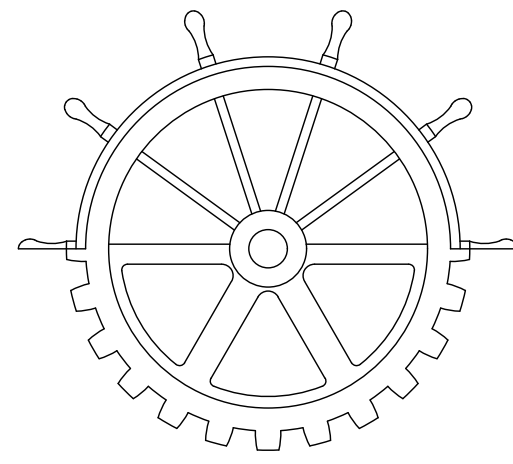




Public Services and Procurement Canada
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Heritage Canals and Engineering Works Group
 Parks Canada Infrastructure Directorate

Groupe Canaux historiques et travaux d'ingénierie
 Direction de l'Infrastructure de Parcs Canada



Parks Canada
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RIDEAU CANAL NATIONAL HISTORIC SITE KINGSTON MILLS LOCKSTATION LOCKS 46 - 49 REHABILITATION

KINGSTON, ONTARIO



KEY PLAN

WSP PROJECT No. 171-02359-00
 ISSUED FOR TENDER

PSPC PROJECT No. R.079796.009

Canada

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STRENGTH OF EXISTING STONES, MORTARS AND CONCRETE REMOVAL:

- THE STRENGTH AND INTEGRITY OF THE STONES, MORTARS AND CONCRETE WILL VARY AT DIFFERENT LOCATION OF WORK.
- FOR THE PURPOSE OF ASSESSING THE PHYSICAL EFFORT AND TIME REQUIRED TO CARRY OUT REMOVALS, AND FOR NO OTHER PURPOSE, THE FOLLOWING ASSUMPTIONS SHALL BE MADE:
 - DETERIORATED CONCRETE: 25 MPa.
 - SOUND CONCRETE BELOW HIGH-WATER LEVEL DURING LOCK USE: 40 MPa.
 - SOUND CONCRETE ABOVE HIGH-WATER LEVEL DURING LOCK USE: 30 MPa.
 - FINISHING MORTAR BELOW HIGH-WATER LEVEL DURING LOCK USE: 22 MPa.
 - FINISHING MORTAR ABOVE HIGH-WATER LEVEL DURING LOCK USE: 18 MPa.
 - BACKING MORTAR BELOW NORMAL WATERLINE DURING LOCK USE: 28 MPa.
 - BACKING MORTAR ABOVE HIGH-WATER LEVEL DURING LOCK USE: 25 MPa.
 - DETERIORATED STONE: 60 MPa. (MINIMUM STRENGTH)
 - SOUND STONE: 160 MPa. (AVERAGE STRENGTH)

ANCHORAGE FOR TEMPORARY SYSTEMS

- ADVANCE TEMPORARY ANCHORS INTO EXISTING CONCRETE OR GROUT LINES, OR STONES TO BE REMOVED AS PART OF THE WORK.
- DO NOT ADVANCE ANCHORS FOR TEMPORARY WORKS INTO STONES DESIGNATED TO REMAIN. SUCH ANCHORS ARE ALLOWED ONLY WITH SPECIAL PERMISSION OF DEPARTMENTAL REPRESENTATIVE UNDER ISOLATED UNAVOIDABLE CIRCUMSTANCES. SUCH ANCHORAGE SHOULD BE FULLY REMOVED WHEN NO LONGER REQUIRED AND STONE REPAIRED TO ORIGINAL APPEARANCE.
- REMOVE TEMPORARY ANCHORS WHERE POSSIBLE AND REPAIR HOLES WITH GROUT.
- WHERE TEMPORARY ANCHORS CANNOT BE REMOVED ALL ANCHORS SHALL BE STAINLESS STEEL.
- FOR THE DESIGN OF ANCHORAGES ASSUME THAT COMPETENT CONCRETE HAS A COMPRESSIVE STRENGTH OF 15 MPa.
- ASSUME THAT LOCALIZED MORTAR REPAIRS WILL BE REQUIRED FOR THE INSTALLATION OF TEMPORARY ANCHORS.

GENERAL CONSTRUCTION NOTES:

- ALL DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND SPECIFICATIONS.
- ALL SUB-SURFACE CONDITIONS SHOWN ON DRAWINGS ARE BASED ON LIMITED INFORMATION AND BOREHOLES AND ARE NOT GUARANTEED. CONDITIONS WHICH DIFFER FROM THOSE SHOWN ON THE DRAWINGS SHALL BE REPORTED TO DEPARTMENTAL REPRESENTATIVE, WHICH PROVIDE DIRECTION AS REQUIRED TO PROCEED WITH WORK.
- STONE: AS PER SPECIFICATION
- MORTAR REQUIREMENTS: AS PER SPECIFICATION
- GROUT REQUIREMENTS: AS PER SPECIFICATION
- CLASS OF CONCRETE:
 - VERTICAL CONCRETE REPAIRS/REFACING: 35 MPa
 - HORIZONTAL CONCRETE REPAIRS/OVERLAY: 35 MPa
 - OVERHEAD CONCRETE REPAIRS: 35 MPa
- CLEAR COVER TO REINFORCING STEEL:
 - FOOTINGS - 100±25
 - REMAINDER - 70±20MM (UNLESS NOTED OTHERWISE)
- ALL NEW REINFORCING STEEL:
 - GALVANIZED REINFORCING: GRADE 400W (WELDABLE)
 - STAINLESS: MINIMUM GRADE 420 MPa
 - PREFIX 'S' DENOTES STAINLESS REINFORCING.
 - PREFIX 'G' DEMOTES GALVANIZED REINFORCING.
 - CLASS 'B' TENSIONS SPLICE UNLESS OTHERWISE NOTED.
- HIGH STRENGTH BARS TO ASTM A772 GRADE 150.
- HOT DIP GALVANIZING SHALL BE IN ACCORDANCE WITH CAN/CSA-G164-M92 (R2003)
- ALL NEW CONSTRUCTION JOINTS IN CONCRETE ELEMENTS TO BE BUTT JOINTS. NO CHAMFER PERMITTED AT CONSTRUCTION JOINTS.
- ALL NEW MASONRY JOINTS TO HAVE A MINIMUM OFFSET OF 300mm.
- ALL CONDITIONS SHOWN ARE BASED ON LIMITED INFORMATION/BOREHOLES AND ARE NOT GUARANTEED.
- ALL WORK AREAS TO BE PROTECTED FROM FREEZING AND MAINTAINED FROST FREE DURING THE WORK.
- ALL CONCRETE AND STONENWORK TO BE PLACED ON SUBGRADE THAT IS FROST FREE AND AT LEAST 5 DEGREES CELSIUS.
- FOLLOW ALL WINTER WEATHER PROCEDURES SPECIFIED IN CONTRACT FOR ALL MASONRY AND CONCRETE WORK INCLUDING HOARDING AND HEATING OF WORKS.
- THE CONTRACTOR SHALL VERIFY ALL DETAILS AND DIMENSIONS OF THE EXISTING STRUCTURE PRIOR TO UNDERTAKING WORK.
- ALL TEMPORARY WORKS REQUIRED FOR DEMOLITION AND ACCESS TO WORK AREAS TO BE CONSTRUCTED IN FULL CONFORMANCE WITH ONTARIO MINISTRY OF LABOUR REQUIREMENTS AND OCCUPATIONAL HEALTH AND SAFETY ACT. ALL SUBMISSIONS PERTAINING TO TEMPORARY WORKS TO BE SIGNED AND SEALED BY DESIGN AND CHECK ENGINEERS LICENSED IN THE PROVINCE OF ONTARIO.
- ALL ENVIRONMENTAL PROTECTION SYSTEMS TO BE FULLY (100%) EFFECTIVE IN PREVENTING CONTAMINATION OF ENVIRONMENT.
- CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR SAFETY OF PEDESTRIAN AND VEHICULAR TRAFFIC, HIS WORKERS AND THE PUBLIC.
- ENSURE STABILITY AND SAFETY OF ALL COMPONENTS OF EXISTING AND TEMPORARY STRUCTURES IN ALL PHASES OF CONSTRUCTION.
- ALL CONCRETE TO BE PLACED IN FULL CONFORMANCE WITH CSA A23.1 INCLUDING BUT NOT LIMITED TO MIXING/DISPOSAL TIME LIMITATIONS AND FULL ADHERENCE TO COLD/HOT WEATHER PROTECTION REQUIREMENTS.
- NON-CONFORMING MATERIALS WILL BE REJECTED AND SHALL BE REMOVED FROM SITE.
- ALL WELDING SHALL BE IN CONFORMANCE WITH CSA W59.
- PROVIDE APPROPRIATE SIGNAGE TO ALERT USERS OF CONSTRUCTION AREA AND PROVIDE CONSTRUCTION FENCING TO PREVENT OTHER USERS FROM ACCESSING WORK AREA.
- ALL TRAFFIC CONTROL SHALL BE CARRIED OUT TO AT LEAST THE MINIMUM STANDARDS SET FORTH IN BOOK 7 OF THE ONTARIO TRAFFIC MANUAL.
- ALL AREAS AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE FULLY REINSTATED TO PRE-CONSTRUCTION OR BETTER CONDITIONS TO THE SATISFACTION OF THE DEPARTMENT REPRESENTATIVE INCLUDING REINSTATEMENT OF ALL VEGETATION, PATHWAYS, FENCES, AREAS USED FOR SITE ACCESS, SITE STORAGE, ETC.
- LOCK GATES:
 - REMOVE GATES AND STORE AS INDICATED OR AS REQUIRED TO EXECUTE WORK AND APPROVED BY DEPARTMENTAL REPRESENTATIVE.
 - ANY DAMAGE OR DEFICIENCIES DUE TO REMOVAL AND STORAGE OF GATES TO BE REPAIRED OR CORRECTED AT THE CONTRACTOR'S EXPENSE.
 - REINSTATE GATES AT THE END OF EACH CONSTRUCTION SEASON.
 - ONCE GATES ARE REINSTATED TEST FOR ACCEPTABLE OPERATION AND WATER TIGHTNESS AND CORRECT ANY DEFICIENCIES IN ACCORDANCE WITH REQUIREMENTS OF DEPARTMENTAL REPRESENTATIVE.
- THE SUGGESTED WORK PLAN IS PROVIDED ON DRAWINGS 01 TO 06.

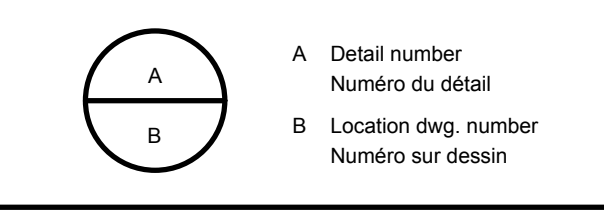
LIST OF OPSD

- 219.260 TURBIDITY CURTAIN
- 219.261 TURBIDITY CURTAIN, SEAM DETAIL



No.	Description	Revision / Révision	Des. By / Des. Par	Date
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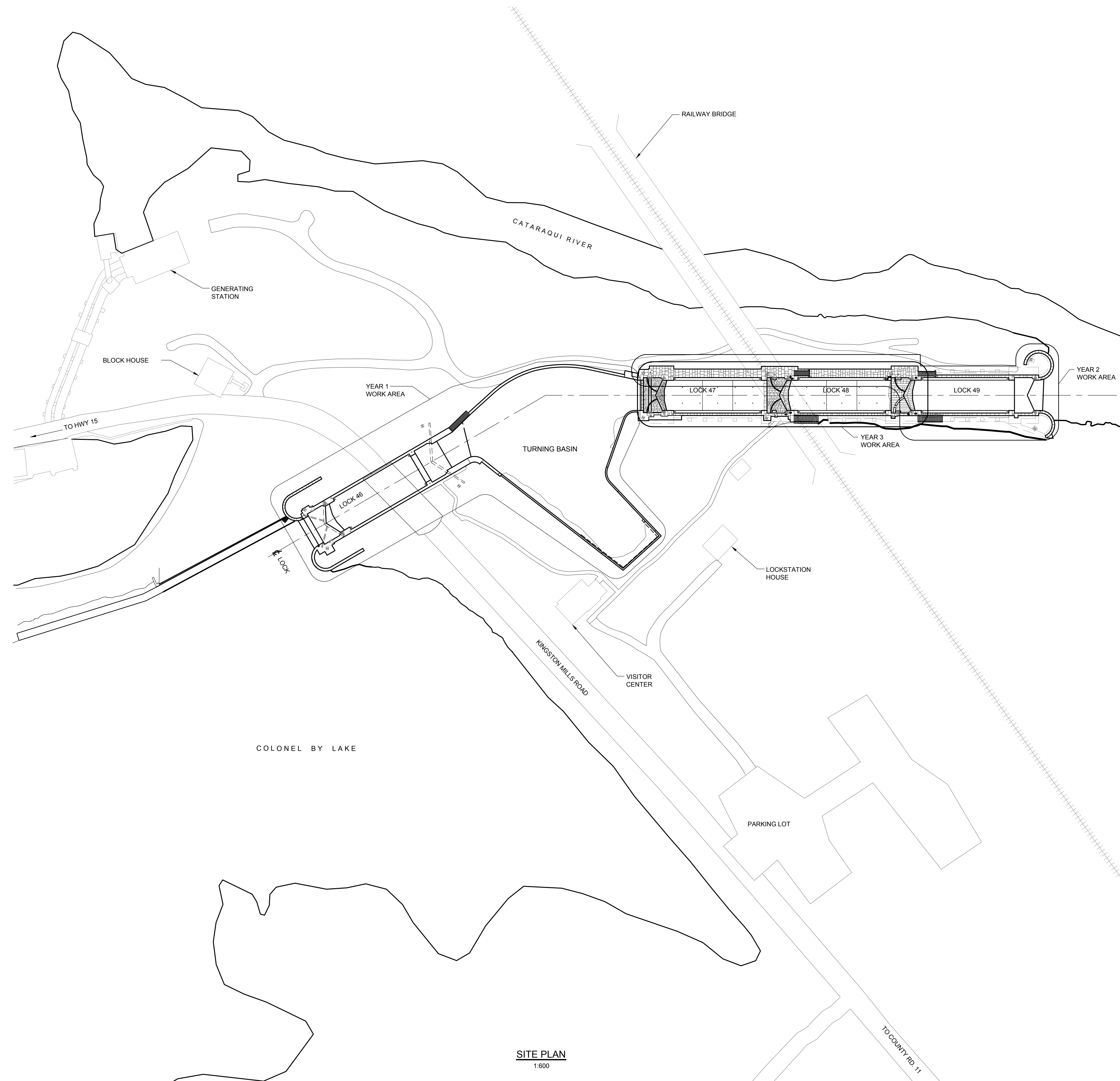
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Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

LIST OF DRAWINGS & GENERAL NOTES

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 00
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 2 of 78



GENERAL SCOPE OF WORK:

- YEAR 1**
- A. MOBILIZE.
 - B. ESTABLISH SEMI-PERMANENT LAYDOWN AREA.
 - C. ESTABLISH TEMPORARY ACCESS ROADS.
 - D. ESTABLISH TEMPORARY LAYDOWN AREAS.
 - E. INSTALL STOP LOGS AND DRAIN LOCKSTATION.
 - F. REMOVE AND STORE FURNITURE IN WORK AREAS INCLUDING BUT NOT LIMITED TO: BENCHES, LIFESAVING EQUIPMENT, ETC...
 - G. CARRY OUT WORK AT LOCK 46 (SEE DRAWING 03).
 - H. CARRY OUT WORK AT BASIN (SEE DRAWING 20).
 - I. CARRY OUT WORK AT LOCK 47 (SEE DRAWING 04).
 - J. CARRY OUT WORK AT LOCK 48 (SEE DRAWING 05).
 - K. CARRY OUT WORK AT LOCK 49 (SEE DRAWING 06).
 - L. REMOVE TREES DESIGNATED FOR REMOVAL.
 - M. REMOVE ALL MATERIAL AND EQUIPMENT FROM ALL WORK AREAS.
 - N. CLEAN AND REINSTATE ALL WORK AREAS.
 - O. REMOVE ALL MATERIAL AND EQUIPMENT FROM ALL TEMPORARY LAYDOWN AREAS.
 - P. CLEAN AND REINSTATE ALL TEMPORARY LAYDOWN AREAS.
 - Q. REMOVE TEMPORARY ACCESS ROADS.
 - R. CLEAN AND REINSTATE AREAS USED FOR TEMPORARY ACCESS ROADS.
 - S. REINSTATE FURNITURE IN WORK AREAS, AS DIRECTED, INCLUDING BUT NOT LIMITED TO: BENCHES, LIFESAVING EQUIPMENT, ETC..
 - T. REMOVE STOP LOGS AND FILL LOCKSTATION AND DEMOBILIZE.
- YEAR 2**
- A. MOBILIZE.
 - B. ESTABLISH TEMPORARY ACCESS ROADS.
 - C. ESTABLISH TEMPORARY LAYDOWN AREAS.
 - D. INSTALL STOP LOGS AND DRAIN LOCKSTATION.
 - E. REMOVE AND STORE ALL FURNITURE IN WORK AREAS INCLUDING BUT NOT LIMITED TO: BENCHES, LIFESAVING EQUIPMENT, ETC..
 - G. NO WORK AT LOCK 46 (SEE DRAWING 03).
 - H. NO WORK AT BASIN (SEE DRAWING 20).
 - I. CARRY OUT WORK AT LOCK 47 (SEE DRAWING 04).
 - J. CARRY OUT WORK AT LOCK 48 (SEE DRAWING 05).
 - K. CARRY OUT WORK AT LOCK 49 (SEE DRAWING 06).
 - L. REMOVE ALL MATERIAL AND EQUIPMENT FROM ALL WORK AREAS.
 - M. CLEAN AND REINSTATE ALL WORK AREAS.
 - N. REMOVE ALL MATERIAL AND EQUIPMENT FROM ALL TEMPORARY LAYDOWN AREAS.
 - O. CLEAN AND REINSTATE ALL TEMPORARY LAYDOWN AREAS.
 - P. REMOVE TEMPORARY ACCESS ROADS.
 - Q. CLEAN AND REINSTATE AREA USED FOR TEMPORARY ACCESS ROAD.
 - R. REPLACE OR REINSTATE ALL FURNITURE IN WORK AREAS, AS DIRECTED, INCLUDING BUT NOT LIMITED TO: BENCHES, LIFESAVING EQUIPMENT, ETC..
 - S. REMOVE STOP LOGS AND FILL LOCKSTATION AND DEMOBILIZE.
- YEAR 3**
- A. MOBILIZE.
 - B. ESTABLISH TEMPORARY ACCESS ROADS.
 - C. ESTABLISH TEMPORARY LAYDOWN AREAS.
 - D. INSTALL STOP LOGS AND DRAIN LOCKSTATION.
 - E. REMOVE AND STORE ALL FURNITURE IN WORK AREAS INCLUDING BUT NOT LIMITED TO: BENCHES, LIFESAVING EQUIPMENT, ETC..
 - G. NO WORK AT LOCK 46 (SEE DRAWING 03).
 - H. NO WORK AT BASIN (SEE DRAWING 20).
 - I. CARRY OUT WORK AT LOCK 47 (SEE DRAWING 04).
 - J. CARRY OUT WORK AT LOCK 48 (SEE DRAWING 05).
 - K. NO WORK AT LOCK 49 (SEE DRAWING 06).
 - L. PLANT TREES.
 - M. REMOVE ASPHALT AND REINSTATE WITH FLAGSTONE.
 - N. REMOVE SLATE PAVERS AND REINSTATE AREAS WITH FLAGSTONE.
 - O. REMOVE DETERIORATED CONCRETE SLABS AND REINSTATE WITH FLAGSTONE.
 - P. REMOVE ALL MATERIAL AND EQUIPMENT FROM WORK AREA.
 - Q. CLEAN AND REINSTATE WORK AREA.
 - R. REMOVE ALL MATERIAL AND EQUIPMENT FROM ALL TEMPORARY LAYDOWN AREA.
 - S. CLEAN AND REINSTATE ALL TEMPORARY LAYDOWN AREA.
 - T. REMOVE TEMPORARY ACCESS ROADS.
 - U. CLEAN AND REINSTATE AREA USED FOR TEMPORARY ACCESS ROAD.
 - V. REMOVE ALL MATERIAL AND EQUIPMENT FROM SEMI-PERMANENT LAYDOWN AREA.
 - W. CLEAN AND REINSTATE SEMI-PERMANENT LAYDOWN AREA.
 - X. TOP DRESS AND GRADE GRAVEL ACCESS ROADS.
 - Y. REPLACE OR REINSTATE ALL FURNITURE IN WORK AREAS INCLUDING BUT NOT LIMITED TO: BENCHES, LIFESAVING EQUIPMENT, ETC..
 - Z. REMOVE STOP LOGS AND FILL LOCKSTATION AND DEMOBILIZE.

SITE PLAN
1:600

Public Services and Procurement Canada
Services publics et Approvisionnement Canada

Heritage Canals and Engineering Works Group
Parcs Canada Infrastructure Directorate
Groupe Canaux historiques et travaux d'ingénierie
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1	ISSUED FOR TENDER	J.M.	2018-06-15

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A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

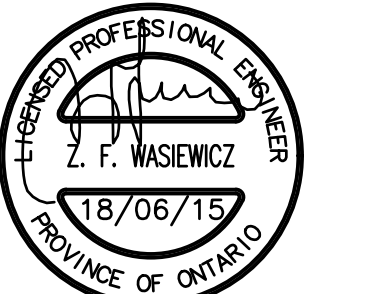
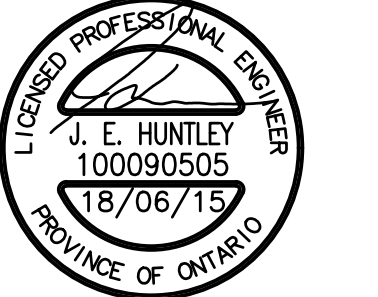
Project title / Titre du projet

**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**

ELGIN ONTARIO

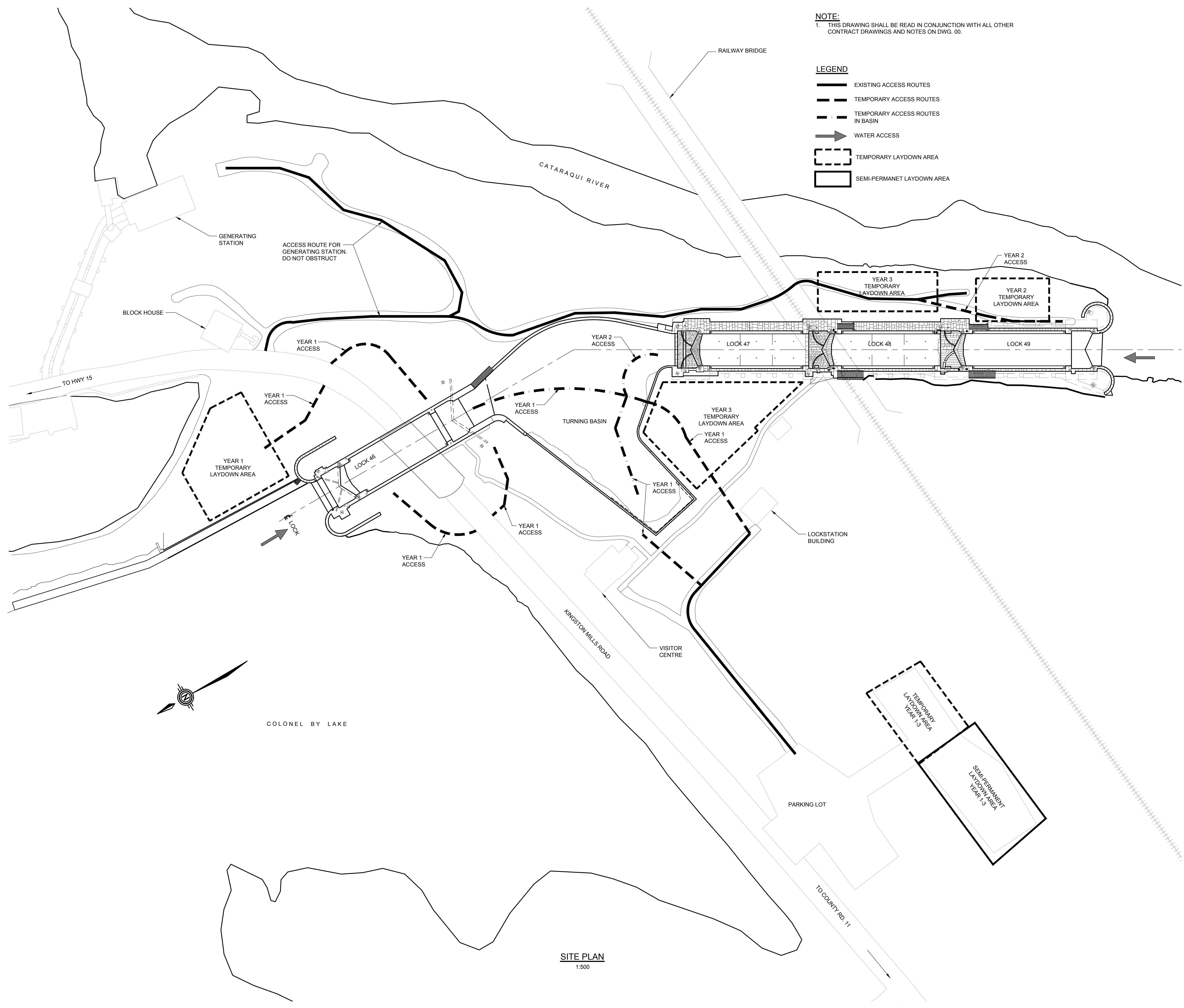
**GENERAL ARRANGEMENT
& SITE PLAN**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 01
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NOTE:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND NOTES ON DWG. 00.

- LEGEND**
- EXISTING ACCESS ROUTES
 - - - TEMPORARY ACCESS ROUTES
 - - - TEMPORARY ACCESS ROUTES IN BASIN
 - ➔ WATER ACCESS
 - ⬜ TEMPORARY LAYDOWN AREA
 - ▭ SEMI-PERMANENT LAYDOWN AREA



SITE PLAN
 1:500

No.	Description	Drawn By / Des. Par	Date
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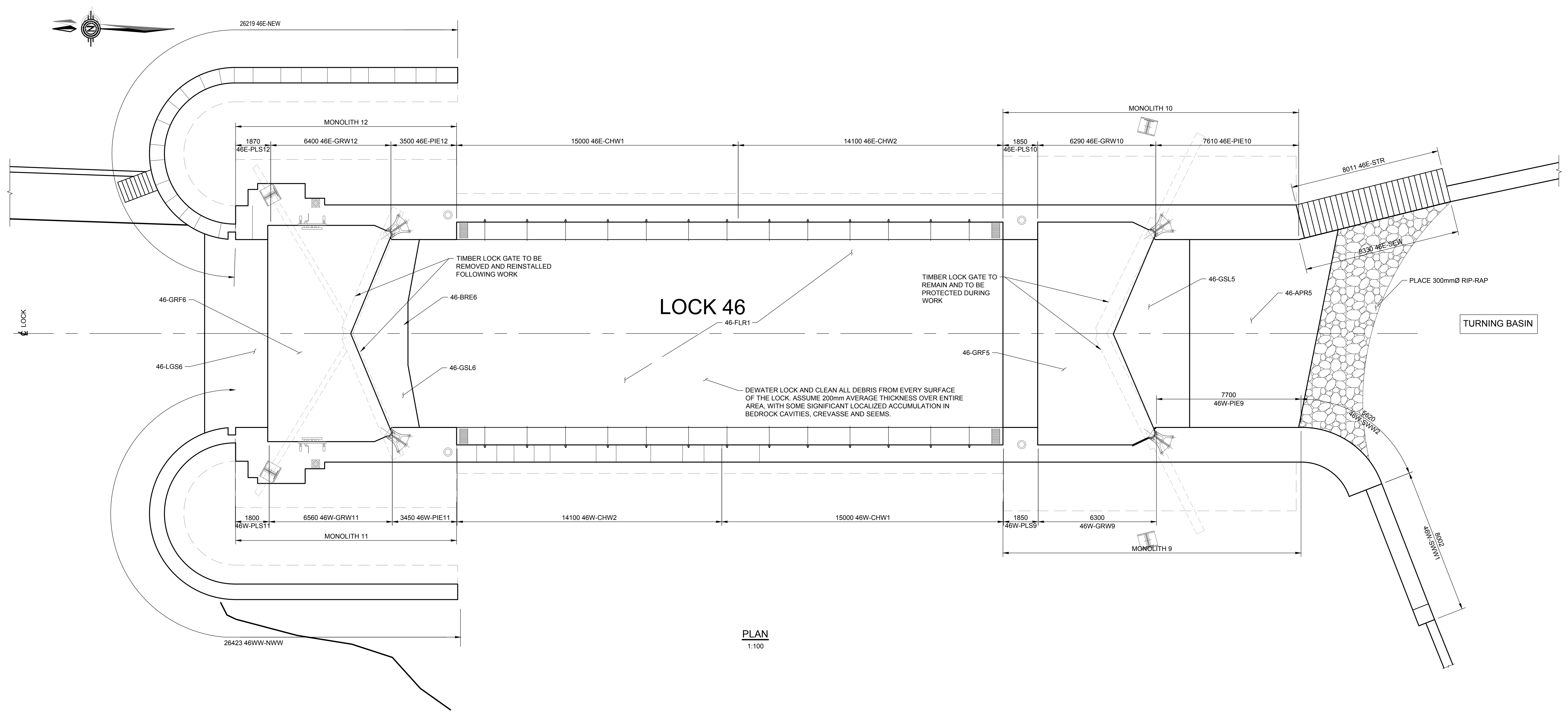
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Drawing title / Titre du dessin
**SITE ACCESS AND
 STAGING PLAN**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILION	Drawing Number / Numéro du Dessin 02
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PLAN
1:100

YEAR 1 - SEQUENCE OF WORK

- A. REMOVE AND SALVAGE ALL LOCK HARDWARE AS REQUIRED TO EXECUTE SCOPE OF WORK.
- B. REMOVE LADDERS FROM CHAMBER WALLS.
- C. REMOVE MOORING LINES FROM CHAMBER WALLS AS REQUIRED TO EXECUTE THE SCOPE OF WORK.
- D. REMOVE UPPER LOCK GATES AND STORE AS DIRECTED.
- E. REMOVE DETERIORATED MASONRY FROM EAST AND WEST UPSTREAM WINGWALLS UNDER WATER WITH DIVERS (FALL).
- F. PLACE NEW CONCRETE REPAIRS AT EAST AND WEST UPSTREAM WINGWALLS UNDER WATER WITH DIVERS (FALL).
- G. REPOINT MASONRY AT EAST AND WEST UPSTREAM WINGWALLS UNDER WATER WITH DIVERS (FALL).
- H. INSTALL HEATED ENCLOSURE FOR WORK ON THE EAST AND WEST UPSTREAM WINGWALLS ABOVE WATER.
- I. REMOVE DETERIORATED STONES ON THE EAST AND WEST UPSTREAM WINGWALLS ABOVE WATER.
- J. PLACE NEW CONCRETE REPAIRS ON THE EAST AND WEST UPSTREAM WINGWALLS ABOVE WATER.
- K. REPOINT MASONRY IN THE EAST AND WEST UPSTREAM WINGWALLS ABOVE WATER.
- L. REMOVE HEATED ENCLOSURE FOR WORK ON EAST & WEST UPSTREAM WINGWALLS ABOVE WATER.
- M. CLEAN CHAMBER FLOOR AND REMOVE ALL LOOSE BEDROCK
- N. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE UPSTREAM GATE RECESS FLOOR, UPSTREAM GATE SILL AND BREAST WALL.
- O. REMOVE DETERIORATED STONE AND CONCRETE IN UPPER GATE RECESS FLOOR, UPPER GATE SILL AND BREAST WALL.
- P. PLACE REINFORCING STEEL IN UPPER GATE RECESS FLOOR, UPPER GATE SILL AND BREAST WALL.
- Q. PLACE CONCRETE OVERLAY ON UPPER GATE RECESS FLOOR AND UPPER GATE SILL.
- R. PLACE CONCRETE REFACING AT BREAST WALL.
- S. CAST MASS CONCRETE SLAB IN CHAMBER FLOOR AT BREAST WALL.
- T. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE UPPER GATE RECESS FLOOR, GATE SILL AND BREAST WALL.
- U. INSTALL HEATED ENCLOSURES FOR WORK AT MONOLITHS 11 (WEST UPSTREAM MONOLITH) AND 12 (EAST UPSTREAM MONOLITH)
- V. INSTALL TEMPORARY BRACING FOR STOP LOGS.
- W. REMOVE DETERIORATED CONCRETE AND MASONRY ON PILASTERS, GATE RECESS WALLS AND PIERS AT MONOLITHS 11 AND 12.
- X. REMOVE DETERIORATED CONCRETE AND MASONRY IN SLUICE TUNNELS AT MONOLITHS 11 AND 12.
- Y. PLACE REINFORCING STEEL FOR CONCRETE REPAIRS IN SLUICE TUNNELS AT MONOLITHS 11 AND 12.
- Z. PLACE CONCRETE REPAIRS IN SLUICE TUNNELS AT MONOLITHS 11 AND 12.

- AA. PLACE REINFORCING STEEL FOR REFACING OF PILASTERS, GATE RECESS WALLS AND PIERS AT MONOLITHS 11 AND 12.
- AB. PLACE CONCRETE REFACING ON PILASTERS, GATE RECESS WALLS AND PIERS AT MONOLITHS 11 AND 12.
- AC. REMOVE HEATED ENCLOSURES FROM MONOLITHS 11 AND 12.
- AD. INSTALL HEATED ENCLOSURES FOR WORK IN THE EAST AND WEST CHAMBER WALLS.
- AE. REMOVE DETERIORATED STONES IN EAST AND WEST CHAMBER WALLS.
- AF. PLACE REINFORCING FOR CONCRETE REPAIRS IN EAST AND WEST CHAMBER WALLS.
- AG. PLACE CONCRETE REPAIRS IN EAST AND WEST CHAMBER WALLS.
- AH. REMOVE HEATED ENCLOSURES FOR WORK IN THE EAST AND WEST CHAMBER WALLS.
- AI. INSTALL NEW LADDERS ON CHAMBER WALLS.
- AJ. REINSTATE MOORING LINES.
- AK. INSTALL HEATED ENCLOSURES FOR WORK AT MONOLITHS 9 (WEST DOWNSTREAM MONOLITH) AND 10 (EAST DOWNSTREAM MONOLITH) ON THE PILASTERS, GATE RECESS WALLS AND PIERS AND AT DOWNSTREAM WINGWALLS.
- AL. REMOVE DETERIORATED CONCRETE AND STONES IN THE PILASTERS, GATE RECESS WALLS AND PIERS AT MONOLITHS 9 AND 10 AND DOWNSTREAM WINGWALLS.
- AM. PLACE REINFORCING STEEL FOR CONCRETE REPAIRS IN PILASTERS, GATE RECESS WALLS AND PIERS AT MONOLITHS 9 AND 10 AND DOWNSTREAM WINGWALLS.
- AN. PLACE CONCRETE REPAIRS IN PILASTERS AND PIERS AT MONOLITHS 9 AND 10 AND IN DOWNSTREAM WINGWALLS.
- AO. REMOVE HEATED ENCLOSURES FROM MONOLITHS 9 AND 10 AND DOWNSTREAM WINGWALLS.
- AP. INSTALL HEATED ENCLOSURE FOR WORK ON END POST AT SOUTHWEST WINGWALL.
- AQ. REMOVE DETERIORATED END POST.
- AR. PLACE REINFORCING STEEL FOR NEW END POST.
- AS. PLACE CONCRETE FOR NEW END POST.
- AT. REMOVE HEATED ENCLOSURE FOR WORK ON END POST AT SOUTHWEST WINGWALL.
- AU. REINSTALL ALL LOCK HARDWARE REMOVED TO EXECUTE THE WORK.
- AV. REINSTALL UPPER LOCK GATES.

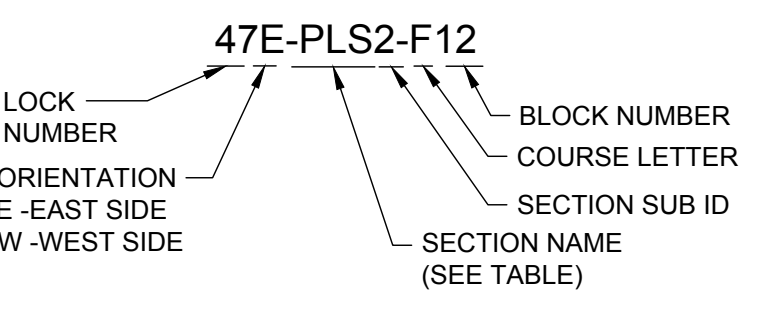
YEAR 2 - SEQUENCE OF WORK

NO WORK

YEAR 3 - SEQUENCE OF WORK

NO WORK

STONE LABELING CODE



ELEMENT NAMES	
PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BFM	BACK FACE OF MONOLITH
BFW	BACK FACE OF CHAMBER WALL
BRE	BREAST WALL
EBW	EAST BASIN WALL
NBW	NORTH BASIN WALL
WBW	WEST BASIN WALL
SBW	SOUTH BASIN WALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

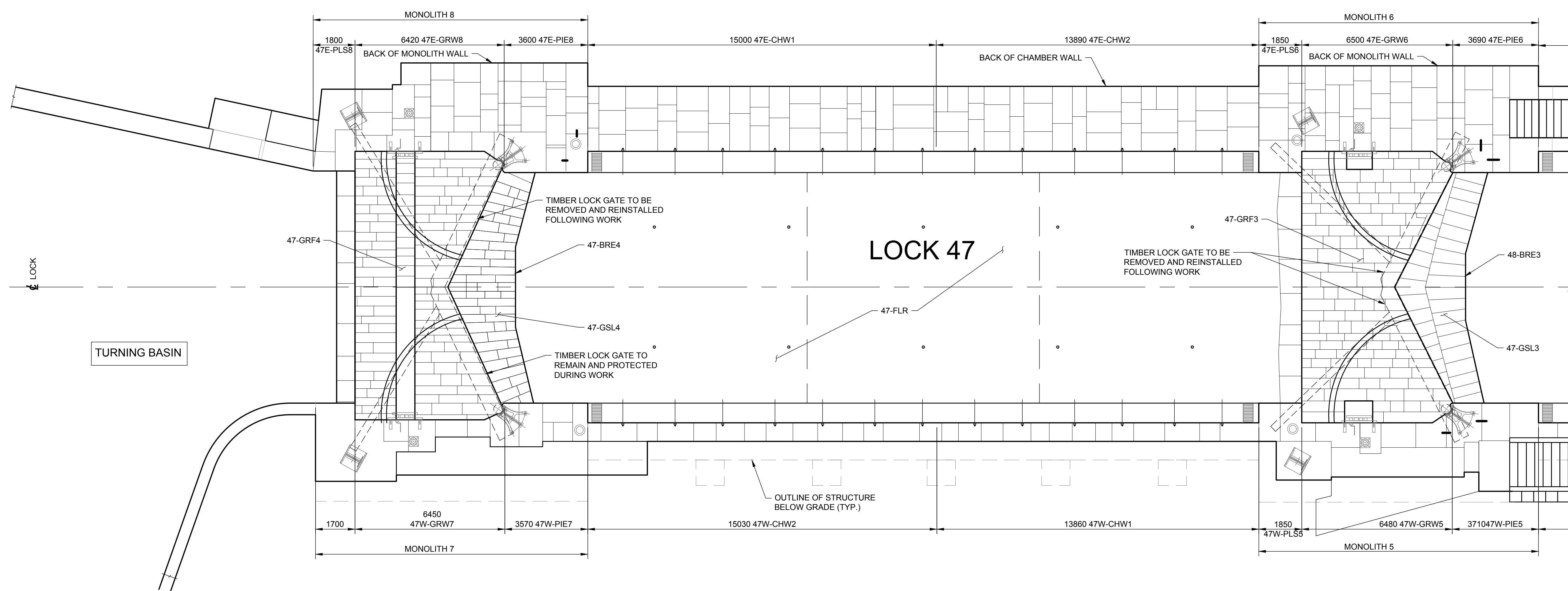
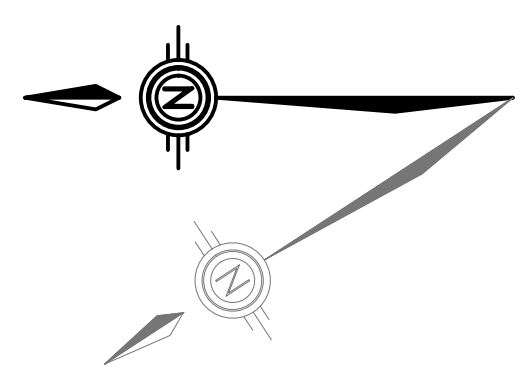
Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number / Numéro du détail
B	Location dwg. number / Numéro sur dessin

Project title / Titre du projet
RIDEAU CANAL NATIONAL HISTORIC SITE KINGSTON MILLS LOCKS 46-49 REHABILITATION
 ELGIN ONTARIO

LOCK 46 GENERAL ARRANGEMENT

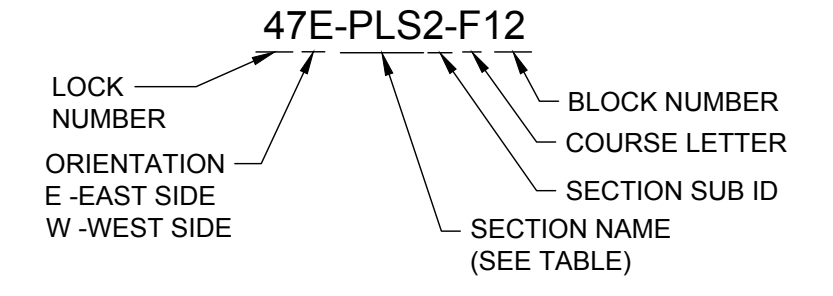
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILION	Drawing Number / Numéro du Dessin 03
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 5 of 78



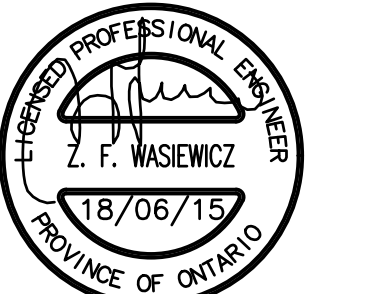
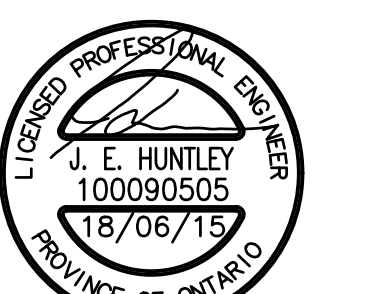
LOCK 47

PLAN
1:100

STONE LABELING CODE



ELEMENT NAMES	
PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BFM	BACK FACE OF MONOLITH
BFW	BACK FACE OF CHAMBER WALL
BRE	BREAST WALL
EBW	EAST BASIN WALL
NBW	NORTH BASIN WALL
WBW	WEST BASIN WALL
SBW	SOUTH BASIN WALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL



YEAR 1 - SEQUENCE OF WORK

- A. SURVEY COPING STONES AND STONES IN BACK FACE OF MONOLITHS AND CHAMBER WALLS FOR REPLACEMENT IN YEAR 2.
- B. CUT AND PREPARE REPLACEMENT COPING STONES.

YEAR 2 - SEQUENCE OF WORK

- A. REMOVE EXISTING PEDESTRIAN RAILING ON MONOLITHS, CHAMBER WALL AND EAST STAIRCASE.
- B. REMOVE AND SALVAGE DECORATIVE POSTS AT STAIRCASES.
- C. REMOVE AND SALVAGE ALL LOCK HARDWARE AS REQUIRED INCLUDING TO EXECUTE SCOPE OF WORK.
- D. CLEAN BACK FACES OF WALLS AND MONOLITHS.
- E. INSTALL HEATED ENCLOSURES FOR THE WORK ON THE BACK FACES AND TOPS OF MONOLITHS 6 (EAST DOWNSTREAM MONOLITH) AND 8 (EAST UPSTREAM MONOLITH) AND THE CHAMBER WALL.
- F. REMOVE DETERIORATED STONES ON THE BACK FACES AND TOPS OF MONOLITHS 6 AND 8 AND THE CHAMBER WALL.
- G. PLACE NEW STONE AND DUTCHMAN REPAIRS IN THE BACK FACES AND TOPS OF MONOLITHS 6 AND 8 AND THE CHAMBER WALL.
- H. REPOINT MASONRY IN THE BACK FACES AND TOPS OF MONOLITHS 6 AND 8 AND THE CHAMBER WALL.
- I. REMOVE HEATED ENCLOSURES FOR THE WORK ON THE BACK FACES AND TOPS OF MONOLITHS 6 AND 8 AND THE CHAMBER WALL.
- J. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE STAIRCASE BETWEEN LOCKS 47 AND 48.
- K. REMOVE AND SALVAGE STONE TREADS FROM THE STAIRCASE.
- L. REMOVE DETERIORATED STONES FROM SIDEWALLS OF STAIRCASE.
- M. PLACE NEW STONES AND DUTCHMAN REPAIRS IN SIDEWALLS OF STAIRCASE.
- N. REINSTATE TREADS
- O. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE STAIRCASE.
- P. SUPPLY AND INSTALL NEW RAILING ON MONOLITHS, CHAMBER WALL AND STAIRCASE INCORPORATING SALVAGED POSTS.
- Q. REINSTATE ALL LOCK HARDWARE.
- R. SURVEY STONES IN FLOORS, SILLS, CHAMBER WALLS AND MONOLITHS FOR REPLACEMENT IN YEAR 3.

YEAR 3 - SEQUENCE OF WORK

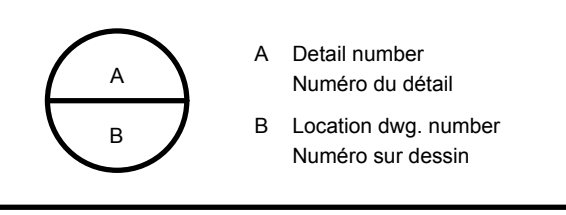
- A. REMOVE AND SALVAGE ALL LOCK HARDWARE AS REQUIRED TO EXECUTE SCOPE OF WORK.
- B. REMOVE UPPER AND LOWER LOCK GATES AND STORE AS DIRECTED.
- C. REMOVE EXISTING LADDERS FROM CHAMBER WALLS.
- D. REMOVE AND SALVAGE MOORING LINES.
- E. CLEAN FLOORS, SILLS, WALLS, TUNNELS AND MONOLITHS.
- F. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE UPSTREAM GATE RECESS FLOOR, UPSTREAM GATE SILL, BREAST WALL.
- G. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM THE UPSTREAM GATE RECESS FLOOR, UPSTREAM GATE SILL AND BREAST WALL.
- H. PLACE NEW STONES AND DUTCHMAN REPAIRS IN THE UPSTREAM GATE RECESS FLOOR, UPSTREAM GATE SILL AND BREAST WALL.
- I. REPOINT MASONRY IN THE UPSTREAM GATE RECESS FLOOR, UPSTREAM GATE SILL AND BREAST WALL.
- J. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE UPSTREAM GATE RECESS FLOOR, UPSTREAM GATE SILL, BREAST WALL.
- K. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE CHAMBER FLOOR.
- L. REMOVE DETERIORATED CONCRETE IN CHAMBER FLOOR.
- M. REMOVE EXISTING PRESSURE RELIEF VALVES IN CHAMBER FLOOR.
- N. INSTALL NEW PRESSURE RELIEF VALVES IN CHAMBER FLOOR.
- O. PLACE STEEL REINFORCING FOR CONCRETE REPAIRS IN CHAMBER FLOORS.
- P. PLACE CONCRETE REPAIRS IN CHAMBER FLOORS.
- Q. REMOVE HEATED ENCLOSURE FOR THE WORK IN THE CHAMBER FLOOR.
- R. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE DOWNSTREAM GATE RECESS FLOOR, DOWNSTREAM GATE SILL AND LOCK 48 BREAST WALL.
- S. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM THE DOWNSTREAM GATE RECESS FLOOR, DOWNSTREAM GATE SILL AND LOCK 48 BREAST WALL.
- T. PLACE NEW STONES AND DUTCHMAN REPAIRS IN THE DOWNSTREAM GATE RECESS FLOOR, DOWNSTREAM GATE SILL AND LOCK 48 BREAST WALL.
- U. REPOINT MASONRY IN THE DOWNSTREAM UPSTREAM GATE RECESS FLOOR, DOWNSTREAM GATE SILL AND LOCK 48 BREAST WALL.
- V. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE DOWNSTREAM GATE RECESS FLOOR, DOWNSTREAM GATE SILL, AND LOCK 48 BREAST WALL.
- W. INSTALL HEATED ENCLOSURES FOR THE WORK ON MONOLITHS 7 (WEST UPSTREAM MONOLITH) AND 8 (EAST UPSTREAM MONOLITH).
- X. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM THE PILASTERS, GATE RECESS WALLS AND PIERS IN

MONOLITHS 7 AND 8.

- Y. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM THE SLUICE TUNNELS AT MONOLITHS 7 AND 8.
- Z. PLACE NEW STONES AND DUTCHMAN REPAIRS AT THE INLETS AND OUTLETS OF THE SLUICE TUNNELS AT MONOLITHS 7 AND 8.
- AA. PLACE REINFORCING STEEL FOR CONCRETE REPAIRS INSIDE THE SLUICE TUNNELS AT MONOLITHS 7 AND 8.
- AB. FORM AND PLACE NEW CONCRETE REPAIRS INSIDE THE SLUICE TUNNELS AT MONOLITHS 7 AND 8.
- AC. PLACE NEW STONES AND DUTCHMAN REPAIRS IN THE PILASTERS, GATE RECESS WALLS AND PIERS IN MONOLITHS 7 AND 8.
- AD. REPOINT MASONRY IN THE PILASTERS, GATE RECESS WALLS AND PIERS IN MONOLITHS 7 AND 8.
- AE. REMOVE HEATED ENCLOSURE FOR THE WORK ON MONOLITHS 7 AND 8.
- AF. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE EAST AND WEST CHAMBER WALLS.
- AG. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM EAST AND WEST CHAMBER WALLS.
- AH. PLACE NEW STONES AND DUTCHMAN REPAIRS IN THE EAST AND WEST CHAMBER WALLS.
- AI. REPOINT MASONRY IN THE EAST AND WEST CHAMBER WALLS.
- AJ. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE EAST AND WEST CHAMBER WALLS.
- AK. INSTALL NEW LADDERS ON CHAMBER WALLS.
- AL. REINSTALL MOORING LINES.
- AM. INSTALL HEATED ENCLOSURES FOR THE WORK ON MONOLITHS 5 (WEST DOWNSTREAM MONOLITH) AND 6 (EAST DOWNSTREAM MONOLITH).
- AN. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM THE PILASTERS, GATE RECESS WALLS AND PIERS IN MONOLITHS 5 AND 6.
- AO. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM THE SLUICE TUNNELS AT MONOLITHS 5 AND 6.
- AP. PLACE NEW STONES AND DUTCHMAN REPAIRS AT THE INLET AND OUTLET OF THE SLUICE TUNNELS AT MONOLITHS 5 AND 6.
- AQ. PLACE REINFORCING STEEL FOR CONCRETE REPAIRS INSIDE THE SLUICE TUNNELS AT MONOLITHS 5 AND 6.
- AR. FORM AND PLACE NEW CONCRETE REPAIRS INSIDE THE SLUICE TUNNELS AT MONOLITHS 5 AND 6.
- AS. PLACE NEW STONES AND DUTCHMAN REPAIRS IN THE DOWNSTREAM PILASTERS, GATE RECESS WALLS AND PIERS IN MONOLITHS 5 AND 6.
- AT. REPOINT MASONRY IN THE PILASTERS, GATE RECESS WALLS AND PIERS IN MONOLITHS 5 AND 6.
- AU. REMOVE HEATED ENCLOSURES FOR THE WORK ON MONOLITHS 5 AND 6.
- AV. REINSTATE ALL LOCK HARDWARE AS REQUIRED TO EXECUTE SCOPE OF WORK.
- AW. REINSTALL UPPER AND LOWER LOCK GATES.

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Des. By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

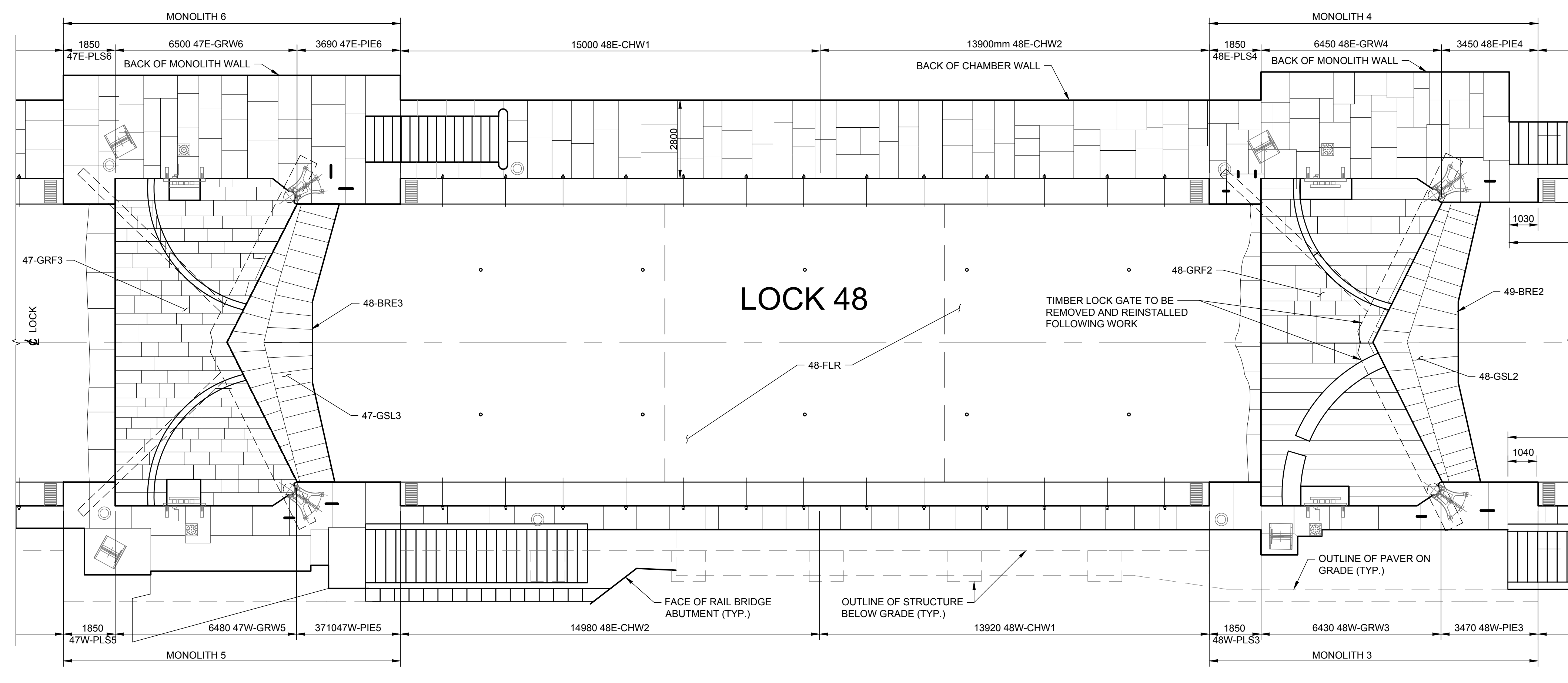
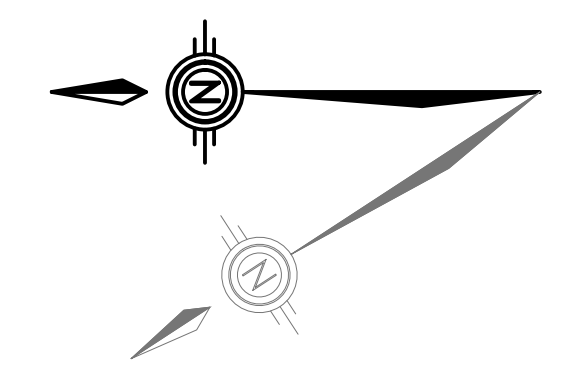


- A Detail number
Numéro du détail
- B Location dwg. number
Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 47 GENERAL
ARRANGEMENT**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 04
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 6 of 78



PLAN
1:100

YEAR 1 - SEQUENCE OF WORK

- A. SURVEY COPING STONES AND STONES IN BACK FACE OF MONOLITHS AND CHAMBER WALLS FOR REPLACEMENT IN YEAR 2.
- B. CUT AND PREPARE REPLACEMENT COPING STONES.

YEAR 2 - SEQUENCE OF WORK

- A. REMOVE EXITING PEDESTRIAN RAILING ON MONOLITHS, CHAMBER WALL AND EAST STAIRCASE.
- B. REMOVE AND SALVAGE DECORATIVE POSTS AT STAIRCASES.
- C. REMOVE AND SALVAGE ALL LOCK HARDWARE AS REQUIRED INCLUDING TO EXECUTE SCOPE OF WORK.
- D. CLEAN BACK FACES OF WALLS AND MONOLITHS.

- E. INSTALL HEATED ENCLOSURES FOR THE WORK ON THE BACK FACES OF CHAMBER WALL AND MONOLITH 4 (EAST DOWNSTREAM MONOLITH AT LOCK 48).
- F. REMOVE DETERIORATED STONES ON THE BACK FACES OF CHAMBER WALL AND MONOLITH 4.
- G. PLACE NEW STONES AND DUTCHMAN REPAIRS IN BACK FACES OF THE EAST CHAMBER WALL AND MONOLITH 4.
- H. REPOINT MASONRY IN BACK FACES OF THE EAST CHAMBER WALL AND MONOLITH 4.
- I. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE BACK FACES OF EAST CHAMBER WALL AND MONOLITH 4.
- J. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE EAST STAIRCASE BETWEEN LOCKS 48 AND 49.
- K. REMOVE AND SALVAGE STONE TREADS FROM THE STAIRCASE.
- L. REMOVE DETERIORATED STONES FROM SIDEWALLS OF STAIRCASE.
- M. PLACE NEW STONES AND DUTCHMAN REPAIRS IN SIDEWALLS OF STAIRCASE.
- N. REINSTATE TREADS.
- O. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE STAIRCASE.

- P. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE TOP HALF OF THE WEST STAIRCASE BETWEEN LOCKS 48 AND 49.
- Q. REMOVE DETERIORATED CONCRETE FROM THE TOP HALF OF THE WEST STAIRCASE BETWEEN LOCKS 48 AND 49.
- R. PLACE REINFORCING STEEL FOR CONCRETE REPAIRS IN THE TOP HALF OF THE WEST STAIRCASE BETWEEN LOCKS 48 AND 49.
- S. FORM AND PLACE NEW CONCRETE REPAIRS IN THE TOP HALF OF THE WEST STAIRCASE BETWEEN LOCKS 48 AND 49.
- T. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE EAST STAIRCASE.

- U. SUPPLY AND INSTALL NEW RAILING ON MONOLITHS, CHAMBER WALL AND STAIRCASE INCORPORATING SALVAGED POSTS.

- V. REINSTATE ALL LOCK HARDWARE.

- W. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE DOWNSTREAM GATE RECESS FLOOR, DOWNSTREAM GATE SILL AND LOCK 49 BREAST WALL (TO BE DONE CONCURRENT WITH WORK ON LOCK 49).

- X. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM THE DOWNSTREAM GATE RECESS FLOOR, DOWNSTREAM GATE SILL AND LOCK 48 BREAST WALL.
- Y. PLACE NEW STONES AND DUTCHMAN REPAIRS IN THE DOWNSTREAM GATE RECESS FLOOR, DOWNSTREAM GATE SILL AND LOCK 49 BREAST WALL.
- Z. REPOINT MASONRY IN THE DOWNSTREAM GATE RECESS FLOOR, DOWNSTREAM GATE SILL AND LOCK 48 BREAST WALL.

- AA. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE DOWNSTREAM GATE RECESS FLOOR, DOWNSTREAM GATE SILL, AND LOCK 49 BREAST WALL.

- AB. INSTALL HEATED ENCLOSURE FOR THE WORK ON PILASTERS, GATE RECESS WALLS, PIERS AND SLUICE TUNNELS AT MONOLITH 3 (WEST DOWNSTREAM MONOLITH) AND 4 (EAST DOWNSTREAM MONOLITH). (TO BE DONE CONCURRENT WITH WORK ON LOCK 49.)

- AC. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM THE PILASTERS, GATE RECESS WALLS, PIERS AND SLUICE TUNNELS IN MONOLITHS 3 AND 4.

- AD. PLACE NEW STONES AND DUTCHMAN REPAIRS AT THE INLET AND OUTLET OF THE SLUICE TUNNELS IN MONOLITHS 3 AND 4.

- AE. PLACE REINFORCING STEEL FOR CONCRETE REPAIRS INSIDE THE SLUICE TUNNELS AT MONOLITHS 3 AND 4.

- AF. FORM AND PLACE NEW CONCRETE REPAIRS INSIDE THE SLUICE TUNNELS AT MONOLITHS 3 AND 4.

- AG. PLACE NEW STONES AND DUTCHMAN REPAIRS IN THE PILASTERS, GATE RECESS WALLS AND PIERS AT MONOLITHS 3 AND 4.

- AH. REPOINT MASONRY IN THE PILASTERS, GATE RECESS WALLS, PIERS AND SLUICE TUNNELS AT MONOLITH 3 AND 4.

- AI. REMOVE HEATED ENCLOSURE FOR THE WORK ON MONOLITHS 3 AND 4.

- AJ. SURVEY STONES IN FLOORS, SILLS, CHAMBER WALLS AND MONOLITHS FOR REPLACEMENT IN YEAR 3.

YEAR 3 - SEQUENCE OF WORK

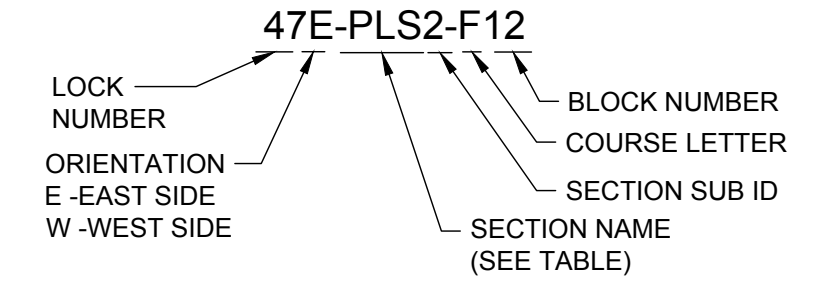
- A. REMOVE AND SALVAGE ALL LOCK HARDWARE AS REQUIRED TO EXECUTE SCOPE OF WORK.
- B. REMOVE UPPER LOCK GATES AND STORE AS DIRECTED.
- C. REMOVE EXISTING LADDERS FROM CHAMBER WALLS.
- D. REMOVE AND SALVAGE MOORING LINES.
- E. CLEAN FLOORS, SILLS, WALLS, TUNNELS AND MONOLITHS.

- F. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE CHAMBER FLOOR.
- G. REMOVE DETERIORATED CONCRETE IN CHAMBER FLOOR.
- H. REMOVE EXISTING PRESSURE RELIEF VALVES IN CHAMBER FLOOR.
- I. INSTALL NEW PRESSURE RELIEF VALVES IN CHAMBER FLOOR.
- J. PLACE STEEL REINFORCING FOR CONCRETE REPAIRS IN CHAMBER FLOORS.
- K. PLACE CONCRETE REPAIRS IN CHAMBER FLOORS.
- L. REMOVE HEATED ENCLOSURE FOR THE WORK IN THE CHAMBER FLOOR.

- M. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE EAST AND WEST CHAMBER WALLS.
- N. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM EAST AND WEST CHAMBER WALLS.
- O. PLACE NEW STONES AND DUTCHMAN REPAIRS IN THE EAST AND WEST CHAMBER WALLS.
- P. REPOINT MASONRY IN THE EAST AND WEST CHAMBER WALLS.
- Q. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE EAST AND WEST CHAMBER WALLS.

- R. INSTALL NEW LADDERS ON CHAMBER WALLS.
- S. REINSTATE MOORING LINES.
- T. REINSTATE ALL LOCK HARDWARE AS REQUIRED TO EXECUTE SCOPE OF WORK.
- U. REINSTALL UPPER AND GATES.

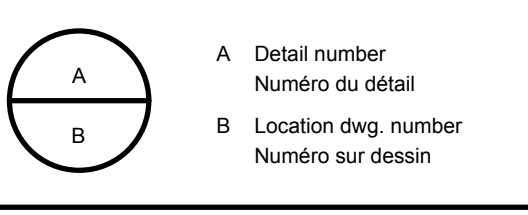
STONE LABELING CODE



ELEMENT NAMES	
PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BFM	BACK FACE OF MONOLITH
BFW	BACK FACE OF CHAMBER WALL
BRE	BREAST WALL
EBW	EAST BASIN WALL
NBW	NORTH BASIN WALL
WBW	WEST BASIN WALL
SBW	SOUTH BASIN WALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.



Project title / Titre du projet

**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin

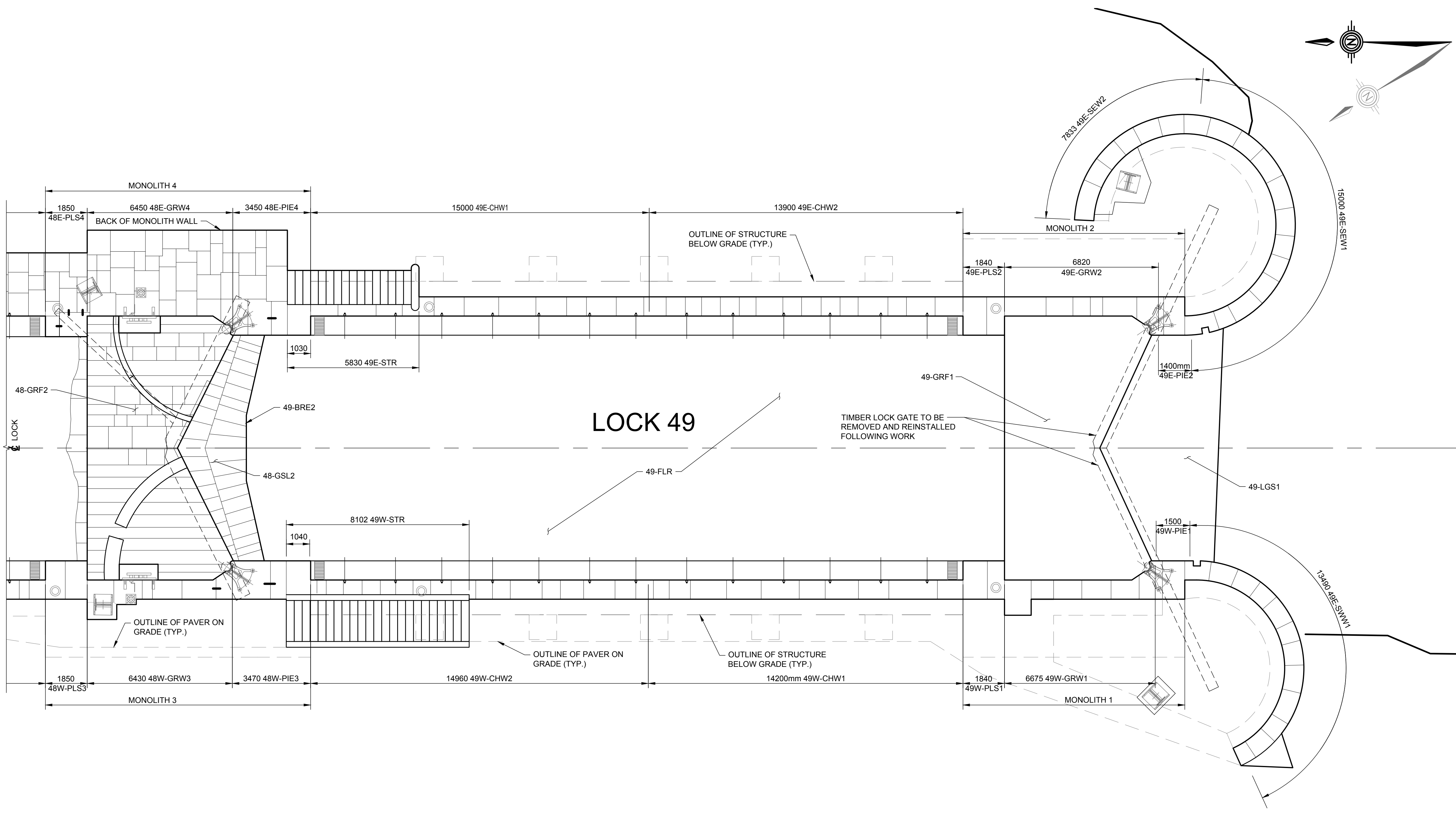
**LOCK 48 GENERAL
 ARRANGEMENT**

Drawn by / Dessiné par
 ADRIAN MEUNIER
 Designed by / Conçu par
 FELIX WASIEWICZ

Approved by / Approuvé par
 JULIA MARSON
 Drawing Date / Date du dessin
 JUNE 2018

Project manager / Administrateur de projet
 SHAWN FILLION
 Drawing Number / Numéro du Dessin
 05

Project Number / Numéro du projet
 R.079796.009
 Sheet / Feuille
 7 of 78



YEAR 1 - SEQUENCE OF WORK

- A. SURVEY COPING STONES AND STONES IN MONOLITHS AND CHAMBER WALLS FOR REPLACEMENT IN YEAR 2.
- B. CUT AND PREPARE REPLACEMENT COPING STONES.

YEAR 2 - SEQUENCE OF WORK

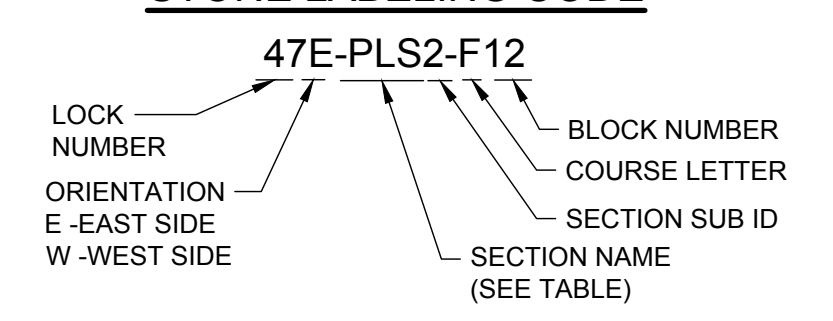
- A. REMOVE AND SALVAGE ALL LOCK HARDWARE AS REQUIRED TO EXECUTE SCOPE OF WORK.
- B. REMOVE UPPER LOCK GATES AND STORE AS DIRECTED.
- C. REMOVE EXISTING LADDERS FROM CHAMBER WALLS.
- D. REMOVE AND SALVAGE MOORING LINES.
- E. CLEAN FLOORS, SILLS, WALLS, TUNNELS AND MONOLITHS.
- F. REMOVE DETERIORATED MASONRY FROM EAST AND WEST DOWNSTREAM WINGWALL UNDER WATER WITH DIVERS (FALL).
- G. PLACE NEW STONES AND DUTCHMAN REPAIRS ON EAST AND WEST DOWNSTREAM WINGWALLS UNDER WATER WITH DIVERS (FALL).
- H. REPOINT MASONRY ON EAST AND WEST DOWNSTREAM WINGWALLS UNDER WATER WITH DIVERS (FALL).
- I. REMOVE DEBRIS FROM SCOUR HOLE DOWNSTREAM OF APRON AT LOCK 49 WITH DIVERS (FALL).
- J. INSTALL RIPRAP EMBANKMENT DOWNSTREAM OF SCOUR HOLE AND FORM SCOUR HOLE WITH DIVERS (FALL).
- K. PLACE TREMIE CONCRETE FILL IN SCOUR HOLE WITH DIVERS (FALL).
- L. INSTALL DOWNSTREAM STOP LOGS AT LOCK 49 AND DEWATER LOCK CHAMBER
- M. REMOVE ALL DEBRIS AND CLEAN CHAMBER FLOOR.
- N. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE CHAMBER FLOOR.
- O. REMOVE DETERIORATED TIMBER IN CHAMBER FLOOR.
- P. REPLACED DETERIORATED TIMBER IN CHAMBER FLOOR.
- Q. REMOVE DETERIORATED STONES IN CHAMBER FLOOR.
- R. PLACE NEW STONE AND DUTCHMAN REPAIRS IN CHAMBER FLOOR.
- S. REPOINT MASONRY IN CHAMBER FLOOR.
- T. REMOVE HEATED ENCLOSURE FOR THE WORK IN THE CHAMBER FLOOR.
- U. INSTALL HEATED ENCLOSURE FOR THE WORK ON THE DOWNSTREAM GATE RECESS FLOOR AND GATE SILL.
- V. REMOVE DETERIORATED CONCRETE IN THE DOWNSTREAM GATE RECESS FLOOR AND GATE SILL.
- W. PLACE REINFORCING STEEL FOR CONCRETE REPAIRS IN THE DOWNSTREAM GATE RECESS FLOOR AND GATE SILL.
- X. PLACE CONCRETE REPAIRS IN THE DOWNSTREAM GATE RECESS FLOOR AND GATE SILL.
- Y. REMOVE HEATED ENCLOSURE FOR THE WORK ON THE DOWNSTREAM GATE RECESS FLOOR AND GATE SILL.

YEAR 3 - SEQUENCE OF WORK

NO WORK

- AE. INSTALL NEW LADDERS ON CHAMBER WALLS.
- AF. REINSTALL MOORING LINES.
- AG. INSTALL HEATED ENCLOSURES FOR THE WORK ON MONOLITHS 1 (WEST DOWNSTREAM MONOLITH) AND 2 (EAST DOWNSTREAM MONOLITH).
- AH. REMOVE DETERIORATED STONES AND CONCRETE REPAIRS FROM THE PILASTERS, GATE RECESS WALLS AND PIERS AT MONOLITHS 1 AND 2.
- AI. PLACE NEW STONES AND DUTCHMAN REPAIRS IN THE PILASTERS, GATE RECESS WALLS AND PIERS AT MONOLITH 1 AND 2.
- AL. REPOINT MASONRY IN THE PILASTERS, GATE RECESS WALLS AND PIERS AT MONOLITHS 1 AND 2.
- AK. REMOVE HEATED ENCLOSURE FOR THE WORK ON MONOLITHS 1 AND 2.
- AM. INSTALL HEATED ENCLOSURE FOR WORK ON EAST AND WEST DOWNSTREAM WINGWALLS ABOVE WATERLINE.
- AN. REMOVE DETERIORATED STONES FROM EAST AND WEST DOWNSTREAM WINGWALL ABOVE WATERLINE.
- AO. PLACE NEW STONES AND DUTCHMAN REPAIRS ON EAST AND WEST DOWNSTREAM WINGWALLS ABOVE WATERLINE.
- AP. REPOINT MASONRY ON EAST AND WEST DOWNSTREAM WINGWALLS ABOVE WATERLINE.
- AQ. REMOVE HEATED ENCLOSURE FOR WORK ON EAST DOWNSTREAM WINGWALLS ABOVE WATERLINE.
- AQ. REINSTATE ALL LOCK HARDWARE AS REQUIRED TO EXECUTE SCOPE OF WORK.
- AR. REINSTALL UPPER LOCK GATES.
- AS. FILL LOCK AND REMOVE STOP LOGS.

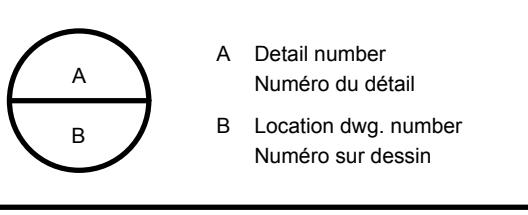
STONE LABELING CODE



ELEMENT NAMES	
PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BFM	BACK FACE OF MONOLITH
BFW	BACK FACE OF CHAMBER WALL
BRE	BREAST WALL
EBW	EAST BASIN WALL
NBW	NORTH BASIN WALL
WBW	WEST BASIN WALL
SBW	SOUTH BASIN WALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUCE TUNNEL

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings.
 Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.



Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 49 GENERAL
 ARRANGEMENT**

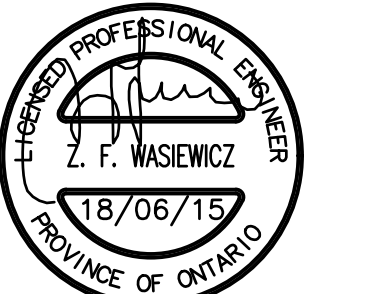
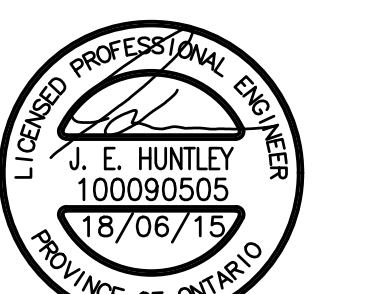
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018

Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 06
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 8 of 78

NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 2. ALL FLAGSTONE AND SLATE PAVERS SHALL BE REMOVED AND SALVAGED FOR REINSTATEMENT. SIZE OF STONE USED FOR REINSTATEMENT SHALL CONFORM TO SPECIFIED.



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No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

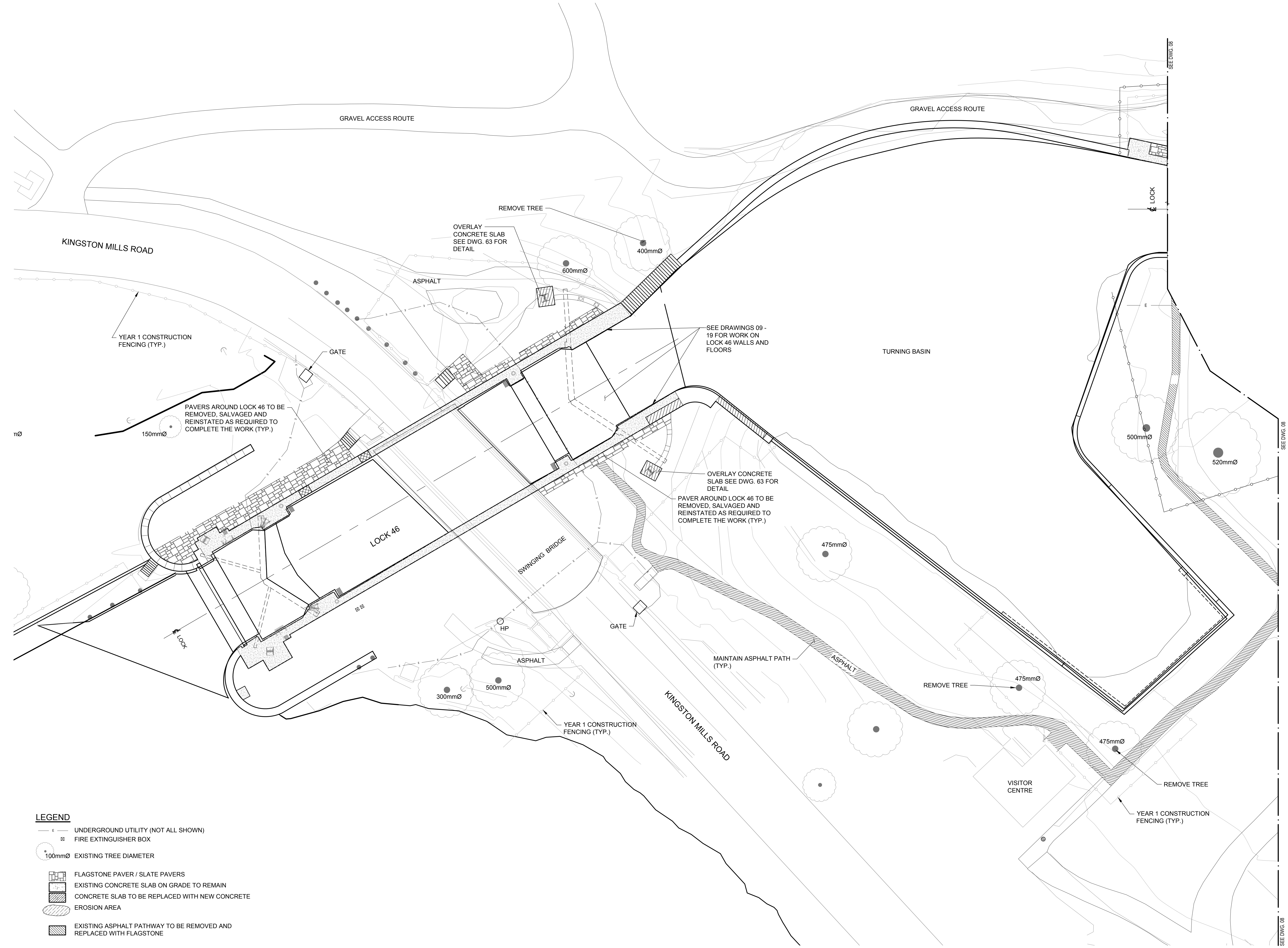
Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

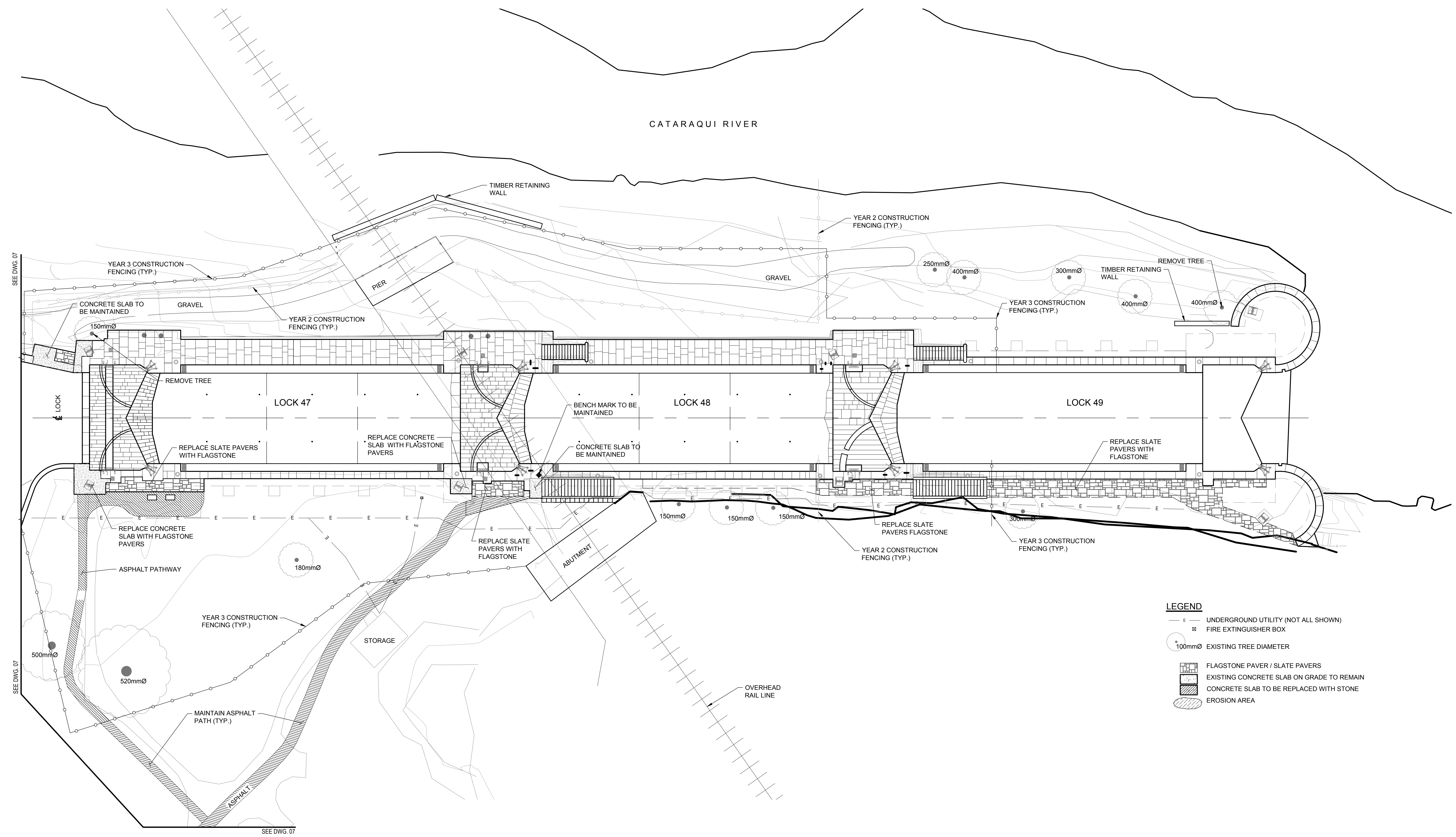
Drawing title / Titre du dessin
**LOCK 46 AND TURNING
 BASIN LANDSCAPING**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 07
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 9 of 78



- LEGEND**
- UNDERGROUND UTILITY (NOT ALL SHOWN)
 - ☒ FIRE EXTINGUISHER BOX
 - 100mmØ EXISTING TREE DIAMETER
 - ▨ FLAGSTONE PAVER / SLATE PAVERS
 - ▩ EXISTING CONCRETE SLAB ON GRADE TO REMAIN
 - ▧ CONCRETE SLAB TO BE REPLACED WITH NEW CONCRETE
 - ▨ EROSION AREA
 - ▨ EXISTING ASPHALT PATHWAY TO BE REMOVED AND REPLACED WITH FLAGSTONE

- NOTES:**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 2. ALL FLAGSTONE AND SLATE PAVERS SHALL BE REMOVED AND SALVAGED FOR REINSTATEMENT. SIZE OF STONE USED FOR REINSTATEMENT SHALL CONFORM TO SPECIFIED.
 3. BLOCK PEDESTRIAN ACCESS TO UPPER AND LOWER LOCK GATES AT LOCK 47 IN YEAR 2.



LEGEND

- E — UNDERGROUND UTILITY (NOT ALL SHOWN)
- ⊗ FIRE EXTINGUISHER BOX
- 100mmØ EXISTING TREE DIAMETER
- ▨ FLAGSTONE PAVER / SLATE PAVERS
- ▩ EXISTING CONCRETE SLAB ON GRADE TO REMAIN
- ▧ CONCRETE SLAB TO BE REPLACED WITH STONE
- ▨ EROSION AREA



No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

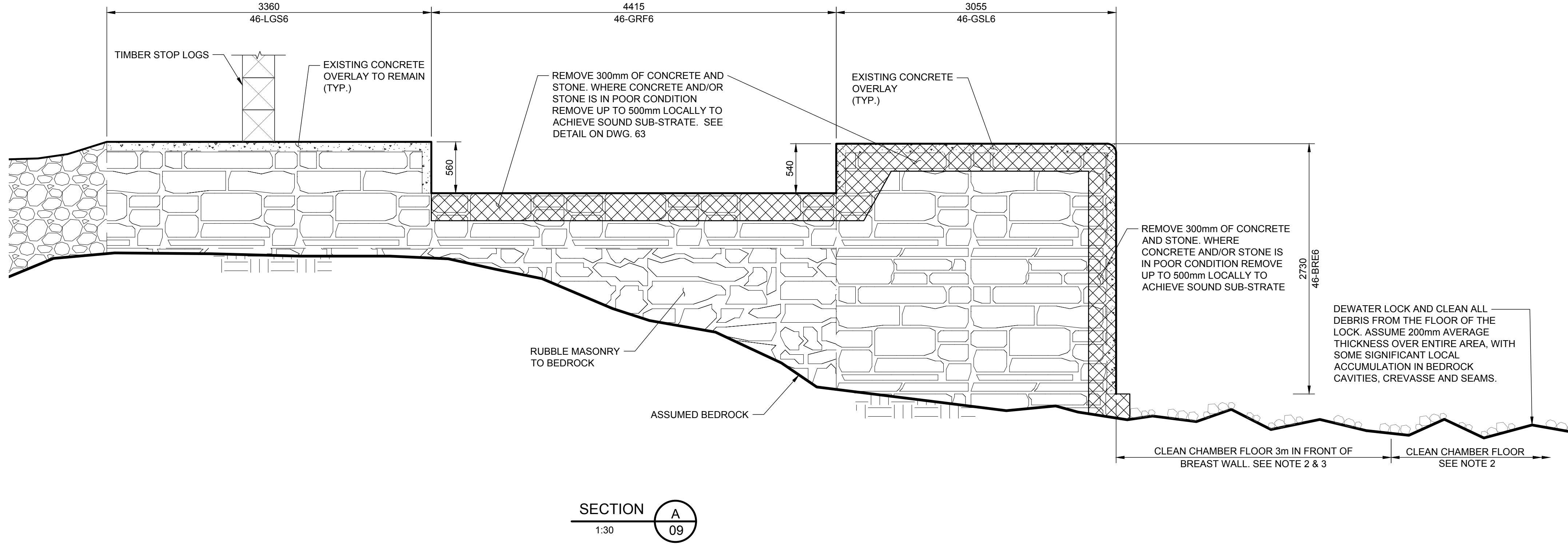
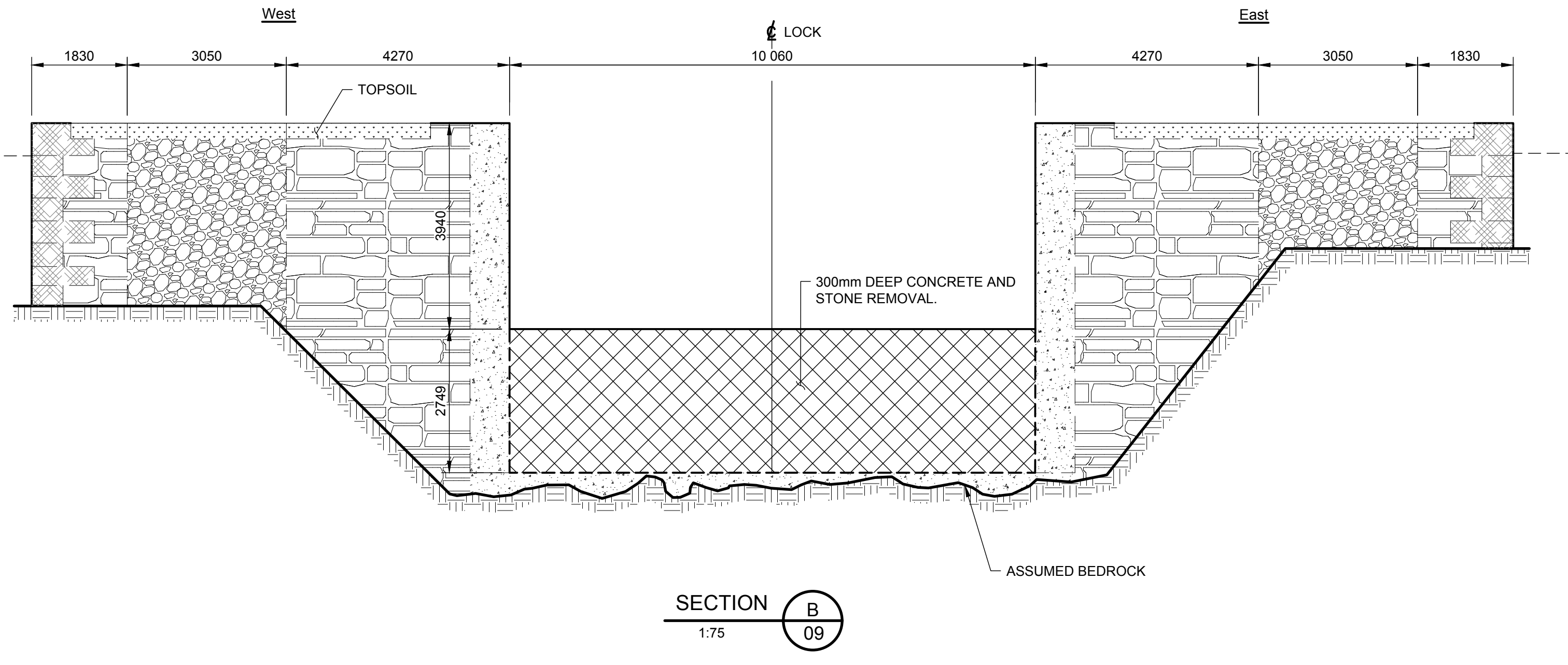
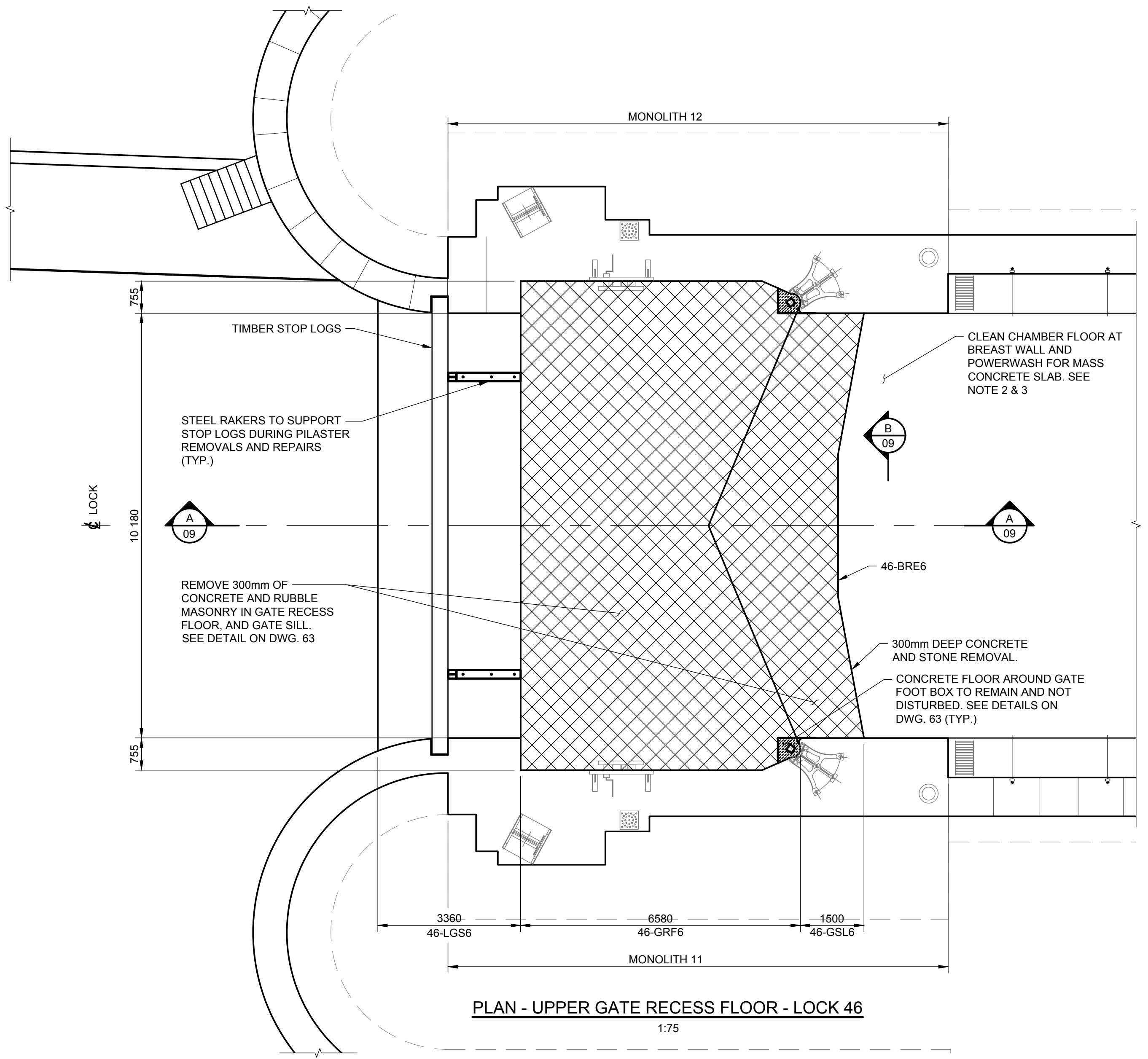
A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

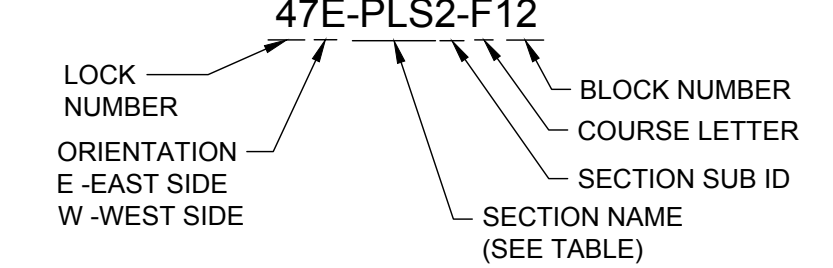
Lock 47 - 49
LANDSCAPING

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 08
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 10 of 78

- NOTES:**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 2. DEWATER CHAMBER FLOOR AND REMOVE ALL LOOSE DEBRIS.
 3. WATER BLAST BEDROCK WITHIN 3m OF BREAST WALL.
 4. REMOVE TIMBER GATE (NOT SHOWN) AND STORE IN ACCORDANCE WITH CONTRACT DOCUMENTS. PINION AT BOTTOM OF GATE TO NOT BE DISTURBED.
 5. FOLLOWING REMOVALS, ALL SUBGRADE AREAS ARE TO BE PROTECTED FROM FREEZING AND MAINTAINED FROST FREE DURING THE WORK.



STONE LABELING CODE



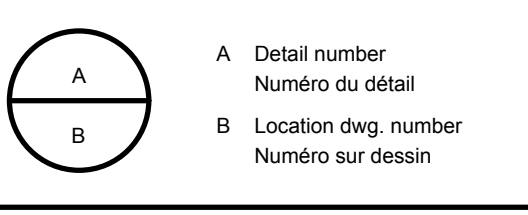
REMOVALS LEGEND

- [Pattern] CONCRETE AND CONCRETE/STONE REMOVALS FOR CONCRETE REPAIR
- [Pattern] FULL DEPTH STONE REMOVAL FOR FULL DEPTH STONE REPAIR
- [Pattern] PARTIAL DEPTH STONE
- [Pattern] PARTIAL DEPTH PARTIAL STONE REMOVAL
- [Pattern] EXCAVATION
- [Pattern] CLEAN FLOORS
- [Pattern] BEDROCK
- [Pattern] EXISTING FINISHED MASONRY
- [Pattern] GROUTED RUBBLE MASONRY
- [Pattern] RUBBLE MASONRY FILL
- [Pattern] NATIVE FILL
- [Pattern] EXISTING CONCRETE

ELEMENT NAMES	
PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BFM	BACK FACE OF MONOLITH
BFW	BACK FACE OF CHAMBER WALL
BRE	BREAST WALL
EBW	EAST BASIN WALL
NBW	NORTH BASIN WALL
WBW	WEST BASIN WALL
SBW	SOUTH BASIN WALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL

No.	Description	Rev. By	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

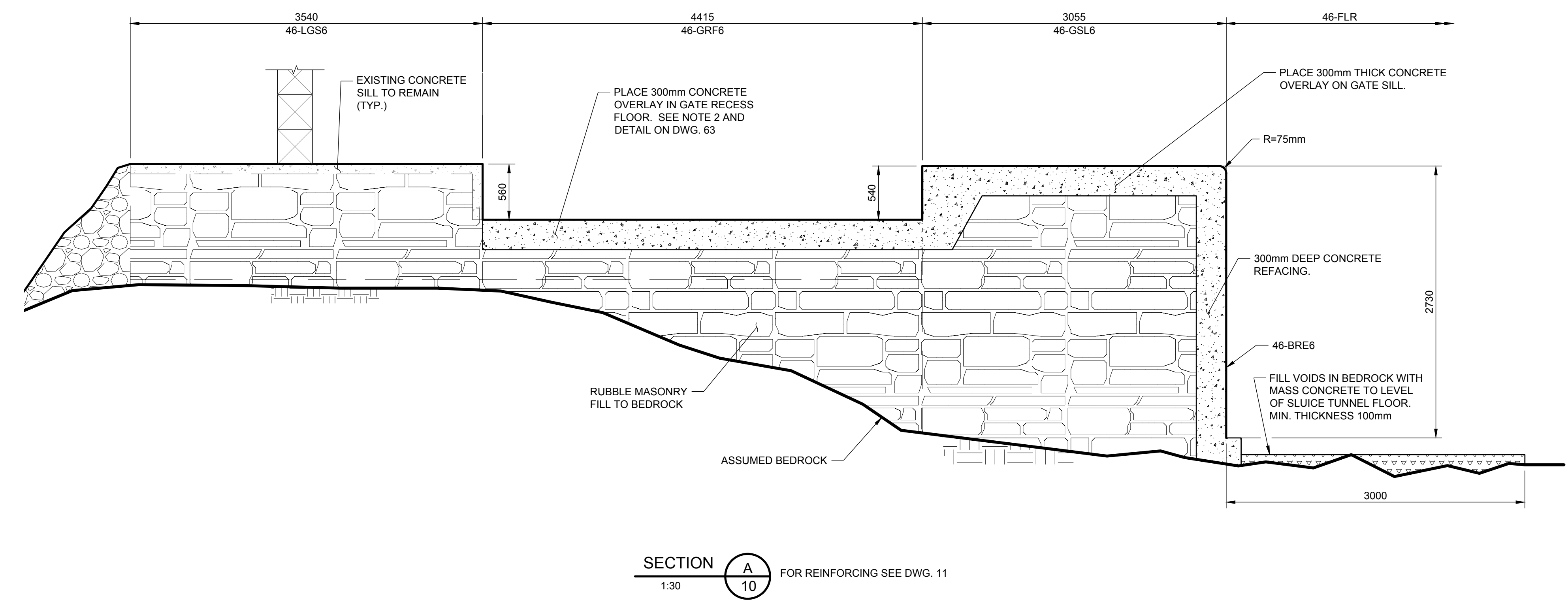
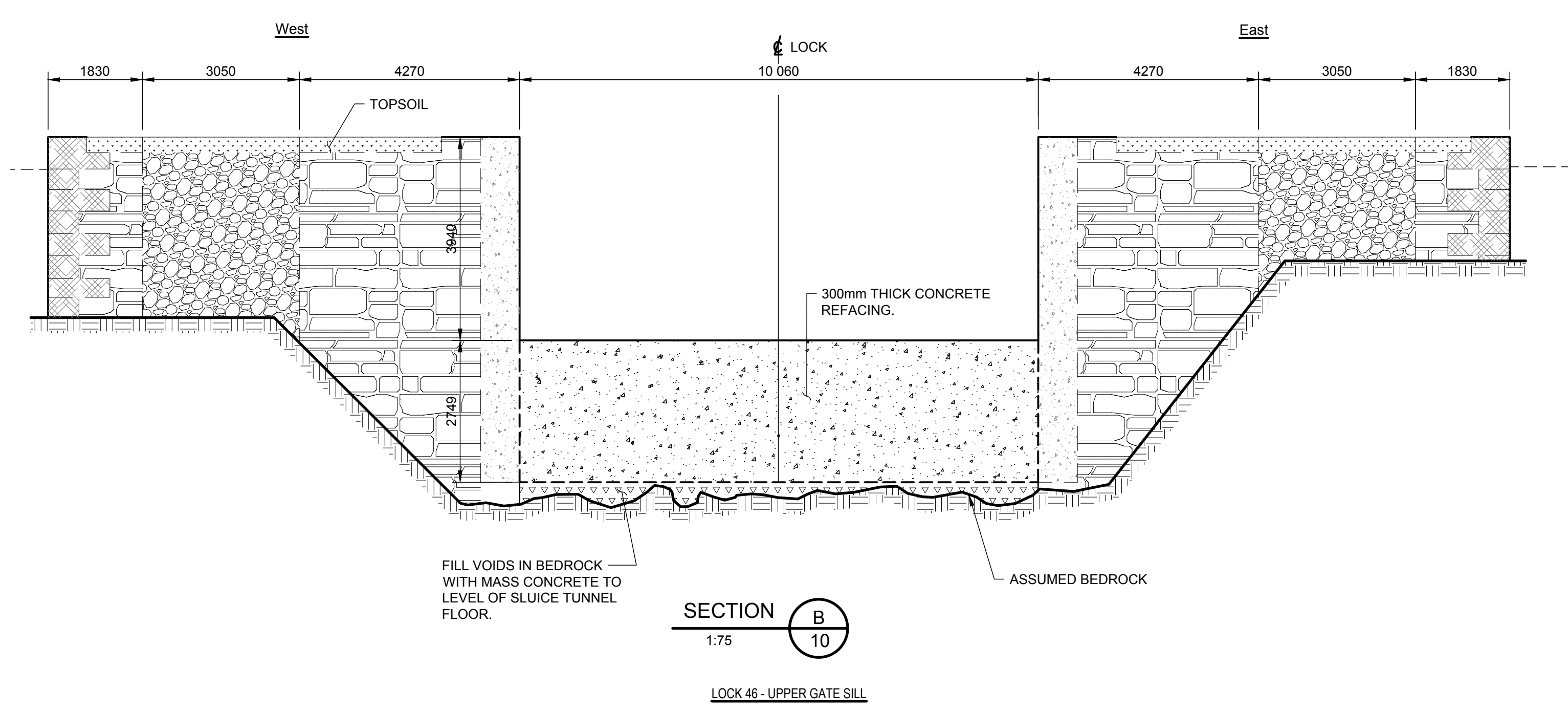
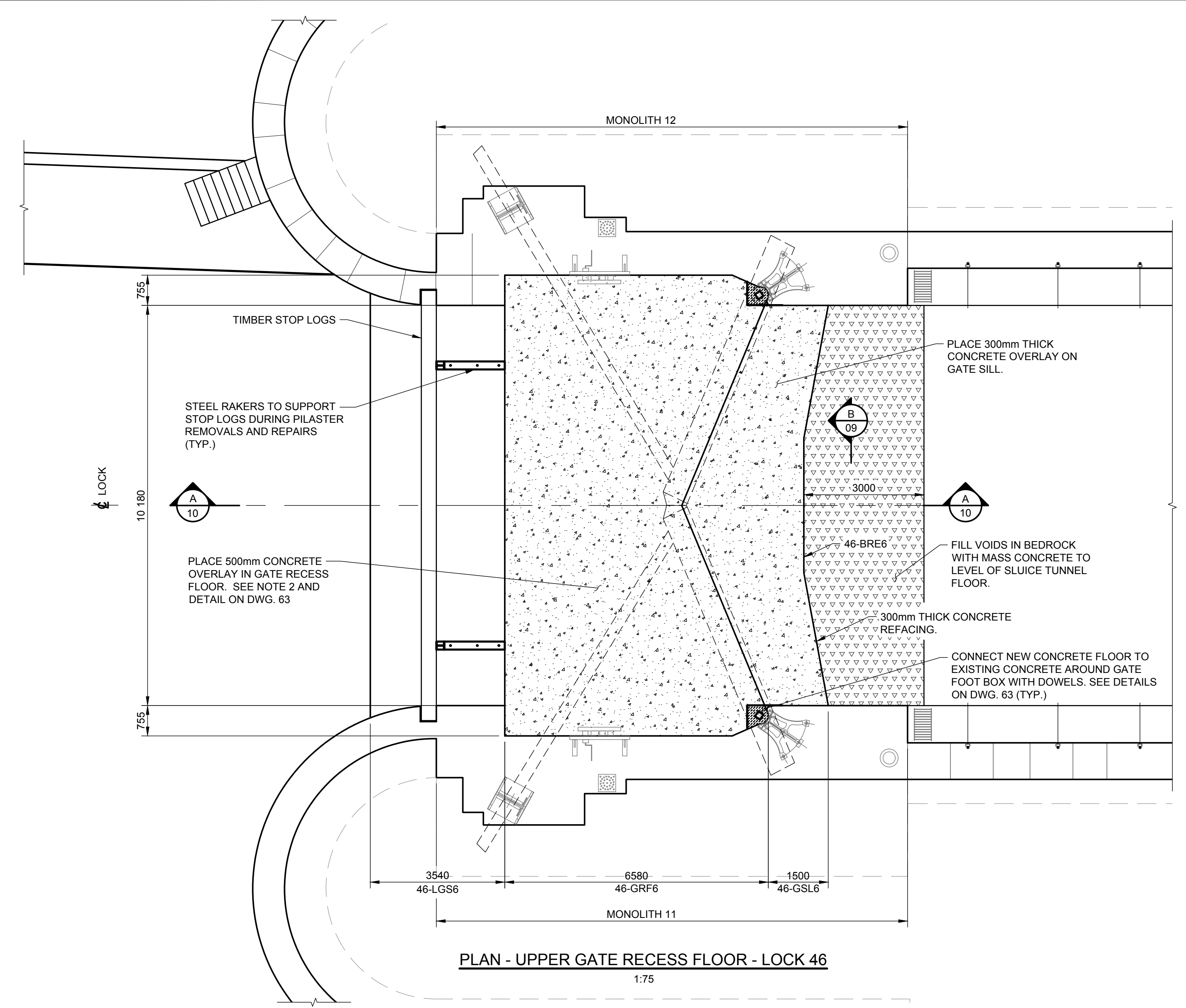


Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 46
 UPPER GATE RECESS
 FLOOR - REMOVALS**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 09
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 11 of 78

NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 2. FINAL FLOOR ELEVATION OF UPPER GATE RECESS FLOOR TO MATCH SLUICE TUNNEL INTAKE OPENING AND MUST NOT IMPEND GATE OPERATION.



REPAIR LEGEND:

[Pattern]	NEW CONCRETE
[Pattern]	NEW MASS CONCRETE
[Pattern]	NEW FULL DEPTH STONE
[Pattern]	NEW DUTCHMAN
[Pattern]	NEW PARTIAL DUTCHMAN
[Pattern]	CLEAR STONE FILL
[Pattern]	BEDROCK
[Pattern]	EXISTING FINISHED MASONRY
[Pattern]	GROUTED RUBBLE MASONRY
[Pattern]	RUBBLE MASONRY FILL
[Pattern]	NATIVE FILL
[Pattern]	EXISTING CONCRETE

STONE LABELING CODE

47E-PLS2-F12

LOCK NUMBER: 47
 ORIENTATION: E - EAST SIDE, W - WEST SIDE
 BLOCK NUMBER: PLS
 COURSE LETTER: 2
 SECTION SUB ID: F
 SECTION NAME: 12 (SEE TABLE)

ELEMENT NAMES

PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BFM	BACK FACE OF MONOLITH
BFW	BACK FACE OF CHAMBER WALL
BRE	BREAST WALL
EBW	EAST BASIN WALL
NBW	NORTH BASIN WALL
WBW	WEST BASIN WALL
SBW	SOUTH BASIN WALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number / Numéro du détail
B	Location dwg. number / Numéro sur dessin

Project title / Titre du projet
RIDEAU CANAL NATIONAL HISTORIC SITE KINGSTON MILLS LOCKS 46-49 REHABILITATION
 ELGIN ONTARIO

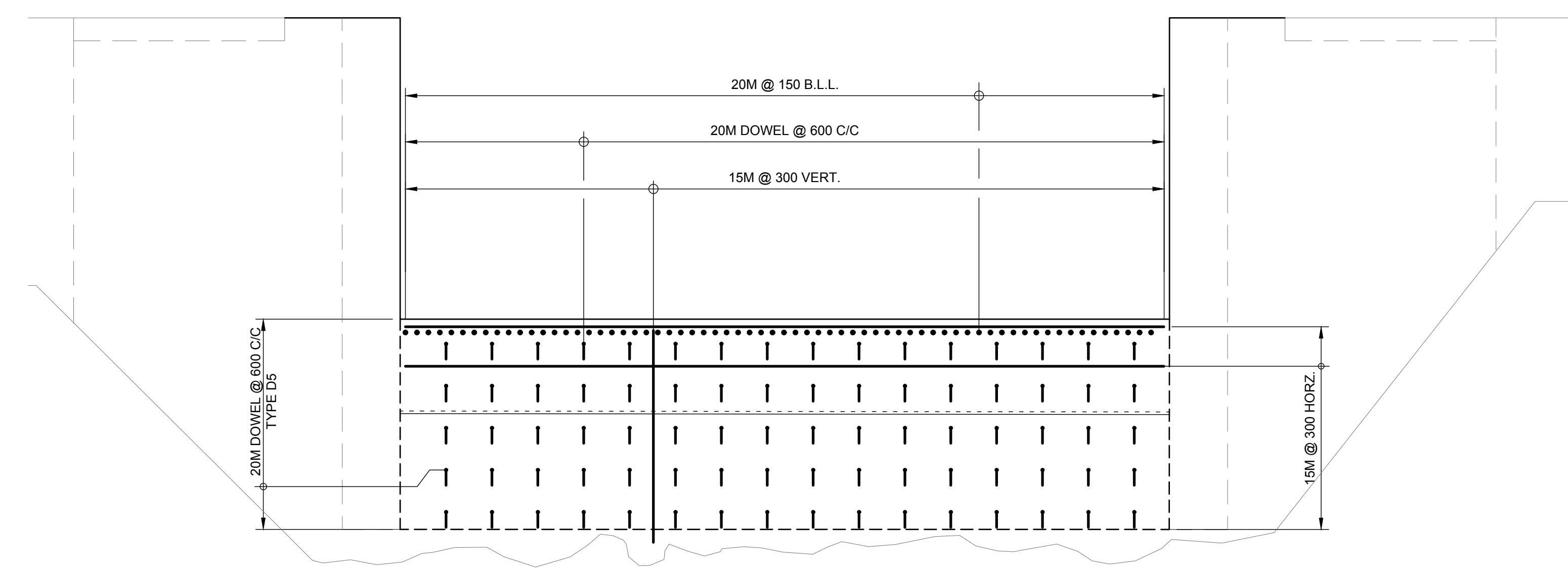
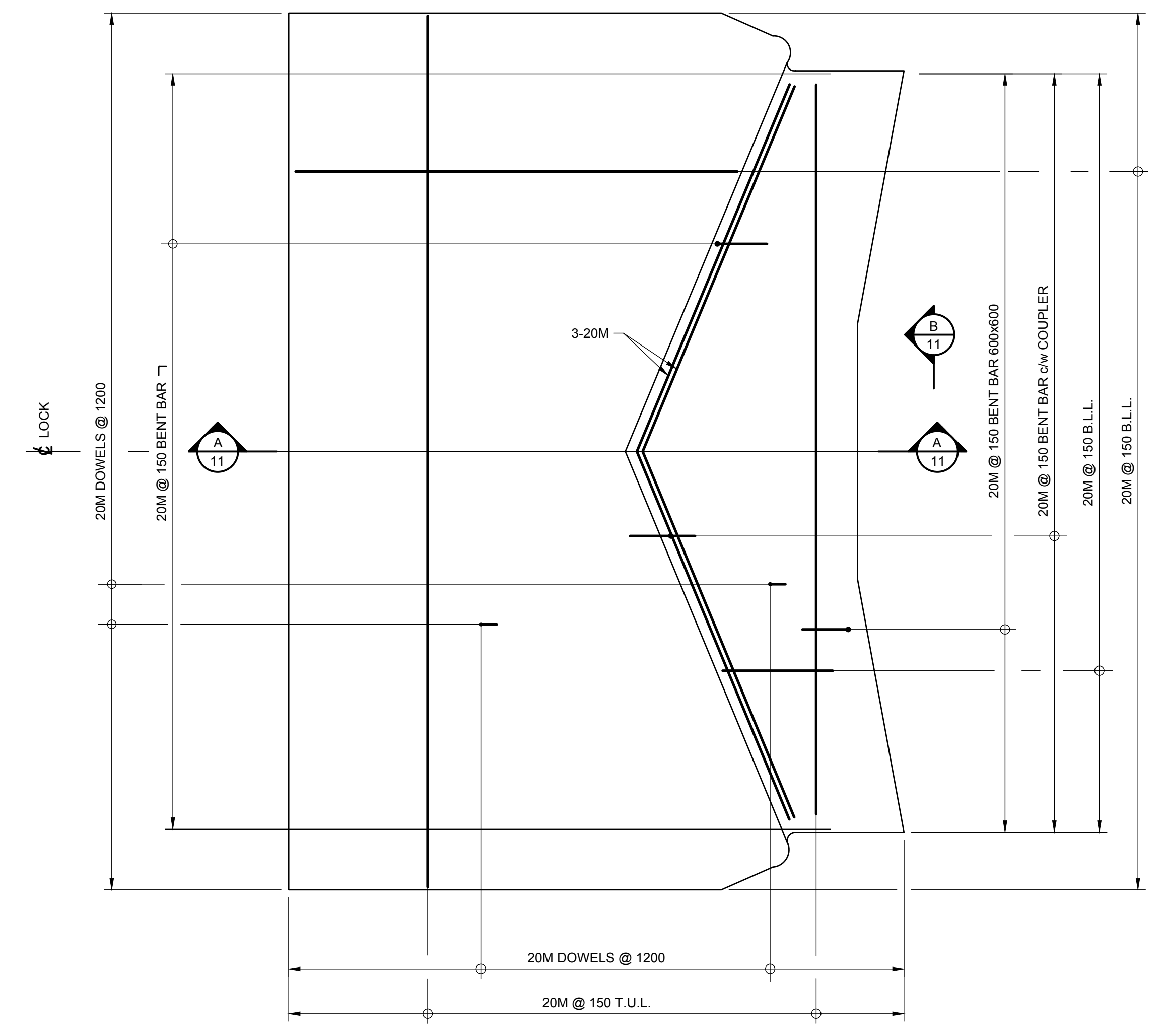
Drawing title / Titre du dessin
LOCK 46 UPPER GATE RECESS FLOOR - REPAIR

Drawn by / Dessiné par	Designed by / Conçu par
ADRIAN MEUNIER	FELIX WASIEWICZ
Approved by / Approuvé par	Drawing Date / Date du dessin
JULIA MARSON	JUNE 2018
Project manager / Administrateur de projet	Drawing Number / Numéro du Dessin
SHAWN FILLION	10
Project Number / Numéro du projet	Sheet / Feuille
R.079796.009	12 of 78

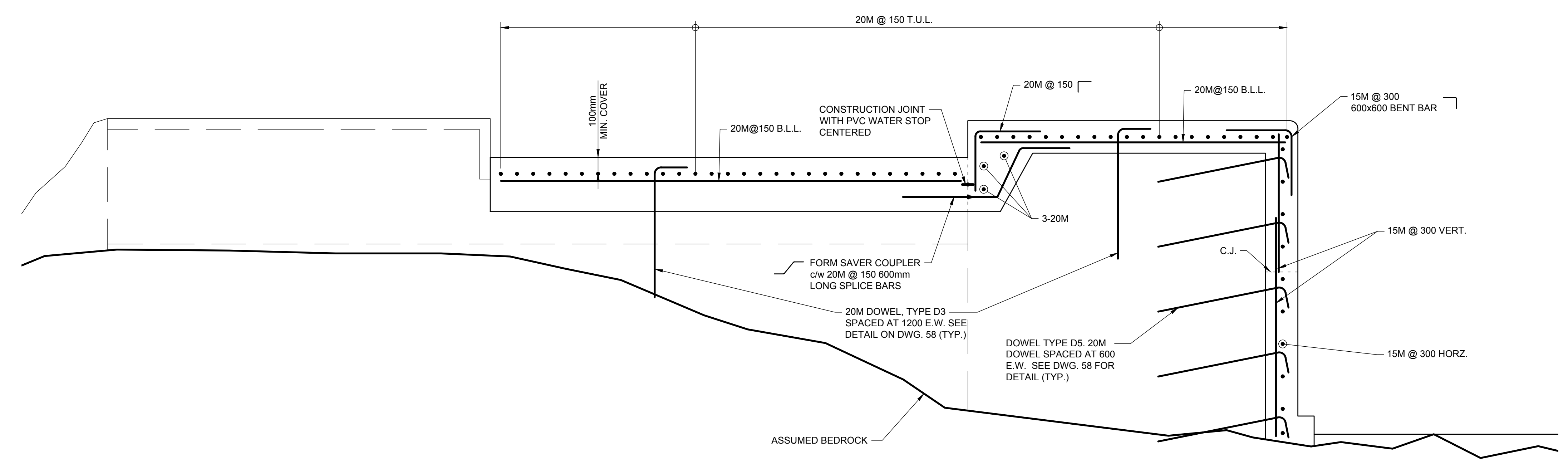
NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.



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SECTION B
 1:50 17



SECTION A
 1:25 11

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

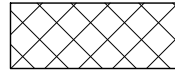


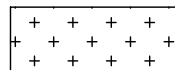
A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 46
 UPPER GATE RECESS
 FLOOR –
 REINFORCING**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 11
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 13 of 78

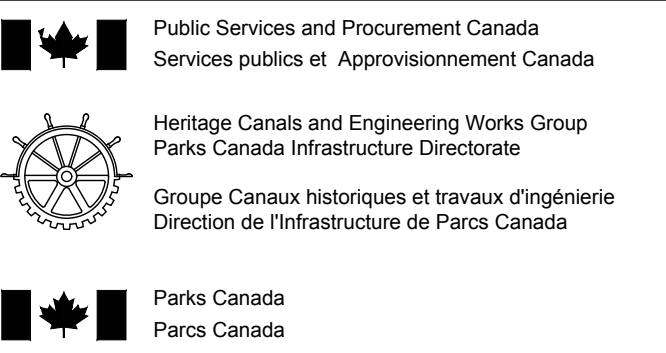
REPAIR LEGEND:

-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 200mm DEEP - SEE DETAILS DRAWINGS 62
-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 300mm DEEP - SEE DETAILS DRAWING 62
-  ISOLATED STONE REMOVALS FOR CONCRETE REPAIRS SEE DRAWING 64.
-  REPLACE CONCRETE COPING STONE SEE DETAILS DRAWING 64

- C DENOTES EXISTING CONCRETE
- S DENOTES EXISTING STONE TO BE REMOVED, SALVAGED, AND REINSTATED.

NOTES:

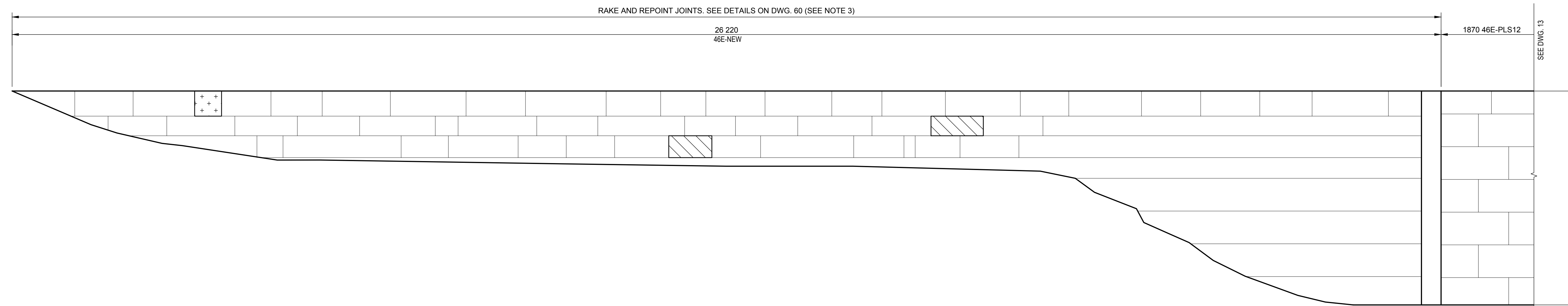
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
3. JOINT RAKING AND REPOINT IS REQUIRED LOCALLY THROUGHOUT THE WALL BOTH ABOVE AND BELOW WATER LEVEL, AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE.



Canada



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NORTHEAST WINGWALL ELEVATION
1:40

No.	Description	Drawn By / Des. Par.	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 46
NORTHEAST WINGWALL
- REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Project Number / Numéro du projet R.079796.009
Drawing Number / Numéro du Dessin 12	
Sheet / Feuille 14 of 78	

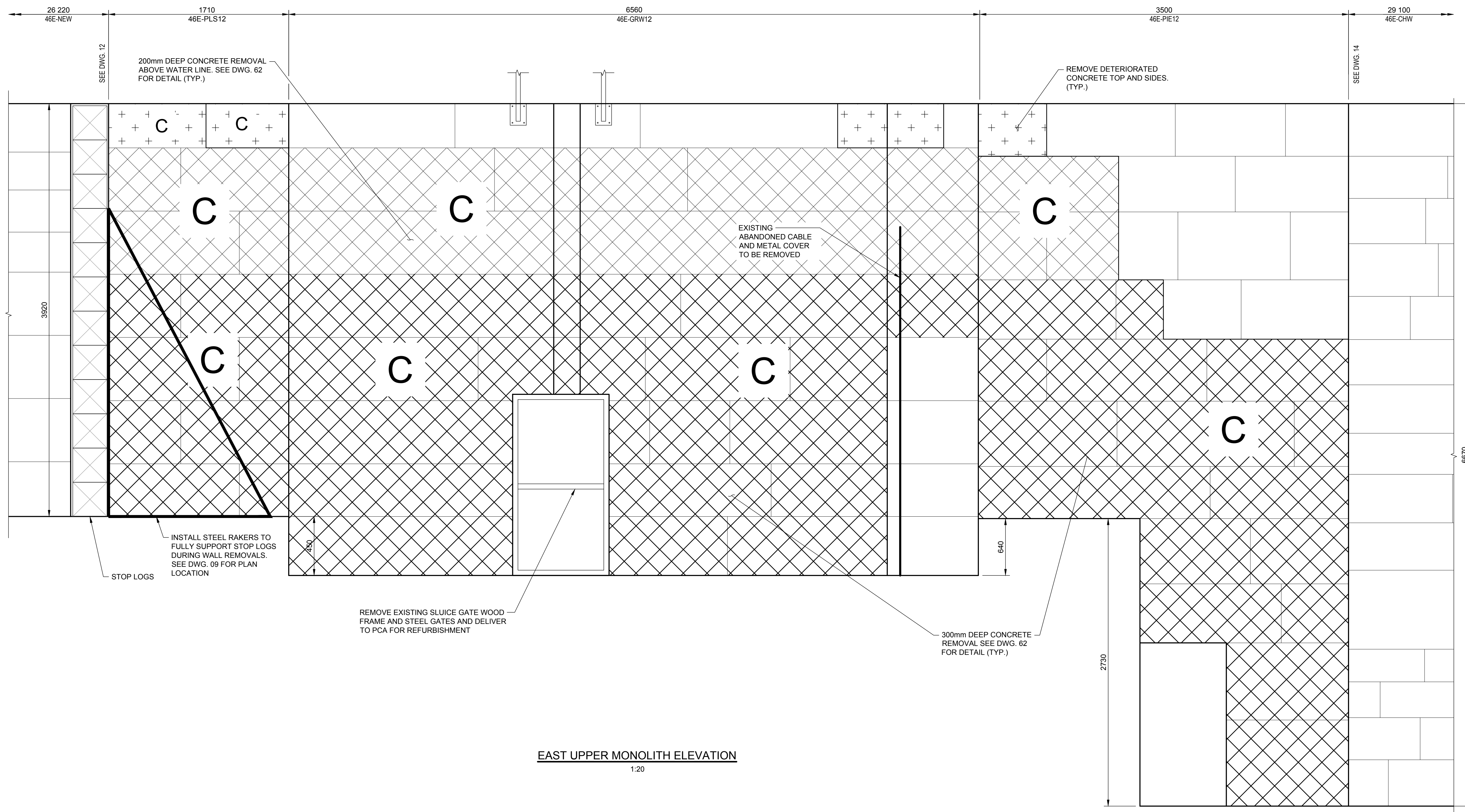


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- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 - CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.

- REPAIR LEGEND:**
- CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 200mm DEEP - SEE DETAILS DRAWINGS 62
 - CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 300mm DEEP - SEE DETAILS DRAWING 62
 - ISOLATED STONE REMOVALS FOR CONCRETE REPAIRS SEE DRAWING 64.
 - REPLACE CONCRETE COPING STONE SEE DETAILS DRAWING 64

- C DENOTES EXISTING CONCRETE
- S DENOTES EXISTING STONE TO BE REMOVED, SALVAGED, AND REINSTATED.



No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

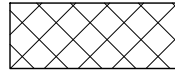


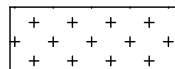
A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

**LOCK 46
 EAST UPPER
 MONOLITH - REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 13
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 15 of 78

REPAIR LEGEND:

-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 200mm DEEP - SEE DETAILS DRAWINGS 62
-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 300mm DEEP - SEE DETAILS DRAWING 62
-  ISOLATED STONE REMOVALS FOR CONCRETE REPAIRS SEE DRAWING 64.
-  REPLACE CONCRETE COPING STONE SEE DETAILS DRAWING 64

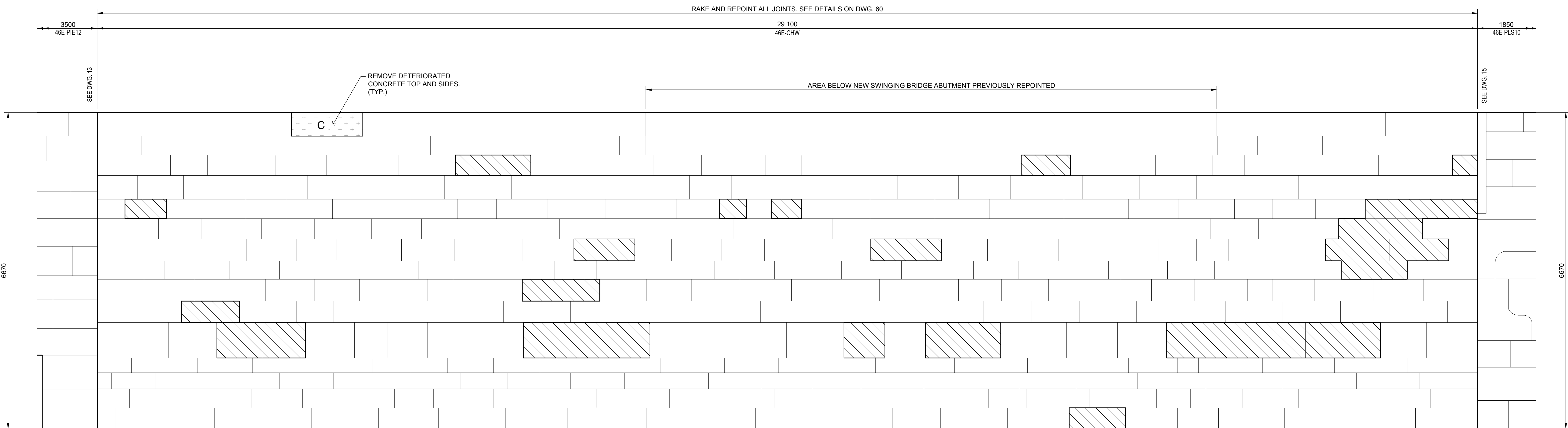
- C DENOTES EXISTING CONCRETE
- S DENOTES EXISTING STONE TO BE REMOVED, SALVAGED, AND REINSTATED.

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



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EAST CHAMBER WALL ELEVATION
1:40



1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO




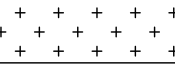
Drawing title / Titre du dessin
**LOCK 46
EAST CHAMBER WALL
- REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 14
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 16 of 78

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.

REPAIR LEGEND:

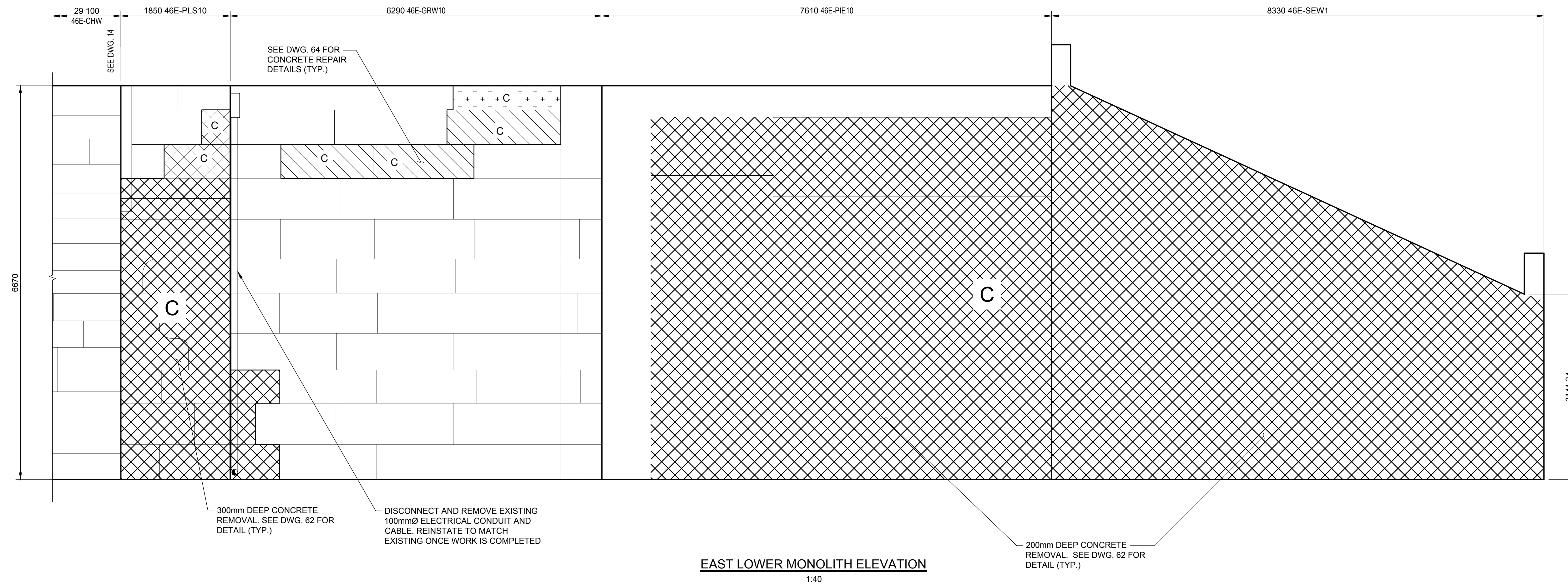
-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 200mm DEEP - SEE DETAILS DRAWINGS 62
-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 300mm DEEP - SEE DETAILS DRAWING 62
-  ISOLATED STONE REMOVALS FOR CONCRETE REPAIRS SEE DRAWING 64.
-  REPLACE CONCRETE COPING STONE SEE DETAILS DRAWING 64

- C DENOTES EXISTING CONCRETE
- S DENOTES EXISTING STONE TO BE REMOVED, SALVAGED, AND REINSTATED.

Canada



300-2611 QUEENSWAY DRIVE
OTTAWA (ON) K2B 9K2
CANADA K2B 9K2
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No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

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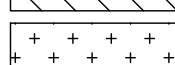
A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 46
EAST LOWER
MONOLITH - REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 15
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 17 of 78

REPAIR LEGEND:

-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 200mm DEEP - SEE DETAILS DRAWINGS 62
-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 300mm DEEP - SEE DETAILS DRAWING 62
-  ISOLATED STONE REMOVALS FOR CONCRETE REPAIRS SEE DRAWING 64.
-  REPLACE CONCRETE COPING STONE SEE DETAILS DRAWING 64

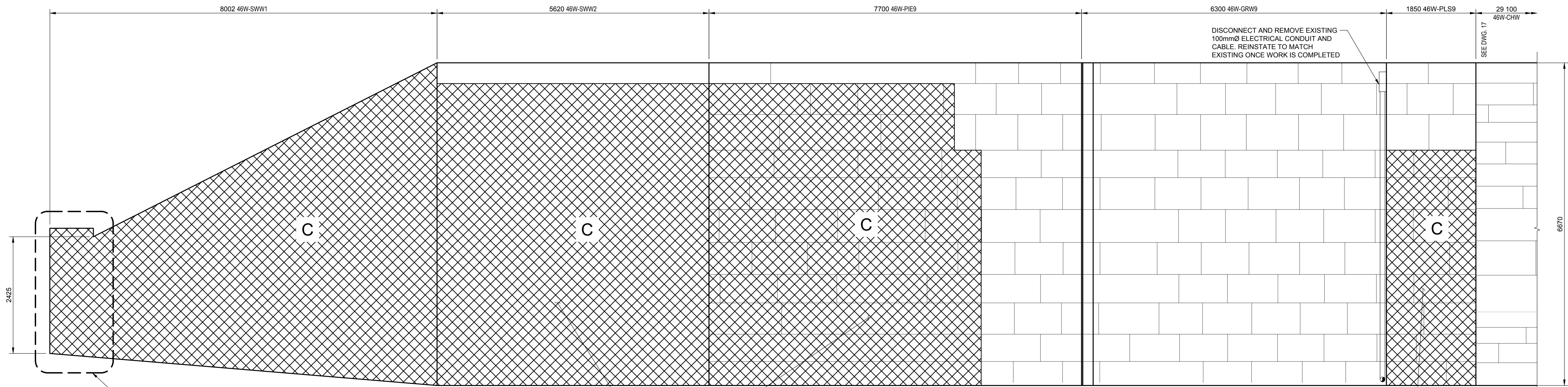
- C DENOTES EXISTING CONCRETE
- S DENOTES EXISTING STONE TO BE REMOVED, SALVAGED, AND REINSTATED.

NOTES:

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WEST LOWER MONOLITH ELEVATION
1:40

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

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A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet

**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**

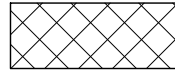


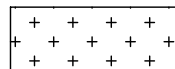
ELGIN ONTARIO

Drawing title / Titre du dessin

**LOCK 46
WEST LOWER
MONOLITH - REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 16
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 18 of 78

REPAIR LEGEND:

-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 200mm DEEP - SEE DETAILS DRAWINGS 62
-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 300mm DEEP - SEE DETAILS DRAWING 62
-  ISOLATED STONE REMOVALS FOR CONCRETE REPAIRS SEE DRAWING 64.
-  REPLACE CONCRETE COPING STONE SEE DETAILS DRAWING 64

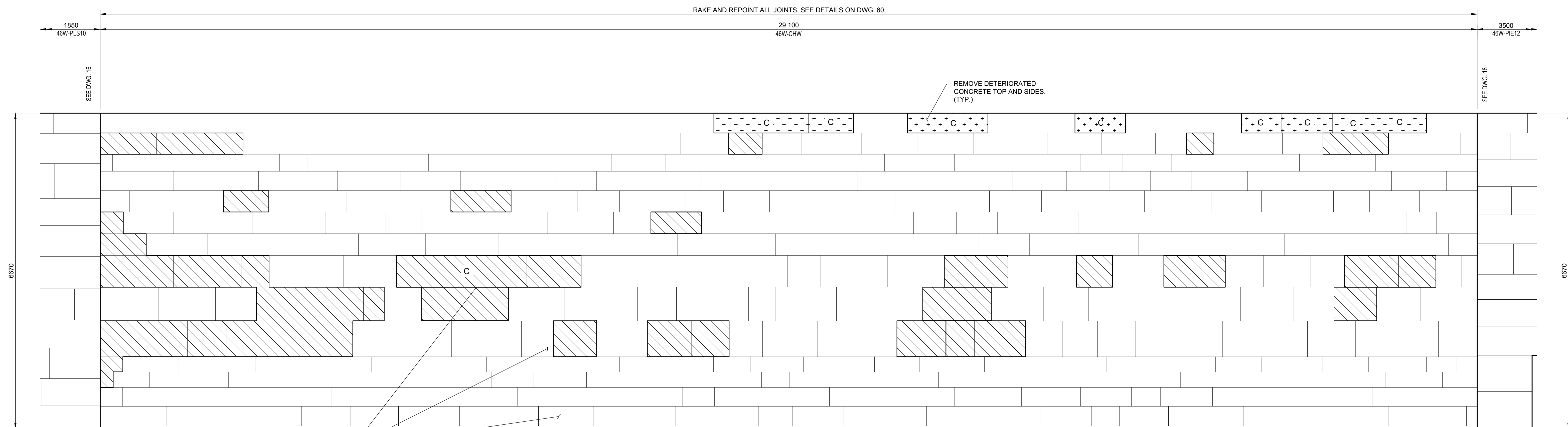
- C DENOTES EXISTING CONCRETE
- S DENOTES EXISTING STONE TO BE REMOVED, SALVAGED, AND REINSTATED.

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WEST CHAMBER WALL ELEVATION

1:40

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

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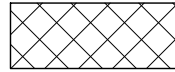


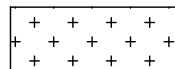
A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 46
WEST CHAMBER WALL
- REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 17
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 19 of 78

REPAIR LEGEND:

-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 200mm DEEP - SEE DETAILS DRAWINGS 62
-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 300mm DEEP - SEE DETAILS DRAWING 62
-  ISOLATED STONE REMOVALS FOR CONCRETE REPAIRS SEE DRAWING 64.
-  REPLACE CONCRETE COPING STONE SEE DETAILS DRAWING 64

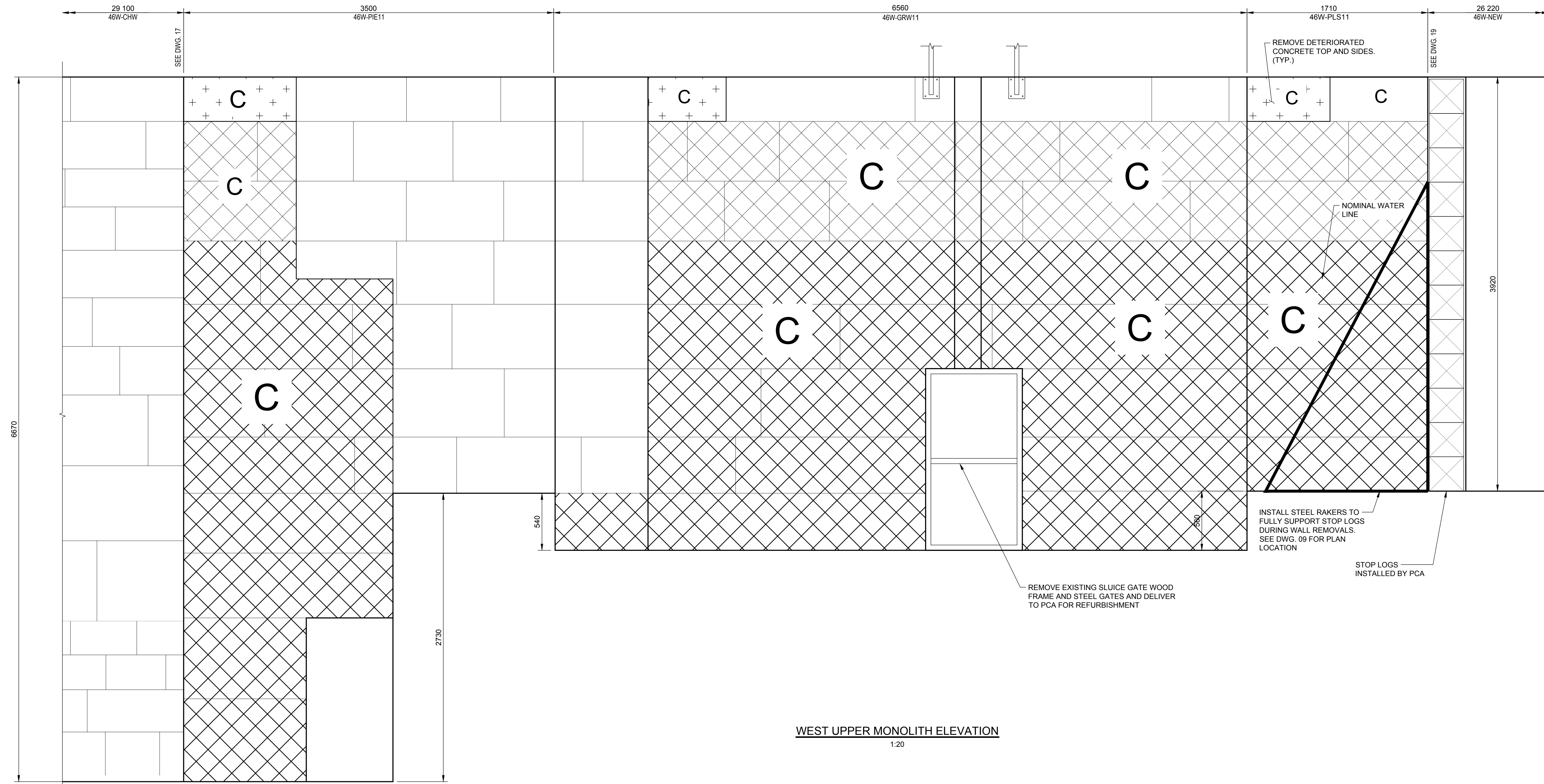
- C DENOTES EXISTING CONCRETE
- S DENOTES EXISTING STONE TO BE REMOVED, SALVAGED, AND REINSTATEMENT.

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



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WEST UPPER MONOLITH ELEVATION
1:20

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

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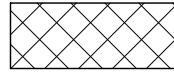


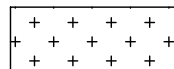
A	Detail number / Numéro du détail
B	Location dwg. number / Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 46
 WEST UPPER MONOLITH
 - REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 18
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 20 of 78

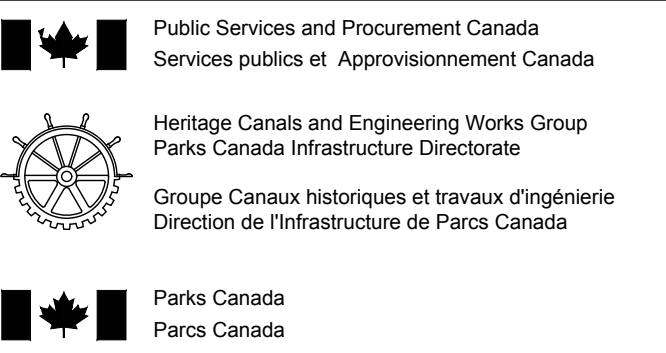
REPAIR LEGEND:

-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 200mm DEEP - SEE DETAILS DRAWINGS 62
-  CONCRETE AND/OR STONE REMOVALS AND REINSTATEMENT, 300mm DEEP - SEE DETAILS DRAWING 62
-  ISOLATED STONE REMOVALS FOR CONCRETE REPAIRS SEE DRAWING 64.
-  REPLACE CONCRETE COPING STONE SEE DETAILS DRAWING 64

- C DENOTES EXISTING CONCRETE
- S DENOTES EXISTING STONE TO BE REMOVED, SALVAGED, AND REINSTATED.

NOTES:

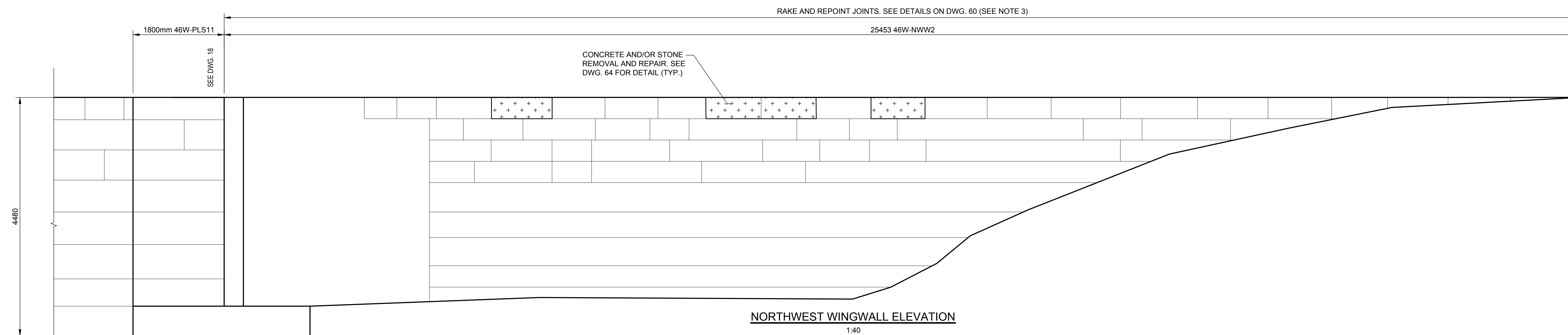
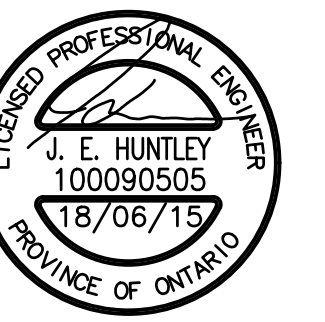
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
3. JOINT RAKING AND REPOINT IS REQUIRED LOCALLY THROUGHOUT THE WALL BOTH ABOVE AND BELOW WATER LEVEL, AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE.



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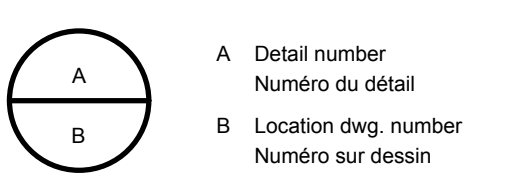


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No.	Description	Des. By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

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- A Detail number / Numéro du détail
- B Location dwg. number / Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 46
NORTHWEST WINGWALL
- REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 19
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 21 of 78

YEAR 1 - SEQUENCE OF WORK:

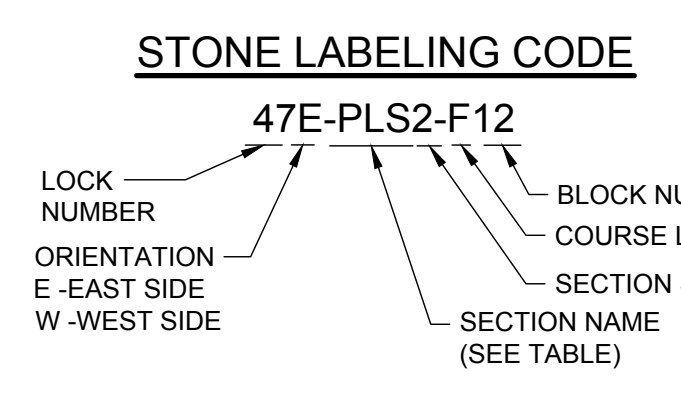
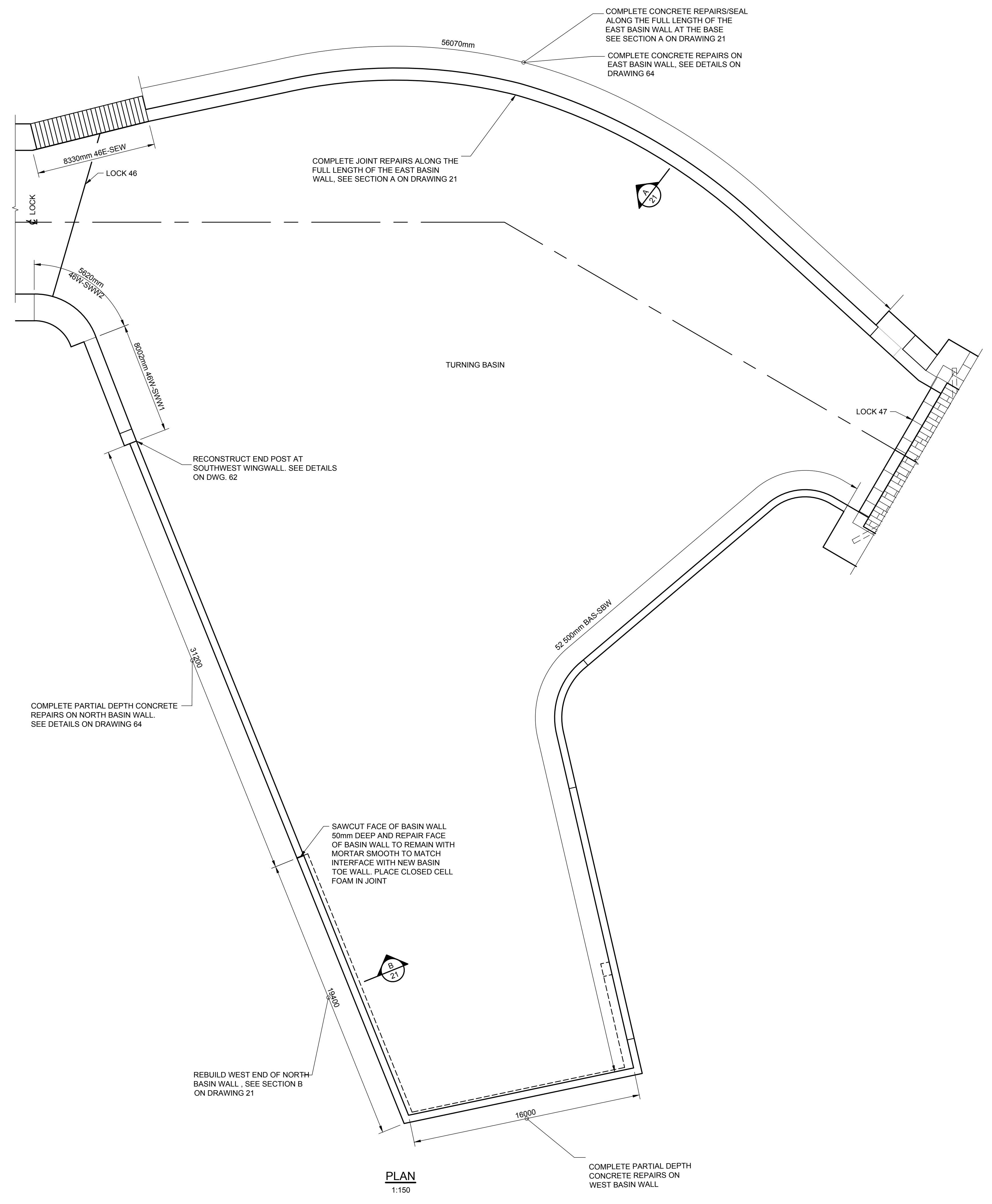
- A. INSTALL HEATED ENCLOSURE FOR THE EAST BASIN WALL
- B. REMOVE DETERIORATED CONCRETE AND STONE AT BASE OF EAST BASIN WALL
- C. REPAIR BOTTOM OF EAST BASIN WALL:
 - EXCAVATE A 300mm WIDE AND 100mm DEEP POCKET ALONG THE BOTTOM OF THE EAST WALL.
 - CAST CONCRETE SEAL IN POCKET TO CREATE A SEAL.
 - REGRADE THE FLOOR OF THE BASIN AT THE EAST BASIN WALL.
- D. PLACE NEW REINFORCED CONCRETE PATCH AT BASE OF EAST BASIN WALL TO BEDROCK
- E. REPAIR TO JOINT LINE IN EAST BASIN WALL:
 - REMOVE MORTAR IN JOINTS THE FULL LENGTH OF THE WALL.
 - THE WIDTH OF REMOVALS 100-200mm.
 - DEPTH OF REMOVALS 25-100mm.
 - REPAIR OPENED JOINT WITH MORTAR.
- F. REMOVE HOUSING AND HEATING ENCLOSURE FOR THE EAST BASIN WALL
- G. INSTALL HEATED ENCLOSURE FOR THE NORTH BASIN WALL
- H. REMOVE SECTION AT THE WEST END OF THE NORTH BASIN WALL
- I. INSTALL NEW CONCRETE TOE WALL
- J. REGRADE EMBANKMENT BEHIND TO MATCH TOP OF WALL.
- K. REGRADE BASIN FLOOR AT WEST END OF NORTH BASIN WALL.
- L. REMOVE DETERIORATED CONCRETE FROM THE REMAINDER OF THE NORTH BASIN WALL.
- M. PLACE NEW REINFORCED CONCRETE REPAIRS IN THE REMAINDER OF THE NORTH BASIN WALL
- N. REMOVE HEATED ENCLOSURE FOR THE NORTH BASIN WALL
- O. RECONSTRUCT END POST AT SOUTHWEST WINGWALL OF LOCK 46.
 - EXCAVATE THE FILL BEHIND END POST AS REQUIRED.
 - DISMANTLE END POST AT THE END OF THE SOUTHWEST WINGWALL.
 - PLACE NEW REINFORCED CONCRETE END POST IN CONCRETE.
 - REINSTATEMENT OF FILL BEHIND THE WALL.
- P. INSTALL HEATED ENCLOSURE FOR THE WEST BASIN WALL
- Q. REMOVE DETERIORATED CONCRETE IN WEST BASIN WALL
- R. PLACE NEW REINFORCED CONCRETE IN WEST BASIN WALL
- S. REMOVE HEATED ENCLOSURE FOR THE WEST BASIN WALL
- T. APPLY PENETRATING CONCRETE SEALER TO TOP SURFACE OF ALL BASIN WALL

YEAR 2 - SEQUENCE OF WORK:

NO WORK

YEAR 3 - SEQUENCE OF WORK:

NO WORK

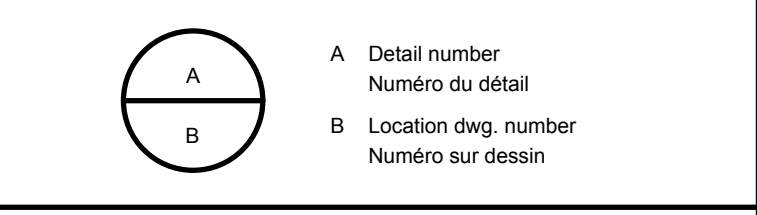


ELEMENT NAMES	
PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BFM	BACK FACE OF MONOLITH
BFW	BACK FACE OF CHAMBER WALL
BRE	BREAST WALL
EBW	EAST BASIN WALL
NBW	NORTH BASIN WALL
WBW	WEST BASIN WALL
SBW	SOUTH BASIN WALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL



1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

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Project title / Titre du projet

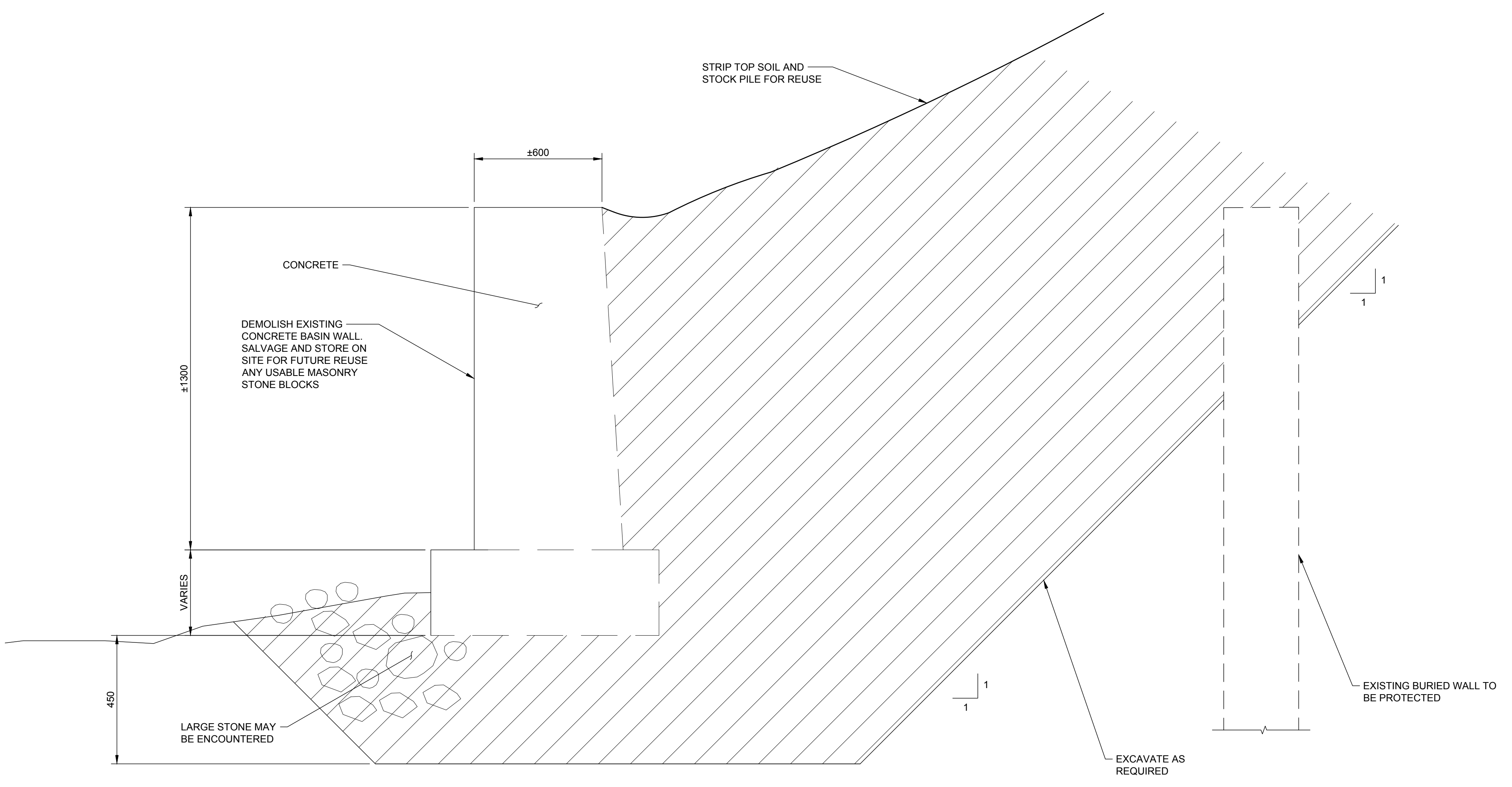
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**

ELGIN ONTARIO

Drawing title / Titre du dessin

**TURNING BASIN GENERAL
ARRANGEMENT**

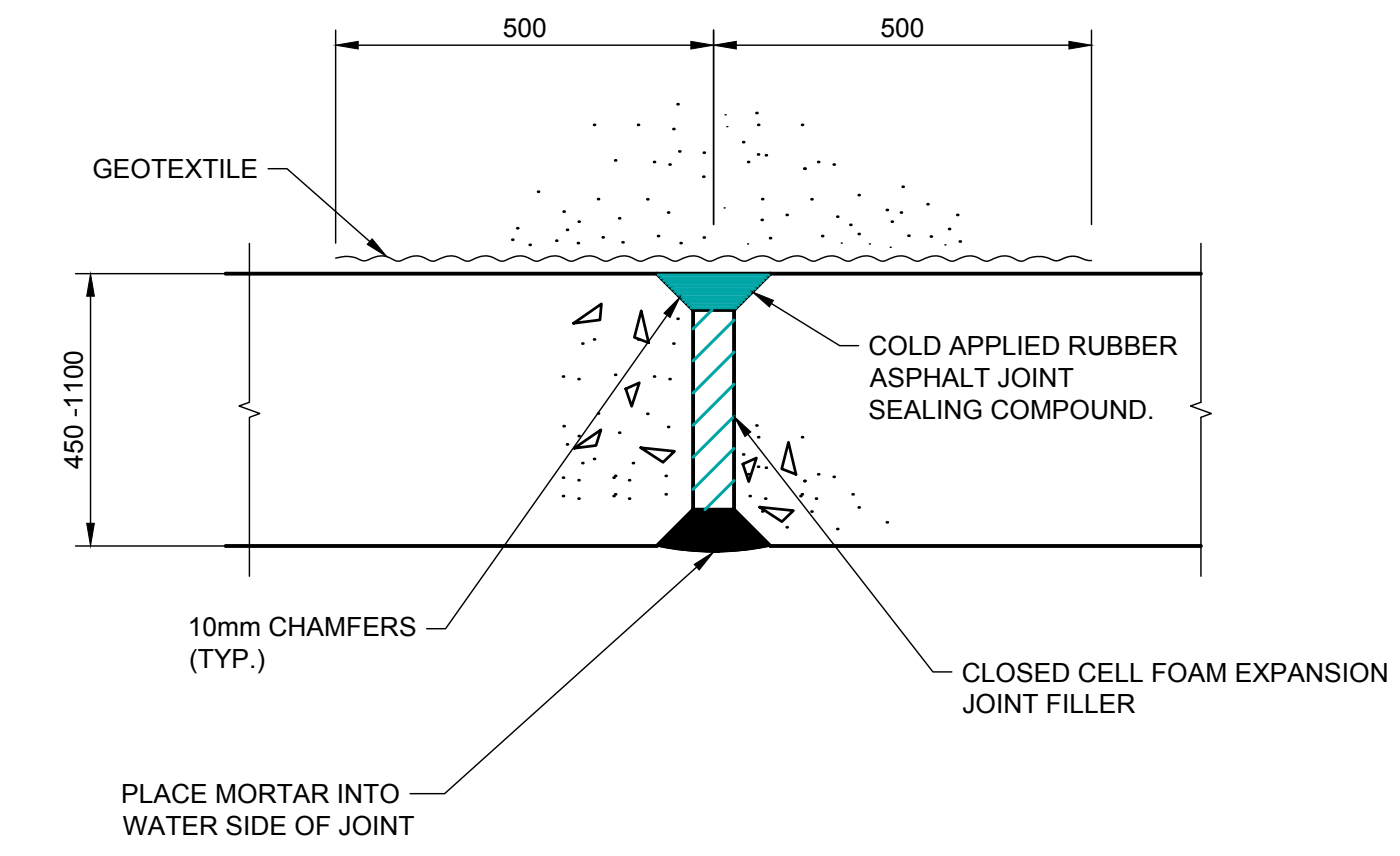
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 20
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 22 of 78



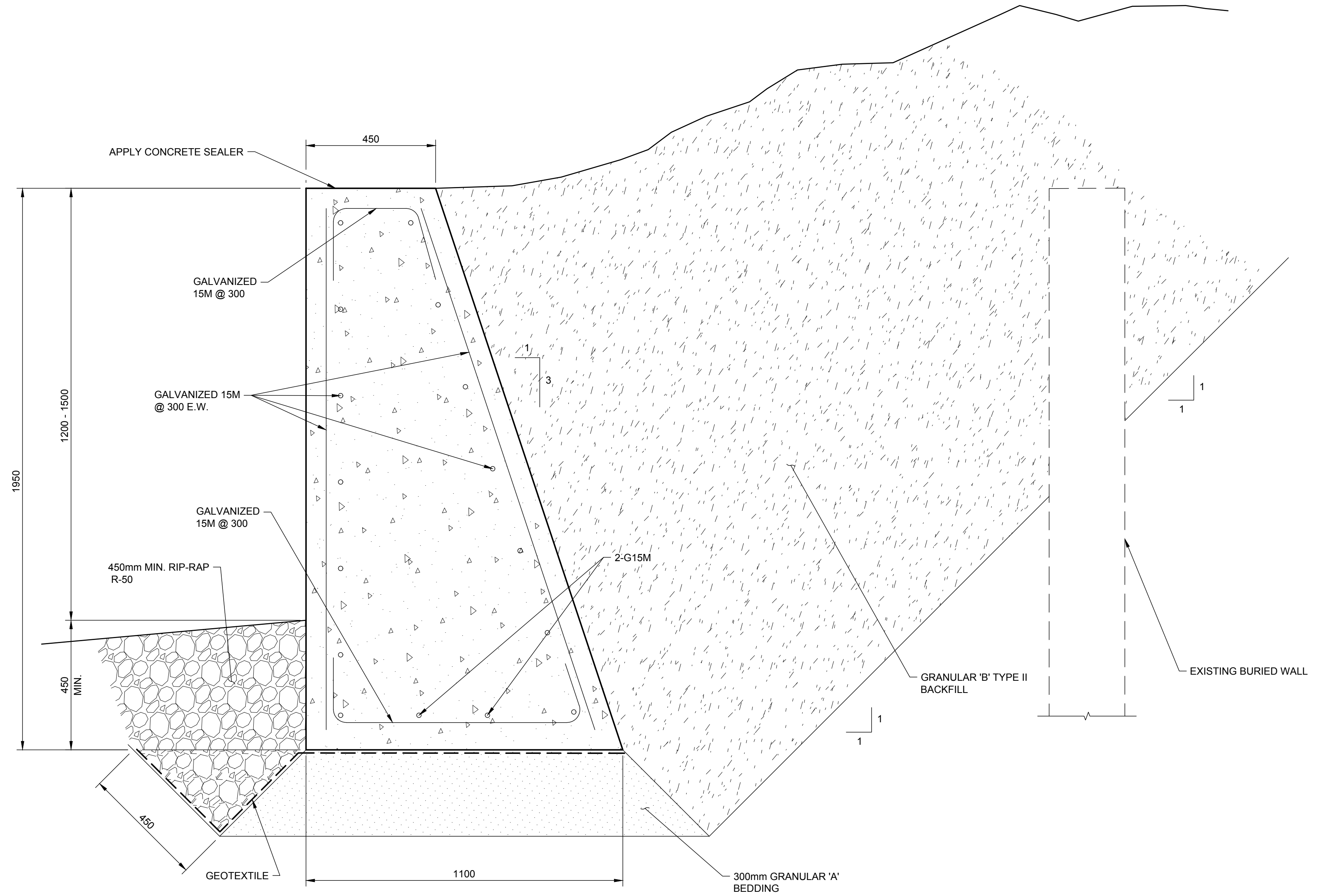
SECTION **B** NORTH BASIN WALL - REMOVAL
 1:10 **21** 1:10

DESIGN NOTES:

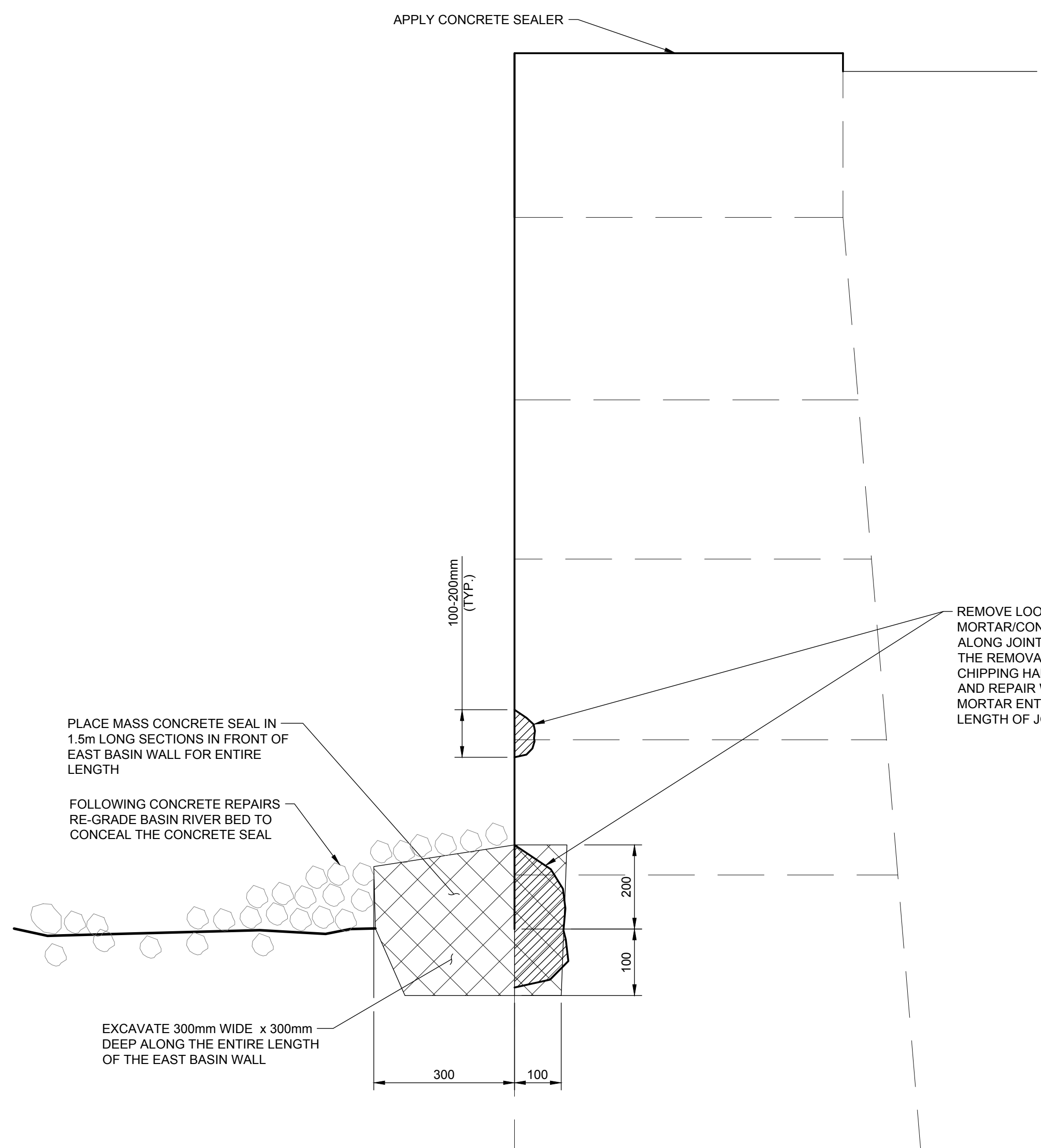
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. EXISTING STRUCTURAL WALL SYSTEM IS UNKNOWN.



PLAN OF JOINT DETAIL IN CONCRETE
 TOE WALLS AT 3.0m SPACING
 1:10



SECTION **B** NORTH BASIN WALL - NEW
 1:10 **21** 1:10



SECTION **A** EAST BASIN WALL - REMOVAL AND REPAIR
 1:10 **21** 1:10




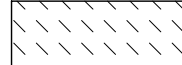
1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

**TURNING BASIN -
 DETAILS**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILION	Drawing Number / Numéro du Dessin 21
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 23 of 78

- REPAIR LEGEND:**
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
 -  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
 -  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
 -  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
 - C DENOTES EXISTING CONCRETE
 - S DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

- NOTES:**
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Public Services and Procurement Canada
Services publics et Approvisionnement Canada

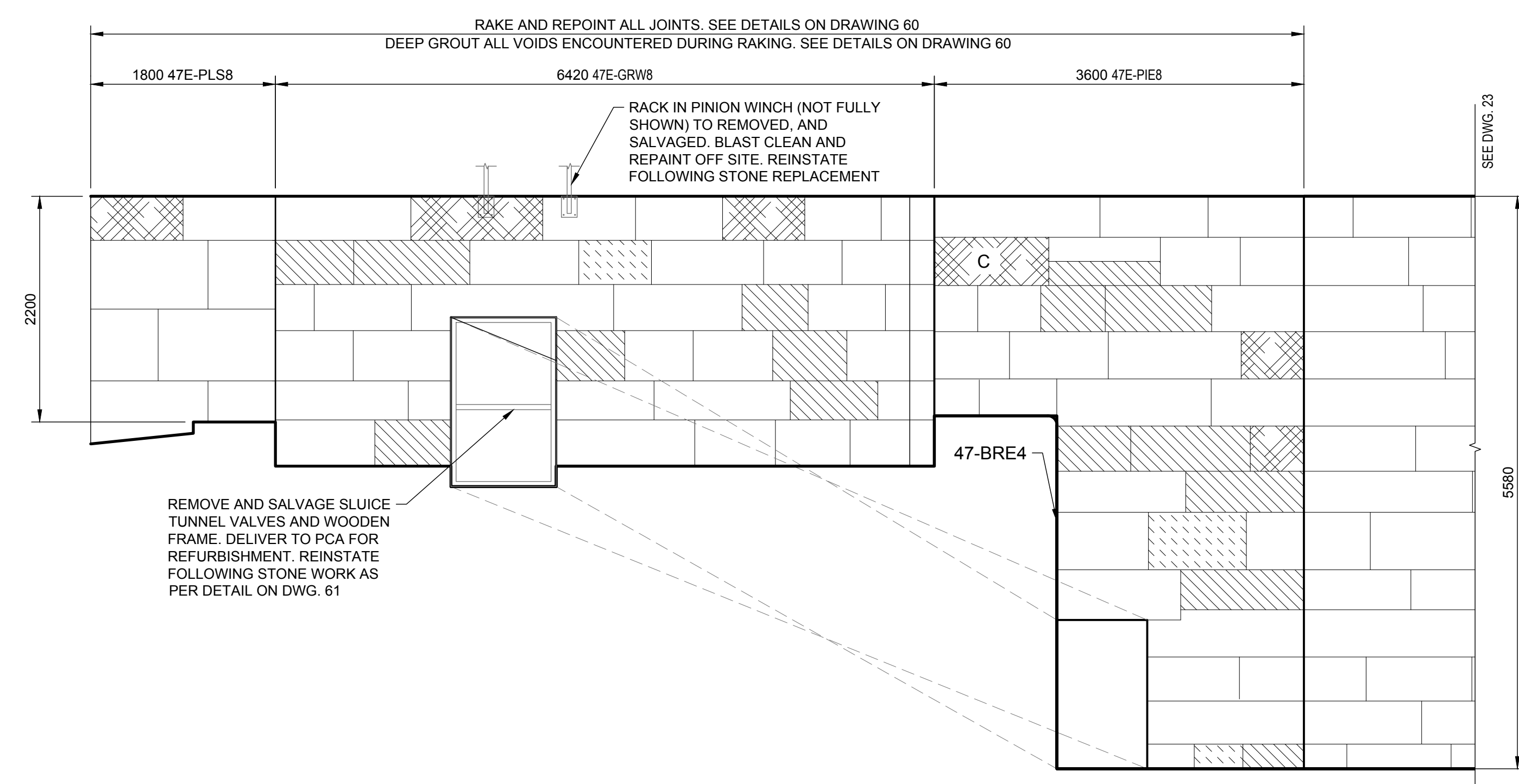
Heritage Canals and Engineering Works Group
Parcs Canada Infrastructure Directorate
Groupe Canaux historiques et travaux d'ingénierie
Direction de l'infrastructure de Parcs Canada

Parcs Canada
Parcs Canada

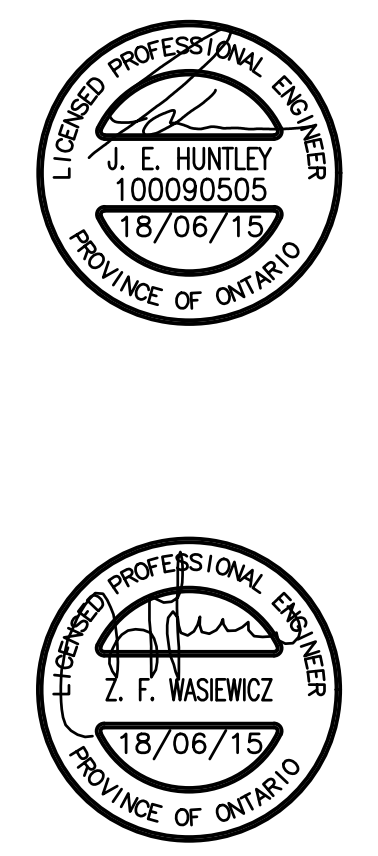
Canada

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OTTAWA (ONTARIO)
CANADA K2B 8K2
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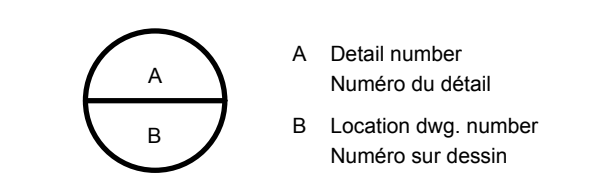


EAST MONOLITH 8 ELEVATION - LOCK 47 UPPER
1:40



1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

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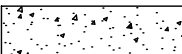


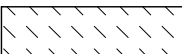
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**

ELGIN ONTARIO

Drawing title / Titre du dessin

**LOCK 47
EAST MONOLITH 8 -
REPAIR**

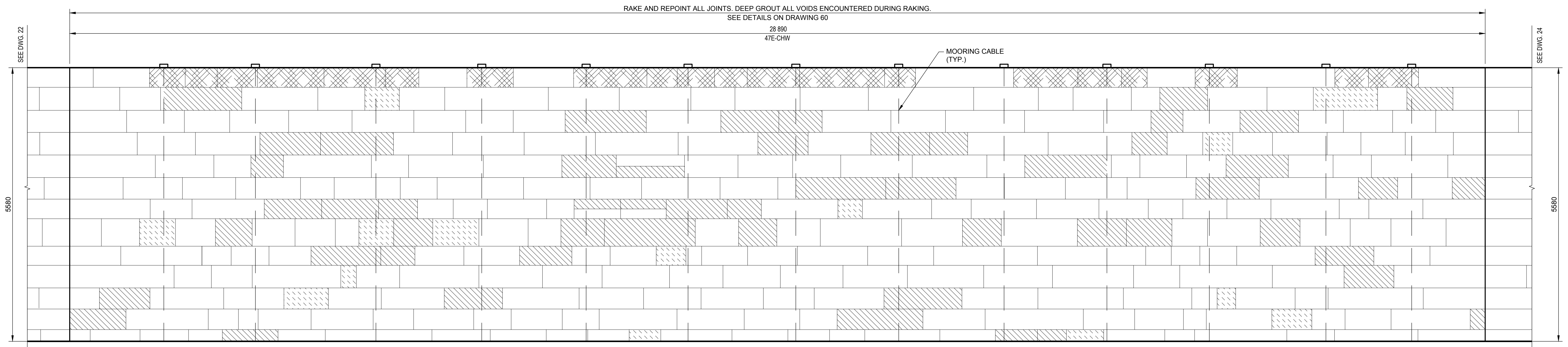
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 22
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 24 of 78

- REPAIR LEGEND:**
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
 -  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
 -  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
 -  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
 - C** DENOTES EXISTING CONCRETE
 - S** DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 - CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



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EAST CHAMBER WALL ELEVATION - LOCK 47
 1:40

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.




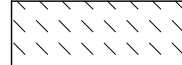
A Detail number / Numéro du détail
 B Location dwg. number / Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 47
 EAST CHAMBER WALL -
 REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 23
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 25 of 78

REPAIR LEGEND:

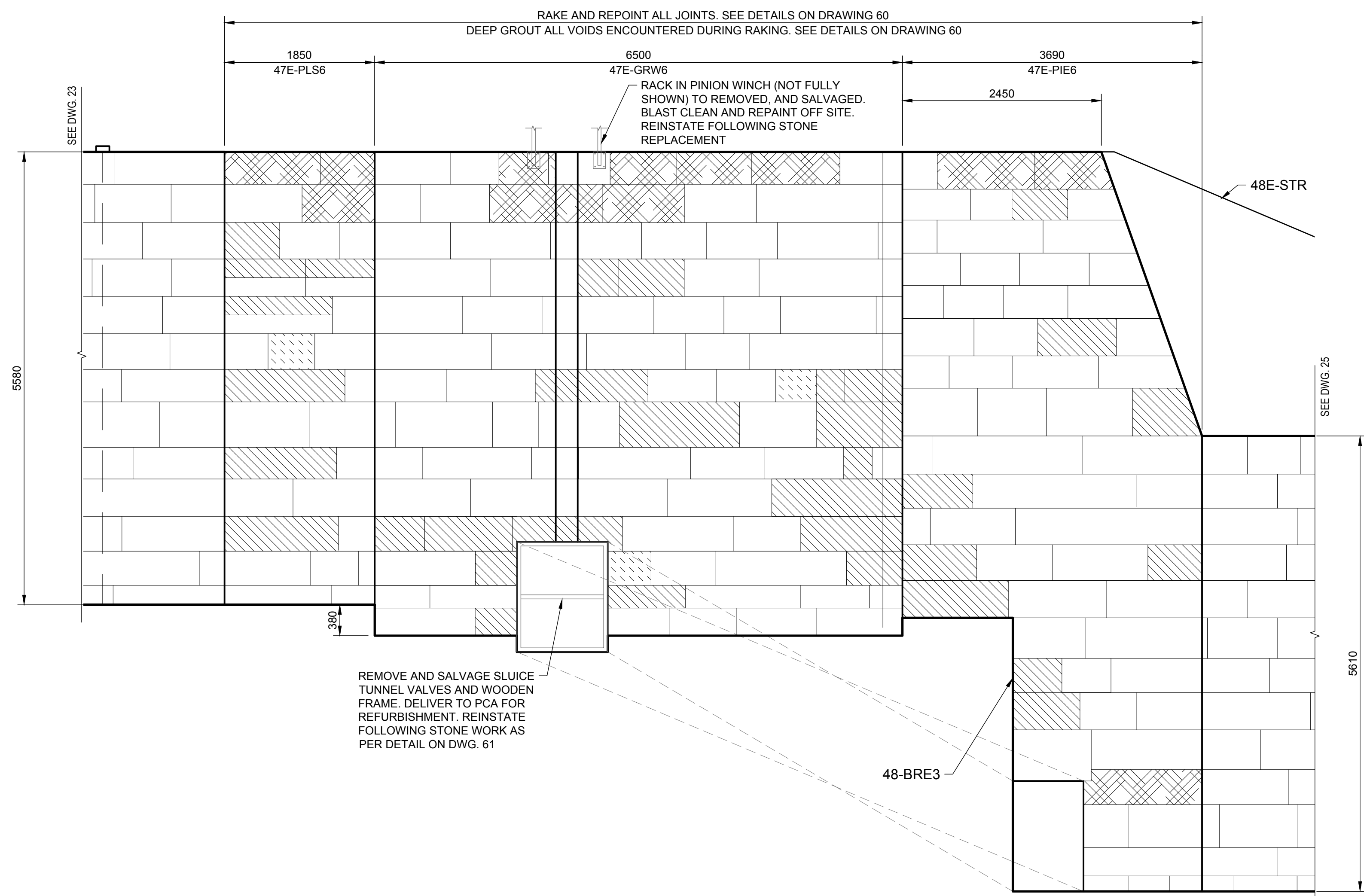
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
- C** DENOTES EXISTING CONCRETE
- S** DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



Canada

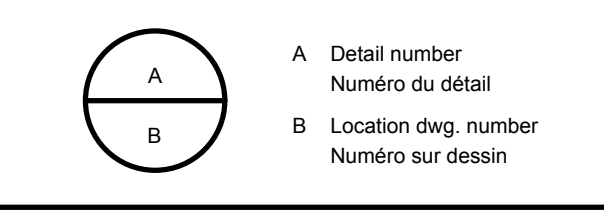


EAST MONOLITH 6 ELEVATION - LOCK 47 LOWER
1:40



No.	Description	Drawn By / Des. Par.	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

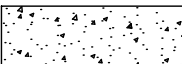


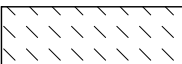
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Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 47
EAST MONOLITH 6 -
REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 24
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 26 of 78

- REPAIR LEGEND:**
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
 -  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
 -  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
 -  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
 - C** DENOTES EXISTING CONCRETE
 - S** DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

- NOTES:**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.

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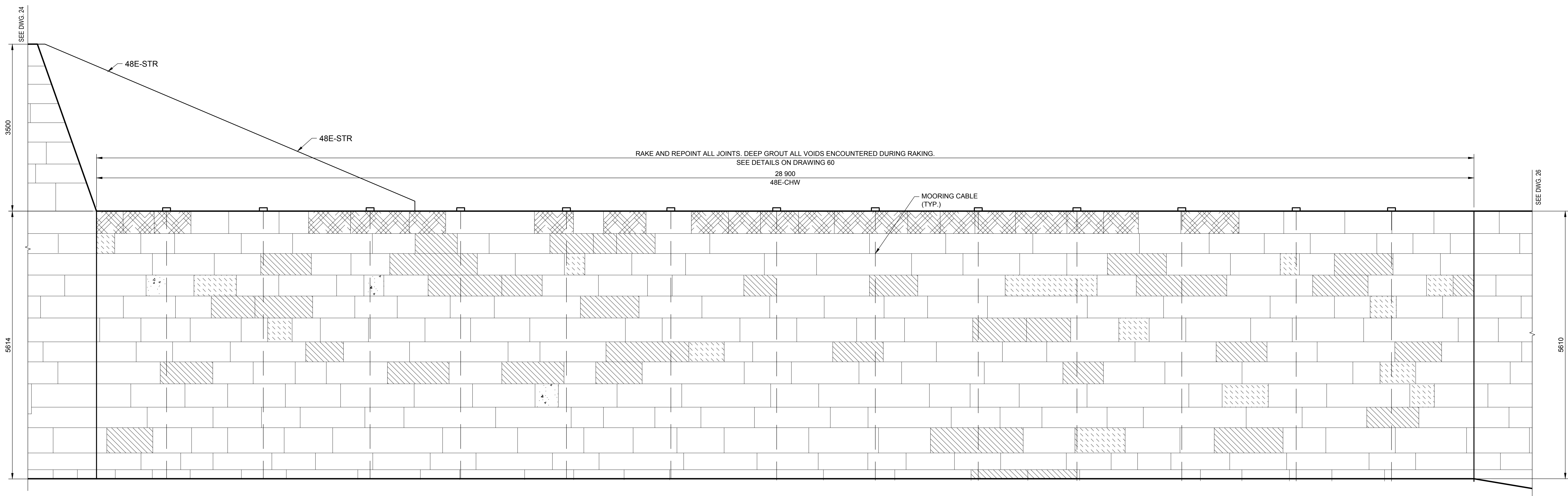
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Direction de l'infrastructure de Parcs Canada

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EAST CHAMBER WALL ELEVATION - LOCK 48
1:40

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

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A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet




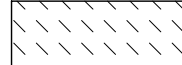
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**

ELGIN ONTARIO

Drawing title / Titre du dessin

**LOCK 48
EAST CHAMBER WALL -
REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 25
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 27 of 78

- REPAIR LEGEND:**
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
 -  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
 -  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
 -  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
 - C DENOTES EXISTING CONCRETE
 - S DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

- NOTES:**
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 - CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.

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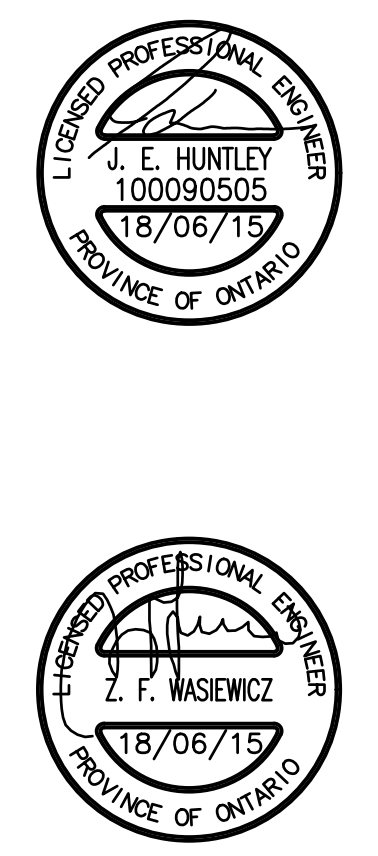
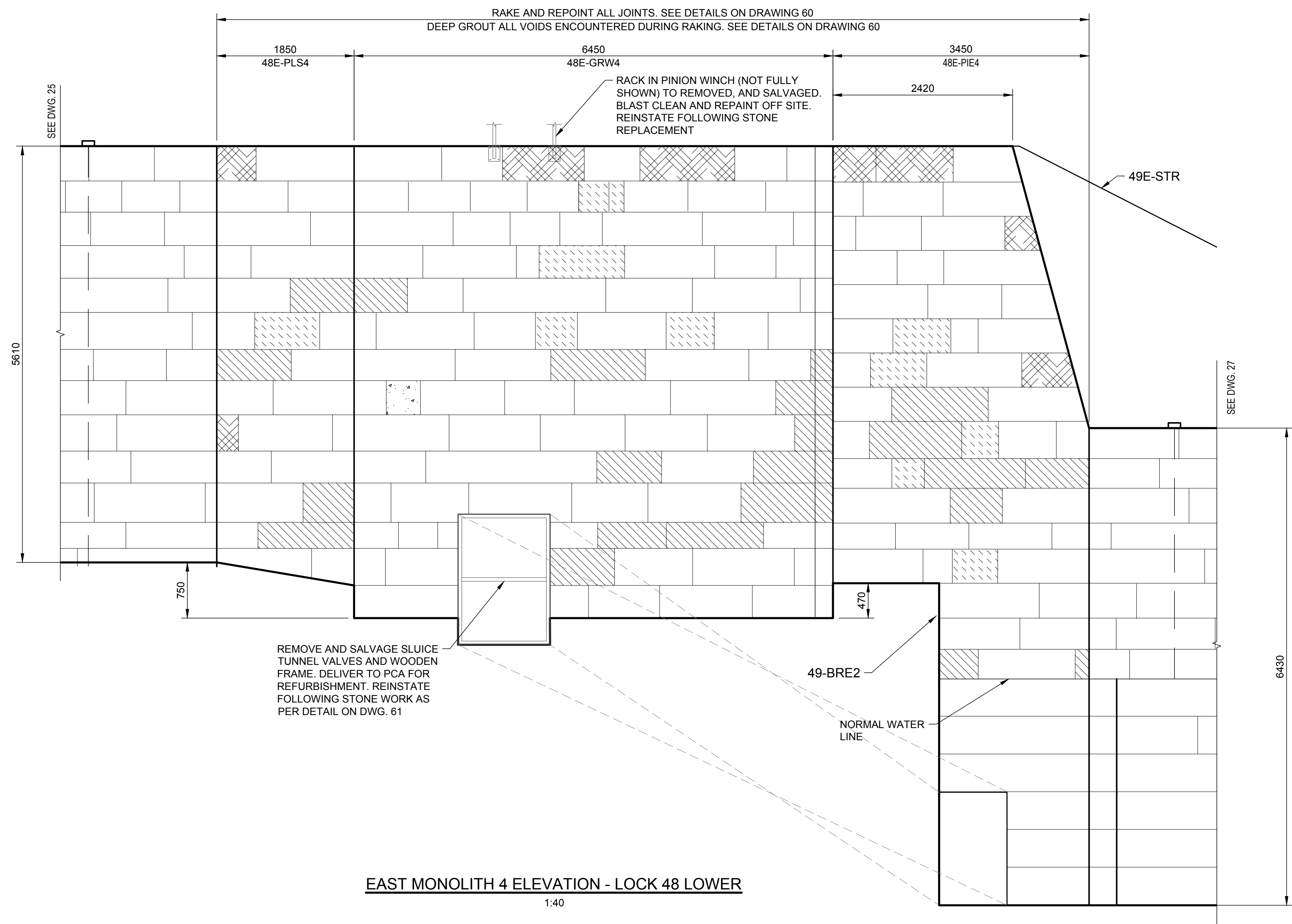
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Groupe Canaux historiques et travaux d'ingénierie
Direction de l'infrastructure de Parcs Canada

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No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

A	B
Detail number / Numéro du détail	Location dwg. number / Numéro sur dessin

Project title / Titre du projet

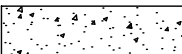

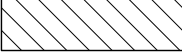
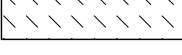
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**

ELGIN ONTARIO

Drawing title / Titre du dessin

**LOCK 48
EAST MONOLITH 4 -
REPAIR**

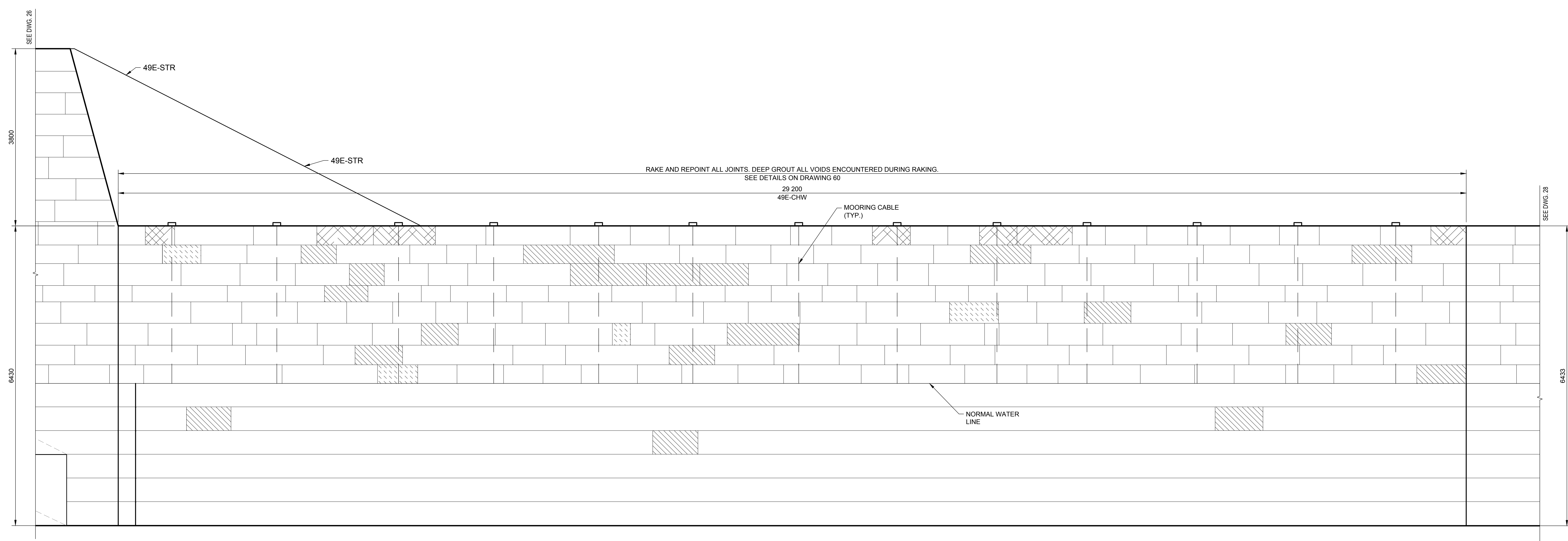
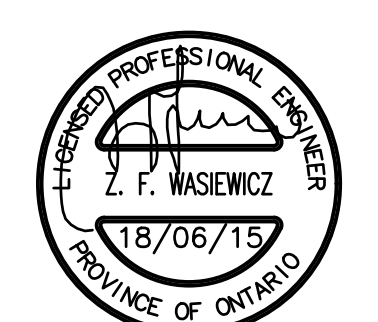
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 26
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 28 of 78

- REPAIR LEGEND:**
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
 -  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
 -  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
 -  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
 - C DENOTES EXISTING CONCRETE
 - S DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

- NOTES:**
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 - CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



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EAST CHAMBER WALL ELEVATION - LOCK 49
 1:40

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15




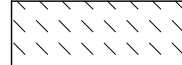
Revision / Révision	
A	Detail number / Numéro du détail
B	Location dwg. number / Numéro sur dessin

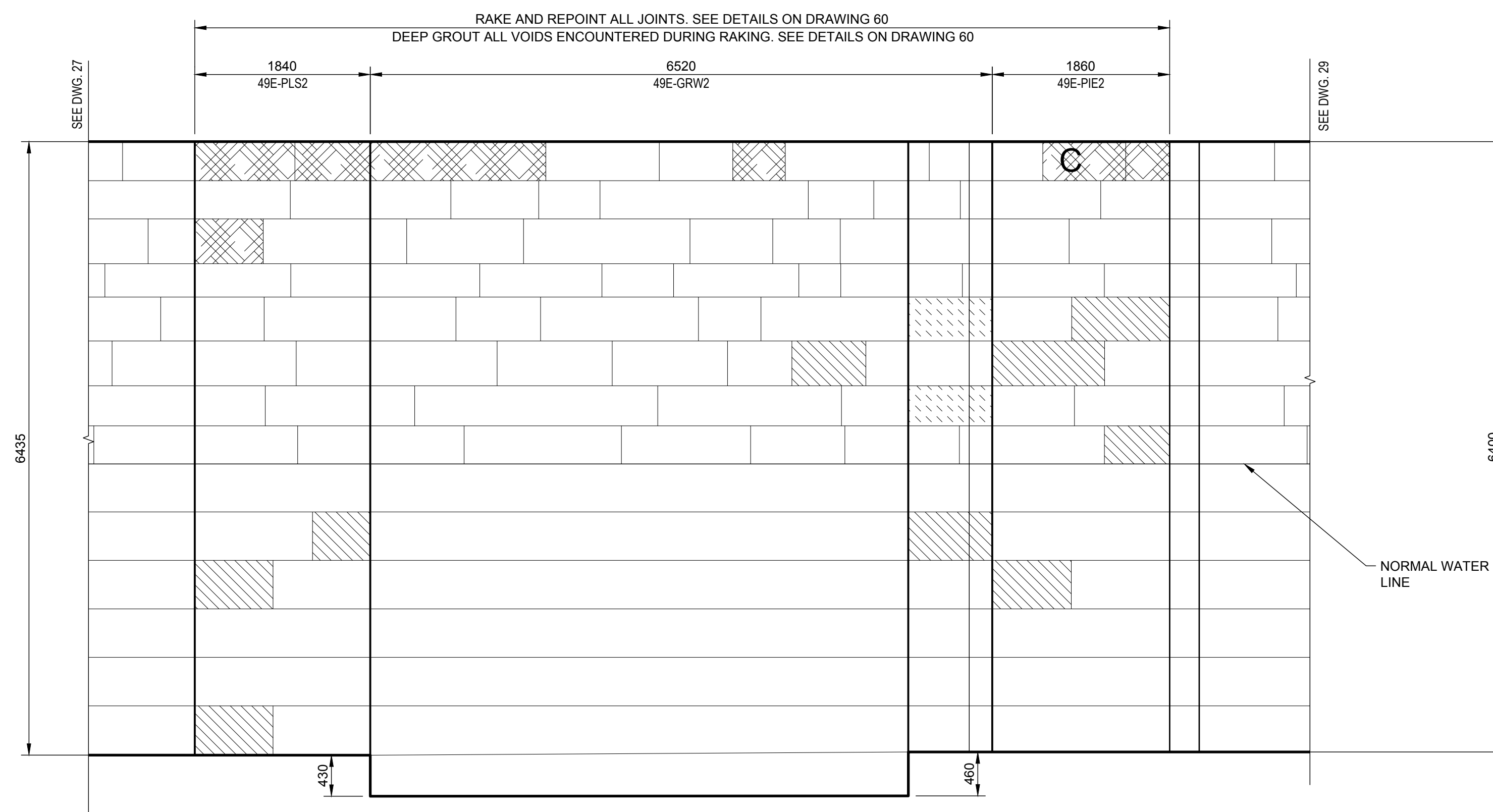
Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 49
 EAST CHAMBER WALL -
 REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 27
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 29 of 78

REPAIR LEGEND:

-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
-
- C DENOTES EXISTING CONCRETE
- S DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED



EAST MONOLITH 2 ELEVATION - LOCK 49 LOWER
1:40

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

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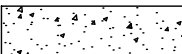
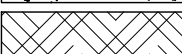

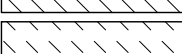
A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 49
EAST MONOLITH 2
- REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 28
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 30 of 78

REPAIR LEGEND:

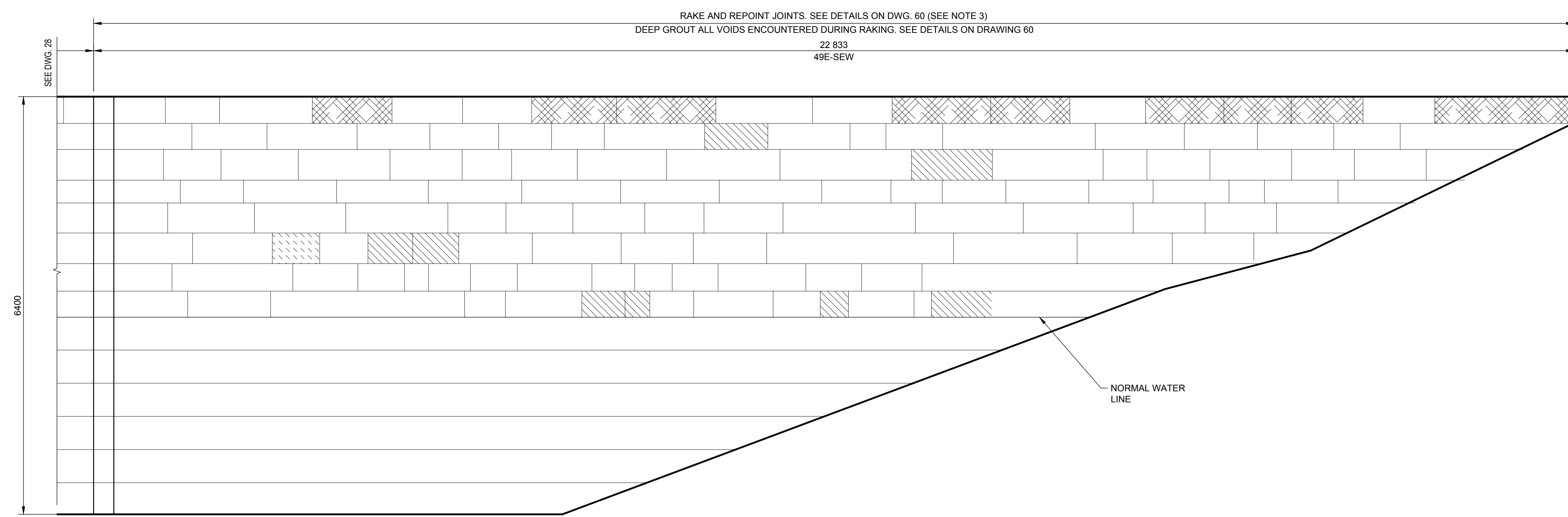
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
- C** DENOTES EXISTING CONCRETE
- S** DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

NOTES:

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2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
3. JOINT RAKING AND REPOINT IS REQUIRED LOCALLY THROUGHOUT THE WALL BOTH ABOVE AND BELOW WATER LEVEL, AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE.



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SOUTHEAST WINGWALL ELEVATION - LOCK 49
 1:40

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.





A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 49
 SOUTHEAST WINGWALL
 - REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 29
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 31 of 78

REPAIR LEGEND:

-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
- C** DENOTES EXISTING CONCRETE
- S** DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

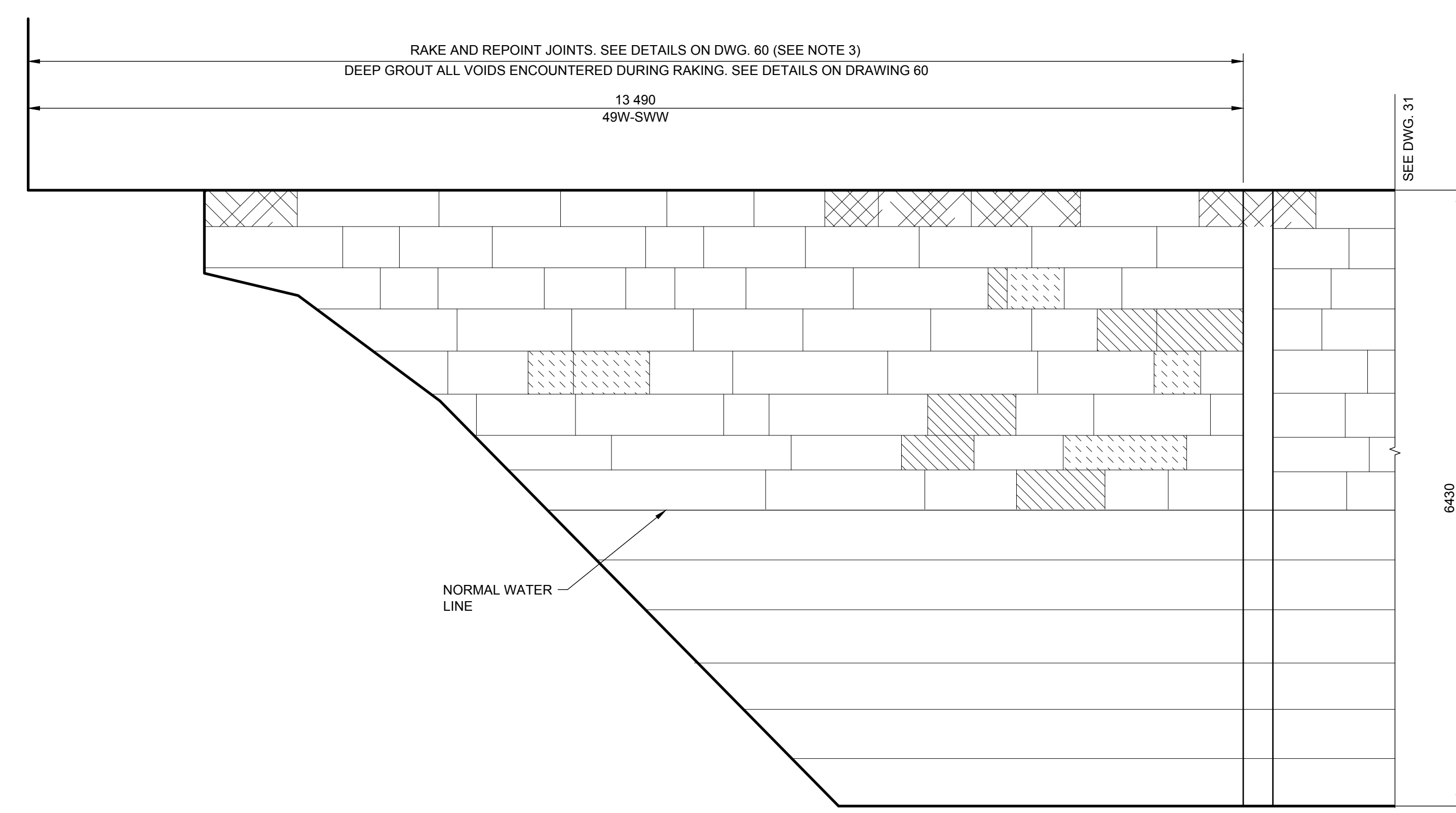
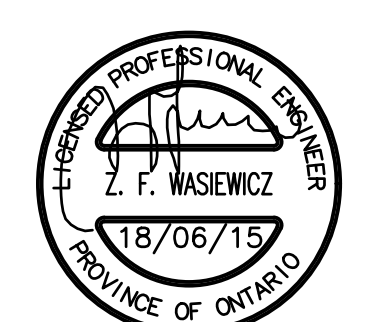
NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
3. JOINT RAKING AND REPOINT IS REQUIRED LOCALLY THROUGHOUT THE WALL BOTH ABOVE AND BELOW WATER LEVEL, AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE.

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 Direction de l'infrastructure de Parcs Canada
 Parks Canada
 Parcs Canada



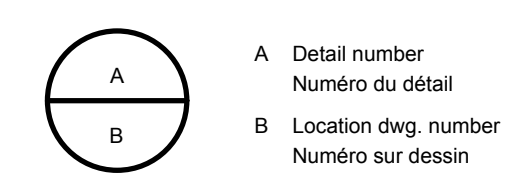
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SOUTHWEST WINGWALL ELEVATION - LOCK 49
 1:40

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.



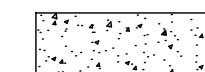


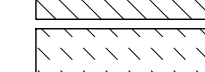
- A Detail number
Numéro du détail
- B Location dwg. number
Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 49
 SOUTHWEST WINGWALL
 - REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 30
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 32 of 78

REPAIR LEGEND:

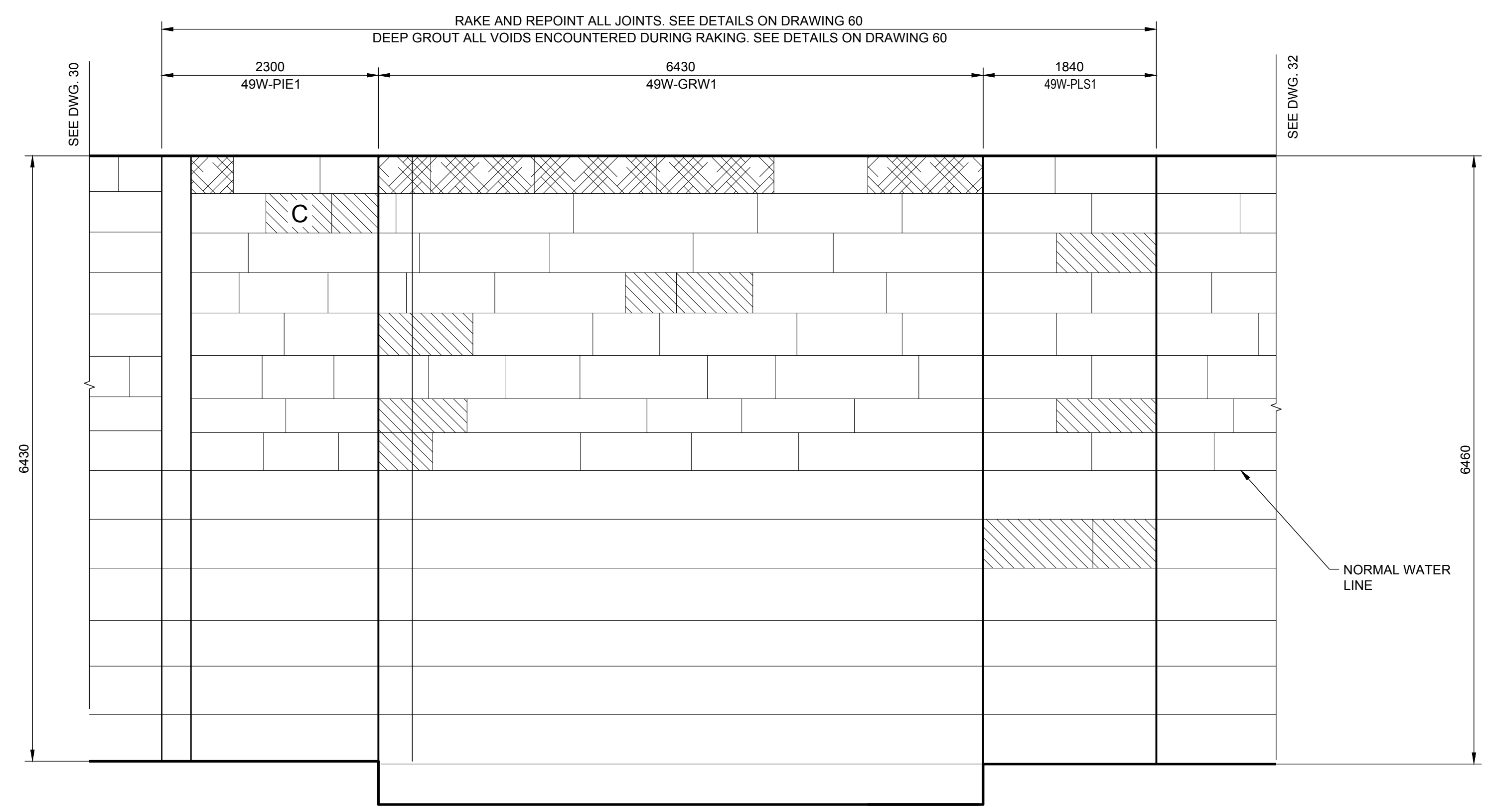
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
- C** DENOTES EXISTING CONCRETE
- S** DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



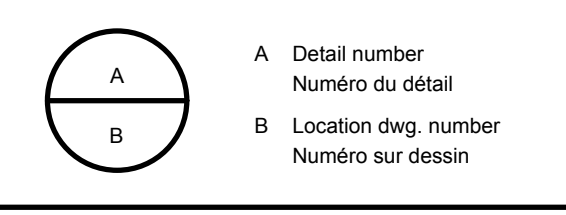
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WEST MONOLITH 1 ELEVATION - LOCK 49 LOWER
 1:40

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

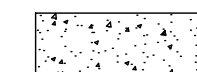


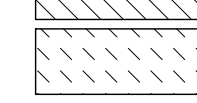


Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 49
 WEST MONOLITH 1 -
 REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Project Number / Numéro du projet R.079796.009
Drawing Number / Numéro du Dessin 31	Sheet / Feuille 33 of 78

REPAIR LEGEND:

-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56

- C DENOTES EXISTING CONCRETE
- S DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

NOTES:

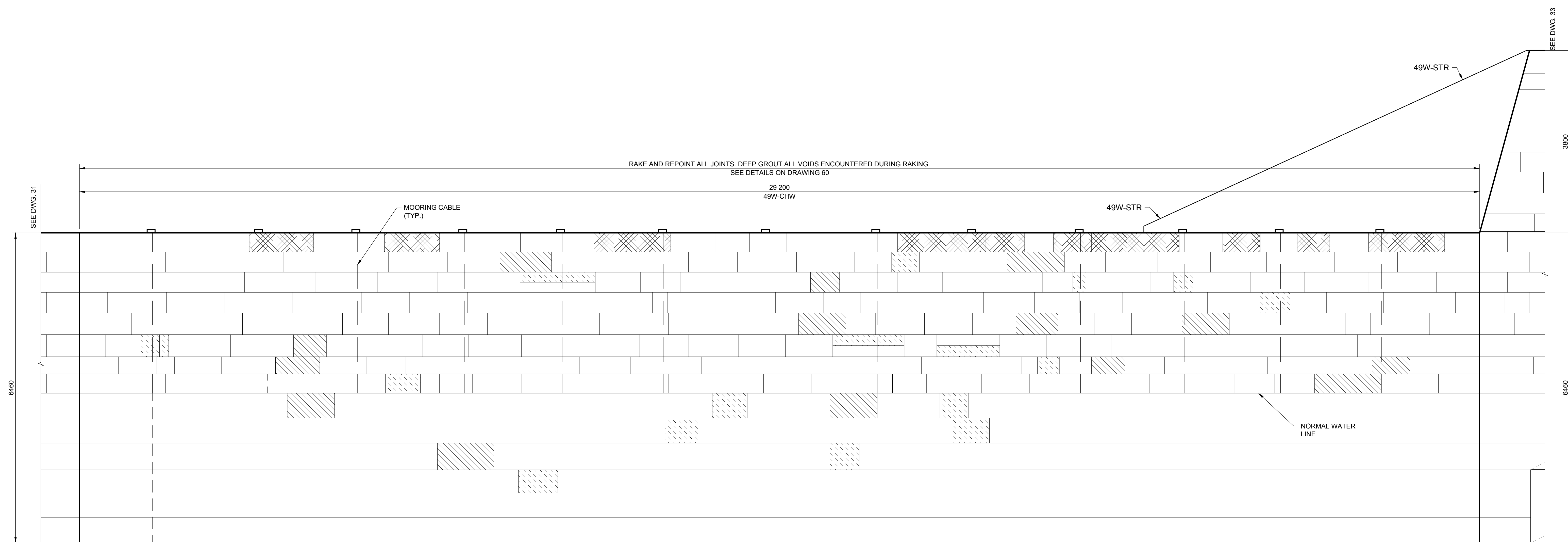
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



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WEST CHAMBER WALL ELEVATION - LOCK 49
1:40

No.	Description	Drawn By / Des. Par.	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

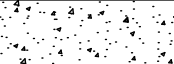



Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

LOCK 49
WEST CHAMBER WALL
- REPAIR

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 32
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 34 of 78

- REPAIR LEGEND:**
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
 -  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
 -  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
 -  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
 - C DENOTES EXISTING CONCRETE
 - S DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

- NOTES:**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
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Public Services and Procurement Canada
Services publics et Approvisionnement Canada

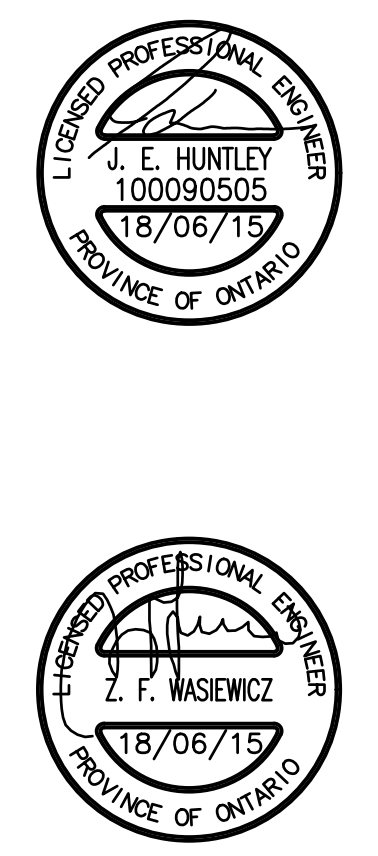
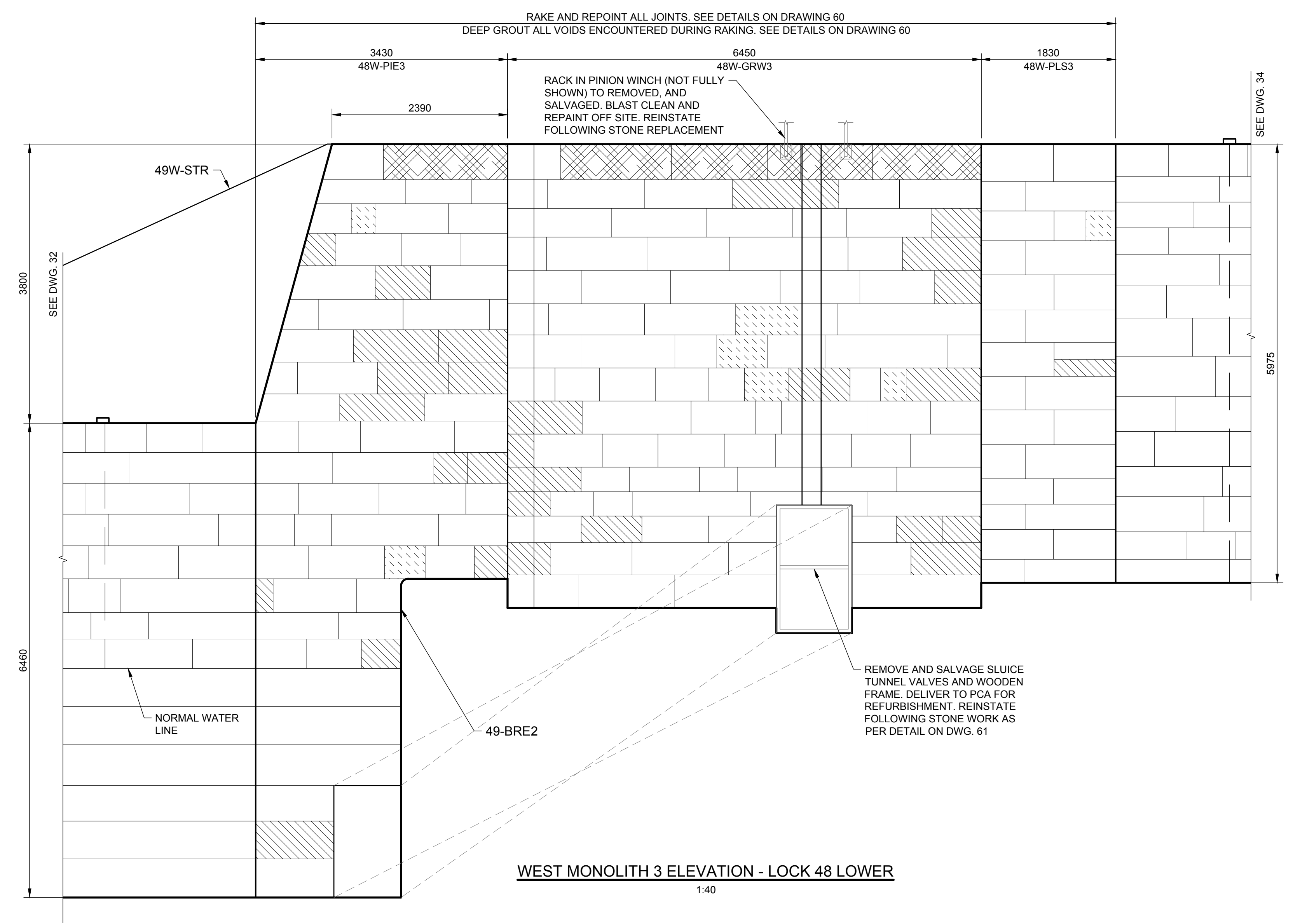
Heritage Canals and Engineering Works Group
Parks Canada Infrastructure Directorate
Groupe Canaux historiques et travaux d'ingénierie
Direction de l'infrastructure de Parcs Canada

Parks Canada
Parcs Canada

Canada

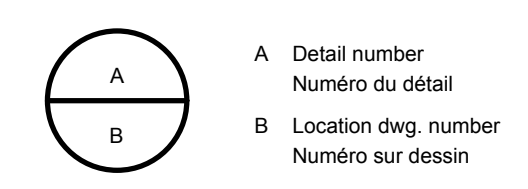
wsp

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1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

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Project title / Titre du projet

**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**





ELGIN ONTARIO

Drawing title / Titre du dessin

**LOCK 48
WEST MONOLITH 3 –
REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 33
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 35 of 78

REPAIR LEGEND:

-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56

- C DENOTES EXISTING CONCRETE
- S DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

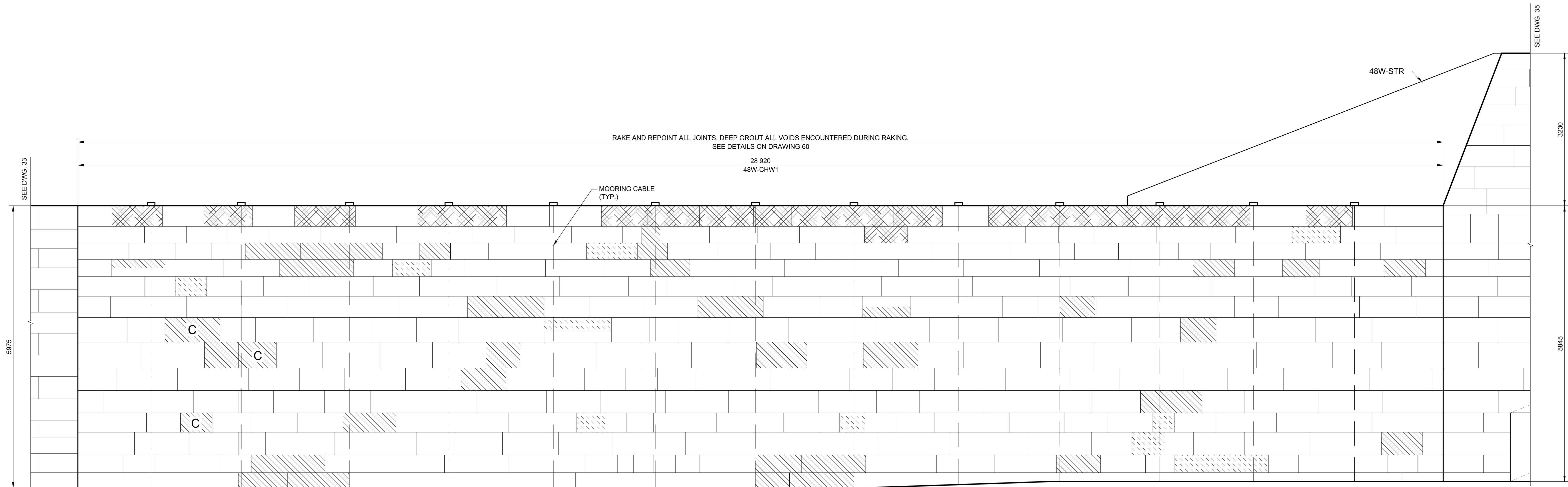
NOTES:

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2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



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WEST CHAMBER WALL ELEVATION - LOCK 48
 1:40

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			



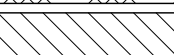
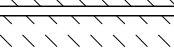
Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 48
 WEST CHAMBER WALL
 - REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 34
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 36 of 78

- REPAIR LEGEND:**
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
 -  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
 -  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
 -  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
 - C DENOTES EXISTING CONCRETE
 - S DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

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 - CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.

Public Services and Procurement Canada
Services publics et Approvisionnement Canada

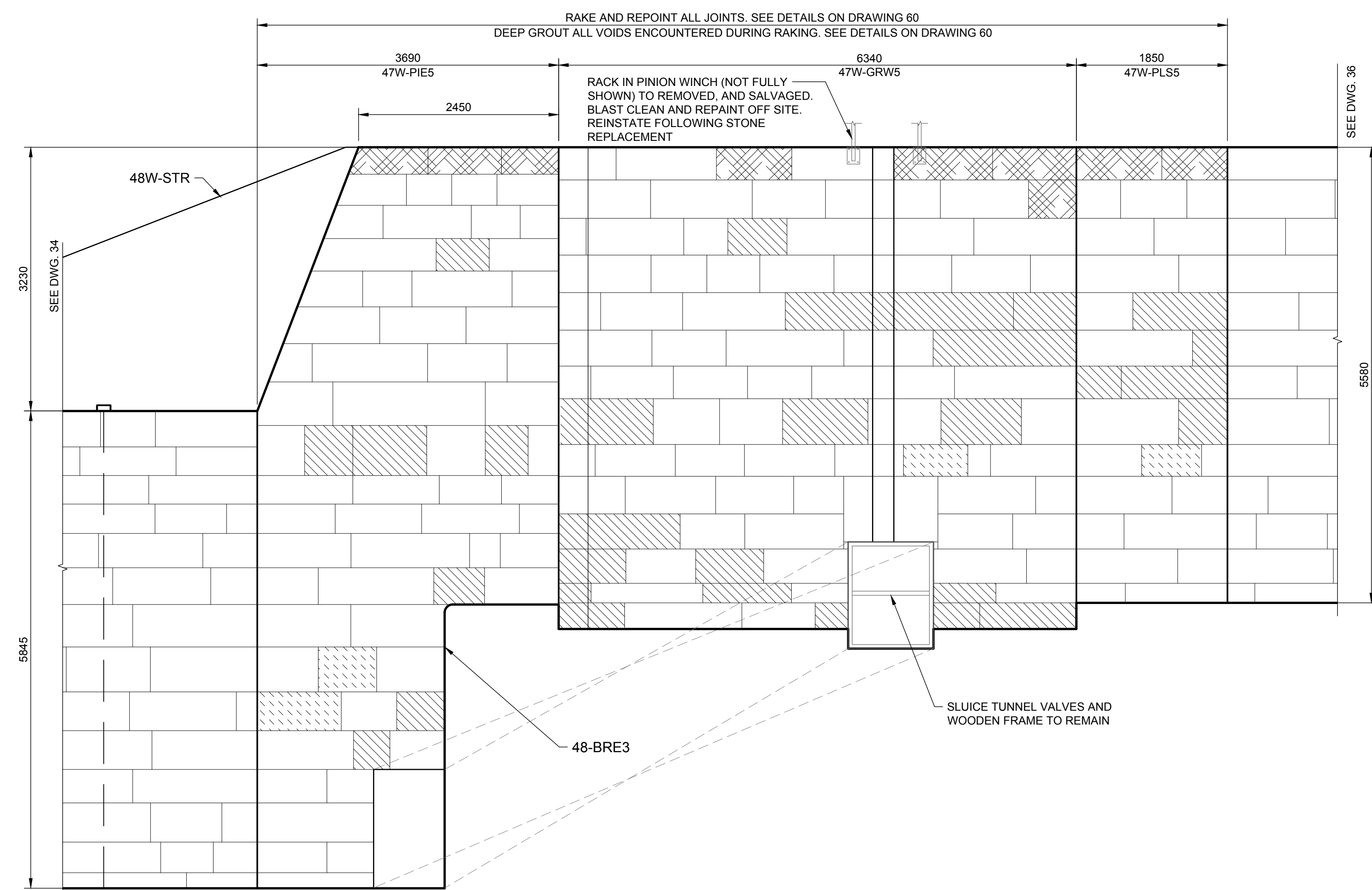
Heritage Canals and Engineering Works Group
Parcs Canada Infrastructure Directorate
Groupe Canaux historiques et travaux d'ingénierie
Direction de l'infrastructure de Parcs Canada

Parcs Canada
Parcs Canada

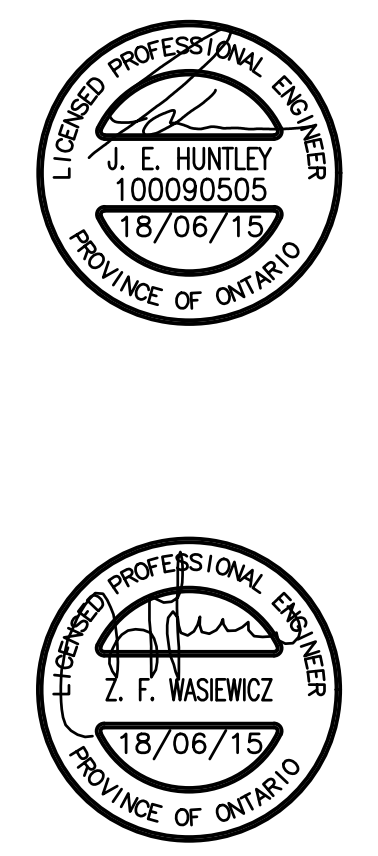
Canada

wsp

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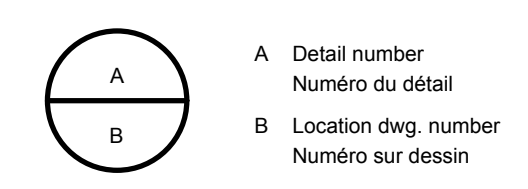


WEST MONOLITH 5 ELEVATION - LOCK 47 LOWER
1:40



No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

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Project title / Titre du projet

**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**

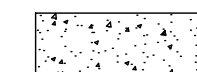


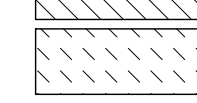
ELGIN ONTARIO

Drawing title / Titre du dessin

**LOCK 47
WEST MONOLITH 5 -
REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 35
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 37 of 78

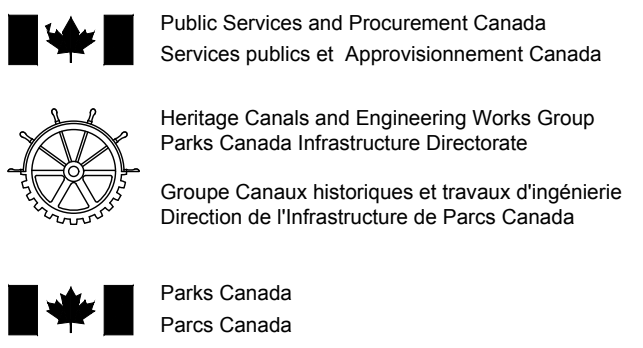
REPAIR LEGEND:

-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56

- C DENOTES EXISTING CONCRETE
- S DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

NOTES:

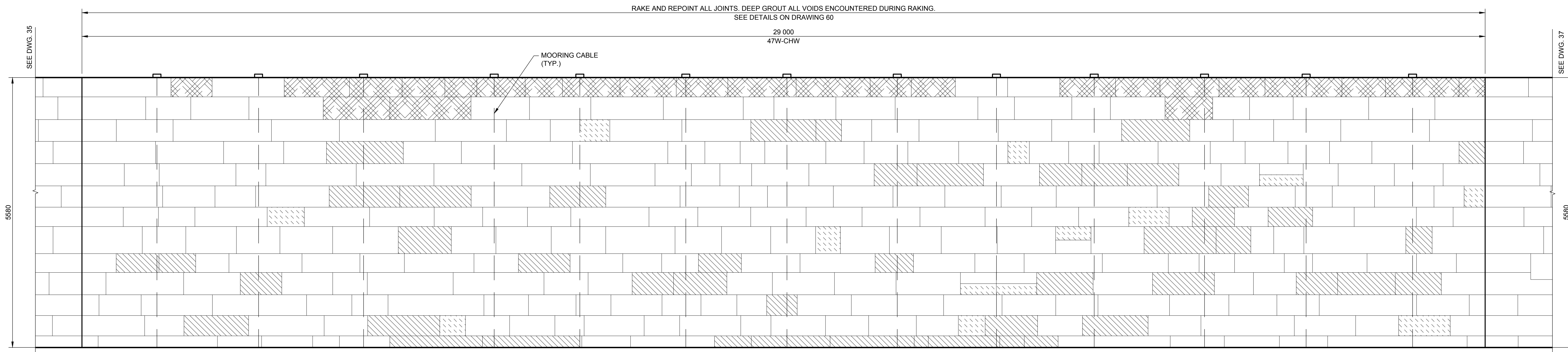
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



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WEST CHAMBER WALL ELEVATION - LOCK 47
1:40

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

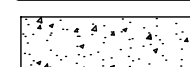



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A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

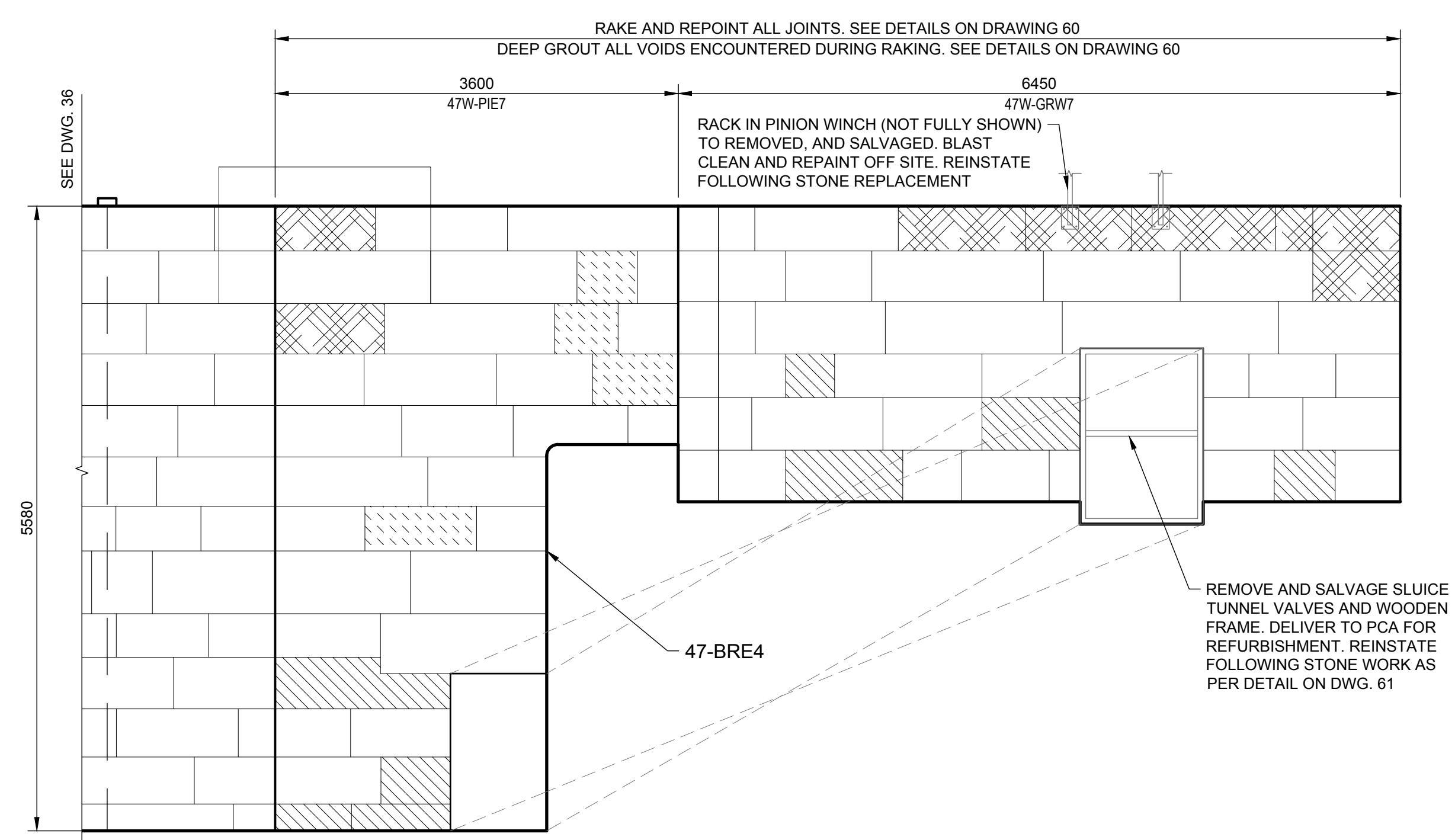
Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

LOCK 47
WEST CHAMBER WALL
— REPAIR

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 36
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 38 of 78

- REPAIR LEGEND:**
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
 -  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
 -  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
 -  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
 - C DENOTES EXISTING CONCRETE
 - S DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 - CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.



WEST MONOLITH 7 ELEVATION - LOCK 47 UPPER
 1:40

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

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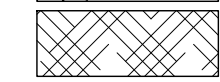
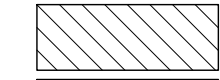

A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 47
 WEST MONOLITH 7 -
 REPAIR**

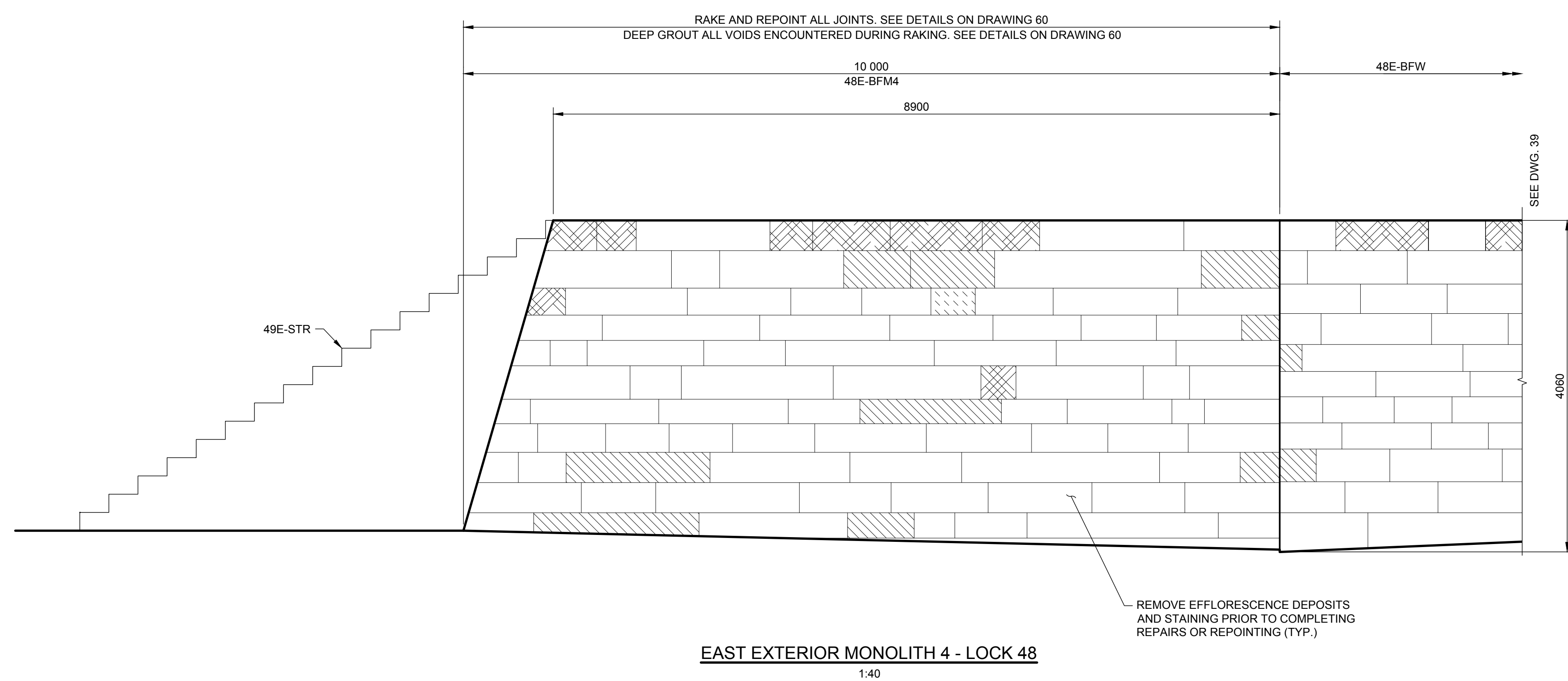
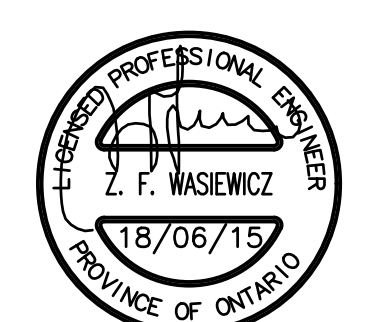
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Project Number / Numéro du projet R.079796.009
Drawing Number / Numéro du Dessin 37	Sheet / Feuille 39 of 78

REPAIR LEGEND:

-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
- C** DENOTES EXISTING CONCRETE
- S** DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

NOTES:

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EAST EXTERIOR MONOLITH 4 - LOCK 48
 1:40

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.


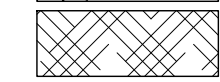
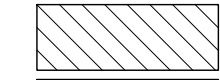

A	Detail number / Numéro du détail
B	Location dwg. number / Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

LOCK 48
 EAST EXTERIOR WALL
 MONOLITH 4 - REPAIR

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Project Number / Numéro du projet R.079796.009
Drawing Number / Numéro du Dessin 38	Sheet / Feuille 40 of 78

REPAIR LEGEND:

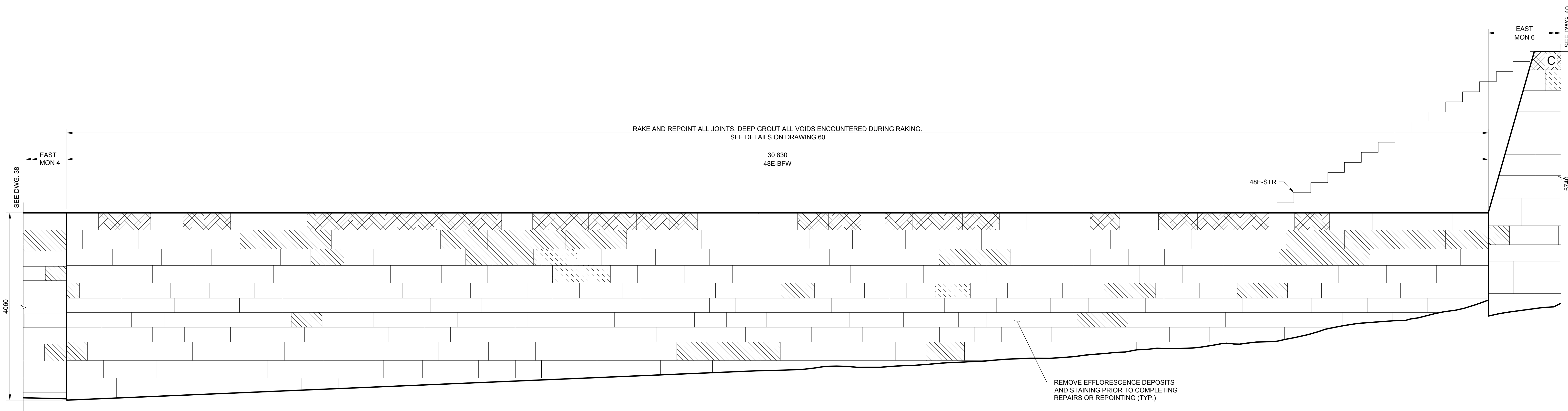
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
- C** DENOTES EXISTING CONCRETE
- S** DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

NOTES:

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EAST EXTERIOR CHAMBER WALL - LOCK 48
 1:40



No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.


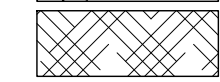
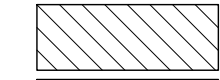

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 48
 EAST EXTERIOR WALL
 CHAMBER — REPAIR**

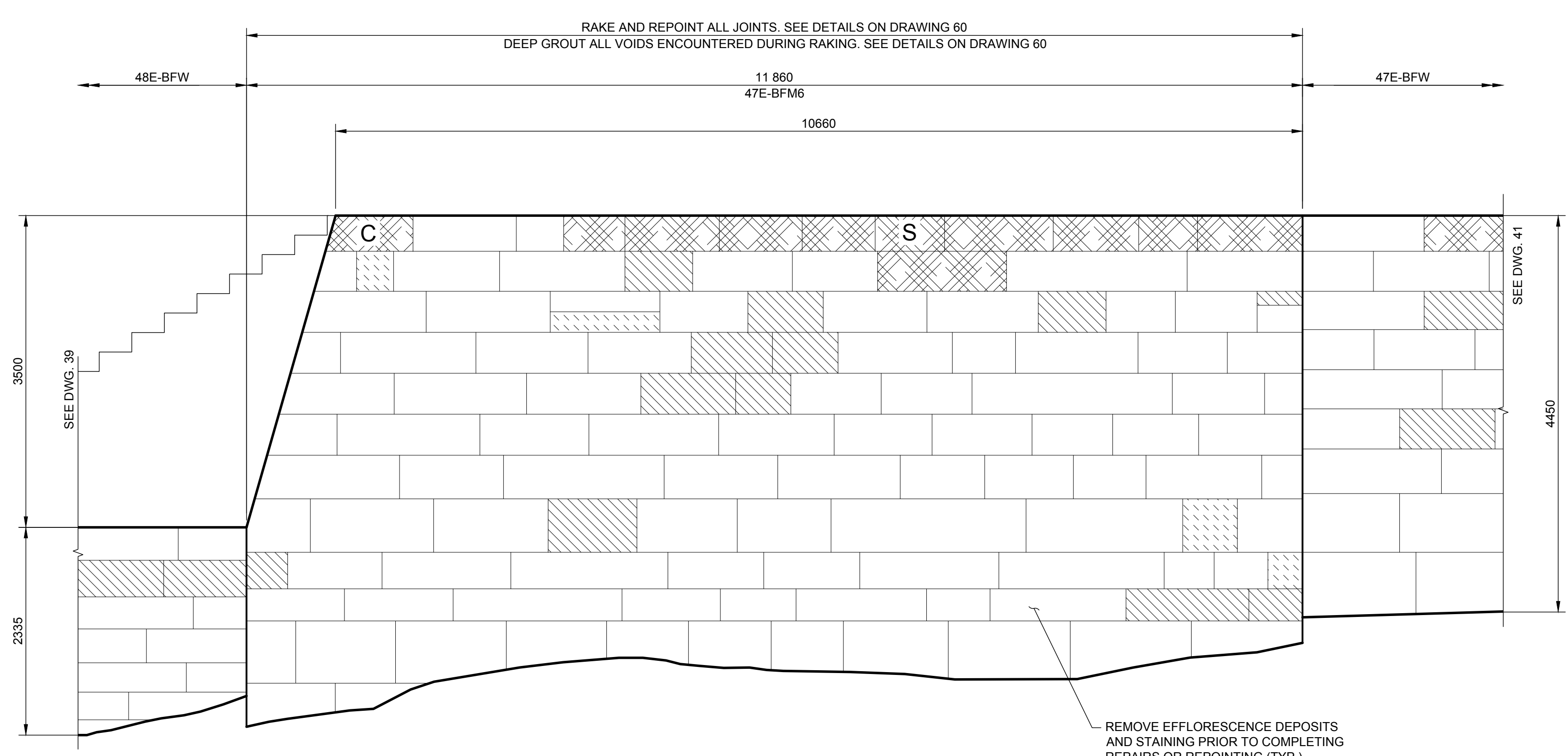
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 39
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 41 of 78

REPAIR LEGEND:

-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
- C** DENOTES EXISTING CONCRETE
- S** DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

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EAST EXTERIOR MONOLITH 6 - LOCK 47
 1:40

No.	Description	Drawn By / Des. Par.	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.


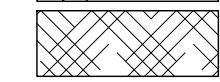
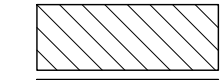

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 47
 EAST EXTERIOR WALL
 MONOLITH 6 - REPAIR**

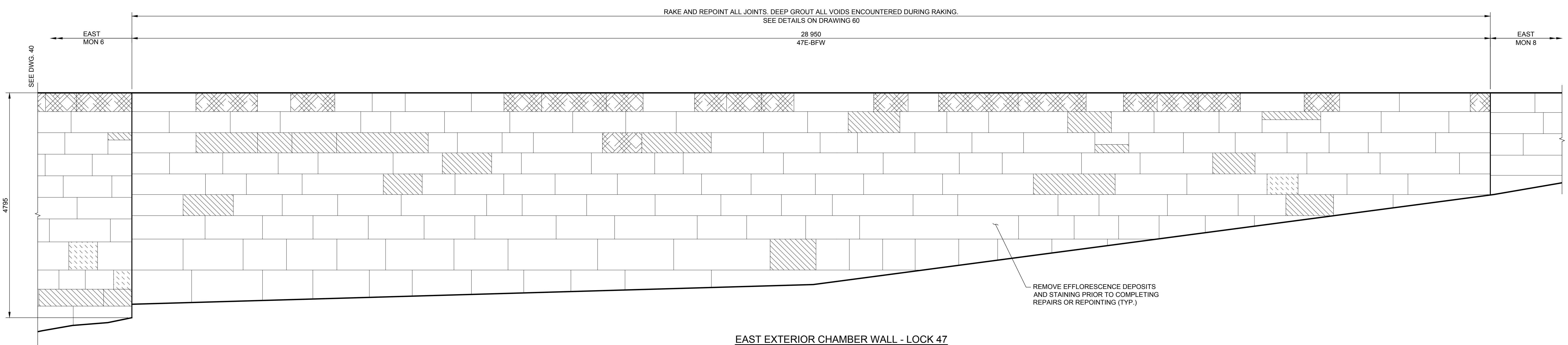
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 40
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 42 of 78

REPAIR LEGEND:

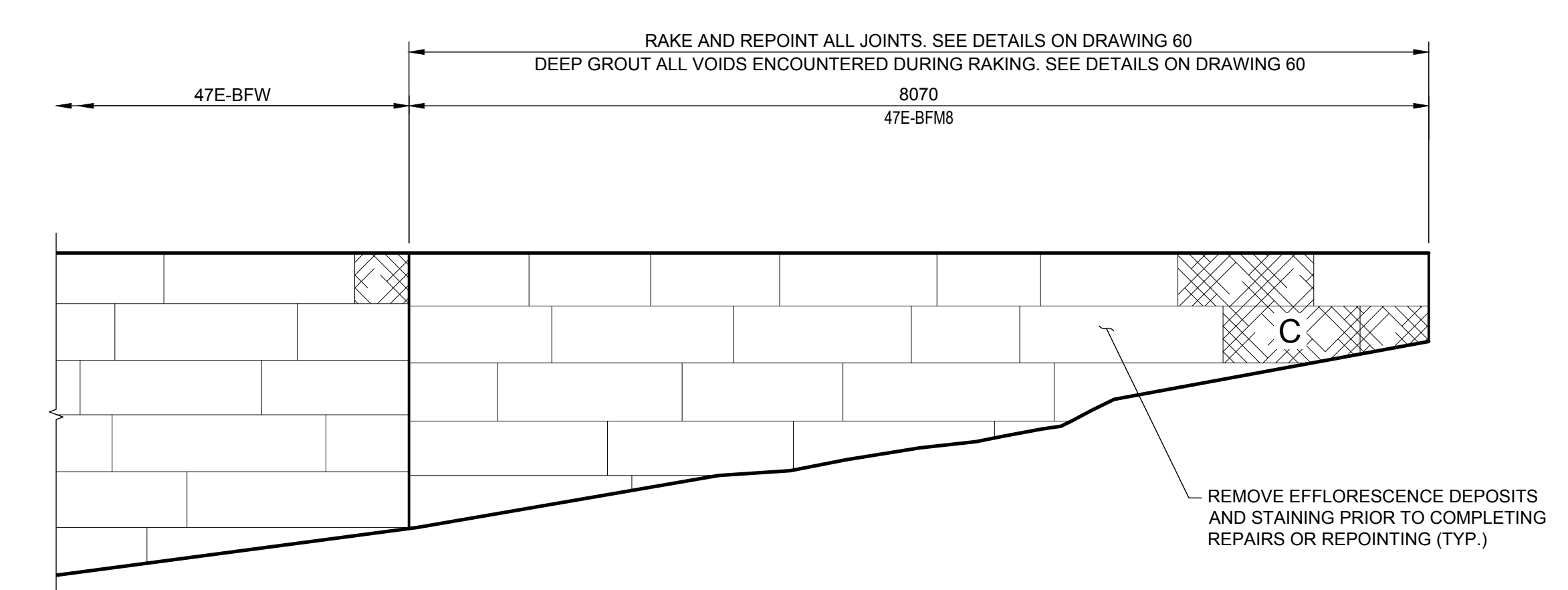
-  NEW CONCRETE - SEE DETAILS ON DRAWING 64
-  NEW FULL DEPTH STONE - SEE DETAILS ON DRAWING 57
-  NEW DUTCHMAN - SEE DETAILS ON DRAWING 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS ON DRAWING 56
- C** DENOTES EXISTING CONCRETE
- S** DENOTES STONE TO BE REMOVED, SALVAGE, AND REINSTATED

NOTES:

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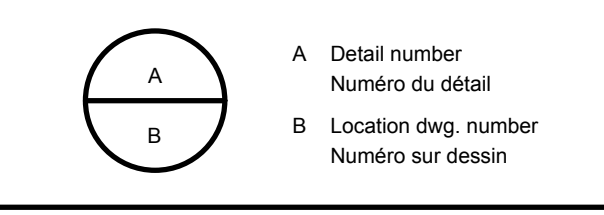
EAST EXTERIOR CHAMBER WALL - LOCK 47
1:40



EAST EXTERIOR MONOLITH 8 - LOCK 47
1:40

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.



Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Lock 47
**EAST EXTERIOR WALL
 CHAMBER & MONOLITH
 8 - REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 41
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 43 of 78

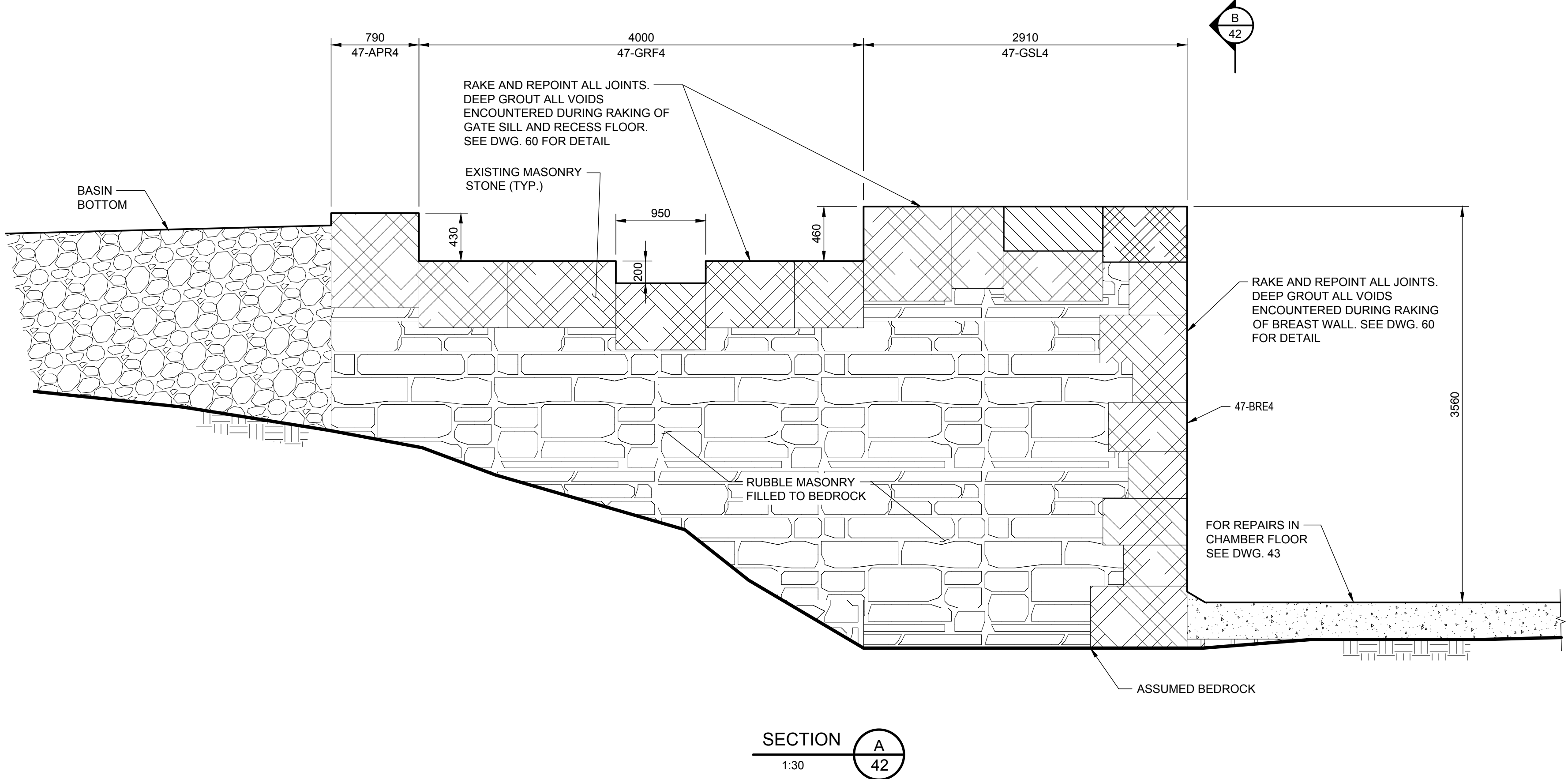
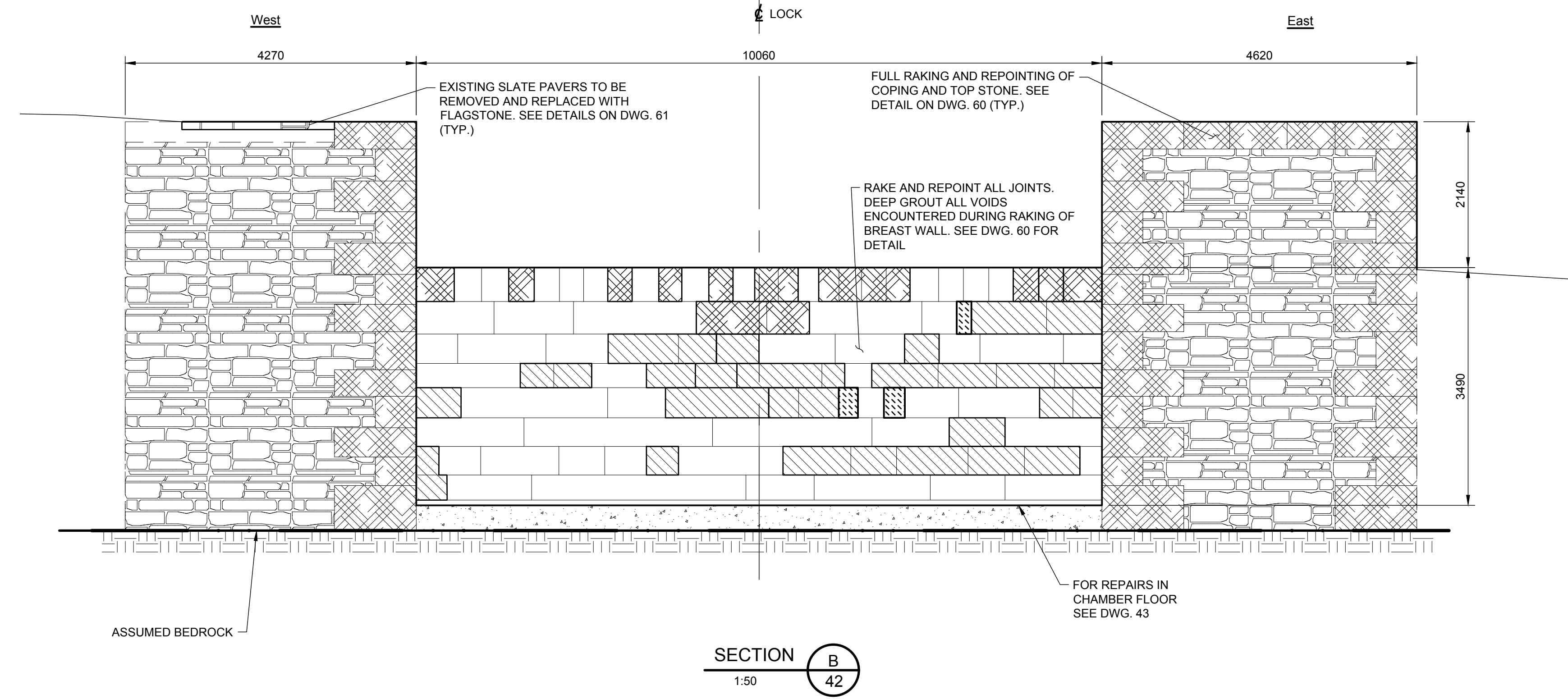
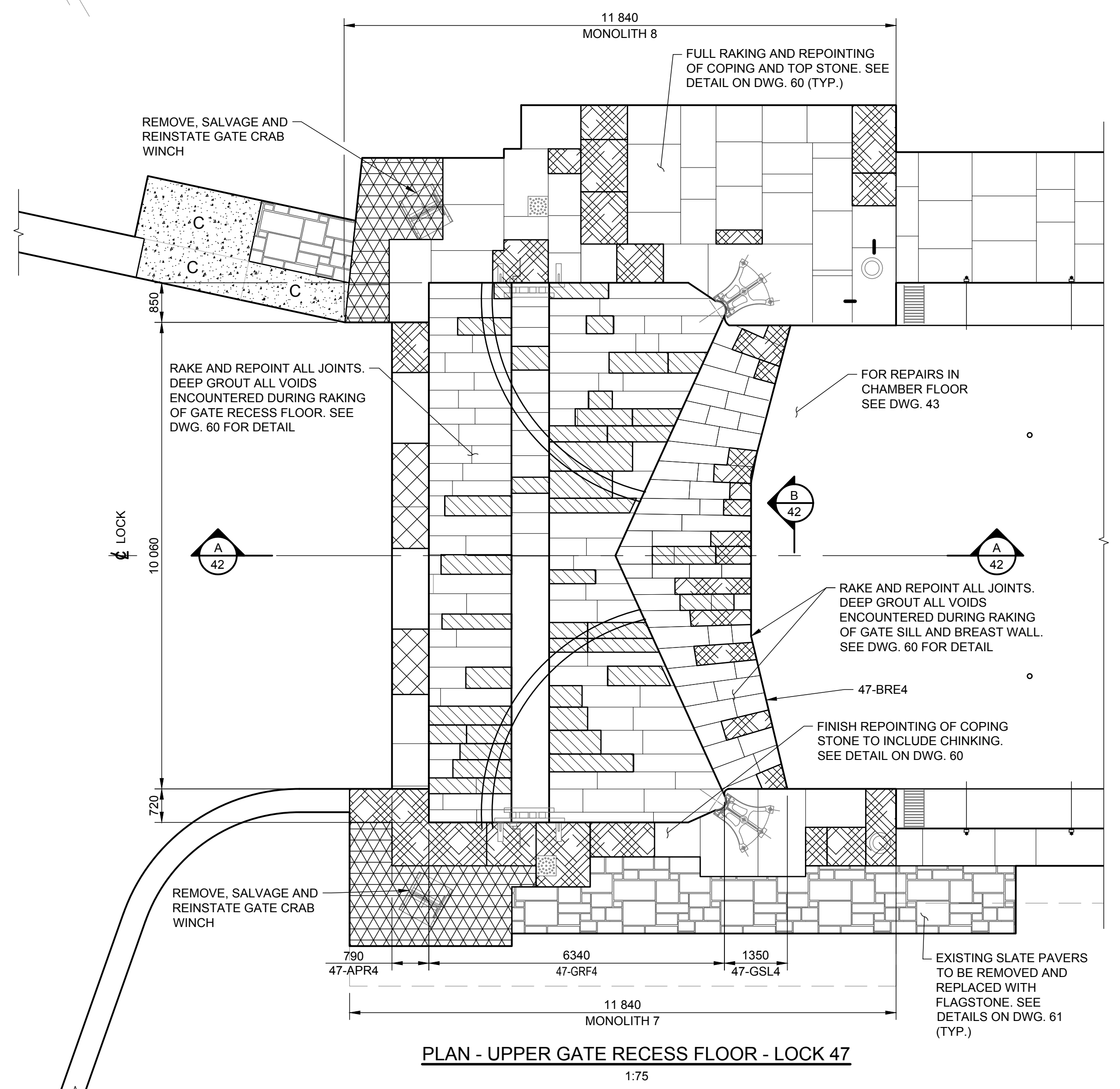
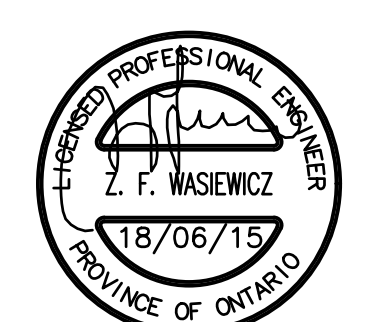
NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. ALL CONDITIONS SHOWN ARE BASED ON LIMITED INFORMATION/BOREHOLES AND NOT GUARANTEED.
3. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
4. REMOVE TIMBER GATE (NOT SHOWN) AND STORE IN FULLY SUPPORTED UPRIGHT POSITION. PINION AT BOTTOM OF GATE TO BE PROTECTED AND NOT DISTURBED.
5. FOLLOWING REMOVALS, ALL SUBGRADE AREAS ARE TO BE PROTECTED FROM FREEZING AND MAINTAINED FROST FREE DURING THE WORK.



300-2611 QUEENSWAY DRIVE
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CANADA K2B 9K2
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LEGEND	
PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL
W. L. EL.	WATER LEVEL ELEVATION



REPAIR LEGEND:

- CONCRETE REMOVALS FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
- NEW CONCRETE. SEE DETAILS ON DWG. 64
- FULL DEPTH STONE REMOVAL FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
- STONE REMOVAL FOR NEW FULL DUTCHMAN. SEE DETAILS ON DWG. 55
- STONE REMOVAL FOR PARTIAL DUTCHMAN. SEE DETAILS ON DWG. 56
- EXISTING CONCRETE SLAB TO REMAIN
- SLATE PAVES REMOVAL FOR NEW FLAGSTONE PAVERS. SEE DWG. 61
- CONCRETE REMOVALS FOR NEW FLAGSTONE. SEE DWG. 61
- EXISTING TIMBER FLOOR
- TIMBER FLOOR REPAIR
- BEDROCK
- EXISTING FINISHED MASONRY (SHOWN IN SECTION ONLY)
- GROUDED RUBBLE MASONRY
- RUBBLE MASONRY FILL
- NATIVE FILL

No.	Description	Revision / Révision	Drawn By / Dessiné par	Date
1	ISSUED FOR TENDER		J.M.	2018-06-15

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	A Detail number Numéro du détail
	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 47
UPPER GATE RECESS
FLOOR - REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 42
Project Number / Numéro du projet R.079796.009	Sheet 43 of 78 Feuille

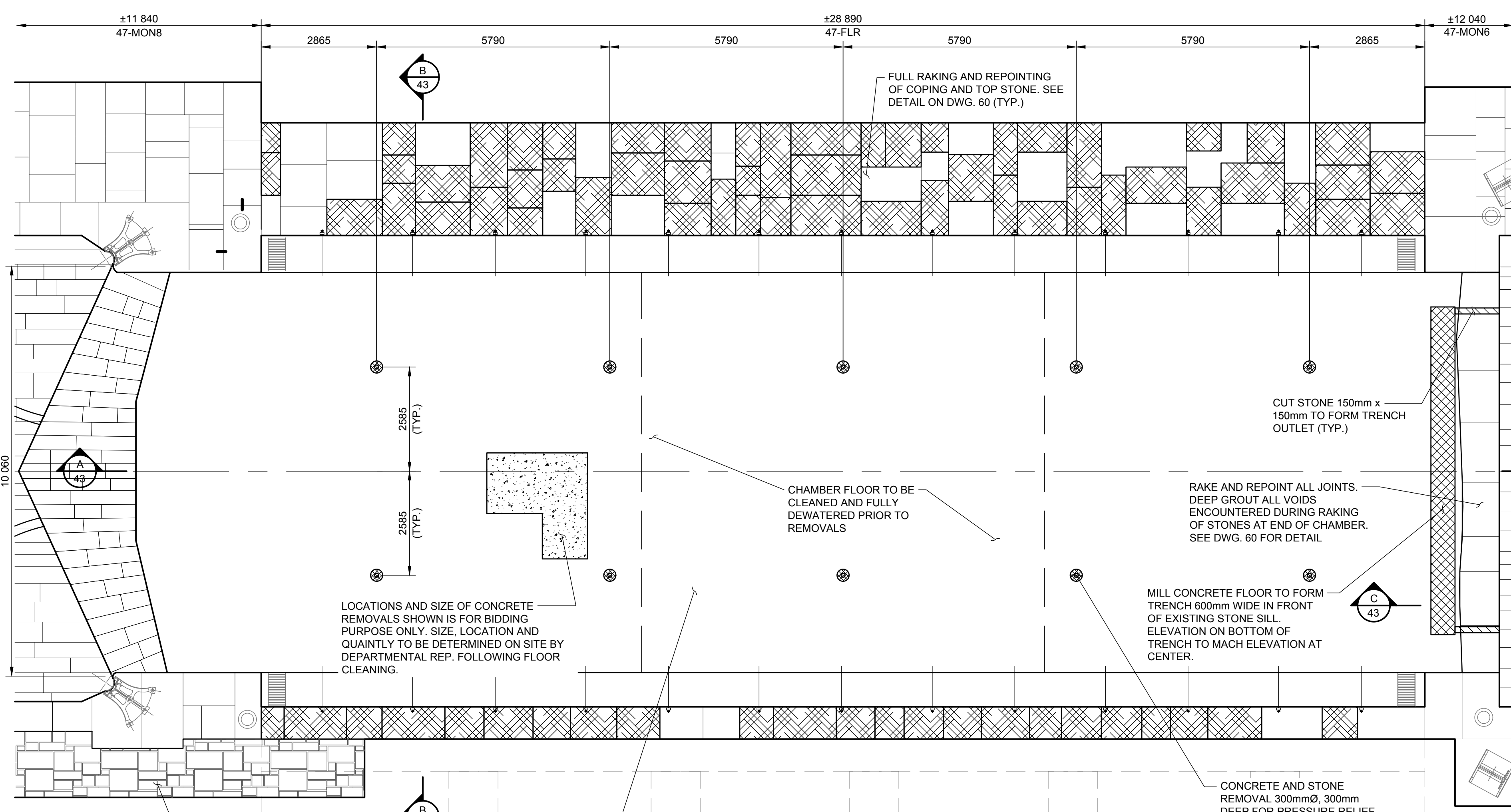
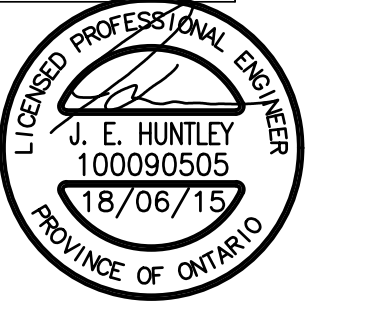
NOTES:

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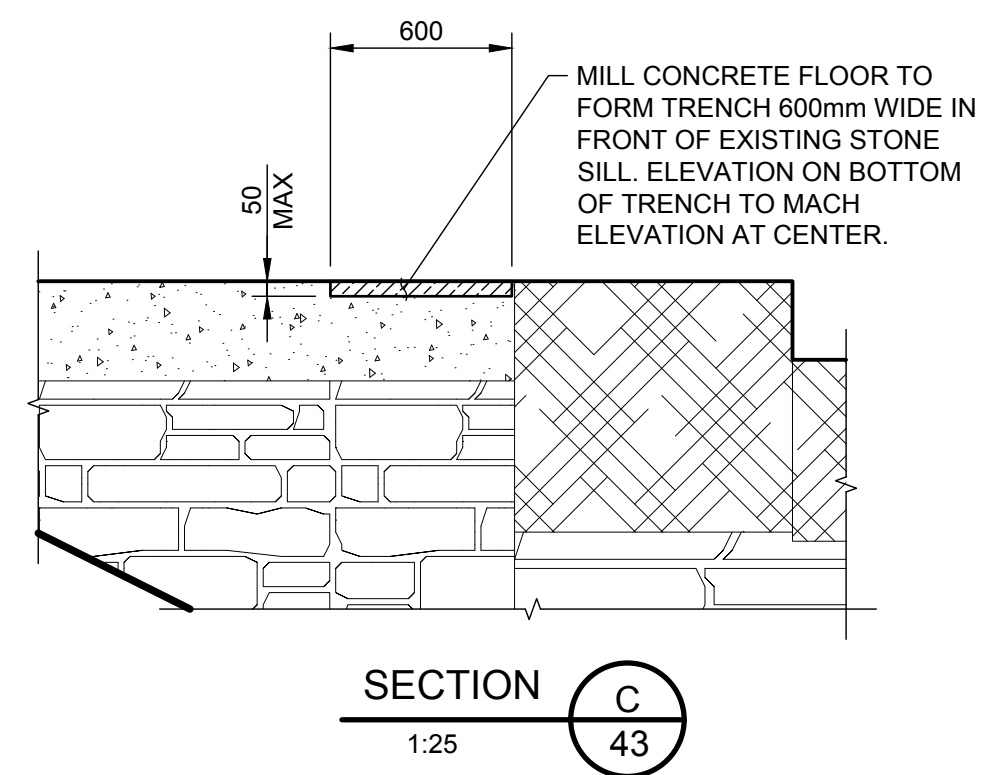


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300-2611 QUEENSWAY DRIVE
OTTAWA (ON N6C 5K2)
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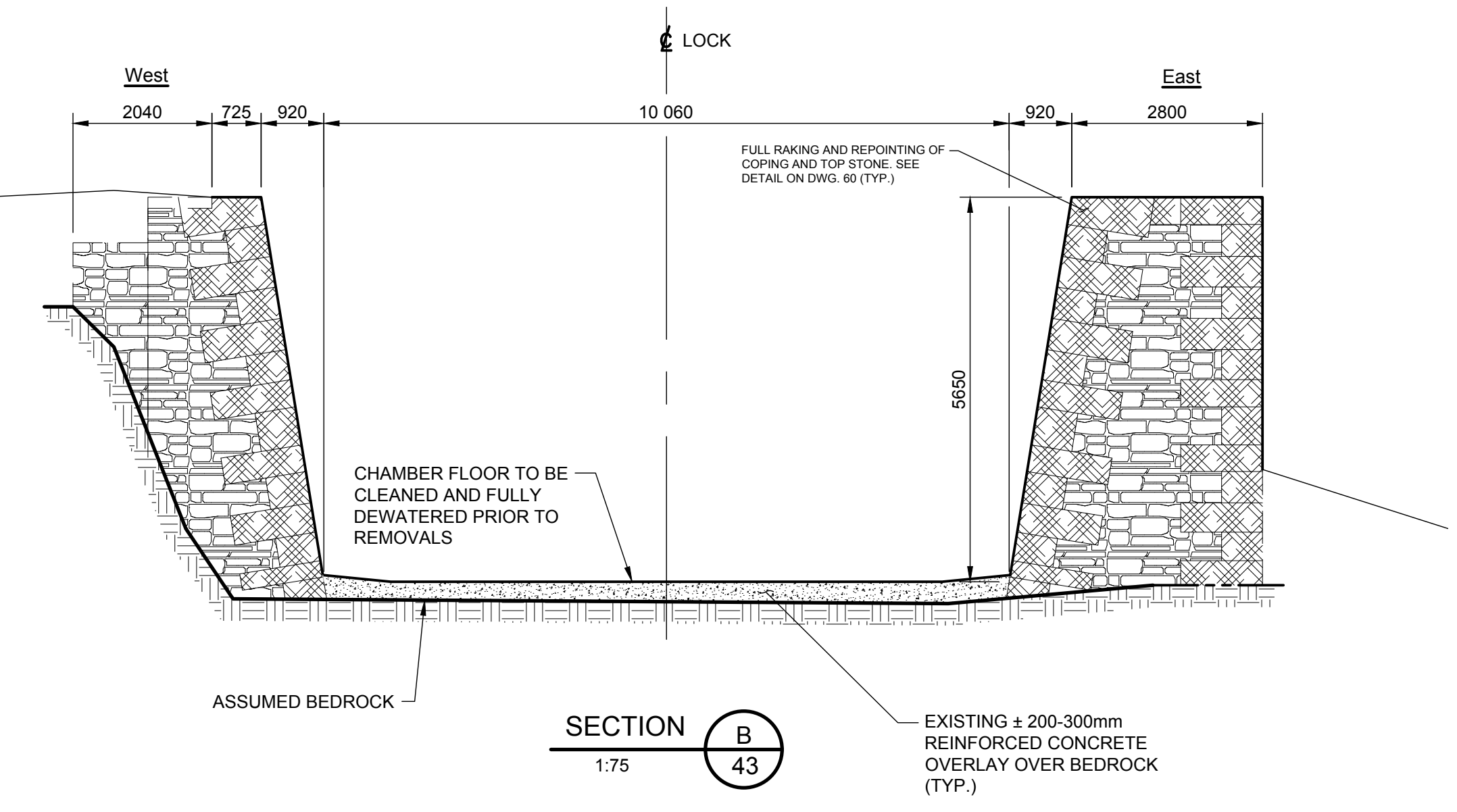
LEGEND	
PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLIUCE TUNNEL
W. L. EL.	WATER LEVEL ELEVATION



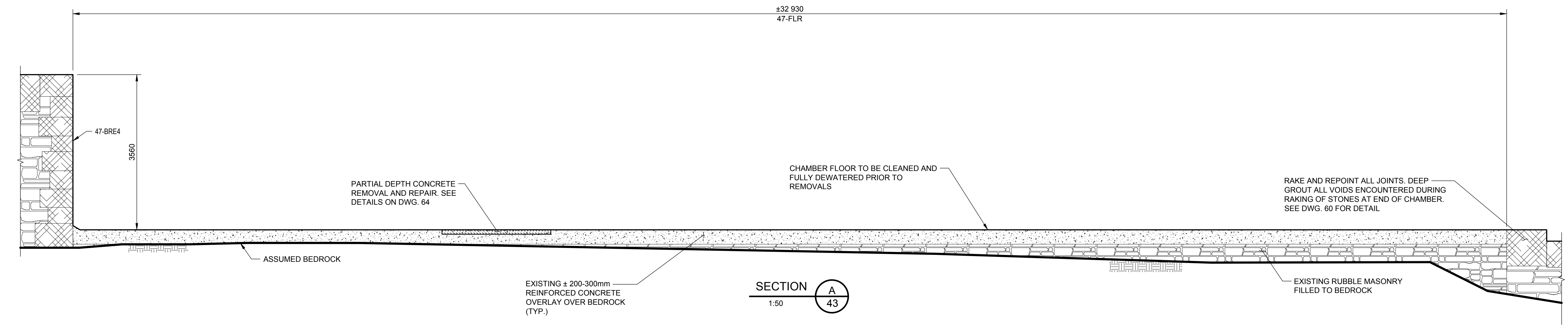
PLAN - CHAMBER FLOOR - LOCK 47
1:75



SECTION C
1:25



SECTION B
1:75



SECTION A
1:50

REPAIR LEGEND:

- CONCRETE REMOVALS FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
- NEW CONCRETE. SEE DETAILS ON DWG. 64
- FULL DEPTH STONE REMOVAL FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
- STONE REMOVAL FOR NEW FULL DUTCHMAN. SEE DETAILS ON DWG. 55
- STONE REMOVAL FOR PARTIAL DUTCHMAN. SEE DETAILS ON DWG. 56
- EXISTING CONCRETE SLAB TO REMAIN
- SLATE PAVER REMOVAL FOR NEW FLAGSTONE PAVERS. SEE DWG. 61
- CONCRETE REMOVALS FOR NEW FLAGSTONE. SEE DWG. 61
- EXISTING TIMBER FLOOR
- TIMBER FLOOR REPAIR
- BEDROCK
- EXISTING FINISHED MASONRY (SHOWN IN SECTION ONLY)
- GROUTED RUBBLE MASONRY
- RUBBLE MASONRY FILL
- NATIVE FILL

No.	Description	Revision / Révision	Des. By / Des. Par	Date
1	ISSUED FOR TENDER		J.M.	2018-06-15

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	A Detail number Numéro du détail
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Project title / Titre du projet
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**
ELGIN ONTARIO

Lock 47
**CHAMBER FLOOR -
REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 43
Project Number / Numéro du projet R.079796.009	Sheet 44 of 78 Feuille

NOTES:

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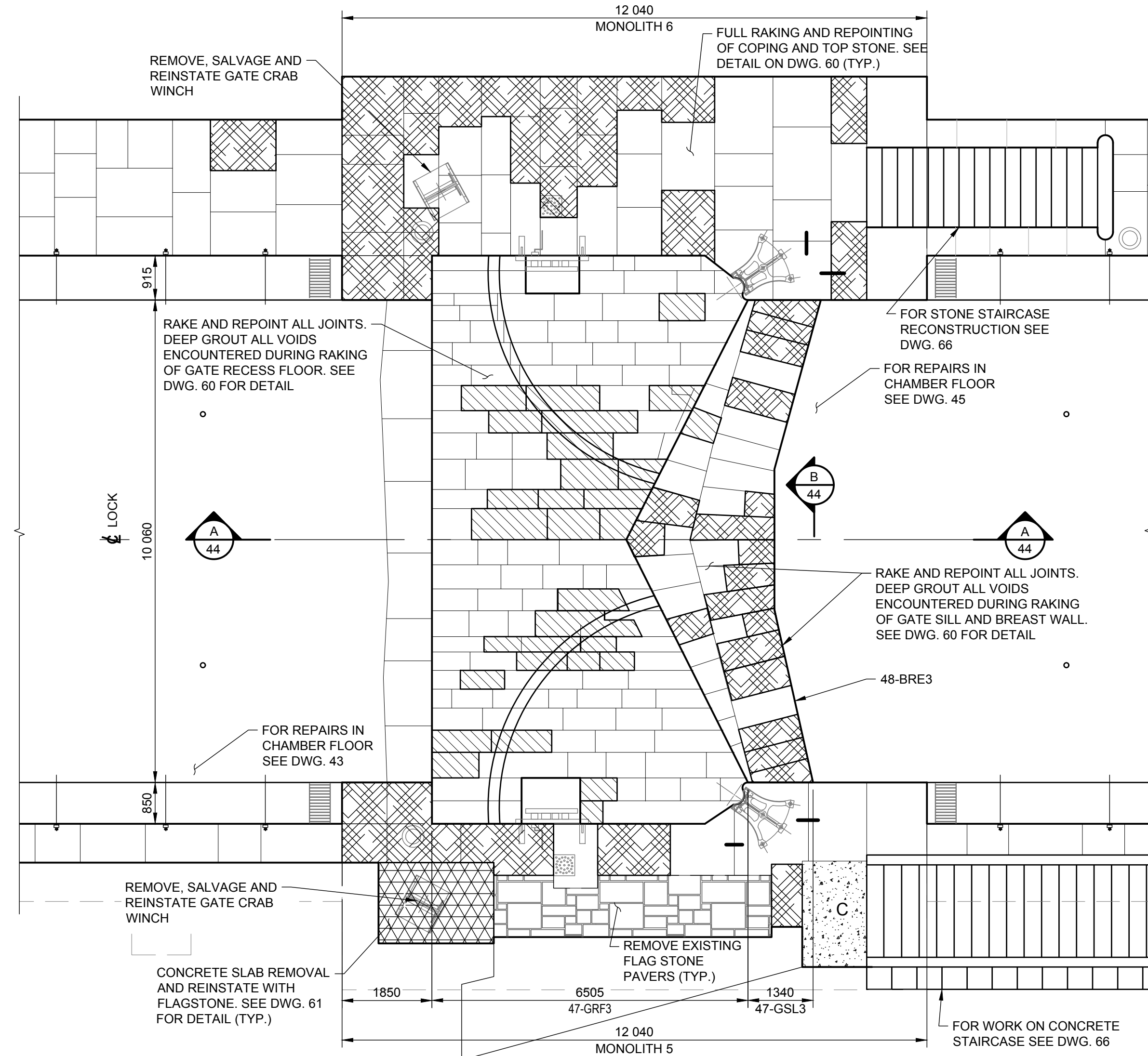
Heritage Canals and Engineering Works Group
Parcs Canada Infrastructure Directorate
Groupe Canaux historiques et travaux d'ingénierie
Direction de l'infrastructure de Parcs Canada

Parcs Canada
Parcs Canada

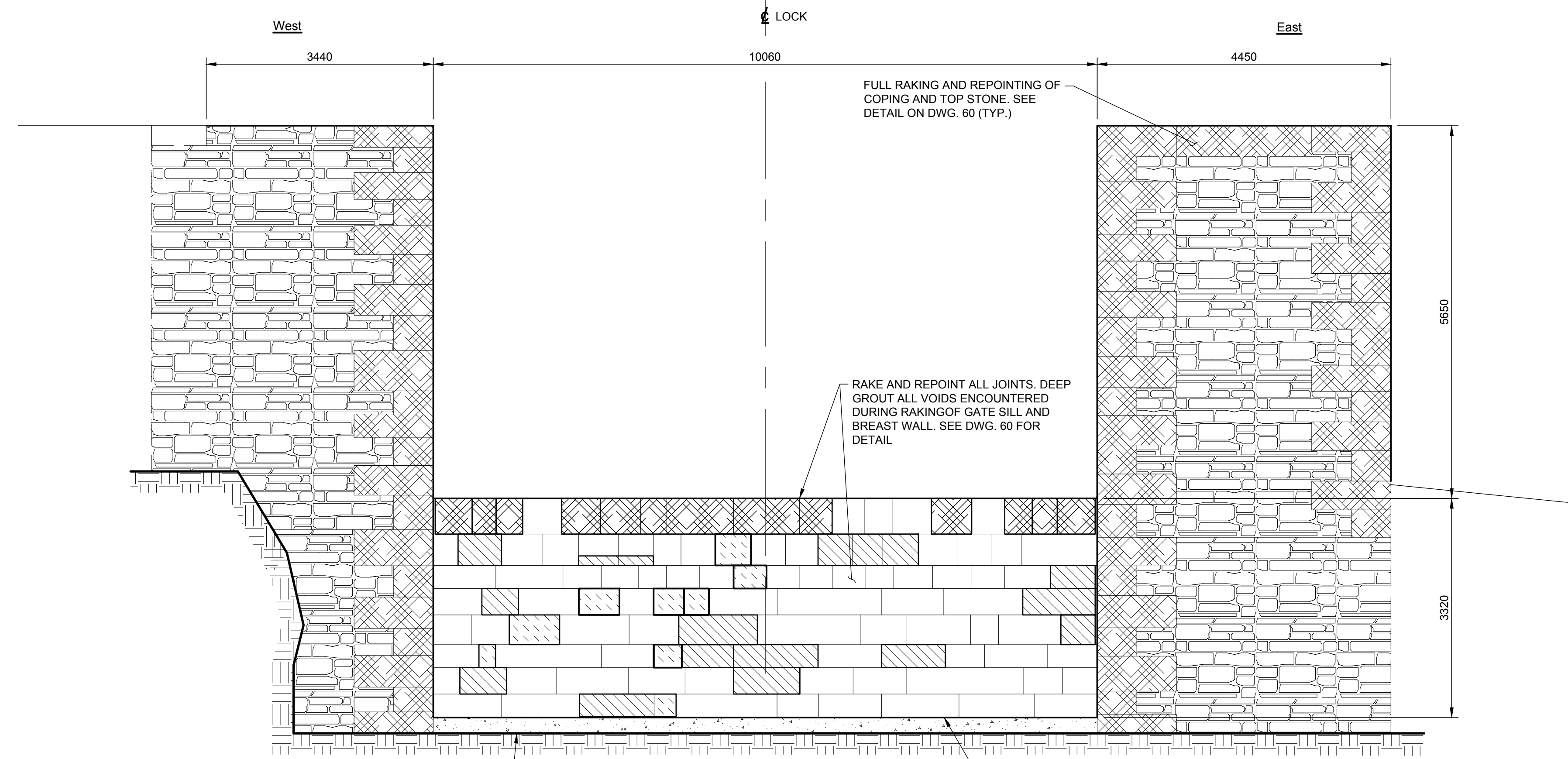
Canada

wsp

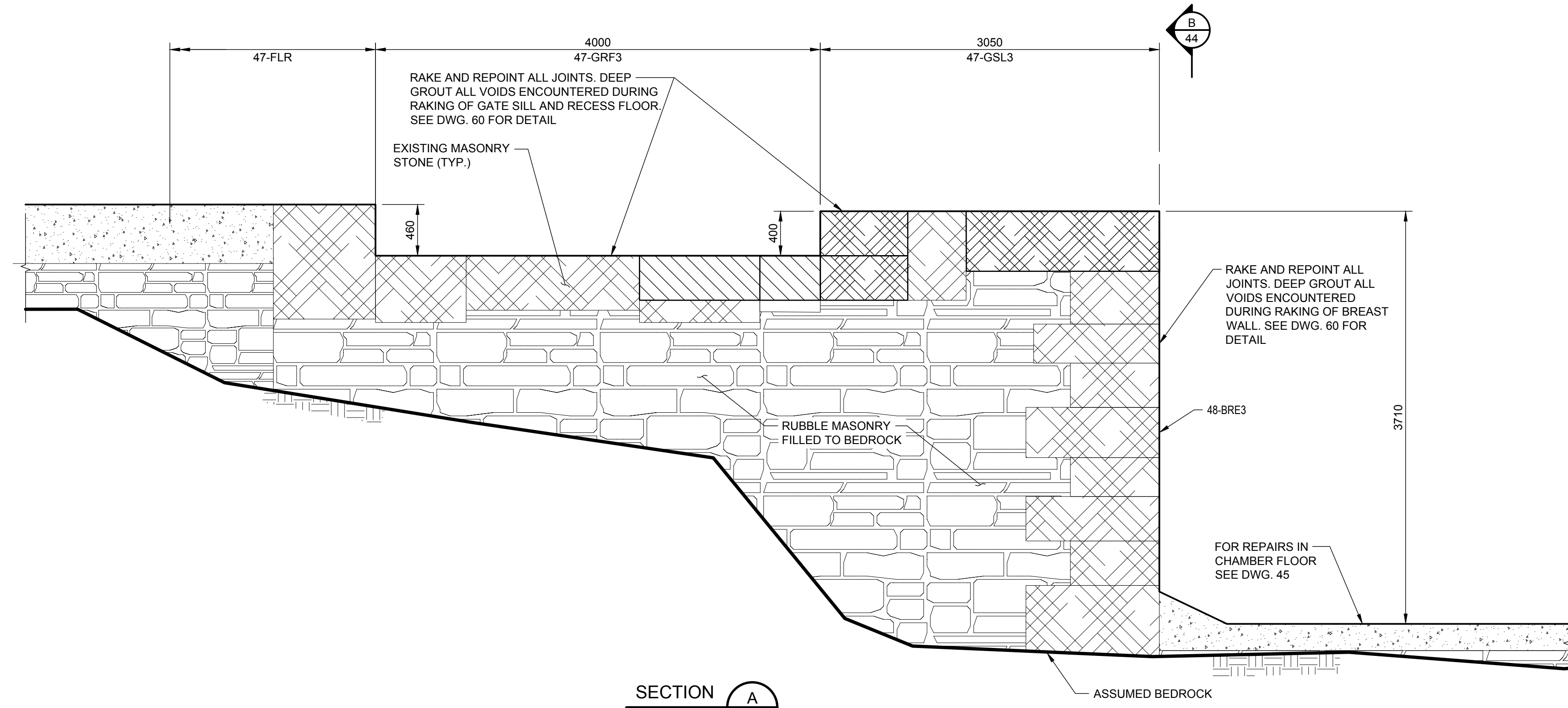
300-2611 QUEENSWAY DRIVE
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CANADA K2B 9C2
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PLAN - LOWER GATE RECESS FLOOR - LOCK 47
1:75



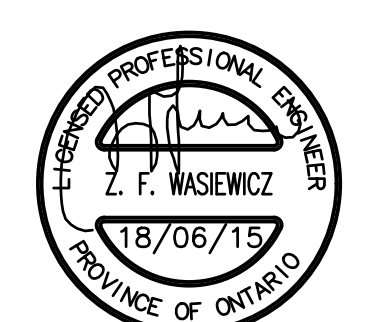
SECTION B
1:50



SECTION A
1:30

LEGEND

PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BRE	BREST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL
W. L. EL.	WATER LEVEL ELEVATION



REPAIR LEGEND:

- CONCRETE REMOVALS FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
- NEW CONCRETE. SEE DETAILS ON DWG. 64
- FULL DEPTH STONE REMOVAL FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
- STONE REMOVAL FOR NEW FULL DUTCHMAN. SEE DETAILS ON DWG. 55
- STONE REMOVAL FOR PARTIAL DUTCHMAN. SEE DETAILS ON DWG. 56
- EXISTING CONCRETE SLAB TO REMAIN
- SLATE PAVER REMOVAL FOR NEW FLAGSTONE PAVERS. SEE DWG. 61
- CONCRETE REMOVALS FOR NEW FLAGSTONE. SEE DWG. 61
- EXISTING TIMBER FLOOR
- TIMBER FLOOR REPAIR
- BEDROCK
- EXISTING FINISHED MASONRY (SHOWN IN SECTION ONLY)
- GROUTED RUBBLE MASONRY
- RUBBLE MASONRY FILL
- NATIVE FILL

No.	Description	Revision / Révision	Des. By / Des. Par	Date
1	ISSUED FOR TENDER		J.M.	2018-06-15

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A Detail number
B Location dwg. number

Project title / Titre du projet

**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**

ELGIN ONTARIO

Lock 47
LOWER GATE RECESS
FLOOR - REPAIR

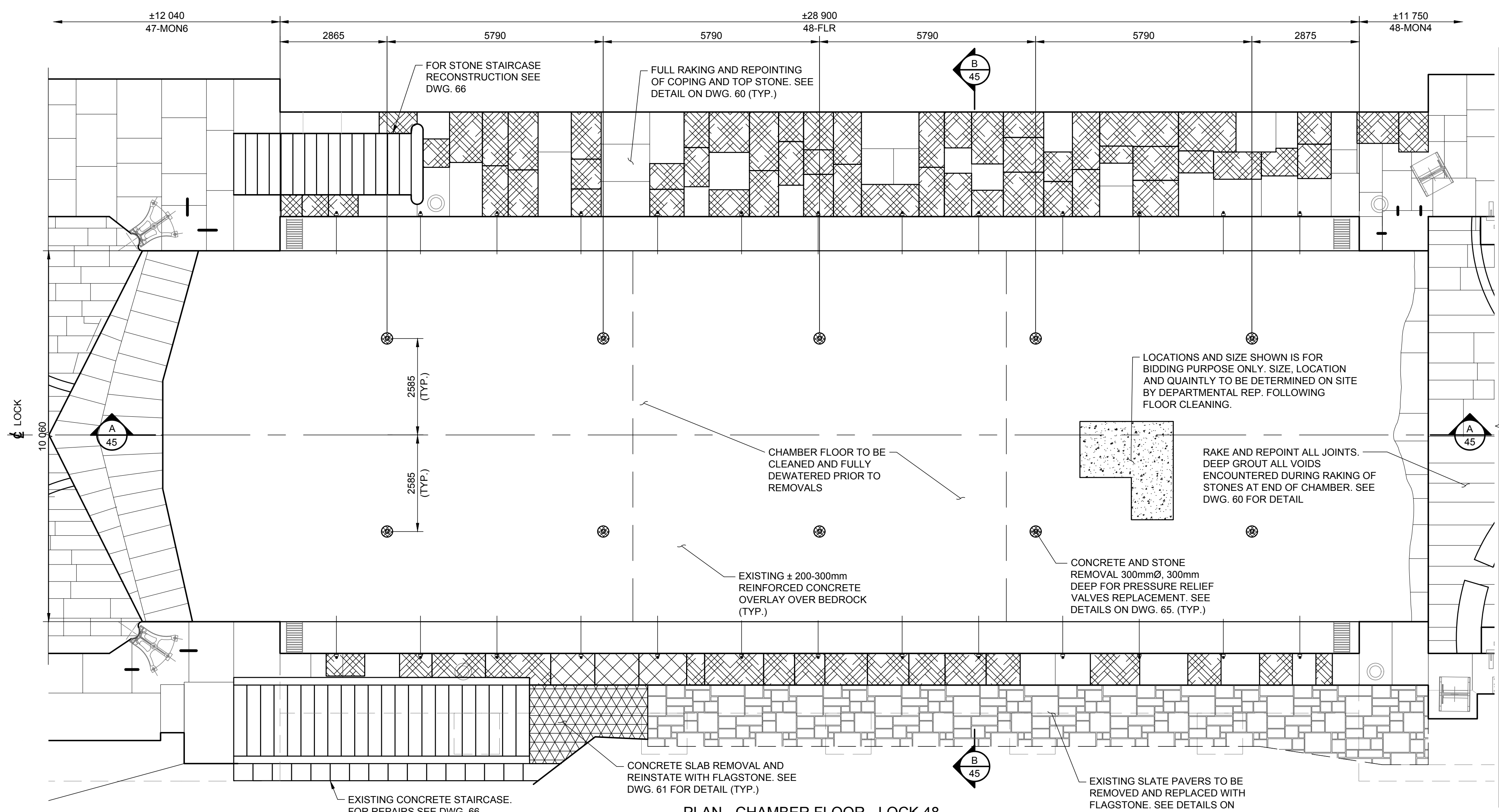
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 44
Project Number / Numéro du projet R.079796.009	Sheet 45 of 78 Feuille

NOTES:

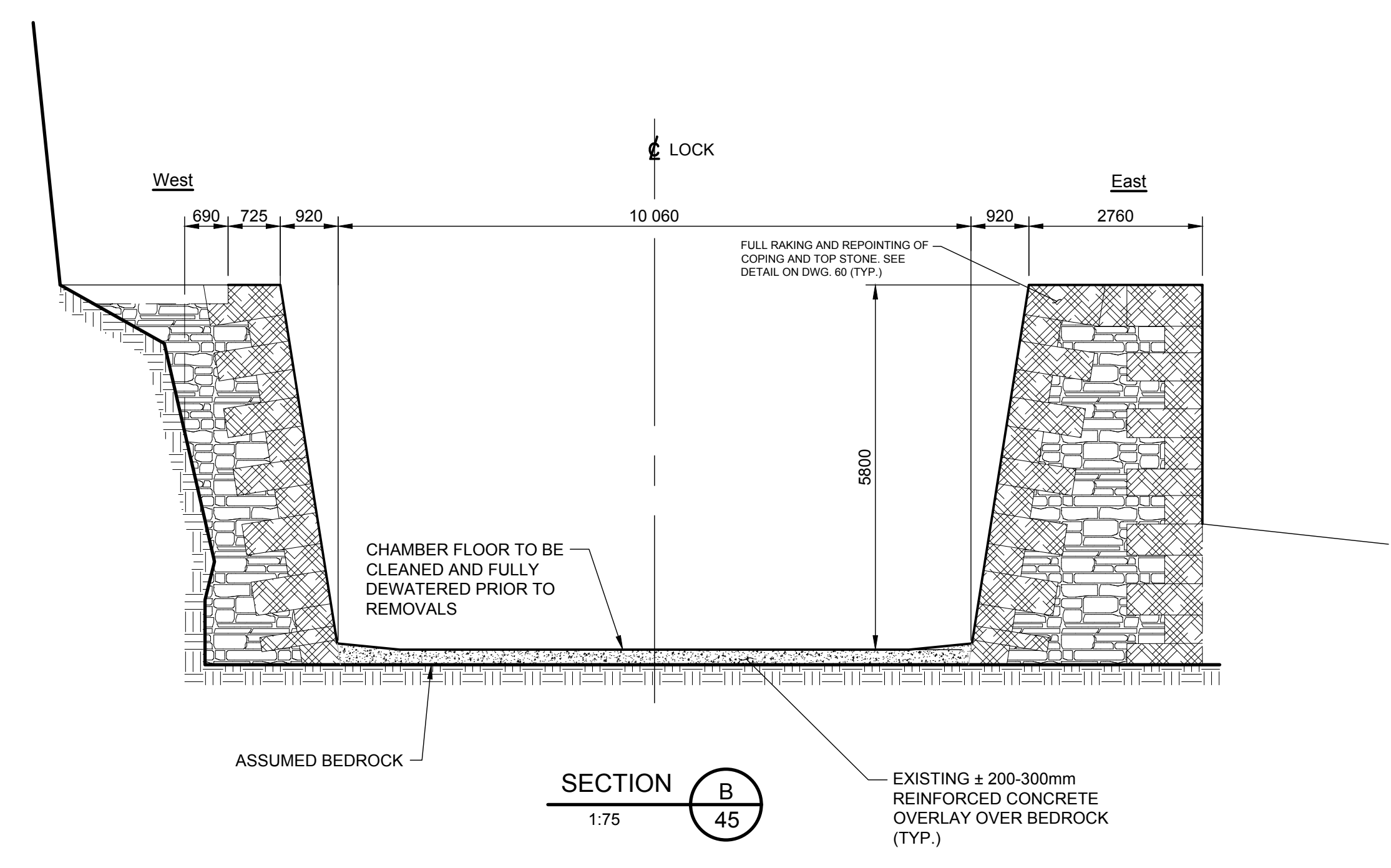
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 OTTAWA (ON N6C 5K2)
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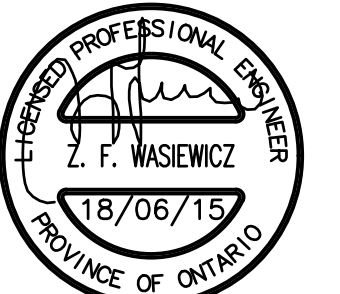
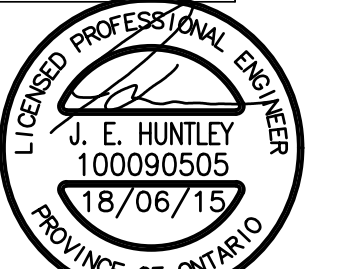
PLAN - CHAMBER FLOOR - LOCK 48
1:75



SECTION B-45
1:75

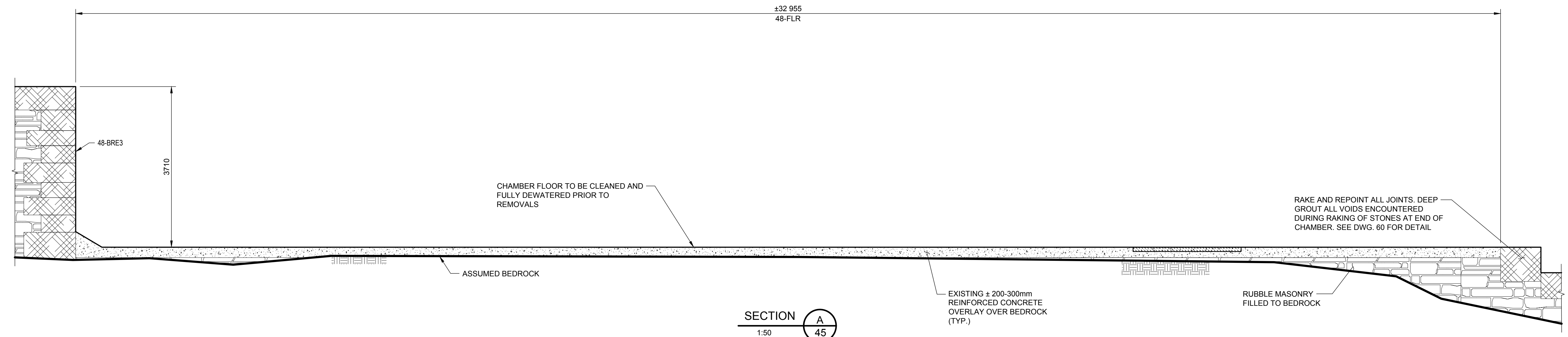
LEGEND

PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
OSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL
W. L. EL.	WATER LEVEL ELEVATION



REPAIR LEGEND:

- CONCRETE REMOVALS FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
- NEW CONCRETE. SEE DETAILS ON DWG. 64
- FULL DEPTH STONE REMOVAL FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
- STONE REMOVAL FOR NEW FULL DUTCHMAN. SEE DETAILS ON DWG. 55
- STONE REMOVAL FOR PARTIAL DUTCHMAN. SEE DETAILS ON DWG. 56
- EXISTING CONCRETE SLAB TO REMAIN
- SLATE PAVER REMOVAL FOR NEW FLAGSTONE PAVERS. SEE DWG. 61
- CONCRETE REMOVALS FOR NEW FLAGSTONE. SEE DWG. 61
- EXISTING TIMBER FLOOR
- TIMBER FLOOR REPAIR
- BEDROCK
- EXISTING FINISHED MASONRY (SHOWN IN SECTION ONLY)
- GROUTED RUBBLE MASONRY
- RUBBLE MASONRY FILL
- NATIVE FILL



SECTION A-45
1:50

No.	Description	Revision / Révision	Des. By / Des. Par	Date
1	ISSUED FOR TENDER		J.M.	2018-06-15

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	A Detail number Numéro du détail
	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 48
 CHAMBER FLOOR -
 REPAIR**

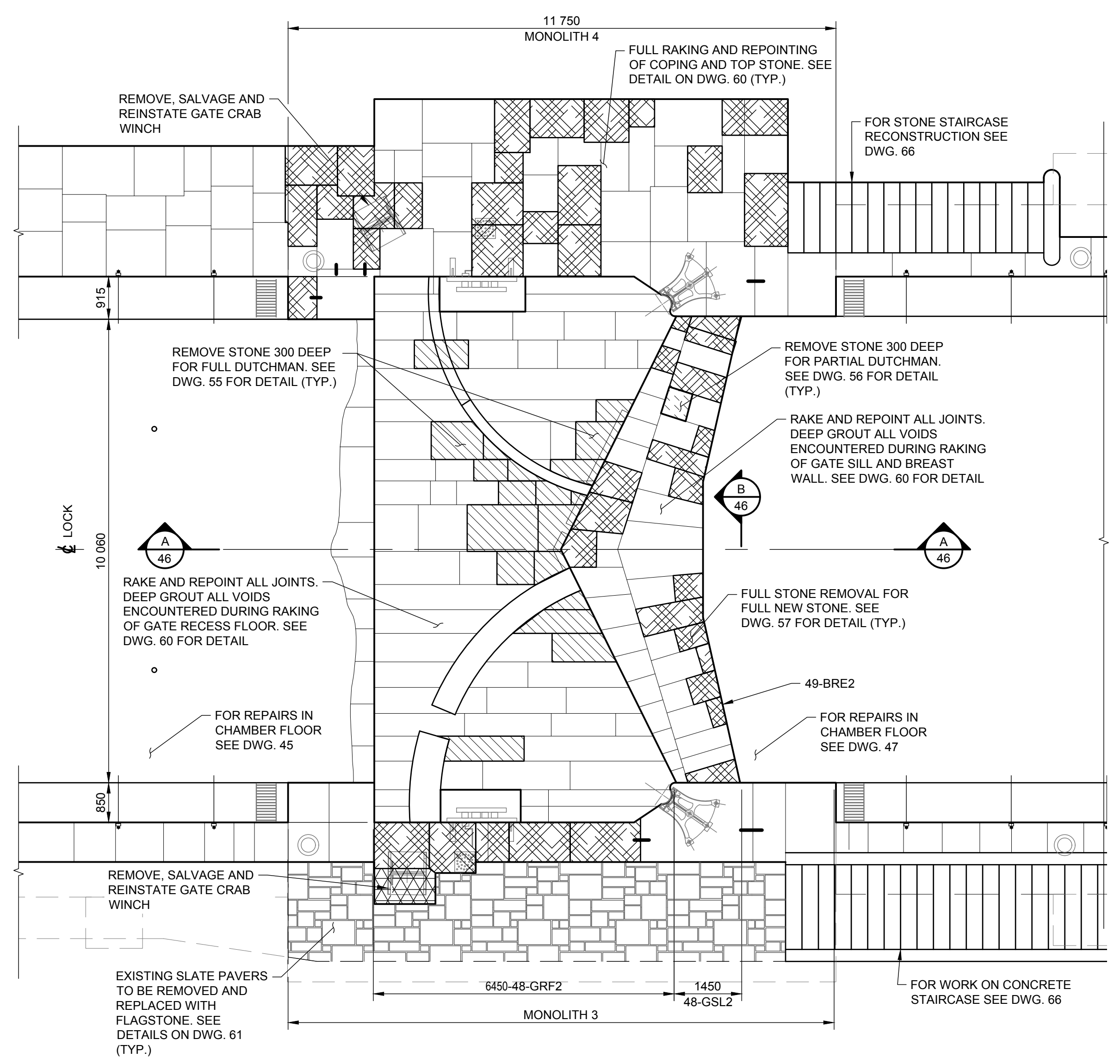
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 45
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 46 of 78



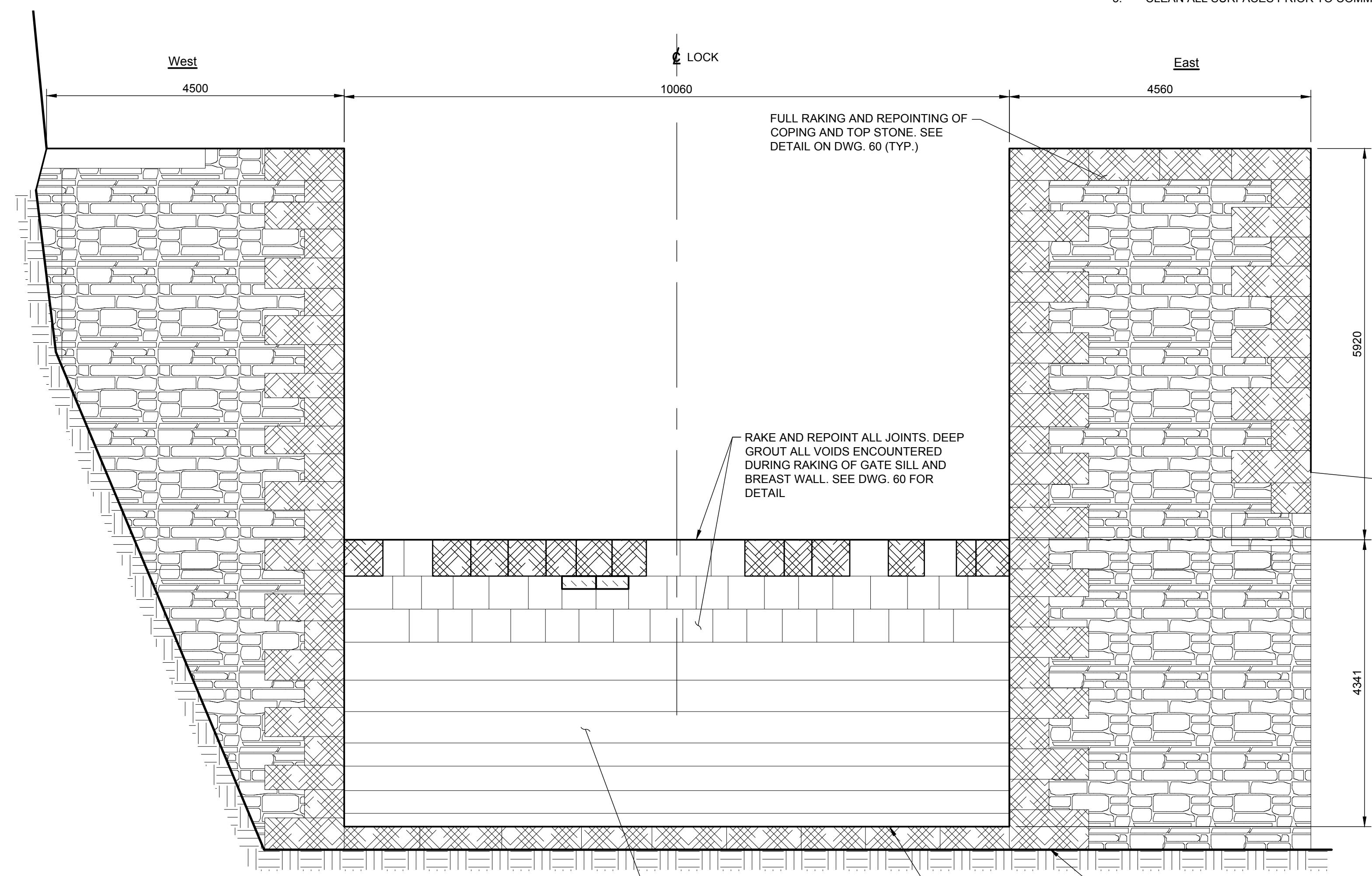
300-2611 QUEENSWAY DRIVE
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 TELEPHONE: 613-929-3800 FAX: 613-929-8299
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NOTES:

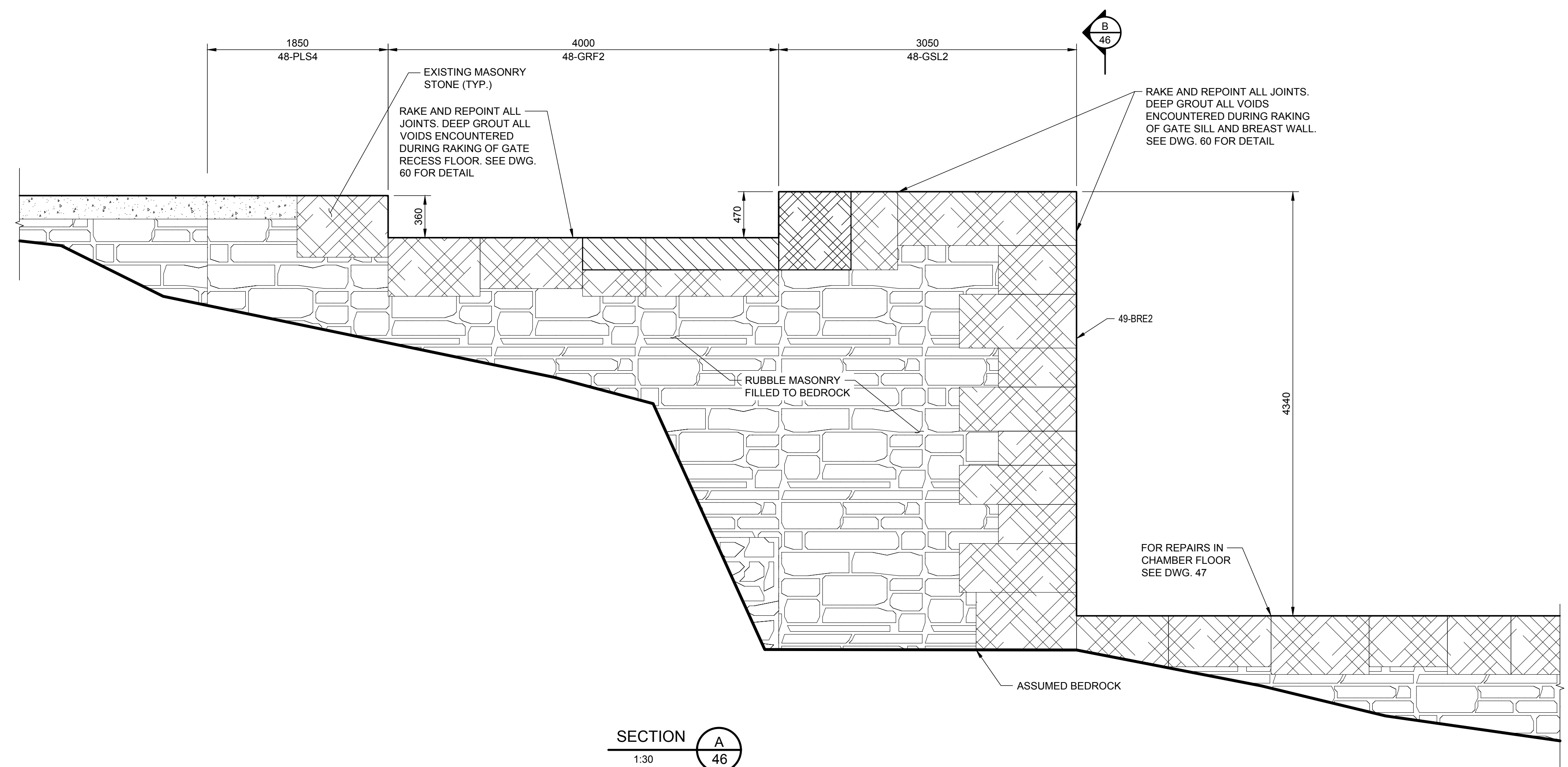
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PLAN - LOWER FLOOR - LOCK 48
 1:75



SECTION B-46
 1:50



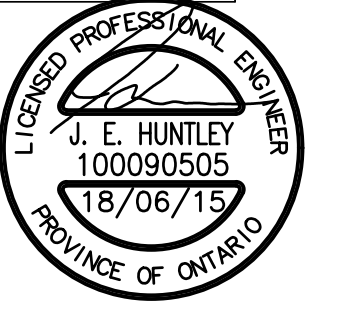
SECTION A-46
 1:30

REPAIR LEGEND:

- CONCRETE REMOVALS FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
- NEW CONCRETE. SEE DETAILS ON DWG. 64
- FULL DEPTH STONE REMOVAL FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
- STONE REMOVAL FOR NEW FULL DUTCHMAN. SEE DETAILS ON DWG. 55
- STONE REMOVAL FOR PARTIAL DUTCHMAN. SEE DETAILS ON DWG. 56
- EXISTING CONCRETE SLAB TO REMAIN
- SLATE PAVER REMOVAL FOR NEW FLAGSTONE PAVERS. SEE DWG. 61
- CONCRETE REMOVALS FOR NEW FLAGSTONE. SEE DWG. 61
- EXISTING TIMBER FLOOR
- TIMBER FLOOR REPAIR
- BEDROCK
- EXISTING FINISHED MASONRY (SHOWN IN SECTION ONLY)
- GROUDED RUBBLE MASONRY
- RUBBLE MASONRY FILL
- NATIVE FILL

LEGEND

PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL
W. L. EL.	WATER LEVEL ELEVATION



No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

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A	Detail number Numero du detail
B	Location dwg. number Numero sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Lock 48
 LOWER GATE RECESS
 FLOOR - REPAIR

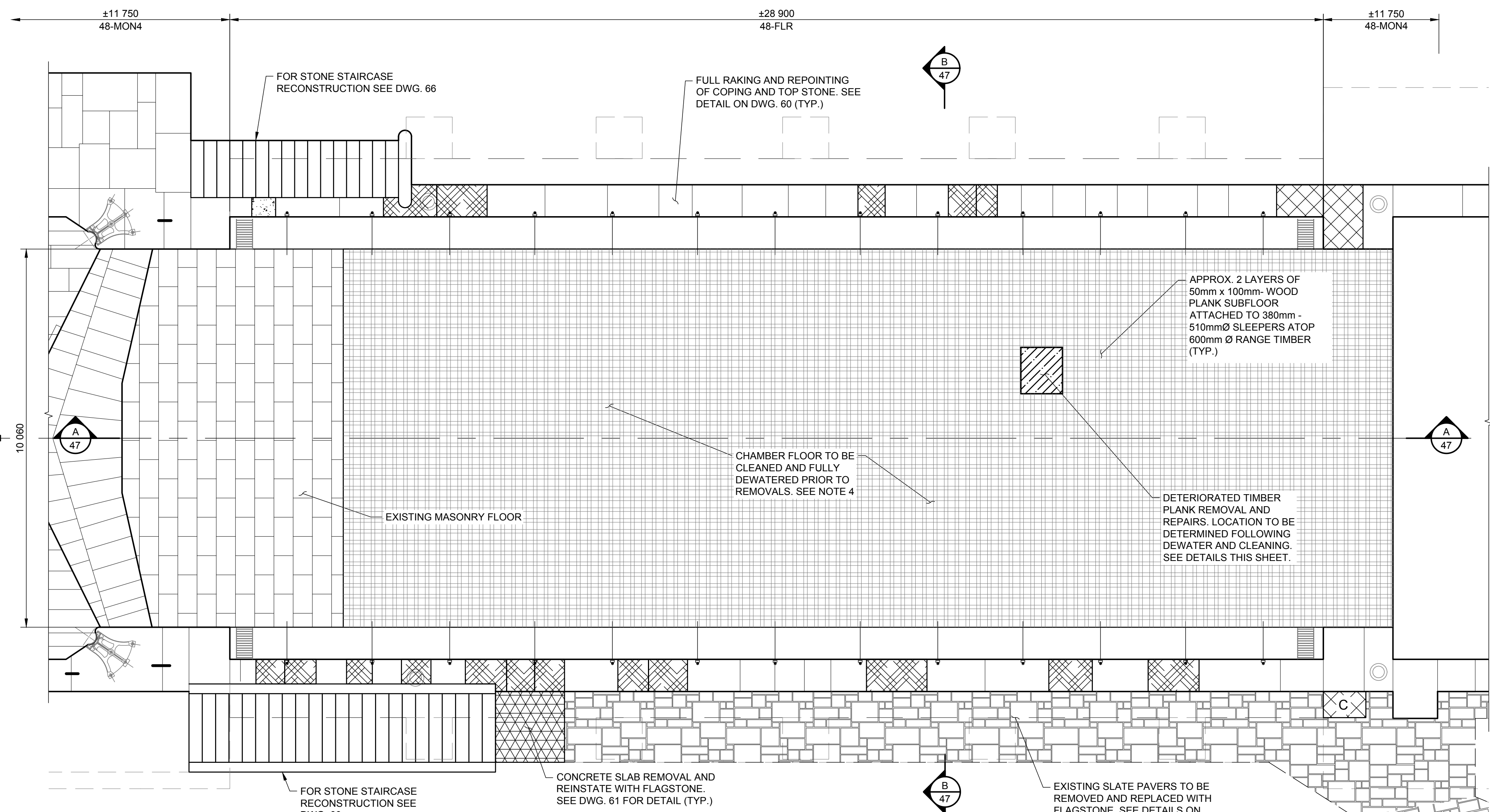
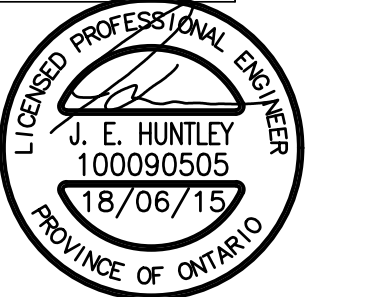
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 46
Project Number / Numéro du projet R.079796.009	Sheet 47 of 78 Feuille

NOTES:

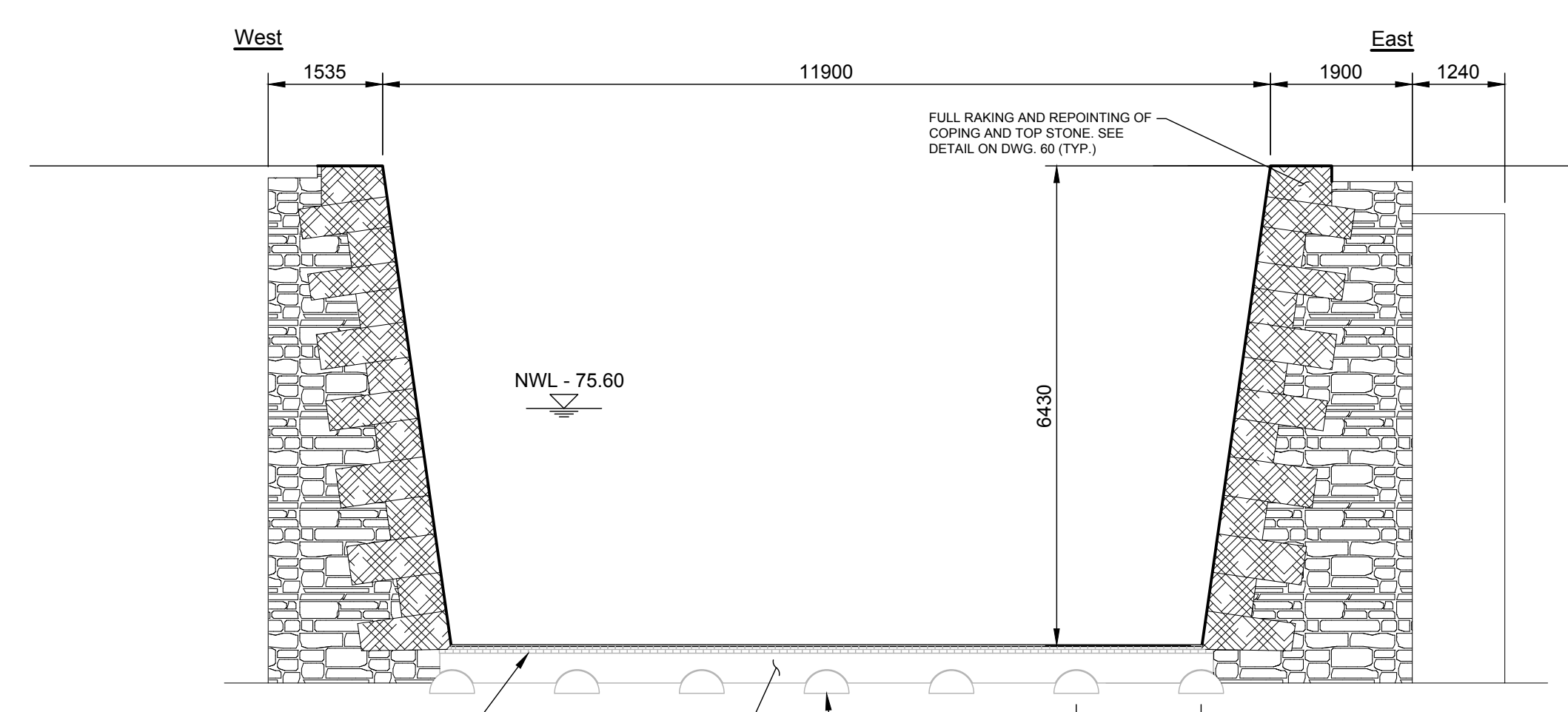
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4. TIMBER IN FLOOR SHALL REMAIN COVERED BY WATER AT ALL TIMES.
5. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
6. SIZES OF TIMBER IN FLOOR AS BASED ON LIMITED INFORMATION AND SHALL BE VERIFIED.

LEGEND

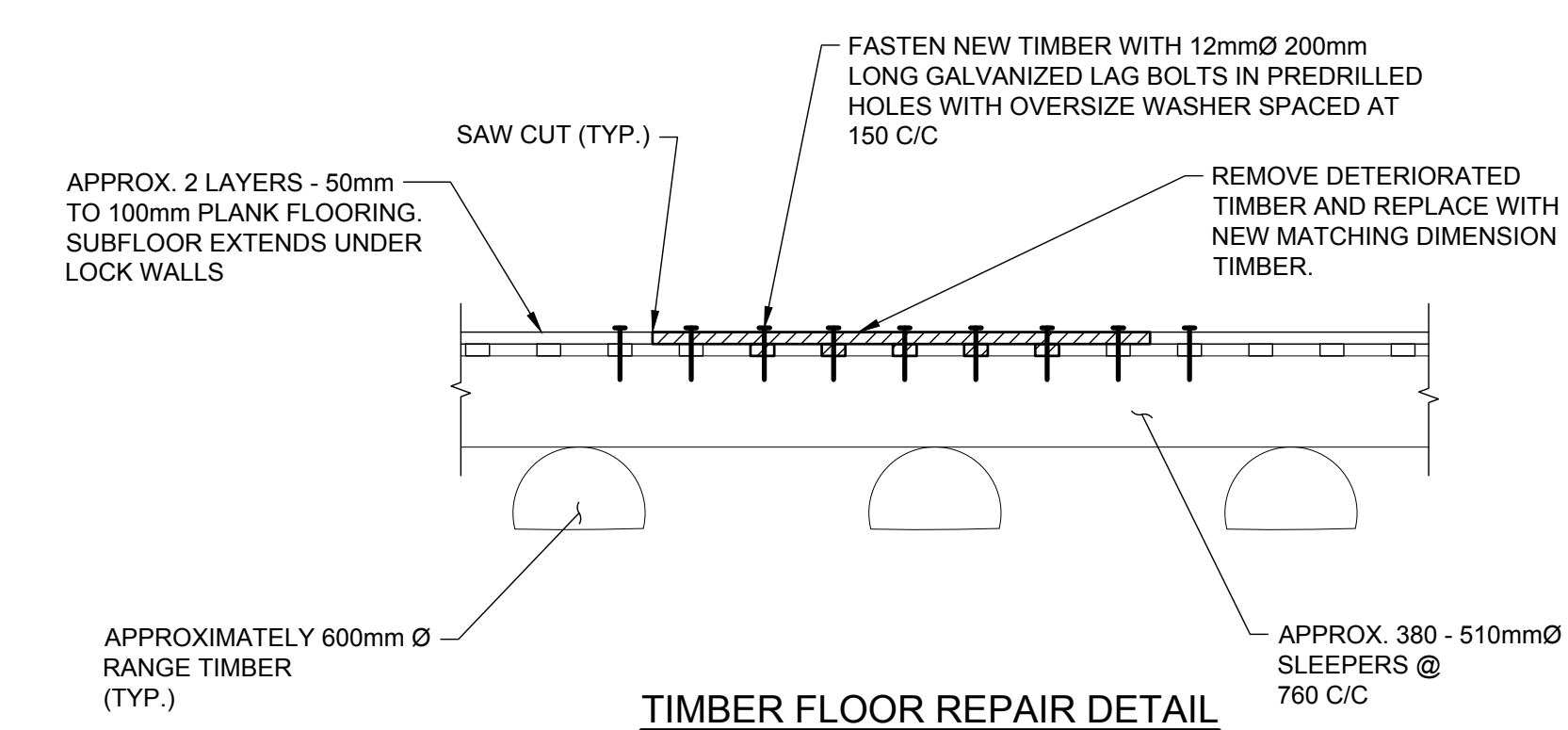
PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
OSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL
W. L. EL.	WATER LEVEL ELEVATION



PLAN - CHAMBER FLOOR - LOCK 49
1:75



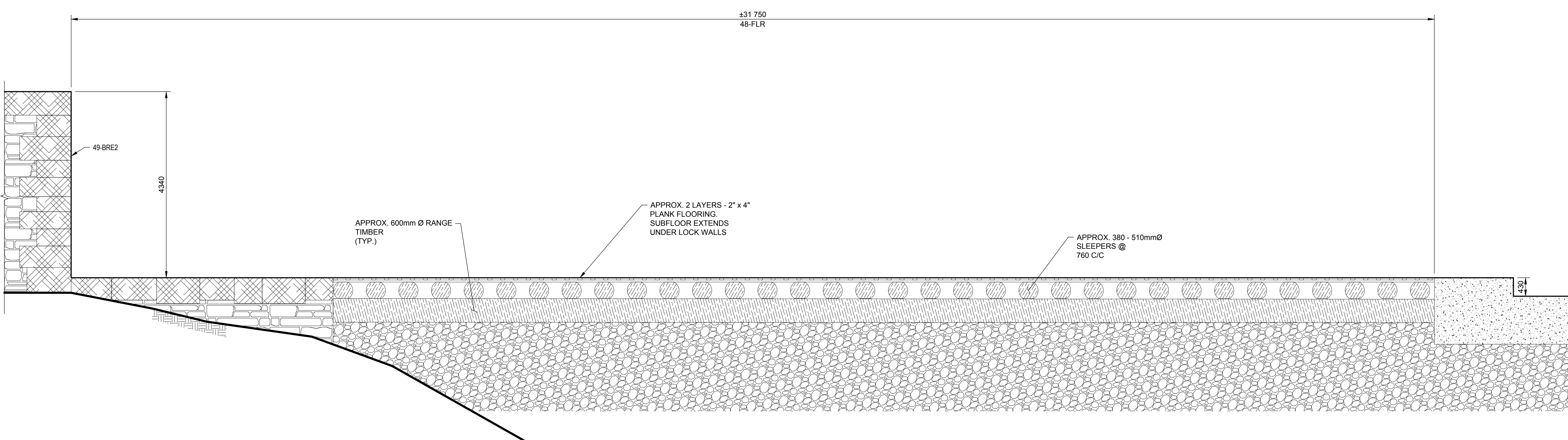
SECTION B
1:75



TIMBER FLOOR REPAIR DETAIL
1:30

REPAIR LEGEND:

	CONCRETE REMOVALS FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
	NEW CONCRETE. SEE DETAILS ON DWG. 64
	FULL DEPTH STONE REMOVAL FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
	STONE REMOVAL FOR NEW FULL DUTCHMAN. SEE DETAILS ON DWG. 55
	STONE REMOVAL FOR PARTIAL DUTCHMAN. SEE DETAILS ON DWG. 56
	EXISTING CONCRETE SLAB TO REMAIN
	SLATE PAVER REMOVAL FOR NEW FLAGSTONE PAVERS. SEE DWG. 61
	CONCRETE REMOVALS FOR NEW FLAGSTONE. SEE DWG. 61
	EXISTING TIMBER FLOOR
	TIMBER FLOOR REPAIR
	BEDROCK
	EXISTING FINISHED MASONRY (SHOWN IN SECTION ONLY)
	GRAUDED RUBBLE MASONRY
	RUBBLE MASONRY FILL
	NATIVE FILL



SECTION A
1:50

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par.	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Lock 49
 Chamber Floor -
 Repair

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 47
Project Number / Numéro du projet R.079796.009	Sheet 48 of 78 Feuille

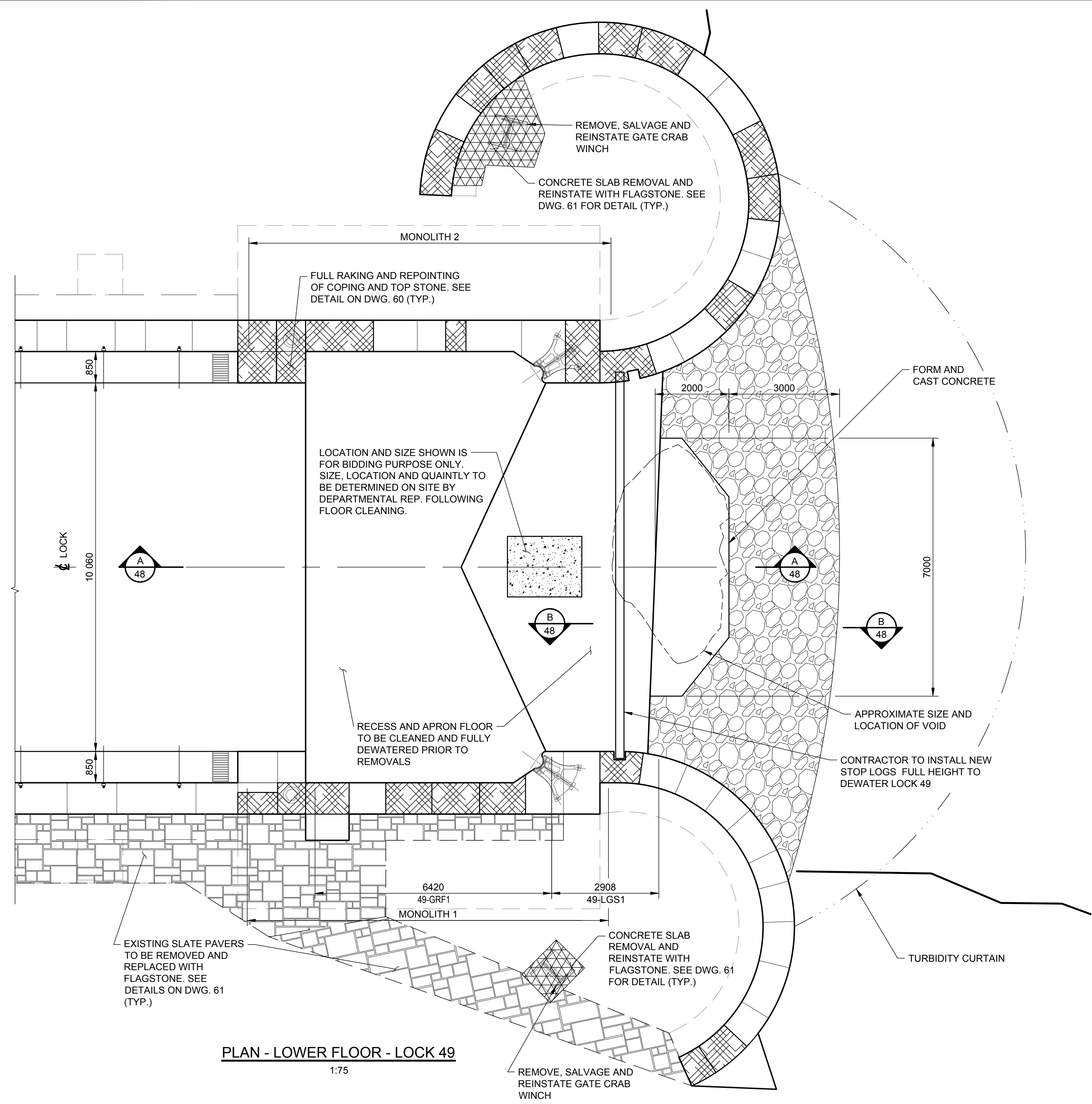
REPAIR LEGEND:

[Symbol]	CONCRETE REMOVALS FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
[Symbol]	NEW CONCRETE. SEE DETAILS ON DWG. 64
[Symbol]	FULL DEPTH STONE REMOVAL FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
[Symbol]	STONE REMOVAL FOR NEW FULL DUTCHMAN. SEE DETAILS ON DWG. 55
[Symbol]	STONE REMOVAL FOR PARTIAL DUTCHMAN. SEE DETAILS ON DWG. 56
[Symbol]	EXISTING CONCRETE SLAB TO REMAIN
[Symbol]	SLATE PAVER REMOVAL FOR NEW FLAGSTONE PAVERS. SEE DWG. 61
[Symbol]	CONCRETE REMOVALS FOR NEW FLAGSTONE. SEE DWG. 61
[Symbol]	EXISTING TIMBER FLOOR
[Symbol]	TIMBER FLOOR REPAIR
[Symbol]	BEDROCK
[Symbol]	EXISTING FINISHED MASONRY (SHOWN IN SECTION ONLY)
[Symbol]	GROUTED RUBBLE MASONRY
[Symbol]	RUBBLE MASONRY FILL
[Symbol]	NATIVE FILL

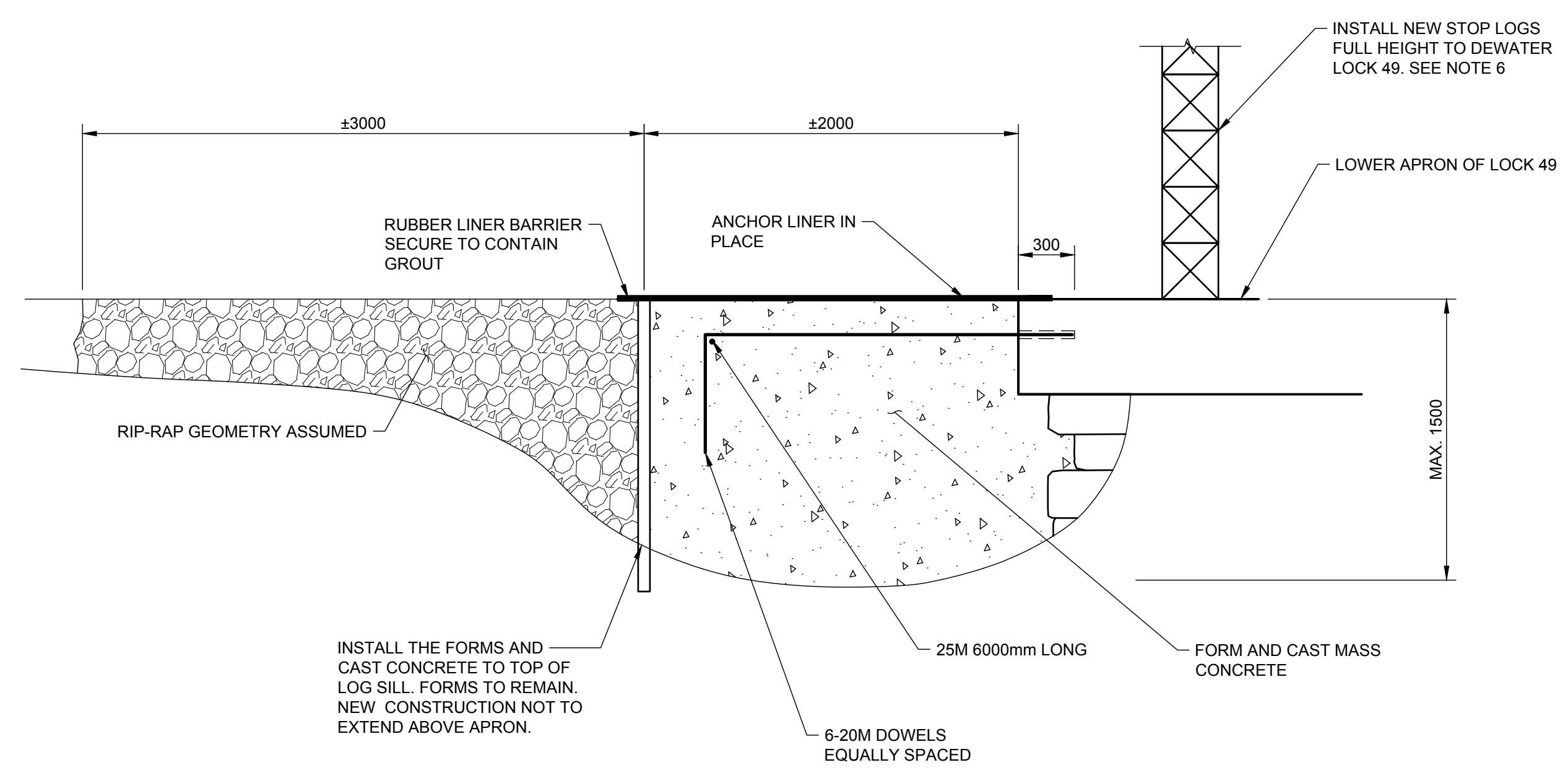
- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 - ALL CONDITIONS SHOWN ARE BASED ON LIMITED INFORMATION AND NOT GUARANTEED. CONTRACTOR TO CONFIRM ALL SITE CONDITIONS WHERE CONDITIONS VARY.
 - REMOVE TIMBER GATE (NOT SHOWN) AND STORE IN FULLY SUPPORTED UPRIGHT POSITION. SALVAGE PINION AT BOTTOM.
 - FOLLOWING REMOVALS, ALL SUBGRADE AREAS ARE TO BE PROTECTED FROM FREEZING AND MAINTAINED FROST FREE DURING THE WORK.
 - ALL WORK SHOWN FOR VOID REPAIR REQUIRES DIVERS.
 - CONTRACTOR TO SUPPLY MEASUREMENT FOR STOP LOGS TO PCA IN THE FALL OF YEAR 1 OF CONSTRUCTION. PCA WILL MANUFACTURE AND DELIVER LOGS FOR DEWATERING OF LOCK 49 IN THE FALL OF YEAR 2.
 - CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.

LEGEND

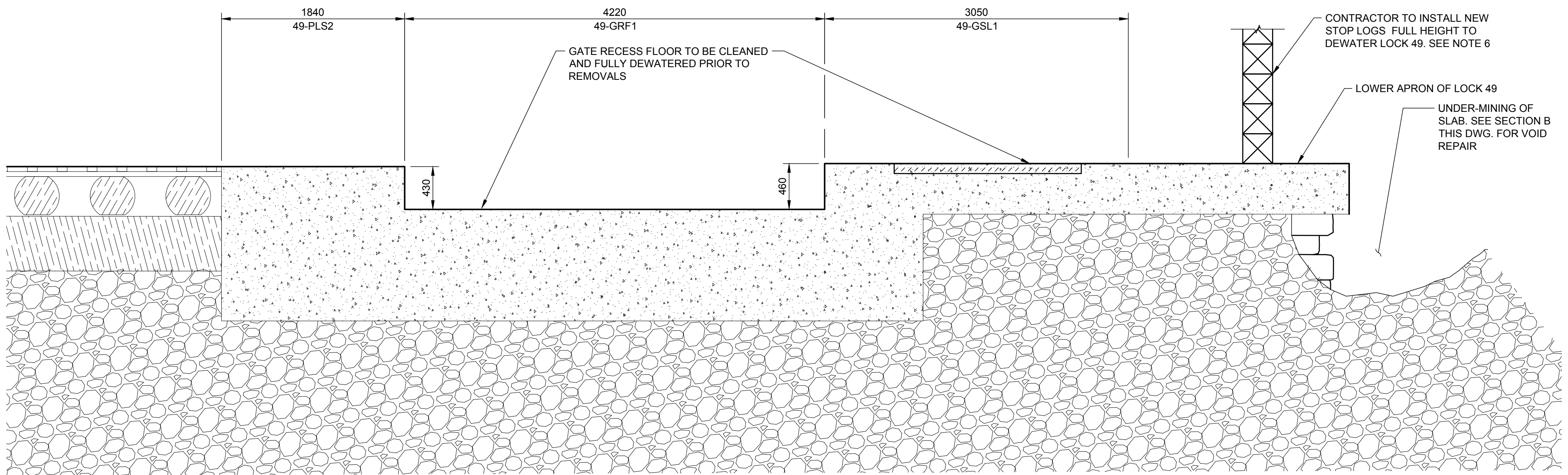
PLS	PILASTER
PIE	PIER
CHW	CHAMBER WALL
GRW	GATE RECESS WALL
NEW	NORTHEAST WINGWALL
SEW	SOUTHEAST WINGWALL
NWW	NORTHWEST WINGWALL
SWW	SOUTHWEST WINGWALL
BRE	BREAST WALL
LGS	LOG SILL
GFR	GATE FLOOR RECESS
GSL	GATE SILL
FLR	CHAMBER FLOOR
APR	APRON
SLT	SLUICE TUNNEL
W. L. EL.	WATER LEVEL ELEVATION



PLAN - LOWER FLOOR - LOCK 49
1:75



SECTION B-48 LOCK 49 - LOWER APRON - VOID REPAIR
1:25



SECTION A-48
1:30

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par.	Date
Revision / Révision			

A	A Detail number / Numéro du détail
B	B Location dwg. number / Numéro sur dessin

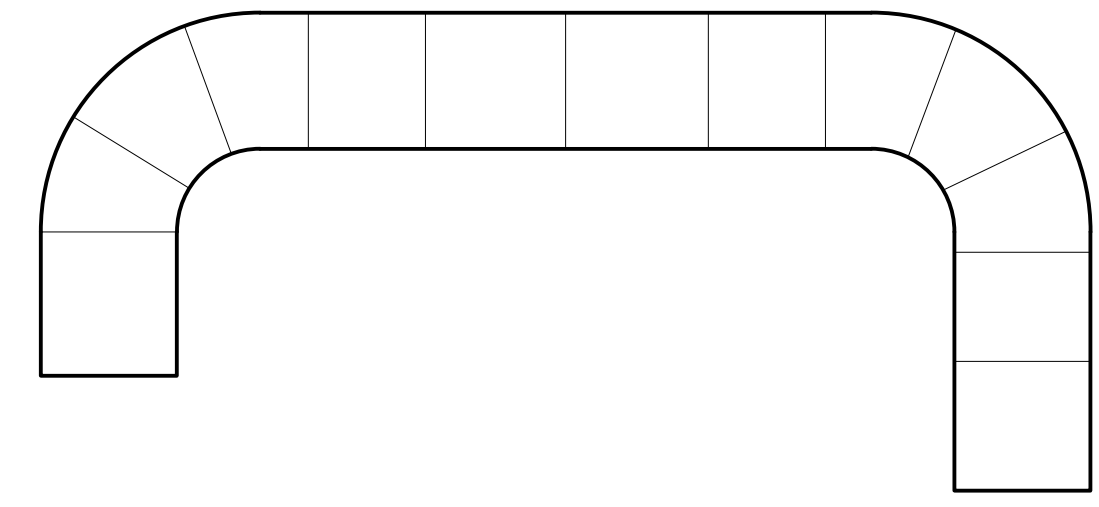
Project title / Titre du projet

**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**

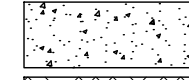


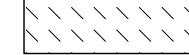
ELGIN ONTARIO

**LOCK 49
 LOWER GATE RECESS
 FLOOR - REPAIR**

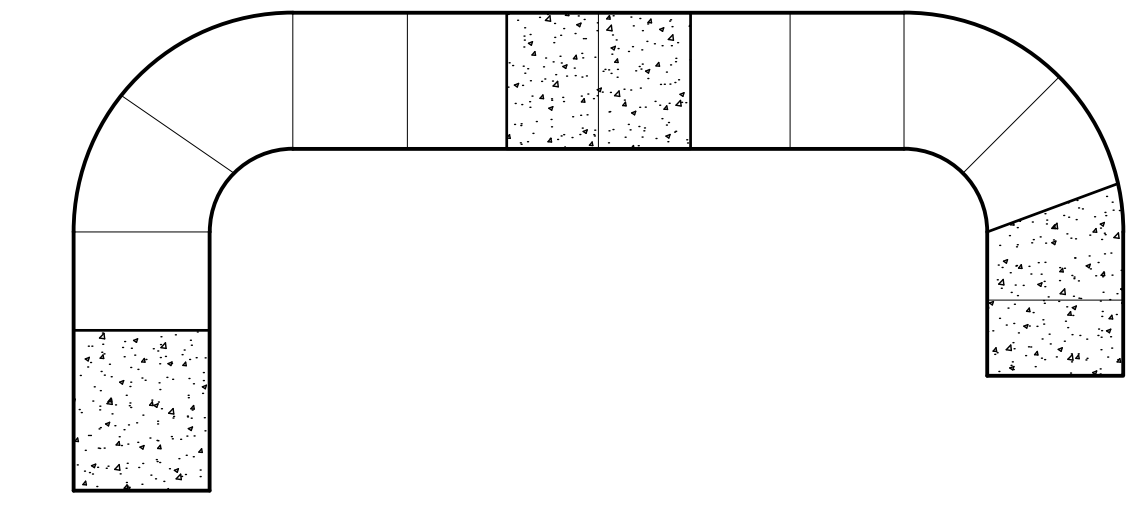
Drawn by / Dessiné par	Designed by / Conçu par
ADRIAN MEUNIER	FELIX WASIEWICZ
Approved by / Approuvé par	Drawing Date / Date du dessin
JULIA MARSON	JUNE 2018
Project manager / Administrateur de projet	Drawing Number / Numéro du Dessin
SHAWN FILLION	48
Project Number / Numéro du projet	Sheet 49 of 78
R.079796.009	



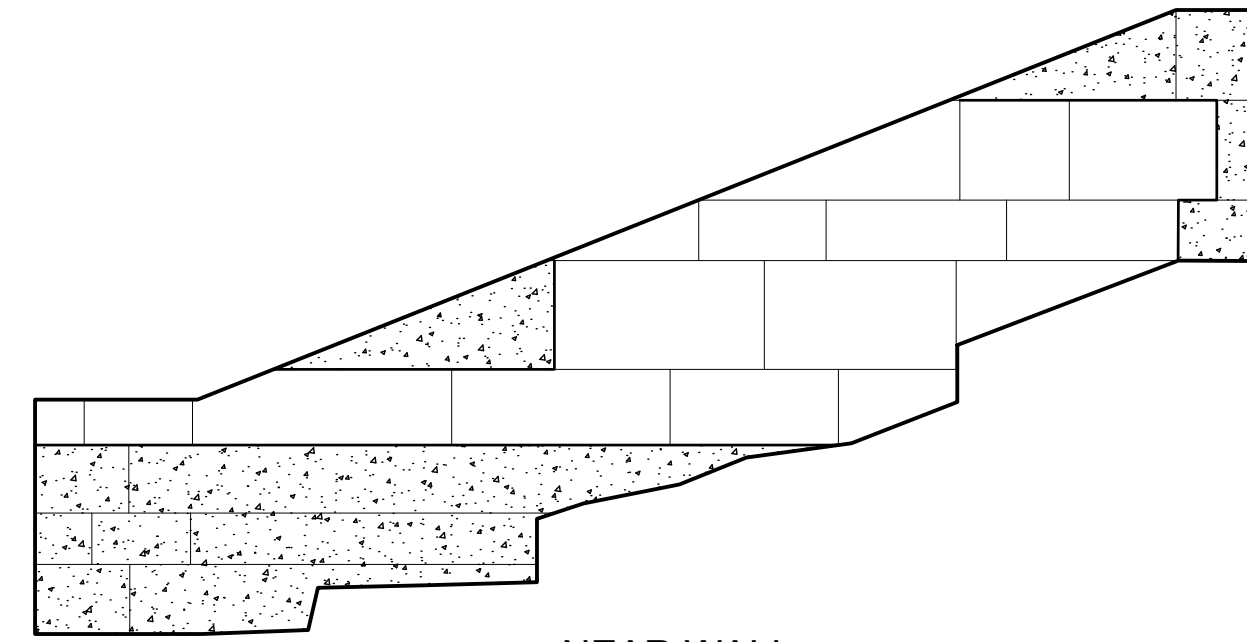
CEILING - XRAY

- REPAIRS LEGEND:**
-  NEW CONCRETE - SEE DETAILS DWG. 53 & 54
 -  NEW FULL DEPTH STONE - SEE DETAILS DWG. 57
 -  NEW DUTCHMAN - SEE DETAILS DWG. 55
 -  NEW PARTIAL DUTCHMAN - SEE DETAILS DWG. 56

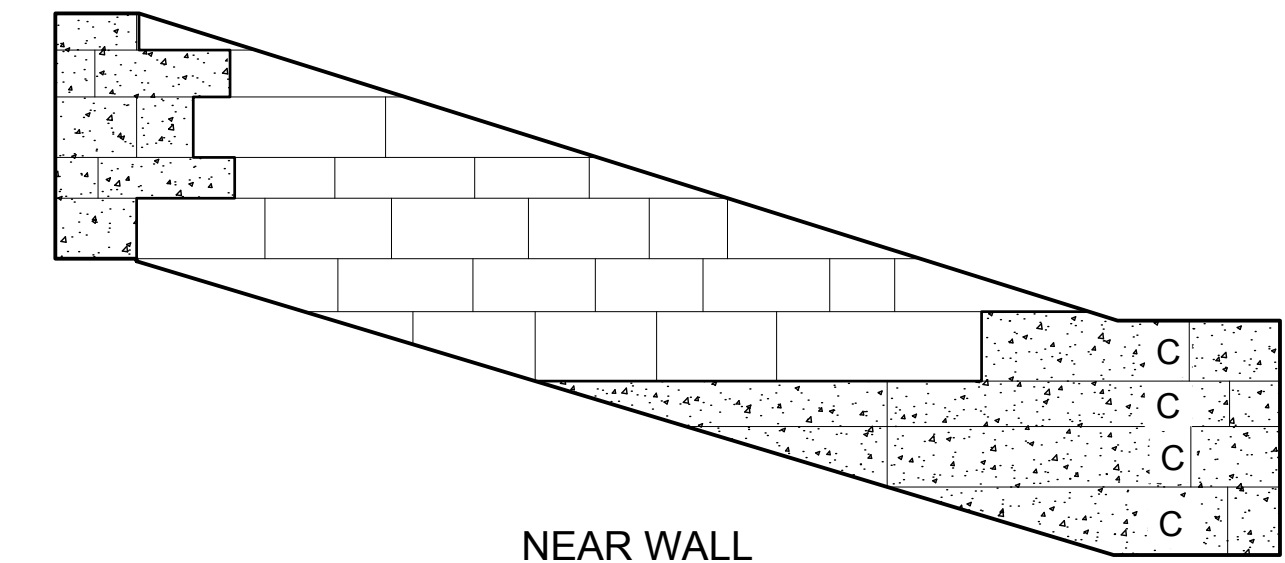
- NOTES:**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 2. FOR REMOVAL AND REPAIR DETAILS AND NOTES SEE DWG. 53 & 54
 3. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
 4. SHALLOW DEPTH REPAIRS SHALL ONLY BE USED WHERE DIRECTED BY DEPARTMENTAL REPRESENTATIVE



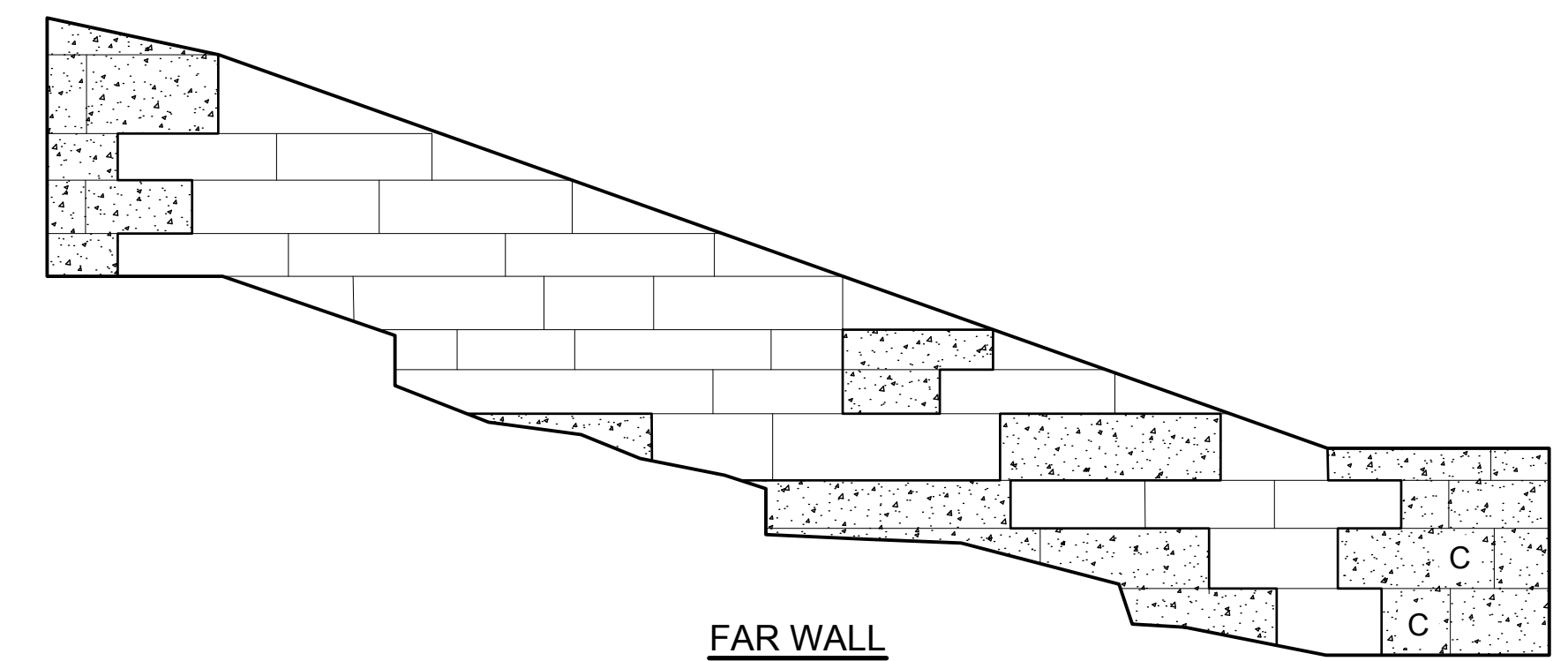
CEILING - XRAY



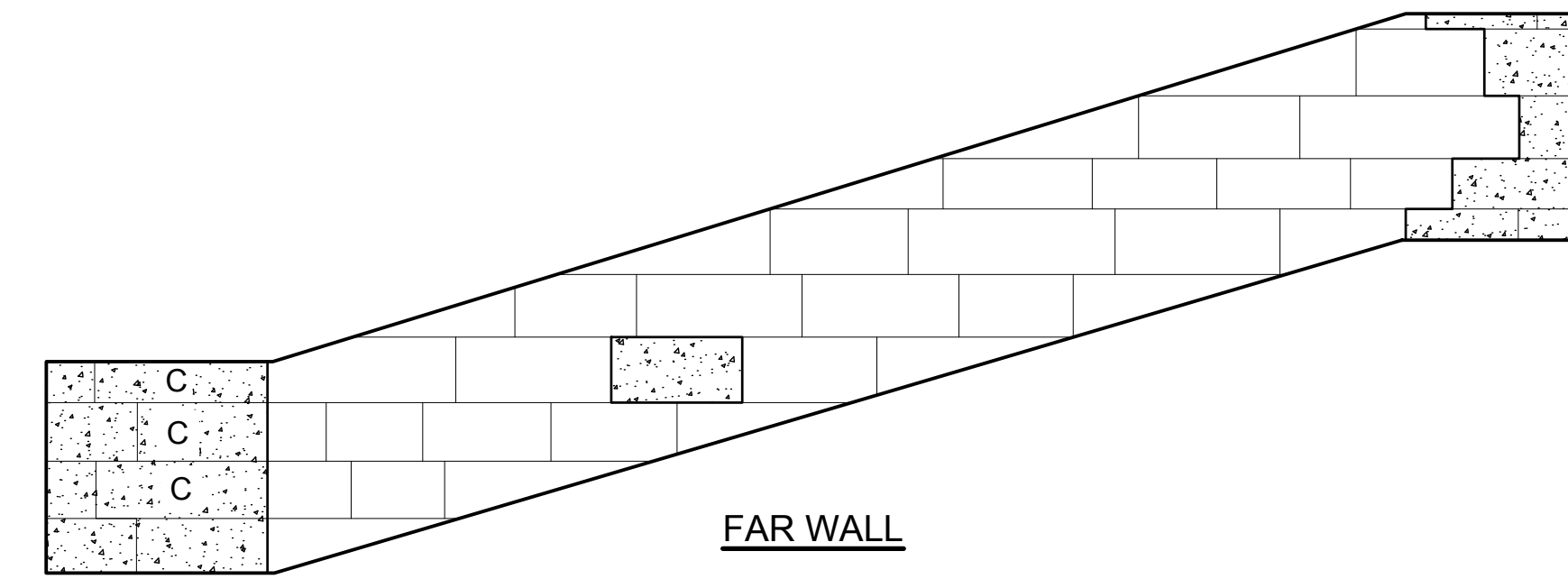
NEAR WALL



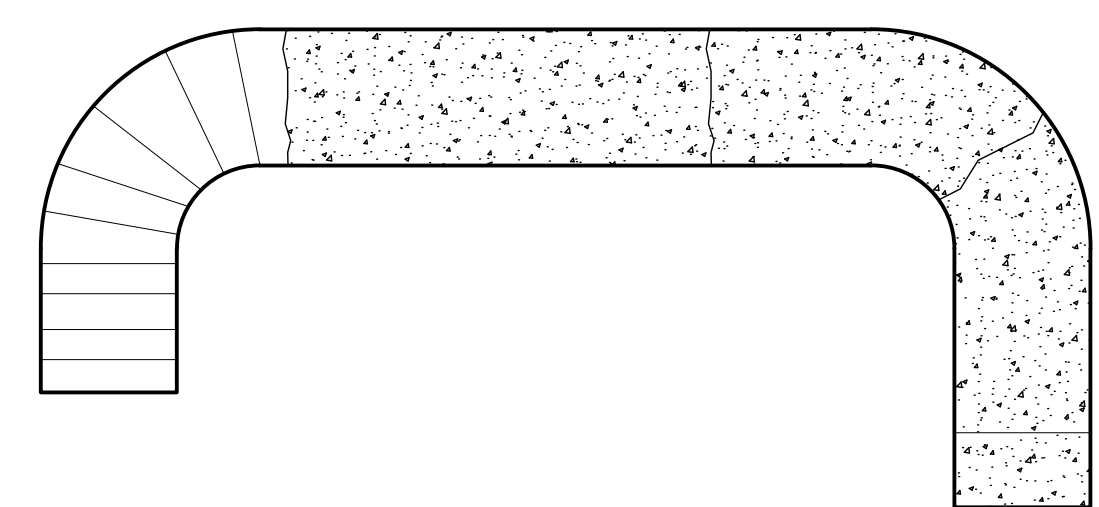
NEAR WALL



FAR WALL

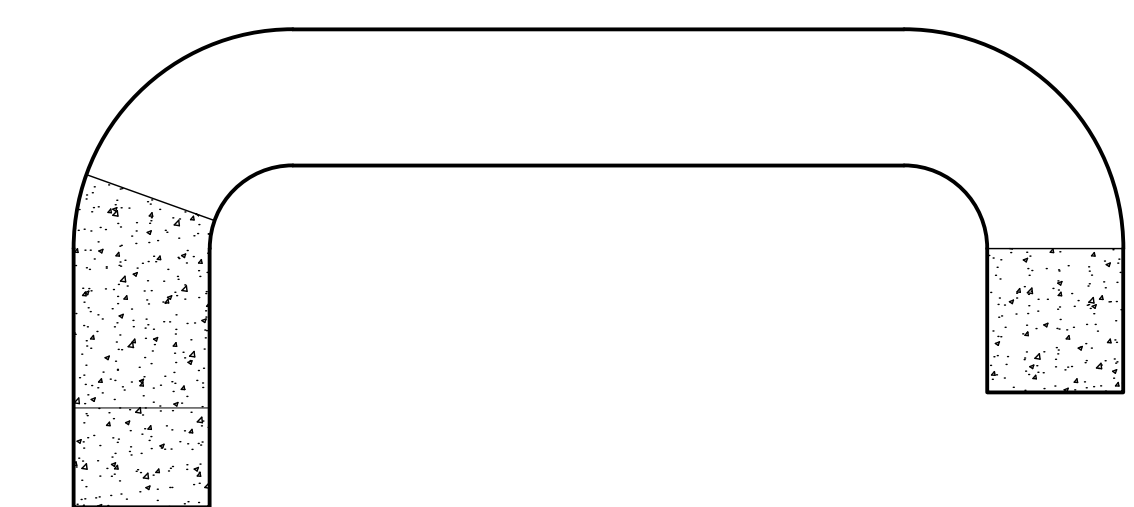


FAR WALL



FLOOR

LOCK 46 - EAST SLUICE TUNNEL



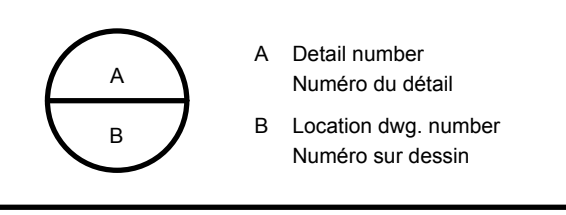
FLOOR

LOCK 46 - WEST SLUICE TUNNEL



1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

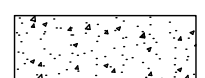

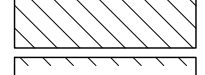
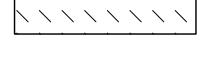


Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 46 SLUICE
 TUNNEL**

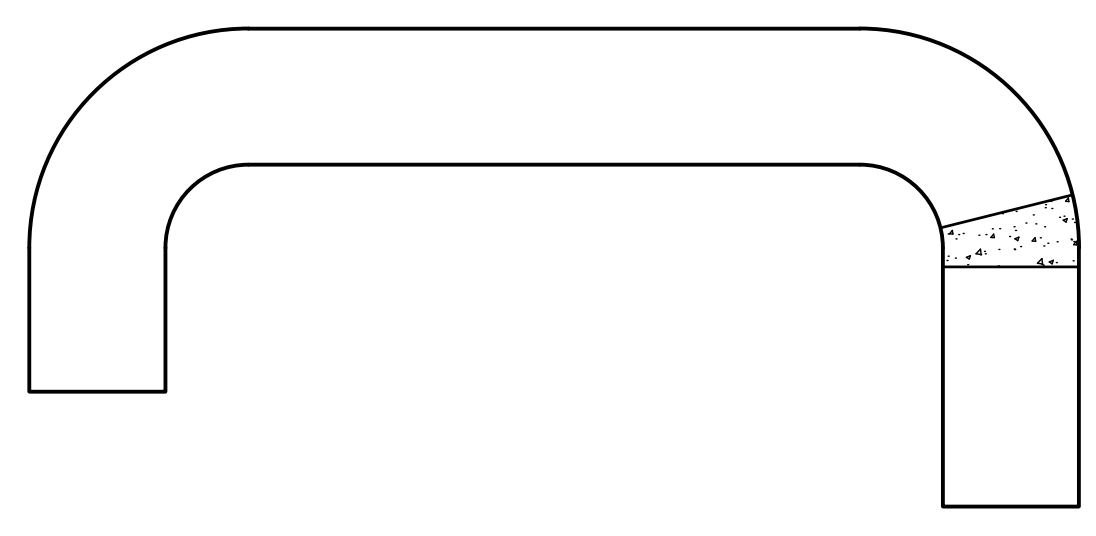
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 49
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 51 of 78

REPAIRS LEGEND:

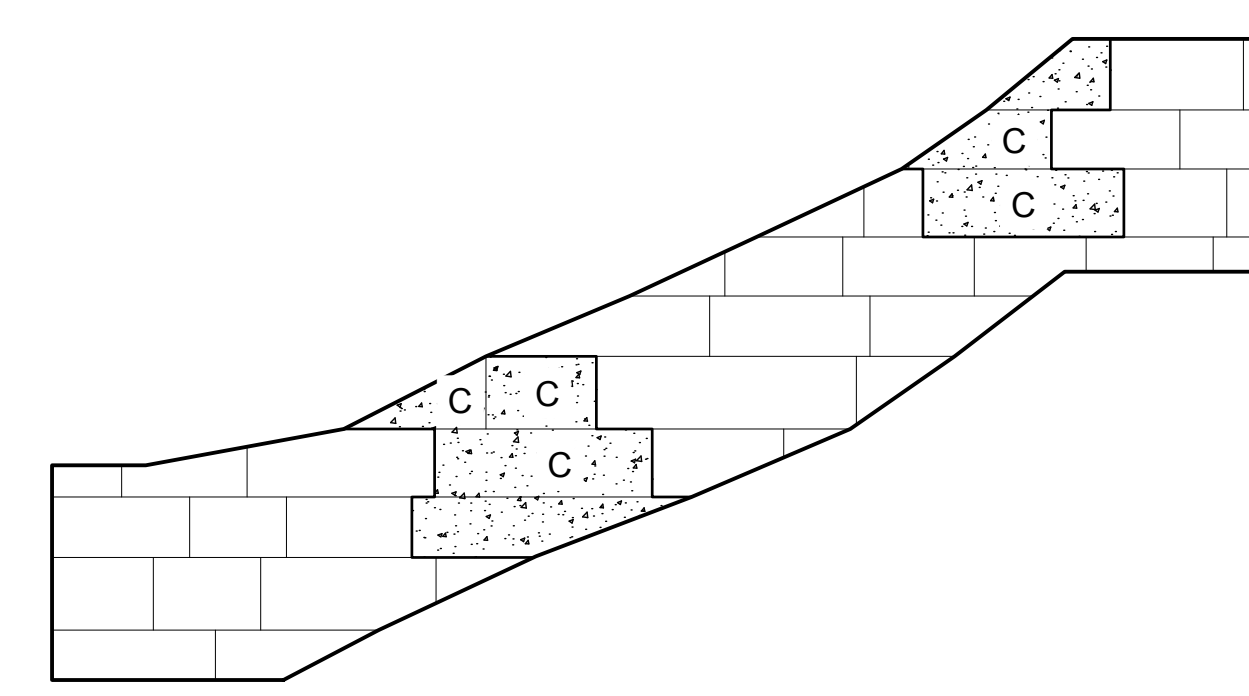
-  NEW CONCRETE - SEE DETAILS DWG. 53 & 54
-  NEW FULL DEPTH STONE - SEE DETAILS DWG. 57
-  NEW DUTCHMAN - SEE DETAILS DWG. 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS DWG. 56

NOTES:

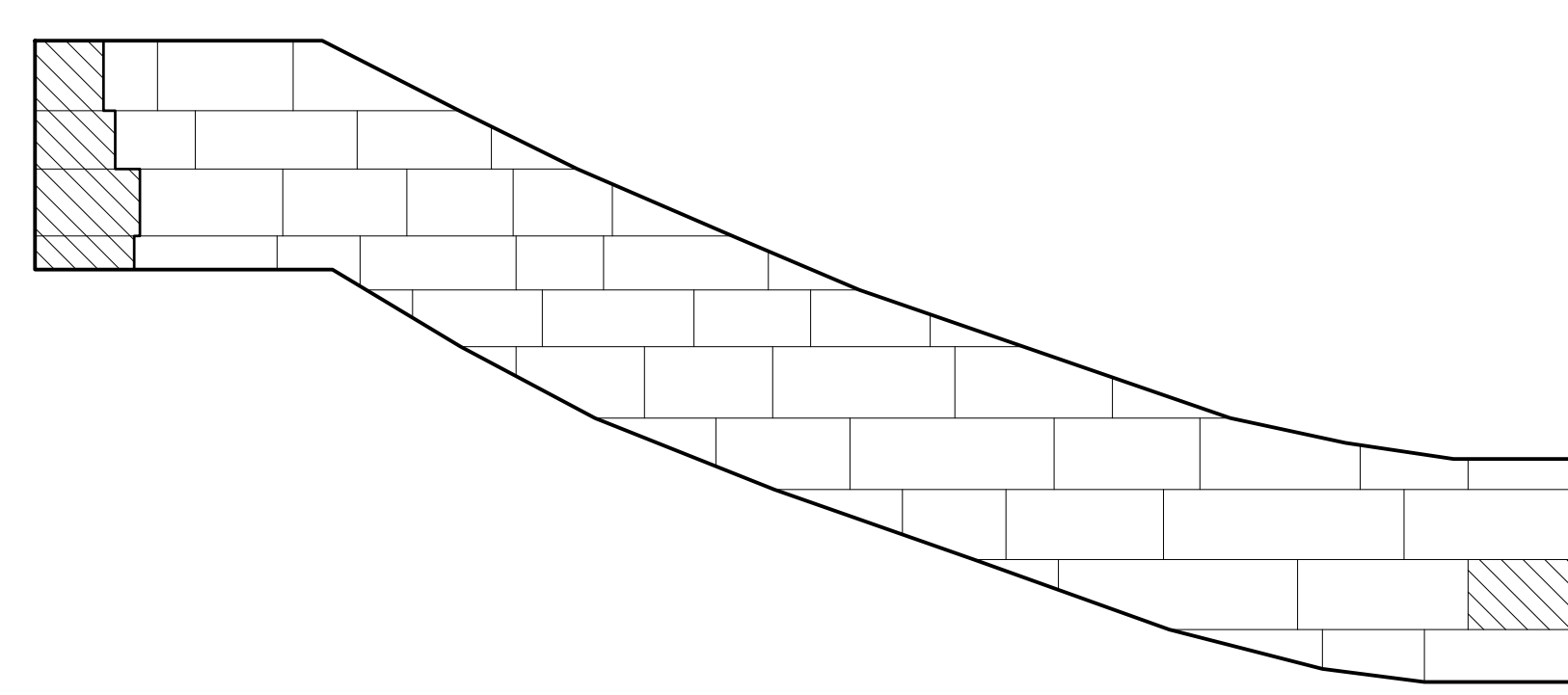
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00
2. FOR REMOVAL AND REPAIR DETAILS AND NOTES SEE DWG. 53 & 54
3. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
4. SHALLOW DEPTH REPAIRS SHALL ONLY BE USED WHERE DIRECTED BY DEPARTMENTAL REPRESENTATIVE.



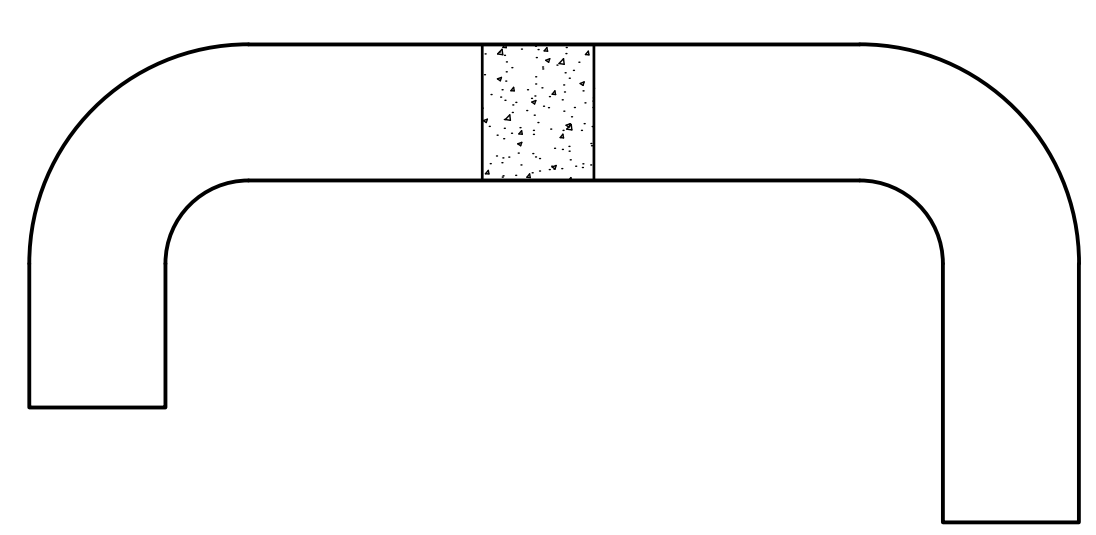
CEILING - XRAY



NEAR WALL

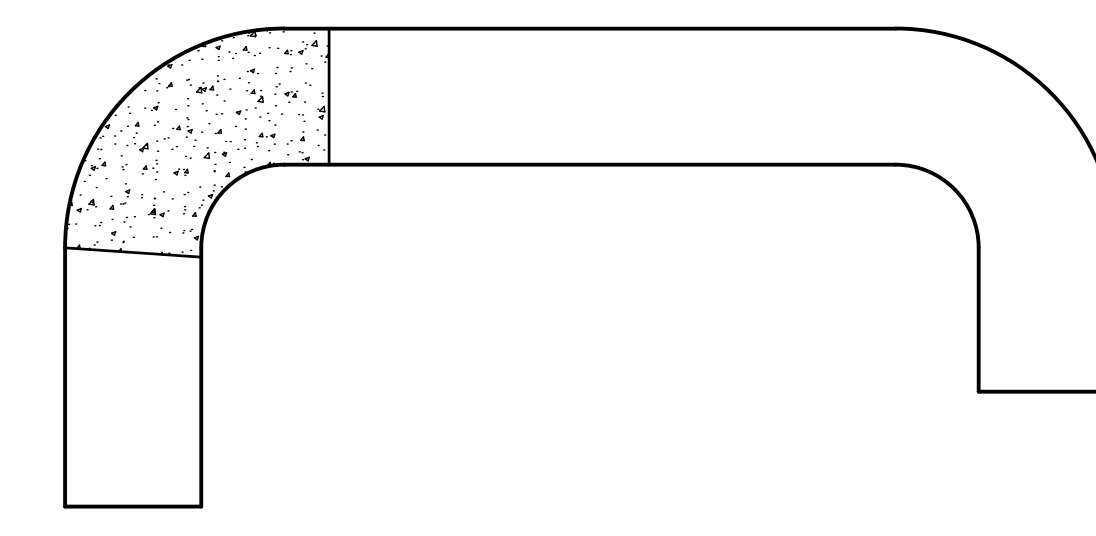


FAR WALL

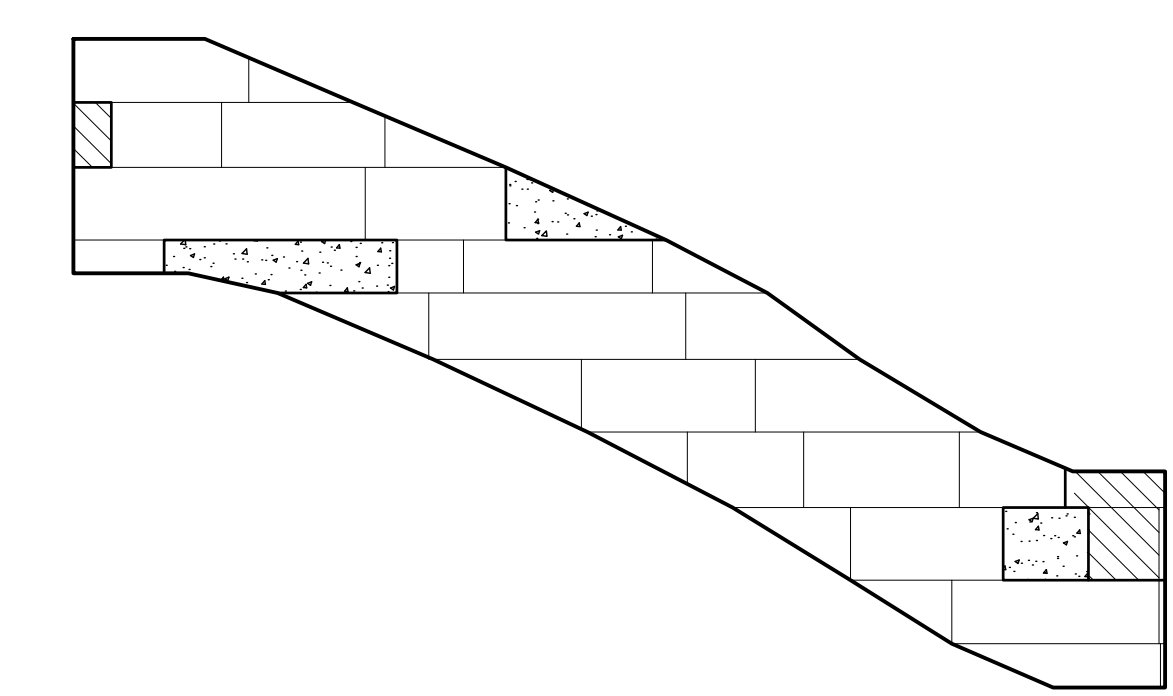


FLOOR

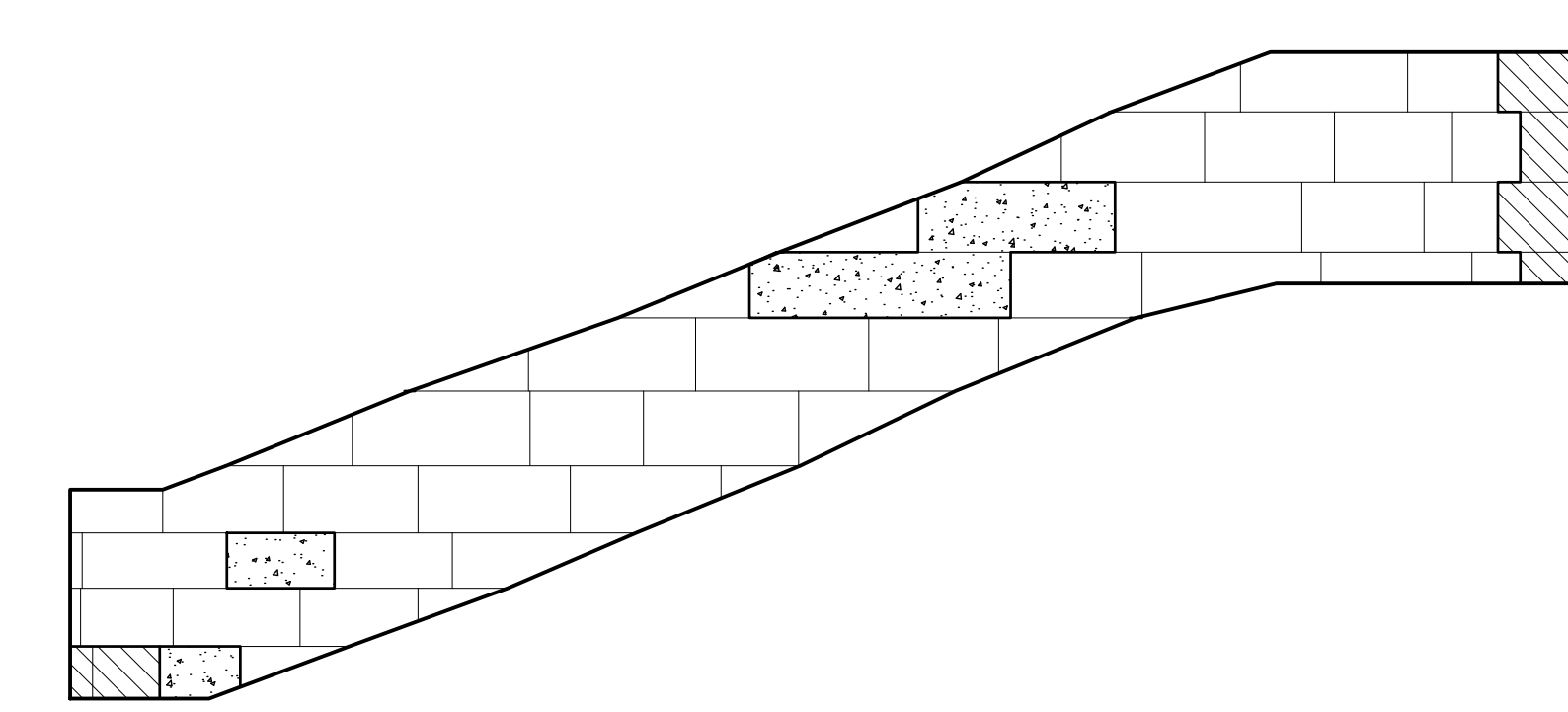
LOCK 47 - EAST SLUICE TUNNEL



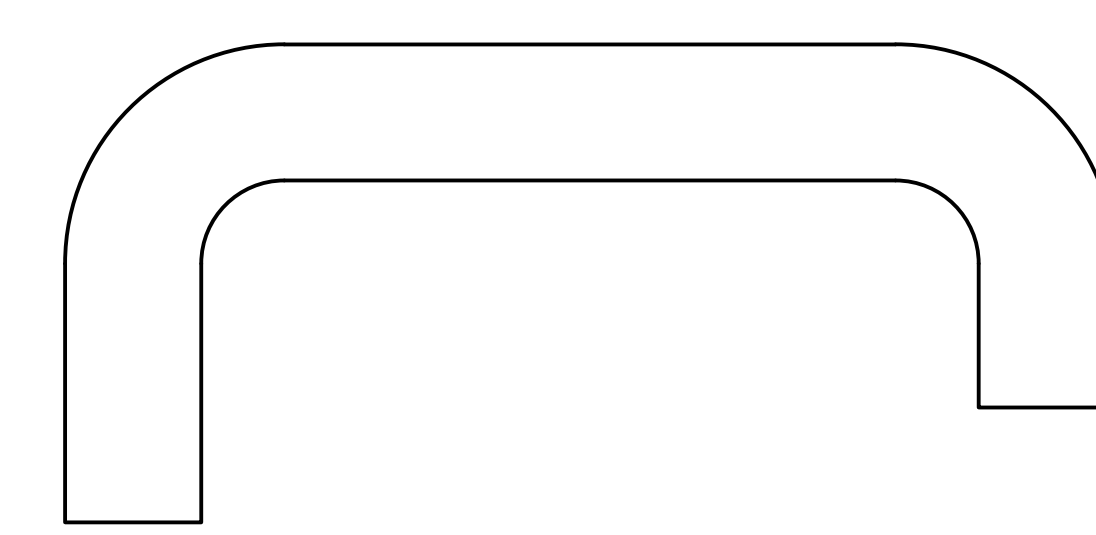
CEILING - XRAY



NEAR WALL

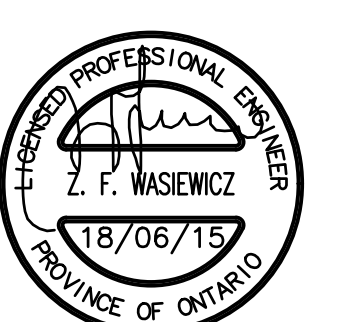


FAR WALL



FLOOR

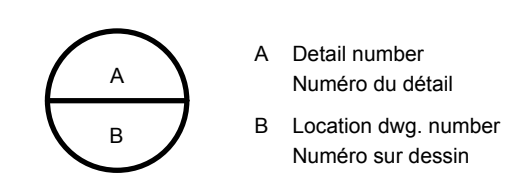
LOCK 47 - WEST SLUICE TUNNEL



No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Revision / Révision	

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.



- A Detail number
Numéro du détail
- B Location dwg. number
Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**BASIN TO LOCK 47
 SLUICE TUNNEL**




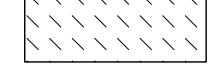
Drawn by / Dessiné par
ADRIAN MEUNIER Designed by / Conçu par
FELIX WASIEWICZ

Approved by / Approuvé par
JULIA MARSON Drawing Date / Date du dessin
JUNE 2018

Project manager / Administrateur de projet
SHAWN FILLION Drawing Number /
 Numéro du Dessin
50

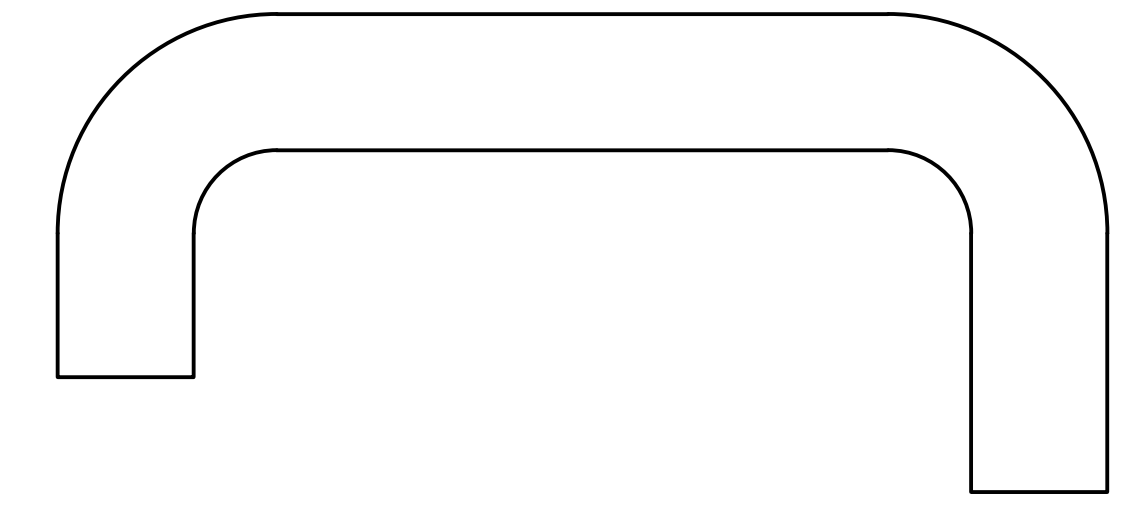
Project Number / Numéro du projet
R.079796.009 Sheet
 Feuille
52 of 78

REPAIRS LEGEND:

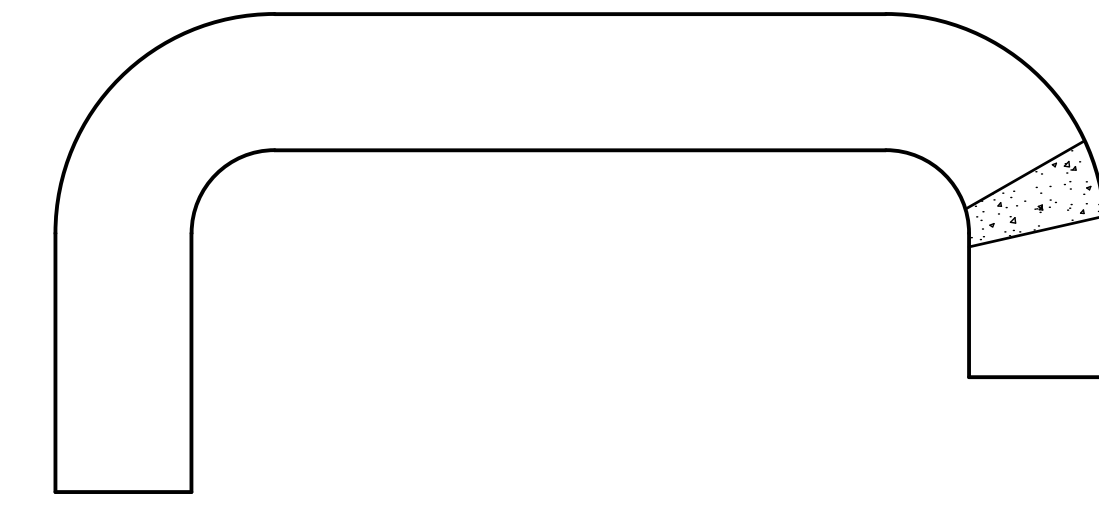
-  NEW CONCRETE - SEE DETAILS DWG. 53 & 54
-  NEW FULL DEPTH STONE - SEE DETAILS DWG. 57
-  NEW DUTCHMAN - SEE DETAILS DWG. 55
-  NEW PARTIAL DUTCHMAN - SEE DETAILS DWG. 56

NOTES:

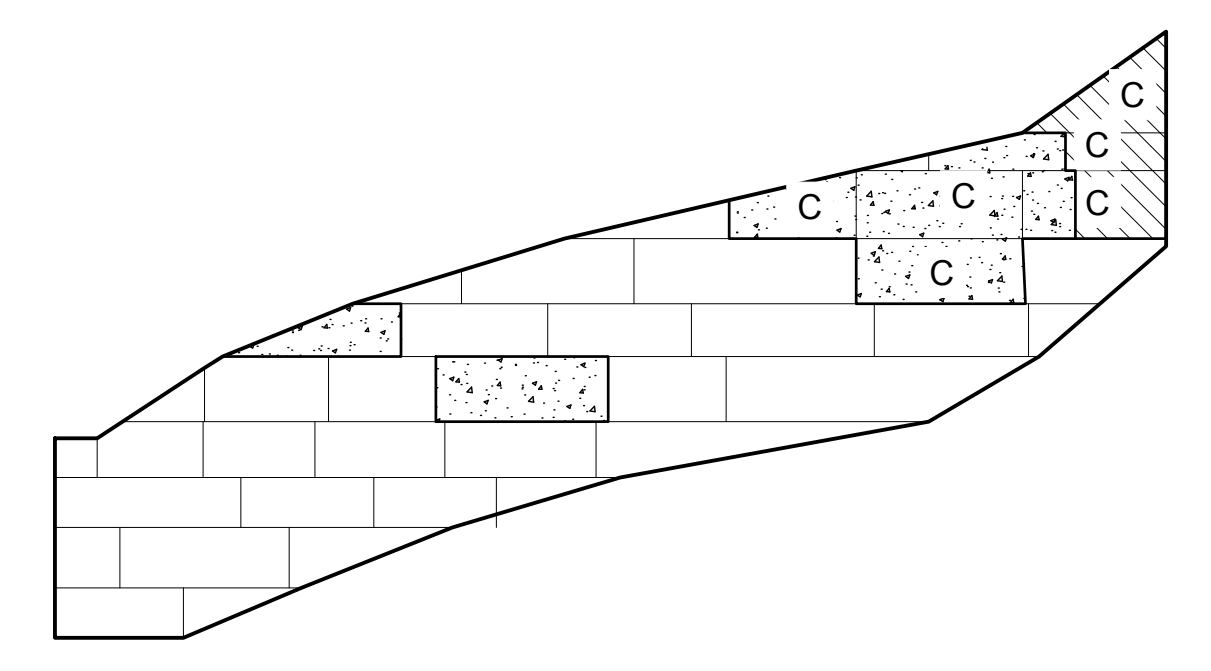
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. FOR REMOVAL AND REPAIR DETAILS AND NOTES SEE DWG. 53 & 54.
3. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
4. SHALLOW DEPTH REPAIRS SHALL ONLY BE USED WHERE DIRECTED BY DEPARTMENTAL REPRESENTATIVE.



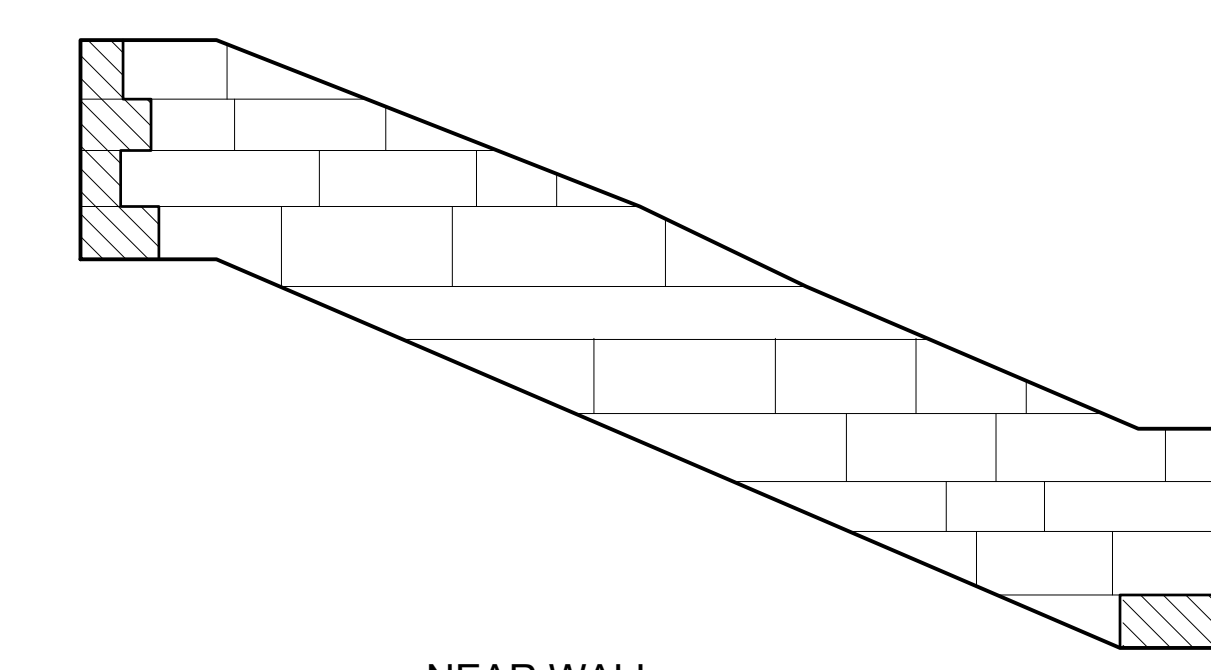
CEILING - XRAY



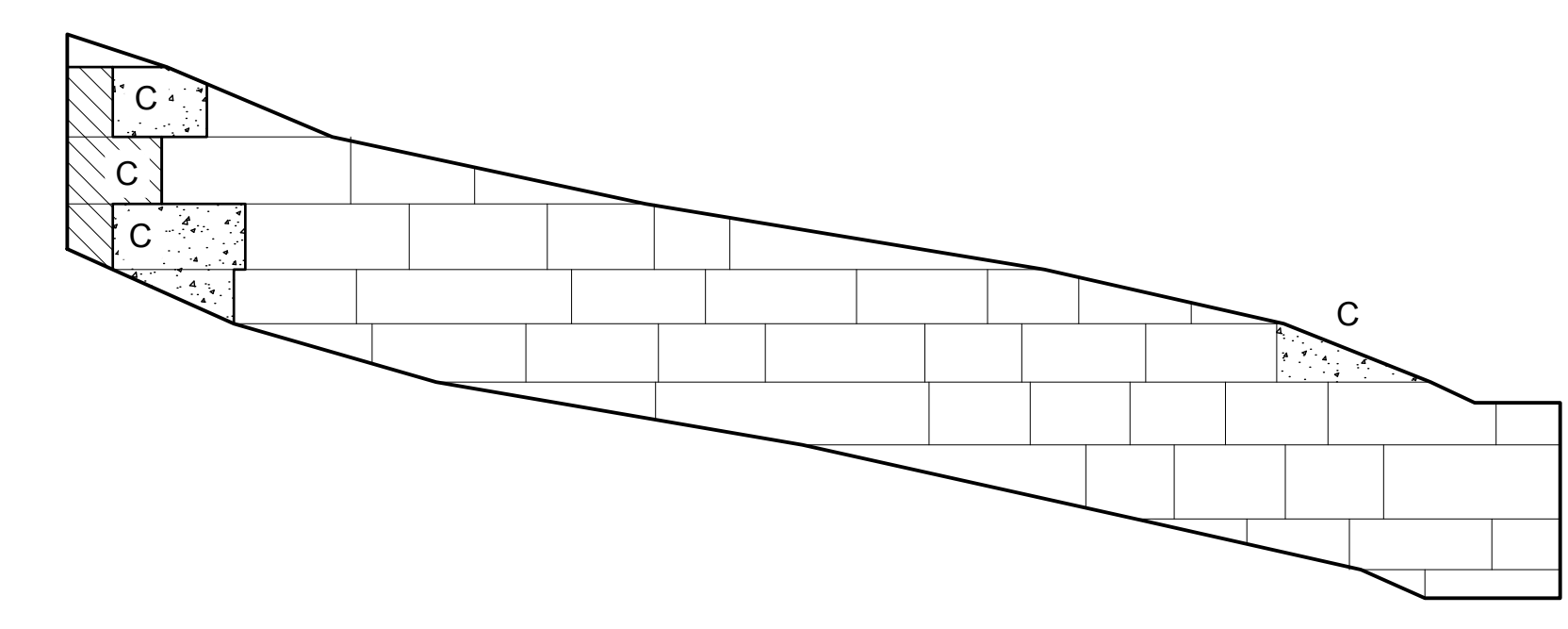
CEILING - XRAY



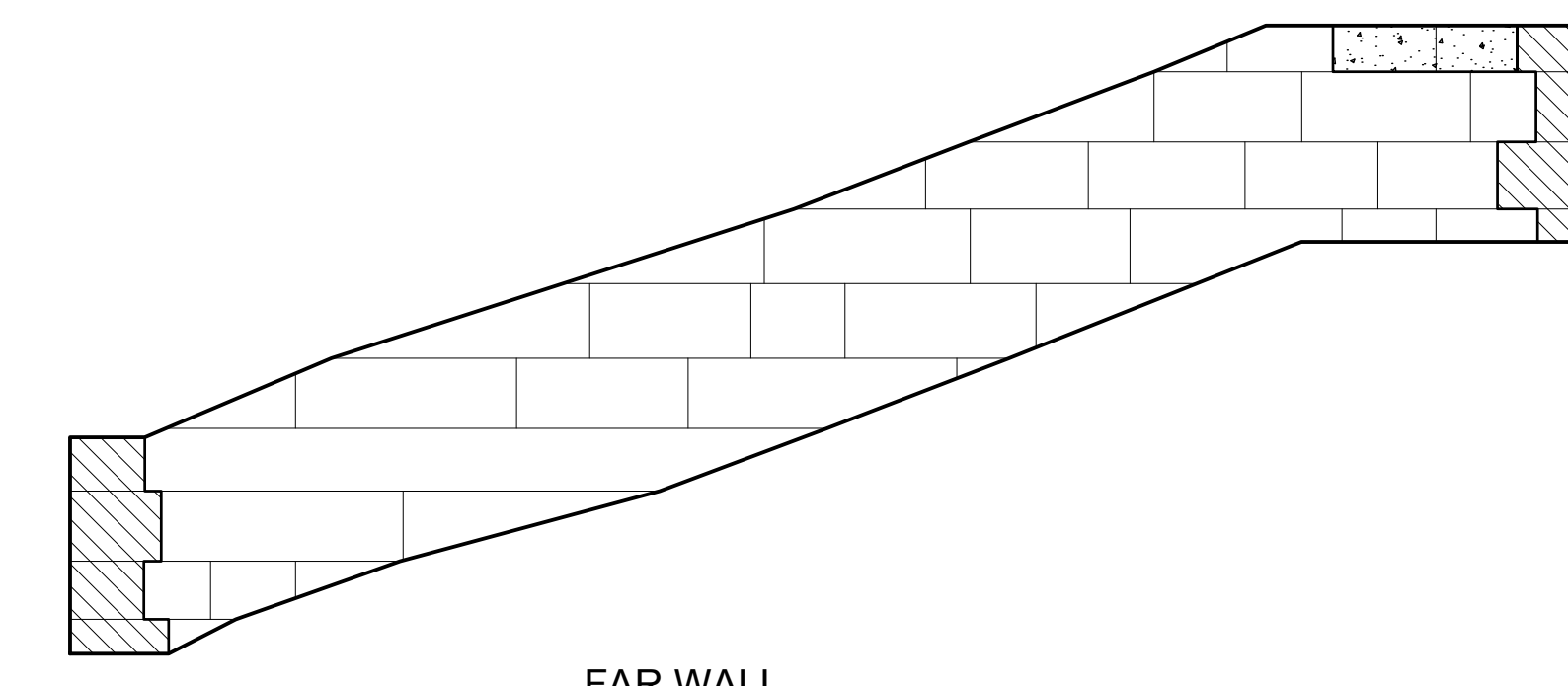
NEAR WALL



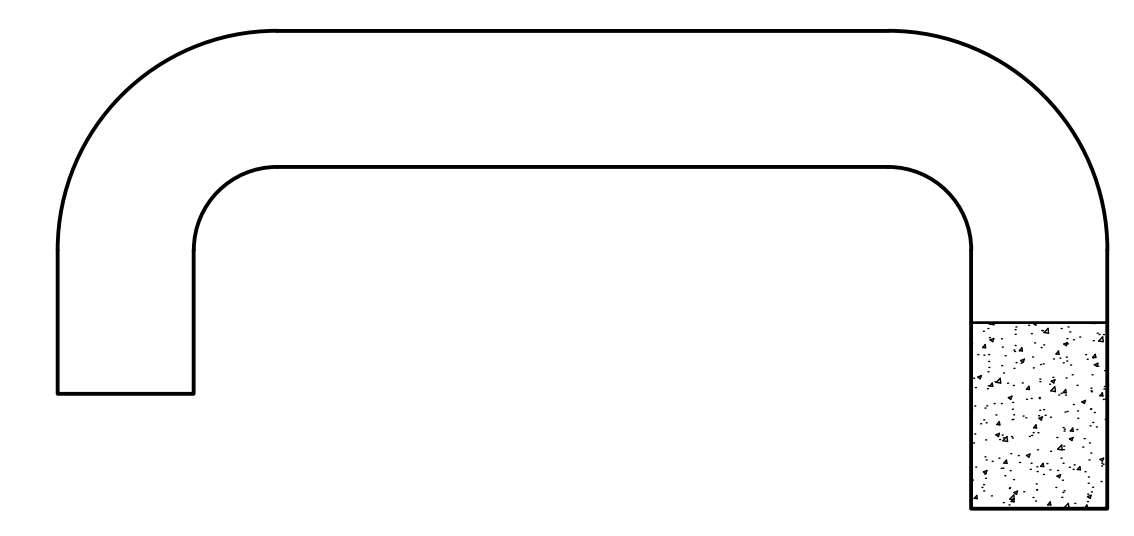
NEAR WALL



FAR WALL

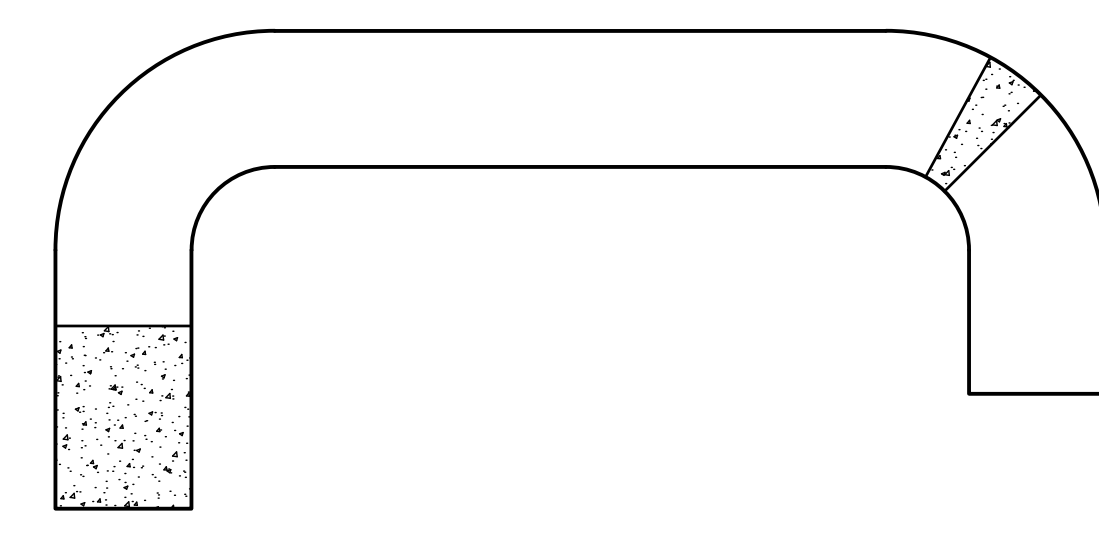


FAR WALL



FLOOR

LOCK 48 - EAST SLUICE TUNNEL



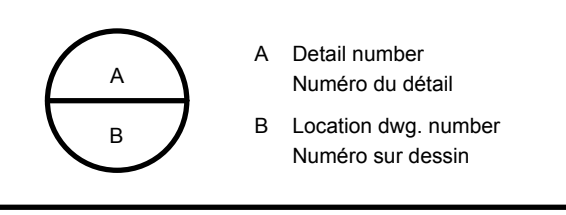
FLOOR

LOCK 48 - WEST SLUICE TUNNEL



1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.



Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
LOCK 47 TO 48 SLUICE TUNNEL

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018

Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 51
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 53 of 78

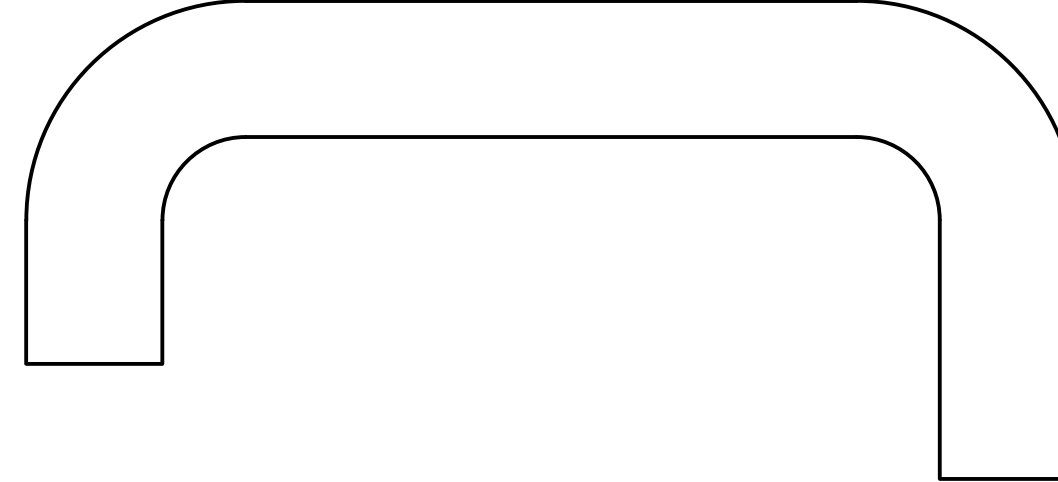


REPAIRS LEGEND:

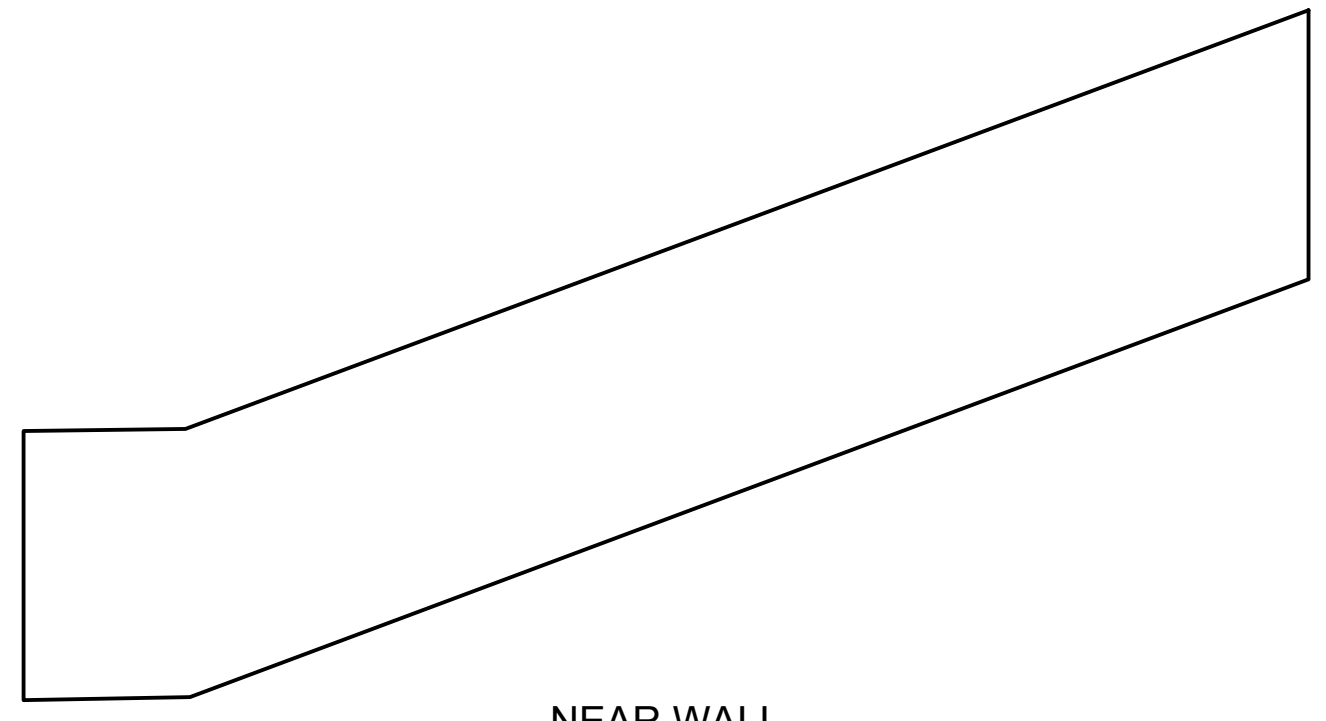
- NEW CONCRETE - SEE DETAILS DWG. 53 & 54
- NEW FULL DEPTH STONE - SEE DETAILS DWG. 57
- NEW DUTCHMAN - SEE DETAILS DWG. 55
- NEW PARTIAL DUTCHMAN - SEE DETAILS DWG. 56

NOTES:

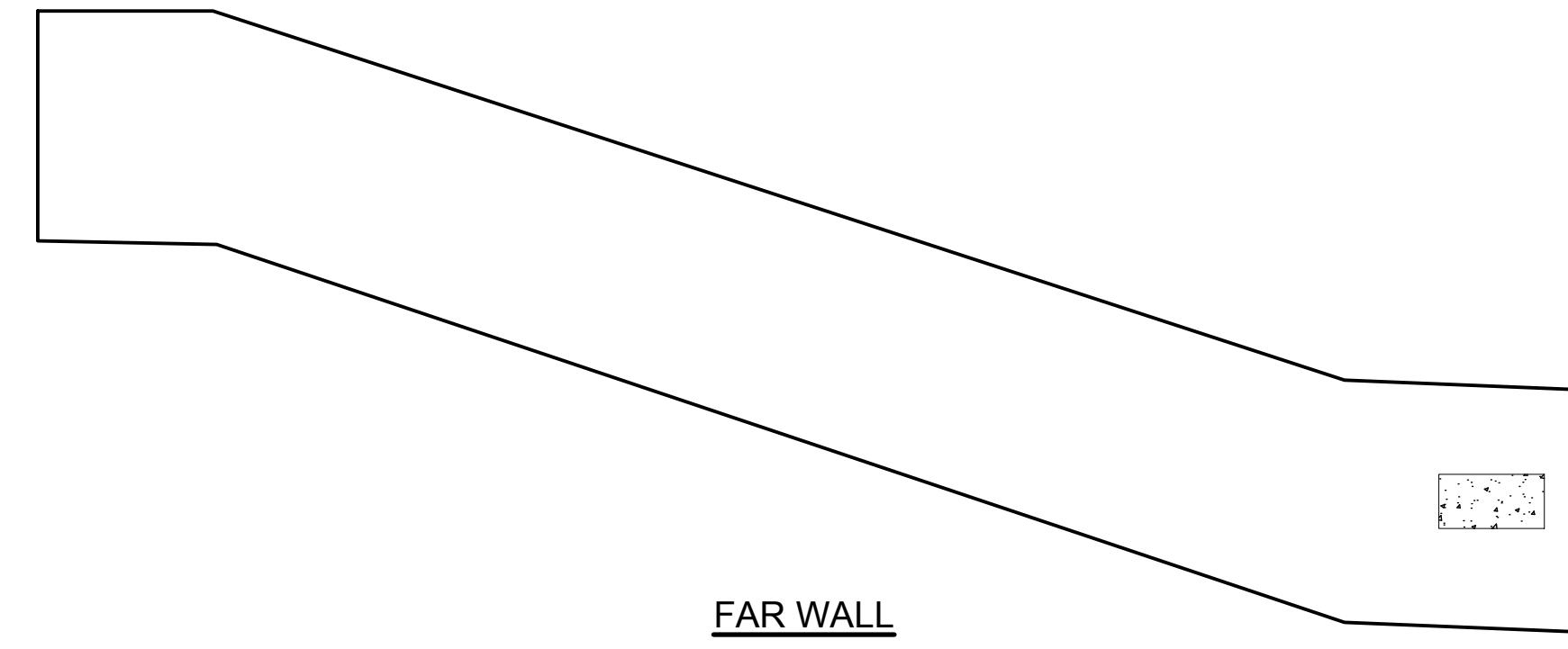
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
2. ADDITIONAL REMOVALS AND REPAIRS WILL BE DETERMINED ON SITE FOLLOWING DEWATERING OF LOCK 49. ASSUME FOR BIDDING PROPOSE ONLY 5% OF TUNNEL WALL AND FLOOR AREA WILL REQUIRE WORK.
3. FOR REMOVAL AND REPAIR DETAILS AND NOTES SEE DWG. 53 & 54.
4. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
5. SHALLOW DEPTH REPAIRS SHALL ONLY BE USED WHERE DIRECTED BY DEPARTMENTAL REPRESENTATIVE.



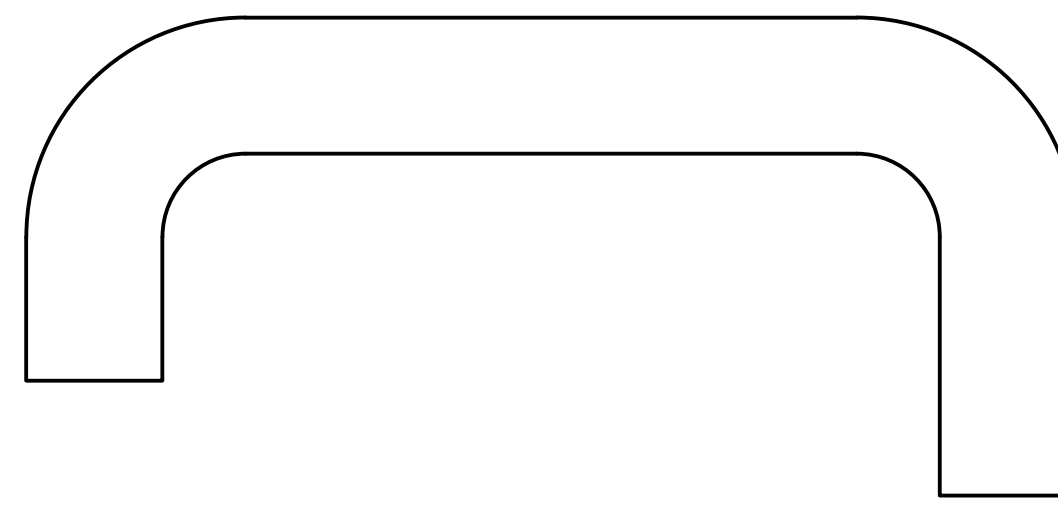
CEILING - XRAY



NEAR WALL

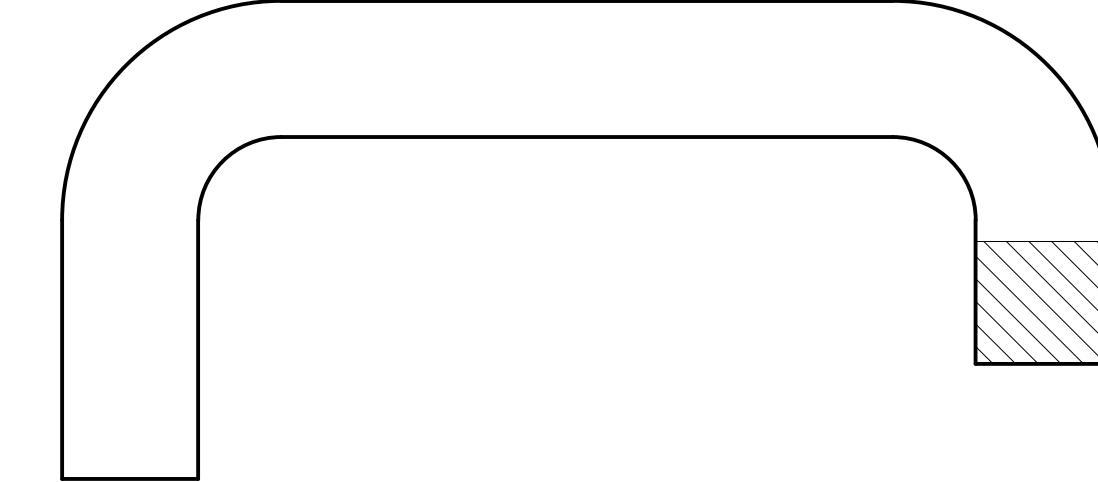


FAR WALL

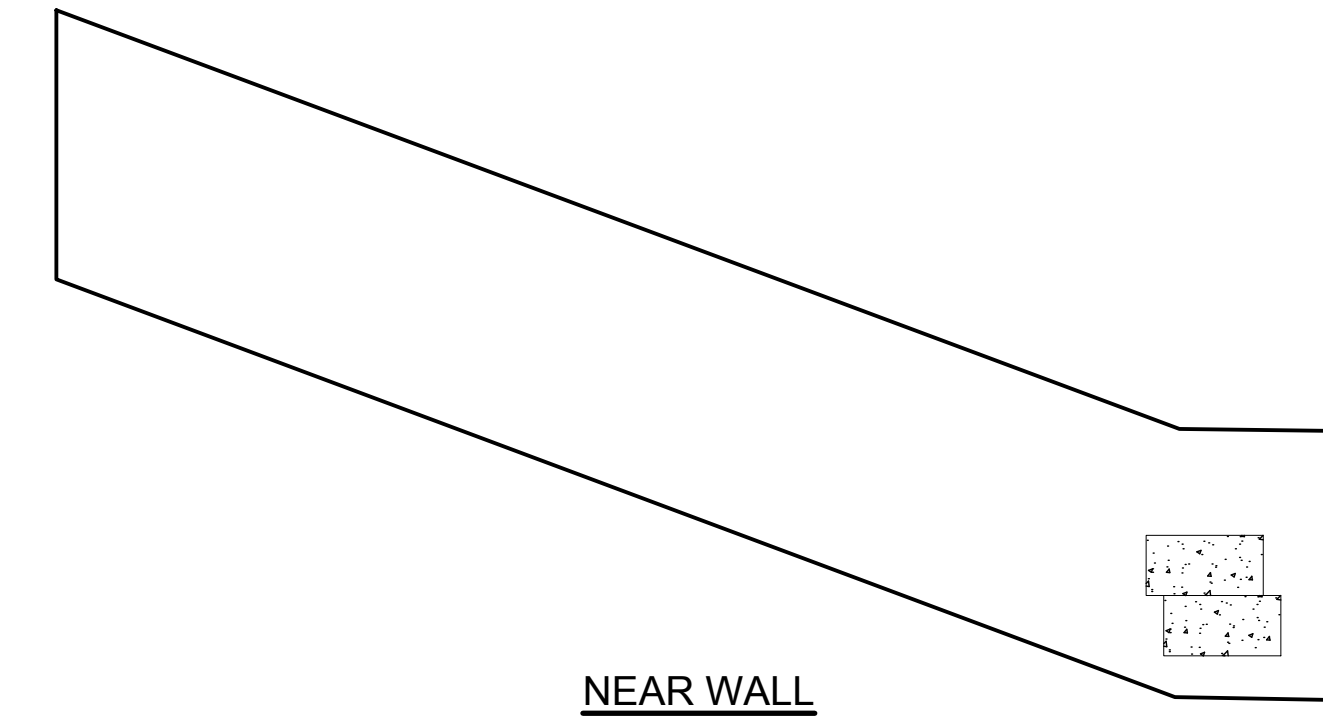


FLOOR

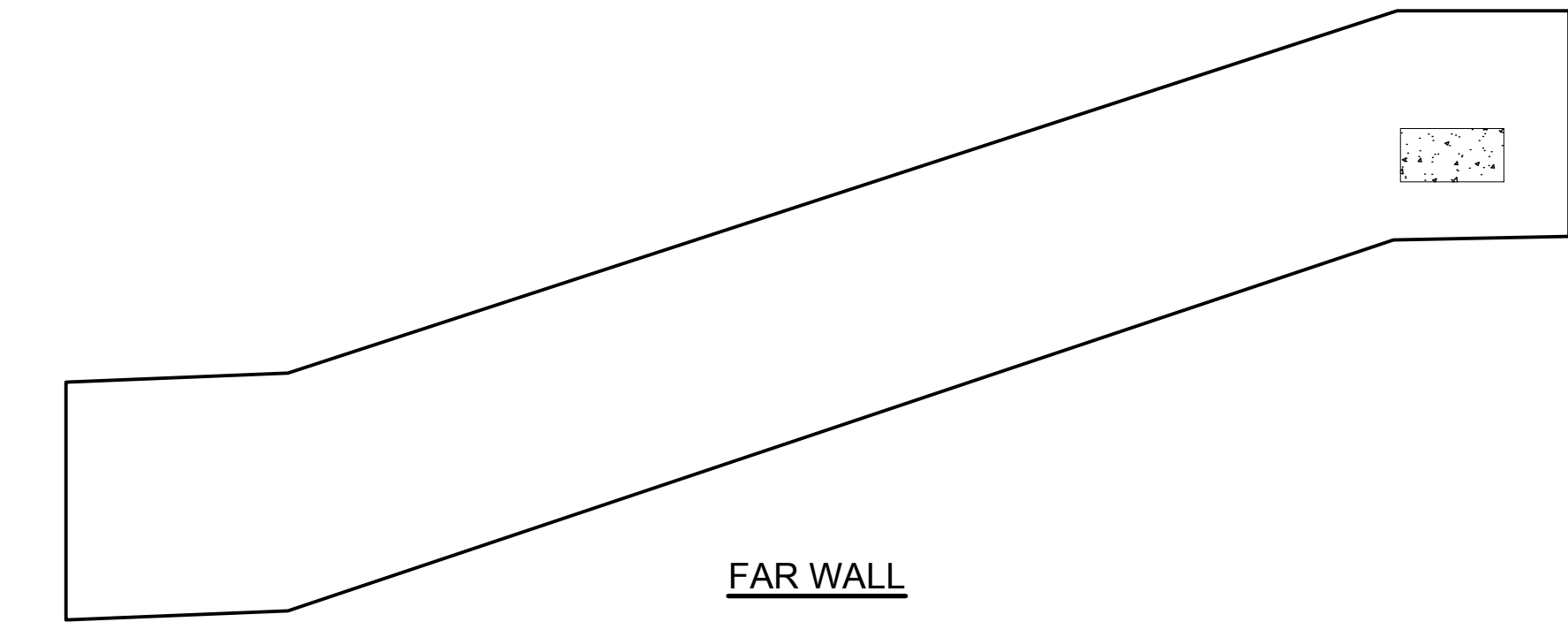
LOCK 49 - EAST SLUICE TUNNEL



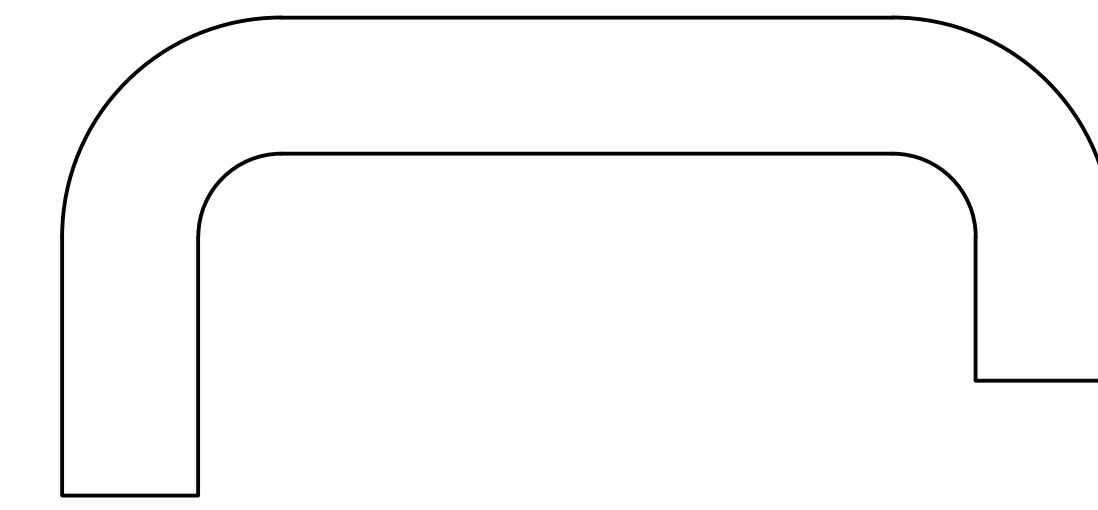
CEILING - XRAY



NEAR WALL



FAR WALL



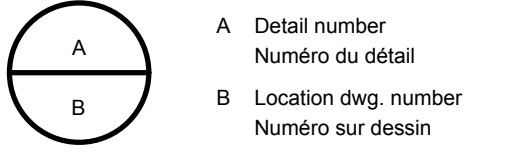
FLOOR

LOCK 49 - WEST SLUICE TUNNEL

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date

Revision / Révision

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.



- A Detail number
Numéro du détail
- B Location dwg. number
Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 48 TO 49 SLUICE
 TUNNEL**

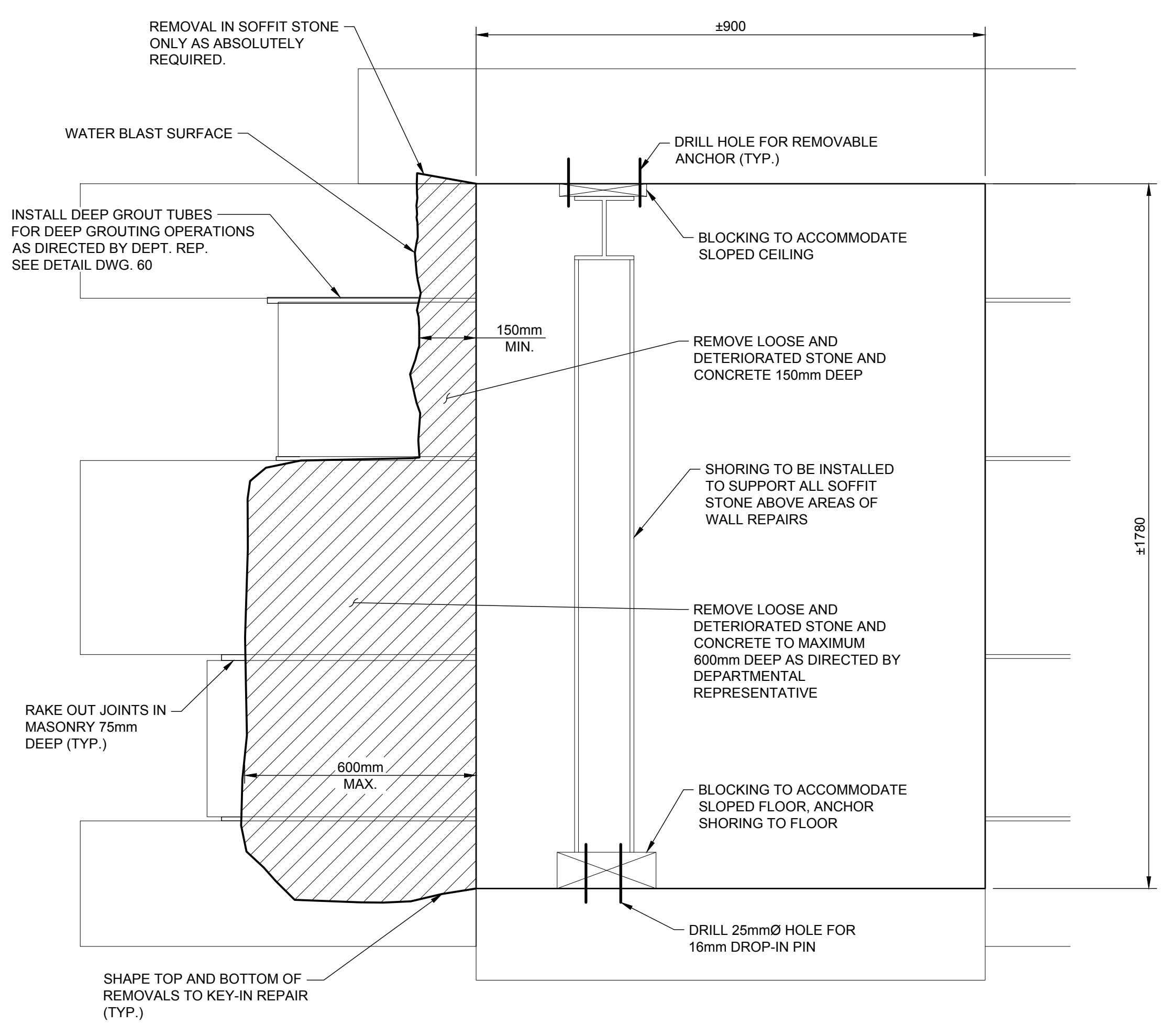
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018

Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 52
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 54 of 78

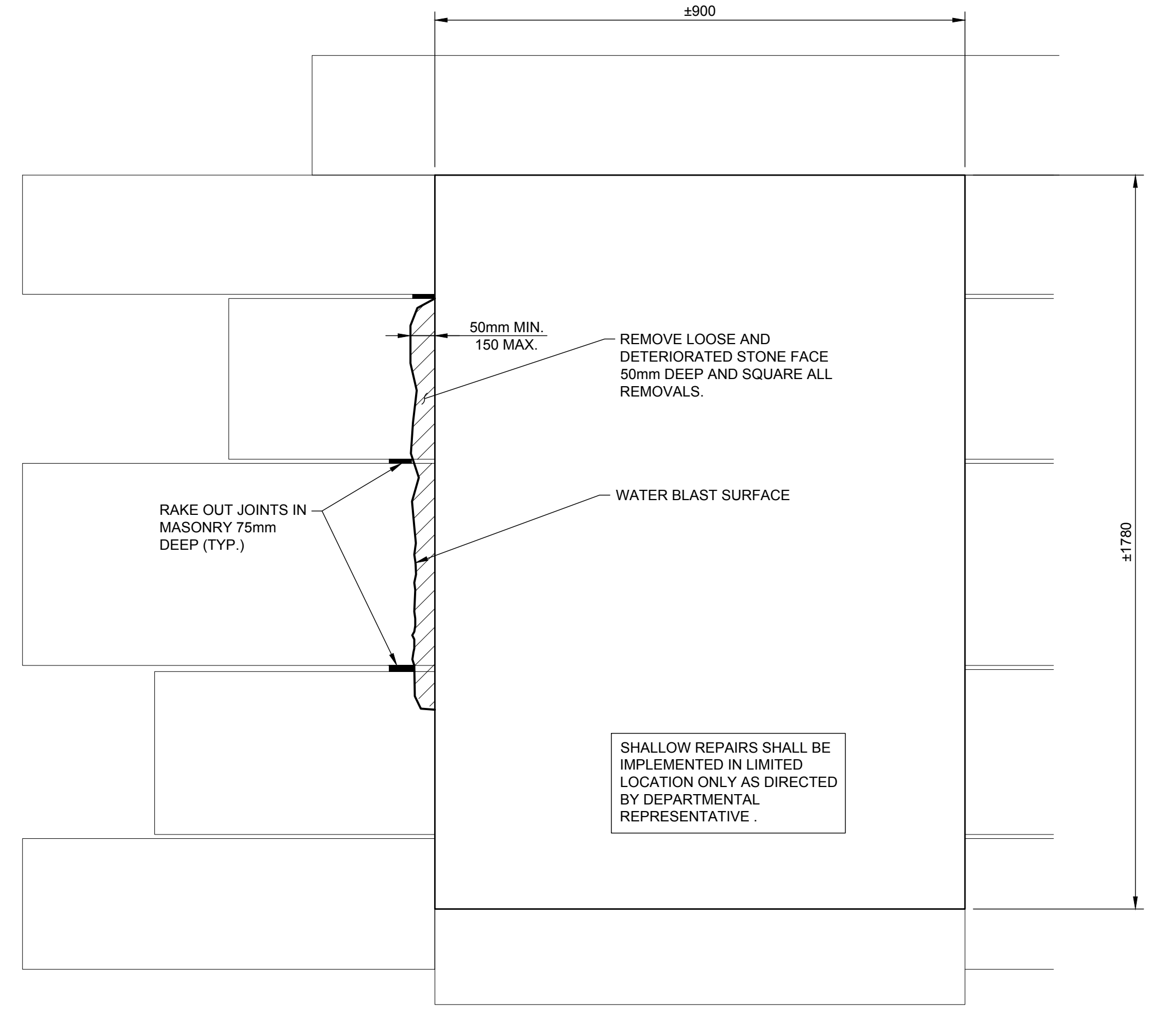
- NOTES:**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 2. EXTRA DOWELS MY BE SPECIFIED BY DEPARTMENTAL REPRESENTATIVE FOLLOWING REMOVALS.
 3. MORE DETERIORATION IS PRESENT IN THE TOP SECTION OF TUNNELS NEAR VALVES AND AROUND BENDS IN TUNNELS FOR WHICH CURVED FORMWORK IS REQUIRED.
 4. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
 5. SHALLOW DEPTH REPAIRS SHALL ONLY BE USED WHERE DIRECTED BY DEPARTMENTAL REPRESENTATIVE



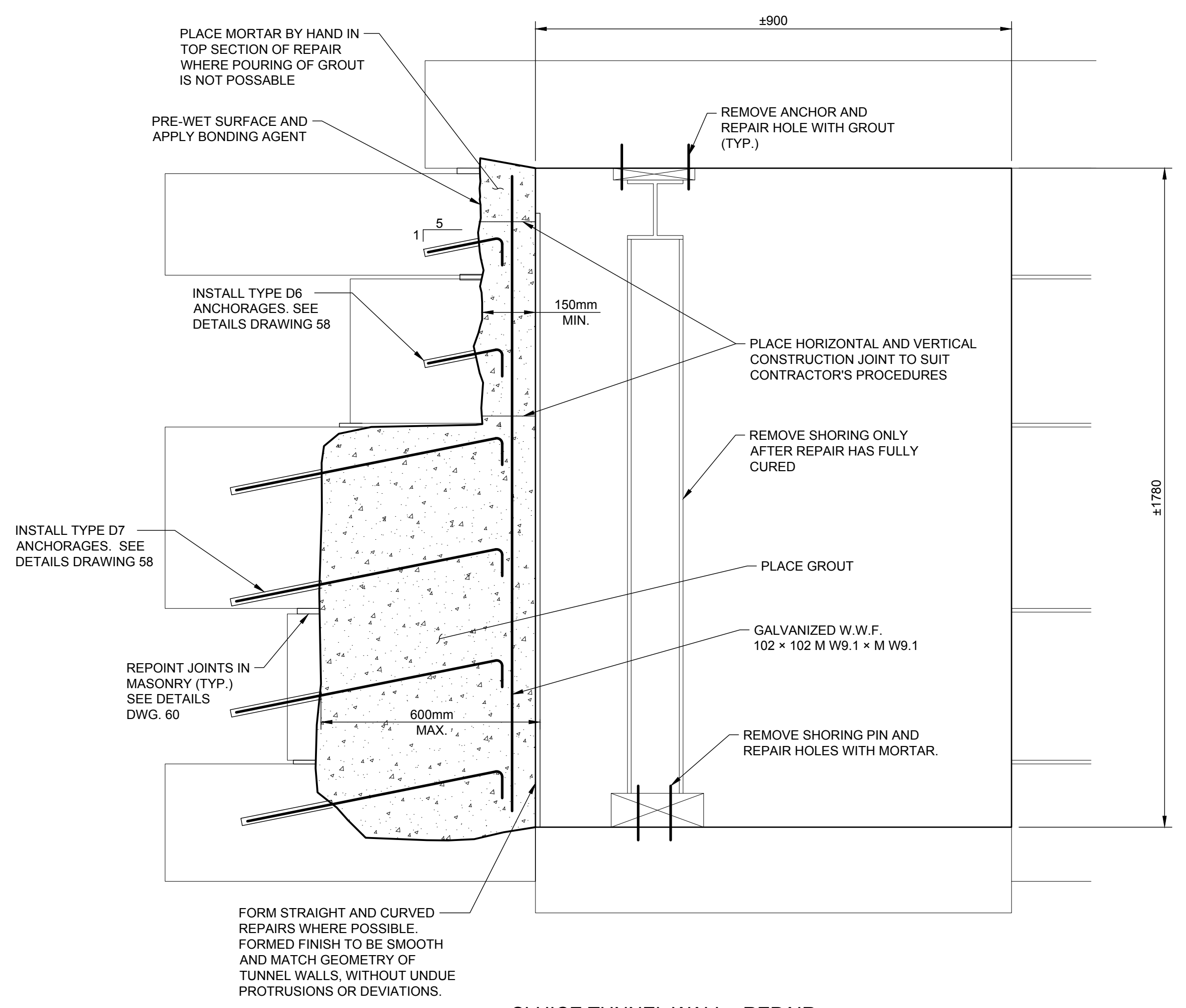
300-2611 QUEENSWAY DRIVE
 OTTAWA (ONTARIO)
 CANADA K2B 8K2
 TELEPHONE: 613-829-2800 FAX: 613-829-8299
 WWW.WSPGROUP.COM



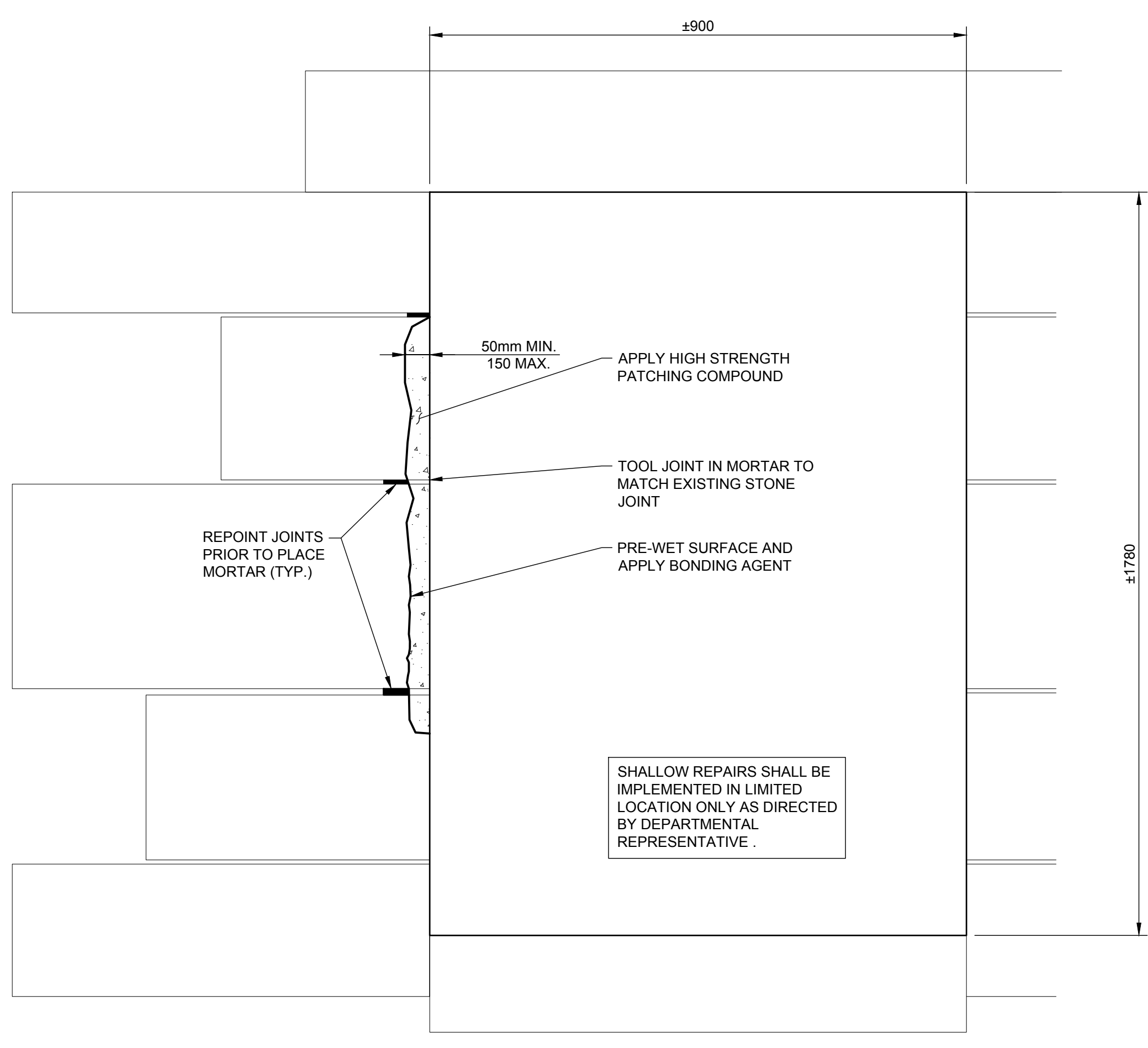
SLUICE TUNNEL WALL - REMOVALS
1:10



SLUICE TUNNEL WALL - SHALLOW REMOVALS
1:10



SLUICE TUNNEL WALL - REPAIR
1:10



SLUICE TUNNEL WALL - SHALLOW REPAIR
1:10

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

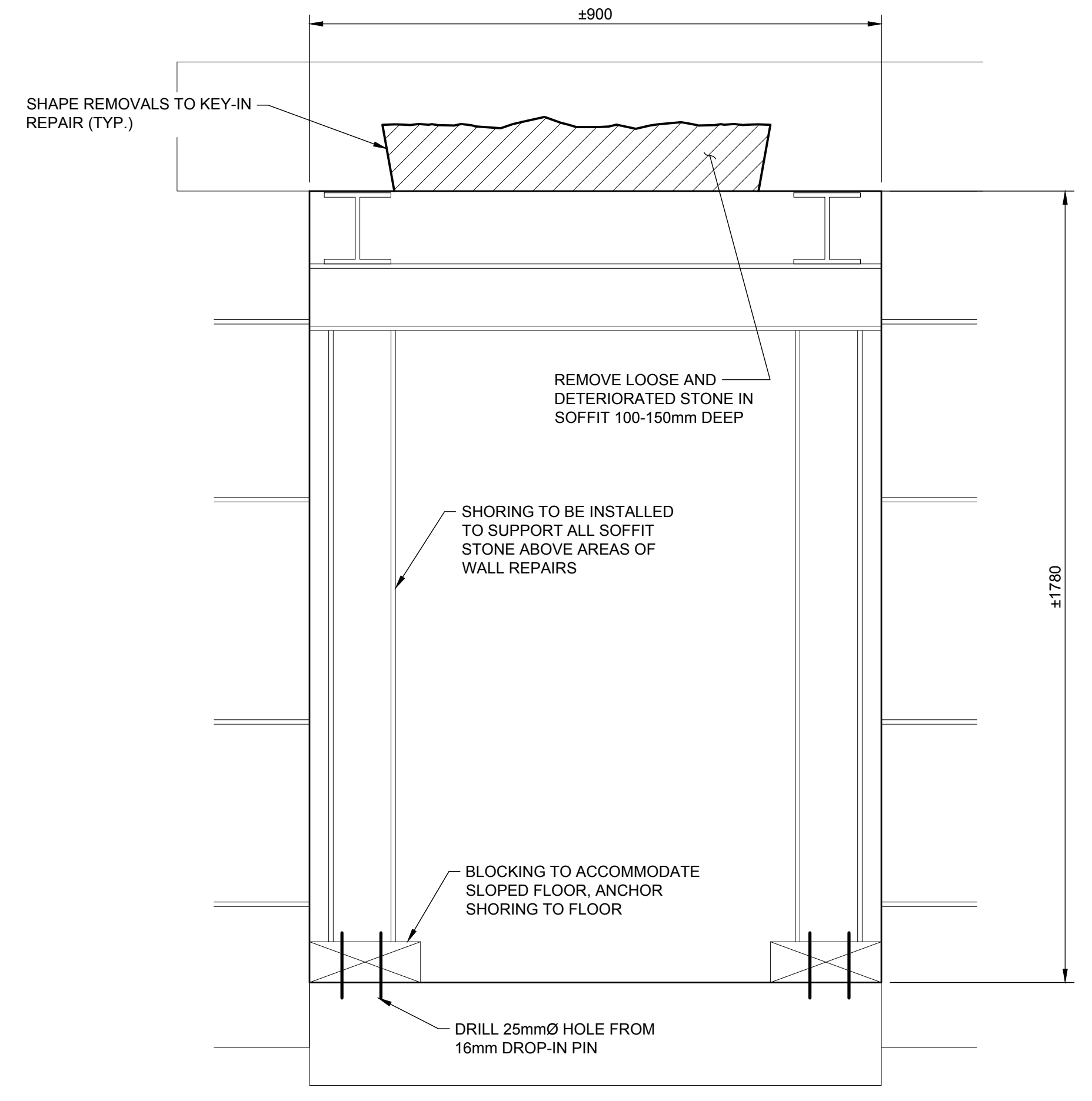
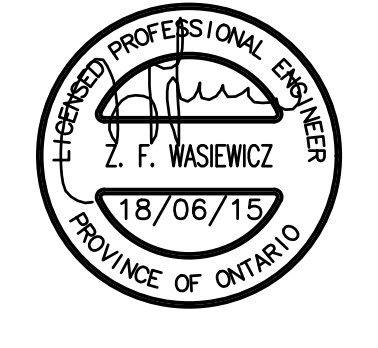
Drawing title / Titre du dessin
**SLUICE TUNNEL
 DETAILS I**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 53
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 55 of 78

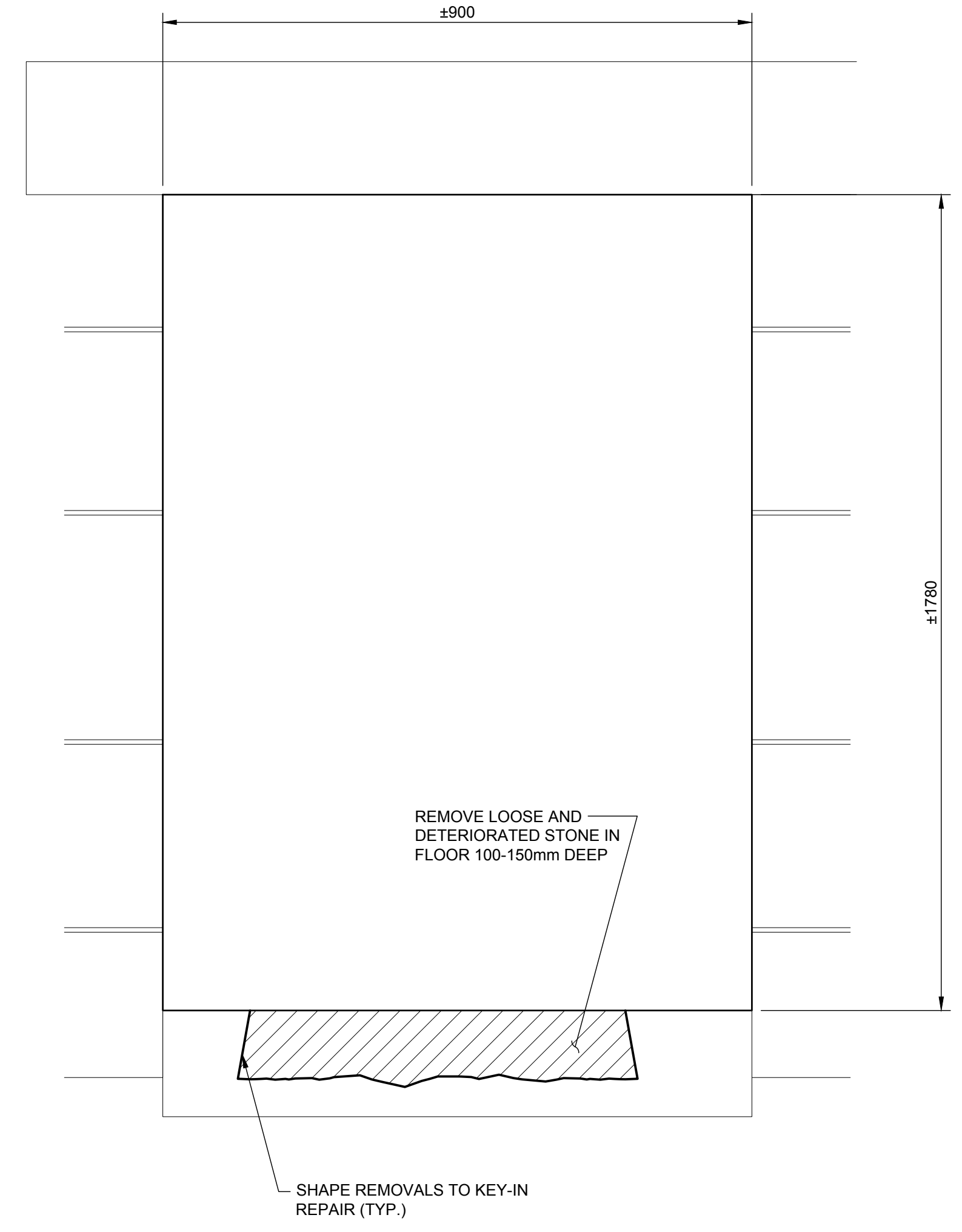
- NOTES:**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 2. EXTRA DOWELS MY BE SPECIFIED BY DEPARTMENTAL REPRESENTATIVE FOLLOWING REMOVALS.
 3. MORE DETERIORATION IS PRESENT IN THE TOP SECTION OF TUNNELS NEAR VALVES AND FOR WHICH CURVED FORMWORK IS REQUIRED.
 4. CLEAN ALL SURFACES PRIOR TO COMMENCING WORK.
 5. SHALLOW DEPTH REPAIRS SHALL ONLY BE USED WHERE DIRECTED BY DEPARTMENTAL REPRESENTATIVE.



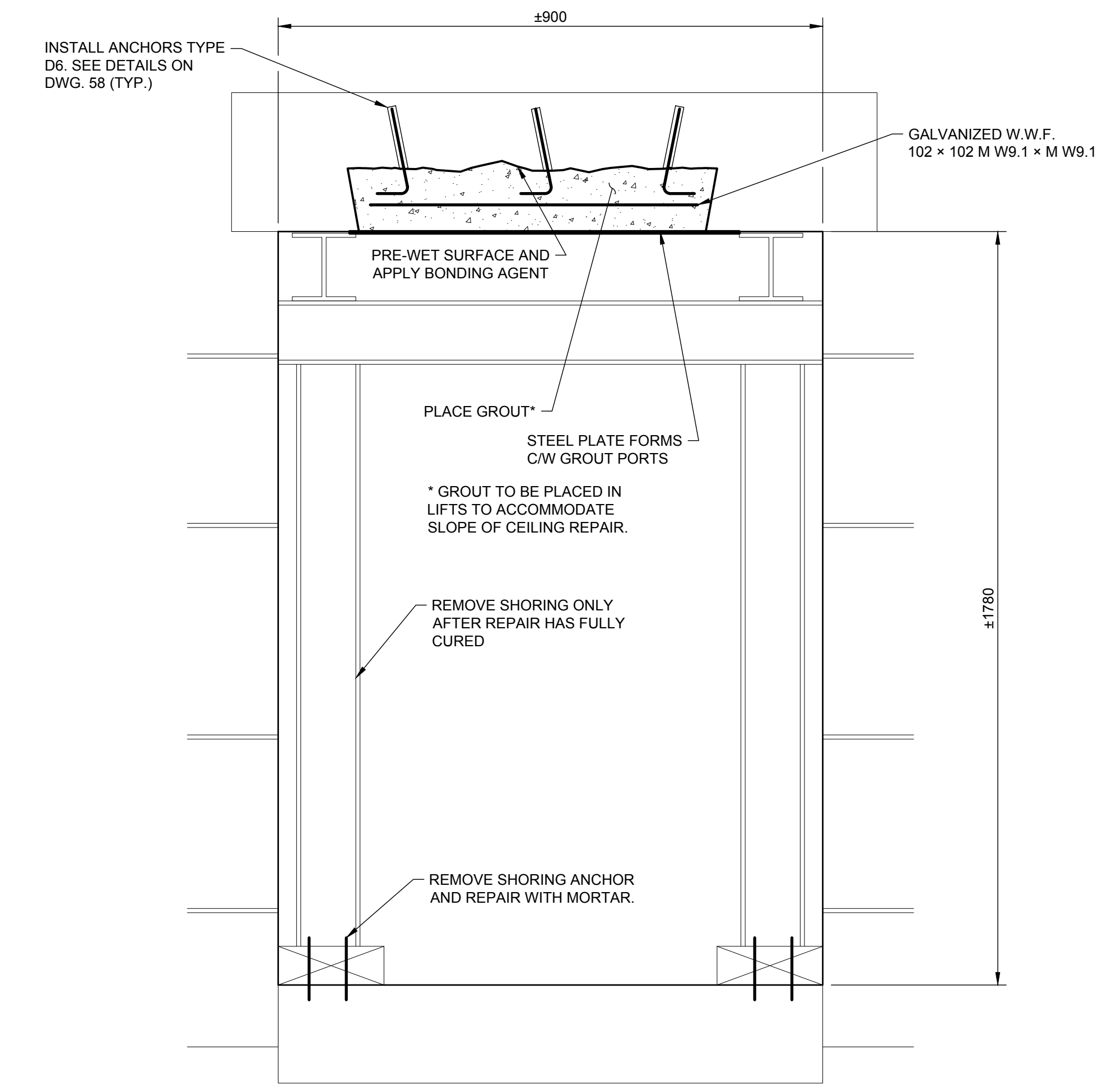
300-2611 QUEENSWAY DRIVE
 OTTAWA (ONTARIO)
 CANADA K2B 8K2
 TELEPHONE: 613-829-2800 FAX: 613-829-8299
 WWW.WSPGROUP.COM



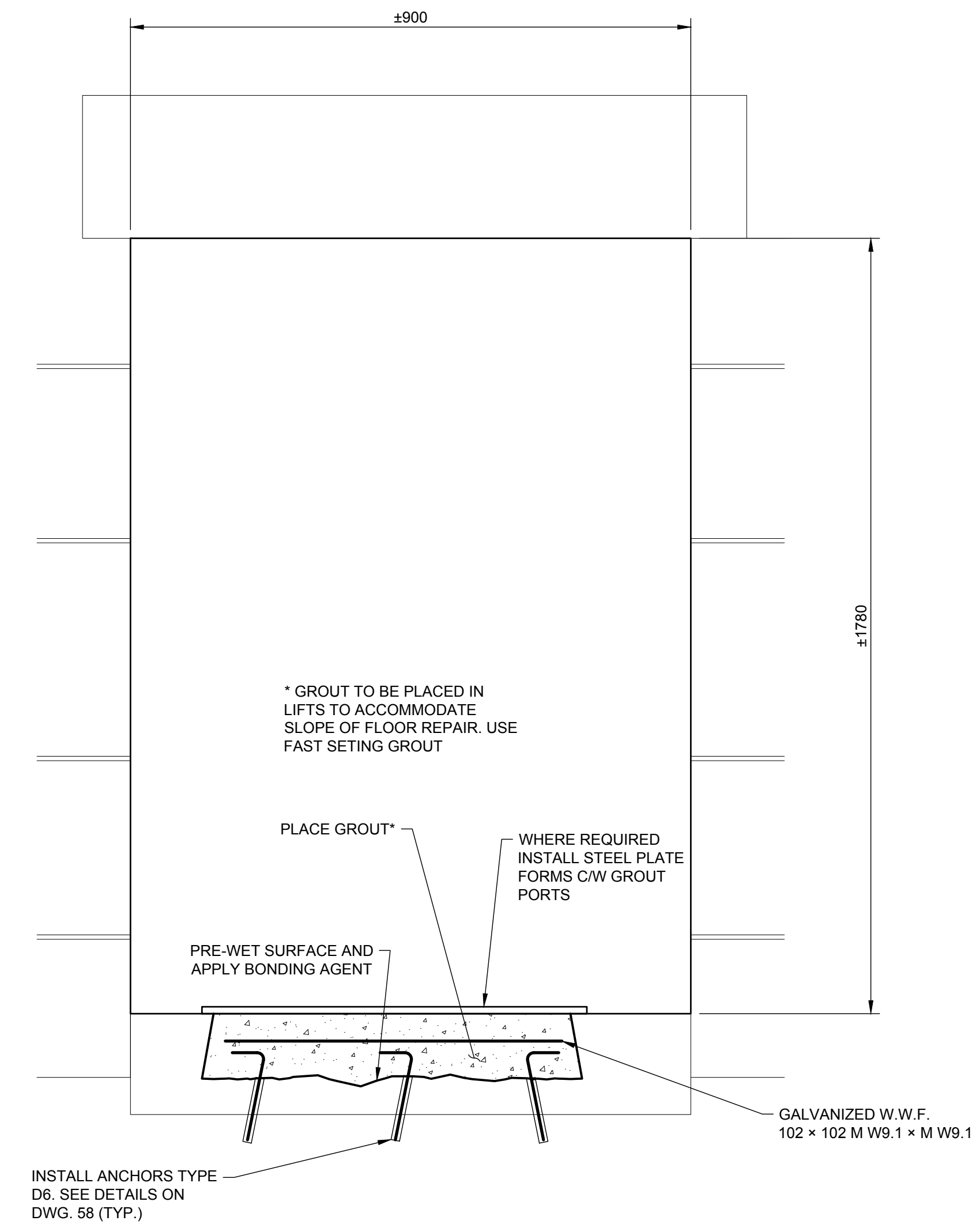
SLUICE TUNNEL SOFFIT - REMOVALS
1:10



SLUICE TUNNEL FLOOR - REMOVALS
1:10



SLUICE TUNNEL SOFFIT - REPAIR
1:10



SLUICE TUNNEL FLOOR - REPAIR
1:10

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

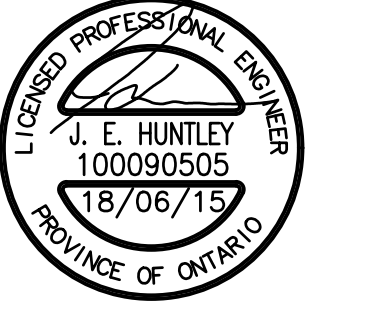
Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

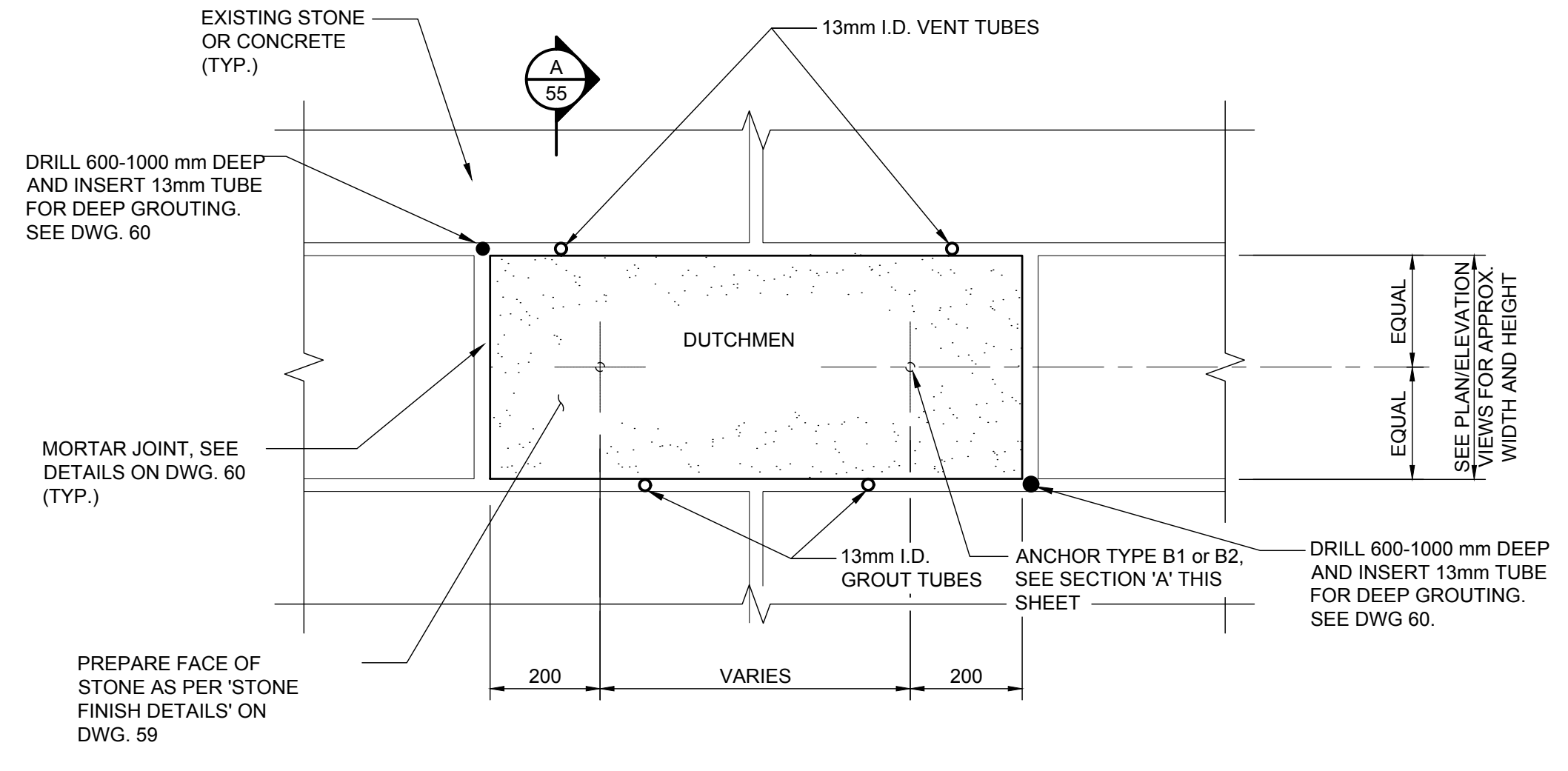
Drawing title / Titre du dessin
**SLUICE TUNNEL
 DETAILS II**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILION	Drawing Number / Numéro du Dessin 54
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 56 of 78

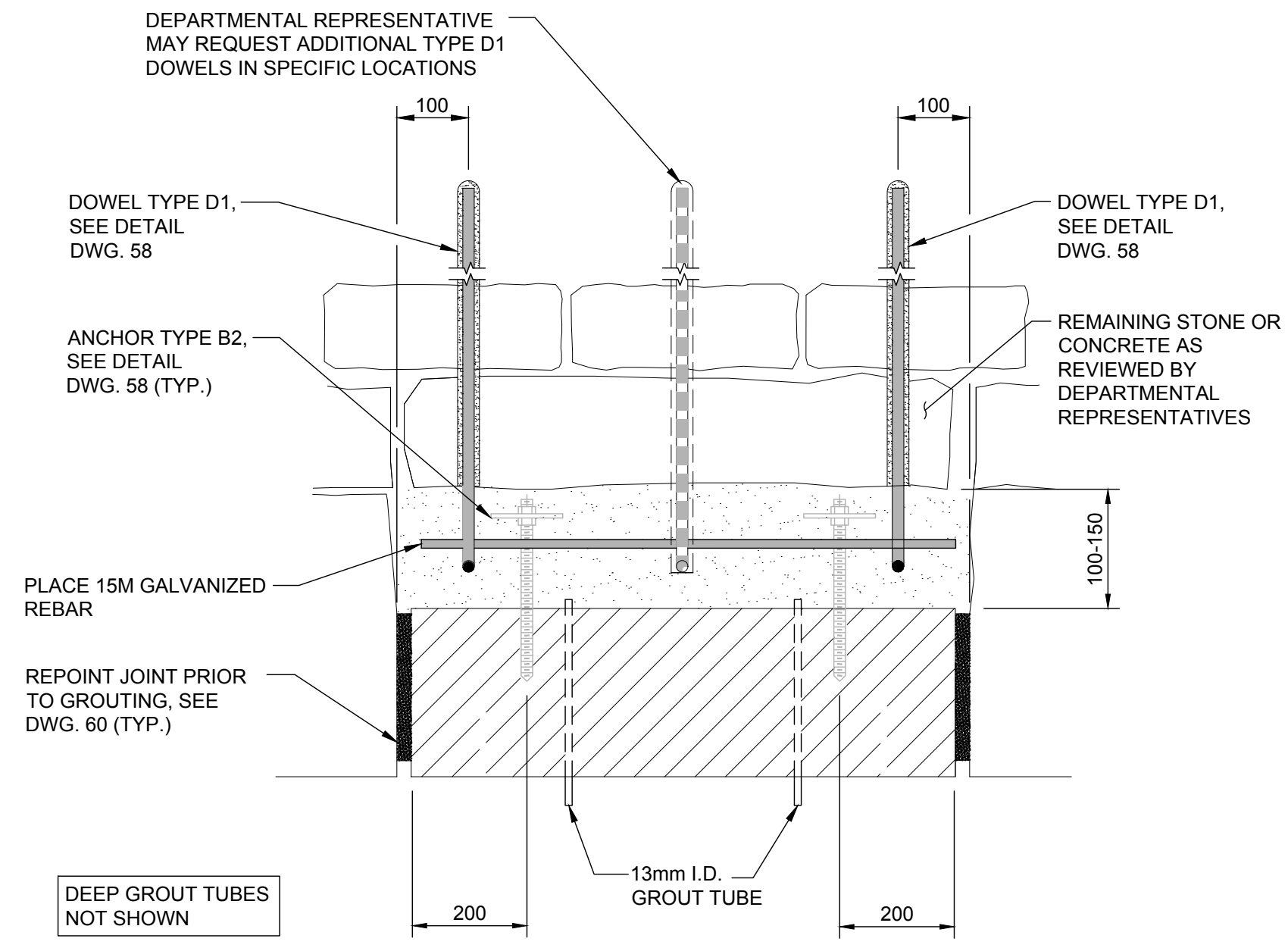


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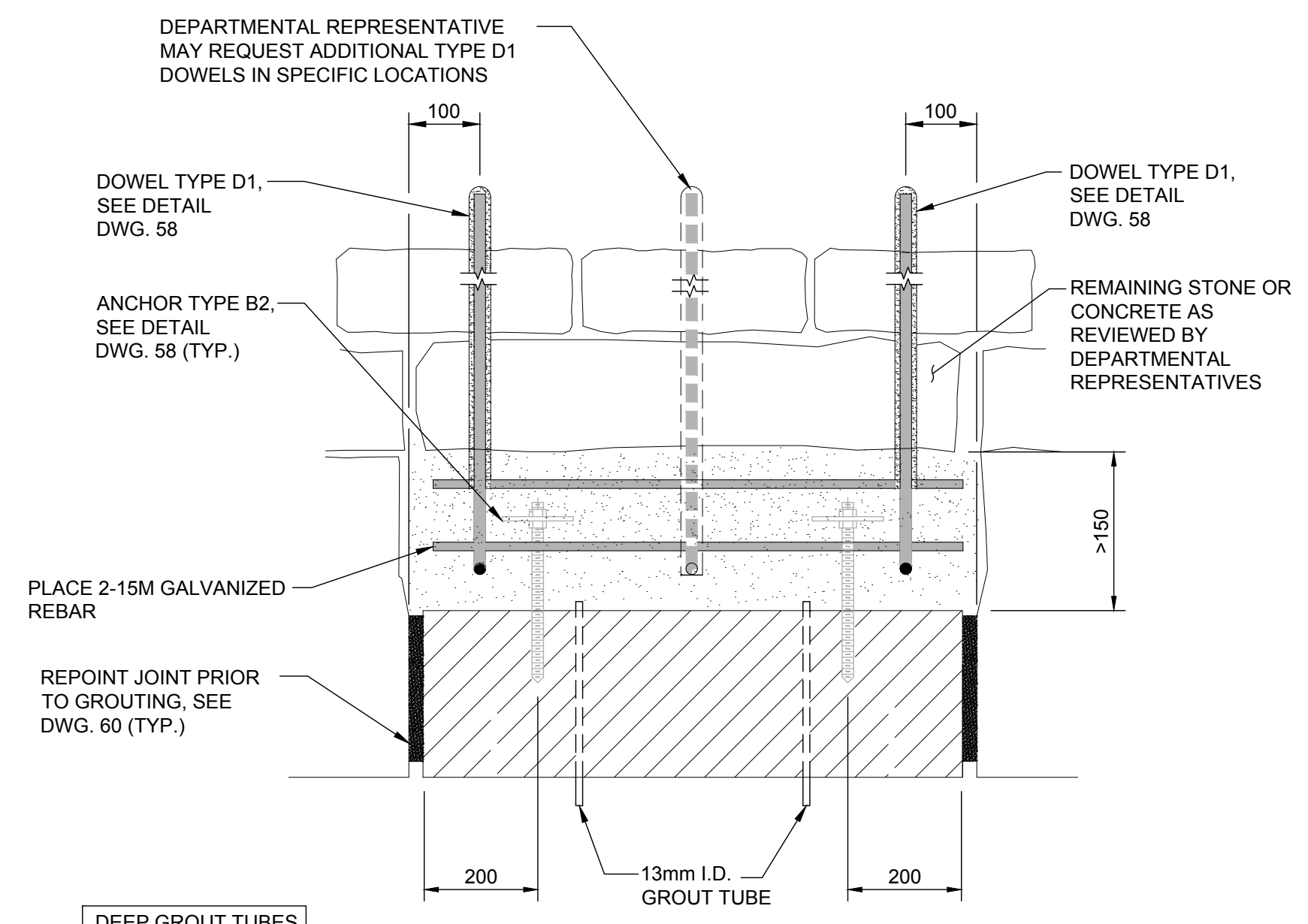
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND NOTES ON DWG. 00.
2. INSTALL NEW STONE TO MATCH EXIST. STONE TYPE, SHAPE AND FINISH. NATURAL LAYERING IN STONE TO BE ORIENTED IN HORIZONTAL PLANE.
3. PLACE GROUT AFTER NEW STONE REPAIR HAS BEEN INSTALLED AND REPOINTING HAS CURED FOR 48 HOURS



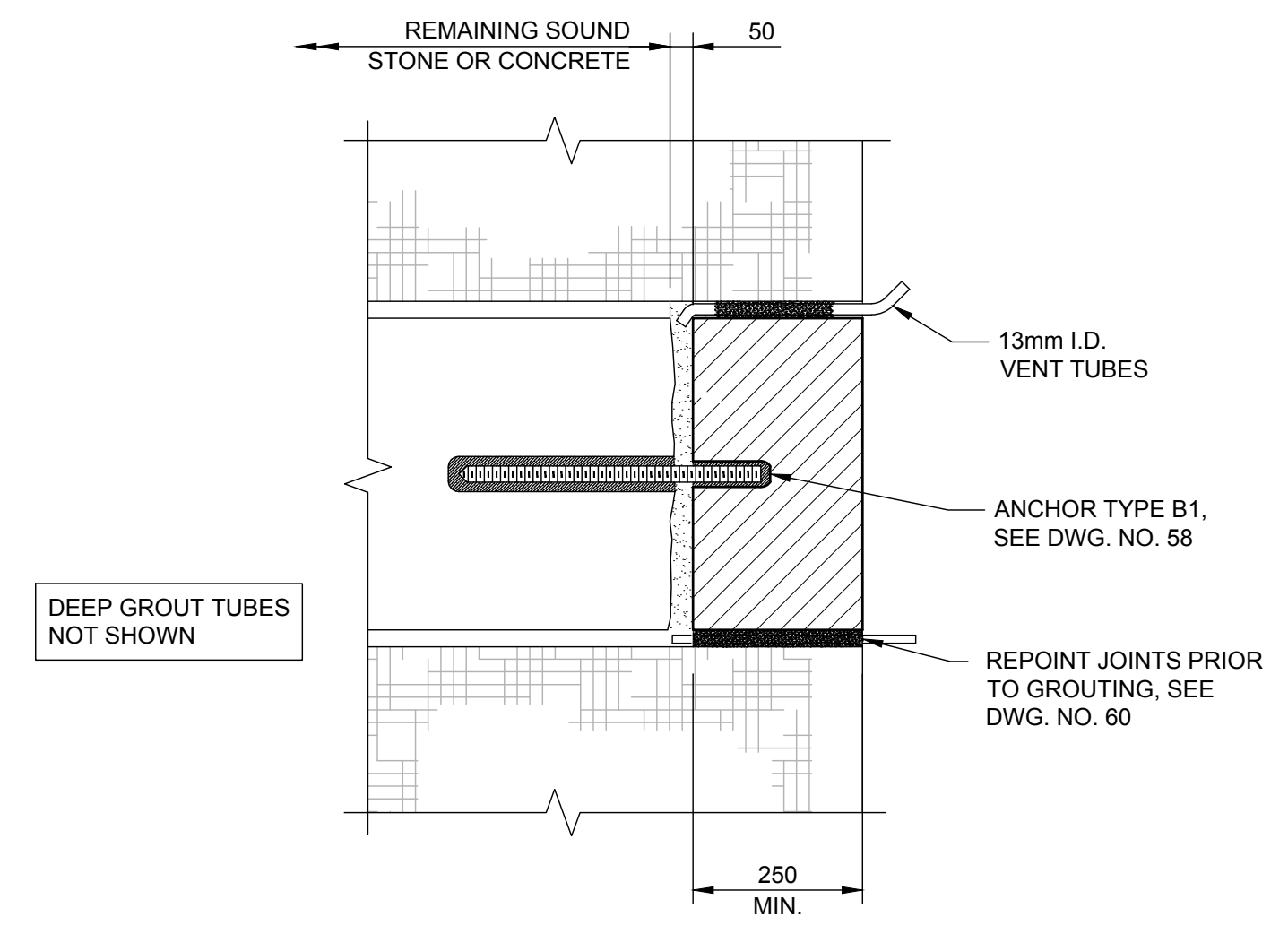
TYPICAL DUTCHMAN - ELEVATION
1:10



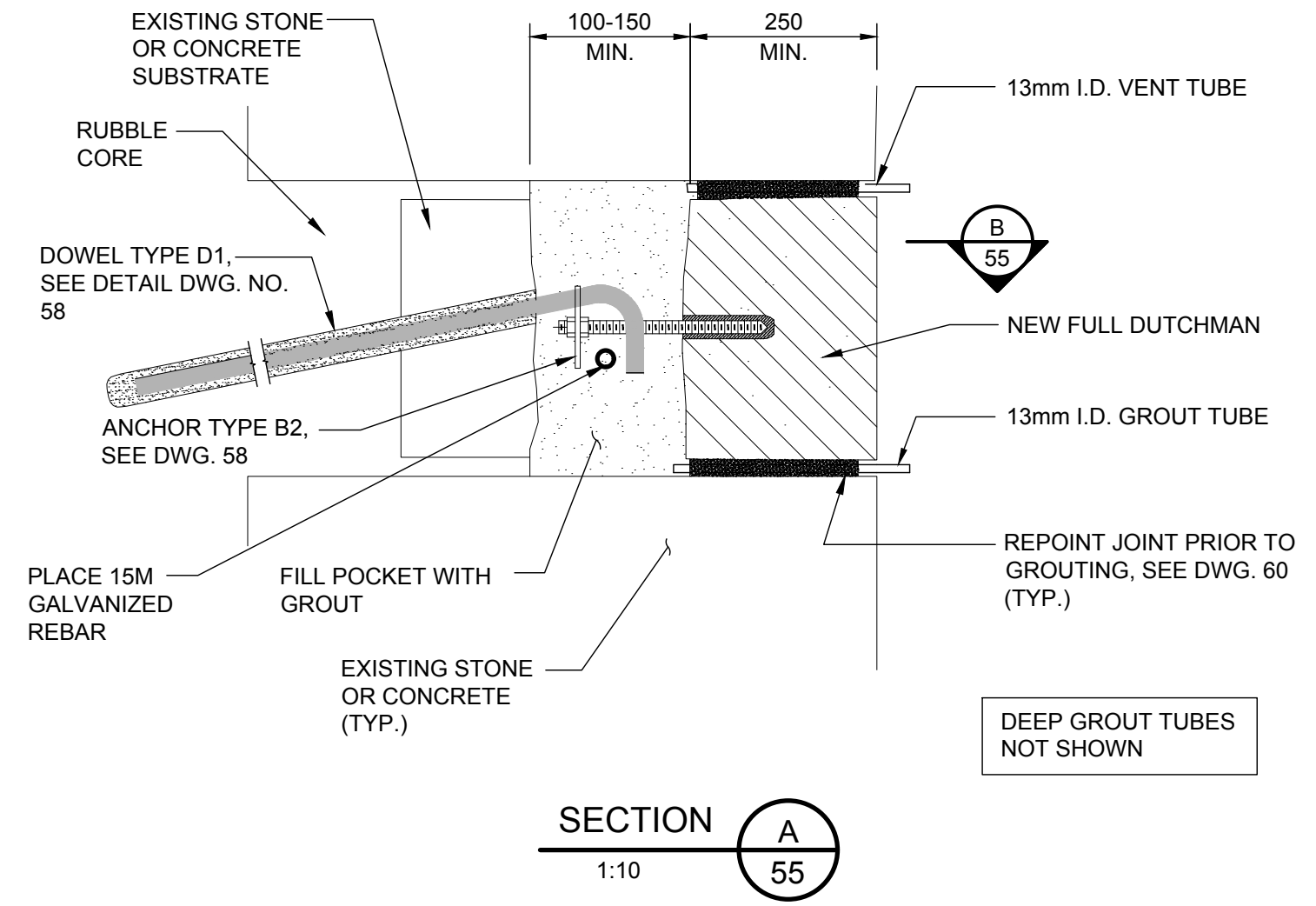
SECTION B
1:10
TYPICAL DUTCHMAN WITH POCKET - PLAN SECTION



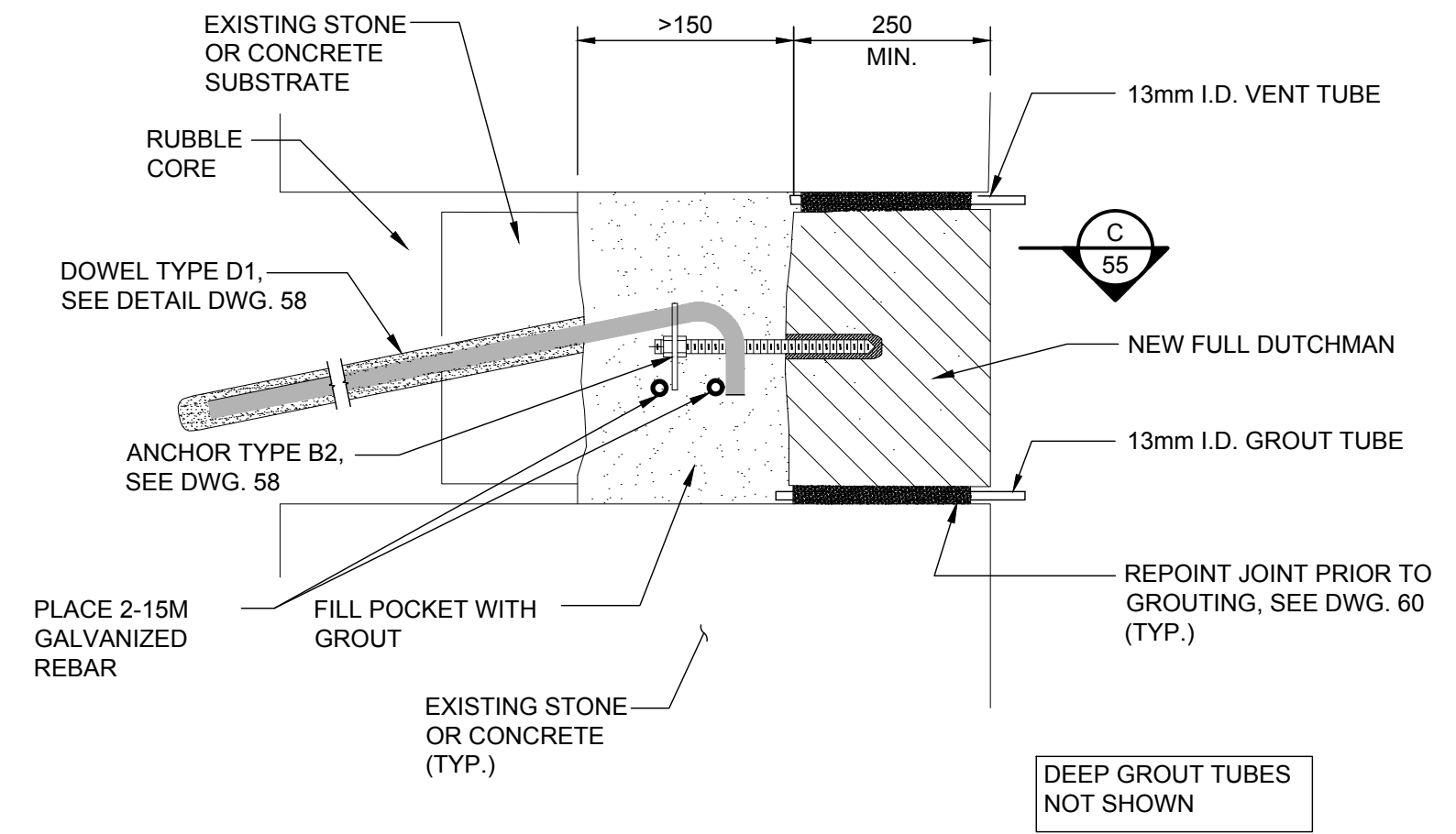
SECTION C
1:10
TYPICAL DUTCHMAN WITH DEEP POCKET - PLAN SECTION



SECTION A
1:10
TYPICAL DUTCHMAN - SECTION



SECTION A
1:10
TYPICAL DUTCHMAN WITH POCKET - SECTION



SECTION A
1:10
TYPICAL DUTCHMAN WITH DEEP POCKET - SECTION

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Des. By	Date
	Revision / Révision		

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

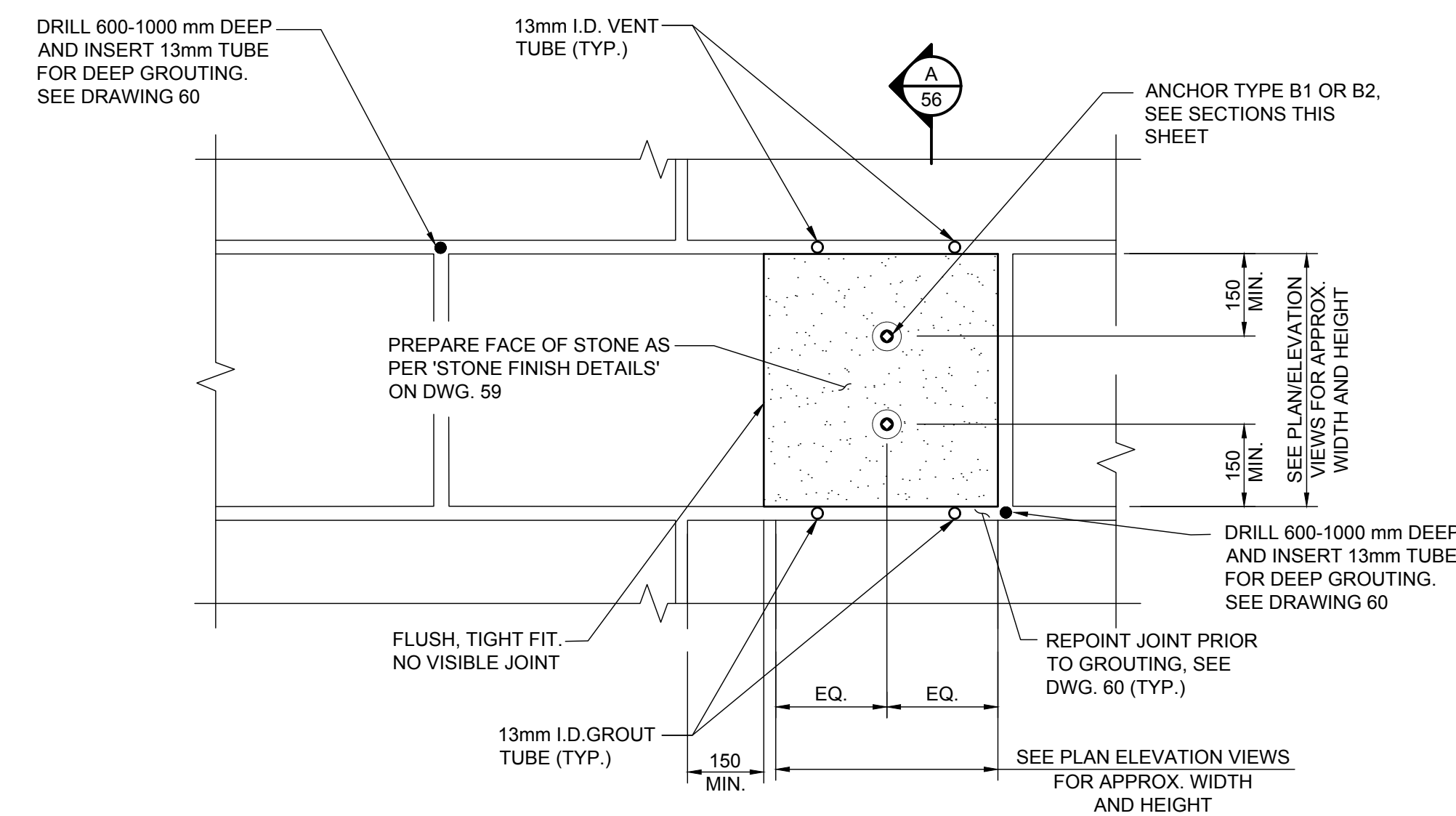
Drawing title / Titre du dessin
**FULL DUTCHMAN
 REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 55
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 57 of 78

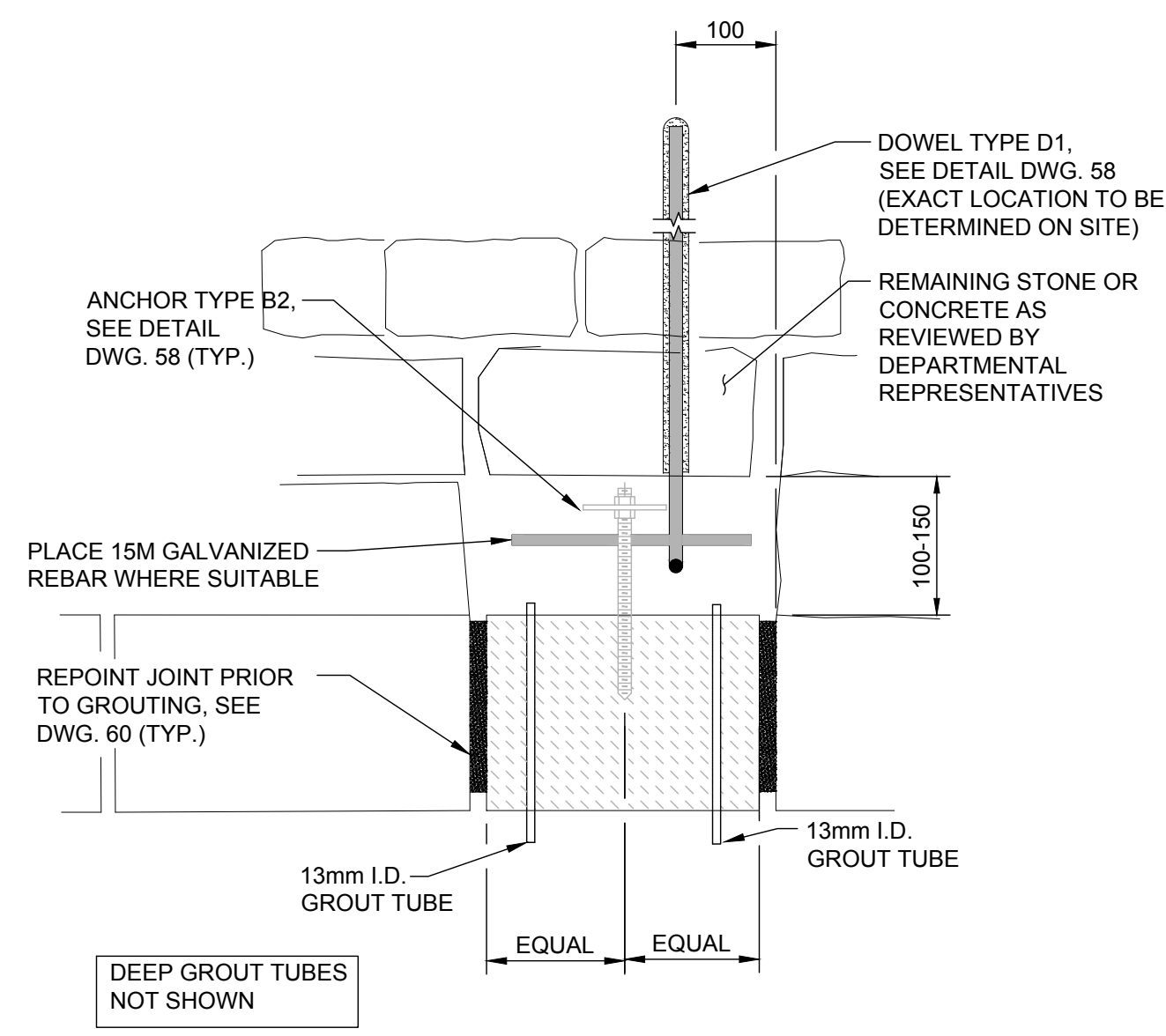
**DUTCHMAN STONE REPAIRS
 MAY BE VERTICAL (AS SHOWN),
 BATTERED (CHAMBER WALL)
 OR HORIZONTAL (FLOOR)**

NOTES:

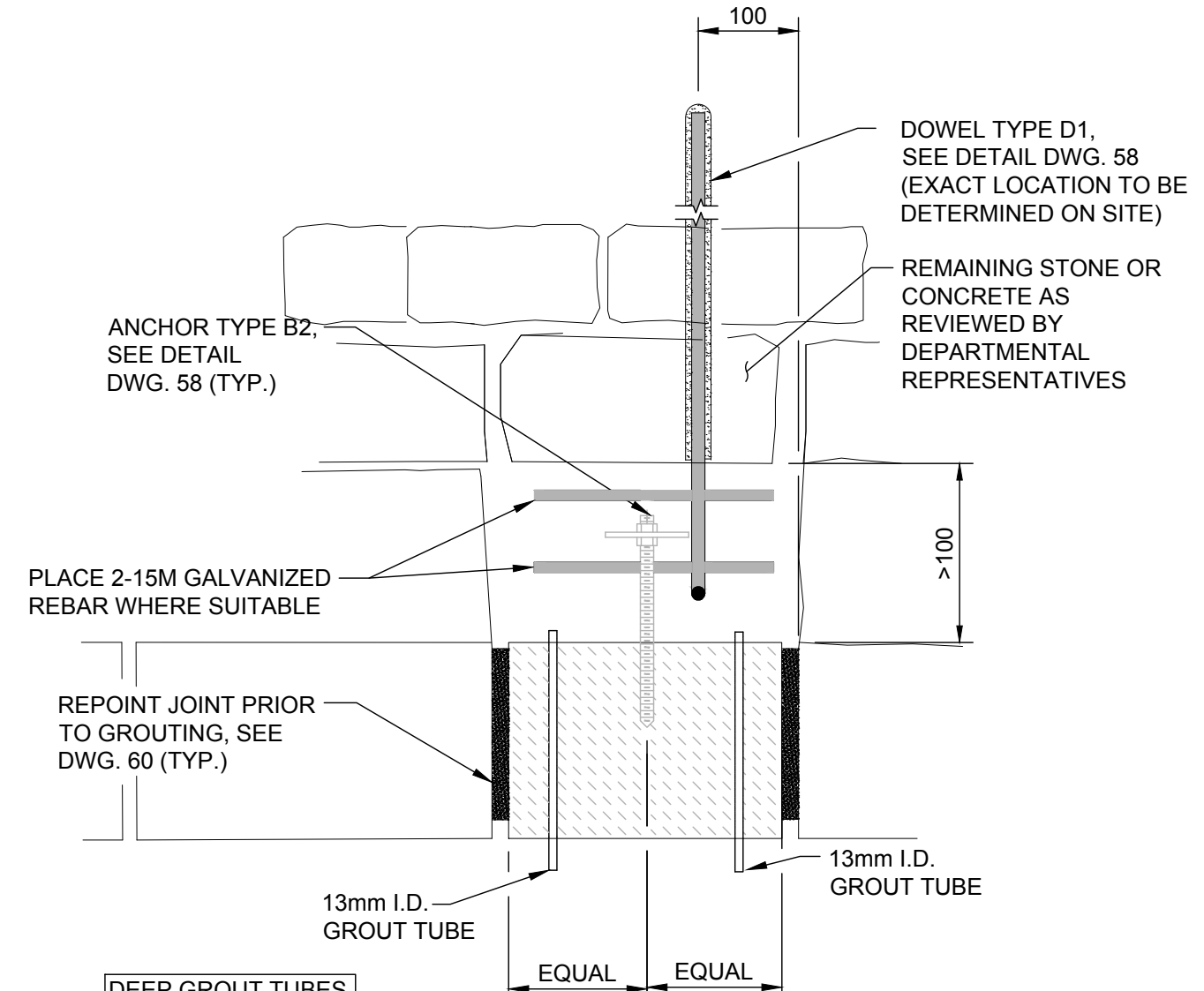
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND NOTES ON DWG. 00.
2. INSTALL NEW STONE TO MATCH EXIST. STONE TYPE, SHAPE AND FINISH. NATURAL LAYERING IN STONE TO BE ORIENTED IN HORIZONTAL PLANE.
3. PLACE GROUT AFTER NEW STONE REPAIR HAS BEEN INSTALLED AND REPOINTING HAS CURED FOR 48 HOURS



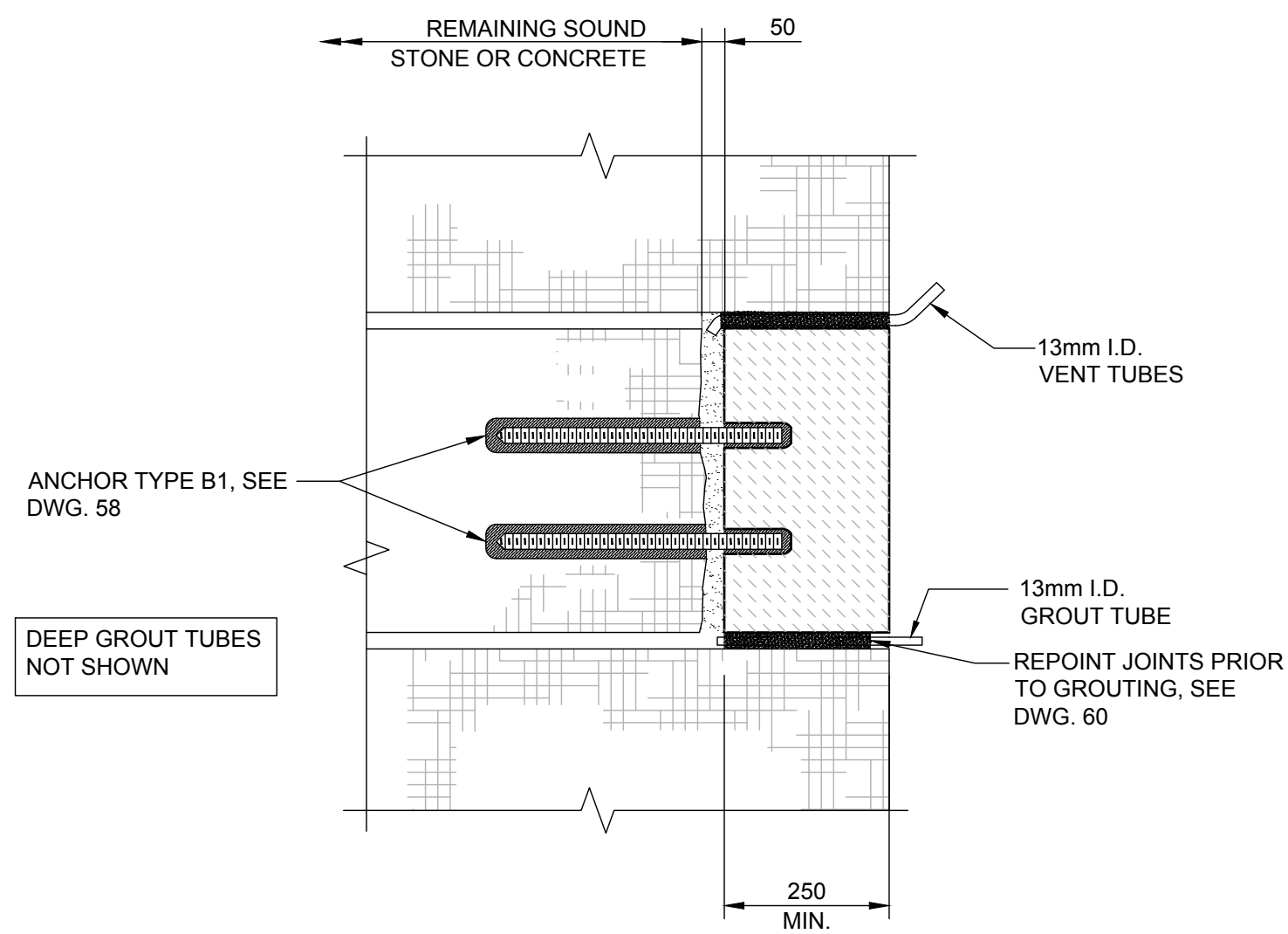
TYPICAL PARTIAL DUTCHMEN - ELEVATION
1:10



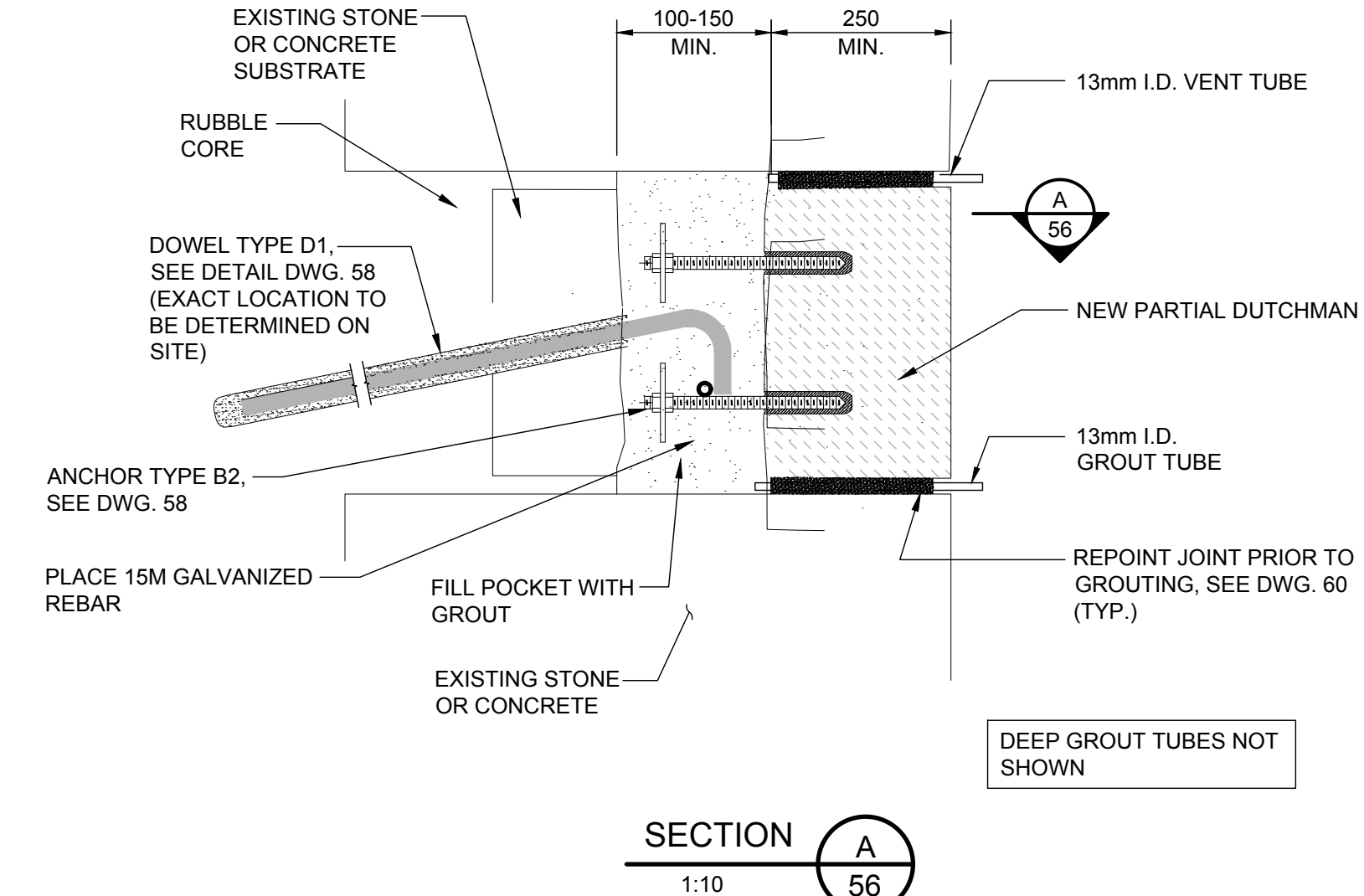
TYPICAL PARTIAL DUTCHMEN WITH POCKET - PLAN SECTION
1:10



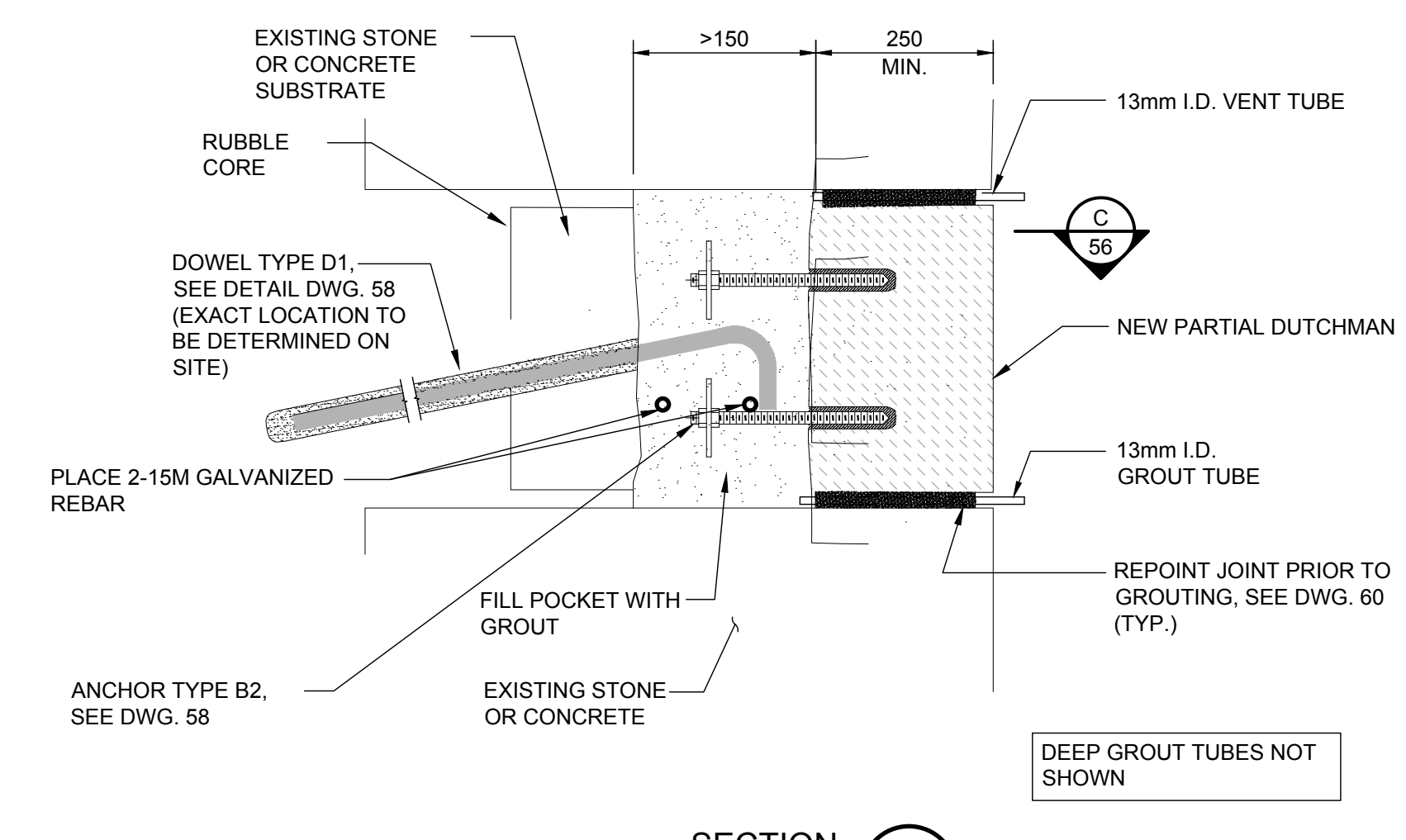
TYPICAL PARTIAL DUTCHMEN WITH DEEP POCKET - PLAN SECTION
1:10



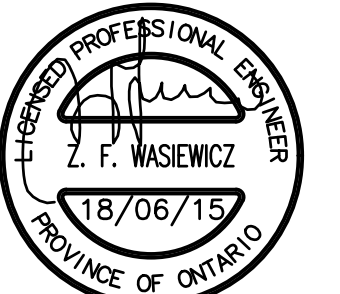
TYPICAL PARTIAL DUTCHMEN - SECTION
1:10



TYPICAL PARTIAL DUTCHMEN WITH POCKET - SECTION
1:10



TYPICAL PARTIAL DUTCHMEN WITH DEEP POCKET - SECTION
1:10



1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
		Revision / Révision	

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

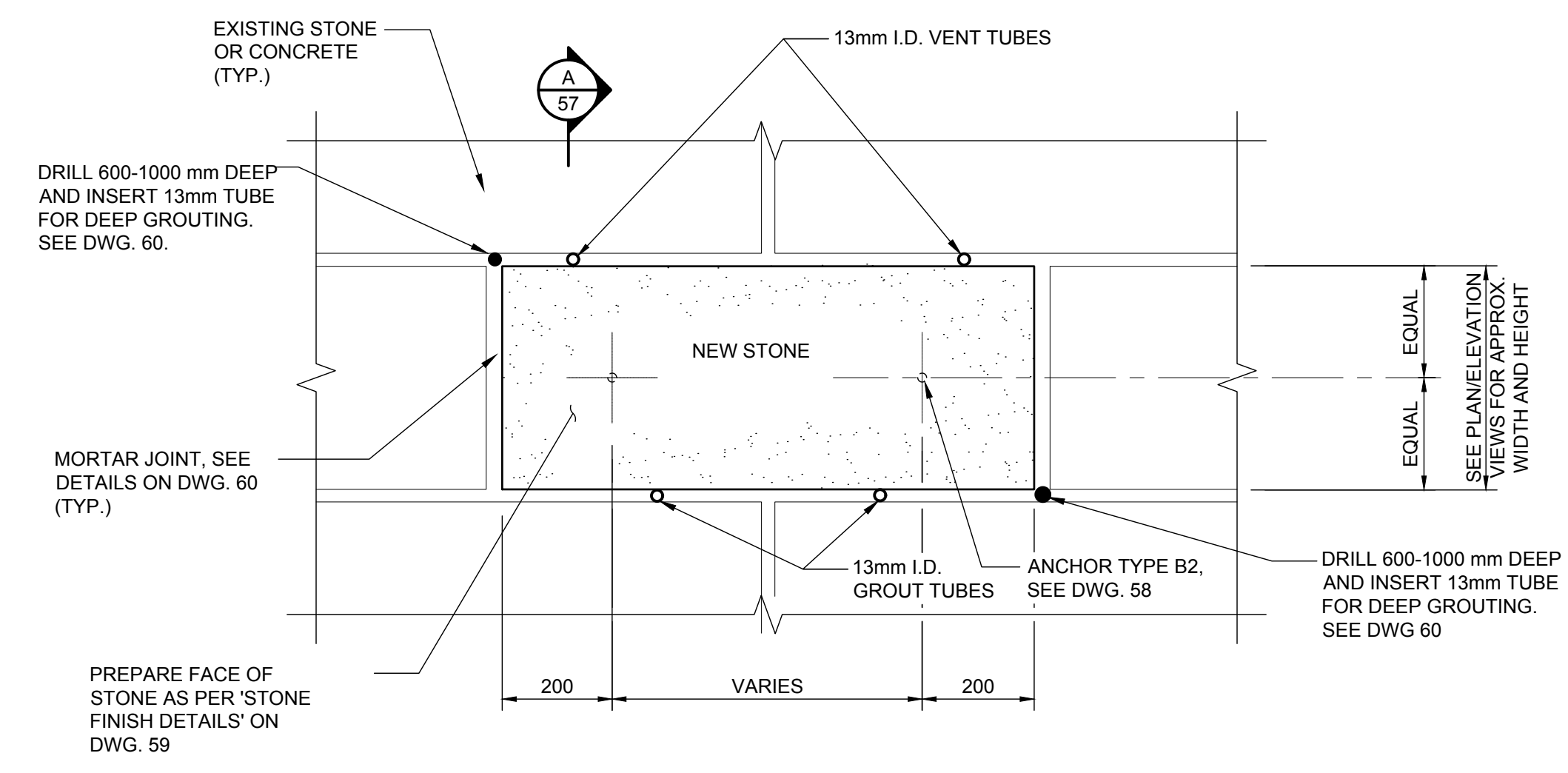
Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Partial Dutchman Repair

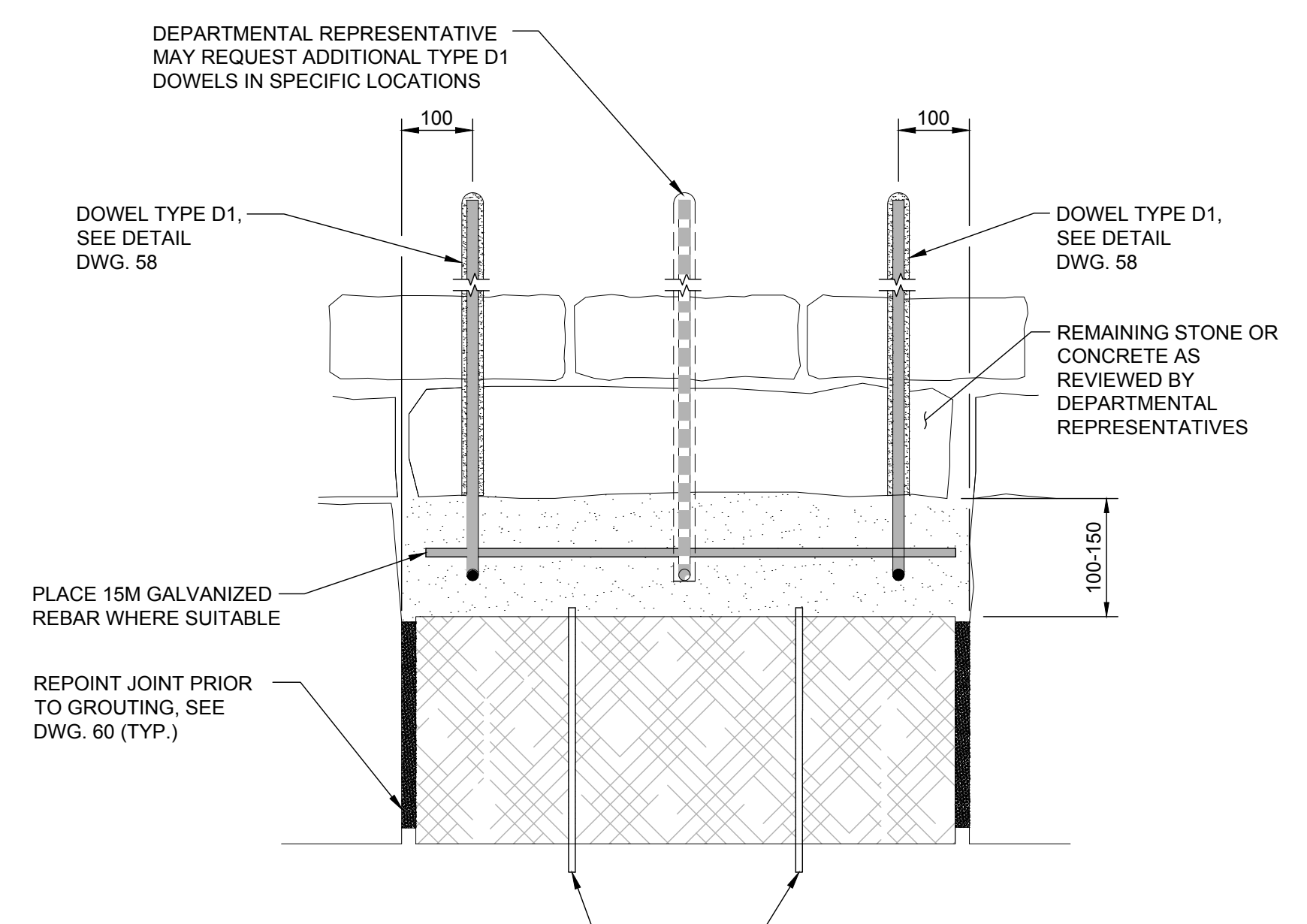
PARTIAL DUTCHMAN REPAIRS MAY ALSO BE FULL WIDTH OF STONE (INSTEAD OF FULL HEIGHT AS SHOWN.) FOR FULL WIDTH, DUTCHMAN PARTIAL ANCHORS TO BE AS PER DWG. 58

PARTIAL DUTCHMAN STONE REPAIRS MAY BE VERTICAL (AS SHOWN), BATTERED (CHAMBER WALL) OR HORIZONTAL (FLOOR)

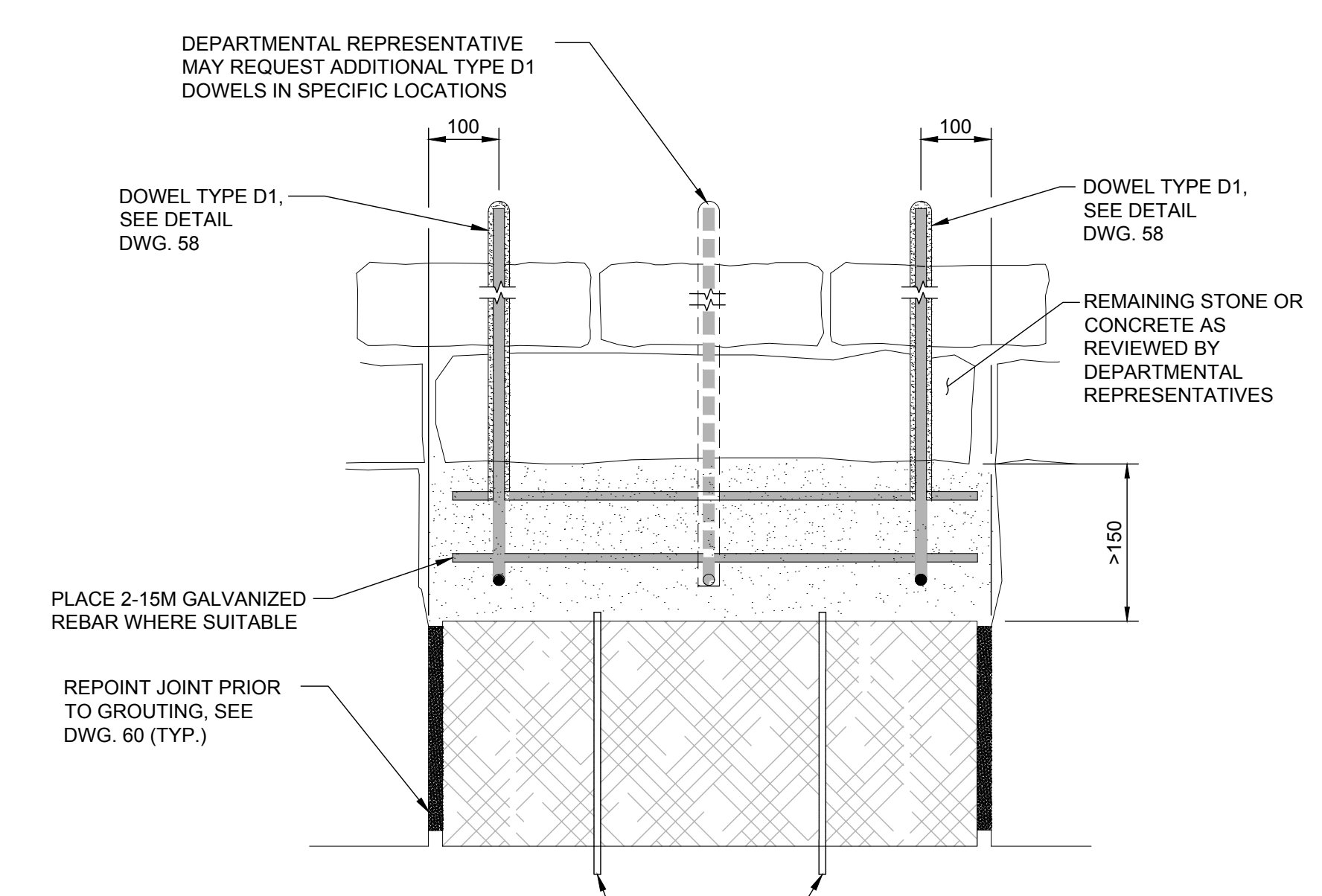
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 56
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 58 of 78



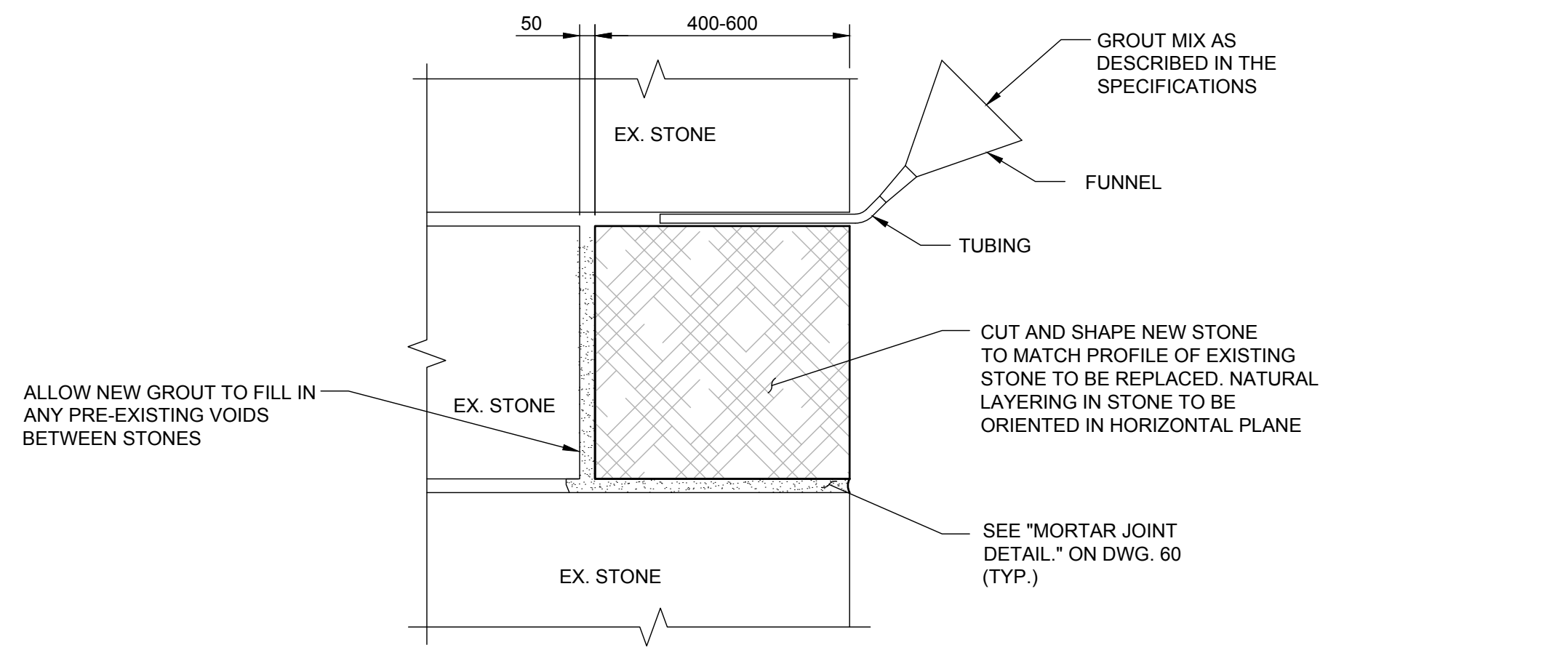
TYPICAL FULL STONE REPAIR - ELEVATION
 1:10



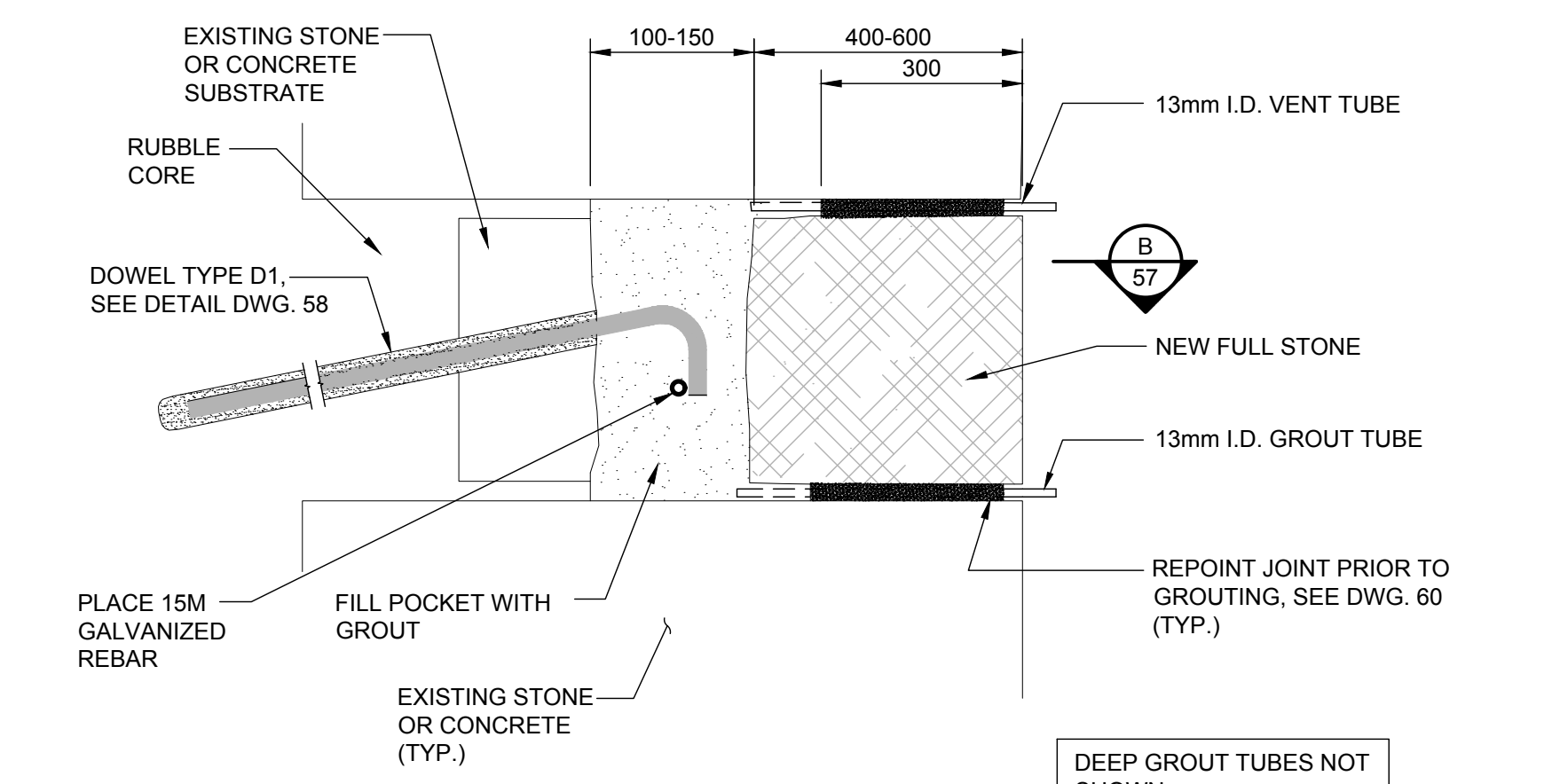
SECTION B
 1:10
TYPICAL FULL STONE REPAIR WITH POCKET - PLAN SECTION



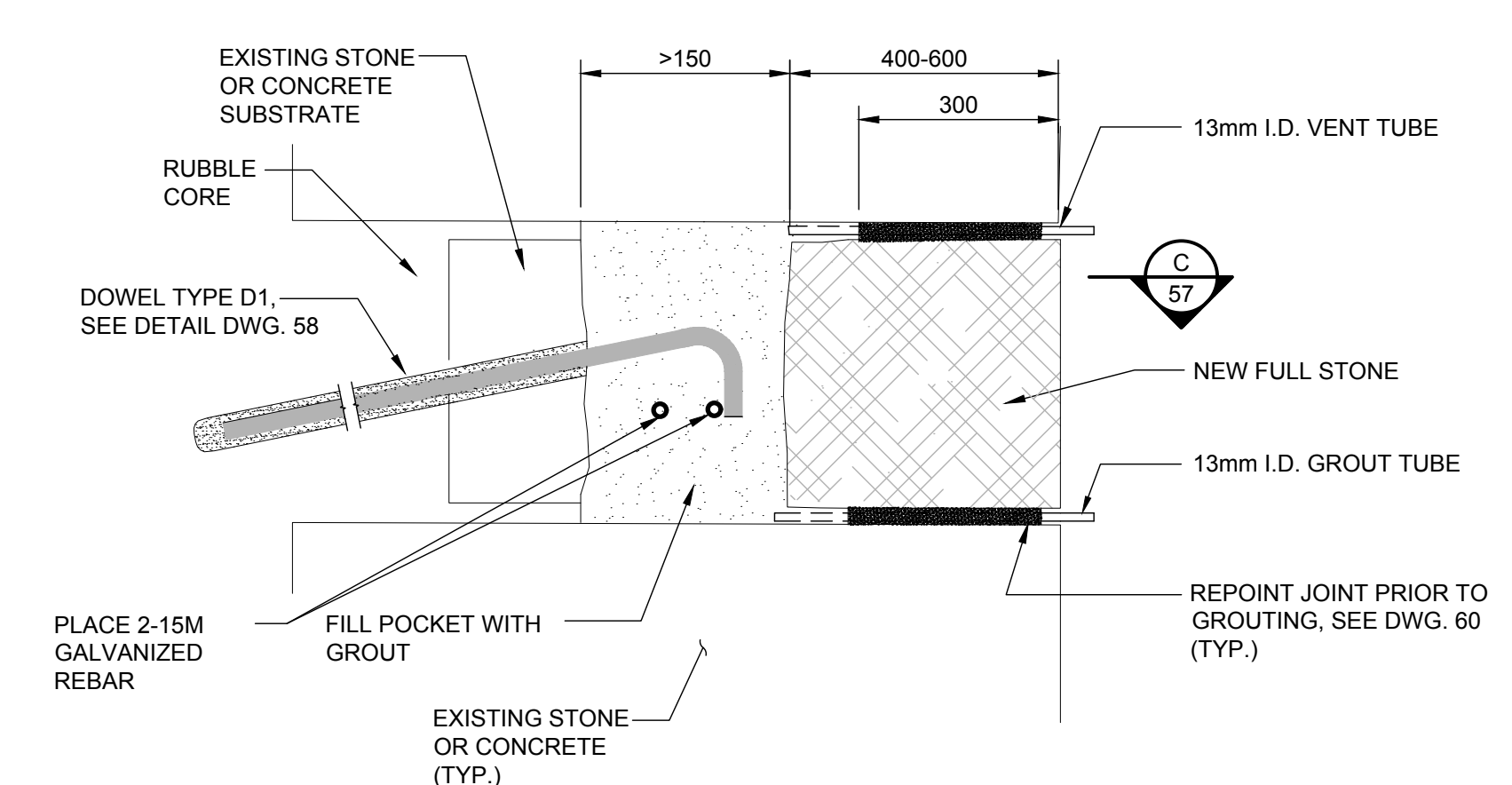
SECTION C
 1:10
TYPICAL FULL STONE REPAIR WITH DEEP POCKET - PLAN SECTION



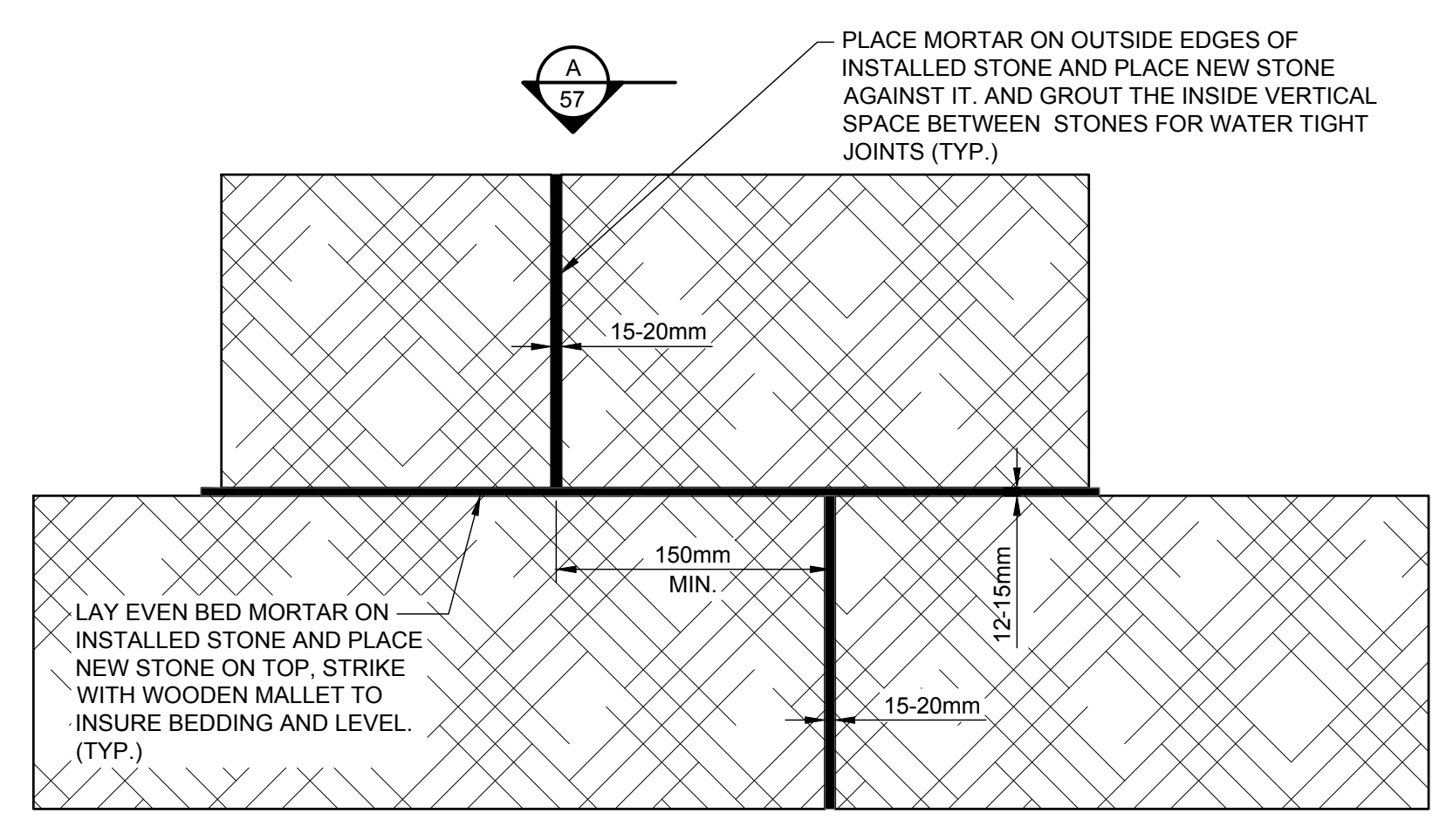
TYPICAL FULL STONE REPAIR - SECTION
 1:10



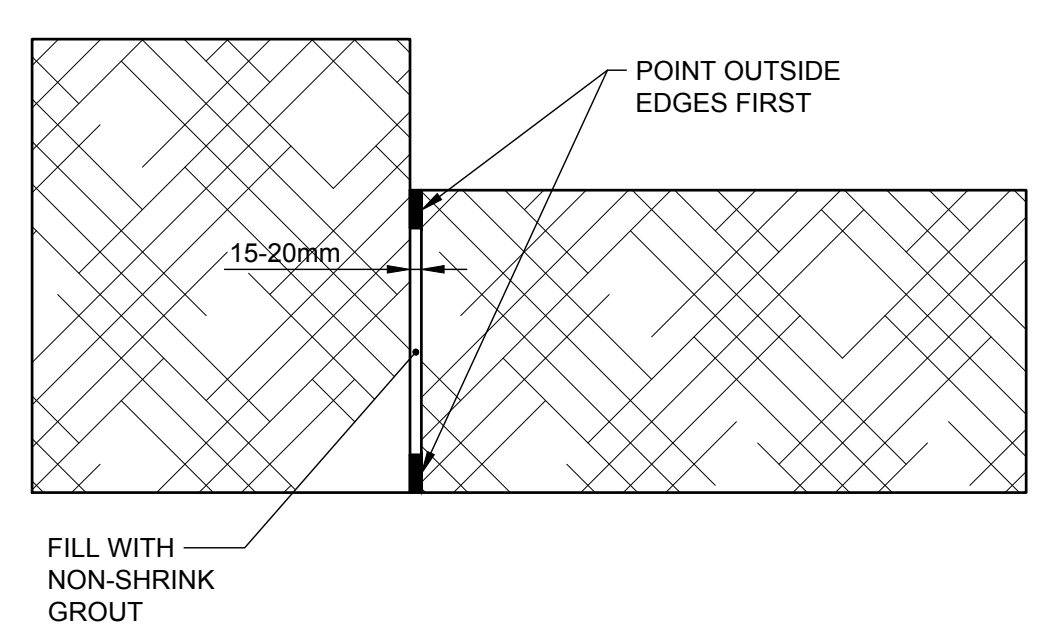
SECTION A
 1:10
TYPICAL FULL STONE REPAIR WITH POCKET - SECTION



SECTION A
 1:10
TYPICAL FULL STONE REPAIR WITH DEEP POCKET - SECTION



TOP AND FACE OF BREAST WALL JOINT DETAILS - F1
 1:10



SECTION A
 1:10
 (VERTICAL JOINTS BETWEEN STONES)

- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND NOTES ON DWG. 00.
 - INSTALL NEW STONE TO MATCH EXIST. STONE TYPE, SHAPE AND FINISH. NATURAL LAYERING IN STONE TO BE ORIENTED IN HORIZONTAL PLANE.
 - PLACE GROUT AFTER NEW STONE REPAIR HAS BEEN INSTALLED AND REPOINTING HAS CURED FOR 48 HOURS

DUTCHMAN STONE REPAIRS MAY BE VERTICAL (AS SHOWN), BATTERED (CHAMBER WALL) OR HORIZONTAL (FLOOR)

No.	Description	Revision / Révision	Des. By / Des. Par	Date
1	ISSUED FOR TENDER		J.M.	2018-06-15

A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

FULL STONE REPAIR

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 57
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 59 of 78

NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND NOTES ON DWG. 00.
 2. INSTALL NEW STONE TO MATCH EXIST. STONE TYPE, SHAPE AND FINISH. NATURAL LAYERING IN STONE TO BE ORIENTED IN HORIZONTAL PLANE.
 3. PLACE GROUT AFTER NEW STONE REPAIR HAS BEEN INSTALLED AND REPOINTING HAS CURED FOR 48 HOURS

Public Services and Procurement Canada
 Services publics et Approvisionnement Canada

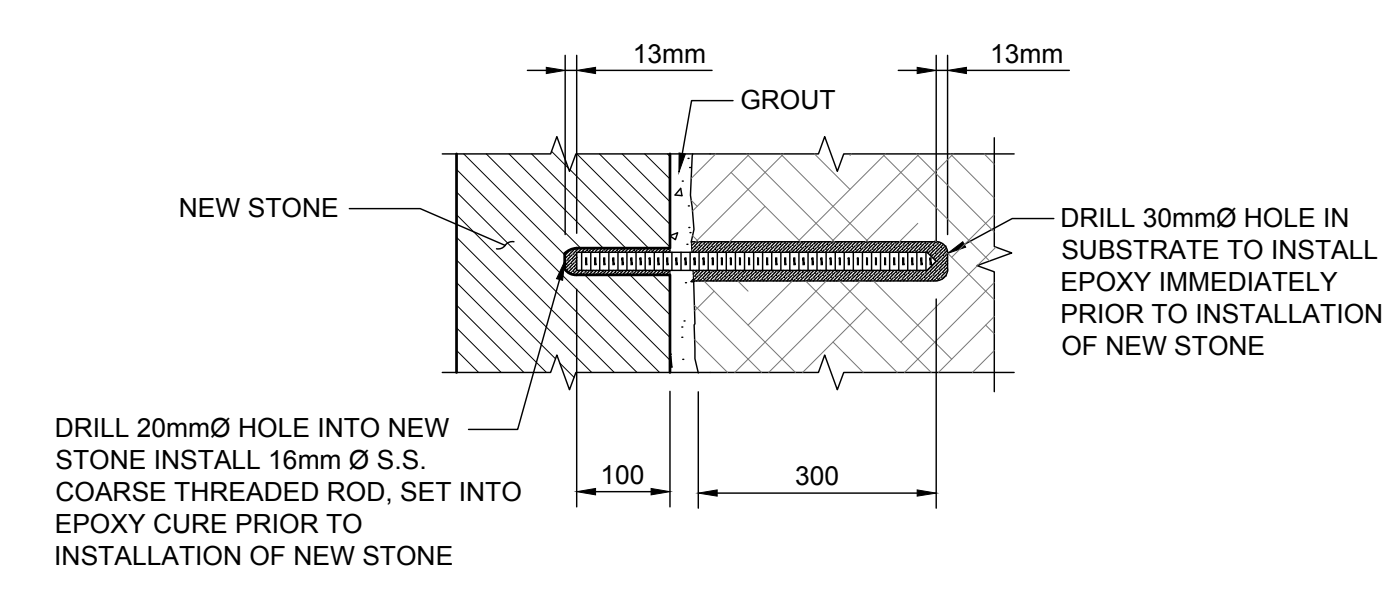
Heritage Canals and Engineering Works Group
 Parks Canada Infrastructure Directorate
 Groupe Canaux historiques et travaux d'ingénierie
 Direction de l'infrastructure de Parcs Canada

Parks Canada
 Parcs Canada

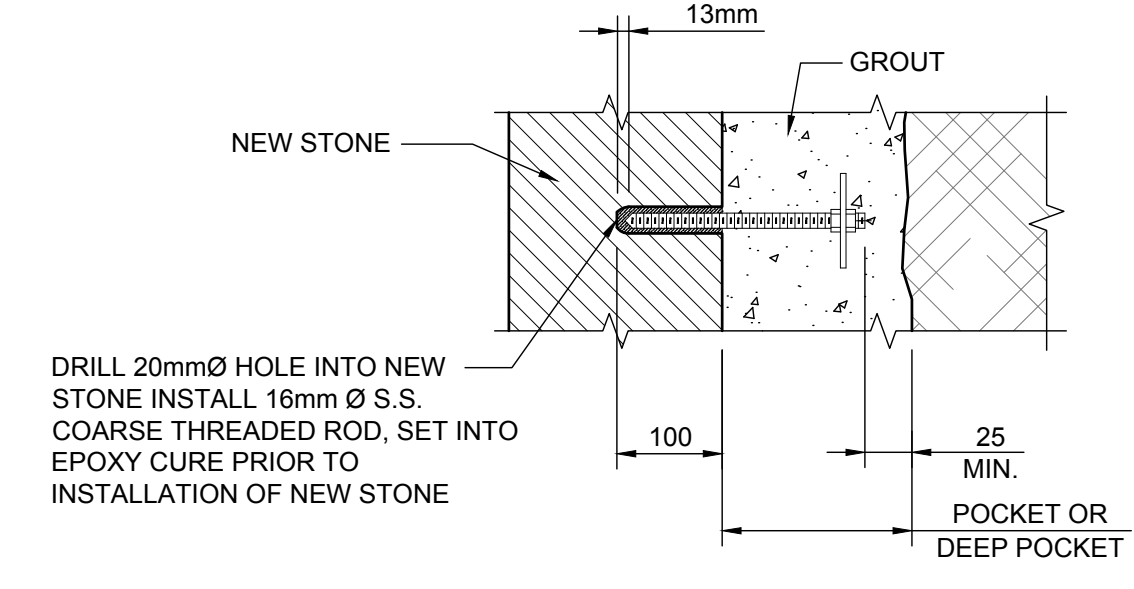
Canada

wsp

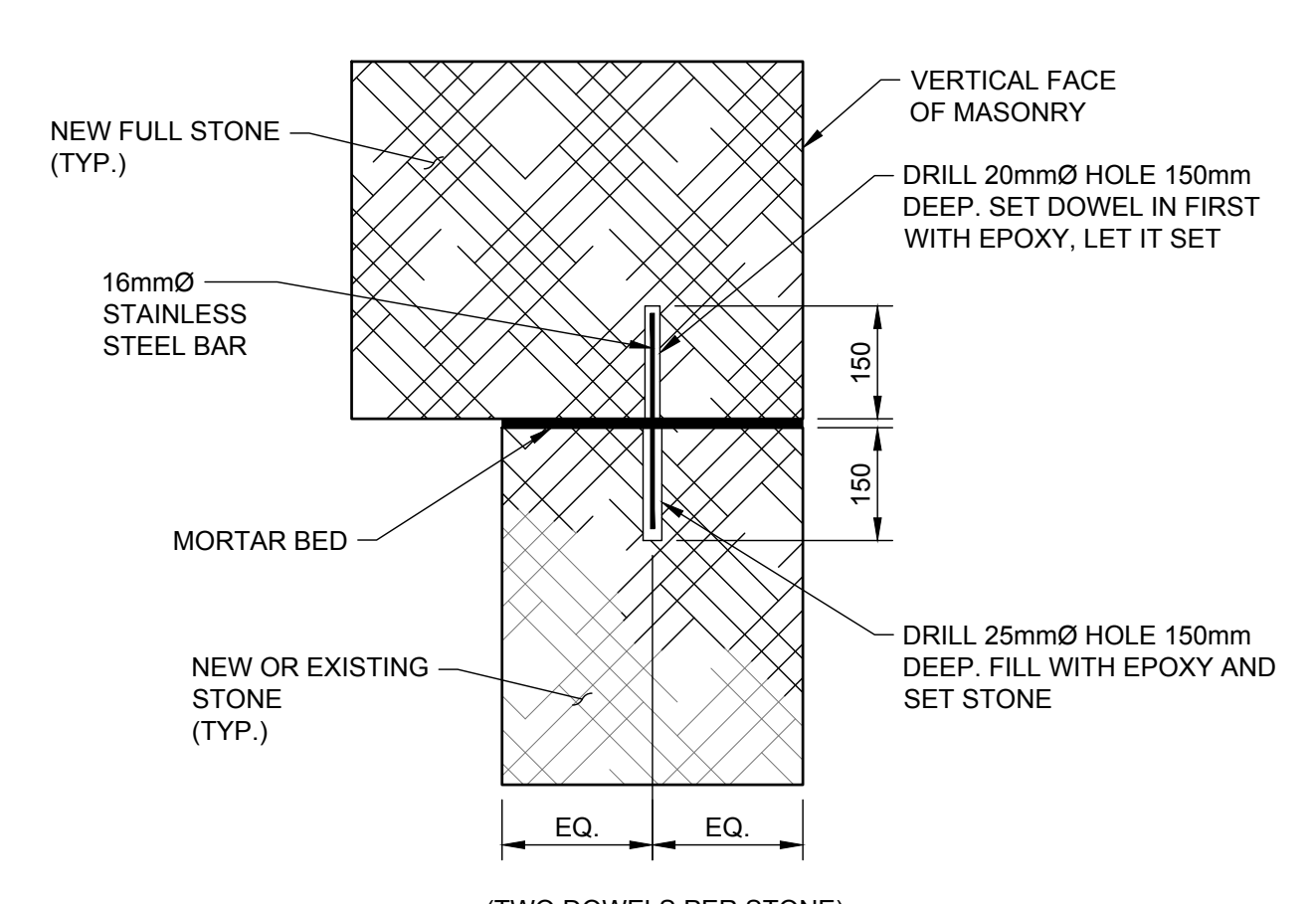
300-2611 QUEENSWAY DRIVE
 OTTAWA (ONTARIO)
 CANADA K2B 9K2
 TELEPHONE: 613-829-2800 FAX: 613-829-8299
 WWW.WSPGROUP.COM



ANCHOR TYPE B1
1:10



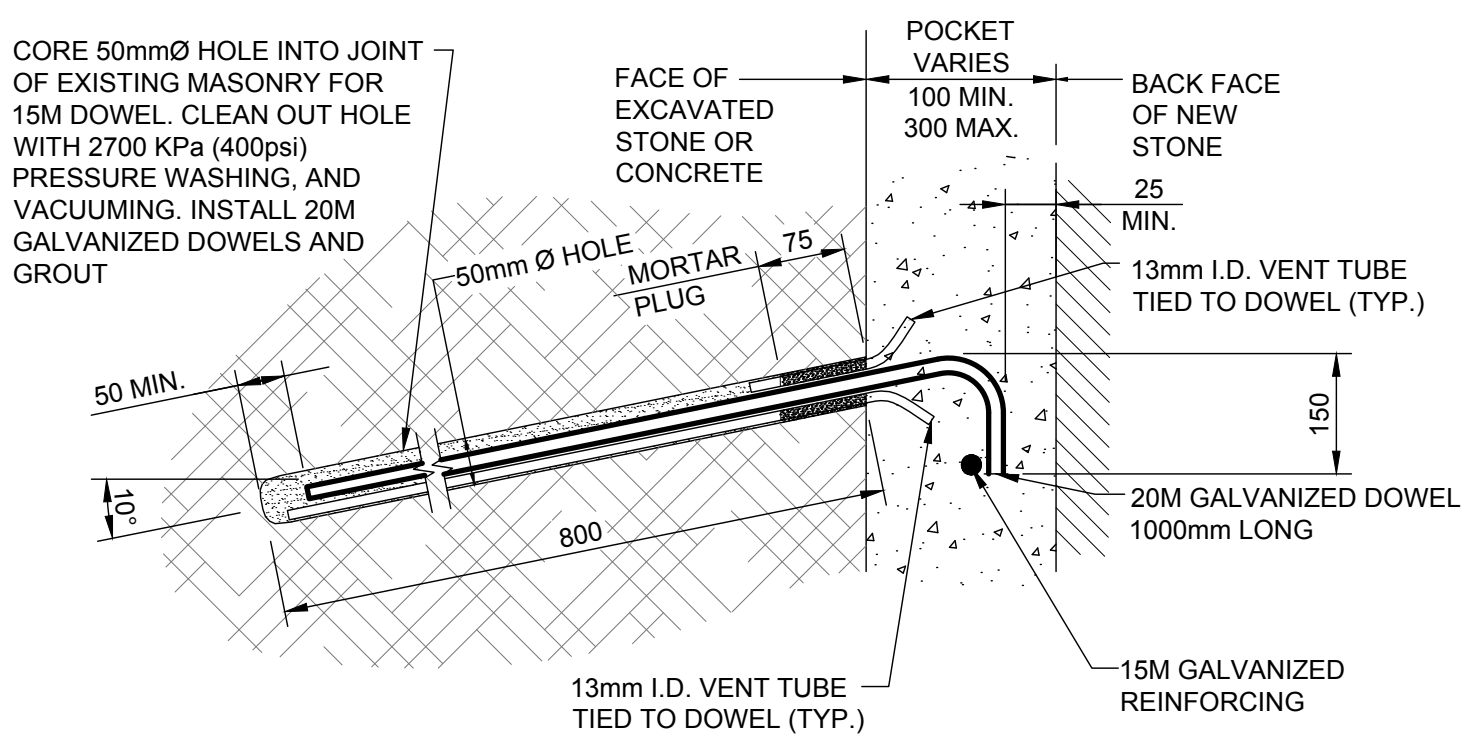
ANCHOR TYPE B2
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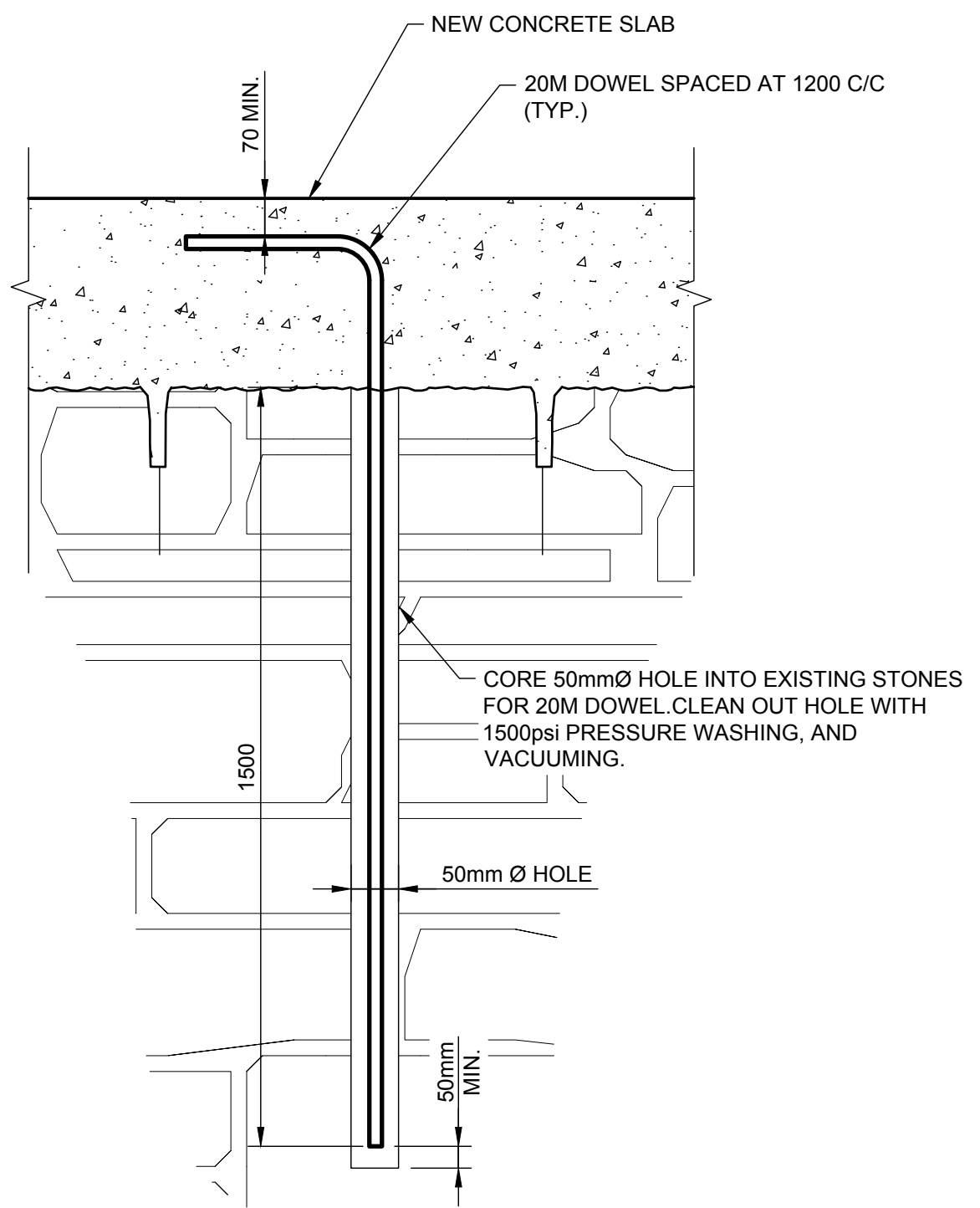
ANCHOR TYPE - B5 - STONE TO STONE
1:10
(BREAST WALL RECONSTRUCTION)

REPAIR LEGEND:

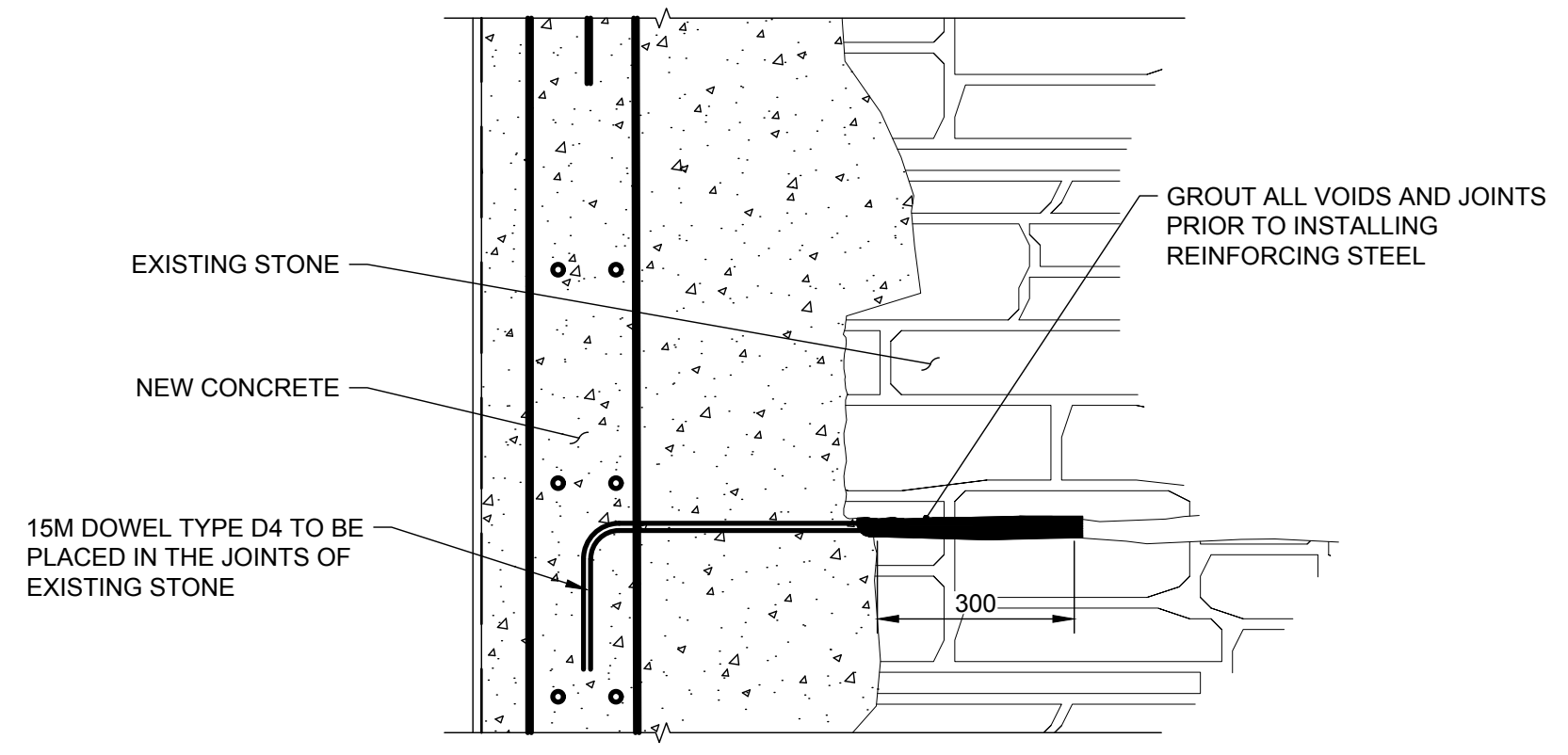
	CONCRETE REMOVALS FOR NEW FULL STONE. SEE DETAILS ON DWG. 57
	NEW CONCRETE. SEE DETAILS ON DWG. 64
	NEW FULL STONE. SEE DETAILS ON DWG. 57
	NEW FULL DUTCHMAN. SEE DETAILS ON DWG. 55
	PARTIAL DUTCHMAN
	EXISTING CONCRETE
	EXISTING FINISHED MASONRY (SHOWN IN SECTION ONLY)
	GROUTED RUBBLE MASONRY
	RUBBLE MASONRY FILL



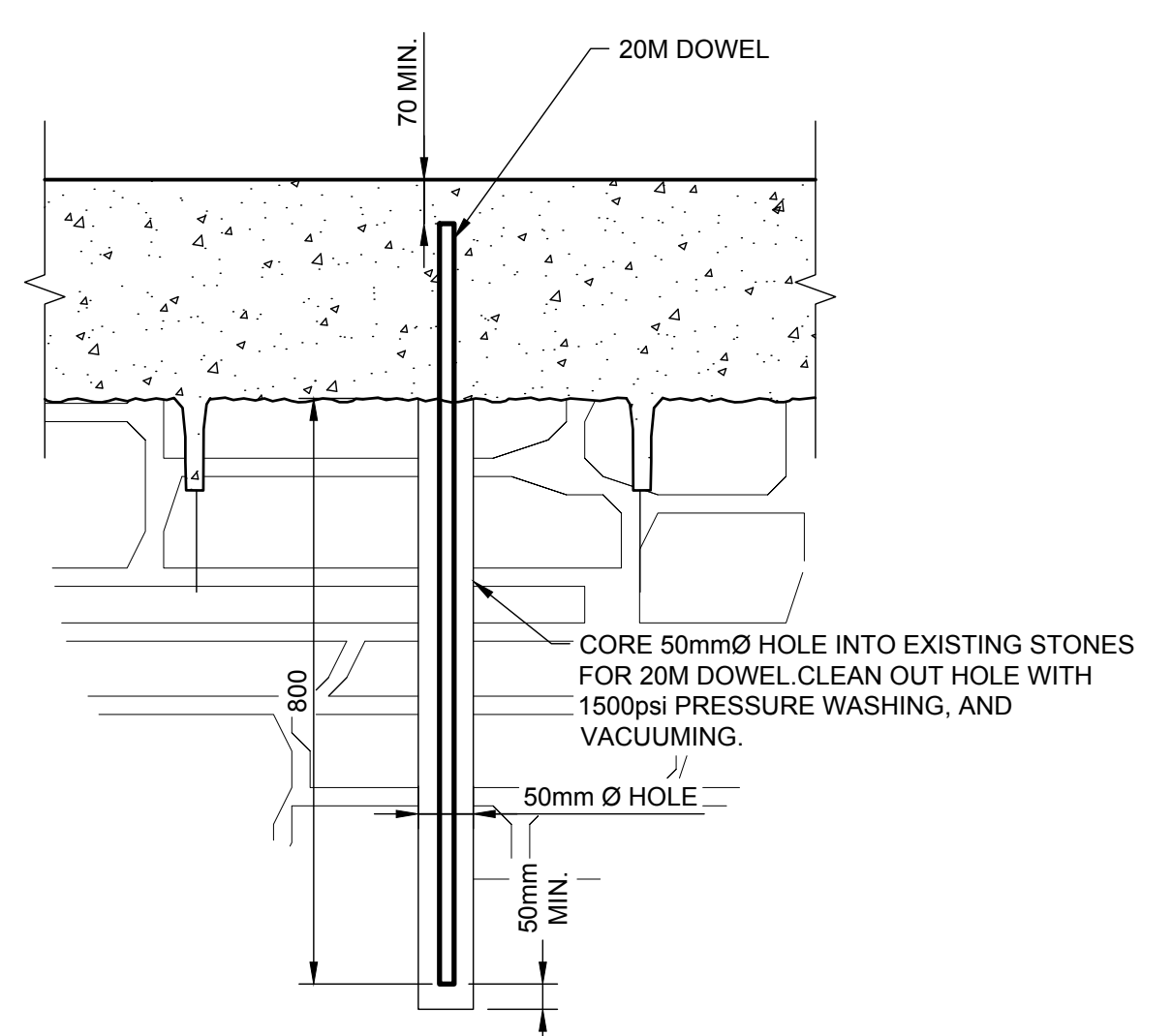
ANCHOR TYPE - D1
1:10



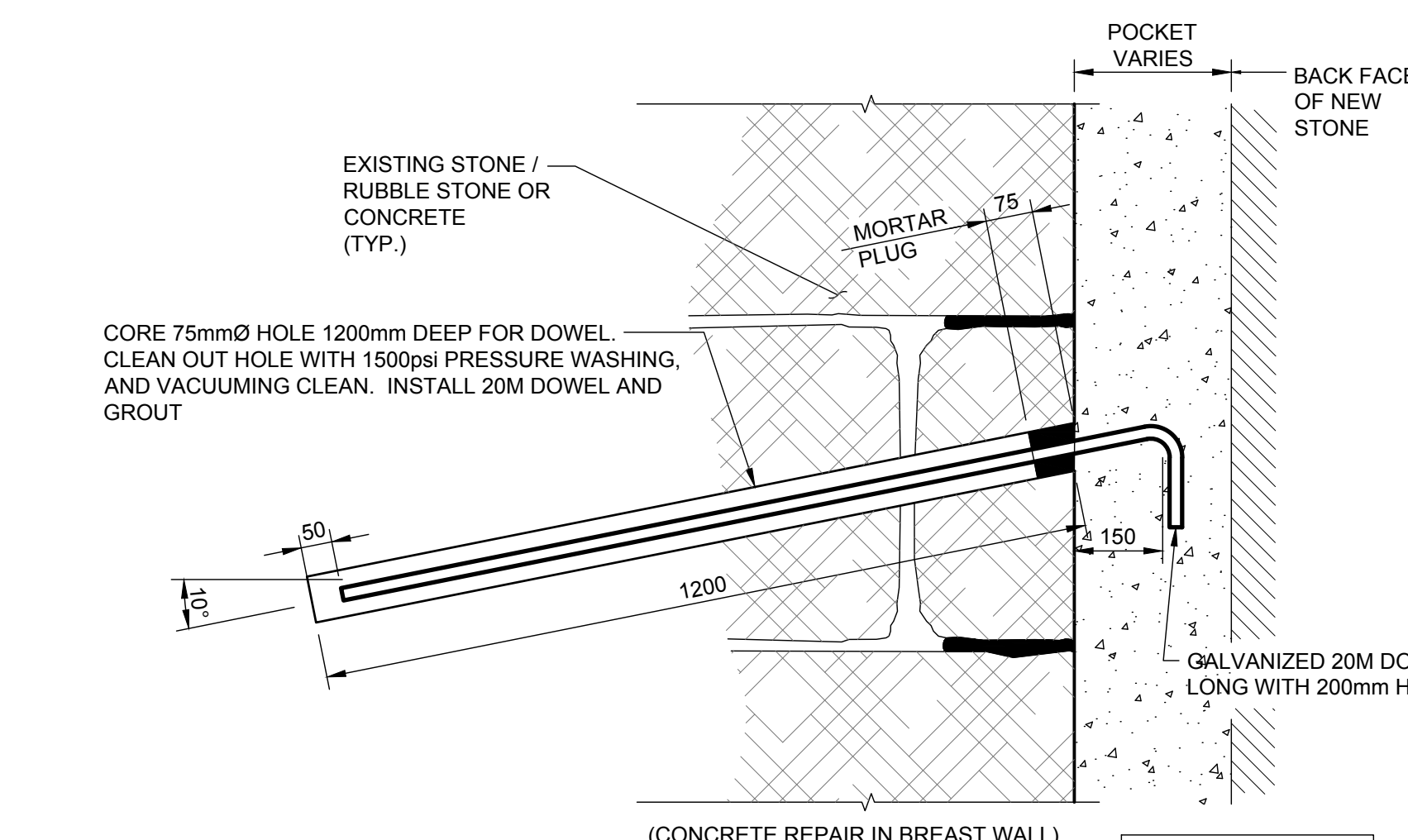
(CONCRETE REPAIR IN FLOORS)
ANCHOR TYPE - D3
1:10



ANCHOR TYPE D4
1:10

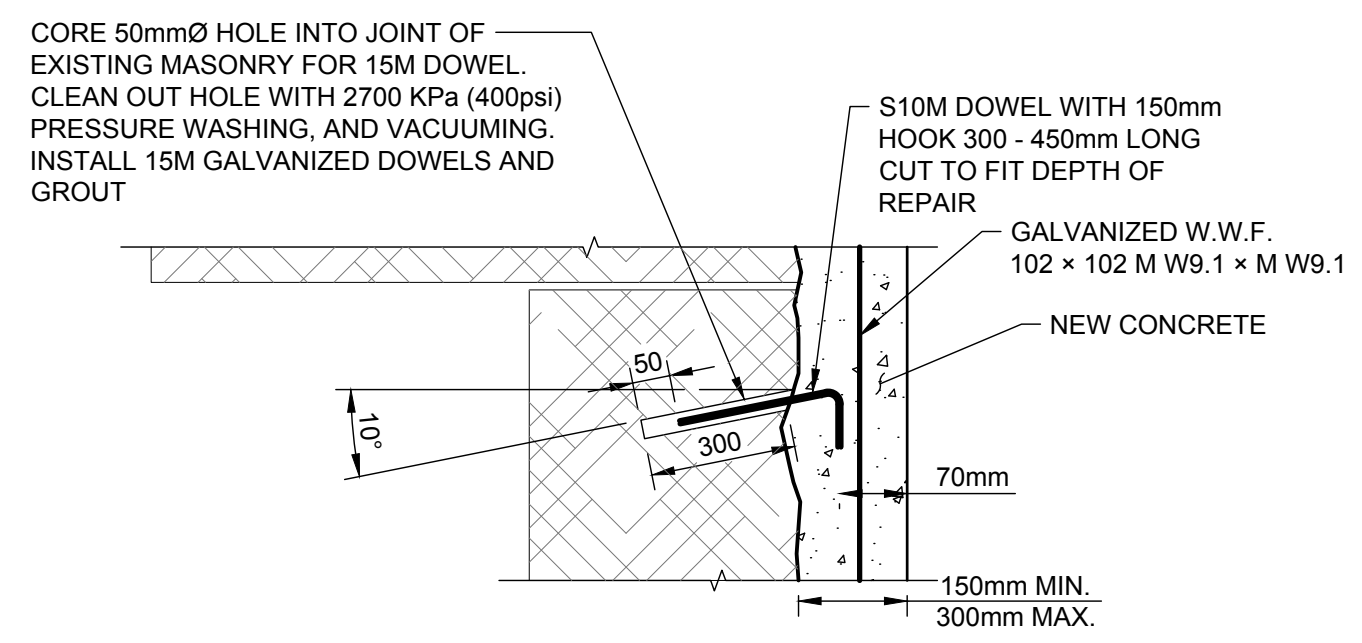


(REPAIR MASONRY STAIRCASE)
ANCHOR TYPE - D8
1:10



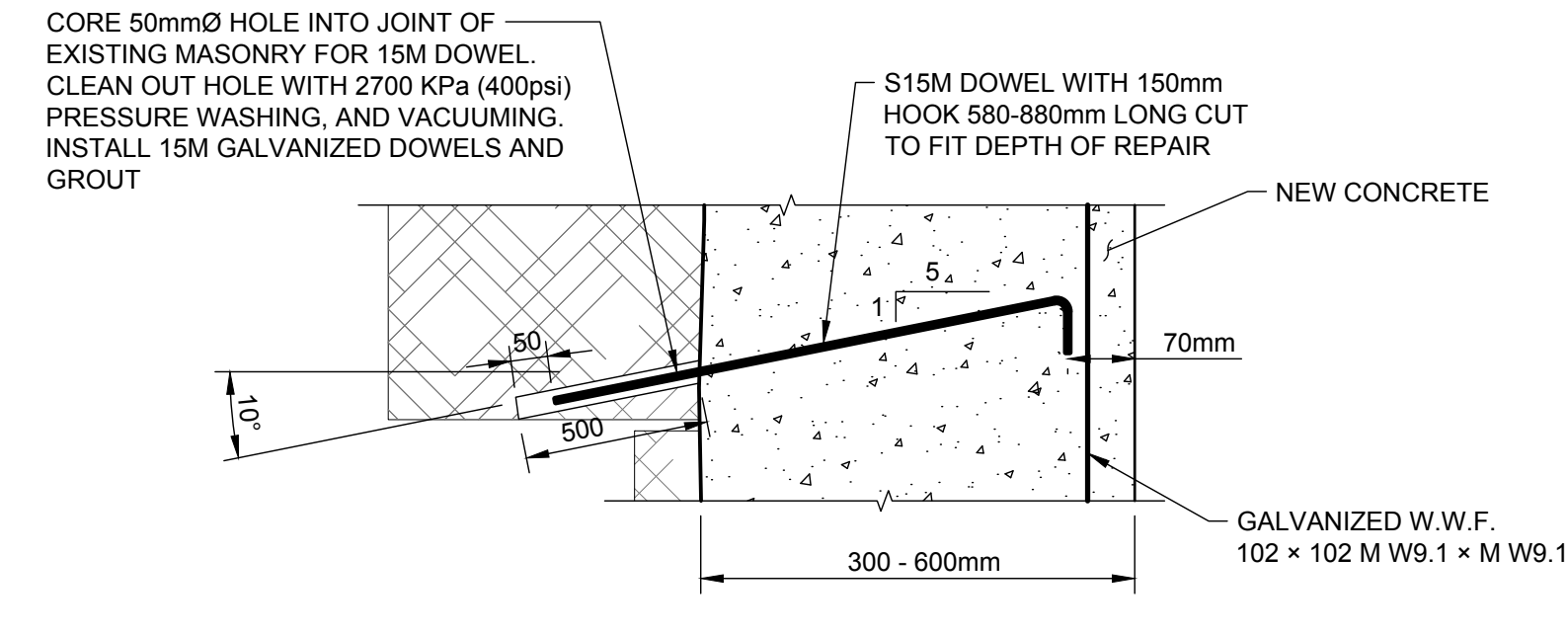
(CONCRETE REPAIR IN BREAST WALL)
ANCHOR TYPE - D5
1:10

GROUT AND VENT TUBES AS SHOWN FOR ANCHOR TYPE D1



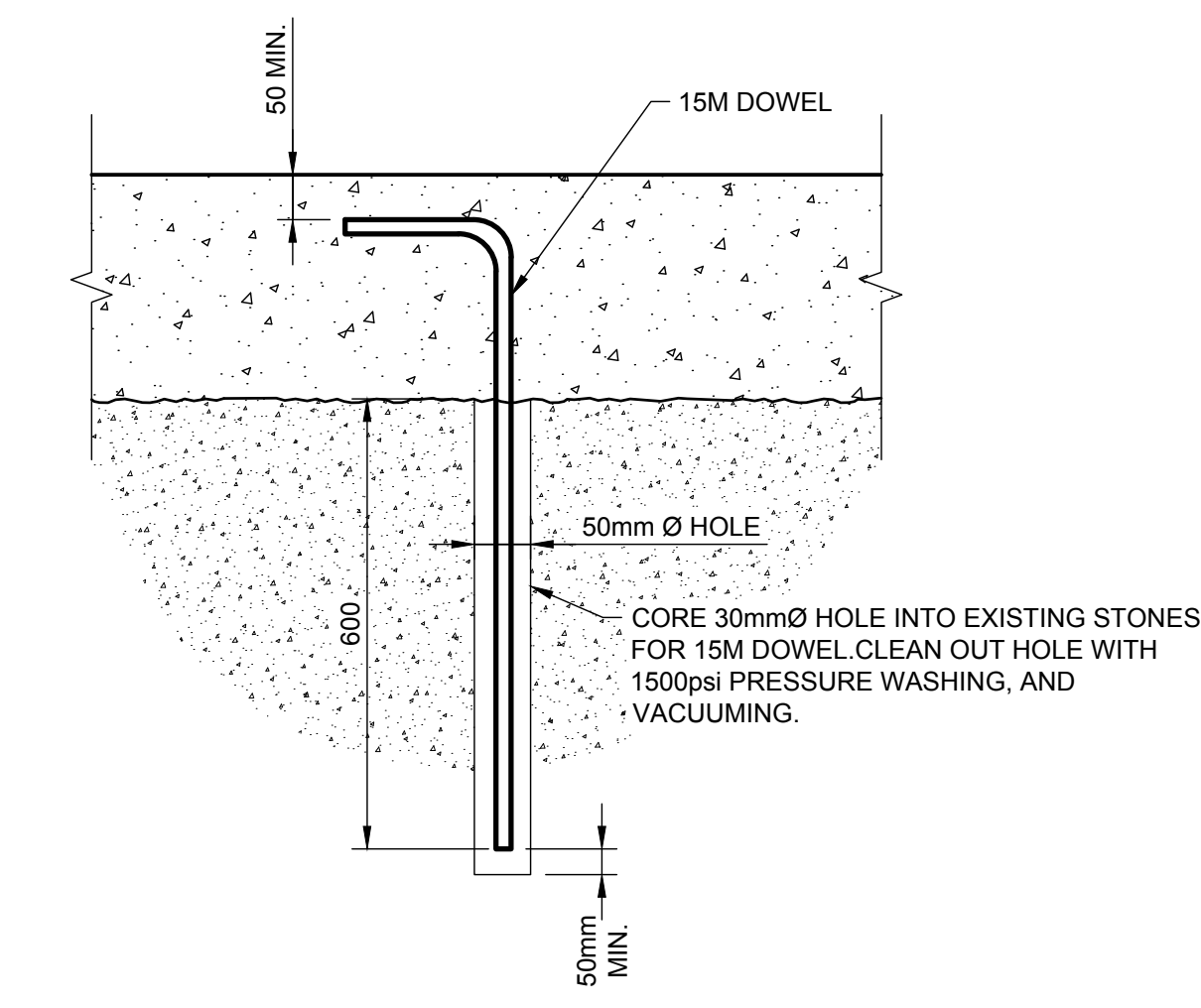
ANCHOR TYPE - D6
1:10

GROUT AND VENT TUBES AS SHOWN FOR ANCHOR TYPE D1



(CONCRETE REPAIR IN SLUICE TUNNEL)
ANCHOR TYPE - D7
1:10

GROUT AND VENT TUBES AS SHOWN FOR ANCHOR TYPE D1



(REPAIR CONCRETE STAIRCASE)
ANCHOR TYPE - D9
1:10

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Des. Par	Date
	Revision / Révision		

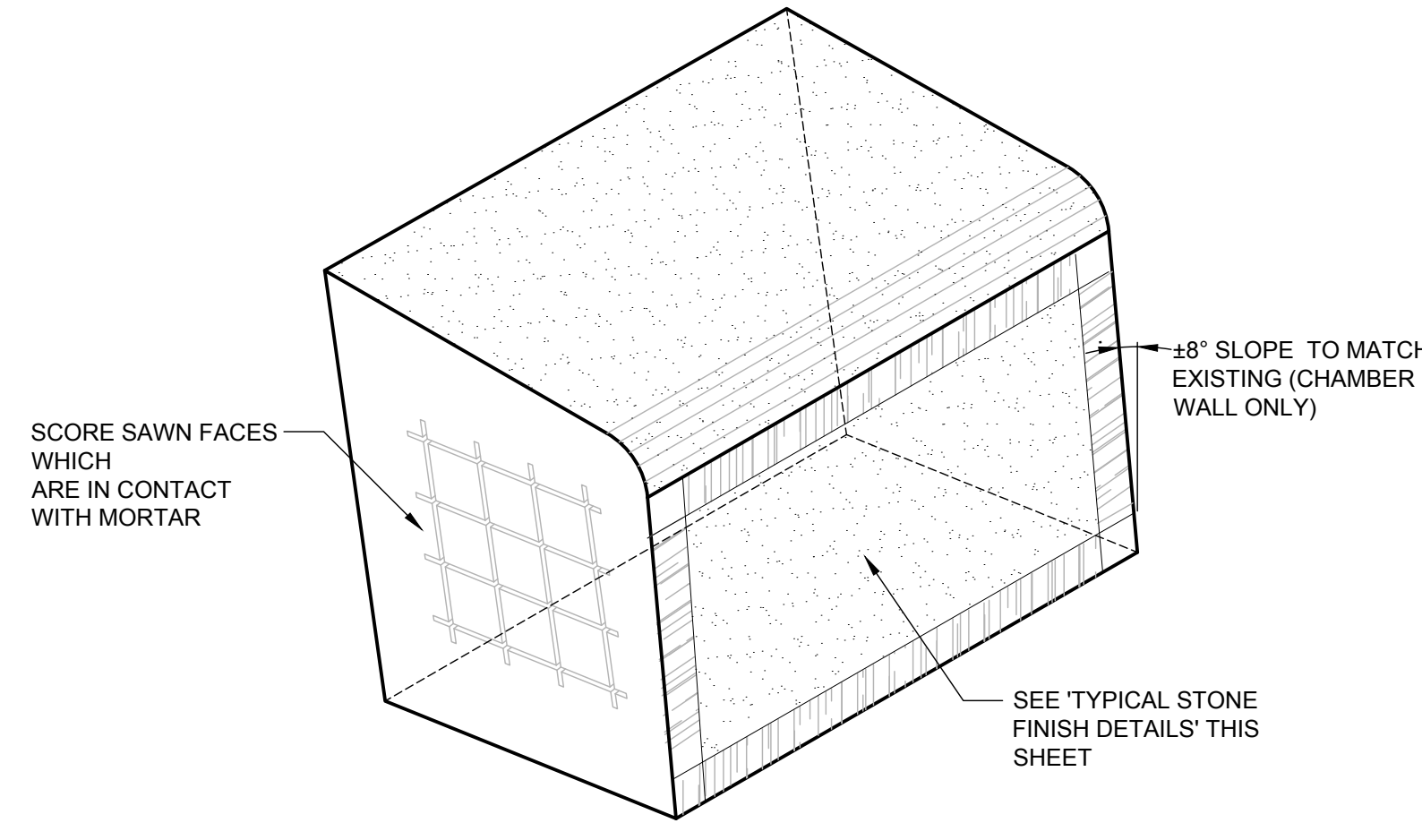
Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

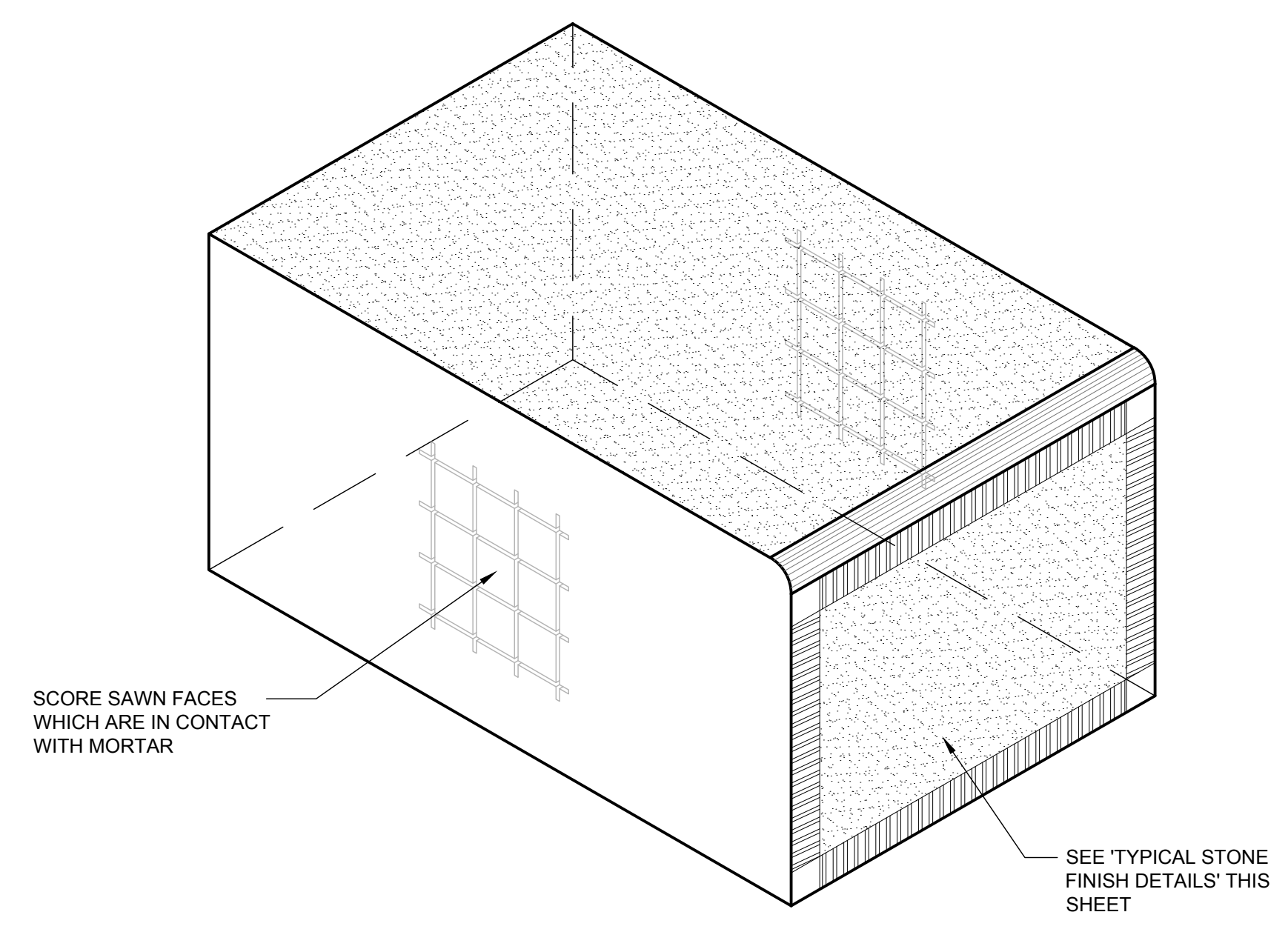
Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

ANCHORAGE DETAILS

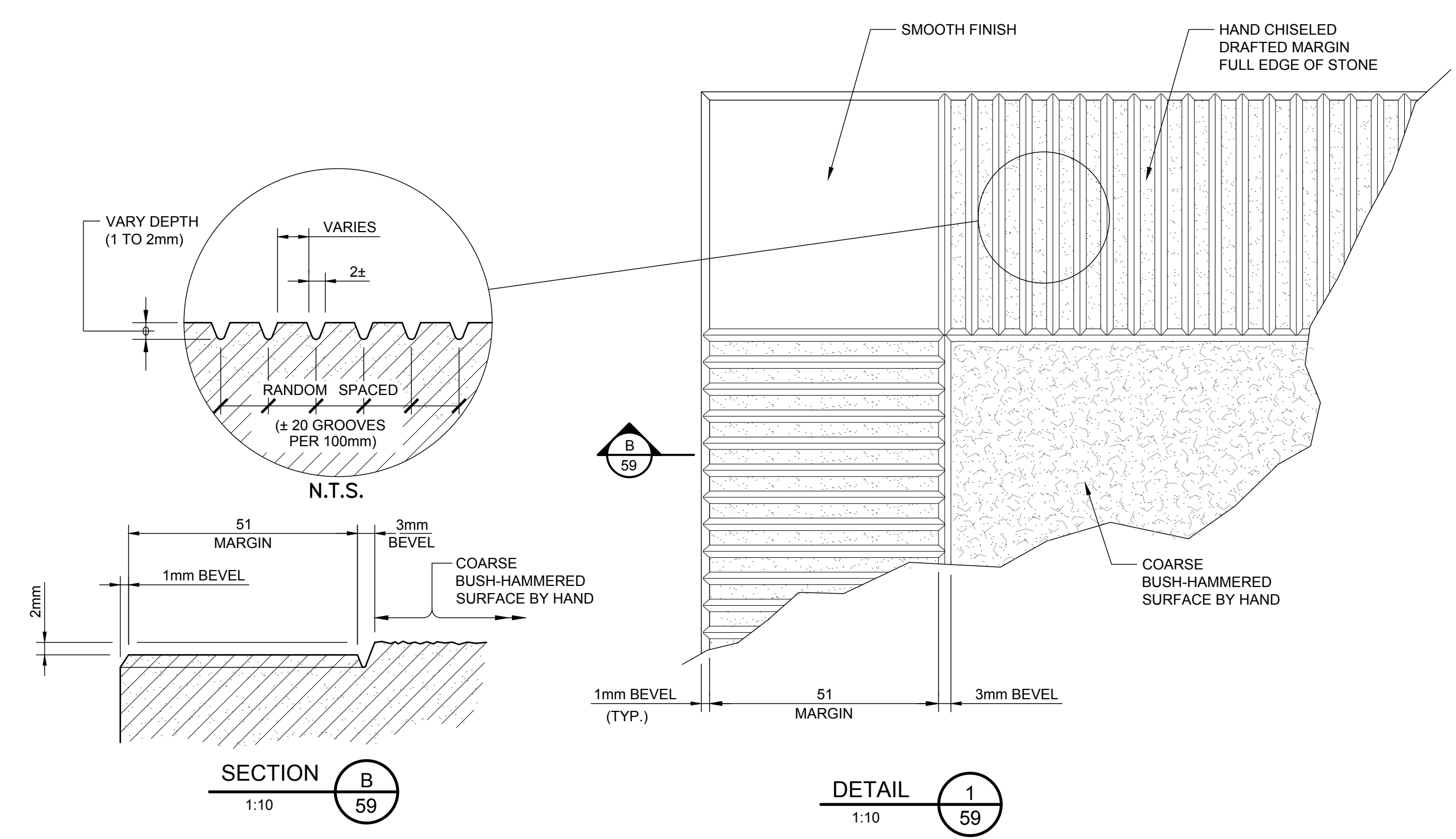
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILION	Drawing Number / Numéro du Dessin 58
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 60 of 78



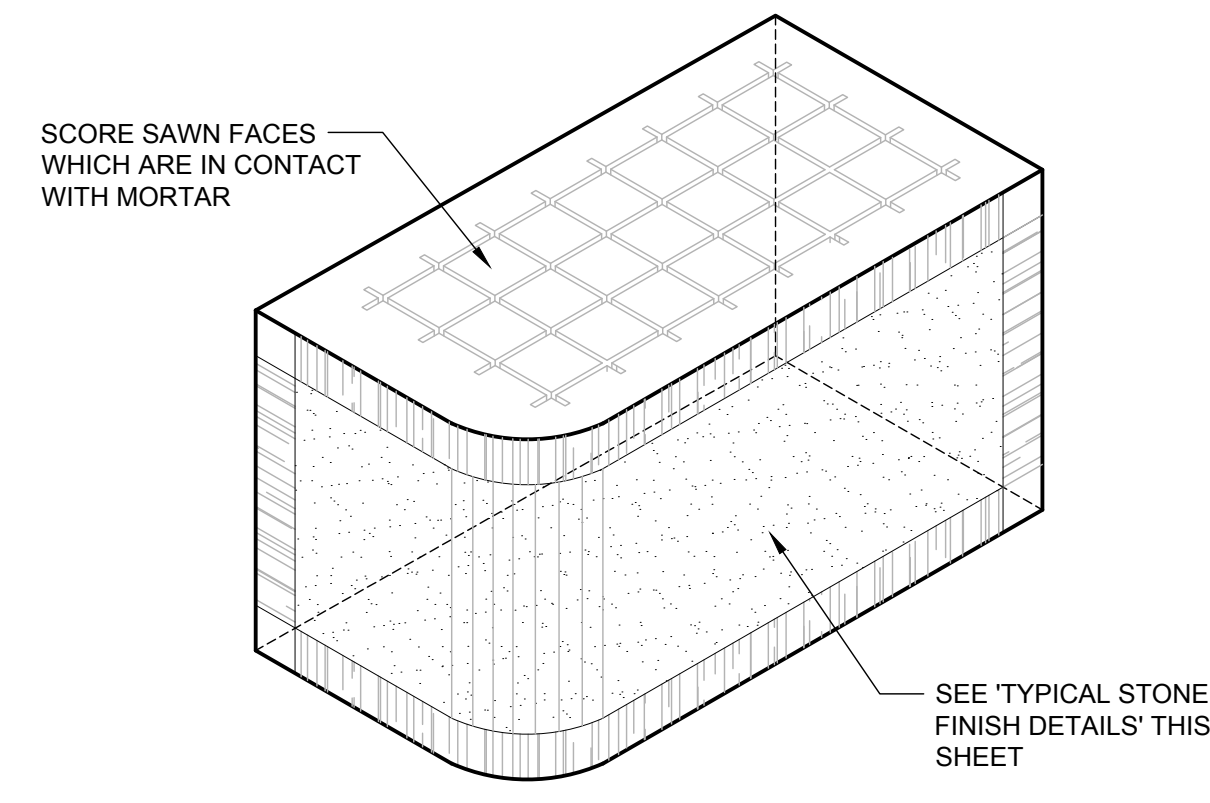
TYPICAL COPING EDGE STONE FINISH
 1:10



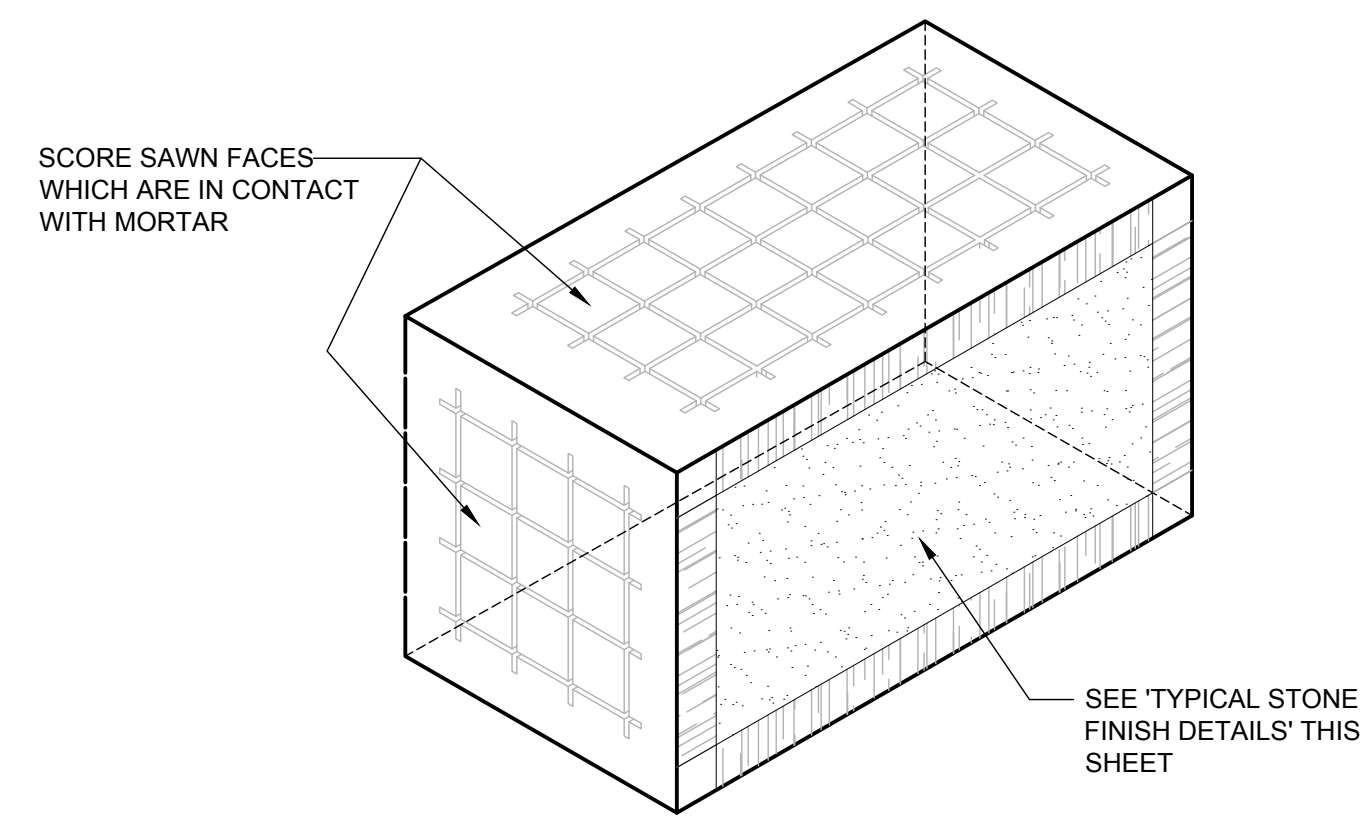
TYPICAL BREAST WALL COPING STONE
 1:10



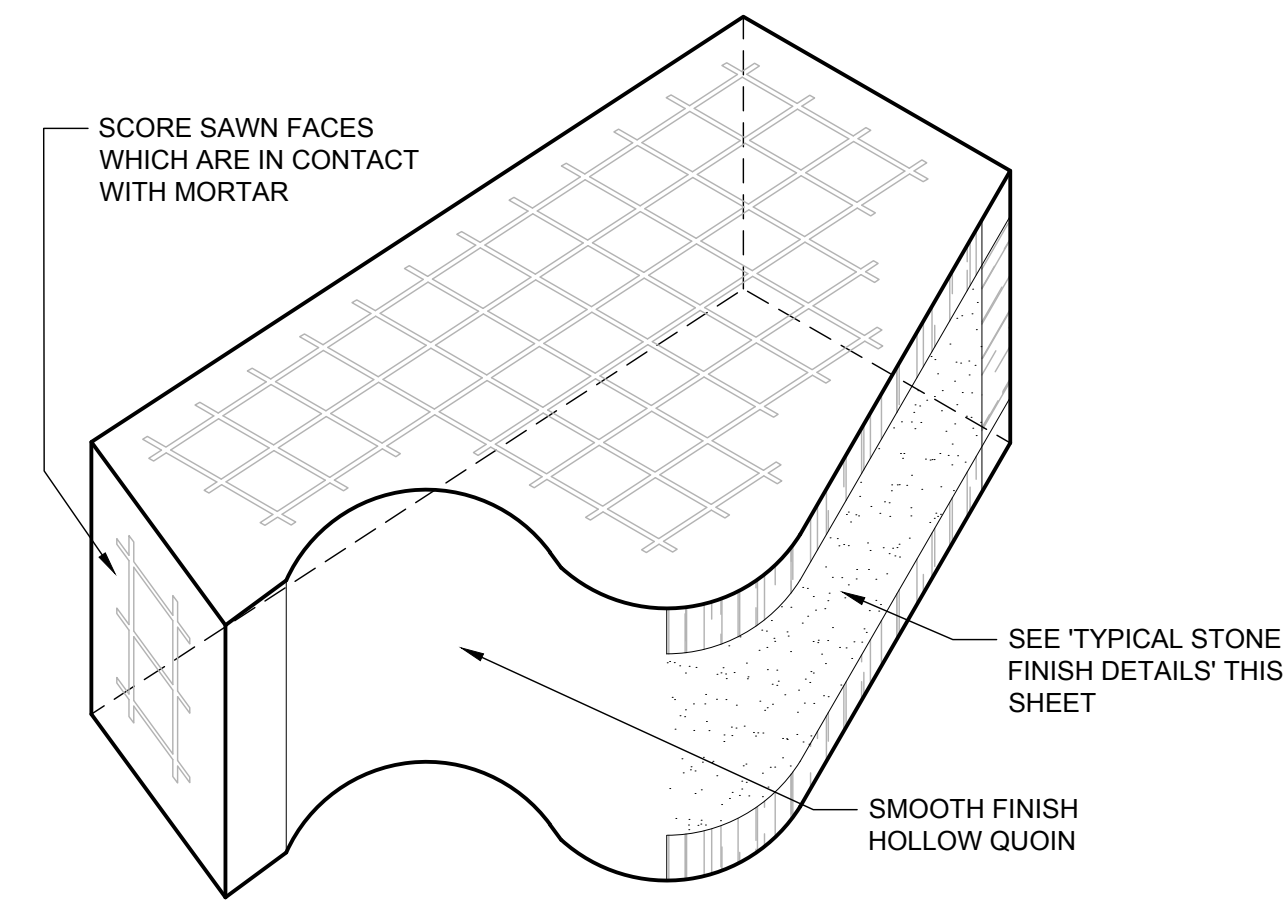
ADDITIONAL STONE FINISH DETAILS



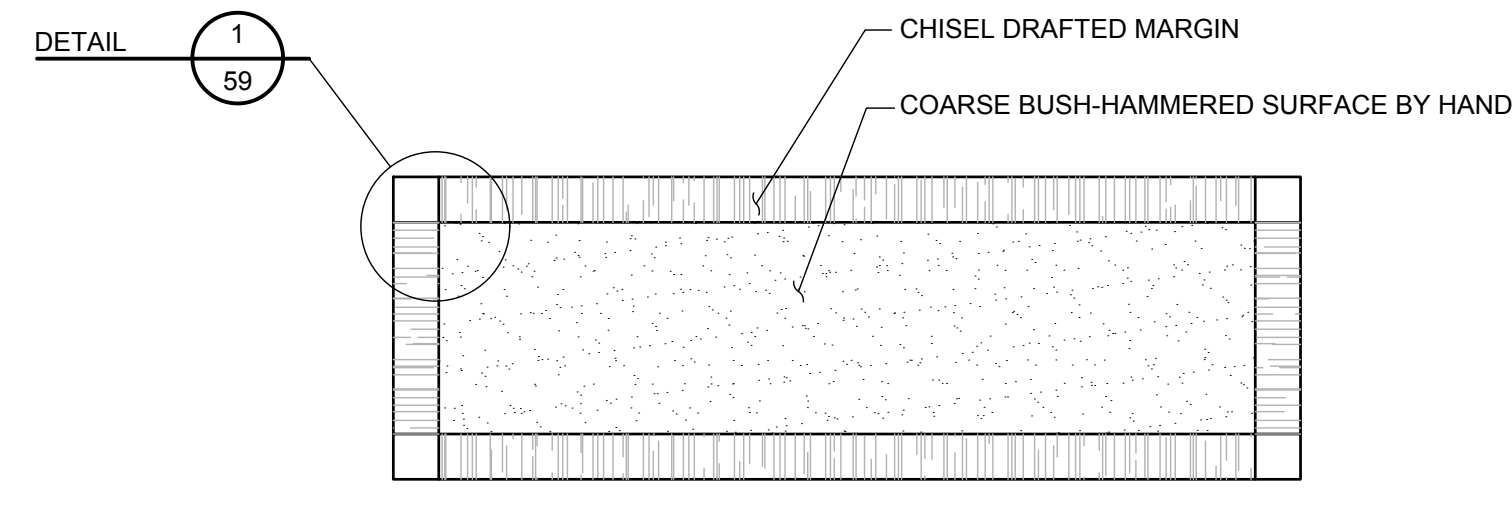
TYPICAL PILASTER CORNER STONE FINISH
 1:10



TYPICAL FULL STONE FINISH
 1:10



TYPICAL QUOIN STONE FINISH
 1:10



TYPICAL STONE FINISH DETAILS
 1:10



No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
STONE DETAILS

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 59
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 61 of 78

NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND NOTES ON DWG. 00.



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NOTES:

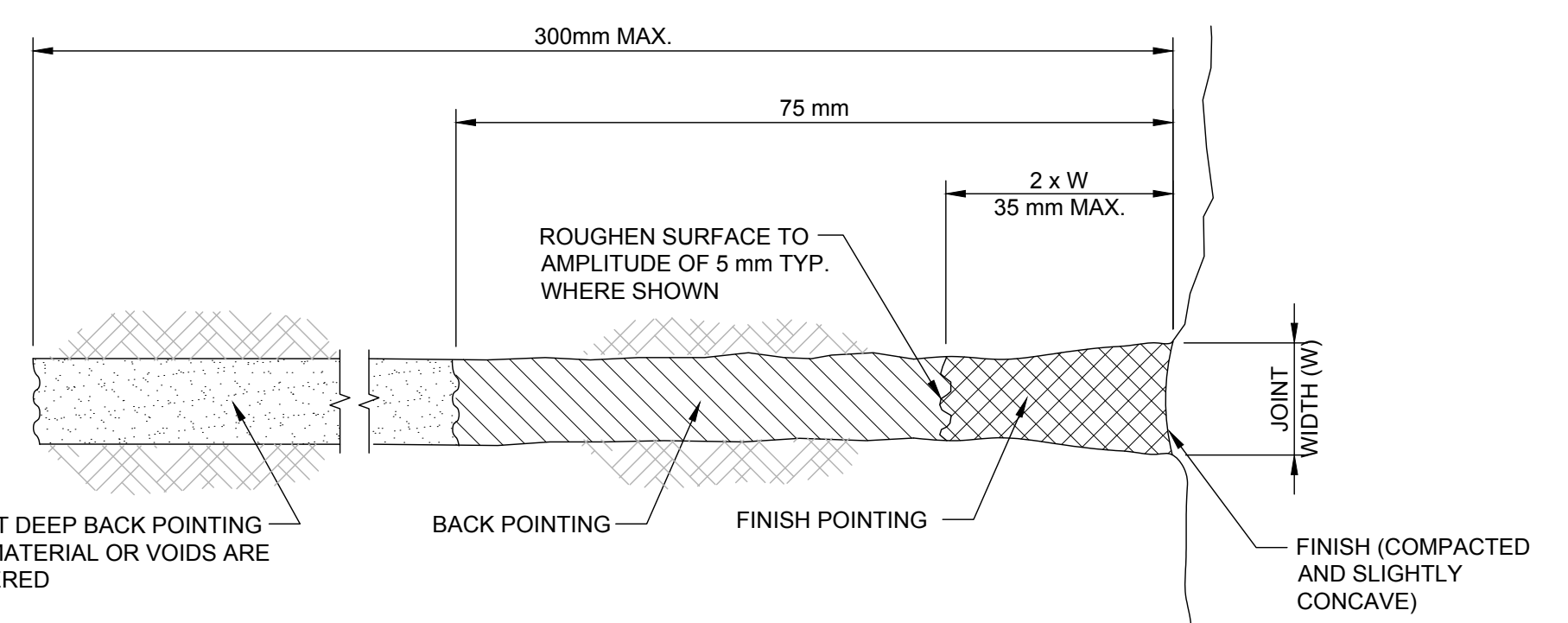
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND NOTES ON DWG. 00.

JOINT RAKING PROCEDURE

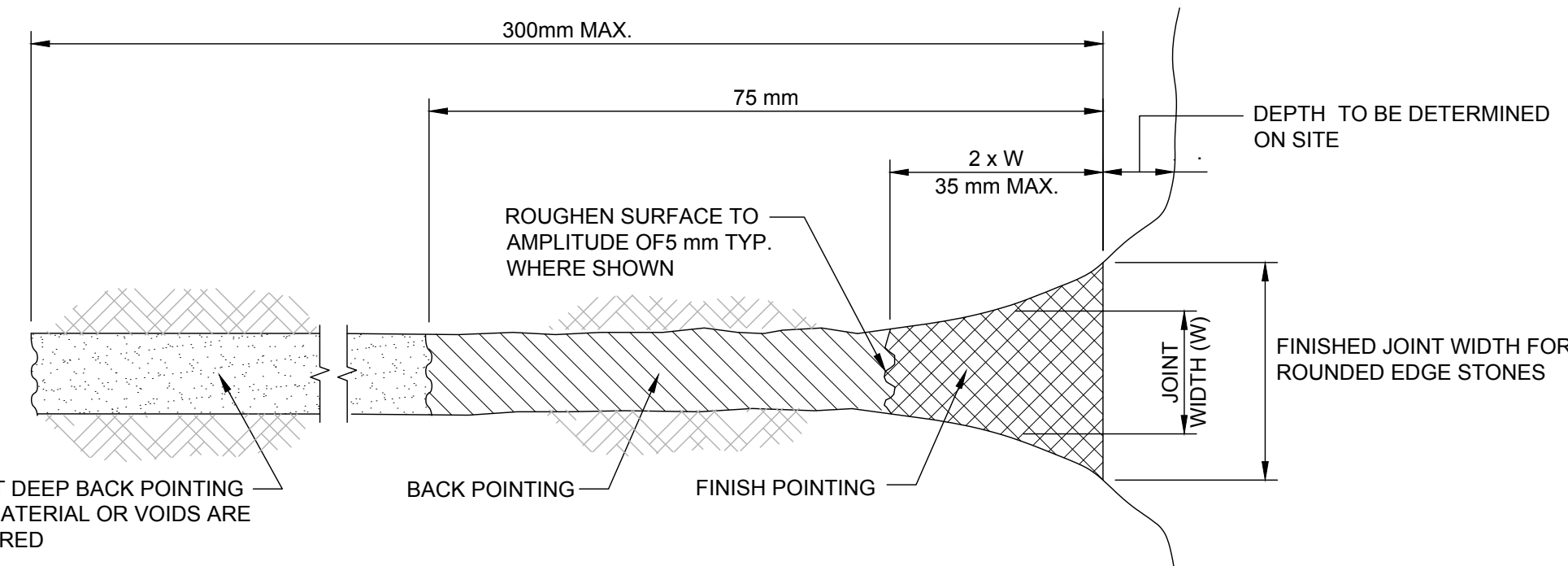
- REMOVE ALL MORTAR TO A MINIMUM DEPTH OF 75MM AND A MAXIMUM DEPTH OF 300MM.
- MANUALLY CLEAN JOINTS WITH HAND EQUIPMENT.
- FLUSH JOINTS WITH WATER UNDER LOW PRESSURE (<400psi).
- ALLOW MASONRY TO DRAIN AND BLOW CLEAN WITH COMPRESSED AIR.

DEEP GROUTING PROCEDURE

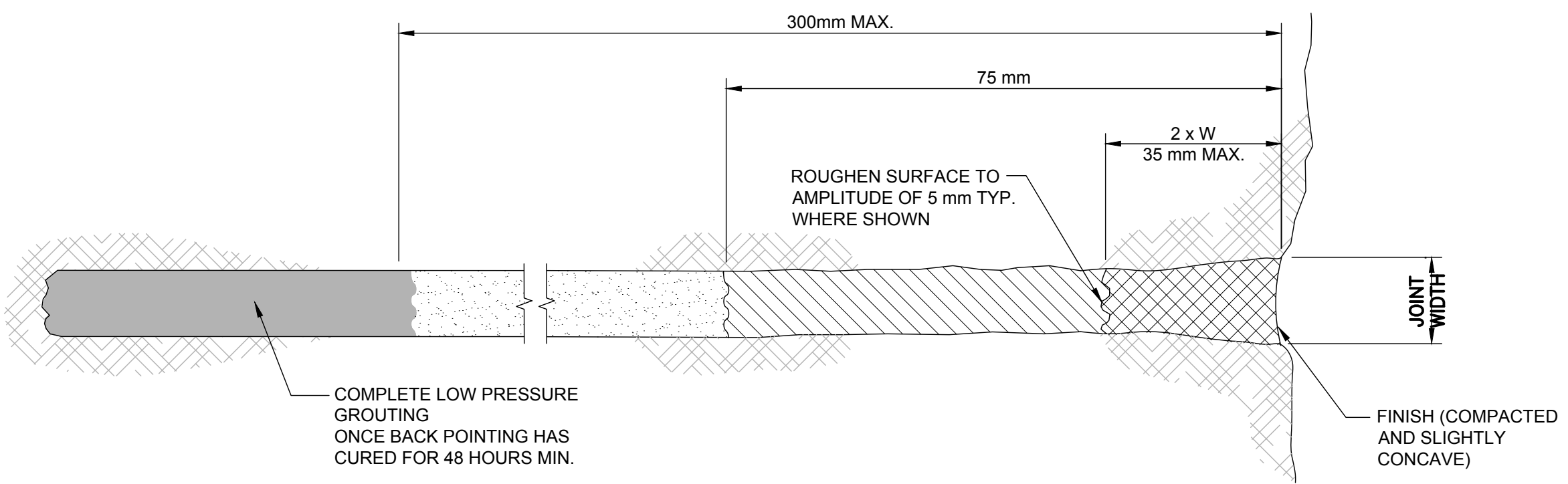
- WHERE VOIDS OR DETERIORATION THAT EXTEND DEEPER THAN 300mm ARE DISCOVERED DURING RAKING NOTIFY DEPARTMENTAL REPRESENTATIVE.
- WITH THE ASSISTANCE OF THE CONTRACTOR DEPARTMENTAL REPRESENTATIVE TO IDENTIFY LOCATION FOR INSTALLATION OF DEEP GROUT TUBES DURING REPOINTING OPERATIONS. SEE DETAIL THIS SHEET.
- ONCE REPOINTING HAS CURED FOR 48 HOURS COMMENCE GROUTING OPERATIONS STARTING AT THE BASE OF THE WALL.



TYPICAL JOINT TREATMENT



JOINT TREATMENT AT STONES WITH ROUNDED EDGES

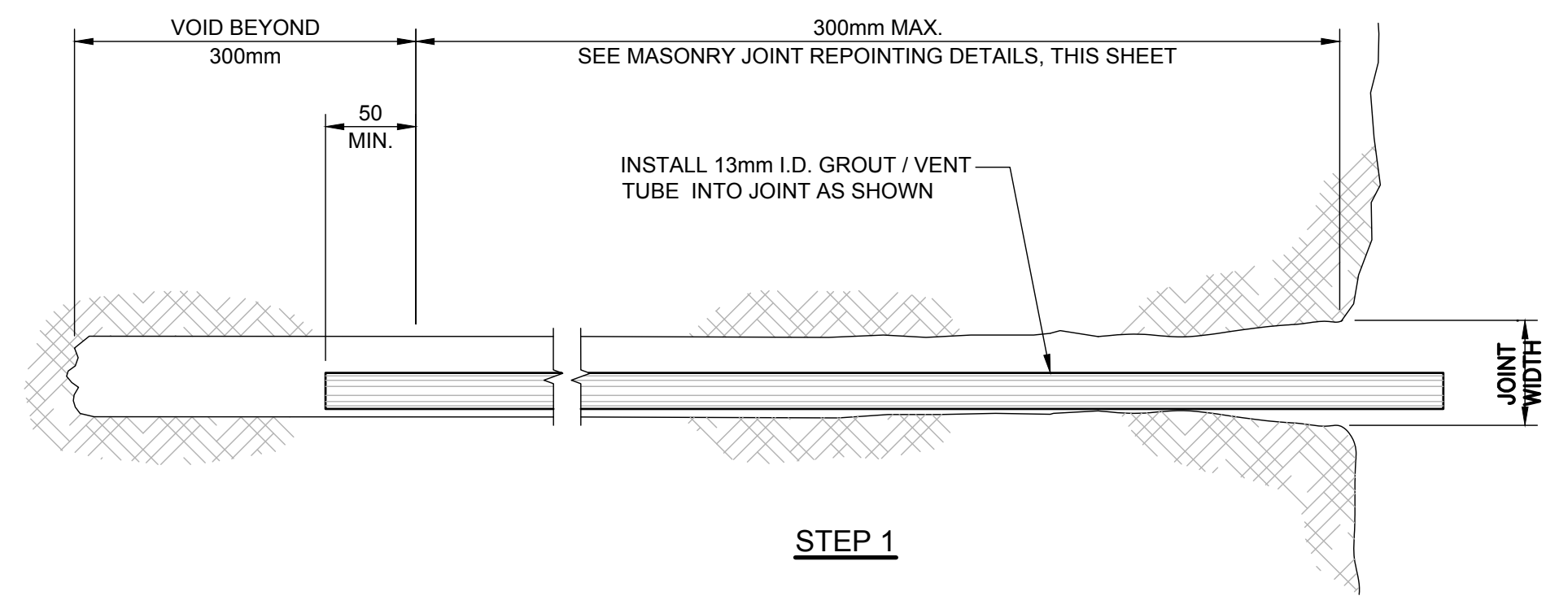


JOINT TREATMENT FOR DEEP GROUTING
 N.T.S.

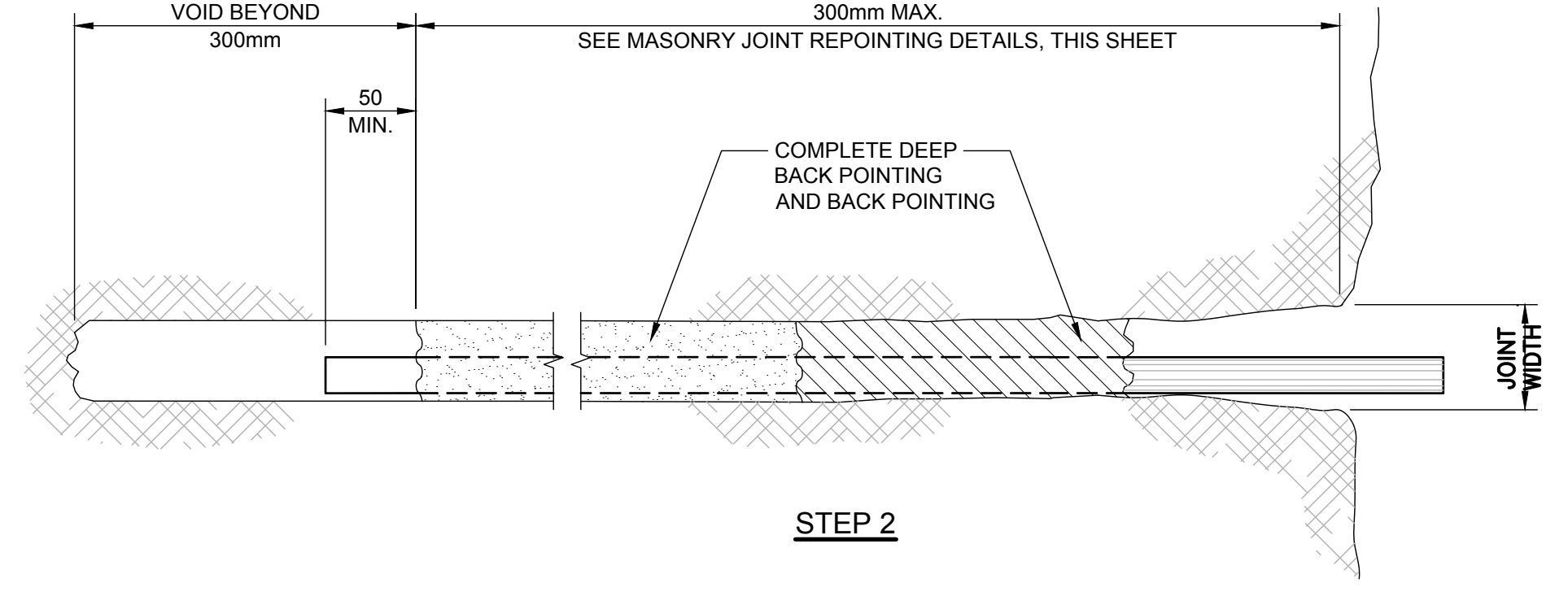
MASONRY JOINT REPOINTING

N.T.S.

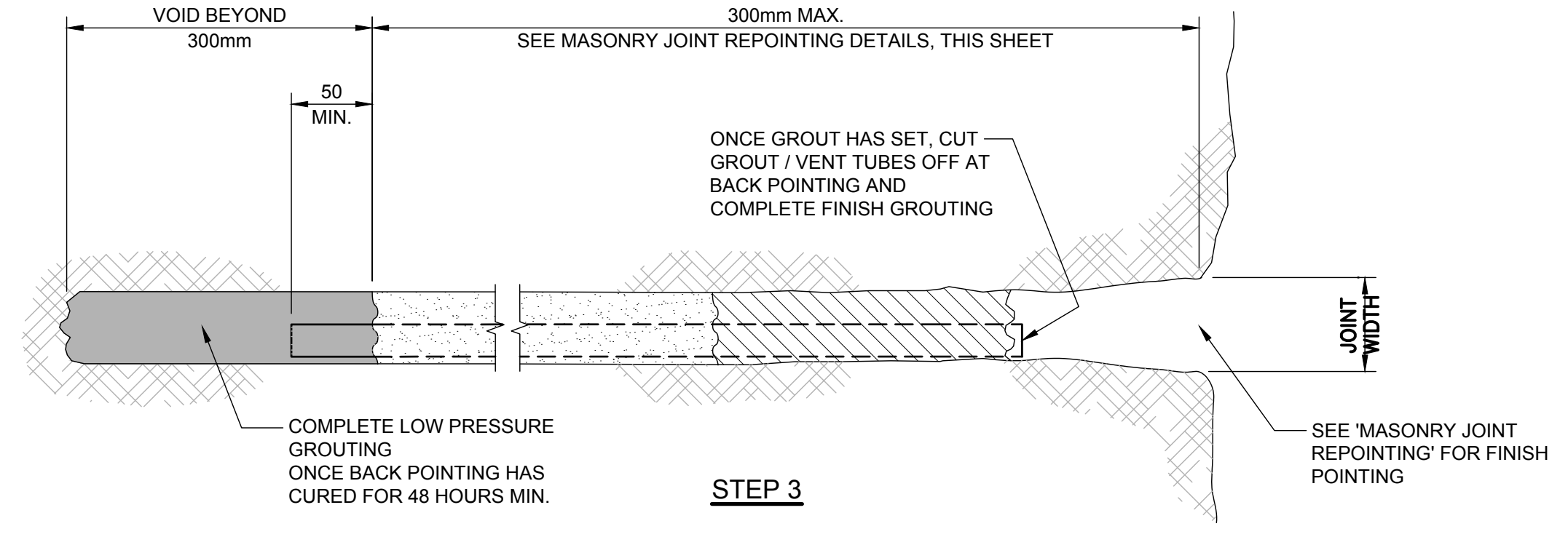
NOTE: USE WEDGES TO SUPPORT EXISTING STONE IN AREAS OF EXTENSIVE, DEEP OR WIDE RAKING



STEP 1



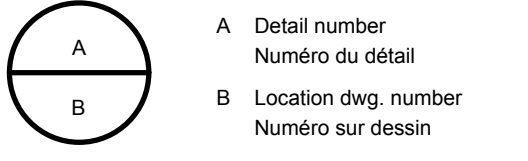
STEP 2



INSTALLATION OF VENT / GROUT FOR GROUTING
 N.T.S.

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

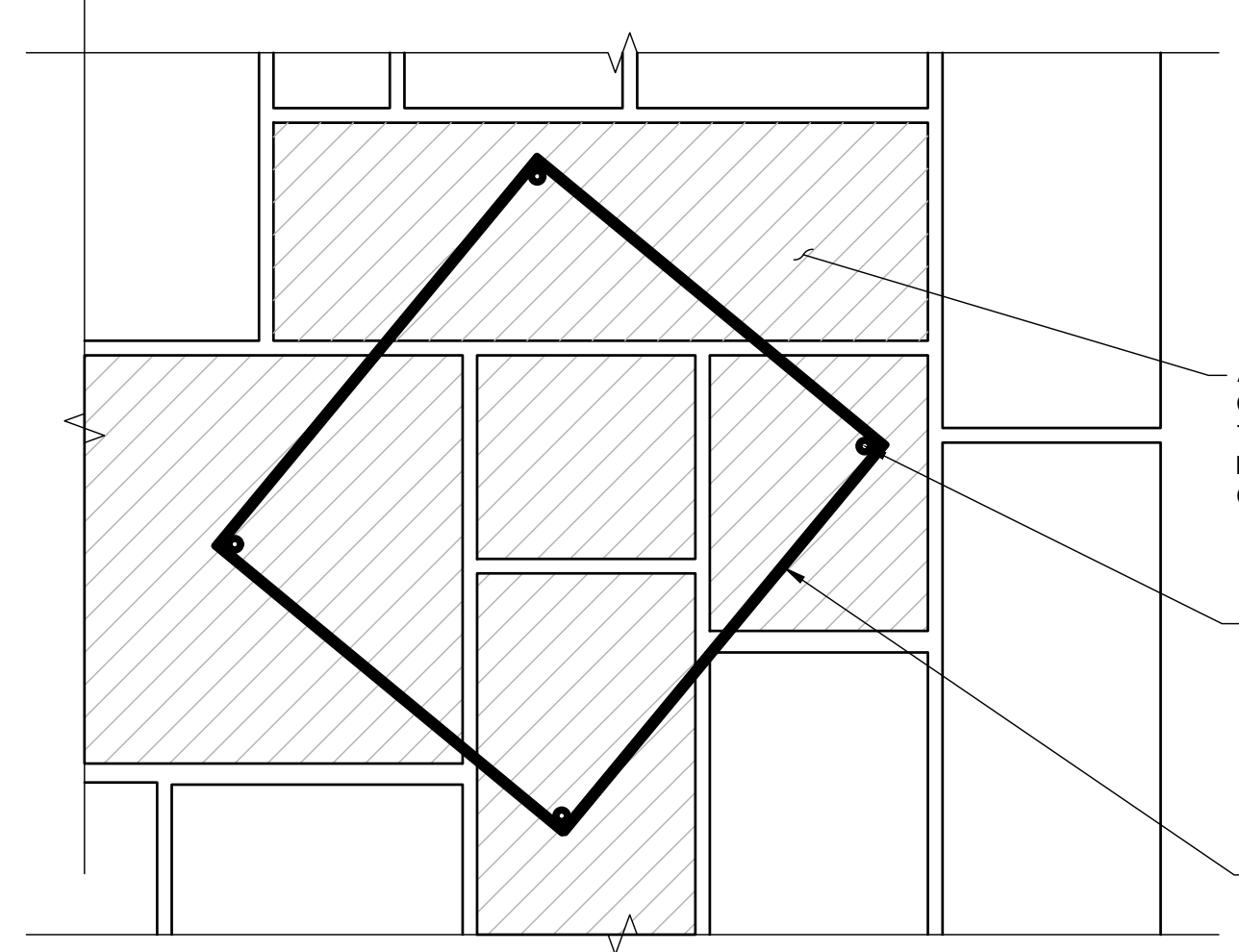
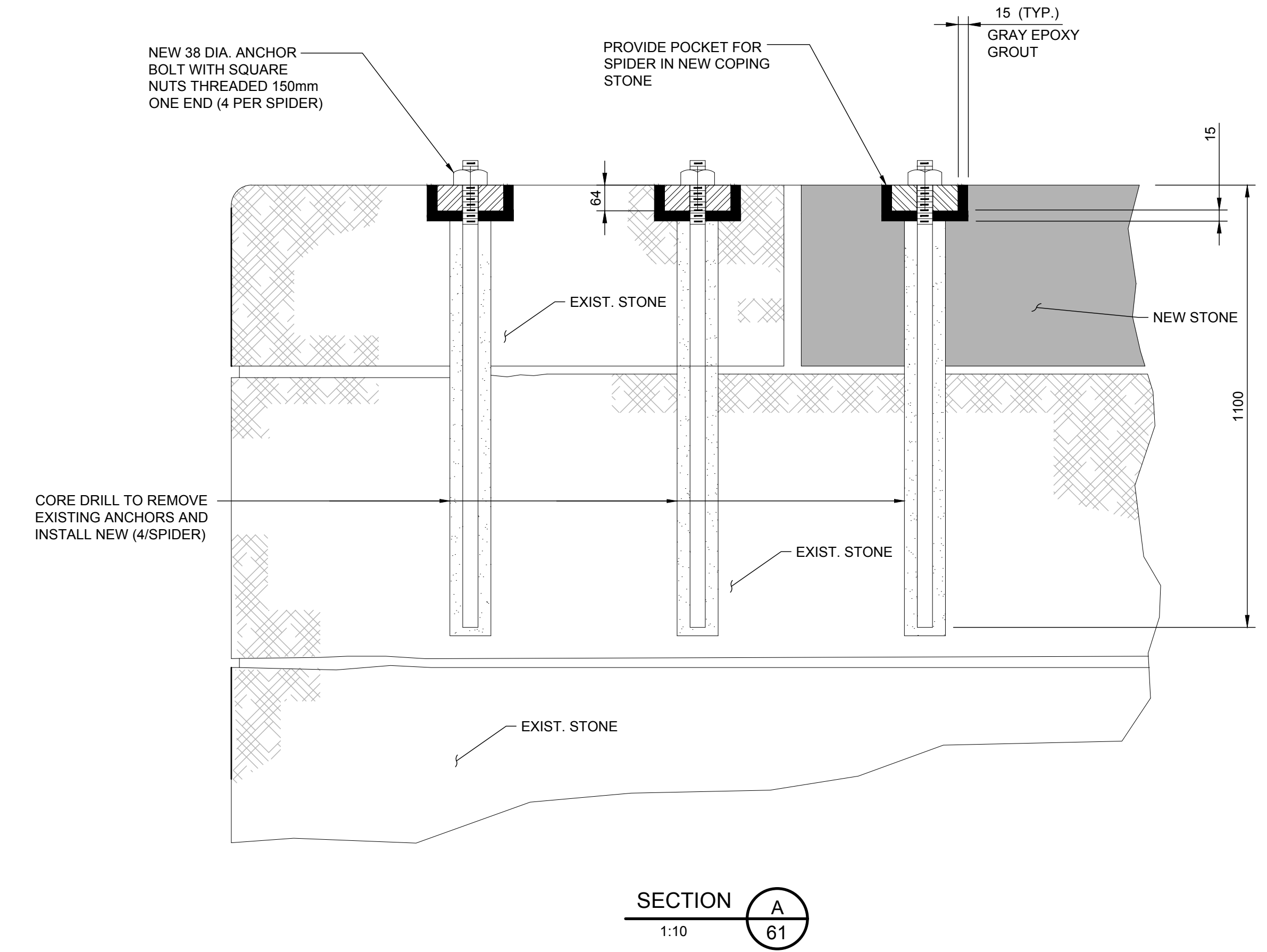
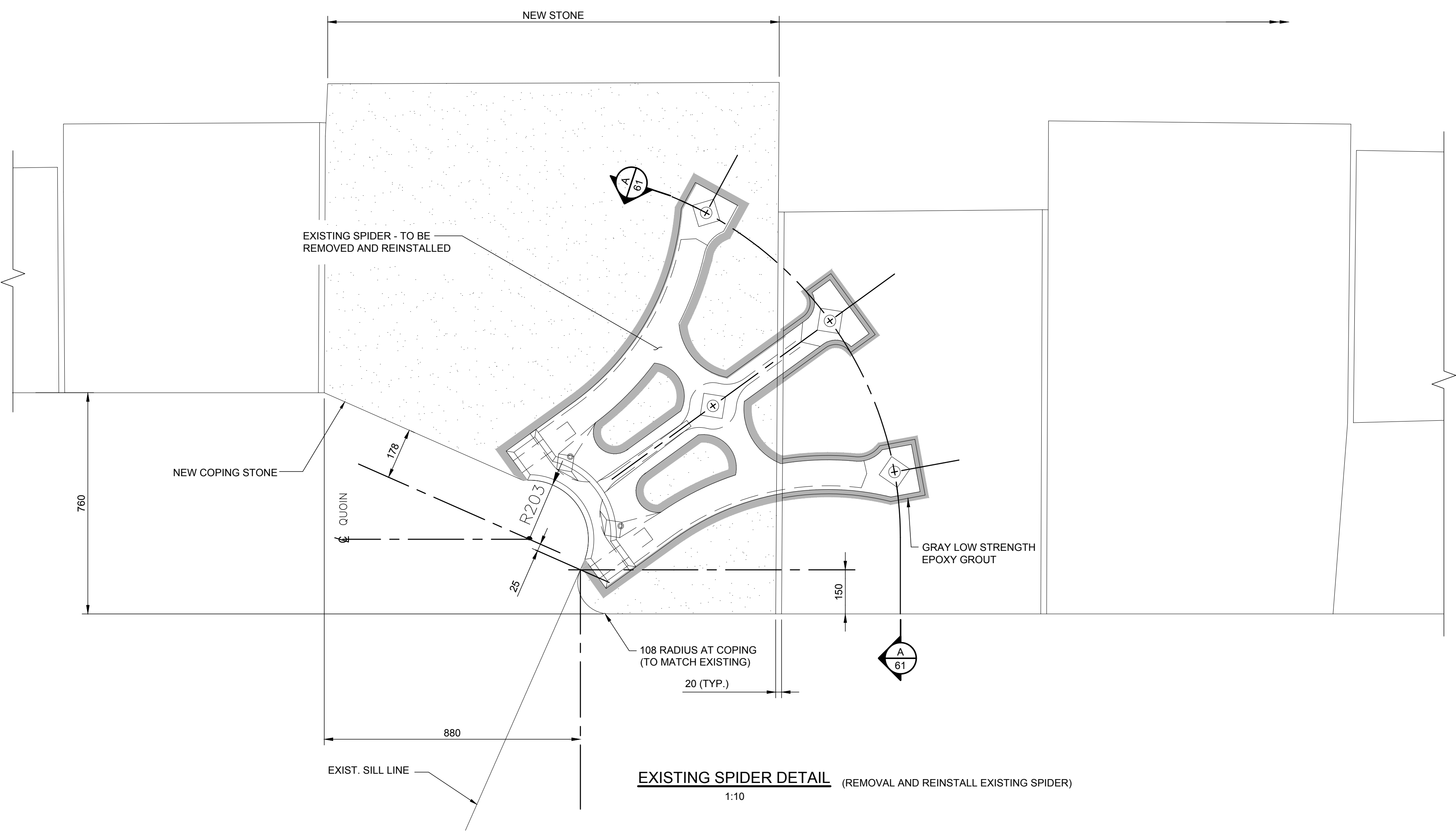


Project title / Titre du projet
RIDEAU CANAL NATIONAL HISTORIC SITE KINGSTON MILLS LOCKS 46-49 REHABILITATION
 ELGIN ONTARIO

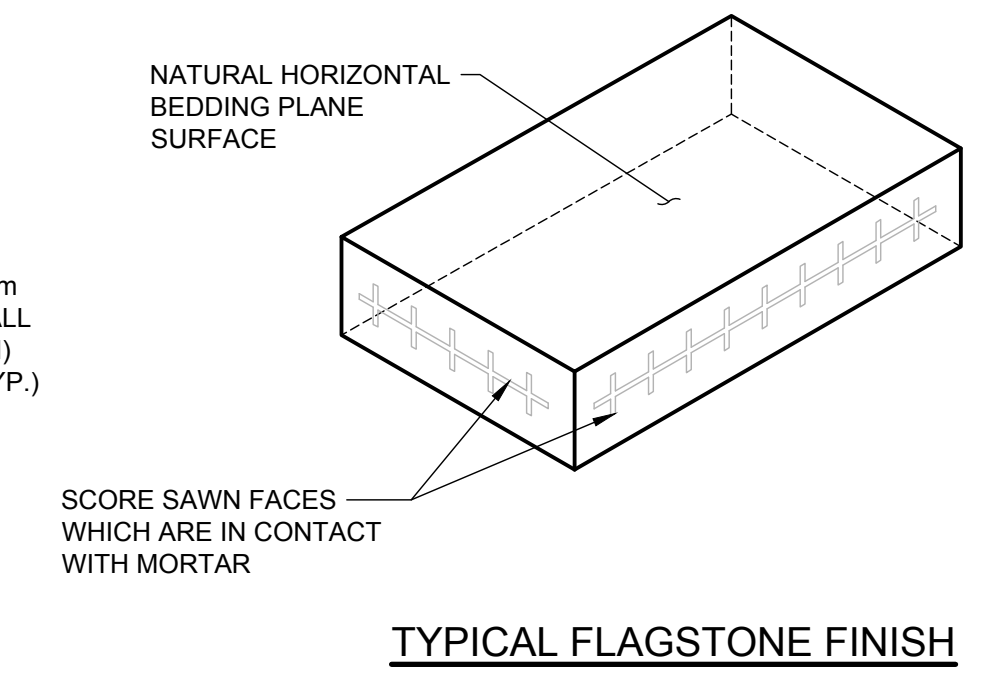
REPOINTING

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 60
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 62 of 78

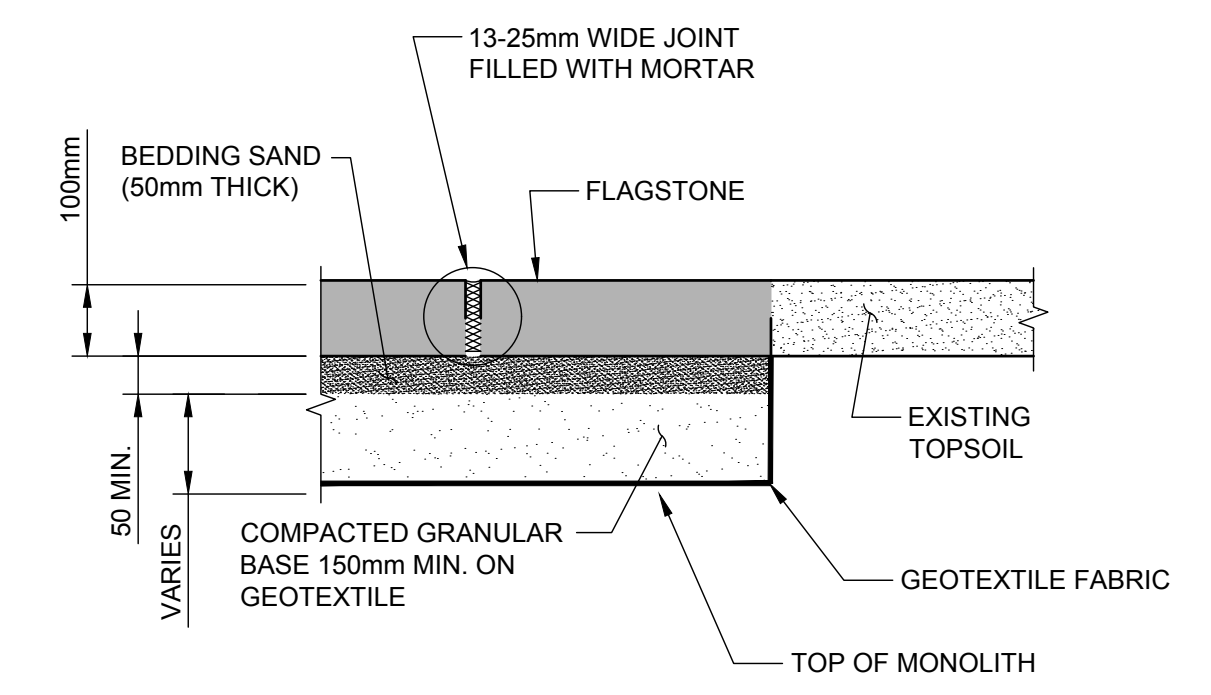
NOTE:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND NOTES ON DWG. 00.
 2. QUOIN DIMENSIONS ARE APPROXIMATE. MAKE TEMPLATES TO MATCH EXISTING ANCHOR BOLT LOCATIONS WITH 2mm TOLERANCE.



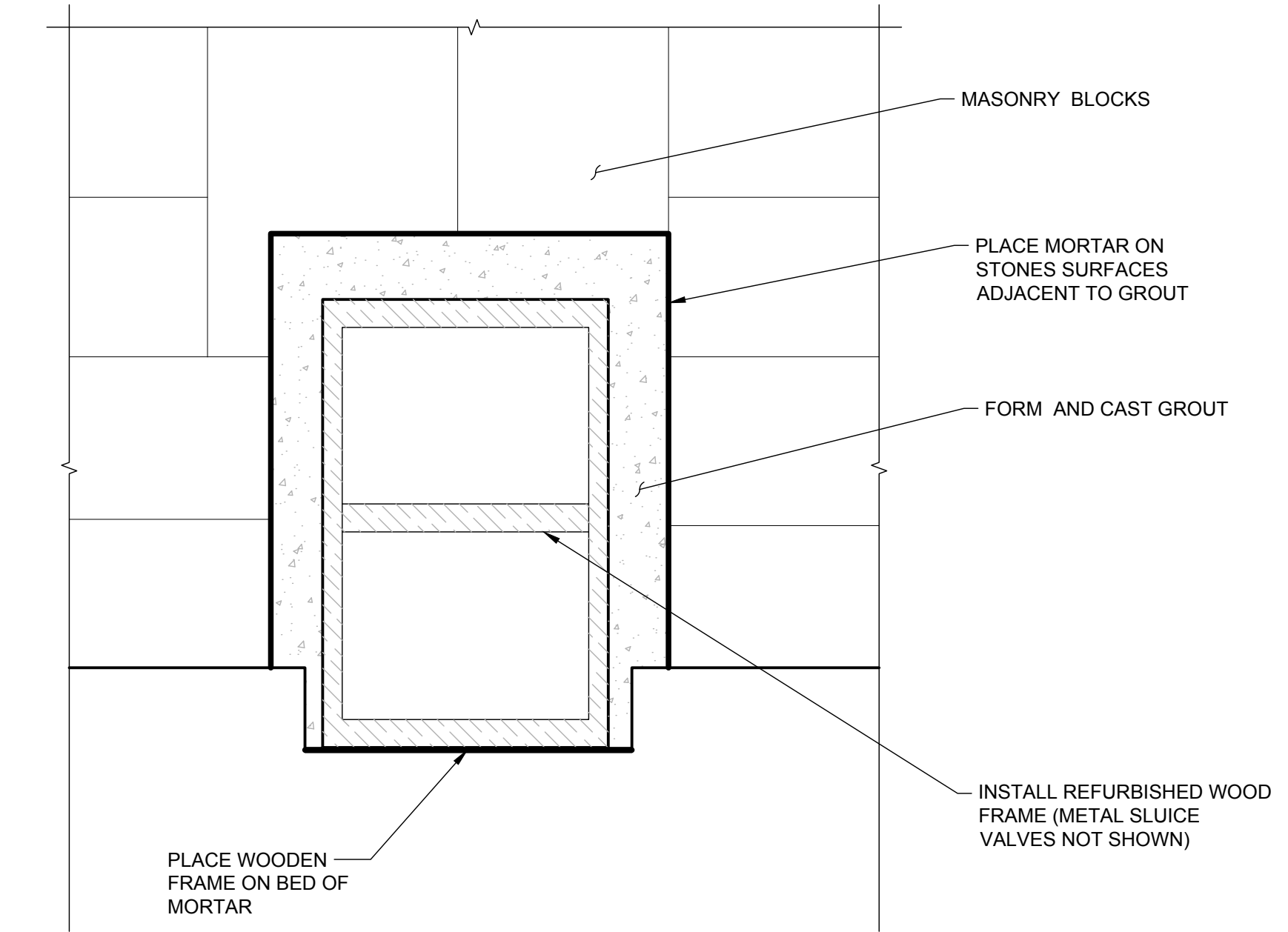
FLAGSTONE BELOW CRAB WINCHES



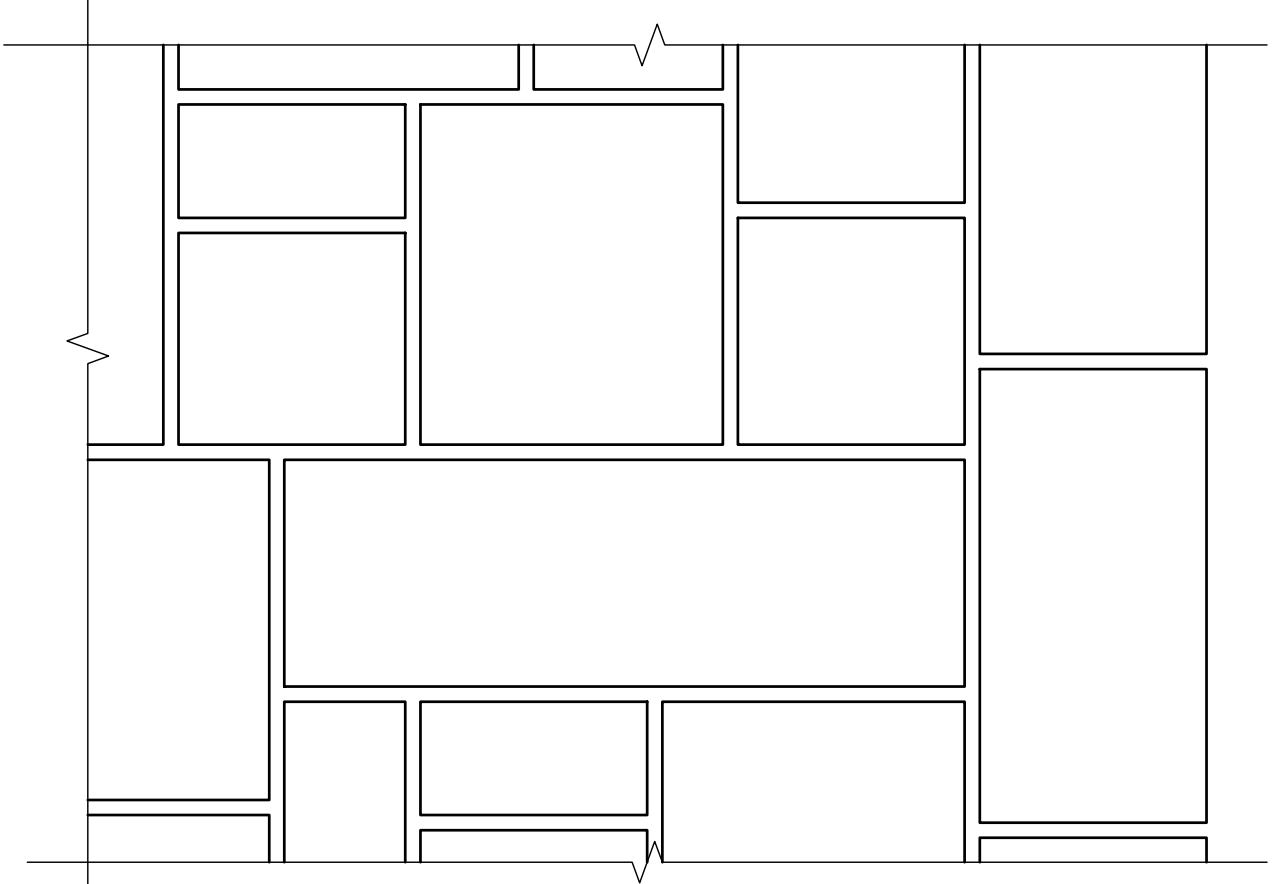
TYPICAL FLAGSTONE FINISH



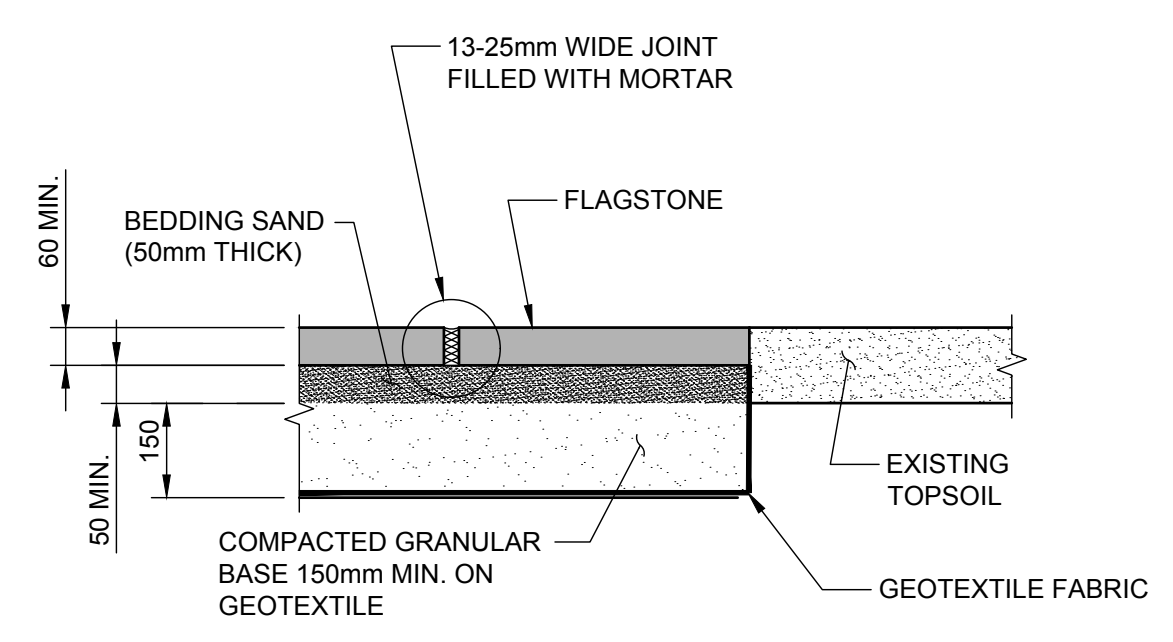
TYPICAL 100mm FLAGSTONE SECTION (OVER MONOLITH)



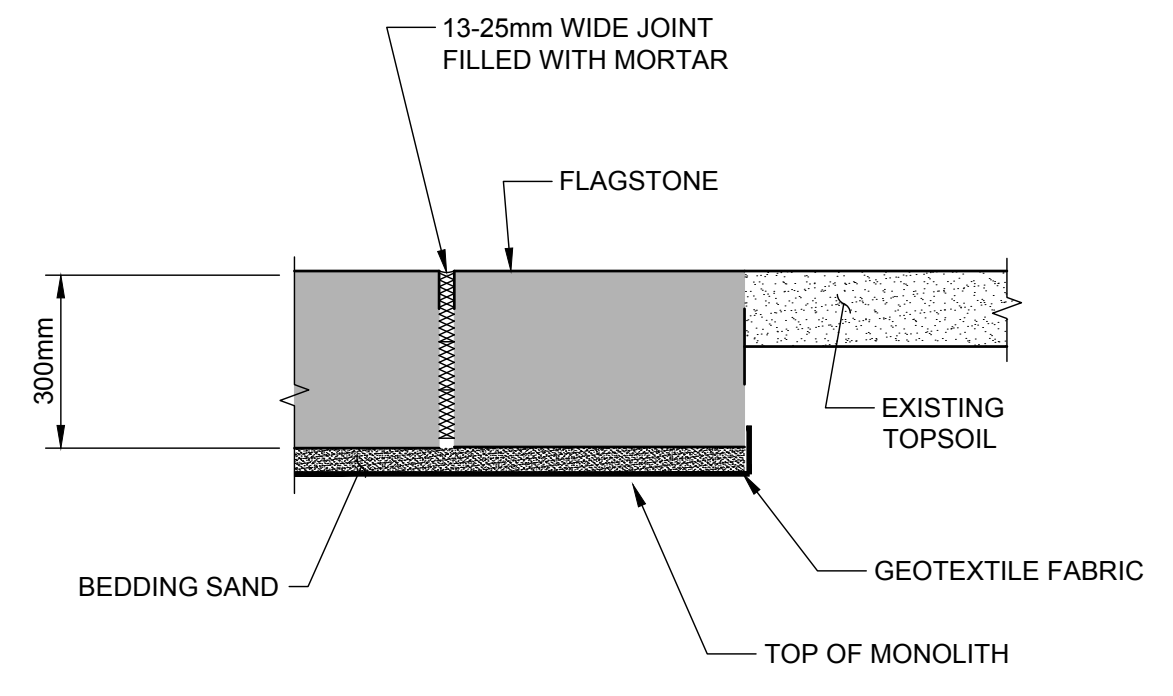
SLUICE VALVE REINSTALLATION DETAIL 1:20



FLAGSTONE LAYOUT PATTERN



TYPICAL 60mm FLAGSTONE SECTION (OVER GRADE)



TYPICAL 300mm FLAGSTONE SECTION (OVER MONOLITH)

- FLAGSTONE NOTES:**
- CORNERS OF FOUR STONE SHALL NEVER MEET.
 - MAXIMUM CONTINUOUS JOINT LENGTH OF 2000mm.
 - MIN. SIZE OF STONE 150 x 250mm.
 - MAXIMUM SIZE OF STONE 300 x 900mm.

FLAGSTONE DETAILS N.T.S.

No.	Description	Rev. By / Des. Par	Date
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A Detail number Numero du detail	
B Location dwg. number Numero sur dessin	

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

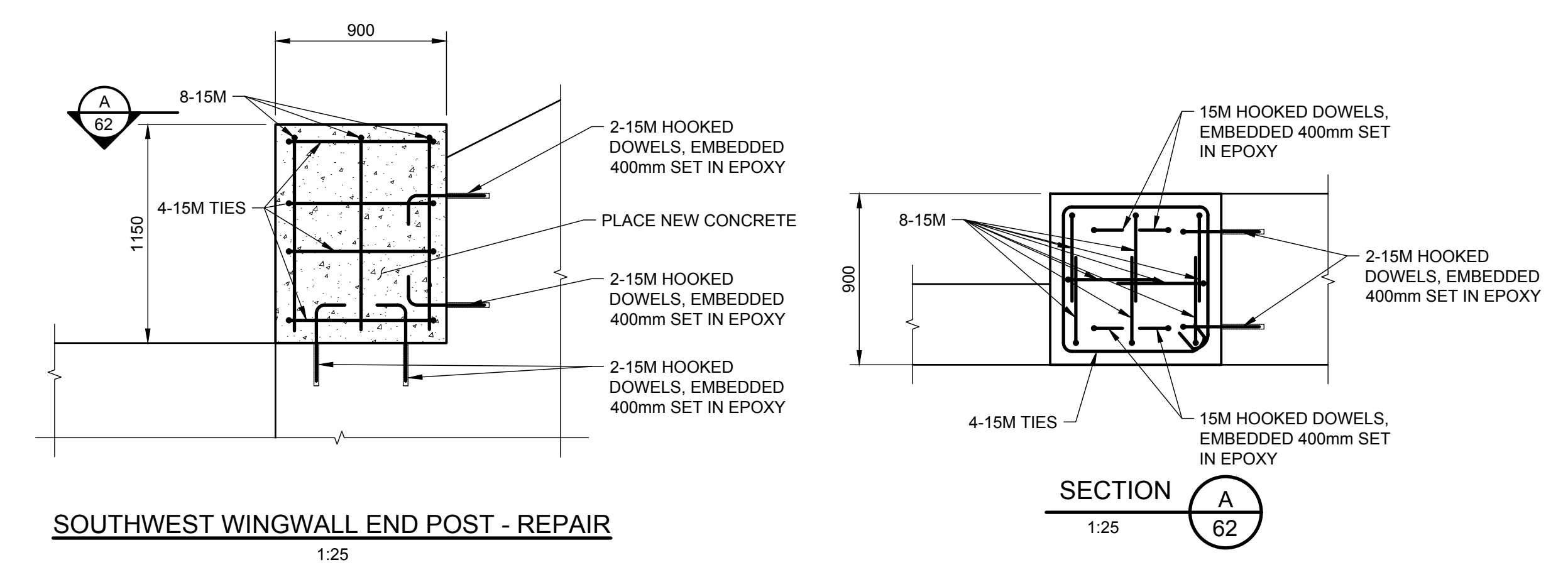
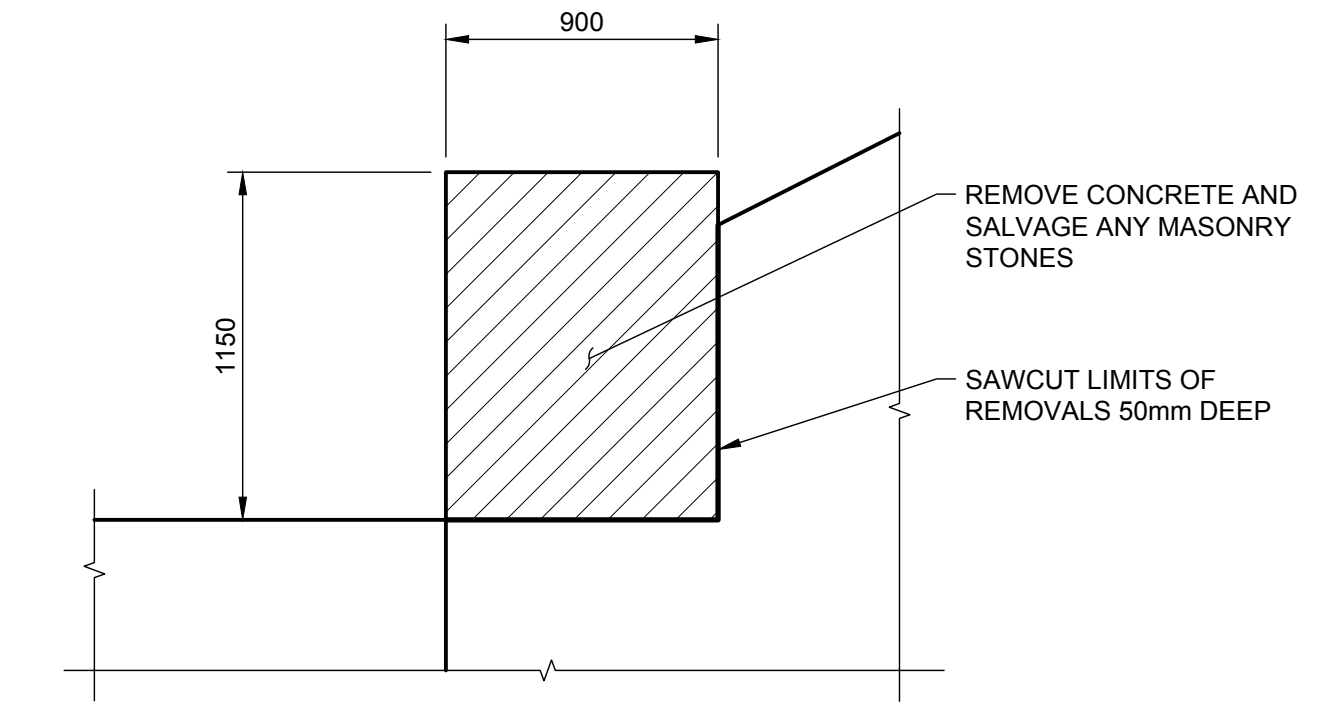
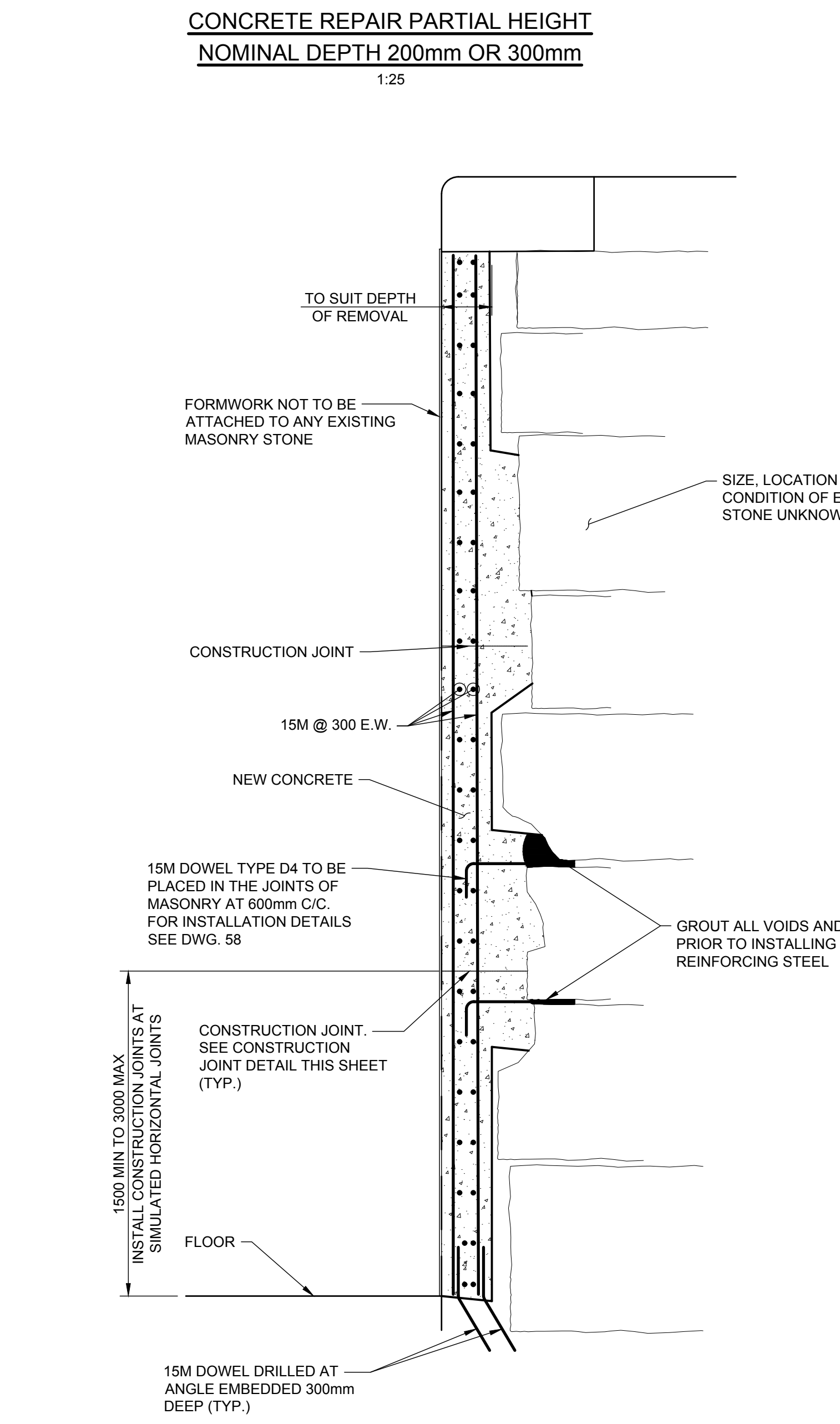
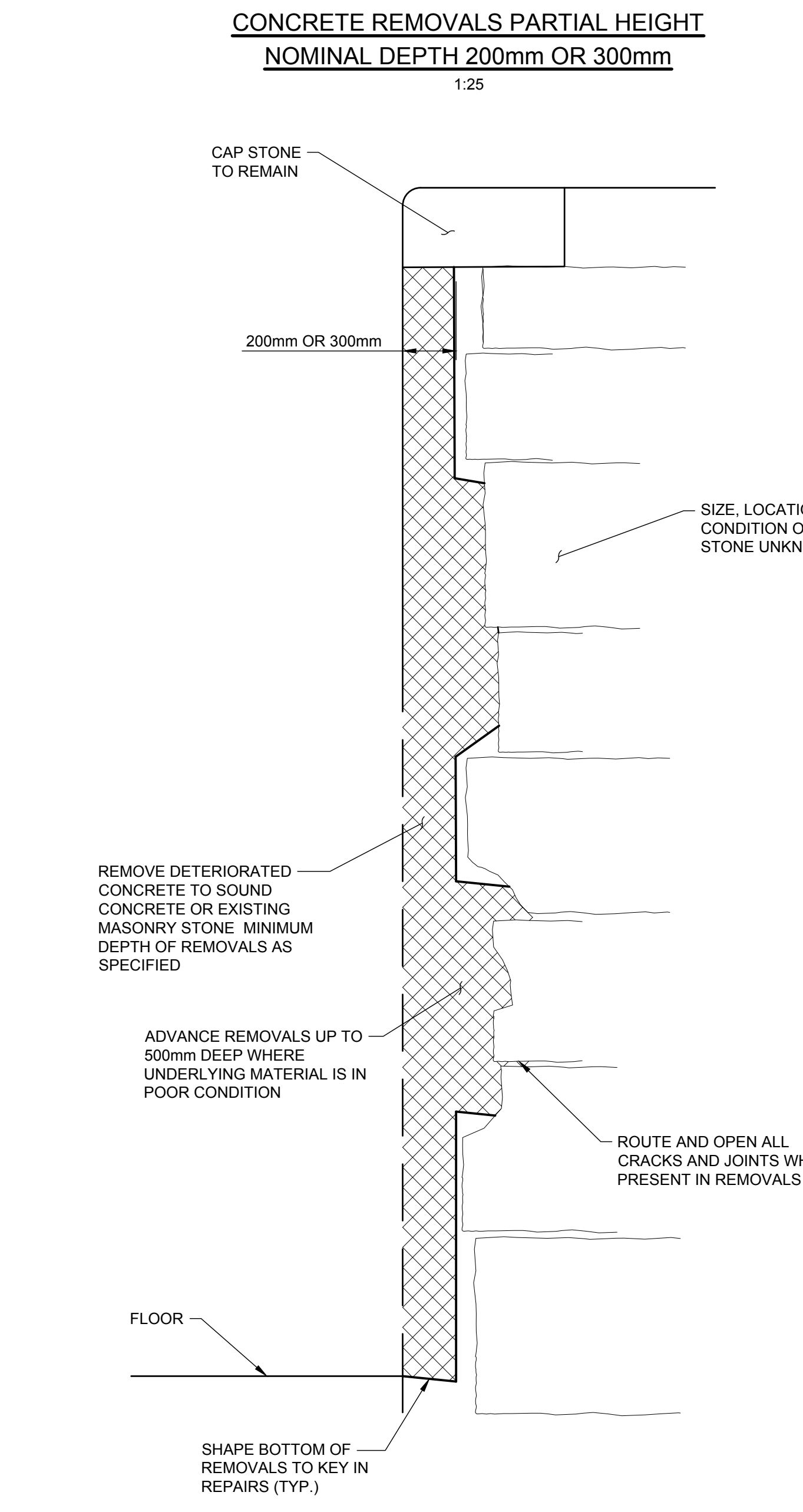
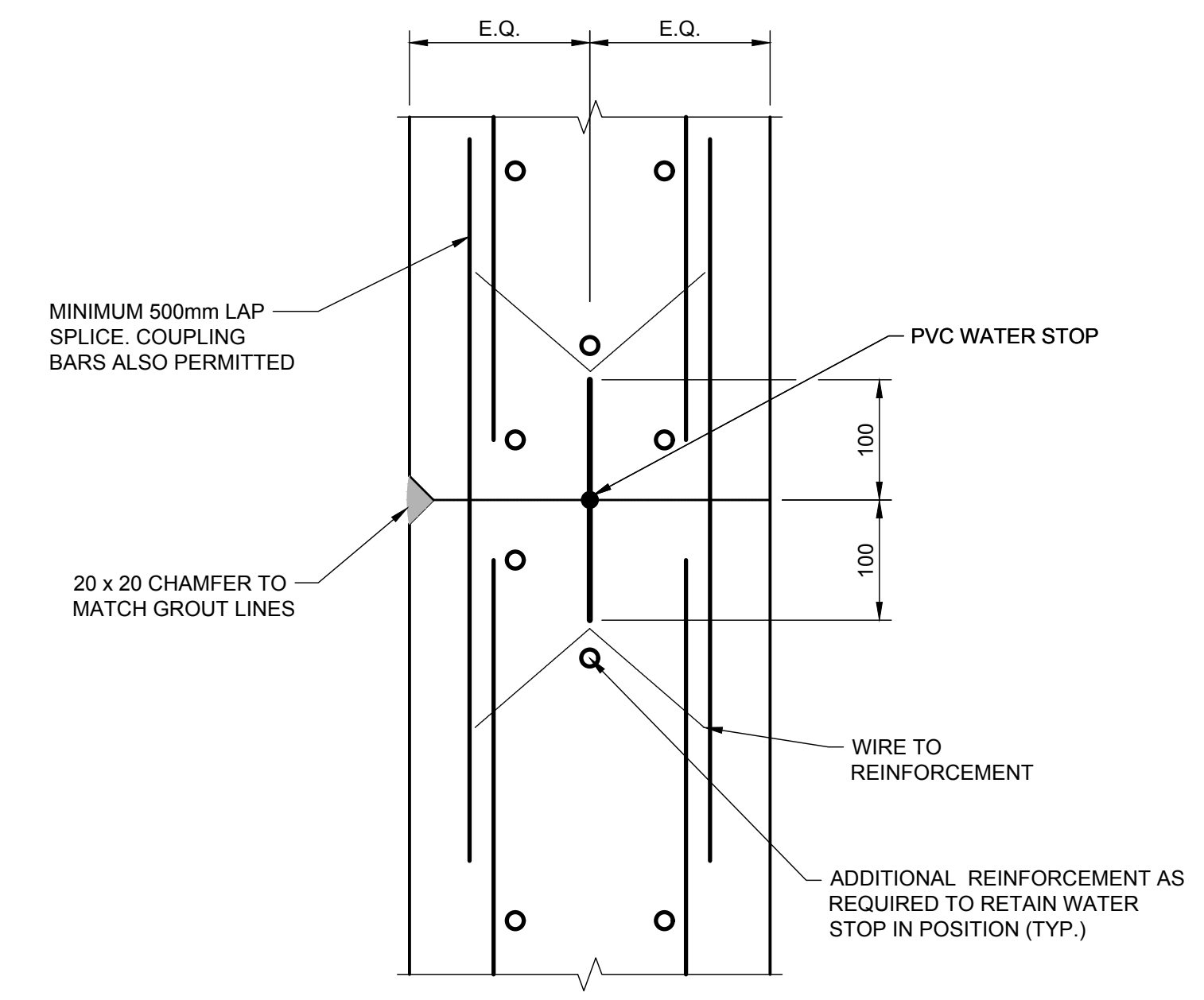
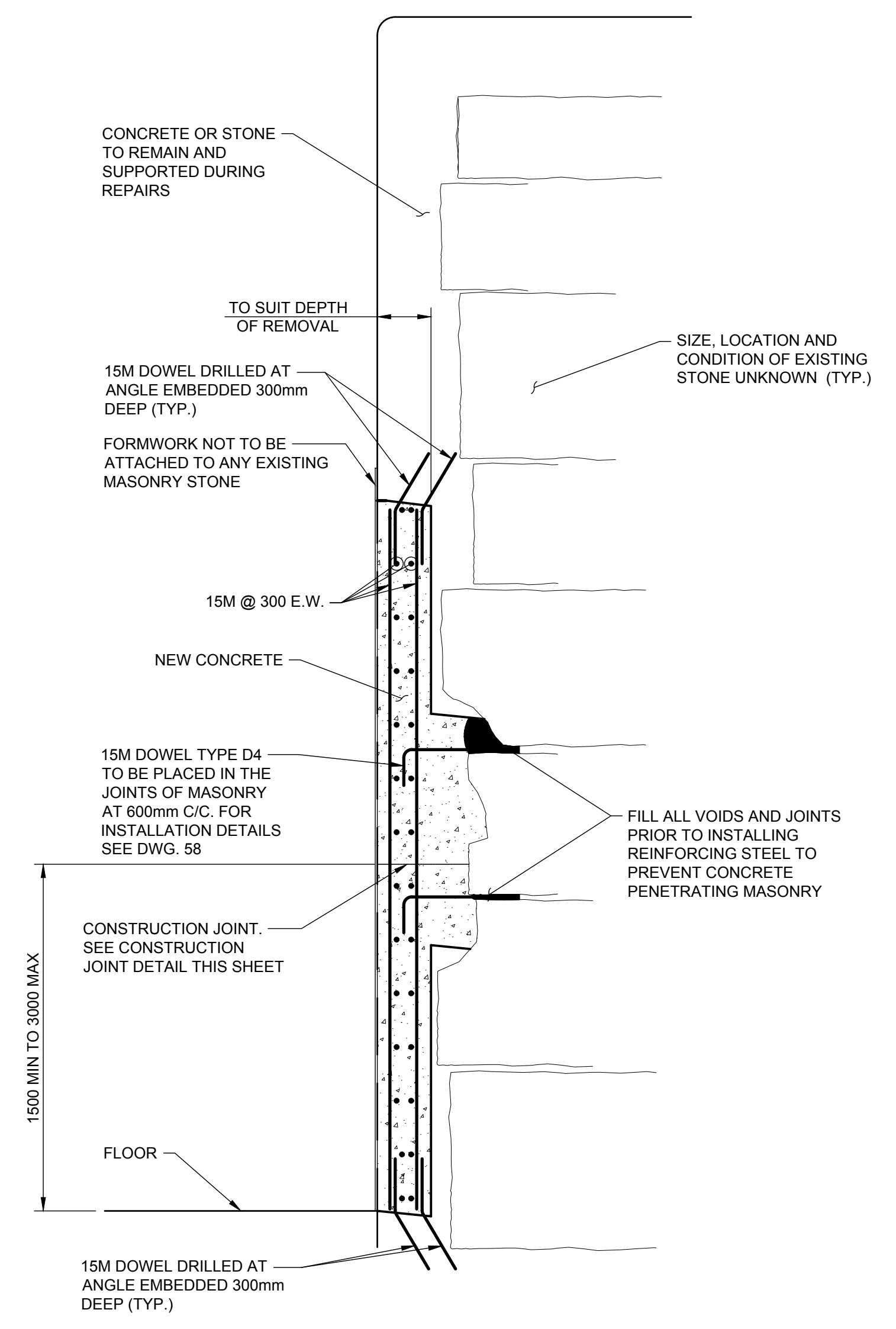
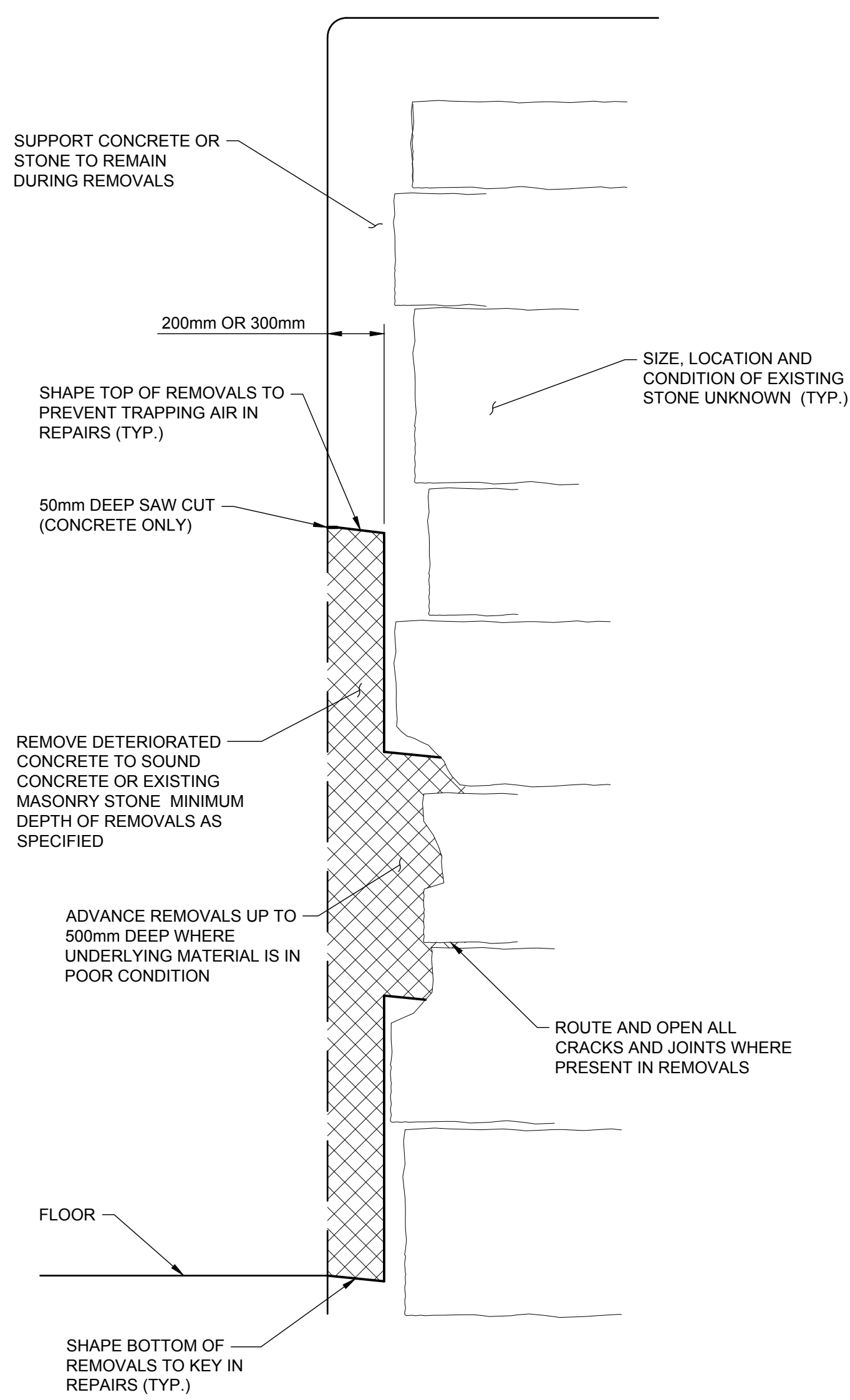
MISCELLANEOUS I

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 61
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 63 of 78

NOTE:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 2. CONCRETE REMOVALS SHALL BE PERFORMED WITH HAND HELD CHIPPING HAMMERS WITHIN 150mm OF EXISTING MASONRY STONE. POSITIVELY IDENTIFY DEPTH OF EXISTING MASONRY STONE BEFORE USING JACKHAMMERS OUTSIDE OF THE 150mm ZONE.
 3. WHERE FORM TIES ARE EMPLOYED PLASTIC CONES WILL NOT BE PERMITTED. SYSTEM EMPLOYED SHALL MINIMIZE THE APPEARANCE.



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No.	Description	Drawn By / Des. Par.	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

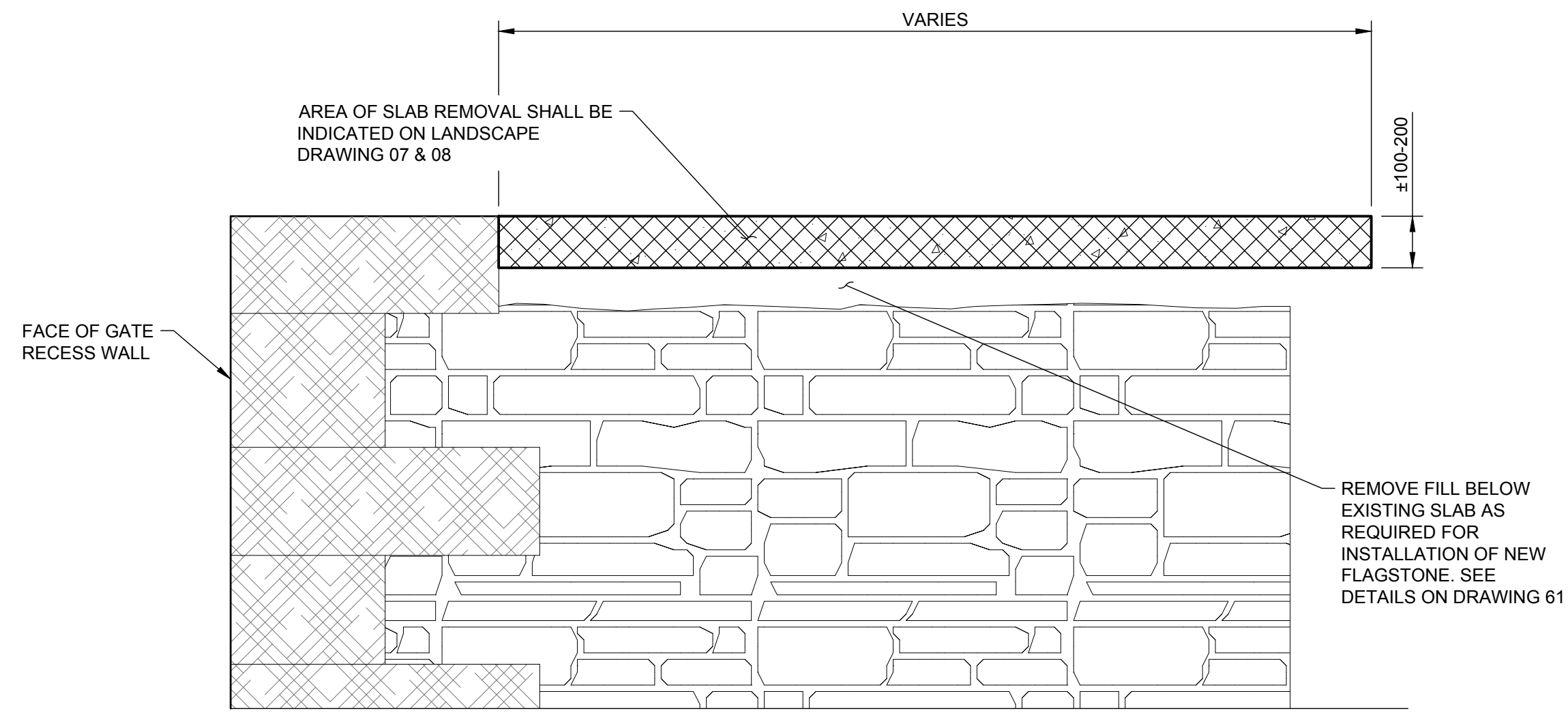
Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number Numero du detail
B	Location dwg. number Numero sur dessin

Project title / Titre du projet
RIDEAU CANAL NATIONAL HISTORIC SITE KINGSTON MILLS LOCKS 46-49 REHABILITATION
 ELGIN ONTARIO

Drawing title / Titre du dessin
CONCRETE DETAILS I

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 62
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 64 of 78

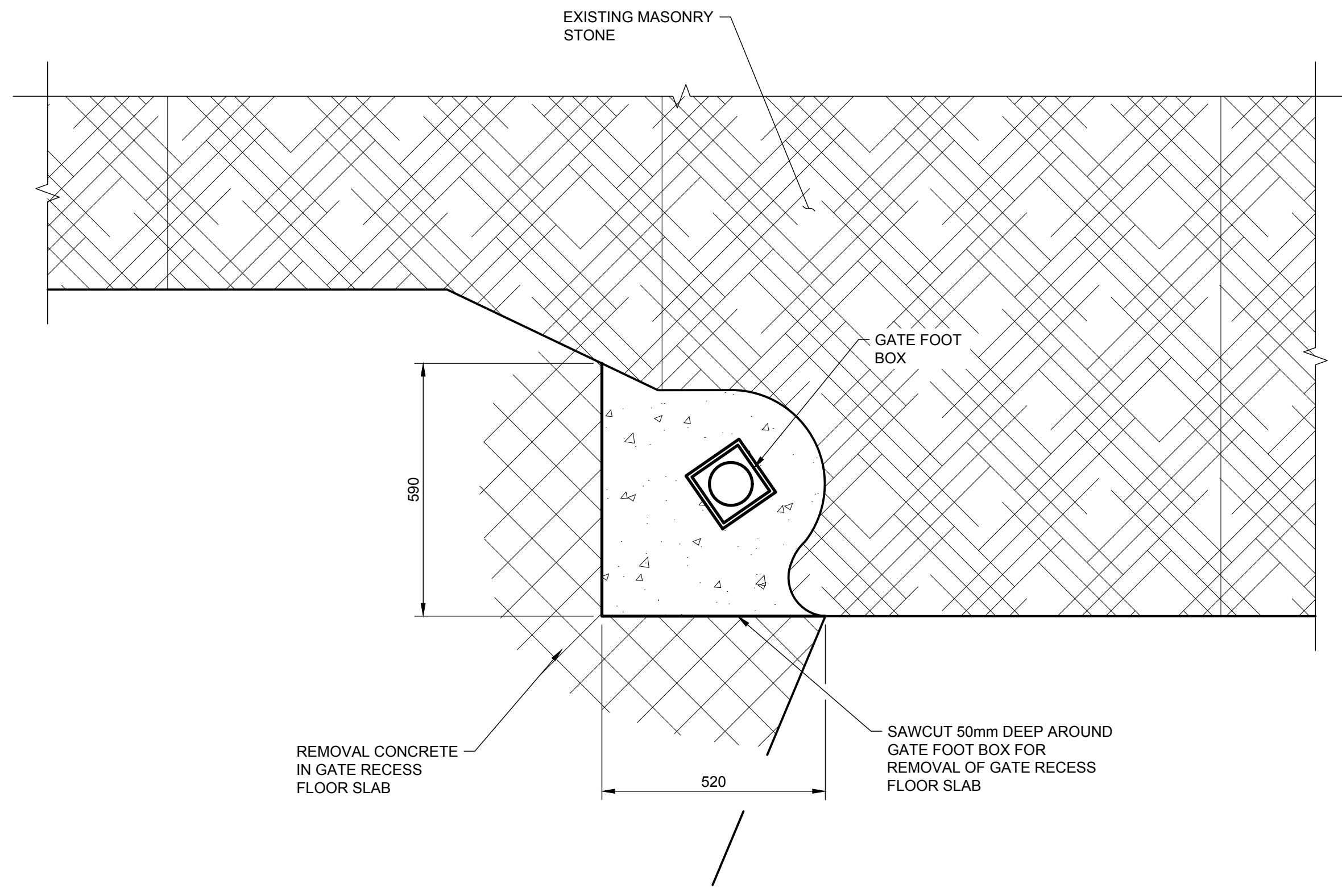


- NOTE:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 - WHERE LOOSE MATERIALS PRESENT IN JOINTS FOLLOWING CONCRETE REMOVALS:
 - EXISTING JOINTS LESS THAN 50mm WIDE: REMOVE UNSOUND MORTAR BY RAKING AND VACUUMING TO A DEPTH OF 150-200mm. WORK WILL BE PAID ON LINEAR METERS OF JOINT CLEANED.
 - EXISTING JOINTS WIDER THAN 50mm: REMOVE UNSOUND MORTAR BY RAKING, 400psi PRESSURE WASHING, AND VACUUMING TO A MAX DEPTH OF 200mm. WORK WILL BE PAID BASED ON CUBIC METERS OF GROUT USED FOR REPAIR.
 - SUPPLY 20M DOWEL 2m LONG, CUT AND TREAT IN FIELD TO SUIT DEPTH REQUIRED, DOWELS TO BE INSTALLED IN SOUND STONE, RELOCATE / ADJUST SPACING UP 300mm TO OBTAIN A SOUND SUBSTRATE AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE.
 - DEPTH OF REMOVALS AS INDICATED ON PLAN, MAX DEPTH OF REMOVALS SHALL BE 500mm UNLESS NOTED OTHERWISE.

CONCRETE SLAB ON GRADE - REMOVAL

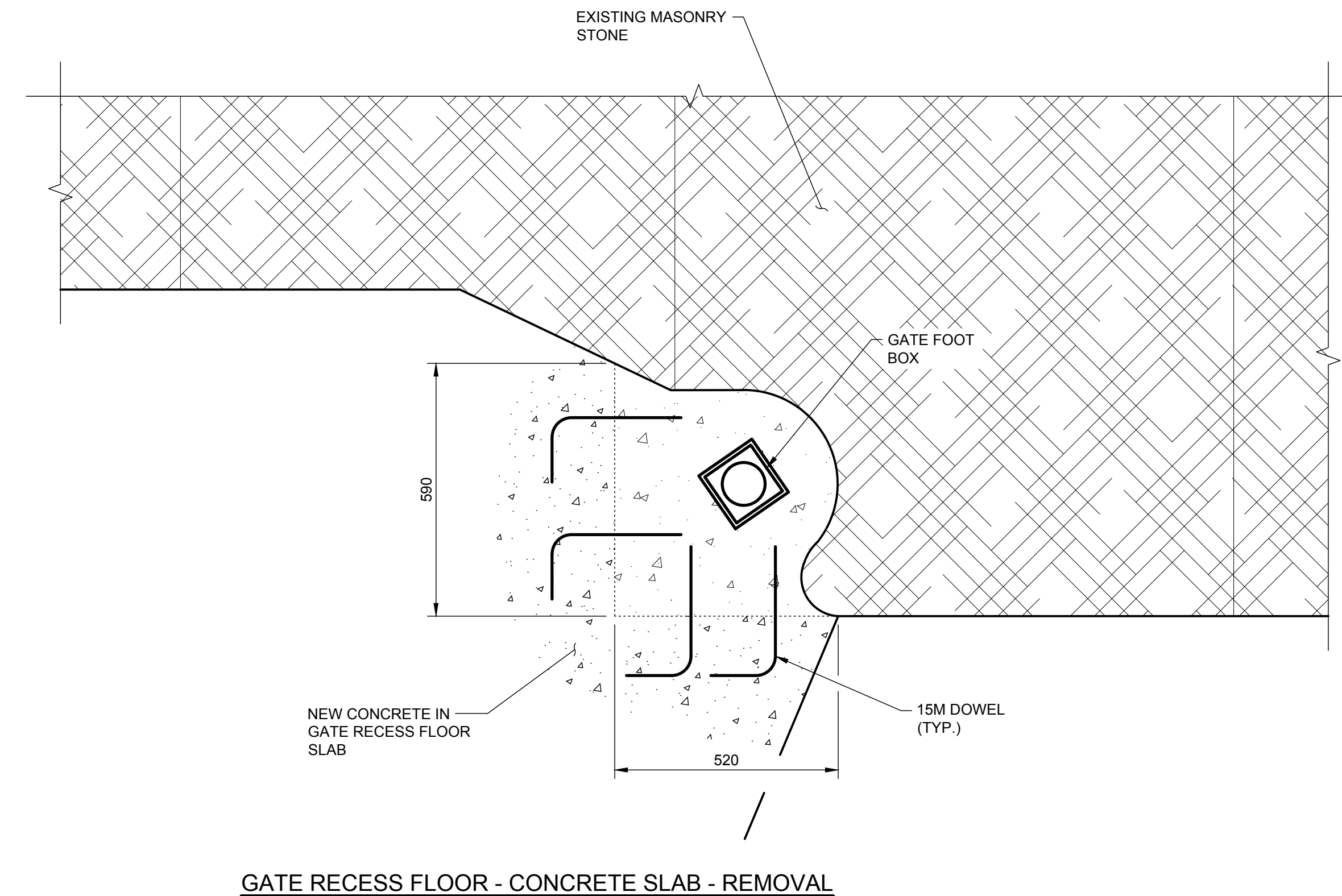
1:20

NOTE:
REMOVE AND REINSTATE HARDWARE (WINCH, BOLLARDS, SLUICE GATE WINCH) AS REQUIRED TO REMOVE CONCRETE SLAB AND REINSTATE FLAGSTONE. THE LOCATION OF ALL ANCHORAGE SHALL BE RECORDED FOR FULL REINSTATEMENT.



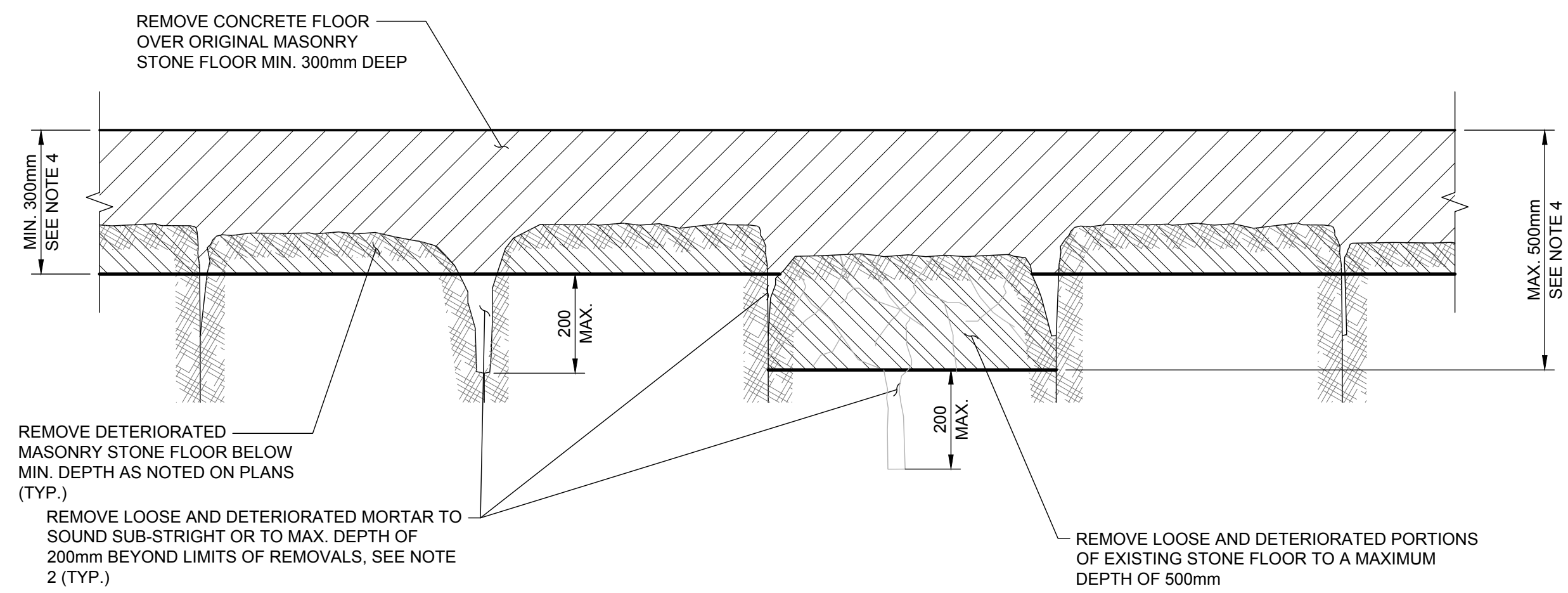
GATE RECESS FLOOR - CONCRETE SLAB - REMOVAL

1:10



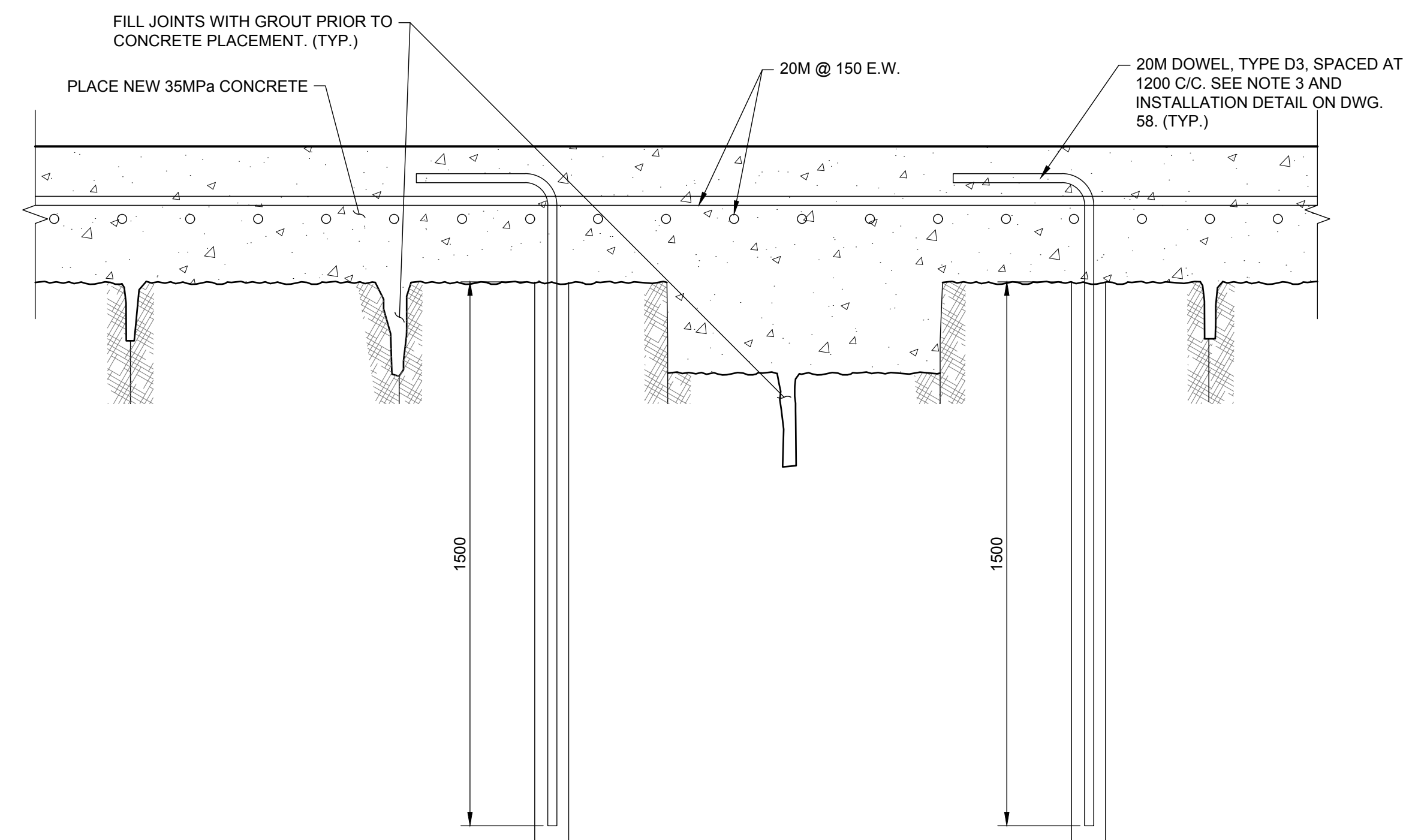
GATE RECESS FLOOR - CONCRETE SLAB - REMOVAL

1:10



REMOVAL OF TYPICAL CONCRETE OVERLAY OVER STONE FLOOR

1:10



REPAIR OF TYPICAL CONCRETE OVERLAY OVER STONE FLOOR

1:10

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Services publics et Approvisionnement Canada

Heritage Canals and Engineering Works Group
Parcs Canada Infrastructure Directorate
Groupe Canaux historiques et travaux d'ingénierie
Direction de l'infrastructure de Parcs Canada

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B	Location dwg. number / Numéro sur dessin

Project title / Titre du projet

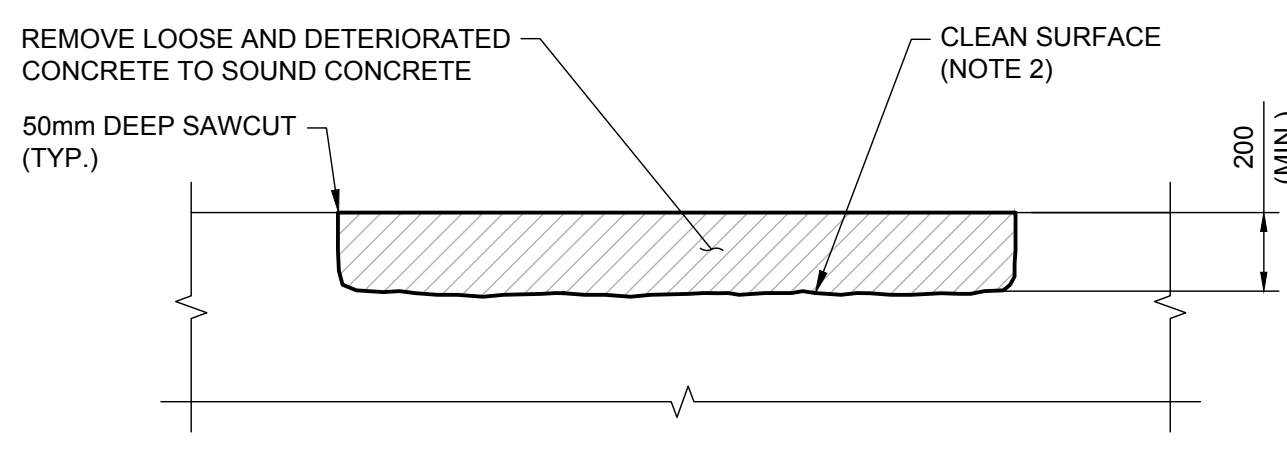
**RIDEAU CANAL
NATIONAL HISTORIC SITE
KINGSTON MILLS
LOCKS 46-49
REHABILITATION**

ELGIN ONTARIO

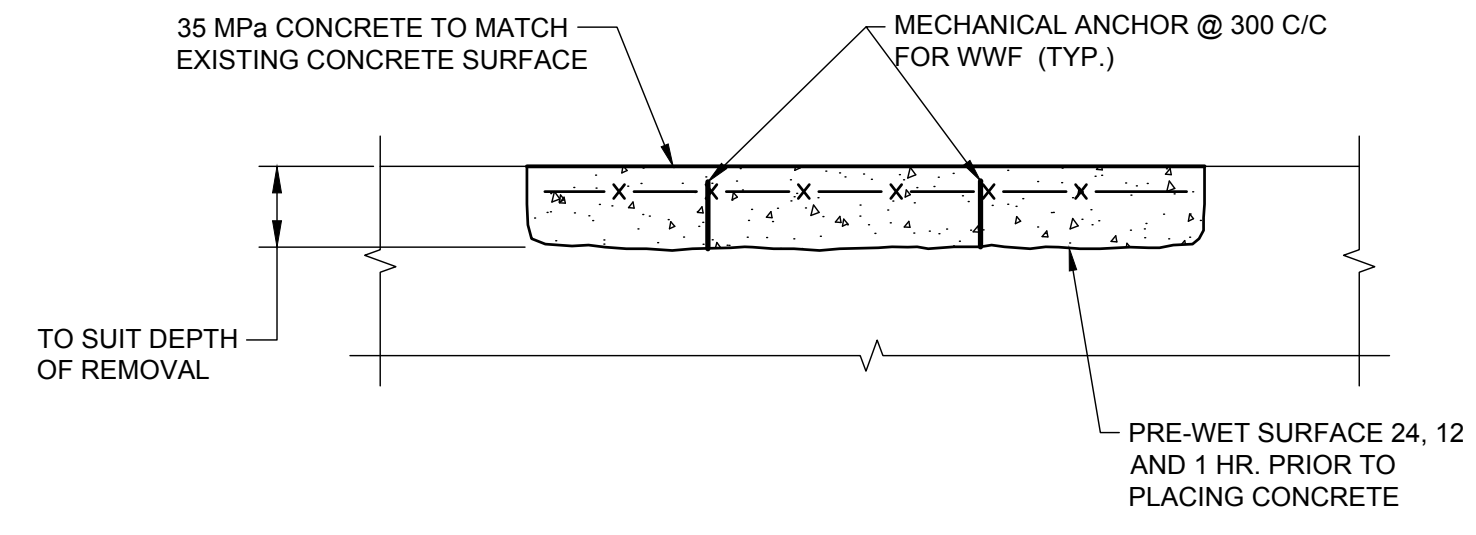
CONCRETE DETAILS II

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 63
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 65 of 78

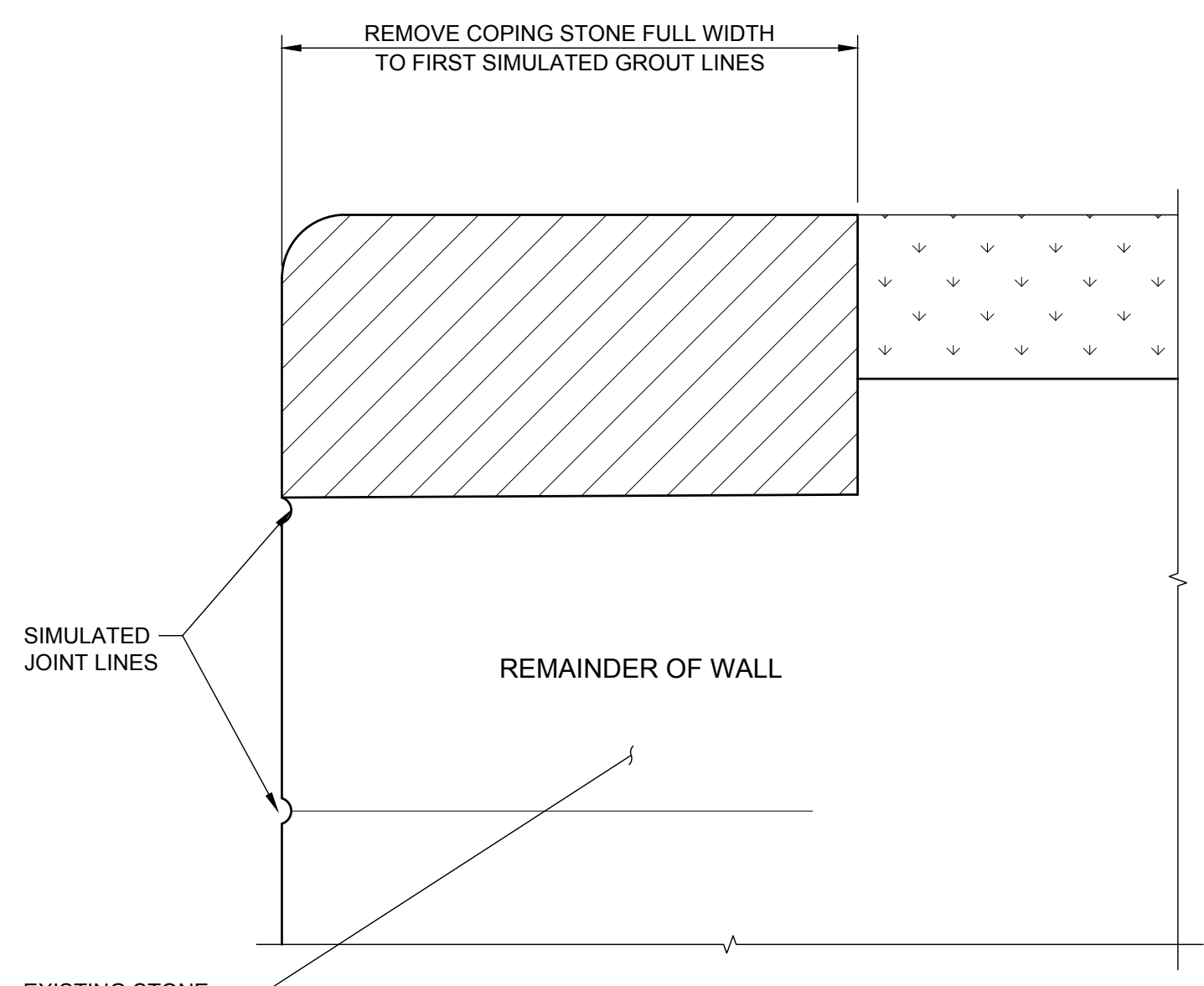
NOTE:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00
 2. CONCRETE SURFACE TO BE CLEANED BY WATER BLASTING AS PER SPECIFICATIONS.
 3. TRIM AND PATCH ALL CONCRETE REPAIRS.



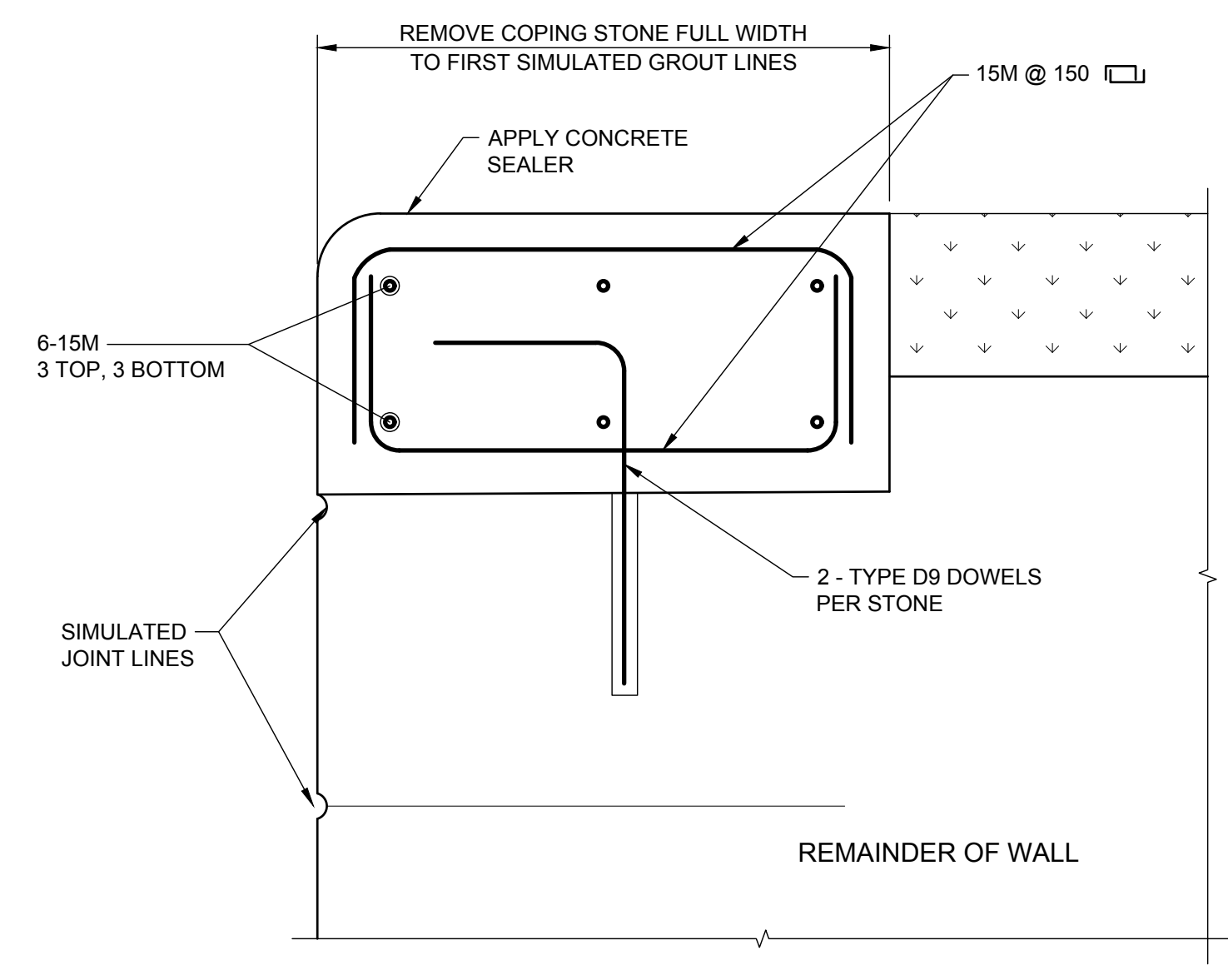
**TYPICAL CONCRETE REMOVAL
 HORIZONTAL SURFACE**



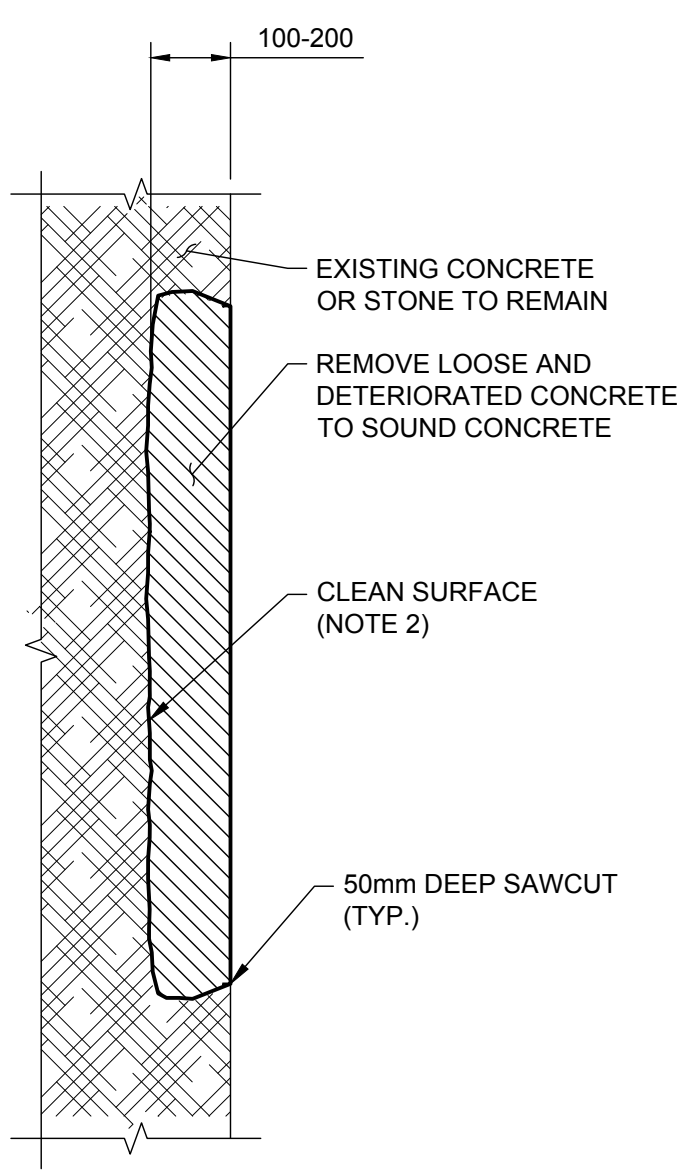
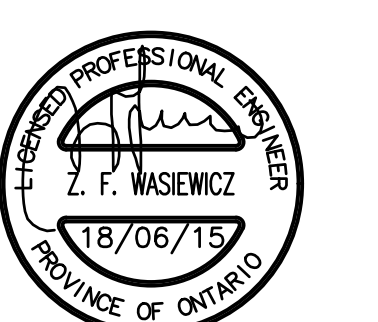
**TYPICAL FORMED CONCRETE REPAIR
 HORIZONTAL SURFACE**



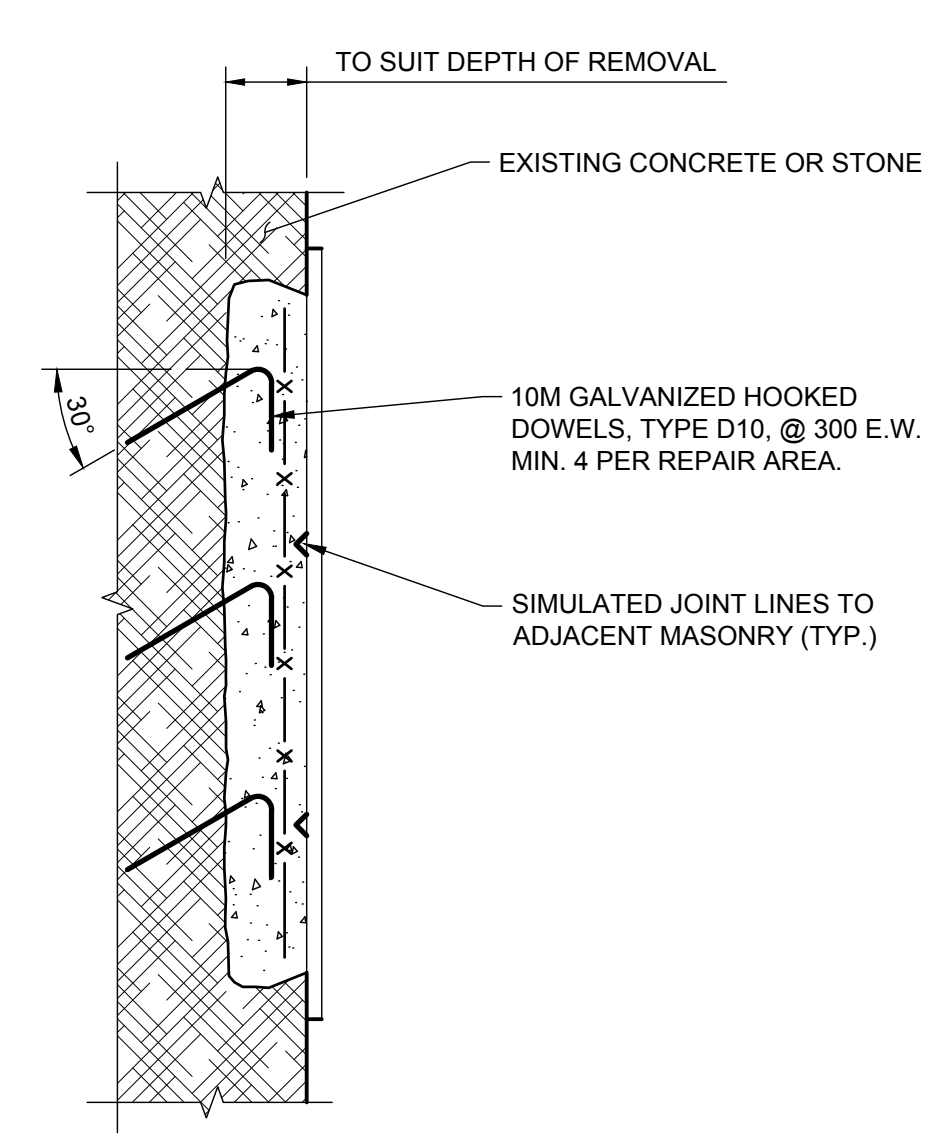
CONCRETE CAPPING STONE - REMOVAL
 1:10



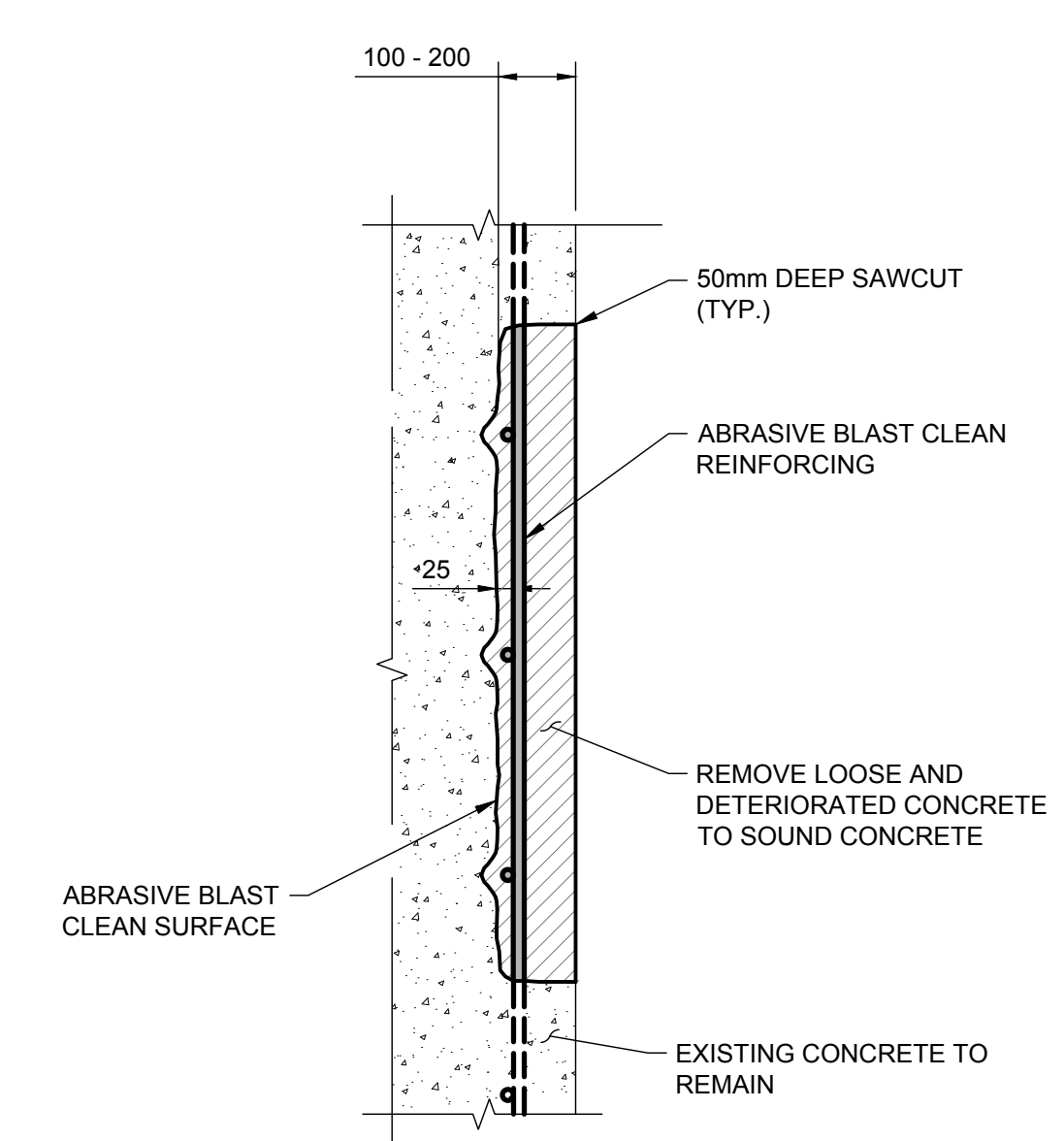
CONCRETE CAPPING STONE - REINSTATEMENT
 1:10



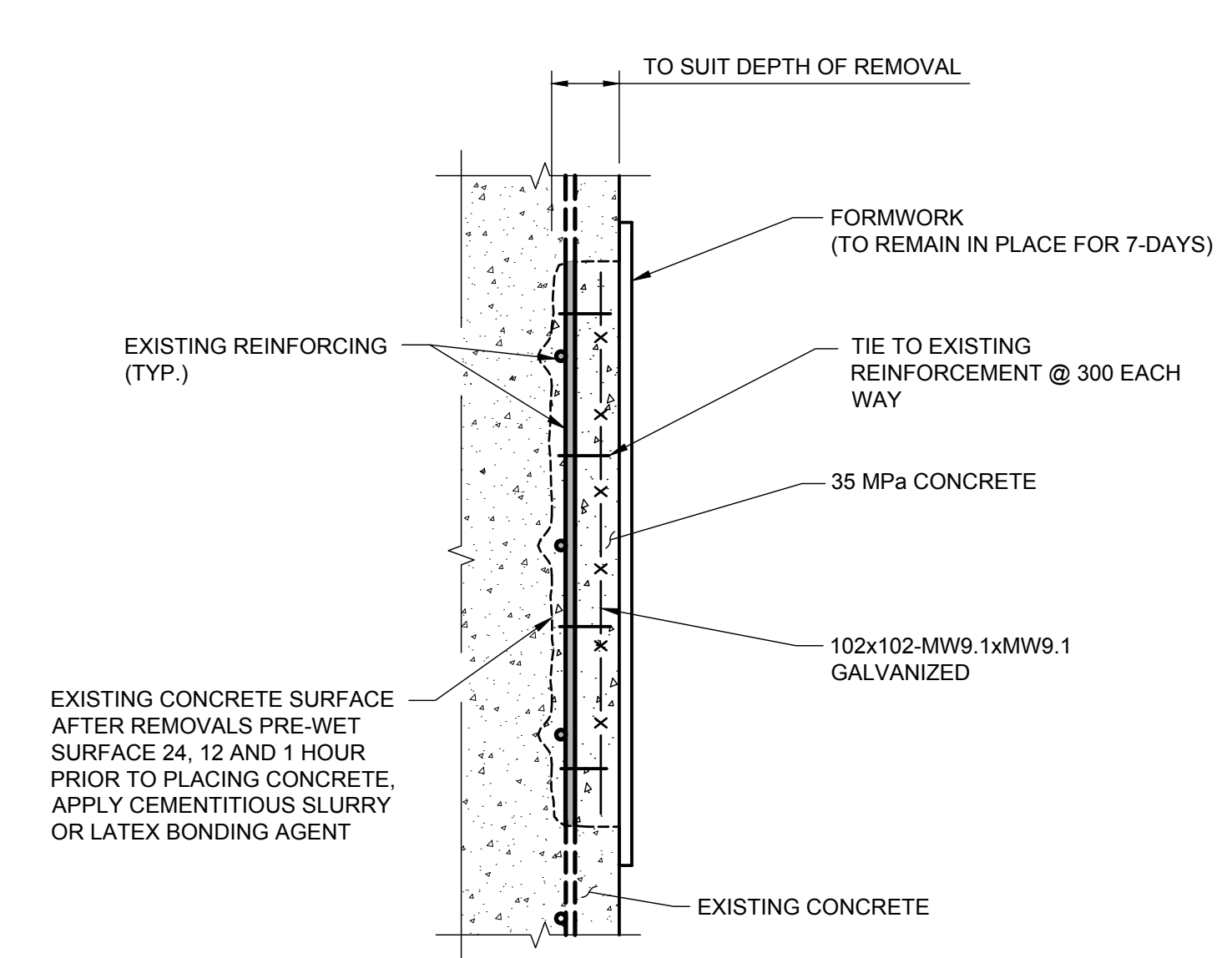
**TYPICAL CONCRETE REMOVAL
 VERTICAL SURFACE 100mm TO 200mm DEEP**



**TYPICAL FORMED CONCRETE REPAIR
 VERTICAL SURFACE 100mm TO 200mm DEEP**



**TYPICAL REINFORCED CONCRETE REMOVAL
 VERTICAL SURFACE 100mm TO 200mm DEEP**



**TYPICAL FORMED CONCRETE REPAIR
 VERTICAL SURFACE - FLUSH**

No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

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A	A Detail number
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Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

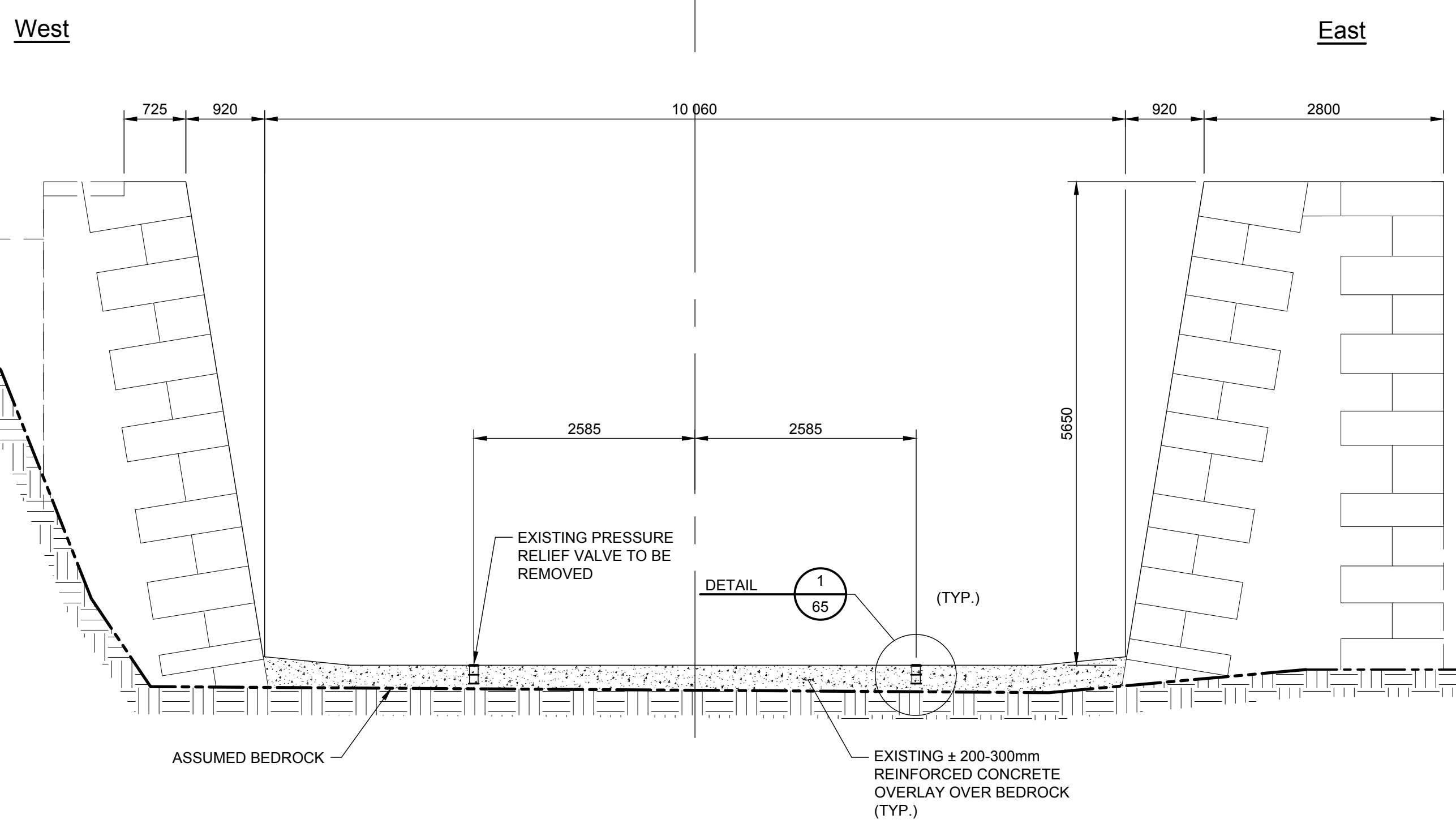
CONCRETE DETAILS III

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 64
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 66 of 78

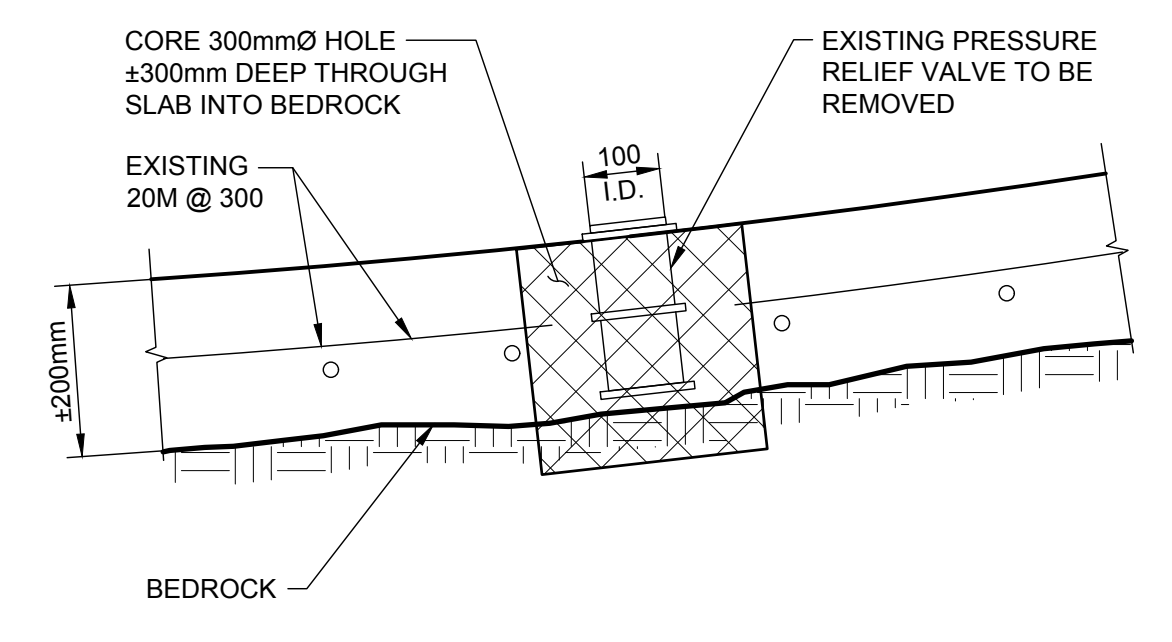
NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 2. ALL CONDITIONS SHOWN ARE BASED ON LIMITED INFORMATION AND BOREHOLES AND NOT GUARANTEED.
 3. DESIGN OF PRESSURE RELIEF VALVE SHOWN HERE IS PROPRIETARY DESIGNED BY OTHER AND IS INTENDED TO INDICATE PERFORMANCE REQUIREMENTS ONLY.



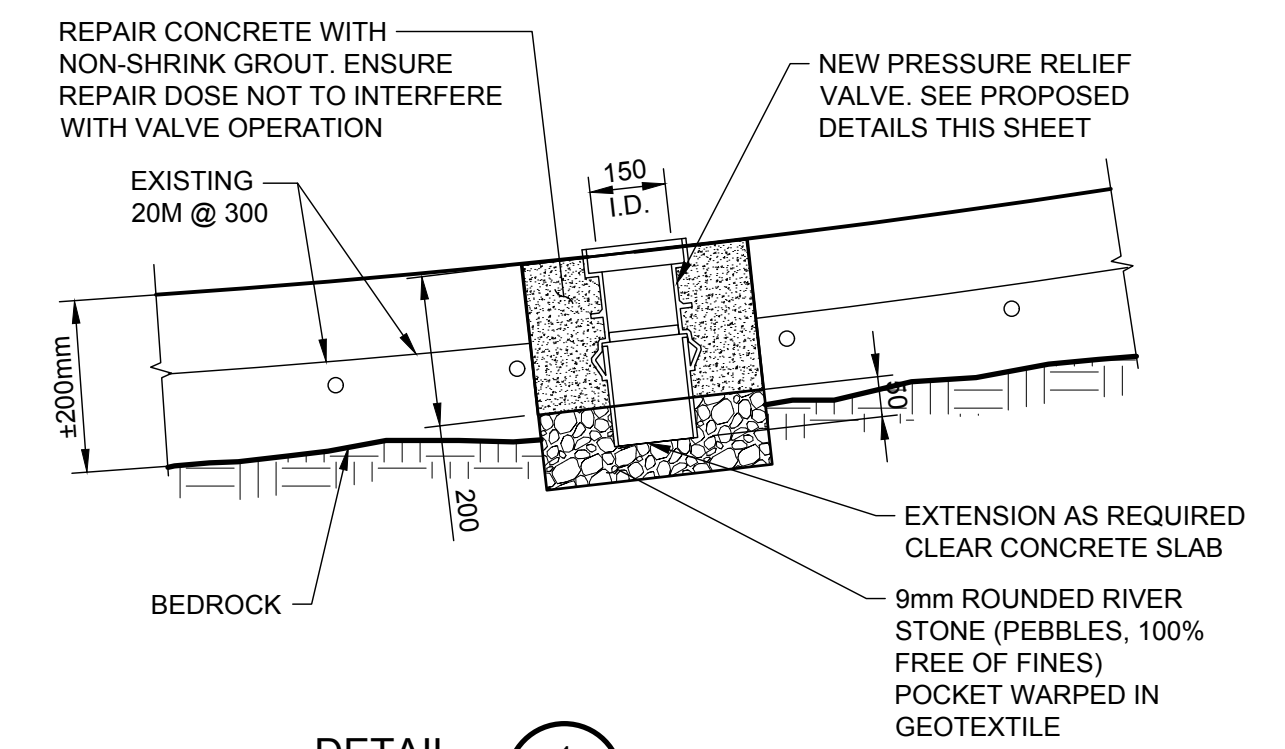
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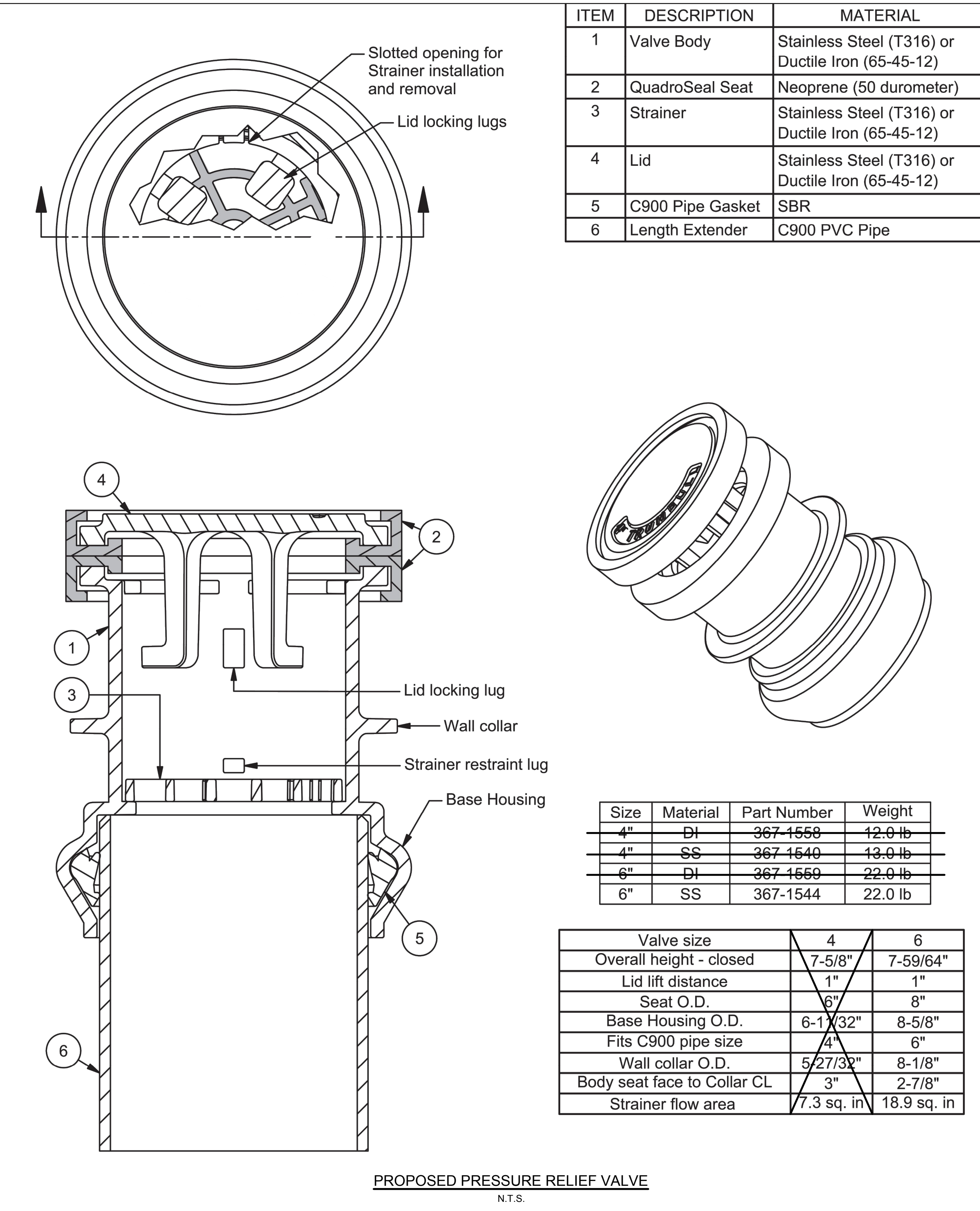
TYPICAL SECTION - PRESSURE RELIEF VALVE
 1:50
 NOTE: SEE FLOOR PLAN ON DWG. 43 & 45 FOR LOCATION



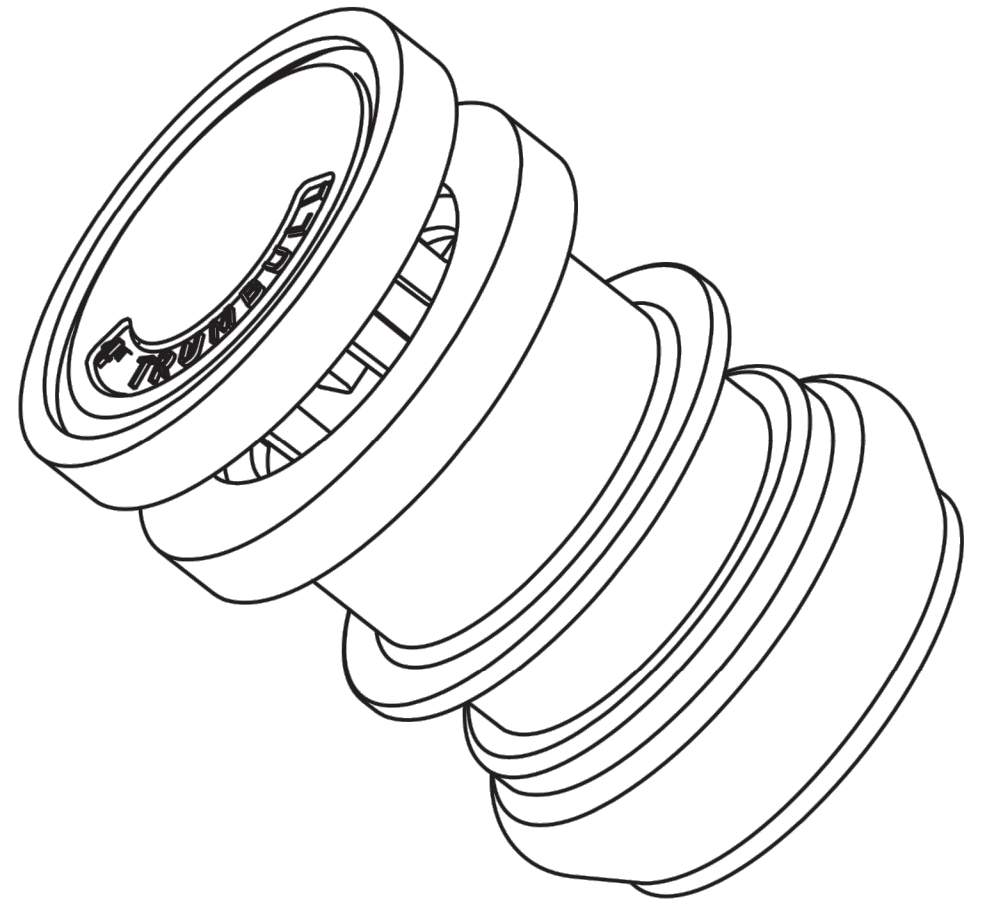
EXISTING PRESSURE RELIEF VALVE - REMOVALS (20 LOCATIONS)
 DETAIL 1 65
 1:10



NEW PRESSURE RELIEF VALVE INSTALLATION (12 LOCATIONS)
 DETAIL 1 65
 1:10



ITEM	DESCRIPTION	MATERIAL
1	Valve Body	Stainless Steel (T316) or Ductile Iron (65-45-12)
2	QuadroSeal Seat	Neoprene (50 durometer)
3	Strainer	Stainless Steel (T316) or Ductile Iron (65-45-12)
4	Lid	Stainless Steel (T316) or Ductile Iron (65-45-12)
5	C900 Pipe Gasket	SBR
6	Length Extender	C900 PVC Pipe

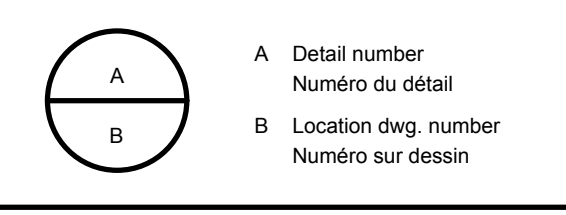


Size	Material	Part Number	Weight
4"	DI	367-1558	12.0 lb
4"	SS	367-1540	13.0 lb
6"	DI	367-1559	22.0 lb
6"	SS	367-1544	22.0 lb

Valve size	4	6
Overall height - closed	7-5/8"	7-59/64"
Lid lift distance	1"	1"
Seat O.D.	6"	8"
Base Housing O.D.	6-1/32"	8-5/8"
Fits C900 pipe size	4"	6"
Wall collar O.D.	5-27/32"	8-1/8"
Body seat face to Collar CL	3"	2-7/8"
Strainer flow area	7.3 sq. in	18.9 sq. in

No.	Description	Drawn By / Des. Par	Date
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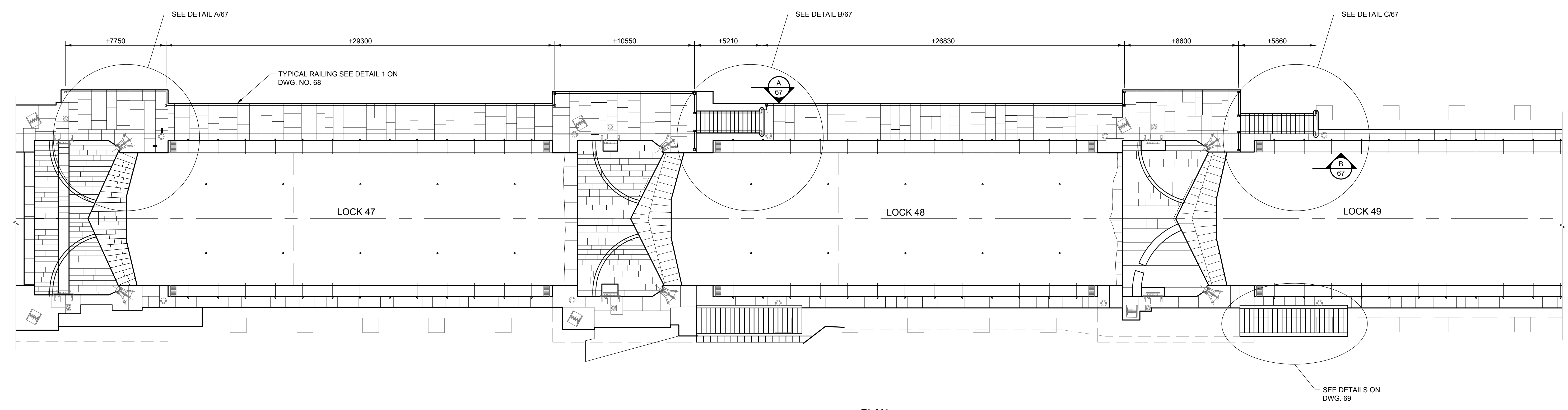
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 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**FLOOR PRESSURE
 RELIEF VALVES**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 65
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 66 of 78



PLAN
1:150



SCOPE OF WORK - RAILING

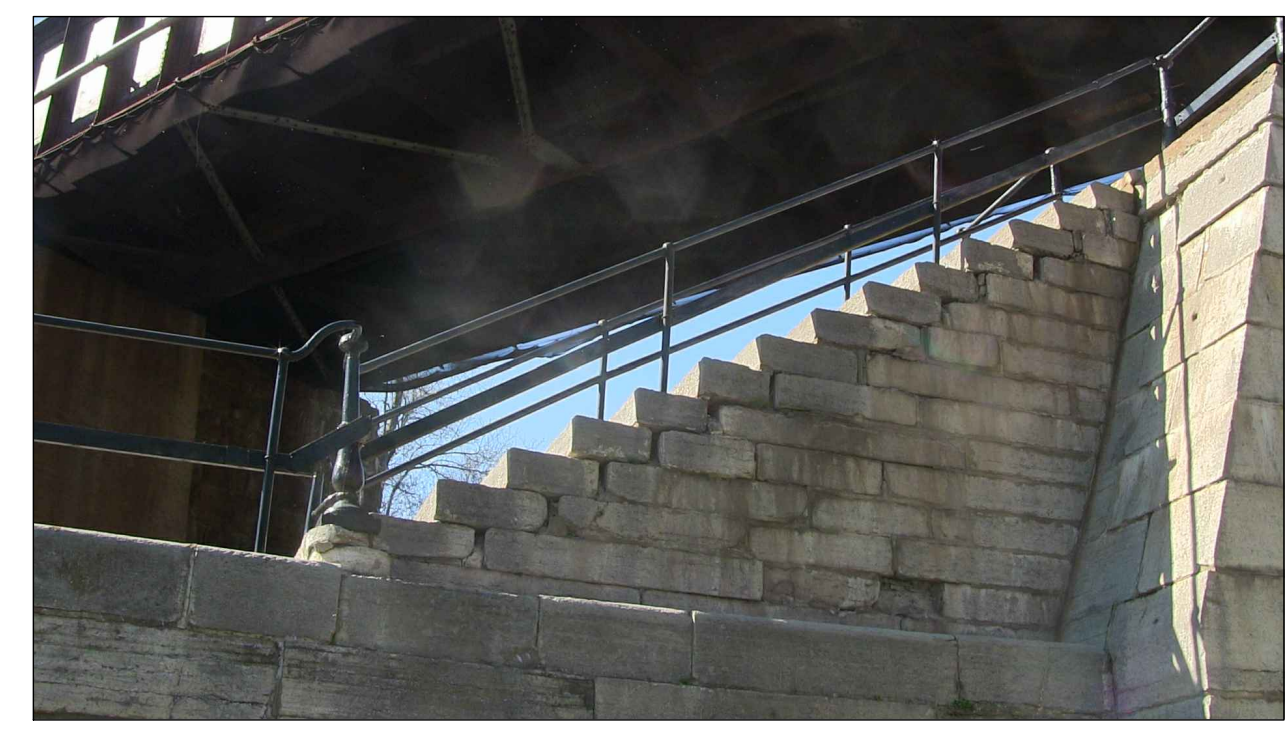
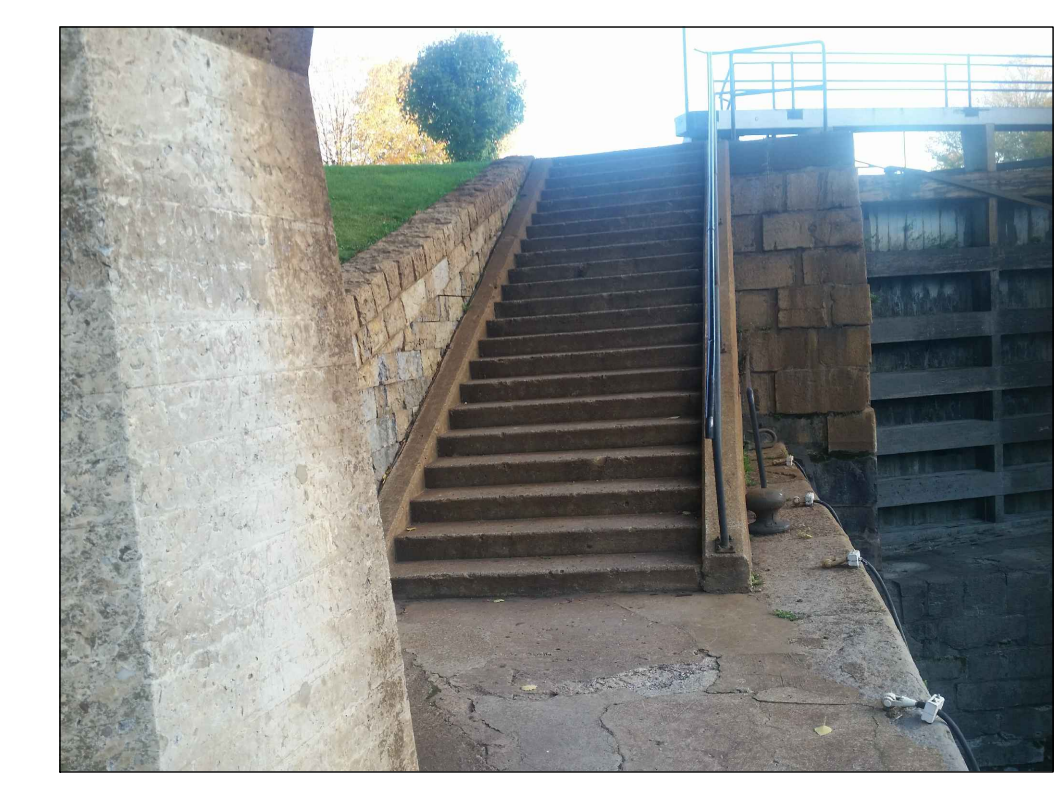
1. REMOVE EXISTING RAILINGS ON EAST CHAMBER WALLS, MONOLITHS AND STAIRCASES.
2. SALVAGE DECORATIVE POSTS AT STAIR CASES.
3. FABRICATE NEW RAILINGS AND INCORPORATING SALVAGED POSTS.
4. COAT RAILINGS.
5. DELIVER AND INSTALL NEW RAILINGS.

SCOPE OF WORK - EAST STAIRCASES

1. REMOVE STONE TREADS. SALVAGE TREADS AS DIRECTED BY DEPT. REP.
2. REMOVE DETERIORATED STONES FROM SIDE WALLS.
3. PLACE NEW STONES AND DUTCHMAN REPAIRS IN SIDE WALLS..
4. REPOINT SIDE WALLS.
5. REINSTATE SALVAGED AND NEW TREADS.
6. REPOINT AND GROUT STAIRS CONCURRENTLY WITH INSTALLATION OF TREADS.

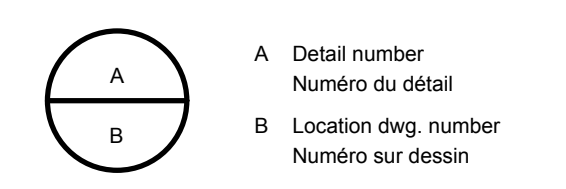
SCOPE OF WORK - WEST STAIRCASES

1. REMOVE CONCRETE IN TREADS WHICH EXHIBIT LOCALIZED SEV. DETERIORATION AS DIRECTED BY DEPT. REP.
2. PLACE REINFORCING STEEL FOR CONCRETE REPAIRS IN TREADS.
3. PLACE CONCRETE FOR CONCRETE REPAIRS IN TREADS.



1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

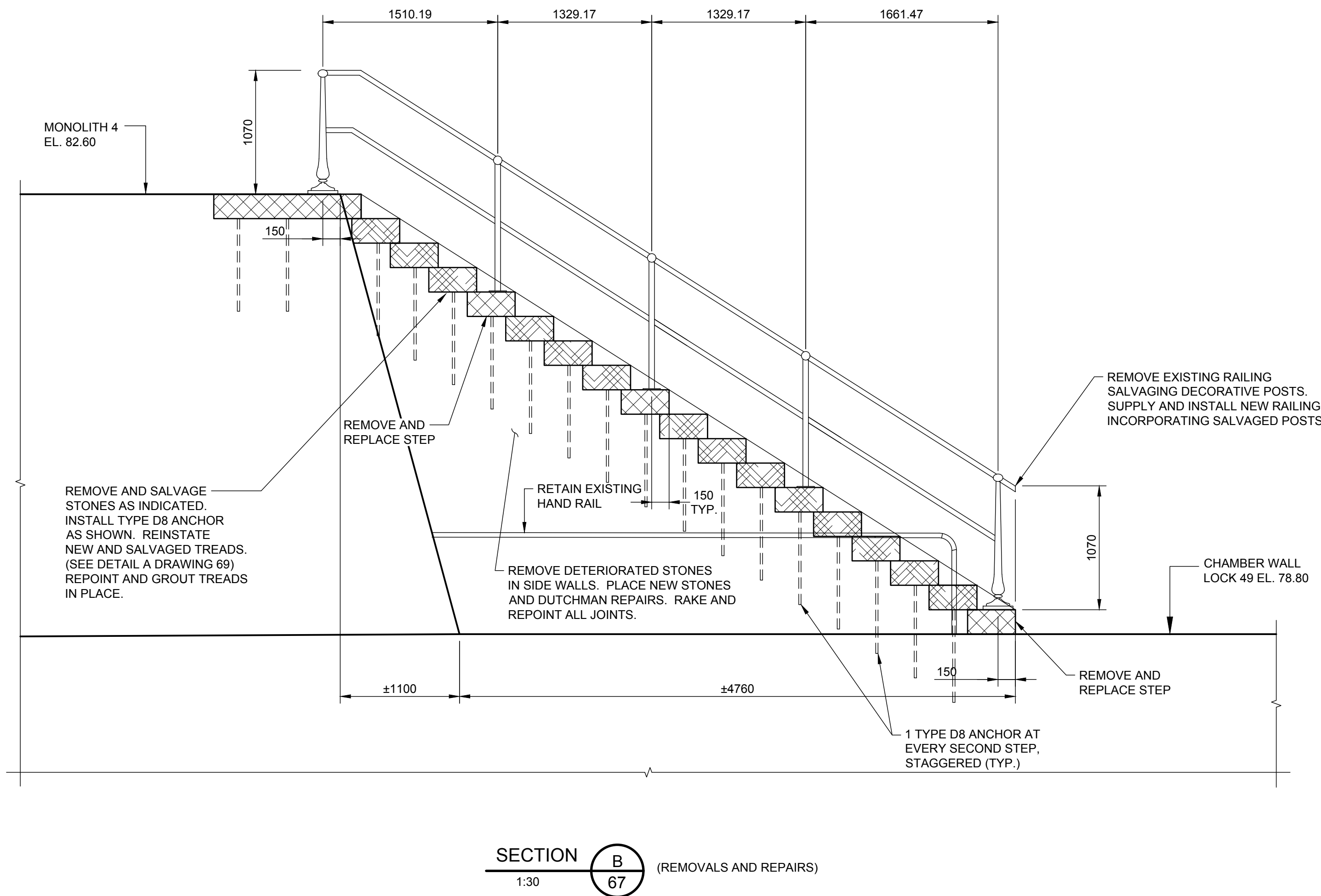
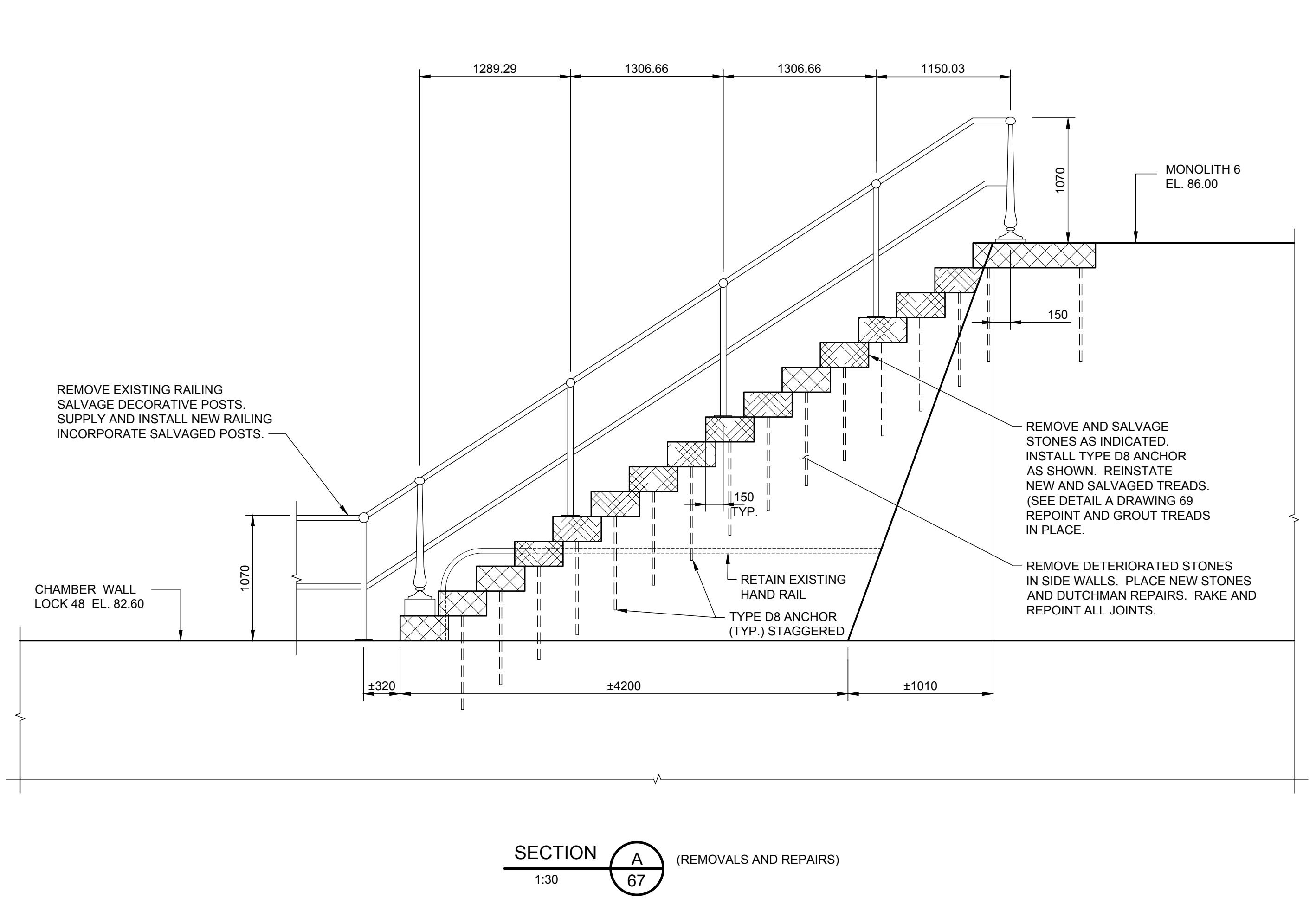
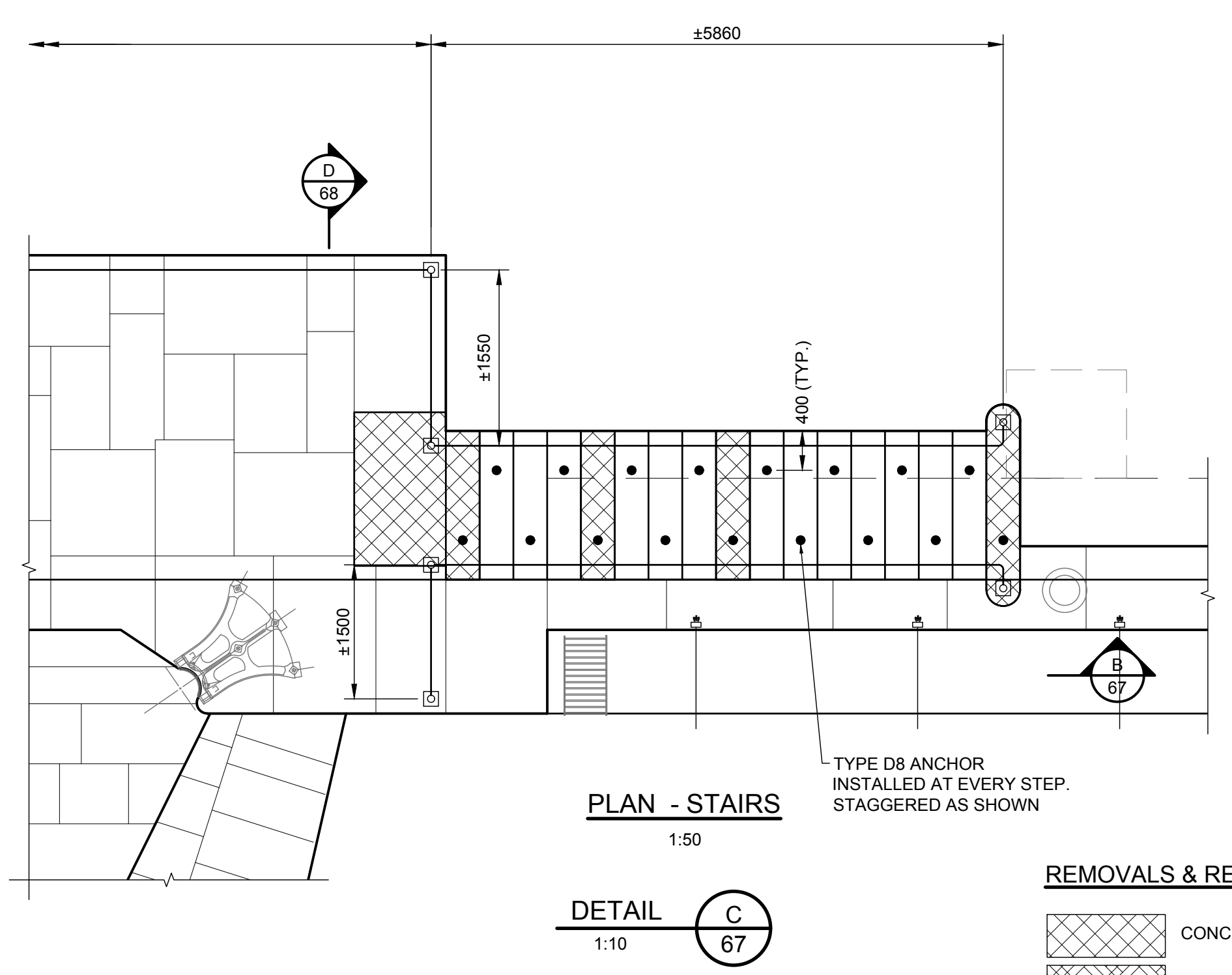
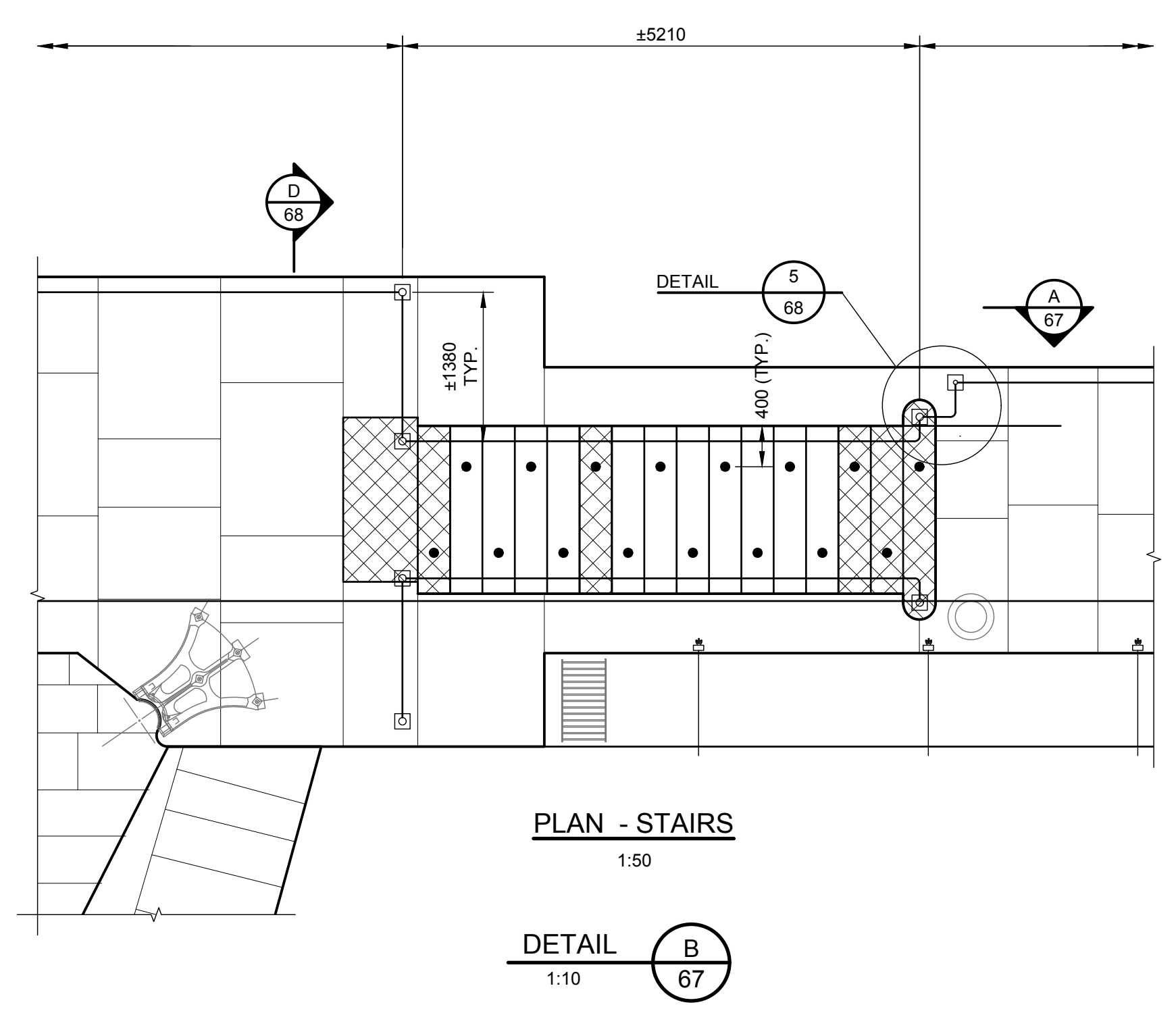
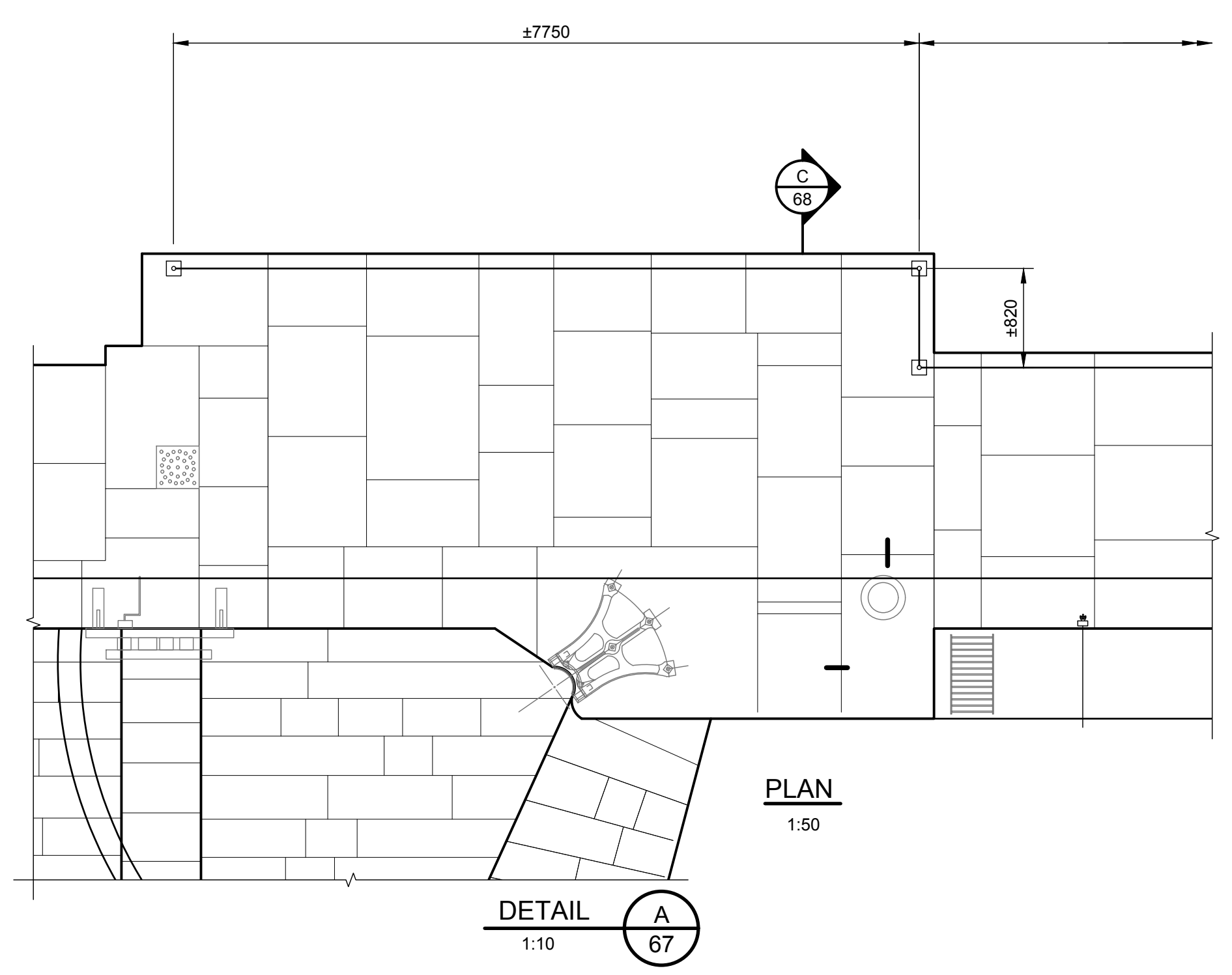


Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**RAILINGS AND STAIRCASES
 LAYOUT - REMOVALS &
 REPAIR**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 66
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 68 of 78

- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 - FIELD MEASURE ALL DIMENSIONS. REPORT ALL DISCREPANCIES TO DEPARTMENT REPRESENTATIVE.



1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
	Revision / Révision		

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

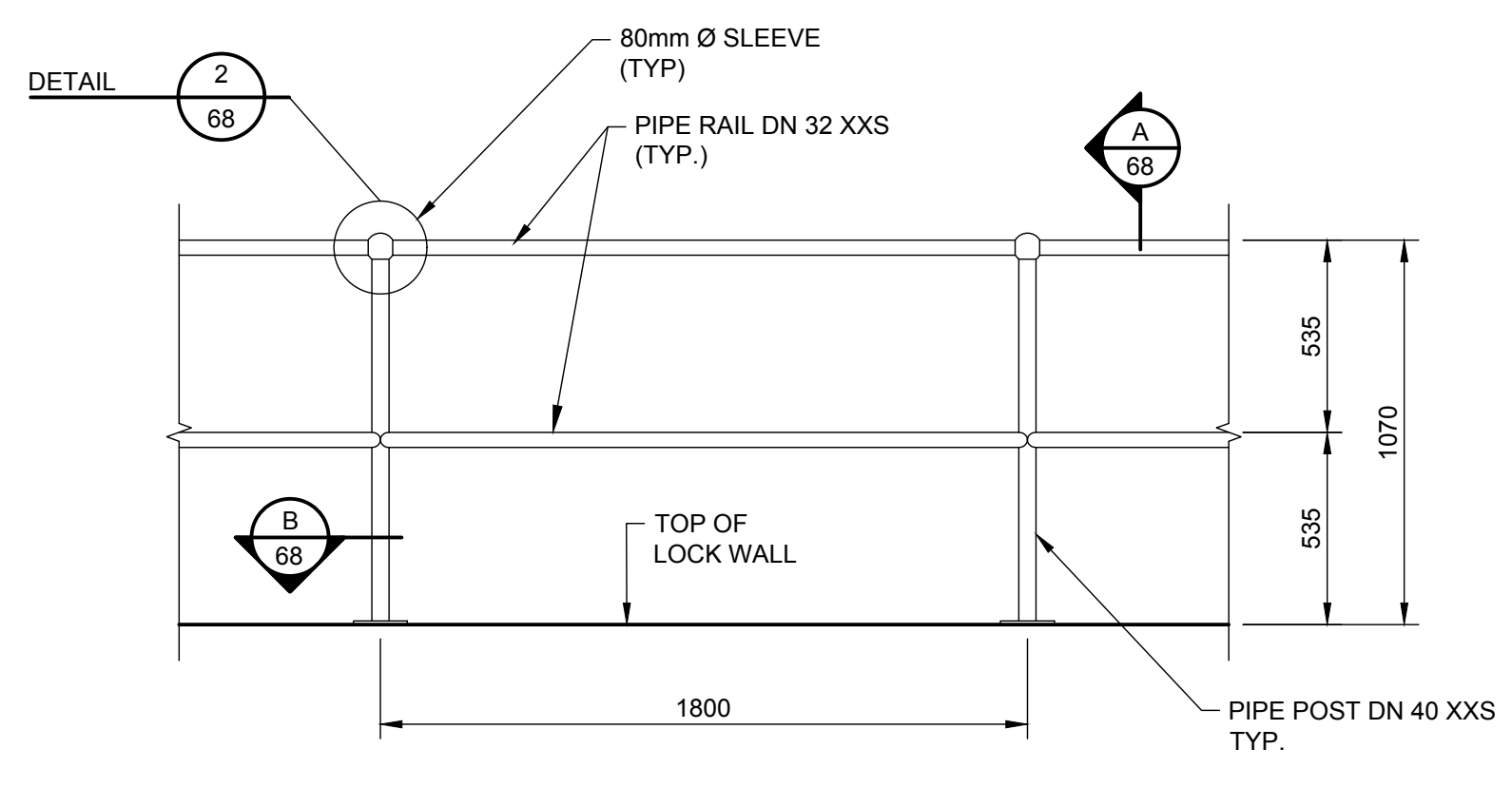
A	Detail number / Numéro du détail
B	Location dwg. number / Numéro sur dessin

Project title / Titre du projet
RIDEAU CANAL NATIONAL HISTORIC SITE KINGSTON MILLS LOCKS 46-49 REHABILITATION
 ELGIN ONTARIO

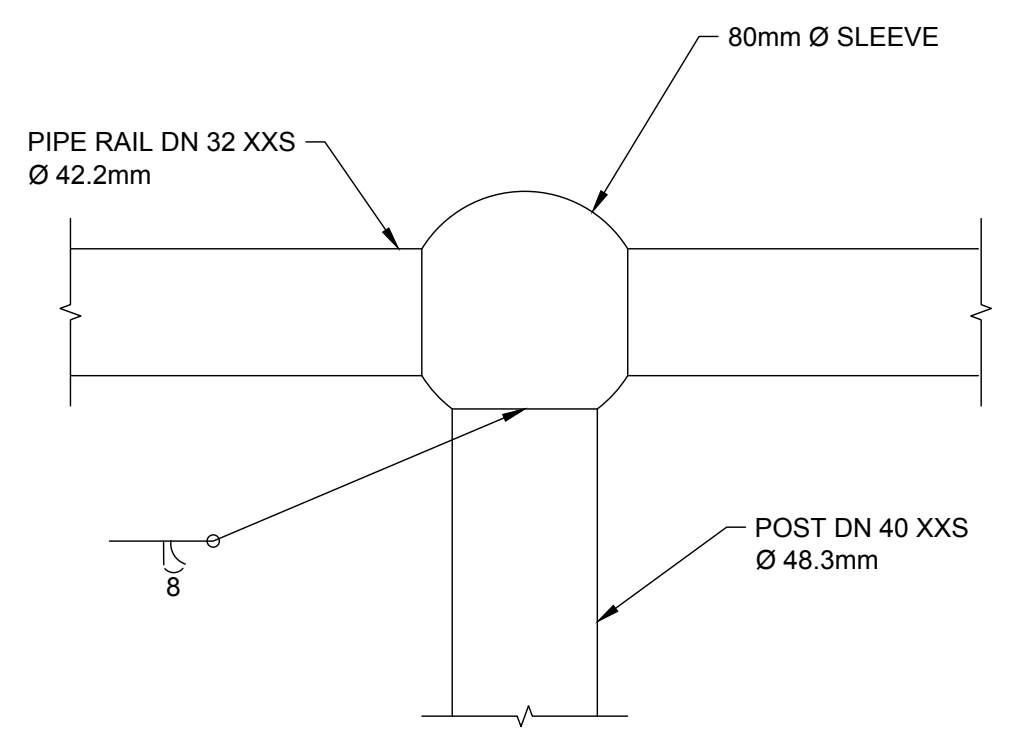
Drawing title / Titre du dessin
STAIRS AND RAILING PLANS AND SECTIONS

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 67
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 69 of 78

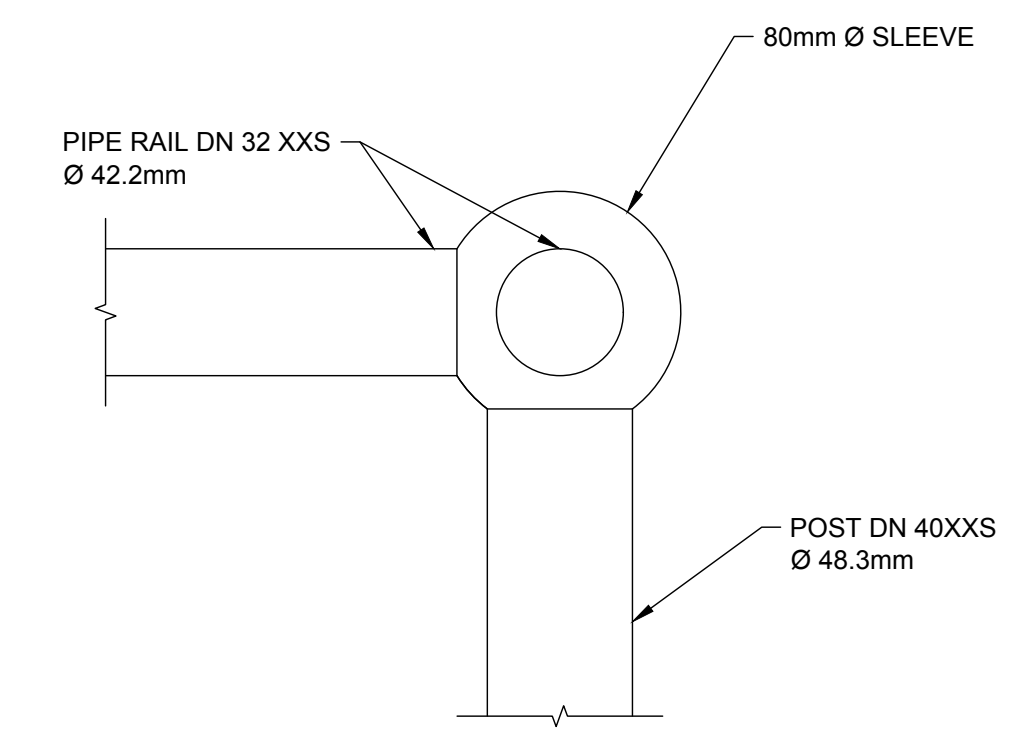
- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 - FIELD MEASURE ALL DIMENSIONS. REPORT ALL DISCREPANCIES TO DEPARTMENT REPRESENTATIVE.



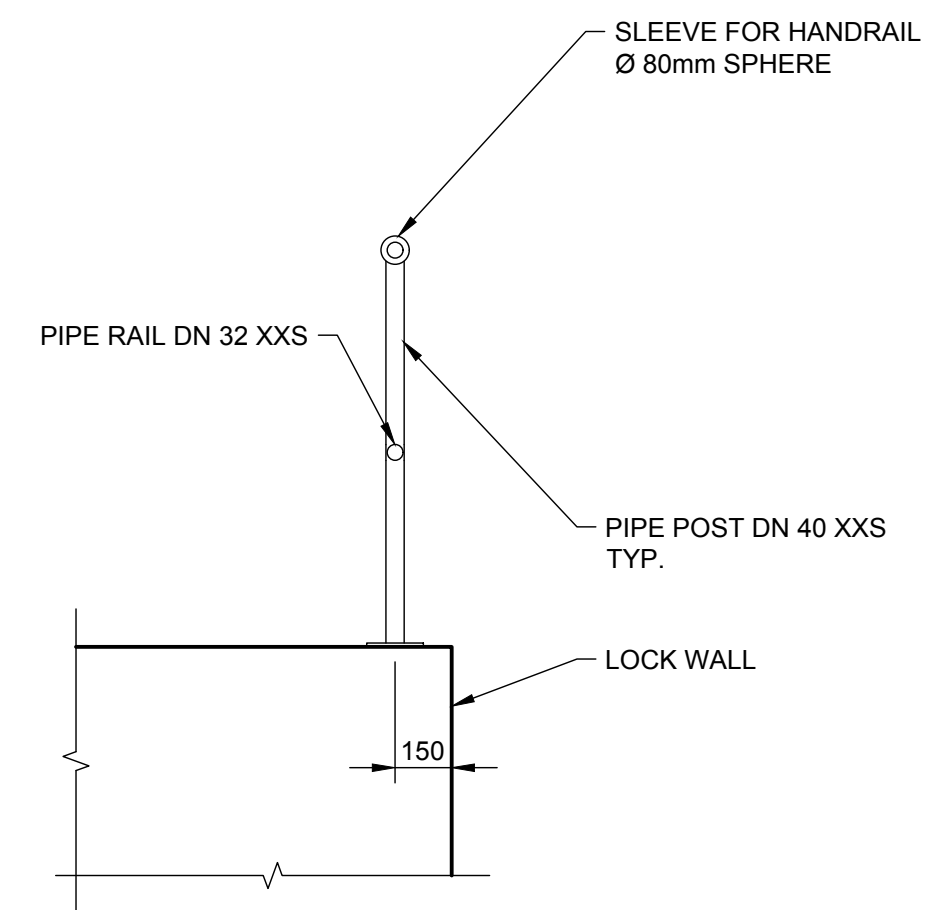
DETAIL 2
 1:20 (TYPICAL RAILING)



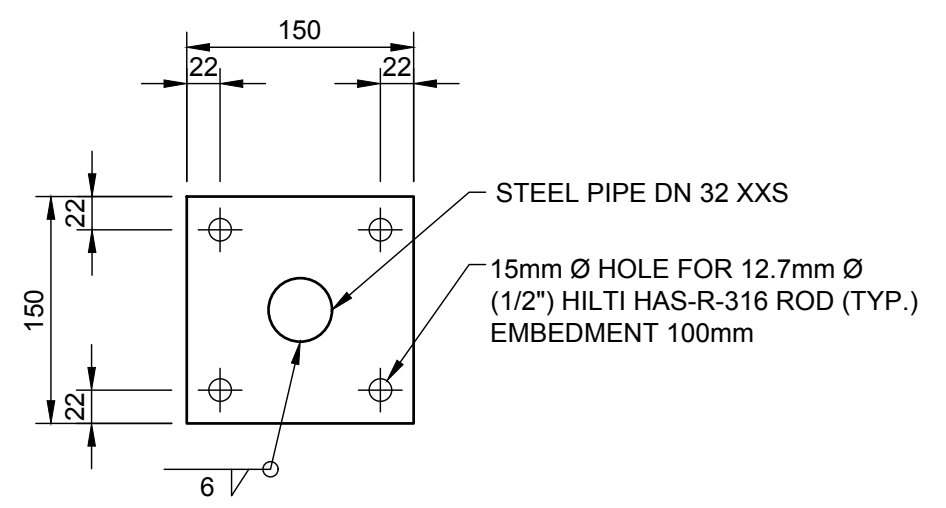
DETAIL 3
 1:25



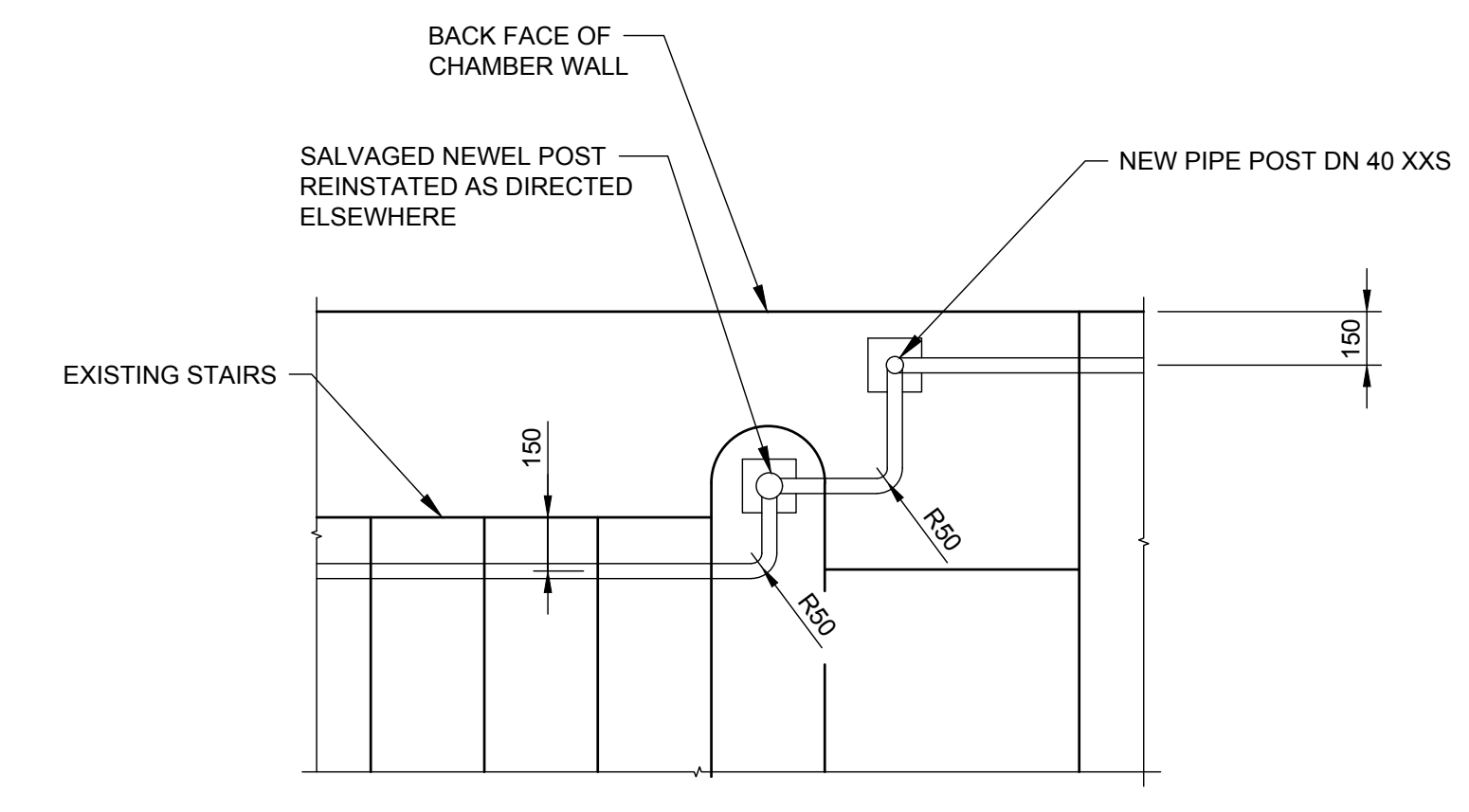
DETAIL 4
 1:25



SECTION A
 1:20



SECTION B
 1:5



DETAIL 5
 1:20



No.	Description	Drawn By / Des. Par.	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

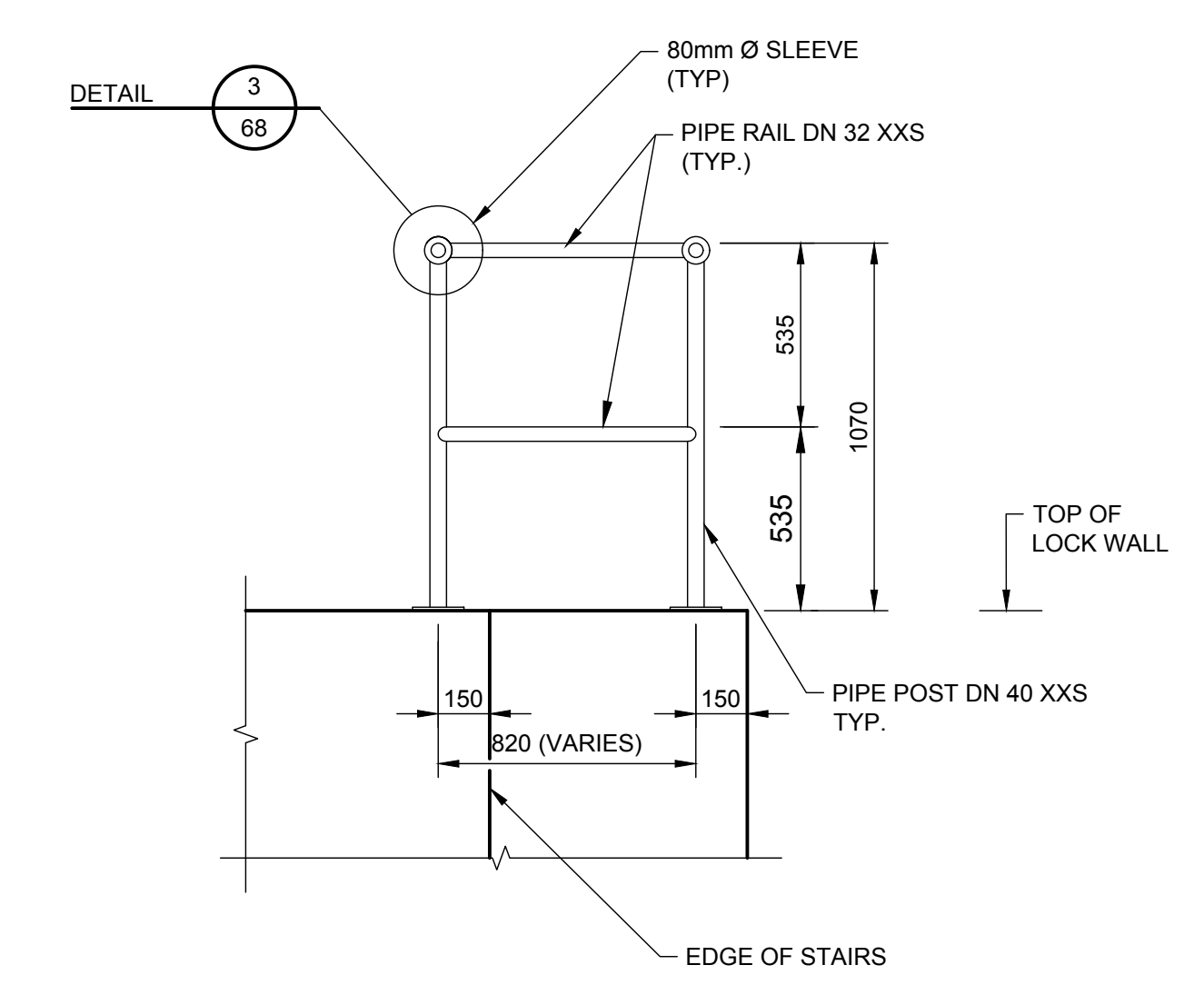
Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number / Numéro du détail
B	Location dwg. number / Numéro sur dessin

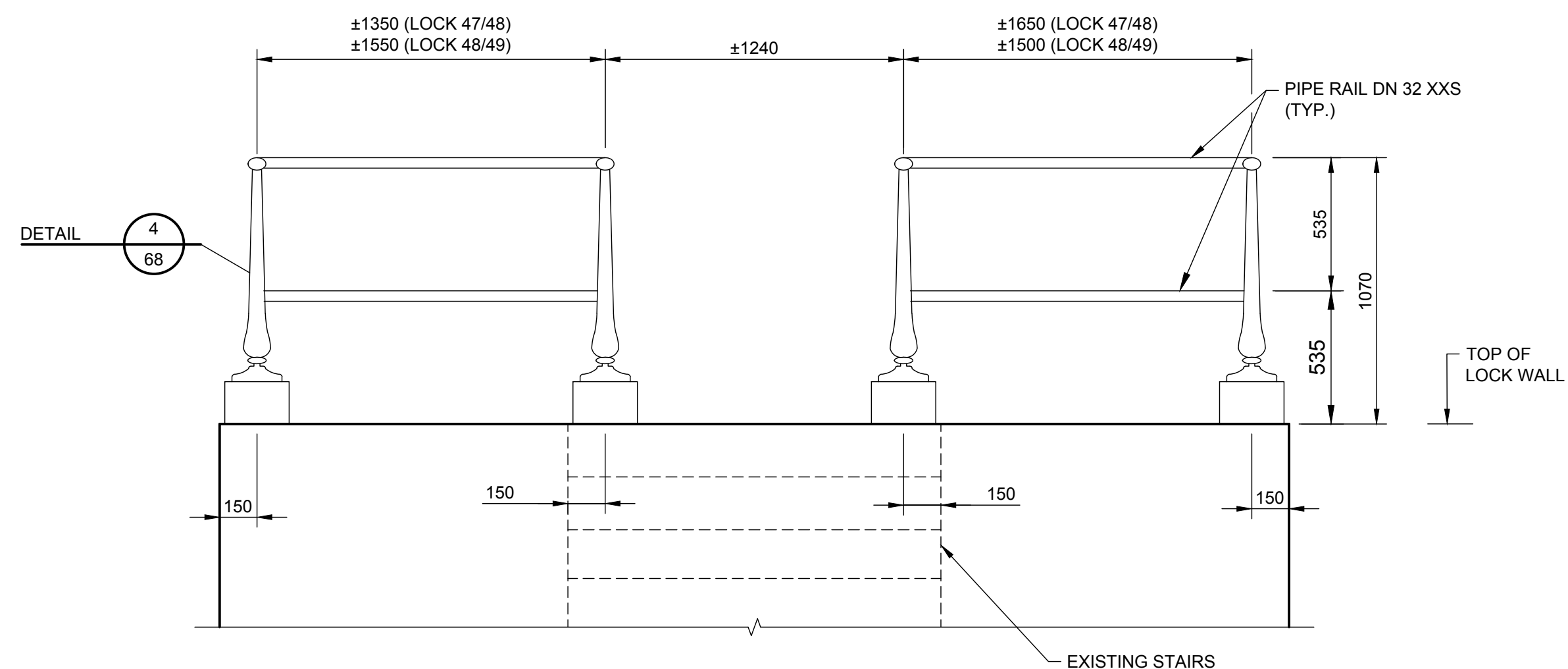
Project title / Titre du projet
RIDEAU CANAL NATIONAL HISTORIC SITE KINGSTON MILLS LOCKS 46-49 REHABILITATION
 ELGIN ONTARIO

Drawing title / Titre du dessin
RAILING DETAILS

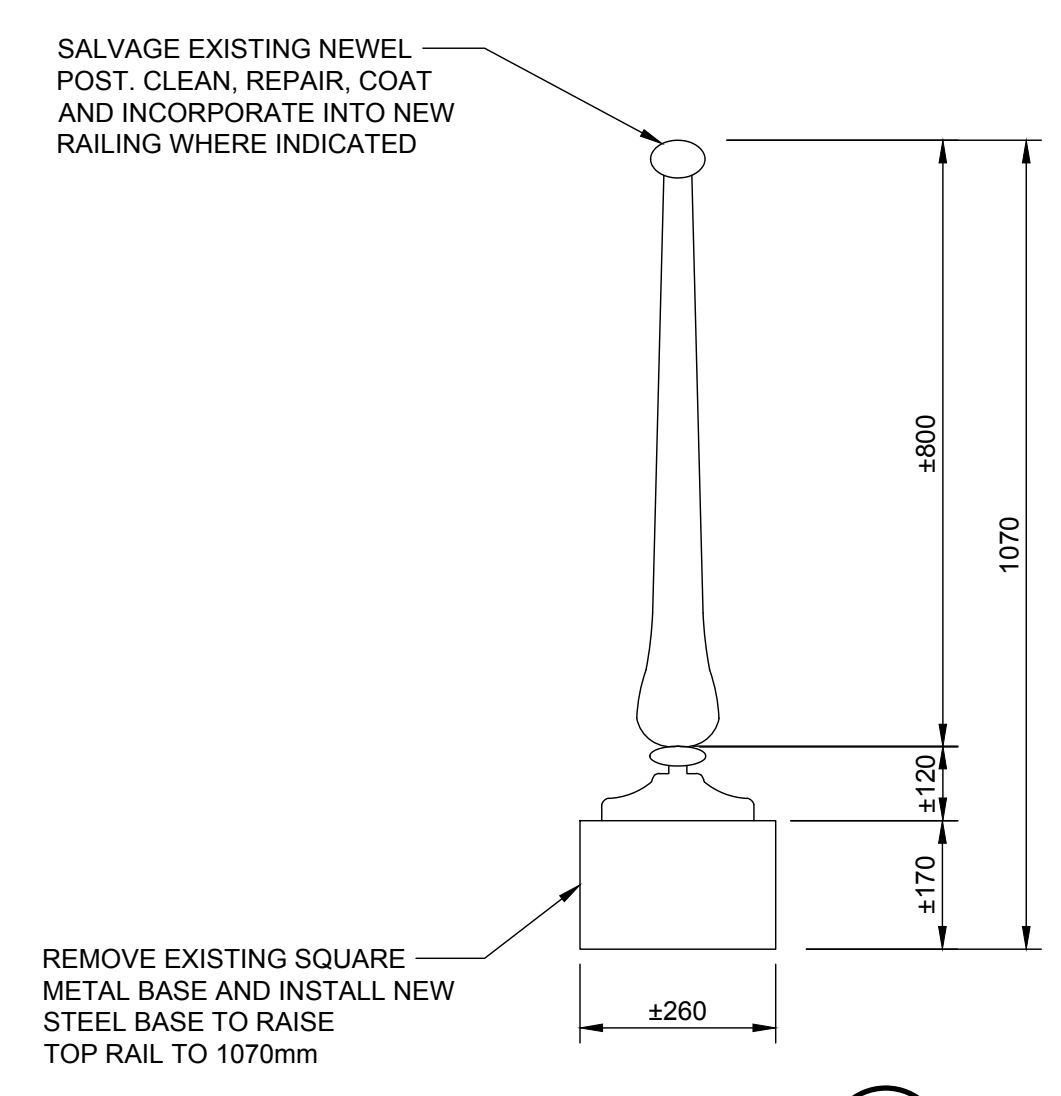
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 68
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 70 of 78



DETAIL 1
 1:20



SECTION D
 1:20

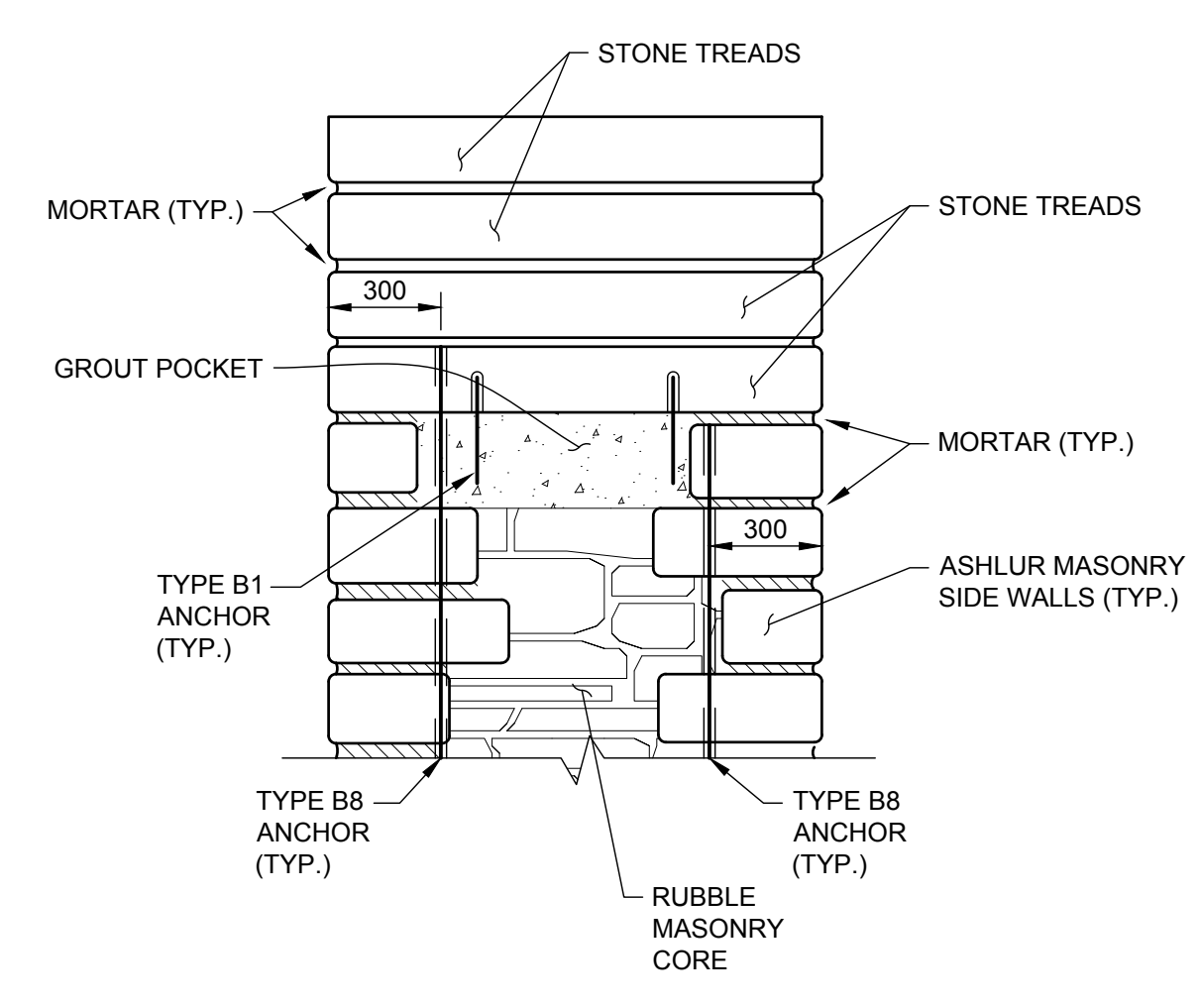


DETAIL 4
 1:10

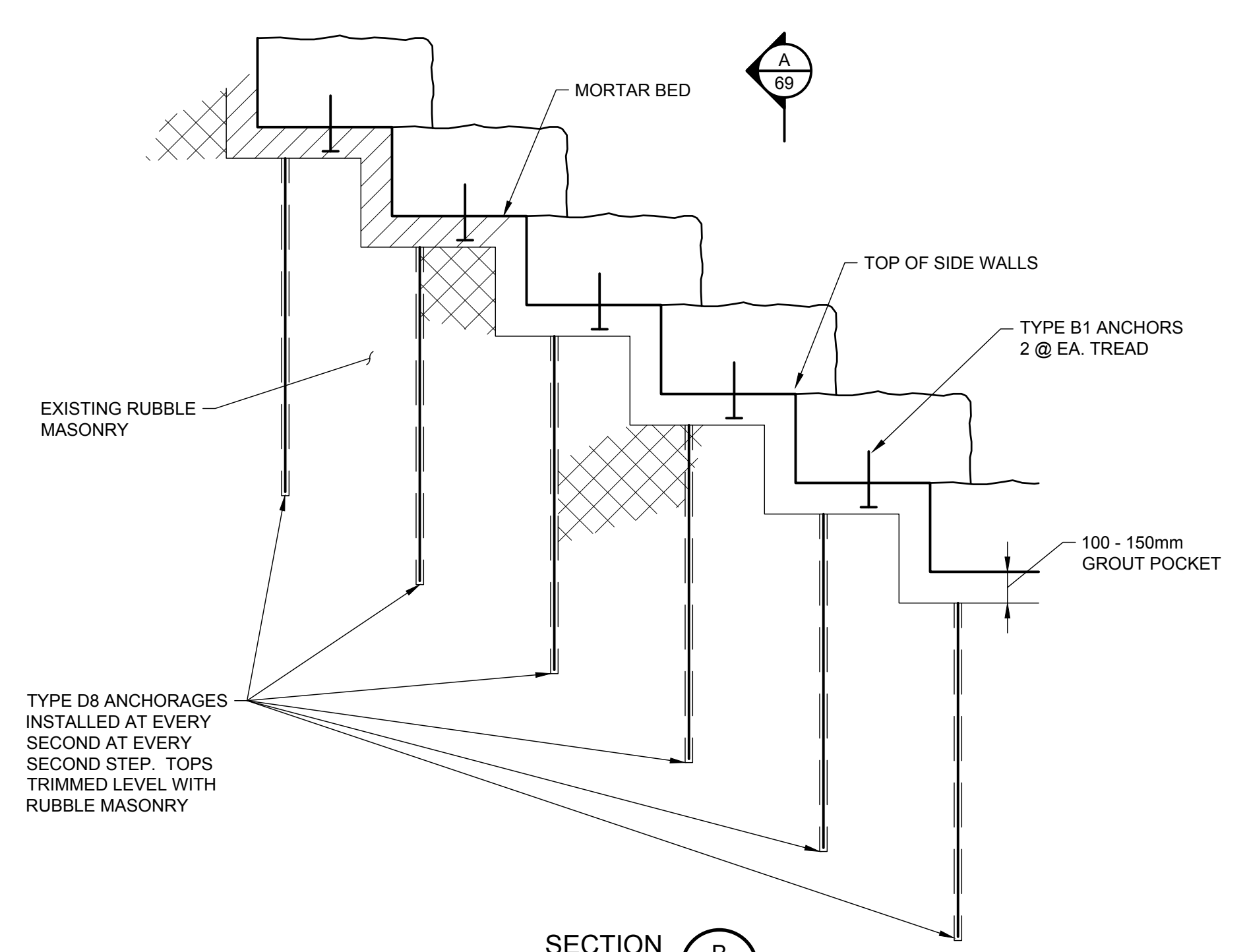


- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 - FIELD MEASURE ALL DIMENSIONS. REPORT ALL DISCREPANCIES TO DEPARTMENT REPRESENTATIVE.

REINSTATEMENT OF NEW SALVAGE TREAD

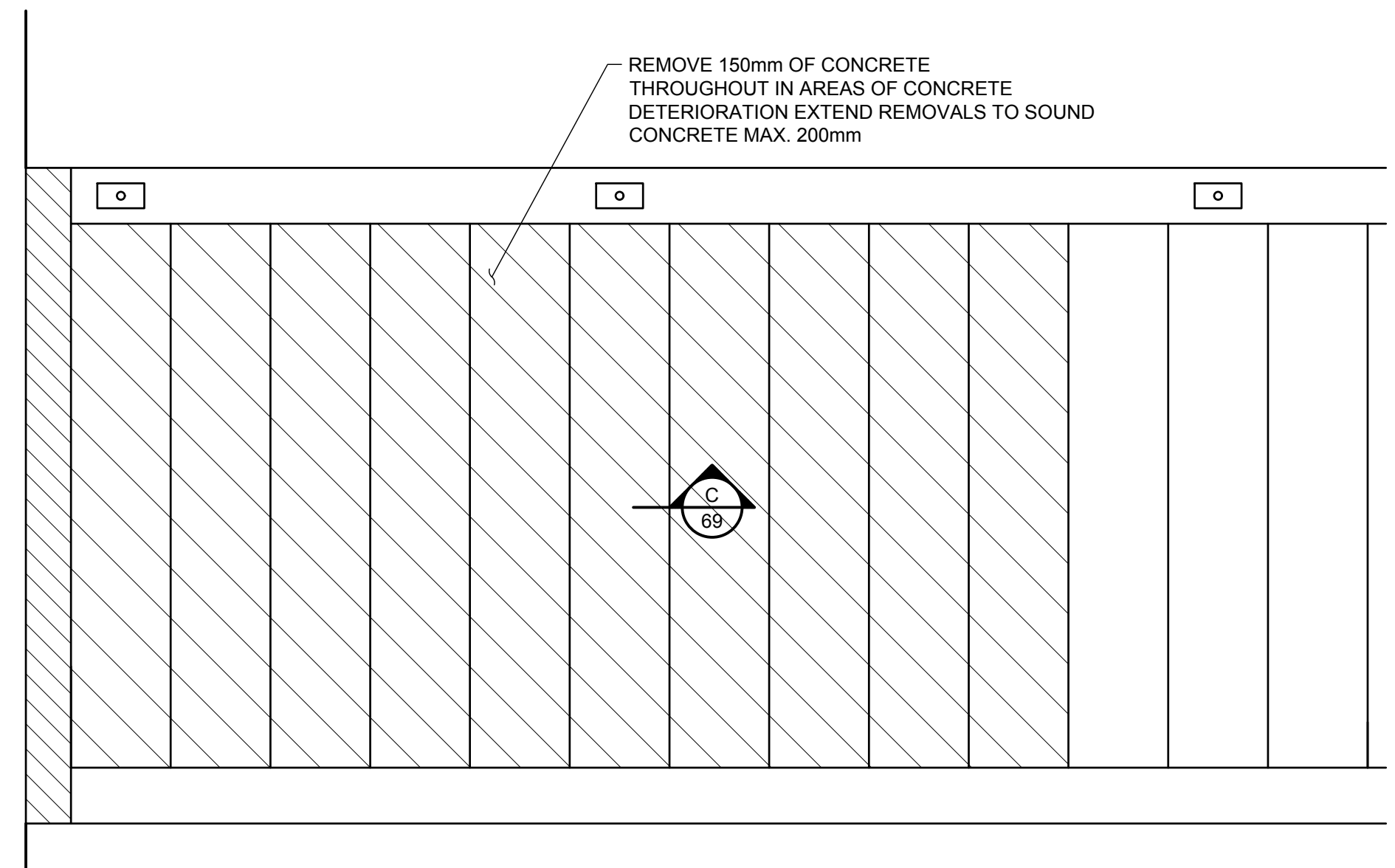


SECTION A
1:20



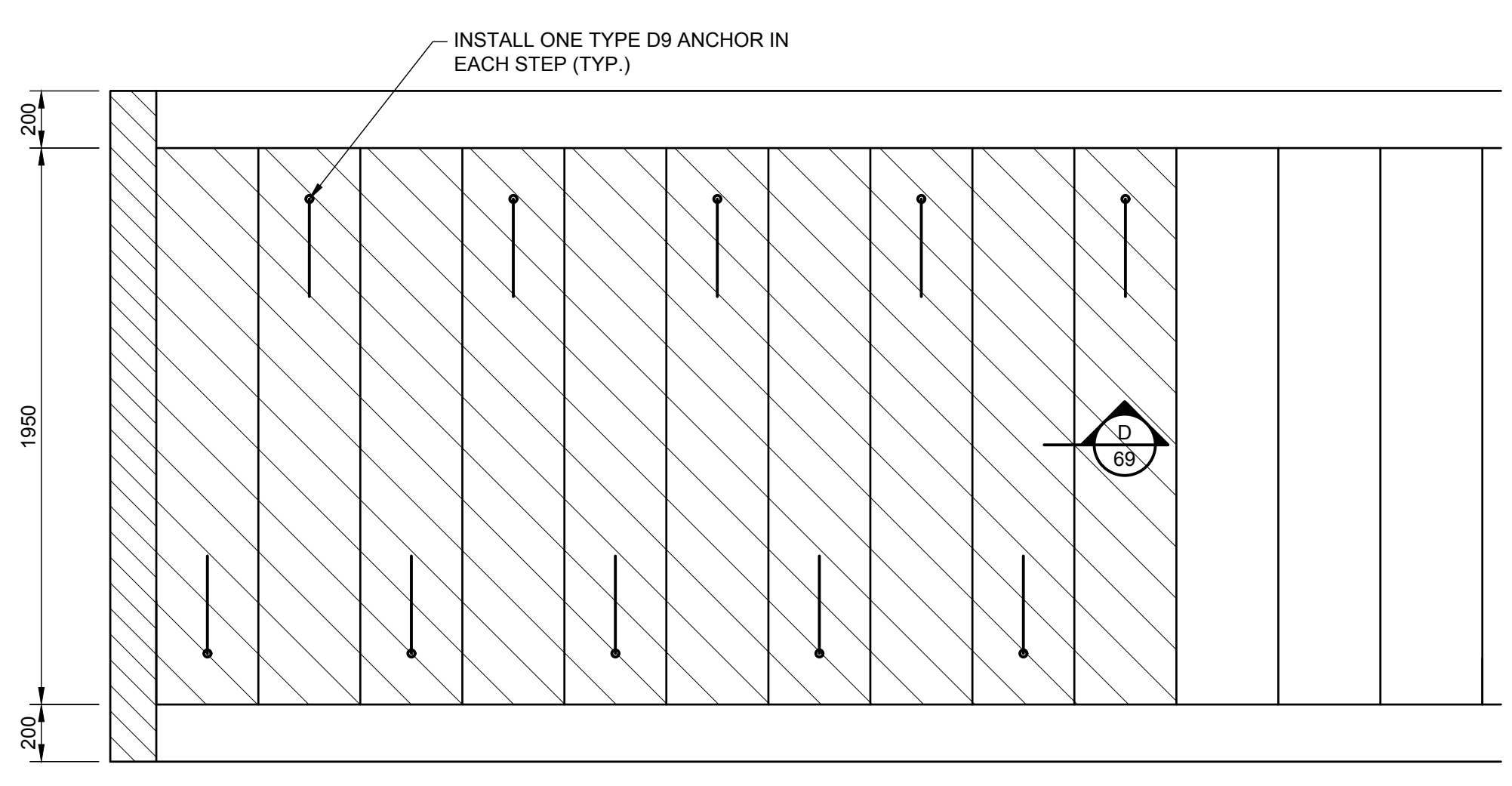
SECTION B
1:20

CONCRETE STAIR 48/49 - REMOVALS

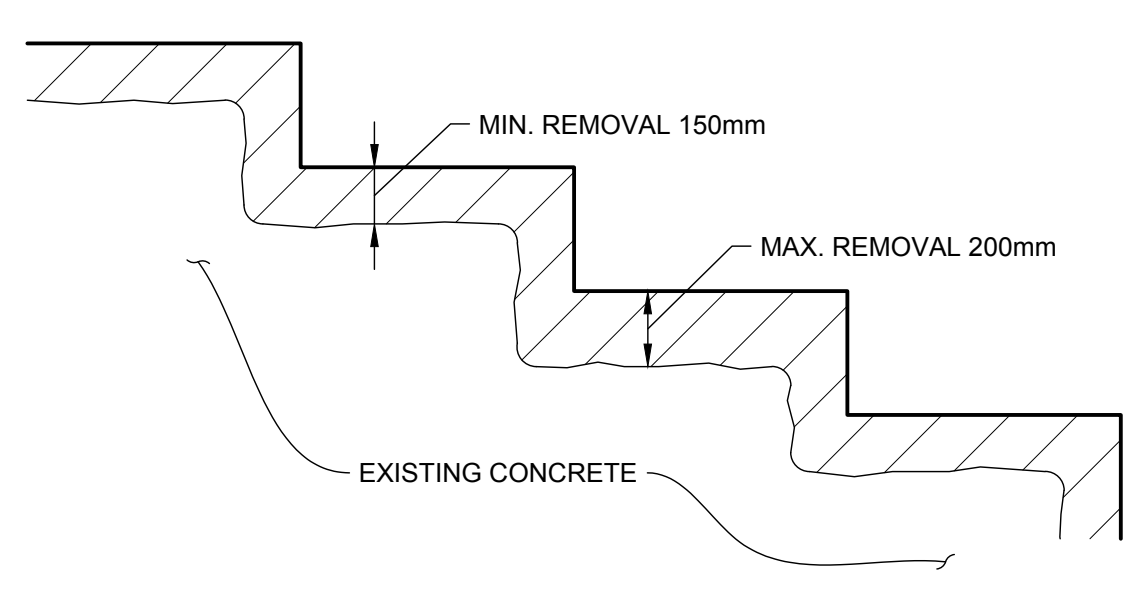


PLAN - STAIRS
1:20

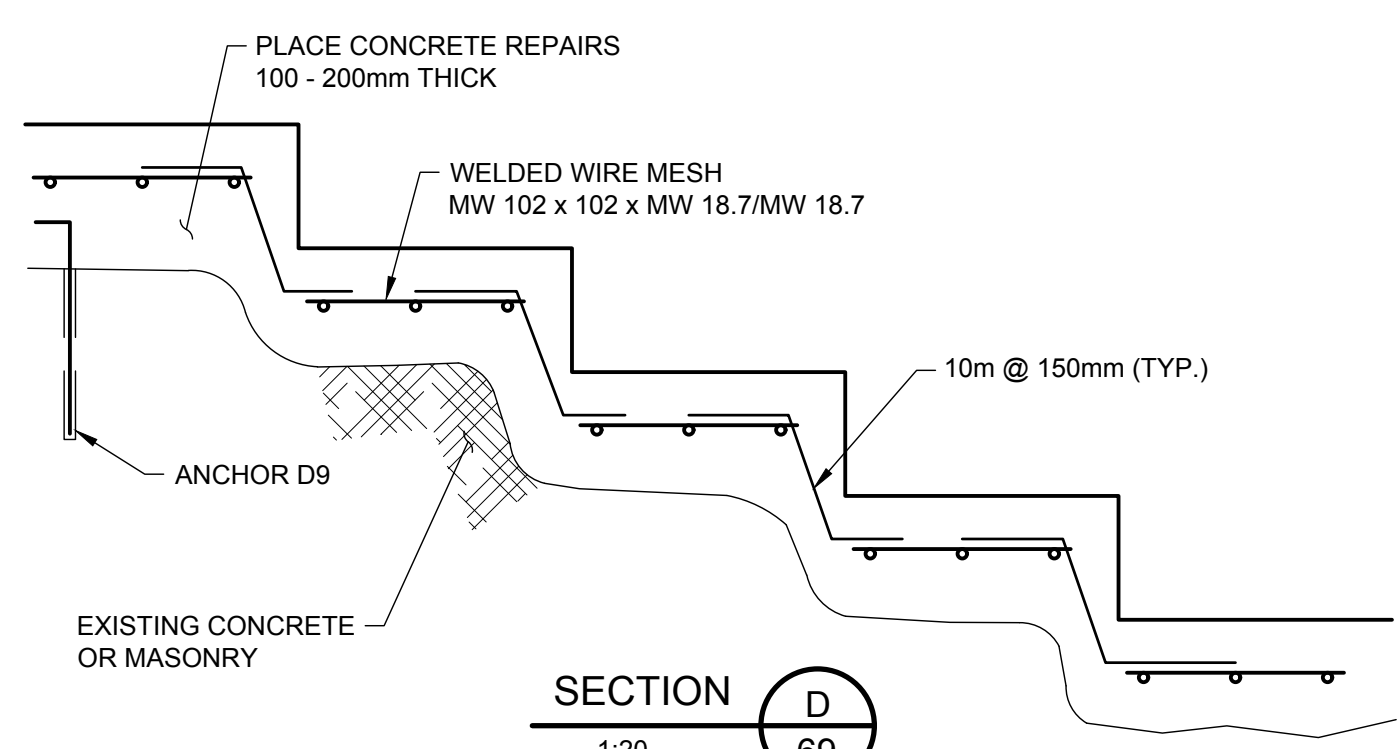
CONCRETE STAIR 48/49 - CONCRETE REPAIRS



PLAN - STAIRS
1:20



SECTION C
1:20



SECTION D
1:20

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet

RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION
 ELGIN ONTARIO

Drawing title / Titre du dessin

STAIR DETAILS

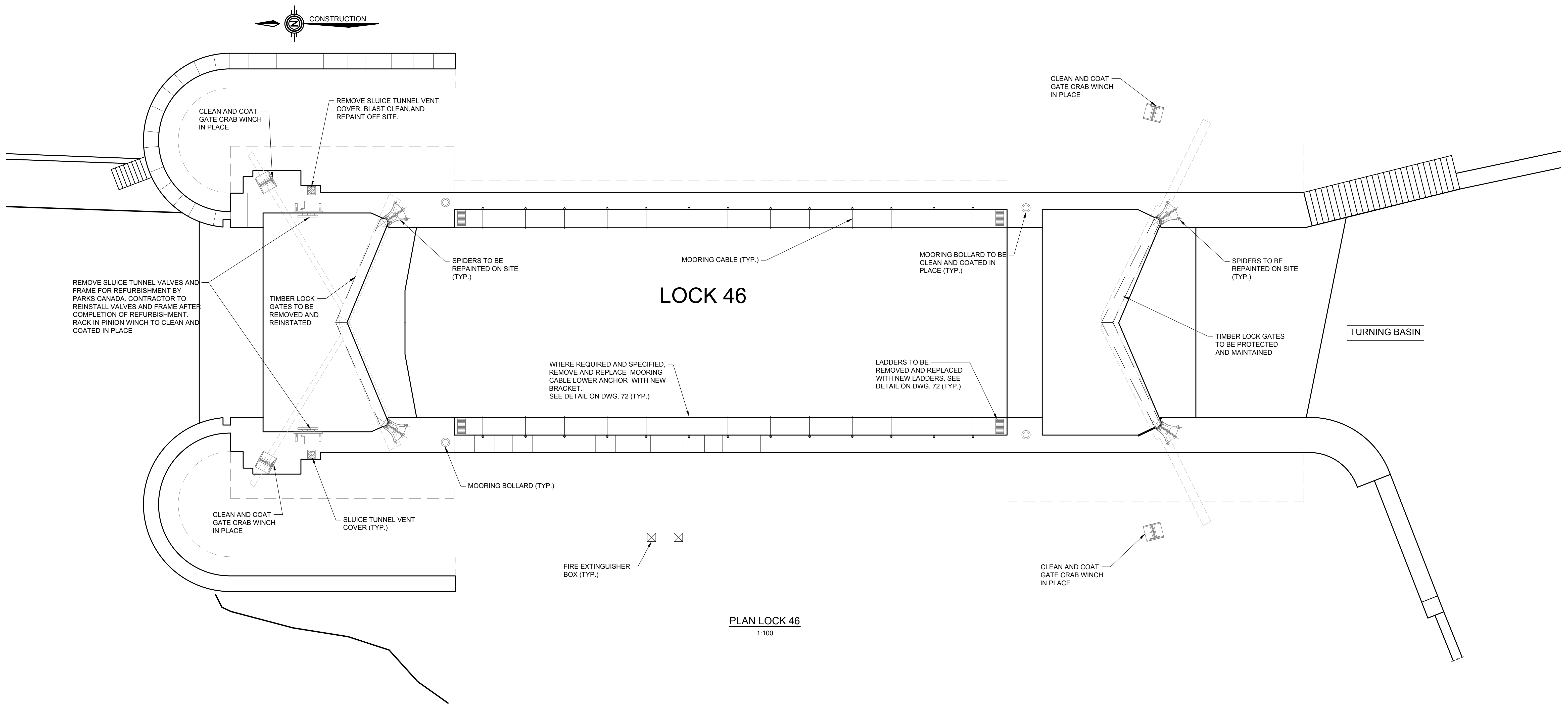
Drawn by / Dessiné par
 ADRIAN MEUNIER
 Designed by / Conçu par
 FELIX WASIEWICZ

Approved by / Approuvé par
 JULIA MARSON
 Drawing Date / Date du dessin
 JUNE 2018

Project manager / Administrateur de projet
 SHAWN FILLION
 Drawing Number / Numéro du Dessin
 69

Project Number / Numéro du projet
 R.079796.009
 Sheet / Feuille
 71 of 78

NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.



PLAN LOCK 46
 1:100

1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
Revision / Révision			

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet

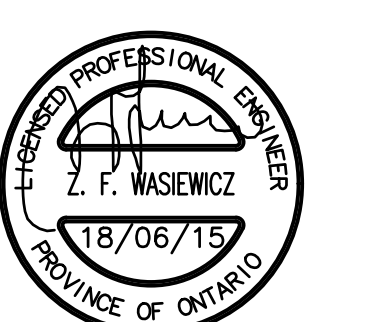
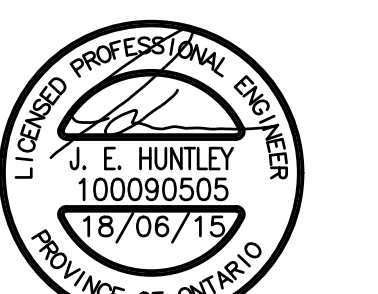
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**

ELGIN ONTARIO

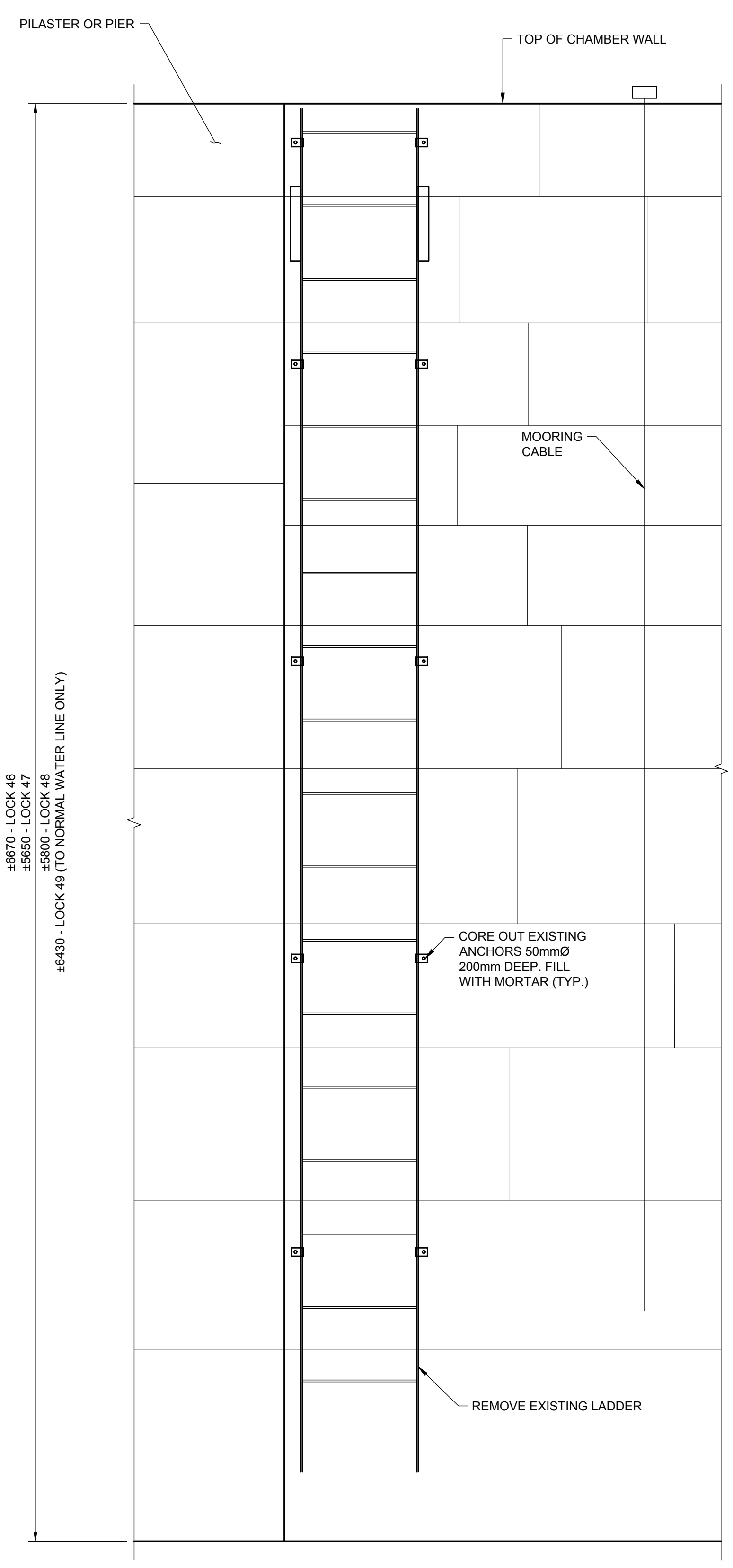
Drawing title / Titre du dessin

**LOCK 46 METAL WORK
 PLAN**

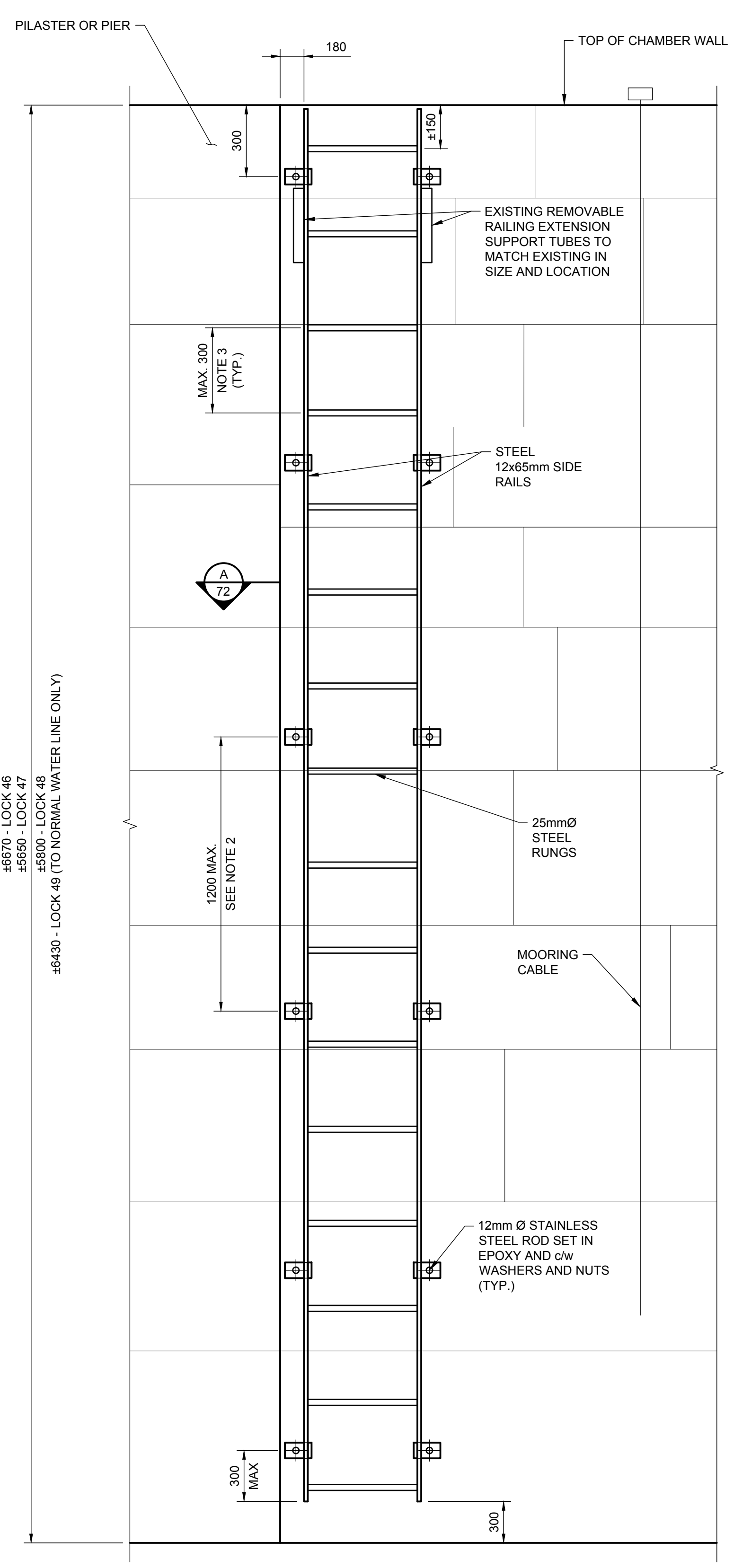
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 70
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 72 of 78



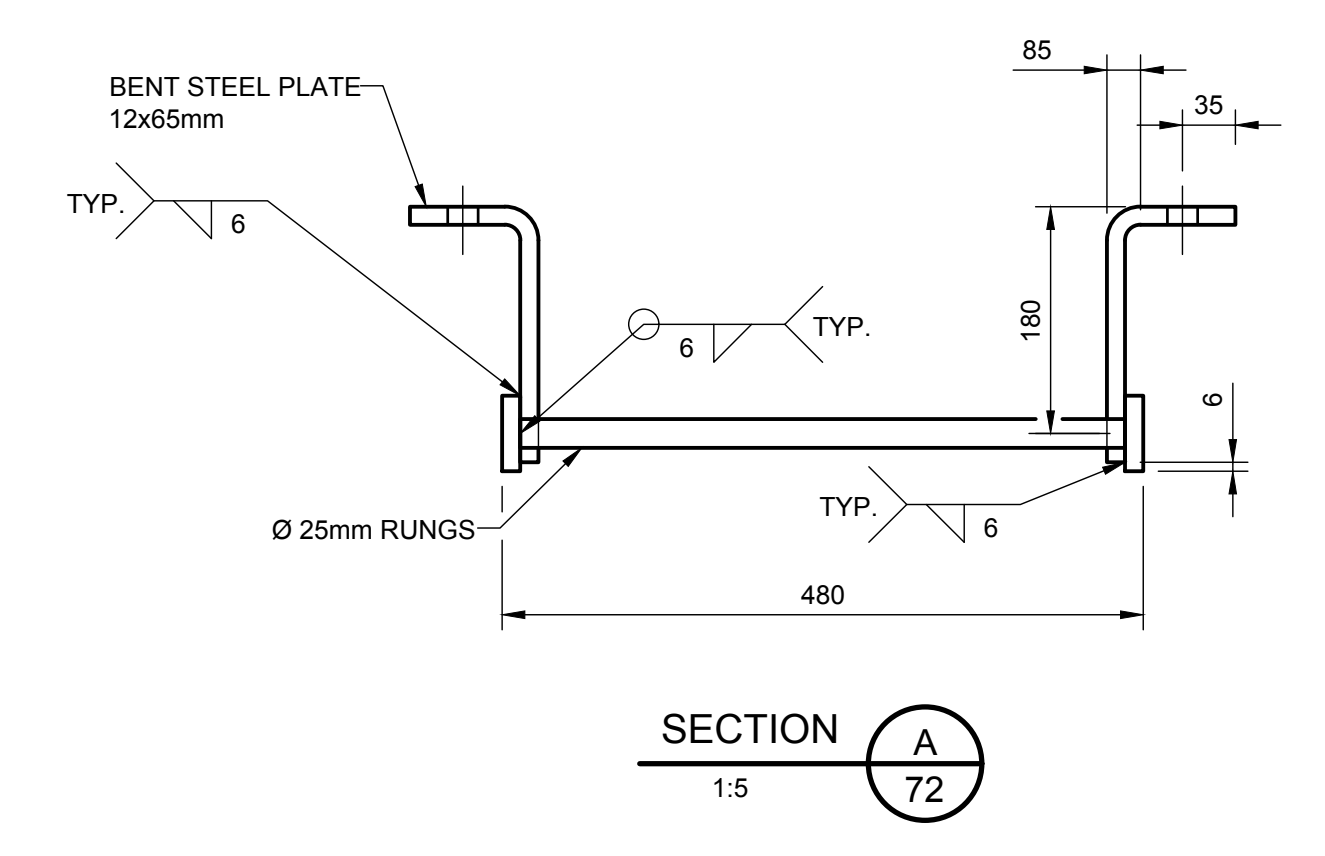
- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND GENERAL NOTES ON DRAWING 00.
 - LOCATION OF LADDER ANCHOR BRACKETS TO SUIT SITE CONDITIONS. BRACKETS SHALL NOT BE LOCATED AT EXISTING ANCHOR HOLES, OR WITHIN 100mm OF STONE JOINTS.
 - RUNG SPACING SHALL BE EQUAL THROUGHOUT.
 - LADDER SHALL BE SHOP PAINTED FOLLOWING BRACKET WELDING.
 - EXISTING LADDERS TO BE FIELD MEASURED. NEW LADDERS SHOP DRAWING TO BE DEVELOPED UTILIZING EXISTING LADDER DIMENSION AND NEW DESIGN REQUIREMENTS AS SHOWN



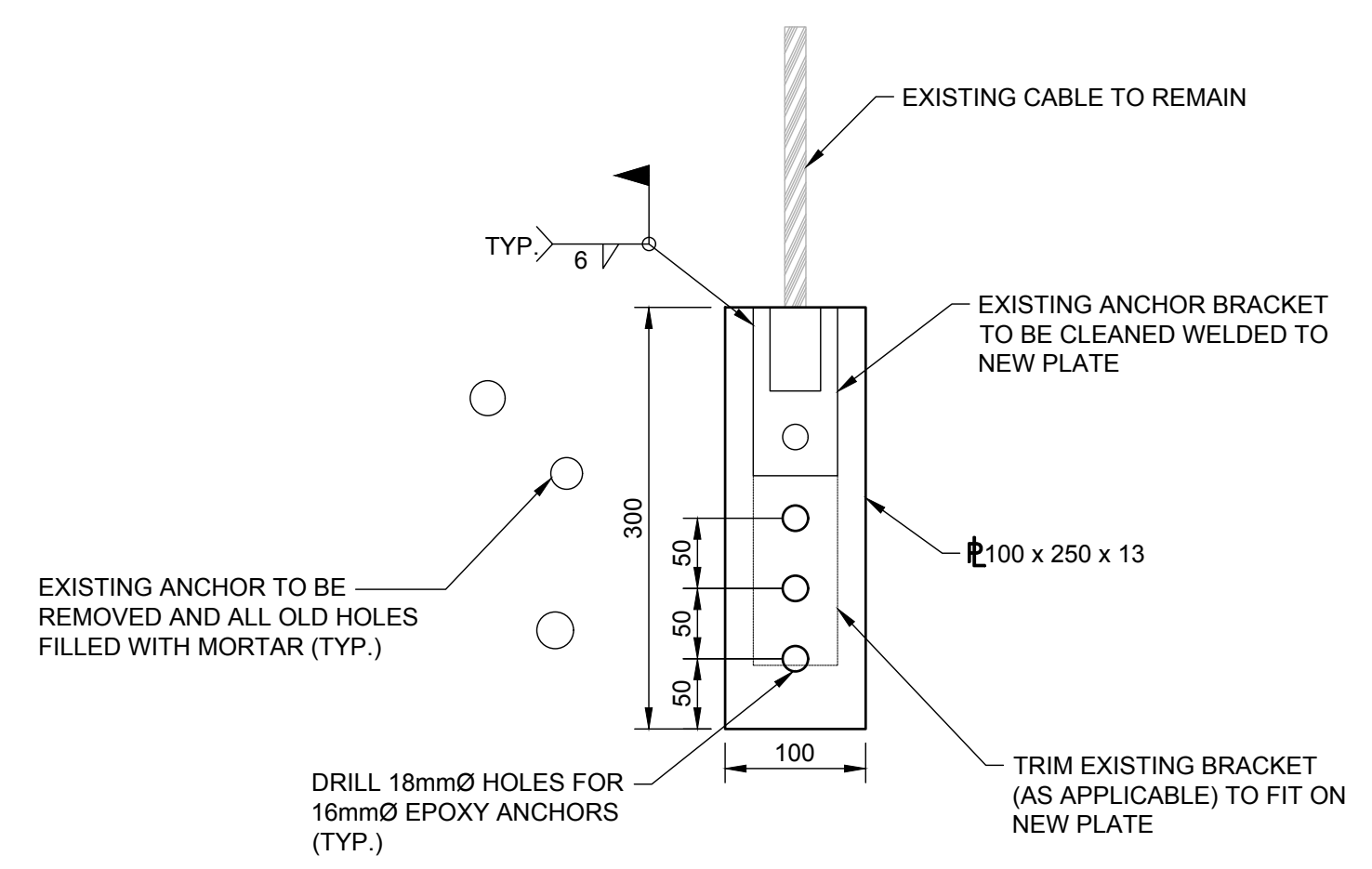
TYPICAL LADDER - REMOVAL
1:15



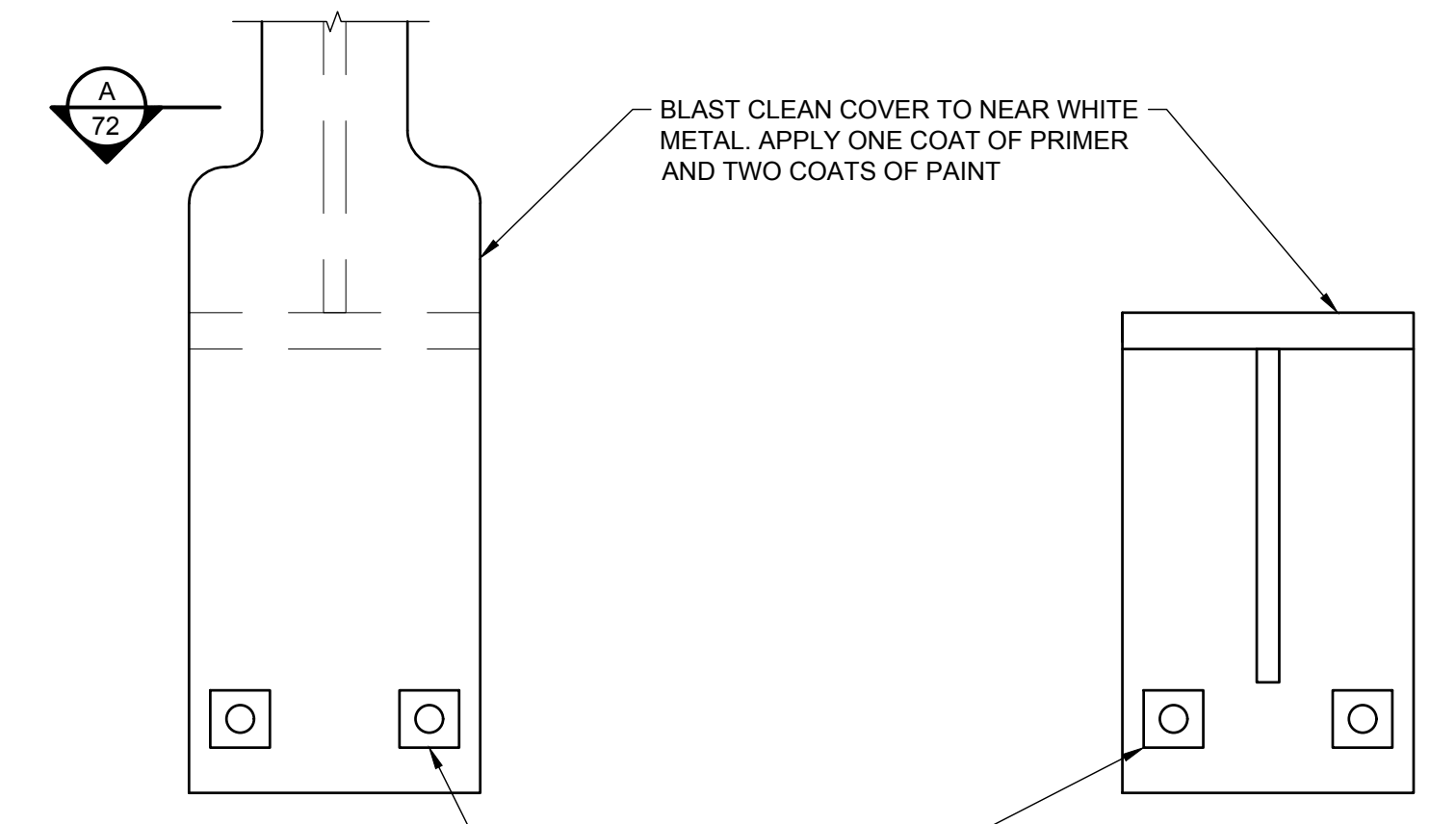
TYPICAL LADDER - NEW
1:15



SECTION A
1:5



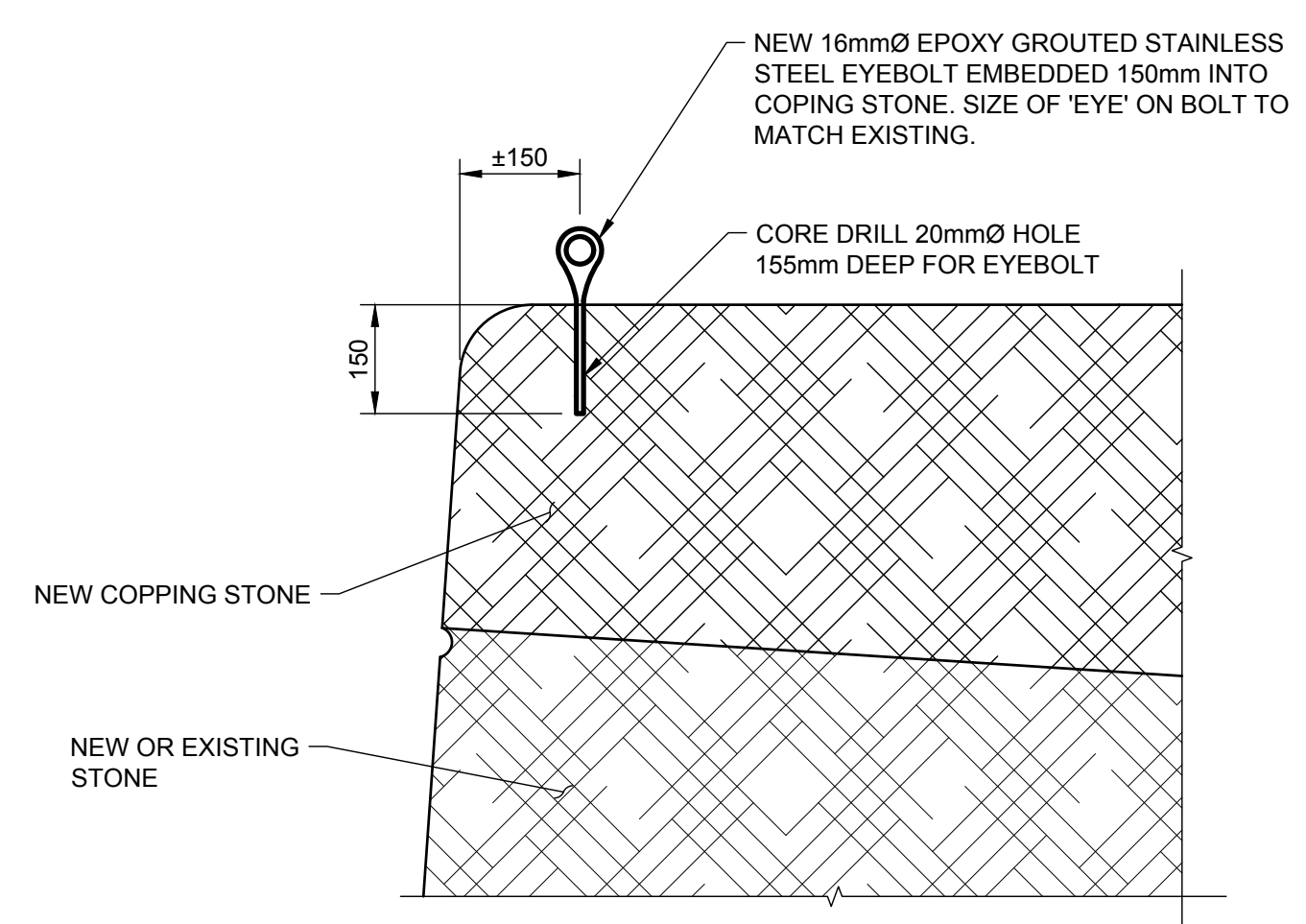
LOWER MOORING CABLES ANCHORAGE
1:5



SECTION A
1:5

- BOLT REMOVAL AND INSTALLATION NOTE:**
- CAREFULLY CUT-OFF EXISTING SQUARE NUTS.
 - REMOVE WINCH AND REFURBISH.
 - CORE OUT EXISTING ANCHOR WITH 25mmØ CORE BIT.
 - REINSTALL NEW STAINLESS STEEL M19 BOLT EMBEDDED 200mm IN EPOXY C/W STAINLESS STEEL WASHERS AND NUTS IN THE SAME LOCATION.
 - NUMBER AND LOCATION OF BOLTS VARIES.
 - SIMILAR PROCEDURE APPLIES TO CRAB WINCH.
 - APPLY ONE COAT OF PRIMER AND TWO COATS OF PAINT

SLUICE TUNNEL RACK AND PINION WINCH - ANCHORS
1:5



NEW UPPER ANCHORAGE FOR MOORING LINES
1:10

No.	Description	Des. By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number Numéro du détail
B	Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

CHAMBER WALL LADDERS & MISC. STEEL

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin 72
Project Number / Numéro du projet R.079796.009	Sheet / Feuille 74 of 78



EAST UPPER GATE WALL



EAST WALL UPPER PIER



EAST CHAMBER WALL



EAST WALL LOWER PIER



WEST WALL LOWER PIER



WEST CHAMBER WALL



WEST WALL UPPER PIER



WEST UPPER GATE WALL



BREAST WALL



UPPER GATE RECESS FLOOR



CHAMBER FLOOR



LOWER GATE APRON



EAST SLUICE TUNNEL LOOKING DOWN 2017



EAST SLUICE TUNNEL LOOKING UP - 2017



WEST SLUICE TUNNEL LOOKING DOWN - 2017



WEST SLUICE TUNNEL LOOKING UP - 2017



No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15
Revision / Révision			

Do not scale drawings.
 Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

**LOCK 46
 PHOTO SHEET I**

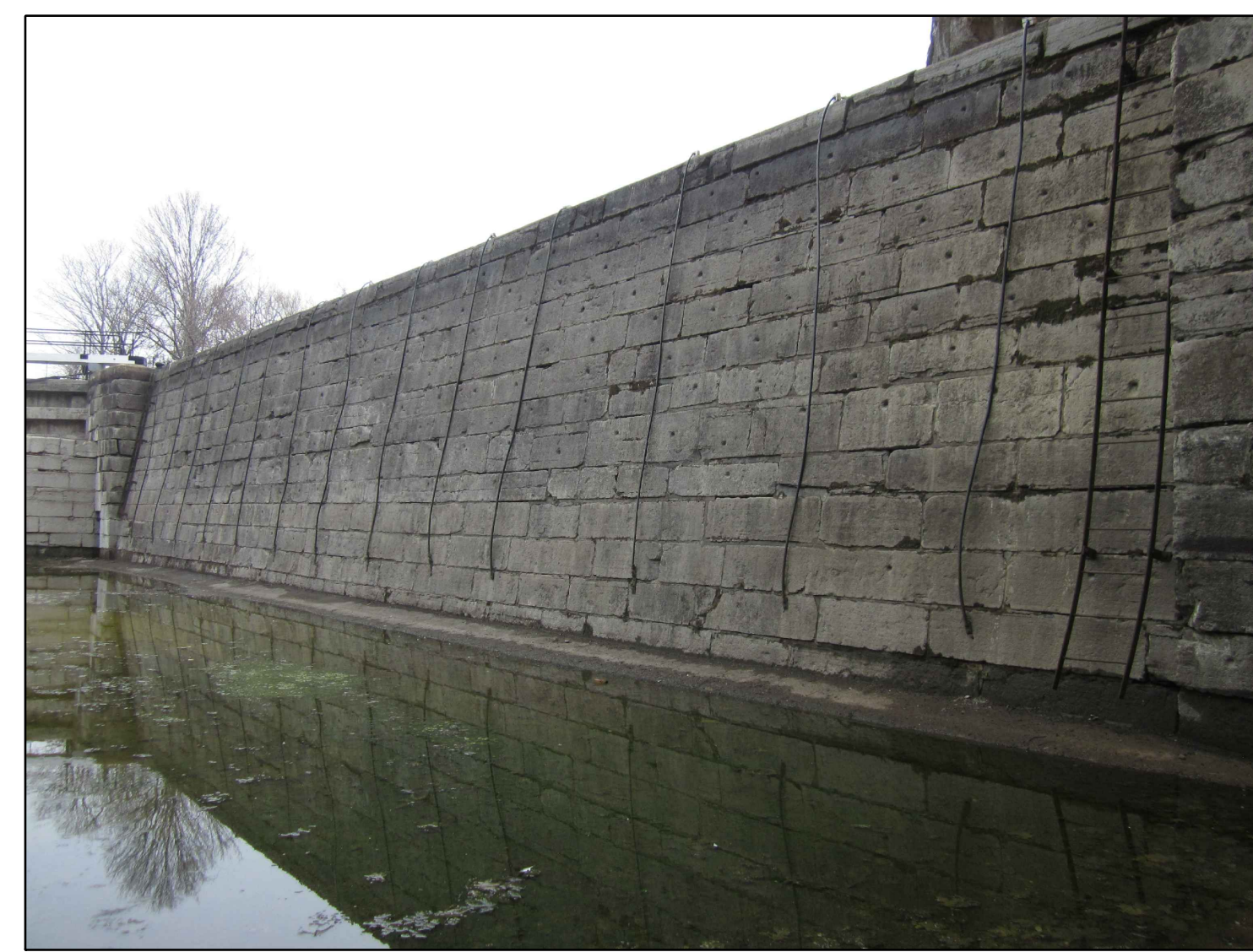
Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILION	Drawing Number / Numéro du Dessin P-100
Project Number / Numéro du projet R.079796.009	Sheet / Feuille # of du 78



EAST UPPER GATE WALL - 2017



EAST WALL UPPER PIER



EAST CHAMBER WALL



EAST WALL LOWER PIER



WEST WALL LOWER PIER



WEST CHAMBER WALL



WEST WALL UPPER PIER



WEST UPPER GATE WALL - 2017



BREAST WALL



UPPER GATE RECESS FLOOR



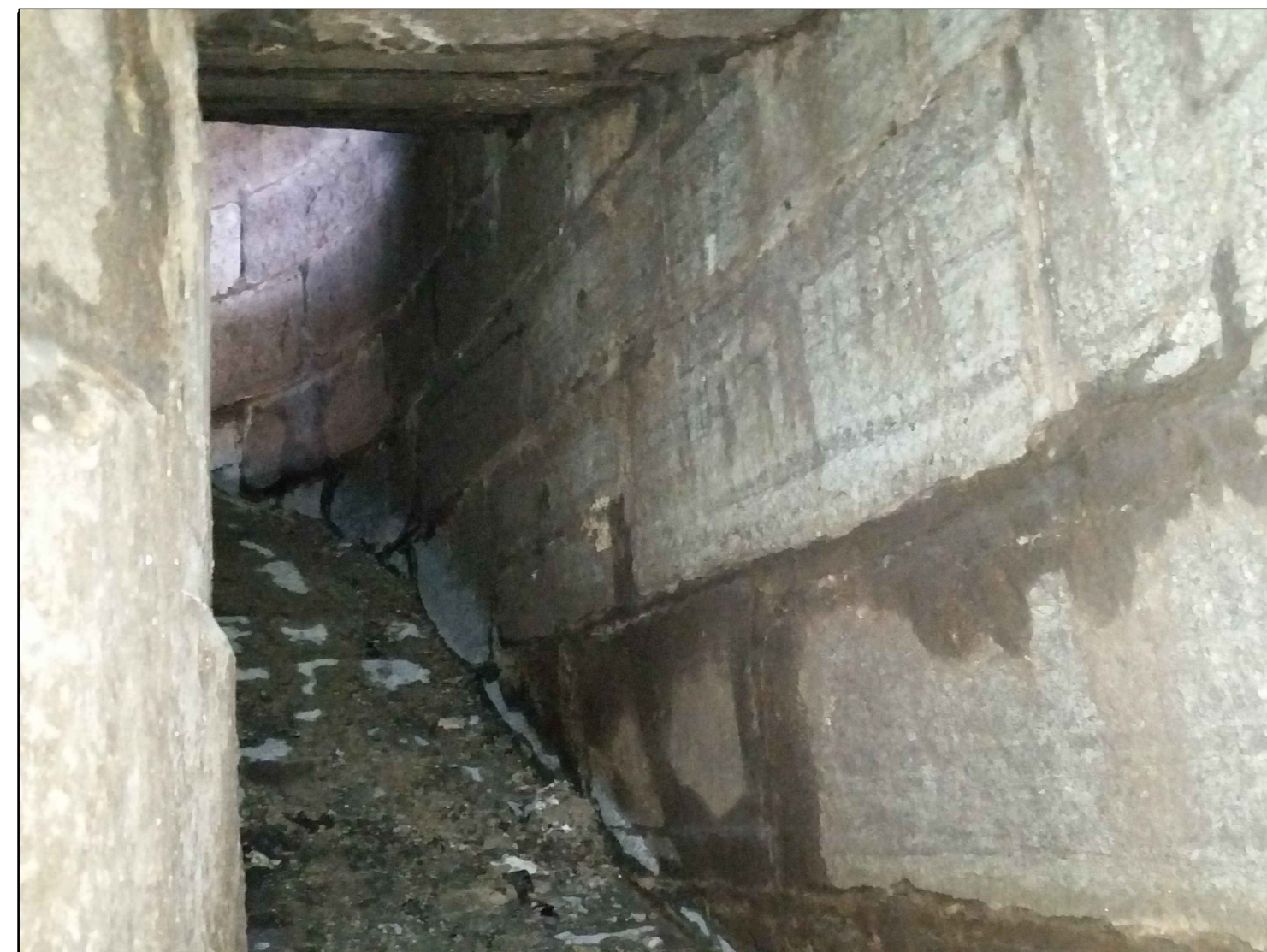
CHAMBER FLOOR



LOWER GATE RECESS FLOOR - 2017



EAST SLUICE TUNNEL LOOKING DOWN - 2017



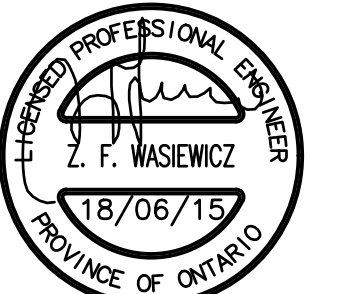
EAST SLUICE TUNNEL LOOKING UP - 2017



WEST SLUICE TUNNEL LOOKING DOWN - 2017



WEST SLUICE TUNNEL LOOKING UP - 2017



1	ISSUED FOR TENDER	J.M.	2018-06-15
No.	Description	Drawn By / Des. Par	Date
	Revision / Révision		

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

**LOCK 47
 PHOTO SHEET II**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin P-101
Project Number / Numéro du projet R.079796.009	Sheet / Feuille # of du 78



EAST WALL UPPER PIER



EAST CHAMBER WALL



EAST CHAMBER WALL



EAST WALL LOWER PIER



WEST WALL LOWER PIER



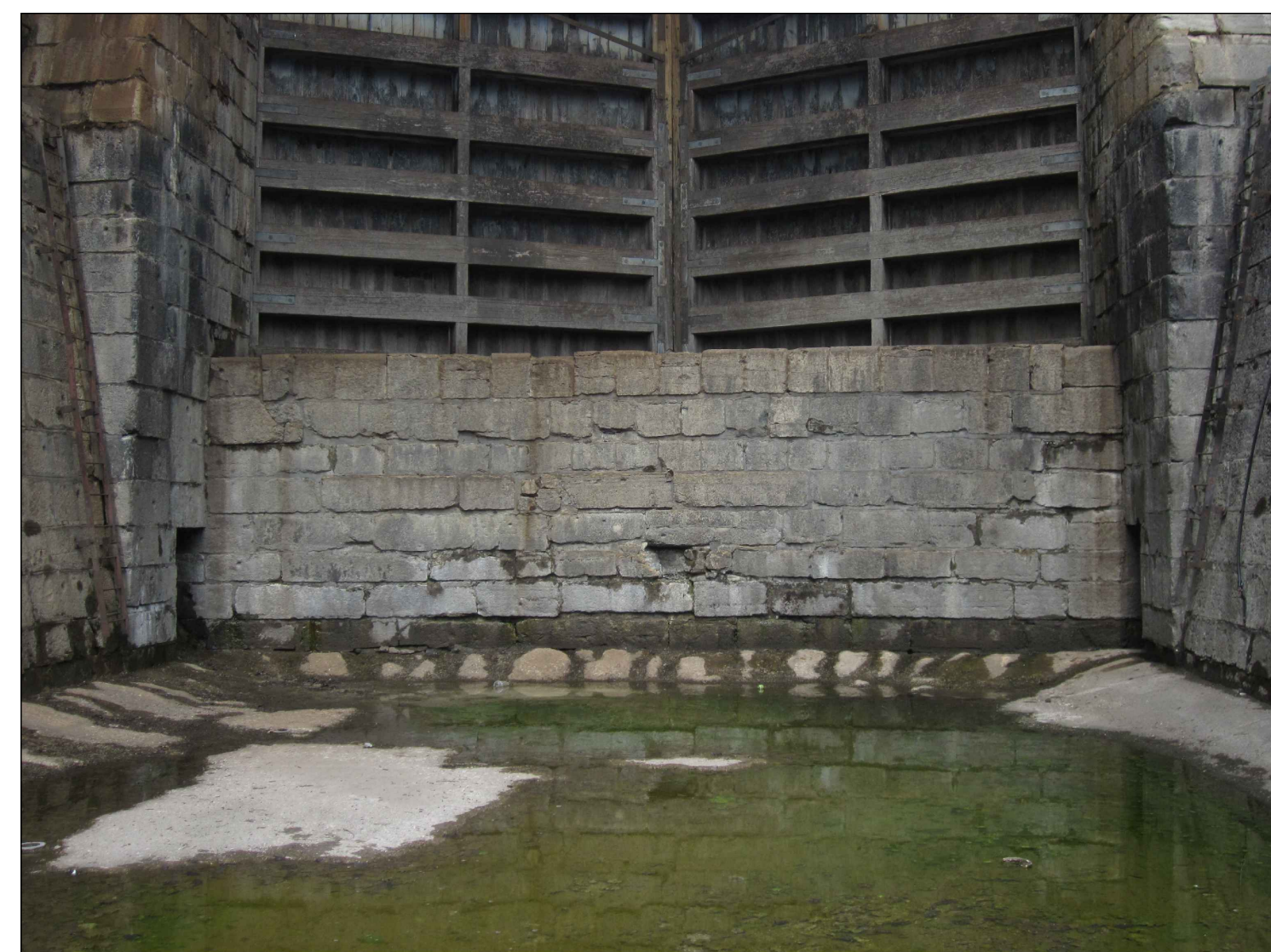
WEST CHAMBER WALL



WEST CHAMBER WALL



WEST WALL UPPER PIER



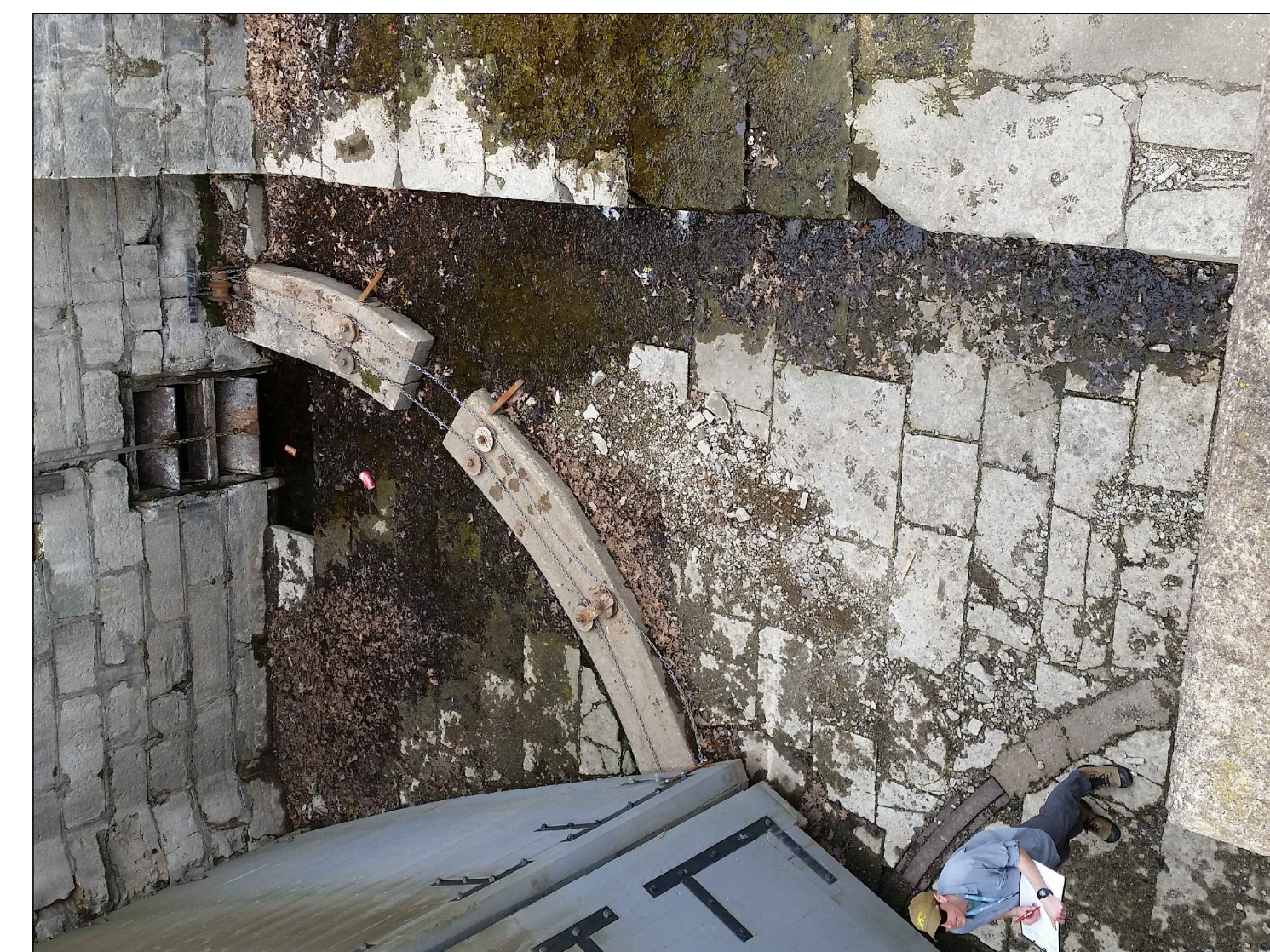
BREAST WALL



CHAMBER FLOOR (LOOKING NORTH) - 2017



CHAMBER FLOOR (LOOKING SOUTH)



LOWER GATE RECESS FLOOR



EAST SLUICE TUNNEL LOOKING DOWN - 2017



EAST SLUICE TUNNEL LOOKING UP - 2017



WEST SLUICE TUNNEL LOOKING DOWN - 2017



WEST SLUICE TUNNEL LOOKING UP - 2017



No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15

Revision / Révision		Date

Do not scale drawings.
 Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 48
 PHOTO SHEET III**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018

Project manager / Administrateur de projet SHAWN FILION	Drawing Number / Numéro du Dessin P-102
Project Number / Numéro du projet R.079796.009	Sheet / Feuille # of du 78



EAST BASIN WALL (NORTH END) - 2017



EAST BASIN WALL (CENTER) - 2017



EAST BASIN WALL (SOUTH END) - 2017



SOUTH BASIN WALL - 2017



WEST BASIN WALL - 2017



BASIN RIVERBED (LOOKING WEST)



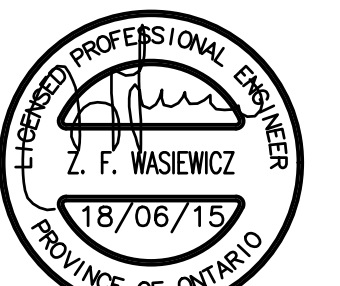
NORTH BASIN WALL (WEST END) - 2017



NORTH BASIN WALL (CENTER) - 2017

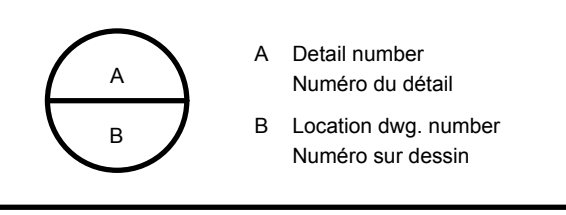


NORTH BASIN WALL (EAST END) - 2017



No.	Description	Drawn By / Des. Par	Date
1	ISSUED FOR TENDER	J.M.	2018-06-15
Revision / Révision			

Do not scale drawings.
 Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.



Project title / Titre du projet
**RIDEAU CANAL
 NATIONAL HISTORIC SITE
 KINGSTON MILLS
 LOCKS 46-49
 REHABILITATION**
 ELGIN ONTARIO

Drawing title / Titre du dessin
**LOCK 48
 PHOTO SHEET IV**

Drawn by / Dessiné par ADRIAN MEUNIER	Designed by / Conçu par FELIX WASIEWICZ
Approved by / Approuvé par JULIA MARSON	Drawing Date / Date du dessin JUNE 2018
Project manager / Administrateur de projet SHAWN FILLION	Drawing Number / Numéro du Dessin P-103
Project Number / Numéro du projet R.079796.009	Sheet # of du # # of 78