#### SECTION 01113

#### CONSTRUCTION OPERATIONS AND SITE UTILIZATION PLAN

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. The Construction Operations Plan provides a coordinated construction environment to ensure an orderly, secure and safe operation within the existing school and the entire school property, consequently forming the basis for the Site Utilization Plan prepared by the General Contractor.
  - 1. The PBC Authorized Representative in direct coordination with CPS will administer the operations plan activities. All Construction Operating issues shall be channeled through and require approval by the PBC Authorized Representative in coordination with CPS and/or the Building Engineer and Principal.
  - 2. The Construction Operations Plan has been prepared based on the requirements of the project and in coordination with the existing school operations and program. The elements of this plan required for incorporation into the Site Utilization Plan are included in this section.

#### 1.2 RELATED SECTIONS

 A. Refer to the General Contractor's Service Agreement for information related to this section. Additional Specification Sections containing information that relate to this section include:
 1. Selective Demolition: Section 01732.

#### 1.3 SUBMITTALS

A. Site Utilization Plan: submit five (5) copies of the site Utilization Plan required in Part 3.
 1. Submit proposed revisions as deemed necessary

#### 1.4 CONSTRUCTION OPERATIONS PLAN

A. Area of Work

In order to minimize disruption to school operations during construction, the Work will be performed in accordance with the designated Areas of Work listed below, along with durations for each.

- 1. Area of Work I New 2 Story Annex:
  - All Work associated with the construction of the New 2 Story Annex, site improvement, courtyard, and landscaping work shall commence upon issuance of the NTP and be completed by no later than November 14, 2012.
  - All Work associated with the furnishing and installation of utility services to the new addition shall commence upon issuance of the NTP and be completed by no later

than August 17, 2012. Utility shut-offs will only be permitted during off hours between the hours of Friday 6:00 pm through Monday 7:00 am. All utility shut-offs require written approval of the PBC Authorized Representative.

• All Work associated with the furnishing and installation of main system tie-ins to existing services including but not limited to computer network, phone, water, sewer, BAS controls, security, fire alarm, and HVAC (coordinate with Area of Work II).

## 2. Area of Work II - Existing Building Interior Renovations:

- No Work shall take place in the Existing Building until environmental remediation has been completed in accordance with the contract documents. Environmental remediation will be permitted from April 2, 2012 through April 7, 2012 and June 18, 2012 through June 29, 2012.
- All Work located within the basement level and associated with the interior renovations of the existing school building shall commence once environmental remediation has been completed in accordance with the contract documents and be completed by no later than August 17, 2012.
- All Work located within first, second, attic, and roof levels associated with the interior renovations shall commence once environmental remediation has been completed in accordance with the contract documents from June 18, 2012 and be completed by no later than August 17, 2012.
- All Work associated with the furnishing and installation of main system tie-ins to existing services including but not limited to computer network, phone, water, sewer, BAS controls, security, fire alarm, and HVAC shall commence once environmental remediation has been completed in accordance with the contract documents from June 18, 2012 and be completed by no later than August 17, 2012. All utility shut-offs require written approval of the PBC Authorized Representative.

# 3. <u>Area of Work III - Parking Lot and Driveway:</u>

- All Work associated with the construction of the Parking Lot and Driveway, site improvement, landscaping, and utility work shall commence on June 18, 2012 and be completed by no later than August 17, 2012.
- All Work associated with the furnishing and installation of utility services to the new addition within the limits of Area of Work III shall commence June 18, 2012 and be completed by no later than August 17, 2012. Utility shut-offs will only be permitted during off hours between the hours of Friday 6:00 pm through Monday 7:00 am. All utility shut-offs require written approval of the PBC Authorized Representative.

# 4. <u>Area of Work IV - Parking Lot Expansion:</u>

• All Work associated with the construction of the Parking Lot Expansion, site improvement, landscaping, and utility work shall commence April 1, 2013 and be completed by no later than May 31, 2013.

## 1.5 GENERAL REQUIREMENTS

- A. General Contractor shall review and be familiar with the site conditions through site visits.
- B. General Contractor to provide all temporary and permanent driveway apron and alley permits for the duration of the construction if required. The General Contractor is to pay all fees required for processing permits and is to contact and comply with all authorities and jurisdiction required for permitting.

- C. General Contractor shall provide snow removal and clear all debris within project limits, and adjacent public right of way.
- D. General Contractor is to provide all required permits for street access for truck delivery from the local and state jurisdiction.
- E. General Contractor will be required to coordinate all phases of construction and complete the work within the milestone completion date(s) for the work. The General Contractor shall be also held responsible for meeting all related provisions as described within this section.
- F. Upon issuance of the Notice to Proceed (NTP) the General Contractor shall survey the site and photograph the area of construction operations and surrounding/adjacent areas. Upon completion of the work the Contractor is to restore the area to the documented condition prior to the start of work or as otherwise indicated in the Contract Documents.
- G. General Contractor is to replace all removed trees, bushes, ground covers and grass on the Chicago Public Schools' property used as part of the construction operations. Also concrete pavement walks and asphalt surfaces shall be replaced to condition prior to construction.
- H. General Contractor shall coordinate work with School during Mandatory State Testing periods. Test dates should be verified with the School. No work will be permitted in the existing facility or on the construction site during testing except as specifically approved by the PBC Authorized Representative. If the General Contractor secures written approval for specific work to be executed in designated areas during testing periods, the General Contractor must minimize noise in these areas during these time periods, and if requested by the School, stop work causing the noise until testing is completed. General Contractor shall account for in his bid and bear all costs for any loss of time or production related to Mandatory State Testing. The State Testing Dates for the 2012 academic years as follows: 2012 March 6 through March 16, 2012.
- I. General Contractor shall coordinate and maintain all exit egress during construction as required by the City of Chicago code, other entities with jurisdiction, and as directed by PBC Authorized Representative. The General Contractor shall provide and maintain all materials and labor including barricades, construction fence, doors, partitions, and fire rated walls as required for safe egress. All costs for this work shall be included in the Contract Base Bid regardless of whether it is indicated in the Contract Documents or not.
- J. No construction deliveries will be permitted to either the existing facility or the new addition between the hours of 8:30 to 9:30 AM and 2:30 to 4:30 PM.
- K. The Contractor is to set up and stage the entire project within the boundaries of the Contract Limits. The General Contractor is responsible for maintaining and modifying the fence as necessary and as approved in the Site Utilization Plan for the life of the project. Removal and disposal of the fence at the conclusion of the project is the responsibility of the General Contractor.
- L. The PBC in conjunction with CPS, the Building Engineer and/or other approved CPS staff as approved by CPS is required to be present at all times work is in progress in the existing Building. If advance arrangements are not made, the General Contractor shall be responsible for all overtime costs for the CPS staff member for work outside of normal working hours. Overtime arrangements for CPS staff includes weekends, holidays, and generally hours beyond

that listed in Site Restrictions above. IUOE Local 143 Holidays are as follows (Saturday holidays are observed on Friday, Sunday holidays are observed on Monday):

- 1. New Year's Day
- 2. Martin Luther King Jr.'s Birthday
- 3. Lincoln's Birthday
- 4. Presidents Day
- 5. Pulaski Day
- 6. Memorial Day
- 7. Independence Day
- 8. Labor Day
- 9. Columbus Day
- 10. Veterans Day
- 11. Thanksgiving
- 12. Friday after Thanksgiving
- 13. Christmas Day

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

#### 3.1 SITE UTILIZATION PLAN

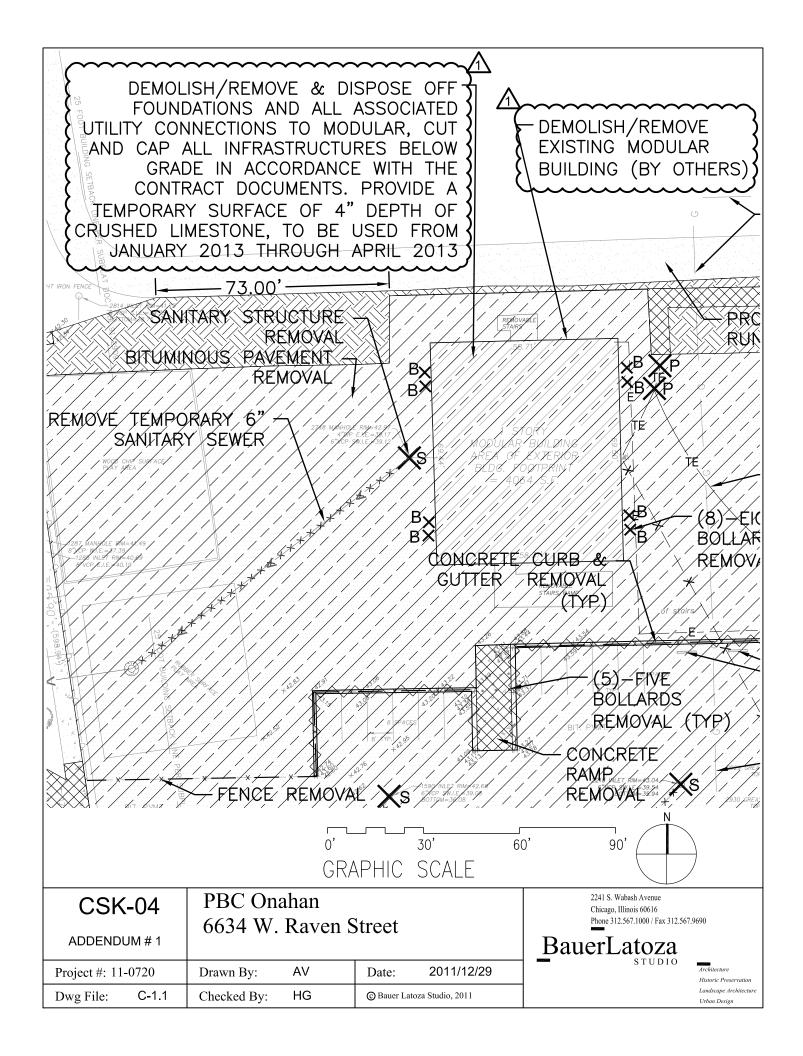
- A. After a Notice of Award and prior to Notice to Proceed the General Contractor is to prepare and submit to the PBC Authorized Representative for approval a Preliminary Site Utilization Plan based on the Construction Operations requirements outlined in this section. Mobilization on-site is not to occur until approval of the Site Utilization Plan is obtained. If requested by the Contractor, a preliminary meeting to review site elements and Construction Operations with the PBC Authorized Representative prior to submission of the Site Utilization Plan shall be held.
- B. The Site Utilization Plan shall be submitted within 15 calendar days of issuance of the NTP and shall be provided in a full-size graphic drawing format (36" x 48"). The final Site Utilization Plan must be approved before any direct construction activities take place on the site. Provide a separate plan for the site and for each floor of the existing building where work is being performed. The Contractor is required to prepare and secure approvals of a separate Site Utilization Plan for each phase of the work. Modifications to the format and sheet size will be permitted if pre-approved by the PBC Authorized Representative and if proposed modifications will facilitate preparation, presentation and review of the Site Utilization Plan. Electronic copies of the Contract Document drawings as appropriate will be provided for this purpose upon request. The Site Utilization Plan shall at a minimum include the following elements:
  - 1. Title block information including School Name, Contract Number, General Contractor, Building floor/level information, and current plan date.
  - 2. All denotations shall be illustrated in a legend on each Site Utilization Plan.
  - 3. Denotation of construction limits by area of work with commencement and completion dates for each.
  - 4. Building footprint of both new and existing buildings, trees, landscaping, paving, drainage structures, existing and ornamental fencing and other important site features.

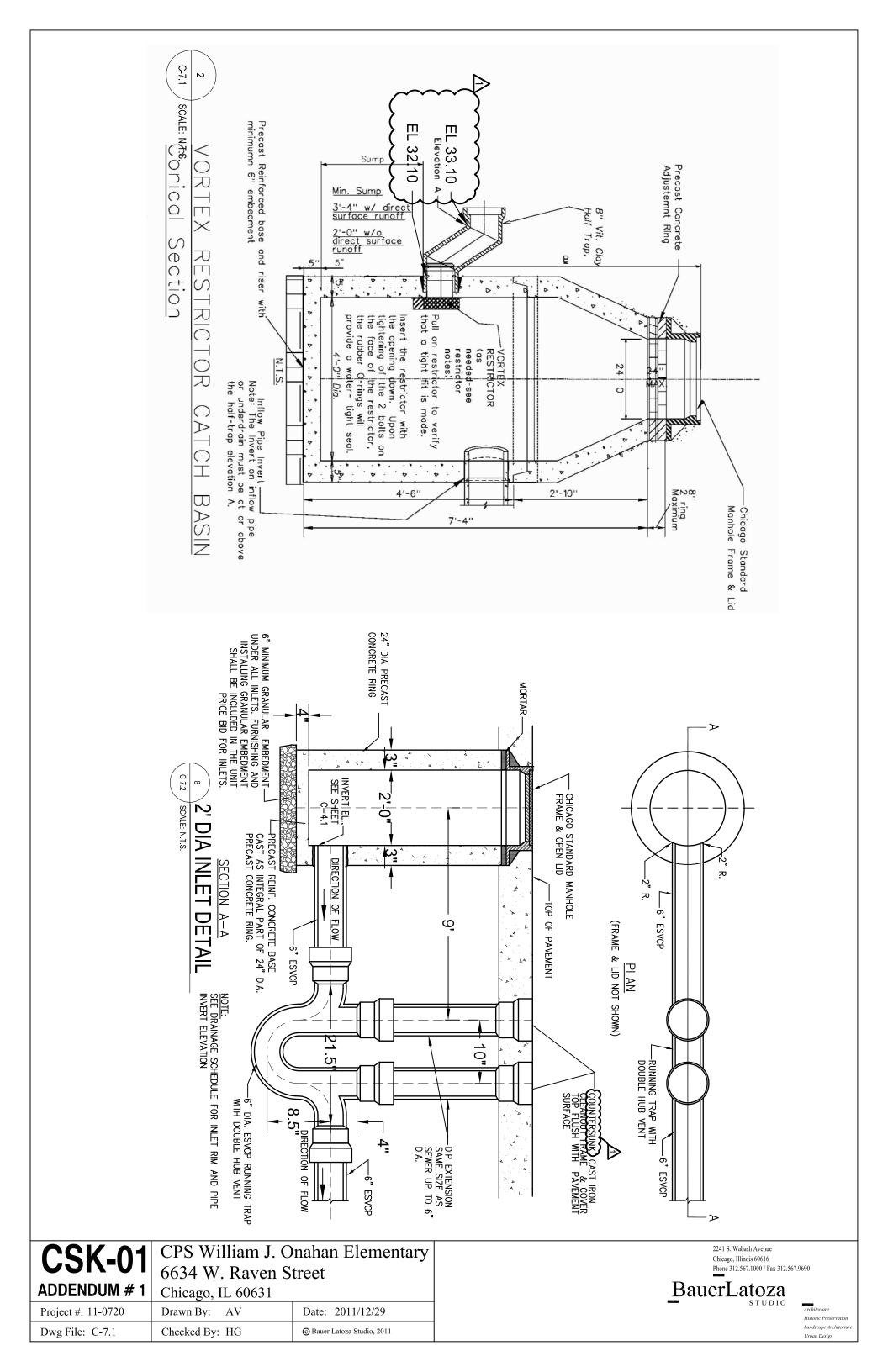
- 5. Areas of staging for students and staff, student drop-off points, existing school entrances and exits, staff parking areas, and traffic patterns for both construction and non-construction vehicles.
- 6. Denotation of the limits of construction and required construction fencing including any existing fencing to remain.
- 7. Denotation of required covered construction barricade walkways
- 8. Denotation of areas allowed for staging purposes: construction personnel parking, material storage, and construction trailer(s). Such activities are to only take place in areas designated and approved by the PBC Authorized Representative.
- 9. Denotation of any specific site conditions required to be observed such as keeping alleys clear next to adjacent properties, and any other issues listed on the Construction Operations Site Plan.
- 10. Denotation of areas allowed for site access and equipment including but not limited to gates, cranes, scaffold, trailers, dumpster, wheel washers, storage and existing utility poles.
- 11. Denotation of all required temporary utilities, including but not limited to AT&T, Peoples Gas, and ComEd.
- 12. Denotation of areas of work within the existing building for the period of time covered by the Site Utilization Plan, coordinated with the Project Schedule. Each area should indicate planned beginning and end dates for work in that area. Areas where all work is completed are to be noted.
- 13. Construction worker ingress/egress, material staging areas in the existing building.
- 14. Proposed locations of temporary protection, barricades, and temporary walls within the existing building.
- 15. Denotation of all temporary exits and path of travel by pedestrians and vehicular traffic.
- 16. Denotation of commencement and completion of the work for systems tie-ins to existing services including but not limited to water, sewer, power, controls, security, and HVAC.

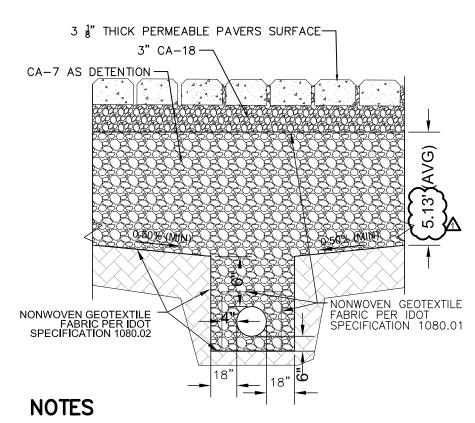
## 3.2 SITE UTILIZATION PLAN UPDATES

- A. The General Contractor is required to submit for approval updated Site Utilization Plans whenever conditions in the current approved plan have changed. Approval is required prior to proceeding on any changed conditions not previously approved. Requirements for updating include the following:
  - 1. In coordination with the project schedule provide detailed information regarding work in the existing building including phasing, vacation of existing in-use areas, and any other information requested by the PBC Authorized Representative and CPS.
  - 2. Revision to the site plan to reflect changing conditions regarding construction fencing, ingress and egress, student and staff staging, construction deliveries, areas of stored materials, parking, and any other construction facility revisions.

## END OF SECTION



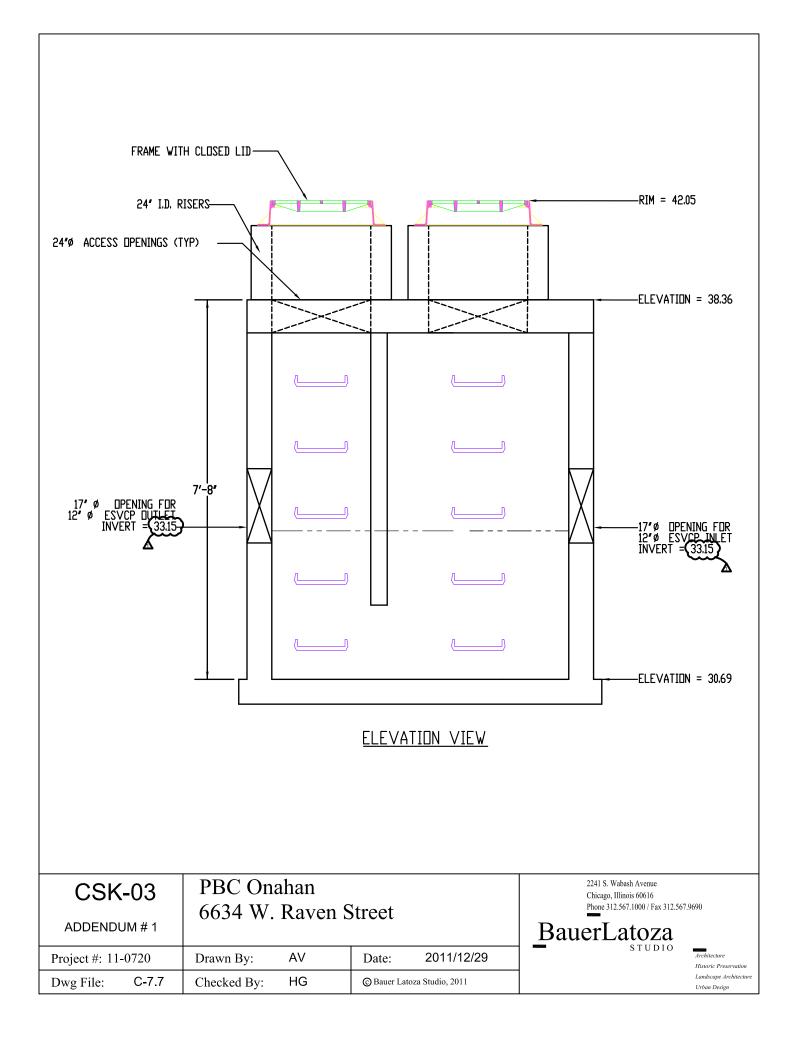


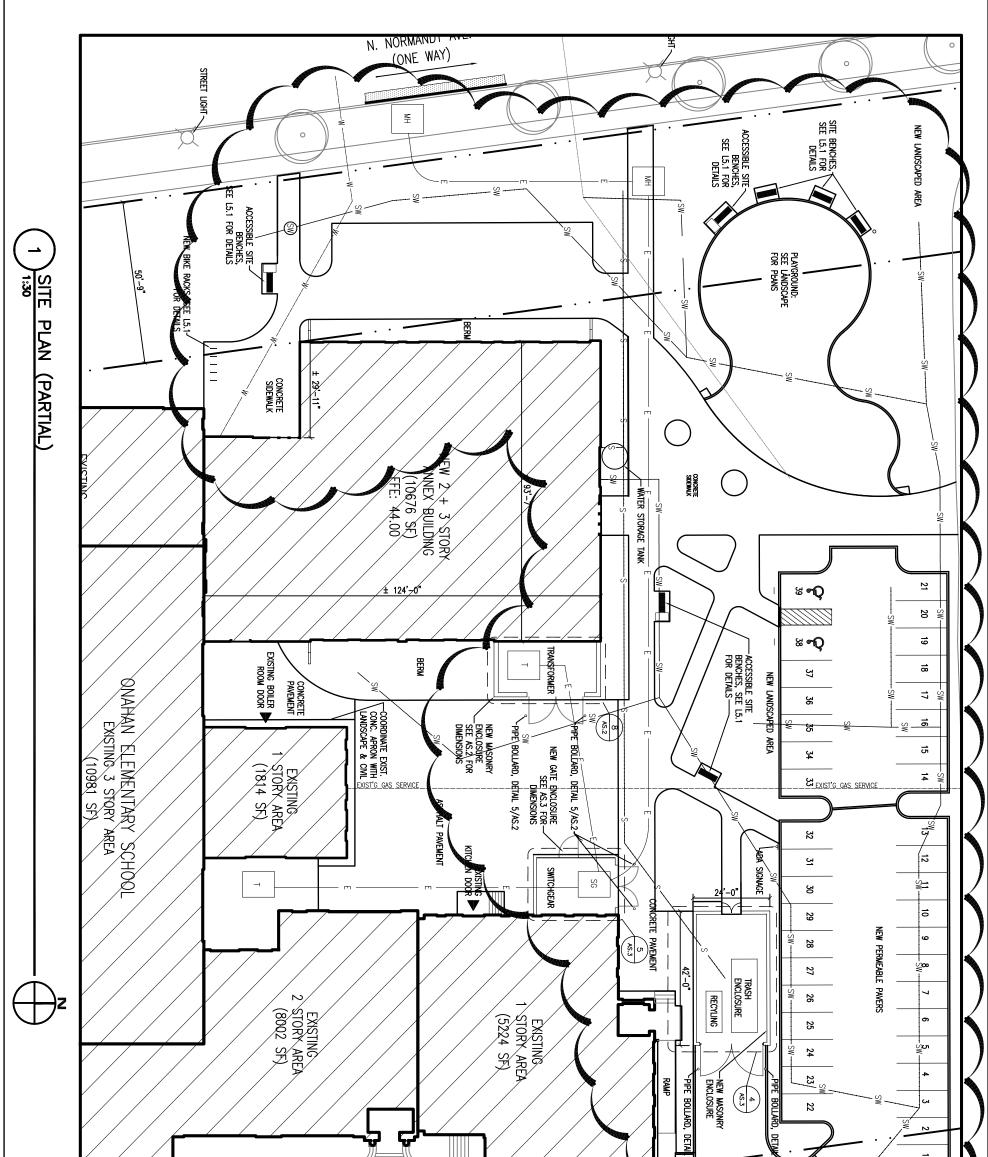


- 1. GEOTEXTILE FILTER FABRIC SHALL BE IN ACCORDANCE WITH SECTION 1080 OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007 INCLUDING ALL ADDENDA.
- 2. PLACE GEOTEXTILE FILTER FABRIC IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF 16 INCH. SECURE FABRIC AT LEAST 2 FT. OUTSIDE OF CA-7 BED AND TAKE STEPS NECESSARY TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE CA-7 BED.
- 3. INSTALL CA-7 COARSE AGGREGATE IN 6 INCH MAXIMUM LIFTS. LIGHTLY COMPACT EACH LAYER WITH A TAMPING ROLLER, A PNEUMATIC-TIRED ROLLER, A VIBRATORY MACHINE OR A COMBINATION OF THE THREE, UNTIL COMPACTION HAS BEEN APPROVED BY THE RESIDENT ENGINEER.

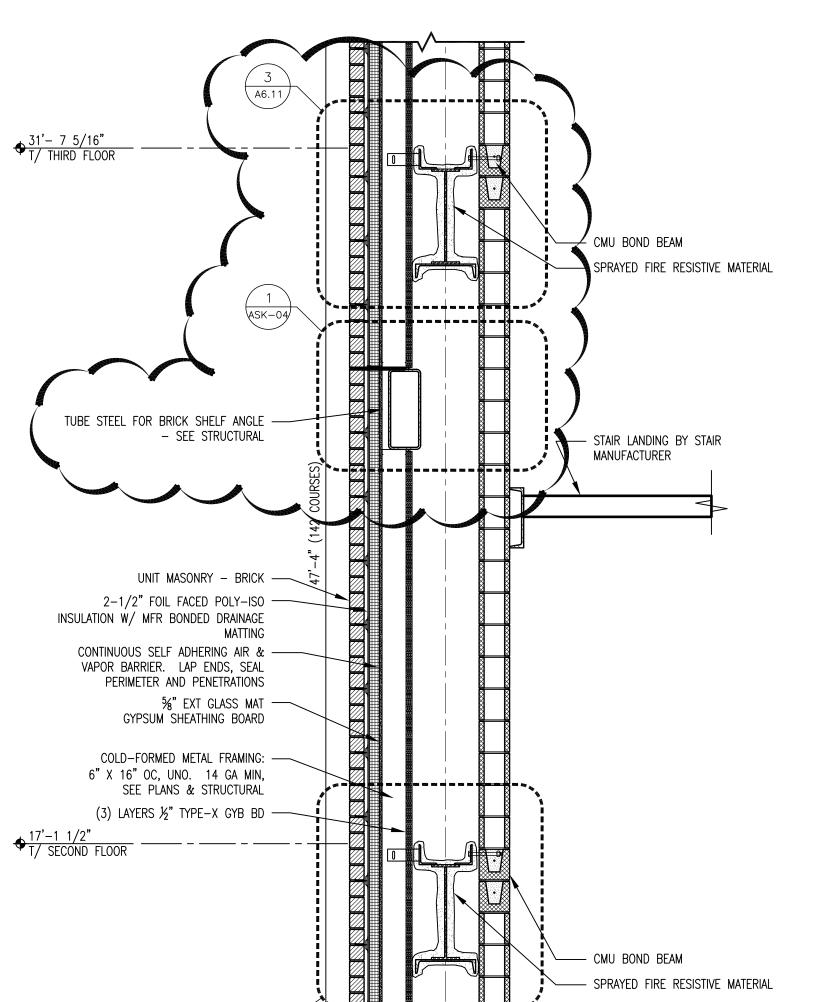
# UNDERDRAIN DETAIL UNDER PERMEABLE PAVERS AREA SCALE: N.T.S.

CSK-02	PBC Onahan 6634 W. Raven S	Street	2241 S. Wabash Avenue Chicago, Illinois 60616 Phone 312.567.1000 / Fax 312.56	7.9690
ADDENDUM # 1			BauerLatoza	
Project #: 11-0720	Drawn By: AV	Date: 2011/12/29	STUDIO	Architecture Historic Preservation
Dwg File: C-7.2	Checked By: HG	© Bauer Latoza Studio, 2011		Landscape Architecture Urban Design

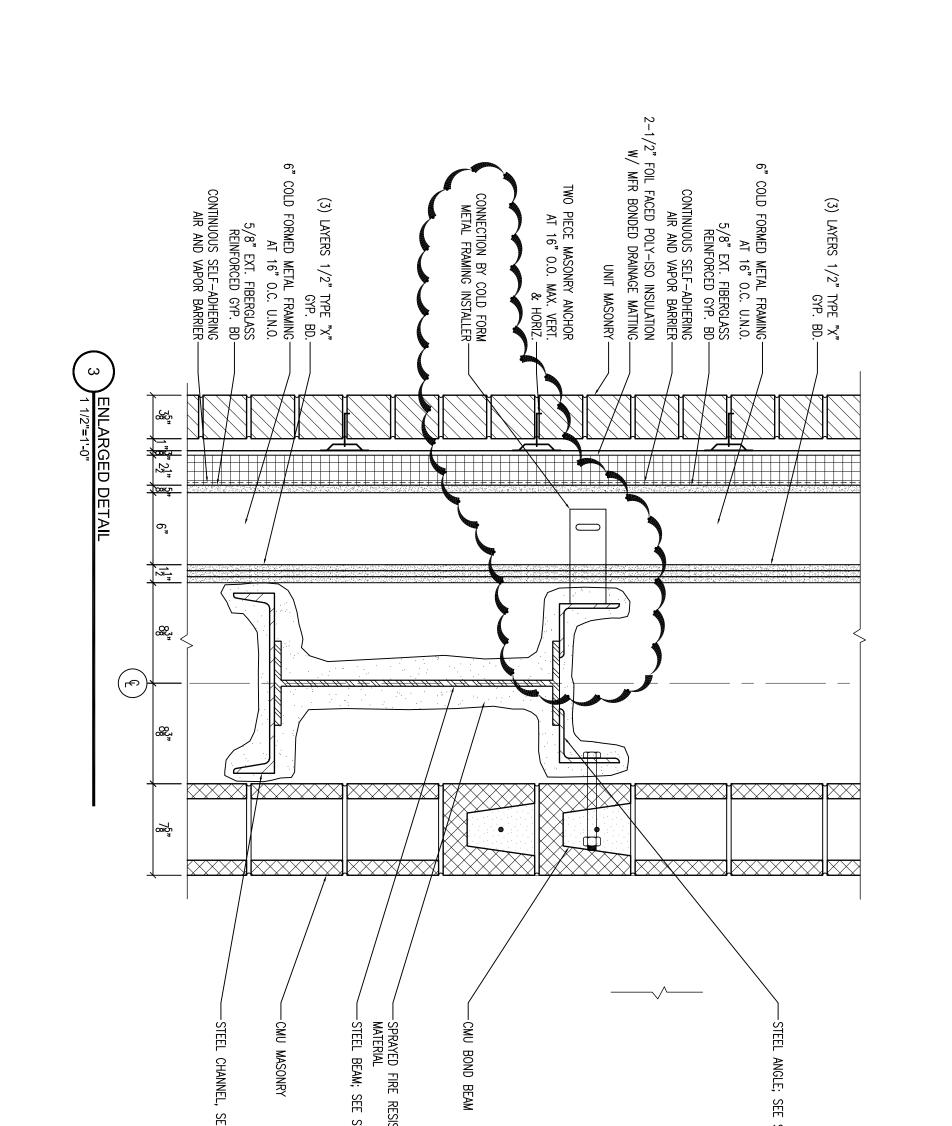




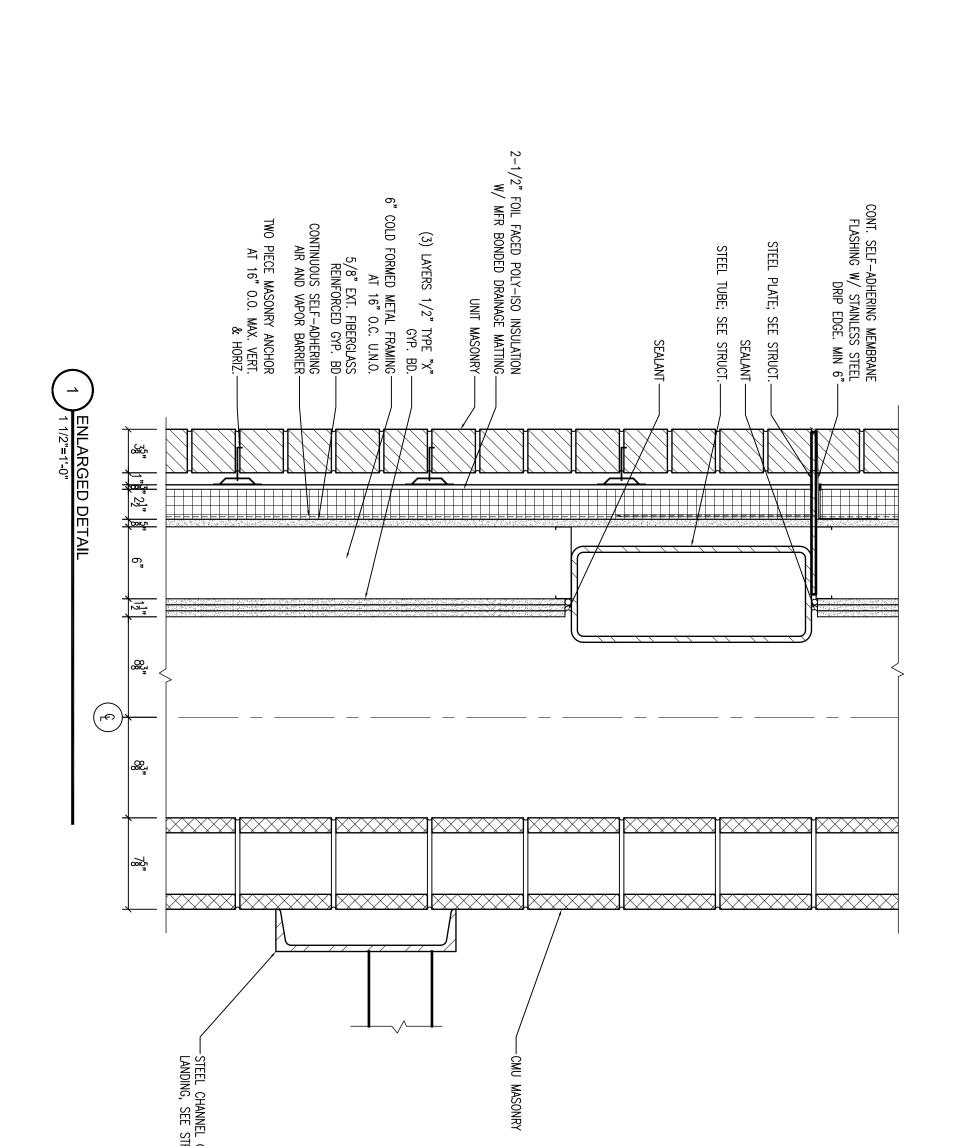
	EXISTING CONCRETE	EXISTING FIAIRS	NEW ASPHAL NEW ASPHAL NEW ASPHAL NEW ASPHAL SIDERMAL ALT-T ENSTING LANDSCAPING
	CPS William J. C	Dnahan Elementary	2241 S. Wabash Avenue Chicago, Illinois 60616
<b>ASK-01</b>	6634 W. Raven S	Street	Phone 312.567.1000 / Fax 312.567.9690
ADDENDUM #1	Chicago, IL 60631		BauerLatoza
Project #: 11-0720	Drawn By: JC	Date: 2011/12/29	Architecture Historic Preservation
Dwg File: AS.1	Checked By: JC	© Bauer Latoza Studio, 2011	Landscape Architecture Urban Design



		6 A6.13		
	WALL SECTION E (PA	RTIAL)	UL# U902; 2 HR. RATED	
ASK-02	CPS William J. C 6634 W. Raven S Chicago, IL 60631	Dnahan Elementary Street	C	241 S. Wabash Avenue hicago, Illinois 60616 none 312.567.1000 / Fax 312.567.9690 <b>rLatoza</b>
Project #: 11-0720	Drawn By: JC	Date: 2011/12/29	—	STUDIO Architecture Historic Preservatio
Dwg File: 2/A5.1	Checked By: JC	© Bauer Latoza Studio, 2011		Landscape Architect Urban Design

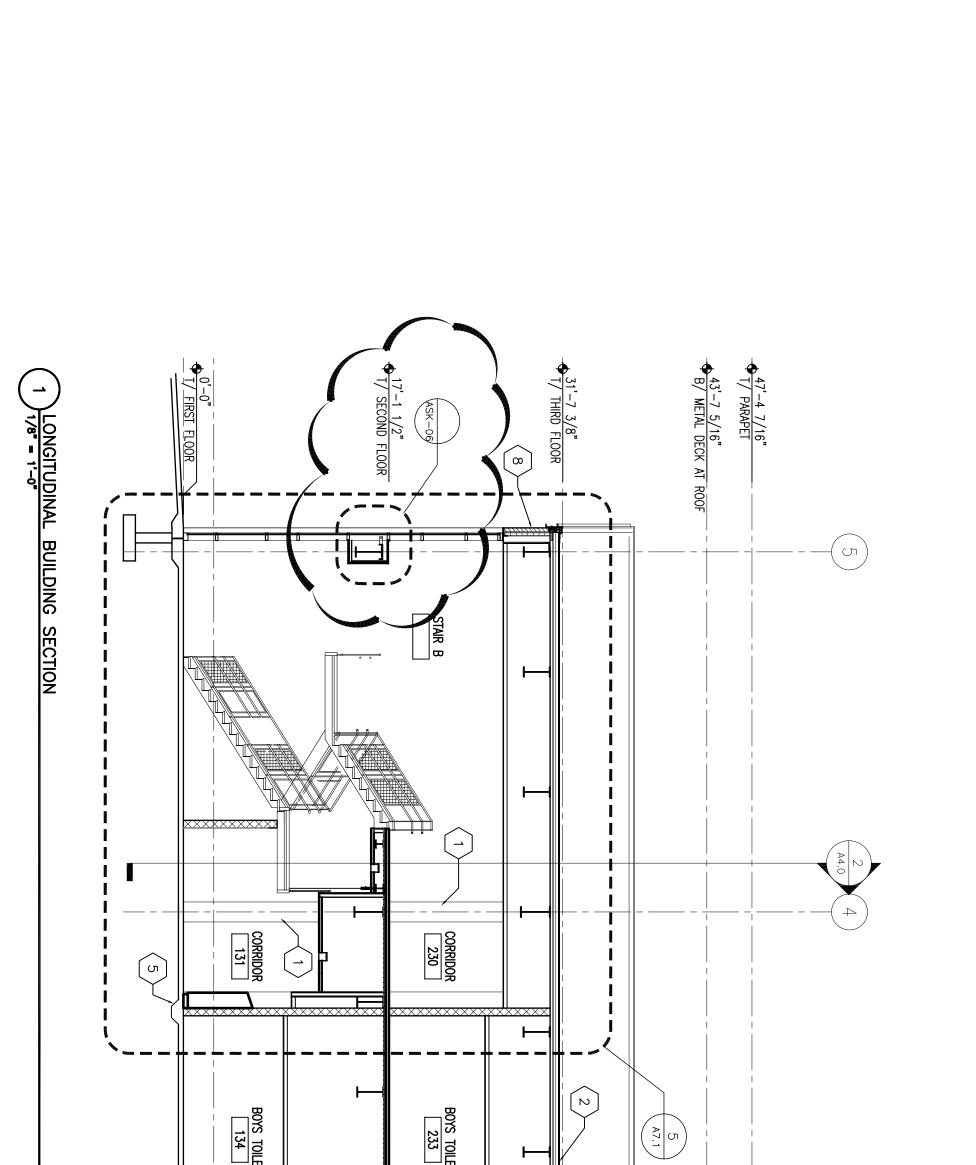


	SEE STRUCT.	e structural	STRUCTURAL
ASK-03	CPS William J. C 6634 W. Raven S	Onahan Elementary Street	2241 S. Wabash Avenue Chicago, Illinois 60616 Phone 312.567.1000 / Fax 312.567.9690
<b>ASK-03</b> ADDENDUM #1 Project #: 11-0720			Chicago, Illinois 60616

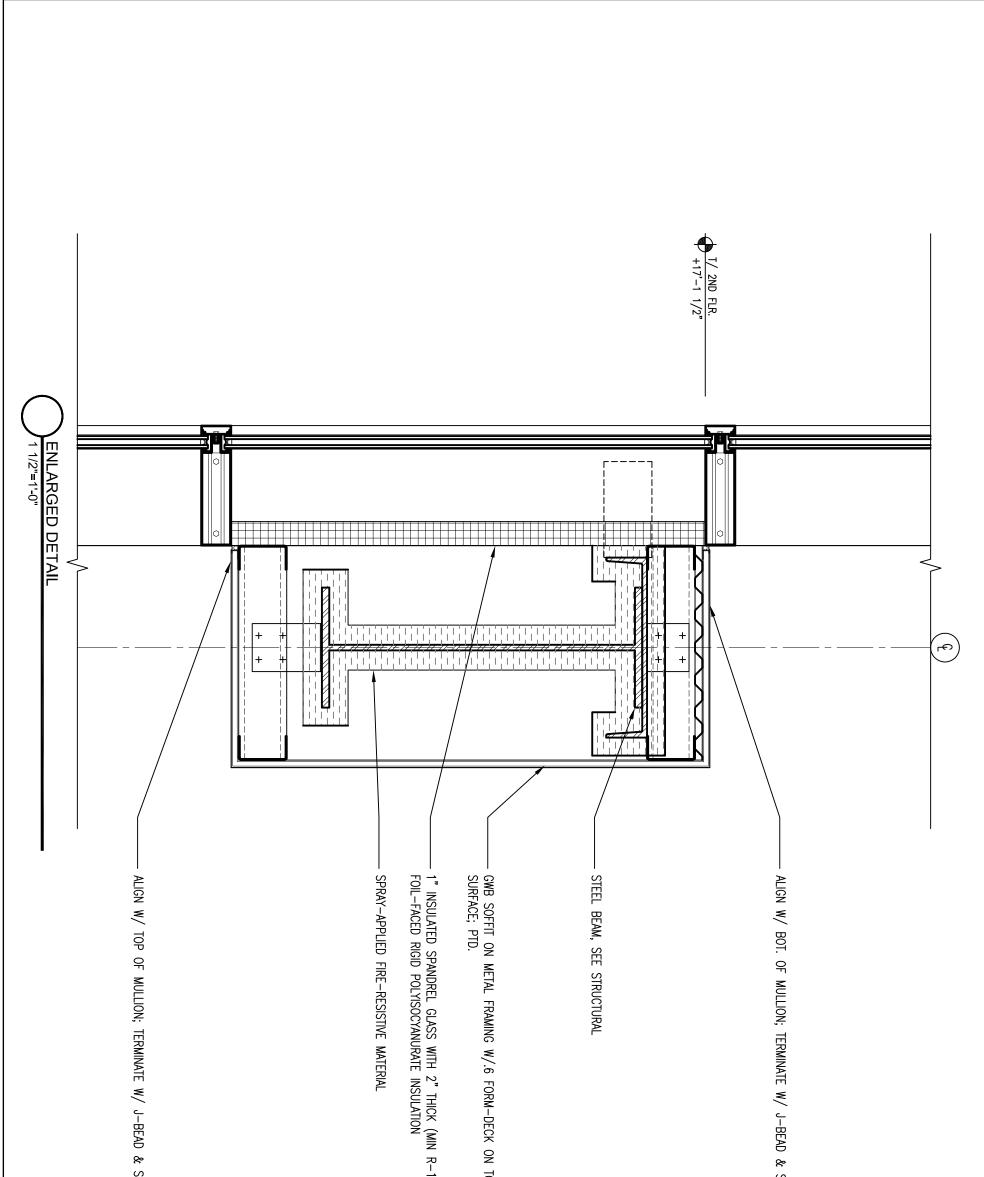


R	0
JCT.	/TS
	Ħ

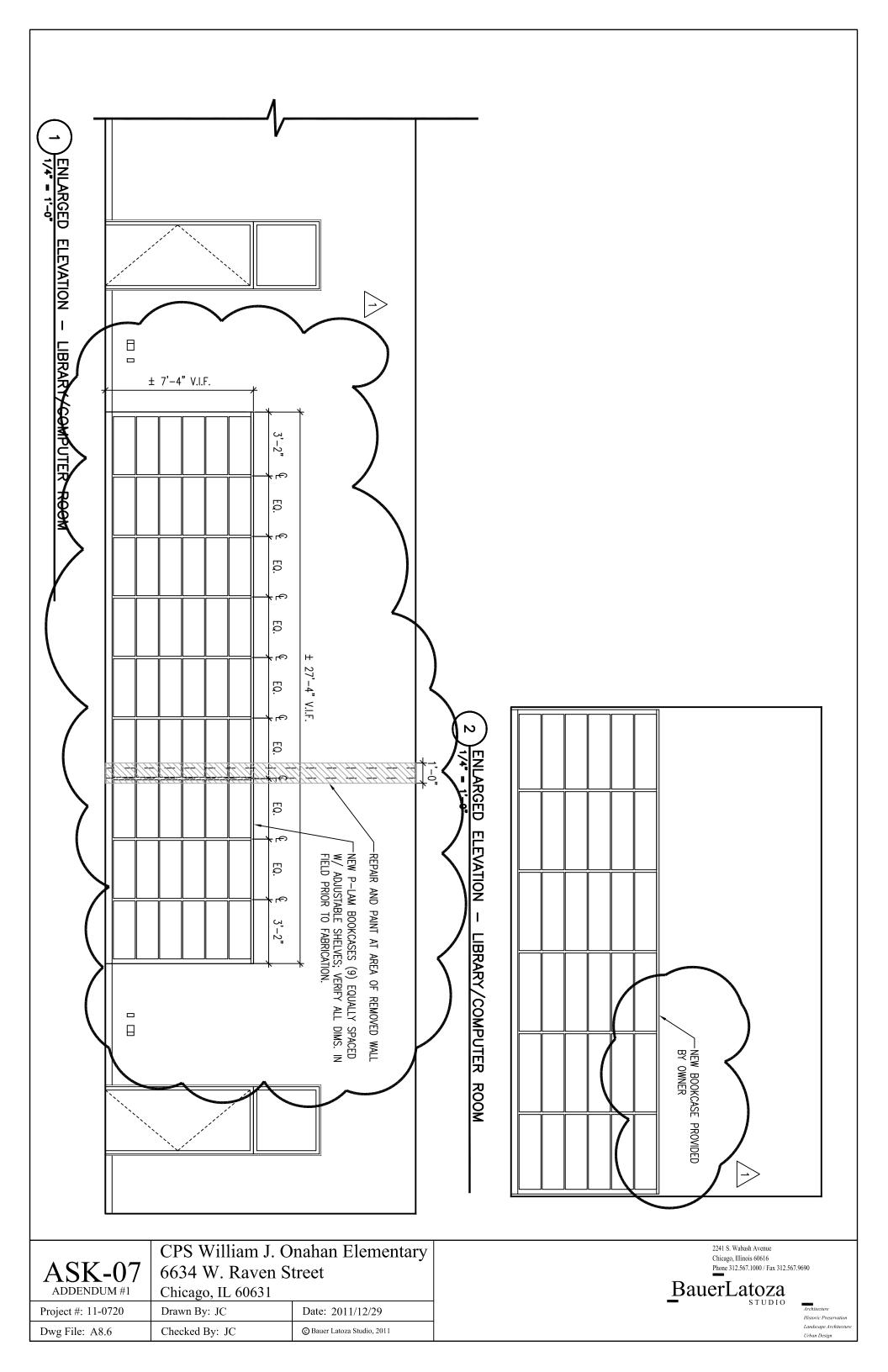
ASK-04	6634 W. Raven S	nahan Elementary treet	2241 S. Wabash Avenue Chicago, Illinois 60616 Phone 312.567.1000 / Fax 312.567 BauerLatoza	.9690	
ADDENDUM #1 Project #: 11-0720	Chicago, IL 60631 Drawn By: JC	Date: 2011/12/29		Architecture	
Dwg File: A6.11	Checked By: JC	© Bauer Latoza Studio, 2011		Historic Preservation Landscape Architecture Urban Design	

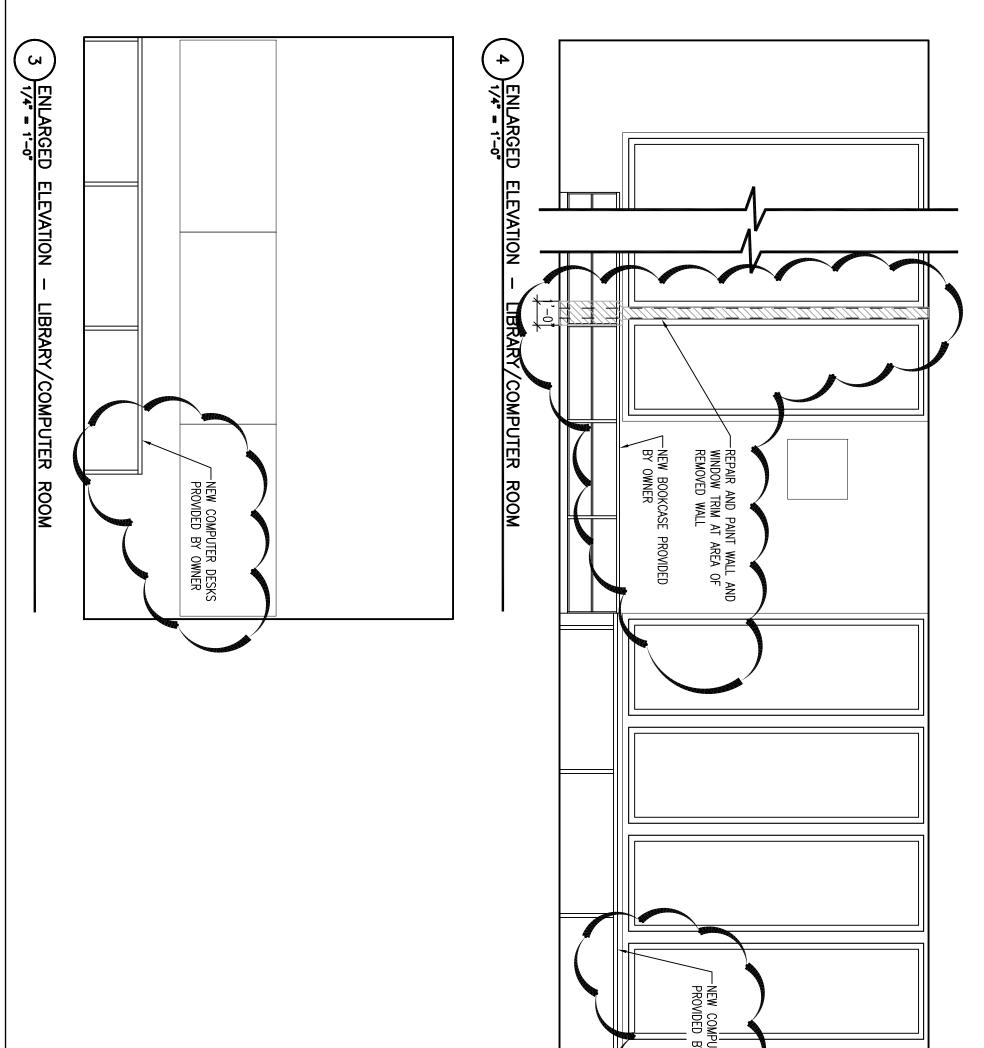


ASK-05 ADDENDUM #1	CPS William J. C 6634 W. Raven S Chicago, IL 60631	Onahan Elementary Street		2241 S. Wabash Avenue Chicago, Illinois 60616 Phone 312.567.1000 / Fax 312.56 BauerLatoza	7.9690
Project #: 11-0720	Drawn By: JC	Date: 2011/12/29		STUDIO	Architecture Historic Preservation
Dwg File: 1/A4.1	Checked By: JC	© Bauer Latoza Studio, 2011			Landscape Architecture Urban Design

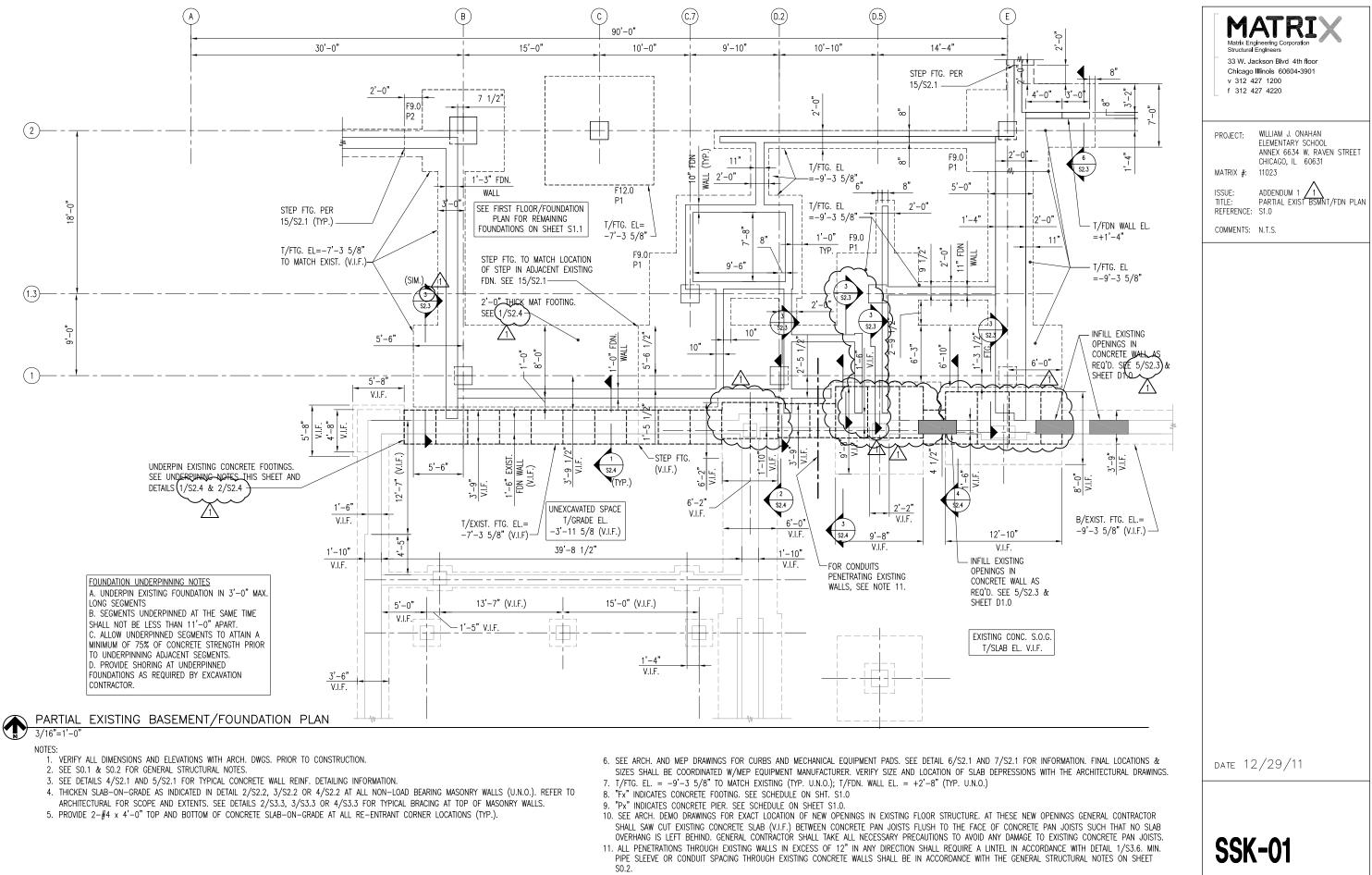


& SEALANT			z Top	& SEALANT	
ASK-06	CPS William J. C 6634 W. Raven S	Inahan Elementary		2241 S. Wabash Avenue Chicago, Illinois 60616 Phone 312.567.1000 / Fax 312.567	7.9690
ADDENDUM #1	Chicago, IL 60631		]	BauerLatoza	
Project #: 11-0720	Drawn By: JC	Date: 2011/12/29	-	STUDIO	Architecture Historic Preservation
Dwg File: A6.11	Checked By: JC	© Bauer Latoza Studio, 2011			Landscape Architect Urban Design





			BY OWNER
ASK-08	CPS William J 6634 W. Raver	. Onahan Elementary	2241 S. Wabash Avenue Chicago, Illinois 60616 Phone 312.567.1000 / Fax 312.567.9690
ADDENDUM #1	Chicago, IL 60631		BauerLatoza
Project #: 11-0720	Drawn By: JC	Date: 2011/12/29	STUDIO Architecture Historic Preservation
Dwg File: A8.6	Checked By: JC	Bauer Latoza Studio, 2011	Landscupe Architectur Urban Design



		COL	UMN	SCHE	DULE						
MA	ARK	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
T/MECH. ROOF EL. SEE PLAN T/LOW ROOF EL. SEE PLAN T/2ND FLOOR EL. SEE PLAN T/1ST FLOOR/FD EL. SEE PLAN	N	W10x39	W10x39	W10x49	W10x49	W10x60	W10x68	SEE NOT E 17 001001	W10x100	HSS 8x8x3/8	6"ø XS PIPE
BASE PLATE	W	18"	18"	18"	18"	18"	18"	20"	20"	NOTE 4	NOTE 4
	L	18"	18"	18"	18"	18"	18"	20"	20"	NOTE 4	NOTE 4
	t	1"	1"	1 1/2"	1 1/2"	1 3/4"	2"	2 1/4"	2 1/4"	NOTE 4	NOTE 4
ANCHOR BOLTS	ø	1 1/2 <b>"</b> ø	3/4"ø	3/4 <b>"</b> ø	3/4"ø	1 1/2"ø	1 1/2 <b>"</b> ø	3/4 <b>"</b> ø	3/4 <b>"</b> ø	NOTE 4	NOTE 4
	EMBED.	1'-0"	9"	9"	9"	1'-6"	1'-6"	9"	9"	NOTE 4	NOTE 4
REMARKS	REMARKS SEE DETAIL 8/S2.3 FOR NUMBER, SIZE, & CONFIGURATION OF ANCHOR BOLTS AT BRACED FRAMES AND MOMENT FRAMES AND FOR INFORMATION NOT SHOWN IN SCHEDULE										

# NOTES:

1. COLUMNS WITH FIRETROL ENCASEMENT OCCUR AT C/2 AND C/4. SEE ARCH DWGS, FOR SIZE & EXTENT OF FIRETROL ENCASEMENT.

2. SEE TXPIGAL BASE PLATE DETAIL 14/S2.1 AND 8/S2.3 FOR MORE INFORMATION. SEE 8/S2.3 FOR 1 BASEPLATE, ANCHOR SIZE, AND ANCHOR EMBEDMENTS THAT DEVIATE FROM SCHEDULE 3. ALL COLUMNS SHALL BE ERECTED AS ONE MEMBER: IT IS NOT ACCEPTABLE TO INSTALL A FIELD

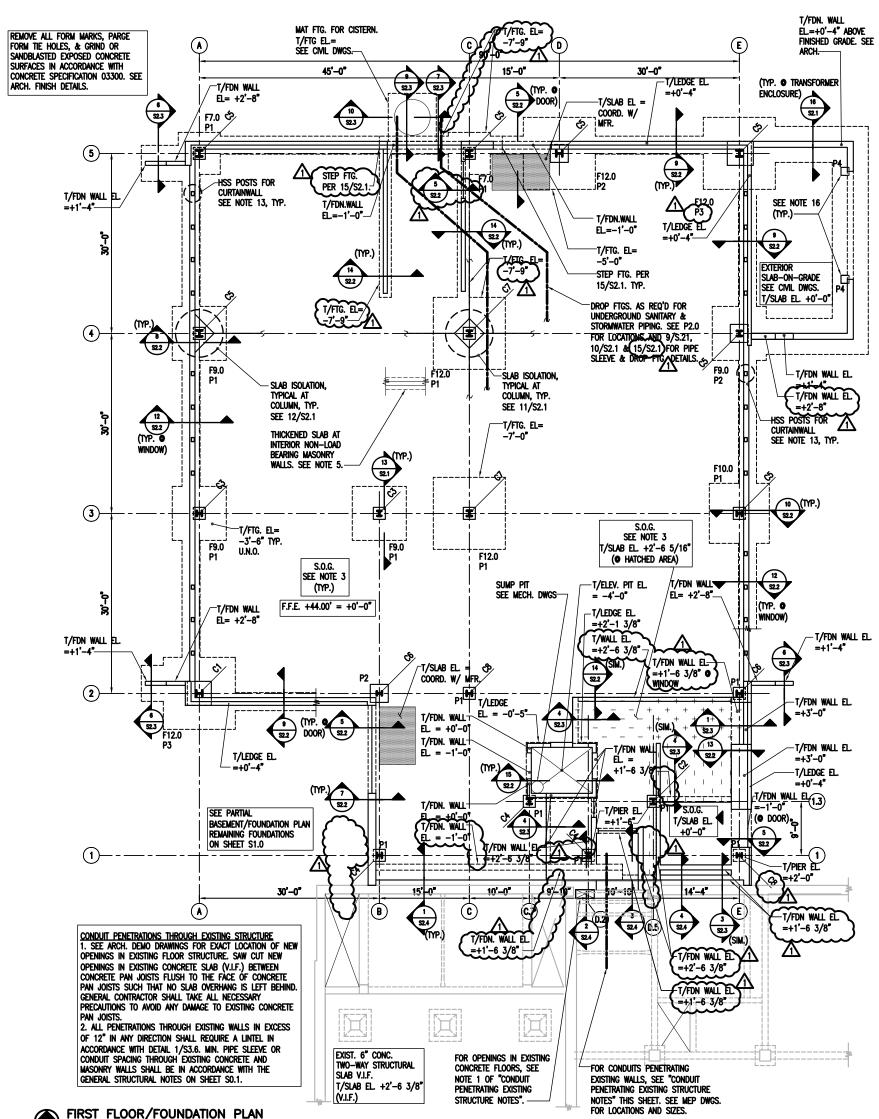
Matrix Engineering Corporation Structural Engineers 33 W. Jackson Blvd 4th floor Chicago Illinois 60604-3901 v 312 427 1200

f 312 427 4220

PROJECT: MATRIX #:	WILLIAM J. ONAHAN ELEMENTARY SCHOOL ANNEX 6634 W. RAVEN STREET CHICAGO, 11023	IL	60631
ISSUE: TITLE: REFERENCE:	ADDENDUM 1		

COMMENTS:

DATE: 12/29/11 SSK-02



SCALE 1/8"=1'-0"

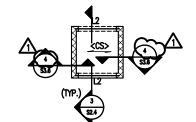
NOTES:

- VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH. DWGS. PRIOR TO CONSTRUCTION.
  SEE S0.1 & S0.2 FOR GENERAL STRUCTURAL NOTES.
- S.O.G. INDICATES 5" CONCRETE SLAB-ON-GRADE W/4x4-W4.0xW4.0 WWF OVER VAPOR BARRIER OVER 2 1/2" ASTM C578 "XEPS" INSULATION OVER 6" GRANULAR FILL OVER ENGINEERED FILL AS REQUIRED IN SOIL 3. REPORT. (TYP.) SEE TYPICAL DETAILS 1/S2.1, 2/S2.1 AND 3/S2.1. PROVIDE CONSTRUCTION/CONTROL JOINTS AT 15"-0" MAXIMUM IN EA. DIRECTION (TYP.). SUBMIT JOINT LAYOUT FOR REVIEW PRIOR TO PLACING SLAB-ON-GRADE. COORDINATE JOINT LOCATIONS WITH ARCH. DWGS. T/SLAB EL. +0'-0" U.N.O.
- 4. SEE DETAILS 4/S2.1 AND 5/S2.1 FOR TYPICAL CONCRETE WALL REINF. DETAILING INFORMATION.
- 5. THICKEN SLAB-ON-GRADE AS INDICATED IN DETAIL 2/S2.2, 3/S2.2 OR 4/S2.2 AT ALL NON-LOAD BEARING MASONRY WALLS (U.N.O.). REFER TO ARCHITECTURAL FOR SCOPE AND EXTENTS. SEE DETAILS 2/S3.3, 3/S3.3 AND 4/S3.3 FOR TYPICAL BRACING AT TOP OF MASONRY WALLS.
- 6. PROVIDE 2-44 × 4"-0" TOP AND BOTTOM OF CONCRETE SLAB-ON-GRADE AT ALL RE-ENTRANT CORNER LOCATIONS (TYP.). 7. SEE ARCH, AND MEP DRAWINGS FOR CURBS AND MECHANICAL EQUIPMENT PADS. SEE DETAIL 6/S2.1 AND 7/S2.1 FOR INFORMATION. FINAL LOCATIONS & SIZES SHALL BE COORDINATED W/MEP EQUIPMENT MANUFACTURER. VERIFY SIZE AND LOCATION OF SLAB DEPRESSIONS WITH THE ARCHITECTURAL DRAWINGS
- Indicates depressed slab. See 8/s2.1 for detail coord. W/Arch. dwg. for locations. General contractor to coordinate with equipment providers for final plan dimensions and depth of 8. DEPRESSIONS.
- 9. SEE MEP DRAWINGS FOR LOCATIONS AND ELEVATIONS OF FOUNDATION WALL PENETRATIONS. SEE DETAIL 9/S2.1 AND 10/S2.1 FOR ADD'L REINF. REQUIREMENT.

- 10. "Cx" INDICATES STEEL COLUMN. SEE S1.0 FOR COLUMN SCHEDULE. SEE ARCH. DWGS. FOR SIZE AND EXTENT OF FIRETROL COLUMN ENCASEMENT. 11. VERTICAL & HORIZONTAL REBAR ALONG THE EXTERIOR FACE OF THE FOUNDATION WALL EXPOSED TO WEATHER SHALL BE EPOXY COAT. 12. T/FDN. WALL EL. = +2'-8'' (TYP. U.N.O.); T/FDN. WALL EL. DOOR = -1'-0'' (U.N.O.); T/FTG. EL. = -3'-6''' (TYP. U.N.O.); T/LEDGE EL. +0'-4''' (TYP. U.N.O.)

- 13. SEE SHEET S6.1 FOR WINDOW/WINDOW WALL SUPPORT FRAMING ELEVATIONS AND INFORMATION. SEE DETAIL 11/S2.2 FOR HSS POST CONNECTION TO FDN. WALL 14. "PX" INDICATES CONCRETE PIER. SCHEDULE ON SHEET S1.0. T/PIER EL -1'-0" (TYP. U.N.O.) 15. "Fx" INDICATES CONCRETE FOOTING. SEE FOOTING SCHEDULE ON SHEET S1.0. T/PIER EL -3'-6" (TYP. U.N.O.) 16. POSTS, PIER SIZES, AND FOOTINGS SHOWN ON PLAN FOR GATE POSTS ARE FOR BID PURPOSES ONLY. CONTRACTOR SHALL COORDINATE FINAL SIZES WITH GATE POST PROVIDER AND POUR CONCRETE PIERS FOR THE GATE POSTS, PIER SIZES, AND FOOTINGS SHOWN ON PLAN FOR GATE POSTS ARE FOR BID PURPOSES ONLY. CONTRACTOR SHALL COORDINATE FINAL SIZES WITH GATE POST PROVIDER AND POUR CONCRETE PIERS FOR THE GATE POSTS PIER SIZES, AND FOOTINGS SHOWN ON PLAN FOR GATE POSTS ARE FOR BID PURPOSES ONLY. CONTRACTOR SHALL COORDINATE FINAL SIZES WITH GATE POST PROVIDER AND POUR CONCRETE PIERS FOR THE GATE POST INTEGRALLY WITH THE FOUNDATION WALL/FTG. SEE 1/S2.2 2/S2.3 FOR ADD'L INFORMATION. T/PIER EL. +0'-0".

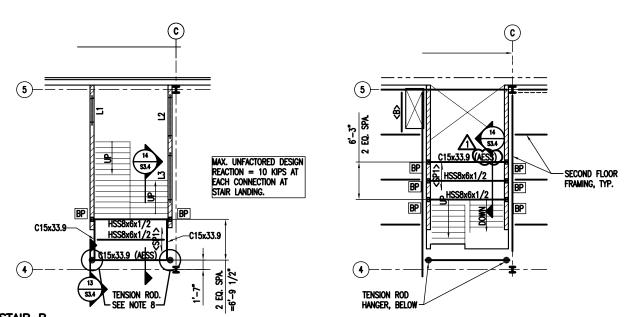
Matrix Engineering Corporation Structural Engineers 33 W. Jackson Blvd 4th floor Chicago Illinois 60604-3901 v 312 427 1200 f 312 427 4220	PROJECT: WILLIAM J. ONAHAN ELEMENTARY SCHOOL ANNEX 6634 W. RAVEN STREET CHICAGO, IL 60631 MATRIX #: 11023 ISSUE: ADDENDUM 1 TITLE: FIRST FLOOR/FOUNDATION PLAN REFERENCE: S1.1 COMMENTS: 1/16"=1'-0" DATE 12/29/	<sup>1</sup> SSK-03
---	--	---------------------



#### 4 HR VESTIBULE FLOOR FRAMING PLANS 1/8\*=1'-0\*

NOTES:

- 1. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH. DWGS. PRIOR TO CONSTRUCTION. COORDINATE SIZE AND LOCATION OF ALL OPENINGS/PENETRATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. TYPICAL SLAB EDGES AT SLAB OPENINGS/PENETRATIONS SHALL BE 6" OFF THE CENTERLINE OF STEEL FRAMES, U.N.O.
- SEE SO.1 & SO.2 FOR GENERAL STRUCTURAL NOTES. FOR TYPICAL STEEL CONNECTIONS AND TYPICAL SLAB ON DECK CONSTRUCTION, SEE SHEETS
- S3.1 AND S3.2. 3. <u>CS</u> INDICATES 2"x18GA. GALV. COMPOSITE FLOOR DECK W/3 1/4" LIGHT WEIGHT CONCRETE (5 1/4" TOTAL THICKNESS) W/6x6 W1.4xW1.4 WWF. T/SLAB EL=+17'-1 1/2" AT SECOND FLOOR; T/SLAB EL=+31'-7 3/8" AT MECHANICAL ROOM FLOOR. sée sheet s1.3.
- T/STEEL EL. + 10"-8 1/4" AT SECOND FLOOR; T/STEEL EL. + 31'-2 1/8" AT MECHANICAL FLOOR. SEE SHEET S1.3.
- INDICATES 10" CMU WALL W/#5032"O.C. VERTICAL BARS, TYP. SEE SHEET S5.1 FOR TYP. DETAILS. 5.
- 6. "Lx" INDICATES LINTEL FOR OPENING IN WALL. SEE LINTEL SCHEDULE ON SHEET S5.1.



STAIR B



#### NOTES:

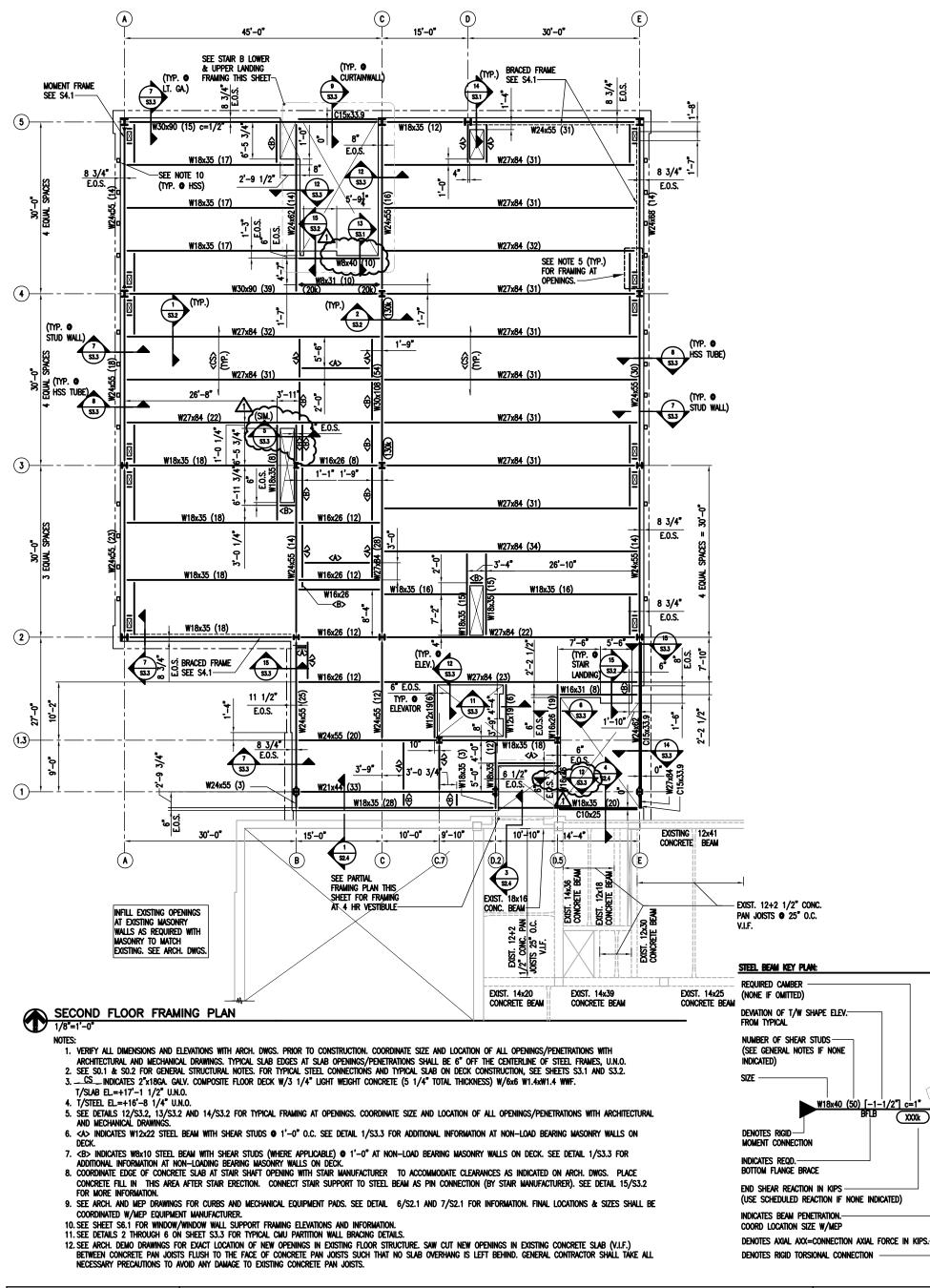
- 1. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH. DWGS. PRIOR TO CONSTRUCTION. COORDINATE SIZE AND LOCATION OF ALL OPENINGS/PENETRATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. TYPICAL SLAB EDGES AT SLAB OPENINGS/PENETRATIONS SHALL BE 6" OFF THE CENTERLINE OF STEEL FRAMES, U.N.O. 2. SEE SO.1 & SO.2 FOR GENERAL STRUCTURAL NOTES. FOR TYPICAL STEEL CONNECTIONS AND TYPICAL SLAB ON DECK CONSTRUCTION, SEE SHEETS ST.1.4.100 ST.0.
- S3.1 AND S3.2.
- $\underline{\langle SP1 \rangle}$  indicates 3/8" cont. Steel plate w/ 2 1/2" light weight concrete topping w/ 4LBS of Poly-Ethylene macro-fiber mesh reinf. Per one cubic yard of concrete. T/SLAB EL = +8'-6 3/4". Stair Stringers and additional framing by Stair Fabricator, typ.  $\underline{\mathbb{ZZZ}}$  indicates 8" cmu wall w/#5024"o.c. vertical bars, typ. SEE Sheet S5.1 for typ. details.  $\underline{\mathbb{ZZZ}}$  indicates 1.1 for typ. details. 3.
- 5.
- 6. "Lx" INDICATES LINTEL FOR OPENING IN WALL. SEE LINTEL SCHEDULE ON SHEET S5.1.
- 7. BP INDICATES 5/8"x7"x10" BEARING PLATE W/(2)1/2"#x4" LONG HEADED STUDS AT BEAM BEARING TYP. SEE 11/S5.1, SIM.
- 5/8" (ARBON STEEL TENSION ROD (ASTM A572, GRADE 50 [Fy= 50 KSI]) W/ CLEVIS & PLATE ATTACHMENTS (ASTM A572, GRADE 50 [Fy= 50 KSI]) TO STRUCTURE BY MFR. REFER TO ARCH. FOR PAINT FINISH REQUIREMENTS.

#### STAIR B UPPER LANDING FRAMING PLAN 1/8"=1'-0"

#### NOTES:

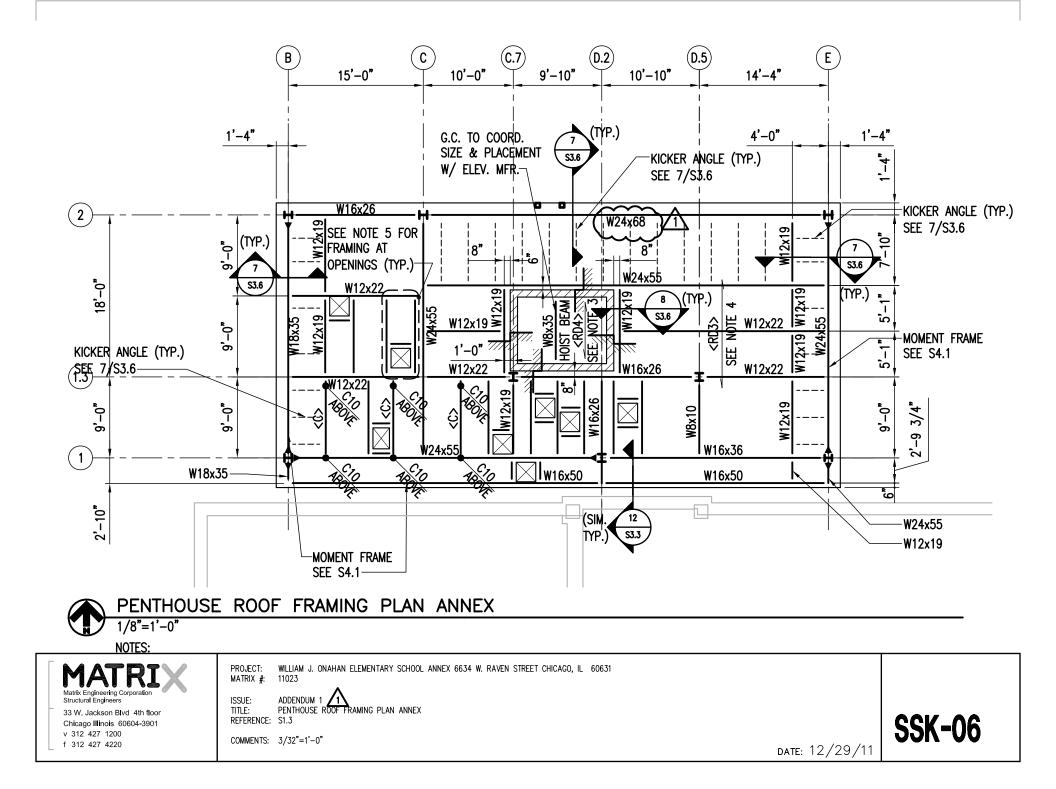
- 1. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH. DWGS. PRIOR TO CONSTRUCTION. COORDINATE SIZE AND LOCATION OF ALL OPENINGS/PENETRATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. TYPICAL SLAB EDGES AT SLAB OPENINGS/PENETRATIONS SHALL BE 6" OFF THE CENTERLINE OF STEEL FRAMES, U.N.O.
   SEE SO.1 & SO.2 FOR GENERAL STRUCTURAL NOTES. FOR TYPICAL STEEL CONNECTIONS AND TYPICAL SLAB ON DECK CONSTRUCTION, SEE SHEETS CO.1
- S3.1 AND S3.2.
- 3. <SP1> INDICATES 3/8" CONT. STEEL PLATE W/ 2 1/2" LIGHT WEIGHT Concrete topping w/ 4Lbs of Poly-ethylene macro-fiber mesh reinf per one cubic yard of concrete t/slab el = +9'-10". Star stringers and additional framing by stair fabricator, typ.  $\mathbb{Z}$ indicates 8" cmu wall w/ $\frac{1}{4}$ 5024".o.c. vertical bars, typ. see sheet s5.1 for typ. details.
- 5.
- "Lx" INDICATES LINTEL FOR OPENING IN WALL. SEE LINTEL SCHEDULE ON 6. SHEET S5.1.
- 7. BP INDICATES 5/8"x7"x10" BEARING PLATE W/(2)1/2"#x4" LONG HEADED STUDS AT BEAM BEARING TYP. SEE 11/S5.1, SIM.

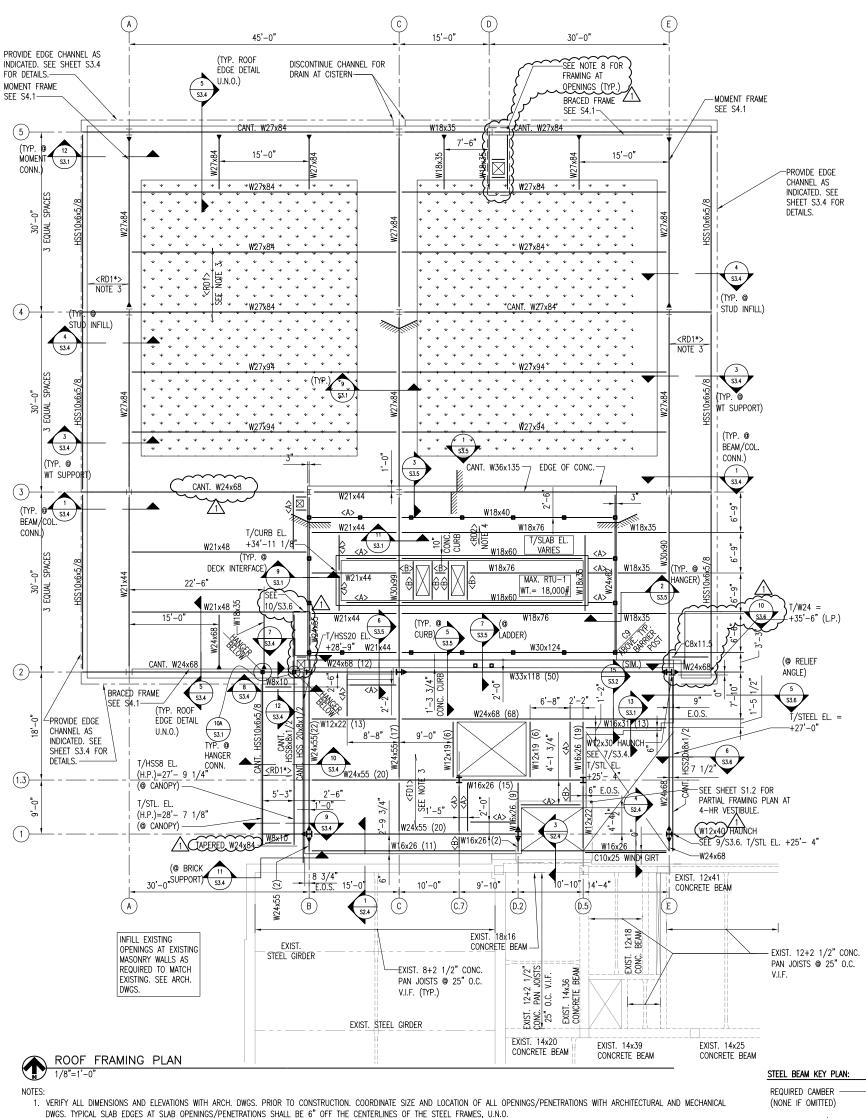
Matrix Engineering Corporation Structural Engineering Corporation 33 W. Jackson Blvd 4th floor Chicago Illinois 60604-3901 v 312 427 1200 f 312 427 4220 DATE 12/29/11 DATE 12/29/11	Structural Engineers 33 W. Jackson Blvd 4th floor Chicago Illinois 60604-3901 v 312 427 1200	- 3 0 V
---	---	---------------



Matrix Engineering Corporation Structural Engineers 33 W. Jackson Blvd 4th floor Chicago Illinois 60604-3901 v 312 427 1200 f 312 427 4220	PROJECT: WILLIAM J. ONAHAN ELEMENTARY SCHOOL ANNEX 6634 W. RAVEN STREET CHICAGO, IL 60631 MATRIX #: 11023 ISSUE: ADDENDUM 1 TITLE: AS NOTED REFERENCE: S1.2 COMMENTS: 1/16"=1'-0"	DATE 12/29/11 SSK-05	
---	--	----------------------	--

Ρ





SEE SO.1 & SO.2 FOR GENERAL STRUCTURAL NOTES. FOR TYPICAL SEEL CONNECTIONS AND TYPICAL SLAB ON DECK CONSTRUCTION, SEE SHTS. S3.1 AND S3.2. <u>RD1</u>\_INDICATES PERFORATED 'EPIC TORIS A' ACOUSTIC ROOF DECK (18GA.) SEE ARCH. DRAWING FOR EXTENTS OF DECK. CONTINUOUSLY ATTACH TO ALL SUPPORTING <u>MEMBERS</u> W/ 3/4"& PUDDLE WELDS @ 12" O.C. PROVIDE 1 1/2" LONG SEAM WELD SIDE LAP FASTENERS @ 36" O.C. MAX.

RD1\* INDICATES NON-PERFORATED 'EPIC TORIS' ROOF DECK (18GA.) WITH A CONTINUOUS ADDITIONAL FLAT PROFILE METAL SHEET (MIN. 20 GA.) AT UNDERSIDE; TYP. AT ROOF OVERHANGS. SEE ARCH. DRAWING FOR EXTENTS OF THIS TYPE OF DECK. CONTINUOUSLY ATTACH ROOF DECK TO ALL SUPPORTING MEMBERS W/ 3/4"0 PUDDLE WELDS @ 12" O.C. PROVIDE 1 1/2" LONG SEAM WELD SIDE LAP FASTENERS @ 36" O.C. MAX.

4. \_RD2\_ INDICATES PERFORATED 'EPIC TORIS CA' ACOUSTIC COMPOSITE ROOF DECK (186A.) W/3" LIGHT WEIGHT CONCRETE (5 1/2" TOTAL THICKNESS) W/6x6 W1.4xW1.4 WWF.

5. \_FD1\_ INDICATES 2"x18 GA. COMPOSITE METAL FLOOR DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING (5 1/4" TOTÀL SLAB THICKNESS) W/6x6-W1.4xW1.4 WWF. T/SLAB EL. +31'-7 3/8" AT MECHANICAL PENTHOUSE. T/SLAB EL. +31'-7 7/8"

6. EDITED INDICATES EXTENSIVE GREEN ROOF SYSTEM (30 psf MAX.). CONTRACTOR SHALL SUBMIT FOR APPROVAL PRIOR TO INSTALLATION. COORD. W/ARCH. DWG.

7. "Cx" INDICATES STEEL COLUMN. SEE SCHEDULE ON SHEET S1.0.

2.

3.

8. SEE DETAILS 12/S3.2, 13/S3.2 AND 14/S3.2 FOR TYPICAL FRAMING AT OPENINGS. COORDINATE SIZE AND LOCATION OF ALL OPENINGS/PENETRATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

9. SEE ARCH. AND MEP DRAWINGS FOR CURBS AND MECHANICAL EQUIPMENT PADS. SEE DETAIL 6/S2.1 AND 7/S2.1 FOR INFORMATION. FINAL LOCATIONS & SIZES SHALL BE COORDINATED W/MEP EQUIPMENT MANUFACTURER.

10. IN CASES WHERE MECHANICAL/ELECTRICAL EQUIPMENT LOADING LISTED ON THE MANUFACTURER'S PRODUCT DATA EXCEEDS DESIGN LOADS INDICATED ON THE DESIGN

DRAWINGS, CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER AND ARCHITECT PRIOR TO PROCEEDING WITH THE WORK. 11. <A> INDICATES W12x22 STEEL BEAM WITH SHEAR STUDS (WHERE APPLICABLE) @ 1'-0" O.C.. SEE DETAIL 1/S3.3 FOR ADDITIONAL INFORMATION AT NON-LOAD BEARING MASONRY WALLS ON DECK. 12. <B> INDICATES W8x10 NON-COMPOSITE STEEL BEAM AT NON-LOAD BEARING MASONRY WALLS ON DECK. SEE DETAIL 1/S3.3 FOR ADDITIONAL INFORMATION AT NON-LOAD BEARING MASONRY WALLS ON DECK.

13. T/STEEL EL. +31'-2 1/8" AT MECHANICAL PENTHOUSE (TYP. U.N.O.). 14. SEE ARCH. DEMO DRAWINGS FOR EXACT LOCATION OF NEW OPENINGS IN EXISTING FLOOR STRUCTURE. AT THESE NEW OPENINGS GENERAL CONTRACTOR SHALL SAW CUT EXISTING CONCRETE SLAB BETWEEN CONCRETE PAN JOISTS FLUSH TO THE FACE OF CONCRETE PAN JOISTS SUCH THAT NO SLAB OVERHANG IS LEFT BEHIND. GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID ANY DAMAGE TO EXISTING CONCRETE PAN JOISTS. SEE 2/S3.6.

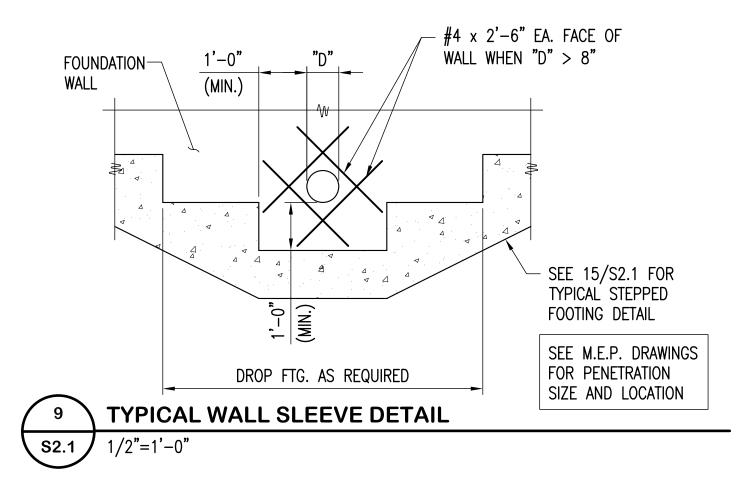
15. DO NOT HANG LOADS FROM DECK. HANG ALL DUCTWORK, PIPING ETC DIRECTLY FROM STEEL FRAMING OF SUPPLEMENTARY MEMBERS. ALL HANGING LOADS SHALL BE SUBMITTED FOR REVIEW.

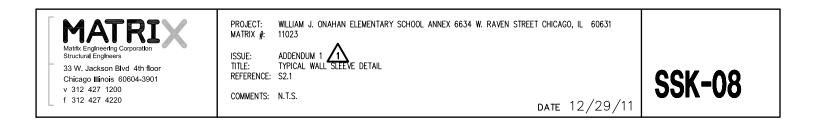
NUMBER OF SHEAR STUDS (SEE GENERAL NOTES IF NONE INDICATED)
SIZE
W18x40 (50) [-1-1/2"] c=1" BFLB
DENOTES RIGID
INDICATES REQD BOTTOM FLANGE BRACE
END SHEAR REACTION IN KIPS (USE SCHEDULED REACTION IF NONE INDICATED)
INDICATES BEAM PENETRATION.
DENOTES AXIAL AXX=CONNECTION AXIAL FORCE IN KIPS.
DENOTES RIGID TORSIONAL CONNECTION

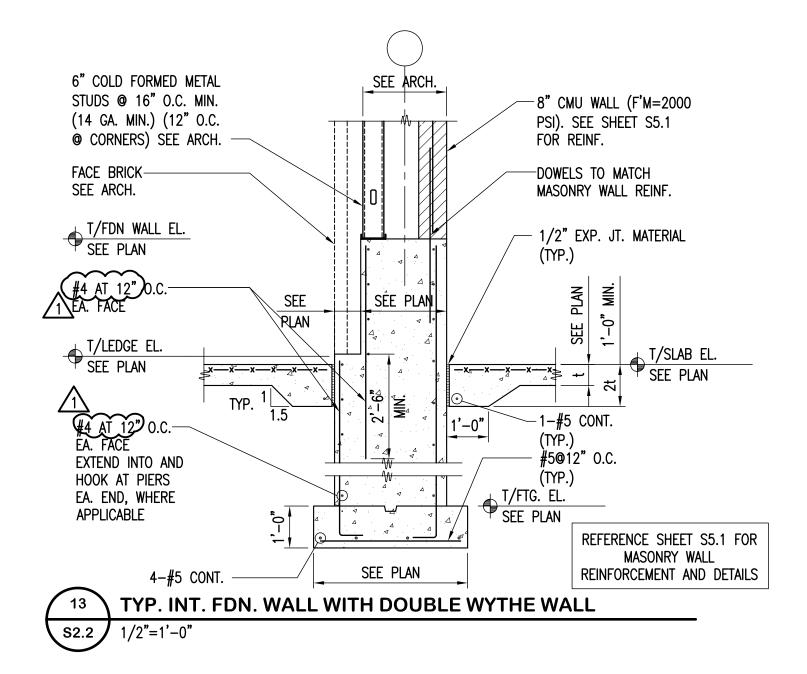
Matrix Engineering Corporation Structural Engineers 33 W. Jackson Blvd 4th floor Chicago Illinois 60604-3901 v 312 427 1200 f 312 427 4220	PROJECT: WILLIAM J. ONAHAN ELEMENTARY SCHOOL ANNEX 6634 W. RAVEN STREET CHICAGO, IL 60631 MATRIX #: 11023 ISSUE: ADDENDUM 1 1 TITLE: ROOF FRAMING PLAN REFERENCE: \$1.3 COMMENTS: 1/16"=1'-0" DATE 12/29/11	SSK-07
---	---	--------

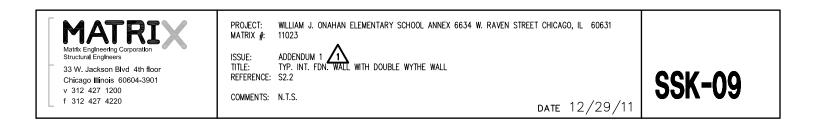
DEVIATION OF T/W SHAPE ELEV. FROM TYPICAL

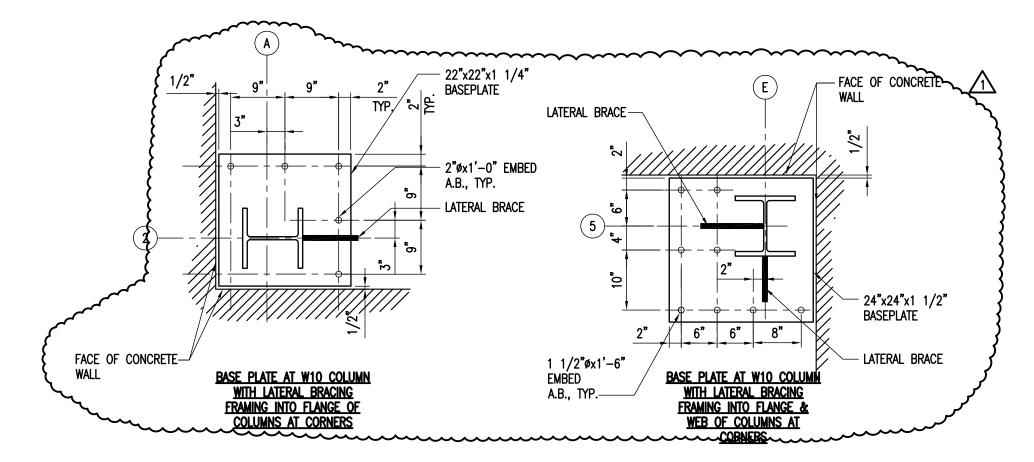
SPACE SLEEVES FOR CONDUIT A MINIMUM OF 3 CONDUIT DIAMETERS ON CENTER OR 4 INCHES. WHICHEVER IS GREATER DO NOT INTERRUPT FDN. WALL REINF. IF THIS CRITERIA IS NOT MET, TREAT THE ROW OF SLEEVE OPENINGS AS ONE CONTINUOUS CONCRETE WALL OPENING AND PROVIDE ADDITIONAL REINFORCEMENT PER DETAIL 10/S2.1.



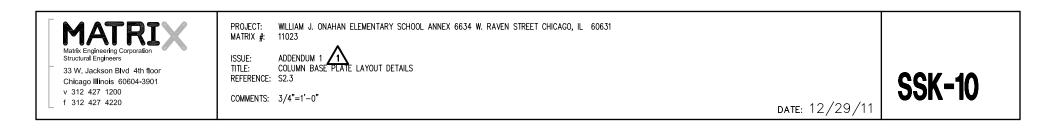


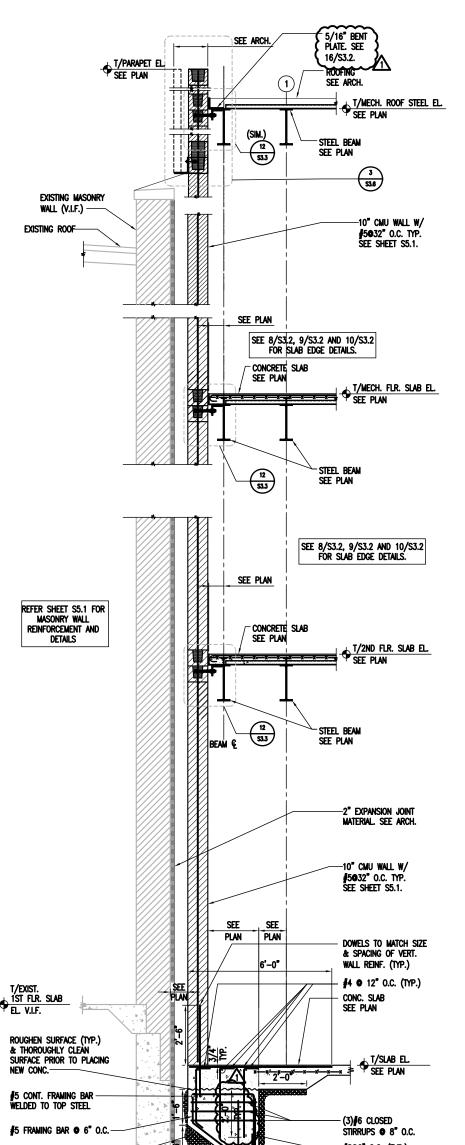


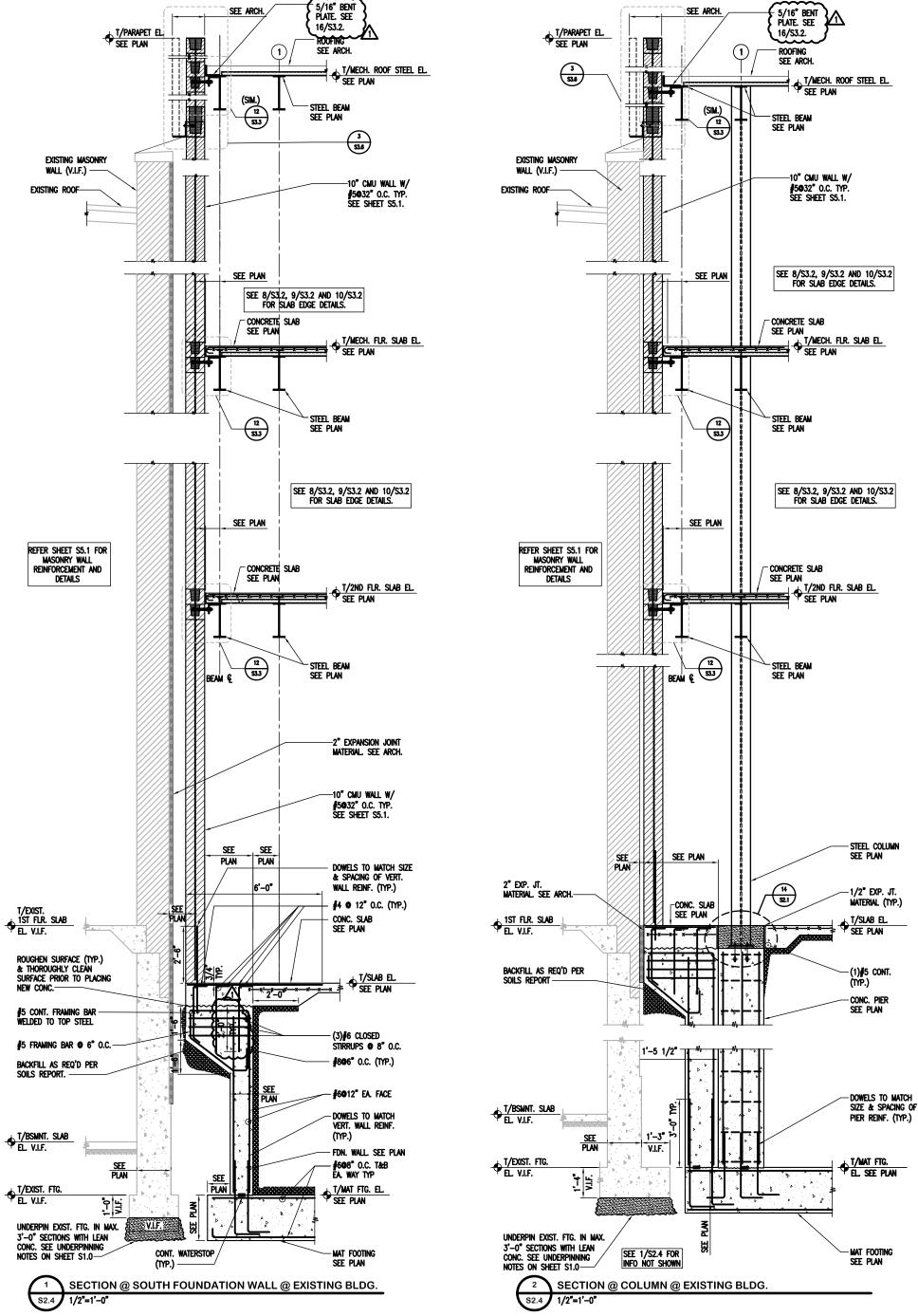


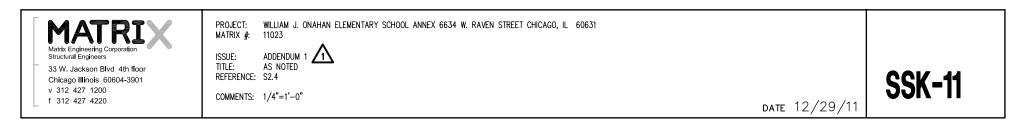


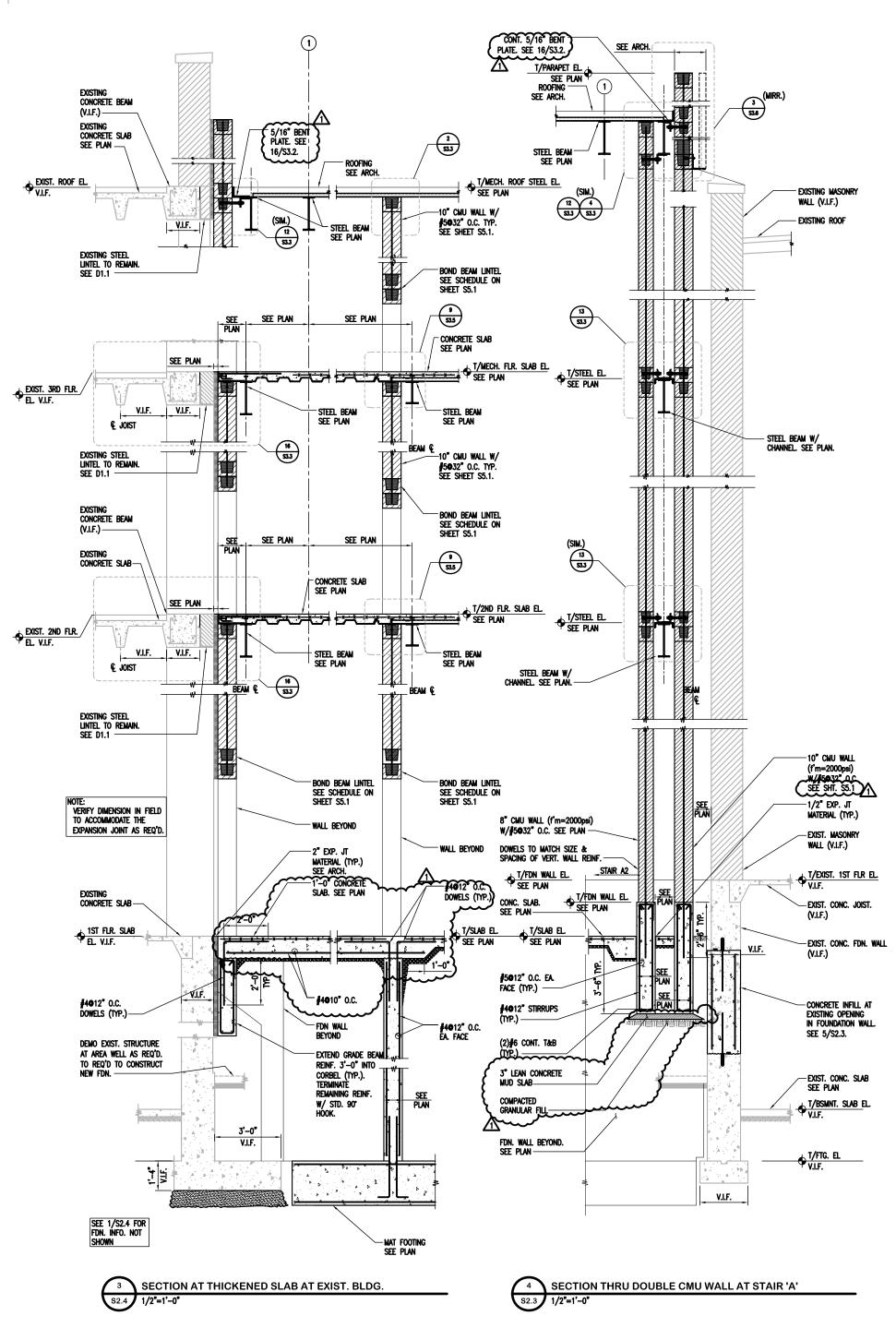


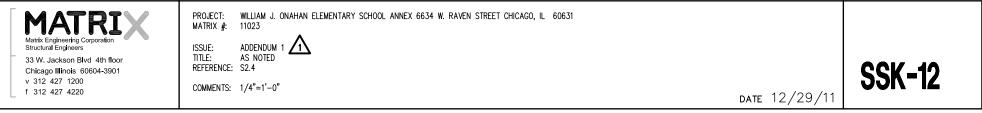


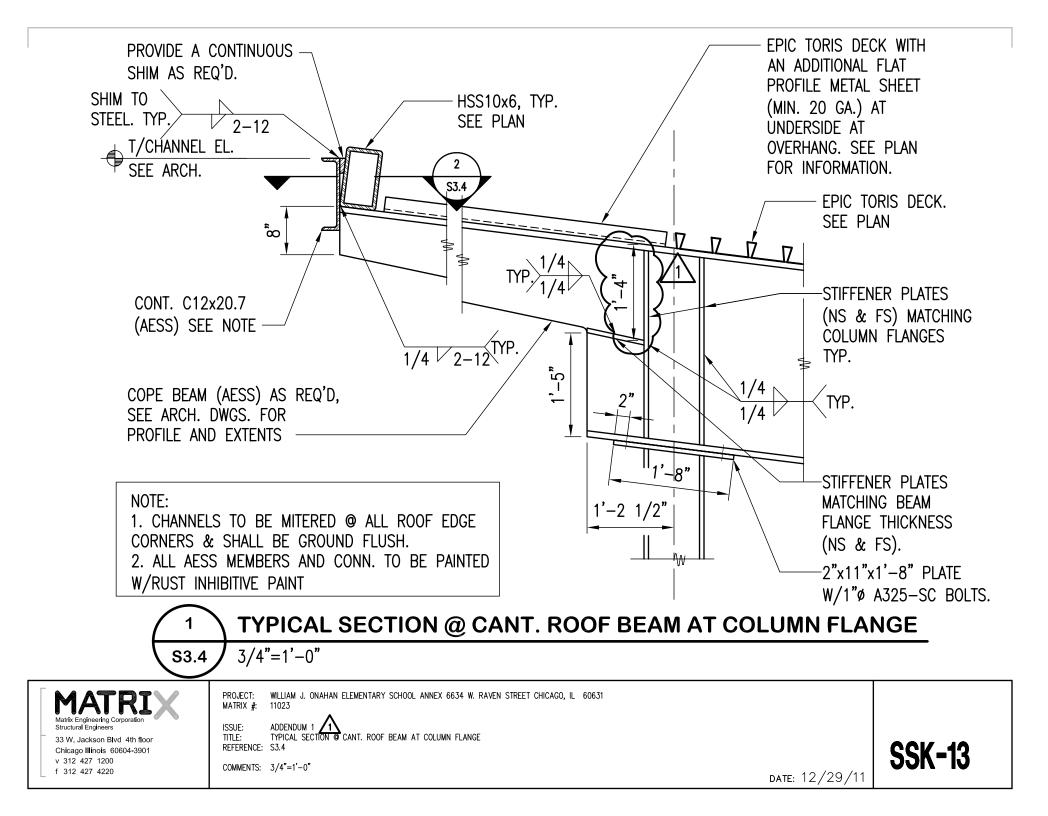


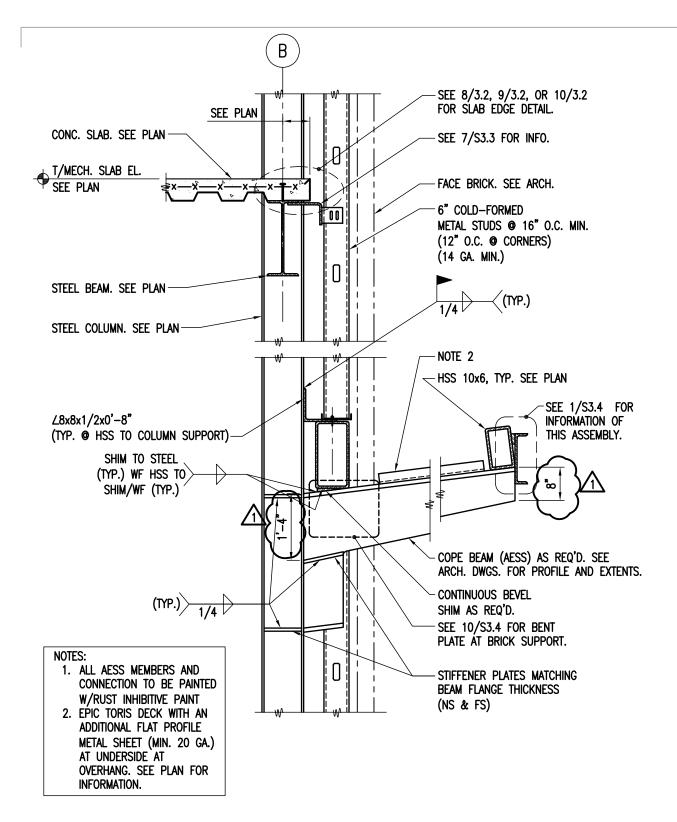


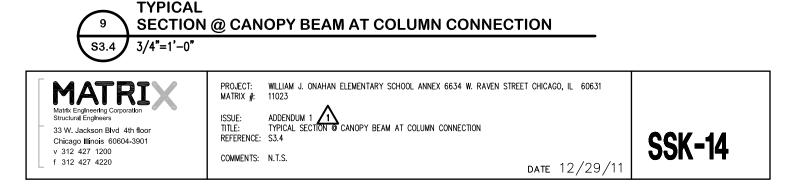


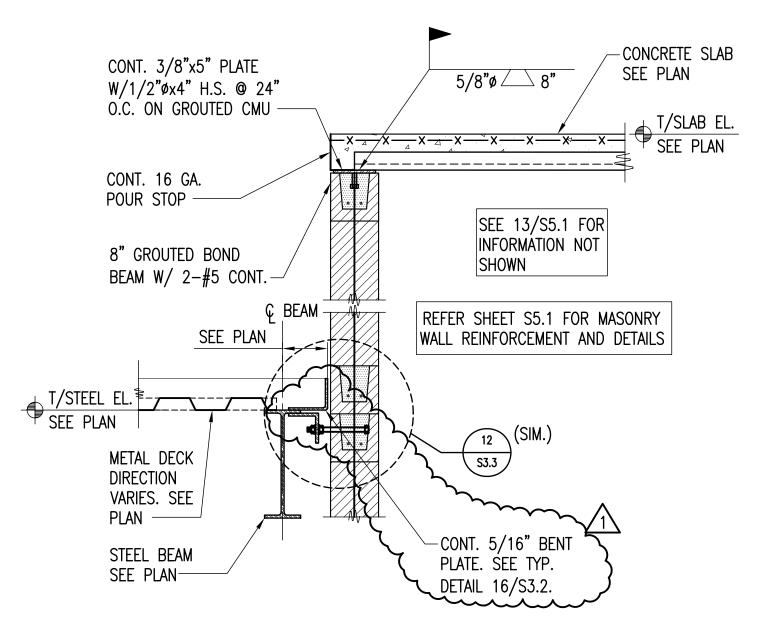


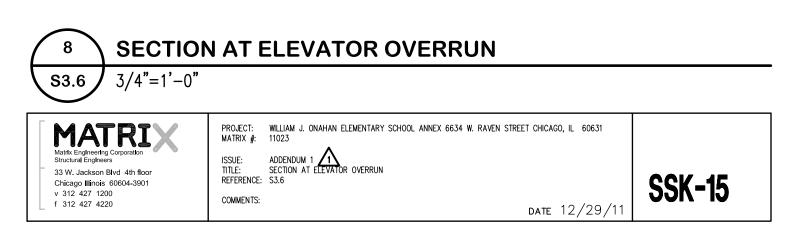


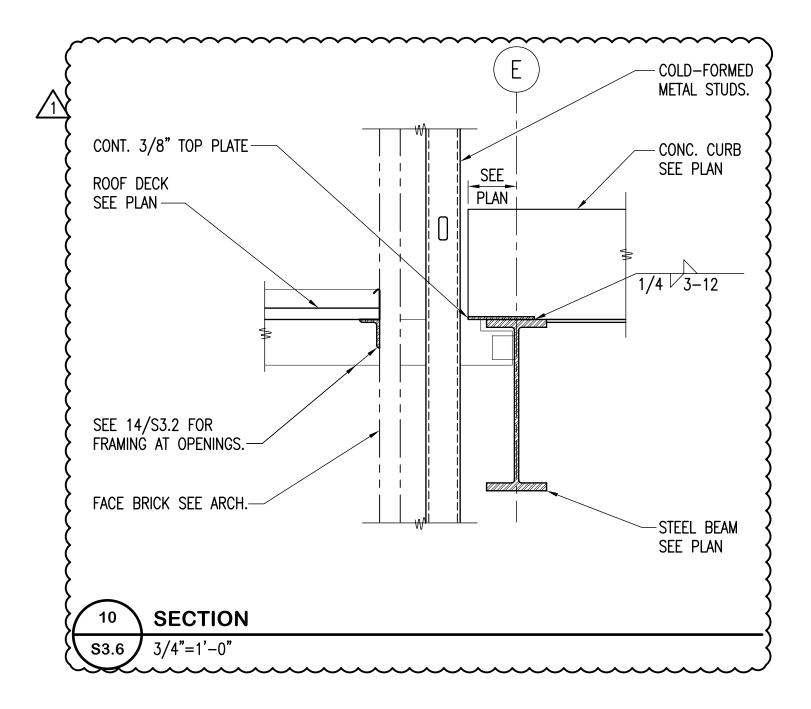


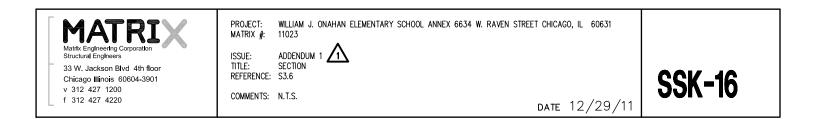


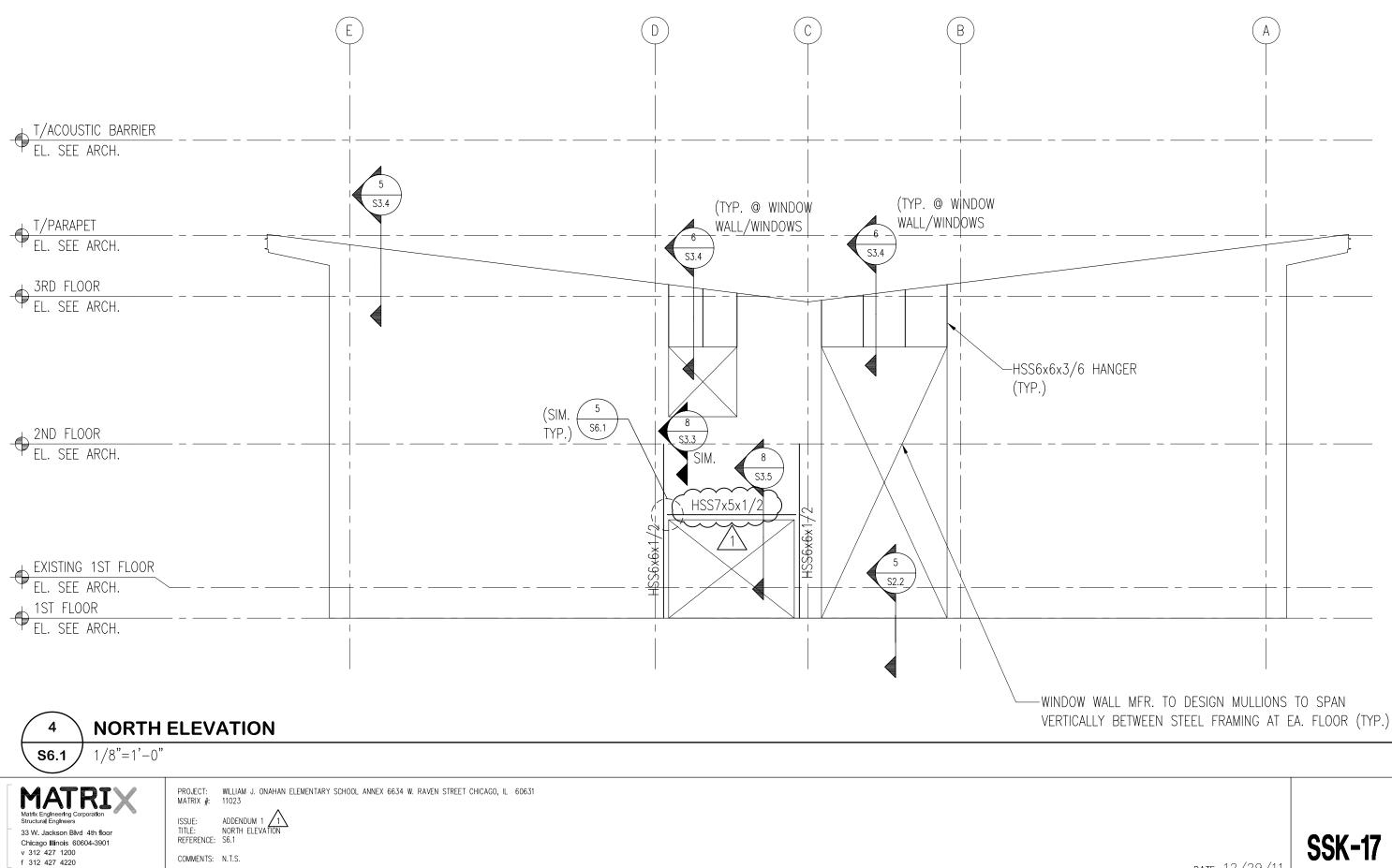






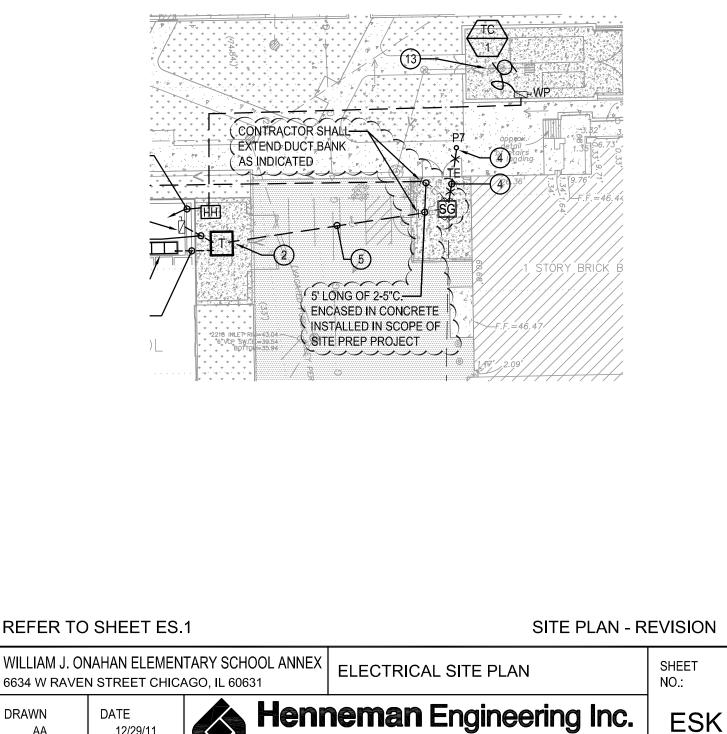






date 12/
----------





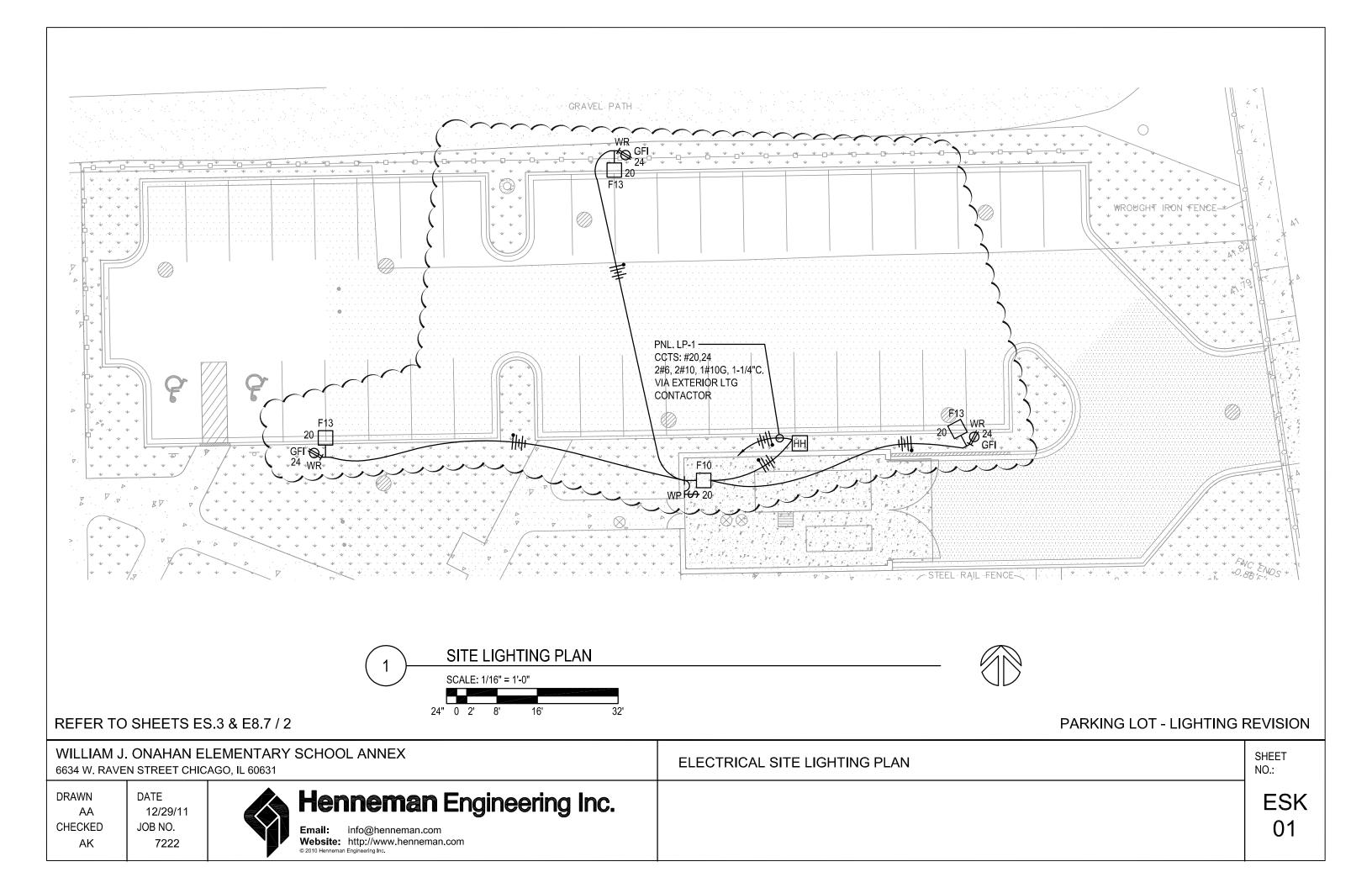
DRAWN AA CHECKED AK

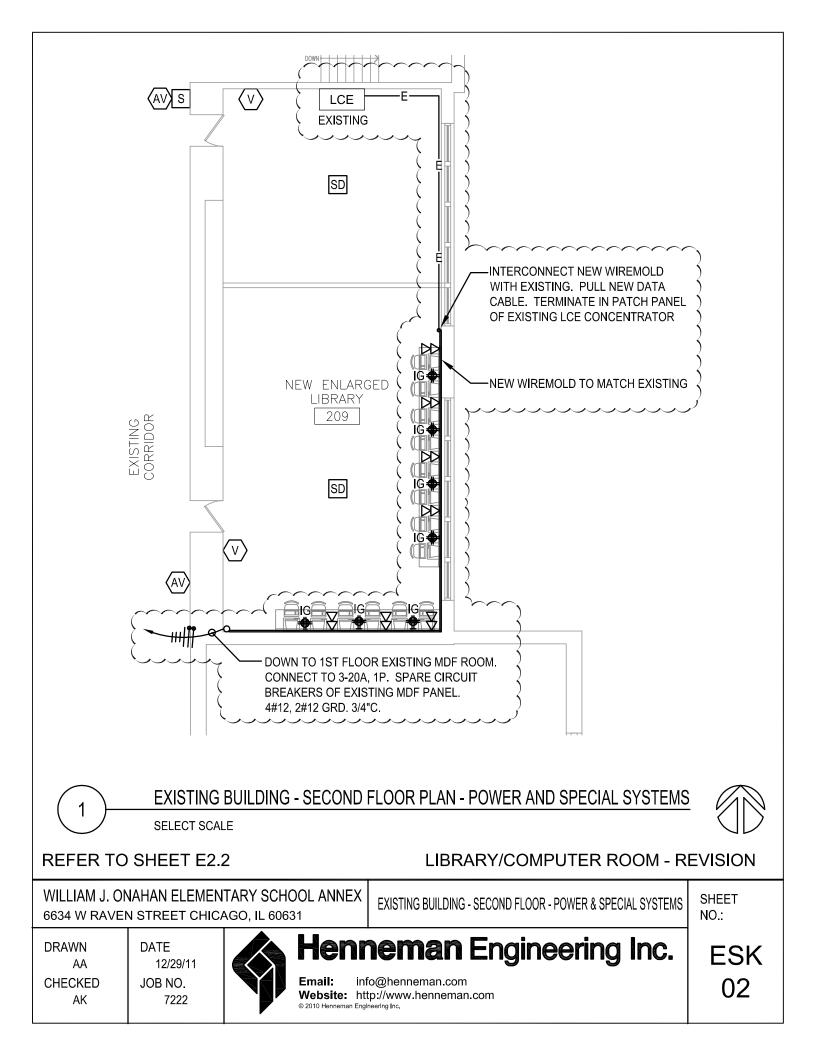
DATE 12/29/11 JOB NO. 7222



Email: info@henneman.com Website: http://www.henneman.com © 2010 Henneman Engineering Inc.

04





BRANCH PANEL		VOLTAGE			PHASE	PHASE WIRE BUS SIZE		ZE	M	AIN	AIC RATING	
LP-1	1:	20/	208		3	4	100A	MLO			10,000	
	CODE: L=LIGHTING, R=RECEPTACLES, M=MOTORS											
		COPPER GROUND BAR										
LOAD	CODE	POLE	BKR	CKT#	A	В	С	CKT#	BKR	CODE	LOAD	
CLASSROOM 03		1	20A	1	930						CLASSROOM 05	
LTG					930	_		2	20A	1	LTG	
CLASSROOM 03		1	20A	3		465					CLASSROOM 05	
LTG						465		4	20A	1	LTG	
CLASSROOM 02		1	20A	5	-		930				CLASSROOM 04	
LTG					-		930	6	20A	1	LTG	
CLASSROOM 02		1	20A	7	465						CLASSROOM 04	
LTG					465			8	20A	1	LTG	
CLASSROOM 01		1	20A	9		930					NICHE LTG	
LTG					-	450		10	20A	1		
CLASSROOM 01		1	20A	11			465				ELEC., BATHROOM, JANITOR	
LTG					-		372	12	20A	1	LTG	
CORRIDOR		1	20A	13	920						PLUMBING, ELEV MACH. ROOM	
LTG					434			14	20A	1	LTG	
CORRIDOR		1	20A	15		736					RESTROOM	
LTG						868		16	20A	1	LTG	
EXTERIOR		1	20A	17			500				EXTERIOR	
TIMECLOCK/PHOTOCELL RELAY							770	18	20A	1	WALLPACKS	
SPARE		1	20A	19	$\frown$	$\frown$	$\sim$	$\sim$	$\sim$		PARKING LOT	
					( 1,505			20	20A	1	LTG	
SPARE		1	20A	21	$\sim$				$\sim$	$\searrow$	PLAYGROUND	
					_	840		22	20A	1	PARKING LOT	
SPARE		1	20A	23	_		$\frown$	$\sim$		$\sim$	PARKING LOT	
						_ (	540	24	20A	1	(3)DR	
SPARE		1	20A	25				$\sim$				
							_	26		1	SPACE	
SPARE		1	20A	27	-		_					
					-			28		1	SPACE	
SPARE		1	20A	29	-							
								30		1	SPACE	
5,649	PHA	PHASE A		ASE A RECEPT-W @		50%		TCL VA			(* 14,910	
4.754	PHA	PHASE B L		LIGHTS-W @		100%		DEN	IAND V	A		
(4,507)	PH4	PHASE C MOTOR-W @		OR-W@	100%				47			
			•			10070				1. 7		
14,910	TCL	-						IDEN	DEMAND A		× 41 /	

**REFER TO SHEET E6.2** 

PANEL SCHEDULE - REVISION

