Page 1 of 1

ADDENDUM NO.: 11

Connecticut

DATE OF CMR ADDENDUM: 2/6/13

Notice of Construction Manager-at-Risk (CMR) Addendum on behalf of the CT Department of Construction Services (CT DCS)

Project Name:	JM Wright Tech High School
Project Location:	Stamford CT
Project Description:	Additions & Renovations
Project Construction Budget:	50,000,000.00
CT DCS Project Number:	BI-RT-842-CMR

The Construction Manager-at-Risk (CMR) is issuing a Notice of CMR Addendum for this State of CT Department of Construction Services (CT DCS) Project. Specific Addendum Information is available as noted below. If you have any questions, please contact the CMR as noted below.

CMR Information:

CMR Firm:	KBE Building Corp
Address:	30 Batterson Park Rd
Contact Name:	Ryan Bentz
Contact Phone Number:	Office: 860-284-7467 Cell: 860-250-1552
Contact Email Address:	rbentz@comcast.net

Addendum Information is available as follows:

CMR Website and/or FTP Site:	Address: ftp.kbebuilding.com	User: JMWrightHS	Pass: 6w6dwi
Printing Company:	BL Graphics 203-630-2671		

Note to CMR Firm: This Form must be completed and emailed to the DCS personnel listed below. DCS will post the form to the State Contracting Portal as "Addendum No. #". Delete this "Note" prior to emailing the document to DCS.

Copies:	□ DCS Project Manager (insert email address)	☐ DCS Process Management (<u>randy.daigle@ct.gov</u>)
	□ DCS Process Management (peter babey@ct.gov)	☐ DCS Website Management (rebecca cutler@ct.gov



JM Wright Technical High School Stamford, CT State Project # BI-RT-842-CMR

ADDENDUM #11 February 6, 2013

Contents of Addendum #11

- 1) As an update to Addendum #10, the following bid packages will be re-bid with package numbers: (All other packages will be awarded.)
 - 4.2 Masonry*
 - 4.3 Structural Steel*
 - 4.5a Lab Casework and Fume Hoods
 - 4.9 Overhead Doors and Grilles
 - 4.24 Electrical*
 - 4.26 Miscellaneous Metals—(No longer a proposed MBE/WBE package)*
 - *--Indicates a new bid form and a modified scope of work which will be available on the FTP site by 2/6/13.
- 2) The attached Invitation to Bid, dated 1/30/13, indicates the bid due date for the above listed bid packages as 2/20/13 at 2:00 pm.
- 3) Revised Preliminary Early Start & Overall Project Schedule dated 2/5/13
- 4) NCA's Addendum 11 Narrative dated 2/5/13
- 5) Revised Specification Section 260519 Building Wire & Cable dated 2/5/13
- 6) Updated Drawing log dated 2/6/13

End of Addendum 11

Section 00100 Invitation to Bid February 6, 2012



Invitation to Bid

Project Title: RENOVATIONS and ADDITIONS to

J.M. WRIGHT TECHNICAL HIGH SCHOOL 120 BRIDGE STREET, STAMFORD, CT

Project Number: State Project No. BI-RT-842

1. Sealed bids for the bid packages listed below addressed to Craig R. Ortola, Project Manager, KBE Building Corporation, 30 Batterson Park Road, Farmington, CT 06032 will be received until 2:00 pm local time on **Wednesday, February 20, 2013**. All bids will be opened publicly and read aloud shortly thereafter. Specific questions regarding bidding procedures, project scope and site visits may be directed in writing to Craig R. Ortola at jmwbid@kbebuilding.com

Bid Package Number and Name:

Bid Package

BP-004.2 Masonry

BP-004.3 Structural Steel

BP-004.5a Laboratory Fume Hoods & Wood Laboratory Casework

BP-004.9 Overhead Doors and Grilles

BP-004.24 Electrical

BP-004.26 Miscellaneous Metals

DAS Prequalification required: Yes – for all bid packages

Set-Aside Requirements:

a. Bidders shall be responsible to award not less than 30% of the cost of construction to subcontractors that are certified and eligible to participate under the State of Connecticut Set Aside Program for small, minority and women owned business enterprises including 10% that must be awarded to certified and eligible minority/women owned enterprises, in accordance with Connecticut General Statutes section 4a-60g through 4a-60j. This requirement must be met even if Bidder s certified and eligible to participate in the Small Business Set-Aside Program. Subcontractors shall draft and submit for approval an affirmative action plan in accordance with the rules and regulations of the Connecticut Human Rights and Opportunities Commission ("CHRO"). The affirmative action plan must be approved by the CHRO as a condition precedent to approval of the subcontractor's contract.



b. S/MBE Resources

- i. The Business Resource Center (BRC) http://www.brcct.com
 The BRC is a comprehensive, ONE-STOP Services Center that provides quick and easy access to professional consultation, resource materials, and, action-oriented training (OSHA, certified payrolls, schedules, billings, estimating, etc.), in the skills/techniques needed to grow business in the Greater Hartford area. The Business Resource Center, in addition to its focus on developing small businesses, operates a Minority Business Enterprise Assistance Program which has a specific focus on the development of minority construction firms in Connecticut, including assistance with the capacity to qualify for bonding (bid, performance and payment). For additional information please contact Kim Hawkins, Director, Business Resource Center at (860) 527-1100 or email her at khawkins@brcct.com
- ii. The Hartford Economic Development Corporation & The Greater Hartford Business Development Center, Inc. (HEDCo & GHBDC) –

http://www.hedco-ghbdc.com

HEDCo is a 501 (c 3) Community Development Financial Institution (CDFI) and a Small Business Administration Certified Micro Lender. The agency has been in operation since 1975 and serves the 169 cities and towns in Connecticut, especially small business within the City of Hartford, to help them develop business plans, acquire financing and achieve sustained successful growth. \cdot

c. Bidders are to take note of the CHRO form (see attached "Set-Aside Plan Format") that is a requirement to be completed by the successful qualified bidder. Bidders shall note that if they are not familiar with the preparation and submission of this form, they should retain the services of a Consultant to help them through the preparation and submission process.

2. Bidder Prequalification and Security

- a. For work to be performed with an estimated value in excess of Five Hundred Thousand Dollars (\$500,000.00), the subcontractor shall be prequalified in the State of Connecticut Department of Administrative Services classification noted on the pertinent Invitation to Bid on or before the date that the bid is awarded;
- b. The bid shall be accompanied by a bid bond or certified check in an amount which shall be Ten Percent (10%) of any bid for work with an amount value of at least Fifty Thousand Dollars (\$50,000.00). If the bidder is a small contractor or minority business enterprise pursuant to Connecticut General Statutes Section 4a-60g and further described in Appendix I to this agreement "Administrative and Statutory Requirements" ("Appendix I"), it may provide in lieu of a bid bond, a letter of credit in an amount equal to Ten Percent (10%) of the bid amount if the estimated value is



less than one hundred thousand dollars and in an amount equal to Twenty-Five Percent (25%) of the bid amount, if the estimated value is one hundred thousand dollars or greater, and

- c. The bidder shall possess experience with projects of a similar nature and scope.
- **3.** Bid packages will be available on Wednesday, February 6, 2012.
- **4.** Bid documents will be available for electronic viewing and download on iSqFt a web-based virtual plan room provided by and will be available by request only. Interested participants may request bid packages by email to jmwbid@kbebuilding.com, by fax to (860) 284-7836 or by telephone to (860) 284-7436 (project specific voice message & Fax lines). Bid documents will also be available via the following ftp website: ftp.kbebuilding.com Username: JMWrightHS and Password: 6w6dwi. To secure hard copies of bid documents at bidder's expense, contact BL Graphics at (203) 630-2671 or email tgallagher@blcompanies.com Documents will also be available for review at KBE's office located at 30 Batterson Park Road, Farmington, CT 06032.

All document clarification requests or Bid questions (RFI's) must be submitted in writing to the **CONSTRUCTION MANAGER** <u>ONLY</u> via fax (860) 284-7836 or email (jmwbid@kbebuilding.com), Attention: Craig R. Ortola. <u>Telephone inquiries will not be acknowledged during the bidding process.</u> <u>Bidders are to communicate solely with Construction Manager in relation to the Project and the bidding process.</u> Answers received directly from Owner, Architect or Engineers will not be binding on Construction Manager. <u>All questions must be submitted no later than December 28, 2012.</u>

- 5. All Bidders are to note that DAS certification date MUST run through the duration of the project.
- **6.** This project is being performed under the Construction Management at Risk (CMR) form of construction. Each Trade Contractor's contract shall be with the Construction Manager. The Owner has contracted with KBE Building Corporation to serve as the CMR
- **7.** No oral, telephone or telegraphic proposals will be considered. All bids shall stand available for acceptance for a period of ninety (90) days from the date proposals are received.
- **8.** No bid shall be accepted from any person/company who is in arrears to the Owner and/or Construction Manager upon debt, or contract, or who is a defaulter as surety or otherwise upon obligations to the Owner and/or Construction Manager.
- **9.** The Construction Manager reserves the right to reject any or all bids, without stating reasons therefore, including without limitation the right to reject any or all nonconforming, non-responsive, unbalanced, or conditional bids and to reject the bid of any bidder if the Construction Manager believes that it would not be in the best interest of the Owner or the project to make an award to that bidder, whether because the bid is not responsive or the bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by the Construction Manager. The Construction Manager reserves the right to waive informalities and to negotiate contract terms with one or more bidders without



reopening the bidding process in so far such negotiations are not violative of applicable competitive bidders statutes or law. In evaluating bids, the Construction Manager will consider the qualifications of the bidder, whether or not the bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Form of Bid or prior to Notice of Award. The Construction Manager may consider the qualification and experience of subcontractors and other persons and organizations proposed for those portions of the work as to which the identity of subcontractors and other persons and organizations must be submitted as provided by the bid documents. The Construction Manager reserves the right to require, prior to Notice of Award, a statement of facts in detail of the business and technical organization and plan of the bidder available for the contemplated work, including financial resources, present commitments, and experience of the bidder in performance of comparable work. Construction Manager recommended trade contractors are subject to DCS approval.

10. KBE Building Corporation is an Affirmative Action Equal Opportunity Employer M/F/H/V.

END OF DOCUMENT







JM Wright Technical High School Stamford, CT (BI-RT-842 CMR)

January 21, 2013

Package # BP-002.2

MASONRY

SCOPE OF WORK

The following items are included in Subcontractor's Scope of Work but are in NO WAY meant to limit the Scope of Work and obviously do not list all the items that Subcontractor must perform.

 Furnish all labor, materials, supervision, tools, supplies equipment, insurance, permits and services necessary for a COMPLETE CONCRETE UNIT MASONRY PACKAGE as shown in the Contract Documents for the above referenced project, to be in accordance with the Project's General Conditions and related work by others as described herein, to include, but not limited to the following:

Division 0 – Procurement and Contracting Requirements Section 00 31 26.23 – General Survey for asbestos containing material and lead-based paint, Section 00 31 19.26 – Existing conditions survey, Section 00 31 26.29 – Existing PCB information, Section 00 31 32.13 – Subsurface geotechnical report, Division 1 General Requirements, Division 04, Section 04 01 20 - Maintenance of Unit Masonry, Precast Concrete and Limestone, Section 04 20 00--Unit Masonry, Section 04 72 00 - Cast Stone Masonry and Division 7, 07 19 00 - Water Repellants.

UNIT MASONRY

- A. Unit Masonry Subcontractor scope of work includes all the supply and installation of all types of interior and exterior Unit Masonry assemblies as shown and as specified including but not limited to all Concrete Unit Masonry units, face brick, building (common) brick, mortar and grout, all Unit Masonry reinforcing steel, Unit Masonry joint reinforcement, ties and anchors, embedded flashings & sheetmetal, miscellaneous Unit Masonry accessories and cavity-wall insulation.
- B. At any interface between masonry and door, frame, window, curtain-wall, and/or roof flashings, the masonry subcontractor shall furnish and install all flashings. Flashings will be terminated by the window, curtain-wall, and/or roofing contractors.
- C. Subcontractor shall furnish and install all Masonry Veneer at both the interior and exterior of the building.
- D. Subcontractor is responsible for all masonry repair work shown on the Contract Documents and patches from other trades penetrations Interior and Exterior finishes.
- E. Subcontractor is responsible for ALL layout and surveying associated with this scope of work. Two benchmarks will be provided by the site contractor.
- F. Subcontractor shall provide a register professional surveyor to transfer control to each floor and the roof and to provide brick points.
- G. At submission of bid, subcontractor to contact suppliers of the specified block, brick and stone to determine availability of product at the time of bid. Furthermore, Subcontractor is required to advise CM of available stock of specified material.

- H. Subcontractor shall provide and install all precast stone sill and copings, including all embedded steel. Subcontractor shall coordinate the installation with the miscellaneous steel subcontractor. Welding and clip angles are provided by others.
- Subcontractor to provide shop drawings and all submittals required by the contract documents for the installation of its work as called for in the specifications. Subcontractor shall provide shop drawings sealed by a professional engineer registered in the State of Connecticut where required.
- J. Subcontractor shall provide Mockups: Build Mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution. Typical exterior and Interior Wall in sizes 60 inches by 48 inches high. See Section 042000 Item E.
- K. Subcontractor shall furnish and install all Unit Masonry incidentals and accessories required for a completed scope of work including but not limited to all mortar, grout, pumps, buggies, lifts, staging, mixers, anchors, dowels, angles, inserts, fasteners, shims, flashings, weep holes, control joints, vent tubes and all other miscellaneous accessories needed for a complete installation.
- L. Subcontractor shall install all embedded steel as shown and specified. Embed steel will be supplied by others. Embedded steel to include but not be limited to all steel lintels, plates, studs, bolts, hooks, and any other miscellaneous steel required for scope of work but not specifically shown on the contract documents.
- M. Subcontractor shall supply and install all membrane or metal flashings & weeps as per contract documents.
- N. Subcontractor shall coordinate and install all mechanical sleeves and anchors in Unit Masonry walls provided by other trades.
- O. Subcontractor shall furnish and install all Unit Masonry or precast lintels and bond beams as required by the contract documents.
- P. Subcontractor shall furnish and install all penetrating water repellent treatments for the following vertical and horizontal surfaces: precast concrete, cast stone, clay brick masonry, and natural stone to include new and existing. All surfaces to be cleaned and prepared prior to installation.
- Q. Subcontractor shall brace walls as required. Bracing shall meet O.S.H.A. standards
- R. Subcontractor shall furnish and install all scaffolding required for the complete installation of all Unit Masonry. Scaffolding shall conform to all OSHA standards. Scaffolding must be provided with access stairs. Stair towers are to be provided a minimum of every 200' and provide access to all levels.
- S. Workers erecting and dismantling staging/scaffolding must be fully tied off.
- T. Subcontractor shall final clean all exposed brick and precast surfaces (new and existing) in accordance with contract documents. Subcontractor must contain and control all run-off generated by the wash down operation.
- U. Subcontractor shall be responsible for all Unit Masonry lay-out and control required to install its work.
- V. Water and Electrical Services will be provided by the Construction Manager and will be available to the Subcontractor. Final connections to equipment used by the Subcontractor will be Subcontractor's responsibility.
- W. Subcontractor shall provide all winter conditions and protection for this scope of work. This includes all tenting, heating (heating units and fuel), framing associated with tenting, additional staging or scaffolding, heated water, accelerants, etc.

- X. Subcontractor shall cover all masonry on a nightly basis to prevent water infiltration within the cavity. Provide and remove temporary caps at masonry parapets to prevent water infiltration until permanent cap has been installed.
- Y. Subcontractor shall provide no less than two (2) laborers dedicated to clean up during each shift for their work.
- Z. Subcontractor shall provide (2) laborers for a duration of 3 months to clean up as directed by the Construction Manager's Superintendent.
- AA. Subcontractor to provide (80) hours of forklift and operator time for use at the discretion of the Construction Manager. Time will be verified by CM's signature on daily work tickets.
- BB. NO DRY CUTTING OF MASONRY MATERIALS IS ALLOWED ON SITE.
- CC. Unit Masonry subcontractor shall remobilize to the site just prior to Substantial Completion and spot clean any efflorescence using lifts to reach all areas.
- DD. Subcontractor will be required to "tooth-in" block and brick as required by the project specifications.
- EE. Subcontractor shall provide (3) temporary stair towers for a period of one year as indicated on roof access plan. These temporary stair towers shall be maintained and inspected per OSHA regulations throughout the job duration.
- FF. Subcontractor has included in their base bid the following allowances:
 - a. Allowance #1: Exterior brick replacement: Includes **500** brick removal and replacement as specified in section 040120 "Maintenance of Unit Masonry, Precast and Limestone."
 - b. Allowance #2: Include **2,250** square feet of brick repointing as specified in section 040120 "Maintenance of Unit Masonry, Precast and Limestone."
 - c. Allowance #3: Include **50** linear feet of exterior precast concrete crack repair specified in section 040120 "Maintenance of Unit Masonry, Precast and Limestone."
 - d. Allowance #4: Include **50** square feet of exterior precast concrete patching and repair as specified in section 040120 "Maintenance of Unit Masonry, Precast and Limestone."
 - e. Allowance #5: Include **50** linear feet of limestone crack repair as specified in section 040120 "Maintenance of Unit Masonry, Precast and Limestone."
 - f. Allowance #6: Include **50 square** feet of limestone patching repair as specified in section 040120 "Maintenance of Unit Masonry, Precast and Limestone."
 - g. Allowance #17: Include **250** square feet of Partition Type 12.
 - h. Allowance #18: Include 2,000 square feet of Partition Type 19.
 - i. Allowance #19: Include **4,000** square feet of miscellaneous 4" CMU interior wall in-fills.

END OF DOCUMENT



PROPOSAL FORM – BP 004.2 MASONRY

BID FORM

J. M. WRIGHT TECHNICAL HIGH SCHOOL STATE PROJECT # BI-RT-842-CMR

Directions for Bid Forms

This Bid Form identifies the major type of work required for this Bid Package. The Bidder is to provide pricing as follows:

- A. LUMP SUM TOTAL for this Bid Package. A Lump Sum amount is required for each item on this form. The amount is to include labor, material, supervision, tools, supplies, equipment, direct or indirect expenses, overhead, profit, insurance, bonding, and any applicable taxes necessary to perform the full obligations as set forth in this Bid Package.
- B. ALLOWANCES. The Allowances are to be incorporated into the selected bidder's Scope of Work. Allowances are to be provided in accordance with specifications section 01 22 00 and as indicated in the subcontractor's scope of work.
- C. UNIT PRICING: Unit Prices will be used to add or delete work from the contract sum by change order in the event the project Scope of Work is altered. Each unit price shall include all equipment, tools, operators, fuel, maintenance, mobilization, demobilization, insurance, permits, fees, bond, overhead and profit incidental to the installation and completion of the work involved.
- D. ADDENDA CONFIRMATION. This form is acknowledgment of receipt of all applicable addenda. Failure to list all issued addenda will be grounds for disqualifications.
- E. BID ITEMS Bidders are required to submit pricing for each individual bid package. No bidder may withdraw its bid during the bid review period.
- F. Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a. contract consistent with its bid will subject Bidder to automatic forfeiture of Bidders Bid Security.
- G. A checklist for required forms is provided within the bid form. Each line item shall be initialed to confirm receipt and acceptance of each item. All Bid Forms to be signed and dated in the space indicated.

Bid Item A: Lump Sum Base bid

1) Base Bid (including Payment,	Per	formance B	ond, Allowances)	
(in numbers) \$				
(in words)				
				and 00/100 Dollars
2) 100% Labor & Materials Payme	nt &	& Performar	nce Bond (Breakout)	
(in numbers) \$				
(in words)				
				and 00/100 Dollars
Section 04 20 00 – Unit Masonry (Information Only)	(Su	ım of A thru I	В)	1
(Line)dds Cyy	A. B.	Material Labor		
Section 04 97 22 – Cast Stone Masonry			(Sum of C thru D)	2
	C. D.	Material Labor		
Section 07 19 00- Water Repellants			(Sum of E thru F)	3
	E. F.		l <u></u>	

BID ITEM B: ALLOWANCES

All Bidders are to note that allowance quantities provided in Section 01 22 00 are to be part of the base bid. The unit costs that are to be provided will reflect additions or reductions to those quantities given. Any allowances not used will be issues as a deduct change order.

Allowance #1: Exterior brick replacement: Includes 500 brick rer as specified in section 040120 "Maintenance of Unit Masonry, Pred	•
Allowance #2: Include 2,250 square feet of brick repointing as sp 040120 "Maintenance of Unit Masonry, Precast and Limestone."	pecified in section
Allowance #3: Include 50 linear feet of exterior precast concrete in section 040120 "Maintenance of Unit Masonry, Precast and Lime	
Allowance #4: Include 50 square feet of exterior precast concrete as specified in section 040120 "Maintenance of Unit Masonry, Prec	
Allowance #5: Include 50 linear feet of limestone crack repair as 040120 "Maintenance of Unit Masonry, Precast and Limestone."	specified in section
Allowance #6: Include 50 linear feet of limestone patching repair 040120 "Maintenance of Unit Masonry, Precast and Limestone."	as specified in section
Allowance #17: Include 250 sf of Partition Type 12	\$ \$
Allowance #18: Include 2,000 sf of Partition Type 19	\$
Allowance #19: Include 2,000 sf of miscellaneous 4" CMU interior	\$
Supply and install all required labor and materials to provide all neconditions for the masonry scope of work.	ecessary winter \$25,000
80 hours of forklift operator and equipment as per Scope of Work	\$/LS \$/HR
(2) Laborers for (3) month duration to clean per Scope of Work	\$/LS \$/HR

** Quantities will be measured in place. Quantities derived from delivery tickets or invoices will not be accepted**.

BID ITEM C: UNIT PRICES

Unit Prices shall be used, where applicable, to make adjustments to the cost of the Work due to changes. All Unit Prices submitted shall be complete in-place (unless otherwise noted) and include all costs for overhead, profit, labor, materials, equipment, and any other incidentals related to the completion of the Work, and shall remain firm for the period of the contract. Unit Prices listed are for added work. Deductive unit prices will be calculated at no less than 85% of the additive unit price (100% if used in conjunction with an allowance). Subcontractor shall provide a licensed surveyor to determine elevations of materials associated with earth and rock removal to determine the total area removed and replaced as it relates to unit costs.

CMU Wall Installation	\$ per SF
Brick Wall Installation	\$ per SF

BID ITEM D:

BID DOCUMENT CHECK LIST:

Bidder is to provide all documents as listed below with their properly identified bid. Bidder's initials are
required on all lines of following listed items.
Original and (2) copies of Bid Form on Bidders Letterhead
DAS Qualification/Certification Bid Security
Bidder Qualification Statement
Non-Collusion Affidavit
Surety's letter of intent to issue Payment and Performance Bond
List of bidders primary subcontractors and suppliers (on separate letterhead)
Bidder agrees by execution and submission of this bid that its bid inclusive of Base Bids, Alternates, and Unit Prices is valid and irrevocable for a minimum of (90) calendar days from the bid due date, that the Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a contract consistent with its bid will subject Bidder to automatic forfeiture of Bidder's Bid Security.
By submitting this bid, Bidder acknowledges receipt of the following addenda:

BIDDER:
Name:
Address:
Telephone # Fax #
Typed Name of Officer
Signature of Officer
Title of Officer
Date



JM Wright Technical High School Stamford, CT (BI-RT-842 CMR)

February 6, 2013

Package # BP-004.3

STRUCTURAL STEEL

SCOPE OF WORK

The following items are included in Subcontractor's Scope of Work but are in NO WAY meant to limit the Scope of Work and obviously do not list all the items that Subcontractor must perform.

 Furnish all labor, materials, supervision, tools, supplies equipment, insurance, permits and services necessary for a COMPLETE STRUCTURAL STEEL PACKAGE as shown in the Contract Documents for the above referenced project, to be in accordance with the Project's General Conditions and related work by others as described herein, to include, but not limited to the following:

Division 0 – Procurement and Contracting Requirements, Division 1 – General Requirements Division 02 - Existing Conditions, Division 05 Metals, Division 8 Openings and all applicable specifications sections pertinent to scope of work, including but not limited to the following Section 00 31 26.23 – General Survey for asbestos containing material and lead-based paint, Section 00 31 19.26 – Existing conditions survey, Section 00 31 26.29 – Existing PCB information Sections, Section 02 83 00 Lead Awareness, Section 05 12 00 Structural Steel Framing, Section 05 21 23 Steel Joist Girder Framing, Section 05 31 00 Steel Decking, Section 08 63 00 Engineered Exterior Canopy System.

STRUCTURAL STEEL FRAMING

- A. The Structural Steel Subcontractor is responsible for all structural notes on S001 as they relate to structural steel, specifically the structural general notes, structural steel notes, Floor Decking Notes, Steel Joist and Roof Decking Notes, Roof Top Support Equipment Note
- B. The subcontractor to provide all submittals and shop drawings per the specification section 05 12 00, specifically structural steel materials, bolts, connectors and anchors, primer, bituminous coating, fabrication, shop connections, galvanizing and source quality control and 05 31 00 specifically roof deck, acoustical roof deck, composite floor deck, steel form deck and accessories. The submittals are to be submitted by area as to not impede the construction schedule.
- C. The Subcontractor shall meet all requirements as outlined and detailed in the <u>MEP</u> COORDINATION AND BIM MODELING EXHIBIT dated November 8, 2012, attached hereto.
- D. The subcontractor is responsible for the fabrication and installation standards as described in specification section 05 12 00 and 05 21 23
- E. The subcontractor is required to be AISC Certified for both Erection and Fabrication.
- F. Subcontractor shall field verify all existing conditions prior to steel fabrication. Specifically in regards to elevations, locations, ect.

- G. The Structural Steel Subcontractor is responsible to coordinate mechanical openings to include but limited to roof drains, exhaust fans and roof top units. Subcontractor to submit shop drawings indicating proposed locations and modifications to the existing deck and structure. Structural subcontractor is required to supply and install all required support framing for all openings in deck.
- H. The subcontractor shall be required to coordinate all work with all other Trades.
- I. The subcontractor shall verify all existing measurements indicated on the drawings in the field.
- J. It will be the subcontractor's responsibility to remove from the site any damaged, rejected, surplus or unusable items that will not fit into its onsite dumpsters. If Subcontractor's waste material is considered hazardous waste, it will be the responsibility of this Subcontractor to remove this material from the site and dispose of all hazardous waste materials as required by all applicable regulatory agencies.
- K. The subcontractor will be required to store materials off-site or in designated area coordinated with the Construction Managers Superintendent. Storage of materials and/or equipment in the building will not be allowed.
- L. The subcontractor shall furnish and install all miscellaneous structural steel equipment, including cranes, rigging, bracing, safety, and miscellaneous welding supplies per plans and specifications and all contract drawings as needed to complete the structural steel work.
- M. The subcontractor to furnish all anchor bolts and leveling plates. Anchor and leveling plates install by others.
- N. The subcontractor to furnish all bearing plates in masonry walls as shown on the contract drawings and coordinate the installation with the masonry contractor.
- O. The subcontractor to furnish all labor, material and equipment for the installation of masonry anchors to all new structural steel members and to existing structural Steel Members being encased in Masonry.
- P. The subcontractor shall furnish all labor, material and equipment for the reinforcement of existing columns as shown on the construction documents.
- Q. The subcontractor shall furnish all labor, material and equipment for stiffeners on existing steel beams.
- R. The subcontractor shall furnish all labor, material and equipment for the reinforcing of existing joists as shown on the contract drawings.
- S. The Structural Steel Subcontractor shall furnish and install all structural steel beams and girders, braced and moment resistant frames, permanent diagonal bracing, posts and columns, checkered plate, and frames for openings, miscellaneous angles, angle ledgers, channels, clip angles, continuous angles, stiffeners, bent plates and plates including all bolts and welding as required for the complete installation of the work. The subcontractor shall furnish all the necessary shoring and bracing required to execute the installation of its work. Where required, designs shall be provided by an engineer registered in the State of Connecticut.
- T. The subcontractor shall furnish all labor, material and equipment to install RTU steel dunnage as shown on the construction documents.
- U. The subcontractor shall furnish and install all structural steel components involved with the screen walls located on the roof, including the installation of the base plates and connections.
- V. The subcontractor shall furnish all labor material and equipment to install the hoist beam at the elevator if required.

- W. The subcontractor shall furnish and install all temporary wire safety railings (per OSHA standards) throughout the Sections of A-1 and A-2 of the project at the roof portion. Subcontractor shall also provide two gates at every level including the roof within this safety railing so that materials can be loaded onto the second floor.
- X. The subcontractor shall provide labor and materials and equipment for structural requirements or reinforcing for Curtain walls and Sunshades.
- Y. The subcontractor shall provide all labor, material and equipment for the removal of joists and beams, lintels in coordination of installation of new steel members.
- Z. The subcontractor shall furnish all labor, material and equipment for AESS. All AESS to be placed shall follow the standards listed in the contract documents. The Subcontractor will be responsible for all on-site repairs, if needed, to meet the AESS standards that apply to this project.
- AA. All structural plates and shapes directly in contact with exterior block or block masonry must be galvanized.
- BB. The subcontractor shall furnish all shop and field drilling, punching and cutting for all mechanical, electrical and other trades.
- CC. The subcontractor shall furnish shop painting and field touch-ups of all steel, except anchor bolts and steel to be encased in concrete.

METAL DECKING

- A. The subcontractor shall be responsible for painting of all metal deck welds.
- B. The subcontractor shall furnish and install all composite form decking to include all required shear connectors and metal closures to prevent concrete leakage.
- C. The subcontractor shall furnish and install all metal roofs decking to include metal closure strips.
- D. Subcontractor has included in their base bid the following allowances:
 - a. Allowance #12: Include 8,000 square feet of removal and replacement of existing metal **ROOF** decking.

ENGINEERED EXTERIOR CANOPY SYSTEM

- A.—The subcontractor is to submit shop drawings for engineered exterior canopy system within 30 days of project award. Submittals are to be stamped and singed by a licensed engineer within the State of Connecticut.
- B.—The subcontractor shall provide engineered exterior canopy system as detailed in the project specification section 08 63 00. Translucent panel system is to be proved by others.
- C.—The subcontractor to provide final cleaning of structural members of engineered exterior canopy system prior to acceptance by the Construction Manager.

END OF DOCUMENT



PROPOSAL FORM – BP 004.3 STRUCTURAL STEEL

BID FORM

J. M. WRIGHT TECHNICAL HIGH SCHOOL STATE PROJECT # BI-RT-842-CMR

Directions for Bid Forms

This Bid Form identifies the major type of work required for this Bid Package. The Bidder is to provide pricing as follows:

- A. LUMP SUM TOTAL for this Bid Package. A Lump Sum amount is required for each item on this form. The amount is to include labor, material, supervision, tools, supplies, equipment, direct or indirect expenses, overhead, profit, insurance, bonding, and any applicable taxes necessary to perform the full obligations as set forth in this Bid Package.
- B. ALLOWANCES. The Allowances are to be incorporated into the selected bidder's Scope of Work. Allowances are to be provided in accordance with specifications section 01 22 00 and as indicated in the subcontractor's scope of work.
- C. UNIT PRICING: Unit Prices will be used to add or delete work from the contract sum by change order in the event the project Scope of Work is altered. Each unit price shall include all equipment, tools, operators, fuel, maintenance, mobilization, demobilization, insurance, permits, fees, bond, overhead and profit incidental to the installation and completion of the work involved.
- D. ALTERNATES. Bidder is to provide a LUMP SUM price for EACH of the following Alternates, but do not include in the LUMP SUM TOTAL. If no cost, please indicate with "NC":
- E. BID DOCUMENT CHECKLIST AND ADDENDA CONFIRMATION. A checklist for required forms is provided within the bid form. Each line item shall be initialed to confirm receipt and acceptance of each item. All Bid Forms to be signed and dated in the space indicated. Also included is an addenda confirmation. This form is acknowledgment of receipt of all applicable addenda. Failure to list all issued addenda will be grounds for disqualifications.
- F. BID ITEMS Bidders are required to submit pricing for each individual bid package. No bidder may withdraw its bid during the bid review period.
- G. Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a. contract consistent with its bid will subject Bidder to automatic forfeiture of Bidders Bid Security.

Bid Item A: Lump Sum Base bid

1) Base Bid (including Paymen	t, Perfor	mance B	ond, Allowances)	
(in numbers) \$				
(in words)				and 00/100 Dollars
2) 100% Labor & Materials Payn	nent & P	erformar	nce Bond (Breakout	
(in numbers) \$				
(in words)				 and 00/100 Dollars
Section 05 12 00 – Structural Steel Fra	A. Ma	aterial bor	(Sum of A thru B)	1
Section 05 21 23 - Steel Joist Girder F	raming C. D.	Material Labor	(Sum of C thru D)	2
Section 05 31 00 – Steel Decking			(Sum of E thru F)	3
	E. F.		l	
Section 08 63 00 — Engineered Exterio	o r Canop	y System-	(Sum of G thru H)	4
		G. H.	Material Labor	<u>=</u>

BID ITEM B: ALLOWANCES

All Bidders are to note that allowance quantities provided in Section 01 22 00 are to be part of the base bid. The unit costs that are to be provided will reflect additions or reductions to those quantities given. Any allowances not used will be issues as a deduct change order.

Allowance #12: Include 8,000 square feet of removal and replacement of existing metal **ROOF** decking.....\$

** Quantities will be measured in place. Quantities derived from delivery tickets or invoices will not be accepted**.

BID ITEM C: UNIT PRICES

Unit Prices shall be used, where applicable, to make adjustments to the cost of the Work due to changes. All Unit Prices submitted shall be complete in-place (unless otherwise noted) and include all costs for overhead, profit, labor, materials, equipment, and any other incidentals related to the completion of the Work, and shall remain firm for the period of the contract. Unit Prices listed are for added work. Deductive unit prices will be calculated at no less than 85% of the additive unit price (100% if used in conjunction with an allowance). Subcontractor shall provide a licensed surveyor to determine elevations of materials associated with earth and rock removal to determine the total area removed and replaced as it relates to unit costs.

Structural Steel Erection	\$ _ per TN
Roof Decking Installation	\$ _ per SF

BID ITEM D: ALTERNATES

Bidder is to provide a LUMP SUM price for EACH of the following Alternates, but do not include in the LUMP SUM TOTAL above. If no cost, please indicate with "NC":

Alternate #1:	Lump Sum Total:
Removal of premium cost to cor	nplete project with SBE/MBE requirements
Alternate #2:	Lump Sum Total:
Voluntary deduct for combination	n of structural steel package with miscellaneous metals packag

Subcontractor shall include with its bid a copy of the miscellaneous metals bid form.

BID ITEM E:

BID DOCUMENT CHECK LIST:

dder is to provide all documents as listed below with their properly identified bid. Bidder's initials are quired on all lines of following listed items.
Original and (2) copies of Bid Form on Bidders Letterhead
DAS Qualification/Certification
Bid Security
Bidder Qualification Statement
Non-Collusion Affidavit Surety's letter of intent to issue Payment and Performance Bond
List of bidders primary subcontractors and suppliers (on separate letterhead)
dder agrees by execution and submission of this bid that its bid inclusive of Base Bids, Alternates, and alt Prices is valid and irrevocable for a minimum of (90) calendar days from the bid due date, that the dder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that lure of Bidder (if awarded) to execute a contract consistent with its bid will subject Bidder to automatic feiture of Bidder's Bid Security.
y submitting this bid, Bidder acknowledges receipt of the following addenda:
SIDDER:
me:
ldress:
lephone # Fax #
ped Name of Officer
gnature of Officer
ele of Officer

END OF BID FORM



JM Wright Technical High School Stamford, CT (BI-RT-842 CMR)

February 6, 2013

Package # BP-004.5a

LABORATRY FUME HOODS & WOOD LABORATORY CASEWORK

SCOPE OF WORK

The following items are included in Subcontractor's Scope of Work but are in NO WAY meant to limit the Scope of Work and obviously do not list all the items that Subcontractor must perform.

Furnish all labor, materials, supervision, tools, supplies equipment, insurance, permits and services necessary for a **LABORATRY FUME HOODS & WOOD LABORATORY CASEWORK** package as shown in the Contract Documents for the above referenced project, to be in accordance with the Project's General Conditions and related work by others as described herein, to include, but not limited to the following:

Division 00 – Procurement and Contracting Requirements, Division 01- General Requirements, Division 06 – Woods, Plastics and Composites and including but not limited to all applicable specification sections pertinent to scope of work. Including but not limited to the following sections: Specification section 00 31 19.26 – Existing Conditions Survey, 00 31 26.23 – General Survey for Asbestos Containing Material and Lead-Based Paint, 00 31 26.29 – Existing PCB Information, 11 53 13 – Laboratory Fume Hoods and 12 35 53.19 – Wood Laboratory Casework.

All **LABORATRY FUME HOODS & WOOD LABORATORY CASEWORK** on the drawings and in the specifications, which is not specifically called out for as work by others is the responsibility of this Subcontractor.

GENERAL REQUIRMENTS

- A. The **LABORATRY FUME HOODS & WOOD LABORATORY CASEWORK** subcontractor shall be required to coordinate all work with other Subcontractors and the Construction Manager.
- B. Subcontractor shall schedule, receive, inspect, inventory, store, rig and install all equipment and materials. Quantities to be verified at the time of delivery for correctness with any discrepancies reported to the Construction Manager immediately and prior to the start of any work. Once work has commenced, subcontractor shall be responsible for all material in their charge.
- C. This Subcontractor shall exercise care to protect existing conditions. Repair or replace, at the Construction Managers and Owner's discretion, any damage caused by this subcontractors work, to the satisfaction of CM and the Owner of the item damaged. All costs associated with replacing damaged or rejected work is to be by responsible subcontractor.
- D. This Subcontract includes all mobilizations necessary to complete work as scheduled.
- E. All other layout required for the Trade's Work is by this Subcontractor. This Subcontractor is responsible to provide all field checking and controls needed for the accurate installation and monitoring of his Work. Include all required or necessary field measurements.

- F. All rigging, supplemental steel and any miscellaneous supports required to hoist and set materials required for this scope of work and/or equipment will be provided by this Subcontractor.
- G. This Subcontractor shall be responsible to provide any repairs to both the installed spray-on insulation and or fireproofing for removal or damages caused by this scope of work.
- H. Construction Manager will not be charged for any incidental stand-by-time by Subcontractor or any of its agents, sub-subcontractors, suppliers or deliveries.
- I. It will be Subcontractor's responsibility to remove from the site any damaged, rejected, surplus or unusable items that will not fit into Contractor's dumpsters. If Subcontractor's waste material is considered hazardous waste, it will be the responsibility of Subcontractor to remove this material from the site and dispose of all hazardous waste materials as required by all applicable regulatory agencies.

LABORATRY FUME HOODS

- A. Subcontractor to furnish and install all Laboratory Fume Hoods indicated or specified on the Contract documents not limited to Bench-top laboratory fume hoods, ADA accessible, Piping and wiring within the fume hoods for service fittings, light fixtures, fan switches, airflow indicator and alarm and other electrical devices included with the fume hoods. Subcontractor shall also include all fume hood base stands, work tops within the fume hoods to match tops included within the wood laboratory casework, laboratory sinks and cup sinks in fume hoods, water, laboratory gas and electrical service fittings located within the fume hoods.
- B. Subcontractor to furnish shop drawings, samples for verification, schedules, maintenance data, warranty, installer qualifications and fabricator qualifications.
- C. Subcontractor to furnish Fume Hoods from a Manufacturer showing compliance with specified performance requirements.
- D. Subcontractor to locate and install Fume Hoods and accessories where shown or indicated on the Contract Documents, using mounting methods of type described and complying with manufacturers written instructions. Install Fume Hoods level, plumb, recessed and at heights indicated on the contract documents with surfaces free of distortion and other defects in appearance.
- E. Subcontractor to provide coordination with the HVAC subcontractor and plumbing subcontractor and electrical subcontractor all final connections for a complete Fume Hood installation.
- F. After installation, the subcontractor shall clean soiled surfaces, provide touch-up kit and preform any repairs required according to manufacturer's written instructions. Subcontractor shall protect Fume Hoods after final installation from damage until acceptance by Construction Manager.

WOOD LABORATORY CASEWORK

- A. Subcontractor shall furnish and install wood laboratory casework, utility-space framing at backs of base cabinet filler and closure panels. Including laboratory countertops, tables, shelves, hardware and laboratory sinks.
- B. Subcontractor to attend Pre-installation Meeting held on Project Site for Wood Laboratory Casework.
- C. Casework to be only provided by manufactures listed in the project specifications. Color and finish as selected by the architect from the manufacturer's full range.

JM Wright Technical High School Stamford, CT (BI-RT-842 CMR)

- D. Countertops, table tops and sinks shall be provided only by manufacturers listed in the project specifications.
- E. This subcontractor is responsible for the clear-laminated tempered glass required for glazed doors.
- F. Subcontractor to furnish and install all keying as required by the contract documents.
- G. Subcontractor shall also conduct a keying conference on site and incorporate keying decisions into the final keying requirements.
- H. Subcontractor shall submit a schematic keying diagram as required in the project specifications.

END OF DOCUMENT



PROPOSAL FORM – BP 004.5a LABORATORY FUME HOODS & WOOD LABORATORY CASEWORK

BID FORM

J. M. WRIGHT TECHNICAL HIGH SCHOOL STATE PROJECT # BI-RT-842-CMR

Directions for Bid Forms

This Bid Form identifies the major type of work required for this Bid Package. The Bidder is to provide pricing as follows:

- A. LUMP SUM TOTAL for this Bid Package. A Lump Sum amount is required for each item on this form. The amount is to include labor, material, supervision, tools, supplies, equipment, direct or indirect expenses, overhead, profit, insurance, bonding, and any applicable taxes necessary to perform the full obligations as set forth in this Bid Package.
- B. ALLOWANCES. The Allowances are to be incorporated into the selected bidder's Scope of Work. Allowances are to be provided in accordance with specifications section 01 22 00 and as indicated in the subcontractor's scope of work.
- C. UNIT PRICING: Unit Prices will be used to add or delete work from the contract sum by change order in the event the project Scope of Work is altered. Each unit price shall include all equipment, tools, operators, fuel, maintenance, mobilization, demobilization, insurance, permits, fees, bond, overhead and profit incidental to the installation and completion of the work involved.
- D. ADDENDA CONFIRMATION. This form is acknowledgment of receipt of all applicable addenda. Failure to list all issued addenda will be grounds for disqualifications.
- E. BID ITEMS Bidders are required to submit pricing for each individual bid package. No bidder may withdraw its bid during the bid review period.
- F. Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a contract consistent with its bid will subject Bidder to automatic forfeiture of Bidders Bid Security.
- G. A checklist for required forms is provided within the bid form. Each line item shall be initialed to confirm receipt and acceptance of each item. All Bid Forms to be signed and dated in the space indicated.

Bid Item A: Lump Sum Base bid

1) Base Bid (including Payment,	, Per	formance E	Bond, Allowances)	
(in numbers) \$				
(in words)				- and 00/100 Dallars
				_and 00/100 Donars
2) 100% Labor & Materials Paymo	ent &	& Performa	nce Bond (Breakout)	
(in numbers) \$				
(in words)				-
				_and 00/100 Dollars
Section 115313 – Laboratory Fume Hoo	ods		(Sum of A thru B)	1
		Material Labor		
Section 123553.19 – Wood Laboratory	Case	ework	(Sum of C thru D)	2
	C. D.		al	

BID ITEM B: ALLOWANCES

All Bidders are to note that allowance quantities provided in Section 01 22 00 are to be part of the base bid. The unit costs that are to be provided will reflect additions or reductions to those quantities given. Any allowances not used will be issues as a deduct change order.



** Quantities will be measured in place. Quantities derived from delivery tickets or invoices will not be accepted**.

BID ITEM C: UNIT PRICES

Unit Prices shall be used, where applicable, to make adjustments to the cost of the Work due to changes. All Unit Prices submitted shall be complete in-place (unless otherwise noted) and include all costs for overhead, profit, labor, materials, equipment, and any other incidentals related to the completion of the Work, and shall remain firm for the period of the contract. Unit Prices listed are for added work. Deductive unit prices will be calculated at no less than 85% of the additive unit price (100% if used in conjunction with an allowance). Subcontractor shall provide a licensed surveyor to determine elevations of materials associated with earth and rock removal to determine the total area removed and replaced as it relates to unit costs.



BID ITEM D:

BID DOCUMENT CHECK LIST:

Bidder is to provide all documents as listed below with their properly identified bid. Bidder's initials are
required on all lines of following listed items.
Original and (2) copies of Bid Form on Bidders Letterhead
DAS Qualification/Certification
Bid Security
Bidder Qualification Statement Non-Collusion Affidavit
Surety's letter of intent to issue Payment and Performance Bond
List of bidders primary subcontractors and suppliers (on separate letterhead)
Bidder agrees by execution and submission of this bid that its bid inclusive of Base Bids, Alternates, and Unit Prices is valid and irrevocable for a minimum of (90) calendar days from the bid due date, that the Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a contract consistent with its bid will subject Bidder to automatic forfeiture of Bidder's Bid Security.
By submitting this bid, Bidder acknowledges receipt of the following addenda:
BIDDER:
Name:
Address:
Telephone # Fax #
Typed Name of Officer
Signature of Officer
Title of Officer
Date

END OF BID FORM





JM Wright Technical High School Stamford, CT (BI-RT-842 CMR)

February 6, 2013

Tel 860.284.7110

Fax 860.284.1174

Package # BP-004.9

OVERHEAD DOORS AND GRILLES

SCOPE OF WORK

The following items are included in Subcontractor's Scope of Work but are in NO WAY meant to limit the Scope of Work and obviously do not list all the items that Subcontractor must perform.

Furnish all labor, materials, supervision, tools, supplies equipment, insurance, permits and services necessary for a **OVERHEAD DOORS AND GRILLES** package as shown in the Contract Documents for the above referenced project, to be in accordance with the Project's General Conditions and related work by others as described herein, to include, but not limited to the following:

Division 00 – Procurement and Contracting Requirements, Division 01- General Requirements, Division 08 – Openings and including but not limited to all applicable specification sections pertinent to scope of work. Including but not limited to the following sections: Specification section 08 33 13 - Coiling Counter Doors, section 08 33 23 - Overhead coiling doors, section 08 33 26 Overhead coiling grilles.

All **OVERHEAD DOORS AND GRILLES** on the drawings and in the specifications, which is not specifically called out for as work by others is the responsibility of this Subcontractor.

GENERAL REQUIRMENTS

- A. The **OVERHEAD DOORS AND GRILLES** subcontractor shall be required to coordinate all work with other Subcontractors and the Construction Manager.
- B. Subcontractor shall schedule, receive, inspect, inventory, store, rig and install all equipment and Ouantities to be verified at the time of delivery for correctness with any discrepancies reported to the Construction Manager immediately and prior to the start of any work. Once work has commenced, subcontractor shall be responsible for all material in their charge.
- C. This Subcontractor shall exercise care to protect existing conditions. Repair or replace, at the Construction Managers and Owner's discretion, any damage caused by this subcontractors work, to the satisfaction of CM and the Owner of the item damaged. All costs associated with replacing damaged or rejected work is to be by responsible subcontractor.
- D. This Subcontract includes all mobilizations necessary to complete work as scheduled.
- E. All other layout required for the Trade's Work is by this Subcontractor. This Subcontractor is responsible to provide all field checking and controls needed for the accurate installation and monitoring of his Work. Include all required or necessary field measurements.

- F. All rigging, supplemental steel and any miscellaneous supports required to hoist and set materials required for this scope of work and/or equipment will be provided by this Subcontractor.
- G. This Subcontractor shall be responsible to provide any repairs to both the installed spray-on insulation and or fireproofing for removal or damages caused by this scope of work.
- H. Construction Manager will not be charged for any incidental stand-by-time by Subcontractor or any of its agents, sub-subcontractors, suppliers or deliveries.
- I. It will be Subcontractor's responsibility to remove from the site any damaged, rejected, surplus or unusable items that will not fit into Contractor's dumpsters. If Subcontractor's waste material is considered hazardous waste, it will be the responsibility of Subcontractor to remove this material from the site and dispose of all hazardous waste materials as required by all applicable regulatory agencies.

COILING COUNTER DOORS

- A. Subcontractor to furnish and install all Coiling Counter Doors as shown or indicated on the contract documents, including but not limited to all frame anchors and fasteners, aluminum curtain slat material, bottom bar, curtain jamb guides, hood, locking device assembly, manual door operator, counter balancing mechanism lifting handles, pull down straps and all other components required for a complete Coiling Counter Door.
- B. Subcontractor to furnish all necessary shop drawings, samples for verification, schedules and maintenance data. Subcontractor also to provide warranty, installer qualifications and fabricator qualifications.
- C. Subcontractor to furnish all Coiling Counter Doors from specified manufacturer's as indicated in the project specifications.
- D. Subcontractor to provide door finishes as indicated in the project specifications.
- E. Subcontractor to locate and install Coiling Counter Doors and accessories where instructed by the architect or as indicated on the contract documents using mounting methods of type described and complying with manufacturers written instructions. Install Coiling Counter Doors level, plumb, and at heights indicated on the contract documents with all surfaces free of distortion and other defects in appearance.
- F. Any and all controls for Coiling Counter Doors shall be provided under this scope of work. Subcontractor shall furnish and install all mechanical and electrically operated finish hardware necessary for Coiling doors as specified and as indicated and required by actual conditions of the building. Final power connections will be provided by others.
- G. After installation, subcontractor shall adjust and clean surfaces according to manufacturer's written instructions and protect Coiling Counter Doors from damage until acceptance by Construction Manager.
- H. Subcontractor to provide initial maintenance services as required by the project specifications.

OVERHEAD COILING DOORS

A. Subcontractor to furnish and install all Overhead Coiling Doors as shown or indicated on the contract documents including but not limited to all accessories and incidentals associated with scope of work including all frame anchors and fasteners, aluminum curtain slat material, bottom bar with sensor edge, curtain jamb guides, hood, locking device assembly, manual door operator, counter balancing mechanism, electric door operator, emergency manual crank, lifting

- handles, obstruction-detection device pull down strap and all other components required for a complete Overhead Coiling Door.
- B. Subcontractor to furnish all necessary shop drawings, samples for verification, schedules and maintenance data. Subcontractor also to provide warranty, installer qualifications and fabricator qualifications.
- C. Subcontractor to provide door finishes as indicated in the project specifications.
- D. Subcontractor to furnish all Overhead Coiling Doors from specified manufacturer as indicated in the project specifications.
- E. Subcontractor to locate and install Overhead Coiling Doors and accessories where instructed by the architect or as indicated on the contract documents using mounting methods of type described and complying with manufacturers written instructions. Install Coiling Counter Doors level, plumb, and at heights indicated on the contract documents with all surfaces free of distortion and other defects in appearance.
- F. Any and all controls for Coiling Counter Doors shall be provided under this scope of work. Subcontractor shall furnish and install all mechanical and electrically operated finish hardware necessary for Coiling doors as specified and as indicated and required by actual conditions of the building. Final power connections will be provided by others.
- G. Subcontractor shall furnish and install all Overhead Coiling Door as shown on the contract drawing door schedule including those that are shown on A-901 at the Maintenance Garage.
- H. After installation, subcontractor shall adjust and clean surfaces according to manufacturer's written instructions and protect Overhead Coiling Doors from damage until acceptance by Construction Manager.
- I. Subcontractor to provide initial maintenance services as required by the project specifications.
- J. Subcontractor to preform installation and startup checks according to Manufacturers Written Instructions. Subcontractor to adjust doors and components to be weather-resistant.
- K. Subcontractor to Furnish and install all overhead coiling door switches and controls along accessible routes in compliance with regulatory requirements for accessibility.

OVERHEAD COILING GRILLES

- A. Subcontractor to furnish and install all Overhead Coiling Grilles as shown or indicated on the contract documents including but not limited to all accessories and incidentals associated with scope of work including all frame anchors and fasteners, aluminum curtain slat material, bottom bar with sensor edge, curtain jamb guides, hood, locking device assembly, manual door operator, counter balancing mechanism, electric door operator, emergency manual crank, lifting handles, obstruction-detection device pull down strap and all other components required for a complete Overhead Coiling Grilles.
- B. Subcontractor to furnish all necessary shop drawings, samples for verification, schedules and maintenance data. Subcontractor also to provide warranty, installer qualifications and fabricator qualifications.
- C. Subcontractor to provide door finishes as indicated in the project specifications.
- D. Subcontractor to furnish all Overhead Coiling Grilles from specified manufacturer as indicated in the project specifications.
- E. Subcontractor to locate and install Overhead Coiling Grilles and accessories where instructed by the architect or as indicated on the contract documents using mounting methods of type described and complying with manufacturers written instructions. Install Overhead Coiling

- Grilles level, plumb, and at heights indicated on the contract documents with all surfaces free of distortion and other defects in appearance.
- F. Any and all controls for Overhead Coiling Grilles shall be provided under this scope of work. Subcontractor shall furnish and install all mechanical and electrically operated finish hardware necessary for Overhead Coiling Grilles as specified and as indicated and required by actual conditions of the building. Final power connections will be provided by others.
- G. Subcontractor shall furnish and install all Overhead Coiling Grilles as shown on the contract drawing door schedule including those that are shown on A-901 at the Maintenance Garage.
- H. After installation, subcontractor shall adjust and clean surfaces according to manufacturer's written instructions and protect Overhead Coiling Grilles from damage until acceptance by Construction Manager.
- I. Subcontractor to provide initial maintenance services as required by the project specifications.
- J. Subcontractor to preform installation and startup checks according to manufacturer's written instructions. Subcontractor to adjust doors and components to be weather-resistant.
- K. Subcontractor to furnish and install all overhead coiling grilles switches and controls along accessible routes in compliance with regulatory requirements for accessibility.

END OF DOCUMENT



PROPOSAL FORM – BP 004.9 OVERHEAD DOORS AND GRILLES

BID FORM

J. M. WRIGHT TECHNICAL HIGH SCHOOL STATE PROJECT # BI-RT-842-CMR

Directions for Bid Forms

This Bid Form identifies the major type of work required for this Bid Package. The Bidder is to provide pricing as follows:

- A. LUMP SUM TOTAL for this Bid Package. A Lump Sum amount is required for each item on this form. The amount is to include labor, material, supervision, tools, supplies, equipment, direct or indirect expenses, overhead, profit, insurance, bonding, and any applicable taxes necessary to perform the full obligations as set forth in this Bid Package.
- B. ALLOWANCES. The Allowances are to be incorporated into the selected bidder's Scope of Work. Allowances are to be provided in accordance with specifications section 01 22 00 and as indicated in the subcontractor's scope of work.
- C. UNIT PRICING: Unit Prices will be used to add or delete work from the contract sum by change order in the event the project Scope of Work is altered. Each unit price shall include all equipment, tools, operators, fuel, maintenance, mobilization, demobilization, insurance, permits, fees, bond, overhead and profit incidental to the installation and completion of the work involved.
- D. ADDENDA CONFIRMATION. This form is acknowledgment of receipt of all applicable addenda. Failure to list all issued addenda will be grounds for disqualifications.
- E. BID ITEMS Bidders are required to submit pricing for each individual bid package. No bidder may withdraw its bid during the bid review period.
- F. Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a. contract consistent with its bid will subject Bidder to automatic forfeiture of Bidders Bid Security.
- G. A checklist for required forms is provided within the bid form. Each line item shall be initialed to confirm receipt and acceptance of each item. All Bid Forms to be signed and dated in the space indicated.

Bid Item A: Lump Sum Base bid

1) Base Bid (including Payment,	Per	formance B	ond, Allowances)	
(in numbers) \$				
(in words)				
				_and 00/100 Dollars
2) 100% Labor & Materials Payme	ent &	& Performai	nce Bond (Breakout)	
(in numbers) \$				
(in words)				
				and 00/100 Dollars
Section 083313 – Coiling Counter doors	Α.	Material	(Sum of A thru B)	1
	B.	Labor		
Section 083323 – Overhead Coiling doo	rs		(Sum of C thru D)	2
	C. D.	Materia Labor	l	
Section 083326 – Overhead Coiling Gril			(Sum of E thru F)	3_
Ç	E.	Materia	` I	
	F.	Labor		

BID ITEM B: ALLOWANCES

All Bidders are to note that allowance quantities provided in Section 01 22 00 are to be part of the base bid. The unit costs that are to be provided will reflect additions or reductions to those quantities given. Any allowances not used will be issues as a deduct change order.



** Quantities will be measured in place. Quantities derived from delivery tickets or invoices will not be accepted**.

BID ITEM C: UNIT PRICES

Unit Prices shall be used, where applicable, to make adjustments to the cost of the Work due to changes. All Unit Prices submitted shall be complete in-place (unless otherwise noted) and include all costs for overhead, profit, labor, materials, equipment, and any other incidentals related to the completion of the Work, and shall remain firm for the period of the contract. Unit Prices listed are for added work. Deductive unit prices will be calculated at no less than 85% of the additive unit price (100% if used in conjunction with an allowance). Subcontractor shall provide a licensed surveyor to determine elevations of materials associated with earth and rock removal to determine the total area removed and replaced as it relates to unit costs.



BID ITEM D:

BID DOCUMENT CHECK LIST:

Bidder is to provide all documents as listed below with their properly identified bid. Bidder's initials are
required on all lines of following listed items.
Original and (2) copies of Bid Form on Bidders Letterhead
DAS Qualification/Certification
Bid Security
Bidder Qualification Statement
Non-Collusion Affidavit
Surety's letter of intent to issue Payment and Performance Bond
List of bidders primary subcontractors and suppliers (on separate letterhead)
Bidder agrees by execution and submission of this bid that its bid inclusive of Base Bids, Alternates, and Unit Prices is valid and irrevocable for a minimum of (90) calendar days from the bid due date, that the Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a contract consistent with its bid will subject Bidder to automatic forfeiture of Bidder's Bid Security.
By submitting this bid, Bidder acknowledges receipt of the following addenda:
BIDDER:
Name:
Address:
Γelephone # Fax #
Typed Name of Officer
Signature of Officer
Γitle of Officer
Date

END OF BID FORM



JM Wright Technical High School Stamford, CT (BI-RT-842 CMR)

February 6, 2013

Package # BP-004.24

ELECTRICAL / COMMUNICATIONS / ELECTRONIC SAFETY AND SECURITY

SCOPE OF WORK

The following items are included in Subcontractor's Scope of Work but are in <u>NO WAY</u> meant to limit the Scope of Work and obviously do not list all the items that Subcontractor must perform.

Furnish all labor, materials, supervision, tools, supplies equipment, insurance, permits and services necessary for a complete **ELECTRICAL / COMMUNICATIONS / ELECTRONIC SAFETY AND SECURITY** package as shown in the Contract Documents for the above referenced project, to be in accordance with the Project's General Conditions and related work by others as described herein, to include, but not limited to the following:

Division 0 - Procurement and Contracting Requirements Division 1 - General Requirements; Division 8 – Openings, Division 11 Food Service Equipment (trade Reference for Coordination Only) Division 26, Electrical, Division 27 Communications, Division 28 Electronic Safety and Security all applicable specifications sections pertinent to scope of work. Including but not limited to the following sections; ; Section 00 31 26.23 – General Survey for asbestos containing material and lead-based paint, Section 00 31 19.26 - Existing conditions survey, Section 00 31 26.29 - Existing PCB information Section 02 83 00 Lead Awareness, Section 08 31 13 Access Doors and Frames (provide only), Section 26 00 10 Electrical Demolition, 26 01 02 Basic Electrical Requirements, 26 04 66 Feeder and Plug-in Busway, 26 05 00-1 Basic Electrical Materials and Methods, 26 05 00-2 Temporary Power and Lighting, 26 05 19 Building Wire and Cable, 26 05 26 Grounding, 26 05 29 Hangers and Supports, 26 05 33 Outlet Boxes, 26 05 34 Pull and Junction Boxes, 26 05 35 Raceways, 26 05 53 Electrical Identification, 26 05 83 Equipment Connections, 26 07 22 Voice Communication Fire Alarm & Detection Systems, 26 07 31 Wireless Clock, 26 07 75 Assisted Listening System, 26 09 23 Lighting Control Equipment, 26 210 0 Electrical Service - Utility, 26 22 00 Dry Type Transformers, 26 24 13 Switchboards, 26 24 16 Panelboards and Circuit Breakers, 26 27 26 Wiring Devices, 26 28 13 Fuses, 26 28 16 Safety Switches, 26 29 00 Motor Controllers, 26 32 13 Engine Generator Systems, 26 36 00 Transfer Switches, 26 43 00 Transient Voltage Surge Suppression, 26 51 00 Interior Lighting Fixtures, 26 51 00-2 Lamps and Ballasts, 26 52 00 Emergency Lights and Exit Signs, 26 56 00 Site Lighting Fixtures, 27 05 19 Area of Rescue Assistance Communication System, 27 05 33 Telecommunications Raceway System, 27 05 48 Vibration Isolation and Seismic Restraints, 27 15 00 Communications Horizontal Cabling, 27 51 16 Public Address System and Music Systems, 27 51 17 Sound System, Section 08 31 13 Access Doors and Frames (Provide Only)

General Requirements

- A. Subcontractor to furnish all labor, material and equipment for coring in existing walls. If subcontractor does not coordinate sleeves during the construction of new walls, subcontractor will perform coring at no additional costs.
- B. Subcontractor to furnish all labor, material and equipment for all link seals in penetrations below grade.
- C. Subcontractor to furnish all labor, material and equipment for all fire stopping in new and existing walls for their penetrations.
- D. Subcontractor shall provide testing and certification data for all materials provided under this contract
- E. All layouts required for the Trade's Work is by this subcontractor. This subcontractor is responsible to provide all field checking and controls needed for the accurate installation and monitoring of his work.
- F. Flag-person(s) will be provided by this subcontractor when entering or exiting the site, when staging from the street, or as necessary for the work of this subcontractor. Certified flag-person(s) required when staging deliveries on any adjacent streets.
- G. Subcontractor is responsible in performing their work to provide all scaffolding, staging, ladders and or safety measures to meet or exceed regulatory requirements including identification of the competent person for the erection and use of the same.
- H. Subcontractor is responsible to provide his own job offices with power and telephone, storage containers, tool boxes and etc.
- I. Subcontractor is responsible to schedule, secure and pay for all police details that may be required by this scope of work or as directed by local authorities.
- J. Subcontractor shall provide all equipment, labor, and materials necessary to facilitate control of dust on site and within the building proper.
- K. Subcontractor shall furnish and install all required connections to equipment as shown on matrix within EQ drawings. Subcontractor shall also make all final connection to Laboratory Case Hoods and Fume Hoods.
- L. Subcontractor shall meet all requirements as outlined and detailed in the <u>MEP</u> COORDINATION AND BIM MODELING EXHIBIT dated November 8, 2012 attached hereto.
- M. Subcontractor shall provide a \$10,000 allowance to cover any and all costs for installation of temporary lighting, power and telecommunication for temporary office space within building structure location in the unoccupied area and as directed by the Construction Manager. Actual work executed will be verified by the project superintendent with daily signed work tickets.

Electrical

- A. Subcontractor shall furnish all labor, materials, supervision, hoisting, tools, supplies, equipment, insurance, permits, all applicable sales and use taxes, and all other things necessary to perform the COMPLETE ELECTRICAL / COMMUNICATIONS / ELECTRONIC SAFETY AND SECURITY as shown in the Contract Documents and as described herein.
- B. All COMPLETE ELECTRICAL / COMMUNICATIONS / ELECTRONIC SAFETY AND SECURITY on the drawings and in the specifications, which is not specifically called out for as work by

- others, even if in specification sections other than sections listed above, is the responsibility of the Subcontractor.
- C. Subcontractor shall be responsible for the condition of the site and building in their charge. They are required to clean their work area on a daily basis, including broom cleaning, and removal all rubbish and debris resulting from their work. They shall protect adjacent work and materials from soiling or damage as well as their own. Upon completion of all COMPLETE ELECTRICAL / COMMUNICATIONS / ELECTRONIC SAFETY AND SECURITY, the Subcontractor shall remove all equipment, debris, dumpsters, and surplus materials generated by their work.
- D. Subcontractor shall be required to coordinate all work with other Subcontractors and the Construction Manager.
- E. Subcontractor will coordinate size and location of all required concrete housekeeping pads. Provide shop drawings for all concrete housekeeping pads identifying size and dimensioned location for all concrete housekeeping pads within 4 weeks of subcontract award. Include all shims, anchors, vibration isolation and grouting. Housekeeping pads will be provided and installed by the concrete subcontractor.
- F. Electrical Subcontractor shall furnish and install all components and infrastructure (conduit, cabling and supports) for sound systems as shown on the contract documents. Include all start, test and applicable programming for these systems.
- G. Subcontractor shall furnish and install primary electrical buried conduits from location coordinated with utility provider to new medium voltage transformer pad. Medium voltage cabling will be furnished and installed by utility provider.
- H. Subcontractor shall furnish and install secondary electrical conduits (duct bank) from medium voltage transformer to building service. Furnish and install all secondary conductors.
- I. Subcontractor shall furnish and install low voltage 4" duct bank from location coordinated with utility provider(s) CATV, telephone, data to connection point at building. Cabling for low voltage services by applicable provider. Building cabling by Electrical Subcontractor.
- J. This Subcontractor shall coordinate all exposed conduit/raceways (where allowed), with the painting subcontractor, for painting.
- K. All rigging, supplemental steel or supports required to hoist and set equipment will be provided by this Subcontractor.
- L. Electrical Subcontractor is responsible for any penetrations (cored holes) associated with the completion of their work. Holes will be promptly covered by this Subcontractor in compliance with OSHA standards and regulations.
- M. Subcontractor will furnish and install all components, conduit, cables, supports, programming for a complete turnkey Fire Alarm System as shown in the contract documents.
- N. Subcontractor will furnish and install all components, conduit, cables, supports, programming for a complete turnkey public address, music and clock systems as shown in the contract documents.
- O. Subcontractor to provide complete conduit infrastructure with pull strings to support the installation (wire, cable, devices) associated with the security/card access/CCTV system (by others). Coordinate installation with other trades to insure pathways are installed concealed. Coordinate with Owner's Security subcontractor to insure proper installation of infrastructure (conduit, boxes, strings).

- P. Furnish and install all seismic bracing and vibration isolation for equipment and conduit support systems per contract documents and applicable building codes.
- Q. Electrical Subcontractor is responsible to coordinate all trenching and concrete encasement required for site utility and site lighting conduits, pole bases, manholes, handholes, transformer pads with Construction Manager and Site Subcontractor.
- R. Electrical Subcontractor to furnish and install all main electrical distribution equipment, switchboards, panelboards, dry type transformers, power monitors, transient voltage surge suppression, utility meter sections, conduit, bussway and buss heads, circuit breakers (fuses and other overcurrent protection devices), raceways and conductors as shown and specified in the contract documents.
- S. Subcontractor to provide and install emergency generator and associated transfer switches as shown and specified in the contract documents.
- T. Electrical Subcontractor shall furnish and install temporary lighting to meet or exceed OSHA standards throughout building interior and stair towers. Subcontractor shall maintain temporary lighting including lamp replacement for the duration of the project until such time as permanent lighting may be utilized. Electrical Subcontractor shall be responsible for the complete removal of all temporary lighting above new ceilings as required by A.H.J. for proper above ceiling inspections.
- U. Electrical Subcontractor shall furnish and install temporary GFCI receptacles (a minimum of six (6) 20 ampere 120 volt circuits per floor) with temporary receptacle stands spaced at a distance not to exceed 100 feet apart from one another. Temporary GFCI receptacles shall be regularly tested and maintained and replaced when proven defective. Temporary branch circuit wiring serving temporary GFCI stands shall be sized so as not to exceed 5% voltage drop.
- V. Electrical Subcontractor shall provide and install complete interior and site lighting systems with all controls as shown and specified in the contract documents. Controls include but are not limited to occupancy sensors, power packs, switches, time clocks, photocells, contactors, dimmers and dimmer racks, Central Battery Unit. It shall be the responsibility of the Electrical Subcontractor to follow all manufacturers' burn-in requirements for dimmable fluorescent fixtures (typically 100 hours at maximum output). Subcontractor shall provide re-lamping or ballast replacement of burnt-out fixtures, interior and site, prior to final completion and acceptance.
- W. Electrical Subcontractor shall furnish and install all components, raceways, cabling and power connections for Area of Refuge <or>
 Area of Rescue Assistance system as shown and specified.
- X. Electrical Subcontractor shall receive, install and wire connections to all combination starters, manual starters, variable frequency drives, disconnects provided by others for mechanical equipment connections. Electrical Subcontractor shall furnish and install any starters, disconnects, VFD's shown on electrical plans and specifications. Electrical Subcontractor shall provide and install all raceways, wiring, and connections for all HVAC and Plumbing equipment as indicated in the contract documents.
- Y. Electrical Subcontractor to make all elevator connections including shunt trip connections as required per contract documents and per the requirements of the Office of the State Elevator Inspector.
- Z. Electrical Subcontractor shall provide all power connections for A/V equipment inclusive but not limited to projection screens, projectors, smart boards, electric window screens, amplifiers, equipment racks. Additionally; Electrical Subcontractor shall furnish and install

- pathways (raceway and strings and boxes) for low voltage control wiring of A/V equipment including but not limited to projection screen up/down switches, connectivity between teachers stations, projectors, screens and smart boards.
- AA. Electrical Subcontractor shall furnish and install a complete assisted listening system as shown in the contract documents.
- BB. Electrical Subcontractor shall furnish and install all raceways, power wiring and connections for kitchen equipment including flexible whips/cords as required for fully operational equipment and systems per contract documents.
- CC. Electrical Subcontractor shall furnish and install complete Telecommunications/Data/CATV and Low Voltage raceway system including conduit/raceways, boxes, pull strings, between floor sleeves, grounding bars as shown and specified in the contract documents. Conduits and raceways to be concealed except at IDF, Electrical and Mechanical rooms unless otherwise noted.
- DD. Electrical Subcontractor shall furnish and install all light and power cord reels as shown and specified in the contract documents.
- EE. Electrical Subcontractor shall furnish and install Nurse Call components, raceways, wire & cables, for complete and operable system as shown on the contract documents.
- FF. Electrical Subcontractor shall provide all permanent and temporary labeling and identification for all electrical devices, conduits, cables, wires, transformers, panels, plates and described in the specifications and per the National Electrical Code.
- GG. Electrical Subcontractor shall furnish and install all final electrical connections to equipment shown on matrix within EQ drawings.
- HH. Electrical Subcontractor shall identify any errors and/or omissions in the drawings, specifications and bid documents and inform the Construction Manager during the bidding process.
- II. Subcontractor has included in their base bid the following allowances:
 - a. Allowance #21: Include 15 LED exit signs, single face, as specified with associated wiring connected to exit sign system.
 - b. Allowance #22: Include 15 LED exit signs, double face, as specified with associated wiring connected to exit sign system.
 - c. Allowance #23: Include 15 LED emergency light fixtures, as specified with associated wiring connected to emergency lighting system.
 - d. Allowance #24: Include 15 fire alarm addressable horn and strobe, with associated wiring connected to fire alarm system.
 - e. Allowance #25: Include 15 fire alarm addressable strobe, with associated wiring connected to fire alarm system.
 - f. Allowance #26: Include 15 fire alarm addressable horn, with associated wiring connected to fire alarm system.
 - g. Allowance #27: Include 5 fire alarm addressable pull station, with associated wiring connected to fire alarm system.
 - h. Allowance #28: Include 15 fire alarm addressable smoke detector, with associated wiring connected to fire alarm system.
 - i. Allowance #29: Include 15 fire alarm addressable heat detector, with associated wiring connected to fire alarm system.

END OF DOCUMENT

JM Wright Technical High School Stamford, CT (BI-RT-842 CMR)



PROPOSAL FORM – BP 004.24

ELECTRICAL/COMMUNICATIONS ELECTRONIC SAFETY & SECURITY

BID FORM

J. M. WRIGHT TECHNICAL HIGH SCHOOL STATE PROJECT # BI-RT-842-CMR

Directions for Bid Forms

This Bid Form identifies the major type of work required for this Bid Package. The Bidder is to provide pricing as follows:

- A. LUMP SUM TOTAL for this Bid Package. A Lump Sum amount is required for each item on this form. The amount is to include labor, material, supervision, tools, supplies, equipment, direct or indirect expenses, overhead, profit, insurance, bonding, and any applicable taxes necessary to perform the full obligations as set forth in this Bid Package.
- B. ALLOWANCES. The Allowances are to be incorporated into the selected bidder's Scope of Work. Allowances are to be provided in accordance with specifications section 01 22 00 and as indicated in the subcontractor's scope of work.
- C. UNIT PRICING: Unit Prices will be used to add or delete work from the contract sum by change order in the event the project Scope of Work is altered. Each unit price shall include all equipment, tools, operators, fuel, maintenance, mobilization, demobilization, insurance, permits, fees, bond, overhead and profit incidental to the installation and completion of the work involved.
- D. ADDENDA CONFIRMATION. This form is acknowledgment of receipt of all applicable addenda. Failure to list all issued addenda will be grounds for disqualifications.
- E. BID ITEMS Bidders are required to submit pricing for each individual bid package. No bidder may withdraw its bid during the bid review period.
- F. Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a. contract consistent with its bid will subject Bidder to automatic forfeiture of Bidders Bid Security.
- G. A checklist for required forms is provided within the bid form. Each line item shall be initialed to confirm receipt and acceptance of each item. All Bid Forms to be signed and dated in the space indicated.

Bid Item A: Lump Sum Base bid

1) Base Bid (incl	uding Payment, Perform	rmance Bo	ond, Allowances)	
(in numbers)	\$			
(in words) _				_ _and 00/100 Dollars
2) 100% Labor & I	Materials Payment & 1	Performan	nce Bond (Breakout))
(in numbers)	\$			
(in words) _				_ _and 00/100 Dollars
Section 083113 – Acce	ess Doors and Frames		(Sum of A thru B)	1
		laterial abor		
Section 260010 – Elec	ctrical Demolition		(Sum of C thru D)	2
	C. D.			
Section 260102 - Basi	ic Electrical Requiremen	its	(Sum of E thru F)	3
	E. F.			
Section 260466 - Fee	der and Plugin Busway		(Sum of G thru H)	4
	G. H.	Material Labor		
Section 260500-1 – Ba	asic Electrical Materials		ds (Sum of I thru J)	5
	I. J.	Material Labor		

Section 260500-2 – Temporary Power a	nd Lighti	ng	(Sum of K thru L)	6
	K. L.			
Section 260519 – Building Wire and C	Cable		(Sum of M thru N)	7
	M. N.			
Section 260526 – Grounding			(Sum of O thru P)	8
	O. P.			
Section 260529 – Hangers and Supports	3		(Sum of Q thru R)	9
	Q. R.			
Section 260533 – Outlet Boxes			(Sum of S thru T)	10
	S. T.			
Section 260534 – Pull and Junction Box	es		(Sum of U thru V)	11
	U. V.			
Section 260535 - Raceways			(Sum of W thru X)	12
	W. X.	Labor		
Section 260553 – Electrical Identification	1		(Sum of Y thru Z)	13
	Y. Z.	Material Labor		
Section 260583 – Equipment Connection	ns		(Sum of AA thru BB)	14
	AA. BB.			
Section 260722 – Voice Communication	Fire Ala		Detection Systems (Sum of CC thru DD)	15
	CC. DD.	Material Labor		

Section 260731 – Wireless Clock			(Sum of EE thru FF)	16
	EE. FF.	Material Labor	<u> </u>	
Section 260775 – Assisted Listening Sys	stem		(Sum of GG thru HH)	17
	GG. HH.	Material Labor	l	
Section 260923 – Lighting Control Equip	ment		(Sum of II thru JJ)	18
	II. JJ.	Material Labor		
Section 262100 – Electrical Service - Ut	ility		(Sum of KK thru LL)	19
	KK. LL.	Material Labor		
Section 262200 – Dry Type Transformer	s		(Sum of MM thru NN)	20
	MM. NN.	Material Labor	l	
Section 262413 - Switchboards			(Sum of OO thru PP)	21
	OO. PP.	Material Labor	<u> </u>	
Section 262416 – Panelboards and Circ	uit Break	ers	(Sum of QQ thru RR)	22
	QQ. RR.			
Section 262726 – Wiring Devices			(Sum of SS thru TT)	23
	SS. TT.			
Section 262813 – Fuses			(Sum of UU thru VV)	24
	UU. VV.			
Section 262816 – Safety Switches			(Sum of WW thru XX)	25
	WW. XX.		l <u></u> _	

Section 262900 – Motor Controllers			(Sum of YY thru ZZ)	26
	YY. ZZ.	Material Labor	l	
Section 263213 – Engine Generator Sys	stems		(Sum of AAA thru BBB)	27
	AAA. BBB.		l	
Section 263600 – Transfer Switches			(Sum of CCC thru DDD)	28
	CCC. DDD.		l	
Section 264300 – Transient Voltage Sur	ge Supp	ression	(Sum of EEE thru FFF)	29
	EEE. FFF.	Material Labor	l	
Section 265100 – Interior Lighting Fixtur	es		(Sum of GGG thru HHH)	30
	GGG. HHH.	1 - 1	l	
Section 265100-2 – Lamps and Ballasts			(Sum of III thru JJJ)	31
	III. JJJ.		l	
Section 265200 – Emergency Lights and	d Exit sig	ns	(Sum of KKK thru LLL)	32
	KKK. LLL.		l	
Section 265600 – Site Lighting Fixtures		(Sum of	f MMM thru NNN)	33
			l	
Section 270519 – Area of Rescue Assis	tance Co	mmunic	ation System (Sum of OOO thru PPP)	34
			l	
Section 270533 – Telecommunications I	Raceway	/ system	(Sum of QQQ thru RRR)) 35
			l	

00 41 00 Bid Proposal Form February 6, 2013 Section 270548 - Vibration Isolation and Seismic Restraints (Sum of SSS thru TTT) 36_____ SSS. Material_____ TTT. Labor _______ Section 271500 - Communications Horizontal Cabling (Sum of UUU thru VVV) 37_____ UUU. Material_____ VVV. Labor ______ Section 275116 - Public Address System and Music Systems (Sum of WWW thru XXX) 38_____ WWW. Material_____ XXX. Labor ________

Section 275117 - Sound System

(Sum of YYY thru ZZZ) 39_____

BID ITEM B: ALLOWANCES

All Bidders are to note that allowance quantities provided in Section 01 22 00 are to be part of the base bid. The unit costs that are to be provided will reflect additions or reductions to those quantities given. Any allowances not used will be issues as a deduct change order.

Allowance #21: Include 15 LED exit signs, single face, as specified with associated wiring connected to exit sign system\$
Allowance #22: Include 15 LED exit signs, double face, as specified with associated wiring connected to exit sign system
Allowance #23: Include 15 LED emergency light fixtures, as specified with associated wiring connected to emergency lighting system
Allowance #24: Include 15 fire alarm addressable horn and strobe, with associated wiring connected to fire alarm system
Allowance #25: Include 15 fire alarm addressable strobe, with associated wiring connected to fire alarm system\$
Allowance #26: Include 15 fire alarm addressable horn, with associated wiring connected to fire alarm system\$
Allowance #27: Include 5 fire alarm addressable pull station, with associated wiring connected to fire alarm system\$
Allowance #28: Include 15 fire alarm addressable smoke detector, with associated wiring connected to fire alarm system
Allowance #29: Include 15 fire alarm addressable heat detector, with associated wiring connected to fire alarm system\$
** Quantities will be measured in place. Quantities derived from delivery tickets or

invoices will not be accepted**.

BID ITEM C: UNIT PRICES

Unit Prices shall be used, where applicable, to make adjustments to the cost of the Work due to changes. All Unit Prices submitted shall be complete in-place (unless otherwise noted) and include all costs for overhead, profit, labor, materials, equipment, and any other incidentals related to the completion of the Work, and shall remain firm for the period of the contract. Unit Prices listed are for added work. Deductive unit prices will be calculated at no less than 85% of the additive unit price (100% if used in conjunction with an allowance). Subcontractor shall provide a licensed surveyor to determine elevations of materials associated with earth and rock removal to determine the total area removed and replaced as it relates to unit costs.



BID ITEM D:

BID DOCUMENT CHECK LIST:

Bidder is to provide all documents as listed below with their properly identified bid. Bidder's initials are
required on all lines of following listed items.
Original and (2) copies of Bid Form on Bidders Letterhead
DAS Qualification/Certification
Bid Security
Bidder Qualification Statement
Non-Collusion Affidavit
Surety's letter of intent to issue Payment and Performance Bond
List of bidders primary subcontractors and suppliers (on separate letterhead)
Bidder agrees by execution and submission of this bid that its bid inclusive of Base Bids, Alternates, and Unit Prices is valid and irrevocable for a minimum of (90) calendar days from the bid due date, that the Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a contract consistent with its bid will subject Bidder to automatic forfeiture of Bidder's Bid Security.
By submitting this bid, Bidder acknowledges receipt of the following addenda:
<u> </u>
BIDDER:
Name:
Address:
Telephone # Fax #
Typed Name of Officer
Signature of Officer
Title of Officer
Date

END OF BID FORM

JM Wright Technical High School Stamford, CT (BI-RT-842 CMR)

February 6, 2013

Package # BP-004.26

MISCELLANEOUS METALS

SCOPE OF WORK

The following items are included in Subcontractor's Scope of Work but are in NO WAY meant to limit the Scope of Work and obviously do not list all the items that Subcontractor must perform.

1. Furnish all labor, materials, supervision, tools, supplies equipment, insurance, permits and services necessary for a COMPLETE MISCELLANEOUS METALS PACKAGE as shown in the Contract Documents for the above referenced project, to be in accordance with the Project's General Conditions and related work by others as described herein, to include, but not limited to the following:

Division 0 – Procurement and Contracting Requirements Division 1 – General Requirements Division 02 Existing Conditions, Division 05 Metals, and all applicable specifications sections pertinent to scope of work. Including but not limited to the following Section 00 31 26.23 – General Survey for asbestos containing material and lead-based paint, Section 00 31 19.26 – Existing conditions survey, Section 00 31 26.29 – Existing PCB information, Section 05 50 00 Metal Fabrications, Section 05 51 00 Metal Stairs, Section 05 52 13 Pipe & Tube Railings.

MISCELLANEOUS METALS

- A. The Miscellaneous Metals subcontractor shall furnish and install all angle framing for roof fans, hatches, equipment, penetrations, supports and miscellaneous framing.
- B. The subcontractor shall furnish all loose steel lintels and angles as indicated on structural and architectural drawings.
- C. The subcontractor shall be responsible for erection of all loose steel lintels weighing more than 200 lbs to include furnishing and erection of all attached lintels.
- D. The subcontractor shall provide all submittals and shop drawings per specification sections 05 50 00 specifically loose lintels, handrails, interior expansion joint covers, metal ladders stair nosing, metal closure cover at fire stops, grilles, elevator steel assembly, roof dunnage steel, miscellaneous framing, anchors and accessories, and corrosion protection, 05 51 00 specifically ferrous metals, fasteners, miscellaneous materials, fabrication, steel-framed stairs and finishes, 05 52 13 specifically metals, steel and iron, fasteners, miscellaneous materials, fabrication, and finishes. The Metal Fabrications Subcontractor is responsible for the fabrication and installation standards as described in specification section 05 Metals
- E. The subcontractor shall be required to coordinate all work with all other Trades.
- F. The subcontractor shall verify all measurements in the field
- G. The subcontractor shall be responsible for all layouts of his work.

- H. The subcontractor shall provide all core drilling and epoxy setting of required handrails and guardrails where required.
- I. The subcontractor shall be responsible for the condition of the site and building in its charge. Subcontractor is required to clean its work area on a daily basis, or as directed by the Construction Managers Field Superintendent, including broom cleaning and removal of all rubbish and debris resulting from its work. Subcontractor shall protect adjacent work and materials from soiling or damage as well as its own. Upon completion of all metal fabrications work, the Subcontractor shall remove all equipment, debris, and surplus materials generated by its work.
- J. The subcontractor shall furnish and install all metal stairs, handrails and railings attached to metal stairs, handrails attached to walls, and all other handrails, guard rails and railings in accordance with the contract documents.
- K. The subcontractor shall furnish and install interior and exterior expansion joint covers as indicated in the contract documents.
- L. The subcontractor shall furnish and install metal closure covers at fire stops as indicated in the contract documents
- M. The subcontractor shall furnish ALL loose lintels, stair nosing and interior bollards.
- N. The subcontractor shall provide all elevator hoist beams, doorsill support angles, elevator sump pit frames/covers and elevator pit ladders.(\$5,000 ALLOWANCE) to be carried in the bid.
- O. The subcontractor shall furnish and install all steel ladders, roof ladders, ladder ups and all other steel ladders represented in the contract documents.
- P. The subcontractor shall furnish and install all framing and support for all rigging for gym equipment and gym roll down divider curtains.
- Q. The subcontractor shall furnish and install all architectural grilles in the contract documents
- R. The subcontractor shall galvanize and/or prime all materials in accordance with contract documents.
- S. The miscellaneous metals subcontractor shall furnish and install all galvanizing repair paint, bituminous paint and touch-up paint in accordance with contract documents.
- T. The subcontractor shall furnish and install all handrails and brackets shown on the contract documents.
- U. The subcontractor shall protect all finishes during construction.
- V. The subcontractor shall supply and install the second floor architectural guard railing system.
- W. The subcontractor shall supply and install exterior window security grilles and countertop supports.
- X. All plates and shapes directly in contact with exterior block or block masonry must be galvanized.
- Y. The subcontractor shall furnish all shop and field drilling, punching and cutting for all mechanical, electrical and other trades.
- Z. The subcontractor shall furnish shop painting and field touch-ups of all steel, except anchor bolts and steel to be encased in concrete.

END OF DOCUMENT



PROPOSAL FORM – BP 004.26 MISCELLANEOUS METALS

BID FORM

J. M. WRIGHT TECHNICAL HIGH SCHOOL STATE PROJECT # BI-RT-842-CMR

Directions for Bid Forms

This Bid Form identifies the major type of work required for this Bid Package. The Bidder is to provide pricing as follows:

- A. LUMP SUM TOTAL for this Bid Package. A Lump Sum amount is required for each item on this form. The amount is to include labor, material, supervision, tools, supplies, equipment, direct or indirect expenses, overhead, profit, insurance, bonding, and any applicable taxes necessary to perform the full obligations as set forth in this Bid Package.
- B. ALLOWANCES. The Allowances are to be incorporated into the selected bidder's Scope of Work. Allowances are to be provided in accordance with specifications section 01 22 00 and as indicated in the subcontractor's scope of work.
- C. UNIT PRICING: Unit Prices will be used to add or delete work from the contract sum by change order in the event the project Scope of Work is altered. Each unit price shall include all equipment, tools, operators, fuel, maintenance, mobilization, demobilization, insurance, permits, fees, bond, overhead and profit incidental to the installation and completion of the work involved.
- D. ADDENDA CONFIRMATION. This form is acknowledgment of receipt of all applicable addenda. Failure to list all issued addenda will be grounds for disqualifications.
- E. BID ITEMS Bidders are required to submit pricing for each individual bid package. No bidder may withdraw its bid during the bid review period.
- F. Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a contract consistent with its bid will subject Bidder to automatic forfeiture of Bidders Bid Security.
- G. A checklist for required forms is provided within the bid form. Each line item shall be initialed to confirm receipt and acceptance of each item. All Bid Forms to be signed and dated in the space indicated.

Bid Item A: Lump Sum Base bid

1) Base Bid (including Payment,	Per	formance B	ond, Allowances)	
(in numbers) \$				
(in words)				- and 00/100 Dallars
				_and 00/100 Dollars
2) 100% Labor & Materials Paymo	ent d	& Performan	nce Bond (Breakout)	
(in numbers) \$				
(in words)				- 100/100 D H
				_and 00/100 Dollars
Section 055000 – Metal Fabrications	Α.	Material	(Sum of A thru B)	1
	B.	Labor		
Section 055100 – Metal Stairs			(Sum of C thru D)	2
	C. D.	Material Labor	l	
Section 055213 - Pipe and Tube Railin	gs		(Sum of E thru F)	3
	E. F.	Materia Labor	l	

BID ITEM B: ALLOWANCES

All Bidders are to note that allowance quantities provided in Section 01 22 00 are to be part of the base bid. The unit costs that are to be provided will reflect additions or reductions to those quantities given. Any allowances not used will be issues as a deduct change order.

** Quantities will be measured in place. Quantities derived from delivery tickets or invoices will not be accepted**.

BID ITEM C: UNIT PRICES

Unit Prices shall be used, where applicable, to make adjustments to the cost of the Work due to changes. All Unit Prices submitted shall be complete in-place (unless otherwise noted) and include all costs for overhead, profit, labor, materials, equipment, and any other incidentals related to the completion of the Work, and shall remain firm for the period of the contract. Unit Prices listed are for added work. Deductive unit prices will be calculated at no less than 85% of the additive unit price (100% if used in conjunction with an allowance). Subcontractor shall provide a licensed surveyor to determine elevations of materials associated with earth and rock removal to determine the total area removed and replaced as it relates to unit costs.



BID ITEM D:

BID DOCUMENT CHECK LIST:

required on all lines of following listed items.
Original and (2) copies of Bid Form on Bidders Letterhead
DAS Qualification/Certification
Bid SecurityBidder Qualification Statement
Bidder Quantication Statement Non-Collusion Affidavit
Surety's letter of intent to issue Payment and Performance Bond
List of bidders primary subcontractors and suppliers (on separate letterhead)
Bidder agrees by execution and submission of this bid that its bid inclusive of Base Bids, Alternates, and Unit Prices is valid and irrevocable for a minimum of (90) calendar days from the bid due date, that the Bidder unconditionally agrees (if awarded) to all terms and conditions of the Bid Documents, and that failure of Bidder (if awarded) to execute a contract consistent with its bid will subject Bidder to automatic forfeiture of Bidder's Bid Security.
By submitting this bid, Bidder acknowledges receipt of the following addenda:
BIDDER:
BIDDER: Name:
Name:
Name:
Name:
Name:

END OF BID FORM



NORTHEAST COLLABORATIVE ARCHITECTS

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ADDENDUM

February 5, 2013

JM Wright Technical High School Stamford, CT State Project #BI-RT-842

FOR: All Bidders at Owner's Request

This Addendum forms part of the Contract Documents and modifies the original Bidding Documents dated December 10, 2012 as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification:

Project Clarifications:

By CM

Changes to Prior Addenda:

See below for drawings incorporating prior addenda

Changes to Bidding Requirements:

By CM

General Clarifications:

- Per prior addenda clarification, Masonry Allowances (040120, 1.4 and 042000, 1.3) are for quantities additional to the content of the drawings and specifications.
- 2. It is not the intent of the specifications that water used for non-acidic masonry cleaning be reclaimed (see Changes to Specifications, Section 040120, below).
- 3. Regarding Allowance 17, Partition Type 12 is indicated to be 8" CMU as shown on A-010.

General Scope Revisions:

- 1. Allowance 18 is revised below and is therefore deleted from Masonry bid package/scope of work (see Allowances below).
- 2. Delete Locker Bases (Addendum 6 sketch ADA-003) from Masonry bid package/scope of work.
- 3. Delete Courtyard Canopy (Spec Section 086300) from Glass & Glazing bid package/scope of work.



Changes to Specifications:

1. Specification Section 012200 - Allowances:

REVISE indicated items of Subparagraph 3.2 to read:

- A. Allowance No. 1: Exterior brick replacement: Include **500** brick removal and replacement as specified in Section 040120 "Maintenance of Unit Masonry, Preacst and Limestone."
- B. Allowance No. 2: Include **2,250** square feet of brick repointing as specified in Section 040120 "Maintenance of Unit Masonry, Preacst and Limestone."
- C. Allowance No. 3: Include **50** linear feet of exterior precast concrete crack repair specified in Section 040120 "Maintenance of Unit Masonry, Preacst and Limestone."
- D. Allowance No. 4: Include **50** square feet of exterior precast concrete patching repair as specified in Section 040120 "Maintenance of Unit Masonry, Preacst and Limestone."
- E. Allowance No. 5: Include **50** linear feet of limestone crack repair as specified in Section 040120 "Maintenance of Unit Masonry, Preacst and Limestone."
- F. Allowance No. 6: Include **50** square feet of limestone patching repair as specified in Section 040120 "Maintenance of Unit Masonry, Preacst and Limestone."
- L. Allowance No. 12: Include 8,000 square feet of removal and replacement of existing metal ROOF decking.
- Q. Allowance No. 17: Include **250** square feet of Partition Type 12.
- R. Allowance No. 18: Include 2,000 square feet of Partition Type **19**.
- S. Allowance No. 19: Include **2,000** square feet of miscellaneous 4" CMU interior wall infills.

NOTE: THESE REVISIONS APPLY TO ALLOWANCE SCHEDULES LISTED IN THE FOLLOWING SPEC SECTIONS: 040120, 042000, and 053100. (Revisions to those schedules not reproduced for this addendum.)

2. Specification Section 040120 – Maintenance of Unit Masonry, Precast Concrete, and Limestone:



REVISE Subparagraph 1.4.B.2 to DELETE phrase "at locations shown."

REVISE Subparagraph 3.10.A to read:

"A. Cold-Water Wash: Use cold water applied by high-pressure spray at A2, B1, and B2 building areas (architect review of mock-up critical to determine if any marking occurs)."

REVISE Subparagraph 3.10.B heading to read:

"B. Detergent Cleaning at A1, A3, C1, C2, and C3 building areas, and at Storage Building:"

REVISE Subparagraph 3.10.C heading to read:

"C. Mold, Mildew, and Algae Removal at northfacing walls at A1, A3, and C1 building areas:"

DELETE Subparagraphs 3.10.D, 3.10.E, & 3.10.F

3. Specification Section 042000 - Unit Masonry:

REVISE Subparagraph 2.2.D to read

- "1. Unit Compressive Strength: Provide units with a minimum average net-area compressive strength of 3000psi.
- 2. Density Classification: Light weight with 25% Post-Industrial recycled content"

ADD Subparagraph 2.2.E.1.b:

"b: Westbrook Concrete Block Co., Inc., GF-658 with 25% cement offset for recycled content

4. Specification Section 075419 - Polyvinyl-Chloride (PVC) Roofing

DELETE Subparagraph 2.1.A.1:

"1. Dura-Last Roofing, Inc."

5. Specification Section 260519 – Building Wire and Cable

REVISED in entirety (see attached)

Changes to Drawings:

1. Drawing S-001 - S-603 (see list below for sheet itemization):



ARCHITECTS

1. Updated issue of 2/4/13 to reflect all prior addenda.

Attachments:

- 2. Attached addendum specifications: Section 260519 Building Wire and Cable
- 3. Attached addendum drawings:

ADDENDUM DWG #	MODIFIES DWG/DET	DESCRIPTION
	-	
S-001	S-001	STRUCTURAL NOTES, LEGENDS, AND SPECIAL INS
S-111	S-111	STRUCTURAL FOUNDATION & SLAB PLAN A1
S-112	S-112	STRUCTURAL FOUNDATION & SLAB PLAN A2
S-114	S-114	STRUCTURAL FOUNDATION & SLAB PLAN B1
S-115	S-115	STRUCTURAL FOUNDATION & SLAB PLAB B2
S-116	S-116	STRUCTURAL FOUNDATION & SLAB PLAN C1
S-117	S-117	STRUCTURAL FOUNDATION & SLAB PLAN C2
S-118	S-118	STRUCTURAL FOUNDATION & SLAB PLAN C3
S-121	S-121	STRUCTURAL FRAMING PLAN SECOND FLOOR A1
S-122	S-122	STRUCTURAL FRAMING PLAN SECOND FLOOR A2
S-131	S-131	STRUCTURAL FRAMING PLAN ROOF A1
S-132	S-132	STRUCTURAL FRAMING PLAN ROOF A2
S-133	S-133	STRUCTURAL FRAMING PLAN ROOF A3
S-134	S-134	STRUCTURAL FRAMING PLAN ROOF B1
S-135	S-135	STRUCTURAL FRAMING PLAN ROOF B2
S-136	S-136	STRUCTURAL FRAMING PLAN ROOF C1
S-137	S-137	STRUCTURAL FRAMING PLAN ROOF C2
S-138	S-138	STRUCTURAL FRAMING PLAN ROOF C3
S-201	S-201	STRUCTURAL CONCRETE SCHEDULES
S-202	S-202	STRUCTURAL STEEL SCHEDULES
S-203	S-203	FRAMING ELEVATION SCHEMATIC DIAGRAMS
S-204	S-204	FRAMING ELEVATION SCHEMATIC DIAGRAMS
S-205	S-205	ENLARGED STRUCTURAL FOUNDATION PLAN
S-301	S-301	STRUCTURAL FOUNDATION SECTIONS
S-302	S-302	STRUCTURAL FOUNDATION SECTIONS
S-401	S-401	STRUCTURAL SECOND FLOOR SECTIONS
S-402	S-402	STRUCTURAL SECOND FLOOR SECTIONS
S-403	S-403	STRUCTURAL ROOF SECTIONS
S-404	S-404	STRUCTURAL ROOF SECTIONS
S-501	S-501	STRUCTURAL SITE SECTIONS
S-502	S-502	PLANS, SECTIONS & DETAILS
S-503	S-503	STRUCTURAL DUNNAGE DETAILS
S-504	S-504	STRUCTURAL DUNNAGE DETAILS
S-601	S-601	STRUCTURAL TYPICAL CONCRETE DETAILS
S-602	S-602	STRUCTURAL TYPICAL STEEL DETAILS
S-603	S-603	STRUCTURAL TYPICAL MASONRY DETAILS

END OF ADDENDUM

PART 1 - GENERAL

1.1 SUMMARY

A. Description of Work: Provide wire, cable, and connectors as indicated or required for all feeders, branch circuits, control circuits, etc.

1.2 SUBMITTALS

A. Product Data: Manufacturer's descriptive literature for each wire and connector type to be used on the project.

PART 2 - PRODUCTS

2.1 GENERAL

A. All wiring systems to consist of individual conductors installed in conduit or other raceway, unless specifically indicated otherwise.

2.2 600 VOLT CLASS WIRE

- A. General: All wire and cable shall be constructed in accordance with all applicable ICEA, NEMA and IEEE published standards, and shall be UL-listed and labeled.
- B. Single-conductor, 98% conductivity, annealed uncoated copper conductor, with 600-volt rated insulation.
- C. #10 AWG and Smaller: Solid or stranded, 75°C with Type THWN insulation.
- D. #8 AWG and Larger: Class B stranded, 75°C with Type THWN insulation.
- E. Do not use aluminum, or copper-clad aluminum alloy conductors.
- F. Multiconductor Cable: Comply with NEMA WC70 for type 50 with ground wire.
- G. Acceptable Manufacturers: American Insulated Wire; Cablec; Cerrowire; Collyer; Continental; Pirelli; Royal; Rome; Southwire, Triangle PWC.

2.3 METAL CLAD CABLE (MC CABLE)

- A. General: UL listed, factory fabricated, designed for application.
- B. May be used for power and lighting as indicated in Part 3 of this specification.
- C. Reference specification 260535 "Raceways" for usage and execution.

2.4 CONNECTORS

- A. General: UL-listed, factory fabricated, designed for the application.
- B. Splicing Connectors (#14-10 AWG): Nylon shell insulated metallic screw-on connectors.

- C. Cable Connectors (#8 AWG and Larger): Cable connectors for making terminations, tee-taps and splices shall be bolted pressure or compression type lugs and connectors, with molded plastic insulators.
- D. Terminations (#10 AWG and smaller, stranded): Nylon insulated, crimp ring or fork type terminals for connection to screw terminals.
- E. Acceptable Manufacturers: Amp; Burndy, Ilsco; Ideal; 3M; Thomas & Betts.

2.5 TAPES

A. Acceptable manufacturers: Plymouth; 3M Scotch Brand.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine all wire and cable prior to installation. Do not use wire and cable with bruised, cut, or abraded insulation; or wire that does not pass a continuity test.

3.2 CONDUCTOR SIZES AND QUANTITIES

- A. Minimum Conductor Size: All branch circuit wiring shall be minimum #12 AWG. All control circuit wiring shall be minimum #14 AWG. Provide larger sizes as indicated or required.
- B. Branch Circuit Conductor Sizes: Provide branch circuit conductor sizes as indicated on the panelboard schedules, plans, or elsewhere. Neutral conductor size to match phase conductors unless approved by Engineer.
- C. Equipment Grounding Conductor Required: For each branch circuit and feeder run, provide an equipment grounding conductor for continuous length of run, sized per NEC 250-95 (minimum), larger if so indicated.
- D. Separate Neutral: For branch circuit homeruns with two or three single-pole circuits (of different phases) use separate neutral conductors, unless approved by Engineer.
- E. Combining Homeruns: Do not combine separately indicated homeruns in single conduit unless indicated or approved by the Engineer.
- F. Switch Legs: Provide branch circuit switch legs and travelers as required for the switching indicated.
- G. Feeders: Provide feeder conductor sizes and quantities as indicated.
- H. Cord drops and portable appliance connections: Type 50= Like Sign, hard service cord with stainless steel, wire-mesh, strain relief device at terminations to suit application.

PROJECT NO.: BI-RT-842

3.3 INSTALLATION

- A. General: Install all conductors and other associated items in compliance with applicable requirements of NEC, NEMA, UL and NECA's "Standards of Installation" and in accordance with manufacturer's recommendations.
- B. In Raceway: Install all wiring in conduit or other specified raceway, unless indicated otherwise.
- C. Terminations: Furnish and install terminations, including lugs if necessary, to make all electrical connections indicated or required. Make connections and terminations for all stranded AWG conductors using crimp, clamp, or box type connectors and terminators. Enclose all strands of stranded conductors in connectors, and lugs.
- D. Tightening: Tighten all connectors, lugs, screws, bolts, Allen-heads and other electrical fasteners to torque values per manufacturer's written instructions.
- E. Restrictions: Do not substitute smaller conductors with higher temperature rated insulations in lieu of conductor size shown on Drawings.

3.4 MC CABLE INSTALLATION

- A. All MC Cable is to be concealed. MC cable is permitted to be run above accessible ceilings only.
- B. Route MC Cable in a direct line, with long sweep bends and offsets. Route MC cable parallel to or perpendicular to building lines.
- C. Support MC Cable with brackets, straps or trapeze hangers suitably anchored to building structure. Where MC Cable is run above a lay-in ceiling, do not support the cable from the ceiling support system. Maintain a minimum of 6" clearance from flues, steam pipes and hot water lines.
- D. MC Cable shall be continuous from enclosure to enclosure and terminated with appropriate connectors to ensure electrical continuity throughout the raceway system.
- E. All home runs to panels for MC Cable branch circuits shall be in conduit. Minimum size conduit shall be ³/₄" and all home run conduit shall be sized to carry one (1) additional future circuit. "HOMERUN" is defined as any circuit collecting branches in walls, light fixtures, etc. and running to panelboard circuit breaker.
- F. Install junction boxes with screw covers where required to facilitate installation of MC Cable and to keep cable lengths to a minimum. Size in accordance with N.E.C., mount in an accessible location and label cover with circuit numbers and destination.
- G. MC Cable shall not be used underground or penetrate through roofs, floors, concrete walls, etc.
- H. MC Cable shall not be allowed for motor circuits, feeders or special equipment. These circuits shall be run in conduit and sealtite.

3.5 COLOR CODE

- A. Color code all branch circuit and feeder conductors as follows:
- B. 208/120 Volts:

<u>Phase</u>	<u>Color</u>
A	Black
В	Red
С	Blue
Neutral	White

C. 480/277 Volts:

<u>Phase</u>	<u>Color</u>	
A	Brown	
В	Orange	
С	Yellow	
Neutral	Gray	

- D. Equipment Grounding Conductors: Green
- E. Conductors No. 10 AWG and Smaller: Color impregnated.
- F. Conductors No. 8 and larger may use color impregnated insulation, or conductor ends may be taped. Taping to be with solid color electrical tape, lap wound, visible without removing dead-front covers in electrical equipment, with at least three inches visible at all terminations and electrical boxes.

3.6 PHASE ARRANGEMENT

- A. Arrange phases in all electrical equipment as follows:
 - 1. A, B, C: Front to Rear.
 - 2. A, B, C: Top to Bottom.
 - 3. A, B, C: Left to Right When Facing Established Front of Equipment.

3.7 HIGH TEMPERATURE WIRE

A. Provide conductors with not less than 90°C rated insulation when branch circuit wiring is attached to high temperature light fixtures (e.g. fluorescent & HID), boilers, incinerators, ovens, ranges, kitchen exhaust fans, other heat-producing equipment, and "100% Rated" overcurrent protective devices. Use special higher temperature wire as required for connection to specialty equipment as required by equipment manufacturer.

END OF SECTION

GENERAL NOTES:

REFER TO THE PROJECT MANUAL FOR GOVERNING JOB REQUIREMENTS AND MATERIAL SPECIFICATIONS. THE FOLLOWING NOTES ARE SUPPLEMENTAL TO THE ABOVE REQUIREMENTS.

- 1. ALL DIMENSIONS TO, OF, AND IN EXISTING STRUCTURES SHALL BE VERIFIED IN FIELD BY
- 2. DO NOT CHANGE SIZE NOR SPACING OF STRUCTURAL ELEMENTS.

CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.

- 3. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- 4. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
- 5. BRACE BUILDING UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED.
- THESE ELEMENTS ARE AS FOLLOWS: ROOF DECK, BRACING MEMBERS, SHEAR WALLS, ETC. 6. DESIGNED ACCORDING TO THE INTERNATIONAL BUILDING CODE AND STATE BUILDING CODE
- 2009 AMENDMENT TO THE 2005 CONNECTICUT SUPPLEMENT. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE
- UNDERGROUND OR OTHER HIDDEN UTILITIES. 8. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE ENGINEER PRIOR TO REMEDIAL OR
- CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL. 9. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND
- COORDINATE HIS WORK WITH THE WORK OF OTHERS. 10. VERIFY SIZE AND LOCATION OF OPENINGS PRIOR TO BEGINNING WORK, FOR DIMENSIONS

NOT SHOWN, SEE MECHANICAL, ELECTRICAL, CIVIL, AND ARCHITECTURAL DRAWINGS.

11. VERIFY SIZE AND LOCATION OF EQUIPMENT PADS WITH MECHANICAL/ELECTRICAL CONTRACTOR AND EQUIPMENT MANUFACTURER.

DESIGN DATA:

1.	FLO	OR LIVE LOADS	
	Α.		100 PSF
		2ND FLOOR CORRIDORS	80 PSF
		STAIRS	100 PSF
	D.		40 PSF
	E. F.	•	150 PSF 70 PSF
	G.		125 PSF
2.	SNO	DW LOAD DATA	
	Α.		30 PSF
	В.	FLAT ROOF SNOW LOAD (Pf):	30 PSF
		SNOW EXPOSURE FACTOR (Ce):	1.0
		SNOW LOAD IMPORTANCE FACTOR (I):	1.1
	E.	THERMAL FACTOR (Ct):	1.0
3.	WIN	D LOAD DATA	
	Α.		105 MPH
		WIND IMPORTANCE FACTOR (IW):	1.15
		WIND EXPOSURE FOR MAIN WIND FORCE RESISTING SYSTI WIND EXPOSURE FOR COMPONENTS AND CLADDING:	EM: B C
4.		RTHQUAKE DESIGN DATA	C
٦.		SEISMIC USE GROUP:	II
		SPECTRAL RESPONSE COEFFICIENTS:	$S_S = 0.322$
	υ.	SI ECHAL RESIGNOE GOEFFICIENTS.	$S_1 = 0.068$
		SEISMIC DESIGN CATEGORY:	<u>c</u>
		SITE CLASS:	D
	E.	BASIC SEISMIC FORCE RESISTING SYSTEM:	ORDINARY STEEL MOMENT FRAMES
	F.	DESIGN BASE SHEAR (V):	0.132W kips
	G.	ANALYSIS PROCEDURE:	EQUIVALENT LATERAL
			FORCE PROCEDURE
	Н.	RESPONSE MODIFICATION COEFFICIENT (R):	3.0
	I.	SEISMIC IMPORTANCE FACTOR (IE):	1.25
5.	ROO	DF DEAD LOADS	
		ROOFING/ INSULATION	11 PSF
		METAL ROOF DECK	3 PSF
		STEEL FRAMING	8 PSF
		MECH/ ELECT LOADS	7 PSF
		CEILINGS	2 PSF
		MISCELLANEOUS	4 PSF
		TOTAL	35 PSF
6.	FLO	OR DEAD LOADS	
		3" CONCRETE SLAB ON METAL DECK	32 PSF
		STEEL FRAMING	8 PSF
		MECH/ ELECT LOADS	7 PSF
		050 0100	0.000

FOUNDATION AND SOIL PREPARATION NOTES:

DATED: JUNE 30, 2006

CEILINGS

TOTAL

7. ROOF LIVE LOADS

1. THE FOUNDATION DESIGN IS BASED ON AN ALLOWABLE BEARING PRESSURE OF 4,000 POUNDS PER SQUARE FOOT AS RECOMMENDED IN THE GEOTECHNICAL REPORT; PREPARED BY: DR. CLARENCE WELTI, P.E., P.C. PREPARED FOR: BIANCO GIOLLITO WESTON ARCHITECTS, LLC

2 PSF

1 PSF

50 PSF

 $L_{R} = 20 PSF$

2. BEARING STRATUM FOR FOOTINGS SHALL BE VERIFIED IN FIELD BY THE

GEOTECHNICAL ENGINEER BEFORE PLACING CONCRETE FOOTINGS.

- 3. THE CONTRACTOR SHALL REVIEW THE SOILS REPORT AND BORING LOGS DURING THE BIDDING PHASE OF THE PROJECT.
- 4. PROVIDE POSITIVE DRAINAGE FOR ALL TRENCHES DURING CONSTRUCTION. DO NOT ALLOW ANY PONDING OF WATER DURING CONSTRUCTION.
- 5. DO NOT PLACE FOOTINGS IN WATER OR ON FROZEN GROUND. DO NOT ALLOW GROUND BENEATH FOOTINGS TO FREEZE.
- 6. BEAR ALL FOOTINGS ON A MINIMUM OF 6" OF COMPACTED CRUSHED STONE UNDERLAIN BY MIRAFI 160N GEOTEXTILE OR APPROVED EQUAL ON AN ACCEPTED SOIL BEARING STRATUM. THE BEARING STRATUM MAY BE NATURAL INORGANIC SOILS, OR STRUCTURAL FILL PLACED AFTER THE REMOVAL OF ANY EXISTING FILLS AND INORGANIC SOILS. SOIL BEARING SURFACES. PREVIOUSLY ACCEPTED BY OWNER'S REPRESENTATIVE, WHICH ARE ALLOWED TO BECOME SATURATED, FROZEN OR DISTURBED SHALL BE REWORKED TO SATISFACTION OF OWNER'S REPRESENTATIVE.
- 7. THE SOIL BENEATH THE BUILDING AND 5 FEET AROUND THE PERIMETER SHALL BE TREATED AS FOLLOWS:
- A. STRIP THE AREA OF ALL VEGETATION AND REMOVE ALL EXISTING FILLS AND ORGANIC SOILS.
- B. PERFORM ANY CUT OPERATIONS.
- C. EACH LIFT SHALL BE TESTED FOR MOISTURE CONTENT AND IN PLACE DENSITY AT A RATE OF ONE TEST PER 3,000 SQUARE FEET (MIN OF THREE PER LIFT).
- D. REFER TO THE SPECIFICATIONS FOR ADDITIONAL SOIL PREPARATION NOTES.
- 7. BACKFILL ALL FOUNDATION WALLS WITH STRUCTURAL FILL.
- 8. RAISE SITE GRADES AS REQUIRED PER CIVIL DRAWINGS WITH 8" LIFTS OF STRUCTURAL FILL COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST, ASTM D1557, EXISTING SOILS AT THE SITE ARE NOT ACCEPTABLE FOR USE AS STRUCTURAL FILL.
- 9. GROUND WATER SHALL BE MAINTAINED AT A MINIMUM DEPTH OF 2 FEET BELOW EXCAVATION BOTTOM AT ALL TIMES. MAINTAIN DRY CONDITIONS FOR ALL FOUNDATION CONSTRUCTION WITH SUITABLE DEWATERING METHODS. SUMP AND PUMP METHODS OF DEWATERING SHALL NOT WITHDRAW FINES FROM THE SOIL. SUMPS SHALL BE LINED WITH FILTER FABRIC AND CRUSHED STONE.
- 10. DIVERT SURFACE WATER FROM ALL EXCAVATIONS DURING CONSTRUCTION.
- 11. ALL EXCAVATIONS SHALL BE PERFORMED IN ACCORDANCE WITH OSHA TYPE C SOIL WHICH REQUIRES SLOPING OF EXCAVATIONS THAT ARE UNSHORED AND EXCEED 5 FEET IN HEIGHT TO A MAXIMUM SLOPE OF 1 1/2 HORIZONTAL TO 1 VERTICAL.

<u>SLAB-ON-GRADE NOTES:</u>

- 1. SUBGRADE BELOW SLAB-ON-GRADE SHALL BE REVIEWED AND ACCEPTED BY OWNER'S REPRESENTATIVE BEFORE CONCRETE SLAB PLACEMENT.
- 2. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DETAILS OF DEPRESSED SLABS.
- 3. THICKEN SLABS-ON-GRADE UNDER NON-BEARING MASONRY WALLS (6" THICK WALLS AND OVER) AND REINFORCE AS SHOWN ON DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.
- 4. CONTROL JOINT AND CONSTRUCTION JOINT LOCATIONS SHALL BE COORDINATED WITH ENGINEER OF RECORD IN ACCORDANCE WITH SPECIFICATIONS.
- 5. REFER TO ARCHITECTURAL DRAWINGS FOR PITCHED SLABS AND FLOOR DRAIN LOCATIONS. VERIFY SIZE AND LOCATION OF PLATFORMS, CURBS, AND PADS WITH MECHANICAL/ ELECTRICAL CONTRACTORS.
- 6. ALL SLABS-ON-GRADE SHALL BE PLACED ON A 15 MIL VAPOR BARRIER ON A COMPACTED SUBBASE AS INDICATED. VAPOR BARRIER SHALL BE A 15 MIL-CLASS A BARRIER. OVERLAP 6" AT JOINTS AND TAPE USING VAPOR BARRIER MANUFACTURER STANDARD TAPE. ALL PENETRATIONS AND BLOCKOUTS SHALL BE SEALED USING A COMBINATION OF VAPOR BARRIER, TAPE AND/OR MASTIC PER MANUFACTURER'S INSTRUCTIONS. BASIS OF DESIGN IS STEGO WRAP BY STEGO INDUSTRIES.
- '. ALL SLABS-ON-GRADE SHALL BEAR ON A SUBBASE OF CLEAN, COMPACTED CRUSHED STONE A MINIMUM OF 6" THICK. THE SUBBASE SHALL BE 3/8" CRUSHED STONE OR A 3/4" MINUS PROCESSED AGGREGATE BASE.
- 8. THE SUBBASE SHALL BE UNDERLAIN BY A 6 OUNCE PER SQUARE YARD OR HEAVIER, NON-WOVEN FILTER FABRIC WITH AN APPARENT OPENING SIZE EQUAL TO OR SMALLER THAN THE U.S. STANDARD SIEVE SIZE OF 7. BASIS OF DESIGN IS MIRAFI 160N OR EQUIVALENT.

CAST-IN-PLACE CONCRETE NOTES:

- 1. ALL CONCRETE SHALL HAVE A 28 DAY DESIGN COMPRESSIVE STRENGTH OF 4,000 PSI, A MINIMUM OF 564 POUNDS OF PORTLAND CEMENT PER CUBIC YARD, 5% TO 7% AIR CONTENT USING AIR ENTRAINING AGENT AS REQUIRED, 4-6 INCH SLUMP.
- 2. ALL CONCRETE SHALL HAVE A MAXIMUM WATER TO CEMENT RATIO OF 0.45.
- 3. ALL CEMENT SHALL CONFORM TO ASTM C150 TYPE 1. ALL CONCRETE AGGREGATES SHALL CONFORM TO ASTM C33. ALL AIR ENTRAINING AGENT SHALL CONFORM TO ASTM C260. ALL WATER REDUCING ADMIXTURES SHALL CONFORM TO ASTM C 494. WATER USED TO MIX CONCRETE SHALL BE DRINKABLE.
- 4. ALL CONCRETE MIXING FACILITIES, READY—MIX TRUCKS, AND MATERIAL SOURCES SHALL BE CONNDOT APPROVED. SUBMIT RECORD COPIES OF CONNDOT CERTIFICATION LETTERS.
- 5. THE AMOUNT OF MID OR HIGH RANGE WATER REDUCER SHALL BE AS RECOMMENDED BY THE ADMIXTURE SUPPLIER TO INCREASE THE SLUMP OF THE CONCRETE BY 50 PERCENT OVER THE SLUMP WITHOUT THE ADMIXTURE. THE SLUMP GIVEN IN THE CONCRETE NOTES ARE AT THE POINT OF DISCHARGE. THIS AMOUNT OF MIDRANGE IS APPROXIMATELY 8-10 OZ PER 100 POUNDS OF CEMENT. HIGH RANGE WATER REDUCER MAY ALSO BE USED WITH THE DOSAGE ADJUSTED FOR THE ABOVE RESULTS.
- 6. THE CONCRETE SUPPLIER SHALL PROVIDE A SIEVE ANALYSIS FOR COARSE AND FINE AGGREGATES USED IN THE PROPOSED CONCRETE MIX. COMBINING TWO OR MORE AGGREGATES MAY BE NECESSARY TO ACHIEVE THIS OPTIMIZATION. THE SUPPLIER SHALL PROVIDE THE OPTIMUM COMBINATION OF THE AGGREGATES WHICH COMES THE CLOSEST TO
- THE FOLLOWING GRADATION SPECIFICATION: A. COARSE AGGREGATE SIZES: 1 1/2", 1", 3/4", 1/2" AND 3/8"
- B. FINE AGGREGATE SIZES: 3/8" AND NUMBERS 4,8,16,30,50,100 COMBINED AGGREGATE GRADATIONS SHALL BE:
- ON THE TOP SIZE SIEVE: 3% TO 5% RETAINED
- ON THE #100 SIEVE 1.5% TO 5 % RETAINED INTERMEDIATE SIEVES BETWEEN 2% AND 20% RETAINED
- G. NO SIEVE PERCENTAGE SHALL HAVE A GREATER THAN 20% DIFFERENCE BETWEEN THE ADJACENT SIEVE.
- 7. IF THE AIR TEMPERATURE IS GREATER THAN 90 DEGREES WITHIN 24 HOURS AFTER PLACEMENT, HOT WEATHER CONCRETE PROCEDURES SHALL BE USED ACCORDING TO ACI 305. THE CONTRACTOR SHALL SUBMIT A PROCEDURE TO THE ENGINEER FOR APPROVAL. THESE PROCEDURES MAY INCLUDE THE FOLLOWING:
- A. PLACING THE CONCRETE IN THE EARLY MORNING HOURS B. THE USE OF EVAPORATION REDUCER (SEE BELOW)
- C. THE USE OF MISTING AS A CURING METHOD D. THE USE OF WET BLANKETS AS A CURING METHOD

E. THE USE OF A RETARDING ADMIXTURE (WITH APPROVAL OF ENGINEER)

- 8. MAKE FOUR CONCRETE CYLINDERS FOR EVERY 75 CUBIC YARDS OR EACH DAYS POUR, TO BE TESTED AT 7. 28. 28. AND ONE TO HOLD. THE CONCRETE SLUMP. TEMPERATURE. AND AIR CONTENT SHALL BE MEASURED EVERY TIME A SET OF FOUR CYLINDERS IS MADE.
- 9. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE AMERICAN CONCRETE INSTITUTE STANDARDS "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318) AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301). SPLICES IN REINFORCEMENT SHALL MEET CLASS B TENSION LAP REQUIREMENTS UNLESS NOTED OTHERWISE.
- 10. COVER FOR ALL REINFORCEMENT SHALL MEET THE COVERAGE REQUIREMENTS AS SHOWN IN THE LATEST ACI 318, AS NOTED BELOW OR AS SHOWN ON THE DETAILS. COVER DIMENSIONS SHOWN ON THE DETAILS CONTROL OVER THE ACI 318 OR THOSE NOTED
- A. AGAINST FORMED SURFACES: 1 1/8" B. AGAINST EARTH: 3"
- C. BETWEEN REBAR: 1 1/2"

OTHERWISE.

COMPLETED.

- D. TOP OF SLAB ON GRADE: 1 ½" 11. ANY CONCRETE TO BE PLACED FURTHER THAN 16 FEET FROM THE END OF A CONCRETE
- TRUCK SHALL BE PUMPED WITH A COMMERCIAL CONCRETE PUMPING TRUCK OR OTHER PLACEMENT METHOD APPROVED BY THE ENGINEER. THE CONCRETE TRUCK SHALL NOT BE ALLOWED TO DRIVE OVER THE SUBGRADE OR THE SLAB REINFORCEMENT.
- 12. REINFORCING BARS SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL CONFORMING TO A.S.T.M. A-615 GRADE 60. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED IN THE FIELD.
- 13. WHERE REINFORCING STEEL IS INDICATED TO BE WELDED, PROVIDE ASTM A706 LOW-ALLOY
- DEFORMED REINFORCING BARS WITH A 60 ksi YIELD STRENGTH (GRADE 60).
- 14. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- 15. PROVIDE CORNER BARS IN ALL WALLS AND FOOTINGS, THE SAME SIZE AND NUMBER AS CONTINUOUS REINFORCEMENT UNLESS NOTED ON THE PLANS OR TYPICAL DETAILS
- 16. WHERE REQUIRED, STEP NEW FOOTINGS UP OR DOWN IN RATIO OF TWO HORIZONTALS TO ONE VERTICAL TO JOIN EXISTING FOOTINGS. CAST STEPPED FOOTINGS MONOLITHICALLY.
- 17. DOWEL CONCRETE WALLS AND PIERS INTO FOOTINGS WITH DOWELS THE SAME SIZE AND SPACING AS VERTICAL REINFORCEMENT. EXTEND DOWELS TO WITHIN 3" OF BOTTOM OF FOOTING, TERMINATED WITH ACI STD. 90 DEGREE HOOK, UNLESS NOTED OTHERWISE.
- 18. PROVIDE A ROUGH CONCRETE SURFACE (1/4" MINIMUM AMPLITUDE) AT THE INTERSECTION OF CONCRETE WALLS, STEM WALLS, AND PILASTERS WITH THE TOP OF FOOTINGS, DO NOT PROVIDE A KEYWAY UNLESS SHOWN OR NOTED ON THE DRAWINGS
- 19. PROVIDE 3/4" x 3/4" CHAMFER AT ALL EXPOSED CORNERS UNLESS NOTED OTHERWISE.
- 20. NO HOLES OR OPENINGS ARE PERMITTED THROUGH CONCRETE SLABS, BEAMS, OR WALLS EXCEPT WHERE SHOWN AND DETAILED ON THE DRAWINGS.
- 21. LOCATE ADDITIONAL CONSTRUCTION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. LOCATE WALL CONSTRUCTION JOINTS AT MASONRY CONTROL

JOINTS WHERE POSSIBLE. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT. DETAIL

- 22. PLACE INTERMEDIATE HORIZONTAL BARS (#4 @ 12" MAXIMUM) ON EACH VERTICAL FACE OF ALL BEAMS GREATER THAN 36" IN DEPTH UNLESS NOTED OTHERWISE.
- 23. CAST CONCRETE ON SLOPED SURFACES BEGINNING AT LOWEST ELEVATION AND CONTINUING MONOLITHICALLY TOWARD HIGHER ELEVATIONS UNTIL INTENDED POUR IS
- 24. REINFORCING BARS, BAR SUPPORTS, AND SPACERS SHALL BE DETAILED AND PROVIDED IN ACCORDANCE WITH THE LATEST ACI DETAILING MANUAL. USE WIRE-BAR SUPPORTS COMPLYING WITH CRSI SPECIFICATIONS. SUPPORTS SHALL NOT BE PLACED FURTHER THAN 4 FEET APART.
- A. AT SLABS-ON-GRADE: (SLAB THICKNESS MINUS 1 1/2 INCHES) HIGH, TYPE R21, OR TYPE BBP USE SUPPORTS WITH SAND PLATES OR HORIZONTAL RUNNERS WHERE BASE MATERIAL WILL NOT SUPPORT CHAIR LEGS. CONCRETE BLOCK OR CLAY MASONRY MAY NOT BE USED.
- B. AT FOOTINGS: 3 IN. HIGH, TYPE R21

JOINT AND SHOW ON SHOP DRAWINGS.

C. FOR EXPOSED TO VIEW CONCRETE SURFACES WHERE LEGS OF SUPPORTS ARE IN CONTACT WITH THE FORMS, PROVIDE SUPPORTS WITH LEGS THAT ARE PLASTIC PROTECTED (CRSI, CLASS 1) OR STAINLESS STEEL PROTECTED (CRSI, CLASS2).

<u>CAST-IN-PLACE CONCRETE NOTES (CONTINUED):</u>

- 25. SEE CIVIL AND PLUMBING DRAWINGS FOR EXACT LOCATIONS AND DETAILS OF ALL PIPING.
- 26. EVAPORATION REDUCERS SHALL BE USED AFTER EACH FINISHING OPERATION ON THE CAST IN PLACE CONCRETE FLOOR SLAB UNLESS PRIOR APPROVAL FROM THE ENGINEER HAS BEEN OBTAINED.
- 27. SAWCUTS IN CONCRETE SLABS SHALL ME MADE WITH AN EARLY ENTRY DRY CUT SAW WITHIN 2 HOURS OF FINAL FINISHING OPERATIONS OR AS NEEDED TO PREVENT RAVELING OF THE AGGREGATE.
- 28. POST INSTALLED ADHESIVE ANCHORS, REBAR, OR THREADED RODS, SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, WHICH INCLUDES CLEANING THE HOLE WITH A WIRE BRUSH AND AIR.
- 29. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, PIPING, WATERSTOPS, INSERTS, GROUNDS, AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT. FOR EMBEDDED ITEMS AND REQUIRED DETAILS, SEE MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS. VERIFY SIZE AND LOCATION OF ALL OPENINGS.
- 30. ALL PIPING PENETRATIONS THROUGH NEW STRUCTURAL SLABS ARE TO BE SLEEVED. NO CORING OF SLAB IS PERMITTED.
- 31. EXPANSION JOINTS CALLED FOR IN CONCRETE WALLS SHALL BE 1" WIDE UNLESS NOTED OTHERWISE, HORIZONTAL REINFORCEMENT (OR DOWELS) SHALL EXTEND THROUGH JOINT AND SHALL BE WRAPPED WITH FELT PAPER TO BREAK BOND. PROVIDE WATERSTOPS AS REQUIRED BY SPECIFICATIONS.
- 32. FLOWABLE FILL: COMPRESSIVE STRENGTH SHALL BE 250 PSI.

STRUCTURAL STEEL NOTES:

- WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISED CODE OF THE AMERICAN WELDING SOCIETY D1.1 STRUCTURAL WELDING CODE-STEEL.
- 2. ANY CONNECTIONS WITHOUT WELD SYMBOLS SHALL BE AT A MINIMUM WELDED ALL AROUND WITH THE MINIMUM FILLET OR BUTT WELD SIZE.
- 3. STRUCTURAL STEEL ANGLES, PLATES, AND CHANNELS SHALL CONFORM TO ASTM. A36 REQUIREMENTS (Fy=36 KSI). STRUCTURAL STEEL WIDE FLANGE AND TEE SHAPES SHALL CONFORM TO A.S.T.M. A992 (Fy=50 KSI). SQUARE AND RECTANGULAR STRUCTURAL TUBING SHALL CONFORM TO THE A.S.T.M. A500 GRADE B REQUIREMENTS (Fy=46 KSI). ROUND STEEL PIPES SHALL CONFORM TO A.S.T.M. A53 GRADE B (Fy=35 KSI).
- 4. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.

. CONNECTIONS:

FROM ALL WELDS.

BEAM, OMITTING WHERE BEAMS INTERSECT.

FOR ROOF OPENINGS SMALLER THAN 1'-0".

- A. ALL BOLTED CONNECTIONS SHALL USE 3/4" MINIMUM DIAMETER A325 TYPE N OR SC BOLTS IN STANDARD HOLES UNLESS NOTED OTHERWISE OR AS DETERMINED BY THE CONNECTION DESIGNER OR NOTED ON THE PLANS. DESIGN USING STANDARD HOLES UNLESS OTHERWISE NOTED OR REQUIRED FOR ERECTION..
- B. MINIMUM CAPACITY OF BEAM CONNECTIONS: FOR CONNECTIONS NOT DETAILED. PROVIDE CONNECTION CAPACITY OF AT LEAST THAT REQUIRED BY "ALLOWABLE LOADS ON BEAMS" FOR ALLOWABLE STRESS DESIGN. FOR THE GIVEN MEMBER AND STEEL SPECIFICATIONS. CONCENTRATED LOADS NEAR SUPPORTS MUST BE ADDED.
- THE DESIGN SHEAR FOR EACH CONNECTION UNLESS NOTED ON THE DRAWINGS SHALL BE 110% OF THE REACTION FROM A UNIFORM LOAD OVER THE SPAN WHICH CREATES THE MAXIMUM DESIGN MOMENT FOR ROOF BEAM CONNECTIONS AND 180% FOR COMPOSITE FLOOR CONNECTIONS. THE MINIMUM REACTION SHALL BE 14 KIPS.
- D. TWIST-OFF TENSION CONTROL BOLT ASSEMBLIES SHALL CONFORM TO ASTM F1852, MINIMUM 3/4" DIAMETER. FULLY TENSION ALL TWIST-OFF BOLTS SO THAT THE END
- SPLINES TWIST OFF. WELDED CONNECTIONS SHALL USE 70 ksi LOW HYDROGEN ELECTRODES AND SHALI BE IN ACCORDANCE WITH ALL AWS STANDARDS AND SPECIFICATIONS. REMOVE SLAG
- F. CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER. USE MINIMUM OF TWO 3/4" DIAMETER A325 BOLTS PER CONNECTION.
- 6. PROVIDE 3/8" STIFFENER PLATES ON EACH SIDE OF THE WEB OF ALL BEAMS AT ALL SUPPORTS THAT ARE BELOW THE BEAM, AND AT ALL COLUMNS THAT ARE ABOVE THE
- 7. ALL STEEL BEAMS BEARING ON MASONRY WALLS HAVE A MINIMUM OF 8" OF BEARING UNLESS NOTED OTHERWISE. PROVIDE BEAMS WITH BEARING PLATES AND WALL ANCHORS
- UNLESS NOTED OTHERWISE. 8. FRAME ALL OPENINGS IN ROOF AND FLOOR DECK 1'-0" OR LARGER WITH A STRUCTURAL STEEL MEMBER ON ALL SIDES EXCEPT WHERE A SIDE MAY BE WITHIN 1'-0" OF ANOTHER FRAMING MEMBER. FRAME OPENINGS WITH C8x11.5 FOR MEMBERS UP TO 8'-0" LENGTH AND W8x21 FOR MEMBER LENGTHS BETWEEN 8'-0" AND 15'-0". FRAMING NOT REQUIRED
- 9. WHERE ROOF BEAMS FRAME INTO COLUMNS, WELD A 1/4" THICK ANGLE TO TOP OF

COLUMN. PROJECT ANGLE 2-1/2" TO FORM A BEARING SURFACE FOR ROOF DECK.

- 10. PROVIDE COLUMNS WITH 1/2" CAP PLATES UNLESS DETAILED OTHERWISE.
- 11. WELD MASONRY ANCHORS AT 16" o.c. TO COLUMN WEBS AND FLANGES WHICH ABUT
- 12. WHERE COLUMNS BEAR ON STEEL BEAMS, PROVIDE BEAMS WITH TWO 3/8" THICK STIFFENER PLATES THE FULL WIDTH AND DEPTH OF BEAM AND IN LINE WITH COLUMN FLANGES ON EACH SIDE OF BEAM.

FLOOR DECK NOTES:

ENGINEER.

- 1. PROVIDE SUPPORT FOR METAL DECK AT ALL INTERIOR COLUMN LOCATIONS.
- 2. ALL FLOOR DECK SHALL HAVE A MINIMUM OF 3" BEARING ON CONCRETE OR MASONRY AND SHALL LAP A MINIMUM OF 2 INCHES AT ENDS. CONTRACTOR MAY AT HIS OPTION BUTT ENDS OF DECK OVER STEEL BEAMS AND TAPE JOINTS TO PREVENT SLURRY PENETRATION.
- 3. METAL DECK SHALL BE CAPABLE OF SUPPORTING DEAD LOAD AND 20 PSF CONSTRUCTION LOAD AS A FORM AND SUPERIMPOSED LOADS INDICATED ON FULL COMPOSITE SECTION. MAXIMUM LIVE LOAD DEFLECTION OF COMPOSITE SECTION SHALL BE 1/360 OF CLEAR SPAN.
- 4. THE COMPOSITE FLOOR DECK SHALL BE 20 GAUGE, TYPE 3VLI BY VULCRAFT OR EQUAL. THE DECK SHALL BE GALVANIZED. DECK SHALL BE WELDED TO SUPPORTS AT 12 INCHES ON CENTER AT ALL SUPPORTS (INTERMEDIATE AND ENDS). WELDS SHALL BE 5/8" PUDDLE WELDS WITH A MAXIMUM BURN-THROUGH OF 30 PERCENT AND WITH A MAXIMUM OF 10 PERCENT FAILING.
- 5. FOR STEEL FRAMED FLOORS, PROVIDE ADDITIONAL CONCRETE AS NECESSARY TO FINISH THE FLOORS TO WITHIN THE SPECIFIED TOLERANCES BY ACCOUNTING FOR THE STEEL JOIST, BEAM AND DECK DEFLECTION UNDER THE WET WEIGHT OF THE CONCRETE. IT IS SUGGESTED TO ALLOW FOR AN ADDITIONAL ONE HALF INCH OF CONCRETE PER FLOOR TO COMPENSATE FOR THE DEFLECTION. CONTRACTOR TO USE THE APPROPRIATE PLACEMENT MEASUREMENT METHOD TO ACCOUNT FOR THIS DEFLECTION.
- . FRAME ALL OPENINGS IN SLABS 2'-0" SQUARE OR LARGER WITH A STRUCTURAL STEEL MEMBER ON ALL SIDES EXCEPT WHERE A SIDE MAY BE WITHIN 1'-0" OF ANOTHER FRAMING MEMBER. FRAME OPENINGS WITH C8X11.5 UNLESSNOTED OTHERWISE. PROVIDE TWO #5 BARS, 6'-0" LONG, AT ALL CORNERS AND AT EDGES OF OPENINGS IN SLAB.
- 8. LOCATE MECHANICAL OPENINGS THROUGH SLABS NO CLOSER THAN 4'-0" TO GIRDER CENTERLINE AND 2'-0" TO BEAM CENTERLINE UNLESS APPROVED BY STRUCTURAL

7. DO NOT APPLY PAINT TO TOP FLANGES ON BEAMS AND GIRDERS WHICH RECEIVE SHEAR

9. FOR SLAB OPENINGS GREATER THAN 1'-0" BUT LESS THAN 2'-0" SQUARE, PROVIDE A #4 BY 3'-0" LONG DIAGONAL BAR AT ALL CORNERS OF OPENINGS.

10. SHORE BEAMS AND DECK AT MIDSPAN FOR A MINIMUM OF 14 DAYS AND THEREAFTER

UNTIL CONCRETE STRENGTH HAS REACHED 0.75 F'c. 11. PROVIDE CONTINUOUS SCREED ANGLE FOR EDGE OF SLAB.

STEEL JOIST AND ROOF DECK NOTES:

SUPPORTS.

- 1. STEEL JOISTS SHALL CONFORM TO THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS FOR OPEN WEB JOISTS. MATERIAL SHALL BE DOMESTIC STEEL WITH ANGLES FOR BOTTOM CHORDS.
- 2. ROOF DECK SHALL BE TYPE B WIDE RIB GAGE AS SPECIFIED BY THE STEEL DECK INSTITUTE AND SHALL BE GALVANIZED. FASTEN ROOF DECK UNITS TO SUPPORTING
- A. FIELD OF THE ROOF ONE WELD, 12 INCHES ON CENTER MAXIMUM (EVERY OTHER

MEMBERS BY NOT LESS THAN 5/8 INCH DIAMETER PUDDLE WELDS SPACED AS FOLLOWS:

- RIB) AT ALL SUPPORTS. B. ROOF PERIMETER AREAS - ONE WELD, 6 INCHES ON CENTER MAXIMUM (EVERY RIB)
- AT ALL SUPPORTS. C. CORNER AREAS — TWO WELDS, 6 INCHES ON CENTER MAXIMUM (EVERY RIB) AT ALL
- 3. PROVIDE MECHANICAL FASTENING AT ALL DECK SIDE LAPS, USING SELF-TAPPING NO. 10 OR LARGER SCREWS. UNLESS THE SPECIFIC FM APPROVAL LISTING REQUIRES A CLOSER SPACING, ENSURE SPACING BETWEEN EACH SIDE-LAP FASTENER OR SIDE-LAP FASTENERS AND SUPPORTS IS NOT MORE THAN 36 INCHES IN THE FIELD OF THE ROOF AND NO MORE THAN 30 INCHES, ON CENTER IN THE PERIMETER AND CORNER AREAS. DO NOT WELD SIDE-LAPS. DECK SHALL BE MODIFIED AS REQUIRED AT EDGE SUPPORTS PARALLEL TO THE RIBS SO THAT THE DECK CAN BE WELDED TO THE SUPPORT AS SPECIFIED. ALL SCREWS SHALL BE Teks BY ITW BUILDEX, OR EQUAL. ALL SCREWS IN EXTERIOR WALLS SHALL BE ZINC PLATED WITH A TYPE II ASTM B 633 COATING.
- 4. PRIOR TO INSTALLATION OF THE NEW ABOVE DECK ROOF COVERING COMPONENTS, ALL EXISTING STEEL ROOF DECK SHALL BE INSPECTED BY THE CONTRACTOR. NOTIFY ENGINEER OF ANY AREAS THAT EXHIBIT MODERATE CORROSION OR ARE FOUND TO BE STRUCTURALLY UNSTABLE. THE AREAS IDENTIFIED TO BE DEFICIENT SHALL BE REMOVED AND REPLACED WITH NEW DECKING.
- 5. THE JOISTS SHALL BE DESIGNED FOR TWO LOADING CONDITIONS: FIRST, AS A SIMPLE SPAN FOR DEAD LOAD AND LIVE LOAD. SECOND FOR THE MOMENTS AND SHEARS
- 6. ALL JOISTS SHALL HAVE BOTTOM CHORD UPLIFT BRIDGING AT EACH END AND BE DESIGNED FOR 25 POUNDS PER SQUARE FOOT NET UPLIFT.

INDICATED ON THE PLAN IN SPECIAL JOIST LOADING DIAGRAMS.

- 7. ROOF PENETRATIONS NOT SHOWN: PROVIDE L4x4x1/4 FRAME AROUND ALL ROOF DECK PENETRATIONS GREATER THAN 1'-0".
- 8. LOCATE CONCENTRATED LOADS ON JOISTS AT PANEL POINTS. PROVIDE ANGLE WEB MEMBERS TO CREATE INTERMEDIATE PANEL POINTS AS REQUIRED. MANUFACTURER SHALL DIRECT INSTALLER AS TO METHOD OF INSTALLATION AND MATERIAL REQUIRED. JOISTS AND JOIST GIRDERS SHALL BE SHOP REINFORCED FOR ALL LOADS PROVIDED ON DRAWINGS. FIELD REINFORCING SHALL BE PROVIDED AS DETAILED ON THE DRAWINGS.
- 9. VERIFY SIZE, LOCATION, AND NUMBER OF ROOF OPENINGS WITH MECHANICAL AND
- 10. PROVIDE BRIDGING ANCHORS FIRMLY ANCHORED TO MASONRY WALLS, BEAMS, AND COLUMNS AT EACH END OF EACH ROW OF BRIDGING, TOP AND BOTTOM.
- 11. INSTALL JOISTS WITHIN A HORIZONTAL SWEEP TOLERANCE OF 1/4" IN 10 FEET.

ROOF TOP SUPPORTED EQUIPMENT NOTE:

ELECTRICAL PLANS AND CONTRACTORS.

1. THE ROOF STRUCTURAL MEMBERS HAVE BEEN DESIGNED FOR THE INDICATED LOCATIONS, SIZES AND WEIGHTS OF ROOFTOP MECHANICAL UNITS. IF THE SIZE AND/OR WEIGHT OF THE MECHANICAL UNITS CHANGE, NOTIFY THE ENGINEER IMMEDIATELY PRIOR TO SETTING UNITS.

CONCRETE MASONRY UNIT (CMU) WALL NOTES:

THESE NOTES, THESE NOTES SHALL GOVERN.

COMPRESSIVE STRENGTH, f'm, IS 1500 PSI.

- REFER TO THE ARCHITECTURAL DRAWINGS OR SPECIFICATIONS FOR TYPES OF MASONRY OTHER THAN CONCRETE MASONRY, SUCH AS BRICK. THESE NOTES DO NOT APPLY TO 4" VENEER CMU. IF THERE ARE ANY CONFLICTS BETWEEN THE WRITTEN SPECIFICATIONS AND
- 2. MORTAR SHALL CONFORM TO TABLE 1 OF ASTM C270, TYPE S. THE MORTAR MIX DESIGN (BY VOLUME) SHALL BE SUBMITTED TO THE ENGINEER BEFORE CONSTRUCTION BEGINS. HOLLOW CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 NORMAL WEIGHT SPECIFICATIONS WITH A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI. THE SPECIFIED
- COARSE CONCRETE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A SLUMP OF 8 TO 11 INCHES. GROUT MAY BE EITHER READY MIXED OR JOB MIXED, AND SHALL BE BASED ON A MIX DESIGN (BY VOLUME) APPROVED BY THE ENGINEER. THE AMOUNT OF COARSE AGGREGATE SHALL NOT EXCEED THE AMOUNT OF FINE AGGREGATE. EVIDENCE THAT THE MIX DESIGN SHOULD ACHIEVE A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI SHALL BE PROVIDED TO THE ENGINEER. HOWEVER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPRESSIVE STRENGTH.
- 4. WHEN MIXING MORTAR AND GROUT, CONTAINERS OF KNOWN VOLUME SHALL BE USED. MEASUREMENT USING SHOVELS SHALL NOT BE ALLOWED. FOR GROUT, THE SAND AND PEA GRAVEL SHALL BE TAKEN FROM SEPARATE PILES, NOT FROM A PRE-BLENDED PILE. IF MEASUREMENT BY SHOVELING OR USE OF A PRE-BLENDED PILE IS DISCOVERED, THE ENGINEER MAY REQUIRE ALL WALLS BUILT SO FAR TO BE TESTED PER ASTM C 1314 BY CUTTING 3 MASONRY PRISMS AND 3 GROUT CORES OUT OF THE WALL FOR EVERY 5,000 SQUARE FEET OF WALL, AND MAY REQUIRE ANY AREA OF WALL TESTING BELOW 1,500 PSI
- TO BE REPLACED AT NO COST TO THE OWNER. 5. COLD WEATHER AND HOT WEATHER PROCEDURES SHALL BE USED IN ACCORDANCE WITH ACI
- 530.1/ASCE 6/TMS 602 ARTICLE 1.8C AND 1.8D. 6. REINFORCING STEEL SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL CONFORMING TO
- A.S.T.M. A-615 GRADE 60. 7. ALL LOAD BEARING AND SHEAR CMU WALLS SHALL BE REINFORCED VERTICALLY AS INDICATED, AND HORIZONTALLY WITH STANDARD TRUSS TYPE BY DUR-O-WALL OR EQUAL AT 16 INCHES ON CENTER. HORIZONTAL BOND BEAMS SHALL BE REINFORCED WITH (2) #4 BARS UNLESS NOTED OTHERWISE. VERTICAL REINFORCEMENT SHALL EXTEND TO THE TOP OF ALL PARAPETS. PROVIDE REINFORCEMENT BARS ALL AROUND ALL OPENINGS, EXTENDEING 2 FEET PAST EACH CORNER. REFER TO THE LINTEL SCHEDULE FOR ADDITIONAL REINFORCEMENT. ALL TOP COURSES SHALL HAVE A HORIZONTAL BOND BEAM. ALL

REINFORCEMENT BARS IN CMU WALLS SHALL BE PROVIDED WITH 1" CONCRETE GROUT COVER.

- 8. ALL NON-LOAD BEARING CMU WALLS SHALL BE REINFORCED HORIZONTALLY WITH STANDARD TRUSS TYPE BY DUR-O-WALL OR EQUAL, AT 16 INCHES ON CENTER. HORIZONTAL BOND BEAMS SHALL BE LOCATED AT THE TOP COURSE OF THE WALL AND ABOVE AND BELOW OPENINGS. HORIZONTAL BEAMS SHALL BE REINFORCED WITH (2) #4 BARS, IN 8 INCH AND 12 INCH WALLS, OR (1) #4 BAR, IN 6 INCH WALLS. PROVIDE (1) #4 BAR VERTICAL REINFORCEMENT ON EACH SIDE OF AN OPENING. EXTEND REINFORCEMENT 2 FEET PAST EACH CORNER OF AN OPENING AND AT 48" ON CENTER. REFER TO THE LINTEL SCHEDULE FOR ADDITIONAL REINFORCEMENT. ALL REINFORCEMENT BARS IN CMU WALL SHALL BE
- PROVIDED WITH 1" CONCRETE GROUT COVER. 9. PROVIDE VERTICAL CONTROL JOINTS AT LOCATIONS APPROVED BY THE ARCHITECT, WITH A MAXIMUM SPACING OF 20 FEET. HORIZONTAL BOND BEAM REINFORCEMENT SHALL CONTINUE THROUGH ALL CONTROL JOINTS IN ALL WALLS (BOTH LOAD-BEARING AND NON-LOAD BEARING WALLS). CONTROL JOINTS SHALL CONSIST OF A VERTICAL MASONRY JOINT, RAKED
- 10. AT ALL STEEL COLUMNS FLUSH AGAINST CMU, WIREBOND 1000 TYPE I ANCHORS OR EQUAL SHALL BE INSTALLED AT 16" OC WITH TIES IN THE BED JOINTS.
- 11. DOVETAIL ANCHORS SHALL BE USED AT ALL VENEER TIES ANCHORED INTO CONCRETE

REMOVALS:

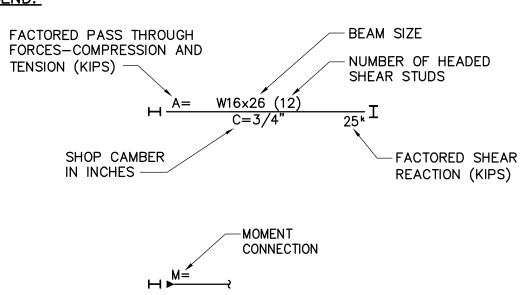
BACK AND CAULKED.

REFER TO DEMOLITION DRAWINGS ISSUED UNDER SEPARATE CONTRACT FOR REMOVALS BY OTHERS. ALL OTHER REMOVALS REQUIRED FOR CONSTRUCTION OF ITEMS SHOWN, INCLUDING BUT NOT LIMITED TO EXCAVATION AND REMOVAL OF CONCRETE. SHALL BE THE RESPONSIBILITY OF THIS CONTRACT.

- SECTION NUMBER - SHEET SECTION IS LOCATED - SECTION NUMBER -SHEET SECTION IS REFERENCED FROM -DETAIL LETTER -SHEET DETAIL LOCATED OR REFERENCED FROM

BEAM LEGEND:

IS LISTED.



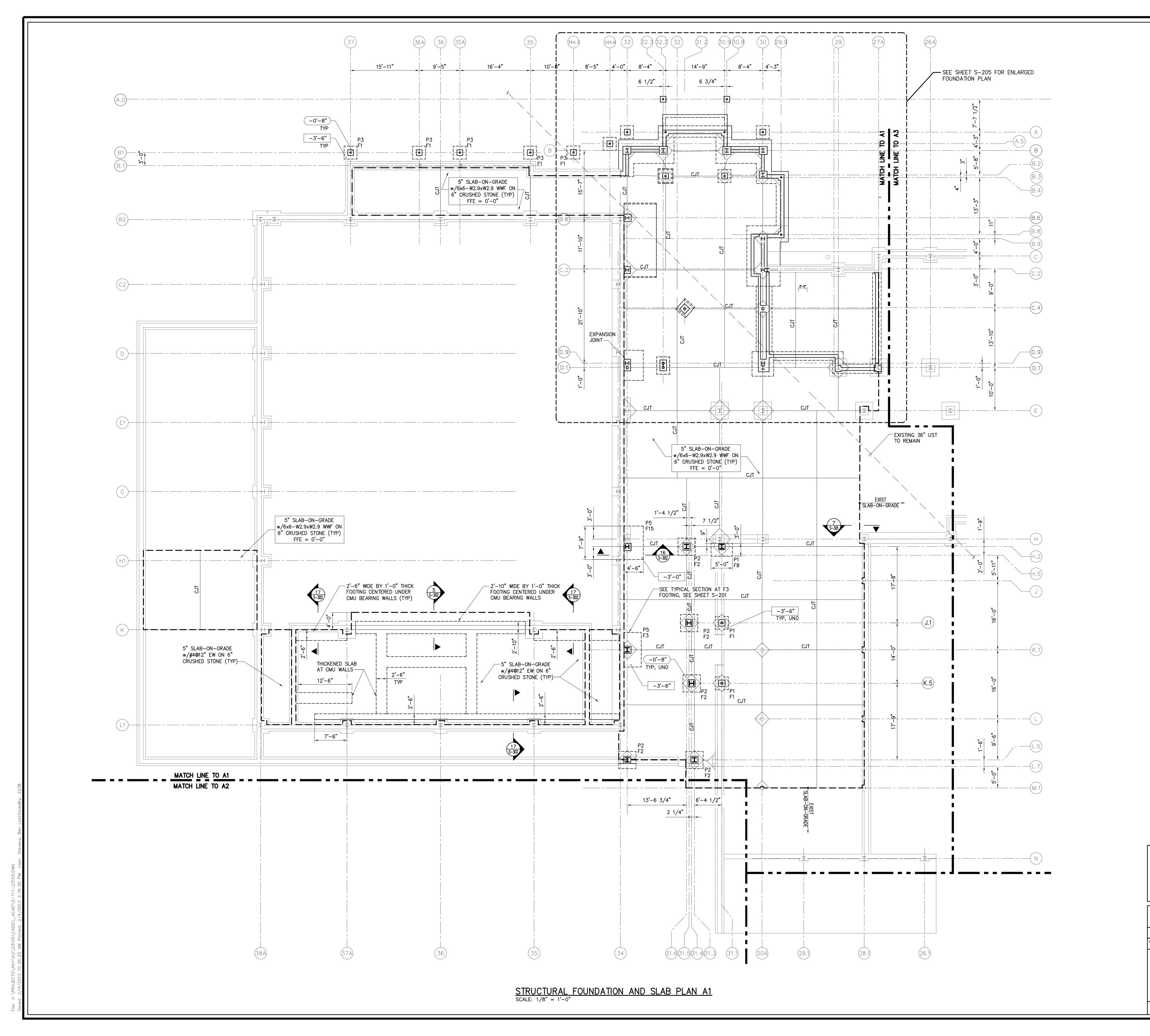
1. M = DESIGN MOMENT. PROVIDE FULL FACTORED ELASTIC CAPACITY IF NONE

2. DESIGN SHEAR REACTION EQUALS 14 KIPS FACTORED IF NONE IS LISTED.

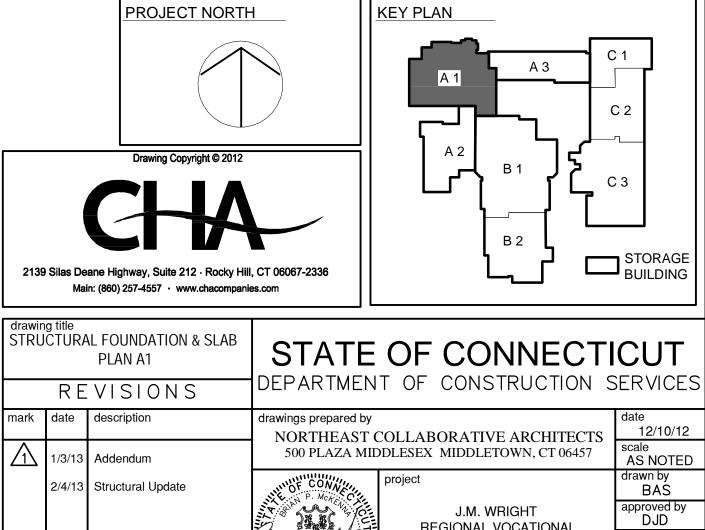
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STRŬCTURAL NOTES, LEGEND & STATE OF CONNECTICUT SPECIAL INSPECTIONS DEPARTMENT OF CONSTRUCTION SERVICES REVISIONS mark date description rawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS 500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457 scale AS NOTED 1 1/3/13 Addendum 2/4/13 Structural Update BAS J.M. WRIGHT DJD REGIONAL VOCATIONAL TECHNICAL SCHOOL S-001 BI-RT-842

SECTION/DETAIL LEGEND:

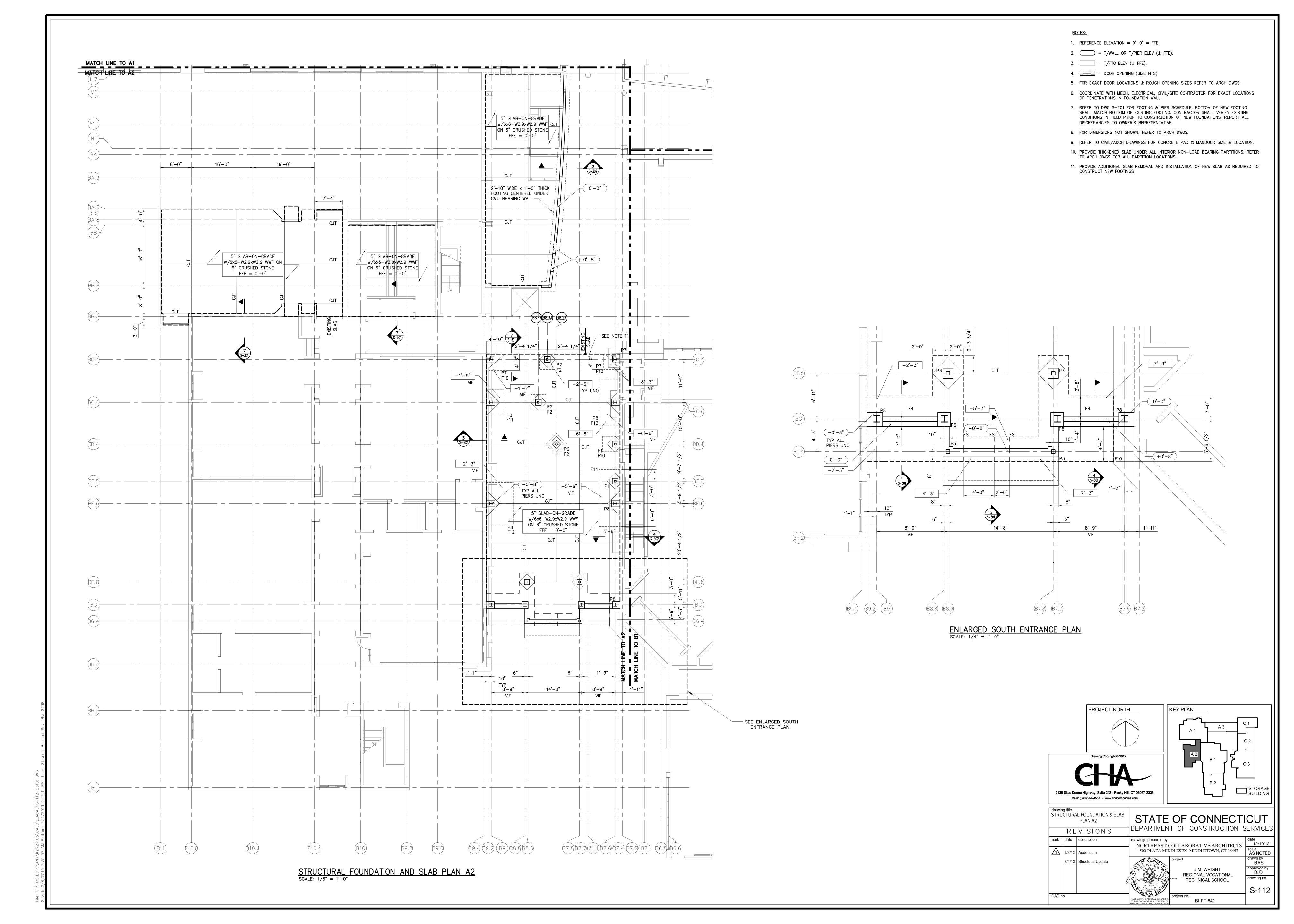


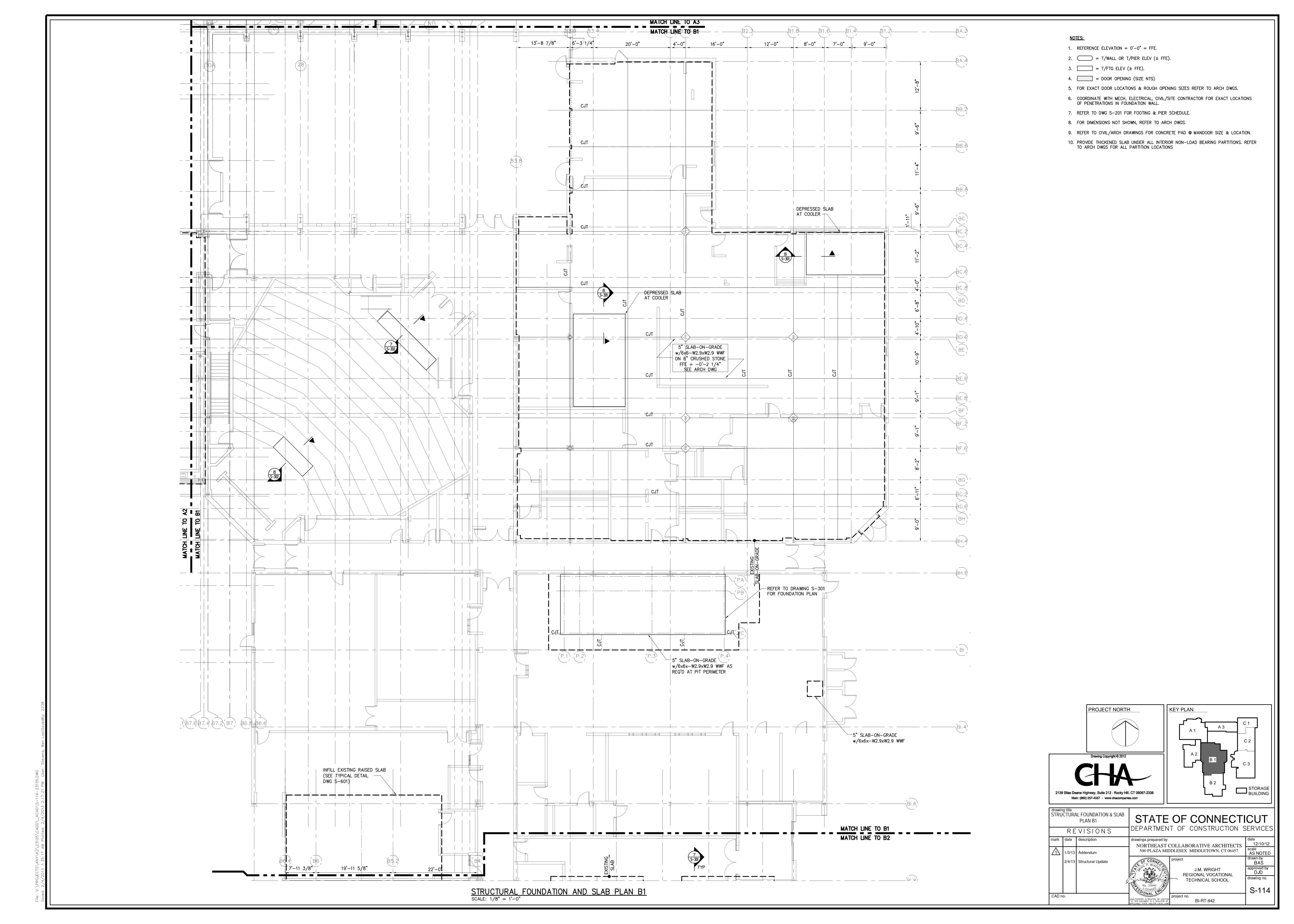
- 1. REFERENCE ELEVATION = 0'-0" = FFE.
- 2. = T/WALL OR T/PIER ELEV (± FFE).
- 3. $= T/FTG ELEV (\pm FFE).$
- 4. DOOR OPENING (SIZE NTS)
- 5. FOR EXACT DOOR LOCATIONS & ROUGH OPENING SIZES REFER TO ARCH DWGS.
- 6. COORDINATE WITH MECH, ELECTRICAL, CIVIL/SITE CONTRACTOR FOR EXACT LOCATIONS OF PENETRATIONS IN FOUNDATION WALL.
- 7. REFER TO DWG S-201 FOR FOOTING & PIER SCHEDULE.
- 8. FOR DIMENSIONS NOT SHOWN, REFER TO ARCH DWGS.
- 9. REFER TO CIVIL/ARCH DRAWINGS FOR CONCRETE PAD @ MANDOOR SIZE & LOCATION.
- PROVIDE THICKENED SLAB UNDER ALL INTERIOR NON-LOAD BEARING PARTITIONS. REFER
 TO ARCH DWGS FOR ALL PARTITION LOCATIONS.
- 11. TOP OF PIER ELEVATION IS $-0^{\circ}-8^{\circ}$ UNLESS OTHERWISE NOTED.
- 12. CJT DENOTES SLAB-ON-GRADE CONTROL JOINT. SEE SHEET S-601 FOR DETAIL (TYP).

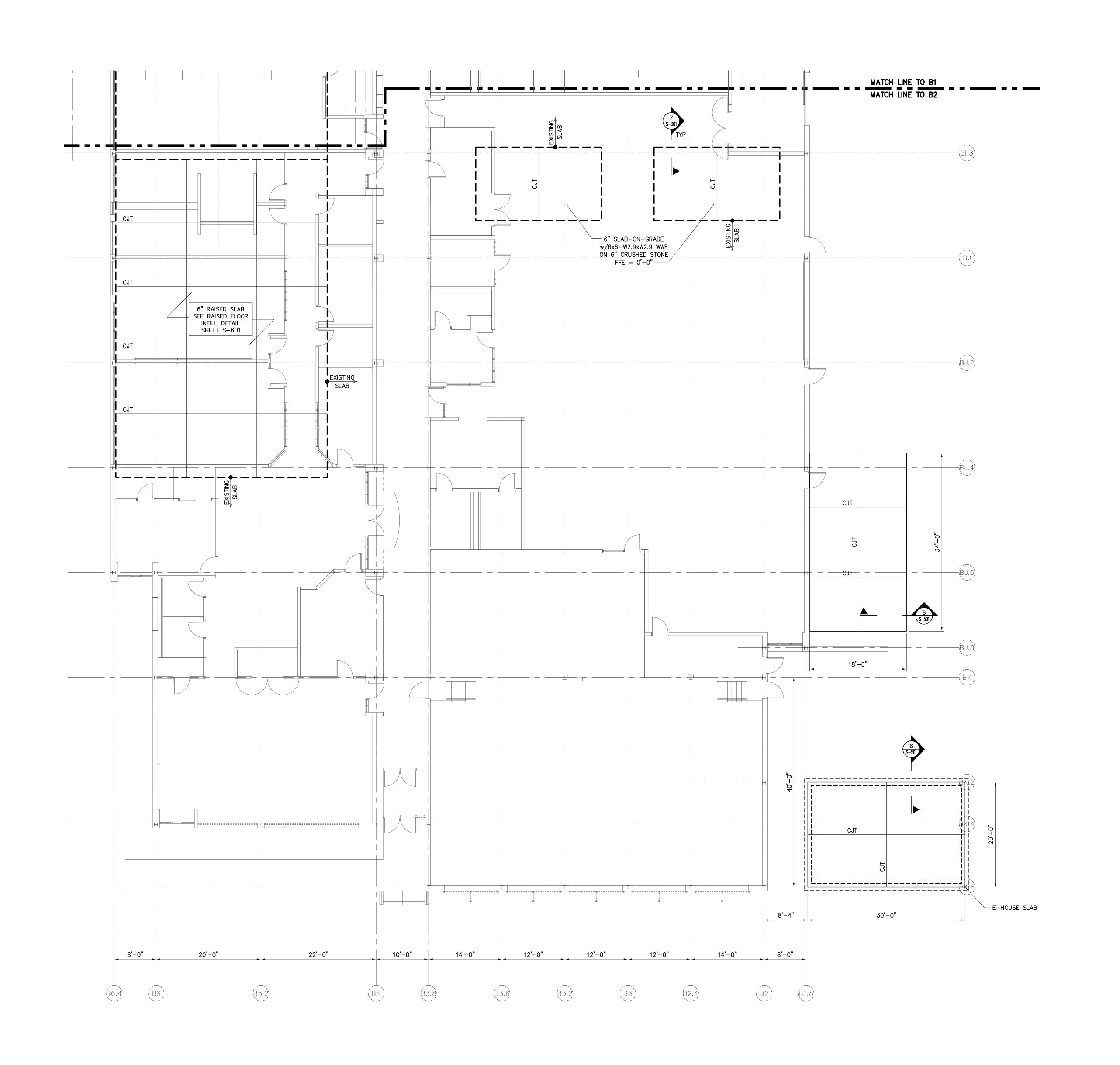


REGIONAL VOCATIONAL TECHNICAL SCHOOL

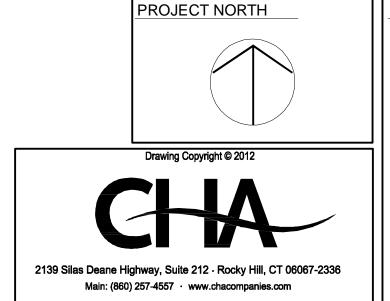
BI-RT-842

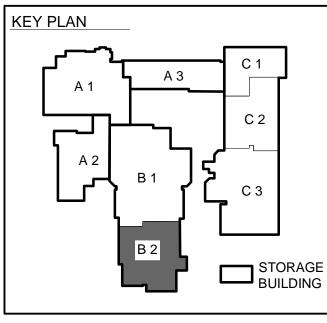




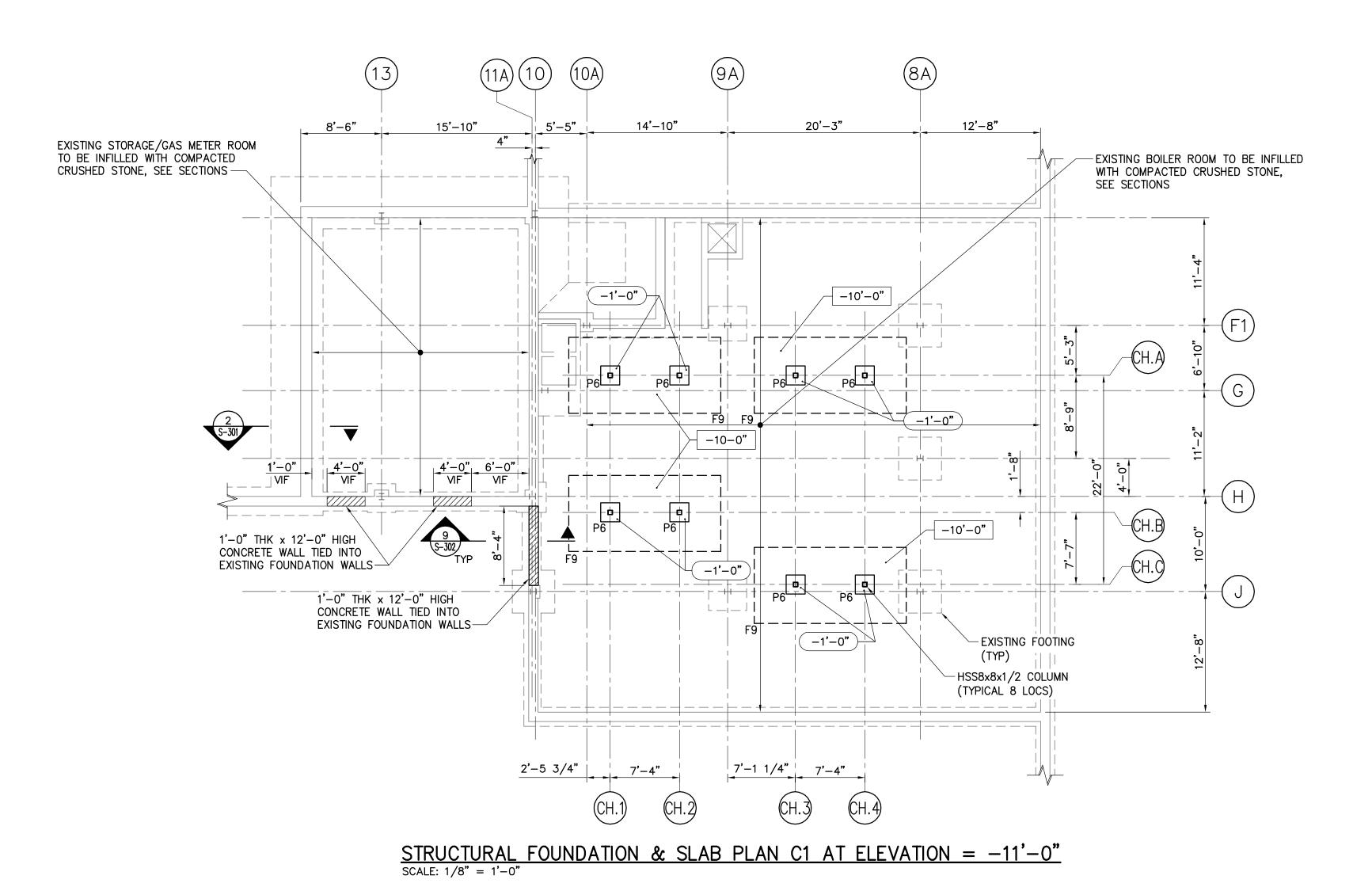


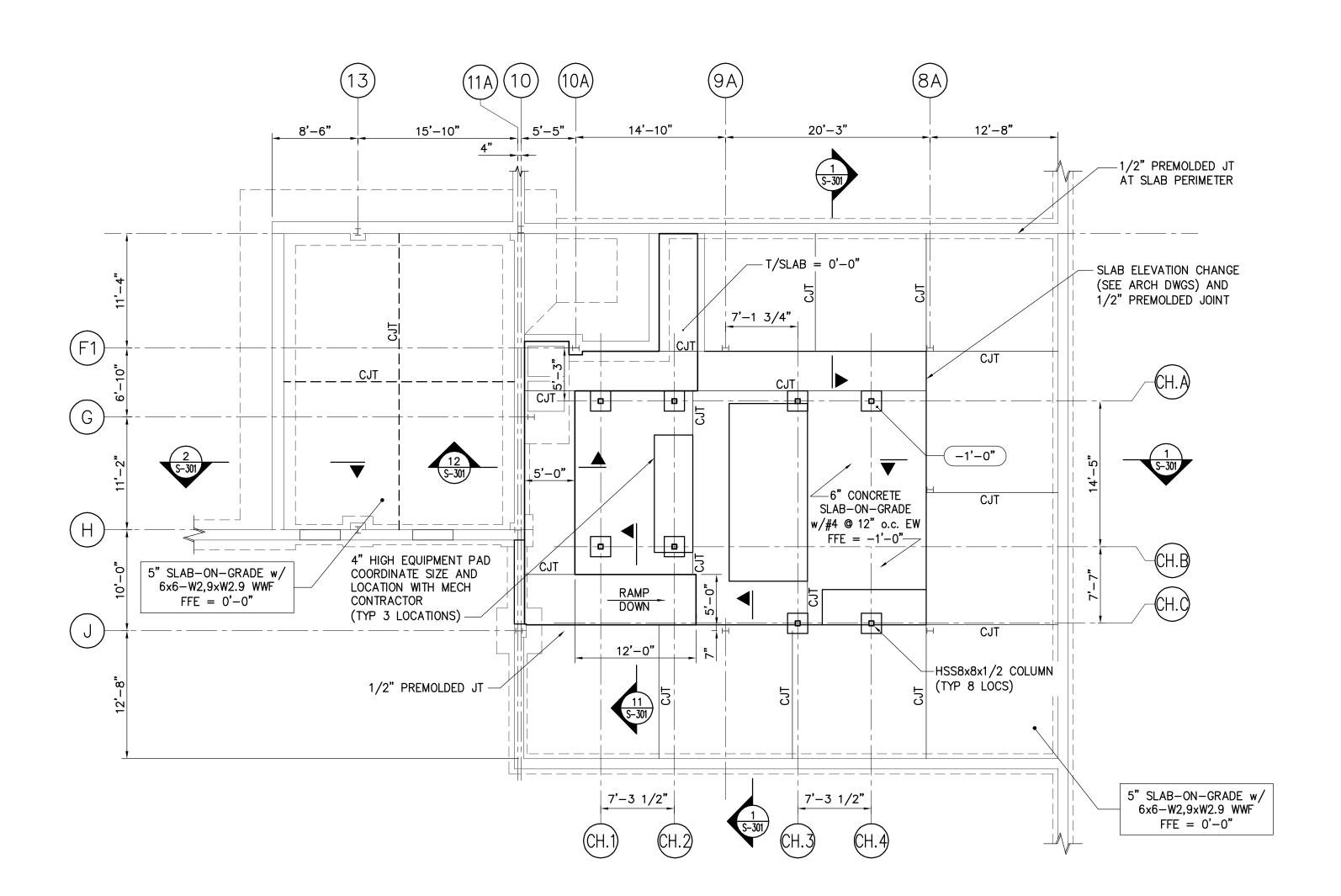
- 1. REFERENCE ELEVATION = 0'-0" = FFE.
- 2. = T/WALL OR T/PIER ELEV (± FFE).
- 3. $= T/FTG ELEV (\pm FFE).$
- 4. DOOR OPENING (SIZE NTS)
- 5. FOR EXACT DOOR LOCATIONS & ROUGH OPENING SIZES REFER TO ARCH DWGS.
- COORDINATE WITH MECH, ELECTRICAL, CIVIL/SITE CONTRACTOR FOR EXACT LOCATIONS OF PENETRATIONS IN FOUNDATION WALL.
- 7. REFER TO DWG S-201 FOR FOOTING & PIER SCHEDULE.
- 8. FOR DIMENSIONS NOT SHOWN, REFER TO ARCH DWGS.
- 9. REFER TO CIVIL/ARCH DRAWINGS FOR CONCRETE PAD @ MANDOOR SIZE & LOCATION.
- 10. PROVIDE THICKENED SLAB UNDER ALL INTERIOR NON-LOAD BEARING PARTITIONS. REFER TO ARCH DWGS FOR ALL PARTITION LOCATIONS





drawing title STRUCTURAL FOUNDATION & SLAB PLAN B2				OF CONNECTI T OF CONSTRUCTION S			
Į F	RE'	VISIONS	DEI AITIMEN	1 OF CONSTRUCTION S	LIVICES		
mark da	ate c	description	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS 500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457		date 12/10/12		
1/3	/3/13	Addendum			scale AS NOTED		
2/4	/4/13	Structural Update	WIND P. MORESCO	project	drawn by BAS		
				J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD		
		L	TECHNICAL SCHOOL		drawing no.		
			NO. 21040 CENSED COLLINIA		S-115		
CAD no.			"minitus"	project no.			



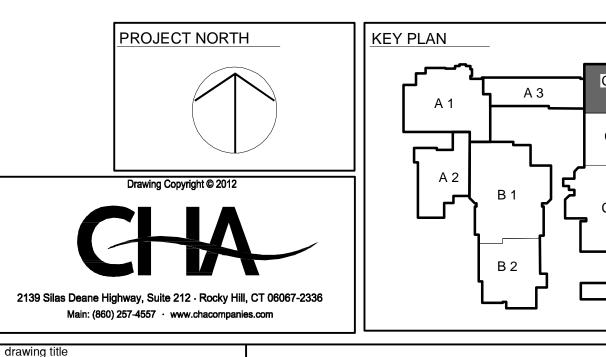


STRUCTURAL FOUNDATION & SLAB PLAN C1 AT ELEVATION = -1'-0''SCALE: 1/8'' = 1'-0''

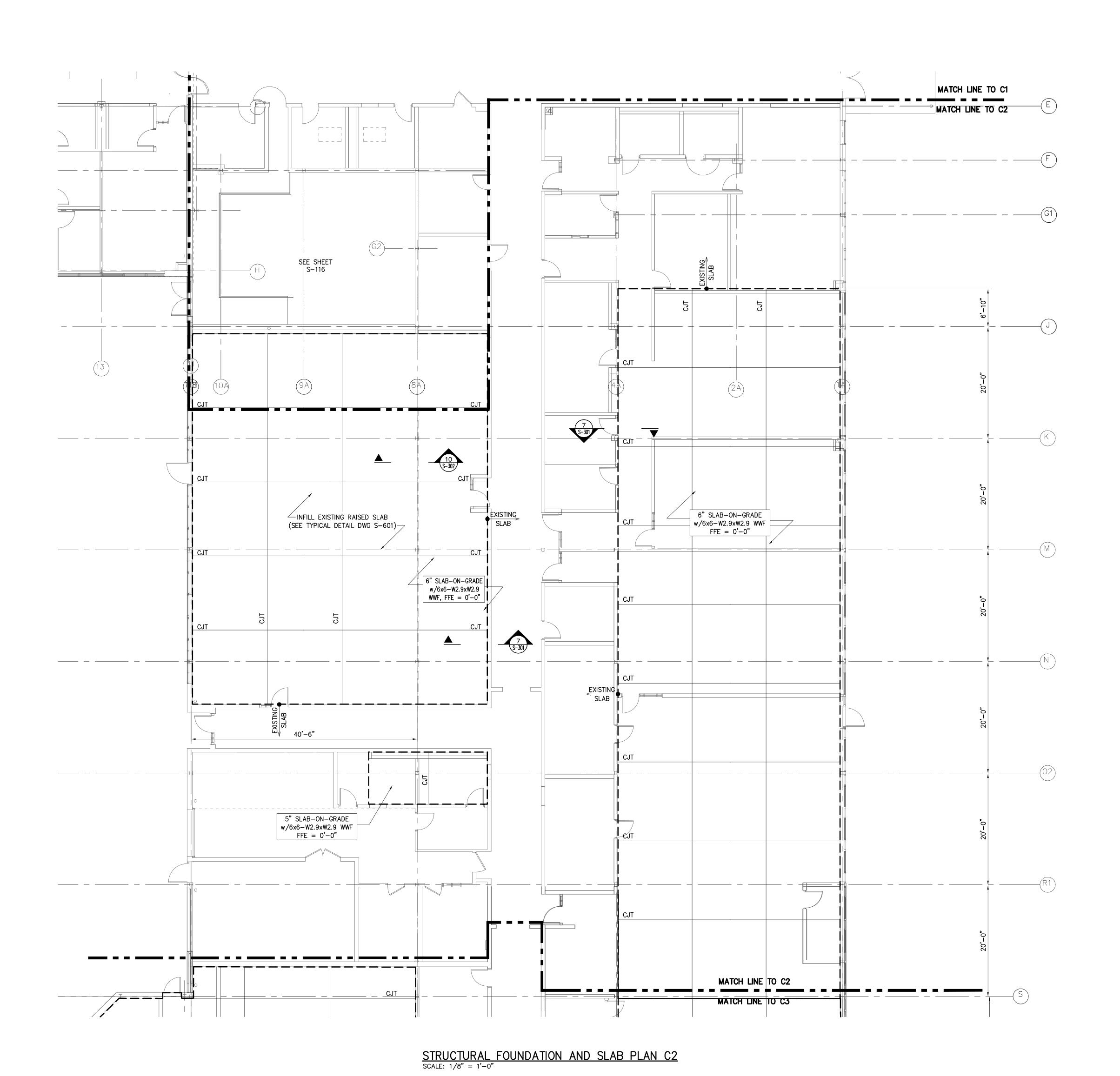
- 1. REFERENCE ELEVATION = 0'-0" = FFE.
- 2. = T/WALL OR T/PIER ELEV (± FFE).
- 3. $= T/FTG ELEV (\pm FFE).$
- 4. DOOR OPENING (SIZE NTS)
- 5. FOR EXACT DOOR LOCATIONS & ROUGH OPENING SIZES REFER TO ARCH DWGS.
- 6. COORDINATE WITH MECH, ELECTRICAL, CIVIL/SITE CONTRACTOR FOR EXACT LOCATIONS OF PENETRATIONS IN FOUNDATION WALL.
- 7. REFER TO DWG S-201 FOR FOOTING & PIER SCHEDULE.
- 8. FOR DIMENSIONS NOT SHOWN, REFER TO ARCH DWGS.
- 10. PROVIDE THICKENED SLAB UNDER ALL INTERIOR NON-LOAD BEARING PARTITIONS. REFER TO ARCH DWGS FOR ALL PARTITION LOCATIONS.

9. REFER TO CIVIL/ARCH DRAWINGS FOR CONCRETE PAD @ MANDOOR SIZE & LOCATION.

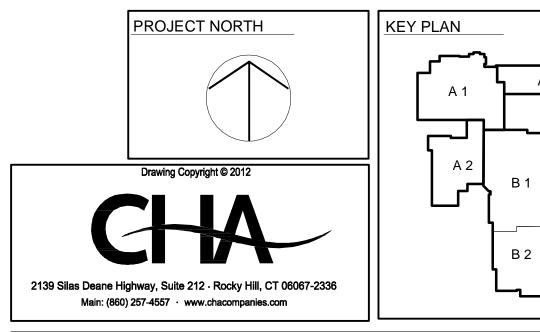
- 11. CJT DENOTES CONTROL JOINT.



drawing title STRUCTURAL FOUNDATION & SLAB PLAN C1 REVISIONS		PLAN C1	STATE OF CONNECTION STATE OF CONSTRUCTION S	
mark	date 1/3/13	description	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS 500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457	date 12/10/12 scale AS NOTED
	2/4/13	Structural Update	J.M. WRIGHT REGIONAL VOCATIONAL TECHNICAL SCHOOL	drawn by BAS approved by DJD drawing no.
CAD no.			unauthorized alteration or addition of this document is a violation of Applicable state and/or local Laws BI-RT-842	

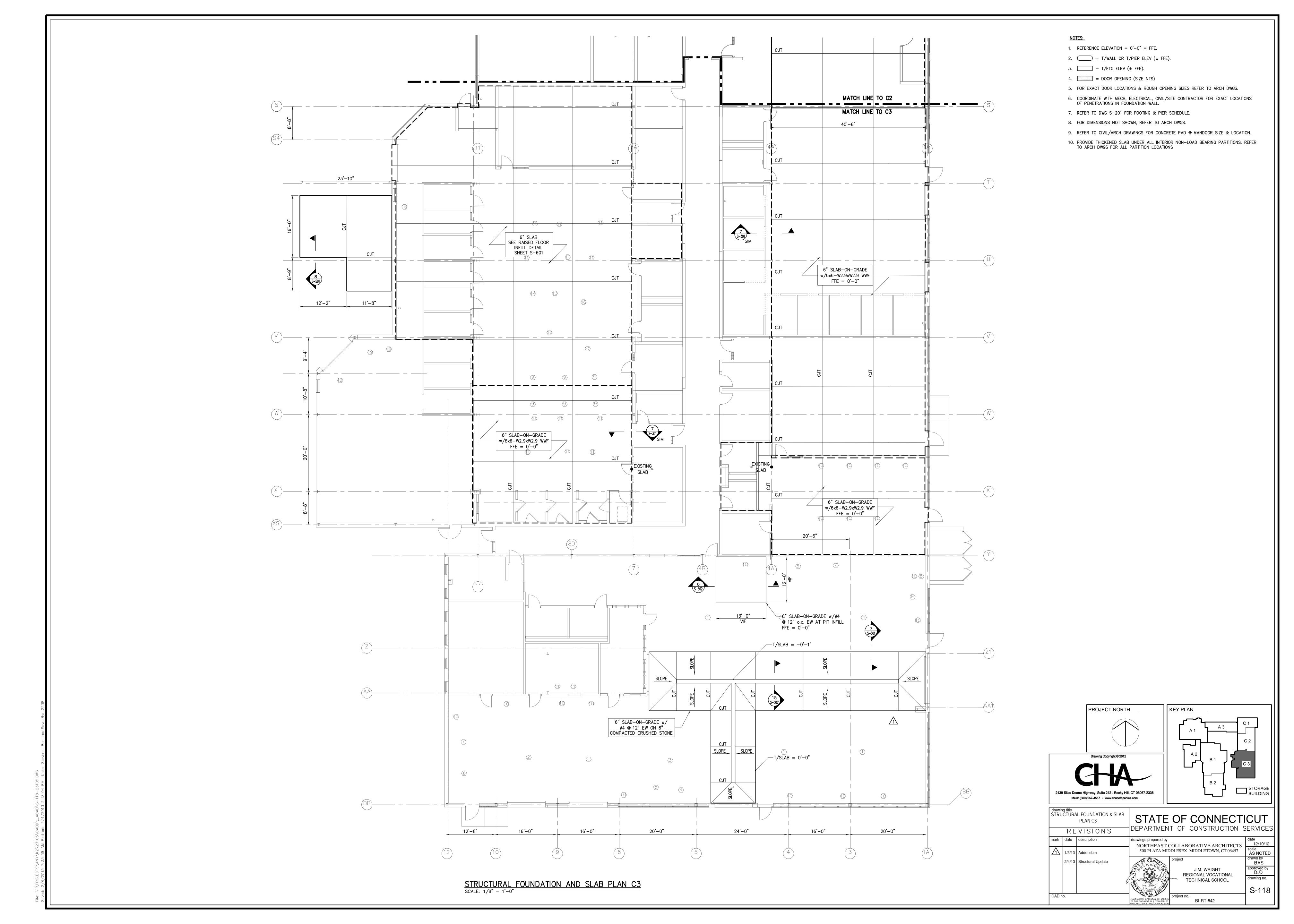


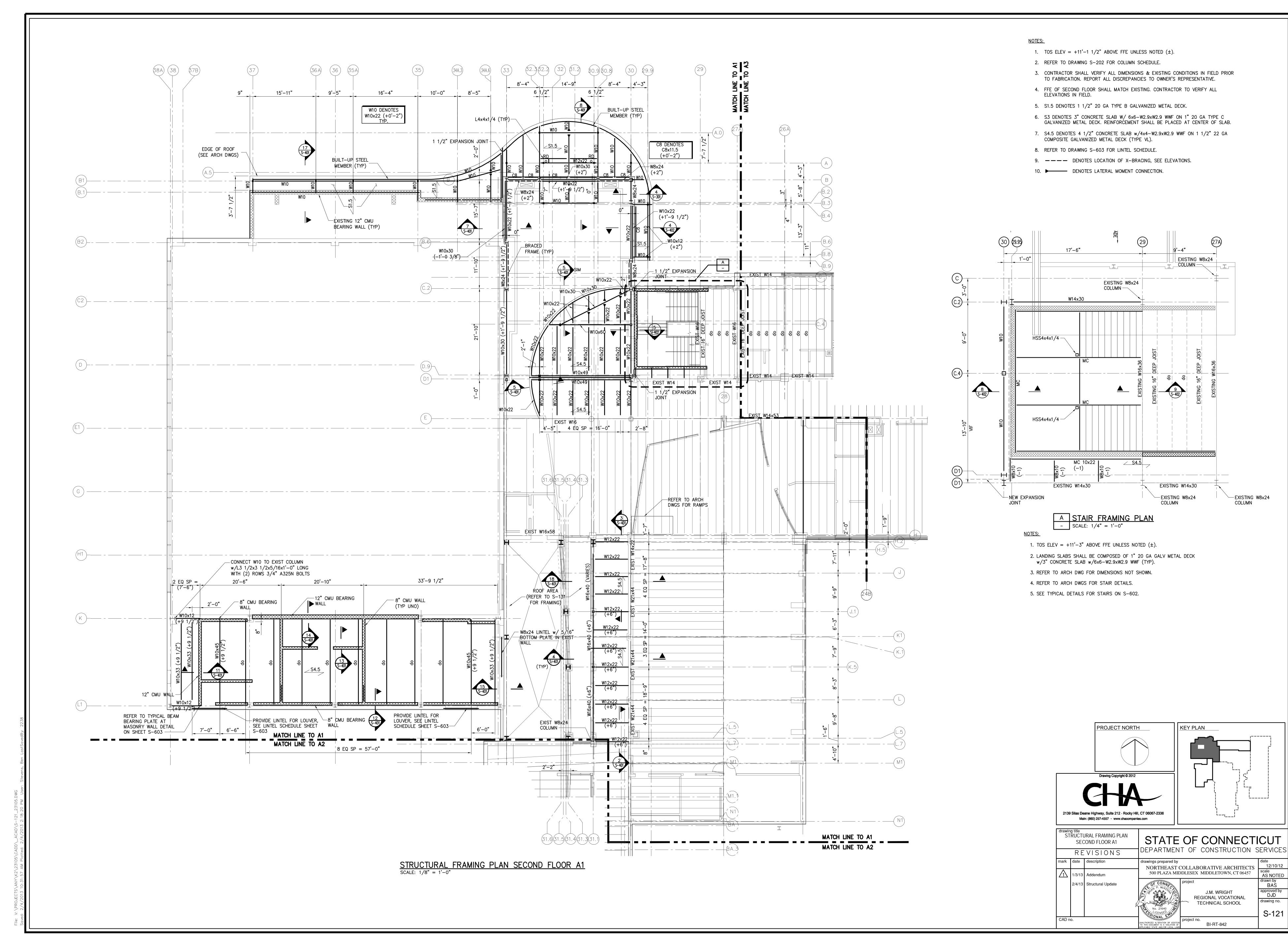
- 1. REFERENCE ELEVATION = 0'-0" = FFE.
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- 7. REFER TO DWG S-201 FOR FOOTING & PIER SCHEDULE.
- 8. FOR DIMENSIONS NOT SHOWN, REFER TO ARCH DWGS.
- 9. REFER TO CIVIL/ARCH DRAWINGS FOR CONCRETE PAD @ MANDOOR SIZE & LOCATION.
- 10. PROVIDE THICKENED SLAB UNDER ALL INTERIOR NON-LOAD BEARING PARTITIONS. REFER TO ARCH DWGS FOR ALL PARTITION LOCATIONS

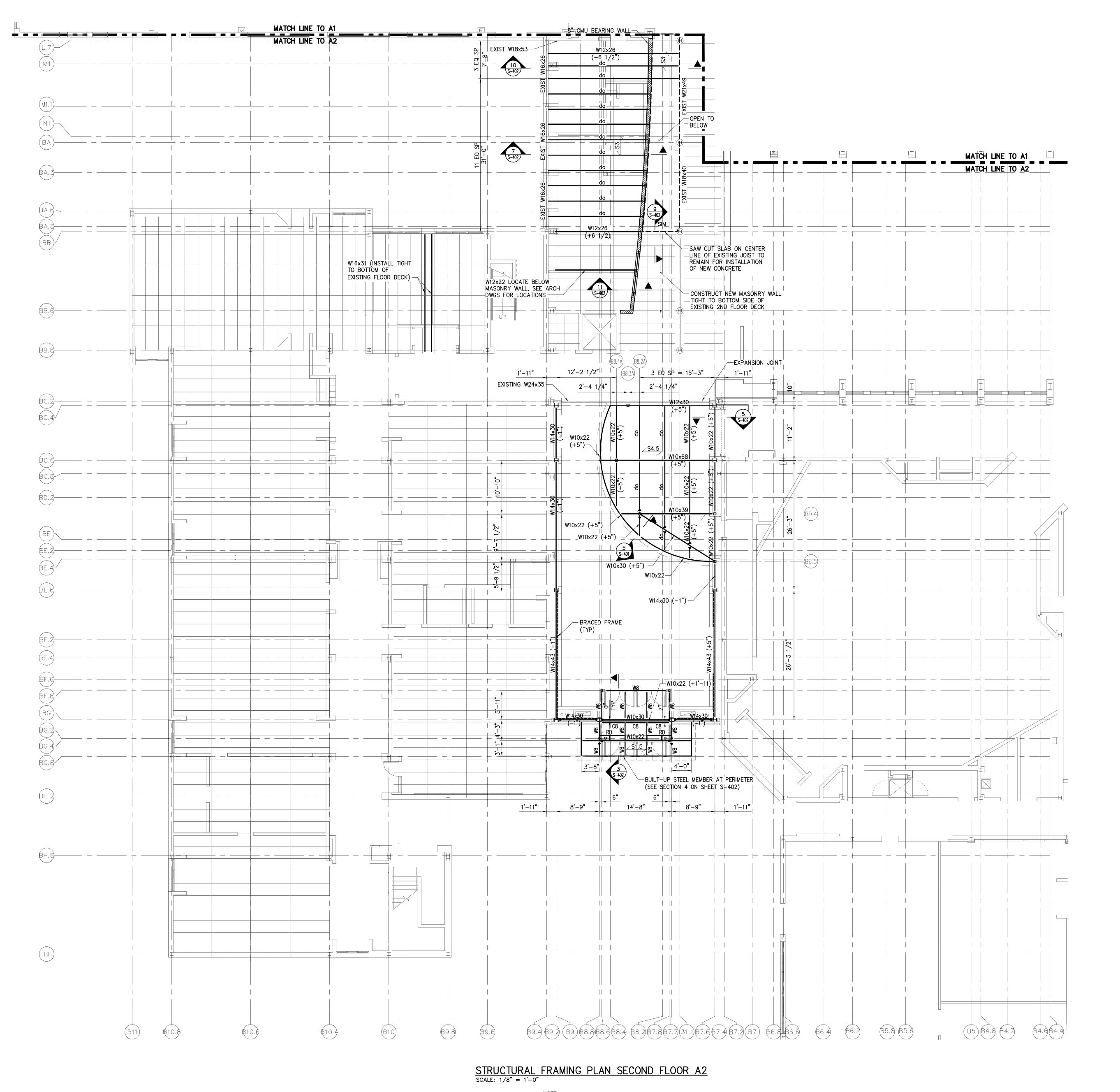


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drawing title STRUCTURAL FOUNDATION & SLAB PLAN C2			STATE OF CONNECTION STATE OF CONSTRUCTION S	
	RE	VISIONS	DEPARTMENT OF CONSTRUCTION S	'EK AICE?
mark	date	description	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS	date 12/10/12
$\overline{\Lambda}$	1/3/13	Addendum	500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457	scale AS NOTED

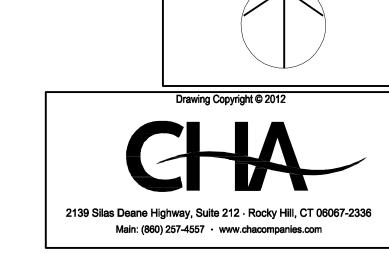
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mark	date	description	drawings prepared by	ו ומי	ABORATIVE ARCHITECTS	date 12/10/12
\triangle	1/3/13	Addendum		-	SEX MIDDLETOWN, CT 06457	scale AS NOTED
	2/4/13	Structural Update	OF CONNE	projec	ct	drawn by BAS
			The state of the s		J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD
		8		~	TECHNICAL SCHOOL	drawing no.
			No. 21640 /CENSED			S-117
CAD no	0.		UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS	projec	ct no. BI-RT-842	
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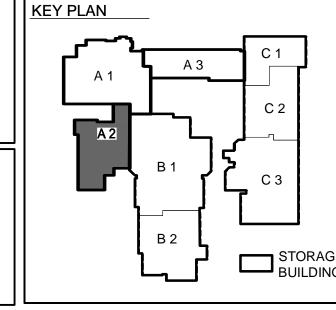




- 1. TOS ELEV = +11'-2 1/2" ABOVE FFE UNLESS NOTED (±).
- 2. REFER TO DRAWING S-202 FOR COLUMN SCHEDULE.
- 3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS & EXISTING CONDITIONS IN FIELD PRIOR TO FABRICATION. REPORT ALL DISCREPANCIES TO OWNER'S REPRESENTATIVE.
- 4. FFE OF SECOND FLOOR SHALL MATCH EXISTING. CONTRACTOR TO VERIFY ALL ELEVATIONS
- 5. S1.5 DENOTES 1 1/2" 20 GA TYPE B GALVANIZED METAL DECK.
- 6. S3 DENOTES 3" CONCRETE SLAB w/6x6 W2.9xW2.9 ON 0.6" 22 GA TYPE C GALVANIZED METAL DECK. REINFORCEMENT SHALL BE PLACED AT CENTER OF SLAB.
- 7. S4.5 DENOTES 4 1/2" CONCRETE SLAB W/ 4x4-W2.9xW2.9 WWF ON 1 1/2" 22 GA COMPOSITE GALVANIZED METAL DECK (TYPE VL).
- 8. REFER TO DRAWING S-603 FOR LINTEL SCHEDULE.
- 9. ——— DENOTES LOCATION OF X-BRACING, SEE ELEVATIONS.
- 10. DENOTES LATERAL MOMENT CONNECTION.
- 11. W8 DENOTES W8x10 UNLESS NOTED OTHERWISE



PROJECT NORTH



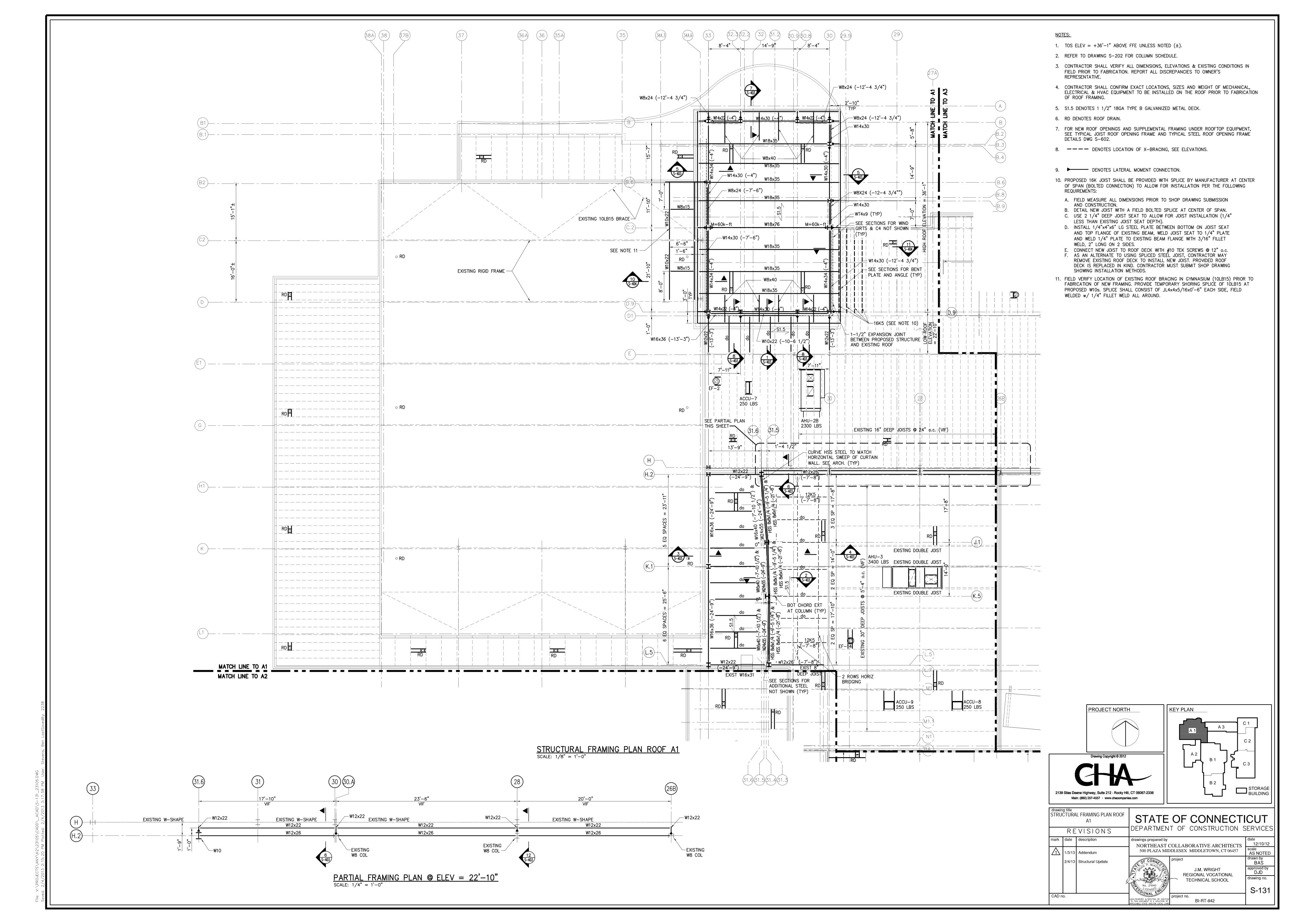
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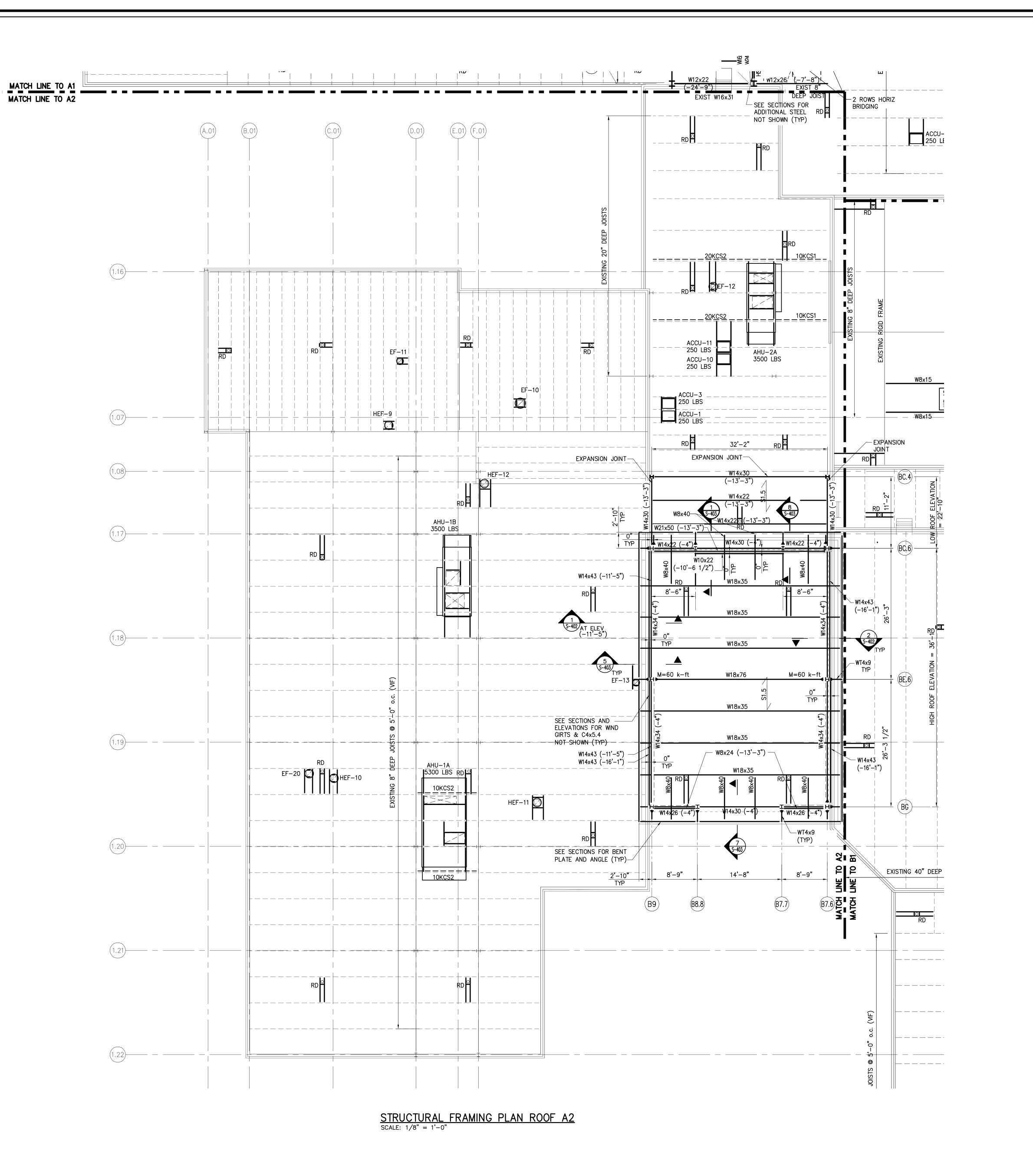
S-122

drawing title STRUCTURAL FRAMING PLAN SECOND FLOOR A2			STATE OF CONNECT	
	RE	VISIONS	DEPARTMENT OF CONSTRUCTION S	SER VICES
mark	date	description	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS	date 12/10/12
$\overline{\Lambda}$	1/3/13	Addendum	500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457	scale AS NOTED
	2/4/13	Structural Update	project	drawn by BAS
			J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD
			TECHNICAL SCHOOL	drawing no.

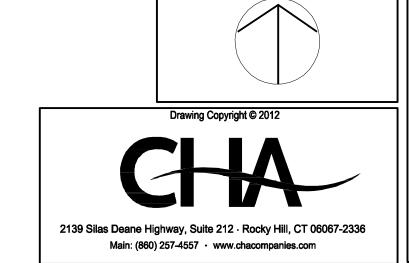
NOTE:

TOS ELEV = $11'-2 \ 1/2"$.

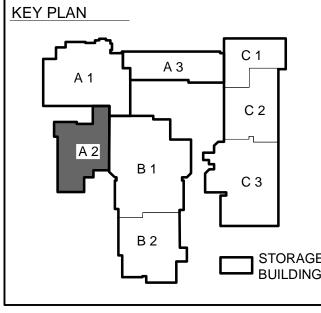




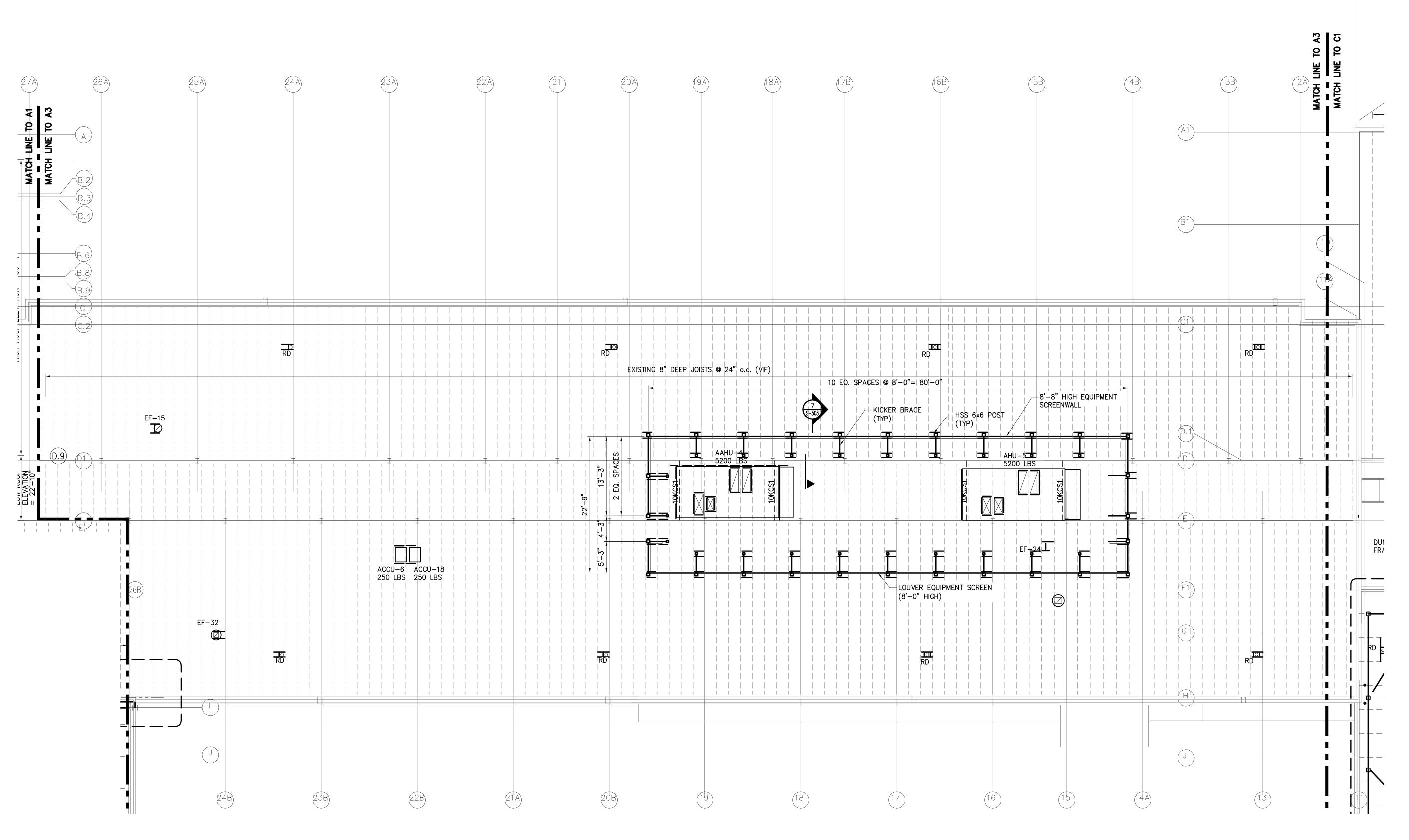
- 1. TOS ELEV = +36'-1" ABOVE FFE UNLESS NOTED (\pm).
- 2. REFER TO DRAWING S-202 FOR COLUMN SCHEDULE.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS & EXISTING CONDITIONS IN FIELD PRIOR TO FABRICATION. REPORT ALL DISCREPANCIES TO OWNER'S REPRESENTATIVE.
- 4. CONTRACTOR SHALL CONFIRM EXACT LOCATIONS, SIZES AND WEIGHT OF MECHANICAL, ELECTRICAL & HVAC EQUIPMENT TO BE INSTALLED ON THE ROOF PRIOR TO FABRICATION OF ROOF FRAMING.
- 5. S1.5 DENOTES 1 1/2" 18 GA TYPE B GALVANIZED METAL DECK.
- 6. RD DENOTES ROOF DRAIN.
- 7. FOR NEW ROOF OPENINGS AND SUPPLEMENTAL FRAMING UNDER ROOFTOP EQUIPMENT, SEE TYPICAL JOIST ROOF OPENING FRAME AND TYPICAL STEEL ROOF OPENING FRAME DETAILS DWG S-602.
- 8. --- DENOTES LOCATION OF X-BRACING, SEE ELEVATIONS.
- 9. DENOTES LATERAL MOMENT CONNECTION.
- 10. ALL NEW JOISTS SHALL BE FIELD—SPLICED PER MANUFACTURER'S BOLTED CONNECTION TO ENSURE FULL CAPACITY OF JOIST IS ACHIEVED. SEE NOTES ON S-131 FOR ADDITIONAL REQUIREMENTS.



PROJECT NORTH



drawing title STRUCTURAL FRAMING PLAN ROOF A2			OF CONNECTI		
	RE	VISIONS	DEPARIMEN	T OF CONSTRUCTION S	SERVICES
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	1/3/13	Addendum		DLESEX MIDDLETOWN, CT 06457	scale AS NOTED
	2/4/13	Structural Update	JIE OF CONNE	project	drawn by BAS
				J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD
		&	T 3 No 21640	TECHNICAL SCHOOL	drawing no.
0.45			ILIOS (ICENSED ICILITATION ON AL ELITITION ON AL		S-132
CAD no.		UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS	project no. BI-RT-842		



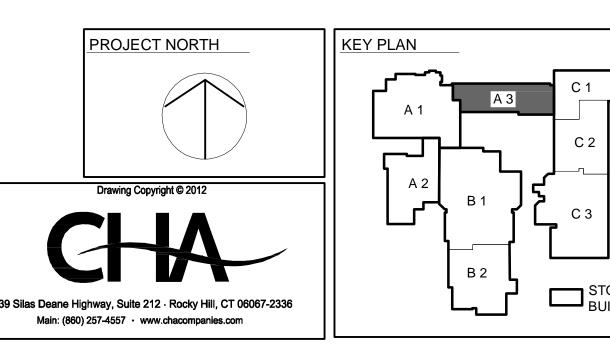
STRUCTURAL FRAMING PLAN ROOF A3 SCALE: 1/8" = 1'-0"

NOTES:

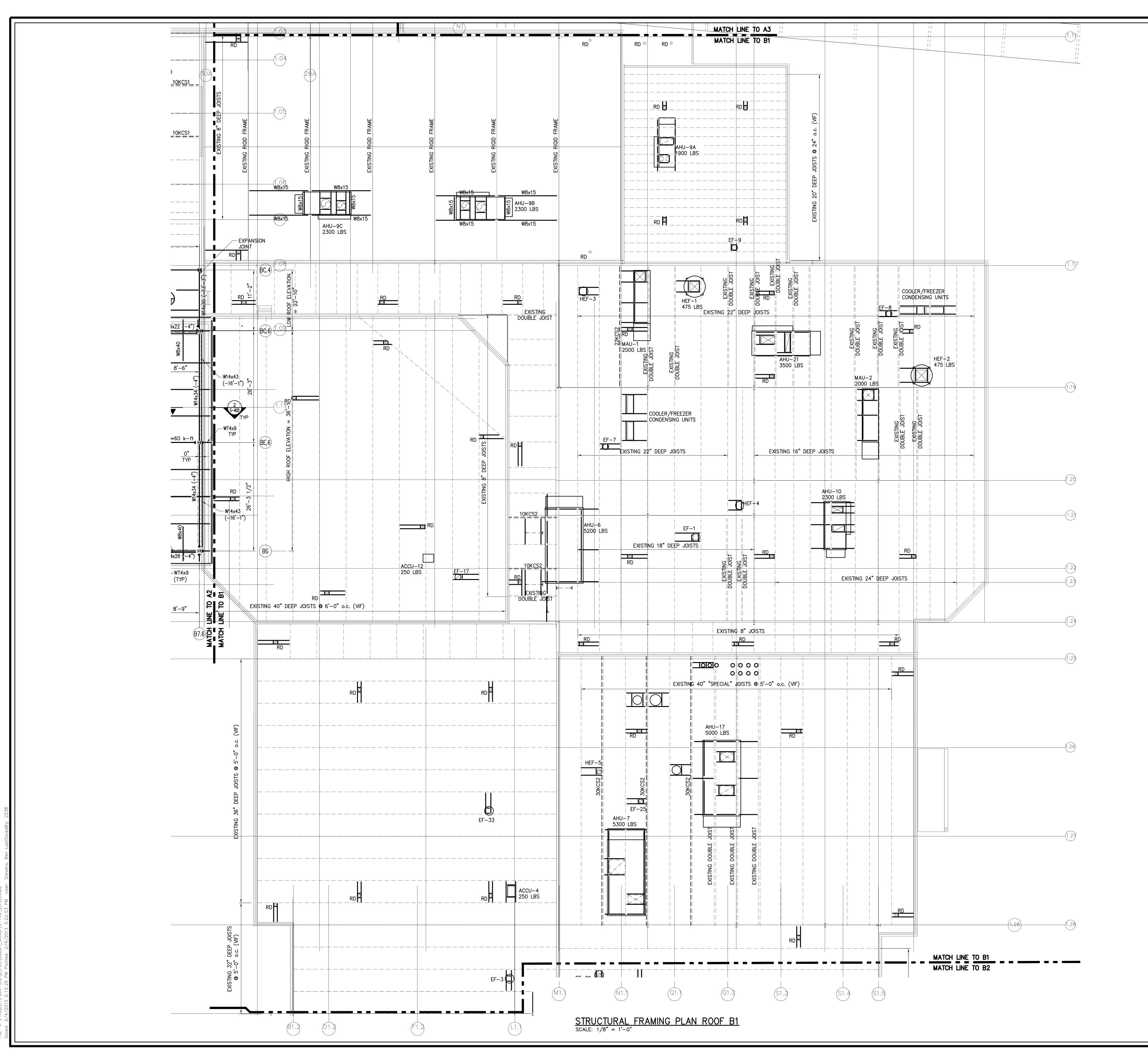
- 1. CONTRACTOR TO INSTALL SCREENWALL POSTS DIRECTLY OVER EXISTING STEEL JOISTS BELOW.
- 2. SPACING AND DIMENSION OF EXISTING ROOF FRAMING MEMBERS TO BE FIELD VERIFIED PRIOR TO THE INSTALLATION OF THE SCREEN WALL POSTS AND BASE PLATES.



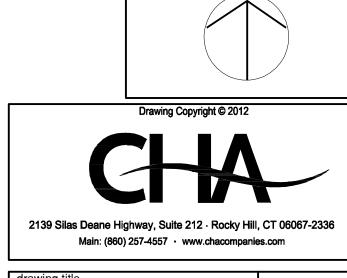
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS & EXISTING CONDITIONS IN FIELD PRIOR TO FABRICATION. REPORT ALL DISCREPANCIES TO OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL CONFIRM EXACT LOCATIONS, SIZES AND WEIGHT OF MECHANICAL, ELECTRICAL & HVAC EQUIPMENT TO BE INSTALLED ON THE ROOF PRIOR TO FABRICATION OF ROOF FRAMING.
- 3. NEW ROOF DECK SHALL BE 1 1/2" 18GA METAL ROOF DECK.
- 4. RD DENOTES ROOF DRAIN.
- 5. FOR NEW ROOF OPENINGS AND SUPPLEMENTAL FRAMING UNDER ROOFTOP EQUIPMENT, SEE TYPICAL JOIST ROOF OPENING FRAMING AND TYPICAL STEEL ROOF OPENING FRAME DETAILS DWG S-602.
- ALL NEW JOISTS SHALL BE FIELD—SPLICED PER MANUFACTURER'S BOLTED CONNECTION
 TO ENSURE FULL CAPACITY OF JOIST IS ACHIEVED. SEE NOTES ON S—131 FOR
 ADDITIONAL REQUIREMENTS.



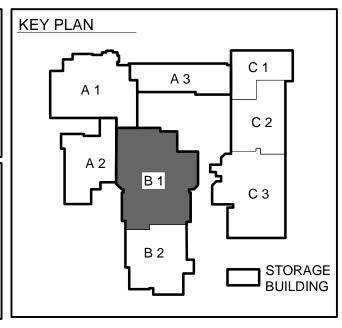
	Main: (860) 257-4557 · www.chacompanies.com							
	drawing title STRUCTURAL FRAMING PLAN ROOF A3				OF CONNECTION S			
١	REVISIONS			DEL ARTIMEN	TO CONSTRUCTION S	DEIX VICES		
	mark	date	description	drawings prepared by	COLLABORATIVE ARCHITECTS	date 12/10/12		
	$\boxed{\upphi}$	1/3/13	Addendum	500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457		scale AS NOTED		
		2/4/13	Structural Update	OF CONVENIE	project	drawn by BAS		
١				STAN TO STAN THE	.I M WRIGHT	approved by		



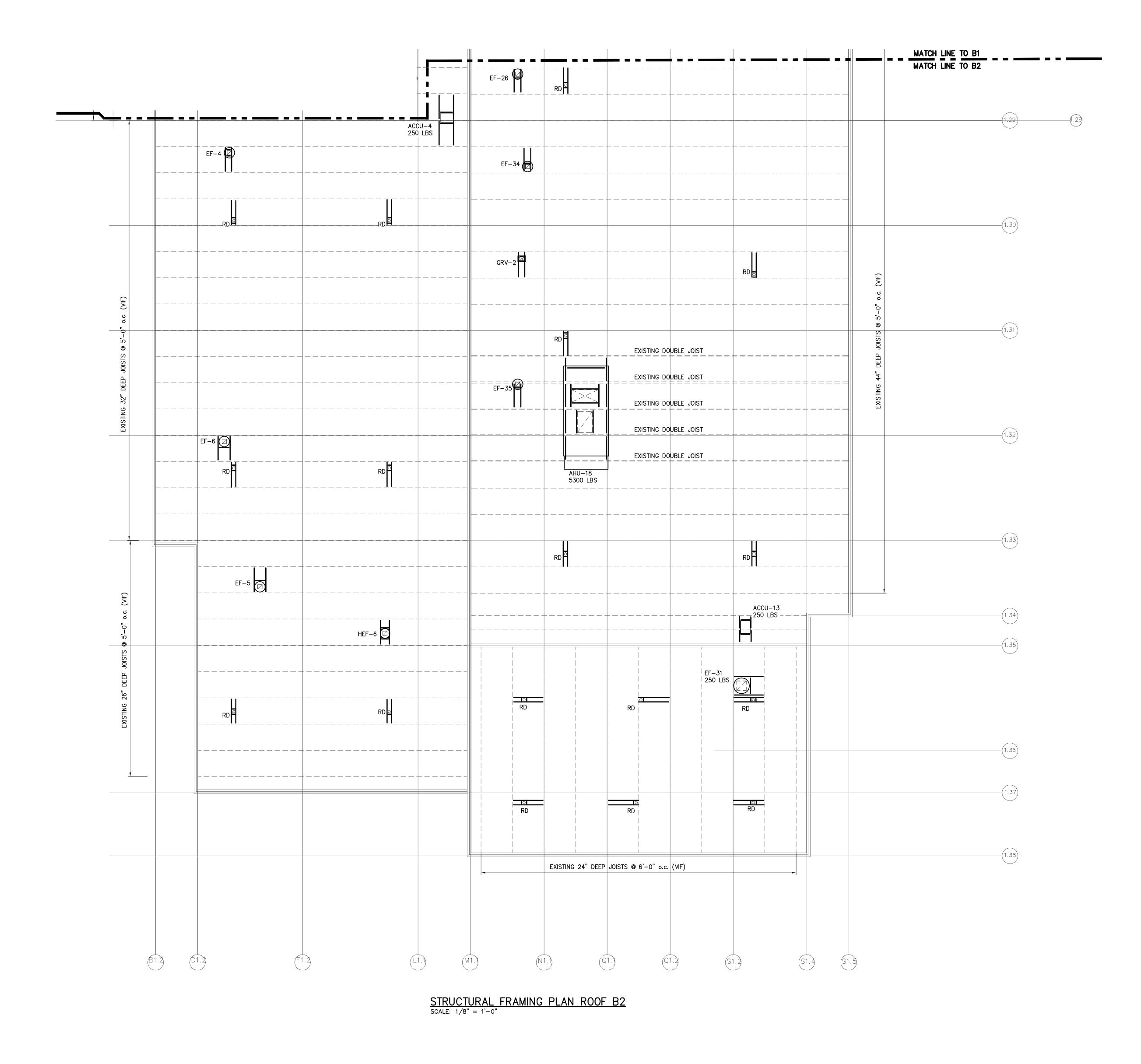
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- 3. NEW ROOF DECK SHALL BE 1 1/2" 18GA METAL ROOF DECK.
- 4. RD DENOTES ROOF DRAIN.
- 5. FOR NEW ROOF OPENINGS AND SUPPLEMENTAL FRAMING UNDER ROOFTOP EQUIPMENT, SEE TYPICAL JOIST ROOF OPENING FRAME AND TYPICAL STEEL ROOF OPENING FRAME DETAILS DWG S-602.
- 6. ALL NEW JOISTS SHALL BE SPLICED IN FIELD BY MANUFACTURER'S STANDARD BOLTED SPLICE TO ENSURE FULL CAPACITY IS ACHIEVED. SEE NOTES ON S-131 FOR ADDITIONAL REQUIREMENTS.



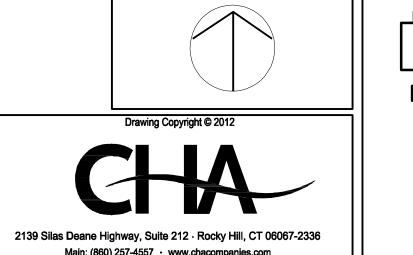
PROJECT NORTH



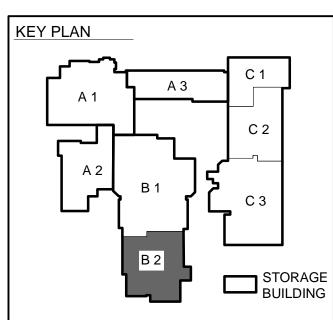
drawing title STRUCTURAL FRAMING PLAN ROOF B1			STATE OF CONNECT DEPARTMENT OF CONSTRUCTION	
	RE	VISIONS	DEPARTMENT OF CONSTRUCTION	SER VICES
mark	date	description	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS	date 12/10/12
\triangle	1/3/13	Addendum	500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457	scale AS NOTED
	2/4/13	Structural Update	project	drawn by BAS
			J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD
		&	TECHNICAL SCHOOL	drawing no.
			NO. 21040 (CENSE) (ONA)	S-134
CAD no.			project no. UNAUTHORIZED ALTERATION OR ADDITION TO THIS DECUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS BI-RT-842	



- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS & EXISTING CONDITIONS IN FIELD PRIOR TO FABRICATION. REPORT ALL DISCREPANCIES TO OWNER'S REPRESENTATIVE.
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- 3. NEW ROOF DECK SHALL BE 1 1/2" 18GA METAL ROOF DECK.
- 4. RD DENOTES ROOF DRAIN. SEE TYPICAL JOIST ROOF OPENING FRAME AND TYPICAL STEEL ROOF OPENING FRAME DETAILS DWG S-602.
- 5. ALL NEW JOISTS SHALL BE SPLICED IN FIELD BY MANUFACTURER'S STANDARD BOLTED SPLICE TO ENSURE FULL CAPACITY IS ACHIEVED. SEE NOTES ON S-131 FOR ADDITIONAL REQUIREMENTS.



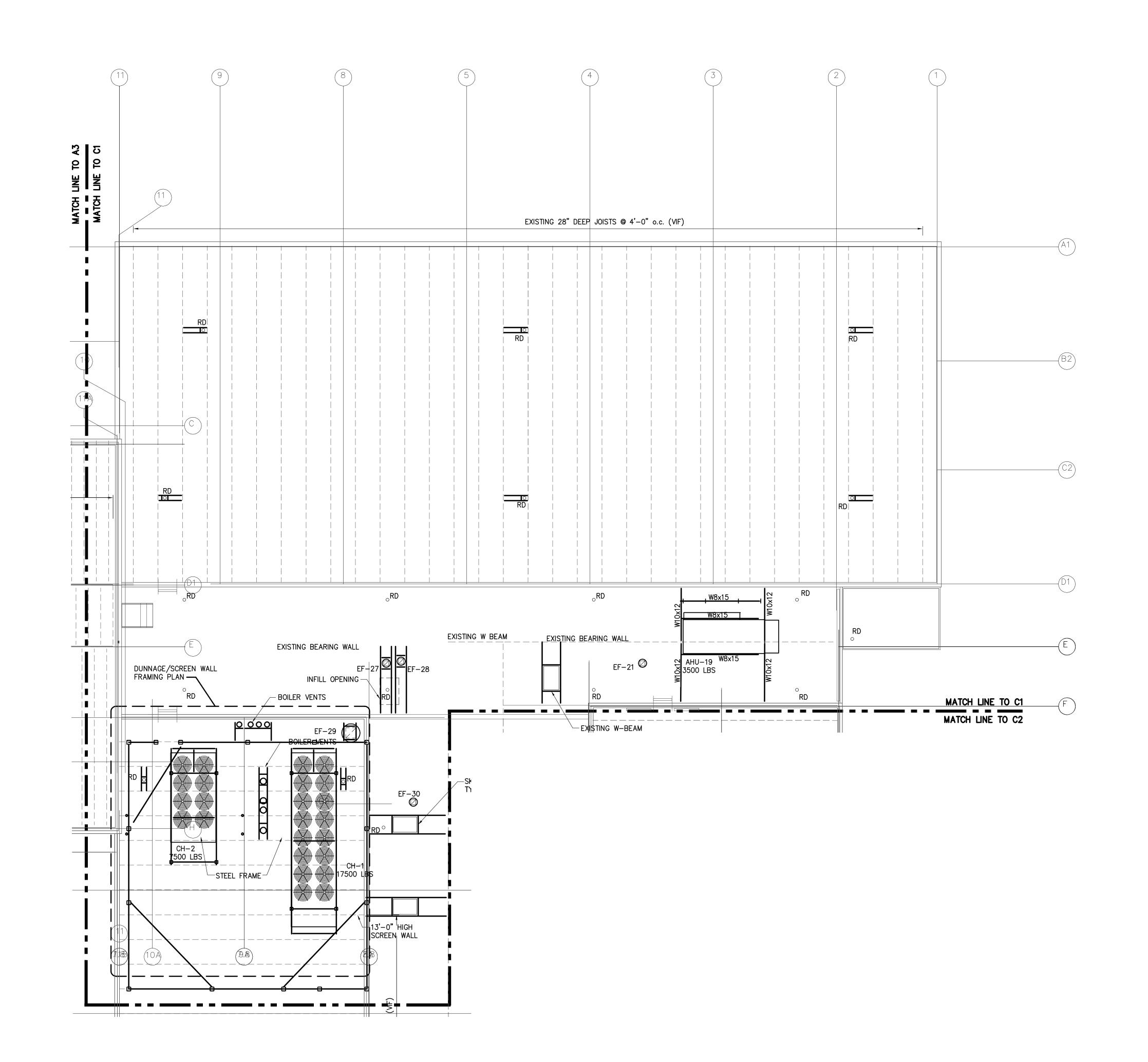
PROJECT NORTH

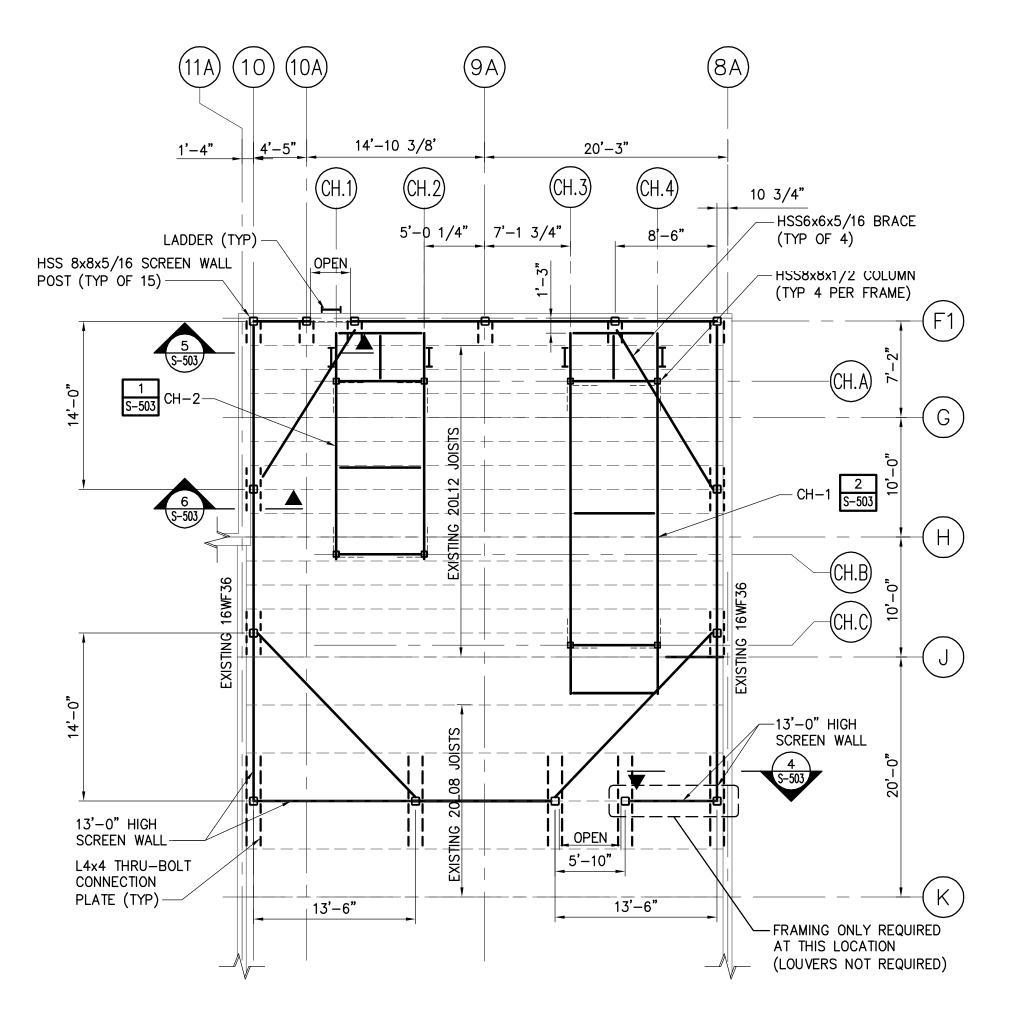


STRUČTURAL FRAMING PLAN ROOF B2			STATE OF CONNECTION	
	RE	VISIONS	DEPARTMENT OF CONSTRUCTION S	ERVICES
mark	date	description	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS	date 12/10/12
Λ	1/3/13	Addendum	500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457	scale AS NOTED
	2/4/13	Structural Update	project	drawn by BAS
			J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD
		8	TECHNICAL SCHOOL	drawing no.
			CENSED ONAL ENTITY	S-135
CAD no.			UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS	



- 1. TOS ELEV = +15'-2" ABOVE FFE TO THE UNDERSIDE OF EXISTING METAL DECK AND +20'-11" ABOVE FFE TO T/STEEL ABOVE ROOF UNLESS NOTED (\pm).
- 2. REFER TO DRAWING S-202 FOR COLUMN SCHEDULE.
- 3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS & EXISTING CONDITIONS IN FIELD PRIOR TO FABRICATION. REPORT ALL DISCREPANCIES TO OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL CONFIRM EXACT LOCATIONS, SIZES AND WEIGHT OF MECHANICAL, ELECTRICAL & HVAC EQUIPMENT TO BE INSTALLED ON THE ROOF PRIOR TO FABRICATION.
- 5. NEW ROOF DECK SHALL BE 1 1/2" 18GA METAL ROOF DECK.
- 6. RD DENOTES ROOF DRAIN.
- 7. FOR NEW ROOF OPENINGS AND SUPPLEMENTAL FRAMING UNDER ROOFTOP EQUIPMENT, SEE TYPICAL JOIST ROOF OPENING FRAME AND TYPICAL STEEL ROOF OPENING FRAME DETAILS DWG S-602.

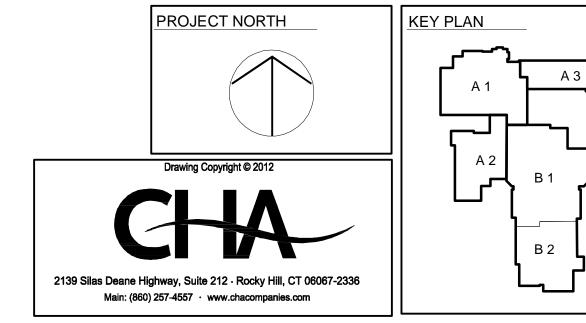




DUNNAGE\SCREEN WALL FRAMING PLAN
SCALE: 1/8" = 1'-0"

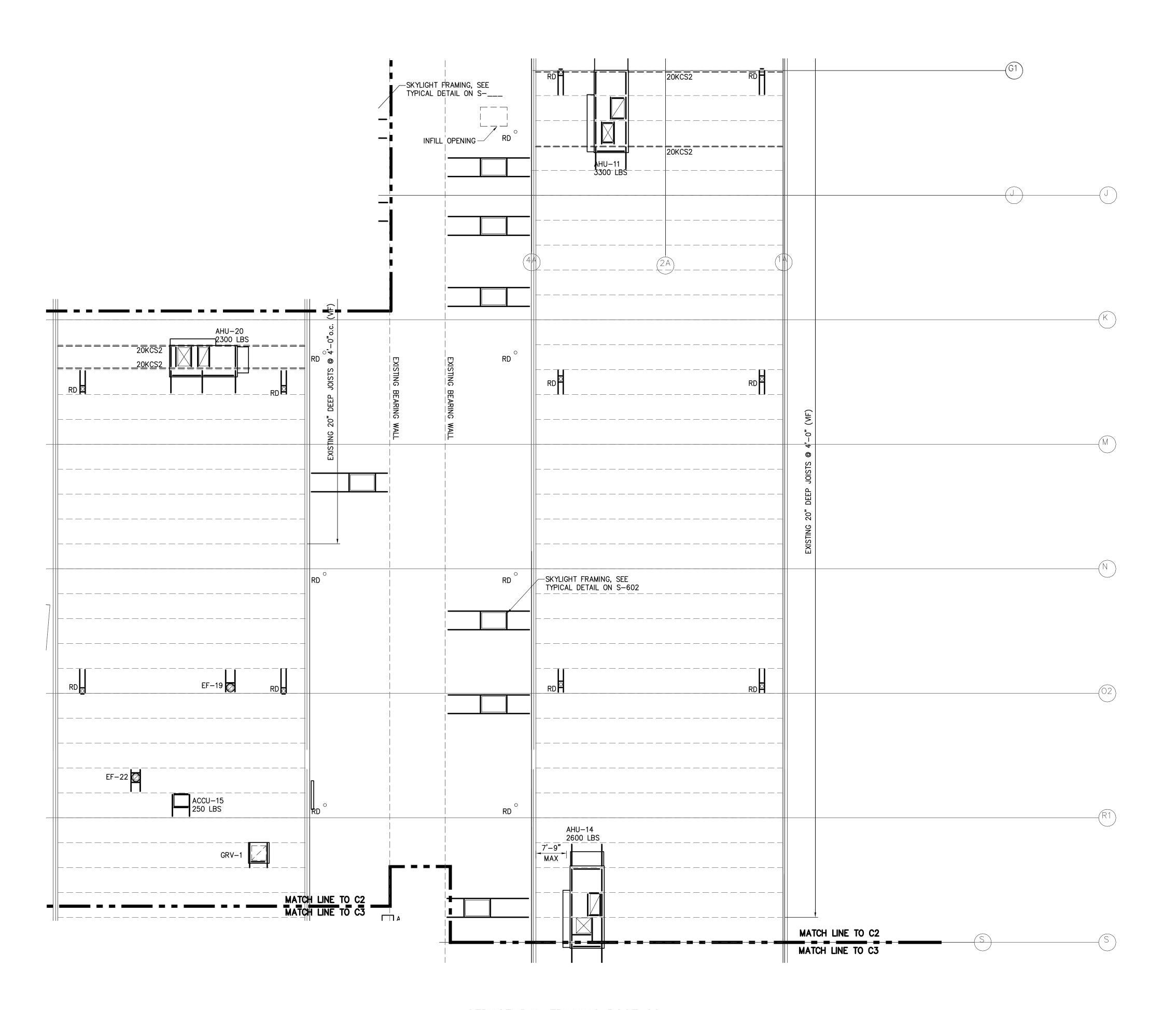
SCALE: 1/8

SEE DWG S-503 FOR SCREEN WALL FRAMING MEMBER SIZES, LOCATIONS, AND DETAILS.



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drawin STRU	g title CTURA	L FRAMING PLAN ROOF C1	STATE OF CONNECT				
	RE	VISIONS	DEPARTMENT OF CONSTRUCTION	SERVICES			
mark	date	description	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS	date 12/10/12			
A 1/0/40 Add on them			500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457				

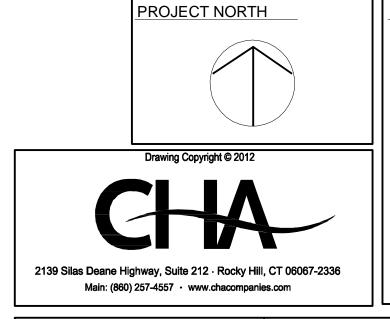
STRUCTURAL FRAMING PLAN ROOF C1
SCALE: 1/8" = 1'-0"

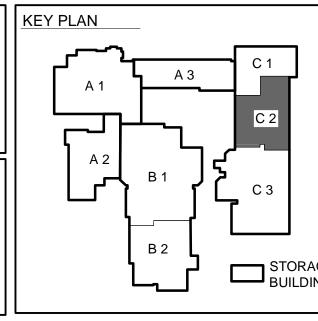


STRUCTURAL FRAMING ROOF C2

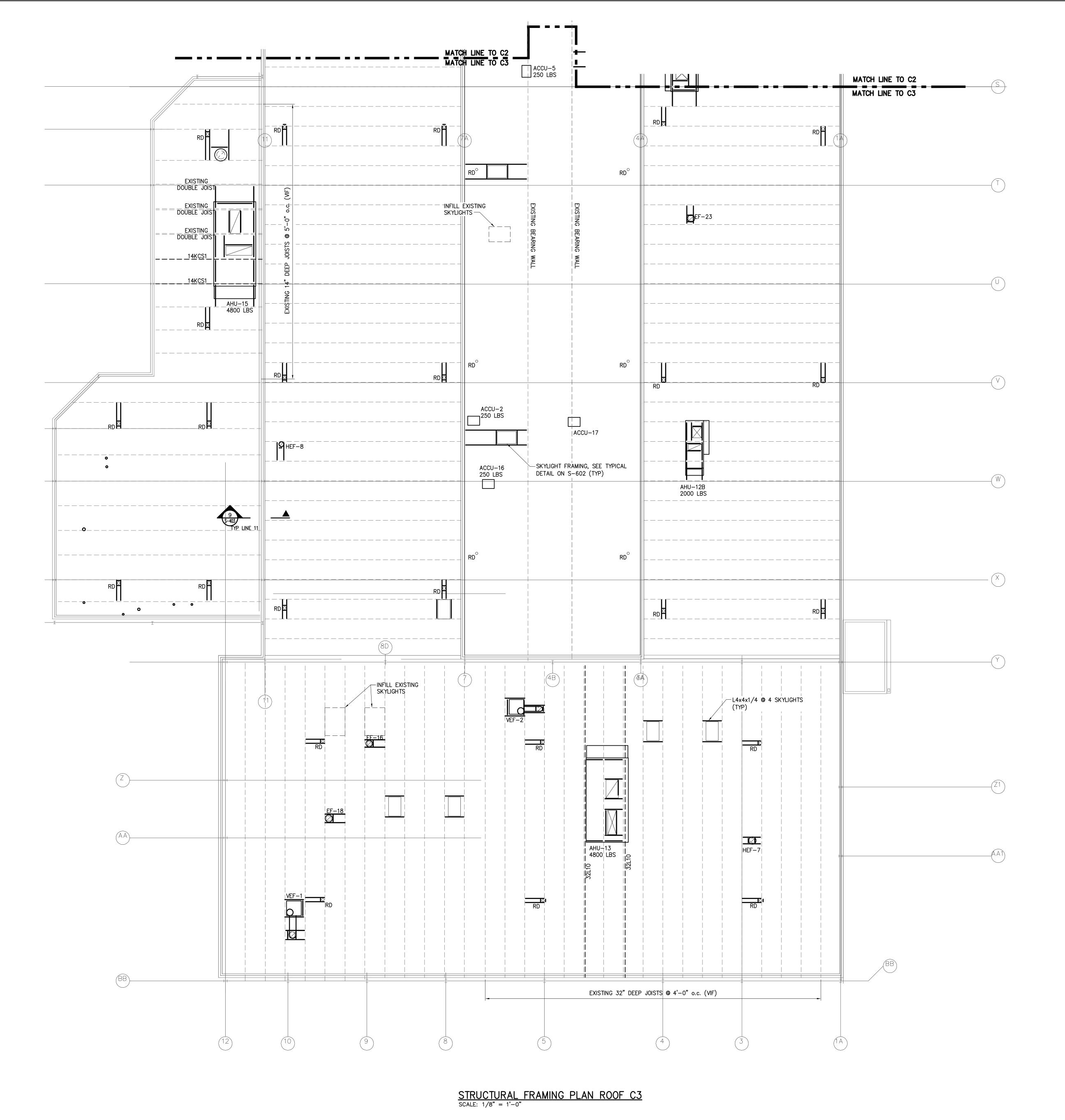
SCALE: 1/8" = 1'-0"

- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS & EXISTING CONDITIONS IN FIELD PRIOR TO FABRICATION. REPORT ALL DISCREPANCIES TO OWNER'S REPRESENTATIVE.
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- 3. NEW ROOF DECK SHALL BE 1 1/2" 18GA METAL ROOF DECK.
- 4. RD DENOTES ROOF DRAIN.
- 5. FOR NEW ROOF OPENINGS AND SUPPLEMENTAL FRAMING UNDER ROOFTOP EQUIPMENT, SEE TYPICAL JOIST ROOF OPENING FRAME AND TYPICAL STEEL ROOF OPENING FRAME DETAILS DWG S-602.
- 6. ALL NEW JOISTS SHALL BE FIELD—SPLICED PER MANUFACTURER'S BOLTED CONNECTION TO ENSURE FULL CAPACITY OF JOIST IS ACHIEVED.

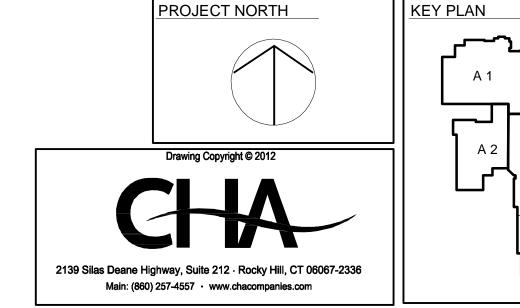


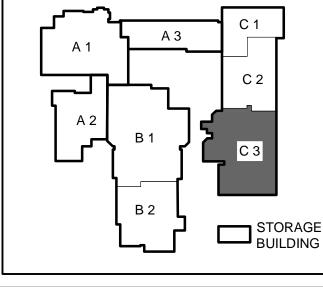


drawing STRU	drawing title STRUCTURAL FRAMING PLAN ROOF C2 REVISIONS		STATE OF CO	
mark 1	1/3/13 2/4/13	Addendum Structural Update	REGIONAL	00010
CAD n	CAD no.		UNAUTHORIZED ALTERATION OR ADDITION TO APPLICABLE STATE AND/OR LOCAL LAWS	Γ-842

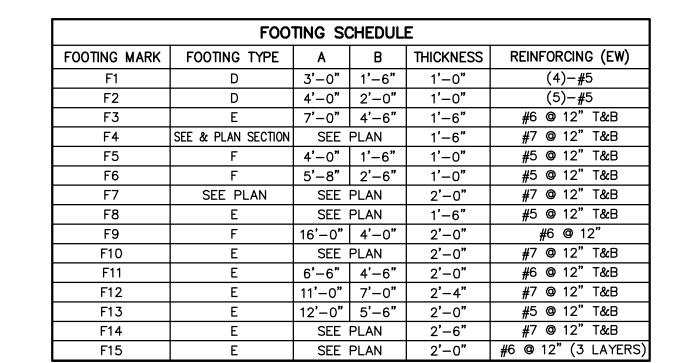


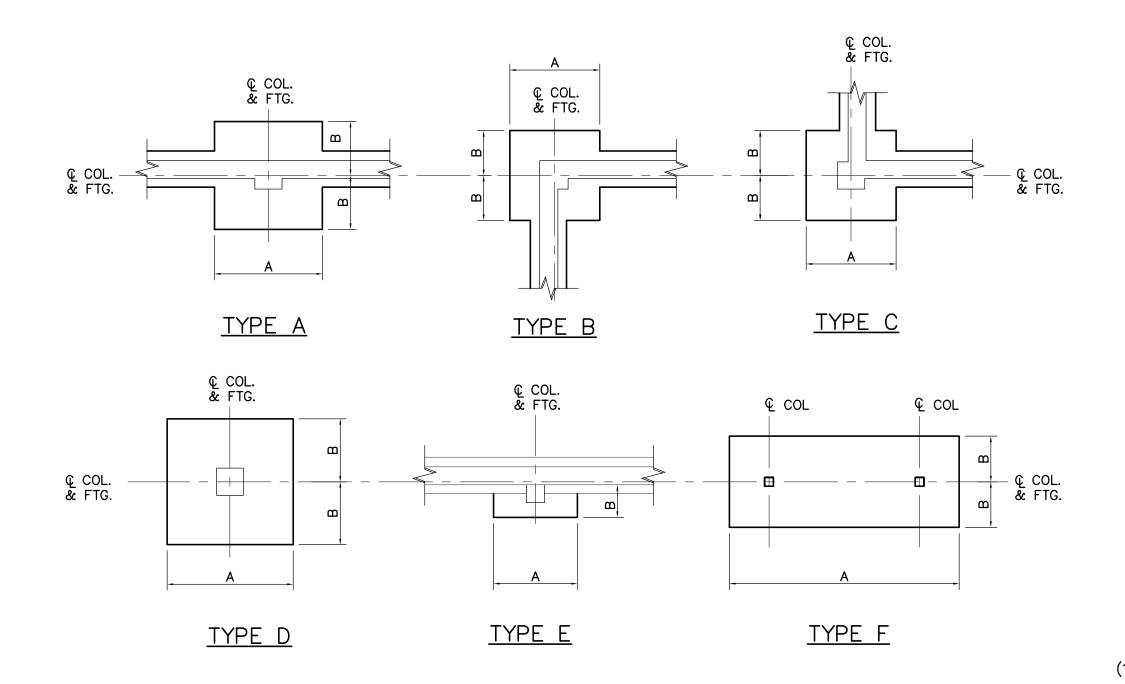
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS & EXISTING CONDITIONS IN FIELD PRIOR TO FABRICATION. REPORT ALL DISCREPANCIES TO OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL CONFIRM EXACT LOCATIONS, SIZES AND WEIGHT OF MECHANICAL, ELECTRICAL & HVAC EQUIPMENT TO BE INSTALLED ON THE ROOF PRIOR TO FABRICATION OF ROOF FRAMING.
 - 3. NEW ROOF DECK SHALL BE 1 1/2" 18GA METAL ROOF DECK.
 - 4. RD DENOTES ROOF DRAIN.
 - 5. FOR NEW ROOF OPENINGS AND SUPPLEMENTAL FRAMING UNDER ROOFTOP EQUIPMENT, SEE TYPICAL JOIST ROOF OPENING FRAME AND TYPICAL STEEL ROOF OPENING FRAME DETAILS DWG S-602.
 - 6. ALL NEW JOISTS SHALL BE FIELD—SPLICED PER MANUFACTURER'S BOLTED CONNECTION TO ENSURE FULL CAPACITY OF JOIST IS ACHIEVED..

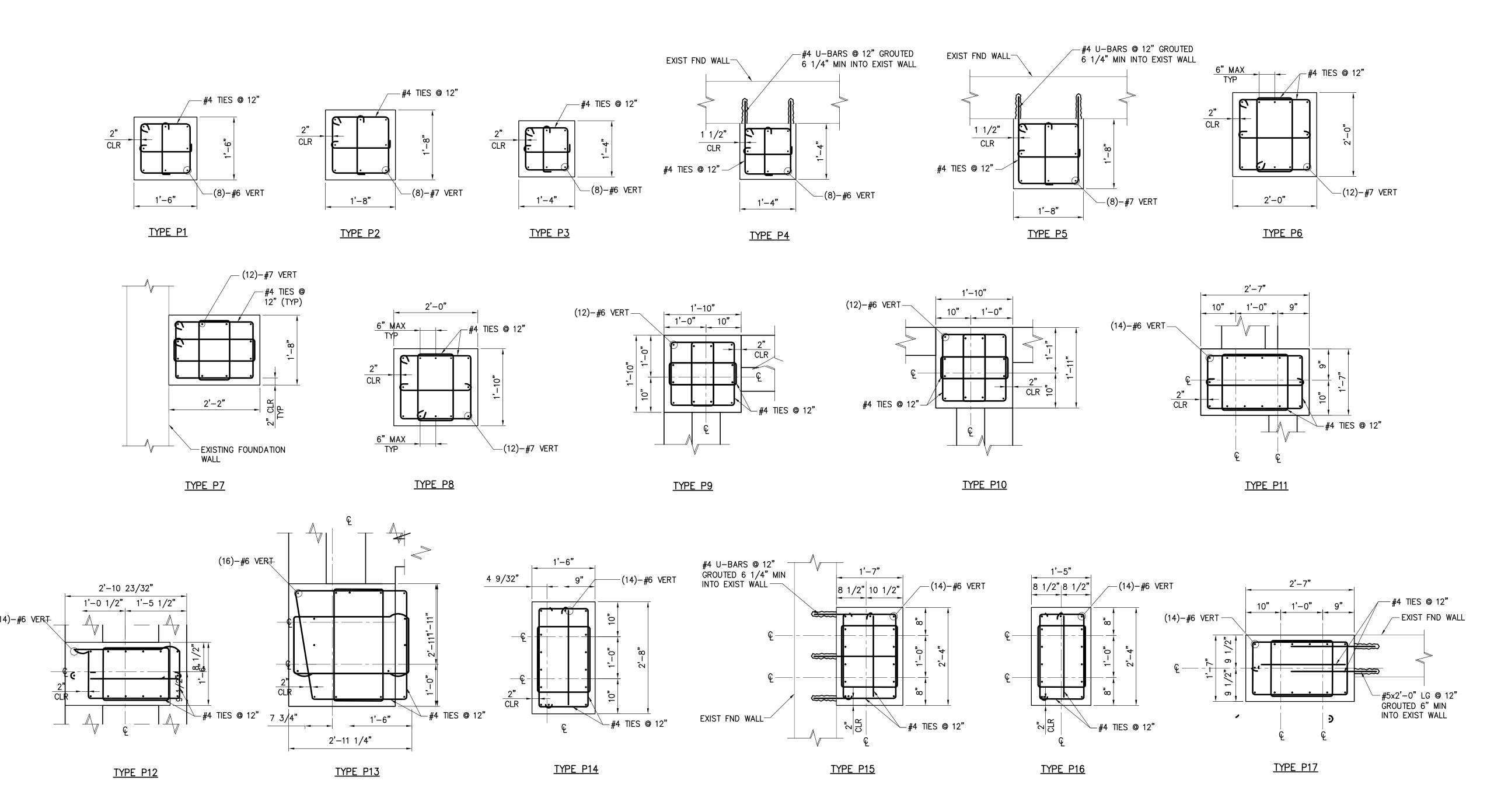




STRUCTURAL FRAMING PLAN ROOF C3			OF CONNECTION S		
	RE	VISIONS	DEPARTMEN	TOF CONSTRUCTION S	SER VICES
mark	date	description	drawings prepared by NORTHEAST (COLLABORATIVE ARCHITECTS	date 12/10/12
\triangle	1/3/13	Addendum	500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457		scale AS NOTED
	2/4/13	Structural Update	THING CONVIN	project	drawn by BAS
				J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD
		&		TECHNICAL SCHOOL	drawing no.
			No. 21640 /CENSED		S-138
CAD n	CAD no.		UNAUTHORIZED ALTERATION OR ADDITION	project no.	

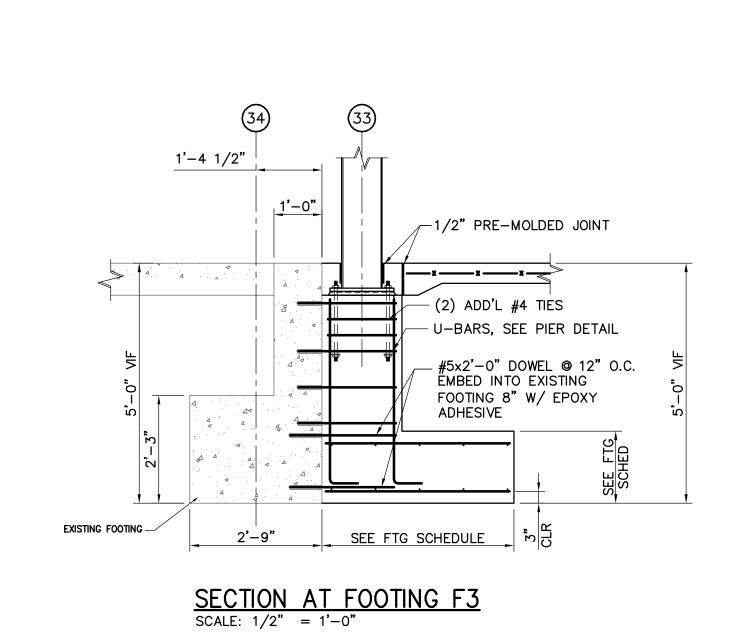


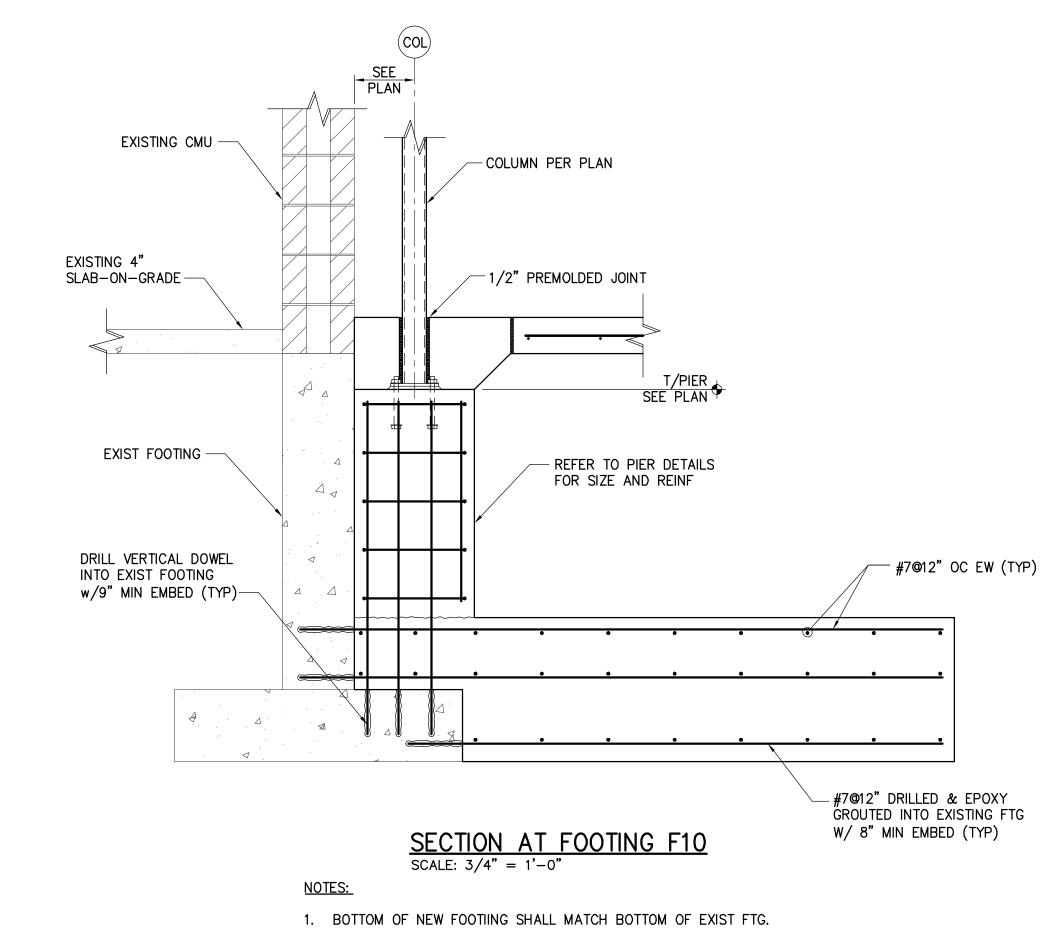


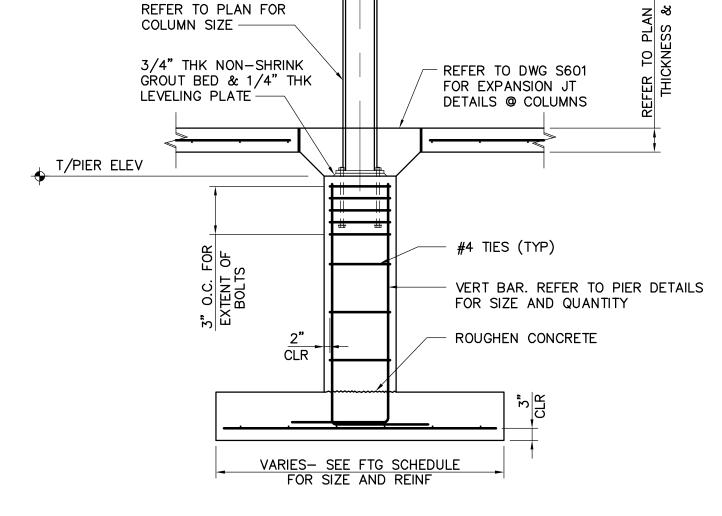


TYPICAL PIER DETAILS SCALE: 3/4" = 1'-0"

- 1. ALL COLUMNS SHALL BE CENTERED ON PIERS UNLESS NOTED OTHERWISE.
- 2. REFER TO PLAN FOR FND WALL THICKNESS & REINF.
- 3. FOR PIER TYPE P-4, DRILL AND EPOXY GROUT VERTICAL BARS INTO EXISTING FTG W/ 9 3/4" MIN EMBED.



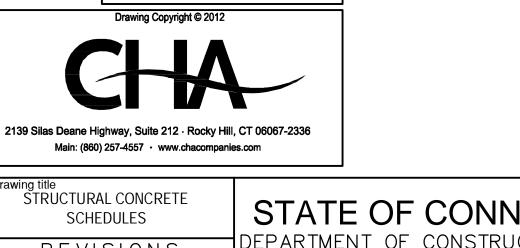




မွ COL/PIER/FTG

TYPICAL COLUMN FOOTING SECTION

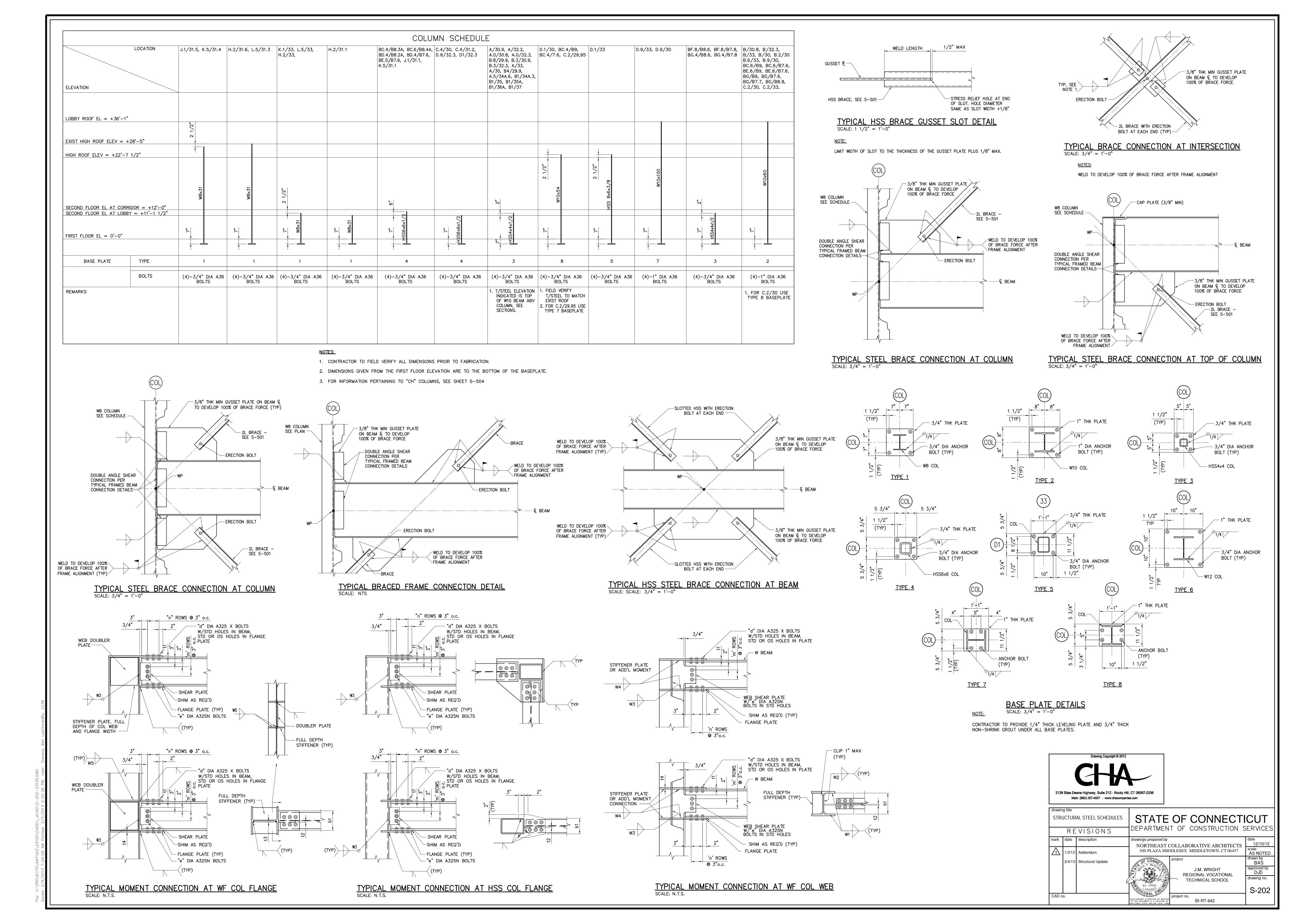
SCALE: 1/2" = 1'-0"

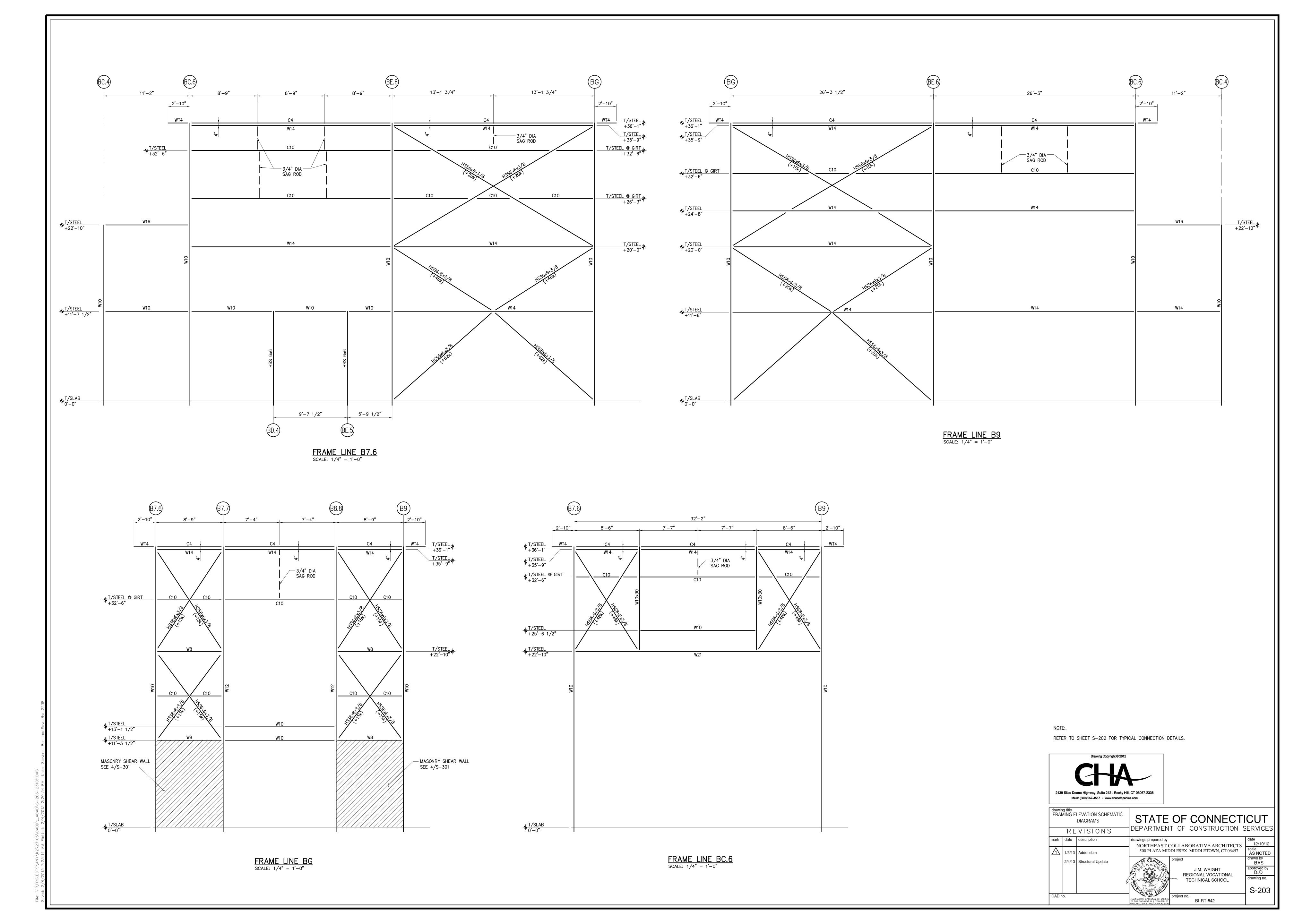


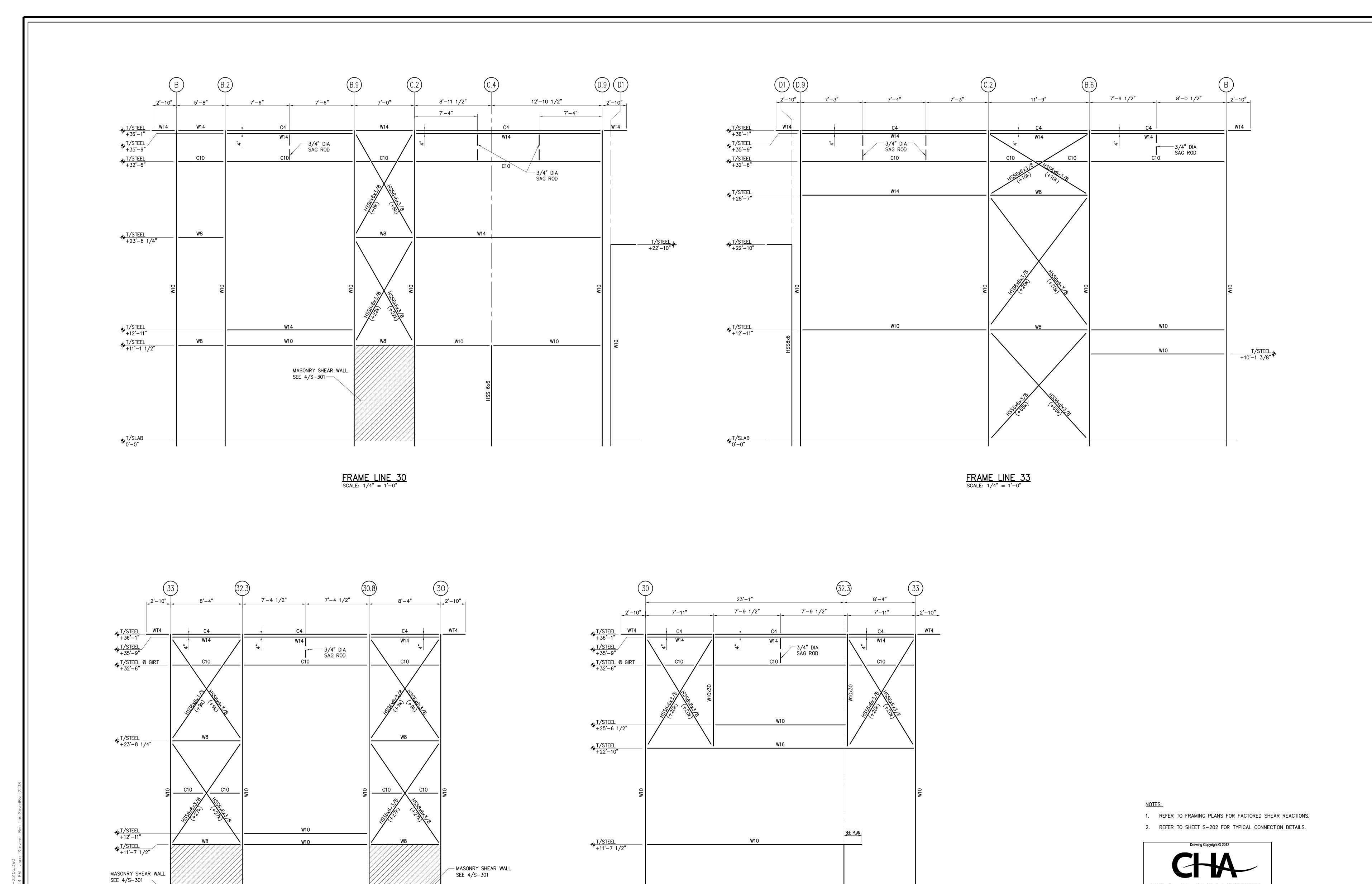
PROJECT NORTH

ŠTRUCTURAL CONCRETE SCHEDULES				OF CONNECTI	
	RΕ	VISIONS	DEPARIMENT	OF CONSTRUCTION S	ERVICES
mark	date	description	drawings prepared by NORTHEAST CO	LLABORATIVE ARCHITECTS	date 12/10/12
\triangle	1/3/13	Addendum		LESEX MIDDLETOWN, CT 06457	scale AS NOTED
	2/4/13	Structural Update	pr	oject	drawn by BAS
				J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD
		&	No. 21640	TECHNICAL SCHOOL	drawing no.
			CENSE COLLIN		S-201
CAD r	0.		UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS	oject no. BI-RT-842	

2. DETAIL REINFORCEMENT FOR FOOTINGS F11, F12, F13 AND F14 SIMILAR. REFER TO FOOTING SCHEDULE FOR REINFORCEMENT SIZE.







◆ T/SLAB 0'-0"

FRAME LINE D.9

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

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STATE OF CONNECTICUT

drawings prepared by

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS

DEPARTMENT OF CONSTRUCTION SERVICES

NORTHEAST COLLABORATIVE ARCHITECTS
500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457

12/10/12
scale
AS NOTED

J.M. WRIGHT REGIONAL VOCATIONAL TECHNICAL SCHOOL

BI-RT-842

drawn by
BAS
approved by
DJD

drawing no.

S-204

drawing title
FRAMING ELEVATION SCHEMATIC

DIAGRAMS

REVISIONS

2/4/13 Structural Update

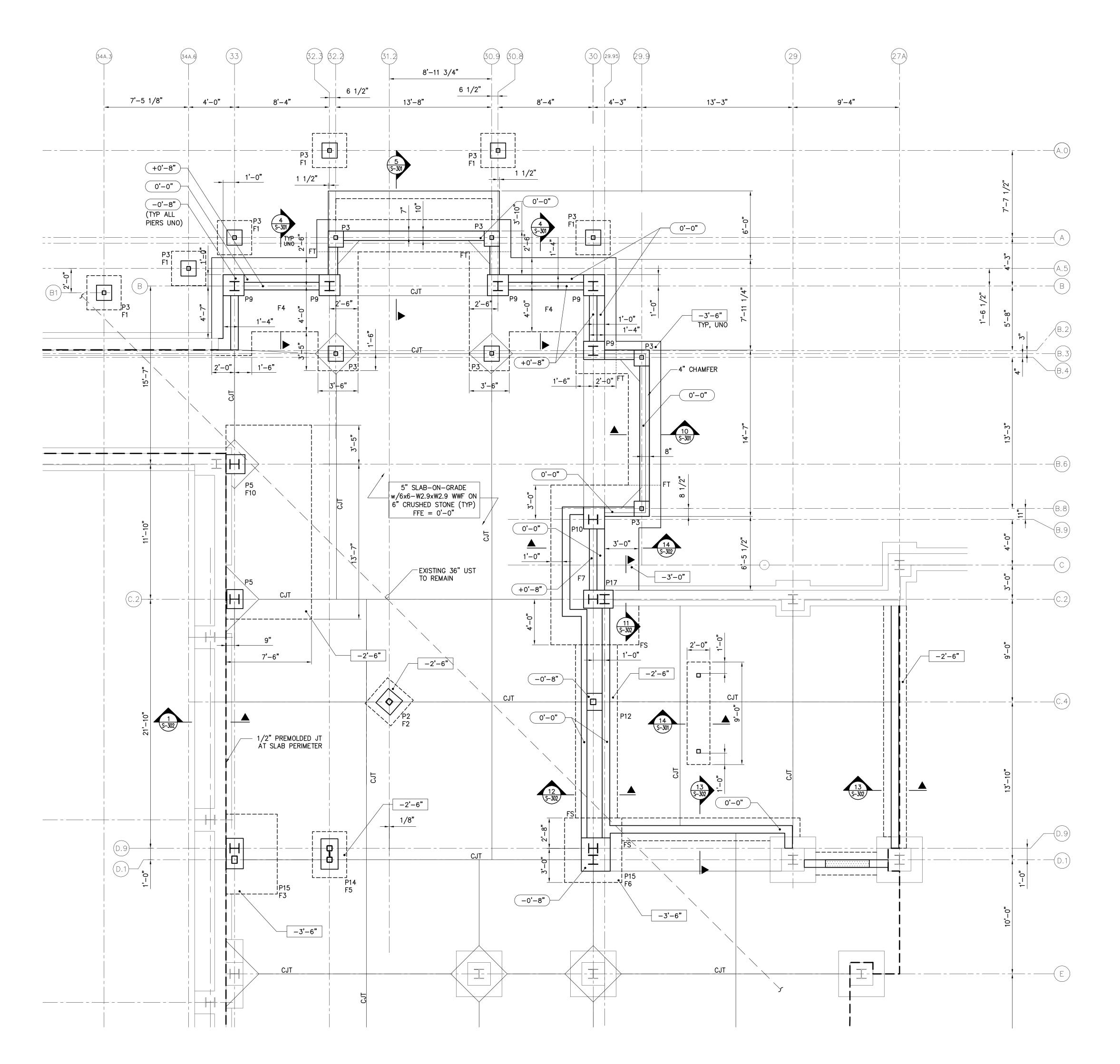
mark date description

1/3/13 Addendum

CAD no.

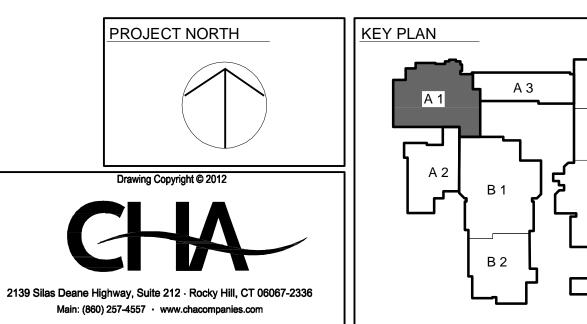
◆ T/SLAB 0'-0"

FRAME LINE B
SCALE: 1/4" = 1'-0"

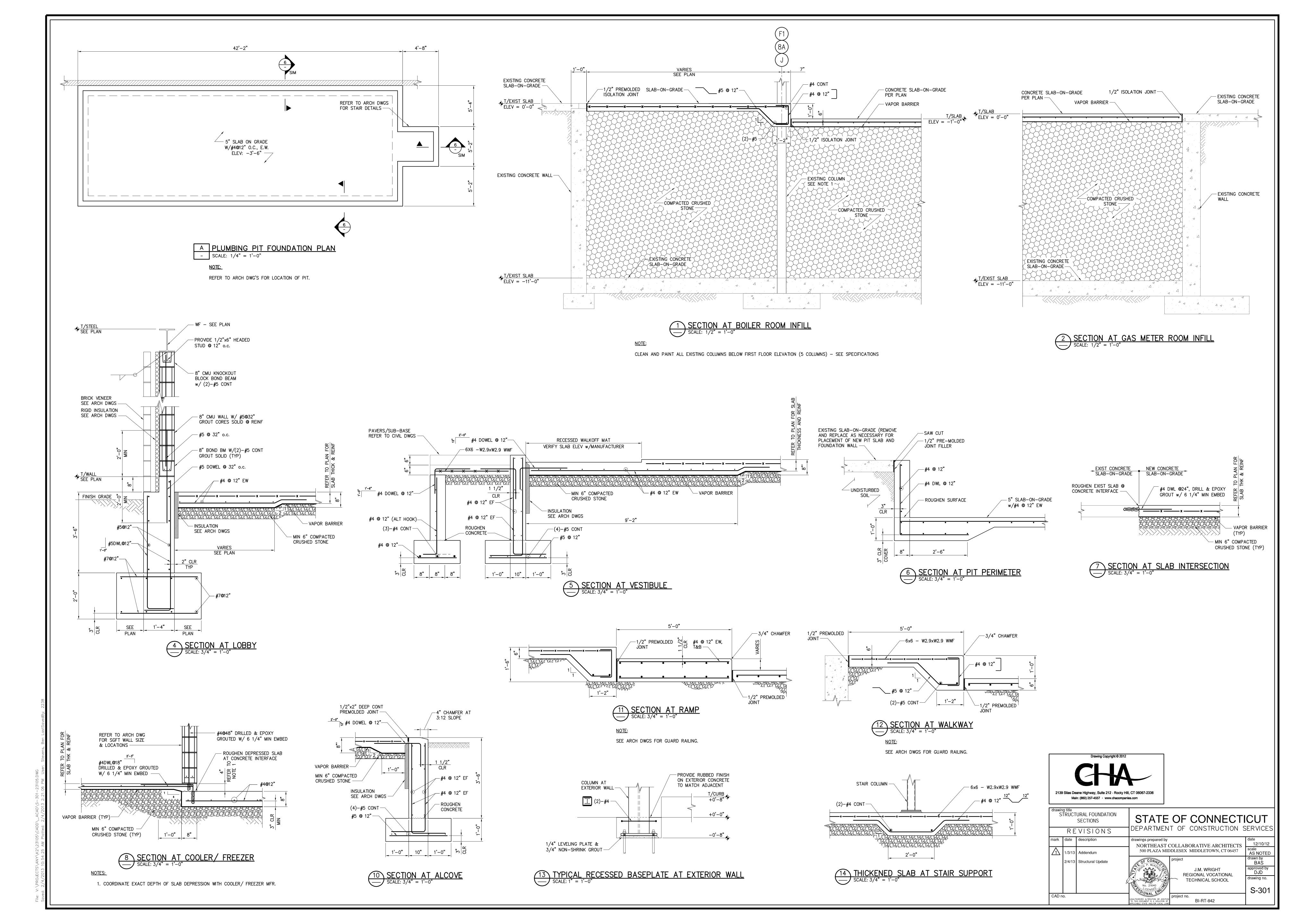


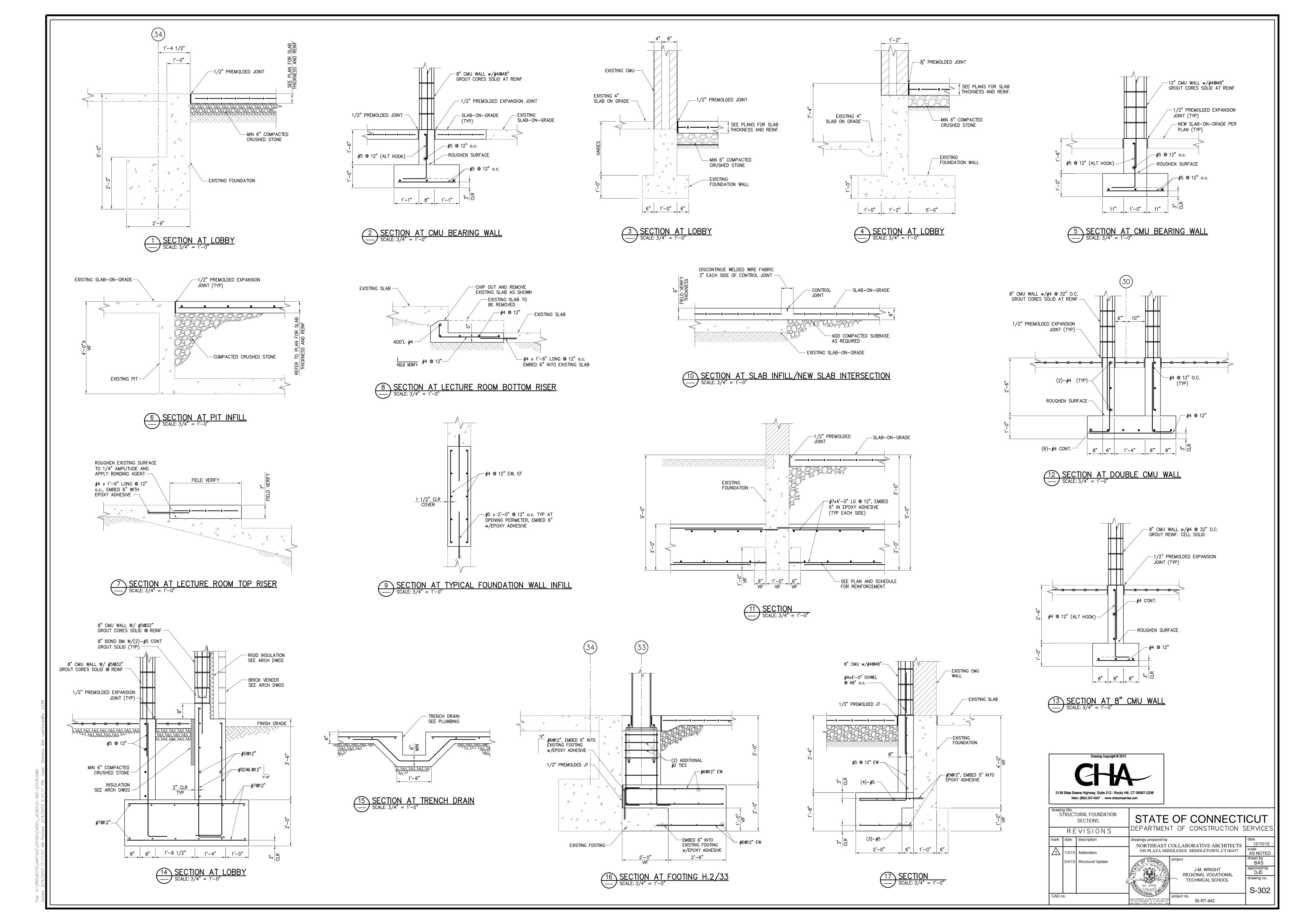
ENLARGED PARTIAL STRUCTURAL FOUNDATION AND SLAB PLAN A1 SCALE: 1/4" = 1'-0"

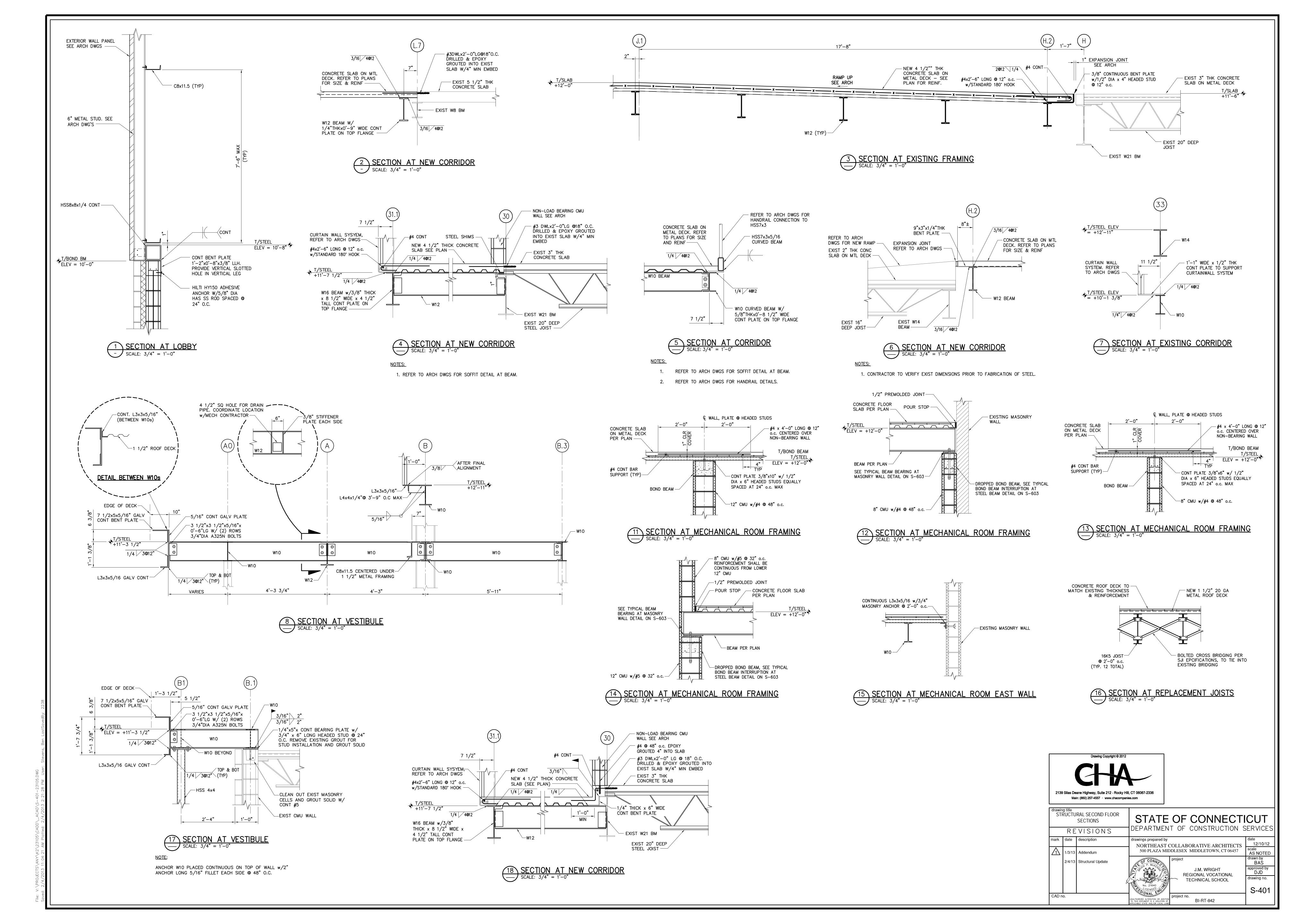
- 1. REFERENCE ELEVATION = 0'-0" = FFE.
- 2. = T/WALL OR T/PIER ELEV (± FFE).
- 3. $= T/FTG ELEV (\pm FFE).$
- 4. DOOR OPENING (SIZE NTS)
- 5. FOR EXACT DOOR LOCATIONS & ROUGH OPENING SIZES REFER TO ARCH DWGS.
- 6. COORDINATE WITH MECH, ELECTRICAL, CIVIL/SITE CONTRACTOR FOR EXACT LOCATIONS OF PENETRATIONS IN FOUNDATION WALL.
- 7. REFER TO DWG S-201 FOR FOOTING & PIER SCHEDULE.
- 8. FOR DIMENSIONS NOT SHOWN, REFER TO ARCH DWGS.
- 9. REFER TO CIVIL/ARCH DRAWINGS FOR CONCRETE PAD @ MANDOOR SIZE & LOCATION.
- PROVIDE THICKENED SLAB UNDER ALL INTERIOR NON-LOAD BEARING PARTITIONS. REFER
 TO ARCH DWGS FOR ALL PARTITION LOCATIONS.
- 11. TOP OF PIER ELEVATION IS -0'-8" UNLESS OTHERWISE NOTED.
- 12. FS DENOTES FOOTING STEP.
- 13. FT DENOTES FOOTING THICKNESS CHANGE.

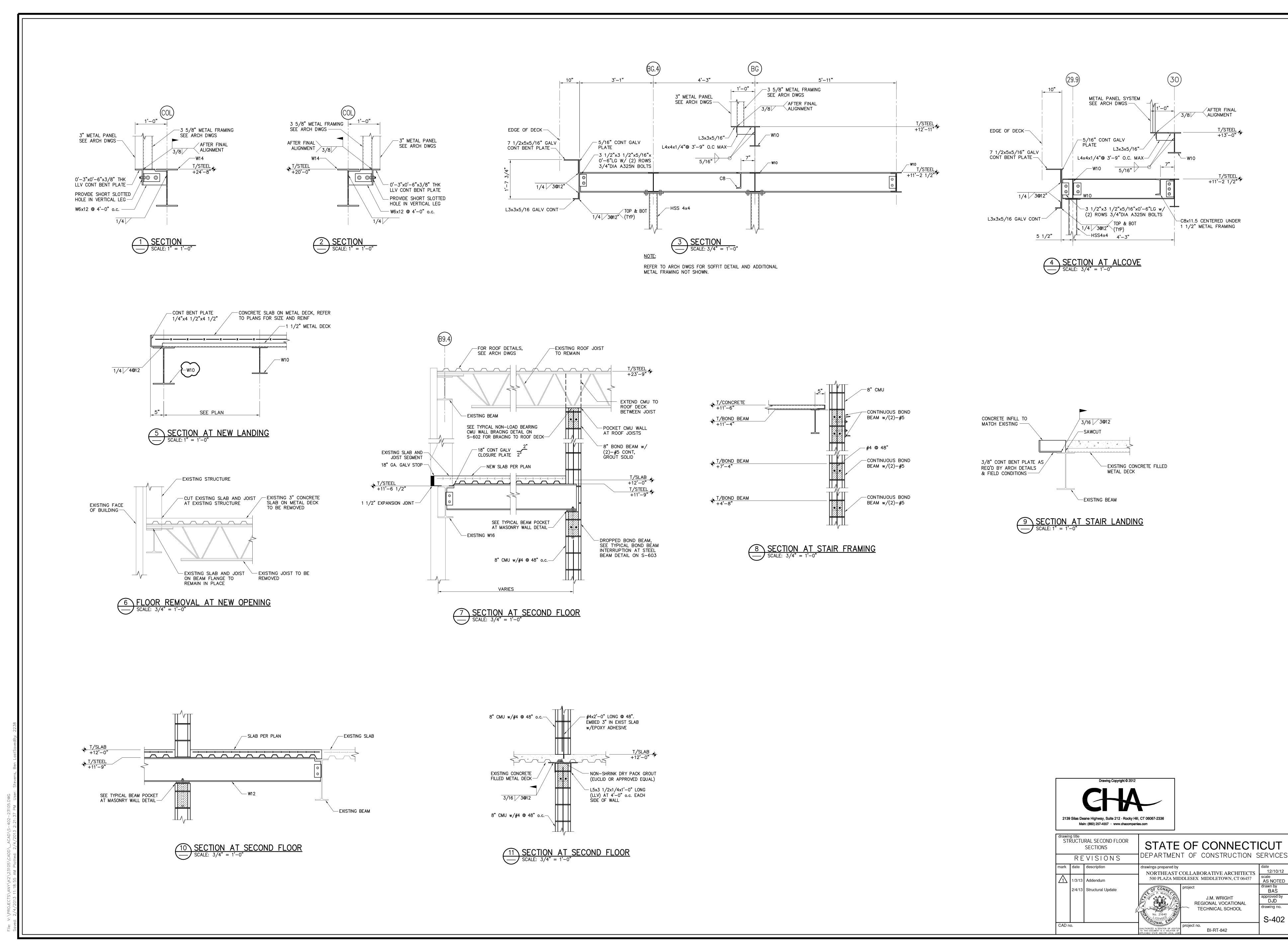


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	RE	VISIONS	DEPARTMENT OF CONSTRUCTION S	SERVICES
mark	date	description	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS	date 12/10/12
Λ	1/3/13	Addendum	500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457	scale AS NOTED
	2/4/13	Structural Update	project	drawn by BAS
			J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD
			TECHNICAL SCHOOL	drawing no.
			CENSE ONAL	S-205
CAD n	10.		UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS	



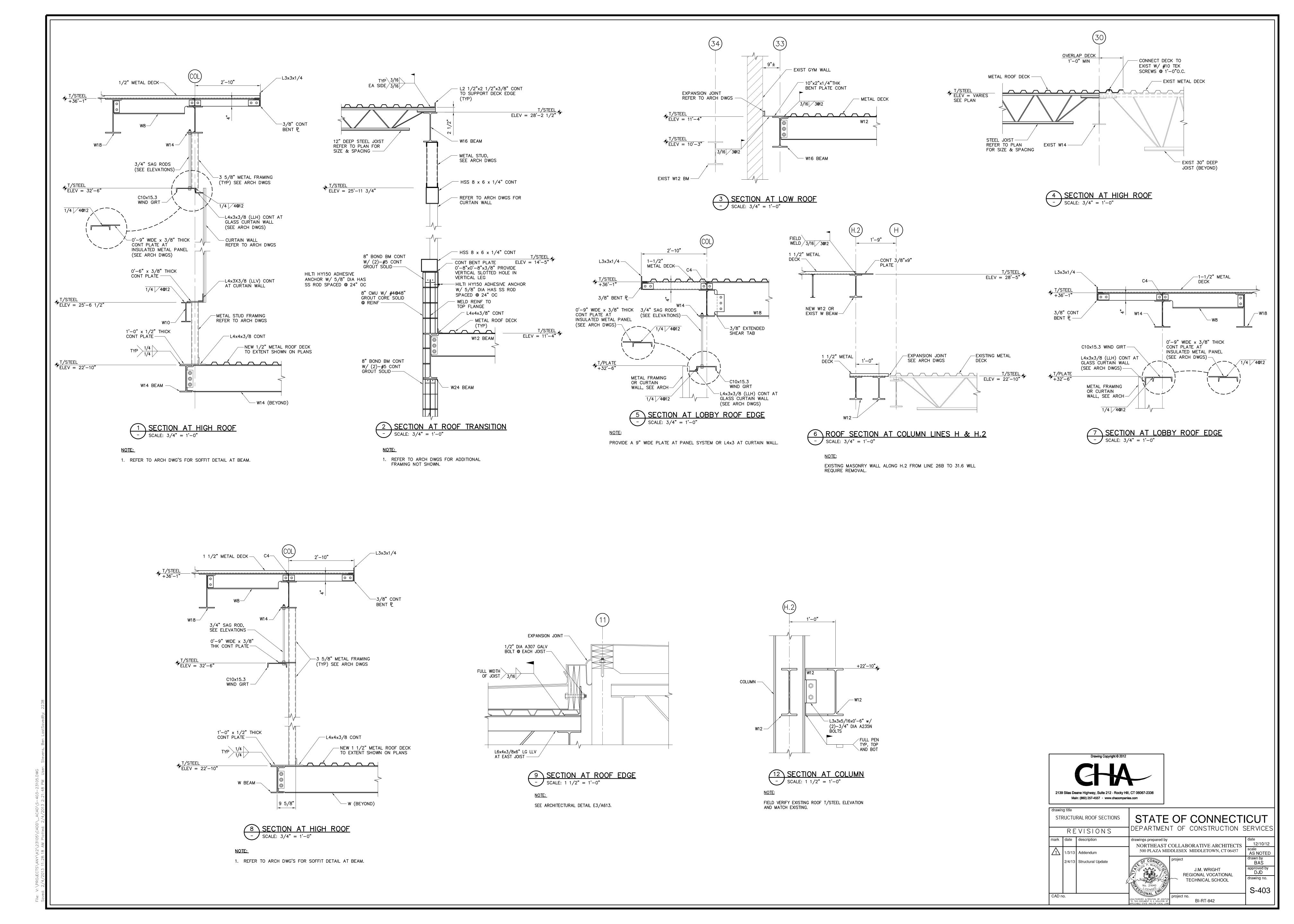


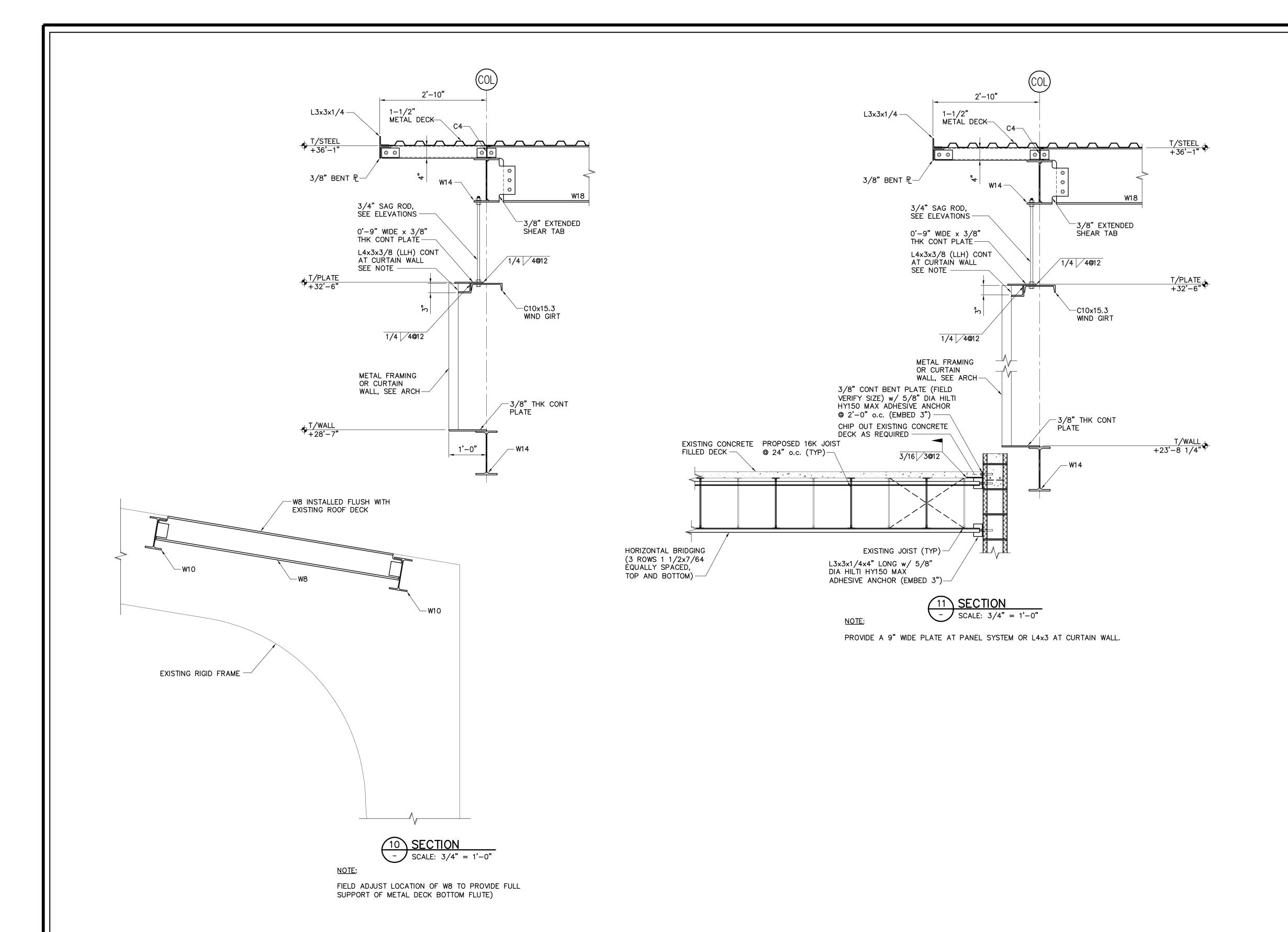


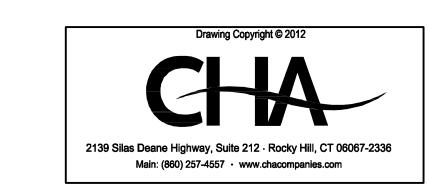


approved by DJD

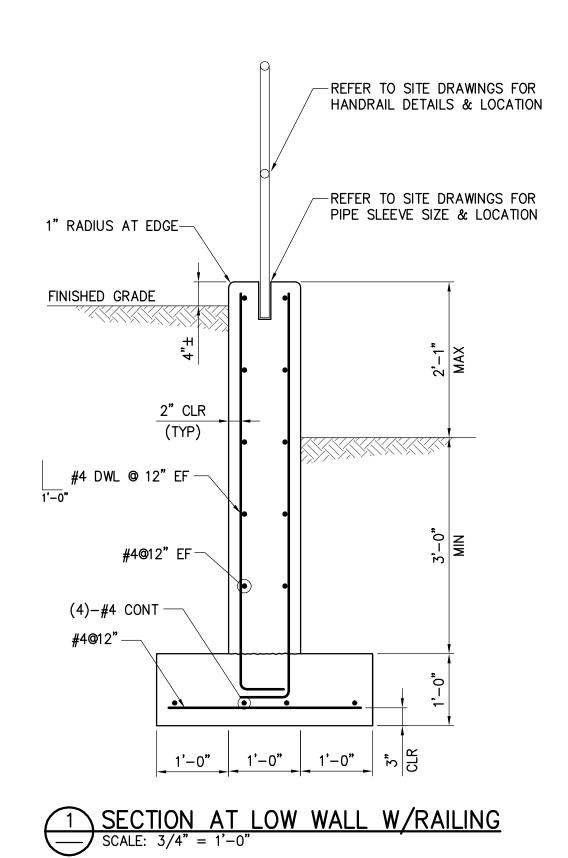
S-402





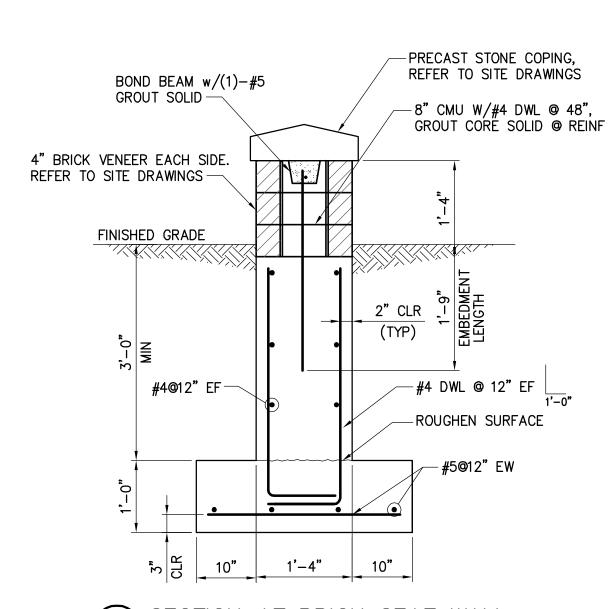


STRUCTURAL ROOF SECTIONS REVISIONS	STATE OF CONNECTION STATE OF CONSTRUCTION S	
mark date description 1/3/13 Addendum	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS 500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457	date 12/10/12 scale AS NOTED
2/4/13 Structural Update	J.M. WRIGHT REGIONAL VOCATIONAL TECHNICAL SCHOOL	drawn by BAS approved by DJD drawing no.
CAD no.	unauthorized Differation or Addition of this document is a violation of APPLICABLE STATE AND/OR LOCAL LAWS project no. BI-RT-842	



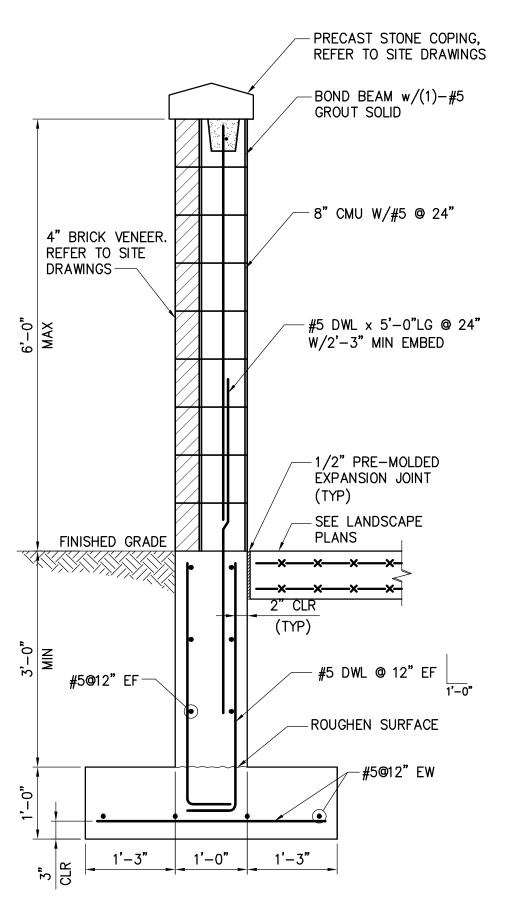
1. REFER TO SITE DRAWINGS FOR LOCATION OF WALL.

2. PROVIDE VERTICAL WALL CONTROL JOINT AT 20'-0" MAX ON CENTER.



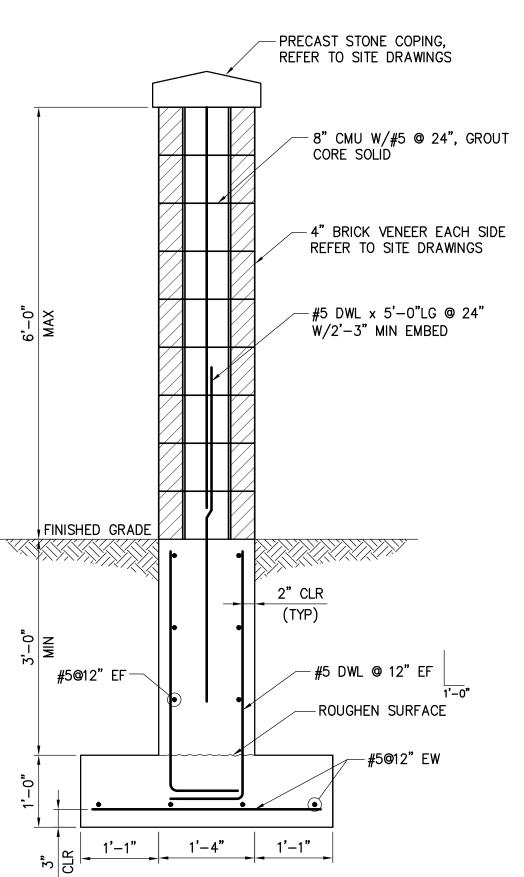
- 2 SECTION AT BRICK SEAT WALL

 SCALE: 3/4" = 1'-0"
- 1. REFER TO SITE DRAWINGS FOR LOCATION OF SEAT WALL.
- 2. REFER TO SITE DRAWINGS FOR CONNECTION OF PRECAST STONE COPING TO CMU.



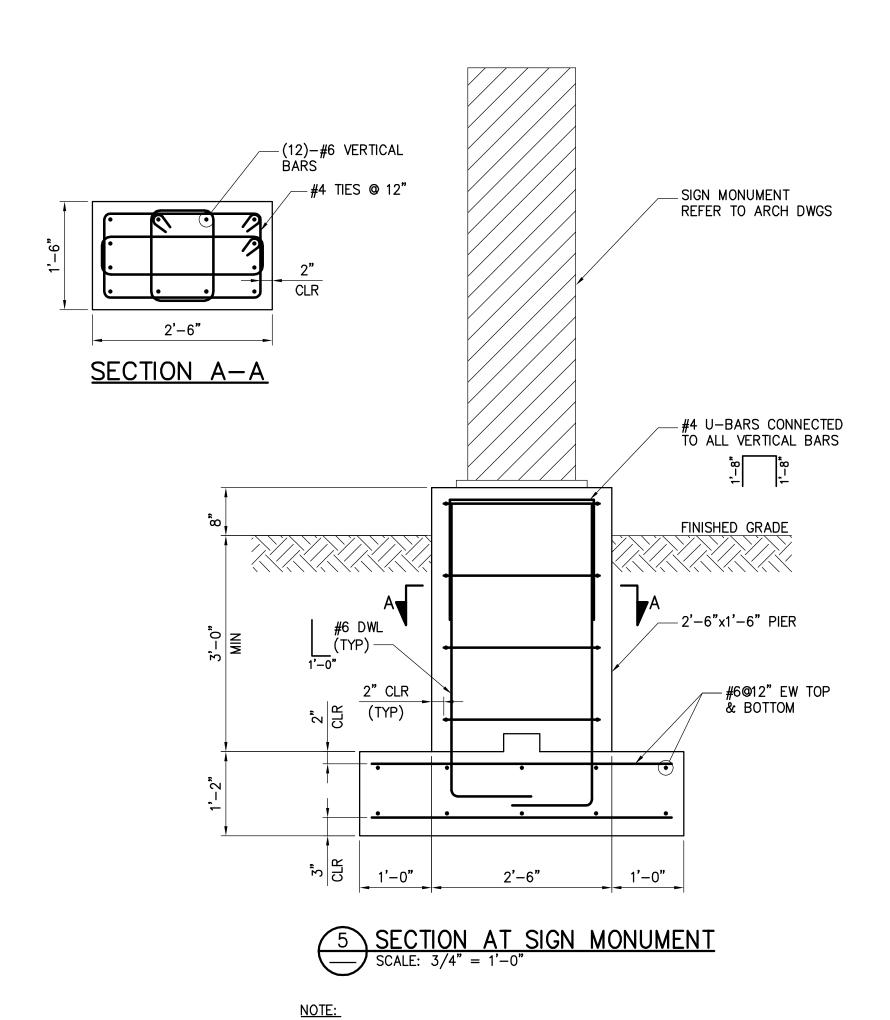
3 SECTION AT DUMPSTER ENCLOSURE WALL
SCALE: 3/4" = 1'-0"

- 1. REFER TO SITE DRAWINGS FOR LOCATION OF DUMPSTER ENCLOSURE
- 2. REFER TO SITE DRAWINGS FOR CONNECTION OF PRECAST COPING TO CMU.
- 3. BOTTOM OF DUMPSTER ENCLOSURE FOOTING SHALL MATCH BOTTOM OF EXIST RETAINING WALL FOOTING.
- 4. WALL TO BE REINFORCED VERTICALLY AS INDICATED AND HORIZONTALLY WITH STANDARD TRUSS TYPE DUR-O-WALL AT 16" o.c.



SECTION AT SCREEN WALL SCALE: 3/4" = 1'-0"

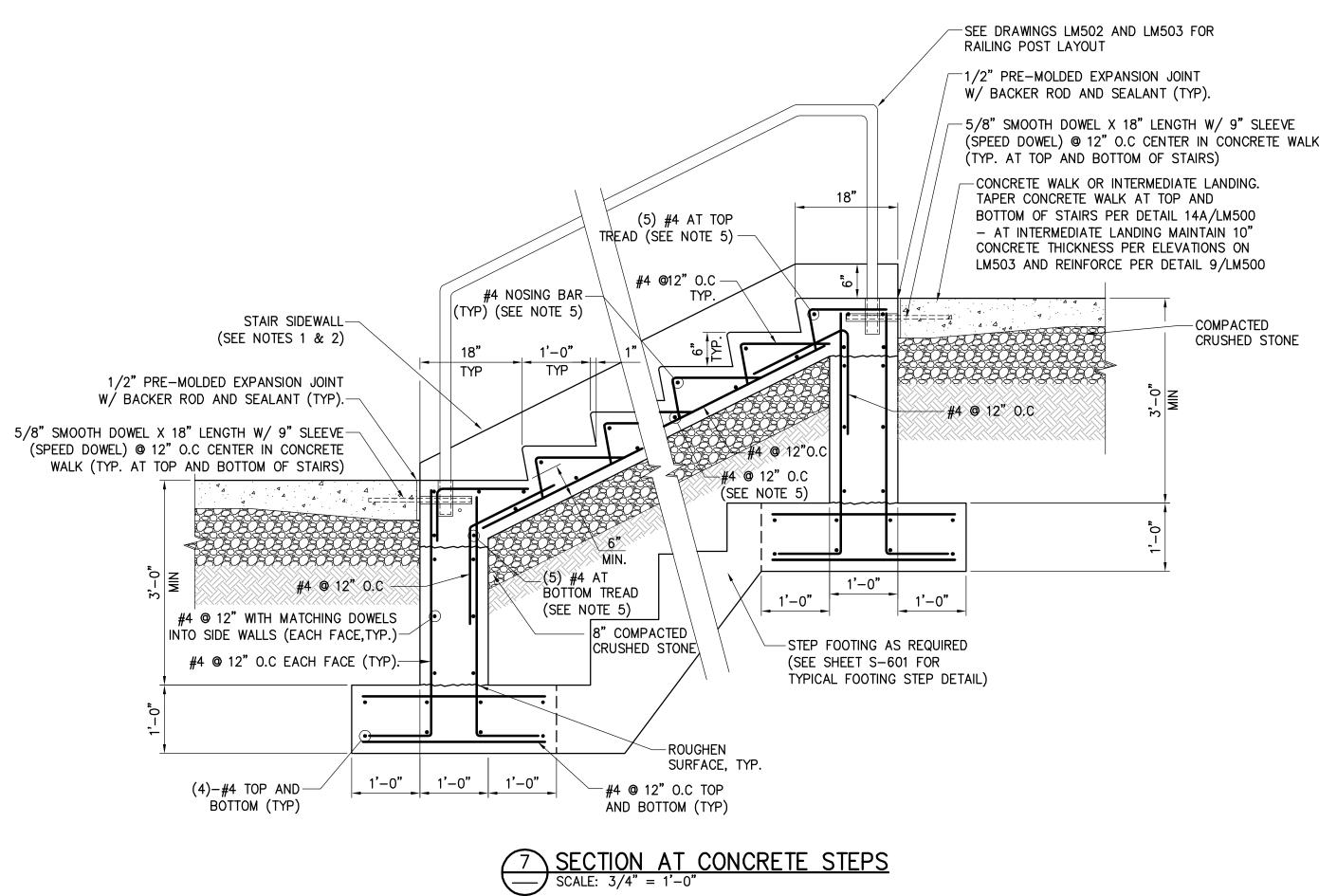
- 1. REFER TO SITE DRAWINGS FOR LOCATION OF SCREEN WALL ENCLOSURE.
- 2. REFER TO SITE DRAWINGS FOR CONNECTION OF PRECAST STONE COPING TO CMU.
- 3. WALL TO BE REINFORCED VERTICALLY AS INDICATED AND HORIZONTALLY WITH STANDARD TRUSS-TYPE DUR-O-WALL AT 16" o,c,



COORDINATE SIGN ATTACHMENT TO FOUNDATIONS W/ARCH DWGS.

-6x6-W4.0xW4.0 WWF - COMPACTED CRUSHED -#4 @ 18" ALT HOOK -(3)-#4 CONT AS SHOWN -(3)-#4 CONT 2'-0" 6 SECTION AT E-HOUSE PAD EDGE
SCALE: 3/4" = 1'-0"

REFER TO SITE DRAWINGS FOR PAD SIZE AND LOCATION.



NOTES:

1. SEE DETAIL 3 SHEET LM502 AND DETAIL 1 SHEET LM503 FOR TYPICAL STAIR

OUTSIGN WALL (STAIR SIDEWALL) TERMINATION LOCATIONS.

DIMENSIONS AND CHEEK WALL (STAIR SIDEWALL) TERMINATION LOCATIONS.

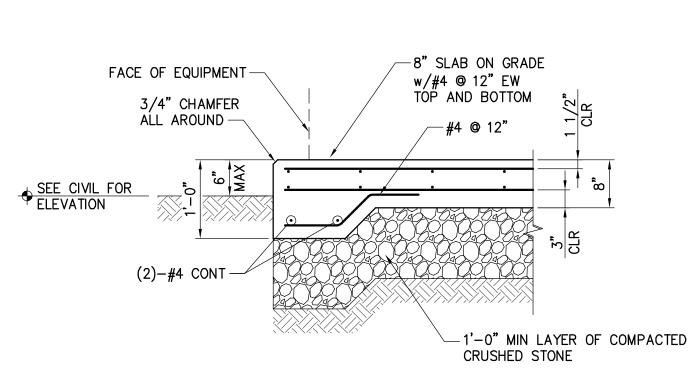
2. REFER TO DETAIL 1 SHEET S-501 FOR TYPICAL STAIR SIDEWALL SECTION.

4. PROVIDE STAIR FOOTING AT EACH SIDE OF INTERMEDIATE LANDING FOR

3. 1" BATTER TYPICAL AT FACE OF RISERS

5. PROVIDE MATCHING DOWELS INTO SIDE WALLS.

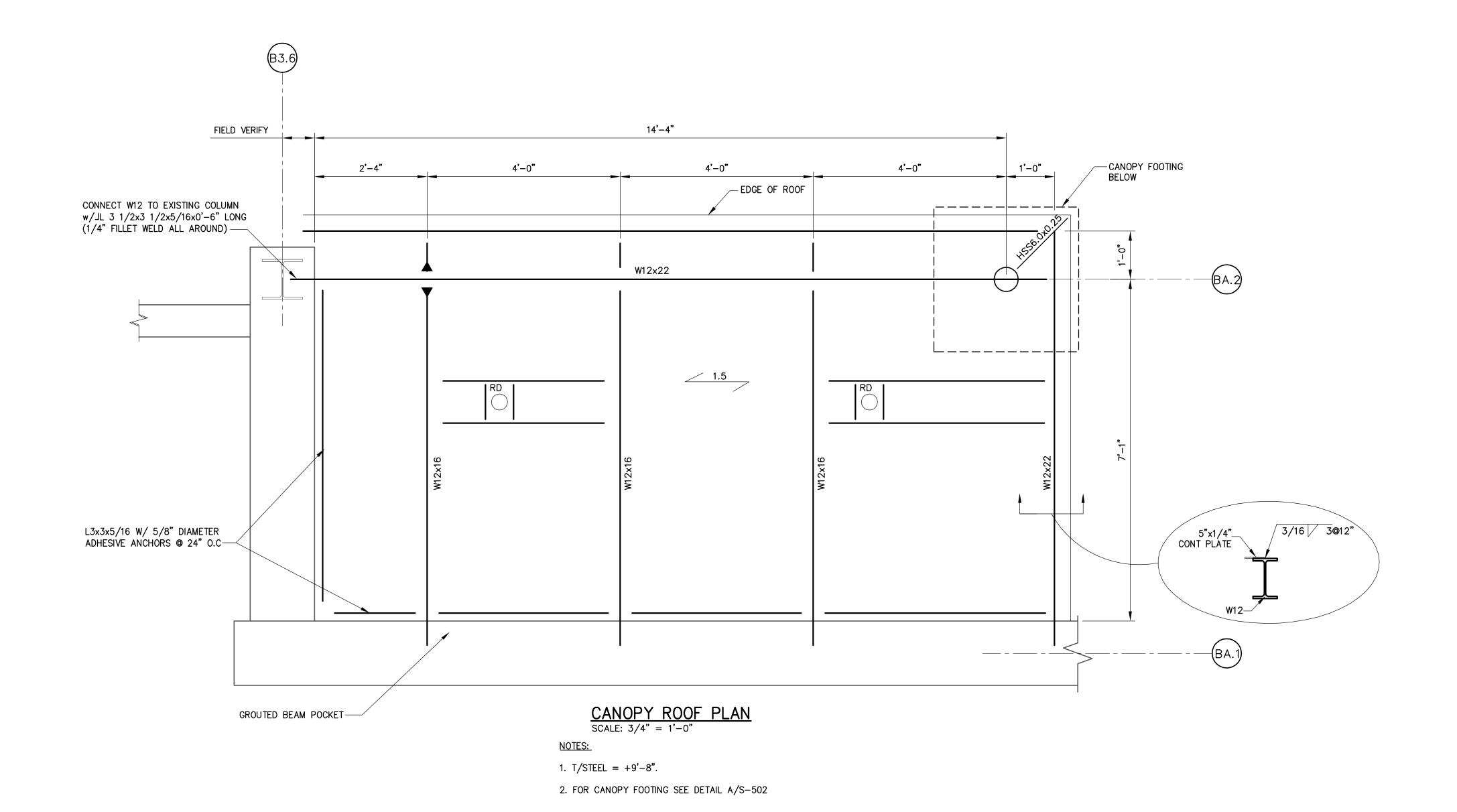
LARGER STAIR.

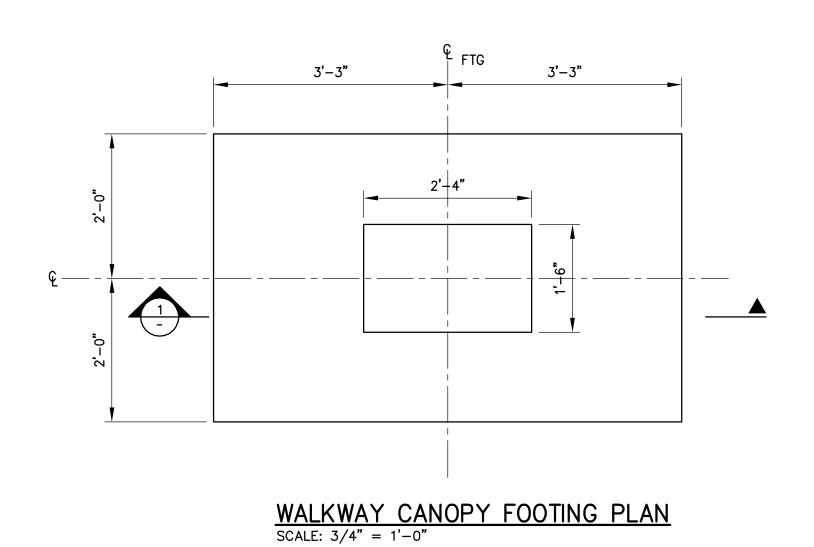


8 SECTION AT DUST COLLECTOR PAD SCALE: 3/4" = 1'-0"



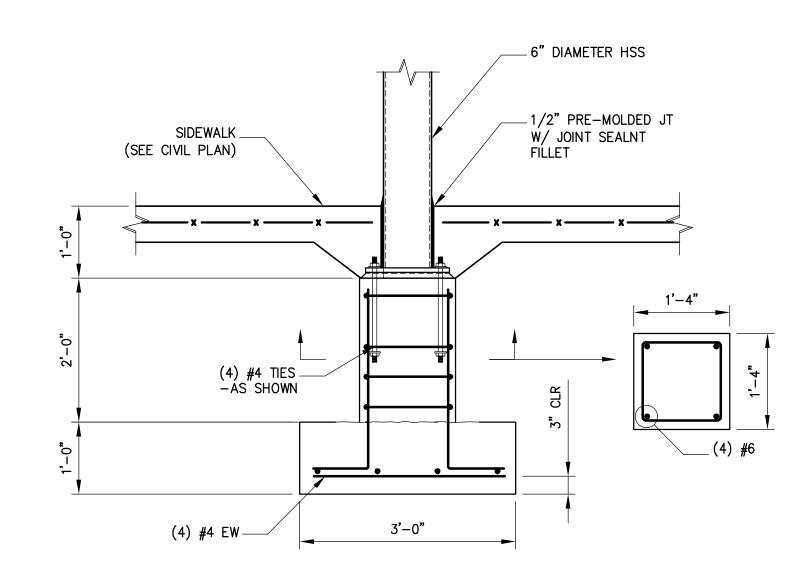
	waii. (860) 257-4557 · www.criacompanies.com						
drawing title STRUCTURAL SITE SECTIONS REVISIONS			STATE OF CONNEC				
mark 1	date 1/3/13	description Addendum	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTURE AND PLAZA MIDDLESEX MIDDLETOWN, CT 064	00000			
	2/4/13	Structural Update	project J.M. WRIGHT REGIONAL VOCATIONAL TECHNICAL SCHOOL	drawn by BAS approved by DJD drawing no.			
CAD n	0.		project no. UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS BI-RT-842				





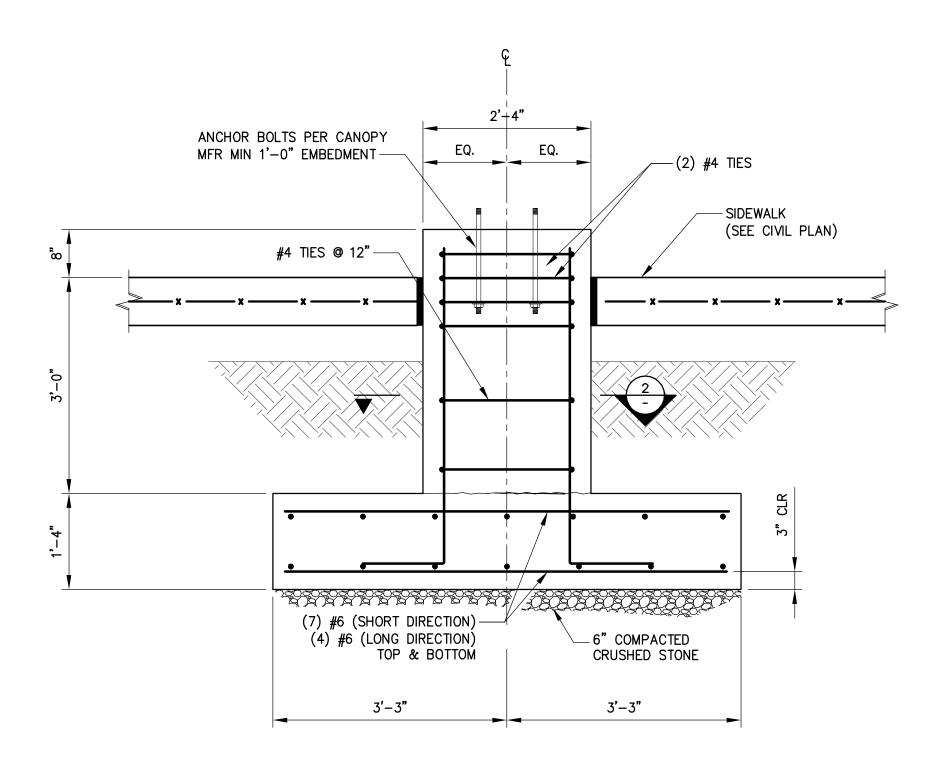
1. SEE ARCH DWG A-616 FOR LAYOUT AND LOCATION OF FOOTINGS (14 REQUIRED)

2. FIELD VERIFY LOCATION OF EXISTING FOUNDATION PRIOR TO FABRICATION OF REINFORCEMENT



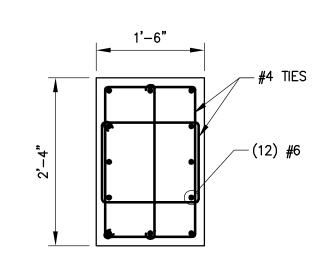
A CANOPY FOOTING DETAIL

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

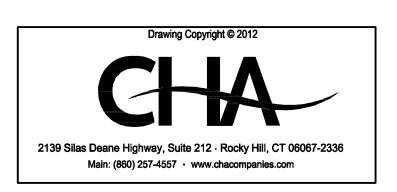


SECTION @ CANOPY FOOTING

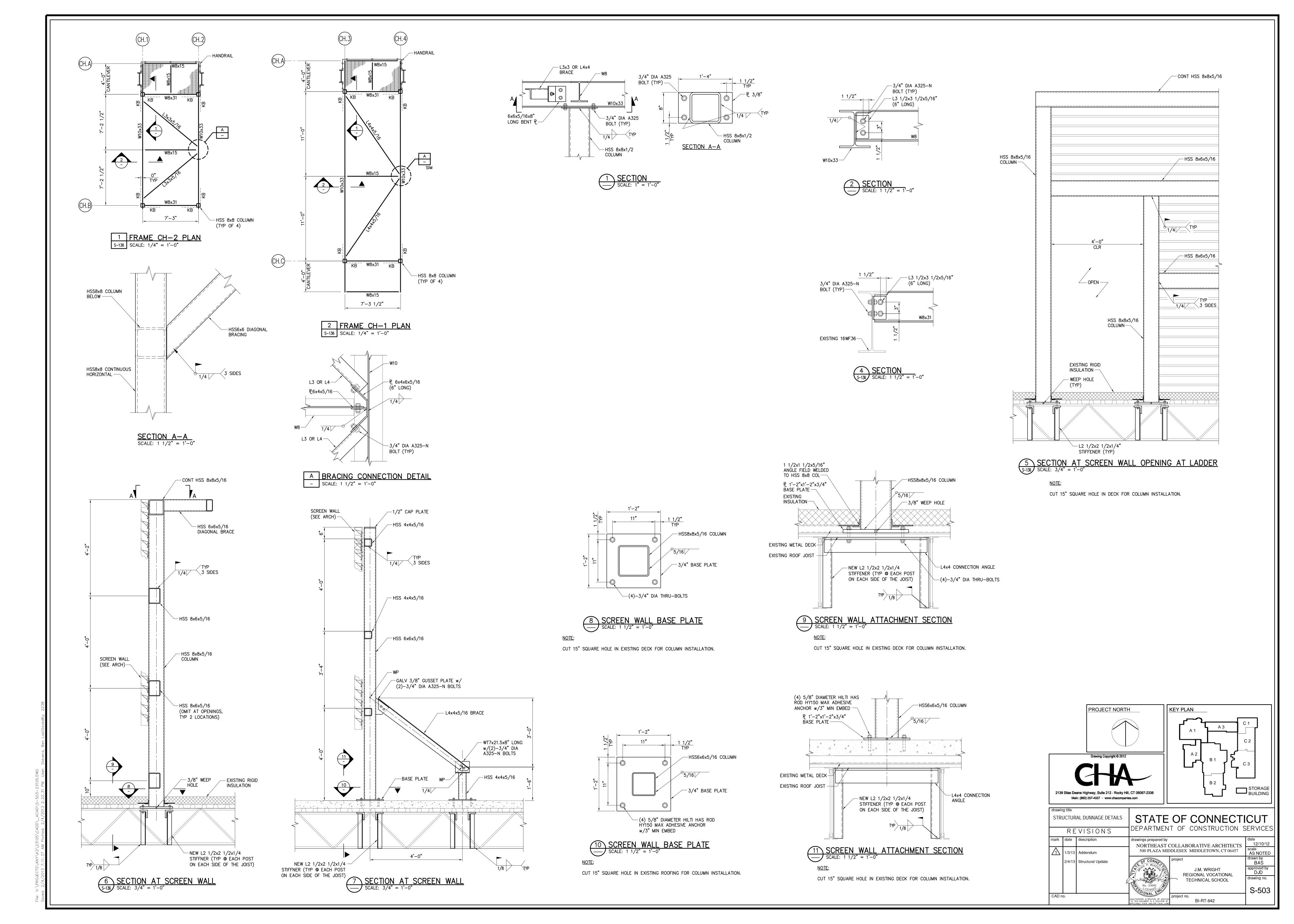
SCALE: 3/4" = 1'-0"

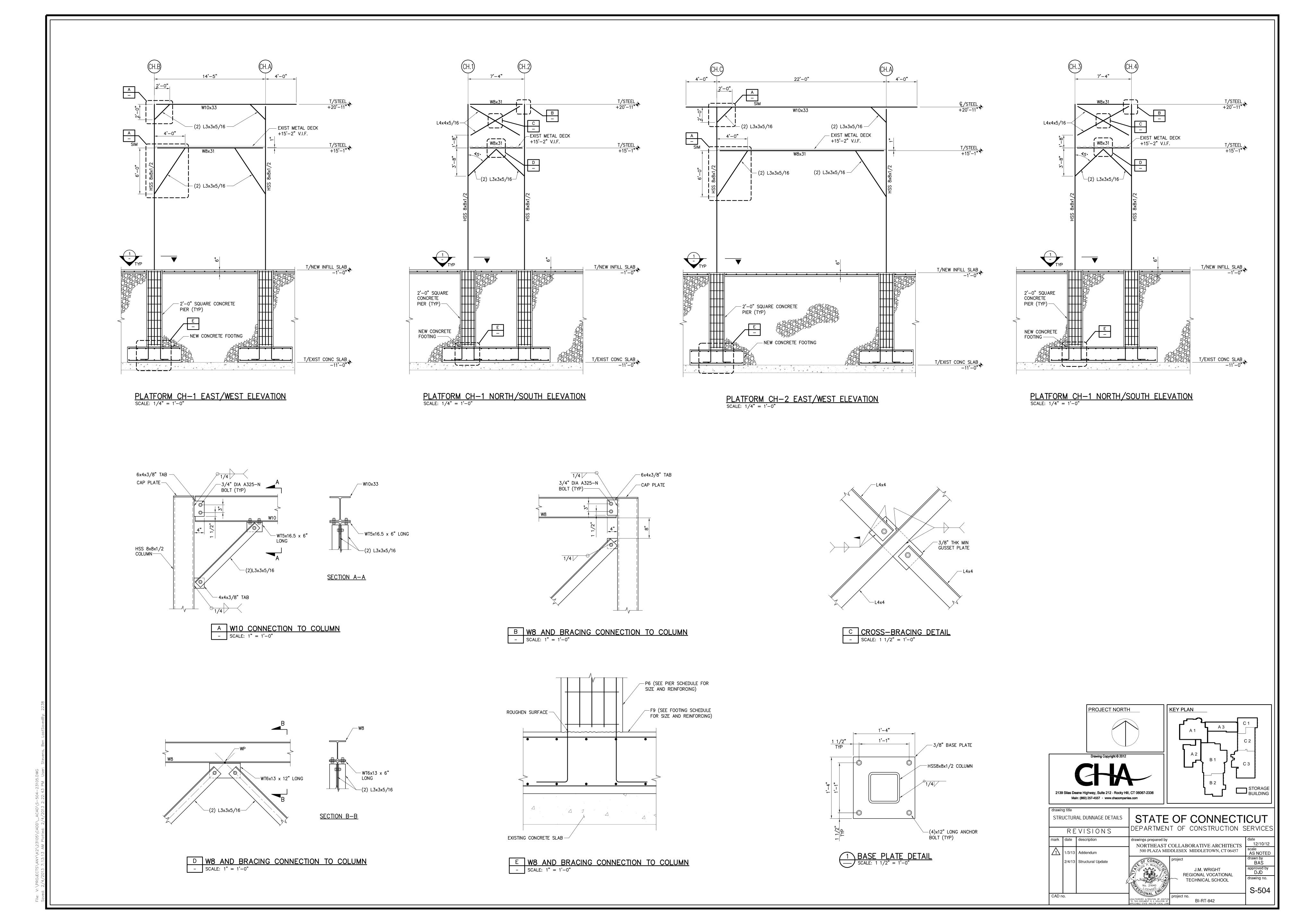


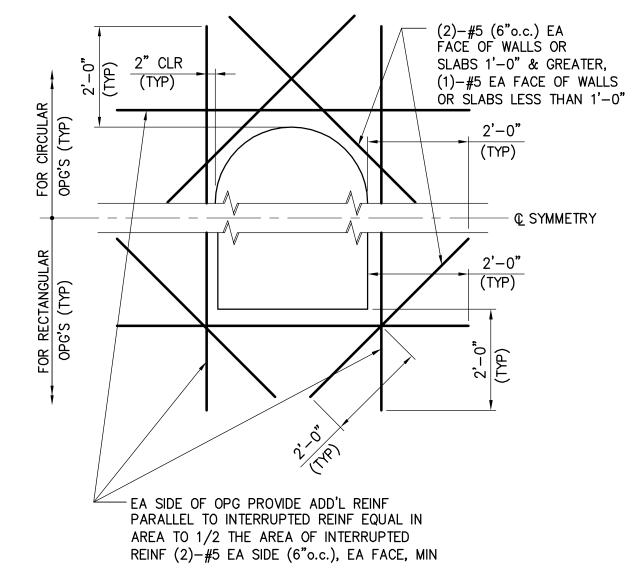
2 CANOPY PIER SECTION SCALE: 3/4" = 1'-0"



drawin PLA	NS, SE	CTIONS AND DETAILS	STATE OF CONNECTOR DEPARTMENT OF CONSTRUCTION	
mark	K L date	VISIONS description	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS	date
$\overline{\Lambda}$	1/3/13	Addendum	500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457	scale AS NOTED
	2/4/13	Structural Update	project J.M. WRIGHT REGIONAL VOCATIONAL TECHNICAL SCHOOL	drawn by BAS approved by DJD drawing no.
CAD n	0.		UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS	

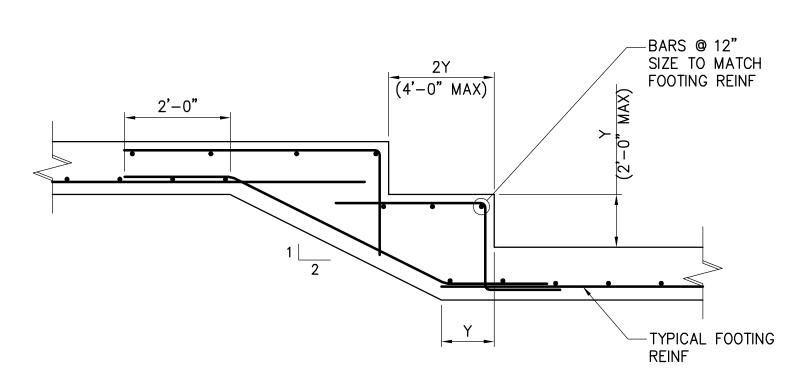






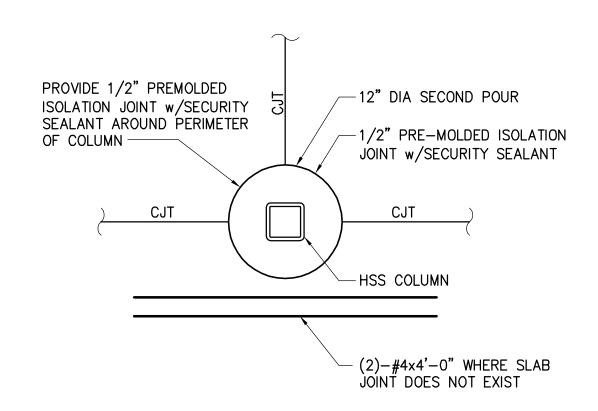
TYPICAL REINF AT RECTANGULAR &
CIRCULAR OPN'GS IN SLABS AND WALLS
SCALE: 1/2" = 1'-0"

USE ABOVE REINF AROUND OPG'S 1'-0" AND LARGER UNLESS NOTED OTHERWISE ON DWGS.
 FOR OPG'S LESS THAN 1'-0", NO ADD'L. REINF IS REQ'D. UNLESS NOTED OTHERWISE ON DWGS.

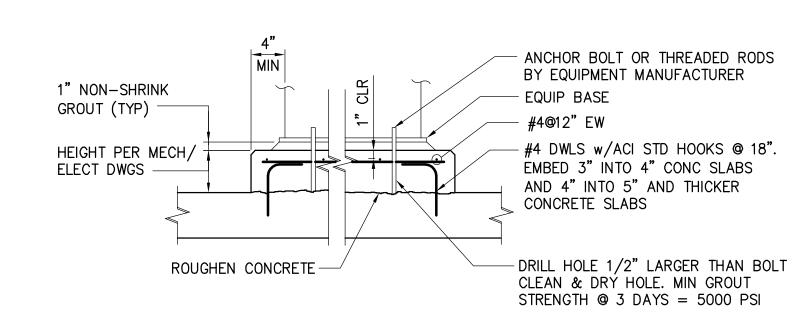


TYPICAL FOOTING STEP DETAIL

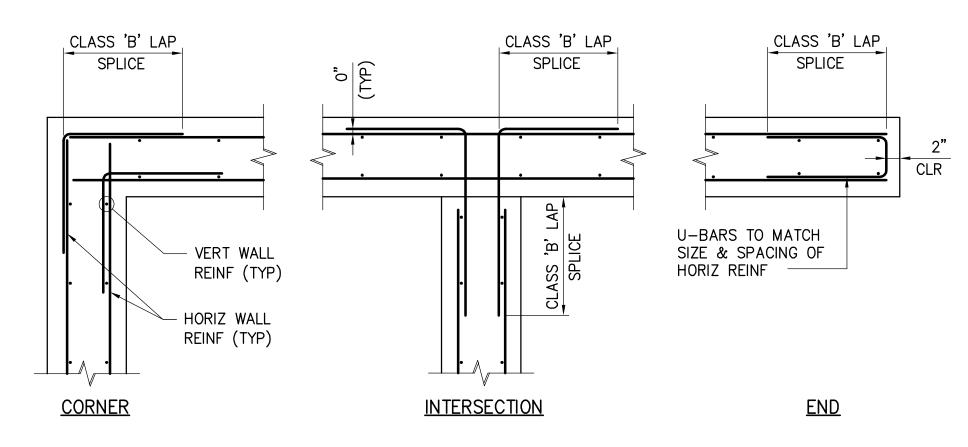
SCALE: 1/2" = 1'-0"



TYPICAL CIRCULAR SECOND POUR
IN CONCRETE SLAB-ON-GRADE

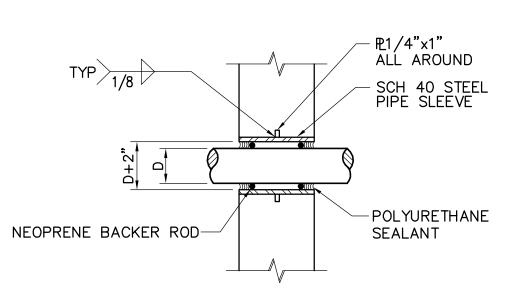


TYPICAL EQUIPMENT PAD



TYPICAL HORIZONTAL WALL REINF
SCALE: 3/4" = 1'-0"

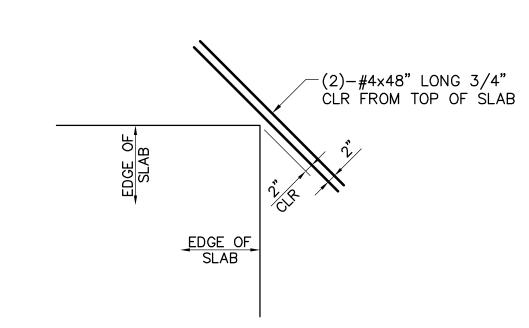
1. FOR WALLS WITH SINGLE REINFORCEMENT (I.E. REINFBARS AT CENTER OF WALL, ETC.), USE REINF DETAILS SIMILAR TO ABOVE DETAILS.



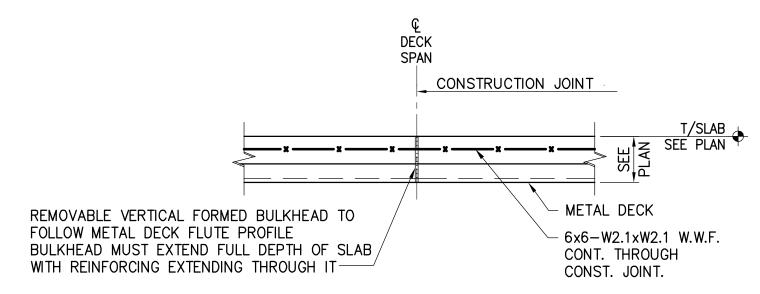
TYPICAL FOUNDATION/WALL SLEEVE SCALE: N.T.S.

NOTE:

SEAL BOTH ENDS AT WALLS, SEAL TOP ONLY AT FLOORS.



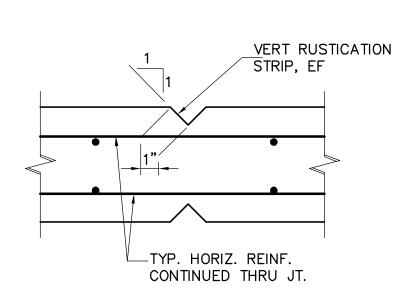
TYPICAL SLAB-ON-GRADE ADDITIONAL REINFORCING AT RE-ENTRANT CORNERS SCALE: N.T.S.



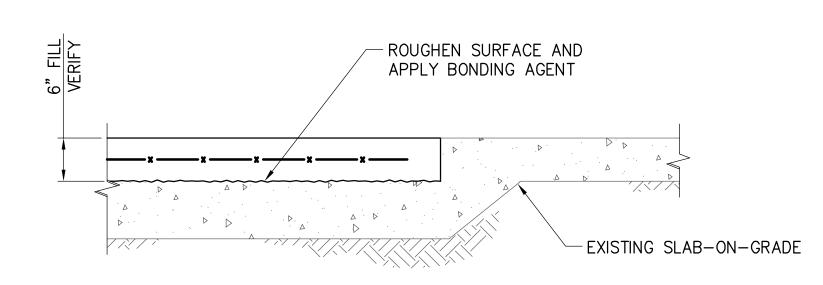
<u>NOTES</u>:

W.W.F. IS REQUIRED TO BE CONT. THRU ALL CONST. JOINTS.
 DETAIL IS SIMILAR AT ALL DECK ORIENTATIONS.

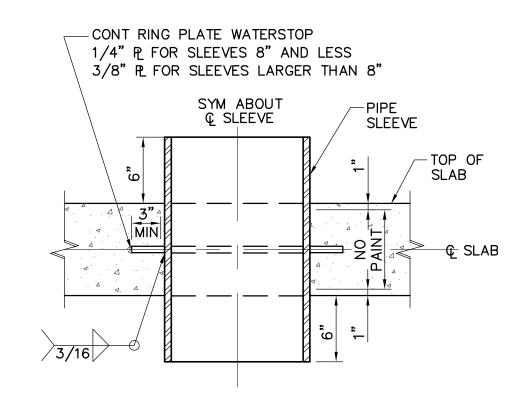
TYPICAL REINFORCED COMPOSITE
SLAB CONSTRUCTION JOINT



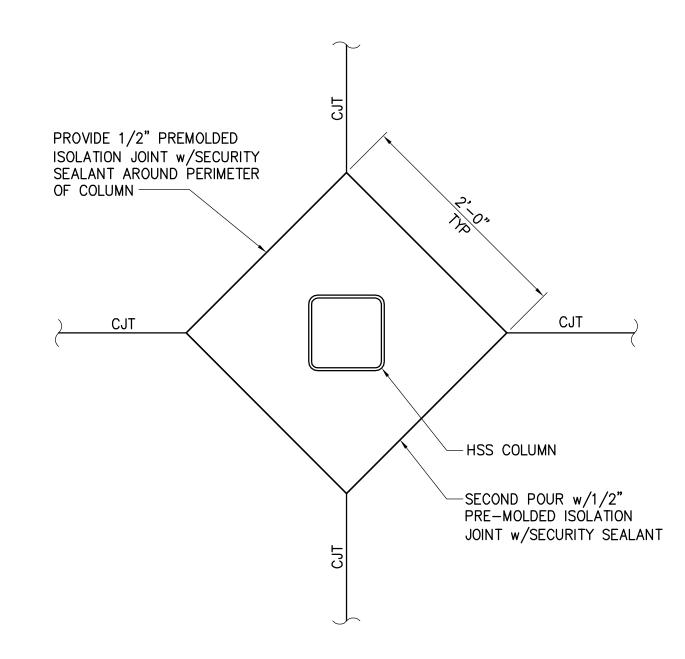
TYPICAL WALL CONTROL JOINT SCALE: N.T.S.



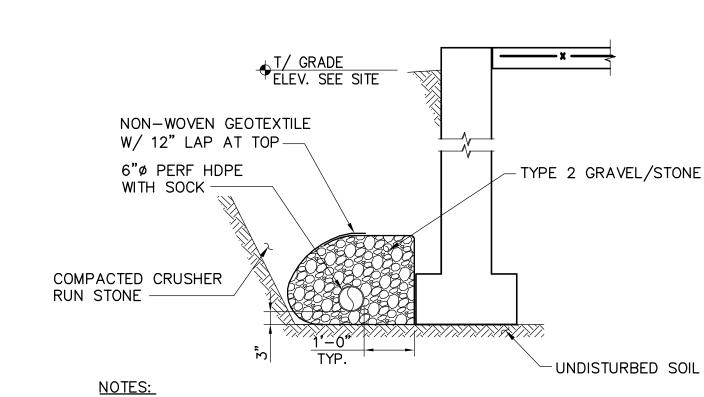
RAISED FLOOR INFILL DETAIL SCALE: N.T.S.



TYPICAL PIPE SLEEVE THROUGH SLAB



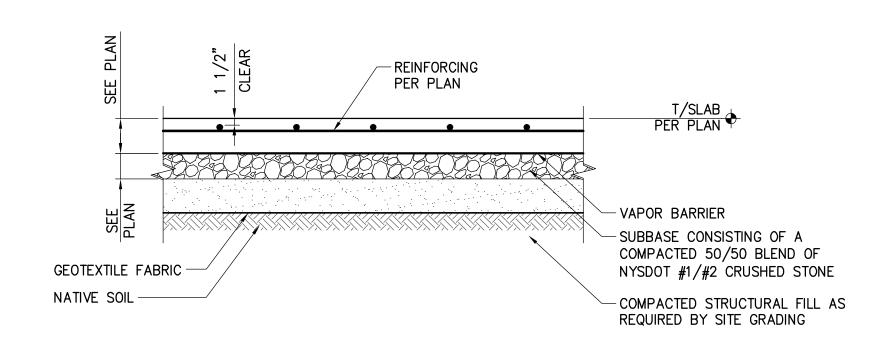
TYPICAL SQUARE SECOND POUR
IN CONCRETE SLAB-ON-GRADE



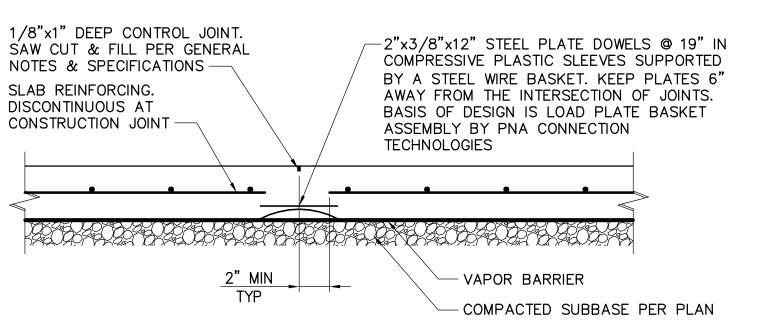
1. SEE SPECIFIC WALL SECTIONS FOR SIZE AND SPACING OF WALL REINFORCING.

2. SEE PLANS FOR LOCATION OF FOUNDATION DRAINS.

TYPICAL FOUNDATION DRAIN



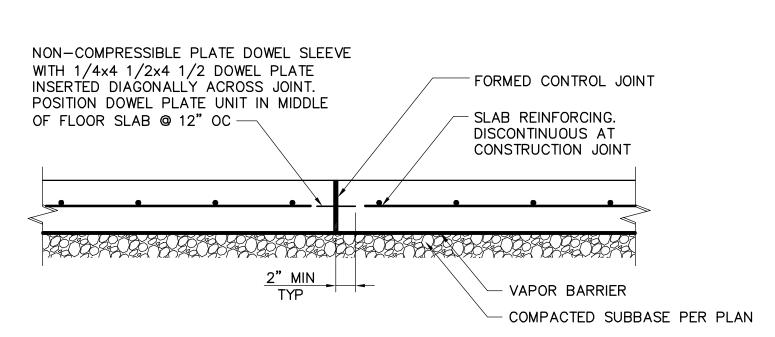
TYPICAL CONCRETE SLAB-ON-GRADE



TYPICAL SLAB-ON-GRADE CONTROL JOINT

NOTES:

- 1. IF FLOOR SLAB CANNOT BE PLACED IN ONE POUR, PROVIDE A CONSTRUCTION JOINT PER "TYPICAL SLAB—ON—GRADE CONSTRUCTION JOINT" ON THIS SHEET. THE FIRST POUR SHALL TERMINATE WITH A FORMED EDGE AT A CONSTRUCTION JOINT LOCATION AS SHOWN ON FOUNDATION/FLOOR PLAN.
- 2. SAW CUTS SHALL ONLY BE MADE WITH AN EARLY ENTRY DRY CUT SAW SUCH AS THE "SOFF-CUT" SAW WITH TWO HOURS OF FINAL SLAB FINISHING OPERATIONS



TYPICAL SLAB-ON-GRADE CONSTRUCTION OINT

NOTES:

- 1. IF FLOOR SLAB CANNOT BE PLACED IN ONE POUR, THE FIRST POUR SHALL TERMINATE WITH A FORMED EDGE AT A CONTRACTION JOINT LOCATION AS SHOWN ON FOUNDATION/FLOOR SLAN PLAN. REFERENCE SHEET 1.
- 2. BASIS OF DESIGN IS THE DIAMOND DOWEL SYSTEM BY DNA CONSTRUCTION TECHNOLOGIES.

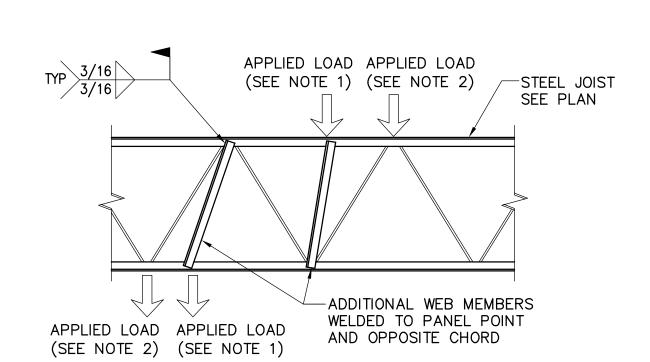
REINFORCING LAP LENGTHS							
BAR SIZE	MIN. LAP LENGTH (IN.)	MIN. EMBED LENGTH					
4	25"	19"					
5	32"	24"					
6	38"	29"					
7	55"	41"					
8	63"	47"					
9	71"	53"					

NOTE:

TABLE TO BE INCLUDED ON ALL REINFORCED CONCRETE SHOP DRAWINGS.

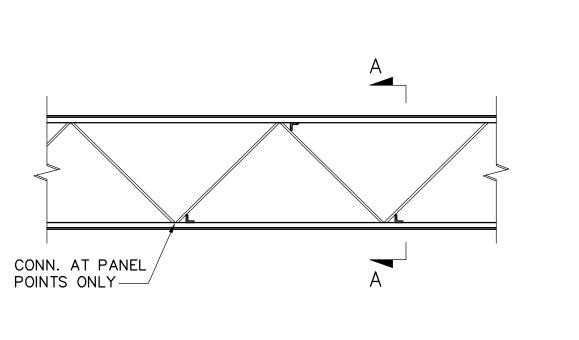


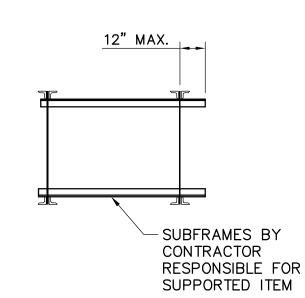
drawing title STRUCTURAL TYPICAL CONCRETE DETAILS				OF CONNECTI T OF CONSTRUCTION S	
	R E	VISIONS	DEI / ((TIWEI)	1 01 001101110011011	PLITAIOLO
mark	date	description	drawings prepared by NORTHEAST (COLLABORATIVE ARCHITECTS	date 12/10/12
$\qquad \qquad \bigcirc$	1/3/13	Addendum		DLESEX MIDDLETOWN, CT 06457	scale AS NOTED
	2/4/13	Structural Update	OF CONN	project	drawn by BAS
			The state of the s	J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD
		&		TECHNICAL SCHOOL	drawing no.
			No. 21640 /CENSEO		S-601
CAD no.			UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS	project no. BI-RT-842	



TYPICAL JOIST REINFORCEMENT AT CONCENTRATED LOADS

- 1. CONCENTRATED LOAD NOT APPLIED AT JOIST PANEL POINT PROVIDE AN ADDITIONAL L1 1/4x1 1/4x3/16" WEB MEMBER EACH SIDE OF JOIST.
- 2. CONCENTRATED LOAD APPLIED AT JOIST PANEL POINT NO ADDITIONAL WEB MEMBERS REQUIRED.
- 3. JOIST MANUFACTURER SHALL REVIEW APPLIED LOADS.



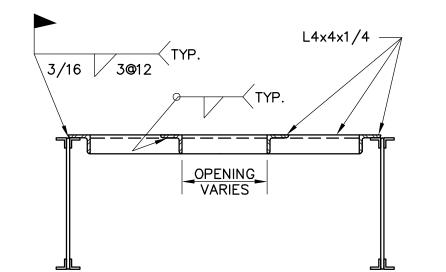


SECTION A-A

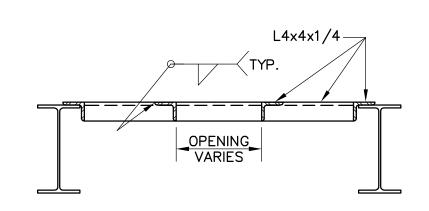
TYPICAL LOAD SUSPENSION DETAIL AT STEEL JOISTS

NOTES:

1. JOIST MANUFACTURER SHALL REVIEW APPLIED LOADS.



TYPICAL JOIST ROOF OPENING FRAME



TYPICAL STEEL ROOF OPENING FRAME SCALE: N.T.S.

TYPICAL NON-LOAD BEARING

PROVIDE 2" MINIMUM GAP BETWEEN BEAM/JOIST AND MASONRY ALL AROUND.

FILL GAP WITH FIRE-SAFING AS REQUIRED BY ARCHITECTURAL DRAWINGS.

CMU WALL BRACING DETAIL
SCALE: 3/4" = 1'-0"

ROOF DECK: SEE PLAN

-L5x3 1/2x1/4" x 1'-0"(LLV) LONG @ 4'-0"

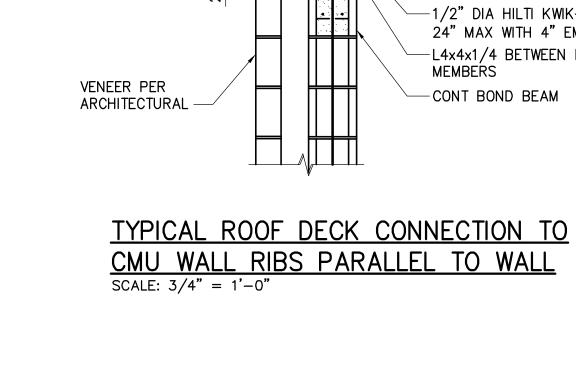
MAX o.c., EACH SIDE

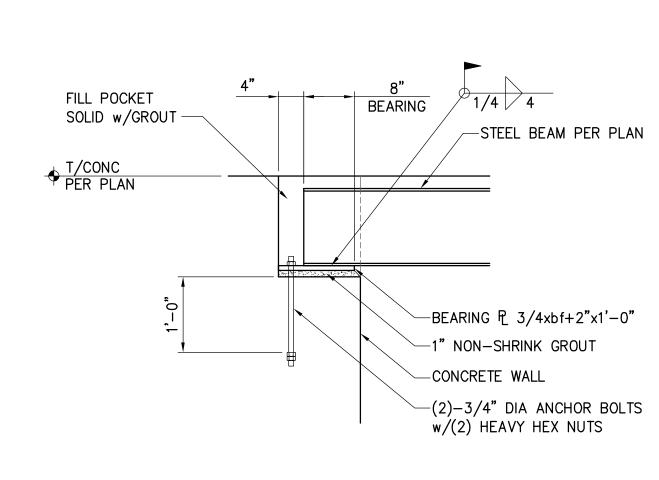
- NON-BEARING CMU WALL,

SEE ARCHITECTURAL

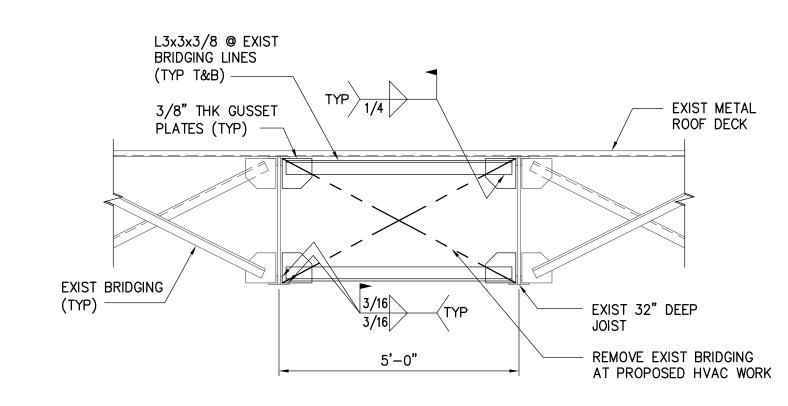
OF WALL

DRAWINGS





TYPICAL STEEL BEAM BEARING ON CONCRETE WALL



TYPICAL BRIDGING REPLACEMENT SECTION

NOTES:

CONT SOLID GROUTED COURSE

-WELD ROOF DECK TO ANGLE

-1/2" DIA HILTI KWIK-BOLT III @ 24" MAX WITH 4" EMBEDMENT

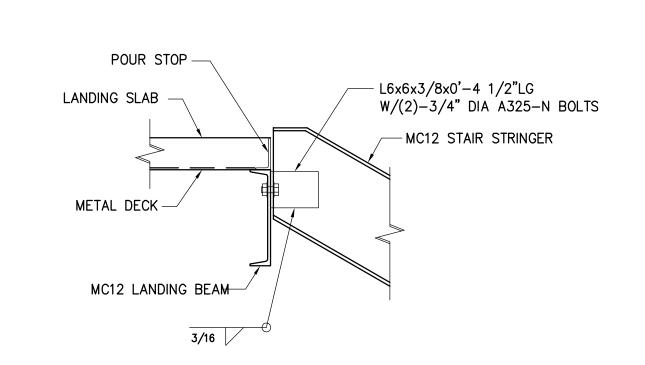
-L4x4x1/4 BETWEEN FRAMING

MEMBERS

-CONT BOND BEAM

-1 1/2" METAL ROOF DECK

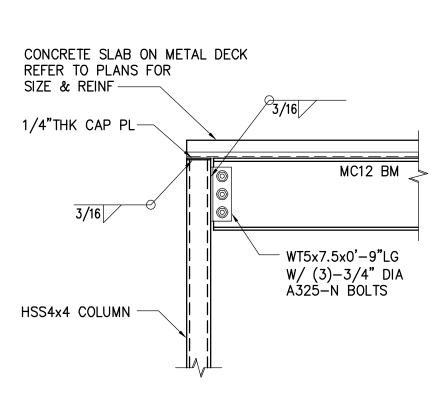
- 1. REFER TO MECHANICAL DWGS FOR LOCATIONS.
- 2. BRIDGING WORK SHALL BE DONE WITH NO SNOW LOAD ON THE ROOF



TYPICAL STAIR STRINGER TO LANDING CONNECTION SCALE: 1" = 1'-0"

NOTES:

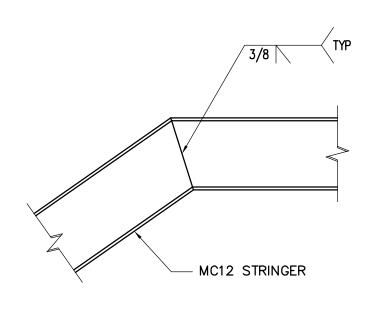
1. THIS DETAIL PERTAINS TO ALL STRINGER LANDING CONNECTIONS UNLESS NOTED OTHERWISE.



TYPICAL STAIR BEAM TO COLUMN CONNECTION

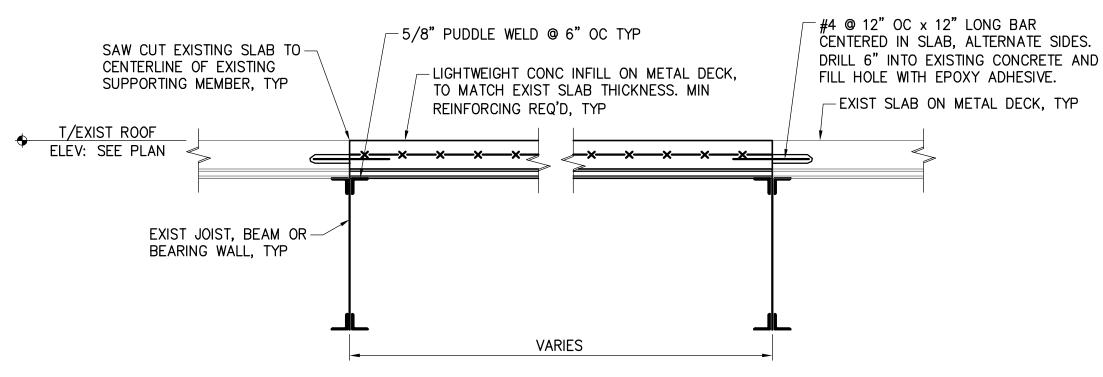
NOTES:

1. CONNECTION OF C8 TO HSS4x4 COLUMN SHALL BE SIMILAR.

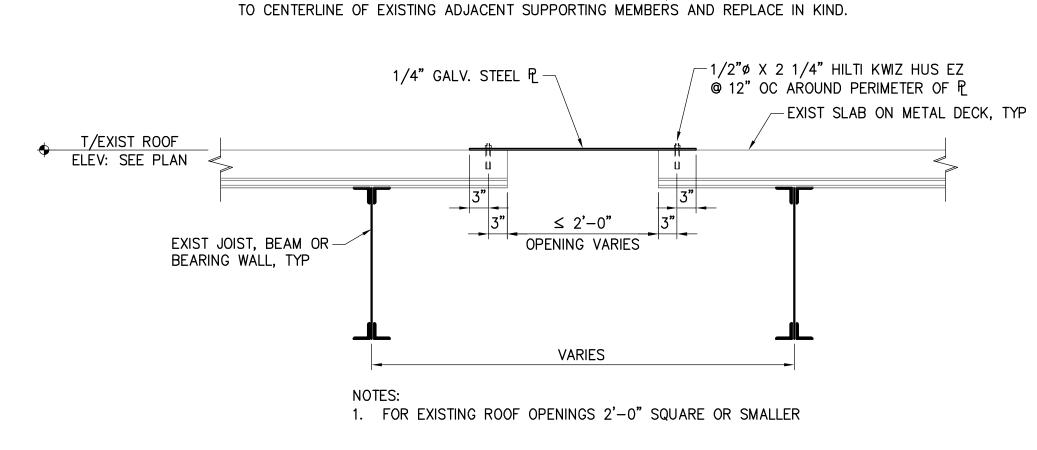


TYPICAL STRINGER CONNECTION DETAIL

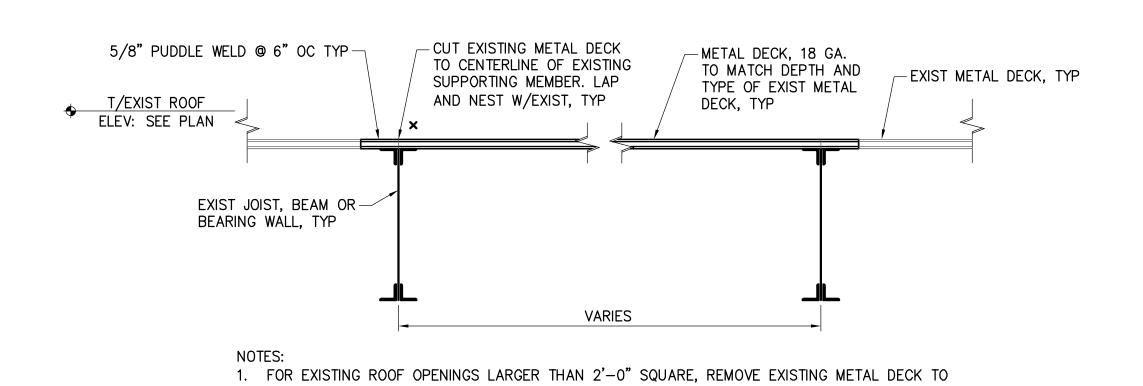
SCALE: 3/4" = 1'-0"



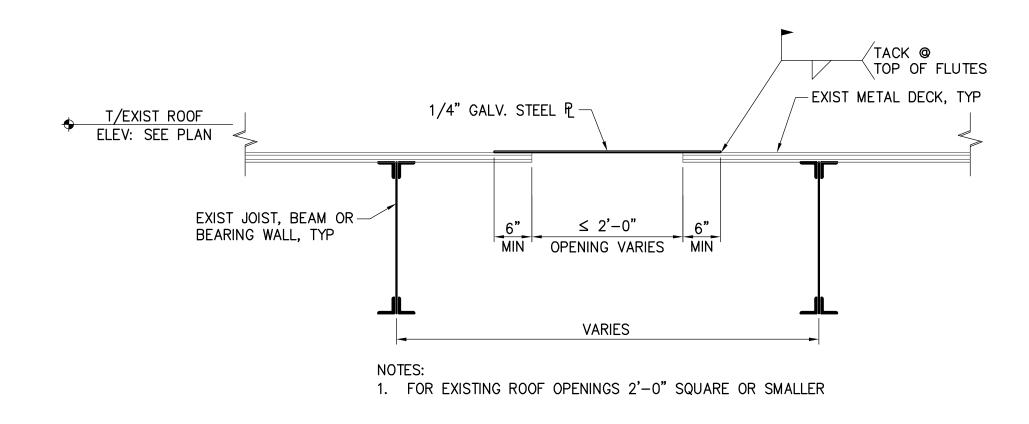
1. FOR EXISTING ROOF OPENINGS LARGER THAN 2'-0" SQUARE, REMOVE EXISTING METAL DECK AND SLAB



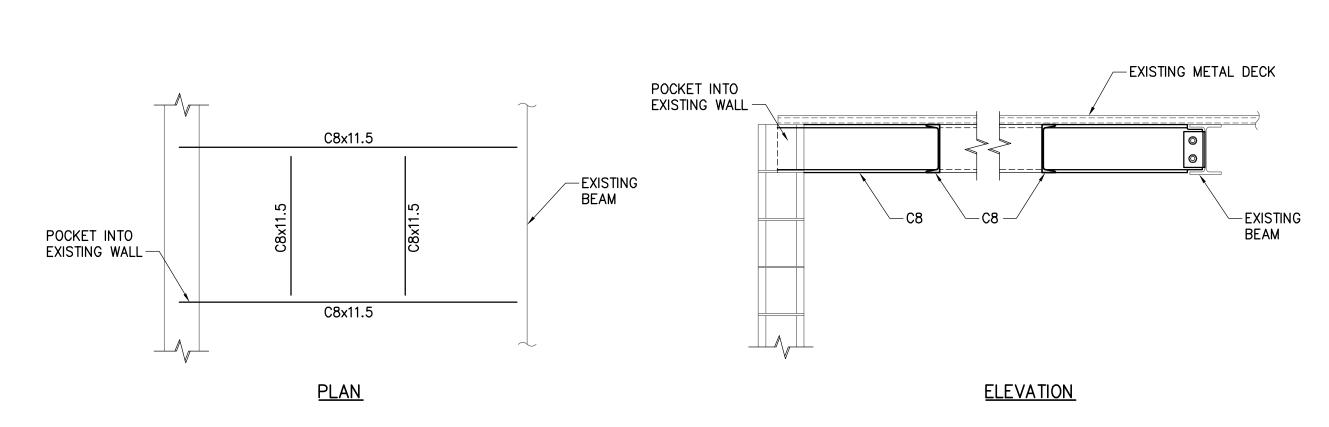
TYP EXIST ROOF SLAB ON METAL DECK INFILL DETAIL
SCALE: NOT TO SCALE



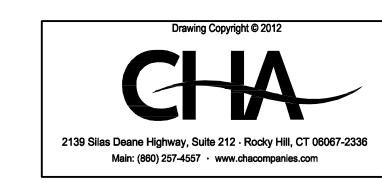
CENTERLINE OF EXISTING ADJACENT SUPPORTING MEMBERS AND REPLACE IN KIND.



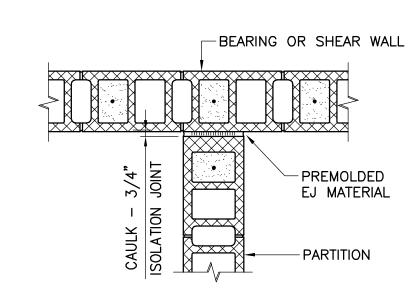
TYP EXIST ROOF METAL SLAB ON DECK INFILL DETAIL



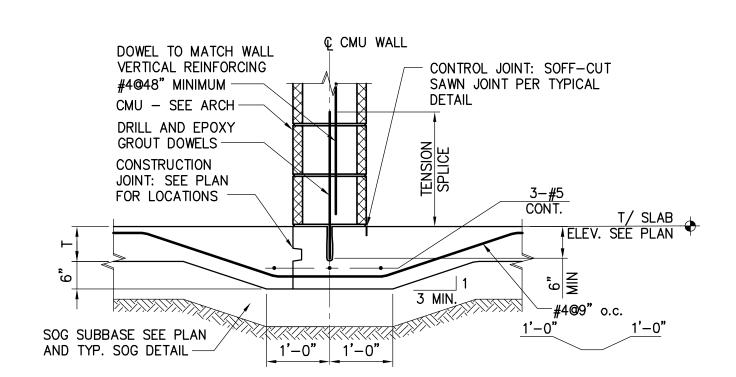
TYPICAL SKYLIGHT OPENING DETAIL SCALE: 3/4" = 1'-0"



drawin ST		IRAL TYPICAL STEEL DETAILS	STATE OF CONNECT	
	RE	VISIONS	DEPARTMENT OF CONSTRUCTION S	SERVICE
mark	date	description	drawings prepared by NORTHEAST COLLABORATIVE ARCHITECTS	date 12/10/12
$\overline{\Lambda}$	1/3/13	Addendum	500 PLAZA MIDDLESEX MIDDLETOWN, CT 06457	scale AS NOTEI
	2/4/13	Structural Update	project	drawn by BAS
			J.M. WRIGHT REGIONAL VOCATIONAL	approved by DJD
			TECHNICAL SCHOOL	drawing no.
040 :-			ONAL ENTRE	S-602
CAD n	0.		UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS	



TYPICAL JOINT AT MASONRY PARTITIONS ABUTTING BEARING OR SHEAR WALLS

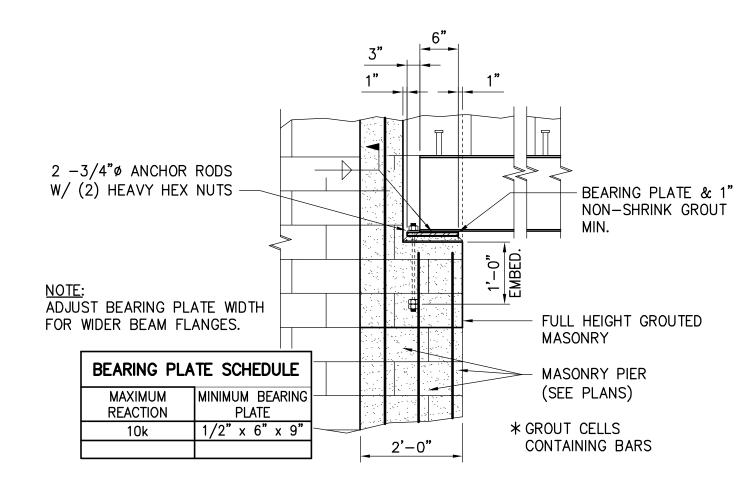


NOTE: SEE ARCH. DWGS. FOR LOCATION OF MASONRY WALLS.

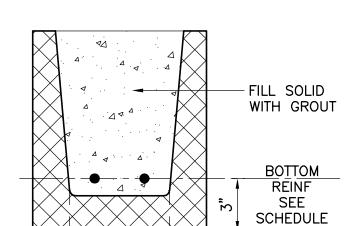
TYPICAL THICKENED SLAB UNDER NON-BEARING MASONRY WALLS

NOTES:

- 1. PROVIDE EITHER CONSTRUCTION OR CONTROL JOINT, NOT BOTH. BOTH TYPES OF JOINTS ARE SHOWN FOR INFORMATIONAL PURPOSES.
- 2. COORDINATE JOINT LOCATIONS WITH PLANS AND REINFORCING SUPPLIER.
- 3. SEE ARCH DRAWINGS FOR LOCATIONS OF CMU WALLS.



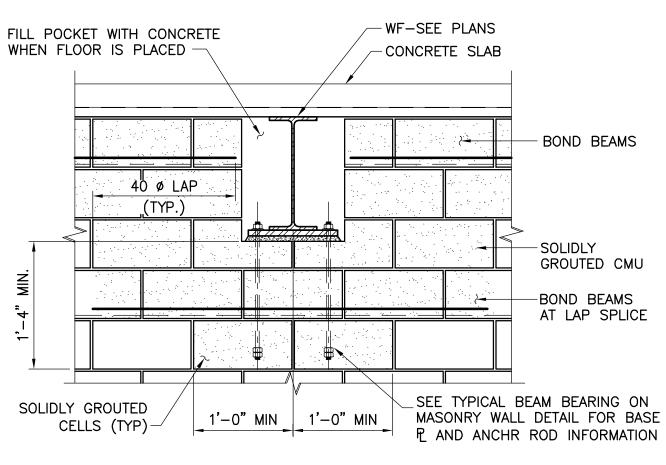
TYPICAL STEEL BEAM LINTEL BEARING PLATE AT PARALLEL MASONRY WALL



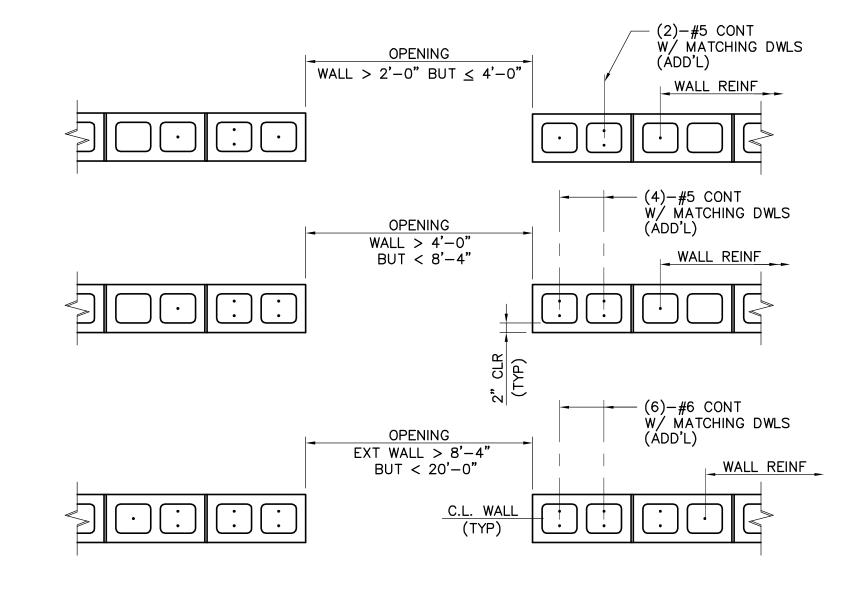
TYPICAL BOND BEAM REINFORCING DETAIL

NOTES:

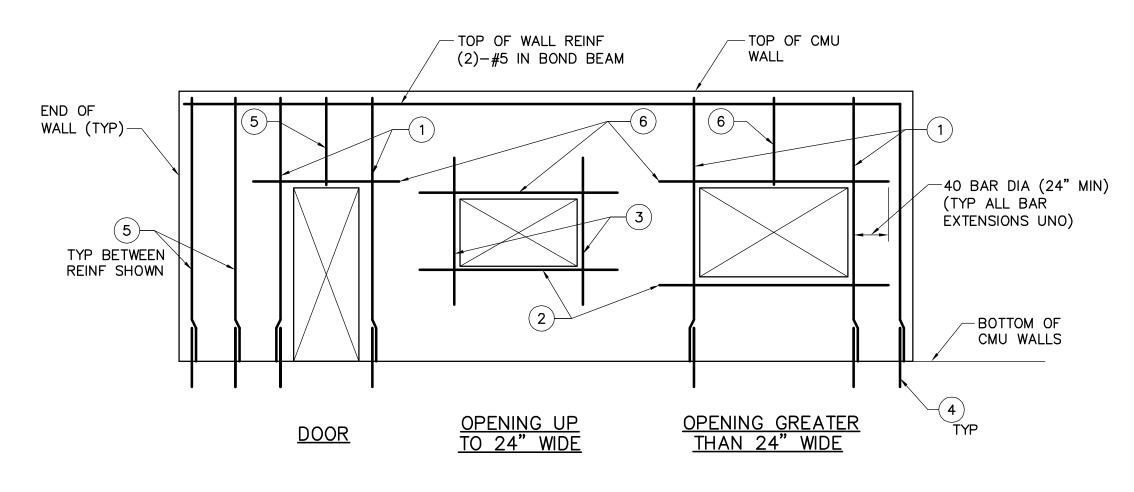
- 1. BOND BEAMS LOCATED AT FLOOR AND ROOF LEVELS TO HAVE REINFORCING CONTINUOUS THROUGH CONTROL JOINTS.
- 2. INTERMEDIATE BOND BEAMS TO HAVE HORIZONTAL REINFORCING DISCONTINUOUS AT CONTROL JOINTS.
- 3. USE LINTEL BLOCKS AT WALL OPENINGS AND USE KNOCK-OUT BLOCKS AT ALL OTHER LOCATIONS.



TYPICAL BOND BEAM INTERRUPTION AT STEEL BEAM

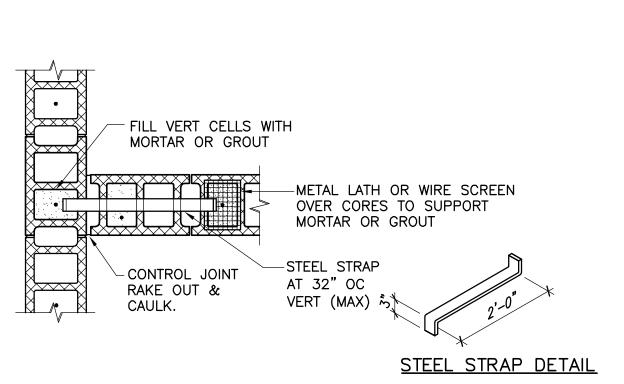


TYPICAL CMU OPENING ADDITIONAL REINFORCING DETAIL SCALE: N.T.S.

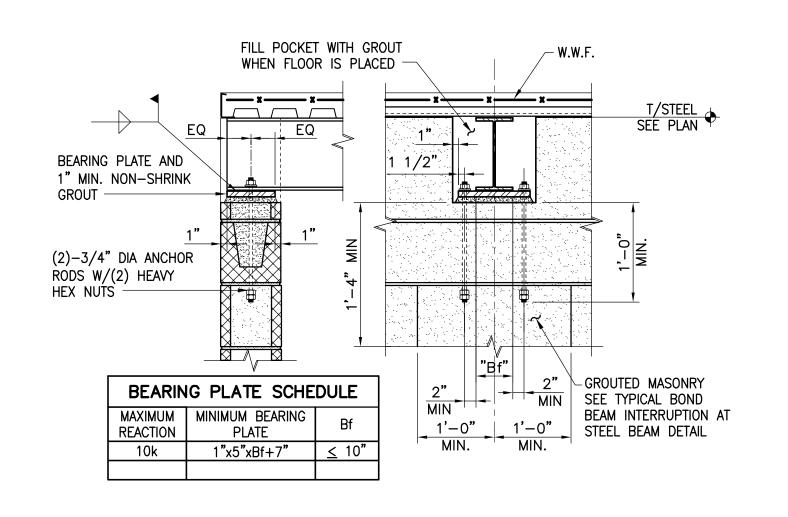


TYPICAL MASONRY WALL REINFORCEMENT LAYOUT

- SEE TYPICAL 8" CMU WALL OPENING DETAIL, THIS SHEET
- 2 SILL BARS. (2)-#4 IN BOND BEAM
- (3) (1)-#4 EACH SIDE
- 4 SEE TYPICAL CMU WALL REINFORCING DETAIL
- 5 BETWEEN BARS SHOWN, PROVIDE TYPICAL WALL REINF AS INDICATED.
- (6) SEE TYPICAL STEEL LINTEL SCHEDULE
- 7 IF FULL LENGTH IS NOT AVAILABLE, EXTEND AS FAR AS POSSIBLE, HOOK 90', THEN EXTEND. BEYOND BEND, REMAINDER OF LENGTH REQ'D (NOT LESS THAN 12")
- HORIZONTAL JOINT REINFORCEMENT SHALL CONSIST OF LADDER TYPE REINFORCEMENT CONSISTING OF (2) CONTINUOUS HORIZONTAL W1.7 WIRES. IN EXTERIOR WALL, JOINT REINFORCEMENT SHALL BE HOT DIP GALVANIZED. SPACE JOINT REINF AT 16"



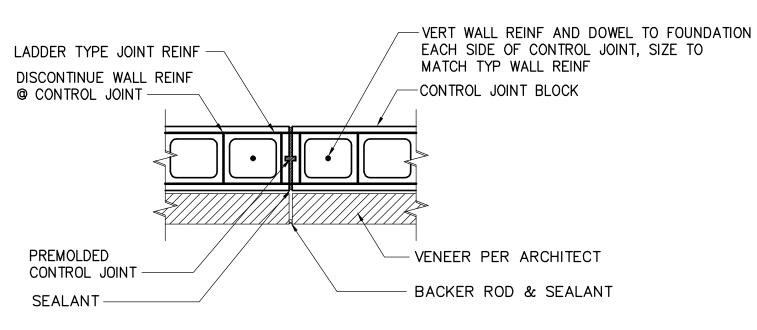
TYPICAL INTERSECTION OF STRUCTURAL MASONRY SHEAR WALLS SCALE: N.T.S.



TYPICAL BEAM BEARING PLATE AT MASONRY WALL

REINF PER SCHEDULES TYP CJ— COORDINATE WITH ARCH WITH ARCH O O O O O O O O O O O O O
<u>INTERSECTION</u> <u>CORNERS</u>

TYPICAL STRUCTURAL BOND BEAM SCALE: N.T.S.



TYPICAL MASONRY CONTROL JOINT SCALE: 3/4" = 1'-0"

- 1. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR VENEER TIES.
- 2. ALIGN CONTROL JOINTS IN VENEER AND BACKUP.

MASONRY WALL STEEL LINTEL SCHEDULE						
OPENING SIZE	4" WALLS	6" WALLS	8" WALLS	12" WALLS		
3'-0"	(1) 4x3 1/2x5/16"	(2) L4x2 1/2x5/16"	(2) L4x3 1/2x5/16"	(3) L4x3 1/2x5/16"		
4'-0"	(1) L4x3 1/2x1/4"	(2) L4x2 1/2x5/16"	(2) L4x3 1/2x5/16"	(3) L4x3 1/2x5/16"		
5'-0"	(1) L5x3 1/2x5/16"	(2) L5x2 1/2x5/16"	(2) L5x3 1/2x5/16"	(3) L5x3 1/2x5/16"		
6'-0"	(1) L6x3 1/2x5/16"	WT 7x13	(2) L6x3 1/2x5/16"	(3) L6x3 1/2x5/16"		
8'-0"	(1) L6x3 1/2x5/16"	WT 8x15.5	(2) L6x3 1/2x3/8"	(3) L6x3 1/2x3/8"		

MASONRY STEEL LINTEL SCHEDULE SCALE: N.T.S.

- 1. UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS, PROVIDE AND INSTALL LINTEL ANGLES FOR MASONRY OPENINGS IN ACCORDANCE WITH THIS SCHEDULE.
- 2. WHERE LINTELS OCCUR IN EXTERIOR WALLS, MINIMUM THICKNESS SHALL BE 5/16".

4. ALL ANGLES SUPPORTING THE EXTERIOR VENEER SHALL BE HOT-DIPPED GALVANIZED.

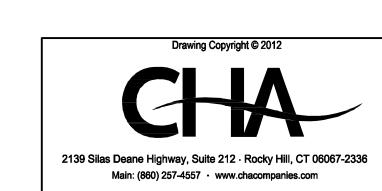
- 3. LINTELS SHALL BE 16" LONGER THAN MASONRY OPENINGS, LONG LEG VERTICAL.
- 5. WELD ADJOINING ANGLES TO FORM A SINGLE UNIT.

2003 IBC STRUCTURAL REINFORCED							
MASONRY LAP SPLICES (1500 PSI)							
REINFORCING	SI	BLOCK S NGLE BAR	SIZE W/ PER CE	LL	BLC DOUBLE	OCK SIZE BAR PE	W/ R CEL
SIZE	6"	8"	10"	12"	8"	10"	12"
#3	19	19	19	19	19	19	19
#4	25	25	25	25	31	28	28
#5	39	31	31	31	48	43	43
#6	80	57	52	52	98	87	87
#7	-	79	61	61	142	118	118
#8	-	112	86	74	229	165	165
#9	_	_	111	90	_	210	210

2003 IBC MASONRY LAP SPLICE SCHEDULES

NOTE:

MECHANICAL SPLICES ARE ACCEPTABLE AS AN ALTERNATE TO THE INDICATED LAP SPLICES. MECHANICAL SPLICES SHALL DEVELOP 125% OF THE SPECIFIED YIELD STRENGTH OF THE REINFORCING BAR.



	IVIA	iii. (600) 237-4337 • www.chacompani	es.com		
drawir STR	ŬCTUR	AL TYPICAL MASONRY DETAILS VISIONS		OF CONNECTI T OF CONSTRUCTION S	
mark	date	description	drawings prepared by		date 12/10/12
Λ	1/3/13	Addendum		COLLABORATIVE ARCHITECTS ODLESEX MIDDLETOWN, CT 06457	scale AS NOTED
	2/4/13	Structural Update	CONNOCIONAL DE LA CONTRACTION	J.M. WRIGHT REGIONAL VOCATIONAL TECHNICAL SCHOOL	drawn by BAS approved by DJD drawing no.
CAD r	00.	<i>*</i>	No. 21640 No. 21640 /CENSE ONAL UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS	project no. BI-RT-842	S-603

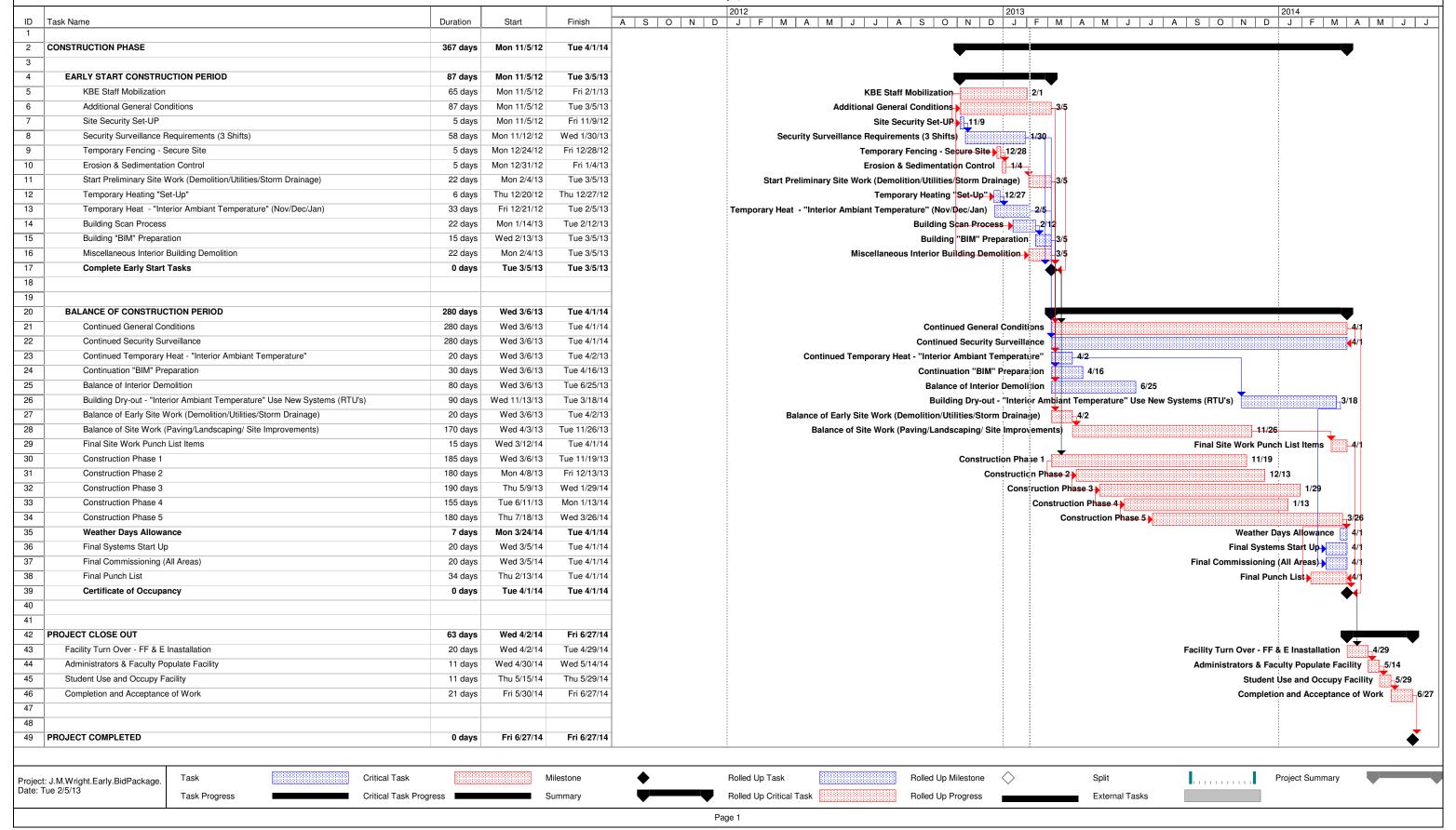


J.M.WRIGHT TECHNICAL HIGH SCHOOL

Project No. BI-RT-842 CMR

PRELIMINARY EARLY START & OVERALL PROJECT SCHEDULE

February 5, 2013



SPECIFICATIONS

Project Specifications Volumes 1-3 dated December 10, 2012, prepared by Northeast Collaborative Architects, LLC., 500 Plaza Middlesex, Middletown, CT 06457 and their consultants.

ADDENDUMS

Addendum 1 dated 11/28/12 Addendum 2 dated 12/3/12 Addendum 3 dated 12/4/12 Addendum 4 dated 12/21/12 Addendum 5 dated 1/4/13 Addendum 6 dated 1/8/13 Addendum 7 dated 1/9/13 Addendum 8 dated 1/15/13 Addendum 9 dated 1/18/13 Addendum 10 dated 1/30/13 Addendum 11 dated 2/6/13

DRAWING LIST

As prepared by Northeast Collaborative Architects, LLC., and their consultants.

ORIG.

DRAWING TITLE DATE REVISION DATES

	· · · · ==		REVISION DATES
	Values 4		
	Volume 1		
14.004	Cover Sheet	40/40/40	
V-001	List of Drawings	12/10/12	
G-001	General Information	12/10/12	
G-002	First Floor Code Plans	12/10/12	1/3/13
G-003	Second Floor Code Plans	12/10/12	
SU-101	Boundary and Topographic Survey	9/12/05	
SU-102	Boundary and Topographic Suvrey	5/4/05	
SU-201	Boundary Survey	9/12/05	
L100	Site Illustrative Plan	11/12/12	
L101	Site Accessibility Plan & Code Information	11/12/12	
LD100	Site Demolition	11/12/12	
LM100	Overall Site Material & Layout	11/12/12	
LM101	Site Layout	11/12/12	
LM102	Site Layout	11/12/12	
LM103	Site Layout	11/12/12	
LM111	Site Materials	11/12/12	
LM112	Site Materials	11/12/12	
LM113	Site Materials	11/12/12	
LM400	Courtyard Enlargement	11/12/12	
LM401	Courtyard Enlargement	11/12/12	
LM402	South Enterance Enlargement	11/12/12	
LM403	North Enterance Enlargement	11/12/12	
LM500	Site Details	11/12/12	11/30/12
LM501	Site Details	11/12/12	
LM502	Site Details	11/12/12	
LM503	Site Details	11/12/12	
LM504	Site Details	11/12/12	
LP100	Overall Site Planting	11/12/12	11/30/12
LP101	Site Planting	11/12/12	
LP102	Site Planting	11/12/12	
LP103	Site Planting	11/12/12	
LP400	Courtuard Enlagement	11/12/12	
LP500	Planting Details	11/12/12	11/30/12
IR-100	Courtyard Irrigation	11/12/12	
IR-101	Rainwater Harvesting	11/12/12	
IR-102	Irrigation Details	11/12/12	
IR-102	Irrigation Details	11/12/12	
1100	Trigation betails	11/12/12	
	Civil		
C-001	Site Utility Demolition Plan	11/12/12	
C-001	Site Utility Demolition Plan	11/12/12	
C-002	Site Utility Demolition Plan	11/12/12	
U-003	Site utility Demolition Plan	11/12/12	

As prepared by Northeast Collaborative Architects, LLC., and their consultants.

ORIG.

DRAWING	G TITLE	ORIG. DATE	REVISION DATES
	Civil (cont.)		
C-200	Overall Grading Plan	11/12/12	
C-201	Site Grading Plan	11/12/12	
C-202	Site Grading Plan	11/12/12	
C-203	Site Grading Plan	11/12/12	
C-204	Erosion & Sediment Control Plan	11/12/12	
C-301	Site Utility Plan	11/12/12	
C-302	Site Utility Plan	11/12/12	
C-303	Site Utility Plan	11/12/12	
C-601	Construction Details	11/12/12	
C-602	Construction Details	11/12/12	
C-603	Construction Details	11/12/12	
C-604	Construction Details	11/12/12	
	<u>Demolition</u>		
D-111	Demo First Floor Plan Section A1	11/12/12	1/3/13
D-112	Demo First Floor Plan Section A2	11/12/12	1/3/12
D-113	Demo First Floor Plan Section A3	11/12/12	1/3/13
D-114	Demo First Floor Plan Section B1	11/12/12	1/3/12
D-115	Demo First Floor Plan Section B2	11/12/12	1/3/13
D-116	Demo First Floor Plan Sections C1	11/12/12	1/3/12
D-117	Demo First Floor Plan Section C2	11/12/12	1/3/13
D-118	Demo First Floor Plan Section C3	11/12/12	1/3/12
D-121	Demo Second Floor Plan Section A1	11/12/12	1/3/13
D-122	Demo Second Floor Plan Section A2	10/15/12	1/3/12
D-123	Demo Second Floor Plan Section A3	11/12/12	1/3/13
D-130 D-201	Roof Demolition Plan Demolition Elevations	11/12/12 11/12/12	
D-201 D-202	Demolition Elevations Demolition Elevations	11/12/12	
D-202	Demontion Elevations	11/12/12	
	Structural		
S-001	Structural Notes, Legend & Special Inspections	12/10/12	1/3/13, 2/4/13
SD-111	Structural Demolition Plan Foundation & Slab A1	11/12/12	
SD-112	Structural Demolition Plan Foundation & Slab A2	11/12/12	
SD-114	Structural Demolition Plan Foundation & Slab B1	11/12/12	
SD-115 SD-116	Structural Demolition Plan Foundation & Slab B2 Structural Demolition Plan Foundation & Slab C1	11/12/12 11/12/12	
SD-110	Structural Demolition Plan Foundation & Slab C2	11/12/12	
SD-117	Structural Demolition Plan Foundation & Slab C3	11/12/12	
SD-110	Structural Demolition Plan Second Floor A1	11/12/12	
SD-122	Structural Demolition Plan Second Floor A2	11/12/12	
SD-131	Structural Demolition Plan Roof A1	11/12/12	
SD-132	Structural Demolition Plan Roof A2	11/12/12	
S-111	Structural Foundation & Slab Plan A1	12/10/12	1/3/13, 2/4/13
S-112	Structural Foundation & Slab Plan A2	12/10/12	1/3/13, 2/4/13
S-114	Structural Foundation & Slab Plan B1	12/10/12	1/3/13, 2/4/13
S-115	Structural Foundation & Slab Plan B2	12/10/12	1/3/13, 2/4/13
S-116	Structural Foundation & Slab Plan C1	12/10/12	1/3/13, 2/4/13
S-117	Structural Foundation & Slab Plan C2	12/10/12	1/3/13, 2/4/13
S-118	Structural Foundation & Slab Plan C3	12/10/12	1/3/13, 2/4/13
S-121	Structural Framing Plan Second Floor A1	12/10/12	1/3/13, 2/4/13
S-122	Structural Framing Plan Second Floor A2	12/10/12	1/3/13, 2/4/13
S-131	Structural Framing Plan Roof A1	12/10/12	1/3/13, 2/4/13
S-132	Structural Framing Plan Roof A2	12/10/12	1/3/13, 2/4/13
S-133	Structural Framing Plan Roof A3	12/10/12	1/3/13, 2/4/13
S-134	Structural Framing Plan Roof B1	12/10/12	1/3/13, 2/4/13
S-135	Structural Framing Plan Roof B2	12/10/12	1/3/13, 2/4/13
S-136	Structural Framing Plan Roof C1	12/10/12	1/3/13, 2/4/13
S-137	Structural Framing Plan Roof C2	12/10/12	1/3/13, 2/4/13
S-138	Structural Framing Plan Roof C3	12/10/12	1/3/13, 2/4/13
S-201	Structural Concrete Schedules	12/10/12	1/3/13, 2/4/13
S-202	Structural Steel Schedules	12/10/12	1/3/13, 2/4/13
S-203	Framing Elevation Schematic Diagrams	12/10/12	1/3/13, 2/4/13

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S-204	Structural (Cont.) Framing Elevation Schematic Diagrams	12/10/12	1/2/12 2/4/12
S-204 S-205	Enlarged Structural Foundation Plan	12/10/12 12/10/12	1/3/13, 2/4/13 1/3/13, 2/4/13
S-301	Structural Foundation Section	12/10/12	1/3/13, 2/4/13
S-301	Structural Foundation Sections	12/10/12	1/3/13, 2/4/13
S-401	Structural Foundation Sections Structural Second Floor Sections	12/10/12	1/3/13, 2/4/13
S-401	Structural Second Floor Sections	12/10/12	1/3/13, 2/4/13
S-402	Structural Roof Sections	12/10/12	1/3/13, 2/4/13
S-404	Structural Roof Sections	12/10/12	1/3/13, 2/4/13
S-501	Structural Site Sections	12/10/12	1/3/13, 2/4/13
S-502	Plans Sections & Details	12/10/13	1/3/13, 2/4/13
S-503	Structural Dunnage Details	12/10/12	1/3/13, 2/4/13
S-504	Structural Dunnage Details	12/10/12	1/3/13, 2/4/13
S-601	Structural Typical Concrete Details	12/10/12	1/3/13, 2/4/13
S-602	Structural Typical Steel Details	12/10/12	1/3/13, 2/4/13
S-603	Structural Typical Masonry Details	12/10/12	1/3/13, 2/4/13
	j,		
	<u>Architecurals</u>		
V-002	General Information	12/10/12	
A-001	Finish Schedule Part 1 of 3	12/10/12	
A-002	Finish Schedule Part 2 of 3	12/10/12	
A-003	Finish Schedule Part 3 of 3	12/10/12	
A-010	Wall Types	12/10/12	
A-011	Wall Types	12/10/12	1/3/13
A-020	Door Schedule	12/10/12	
A-021	Door Schedule	12/10/12	
A-022	Door Frames	12/10/12	
A-023	Door Details	12/10/12	
A-030	Window Details	12/10/12	
A-030 A-031	Wondow Details Wondow Details	12/10/12	
A-032	Window Elevations	12/10/12	
A-033	Window Details	12/10/12	
A-034	Window Details	12/10/12	
A-035	Window Detials	12/10/12	
A-036	Hollow Metal Window Elevations	12/10/12	
A-101	Overall First Floor Plan and Location of Flood Barrier Panels	12/10/12	
A-102	Overall Second Floor Plan	12/10/12	
A-111	First Floor Plan Section A1	12/10/12	
A-112	Floor Plan Section A2	12/10/12	
A-113	First Floor Plan Sections A3	12/10/12	
A-114	First Floor Plan Section B1	12/10/12	
A-115	First Floor Plan Section B2	12/10/12	
A-116	First Floor Plan Section C1	12/10/12	
A-117	First Floor Plan Section C2	12/10/12	
A-117	First Floor Plan Section C3	12/10/12	
A-110 A-121	Second Floor Plan Section A1	12/10/12	
A-121	Second Floor Plan Section A2	12/10/12	
A-123	Second Floor Plan Section A3	12/10/12	
A-131	First Floor Dimension Plan Section A1	12/10/12	1/3/13
A-132	First Floor Dimension Plan Section A2	12/10/12	
A-132	First Floor Dimension Plan Section A3	12/10/12	
A-133	First Floor Dimension Plan Section B1	12/10/12	
A-134 A-135	First Floor Dimension Plan Section B2	12/10/12	
A-135 A-136	First Floor Dimension Plan Section B2 First Floor Dimension Plan Section C1	12/10/12	1/3/13
A-130	LIEST LIONE DILLIGUSION LIQUE SECTION CL	12/10/12	1/3/13

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A-137	First Floor Dimension Plan Section C2	12/10/12	
A-138	First Floor Dimension Plan Section C3	12/10/12	
A-141	Second Floor Dimension Plan Section A1	12/10/12	
A-142	Second Floor Dimension Plan Section A2	12/10/12	1/3/13
A-143	Second Floor Dimension Plan Section A3	12/10/12	
A-150	Overall Roof Plan	12/10/12	
A-151	Partial Roof Plan	12/10/12	
A-152	Partial Roof Plan	12/10/12	
A-153	Partial Roof Plan	12/10/12	
A-154	Partial Roof Plan	12/10/12	
A-155	Partial Roof Plan	12/10/12	
A-201	Overall Exterior Elevations	12/10/12	
A-202	Overall Exterior Elevations	12/10/12	
A-203	Enlarged Exterior Elevations	12/10/12	
A-204	Enlarged Exterior Elevations	12/10/12	
A-205	Enlarged Exterior Elevations	12/10/12	
A-206	Enlarged Exterior Elevations Enlarged Exterior Elevations	12/10/12	
A-207	Enlarged Exterior Elevations	12/10/12	
A-208	Building Sections	12/10/12	
A-209	Building Section/Enlarged Elevations	12/10/12	
A-207	Building Section/At Boiler Room	12/10/12	
A-210 A-211	Building Sections	12/10/12	
A-211	Building Section/North Column Line – W	12/10/12	
A-212	Building Section/North Column Line - W	12/10/12	
A-213	Building Section/North of Col Line 1.30	12/10/12	
A-301	Interior Elevations	12/10/12	
A-301	Interior Elevations	12/10/12	
A-302	Interior Elevations	12/10/12	
A-303	Interior Elevations	12/10/12	
A-304 A-305	Interior Elevations	12/10/12	
A-305 A-306	Interior Elevations	12/10/12	
A-300 A-307	Interior Elevations	12/10/12	
A-307 A-308	Interior Elevations	12/10/12	
A-300 A-309	Interior Elevations	12/10/12	
A-309 A-310	Interior Elevations Interior Elevations	12/10/12	
A-310	Interior Elevations Interior Elevations	12/10/12	
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A-316 A-317	Interior Elevations Interior Elevations	12/10/12	1/3/13
A-317 A-318	Interior Elevations Interior Elevations	12/10/12	1/3/13
A-318 A-319	Interior Elevations Interior Elevations	12/10/12	
A-319 A-320	Interior Elevations Interior Elevations	12/10/12	
A-320 A-321	Interior Elevations Interior Elevations	12/10/12	
A-322	Interior Elevations	12/10/12	
A-323	Interior Elevations Interior Elevations	12/10/12 12/10/12	
A-324			
A-325	Interior Elevations	12/10/12	

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A-326	Architecturals (cont.) Interior Elevations	12/10/12	
A-320 A-330		12/10/12	
	Enlarged Floor Plans		
A-331	Millwork Details	12/10/12	
A-332	Millwork Details	12/10/12	
A-333	Science Classroom Millwork Details	12/10/12	
A-334	Millwork Details	12/10/12	
A-340	Enlarged Corridor Plan	12/10/12	
A-341	Interior Corridor Elevations	12/10/12	
A-342	Enlarged Corridor Plan	12/10/12	
A-343	Interior Corridor Elevations	12/10/12	
A-411	Reflected Ceiling Plan Section A1	12/10/12	
A-412	Reflected Ceiling Plan Section A2	12/10/12	
A-413	Reflected Ceiling Plan Section A3	12/10/12	
A-414	Reflected Ceiling Plan Section B1	12/10/12	
A-415	Reflected Ceiling Plan Section B2	12/10/12	
A-416	Reflected Ceiling Plan Section C1	12/10/12	
A-417	Reflected Ceiling Plan Section C2	12/10/12	
A-418	Reflected Ceiling Plan Section C3	12/10/12	
A-421	Reflected Ceiling Plan Section A1	12/10/12	
A-422	Reflected Ceiling Plan Section A2	12/10/12	
A-423	Reflected Ceiling Plan Section A3	12/10/12	
A-430	Ceiling Details	12/10/12	
A-501	Stair Sections	12/10/12	
A-502	Stair/Ramp Details	12/10/12	
A-503	Plumbing Mezzanine Details and Sections	12/10/12	
A-601	Wall Sections	12/10/12	
A-602	Wall Sections	12/10/12	
A-603	Wall Sections	12/10/12	
A-604	Wall Sections	12/10/12	
A-605	Wall Sections	12/10/12	
A-606	Walli Sections	12/10/12	
A-607	Wall Sections	12/10/12	
A-611	Roof Details	12/10/12	
A-612	Roof Details	12/10/12	
A-613	Roof Details	12/10/12	
A-614	Roof Detials	12/10/12	
A-616	Canopy Details	12/10/12	
A-621	Plan Detials	12/10/12	
A-622	Plan Details	12/10/12	
A-623	Plan Details	12/10/12	
A-624	Plan Details	12/10/12	
A-625	Plan Details Plan Details	12/10/12	
A-625 A-901	Storage Building Plans & Elevations	12/10/12	
F-111	Floor Pattern Plan	12/10/12	
F-111	First Floor Pattern Plan	12/10/12	
F-113	First Floor Pattern Plan - Section A3	12/10/12	
F-114	Floor Pattern Plan	12/10/12	
F-115	First Floor Plattern Plan - Section B2	12/10/12	
F-121	Second Floor Pattern Plan – Section A1	12/10/12	
F-122	Second Floor Pattern Plan – Section A2	12/10/12	
F-123	Second Floor Pattern Plan – Section A3	12/10/12	

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		т.	
	Foodconics Fauinment / Fauinment /		
	Foodservice Equipment / Equipment / Electonic Security		
K-100	Schedule of Foodservice Equipment &	12/10/12	
	Connections		
K-101	Foodservice Equipment Plan	12/10/12	
K-102	Foodservice Equipment Rough-In Plan	12/10/12	
K-103	Foodservice Equipment Details	12/10/12	
K-104	Foodservice Equipment Details	12/10/12	
EQ-111	First Floor Equipment Plan Section A1	12/10/12	
EQ-112	First Floor Equipment Plan Section A2	12/10/12	
EQ-113	First Floor Equipment Plan Section A3	12/10/12	
EQ-114	First Floor Equipment Plan Section B1	12/10/12	
EQ-115	First Floor Equipment Plan Section B2	12/10/12	
EQ-117	First Floor Equipment Plan Section C2	12/10/12	
EQ-118	First Floor Equipment Plan Section C3	12/10/12	
EQ-121	Second Floor Equipment Plan Section A1	12/10/12	
EQ-122	Second Floor Equipment Plan Section A2	12/10/12	
EQ-123	Second Floor Equipment Plan Section A3	12/10/12	
TY0.01	Electronic Security Site Plan	12/8/12	Not for Construction
TY1.01	Electronic Security Device Locations	12/8/12	Not for Construction
TY1.02	Electronic Security Devise Locations	12/8/12	Not for Construction
TY1.03	Electronic Security Devise Locations	12/8/12	Not for Construction
TY-G01	Electronic Security General Sheet	12/8/12	Not for Construction
11 001	Electronic desarity contrar sheet	12/0/12	The for construction
	Volume 3		
	Fire Protection		
V-003	General Informtion	12/10/12	
FP-001	Fire Protection Legend, Abbreviations &	12/10/12	1/3/13
11-001	Symbols	12/10/12	173713
FP-002	Fire Protection Zone Plan	12/10/12	
FP-111	Fire Protection Plan First Floor A1	12/10/12	
FP-112	Fire Protection Plan First Floor A2	12/10/12	
FP-113	Fire Protection Plan First Floor A3	12/10/12	
FP-114	Fire Protection Plan First Floor B1	12/10/12	1/3/13
FP-115	Fire Protection Plan First Floor B2	12/10/12	
FP-116	Fire Protection Plan First Floor C1	12/10/12	
FP-117	Fire Protection Plan First Floor C2	12/10/12	1/3/13
FP-118	Fire Protection Plan First Floor C3	12/10/12	1/3/13
FP-121	Fire Protection Plan Second Floor A1	12/10/12	1/3/13
FP-122	Fire Protection Plan Second Floor A2	12/10/12	1/3/13
FP-123	Fire Protection Plan Second Floor A3	12/10/12	1/3/13
FP-501	Fire Protection Details & Schedule	12/10/12	176710
11 001	- 1.5 Frotestion Bottails & Johnston	12/10/12	
	Mechanical		
M-001	Mechanical Legend, Abrreviations & Symbols	12/10/12	
MD-101	Mechanical First Floor Ductwork Demolition Plan	12/10/12	1/3/13
MD-101	Mechanical Second Floor Demolition Plan	12/10/12	1/3/13
MD-102	Mechanical Roof Demolition Plan	12/10/12	1/3/13
M-111	Mechanical Ductwork Plan First Floor A1	12/10/12	1/3/13
			1/2/12
M-112	Mechanical Ductwork Plan First Floor A2	12/10/12	1/3/13
M-113	Mechanical Ductwork Plan First Floor A3	12/10/12	
M-114	Mechanical Ductwork Plan First Floor B1	12/10/12	
M-115	Mechanical Ductwork Plan First Floor B2	12/10/12	
M-116	Mechanical Ductwork Plan First Floor C1	12/10/12	
M-117	Mechanical Ductwork Plan First Floor C2	12/10/12	
M-118	Mechanical Ductwork Plan First Floor C3	12/10/12	

M-119	Mechanical Storage Building	12/10/12			
J.M. Wrig	ght Technical High School Additions and Rend Stamfor		- 12	2026B-01	(Decemeber 10, 2012)

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	Machanical (cont.)	<u> </u>	<u> </u>
M-121	Mechanical (cont.) Mechanical Ductwork Plan Second Floor A1	10/10/10	
		12/10/12	1/2/12
M-122	Mechanical Ductwork Plan Second Floor A2	12/10/12	1/3/13
M-123	Mechanical Ductwork Plan Second Floor A3	12/10/12	
M-131	Mechanical Roof Plan	12/10/12	
M-211	Mechanical Hydronic Piping Plan First Floor A1	12/10/12	
M-212	Mechanical Hydronic Piping Plan First Floor A2	12/10/12	
M-213	Mechanical Hydronic Piping Plan First Floor A3	12/10/12	
M-214	Mechanical Hydronic Piping Plan First Floor B1	12/10/12	
M-215	Mechanical Hydronic Piping Plan First Floor B2	12/10/12	
M-216	Mechanical Hydronic Piping Plan First Floor C1	12/10/12	
M-217	Mechanical Hydronic Piping Plan First Floor C2	12/10/12	
M-218	Mechanical Hydronic Piping Plan First Floor C3	12/10/12	
M-221	Mechanical Hydronic Piping Plan Second Floor A1	12/10/12	
M-222	Mechanical Hydronic Piping Plan Second Floor A2	12/10/12	
M-223	Mechanical Hydronic Piping Plan Second Floor A3	12/10/12	
M-301	Mechanical Partial Plans	12/10/12	
M-302	Mechanical Education Equipment Plan	12/10/12	
M-401	Mechanical Chilled Water Flow Diagram	12/10/12	
M-402	Mechanical Hot Water Flow Diagram	12/10/12	
M-403	AHU-1A, 1B Control Schematic-Airflow Diagram	12/10/12	1/3/13
M-404	AHU-2 Control Schematic-Airflow Diagram	12/10/12	1/3/13
M-405	AHU-3 Control Schematic-Airflow Diagram	12/10/12	1/3/13
M-406	AHU-4 Control Schematic-Airflow Diagram	12/10/12	1/3/13
M-407	AHU-5 Control Schematic-Airflow Diagram	12/10/12	1/3/13
M-408	AHU-6, 8 Control Schematic-Airflow Diagram	12/10/12	1/3/13
M-409	AHU-7 Control Schematic-Airflow Diagram	12/10/12	1/3/13
M-410	AHU-9, 10, 11 Control Schematic-Airflow Diagram	12/10/12	
M-411	AHU-12A, 12B, 13, 14 Control Schematic-Airflow Diagram	12/10/12	1/3/13
M-412	AHU-15, 16 Control Schematic-Airflow Diagram	12/10/12	1/3/13
M-413	AHU-17, 18, 19 Control Schematic-Airflow Diagram	12/10/12	
M-414	AHU-20, 21 Control Schematic-Airflow Diagram	12/10/12	1/3/13
M-415	Mechanical Hydronic Piping Flow Diagram First Floor A1, A2, B1, B2	12/10/12	
M-416	Mechanical Hydronic Piping Flow Diagram First Floor A1,A2, B1	12/10/12	1/3/13
M-417	Mechanical Hydronic Piping Flow Diagram A3	12/10/12	
M-418	Mechanical Hydronic Piping Flow Diagram Second Floor C1, C2, C3	12/10/12	
M-419	Chilled Water Piping Flor Diagram	12/10/12	
M-501	Mechanical Details	12/10/12	
M-601	Mechanical Schedules	12/10/12	
M-602	Mechanical Schedules	12/10/12	1/3/13
M-603	Mechanical Schedules	12/10/12	
M-604	Mechanical Schedules	12/10/12	
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	Diversion	-	
D 001	Plumbing	10/10/10	
P-001	Plumbing Legend, Abbreviations & Symbols	12/10/12	1/0/10
PD-101	Plumbing Basement Demolition Plan	12/10/12	1/3/13
PD-111	Plumbing Demolition Plan First Floor A1	12/10/12	1/3/13
PD-112	Plumbing Demolition Plan First Floor A2	12/10/12	1/3/13
PD-113	Plumbing Demolition Plan First Floor A3	12/10/12	1/3/13
PD-114	Plumbing Demolition Plan First Floor B1	12/10/12	
PD-115	Plumbing Demolition Plan First Floor B2	12/10/12	1/2/12
PD-116 PD-117	Plumbing Demolition Plan First Floor C1 Plumbing Demolition Plan First Floor C2	12/10/12 12/10/12	1/3/13
	-		1/2/12
PD-118	Plumbing Demolition Plan First Floor C3	12/10/12	1/3/13
PD-121 PD-122	Plumbing Demolition Plan Second Floor A1 Plumbing Demolition Plan Second Floor A2	12/10/12 12/10/12	1/3/13
PD-122 PD-123	_	12/10/12	1/3/13
	Plumbing Demolition Plan Second Floor A3		1/3/13
P-111	Plumbing Drainage & Vent Piping Plan First Floor A1	12/10/12	
P-112	Plumbing Drainage & Vent Piping Plan First Floor A2	12/10/12	
P-113	Plumbing Drainage & Vent Piping Plan First Floor A3	12/10/12	
P-114	Plumbing Drainage & Vent Piping Plan First Floor B1	12/10/12	
P-115	Plumbing Drainage & Vent Piping Plan First Floor B2	12/10/12	
P-116	Plumbing Drainage & Vent Piping Plan First Floor C1	12/10/12	
P-117	Plumbing Drainage & Vent Piping Plan First Floor C2	12/10/12	
P-118	Plumbing Drainage & Vent Piping Plan First Floor C3	12/10/12	
P-121	Plumbing Drainage & Vent Piping Plan Second Floor A1	12/10/12	
P-122	Plumbing Drainage & Vent Piping Plan Second Floor A2	12/10/12	
P-123	Plumbing Drainage & Vent Piping Plan Second Floor A3	12/10/12	
P-131	Plumbing Drainage & Vent Piping Roof Plan	12/10/12	
P-211	Plumbing Potable & Natural Gas Piping Plan First Floor A1	12/10/12	
P-212	Plumbing Potable & Natural Gas Piping Plan First Floor A2	12/10/12	
P-213	Plumbing Potable & Natural Gas Piping Plan First Floor A3	12/10/12	
P-214	Plumbing Potable & Natural Gas Piping Plan First Floor B1	12/10/12	
P-215	Plumbing Potable & Natural Gas Piping Plan First Floor B2	12/10/12	
P-216	Plumbing Potable & Natural Gas Piping Plan First Floor C1	12/10/12	
P-217	Plumbing Potable & Natural Gas Piping Plan First Floor C2	12/10/12	
P-218	Plumbing Potable & Natural Gas Piping Plan First Floor C3	12/10/12	
P-219	Mechanical Potable Piping Plan Storage Building	12/10/12	
P-221	Plumbing Potable & Natural Gas Piping Plan Second Floor A1	12/10/12	
P-222	Plumbing Potable & Natural Gas Piping Plan Second Floor A2	12/10/12	

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	Plumbing (cont.)		
P-223	Plumbing Potable & Natural Gas Piping Plan	12/10/12	
	Second Floor A3		
P-301	Plumbing Drainage & Vent Piping Partial Plans	12/10/12	
P-302	Plumbing Drainage & Vent Piping Partial Plans	12/10/12	
P-303	Plumbing Drainage & Vent Piping Partial Plans	12/10/12	
P-401	Plumbing Potable & Natural Gas Piping Partial Plans	12/10/12	
P-402	Plumbing Potable & Natural Gas Piping Partial Plans	12/10/12	
P-403	Plumbing Potable & Natural Gas Piping Partial Plans	12/10/12	
P-501	Plumbing Details	12/10/12	
P-502	Plumbing Kitchen Drainage & Vent Riser Diagram	12/10/12	
P-503	Plumbing Kitchen Potable Riser Diagram	12/10/12	
P-504	Plumbing Drainage & Vent Riser Diagram	12/10/12	
P-505	Plumbing Drainage & Vent Riser Diagram	12/10/12	
P-506	Plumbing Potable Riser Diagram	12/10/12	
P-507	Plumbing Potable Riser Diagram	12/10/12	
P-508	Plumbing Natural Gas Riser	12/10/12	
P-601	Plumbing Schedule	12/10/12	
	<u>Electrical</u>		
E-001	Electrical Ledgend & Abbreviations	12/10/12	
E-002	Electrical Site Plan	12/10/12	
ED-001	Electrical Demolition Notes, Shedule & Ledgend	12/10/12	1/3/13
ED-002	Electrical Site Demo Plan	12/10/12	1/3/13
ED-101	Electrical Basement Demo Plan	12/10/12	1/3/13
ED-111	Electrical First Floor Demo Plan Section A1	12/10/12	1/3/13
ED-112	Electrical First Floor Demo Plan Section A3	12/10/12	1/3/13
ED-113	Electrical First Floor Demo Plan Section A2	12/10/12	1/3/13
ED-114	Electrical First Floor Demo Plan Section C1	12/10/12	1/3/13
ED-115	Electrical First Floor Demo Plan Section C2	12/10/12	1/3/13
ED-116	Electrical First Floor Demo Plan Section C3	12/10/12	1/3/13
ED-117	Electrical First Floor Demo Plan Section B1	12/10/12	1/3/13
ED-118	Electrical First Floor Demo Plan Section B2	12/10/12	1/3/13
ED-121	Electrical Second Floor Demo Plan Section A1	12/10/12	1/3/13
ED-122	Electrical Second Floor Demo Plan Section A3	12/10/12	1/3/13
ED-123	Electrical Second Floor Demo Plan Section A2	12/10/12	1/3/13
ED-131	Electrical Roof Demo Plan	12/10/12	
E-111	Electrical Power Plan First Floor Section A1	12/10/12	
E-112	Electrical Power Plan First Floor Section A2	12/10/12	
E-113	Electrical Power Plan First Floor Section A3	12/10/12	
E-114	Electrical Power Plan First Floor Section B1	12/10/12	1/3/13
E-115	Electrical Power Plan First Floor Section B2	12/10/12	
E-116	Electrical Power Plan First Floor Section C1	12/10/12	
E-117	Electrical Power Plan First Floor Section C2	12/10/12	
E-118	Electrical Power Plan First Floor Section C3	12/10/12	
E-119	Electrical Power Plan Garage	12/10/12	
E-121	Electrical Power Plan Second Floor Section A1	12/10/12	
E-122	Electrical Power Plan Second Floor Section A2	12/10/12	
E-123	Electrical Power Plan Second Floor Section A3	12/10/12	
	Electrical Power Plan Roof	12/10/12	

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	Electrical (cont.)		
E-211	Electrical Lighting Plan First Floor Section A1	12/10/12	
E-212	Electrical Lighting Plan First Floor Section A2	12/10/12	
E-213	Electrical Lighting Plan First Floor Section A3	12/10/12	
E-214	Electrical Lighting Plan First Floor Section B1	12/10/12	
E-215	Electrical Lighting Plan First Floor Section B2	12/10/12	
E-216	Electrical Lighting Plan First Floor Section C1	12/10/12	
E-217	Electrical Lighting Plan First Floor Section C2	12/10/12	
E-218	Electrical Lighting Plan First Floor Section C3	12/10/12	
E-221	Electrical Lighting Plan Second Floor Section A1	12/10/12	
E-222	Electrical Lighting Plan Second Floor Section A2	12/10/12	
E-223	Electrical Lighting Plan Second Floor Section A3	12/10/12	
E-311	Electrical Systems Plan First Floor Section A1	12/10/12	
E-312	Electrical Systems Plan First Floor Section A2	12/10/12	
E-313	Electrical Systems Plan First Floor Section A3	12/10/12	
E-314	Electrical Systems Plan First Floor Section B1	12/10/12	
E-315	Electrical Systems Plan First Floor Section B2	12/10/12	
E-316	Electrical Systems Plan First Floor Section C1	12/10/12	
E-317	Electrical Systems Plan First Floor Section C2	12/10/12	
E-318	Electrical Systems Plan First Floor Section C3	12/10/12	
E-321	Electrical Systems Plan Second Floor Section A1	12/10/12	
E-322	Electrical Systems Plan Second Floor Section A2	12/10/12	
E-323	Electrical Systems Plan Second Floor Section A3	12/10/12	
E-331	Electrical Systems Plan Roof	12/10/12	
E-401	Electrical Power One Line Diagram Removals	12/10/12	
E-402	Electrical Power One Line Diagram Proposed	12/10/12	
E-403	Electrical Kitched Equipment Schedule	12/10/12	
E-404	Electrical Motor Schedule and Facility Mgt Schedule	12/10/12	
E-501	Electrical Fixture Schedule	12/10/12	
E-502	Electrical Panel Schedule-Service A	12/10/12	1/3/13
E-503	Electrical Panel Schedule-Service A	12/10/12	1/3/13
E-504	Electrical Panel Schedule-Service A	12/10/12	1/3/13
E-505	Electrical Panel Schedule-Service A	12/10/12	., e, .e
E-506	Electrical Panel Schedule-Service B	12/10/12	1/3/13
E-507	Electrical Panel Schedule-Service B	12/10/12	1/3/13
E-508	Electrical Panel Schedule-Service B	12/10/12	1/3/13
E-509	Electrical Panel Schedule-Service B	12/10/12	1/3/13
E-601	Electrical Enlarged Kitchen Plan	12/10/12	
E-701	Electrical Details	12/10/12	
E-702	Electrical Details	12/10/12	
E-703	Electrical Details	12/10/12	
E-704	Electrical Details	12/10/12	
E-705	Electrical Details	12/10/12	
E-706	Electrical System Details	12/10/12	
E-707	Electrical Details-Gym Sound System	12/10/12	
E-708	Electrical Details-Lecture Room Sound System	12/10/12	
E-709	Electrical Detail-Cafeteria Sound System	12/10/12	