

MOUNT NEW HYDRAULIC TUBES FROM LOWER GATES TO VERTICAL STRUTS USING SPECIFIED CLIPS

INSTALL NEW SUPPORT STRUTS AND ROUTE NEW TUBING ALONG TRENCH WALL AS SHOWN

MOUNT NEW HYDRAULIC TUBES FOR LOWER GATES AND BY PASS LINE TO VERTICAL STRUTS USING SPECIFIED CLIPS

A
SECTION
SCALE: 1:20

MOUNT NEW HYDRAULIC TUBES TO AND FROM LOWER GATES, SLUICES AND BYPASS LINE TO VERTICAL STRUTS USING SPECIFIED CLIPS

INSTALL NEW SUPPORT STRUTS AND ROUTE NEW TUBING ALONG TRENCH WALL AS SHOWN

MOUNT NEW HYDRAULIC TUBES TO AND FROM UPPER GATES AND SLUICES TO VERTICAL STRUTS USING SPECIFIED CLIPS

B
SECTION
SCALE: 1:20

MOUNT NEW HYDRAULIC TUBES FOR UPPER GATES AND BYPASS LINE TO VERTICAL STRUTS USING SPECIFIED CLIPS

INSTALL NEW SUPPORT STRUTS AND ROUTE NEW TUBING ALONG TRENCH WALL AS SHOWN

MOUNT NEW HYDRAULIC TUBES FROM UPPER GATES TO VERTICAL STRUTS USING SPECIFIED CLIPS

C
SECTION
SCALE: 1:20

INSTALL NEW SLIDING SENSOR TRACK ARRANGEMENT. SEE M007 FOR DETAILS.

MOUNT SLUICE HYDRAULIC LINES ON DOWNSTREAM SIDE OF LOCK

INSTALL FLEX HOSES AT PIVOT CONNECTIONS FOR PINTLE AND CYLINDER

ALLOW FOR POSITIONING OF SENSOR BRACKETS WHEN ROUTING LINES AND CABLES

NEW CYLINDER MOUNTING PER PUBLIC WORKS DRAWINGS

E
LOWER CYLINDER PIT DETAIL
SCALE: 1:40

MOUNT SLUICE HYDRAULIC LINES ON DOWNSTREAM SIDE OF LOCK

ALLOW FOR POSITIONING OF SENSOR BRACKETS WHEN ROUTING LINES AND CABLES

INSTALL FLEX HOSES AT PIVOT CONNECTIONS FOR PINTLE AND CYLINDER

H
UPPER CYLINDER PIT DETAIL
SCALE: 1:40

FABRICATE CAP FORMED FROM #11 GAGE 316SS. BOLT IN PLACE WITH QTY 2 -M8 FASTENERS

GATE CYLINDER PIT

457 [18"]

10mm HOLE (2 PLACES)

LOCK WALL SERVICE COVER

79 [3 1/8"]

INSTALL CAP AT TOP (NOT SHOWN HERE)

COVER FORMED FROM #11 GAGE 316SS (2.4m [8'] LENGTHS OR AS CONVENIENT)

12mm HOLE CENTRED ON LAND EVERY 1m FOR 3/8" ANCHOR (BOTH SIDES)

GATE CYLINDER PIT

457 [18"]

76 [3"]

51 [2"]

COVER PLATE - TYPICAL BOTH SIDES FOR UPPER AND LOWER (4 PLACES TOTAL)

G
LOCK WALL SERVICE COVER DETAIL
SCALE: 1:20

VALVE BANK-TO BE PLACED FOR CONVENIENT ROUTING OF TUBING TO TRENCH, AND EASY ADJUSTMENT OF COMPONENTS ON VALVE BANK

PUMP SKID-POSITION TO ALLOW-FILLING RESERVOIR, MAINTENANCE OF PUMPS & OTHER EQUIPMENT ON SKID

POSITION NEW SKID SO THAT IT IS ALIGNED WITH END OF TRENCH. ENSURE THAT ACCESS IS MAINTAINED TO FLOOR SAFE, SHELVES, AND ANY EQUIPMENT FOR MAINTENANCE

PACK MOISTURE RESISTANT FIBRE-FREE INSULATION IN TRENCH UNDER WALL

INSTALL RODENT BARRIER IN TRENCH AROUND HYDRAULIC LINES AND CABLE TRAY. BARRIER MUST BE EASILY REMOVED.

INSTALL HYDRAULIC LINES IN EAST SIDE OF TRENCH AS SHOWN

49 [1 7/8"] (APPROX.)

EXISTING SKID POSITION (REF.)

INSTALL NEW HYDRAULIC SKID:

TOP OF CONTROL PANEL TO BE 1.5m FROM FLOOR

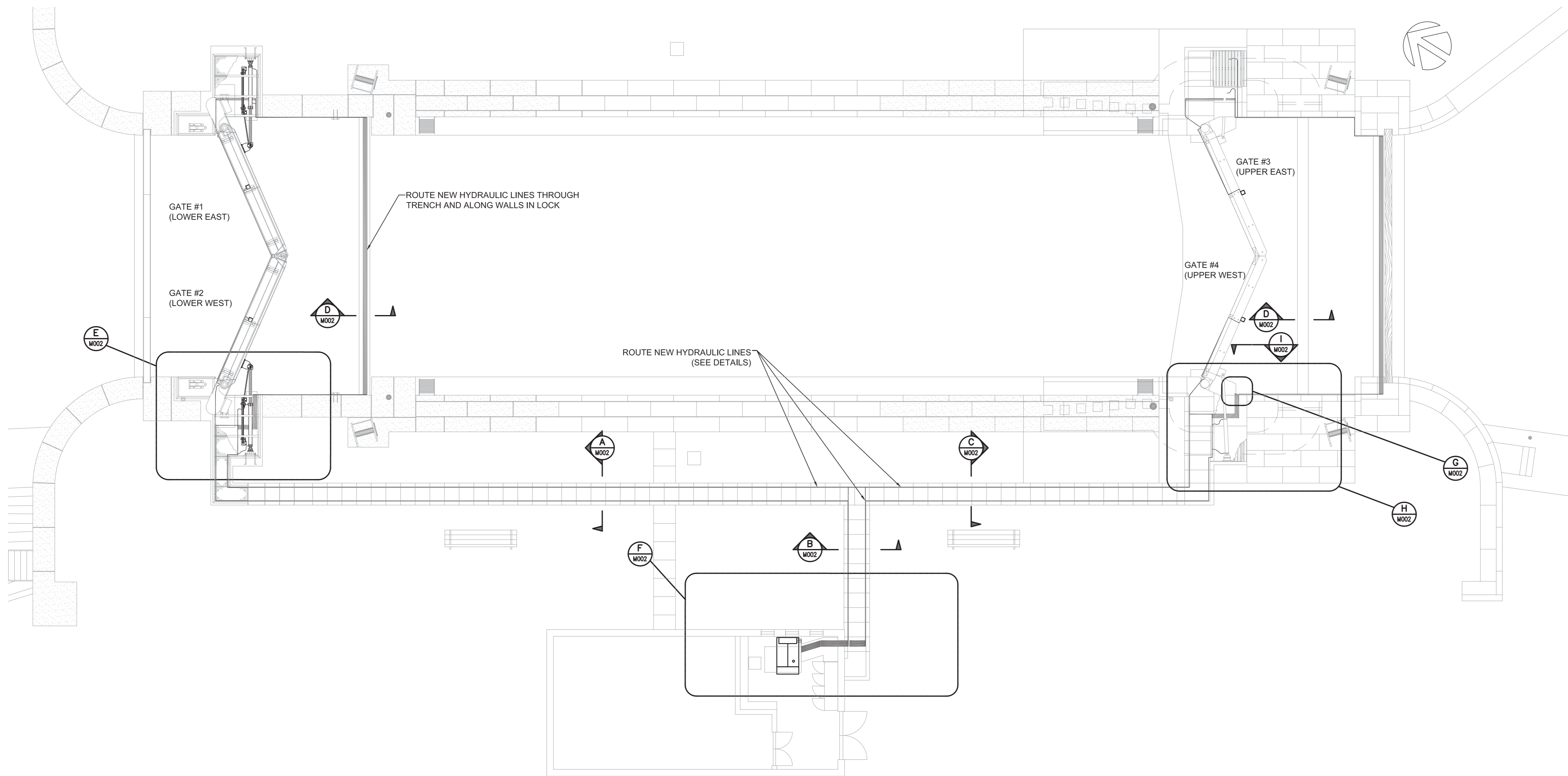
1069 [42 1/8"] (APPROX.)

F
TRENCH TO MECHANICAL ROOM DETAIL
SCALE: 1:40

INSTALL NEW COVER PLATE MADE FROM 6mm SS FASTEN TO LOCK FLOOR USING 3/8" CHEMICAL ANCHORS SPACED EVERY 1m ON EACH SIDE.

INSTALL NEW HYDRAULIC LINES ONTO NEW STRUTS FROM MECHANICAL ROOM TO EACH WEST GATE AND WEST SLUICE CYLINDER. (TYPICAL UPPER AND LOWER LOCK TRENCHES)

D
SECTION
SCALE: 1:20



1
PLAN - HYDRAULIC
SCALE: 1:100

NOTES:

HYDRAULIC:

1. ARRANGE TUBING ORDER TO AVOID LINES CROSSING ONE ANOTHER
2. ROUTING AND MOUNTING TO BE CLEAN AND ORGANIZED TO ALLOW EASY SYSTEM MAINTENANCE

SHOP DRAWINGS REQUIRED:

- HYDRAULIC SKID LAYOUT (CONTRACTOR TO PROVIDE FOR REVIEW BY PUBLIC WORKS)

FABRICATION:

1. DIMENSIONS SHOWN ARE BASED ON ORIGINAL DRAWINGS AND FIELD MEASUREMENTS (WHERE POSSIBLE)

GENERAL:

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. CONTRACTOR TO ENSURE THAT HAZARDS (MECHANICAL, HYDRAULIC, ELECTRICAL) ARE MANAGED DURING ALL PHASES OF WORK

COORDINATION:

1. NOTE THAT THERE IS OTHER WORK BEING PERFORMED ON THIS SITE SIMULTANEOUSLY, INCLUDING EXTENSIVE DEMOLITION AND RE-BUILDING OF THE LOWER LOCK GATE. THE CONTRACTOR MUST COORDINATE WITH PUBLIC WORKS TO PLAN AND SCHEDULE ALL ACTIVITIES.

SPECIFICATIONS:

1. ENSURE THAT ALL APPLICABLE SPECIFICATIONS ARE FOLLOWED.



SEAL AND SIGNATURE MUST BE PRESENT TO USE DRAWING FOR OFFICIAL PURPOSES. TYPED INITIALS IN TITLE BLOCK AND REV BLOCK ARE FOR RECORD KEEPING PURPOSES ONLY.

No.	Description	Dwn.By Des.Par	Date
1	ISSUE FOR TENDER	DP	JULY 2015

Revision / Révision			
A	Detail number No. du détail		
B	Location dwg. no. No. sur dessin		

Project title / Titre du projet
**RIDEAU CANAL
BLACK RAPIDS LOCK 13
UPGRADES 2015**

Drawing No. / Titre du dessin
**MECHANICAL
HYDRAULIC & MECHANICAL
INSTALLATION**

Drawn by / Dessiné par ALEX BAILEY	Designed by / Conçu par JONATHAN SMITH
Approved by / Approuvé par MATTHEW SMITH	Drawing Date / Date du dessin JUNE 2015

Project No. / Numéro du projet R.078218.001	Drawing No. / Dessiné No. M002 Sheet Feuille 1 of 1
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