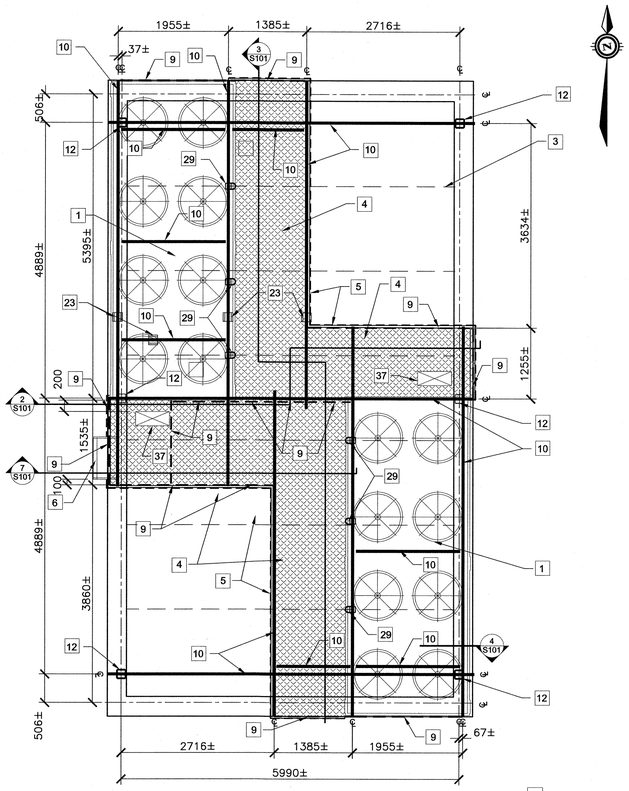
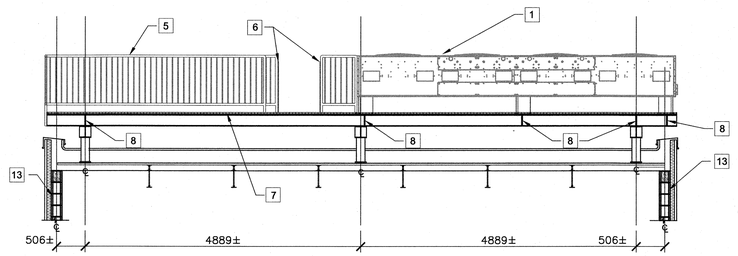
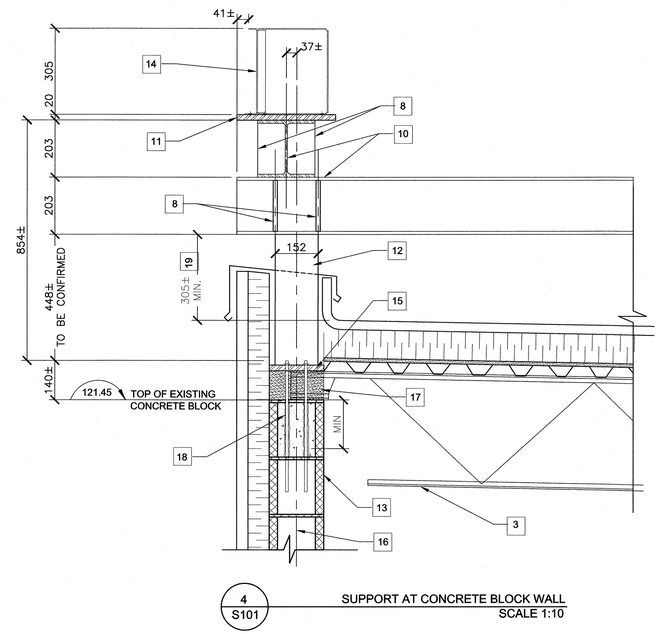


1 S101 — HYDRAULIC BUILDING ROOF - SUPPORT STRUCTURE AND WALKWAY PLAN
SCALE 1:50

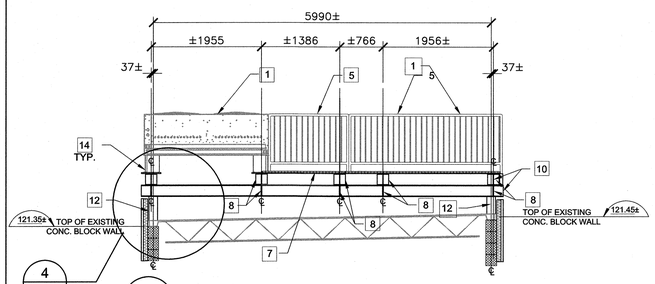
NOTE: DIMENSIONS OF GRATE PLATFORM WILL VARY DEPENDING ON ACTUAL DIMENSIONS OF MECHANICAL EQUIPMENT SELECTED. GC TO COORDINATE.



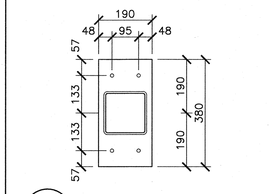
3 S101 — CONDENSER LONGTITUDINAL SUPPORT SECTION
SCALE 1:50



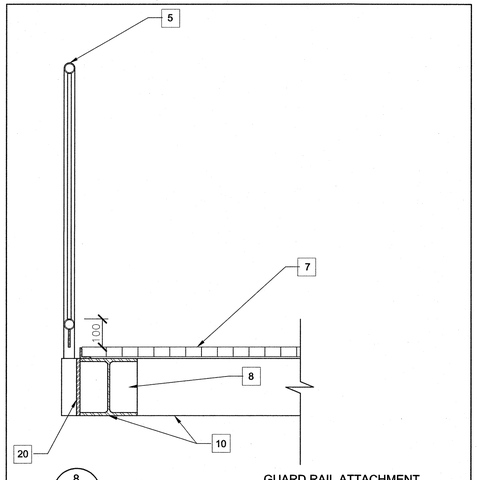
4 S101 — SUPPORT AT CONCRETE BLOCK WALL
SCALE 1:10



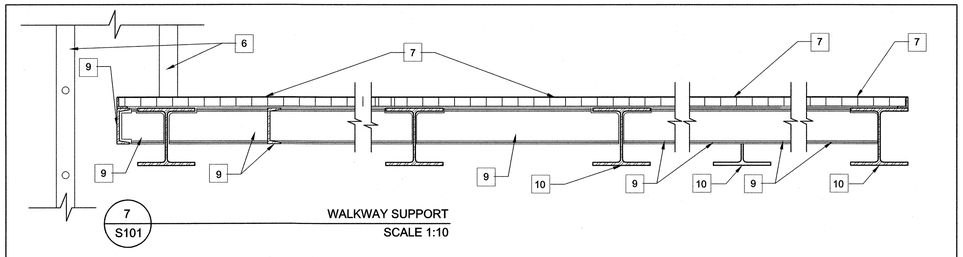
2 S101 — CONDENSER SUPPORT END SECTION
SCALE 1:50



6 S101 — BASEPLATE PLAN DETAIL
SCALE 1:10



8 S101 — GUARD RAIL ATTACHMENT
SCALE 1:10



7 S101 — WALKWAY SUPPORT
SCALE 1:10

ORIGINAL ROOF DESIGN LOADS:

(AS PER DRAWING S6 - HYDRAULIC PUMP BUILDING: FOUNDATION, GROUND FLOOR & ROOF FRAMING PLANS; SECTIONS & DETAILS. PREPARED BY ROBERT HALSALL AND ASSOCIATES, DATED 1990)

DEAD LOADS

ROOFING, INSULATION, BALLAST	1.20 kPa
STEEL DECKING	0.10 kPa
STEEL JOISTS	0.14 kPa
CEILING	0.10 kPa
MECHANICAL & ELECTRICAL	0.24 kPa

LIVE LOADS

SNOW	2.32 kPa

SNOW PILING AS PER N.B.C., LATEST EDITION

NOTES:

0 REFER TO SPECIFICATIONS FOR DETAILED DESCRIPTION OF WORK TO BE COMPLETED AT EACH STAGE OF WORK. STRUCTURAL WORK TO TAKE PLACE DURING STAGES 3 AND 4.

1 NEW CONDENSER, OPERATING WEIGHT 13 kN.

2 TWO EXISTING 1200± x 1200± ROOF OPENINGS TO BE PATCHED AFTER REMOVALS OF EXISTING EXHAUST FANS WITH GALVANISED STEEL DECKING. EXISTING LOUVRE OPENINGS IN WALL TO BE INFILLED WITH CONCRETE BLOCK. REFER TO ARCH. AND MECHANICAL FOR FURTHER INFORMATION.

3 EXISTING 350 DEEP OWSJ @ 1500 TYP. SLOPED AT 2%.

4 GALVANISED ELEVATED WALKWAY.

5 REMOVABLE GALVANISED GUARD RAIL. (SEE ARCH. A-3)

6 ACCESS LADDER. (SEE ARCH. A-3)

7 GALVANISED WELDED STEEL BAR GRATING.

8 6 mm GALVANISED BEARING STIFFENERS BOTH SIDES OF WEB.

9 GALVANISED C150 x 12.

10 GALVANISED STRUCTURAL SUPPORT BEAMS W200 x 46.

11 20 mm GALVANISED STEEL BASEPLATE 350 x 350 AT CONDENSER LEG LOCATIONS (12 LOCATIONS TYP.) ANCHORED TO WALL MASONRY WITH 4 16 mm Ø EPOXY ADHESIVE ANCHORS SUITABLE FOR APPLICATION.

12 GALVANISED H.S.S. 152 x 152 x 4.8.

13 EXISTING 190 CONC. BLOCK WALL.

14 CONTRACTOR TO COORDINATE ANCHORAGE DETAILS BETWEEN LEGS OF CONDENSER AND NEW STEEL FRAMING.

15 20 mm STEEL PLATE 190 mm x 380 mm BEARING ON EXIST'G CONC. BLOCK WALL. CUT STEEL DECK LOCALLY TO INSTALL NEW CONDENSOR SUPPORT FRAME.

16 CENTRE LINE OF EXISTING CONC. BLOCK WALL.

17 EXISTING GROUT INFILL BETWEEN SHOES OF OPEN WEB STEEL JOISTS.

18 16 mm CHEMICAL ANCHORS SUITABLE FOR APPLICATION, EMBED 450 mm IN BLOCK WALL.

19 CLEARANCE BETWEEN U/S OF STEEL BEAM AND TOP OF ROOFING OF 305 mm MINIMUM TO BE PROVIDED AT HIGH POINT OF ROOF (WEST SIDE).

20 GALVANISED 12 mm PLATE 200 mm x 200 mm MOUNTING PLATE FOR REMOVABLE GUARD. REFER TO ARCH DRAWINGS FOR GUARD DETAILS.

21 EXISTING REINFORCED CONC. SLAB.

22 10M @250 E.W.

23 PIPE SUPPORTS, BEAM CLAMPS TO BOTTOM FLANGE OF STEEL BEAMS WITH FIXED PIPE HANGERS. SEE MECHANICAL.

24 BULLNOSE SLAB EDGES.

25 FINISH SIDES AND TOP OF BASE TO MATCH ADJACENT FLOOR FINISH.

26 ROUGHEN EXISTING SLAB SURFACE.

27 DRILL 30Ø HOLE IN SLAB AND GROUT IN PLACE 15M DOWELS. INSTALL DOWELS @ 400 O.C. AROUND PERIMETER OF EQUIPMENT PAD.

28 FOR EXACT LOCATIONS AND SIZE OF CONCRETE PAD REFER TO MECHANICAL AND ELECTRICAL EQUIPMENT SHOP DRAWINGS. GROUT UNDER EQUIPMENT AS REQUIRED. NOTE THAT EXISTING HOUSEKEEPING PADS WILL REQUIRE SAWCUTTING AND AUGMENTATION TO PROVIDE NEW CONFIGURATION SUITABLE FOR NEW EQUIPMENT.

29 FALL ARREST ANCHOR. SEE 11 S102

30 20 mm GALVANISED STEEL PLATE 150 x 150.

31 GALVANISED H.S.S. 102 x102 x 6.4.

32 6.4 mm GALVANISED PLATE.

33 19 mm Ø GALVANISED BENT ROD HOOK.

34 GALVANISED STRUCTURAL SUPPORT BEAMS W200 x 46 C/W WEB STIFFENER.

35 FINISHED EDGE OF GALVANISED GRATING.

36 NEW CONDENSER ABOVE.

37 PROVIDE OPENINGS IN GRATING TO SUIT PIPING REQUIREMENTS. TYPICAL FOR 2 LOCATIONS. OPENINGS TO BE FRAMED WITH 125 mm HIGH TOE GUARD.

38 WHERE EXISTING ROOF FANS ARE REMOVED, FILL IN OPENING WITH NEW 38 mm DEEP 0.76 mm CORE THICKNESS GALVANISED STEEL METAL DECK WITH PROFILE TO MATCH EXISTING. SITE VERIFY PROFILE. FASTEN TO SUPPORTING STEEL MEMBERS WITH 75 mm Ø FUSION WELDS OR APPROVED FASTENER AT 300 mm O.C. MAX. LAP DECK MINIMUM 50 mm OVER SUPPORTING STEEL AND EXISITNG JOISTS. TWO LOCATIONS. SEE ARCHITECTURAL.

39 NEW BOLT TO BE 16 mm Ø GALVANISED ANCHOR FOR MASONRY CONSTRUCTION, PURPOSE-MADE BOLT, MINIMUM EMBEDMENT OF 110 mm IN BLOCK. ANCHORAGE AT 6 LOCATIONS. SEE ARCHITECTURAL.

40 INSTALL WASHERS AND SPACERS AS REQUIRED.

41 SEAL AROUND BENT STEEL PLATE.

42 EXISTING JOIST.

43 NEW ROOF DECK.

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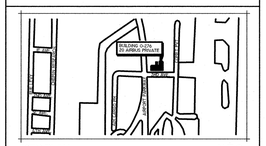
Canada



KEY PLAN N.T.S.
PLAN-REPÈRE

PROJECT NORTH PROJET DU NORD

LICENSED PROFESSIONAL ENGINEER 2015/04/15 K.A. BAKER PROVINCE OF ONTARIO

3	TENDER	2015-04-15
2	100% ISSUE - TENDER	2015-01-30
1	ISSUED FOR 99% REVIEW	2014-10-20
revisions	description	date

A detail no. no. du detail
B location drawing no. sur dessin no.
C drawing no. dessin no.

project projet

CHILLER REPLACEMENT FOR TRANSPORT CANADA TRAINING CENTRE (BUILDING 0-276)

drawing dessin

HYDRAULIC BUILDING CONDENSER SUPPORT PLAN & SECTIONS

Designed By	KAREN BAKER	Conçu par
Date	2014-10-17	(yyyy/mm/dd)
Drawn By	JOHN REVELL	Dessiné par
Date	2014-10-20	(yyyy/mm/dd)
Reviewed By	KAREN BAKER	Examiné par
Date	2014-10-20	(yyyy/mm/dd)
Approved By	APPROVED	Approuvé par
Date	DATE_APP	(yyyy/mm/dd)
Tender	TENDER	Soumission
Project Manager	PROJECT_MAN	Administrateur de projets

Project no. No. du projet
R.060139.002

Drawing no. No. du dessin
S101

PWGSC A1 (841x594)

0 10 20mm 40 60 80 100 120 140 160 180 200mm