

C. 11.12.04

**University of Southern Maine
Community Education Center
PORTLAND, MAINE
GMP Documents**

**ADDENDUM NO. 5
FEBRUARY 2, 2004**

To ALL BIDDERS:

This Addendum is organized in six (6) parts plus attachments:

- Part I Overview
- Part II Revisions/Clarifications to the Bidding Requirements
- Part III Revisions to Contract Requirements
- Part IV General Clarifications
- Part V Revisions to the Drawings
- Part VI Revisions to the Specifications
- Attachments

PART I: OVERVIEW:

- A. This Addendum No. 5 is hereby incorporated into, and amends (by addition, deletion, clarification or alteration) the Bid Documents dated Jan 19 2004 for the University of Southern Maine CEC, Portland, Maine.
- B. The bidder shall acknowledge all addenda on the SUBMISSION OF GMP. Bidders are to please contact Einhorn Yaffee Prescott, Att: Mr. William F. Smith if any document is missing from the bidder's package. Additional costs for items missed in this addendum shall not be accepted for failing to include said **work**.

PART II: REVISIONS/CLARIFICATIONS TO THE BIDDING REQUIREMENTS:

NO CHANGES

PART III: REVISIONS TO CONTRACT REQUIREMENTS:

NO CHANGES

PART IV: GENERAL CLARIFICATIONS:

ITEM 1: STAGE 4 COMMISSIONING

- A. Delete the Master Equipment and Systems List submitted as part of Addendum #4, dated 1/30/2004.
- B. Add the attached Master Equipment and Systems List (6 pages, Dated 2/2/2004) for the USM – Community Education Center.

PART V: REVISIONS TO THE DRAWINGS:

ITEM 1: SHEET C-S501

- A. Modify pedestrian bridge roof framing as shown on SKS-4 (attached).
- B. Revise Plan Detail #8 as per SKS-5 (attached).
- C. Revise Plan Detail #9 as per SKS-6 (attached).
- D. Revise Section Detail #11 as per SKS-7 (attached).
- E. Revise Notes as per SKS-8 (attached).

ITEM 2: SHEET C207

- A. At North end of pedestrian ramp (North of Bedford Street), revise note "PROVIDE TRENCH DRAIN" to read as follows:

"PROVIDE THREE (3) TRENCH DRAINS AND
CONNECT TO PROPOSED 8" PVC STORM DRAIN.
SEE SHEET C-A307, PLAN E1 FOR LOCATIONS."

PART VI: REVISIONS TO THE SPECIFICATIONS:

ITEM 1. SECTION 01210 – ALLOWANCES

- A. Delete Paragraph 01210-3.03-A in its entirety.
- B. Delete Paragraph 01210-3.03-B in its entirety.
- C. Delete Paragraph 01210-3.03-C in its entirety.
- D. Insert the following Paragraph 01210-3.03-A:

"A. The second level display wall: Allow \$40,000 for the construction of wall, millwork and display units yet to be detailed."

ITEM 1. SECTION 01230 – ALTERNATES

- A. Delete Paragraph 01230-1.03 in its entirety.
- B. Insert the following Paragraph 01230-1.03:

"1.03 DESCRIPTION OF ALTERNATES

- A. Deduct Alternates shall include the following:
 - 1. Alternate No. 1: Provide a deduct alternate price to deduct finish grading, top soil, plant materials, plant beds, and all installations as shown on Drawings L101, L102, L103. General Contractor shall be responsible for rough grading and coordination for preparation of the scope of the work outlined above.
 - 2. Alternate No. 2: Provide a deduct alternate price to deduct materials and installation of concrete pavers as shown on Drawing L104 and supporting base of 6-in. reinforced concrete. Provide as alternate for all areas shown as concrete paver: 4-in. bituminous concrete as specified in Section 02513.
- B. Add Alternates shall include the following:
 - 1. Alternate No. 3: Along Bedford Street, in addition to the base underground utility work, provide an add alternate to move lines underground from Pole #1 ½ (next to Bleachers restaurant) to CMP Pole #7.
 - 2. Alternate No. 4 Provide an add alternate to connect the Garage Primary to the existing Campus Primary Loop in the Campus Center Parking Lot, install duct-bank from the Garage meter pad across Bedford Street to existing loop. Include islands in the Campus Center Parking Lot with 227v transformer and light pole bases, one in each island. Refer to electrical drawings for further information."

ITEM 3: SECTION 08331 – OVERHEAD COILING DOORS

- A. Insert Section 08331 (attached) in its entirety.

ATTACHMENTS:

STAGE 4 COMMISSIONING:

6 PAGES, 8-1/2 X 11.

SKETCHES:

5 Sheets; 8-1/2 x 11, Dated 2-2-04: SKS-4; SKS-5; SKS-6; SKS-7; SKS-8.

SECTION 08331 – OVERHEAD COILING DOORS:

4 PAGES, 8-1/2 X 11.

END OF ADDENDUM #5



Master Equipment and Systems List

Stage 4 Commissioning

Project: USM - Community Education Center
SMRT Project #: 03155-00
Field Commissioning Agent: Ted Hollidge, PE

ISSUED FOR GMP

the work. The work is as defined by the Contract Documents. Not all work defined by the Contract Documents is necessarily covered herein.

Air Handling Systems

No.	Identifier	Description / Service	Location	Verification					Issue Key ¹
				Pre-Functional Test / Start-up	Controls Checkout / TAB	Functional Testing	O & M Manuals	Owner Training	
A-01	AHU-1	Office and Lobby (includes Heat Recovery)	Roof						
A-02	AHU-2	Lecture Hall (includes Heat Recovery)	Roof						
A-03		Displacement Ventilation System	Lecture Hall						
A-04	VAV 1-1	Break out Room 110	Open Office 111						
A-05	VAV 1-2	North end of Open Office 111	Open Office 111						
A-06	VAV 1-3	South end of Open Office 111	Director FOB 111A						
A-07	VAV 1-4	Reception & Rooms 111K & 111J	Open Office 111						
A-08	VAV 1-5	Lobby 102	Open Office 111						
A-09	VAV 1-6	Lobby 102	Open Office 111						
A-10	VAV 1-7	Womens 106 & Mens 107	Lobby 102						
A-11	VAV 1-8	Lobby 102	Open Office 111						
A-12	VAV 1-9	Lobby 102	Open Office 111						
A-13	VAV 1-10	Break out Room 109	Break out Room 109						
A-14	VAV 1-11	Director FOB 111A	Director FOB 111A						

¹ Outstanding Issues and Comments are listed and described at the end of Units

Air Handling Systems

No.	Identifier	Description / Service	Location	Pre-Functional Test / Start-up	Controls Checkout / TAB	Functional Testing	O & M Manuals	Owner Training	Issues
A-15	VAV 1-12	FOB Client Meeting 111B	FOB Client Mtg 111B						
A-16	VAV 1-13	111C, D, F, G	Office Suite 111						
A-17	VAV 1-14	Conference Room 111E	Office Suite 111						
A-18	VAV 1-15	111H, Office Suite 111	Office Suite 111						
A-19	VAV 1-16	A/V Control Room 104	Mens 107						
A-20	VAV 2-1	Break out Lounge 202	Womens Room 106						
A-21	VAV 2-2	Gallery 221	Gallery 221						
A-22	VAV 2-3	Break out Lounge 202	Gallery 221						
A-23	VAV 2-4	Break out Lounge 202	Break out Room 212						
A-24	VAV 2-5	Break out Room 212	Break out Room 213						
A-25	VAV 2-6	Break out Room 213	Break out Room 213						
A-26	VAV 2-7	Break out Room 214	Break out Room 214						
A-27	VAV 2-8	Break out Room 215	Break out Room 215						
A-28	VAV 2-9	Break out Room 216	Corr. 220, Conf. Rm 217						
A-29	VAV 2-10	Break out Room 216	Break out Room 216						
A-30	VAV 2-11	Womens 208 & Mens 209	Mens 209						
A-31	FPTU 2-1	Computer Classroom 218 & Corridor 201	Computer Classroom 218						
A-32	FPTU 2-2	Computer Classroom 219 & Corridor 220	Computer Classroom 219						
A-33	FPTU 2-3	Breakout Lounge 202	A/V Storage 206						
A-34	FPTU B-1	Basement / Storage 001	Basement / Storage 001						
A-35	SEF-1	Smoke Exhaust Fan	Roof						
A-36	SF-1	Mech Room 005	Mech Room 005						

¹ Outstanding Issues and Comments are listed and described at the end of this

Geothermal Systems

No.	Identifier	Description / Service	Location	Verification				Issues
				Pre-Functional Test / Start-up	Controls Checkout / TAB	Functional Testing	O & M Manuals	
G-1	PGW-1	Ground Water Pump	Site / Well					
G-2	PGW-2	Ground Water Pump	Site / Well					
G-3	PGW-3	Ground Water Pump	Site / Well					
G-4	PGW-4	Ground Water Pump	Site / Well					
G-5	PGW-5	Ground Water Pump	Site / Well					
G-6	GTHP-1	Geothermal (Water Source) Heat Pump	Basement					
G-7	GTHP-2	Geothermal (Water Source) Heat Pump	Basement					
G-8	GTHP-3	Geothermal (Water Source) Heat Pump	Basement					
G-9	GTHP-4	Geothermal (Water Source) Heat Pump	Basement					
G-10	GTHP-5	Geothermal (Water Source) Heat Pump	Basement					
G-11	GTHP-6	Geothermal (Water Source) Heat Pump	Tel / Data 003					
G-12	GTHP-7	Geothermal (Water Source) Heat Pump	Tel / Data 115					
G-13	GTHP-8	Geothermal (Water Source) Heat Pump	Tel / Data 222					
G-14	PHW-1	Primary Heating Water Pump	Basement					
G-15	PHW-2	Primary Heating Water Pump	Basement					
G-16	PHW-3	Secondary Heating Water Pump	Basement					
G-17	PHW-4	Secondary Heating Water Pump	Basement					
G-18	PCH-1	Primary Chilled Water Pump	Basement					
G-19	PCH-2	Primary Chilled Water Pump	Basement					
G-20	PCH-3	Secondary Chilled Water Pump	Basement					
G-21	PCH-4	Secondary Chilled Water Pump	Basement					
G-22	ST-1	Heating Water Storage Tank	Basement					
G-23	ST-2	Chilled Water Storage Tank	Basement					
G-24	AS-1	Geothermal Water/Air Separator	Basement					

1 Outstanding Issues and Comments are listed and described at the end of this document.

Geothermal Systems

No.	Identifier	Description / Service	Location	Verifications	ISSU
G-25	AS-2	Heating Water Air Separator	Basement		
G-26	AS-3	Chilled Water Air Separator	Basement		
G-27	ET-1	Geothermal Water Expansion Tank	Basement		
G-28	ET-2	Heating Water Expansion Tank	Basement		
G-29	ET-3	Chilled Water Expansion Tank	Basement		
G-30	GTWS/R	Geothermal Water Piping System	throughout		
G-31	HWS&R	Heating Water Piping (incl re-heat coils)	throughout		
G-32	CWS&R	Chilled Water Piping System	throughout		
G-33	various	AHU Coil Freeze Protection Pumps	Second Floor		
G-34	CUH-1	Cabinet Unit Heater	Stair C1, 1st floor		
G-35	CUH-2	Cabinet Unit Heater	Pedestrian Skywalk		
G-36	CUH-3	Cabinet Unit Heater	Vestibule 101		
G-37	CUH-4	Cabinet Unit Heater	Vestibule 101		
G-38	CUH-5	Cabinet Unit Heater	Stair C2, 1st floor		
G-39	CUH-6	Cabinet Unit Heater	Stair C2, roof		

Template last modified 12/17/03

Gray Water System

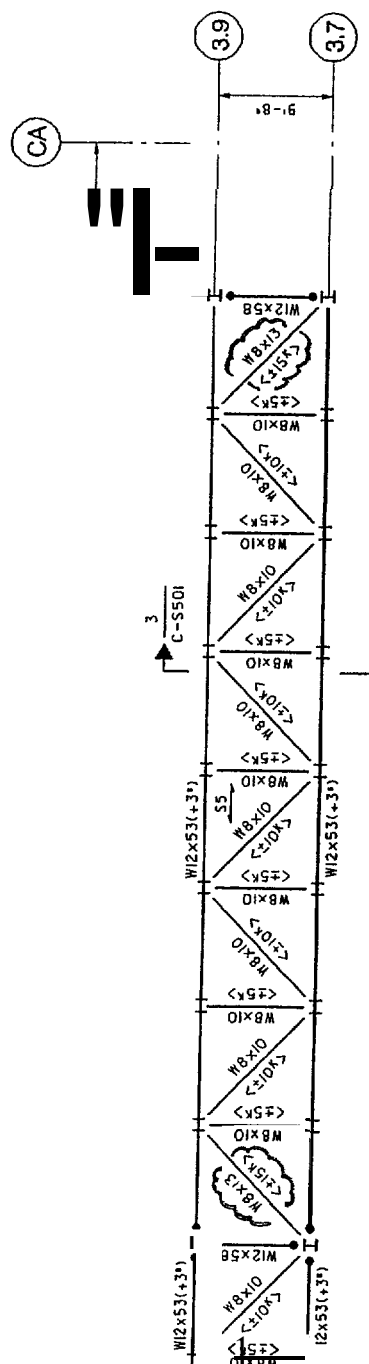
No.	Identifier	Description / Service	Location	Pre-Functional Test / Start-up	Controls Checkout / TAB	Functional Testing	O & M Manuals	Owner Training	Notes
R-1		Storm Water Cisterns	Site						
R-2	P-1	Duplex Cistern Pumps & Level Controls	Cistern						
R-3	P-2	Duplex Distribution Pump Skid	Basement						
R-4	P-3, 4A & 4B	Water Treatment Pumps	Basement						
R-5		Storm Water and Vent Piping Connections	Site / Cistern						
R-6		Gray Water Piping at Source Equipment	Site / Cistern / Basement						
R-7		Bladder Tank	Basement						
R-8		Filtration System	Basement						
<u>Controls</u>									
C-1		Auxiliary Control Devices	throughout						
C-2		Wiring & Raceways	throughout						
C-3		Control Panels	throughout						
C-4		Operator Hardware							
C-5		Software							
C-6		Electrical Sub-Metering							
C-7		Public Video Display							
<u>Electrical</u>									
E-1	ATS #2	Smoke Exhaust Transfer Switch	Parking Garage						

¹ Outstanding Issues and Comments are listed and described at the end of this document.

Outstanding Issues & Comments

[illegible]

SCALE: 1/16" = 1'-0"



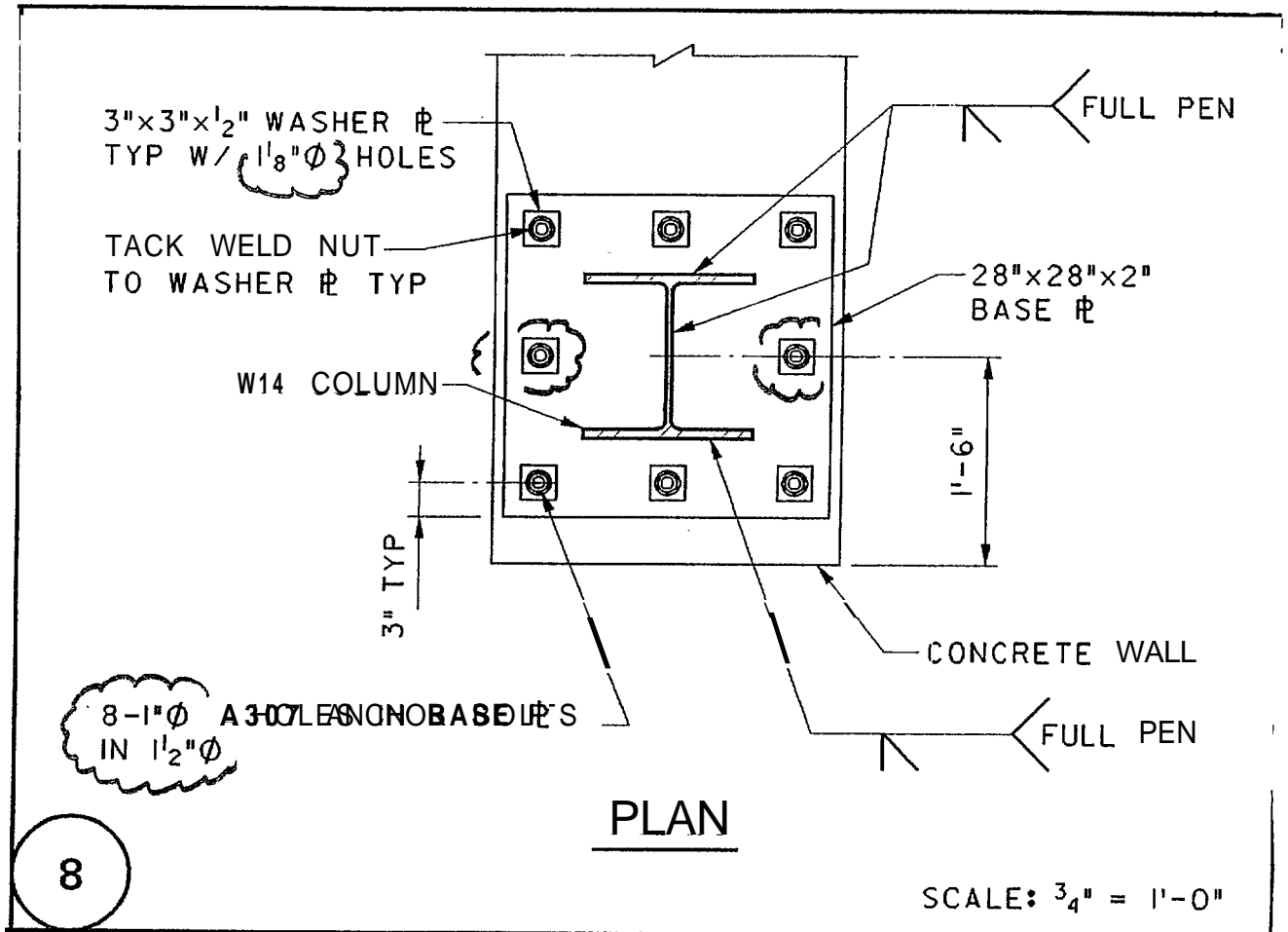
NOTES:

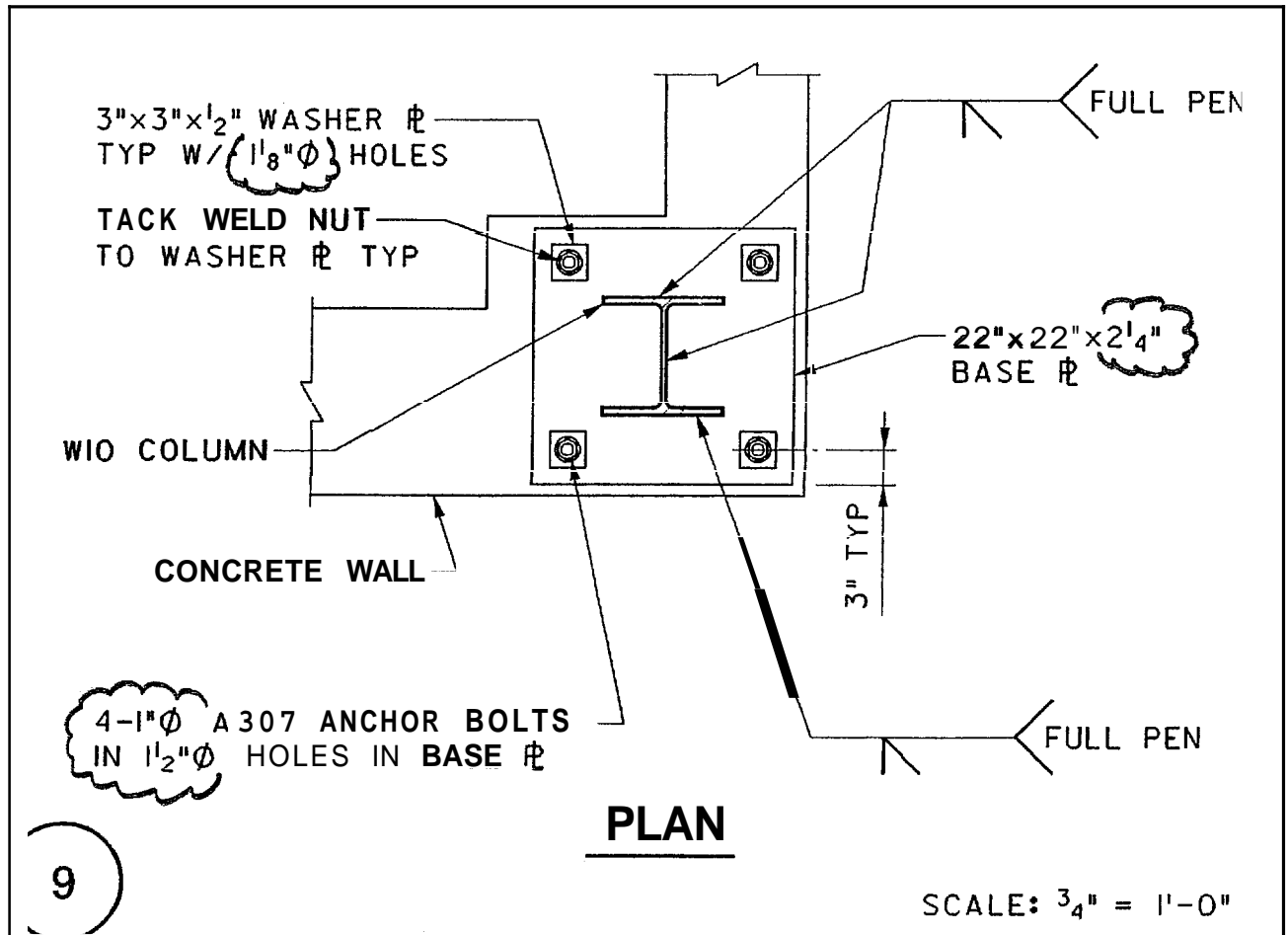
1. SS INDICATES ROOF CONSTRUCTION SHALL BE 3", 18 GA, GALVANIZED ROOF DECK
2. TOP OF STRUCTURAL STEEL AT EL 70'-9" UNLESS NOTED (+) OR (-) ON PLAN.

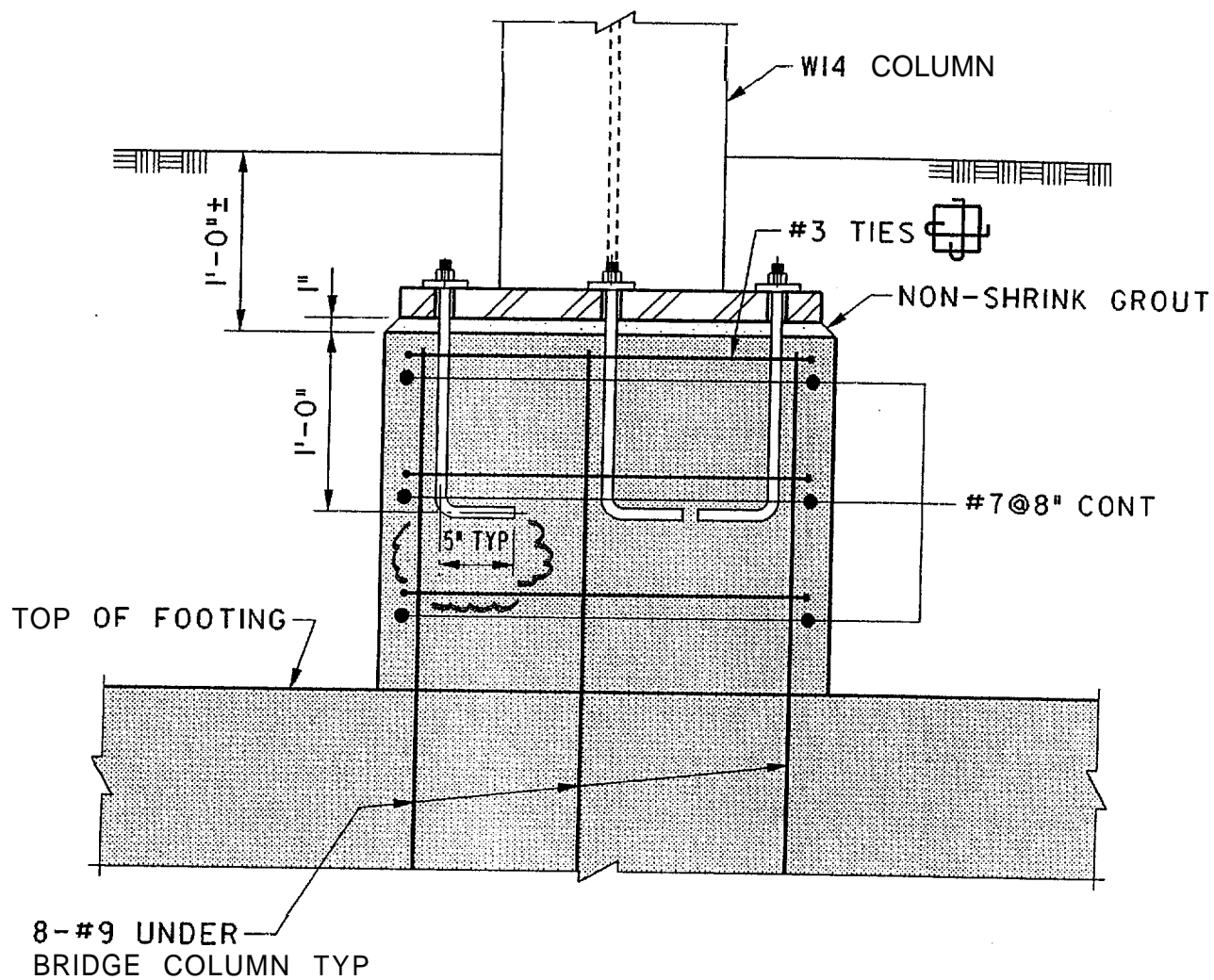


PEDESTRIAN BRIDGE ROOF



5







NOTES:

1. FOR GENERAL NOTES **AND** ABBREVIATIONS SEE DRAWING C-S001.
FOR TYPICAL DETAILS **SEE** DRAWING C-S002 & C-S003.
2. ALL STEEL BRIDGE **MEMBERS** SHALL CONFORM TO AISC "ARCHITECTURALLY EXPOSED" STRUCTURAL STEEL" (AESS), AND BE PAINTED (SEE SPECIFICATIONS),
3.  INDICATES SPAN DIRECTION **OF** STEEL **DECK**,
4.  INDICATES MOMENT CONNECTION, FOR DETAILS SEE DRAWING C-S003.
5. FOR **BEAM** EXPLANATION DIAGRAM SEE DRAWING C-S003.
6. $<\pm 10^k>$, ETC, INDICATES AXIAL FORCE IN KIPS (+ = TENSION, - = COMPRESSION) FOR CONNECTION DESIGN. FORCES ARE IN ADDITION TO VERTICAL REACTIONS,
7. FORCES ARE UNFACTORED (ASD). NO STRESS INCREASE SHALL BE TAKEN FOR CONNECTION DESIGN.
8. CHARPY V-NOTCH IMPACT TESTS SHALL BE PERFORMED ACCORDING TO ASTM A673 ON ALL STEEL USED IN ALL PEDESTRIAN BRIDGE MEMBERS, THE TEST TEMPERATURE SHALL BE 40 DEGREES FAHRENHEIT AND THE **ABSORBED** ENERGY SHALL BE 15 FOOT-POUNDS.

SECTION 08331 - OVERHEAD COILING DOORS

PART 1 GENERAL

1.00 RELATED DOCUMENTS

- A. The BIDDING REQUIREMENTS, CONTRACT FORMS, **AND** CONDITIONS OF THE CONTRACT and applicable parts of DIVISION 1 - GENERAL REQUIREMENTS, as listed in the Table of Contents, shall be included in and made a part of this Section.

1.01 WORK INCLUDED

- A. Work of this Section includes, but is not limited to:
1. Interior steel overhead coiling fire-door assemblies.

1.02 RELATED WORK

- A. Examine Contract Documents for requirements that affect Work of this Section. Other Specification Sections that relate directly to Work of this Section include, but are not limited to:
1. Section 05500, METAL FABRICATIONS; Metal framing and supports.
 2. Section 09900, PAINTING; Finish painting of overhead coiling door assemblies.
 3. Division 16, ELECTRICAL; Electrical service and connections.
 4. Division 16, ELECTRICAL; Security connections.

1.03 REFERENCES

- A. Comply with applicable requirements of the following standards. Where these standards conflict with other specified requirements, the most restrictive requirements shall govern.
1. American Society for Testing and Materials (ASTM):

A 466	Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Structural (Physical) Quality
A 525	General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process
E 152	Fire Tests of Door Assemblies
 2. National Fire Protection Association (NFPA):

80	Standard for Fire Doors and Windows
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1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's product data, rough-in and wiring diagrams, installation instructions, use limitations and recommendations for each material used. Provide operating instructions and maintenance manuals. Provide certifications stating that materials comply with requirements.
- B. Shop Drawings: Provide large scale shop drawings for fabrication, installation and erection of all parts of the work not fully described by manufacturer's product data. Provide plans, elevations, and details of anchorages, connections and accessory items. Provide installation templates for work installed by others.
- C. Field Measurements: Take accurate field measurements before preparation of shop drawings and fabrication. Do not delay job progress.
- D. Label Certification: Submit UL certification for oversized fire-rated doors and frames (if any) that each assembly has been constructed with materials and methods equivalent to requirements for labeled construction.

1.05 QUALITY ASSURANCE

- A. Source: For each type of material required for the work of this section, provide primary materials which are the products of one manufacturer. Provide secondary materials which are acceptable to the manufacturers of the primary materials.
- B. Provide motorized assemblies bearing the UL seal.
- C. Where fire-rated assemblies are indicated, provide fire door assemblies that comply with NFPA 80 and have been fire tested, rated, and labeled in accordance with **ASTM E 152**. Provide fire-rated doors with metal UL label indicating rating in hours of duration of exposure to fire, and letter designation of location for which assembly is designed.
 - 1. Oversized Fire Doors: For fire-rated doors exceeding size that testing and labeling service is offered, provide UL "Certificate of Inspection" in lieu of label, certifying that design, materials, and construction are equal to doors tested and labeled by UL.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials and products in unopened factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from damage.
- B. Sequence deliveries to avoid delays, but minimize on-site storage.

1.07 PROJECT CONDITIONS

- A. Provide inserts and anchorages which must be built into other **work** at the time they are needed. Avoid project delays.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Provide products of one of the following, or approved equal, that meet or exceed requirements specified:
1. Atlas Door Corporation
 2. Cookson Company
 3. Kinnear
 4. North American Door
 5. Overhead Door Corporation
 6. Windsor Door Co.

2.02 INTERIOR OVERHEAD COILING STEEL FIRE AND SMOKE DOORS

- A. Assemble door curtain with interlocking rolled slats, cold-formed to rectangular profile design with flush, square, 2-1/4 in. wide face, from galvanized sheet steel. Slats shall be of section sufficient to provide curtain strength to safely resist design live load of 20 lb. per sq. ft.
1. Bottom bar shall be single steel angle or two steel angles placed back to back.
 2. Exposed steel members shall be hot-dip galvanized, with coating weight of 1.25 oz. per square foot of flat metal in accordance with applicable ASTM standards.
 3. Curtain shall be coiled on steel barrel of sufficient size to carry curtain load with a deflection not to exceed 0.015 in. per foot of opening, evenly balanced by helical torsion springs contained within the pipe. Springs shall be anchored to single torsion rod and held in position by single adjusting wheel from outside. Welding of plugs at ends of barrels will not be acceptable.
 4. End bracket plates to house ends of coils shall be fabricated of high grade iron or steel. Hoods to house the coils shall be formed to fit contour of end brackets of 24 gauge galvanized sheet steel, reinforced as required.
 5. Guides shall be fabricated of structural steel to form a slot of sufficient depth to retain curtain in guides against the above mentioned design load. Include all steel angle and/or plate jamb members, as indicated.
 6. Gears shall be of best grade gray iron, cast teeth machine molded from machine cut patterns.
- B. Shop Finish: Exposed parts of the installation shall be hot-phosphate treated at factory. Steel and galvanized steel parts shall then be given one coat of baked-on rust-inhibitive shop primer ready to receive finish paint in field under Section 09900, PAINTING.
- C. Fire-Rating: Overhead coiling doors shall be equipped for fire-rating and shall bear the UL label of Class and hour-rating scheduled on Drawings, and shall be equipped with UL labeled automatic self-closing device, equipped with fusible-link (temperature rating to

conform to local code requirements) and also for release by remote smoke detection (smoke detector and wiring by Electrical trade). Closing speed shall be controlled by escapement-type speed-control governor, inoperative during normal operation.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Installation of work of this Section shall be by the manufacturer or his authorized representative.
- B. Install units plumb, level and true, securely anchored, complete in all respects, and in perfect operating condition, in strict accordance with the manufacturer's printed installation instructions and specifications.

END OF SECTION