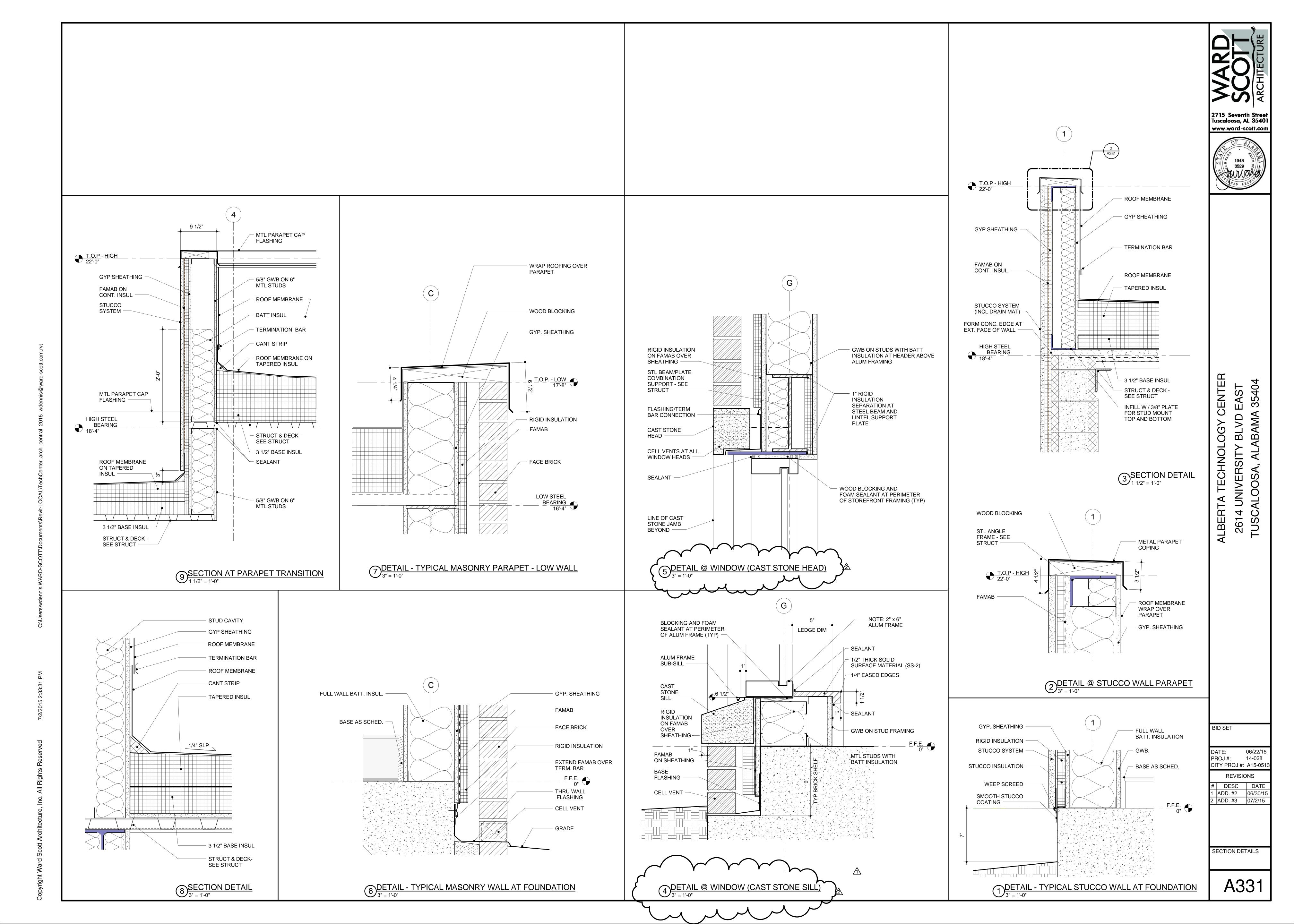


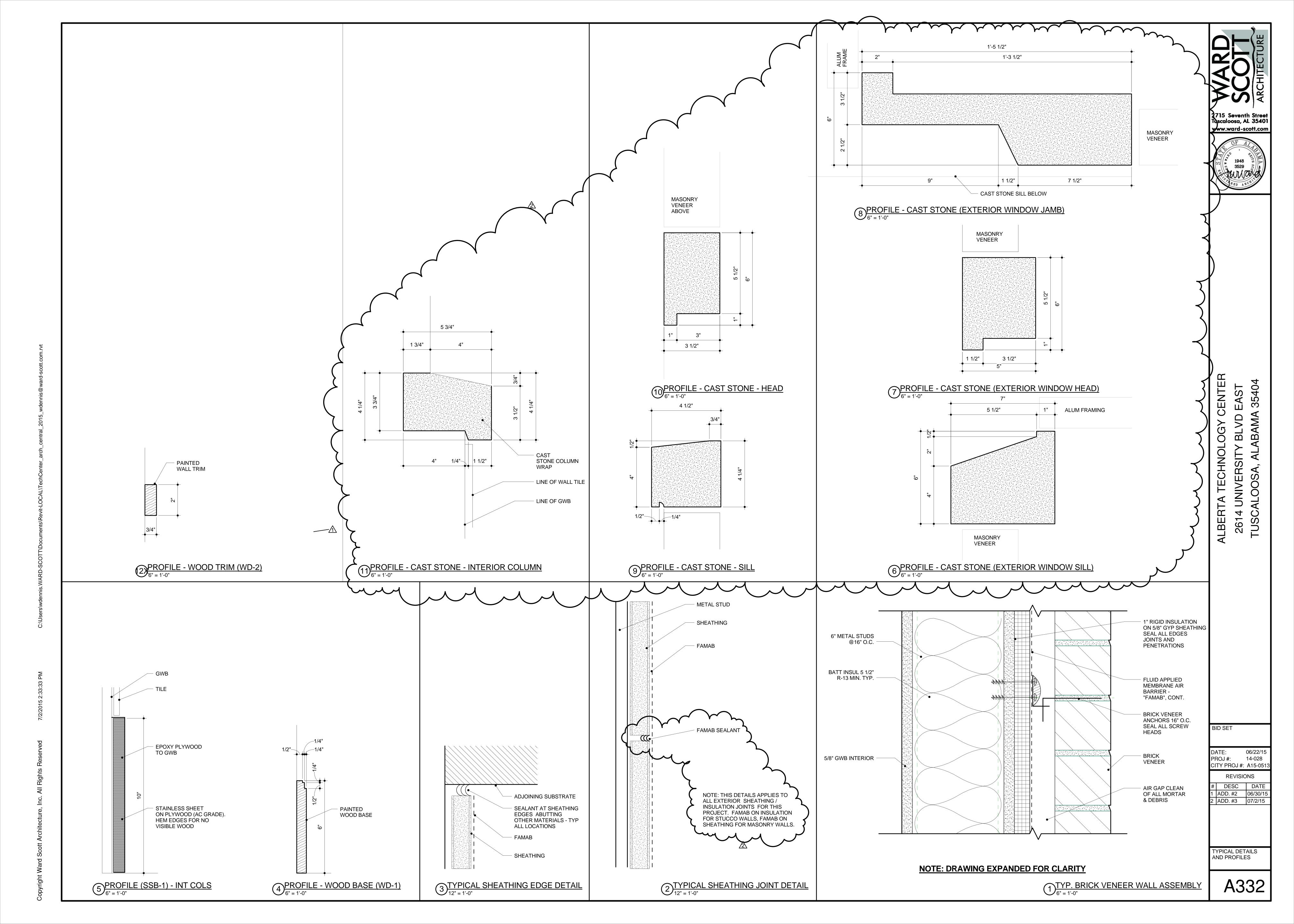


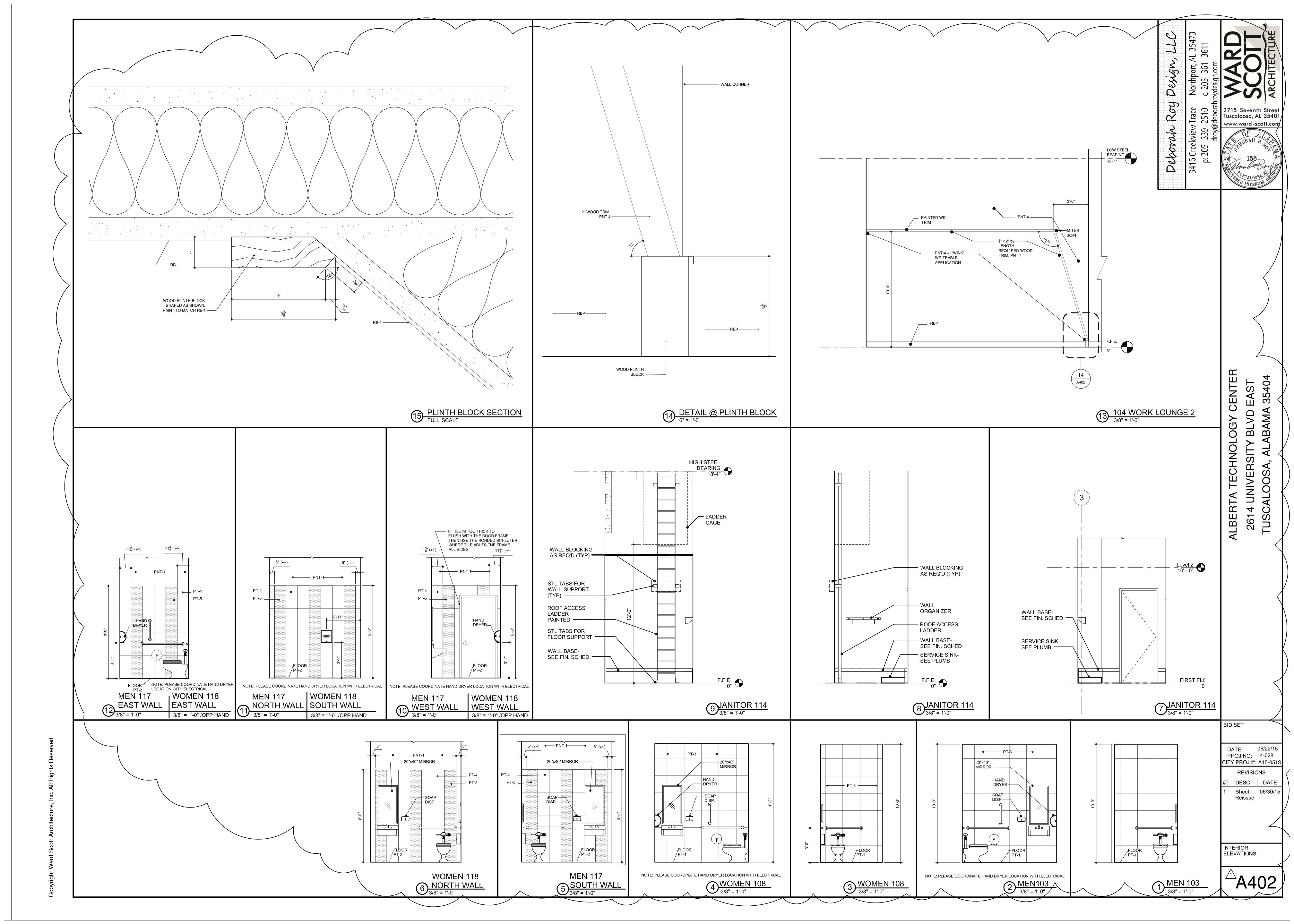
2715 Seventh Street Tuscaloosa, AL 35401 www.ward-scott.com

A202









ADDENDUM



PROJECT: Alberta Technology Center	ENG JOB NO# 1451	DATE: July 2, 2015
Alberta reciliology Center	1431	July 2, 2013

HVAC:

1. Furnish and install control system as follows:

Furnish and install full building automation system capable of HVAC system monitoring and control. System to be manufactured by Automated Logic (sole source). System to utilize BACnet communication protocol compliant with ASHRAE Std. 135. Provide control system consisting of thermostats, dampers, operators, indicating devices, interfaces, etc. to provide a complete control system. System to be accessible through computer web browser and mobile devices utilizing IOS or Android platforms. System to be integrated with owners existing system. System shall operate stand alone with permanent memory at individual controllers. Provide graphical representation of building with equipment locations and provide graphical representation of each piece of equipment.

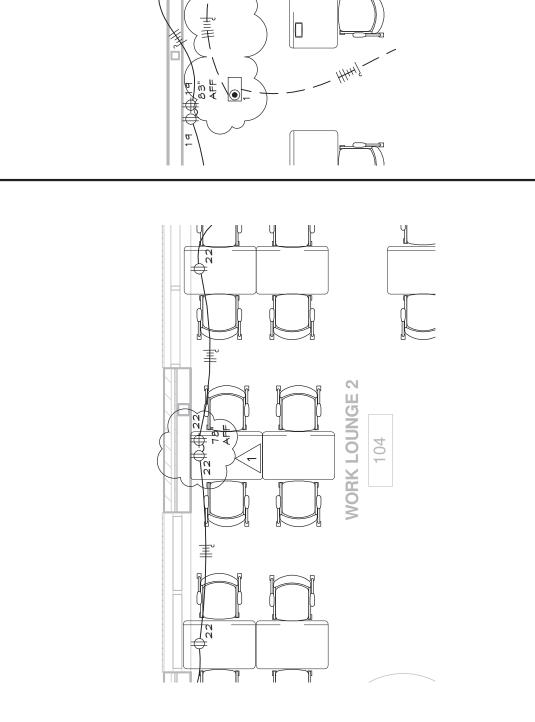
Rooftop VAV units are to have integral control system interfaces for monitoring internal points and operation and have integral automation and sequencing of operation. Control system to provide time of day scheduling for rooftop units and close outdoor air dampers when building is unoccupied. Control system to interface with roof top units to monitor leaving air temperature, entering air temperature, compressor status, fan status, discharge static pressure, fan speed control, high limit alarm, and low limit alarm.

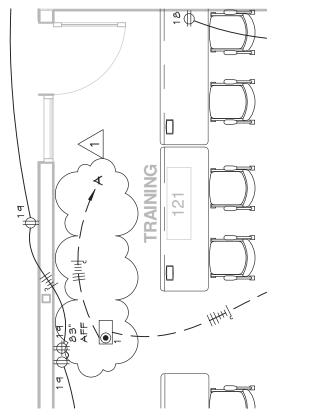
Rooms with split systems installed for data cooling to be provided with temperature sensor in space and integration with unit BAS interface. Provide alarm notification if space temperature exceeds 80F. System to monitor points available from system relevant to operation. All wiring in exposed areas to be installed in conduit.

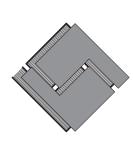
Electrical:

- 1. For all TV locations, provide one (1) 1" empty conduit with pull cord connecting standard height and special height wall A/V outlets. See 'A/V Conduit Detail (AVTALA.AVDS) Typical Layout' on sheet 'TD403'.
- 2. See attached sheets for additional revisions.

END OF ADDENDUM







R H Smith

\$ associates p.c.

Consulting Engineers

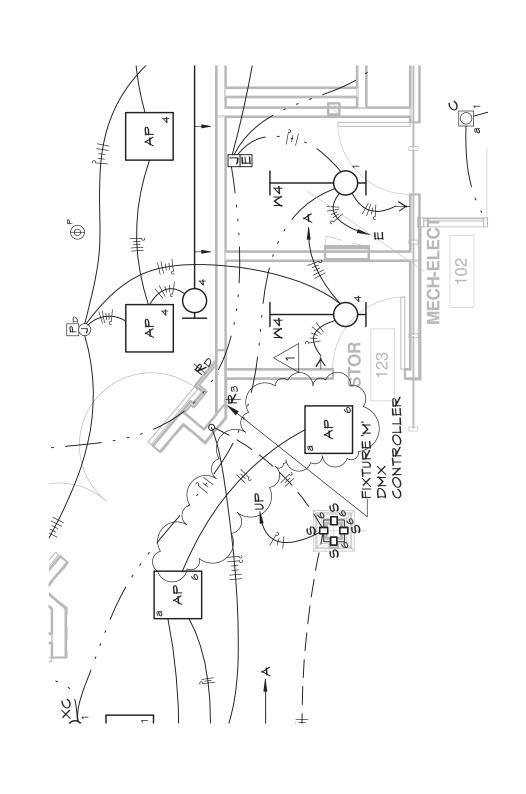


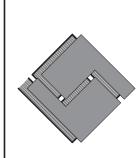
Tuscaloosa, Alabama 35401 E-mail: Info@RHSmithPC.com

ALBERTA TECH CENTER

Revision#	1	#1əə4S	E101
Date:	7/2/15	scale:	1/4" = 1'-0"
Drawn By:	: MSL	Drawing#	1 OF 3







R H Smith

& associates p.c.

Consulting Engineers

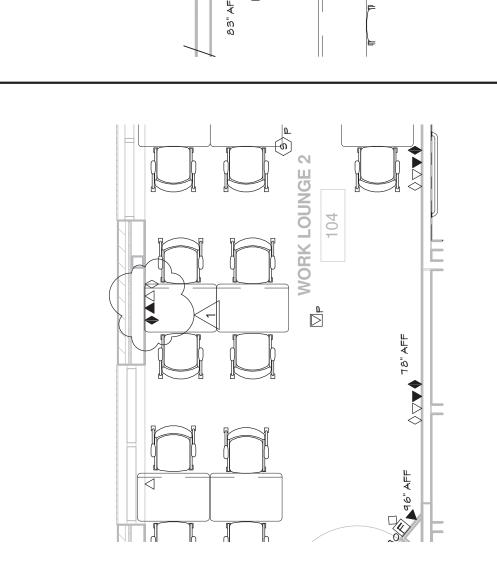
Tuscaloosa, Alabama 35401

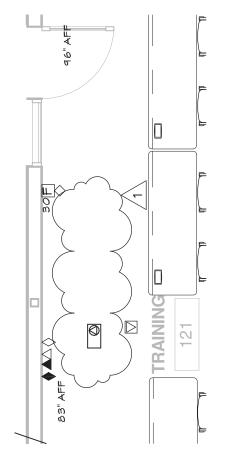
E-mail: Info@RHSmithPC.com

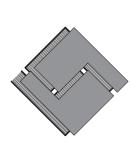
ALBERTA TECH CENTER

Sheet# E201	Scale: 1/4" = 1'-0"	Orawing# 2 OF 3
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1	7/2/15	: MSL
Revision#	Date:	Drawn By:









R H Smith

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Consulting Engineers

ALBERTA TECH CENTER

Revision#	1	Sheet#	E3O1
Date:	7/2/15	Scale:	1/4" = 1'-0"
Drawn By: MSL	MSL	Drawing#	3 OF 3



SECTION 08711 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes items known commercially as finish or door hardware that are required for swing, sliding, and folding doors, except special types of unique hardware specified in the same sections as the doors and door frames on which they are installed.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - Division 8 Section "Standard Steel Doors and Frames" for silencers integral with hollow metal frames.
 - Division 8 Section "Flush Wood Doors" for factory prefitting and factory premachining of doors for door hardware.
 - 3. Division 8 Section "Aluminum Entrances and Storefronts" for aluminum entrance door hardware, except cylinders.

1.3 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification sections.
- B. Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
- C. Final hardware schedule coordinated with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 - 1. Final Hardware Schedule Content: Based on hardware indicated, organize schedule into "hardware sets" indicating complete designations of every item required for each door or opening. Include the following information:
 - a. Type, style, function, size, and finish of each hardware item.
 - b. Name and manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of each hardware set cross referenced to indications on Drawings both on floor plans and in door and frame schedule.
 - e. Explanation of all abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for hardware.
 - g. Door and frame sizes and materials.
 - h. Keying information.
 - 2. Keying Schedule: Submit separate detailed schedule indicating clearly how the Owner's final instructions on keying of locks has been fulfilled.

1.4 QUALITY ASSURANCE

- A. Single Source Responsibility: Obtain each type of hardware (latch and lock sets, hinges, closers, etc.) from a single manufacturer.
- B. Supplier Qualifications: A recognized architectural door hardware supplier, with warehousing facilities in the Project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that employs an experienced architectural hardware consultant (AHC) who is available to Owner, Architect, and Contractor, at reasonable times during the course of the Work, for consultation. Supplier must be a factory authorized distributor for materials scheduled.
 - Require supplier to meet with Owner to finalize keying requirements and to obtain final instructions in writing.

- 2. Upon request from Architect, distributor to provide letter from manufacturer within five days, stating distributor is a direct distributor for the products to be provided.
- C. Fire-Rated Openings: Provide door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by UL, Warnock Hersey, FM, or other testing and inspecting organization acceptable to authorities having jurisdiction for use on types and sizes of doors indicated in compliance with requirements of fire-rated door and door frame labels.

1.5 PRODUCT HANDLING

- A. Tag each item or package separately with identification related to final hardware schedule, and include basic installation instructions with each item or package.
- B. Packaging of door hardware is responsibility of supplier. As material is received by hardware supplier from various manufacturers, sort and repackage in containers clearly marked with appropriate hardware set number to match set numbers of approved hardware schedule. Two or more identical sets may be packed in same container.
- C. Inventory door hardware jointly with representatives of hardware supplier and hardware installer until each is satisfied that count is correct.
- D. Deliver individually packaged door hardware items promptly to place of installation (shop or Project site).
- E. Provide secure lock-up for door hardware delivered to the Project, but not yet installed. Control handling and installation of hardware items that are not immediately replaceable so that completion of the Work will not be delayed by hardware losses both before and after installation.

1.6 MAINTENANCE

A. Maintenance tools and instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Butts and Hinges:
 - a. Hager Hinge Co.
 - b. McKinney Products Co.
 - 2. Locks:
 - a. Sargent Manufacturing Company (No substitution)
 - 3. Cylinders:
 - a. Medeco (No substitution)
 - 3. Exit/Panic Devices:
 - a. Sargent Manufacturing Company (No substitution)
 - 4. Push/Pull Units:
 - a. McKinney
 - b. Hager Hinge Co.
 - c. Rockwood
 - 5. Overhead Closers:
 - a. LCN, Div. Ingersoll-Rand Door Hardware Group
 - b. Sargent Manufacturing Co.
 - 6. Kick, Mop, and Armor Plates:
 - a. McKinney
 - b. Hager Hinge Co.
 - c. Rockwood

2.2 SCHEDULED HARDWARE

- A. Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of finish hardware are indicated in the "Hardware Schedule" at the end of this Section. Products are identified by using hardware designation numbers of the following:
 - Manufacturer's Product Designations: The product designation and name of one manufacturer are listed for each hardware type required for the purpose of establishing minimum requirements. Provide either the product designated or, where more than one manufacturer is specified under the Article "Manufacturers" in Part 2 for each hardware type, the comparable product of one of the other manufacturers that complies with requirements.
- B. Requests for substitution of the above scheduled products must be submitted in writing to the Architect a minimum of TEN (10) days prior to bid date.

2.3 MATERIALS AND FABRICATION

- A. Manufacturer's Name Plate: Do not use manufacturers' products that have manufacturer's name or trade name displayed in a visible location (omit removable nameplates) except in conjunction with required fire-rated labels and as otherwise acceptable to Architect.
 - 1. Manufacturer's identification will be permitted on rim of lock cylinders only.
- B. Base Metals: Produce hardware units of basic metal and forming method indicated using manufacturer's standard metal alloy, composition, temper, and hardness, but in no case of lesser (commercially recognized) quality than specified for applicable hardware units for finish designations indicated.
- C. Fasteners: Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation. Do not provide hardware that has been prepared for self-tapping sheet metal screws, except as specifically indicated.
- D. Furnish screws for installation with each hardware item. Provide Phillips flat-head screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finish of this other work as closely as possible including "prepared for paint" surfaces to receive painted finish.
- E. Provide concealed fasteners for hardware units that are exposed when door is closed except to the extent no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless their use is the only means of reinforcing the work adequately to fasten the hardware securely. Where thru-bolts are used as a means of reinforcing the work, provide sleeves for each thru-bolt or use six screw fasteners.

2.4 HINGES, BUTTS, AND PIVOTS

- A. Templates: Except for hinges and pivots to be installed entirely (both leaves) into wood doors and frames, provide only template-produced units.
- B. Screws: Provide Phillips flat-head screws complying with the following requirements:
 - 1. For metal doors and frames install machine screws into drilled and tapped holes.
 - 2. For wood doors and frames install wood screws.
 - 3. For fire-rated wood doors install #12 x 1-1/4-inch (32-mm), threaded-to-the-head steel wood screws.
 - 4. Finish screw heads to match surface of hinges or pivots.
- C. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
 - 1. Out-Swing Exterior Doors: Nonremovable pins.
 - 2. Out-Swing Corridor Doors with Locks: Nonremovable pins.
 - 3. Interior Doors: Nonrising pins.
 - 4. Tips: Flat button and matching plug, finished to match leaves, except where hospital tip (HT) indicated.
- D. Number of Hinges: Provide number of hinges indicated but not less than 3 hinges per door leaf for doors 90 inches (2250 mm) or less in height and one additional hinge for each 30 inches (750 mm) of additional height.
 - 1. Fire-Rated Doors: Not less than 3 hinges per door leaf for doors 86 inches (2150 mm) or less in height with same rule for additional hinges.

2.5 LOCK CYLINDERS AND KEYING

- A. Except as otherwise indicated, coordinate key system for Project as directed.
- B. Review the keying system with the Owner. Provide the type required (master, grandmaster or greatgrandmaster) to key into existing Medeco system.
- C. Equip locks with manufacturer's 6-pin tumbler.
- D. Metals: Construct lock cylinder parts from brass or bronze, stainless steel, or nickel silver.
- E. Compy with Owner's instructions for master keying and, except as otherwise indicated, provide individual change key for each lock that is not designated to be keyed alike with a group of related locks.
 - Permanently inscribe each key with number of lock that indentifies cylinder manufacturer's key Symbol, and notation "DO NOT DUPLICATE."
- F. Key Material: Provide keys of nickel silver only.
- G. Key Quantity: Furnish 3 change keys for each lock, 5 master keys for each master system, and 5 grandmaster keys for each grandmaster system.
- H. Deliver all keys to Owner.

2.6 KEY CONTROL SYSTEM

- A. Provide a key control system including envelopes, labels, tags with self-locking key clips, receipts forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150 percent of the number of locks required for the Project.
 - 1. To be set up by the owner

2.7 LOCKS, LATCHES, AND BOLTS

- A. Strikes: Provide manufacturer's standard wrought box strike for each latch or lock bolt, with curved lip extended to protect frame, finished to match hardware set, unless otherwise indicated.
- B. Lock Throw: Comply with UL requirements for throw of bolts and latch bolts on rated fire openings.
 - 1. Provide 3/4-inch (19-mm) minimum throw of latch for mortise locks. Provide 1-inch (25-mm) minimum throw for all dead bolts.
- C. Flush Bolt Heads: Minimum of 1/2-inch- (13-mm-) diameter rods of brass, bronze, or stainless steel with minimum 12-inch- (300-mm-) long rod for doors up to 84 inches (2100 mm) in height. Provide longer rods as necessary for doors exceeding 84 inches (2100 mm) in height.

2.8 PUSH/PULL UNITS

A. Exposed Fasteners: Provide manufacturer's standard exposed fasteners for installation, thru-bolted for matched pairs but not for single units.

2.9 CLOSERS AND DOOR CONTROL DEVICES

- A. Size of Units: Except as otherwise specifically indicated, comply with the manufacturer's recommendations for size of door control unit depending on size of door, exposure to weather, and anticipated frequency of use.
- B. Access-Free Manual Closers: Where manual closers are indicated for doors required to be accessible to the physically handicapped, provide adjustable units complying with ANSI A117.1 provisions for door opening force and delayed action closing.

2.10 WEATHERSTRIPPING AND SEALS

- A. General: Provide continuous weatherstripping on exterior doors and smoke, light, or sound seats on interior doors where indicated or scheduled. Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.
- B. Replaceable Seat Strips: Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by manufacturer.
- C. Weatherstripping at Jambs and Heads: Provide bumper-type resilient insert and metal retainer strips, surface applied unless shown as mortised or semimortised and of following metal, finish and resilient bumper material.

2.11 THRESHOLDS

- A. General: Except as otherwise indicated provide standard metal threshold unit of type, size and profile as shown or scheduled.
- B. Exterior Hinged or Pivoted Doors: Provide units not less than 4 inches (100 mm) wide, formed to accommodate change in floor elevation where indicated, fabricated to accommodate door hardware and to fit door frames as follows:

2.12 HARDWARE FINISHES

- A. Match items to the manufacturer's standard color and texture finish for the latch and lock sets (or push-pull units if no latch or lock sets).
- B. Provide finishes that match those established by BHMA or, if none established, match the Architect's sample.
- C. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Mount hardware units at heights indicated in following applicable publications, except as specifically indicated or required to comply with governing regulations and except as otherwise directed by Architect.
 - "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames" by the Door and Hardware Institute.
- B. Install each hardware item in compliance with the manufacturer's instructions and recommendations. Where cutting and fitting is required to install hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation or application of surface protection with finishing work specified in the Division 9 Sections. Do not install surface-mounted items until finishes have been completed on the substrates involved.
- C. Set units level, plumb, and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- D. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
- E. Set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant complying with requirements specified in Division 7 Section "Joint Sealers."
- F. Weatherstripping and Seals: Comply with manufacturer's instructions and recommendations to the extent installation requirements are not otherwise indicated.

3.2 ADJUSTING, CLEANING, AND DEMONSTRATING

- A. Adjust and check each operating item of hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate freely and smoothly or as intended for the application made.
 - 1. Where door hardware is installed more than one month prior to acceptance or occupancy of a space or area, return to the installation during the week prior to acceptance or occupancy and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- B. Clean adjacent surfaces soiled by hardware installation.

3.3 HARDWARE SCHEDULE

- A. General: Provide hardware for each door to comply with requirements of Section "Door Hardware," hardware set numbers indicated in door schedule, and in the following schedule of hardware sets.
 - 1. Hardware sets indicate quantity, item, manufacturer and product designation, size, and finish or color, as applicable.

Hardware Schedule

<u>HW0</u> Control equipment to be located in IT Closet as indicated on drawings. Provide and install control wire and low voltage cabling according to manufacturer's recommendations. Where possible, install all wiring in cable trays above ceiling. Coordinate raceways and voltage requirements with electrical contractor. Provide complete and functioning system. Provide Owner training as required. Patch cable to Owner's switch to be coordinated with IT contractor.

1 Power Supply BPS24-10 (Shared) Securitron
1 Controller UNC-500-422M RBH
2 Expansion Board RC2M Axiom RBH
2 Enclosure ENCL-2PS RBH
1 Power Supply AL600ULACM x Battery Altronix

HW1A 101A Each to receive:

TA386 4.5 x 4.5 NRP 32D 6 Hinge McKinney 2 Electric Hinge **McKinney** TA386 4.5 x 4.5 QC12 32D 2 Wiring Harness McKinney QC-C012 1 Removable Mullion L980A x 651 US28 Sargent 1 Exit Device 16 55 56 8804 32D Sargent 1 Exit Device 16 55 56 8810 32D Sargent 3 Cylinder 10T0200 26D Medeco 1 Cylinder 10T0400 26D Medeco 2 Concealed Closer **2034 HBUMP ALUM** LCN 2 Offset Pull Rockwood **BF157 x T1XHD 32D** 2 Floor Stop 446 32D Rockwood 1 Threshold 1715A x LES **Pemko** 2 Door Sweep **29346CNB x TEKS Pemko**

· Gasketing by door manufacturer.

HW1B 101B Each to receive:

 6 Hinge
 TA386 4.5 x 4.5 32D
 McKinney

 2 Push Bar Set
 BF15747 x T3HD 32D
 Rockwood

 2 Concealed Closer
 2034 HBUMP ALUM
 LCN

 2 Floor Stop
 446 32D
 Rockwood

• Gasketing by door manufacturer.

HW2A 106A, 107A

Each to receive: 6 Hinge TA386 4.5 x 4.5 NRP 32D **McKinney** 2 Electric Hinge TA386 4.5 x 4.5 QC12 32D **McKinney** 2 Wiring Harness QC-C012 McKinney 1 Removable Mullion L980A x 651 US28 Sargent 1 Exit Device M1 16 55 56 8804 24V ISP 03 32D Sargent 1 Exit Device 16 55 56 8810 32D Sargent Medeco 3 Cylinder 10T0200 26D 1 Cylinder 10T0400 26D Medeco 2 Offset Pull **BF157 x T1XHD 32D** Rockwood 2 Concealed Closer **2034 HBUMP ALUM**

 2 Concealed Closer
 2034 HBUMP ALUM
 LCN

 2 Floor Stop
 446 32D
 Rockwood

 1 Threshold
 1715A x LES
 Pemko

 2 Door Sweep
 29346CNB x TEKS
 Pemko

Note: Card reader mounted to door.

Gasketing by door manufacturer.

HW2B 106B Each to receive:

 6 Hinge
 TA386 4.5 x 4.5 32D
 McKinney

 2 Push Bar Set
 BF15747 T3HD 32D
 Rockwood

 2 Concealed Closer
 2034 HBUMP ALUM
 LCN

 2 Floor Stop
 446 32D
 Rockwood

Gasketing by door manufacturer.

HW3 115A Each to receive:

3 Hinge TA386 4.5 x 4.5 NRP 32D McKinney 1 Electric Hinge TA386 4.5 x 4.5 QC12 32D McKinney 1 Wiring Harness QC-C012 **McKinney** 1 Exit Device M1 16 55 56 8804 24V ISP 03 32D Sargent 1 Cylinder Medeco 10T0200 26D 1 Cylinder 10T0400 26D Medeco 1 Offset Pull **BF157 x T1XHD 32D** Rockwood 1 Door Closer 281 CPSH TB EN Sargent 1 Kick Plate K1050 10 x 34 32D x TEKS Rockwood 1 Threshold 1715A x LES **Pemko** 1 Door Sweep 315CN x TEKS **Pemko** 1 Gasketing 303AS x TEKS **Pemko**

Note: Card reader mounted to door.

HW4 109A Each to receive:

3 Hinge TA314 4.5 x 4 NRP 32D **McKinney** 1 Electric Hinge TA314 4.5 x 4 QC12 32D **McKinney** 1 Wiring Harness QC-C044P **McKinney** 1 Electric Lock M1 82271-24V IPS 03 LNP 26D Sargent 1 Cylinder 10T0200 26D Medeco 1 Door Closer 281 P10 TB EN Sargent 1 Kick Plate Rockwood K1050 10 x 34 32D 1 Threshold 1715A x LES **Pemko** 1 Door Sweep **315CN x TEKS Pemko** Pemko 303AS x TEKS 1 Gasketing

Note: Card reader mounted to door.

HW5A 122A Each to receive:

4 Hinge SP3386 4.5 x 4.5 32D **McKinney** 1 Multi Point Lock FM7113 ECP 32D Sargent 1 Cylinder 10T0200 26D Medeco 1 Door Closer Sargent **281 O TB EN** 1 Floor Stop Rockwood 483 26D 1 Holder 461L 26D Rockwood 1 Threshold 1715A x LES Pemko 1 Door Sweep 315CN x TEKS **Pemko** 1 Gasketing 303AS x TEKS **Pemko**

HW5B 119A Each to receive:

4 Hinge SP3386 4.5 x 4.5 32D **McKinney** 1 Multi Point Lock FM7113 ECP 32D Sargent 1 Cylinder 10T0200 26D Medeco 1 Door Closer 281 O TB EN Sargent 1 Floor Stop / Holder 485 26D Rockwood 1 Kick Plate K1050 10 x 34 32D x TEKS Rockwood 1 Gasketing S88BL **Pemko**

<u>HW6</u>		103A,	108A
Each	to	receiv	e:

3 Hinge TA314 4.5 x 4.5 NRP 32D **McKinney** 1 Privacy 49 8265 LNP 32D Sargent 1 Dead Lock Sargent 4877 32D 1 Cylinder 10T0200 26D Medeco 1 Door Closer 281 P10 TB EN Sargent 1 Kick Plate Rockwood K1050 10 x 34 32D 1 Floor Stop / Holder Rockwood 485 26D 1 Threshold 171A x LES Pemko 1 Sweep 315CN x TEKS Pemko 1 Gasketing 303AS x TEKS **Pemko**

HW7 113A, 120A Each to receive:

3 Hinge TA714 4.5 x 4 NRP 26D **McKinney** 1 Electric Hinge **McKinney** TA714 4.5 x 4 QC12 26D 1 Wiring Harness **McKinney** QC-C044P M1 82271-24V IPS 03 LNP 26D Sargent 1 Electric Lock 1 Cylinder 10T0200 26D Medeco 1 Door Closer 281 O TB EN Sargent 2 Kick Plate K1050 10 x 34 32D Rockwood

1 Door Position Switch By Security Contractor

Note: Card reader mounted to door.

<u>HW8</u> 102A, 111A, 114A, 123A

Each to receive:

3 Hinge TA714 4.5 x 4 26D **McKinney** 1 Lockset 8204 LNP 26D Sargent 1 Cylinder Medeco 10T0200 26D 1 Door Closer 281 P10 TB EN Sargent 1 Kick Plate K1050 10 x 34 32D Rockwood 409 32D 1 Wall Stop Rockwood 608 3 Silencers Rockwood

HW9A 121A Each to receive:

McKinney 3 Hinge TA714 4.5 x 4 26D 1 Dead Lock 4877 26D Sargent 1 Cylinder 10T0200 26D Medeco 1 Push Bar Set BF15747 T3HD 32D Rockwood 1 Door Closer Sargent 281 P10 TB EN x 281D 1 Kick Plate Rockwood K1050 10 x 34 32D 1 Wall Stop 409 32D Rockwood 3 Silencers 608 Rockwood

HW9B 121B Each to receive:

3 Hinge TA714 4.5 x 4 26D **McKinney** 1 Dead Lock Sargent 4877 26D 1 Cylinder 10T0200 26D Medeco 1 Push Bar Set BF15747 T3HD 32D Rockwood 1 Door Closer 281 O TB EN Sargent 1 Kick Plate K1050 10 x 34 32D Rockwood 1 Wall Stop 409 32D Rockwood 3 Silencers 608 Rockwood

HW10 104A Each to receive: 6 Hinge 2 Flush Bolts 1 Dead Lock 1 Cylinder 2 Push Bar Set 2 Door Closer 2 Kick Plate 2 Floor Stop / Holder 2 Silencers	TA714 4.5 x 4 26D 555 26D 4877 26D 10T0200 26D BF15747 T3HD 32D 281 O TB EN K1050 10 x 34 32D 491R 26D 608	McKinney Rockwood Sargent Medeco Rockwood Sargent Rockwood Rockwood
HW11 116A Each to receive: 3 Hinge 1 Dead Lock 1 Cylinder 1 Push Bar Set 1 Door Closer 1 Kick Plate 1 Floor Stop / Holder 3 Silencers	TA714 4.5 x 4 26D 4877 26D 10T0200 26D BF15747 T3HD 32D 281 O TB EN K1050 10 x 34 32D 485 26D 608	McKinney Sargent Medeco Rockwood Sargent Rockwood Rockwood
HW12 114B Each to receive: 6 Hinge 2 Flush Bolts 1 Dead Lock 1 Cylinder 1 Wall Stop 2 Silencers	TA714 4.5 x 4 26D 555 26D 4876 32D 10T0200 26D 401 26D 608	McKinney Rockwood Sargent Medeco Rockwood Rockwood
HW13 117A, 118A Each to receive: 3 Hinge 1 Privacy 1 Door Closer 1 Kick Plate 1 Mop Plate 1 Wall Stop 3 Silencers	TA714 4.5 x 4 26D 49 8265 LNP 26D 281 O TB EN K1050 10 x 34 32D K1050 6 x 35 32D 409 32D 608	McKinney Sargent Sargent Rockwood Rockwood Rockwood Rockwood
HW14 110A Each to receive: 3 Hinge 1 Passage 1 Door Closer 1 Kick Plate 1 Wall Stop 3 Silencers	TA714 4.5 x 4 26D 8215 LNP 26D 281 O TB EN K1050 10 x 34 32D 409 32D 608	McKinney Sargent Sargent Rockwood Rockwood Rockwood

HW15 109B Each to receive:

2 Cylinder 10T0200 26D Medeco

Balance of hardware by door manufacturer.