
PHASE 1

CANADIAN MUSEUM OF IMMIGRATION AT PIER 21 – EXPANSION

Halifax, Nova Scotia
Project #: 13-005
July 31 2014

ADDENDUM 01
JULY 31, 2014

ARCHITECTURAL
MECHANICAL
ELECTRICAL

CONTACT;
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The following information supplements and / or supersedes the bid documents issue on July 14th, 2014-07-31. This addendum forms part of the contract documents and is to be read, interpreted, and coordinated with all other parts. The cost of all contained herein is to be included in the contract sum. The following revisions supersede the information contained in the original drawings and specifications issued for the above named project to the extent referenced and shall become part thereof. Acknowledge receipt of this Addendum by inserting its number and date on the Tender Form. Failure to do so may subject to disqualification.

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Architectural Addendum 01

Reference Drawing A1.2.1, A1.2.2 and section 2/A1.5.0

Drawing A1.2.2 indicates the wall types of the walls below along wall between Room 125 and 131, and between room 125 and 127 (W7, W1, and W9). Change wall type note W8 to W2 (sim) (double wall does not continue up to roof). It is W2 (sim) instead of the typical bulkhead W16 because it is insulated.

Change wall type note on A1.5.0 at wall between 125 and 131 to W2 (sim) from W3 (sim).

Reference Drawing A1.2.2

Architectural Revisions to Mechanical Mezzanine: see attached SK-1

Door 206 to be relocated (frame can remain), and placed in new 1hr rated frame to be installed at other end of corridor. Please find attached SK-1. Wall and door assembly to be 1hr rated as shown on SK-1. This will require additional drywall to achieve the rating on this wall.

- Existing concrete floor to be cleaned and washed. Existing holes in floor to be filled, and existing rebar / metal that sticks up from floor needs to be removed.
- Any gaps along exterior wall between building envelope and concrete floor requires Fire Stopping to provide a 1hr separation.

Reference Drawing A1.2.2

Mezzanine Door Infill

There is an Existing Door (32"x7') and frame at south end of mezzanine in the brick demising wall and it is to be removed and filled with block, as per Wall type 13. This is to be a 2hr rated assembly. This work to be done prior to creating new stair opening.

Reference Drawing A1.3.1

Replace text on reflected ceiling plan in rooms 135, 136 and 137 to be "*Hatch Denotes Suspended ACT 10' +/- AFF (Typ)*". The washroom and green room ceilings are ACT as per room finish schedule.

Reference Drawings 4/A1.3.2 and A1.4.0

Tectum panel along GL A of KCR rm 133 goes to a depth equal to the underside of the existing steel beam as shown in detail 11/A1.7.1. This is to be site verified when installing tectum, approximate height of panel is +/- 54". See 4/A1.3.2 for relationship with tectum ceiling.

Reference Drawing 3/A1.7.0 and A1.2.1

The Metal wall covering indicated in A1.2.1, is specified in the detail 3/A1.7.0

Architectural Specification:

Reference Section 00 10 10

Please find attached speciation section missing from original document.
00 01 10 - General Requirements and Project Overview

Reference Section 00 31 13

6.1 Replace words "Division 15 and 16" with "Sections 21 to 28".

Reference Section 00 33 00

Replace referenced sections with the following reference numbers
LUC BOULIANE ARCHITECT INC + DAVID J. AGRO ARCHITECT INC.

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2.1.4	01 31 13
2.1.5	01 31 13
2.1.6	01 32 00
2.1.7	01 32 00
2.1.8	01 32 00
2.1.9	01 32 00
2.1.10	01 41 00
2.1.11	01 77 19
2.1.12	01 77 19
2.1.13	01 77 19

Reference Section 00 35 00

- 1.5 Replace referenced section with 01 50 00
- 2.1 Replace word 'division' with 'section'

Reference Section 00 35 13

Please add new item 17:

Contractor Review and Acceptance of Exterior Assemblies

It is currently CMIP's and HPA's understanding that the existing exterior wall and roof assemblies are without functional deficiencies. Prior to commencing the Work, the contractor will review and inspect the existing exterior assembly of all walls and roof to confirm their agreement with this understanding and will report any noted deficiencies. If no deficiencies are reported and verified by CMIP and HPA it will be considered that no deficiencies exist. The contractor must perform this inspection and provide a report prior to mobilization. Any deficiencies identified following mobilization will be considered the responsibility of the contractor to correct.

Reference Section 00 35 13

Please add new item 18:

Floor Load Capacity

Please find attached the structural loading capacity on floor in of Shed 22 / phase 1. Lifts that work within the weight and access limitations are allowed to be used on site.

Reference section 03 45 36

Concrete related work is in the specifications under 03 45 36.

Reference Section 09 84 14

2.1.6.1 and 2.1.6.2 refer to metal trims and reveal trims – please delete, there are no trims or reveals on the fabric panel.

Reference section 09 84 39

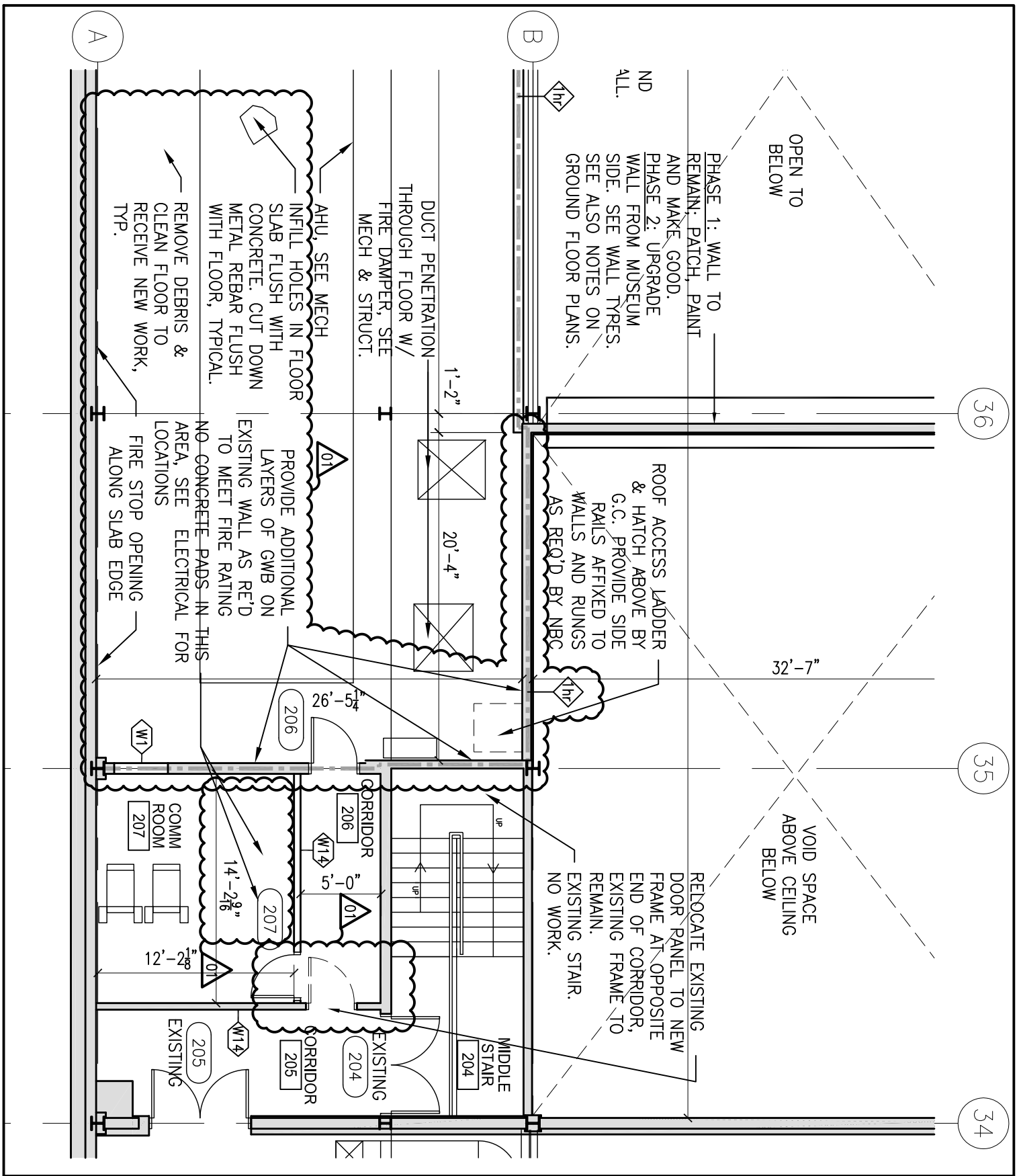
2.1 Replace size of material specified, with "sized as per interior elevations"

Reference Section 10 22 13

The Wire Mesh Partitions (Section 10 22 13) is shown on 1/A1.2.2 between grids 39 and 40. The height is shown in building sections as roughly 6'10" (to be site verified), and the supports are go up to the under side of the ceiling. As per the specification, hasp and keeper and no padlock required.

Reference Project Manual Architectural Schedules

The room finish schedule is in the Project Manual, Architectural Schedules.



01 ISSUED FOR ADDENDUM 01

CANADIAN MUSEUM OF IMMIGRATION AT PEIR 21
HALIFAX, NS

13-005

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Toronto, M6J 1X6
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MECHANICAL SERVICE SPACE FLOOR PLAN

SCALE: 1/4" = 1'
DRAWN BY: WE
DATE: 2014.07.30

SK-1
1/A1.2.2

**CANADIAN MUSEUM OF IMMIGRATION
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July 2014

GENERAL REQUIREMENTS

**SECTION 01 10 00
Page 1**

1. GENERAL REQUIREMENTS

- .1 Meet requirements of "Request for Proposal for General Contractor Services" (RFP). In case of discrepancies between requirements of the RFP and Division 1 – General Requirements, the most stringent requirements shall apply.
- .2 Division 1 requirements apply to all Sections of Work.

2. SUMMARY OF WORK

- .1 Provide all items, articles, materials, services and incidentals, whether or not expressly specified or shown on Drawings, to make finished work complete and fully operational, consistent with the intent of the Contract Documents.
- .2 Provide all work indicated in Contract Documents, regardless whether located within or outside Owner's property lines.
- .3 The following work is not included in this Contract:
 - .1 Work designated N.I.C.

3. DIVISION OF WORK

- .1 Work specified in the Specification has been divided into technical Sections for the purpose of ready reference. Division of work among Subcontractors and suppliers is solely the Contractor's responsibility and Consultant assumes no responsibility to act as an arbiter to establish subcontract limits between Sections or Divisions of work.

4. USE OF SITE

- .1 Comply with requirements of the RFP.
- .2 Accept full responsibility for assigned work areas from the time of Contract award until Substantial Performance of the Work.
- .3 Check means of access and egress, rights and interests which may be interfered with. Do not block lanes, roadways, entrances or exits. Direct construction traffic and locate access to site as directed by municipality.
- .4 Where encroachment beyond property limits is necessary make arrangement with respective property owners.

5. PROJECT OVERVIEW

- .1 Refer to "Project Overview" (1 page) attached hereinafter.

END

Project Overview

The Canadian Museum of Immigration at Pier 21 is located within a historic pier building adjacent to the Halifax waterfront. The building dates back to 1928 and parts of the structure have been Designated a National Historic Site. The lands and building are owned by the Government of Canada and administered by the Halifax Port Authority. The applicable building code is the National Building Code of Canada. Authority for building code review of construction projects falls under the jurisdiction of the Halifax Port Authority.

Upper Shed 22 is currently unoccupied space comprised of a steel post and beam / truss structure with a concrete deck floor and a wood deck roof. Large floor areas are separated by brick fire walls. The existing museum space in Shed 21 and Shed 22 are equipped with sprinklers, but the system in Upper Shed 22 is being upgraded (refer to mechanical). Lower Shed 22 is occupied by tenants of the Halifax Port Authority. Lower Shed 22 houses the Cruise Ship Pavilion and will be open during the first construction phase. Careful planning and coordination for site access will be required to prevent disruption to the tenants.

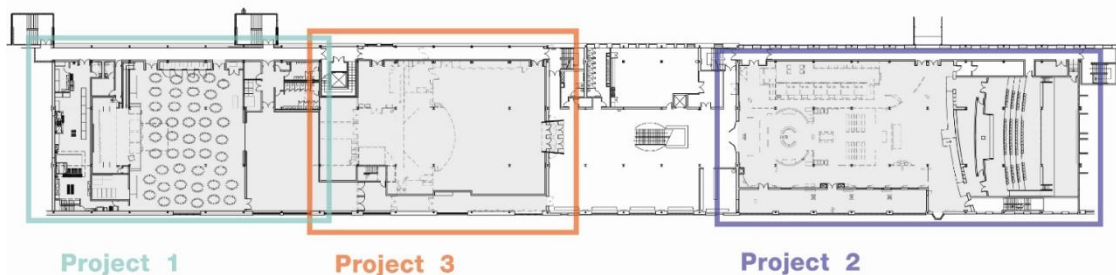
Roofing above the deck was replaced with a modified bitumen roof with R40 insulation in 2013 (refer to detail attached in the appendix). Following a code review, two new stairs were built on the west side of the building to facilitate and increase in exiting capacity from the museum spaces. The stairs are currently under construction.

New exterior walls are comprised of an insulated steel sandwich panel. New windows have been installed on the east and west elevations by the Halifax Port Authority.

In addition to exits, roofing and exterior membranes, the Halifax Port Authority has added a new mechanical service space on the east side of Upper Shed 22. The completion of parts of the mechanical service space in Upper Shed 22 are included in the scope of work. The floor of the mechanical service space is concrete on steel beams, and steel pan on steel beams (refer to existing reflected ceiling plan). The final concrete floor was poured in December 2013. The Halifax Port Authority poured a new concrete floor over the entire floor of Upper Shed 22 in March 2014.

The area of work for Phase 1 includes approximately 15,800 sf of floor area for the KCR Hall (complete with stage), Kitchen, Welcome Pavilion, Washrooms and support spaces, and 5,200 sf in the mechanical support spaces. Additional Mechanical and Electrical work will be required in the Annex (across the street at 1099 Marginal Road) including service connections between equipment in the Annex and the new program areas within Shed 22. Work includes installing access hatches and equipment on the roof on the Annex and on Shed 22.

The complete project consists of demolition of the existing Pier 21 Museum and KCR Hall and fit up of the Pier 21 Museum (including the theatre), New KCR Hall, and New Canadian Museum Space. The project will commence in three phases as shown below: Phase 1 will build a new Kenneth C Rowe Hall in Upper Shed 22, Phase 2 will refurbish the Rudolph P Batty Exhibition Hall, and Phase 3 will build the New Canadians Immigration Story exhibit space in the area formerly used for Kenneth C Rowe Heritage Hall.



The portion of the work included in this set of drawings and specifications is for Phase 1. The work includes installation of the New KCR Hall and Welcome Pavilion in Upper Shed 22 (outside of current CMIP/MCIQ public and events use) as well as M/E systems that will support Phase 1 and future phases of the project.

STRUCTURAL LOADING CAPACITY OF FLOORS IN SHED 22

July 29th, 2014

Based on the original structural drawings made available to us, we calculated the original Live Load Capacity of the floor to be 300 pounds per square foot (PSF). A concrete topping was added to the floor in order to level the floor which reduced the Live Load capacity. The new (current) Live Load capacity of the floor is 200 PSF. 200 PSF is still double the National Building Code Requirement of 100 PSF for this type of occupancy.

If we can be of further assistance, please advise.

Regards

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Mechanical Addendum 01

Reference Drawing P102

Phase Clarification (Ref dwg. P102) The new 2.1/2" domestic cold water piping from gridline 36 to grid 29 as well as the work pertaining the installation of the new water meter shall be included in the Phase 1 contract. Please note that this work cannot be completed until the existing kitchen is shut-down for phase 2 construction. Coordinate this work with the Building owner and General Contractor.

Reference Drawing H103/P102

Phase Clarification (Ref dwg. H103/P102) The new humidifier HU-12 is supplied by 3/4" softened water, 2" low pressure steam and 1.1/4" condensate pipes from the existing mechanical mezzanine. In the phase 1 contract this piping shall be run to the edge of the new mechanical mezzanine and temporarily capped at the phase line. Ensure the condensate drain piping is left at an adequate height to allow the continuation of piping (Phase 2) to slope downward toward the existing connection point.

Reference Drawing H103 and Detail 16-H501

Phase Clarification (Ref dwg. H103 and Detail 16-H501) The 3 ton split system (AC-1) serving the Comm. Room 207 and all associated piping and materials shall be included in the phase 1 contract.

Reference Drawing H102/H103

Phase Clarification (Ref.dwg H102/H103) The 4" Hot water Supply (HWS) and Hot water Return (HWR) Piping, as well as the 4" Chilled Glycol Supply and Return (CGWS/CGWR) Piping Between gridline 35 and the tie-in points on the existing Mechanical Mezzanine level shall be included in the phase one contract. This work is disruptive to the existing space and must be coordinated with the Building owner and General Contractor.

Reference Drawing H102

Phase Clarification (Ref. Dwg H102) Wall fin radiation type "B" and associated piping and materials as well as the 1" HWS and HWR piping drops to level 1 between grid lines 35/E and 36/D shall be included in the Phase 1 contract.

Reference Drawing 1/H502

Hot water/Glycol Piping Schematic) The P5/P6 Glycol water supply and return (GWS/GWR) piping loop shall be increased from 3" to 4" to match the piping sizes shown on the heating plan (H103).

Reference Drawing V501

Drywall acoustic treatments shown in details 3/V501 and 12/V501 are no longer required and shall be deleted.

Reference Drawing V502

The silencer schedule shall be revised as per the attached sketch (MSK-P1-1).

Reference Drawing V502

AHU12 Information schedule; the chilled water coil height shall be changed to 27" not 39" as currently shown.

Reference Drawing H502

Add "Fujitsu" as an acceptable alternate on the Heating Equipment schedule.

Reference Spec Section: 23 21 14

Hydronic Specialties) Add "Amtrol" ASME tanks as an acceptable alternate.

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Ref Drawing F-101

Sprinkler Renovations – Level 1

Sprinkler Legend:

1. Fire Extinguishers to be provided by Owner, installed by this contractor in cabinets or on wall brackets supplied by this contractor.

Reference Specification Section 21 05 01 Common Work Results – Mechanical

1. Sentence 1.5.5 – Delete requirement for Fire Extinguisher Submittals
2. Sentence 1.7.10 – Delete requirement for Fire Extinguisher maintenance material

Reference Specification Section 10 44 16.19 Fire Extinguishers and Safety Blankets

1. Sentence 2.1.1 – Change requirement to provide fire extinguishers to provide fire extinguisher cabinets and/or wall mounting bracket.
2. Sentence 2.4 – Delete requirement to provide spare extinguishers
3. Sentence 3.3 – Delete requirement that extinguishers are 'full' and 'inspected' at turnover.

Reference Specification Section: 23 21 14

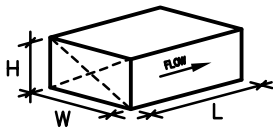
Hydronic Specialties) Add "Amtrol" ASME tanks as an acceptable alternate.

SILENCER SCHEDULE PART 1

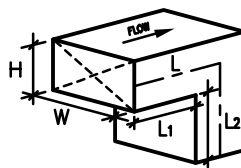
DESIG.	SYS. No.	MANUFACTURER	MODEL	DUCT SIZE W"xH"	LENGTH OF SILENCER (IN)			AIR CAP. CFM	VELOCITY FPM
					L1	L2	TOTAL L		
SL11S	AHU11	VAW	-	38"x48"	24"	4"	76	12000	947
SL11R	AHU11	VAW	-	78"x18"	-	-	60	12000	1231
SL12S	AHU12	VAW	-	50"x44"	21"	12"	77	16625	1088
SL12R	AHU12	VAW	-	30"x66"	-	-	60	16625	1209

ABBREVIATIONS:

LGTH - LENGTH (ALONG CENTER LINE)
 SP - STATIC PRESSURE
 FPM - FEET PER MINUTE
 HTL - HIGH TRANSMISSION LOSS DUCT



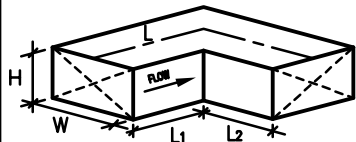
STRAIGHT SILENCER



VERTICAL ELBOW SILENCER

SILENCER SCHEDULE PART 2

DESIG.	S.P. IN	INSERTION LOSS (dB)								SHAPE
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
SL11S	0.1	11	12	11	20	22	25	20	15	VERTICAL ELBOW
SL11R	0.25	13	23	39	43	45	31	26	17	
SL12S	0.26	12	13	16	24	24	25	21	17	VERTICAL ELBOW
SL12R	0.06	4	9	15	19	18	16	15	11	STRAIGHT



HORIZONTAL ELBOW SILENCER

NOTES: 1 - ALL SILENCERS SHALL BE CONSTRUCTED OF 20 GA. MIN.
 2 -
 3 -



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Job Title: PIER 21 - CMIP EXPANSION - CONCRETE PACKAGE

Client: -

Sheet Title **DRAWING V502 REVISED
 SILENCER SCHEDULE**

Dwg. No.

MSK-P1-1

DRAWN: NGB Ck'd: GSM Date: 2014/07/21

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Electrical Addendum 01

Reference Drawing E102

The following general note shall be added:
Phase 2/3 demolition is not in contract.

Reference Drawing E103

The following general note shall be added:
Phase 2/3 demolition is not in contract.

Reference Drawing E104

A fire alarm pull station located adjacent to the fire alarm bell on grid line 43 shall be a be relocated to South Corridor 134.

The following general note shall be added:
Phase 2/3 demolition is not in contract.

Reference Drawing E105

The following general note shall be added:
Phase 2/3 demolition is not in contract.

Reference Drawing E106

The following general note shall be added:
The lighting pipe grid shall be provided by the General Contractor.

The 2'x2' luminaire in South Stair 147 shall be type 11A.

Reference Drawing E107

The 2'x2' luminaires in South Stair 147 shall be type 11A.

Reference Drawing E110

The following shall be added to Note #4 and Note #5:
The existing MCC is a Siemens TIASTAR. Circuit breakers shall be dual mounted 125A frame in a 12" plug-in unit with a common door.

Reference Drawing E112

The following shall be added to Note #4 and Note #6:
The existing MCC is a Siemens TIASTAR.

Reference Drawing E114

The fire alarm pull station adjacent to Stair 1 in South Corridor 134 shall be relocated from grid line 43.

Reference Drawing E116

The following shall be added to Note #1:
Twelve simplex SC connectors, Panduit Cat. No. FSCMCXAQ.
Six SC duplexing clips, Panduit Cat. No. FSCCLIP-L.

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Reference Drawing E601

The following shall be added to Note #1:

The existing distribution panel is a Siemens FCI. The circuit breaker shall be JD6 (25kAIC, 100% rated).

Single Line Additions Note #3 shall be deleted.

The circuit breaker in Distribution Panel "P-DP3201" for Transformer "P-TX3M02" shall be 30A-3P.

The primary feeder for Transformer "P-TX3M02" shall be 3#10+#10BOND-1/2".

Transformer "P-TX3M02" shall be 30 kVA.

MCC "P-MCC3M63" shall be rated 450A 347/600V.

The circuit breaker for MCC "P-MCC3M63" shall be 225A-3P.

The feeder for MCC "P-MCC3M63" shall be 4#3/0+#4BOND-2".

Reference Drawing E604

Luminaire type 11A shall be 2'x2' fluorescent unit surface mounted.

Lamps: 2 – FT40DL/RS/ECO

Specified Units:

Metalux Cat. No. 2M-2BX40A125-120-EB81

CFI Cat. No. SLB2SFSVB414-120-HI

Lithonia Cat. No. M 2CF40 A12125 MVOLT GEB10IS CSA

The circuits connected to the five left type "E" boxes shall be:

D2-01 through D2-19

D2-20 through D2-38

D2-39 through D2-56

D2-57 through D2-74

D2-75 through D2-92

Reference Section 27 10 05-2.9.1

The following shall be added:

Duplex SC connectors, Panduit Cat. No. FSCMCXAQ.

SC duplexing clips, Panduit Cat. No. FSCCLIP-L.