

# LOCK 24 CONCRETE CANAL WALL REHABILITATION

## TRENT SEVERN WATERWAY, ONTARIO

### DRAWING INDEX:


TP-00 - TITLE PAGE

MA-01 - EXISTING CONDITIONS  
 MA-02 - EXISTING CONDITIONS, DEMOLITION AND REMOVALS  
 MA-03 - REPAIR LIMITS AND TYP. DETAILS  
 MA-04 - TYP. DETAILS  
 MA-05 - TYP. DETAILS

C-01 - SITE ACCESS  
 C-02 - NEW STRUCTURE LAYOUT  
 C-03 - TYP. SECTIONS AND DETAILS  
 C-04 - TYP. SECTIONS AND DETAILS  
 C-05 - TYP. SECTIONS AND DETAILS  
 C-06 - TYP. SECTIONS AND DETAILS

D-01 - TYP. DETAILS

L-01 - NEW LANDSCAPE PLAN AND TYP. DETAILS

 TRENT SEVERN WATERWAY,  
 NATIONAL HISTORIC SITE OF CANADA,  
 PARKS CANADA AGENCY



**RIGGS ENGINEERING** Ltd.  
 1240 COMMISSIONERS Rd. WEST  
 SUITE 205  
 LONDON, ONTARIO  
 N6K 1C7  
 (519)-657-1040  
 WWW.RIGGSENGINEERING.COM



revision		date
1	ADDENDUM #2 CHANGES	08/11/2015
0	ISSUED FOR TENDER	07/02/2015

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

- A Detail No.  
No. du détail
- B drawing no. - where detail required  
dessin no. - où détail exigé
- C drawing no. - where detailed  
dessin no. - où détaillé

project title  
titre du projet  
**PETERBOROUGH ONTARIO**

CONCRETE CANAL WALL REHABILITATION  
 LOCK 24, TRENT SEVERN WATERWAY, PARKS  
 CANADA AGENCY

drawing title  
titre du dessin  
**TITLE PAGE**

drawn by  
dessiné par **A.MARCZENKO**

designed by  
conc par **P.L. / W.H. / A.M.**

approved by  
approuvé par **P.LAMPKIN**

tender  
soumission **DUNCAN MANSER** project manager  
administrateur de projets

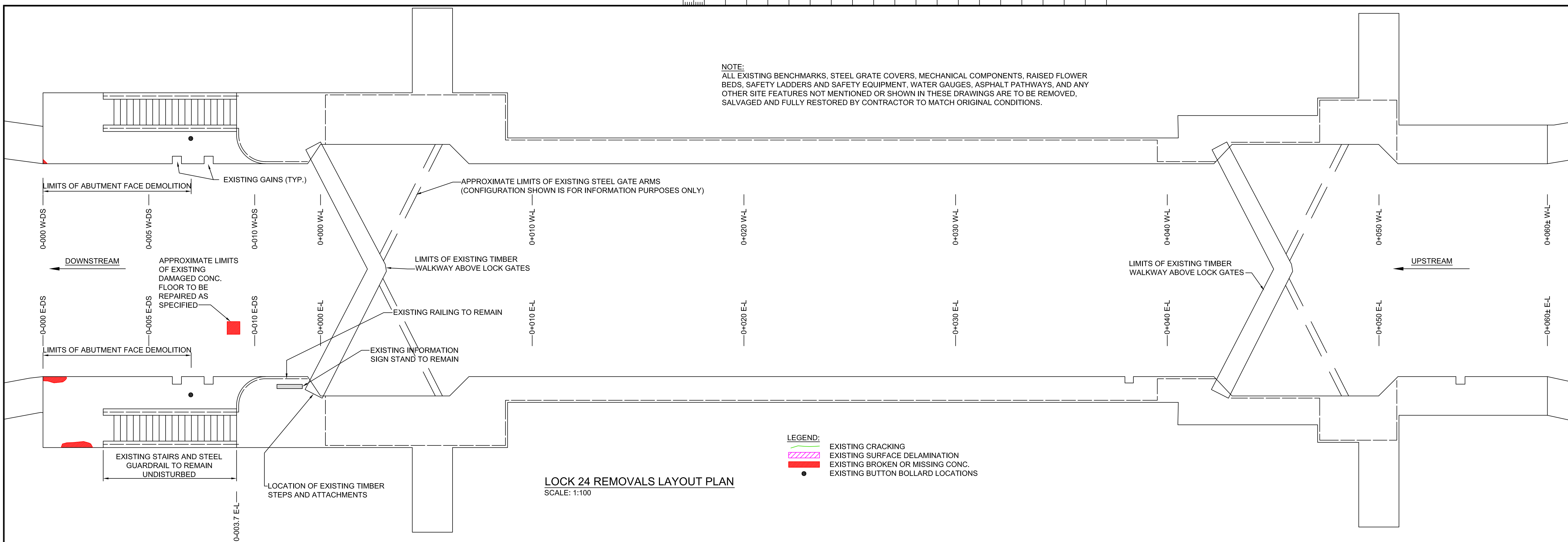
project date  
date du projet **JUNE 16, 2015**

project no.  
no. du projet **30025771-4272-34**

drawing no.  
dessiné no. **TP-00**

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

NOTE:  
ALL EXISTING BENCHMARKS, STEEL GRATE COVERS, MECHANICAL COMPONENTS, RAISED FLOWER BEDS, SAFETY LADDERS AND SAFETY EQUIPMENT, WATER GAUGES, ASPHALT PATHWAYS, AND ANY OTHER SITE FEATURES NOT MENTIONED OR SHOWN IN THESE DRAWINGS ARE TO BE REMOVED, SALVAGED AND FULLY RESTORED BY CONTRACTOR TO MATCH ORIGINAL CONDITIONS.



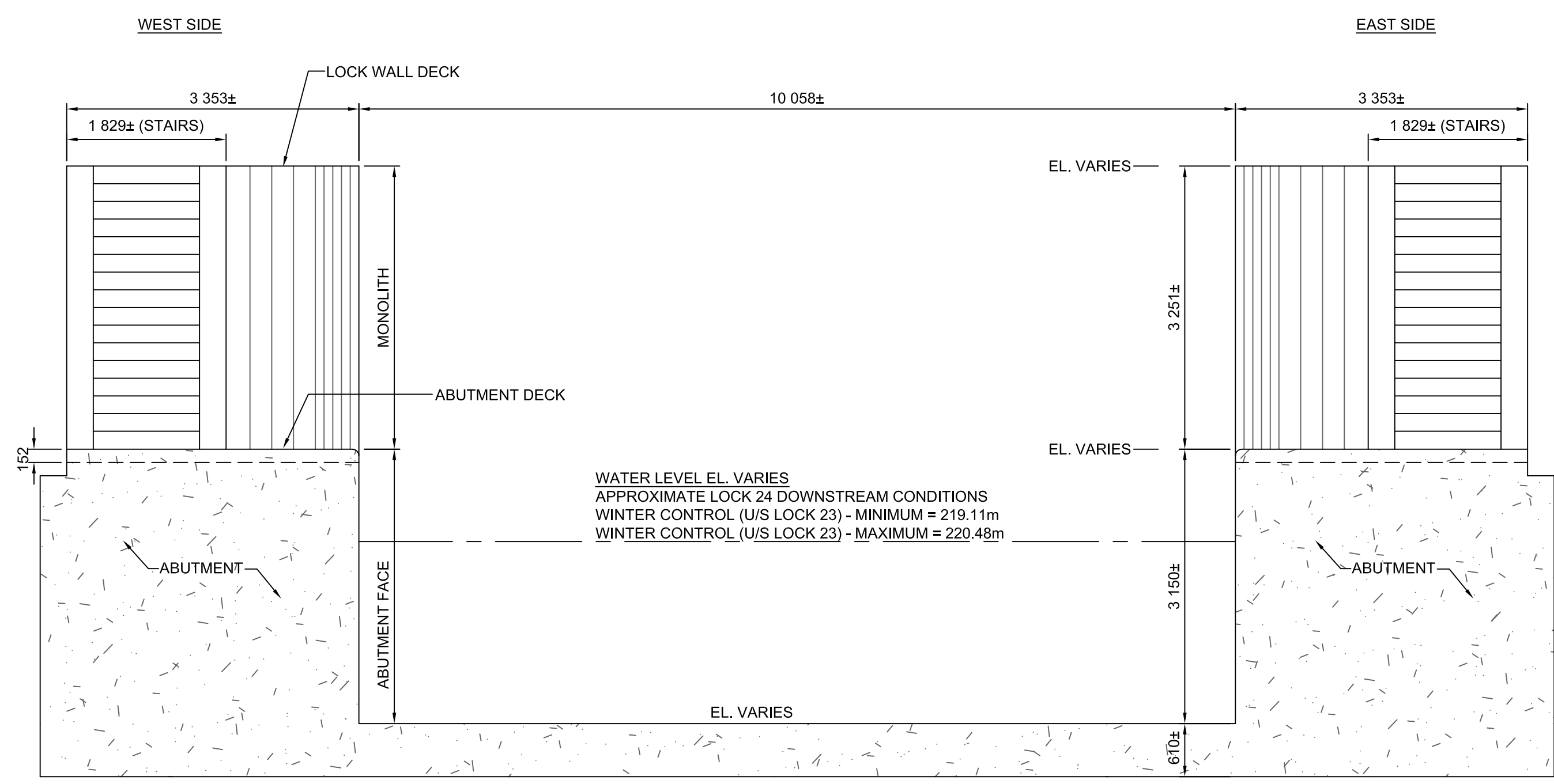
LOCK 24 REMOVALS LAYOUT PLAN  
SCALE: 1:100

LEGEND:  
 EXISTING CRACKING  
 EXISTING SURFACE DELAMINATION  
 EXISTING BROKEN OR MISSING CONC.  
 EXISTING BUTTON BOLLARD LOCATIONS

NOTE:  
THE PHOTOGRAPH SHOWN OF THE EAST WALL HAS BEEN MIRRORED SO THE ORIENTATION IS A MATCH WITH THE STATIONING SHOWN ON THE REMOVALS LAYOUT PLAN. THE PHOTOGRAPH SHOWN IS FOR INFORMATION PURPOSES ONLY TO HELP WITH THE VISUALIZATION OF THE EXISTING DAMAGES ON THE VERTICAL FACE OF THE LOCK WALLS.



LOCK 24 ELEVATION VIEW (EAST WALL)  
SCALE: N.T.S.

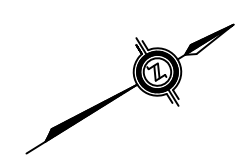


EXISTING STRUCTURE CONSTRUCTION (DOWNSTREAM) - 0-000 DS TO 0-010 DS  
SCALE: 1:50

NOTE:  
1) DIMENSIONS SHOWN IN THESE DETAILS ARE FROM HISTORIC DRAWING RECORDS AND ARE FOR INFORMATION PURPOSES ONLY.  
2) THE LEVELS AND FLOWS CONTAINED WITHIN THE ATTACHED HAVE BEEN PROVIDED TO THE CONTRACTOR FOR GUIDANCE ONLY AND SHOULD NOT BE ASSUMED TO BE ABSOLUTE. ANOMALIES IN WEATHER AND OTHER FORCES BEYOND THE CONTROL OF PARKS CANADA HAVE THE ABILITY TO GENERATE CONDITIONS UNFORESEEN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE CONSTRUCTED WORKS HAVE THE ABILITY TO WITHSTAND THESE CONDITIONS.

TRENT SEVERN WATERWAY,  
NATIONAL HISTORIC SITE OF CANADA,  
PARKS CANADA AGENCY

**RIGGS ENGINEERING**  
RIGGS ENGINEERING Ltd.  
1240 COMMISSIONERS Rd. WEST  
SUITE 205  
LONDON, ONTARIO  
N6K 1C7  
(519)-657-1040  
WWW.RIGGSENGINEERING.COM



revision		date
1	ADDENDUM #2 CHANGES	08/11/2015
0	ISSUED FOR TENDER	07/02/2015

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

	A	Detail No.
	B	No. du détail
	C	drawing no. - where detailed dessin no. - où détaillé

project title  
titre du projet  
**PETERBOROUGH ONTARIO**

CONCRETE CANAL WALL REHABILITATION  
LOCK 24, TRENT SEVERN WATERWAY, PARKS  
CANADA AGENCY

drawing title  
titre du dessin  
**LOCK 24 EXISTING  
CONDITIONS, DEMOLITION  
AND REMOVALS**

drawn by  
dessiné par  
**A.MARCZENKO**

designed by  
conc par  
**P.L. / W.H. / A.M.**

approved by  
approuvé par  
**P.LAMPKIN**

tender  
soumission  
**DUNCAN MANSER**

project manager  
administrateur  
de projets

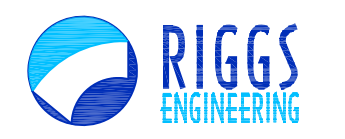
project date  
date du projet  
**JUNE 16, 2015**

project no.  
no. du projet  
**30025771-4272-34**

drawing no.  
dessiné no.  
**MA-02**

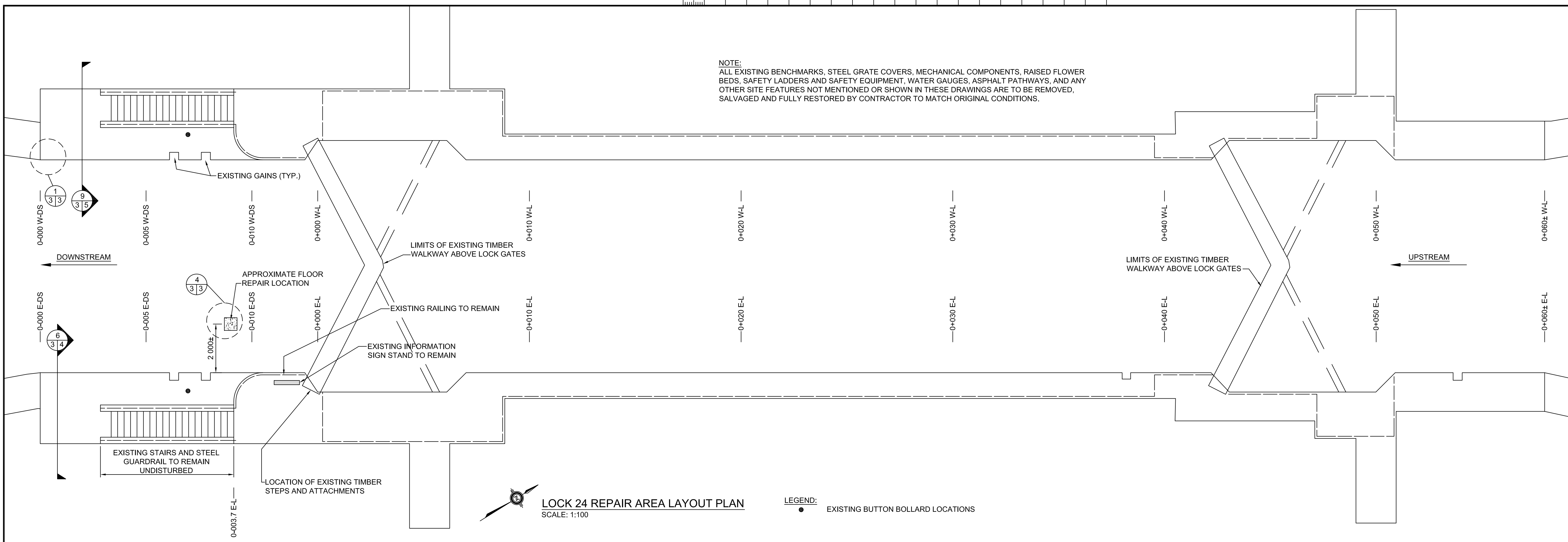
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

TRENT SEVERN WATERWAY,  
NATIONAL HISTORIC SITE OF CANADA,  
PARKS CANADA AGENCY



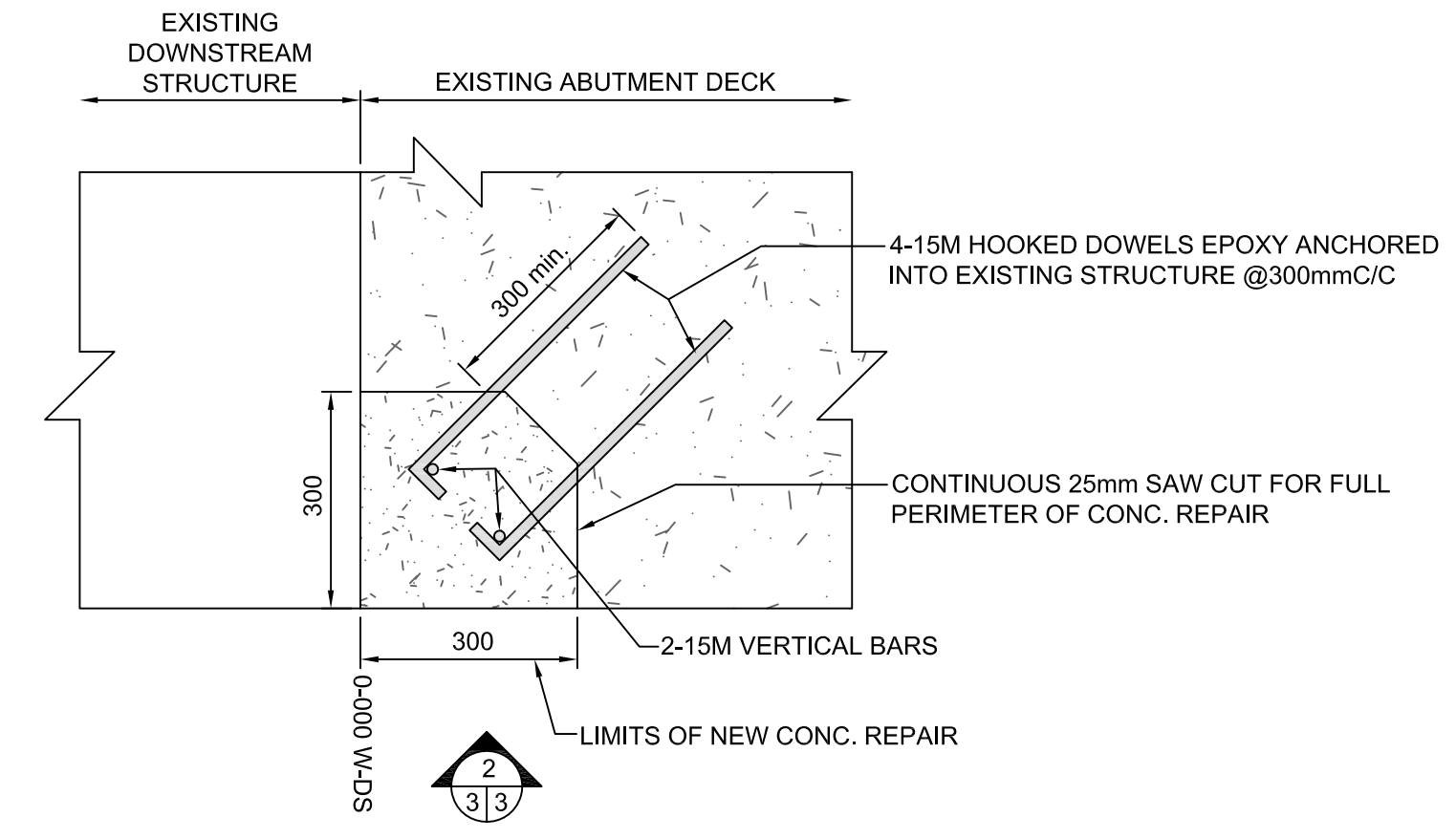
RIGGS ENGINEERING Ltd.  
1240 COMMISSIONERS Rd. WEST  
SUITE 205  
LONDON, ONTARIO  
N6K 1C7  
(519)-657-1040  
WWW.RIGGSENGINEERING.COM

**NOTE:**  
ALL EXISTING BENCHMARKS, STEEL GRATE COVERS, MECHANICAL COMPONENTS, RAISED FLOWER BEDS, SAFETY LADDERS AND SAFETY EQUIPMENT, WATER GAUGES, ASPHALT PATHWAYS, AND ANY OTHER SITE FEATURES NOT MENTIONED OR SHOWN IN THESE DRAWINGS ARE TO BE REMOVED, SALVAGED AND FULLY RESTORED BY CONTRACTOR TO MATCH ORIGINAL CONDITIONS.

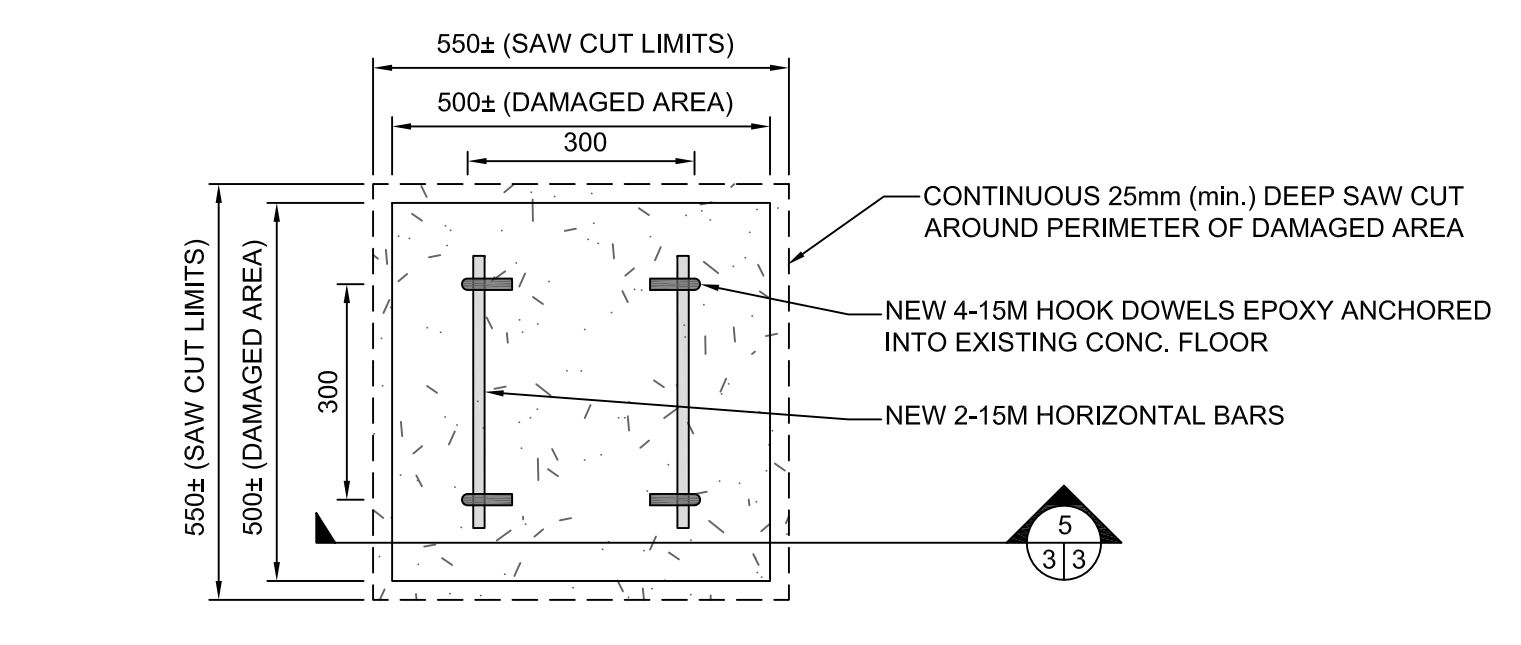


**LOCK 24 REPAIR AREA LAYOUT PLAN**  
SCALE: 1:100

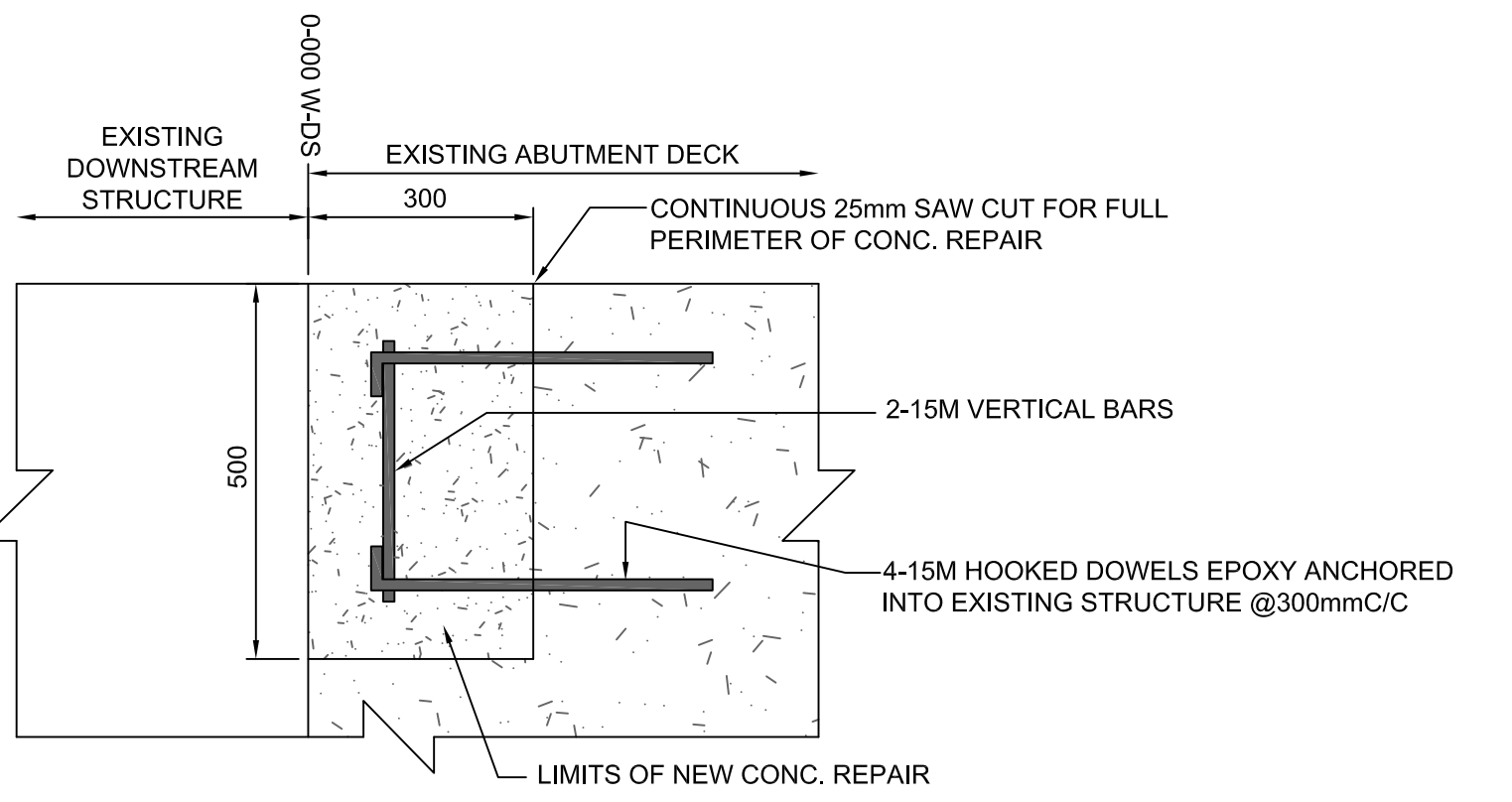
**LEGEND:**  
● EXISTING BUTTON BOLLARD LOCATIONS



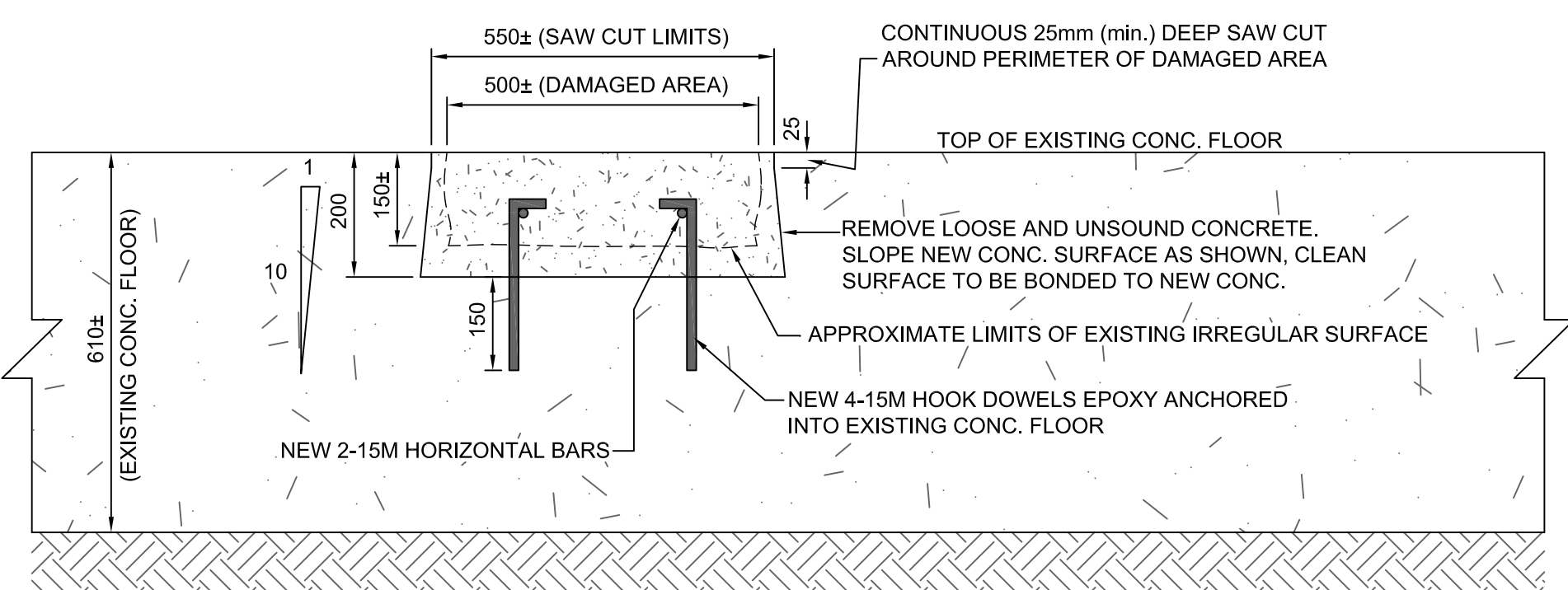
**1 CONC. DECK CORNER REPAIR DETAIL WEST SIDE DOWNSTREAM - (0-000 W-DS)**  
SCALE: 1:10



**4 PLAN VIEW OF NEW CONC. FLOOR REPAIR**  
SCALE: 1:10



**2 CONC. DECK CORNER REPAIR DETAIL WEST SIDE DOWNSTREAM - (0-000 W-DS)**  
SCALE: 1:10



**5 TYP. SECTION OF NEW CONC. FLOOR REPAIR**  
SCALE: 1:10

revision	description	date
1	ADDENDUM #2 CHANGES	08/11/2015
0	ISSUED FOR TENDER	07/02/2015

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

Detail No.	No. du détail
A	drawing no. - where detail required
B	drawing no. - où détail exigé
C	drawing no. - where detailed
	dessin no. - où détaillé

project title / titre du projet  
**PETERBOROUGH ONTARIO**

CONCRETE CANAL WALL REHABILITATION  
LOCK 24, TRENT SEVERN WATERWAY, PARKS  
CANADA AGENCY

drawing title / titre du dessin  
**LOCK 24 REPAIR LIMITS AND TYP. DETAILS**

drawn by / dessiné par  
**A.MARCZENKO**

designed by / conçu par  
**P.L. / W.H. / A.M.**

approved by / approuvé par  
**P.LAMPKIN**

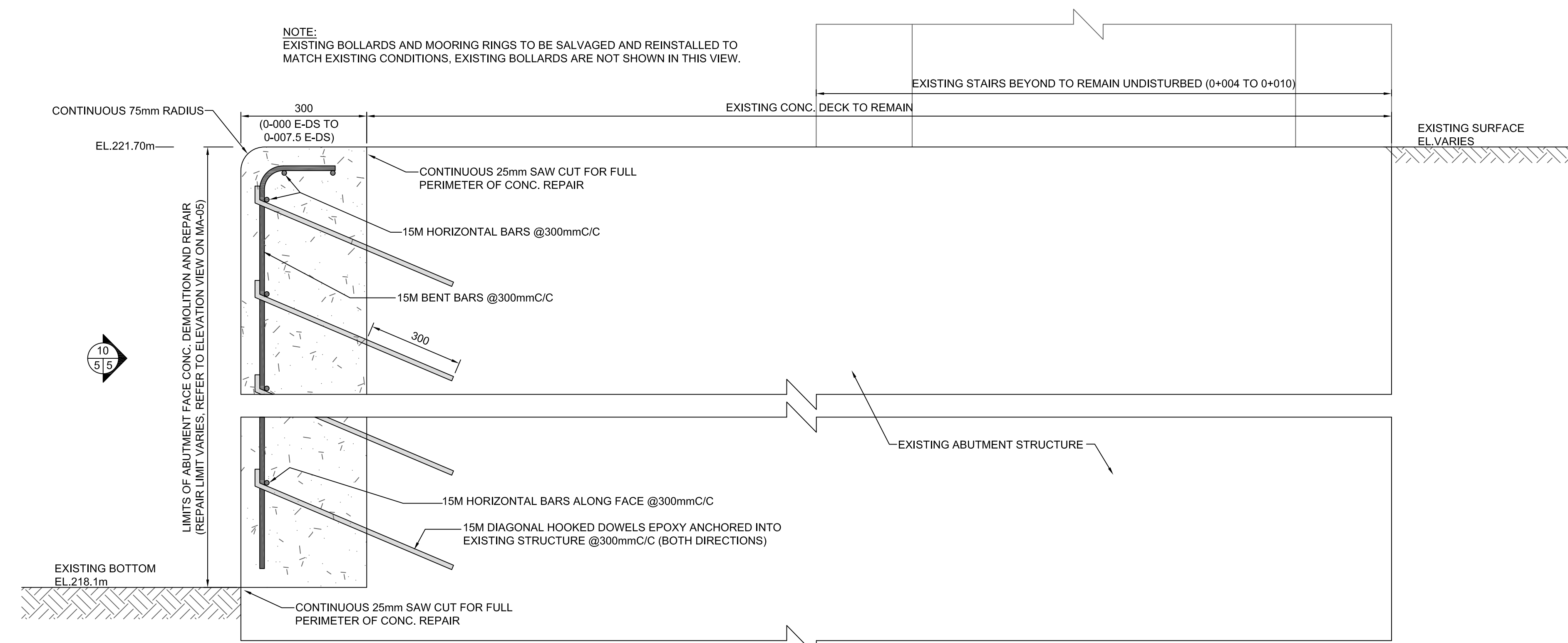
tender submission / soumission de soumission  
**DUNCAN MANSER** project manager / administrateur de projets

project date / date du projet  
**JUNE 16, 2015**

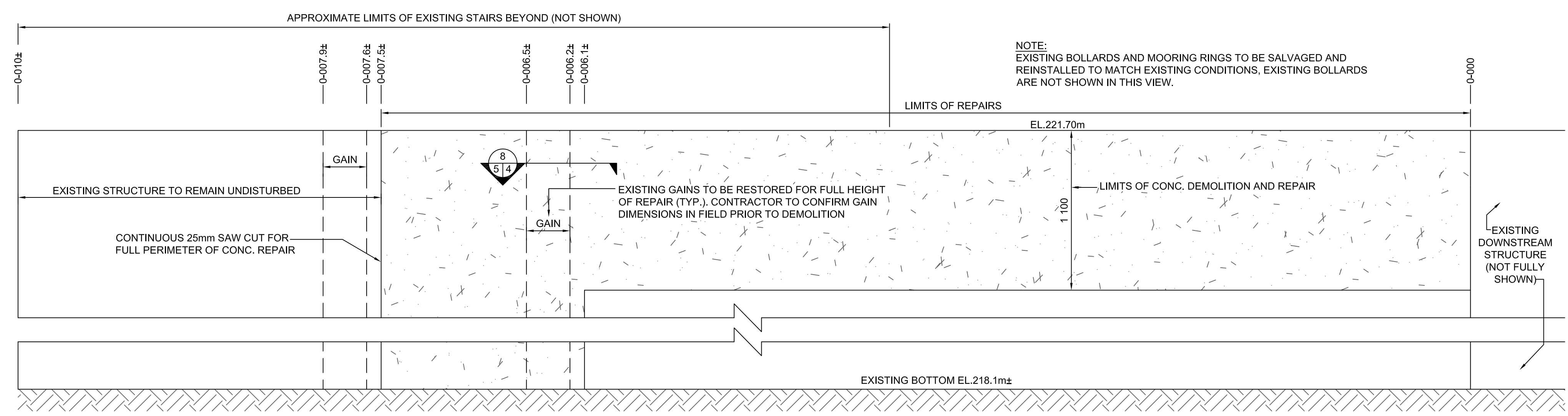
project no. / no. du projet  
**30025771-4272-34**

drawing no. / dessin no.  
**MA-03**

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres



9  
3 5  
CONC. DECK REPAIR DETAIL WEST SIDE DOWNSTREAM - (0-000 W-DS TO 0-007.5 W-DS)  
SCALE: 1:10



10  
5 5  
ELEVATION OF ABUTMENT FACE CONC. REPAIR LIMITS WEST SIDE DOWNSTREAM - (0-000 W-DS TO 0-010 W-DS)  
SCALE: 1:20

TRENT SEVERN WATERWAY,  
NATIONAL HISTORIC SITE OF CANADA,  
PARKS CANADA AGENCY

**RIGGS**  
ENGINEERING  
RIGGS ENGINEERING Ltd.  
1240 COMMISSIONERS Rd. WEST  
SUITE 205  
LONDON, ONTARIO  
N6K 1C7  
(519)-657-1040  
WWW.RIGGSENGINEERING.COM



revision	description	date
1	ADDENDUM #2 CHANGES	08/11/2015

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

A	Detail No. No. du détail
B	drawing no. - where detail required dessin no. - où détail exigé
C	drawing no. - where detailed dessin no. - où détaillé

project title  
titre du projet  
**PETERBOROUGH ONTARIO**

CONCRETE CANAL WALL REHABILITATION  
LOCK 24, TRENT SEVERN WATERWAY, PARKS  
CANADA AGENCY

drawing title  
titre du dessin  
**LOCK 24  
TYP. DETAILS**

drawn by  
dessiné par  
**A.MARCZENKO**

designed by  
conc par  
**P.L. / W.H. / A.M.**

approved by  
approuvé par  
**P.LAMPKIN**

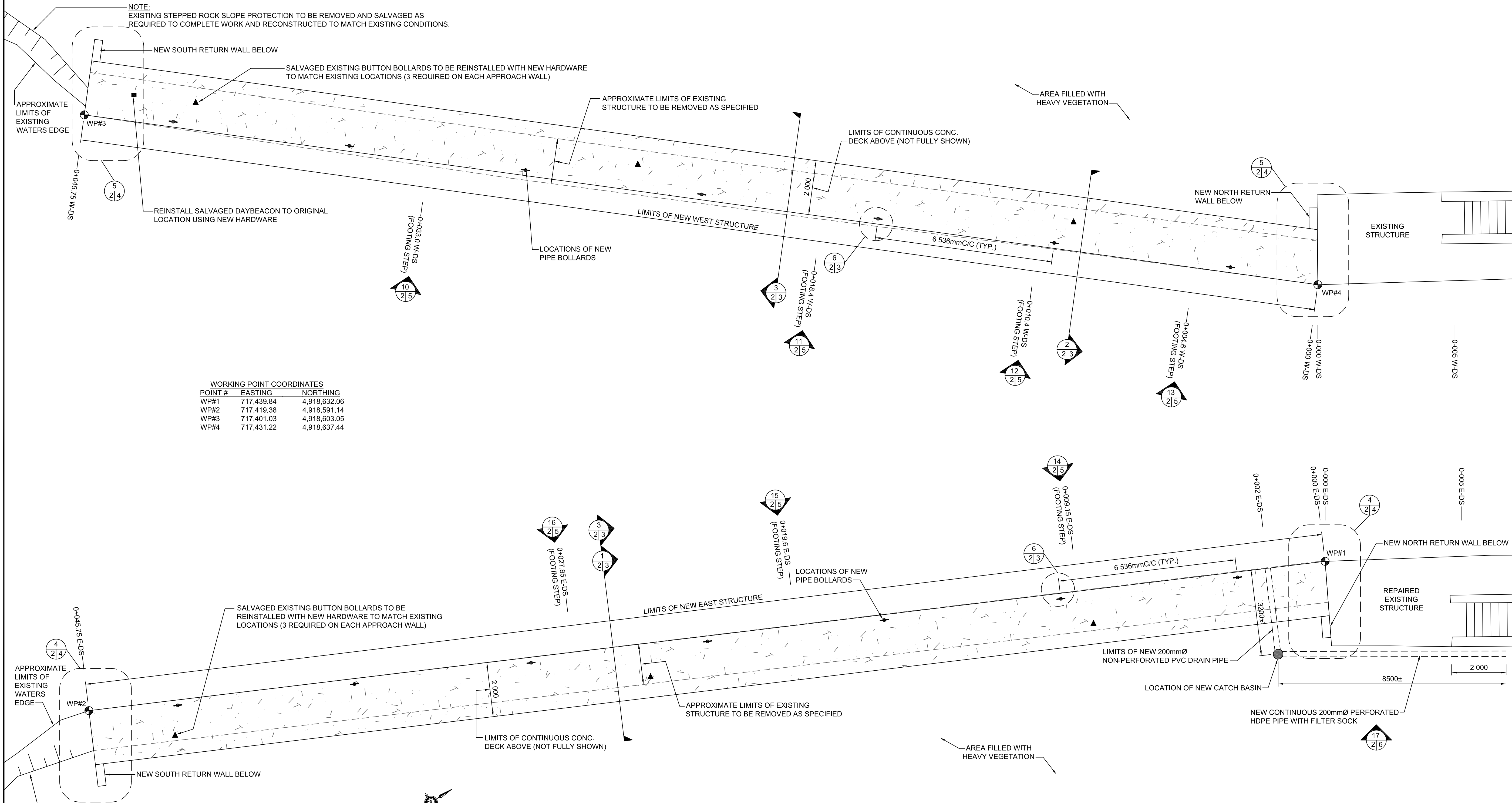
tender  
soumission  
**DUNCAN MANSER** project manager  
administrateur  
de projets

project date  
date du projet  
**JUNE 16, 2015**

project no.  
no. du projet  
**30025771-4272-34**

drawing no.  
dessiné no.  
**MA-05**

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres



**WORKING POINT COORDINATES**

POINT #	EASTING	NORTHING
WP#1	717,439.84	4,918,632.06
WP#2	717,419.38	4,918,591.14
WP#3	717,401.03	4,918,603.05
WP#4	717,431.22	4,918,637.44

TRENT SEVERN WATERWAY, NATIONAL HISTORIC SITE OF CANADA, PARKS CANADA AGENCY

**RIGGS ENGINEERING**  
 RIGGS ENGINEERING Ltd.  
 1240 COMMISSIONERS Rd. WEST  
 SUITE 205  
 LONDON, ONTARIO  
 N6K 1C7  
 (519)-657-1040  
 WWW.RIGGSENGINEERING.COM



revision	description	date
1	ADDENDUM #2 CHANGES	08/11/2015
0	ISSUED FOR TENDER	07/02/2015

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

Detail No.	No. du détail
A	— where detail required
B	— où détail exigé
C	— where detailed
	— où détaillé

project title / titre du projet: **PETERBOROUGH ONTARIO**  
 CONCRETE CANAL WALL REHABILITATION  
 LOCK 24, TRENT SEVERN WATERWAY, PARKS CANADA AGENCY

drawing title / titre du dessin: **LOCK 24 NEW STRUCTURE LAYOUT**

drawn by / dessiné par: **A.MARCZENKO**

designed by / conçu par: **P.L. / W.H. / A.M.**

approved by / approuvé par: **P.LAMPKIN**

tender submission / soumission: **DUNCAN MANSER** project manager / administrateur de projets

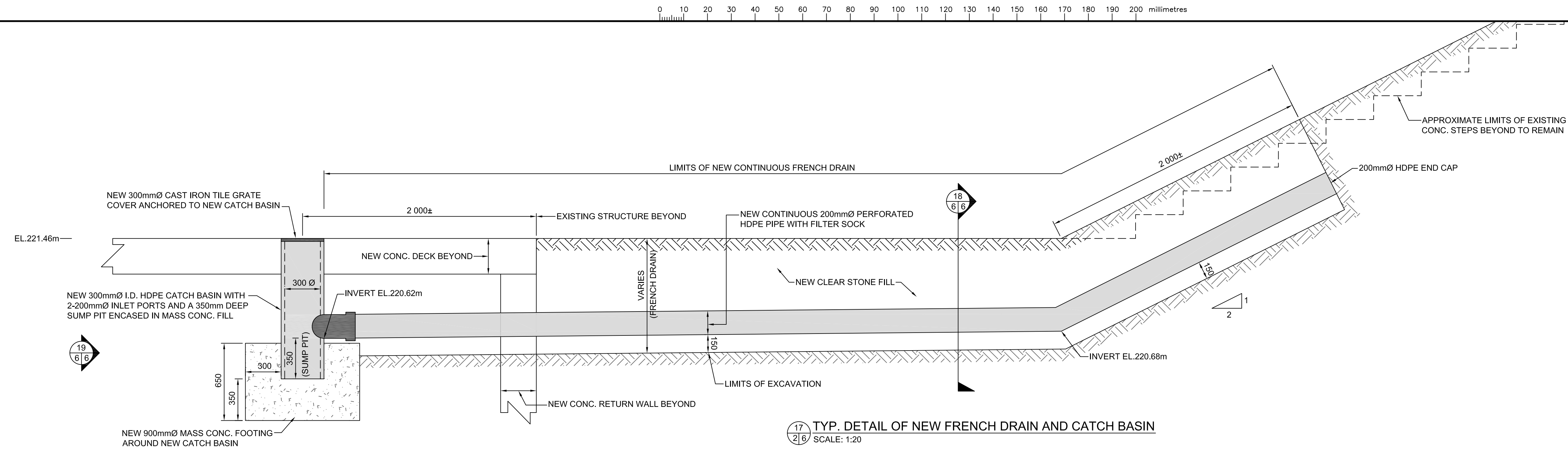
project date / date du projet: **JUNE 16, 2015**

project no. / no. du projet: **30025771-4272-34**

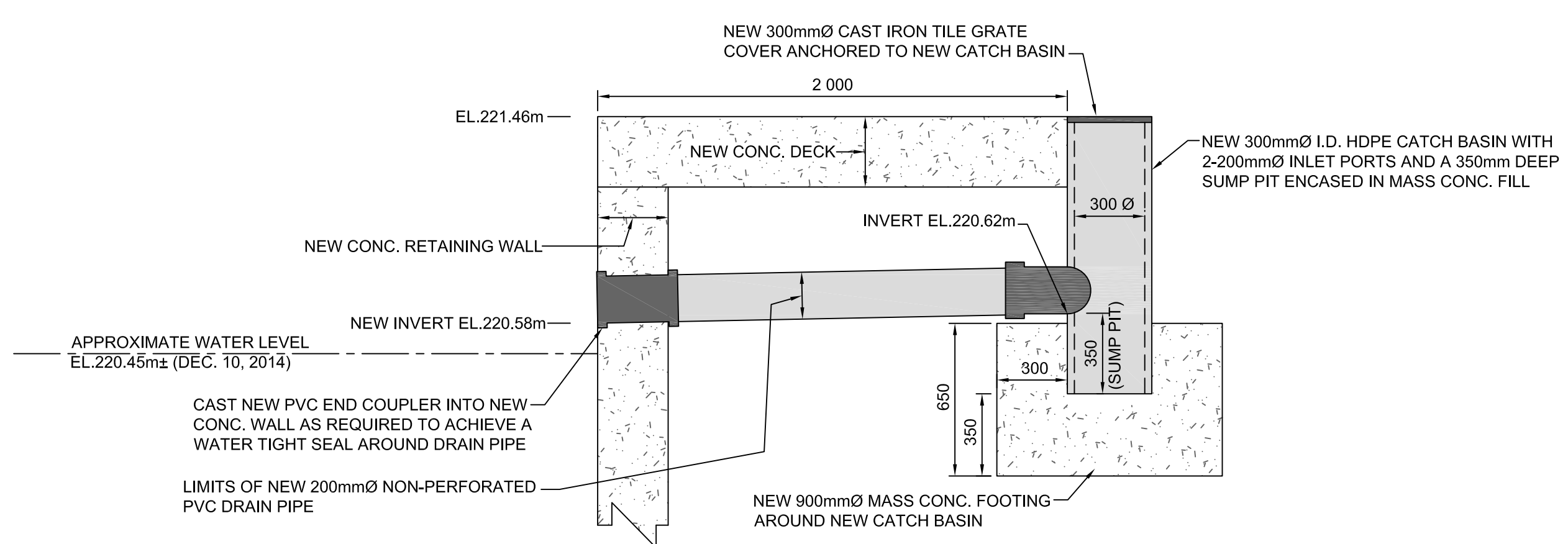
drawing no. / dessiné no.: **C-02**

**LOCK 24 NEW DOWNSTREAM EAST AND WEST APPROACH WALL LAYOUT PLAN**  
 SCALE: 1:75

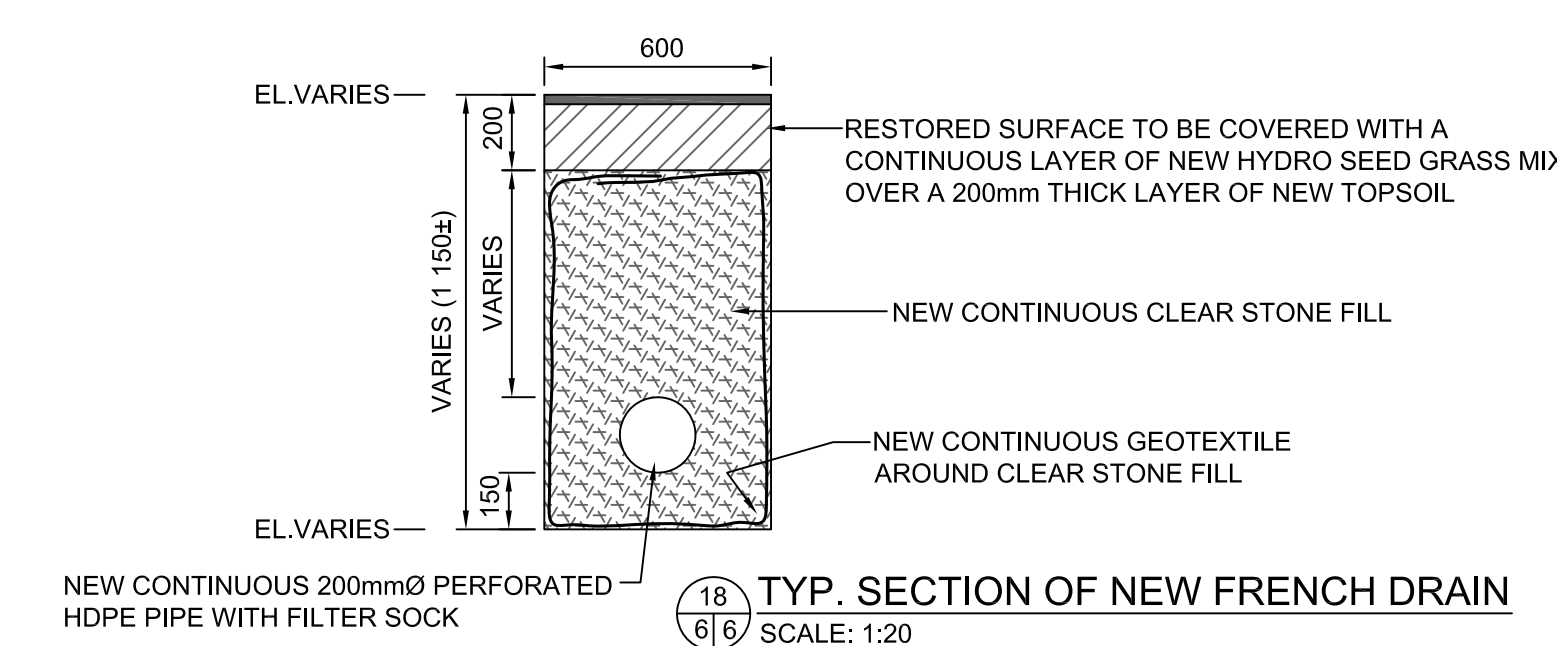
NOTE: EXISTING STEPPED ROCK SLOPE PROTECTION TO BE REMOVED AND SALVAGED AS REQUIRED TO COMPLETE WORK AND RECONSTRUCTED TO MATCH EXISTING CONDITIONS.



17 TYP. DETAIL OF NEW FRENCH DRAIN AND CATCH BASIN  
SCALE: 1:20



19 TYP. DETAIL OF NEW CATCH BASIN AND DRAIN PIPE  
SCALE: 1:20



18 TYP. SECTION OF NEW FRENCH DRAIN  
SCALE: 1:20



revision	description	date
1	ADDENDUM #2 CHANGES	08/11/2015

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

Detail No. No. du détail	drawing no. - where detail required dessin no. - où détail exigé
A	
B	
C	

project title  
titre du projet  
**PETERBOROUGH ONTARIO**

CONCRETE CANAL WALL REHABILITATION  
LOCK 24, TRENT SEVERN WATERWAY, PARKS  
CANADA AGENCY

drawing title  
titre du dessin  
**LOCK 24  
TYP. SECTIONS  
AND DETAILS**

drawn by  
dessiné par  
**A.MARCZENKO**

designed by  
conc par  
**P.L. / W.H. / A.M.**

approved by  
approuvé par  
**P.LAMPKIN**

tender  
soumission  
**DUNCAN MANSER** project manager  
administrateur de projets

project date  
date du projet  
**JUNE 16, 2015**

project no.  
no. du projet  
**30025771-4272-34**

drawing no.  
dessiné no.  
**C-06**