

KAWARTHA PINE RIDGE DISTRICT SCHOOL BOARD

PUR20-015-ITT

Bowmanville High School Science Room Renovations

ADDENDUM NO. 3

This addendum shall form an integral part of the bid documents for the above noted Tender and shall be read in conjunction therewith. This addendum shall, however, take precedence over all requirements as it pertains to the particular and specific items noted below.

Add: Architectural Addendum No. 1, prepared by Moffat & Duncan Architects Inc.
(2 pages)

Add: Architectural Addendum No. 2, prepared by Moffat & Duncan Architects Inc.
(4 pages)

Add: Mechanical & Electrical Addendum No. 1, prepared by DEI Consulting Engineers
(11 pages)

END OF ADDENDUM NO. 3

March 13, 2020

This Addendum forms part of the Tender Documents and amends the Tender Documents as described below.

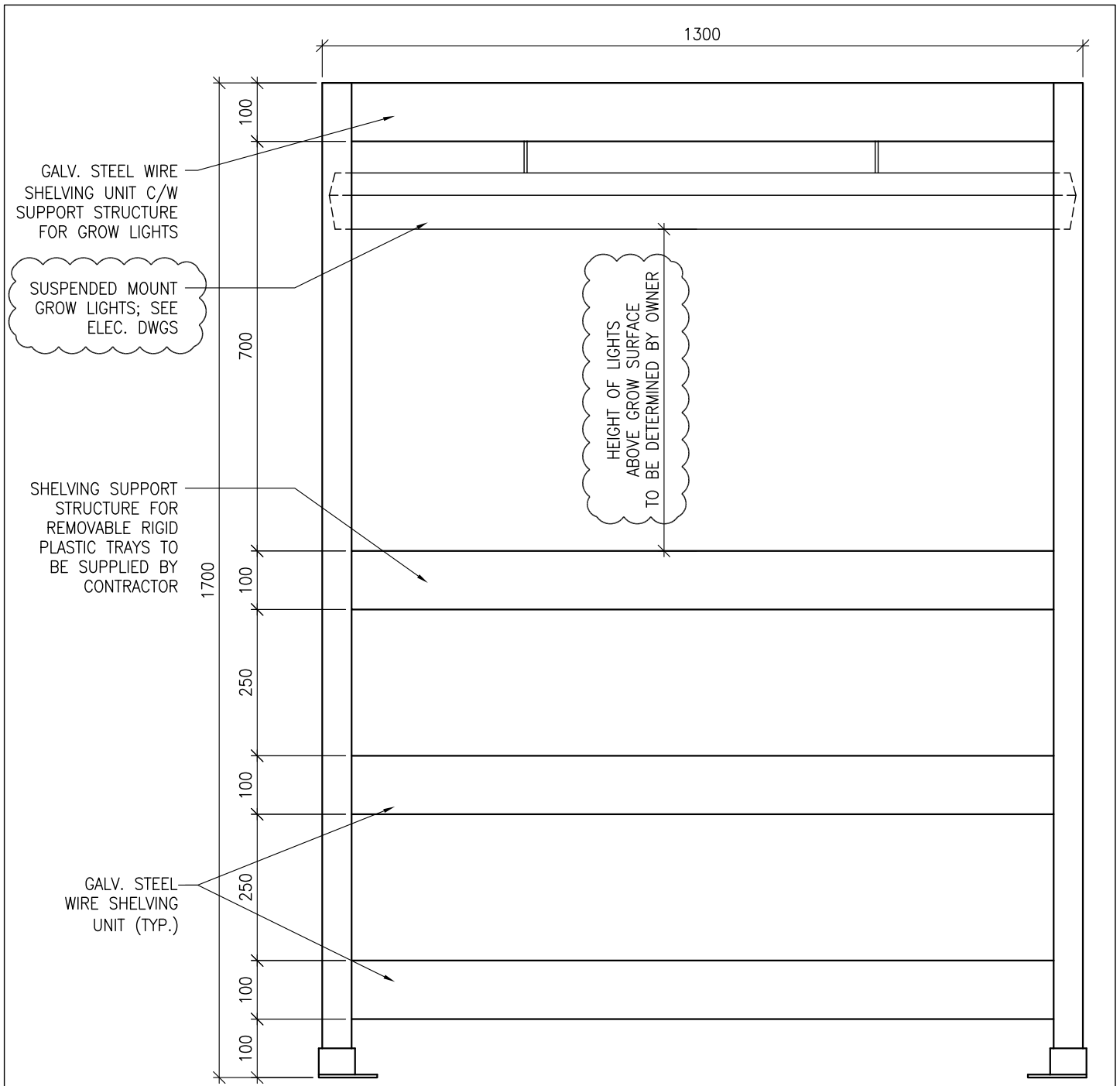
1. ARCHITECTURAL DRAWINGS

1.1 Reference Drawing A5.1 and Attached Drawing ADD #1

- .1 For the Grow Light Stand detail, revise mounting method of lighting fixture and notes regarding design dimensions.

Attach: ADD #1 - Grow Lights Stand Detail

END OF ARCHITECTURAL ADDENDUM NO. 1



19A GROW LIGHT STAND ELEVATION
 A5.1 SCALE 1:10

CONTRACTOR TO CONFIRM DIMENSIONS ON SITE PRIOR TO MANUFACTURE OF STANDS TO ENSURE CLEARANCE FOR WALL-MOUNTED ELECTRICAL RADIATORS; SEE PLANS & ELEC. DWGS

KAWARTHA PINE RIDGE DISTRICT SCHOOL BOARD BOWMANVILLE HIGH SCHOOL SCIENCE ROOM RENOVATIONS 2020 GROW LIGHTS STAND REF. DETAIL 19A/A5.1	SCALE 1:10	DWG. NO. ADD#1
MOFFET & DUNCAN ARCHITECTS INC. 5052 DUNDAS ST. WEST ISLINGTON ONT. M9A 1B9 TELEPHONE (416)-239-2775	JOB # 2005	

This Addendum forms part of the Tender Documents and amends the Tender Documents as described below.

1. **ARCHITECTURAL SPECIFICATIONS**

1.1 **DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS**

.1 SECTION 00 20 00 SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

.1 Delete 'glazed aluminum windows and doors' from clause 1.1.1.1

.2 Delete 'from the Soils Report and' from line 1.6.5

1.2 **DIVISION 06 - WOOD, PLASTICS AND CASEWORK**

.1 SECTION 06 41 16 ARCHITECTURAL CASEWORK

.1 Under Hardware for 38mm thick cupboard doors on page 6 of 11, revise Surface Bolts as follows:

"Surface Bolts Richlieu 39208 646/ANV"

.2 Under Hardware for 38mm thick cupboard doors on page 6 of 11, add Strike Plate as follows:

"Strike Plate Richlieu M3204 SS"

1.3 **DIVISION 08 - OPENINGS**

.1 SECTION 08 71 00 - DOOR HARDWARE

.1 Refer to Subsection 1.5 ALLOWANCES, delete this Subsection entirely.

1.4 **DIVISION 10 - SPECIALTIES**

.1 SECTION 10 14 23 INTERIOR SIGNAGE

.1 Replace Line 1.1.1 with the following:

“.1 Supply and install seven (7) door signs to KPRDSB standard requirements.”

March 17, 2020

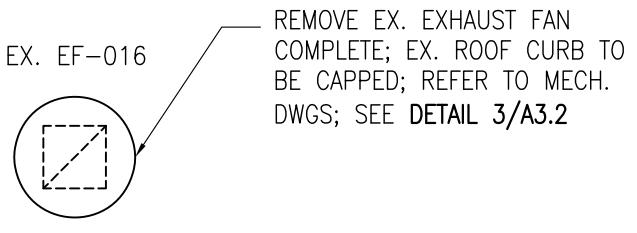
2. ARCHITECTURAL DRAWINGS

2.1 Drawing A3.2 and Attached Drawings ADD #2 and ADD #3

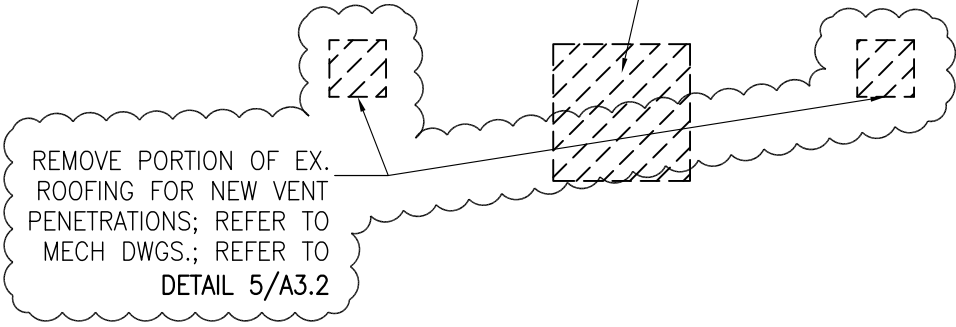
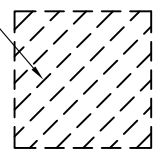
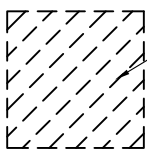
- .1 Revise the extent of existing roofing to be removed and patched to suit new vent penetrations as per Mechanical Drawings.
- .2 Revise note referencing new duct penetration detail.
- .3 Revise note referencing capped duct penetration detail.

Attach: ADD#3 / ADD#4

END OF ARCHITECTURAL ADDENDUM NO. 2



PREPARE FOR NEW EXHAUST FAN CURBS BY REMOVING PORTION OF EX. ROOFING; REFER TO **DETAIL 4/A3.2**



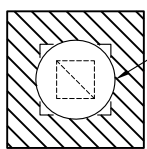
1 PARTIAL ROOF DEMOLITION PLAN
A3.2 SCALE 1:100

KAWARTHA PINE RIDGE DISTRICT SCHOOL BOARD BOWMANVILLE HIGH SCHOOL SCIENCE ROOM RENOVATIONS 2020 PARTIAL ROOF DEMOLITION PLAN REF. 1/A3.2	SCALE 1:100	DWG. NO. ADD#2
	MOFFET & DUNCAN ARCHITECTS INC. 5052 DUNDAS ST. WEST ISLINGTON ONT. M9A 1B9 TELEPHONE (416)-239-2775	JOB # 2005

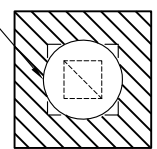
ROOF AREA

CAP EX. ROOF CURB;
REFER TO MECH. DWGS;
SEE DETAIL 3/A3.2

PROVIDE NEW ROOF CURB AND
ROOFING AROUND NEW FANS.
REFER TO MECH DWGS. REFER
TO DETAIL 4/A3.2

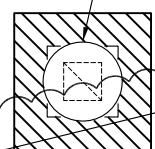
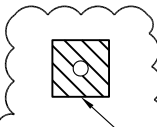


NEW EF-101

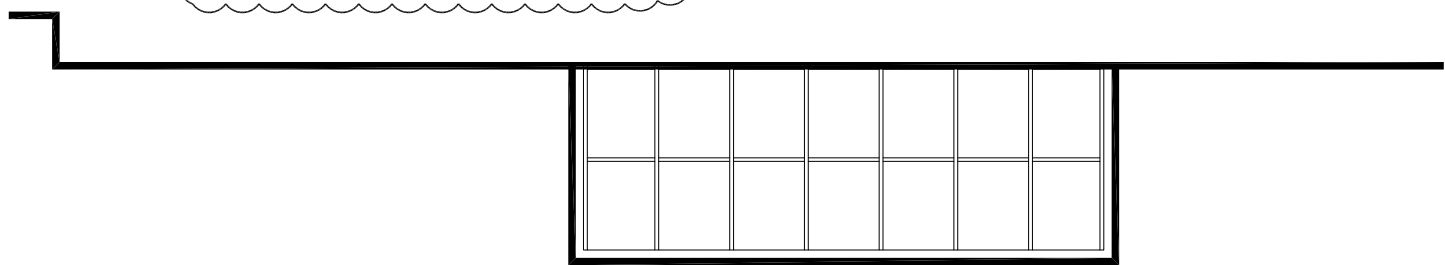
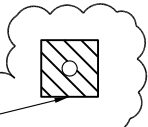


NEW EF-102

PATCH ROOFING AROUND NEW VENT
PENETRATIONS; REFER TO MECH
DWGS. REFER TO DETAIL 5/A3.2



NEW EF-103



2 PARTIAL ROOF PROPOSED PLAN
A3.2 SCALE 1:100

<p>KAWARTHA PINE RIDGE DISTRICT SCHOOL BOARD BOWMANVILLE HIGH SCHOOL SCIENCE ROOM RENOVATIONS 2020 PARTIAL ROOF PROPOSED PLAN REF. 2/A3.2</p>	<p>SCALE 1:100</p>	<p>DWG. NO. ADD#3</p>
<p>MOFFET & DUNCAN ARCHITECTS INC. 5052 DUNDAS ST. WEST ISLINGTON ONT. M9A 1B9 TELEPHONE (416)-239-2775</p>	<p>JOB # 2005</p>	

March 12, 2020

Client: MOFFET & DUNCAN architects inc.
5052 Dundas St. West
Toronto, Ontario
M9A 1B9

RE: Bowmanville High School
Bowmanville, Ontario

Job #: 19404

Attn: Ms. Stela Ambridge, M.Arch., Intern Architect

MECHANICAL AND ELECTRICAL ADDENDUM

MECHANICAL

Item 1

- 1.0 Reference Attached Specification 22 44 13 – Plumbing Fixtures and Trim.
- .1 For item 2.3-2.8, sink numbering revised. Replace previously issued specification section with attached.

Item 2

- 2.0 Reference Drawing M1.1 and Attached Sketch SKM-1
- .1 In Plumbing Fixture Connections schedule, revise sink tags as per SKM-1.

Item 3

- 3.0 Reference Drawing M2.2 and Attached Sketch SKM-1
- .1 In Second Floor Part Plan – Ventilation, thermostats in Biology 226 and General Science 224 to be relocated as per SKM-1.

Item 4

- 4.0 Reference Drawing M2.2 and Attached Sketch SKM-2
- 1. In Second Floor Part Plan – Piping & Drainage, revise sink tags as per SKM-2.
 - 2. In Second Floor Part Plan – Piping & Drainage, relocate neutralizing tank monitoring control panel as per SKM-2.

Item 5

- 5.0 Reference Specification 22 44 13 – Plumbing Fixtures and Trim.
- .1 For item 2.3-2.8, sink numbering revised. See attached specification section.

ELECTRICAL

Item 1

- 1.0 Reference Drawing E2.1 and Attached Sketch SKE-1
- .1 In Greenhouse 225A, demolish ten (10) existing vapour tight type fixtures currently mounted to grow rack that is being demolished by others. Existing feed to be re-used for new fixtures on new rack.

Item 2

2.0 Reference Drawings E3.1, A3.0 and Attached Sketch SKE-1

- .1 On the First Floor renovation lighting plan in the office portion of Staff Room 169, the two (2) light fixtures are to be moved one (1) tile north to match RCP on drawing A3.0.
- .2 On the First Floor renovation power/system plan in the office portion of the Staff Work Room 169, the smoke detector location is to be revised slightly to match RCP on drawing A3.0.
- .3 On the First Floor renovation power/system plan in Staff Work Room 169, the acid neutralizing tank (mechanical item #4) is to be moved up to second floor Staff Work Room 225 adjacent to the millwork control panel.
- .4 In the specific renovation notes, revise note #26 regarding grow rack fixtures as per SKE-1.

Item 3

3.0 Reference Drawing E4.1 and Attached Sketch SKE-1

- .1 In the light fixture schedule, fixture type 'L3' (greenhouse grow light fixture) to be revised to be fixture noted on SKE-1.



Kevin Fox, C.Tech.

19404 Addendum (M&E)(SKE-1) Mar 12 20.docx
mpd/md/kv

Part 1 General

1.1 REFERENCES

- .1 ANSI/ARI 1010-84, Drinking Fountains and Self-Contained, Mechanically Refrigerated Drinking Water Coolers.
- .2 ANSI/ARI 1020-84, Application and Installation of Drinking-Fountains and Drinking Water Coolers.
- .3 CAN/CSA-B45 Series-88, CSA Standards on Plumbing Fixtures.
- .4 CAN/CSA-B125-93, Plumbing Fittings.
- .5 CAN/CSA-B651-M90, Barrier-Free Design.

1.2 SHOP DRAWINGS

- .1 Submit shop drawings and product data in accordance with general requirements.
- .2 Indicate, for all fixtures and trim:
 - .1 Dimensions, construction details, roughing-in dimensions.
 - .2 Factory-set water consumption per flush at recommended pressure.
 - .3 For water closets, urinals: minimum pressure required for flushing.

1.3 CLOSEOUT SUBMITTALS

- .1 Provide maintenance data including monitoring requirements for incorporation into manual specified in general requirements.
- .2 Include:
 - .1 Description of fixtures and trim, giving manufacturer's name, type, model, year, capacity.
 - .2 Details of operation, servicing, maintenance.
 - .3 List of recommended spare parts.

1.4 PRODUCTS INSTALLED BUT NOT SUPPLIED UNDER THIS SECTION

- .1 Install rough-in for equipment supplied by others, complete with valves on hot and cold water supplies, waste and vent.
- .2 Equipment installed by others.
 - .1 Connect with unions.
- .3 Equipment not installed.
 - .1 Capped with valves for future connection by others.

Part 2 Products

2.1 MANUFACTURED UNITS

- .1 Fixtures: manufacture in accordance with CAN/CSA-B45 series.
- .2 Trim, fittings: manufacture in accordance with CAN/CSA-B125.
- .3 Exposed plumbing brass to be chrome plated.
- .4 Number, locations: Architectural drawings to govern.
- .5 Fixtures in any one location to be product of one manufacturer and of same type.
- .6 Trim in any one location to be product of one manufacturer and of same type.

2.2 FIXTURE CARRIERS

- .1 Factory manufactured floor-mounted carrier systems for all relocated wall-mounted fixtures.
- .2 Acceptable materials:
 - .1 Zurn
 - .2 Smith
 - .3 Ancon

2.3 STAINLESS STEEL GREENHOUSE SINK (S-1)(WITH INTERCEPTOR)

- .1 Single compartment, complete with 225 mm (9") backsplash.
From 14 gauge thick type 304 stainless steel, self-rimming. Exposed surfaces are polished satin finish. Backsplash c/w bump-out for concealed piping. Radius covered bowls. Corner waste fitting. Backsplash drilled for 8" centre set. Overall sizes 1219 mm x 690 mm x 350 mm deep (48" x 27 3/16" x 14").

Acceptable materials:

Franke-Kindred WSL2424-1

AMI
- .2 Trim: wall mounted, chrome plated brass, with swing spout, aerator, single lever handle, washerless controls, accessories to limit maximum flow rate to 8.35 l/min (2.2 gpm) at 413 kPa (60 psi).

Acceptable materials:

Delta 28C4433 with 275 mm (10") swing spout.

Moen

Zurn
- .3 Provide Zurn Z-1180 or equal ancon solids interceptor under counter.
- .4 Waste fitting: integral stainless steel basket strainer/stopper, tailpiece, cast brass P-trap with cleanout.

2.4 SINK SINGLE COMPARTMENT INSTRUCTOR SCIENCE SINK (S-2A)

- .1 Single compartment, by millwork contractor
- .2 Trim: chrome plated brass, laboratory type with gooseneck swing spout, vacuum breaker, aerator, indexed hooded lever handle, accessories to limit maximum flow rate to 8.35 l/min (2.2 gpm) at 413 kPa (60 psi).

Acceptable materials:
Delta W6720-9-C
Zurn
Crane/Powers
Chicago Faucet
- .3 Rough-in stops and connection by the mechanical contractor.

2.5 SINGLE COMPARTMENT STUDENT SCIENCE SINK (S-2B)

- .1 Single compartment, by millwork contractor.
- .2 Trim: chrome plated brass, laboratory type with gooseneck swing spout, vacuum breaker, aerator, indexed hooded lever handle, accessories to limit maximum flow rate to 8.35 l/min (2.2 gpm) at 413 kPa (60 psi).

Acceptable materials:
Delta W6600-9-C
Zurn
Crane/Powers
Chicago Faucet
- .3 Rough-in stops and connection by mechanical contractor.

2.6 BARRIER FREE SINGLE COMPARTMENT SCIENCE SINK (S-3)

- .1 Single compartment, by millwork contractor.
- .2 Trim: chrome plated brass, laboratory type with gooseneck swing spout, vacuum breaker, aerator, barrier free (2³/₄") indexed hooded lever handle, accessories to limit maximum flow rate to 8.35 l/min (2.2 gpm) at 413 kPa (60 psi).

Acceptable materials:
Delta W6600-9-C
Zurn
Crane/Powers.
- .3 Rough-in stops and connection by mechanical contractor.
- .4 Provide adjustable height installation. Refer to detail.

2.7 DOUBLE COMPARTMENT SCIENCE SINK C/W DRAINBOARD (S-4A)

- .1 Double compartment, by millwork contractor
- .2 Trim: chrome plated brass, laboratory type with gooseneck swing spout, vacuum breaker, aerator, indexed hooded lever handle, accessories to limit maximum flow rate to 8.35 l/min (2.2 gpm) at 413 kPa (60 psi).

Acceptable materials:

Delta W6720-9-C

Zurn

Crane/Powers

Chicago Faucet

- .3 Rough-in stops and connection by the mechanical contractor.

2.8 DOUBLE COMPARTMENT SCIENCE SINK (S-4B)

- .1 Double compartment, by millwork contractor.
- .2 Trim: chrome plated brass, laboratory type with gooseneck swing spout, vacuum breaker, aerator, indexed hooded lever handle, accessories to limit maximum flow rate to 8.35 l/min (2.2 gpm) at 413 kPa (60 psi).

Acceptable materials:

Delta W6720-9-C

Zurn

Crane/Powers

Chicago Faucet

- .3 Rough-in stops and connection by mechanical contractor.

2.9 EMERGENCY EYE WASH (EW-1)

- .1 250 mm (10") diameter yellow impact resistant bowl chrome plated brass spray heads complete with covers, and wall mounting bracket.
- .2 Tepid water mixing valve meeting requirements of ANSI standard Z358.1. Mixing valve is to provide water temperature between 15.5°C (60°) and 38°C (100°F).
- .3 15 mm (1/2") chrome plated brass stay open ball valve complete with push handle.

Acceptable materials:

Haws 7260BT and Mixing Valve TWBS-EWE

Bradley

Guardian

2.10 EMERGENCY EYE WASH (EW-2)

- .1 Chrome plated brass spray heads complete with covers 3600mm (12' - 0") long yellow recoil hose suitable for domestic water, chrome plated brass lever valve, vacuum breaker, and wall mounting bracket. Provide chrome escutcheon at wall penetration.
- .2 Tepid water mixing valves meeting requirements of ANSI standard Z358.1. Mixing valve is to provide water temperature between 15.5°C(60°F) and 38°C (100°F).
- .3 15mm (½") chrome plated brass stay open ball valve complete with push handle.
- .4 Acceptable materials:
Haws 8905 and mixing valve TWBS-EWE
Bradley
Guardian

2.11 FIXTURE PIPING

- .1 Hot and cold water supplies to each fixture:
Chrome plated flexible supply pipes each with screwdriver stop, reducers, escutcheon and chrome plated nipple.
Acceptable materials:
Delta 47T900 Series
McGuire
- .2 Waste:
Open grid strainer, or pop up as indicated, offset open grid strainer on handicapped fixtures, cast brass fittings with tubular piping, chrome plated, rubber gasket compression fitting, and overflow flange.
Acceptable materials:
Delta 33T200 Series
McGuire
- .3 'P' Traps:
Cast brass P trap with cleanout on each fixture not having integral trap.
Chrome plated in all exposed places.
Acceptable materials:
Delta 33T300 Series
McGuire

Part 3 Execution

3.1 INSTALLATION

- .1 Mounting heights:
 - .1 Standard: to comply with manufacturer's recommendations unless otherwise indicated or specified.
 - .2 Wall-hung fixtures: measured from finished floor.
 - .3 Physically handicapped: to comply with most stringent of either NBCC or CAN/CSA B651.
- .2 Drinking fountains:
 - .1 In accordance with ANSI/ARI 1020.

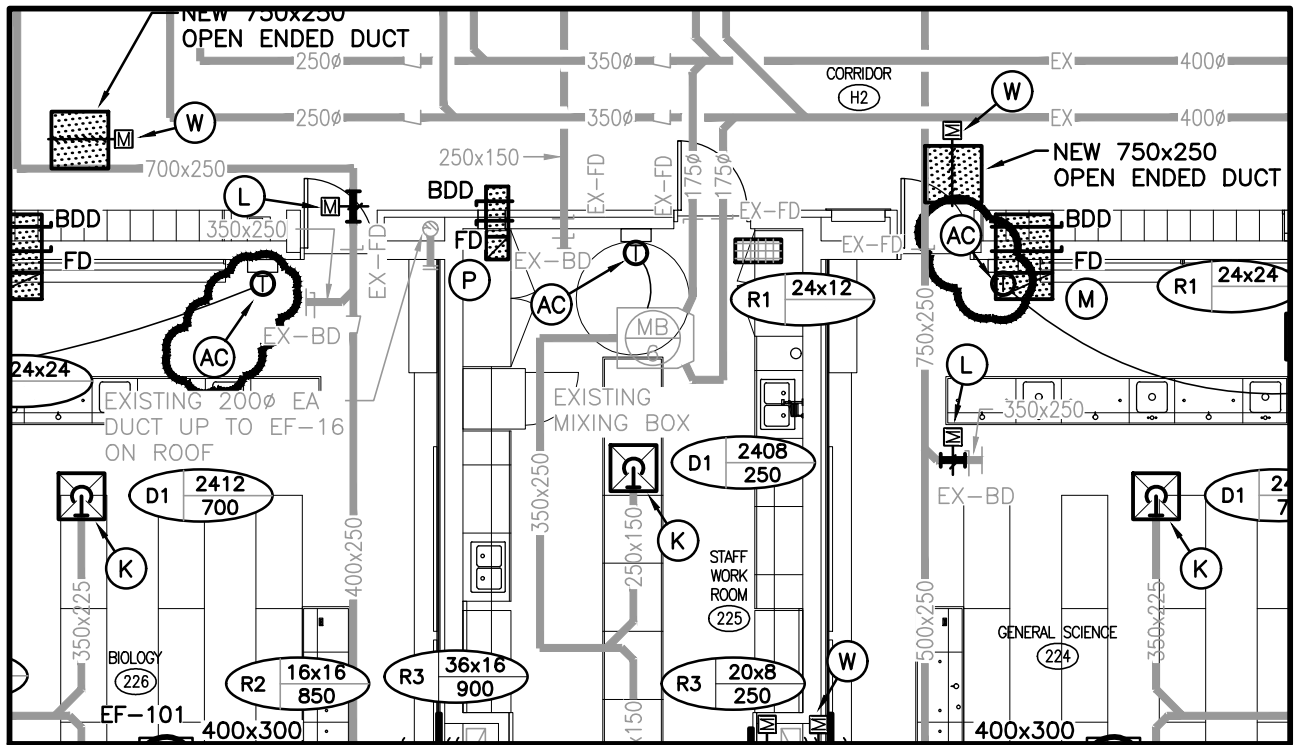
3.2 ADJUSTING

- .1 Conform to water conservation requirements specified this section.
- .2 Adjustments.
 - .1 Adjust water flow rate to design flow rates.
 - .2 Adjust pressure to fixtures to ensure no splashing at maximum pressures.
 - .3 Adjust flush valves to suit actual site conditions.
 - .4 Adjust urinal flush timing mechanisms.
 - .5 Adjust drinking fountain flow stream to ensure no spillage.
 - .6 Automatic flush valves for water closets and urinals: set controls to prevent unnecessary flush cycles during silent hours.
- .3 Checks.
 - .1 Water closets, urinals: flushing action.
 - .2 Aerators: operation, cleanliness.
 - .3 Vacuum breakers, backflow preventors: operation under all conditions.
 - .4 Wash fountains: operation of flow-actuating devices.
- .4 Thermostatic controls.
 - .1 Verify temperature settings, operation of control, limit and safety controls.
- .5 Floor and wall mounted fixtures: caulk to floor or wall using silicone caulking to make water tight, colour to match fixture.
- .6 Counter mounted fixtures: lay fixtures into bead of caulking to ensure excess moisture does not reach the cut edge of the countertop. Clean excess caulking off outside the sink.

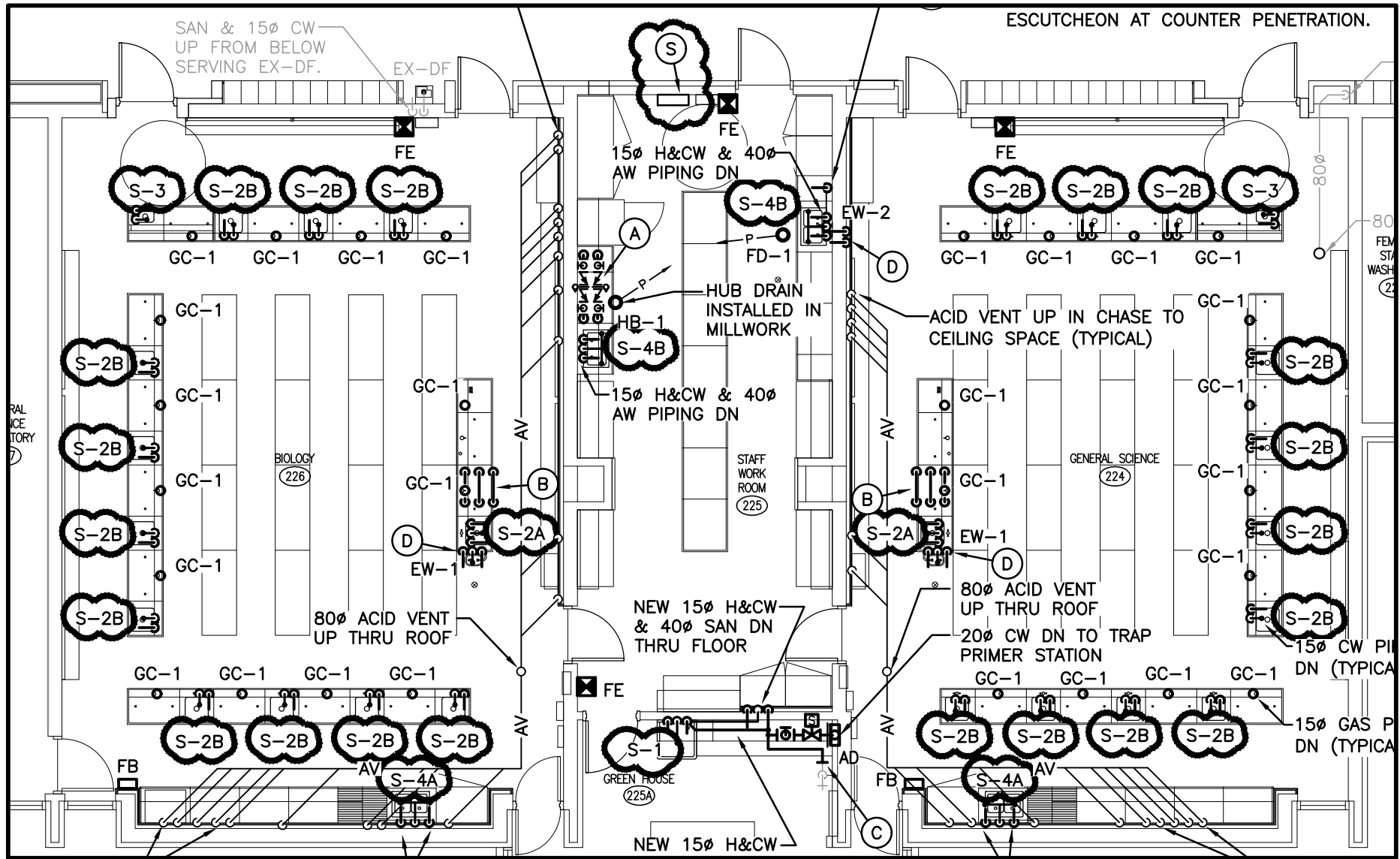
END OF SECTION

PLUMBING FIXTURE CONNECTIONS

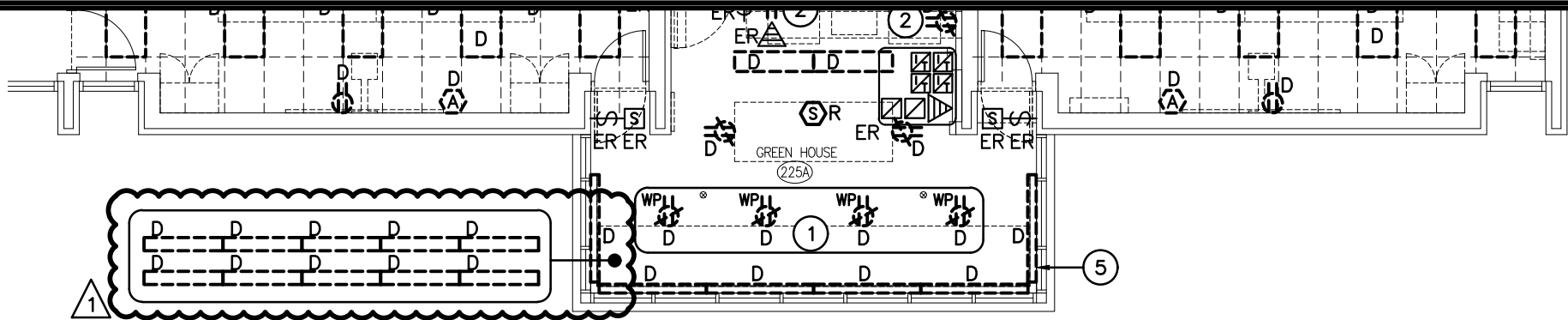
Item	Type	Sanitary (mm)	Vent (mm)	CW (mm)	HW/TW (mm)
S-1	DOUBLE COMPARTMENT SCIENCE SINK (PREP ROOM) TRIM ONLY	40	32	15	15
S-2A	SINGLE COMPARTMENT SCIENCE SINK TRIM ONLY (TEACHER)	40	32	15	15
S-2B	SINGLE COMPARTMENT SCIENCE SINK TRIM ONLY (STUDENT)	40	32	15	-
S-3	BARRIER-FREE SINGLE COMPARTMENT SCIENCE SINK TRIM ONLY (STUDENT)	40	32	15	-
S-4A	DOUBLE COMPARTMENT SCIENCE SINK C/W DRAIN BOARD TRIM ONLY	40	32	15	15
S-4B	STAINLESS STEEL STANDALONE SINGLE SINK C/W SOLIDS INTERCEPTOR (GREENHOUSE)	40	32	15	15



SECOND FLOOR PART PLAN – VENTILATION
SCALE: 1:100



SECOND FLOOR PART PLAN – PIPING & DRAINAGE
SCALE: 1:100



SECOND FLOOR PART PLAN – DEMOLITION

SCALE: 1:100

26 TYPE 'L3' GROW LIGHT FIXTURES TO BE MOUNTED TO GROW LIGHT STAND (STAND SUPPLIED BY OTHERS). COORDINATE EXACT LOCATIONS ON SITE. FEED FROM EXISTING FEED THAT FED DEMOLISHED RACK LIGHTING AND NEW CONTROL AS NOTED. ADJUST FIXTURE CORDS SUCH THAT ROW MOUNTED FIXTURE CONNECTION IS VIA A SINGLE CORD FOR THE INSTALLED GROUPING (FEED THROUGH FIXTURE WIRING COMPARTMENT, CONDUIT NIPPLE).

27 FEED INDICATED DEVICE USING SURFACE METAL RACEWAY EQUAL TO WIREMOLD SERIES 500

<p>L3 ③ ①</p>	<p>COOPER CAT. #4VT2-LD5-12-DR-UNV-L840-CD2-WL AIMLITE CAT. #VPE4-LAR3-2/40K</p>	<p>120V ④</p>	<p>LED 6000 LUMENS 4000K 50W</p>	<p>SURFACE</p>	<p>4' (1220mm) SEALED AND GASKETTED VAPOUR TIGHT FIXTURE C/W FIBREGLASS HOUSING AND HIGH IMPACT DIFFUSER LENS. MUST BE WET LOCATION LISTED. MOUNT TO RACK (SUPPLIED BY OTHERS). TO BE HUNG FROM METAL SUPPORT BEAM OF GROW LIGHT STAND. REFER TO ARCHITECTURAL DETAILS AND COORDINATE ON SITE.</p>
<p>EMERG.</p>	<p>EMERGITLITE CAT. #EPT0LG & EPT0DLG</p>	<p>12V</p>	<p>LED</p>	<p>SURFACE</p>	<p>LED FIXTURE C/W COMPACT DESIGN WITH VARIABLE</p>