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# Canada

# COBOCONK DAM TRENT-SEVERN WATERWAY

6668 ON-35

COBOCONK, ONTARIO

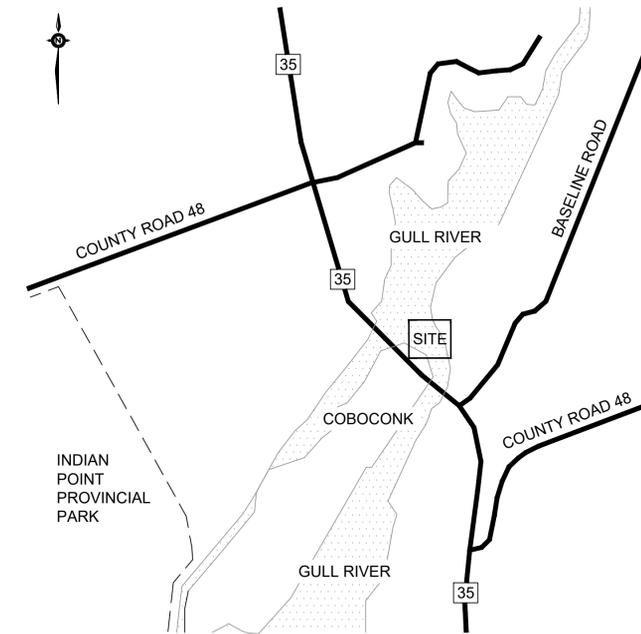
## ISSUED FOR TENDER

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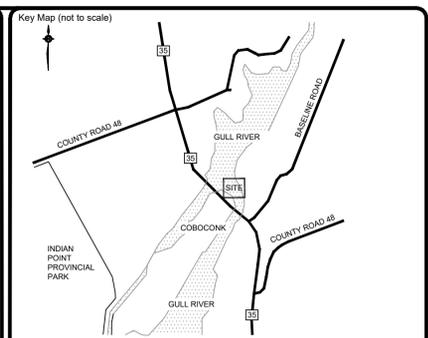
exp PROJECT No:  
BRM00605412a

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •  
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**KEY PLAN**  
**N.T.S.**

DWG No.	DESCRIPTION
COB-01	EXISTING SITE PLAN
COB-02	NEW SITE PLAN
COB-03	EXISTING DAM PLAN AND ELEVATION
COB-04	DEMOLITION SITE PLAN AND ELEVATION
COB-05	DAM REHABILITATION PLAN AND ELEVATION
COB-06	NEW CONCRETE DECK, PLAN AND ELEVATION
COB-07	CONCRETE PIER EXTENSIONS & WINGWALL CONCRETE WORK
COB-08	CONCRETE PIER REPAIRS
COB-09	LOG LIFTING SYSTEM
COB-10	GRADING PLAN
COB-11	PUBLIC SAFETY MEASURES
COB-12	MISCELLANEOUS DETAILS
COB-13	MISCELLANEOUS DETAILS
COB-14	LOG SLIDERS
COB-15	PROPOSED CONSTRUCTION STAGING AREA
COB-16	EROSION AND SEDIMENT CONTROL PLAN
COB-L01	TREE PROTECTION PLAN AND RE-PLANTING PLAN



**SURVEY NOTES:**

- BEARINGS HEREON ARE GRID BEARINGS REFERRED TO THE UTM COORDINATE SYSTEM, ZONE 17, CENTRAL MERIDIAN 81°00'00" WEST LONGITUDE (NAD83 DATUM).
- BENCHMARK: NO. 888023 SMALL ROCK CUT (1M HIGH) ON NORTH SIDE OF HWY 48 0.3 KM EAST OF FRENCH SETTLEMENT RD AND 11.1 M NORTH OF CENTRELINE OF HWY 48. TABLE IS SET VERTICALLY IN TOP OF ROCK 6.6M SOUTH OF NORTH RIGHT-OF-WAY FENCE, 2.0M WEST OF EAST END OF ROCK CUT, 1.4M NORTH TOP OF ROCK CUT, AND IS MARKED BY A STEEL MARKER 48 CM N.E. OF BENCH MARK. ELEV.: 266.034.

**GENERAL NOTES:**

- DO NOT SCALE DRAWINGS.
- ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED ON SITE PRIOR TO CONSTRUCTION.
- ANY DISCREPANCIES, OMISSIONS, OR ERRORS ARE TO BE REPORTED TO THE CONSULTANT. NO WORK IS TO PROCEED BEFORE CLARIFICATION OF THE DISCREPANCIES, ERRORS, OR OMISSIONS IS RECEIVED FROM THE CONSULTANT.
- ALL EXISTING CONDITIONS TO BE CHECKED AND VERIFIED ON SITE PRIOR TO CONSTRUCTION.
- ONLY LATEST APPROVED DRAWINGS TO BE USED FOR CONSTRUCTION.
- ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF THE CONSULTANT, AND SHALL BE RETURNED TO THE CONSULTANT UPON REQUEST. IN NO WAY SHALL THE DRAWINGS AND/OR SPECIFICATIONS IN WHOLE OR IN PART BE REPRODUCED OR DISTRIBUTED WITHOUT THE PERMISSION OF THE CONSULTANT.
- OVERHEAD WIRES ARE PRESENT AT SEVERAL ACCESS ROUTES TO THE SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE IF THESE WIRES WILL IMPEDE ANY CONSTRUCTION ACTIVITY AND MAKE APPROPRIATE ADJUSTMENTS.
- SHIP STORE HANDLE, ERECT, INSTALL ETC. ALL CONSTRUCTION MATERIALS, COMPONENTS, EQUIPMENT, ETC. AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- ALL FABRICATION, CONSTRUCTION, ETC. SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL PERTINENT BUILDING CODES AND LOCAL BY-LAWS AND ORDINANCES.
- SAFEGUARD ALL EXISTING STRUCTURES, SERVICES AND UTILITIES WHICH MAY BE AFFECTED BY THE WORK OF THIS CONTRACT.
- THE CONTRACTOR SHALL NOTIFY PCA AND THE ENGINEER OF ANY NON-COMFORMITY WITH THE DRAWINGS AND CONTRACT DOCUMENTS, OR CONDITION THAT MIGHT INCREASE THE SCOPE OF WORK OR COMPROMISE NEW CONSTRUCTION PRIOR TO THE START OF CONSTRUCTION, OR IMMEDIATELY FOLLOWING DISCOVERY.
- NOTE THAT THE PCA PROPERTY BOUNDARY AND ACCESS EASEMENT LOCATIONS ARE APPROXIMATE.

No.	REVISIONS	Date	By	App.
F	ISSUED FOR TENDER	MAY 18 2018	T.M.	W.A.G.
E	ISSUED FOR FINAL REVIEW II	MAR. 7 2018	T.M.	W.A.G.
D	ISSUED FOR FINAL REVIEW	AUG. 16 2017	T.M.	W.A.G.
C	99% DESIGN SUBMISSION	FEB. 3 2017	T.M.	W.A.G.
B	ISSUED FOR PRELIMINARY DESIGN RESUBMISSION	SEPT. 9 2016	TM	WAG
A	ISSUED FOR PRELIMINARY DESIGN SUBMISSION	AUG. 11 2016	TM	WAG



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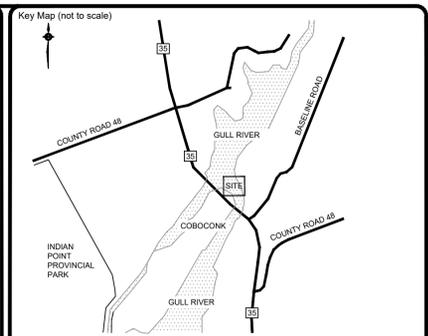
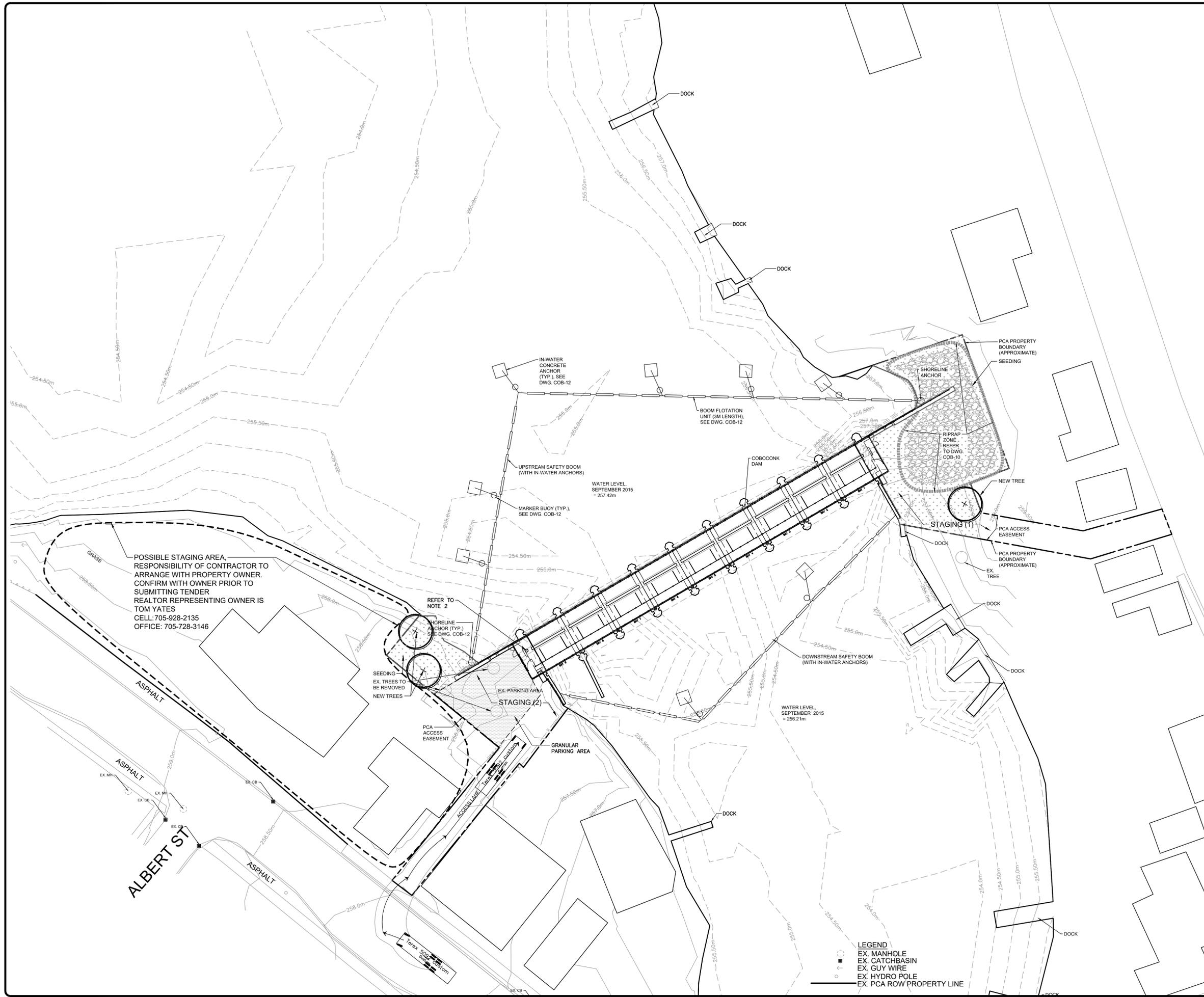


**Canadä**

Location:  
**COBOCONK DAM  
 TRENT- SEVERN WATERWAY**

Title:  
**EXISTING SITE PLAN**

Designed By: \_\_\_\_\_ Drawn By: T.M. Checked By: W.A.G.  
 Scale: 1:500 Date: JUNE 2016 Drawing No.: \_\_\_\_\_  
 Project No.: BRM00605412a **COB-01**



NOTES:  
 1. CONTRACTOR TO CREATE TEMPORARY GRANULAR ACCESS ROAD TO DAM. MUD MAT REQUIRED TO REDUCE MUD TRACKING TO ROADS. REINSTATE TO PRE-CONSTRUCTION CONDITION WHEN DAM WORK IS COMPLETE. REQUIRED AT EAST AND WEST ENDS. REFER TO DWG. COB-16.  
 2. ESTABLISH NEW SURVEY MONUMENT ON DAM DECK. INSTALL MONUMENT AT SAME LOCATION (I.E. SAME X,Y COORDINATES) AS EXISTING BENCHMARK ON THE DAM DECK.

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POSSIBLE STAGING AREA,  
 RESPONSIBILITY OF CONTRACTOR TO  
 ARRANGE WITH PROPERTY OWNER.  
 CONFIRM WITH OWNER PRIOR TO  
 SUBMITTING TENDER  
 REALTOR REPRESENTING OWNER IS  
 TOM YATES  
 CELL: 705-928-2135  
 OFFICE: 705-728-3146



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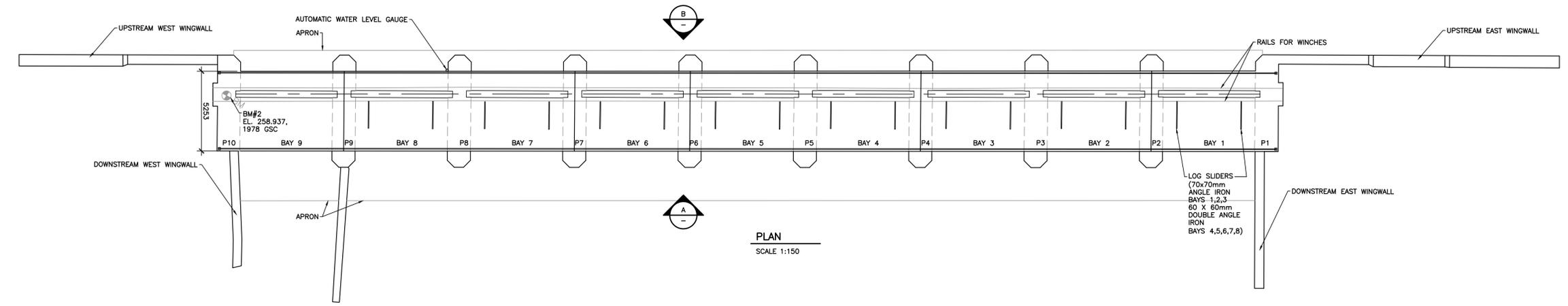
Location:  
**COBOCONK DAM  
 TRENT- SEVERN WATERWAY**

Title:  
**NEW SITE PLAN**

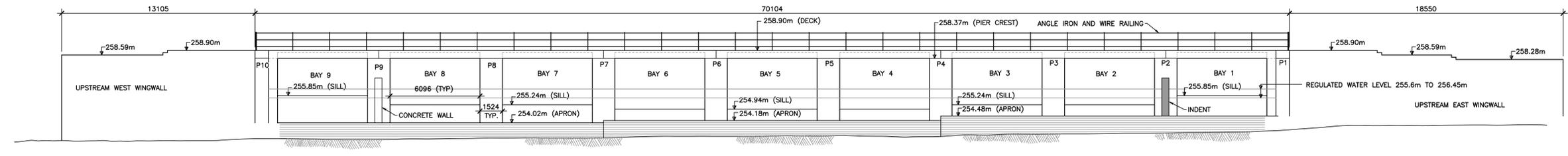
Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: 1:300	Date: JUNE 2016	Drawing No:
Project No.: BRM00605412a		<b>COB-02</b>

**LEGEND**  
 EX. MANHOLE  
 EX. CATCHBASIN  
 EX. GUY WIRE  
 EX. HYDRO POLE  
 EX. PCA ROW PROPERTY LINE

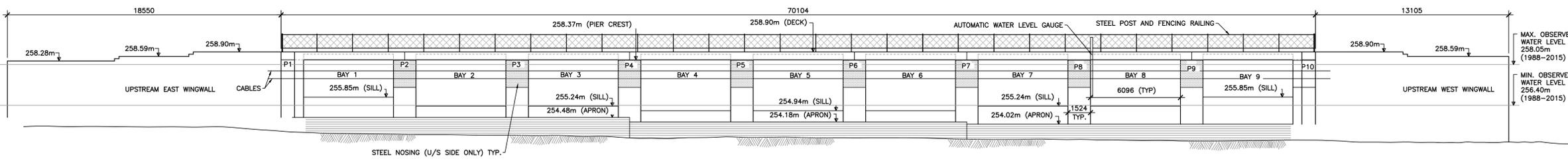
STOP LOG SETTINGS # OF LOGS IN	UPSTREAM TARGET WATER LEVEL (M)	BAY #								
		1	2	3	4	5	6	7	8	9
SPRING	257.21	6	8	4	5	5	5	8	8	8
SUMMER	257.70	6	7	8	8	7	7	7	7	5
WINTER	257.19	6	8	4	5	5	5	8	8	6
TOTAL AVAILABLE PER BAY		6	8	8	9	9	9	8	8	6



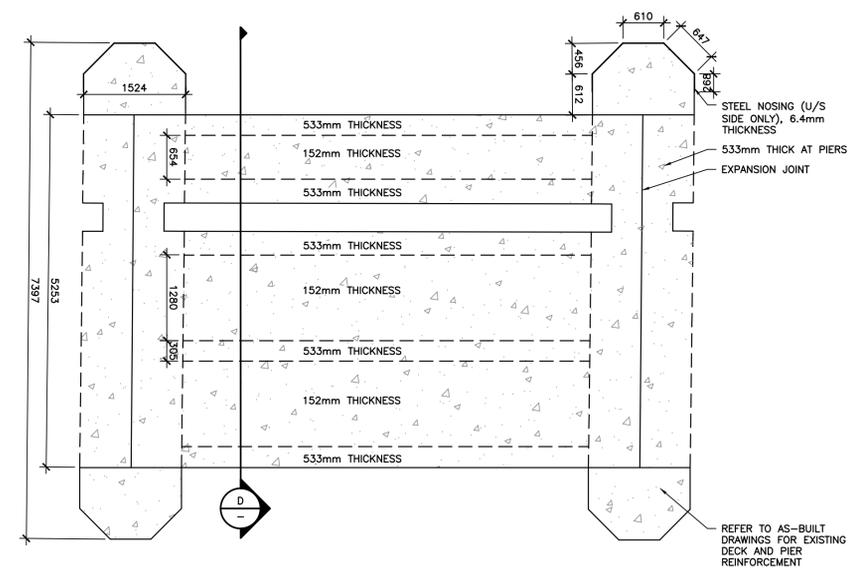
PLAN  
SCALE 1:150



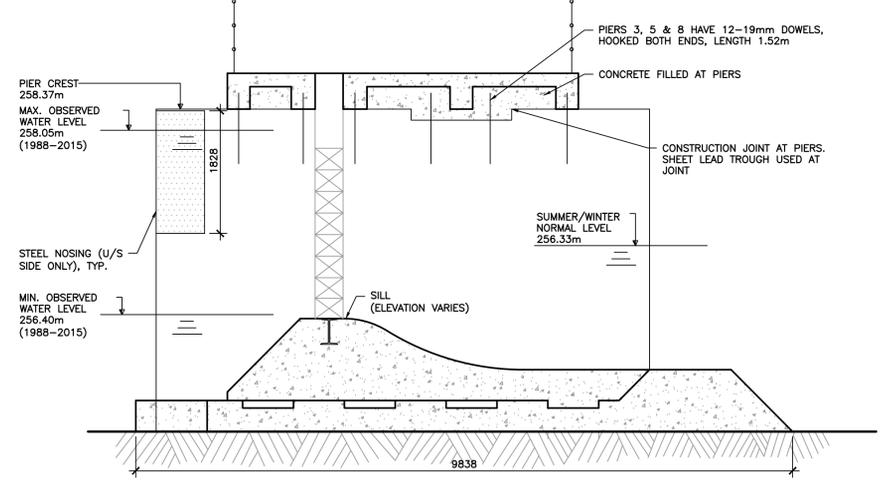
DOWNSTREAM ELEVATION  
SCALE 1:150



UPSTREAM ELEVATION  
SCALE 1:150



PORTION OF DECK  
SCALE 1:50



SECTION  
SCALE 1:50

REVISIONS	DATE	BY	CHKD
F ISSUED FOR TENDER	MAY 18 2018	T.M.	W.A.G.
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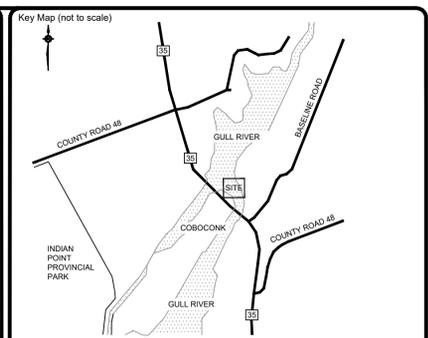
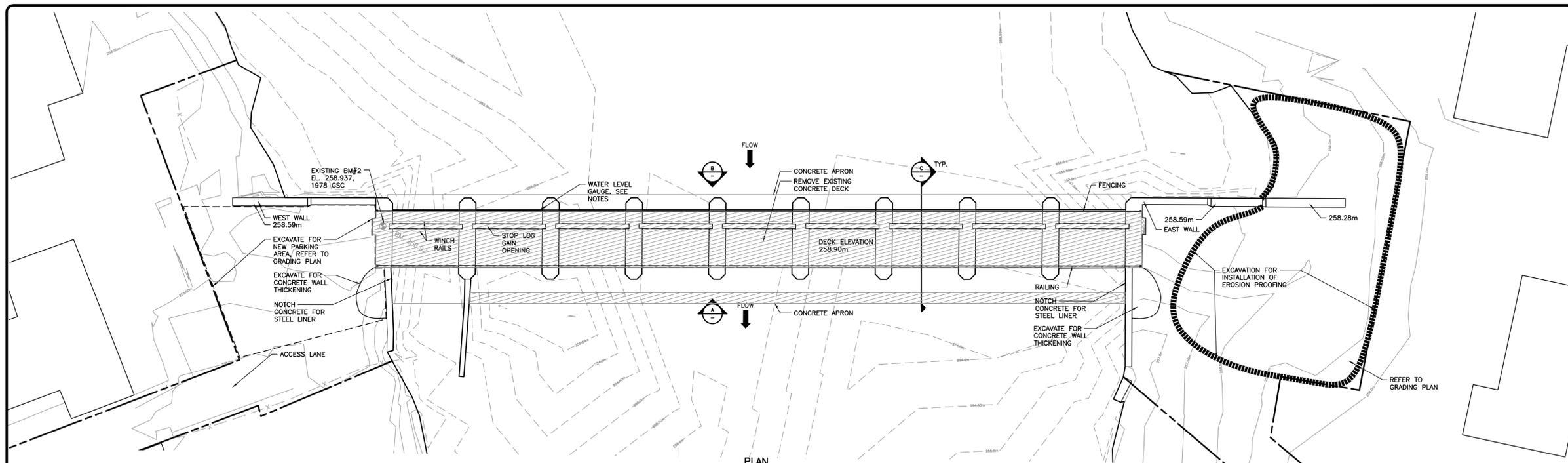


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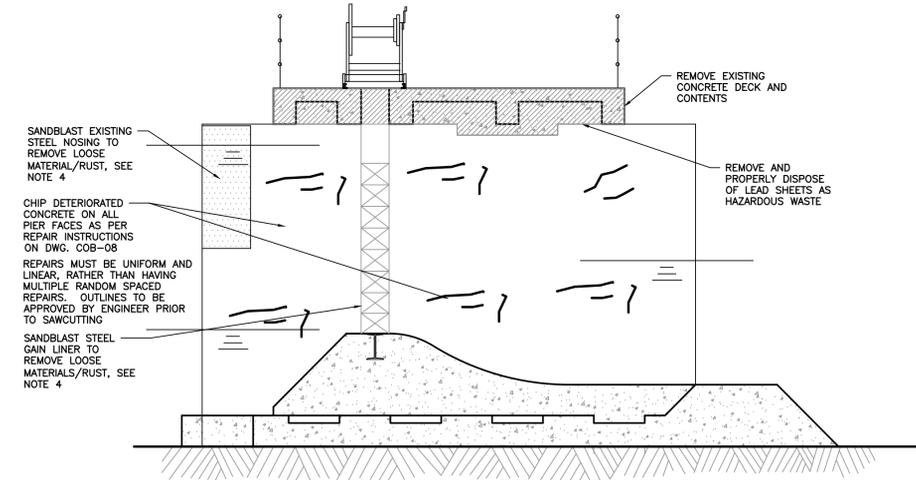
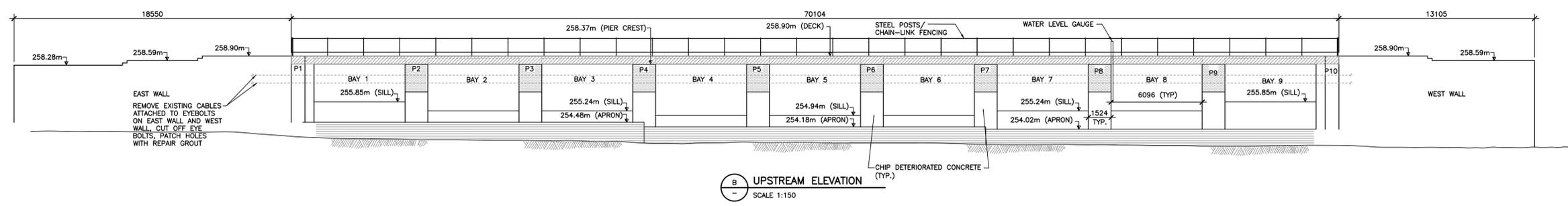
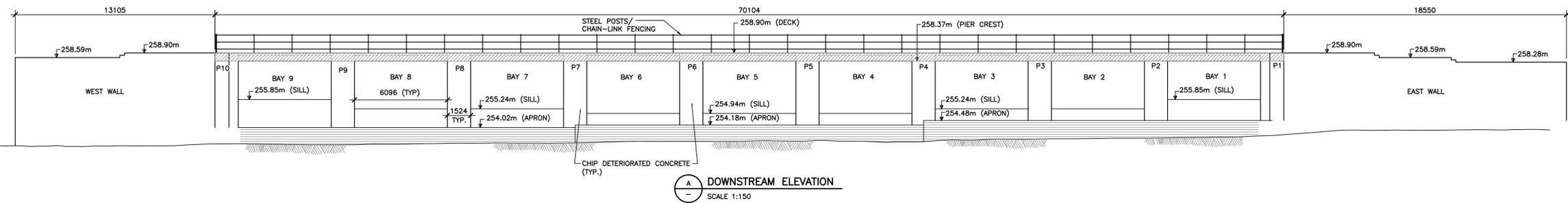
COBOCONK DAM  
TRENT- SEVERN WATERWAY

EXISTING DAM PLAN AND  
ELEVATION

AS NOTED	T.M.	W.A.G.
JUNE 2016		
BRM00605412a		COB-03



- NOTES:**
- REMOVE EXISTING AUTOMATIC WATER LEVEL GAUGE (PCA WATER MANAGEMENT WILL REMOVE OIL FROM GAUGE FIRST); REINSTALL WHEN NEW DECK AND RAILINGS HAVE BEEN INSTALLED. COORDINATE TIMING WITH PCA.
  - INSTALL A TEMPORARY METRIC STAFF GAUGE FOR WATER LEVEL MEASUREMENT DURING CONSTRUCTION. LOCATION TO BE APPROVED BY ENGINEER.
  - EXISTING STEEL PIER NOSINGS TO REMAIN (LOOSE MATERIAL/RUST TO BE REMOVED); EXPOSED CONCRETE TO BE CHIPPED TO SOUND CONCRETE WHERE NECESSARY (AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE).
  - SANDBLAST EXISTING STEEL PIER NOSINGS AND STEEL STOP LOG GAINS TO COMMERCIAL BLAST SSPC-SP6 STANDARD.



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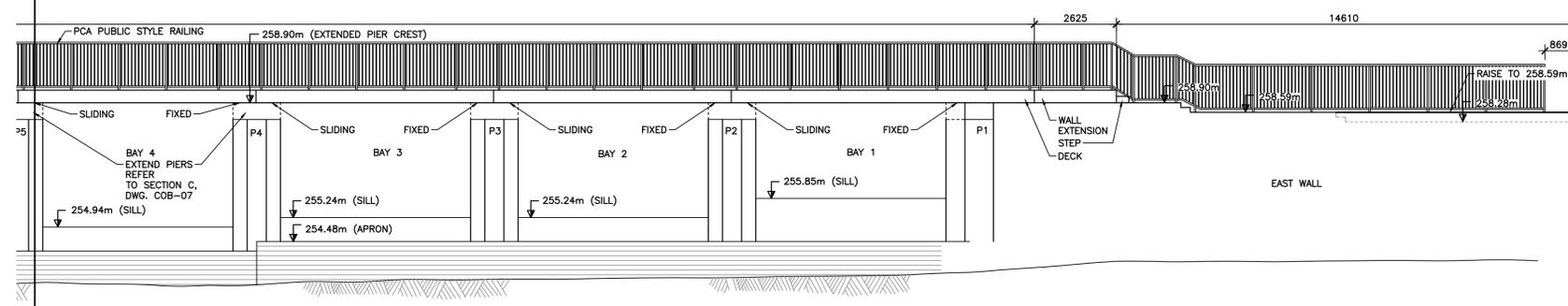
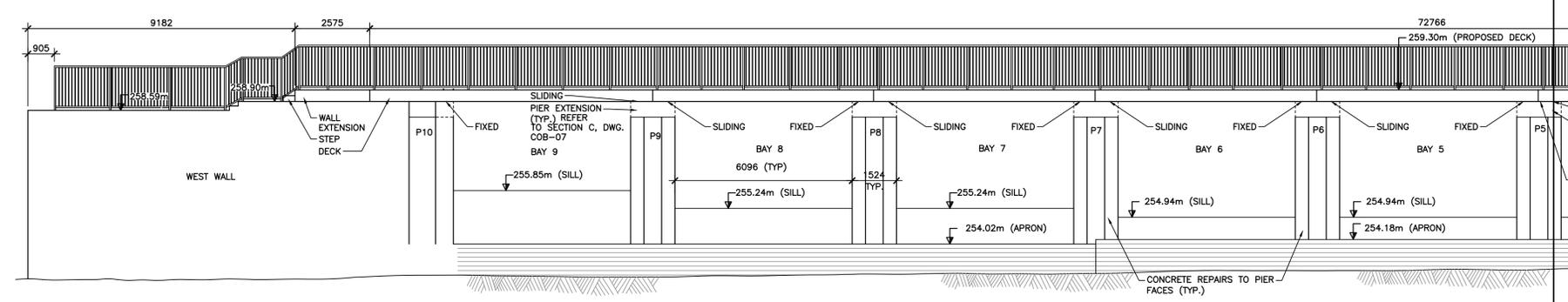
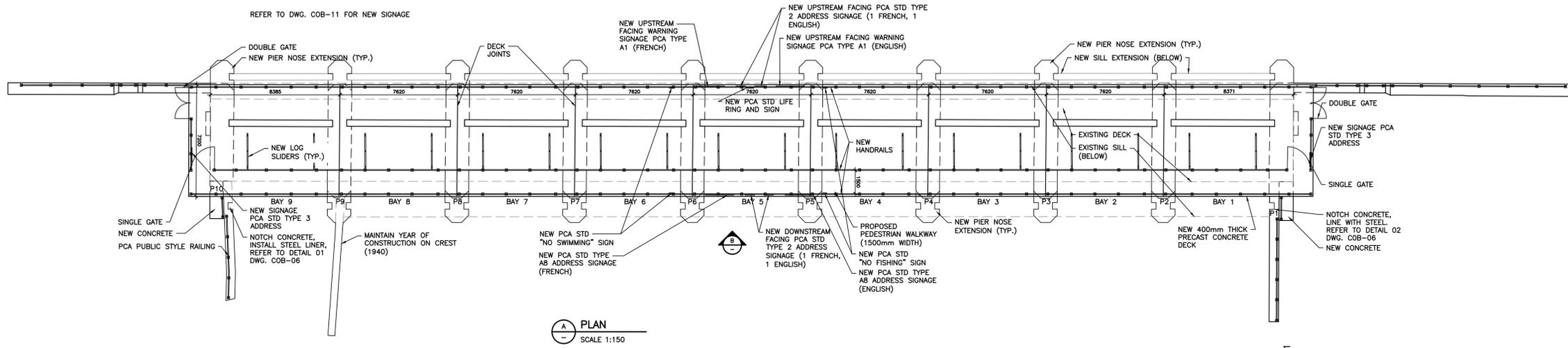
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Location: **COBOCONK DAM  
TRENT-SEVERN WATERWAY**

Title: **DEMOLITION SITE PLAN AND  
ELEVATION**

Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: AS NOTED	Date: JUNE 2016	Drawing No. COB-04
Project No.: BRM00605412a		



- DEWATERING/DIVERSION NOTES:**
- PIER NOSE EXTENSIONS TO BE CONSTRUCTED USING LOCALIZED COFFERDAM.
  - SILL FOR SERVICE GAINS ON THE UPSTREAM SIDE MAY REQUIRE TREMIE CONCRETE METHODS.
  - UPSTREAM AND DOWNSTREAM SERVICE GAINS TO BE USED TO DEWATER EACH BAY FOR PIER FACE REPAIRS.
  - PUMPING OF WATER WILL LIKELY BE REQUIRED DUE TO LEAKAGE AT SERVICE GAINS.
  - PUMPED WATER MUST BE TREATED PRIOR TO DISCHARGE INTO WATERCOURSE.
  - DAM MUST REMAIN OPERABLE DURING CONSTRUCTION. A MINIMUM OF 4 BAYS MUST BE OPERATIONAL AT ALL TIMES DURING CONSTRUCTION.
  - IN-WATER WORKING RESTRICTION PERIOD FROM MARCH 15 TO JULY 15.
  - THE CONTRACTOR MUST SUBMIT A DRAWING/SEDIMENT CONTROL PLAN FOR APPROVAL BY PCA. THE DEWATERING/SEDIMENT CONTROL PLAN MUST BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF ONTARIO.
  - NO MORE THAN 3 BAYS CAN BE ISOLATED BY COFFERDAM AT ONE TIME.
  - ONLY PARKS CANADA TO OPERATE EXISTING STOP LOG BAYS IN THE PRIMARY STOP LOG GAINS. OPERATION OF STOP LOGS IN THE SERVICE GAINS IS THE RESPONSIBILITY OF THE CONTRACTOR IN COORDINATION WITH PCA.

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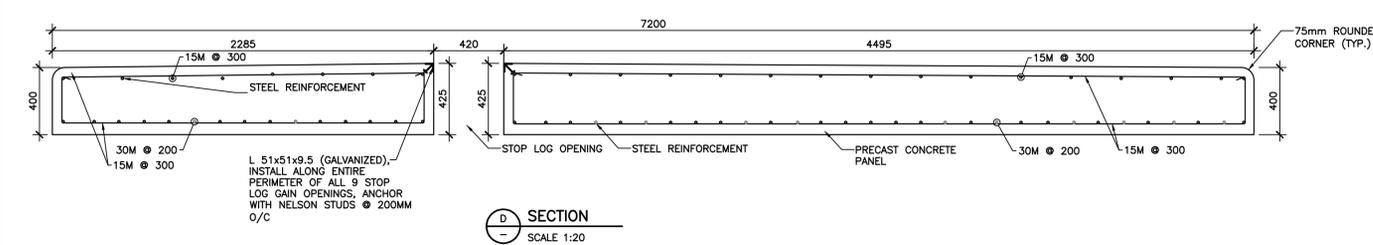
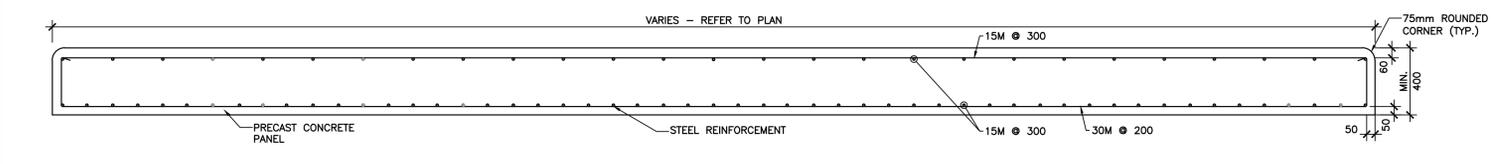
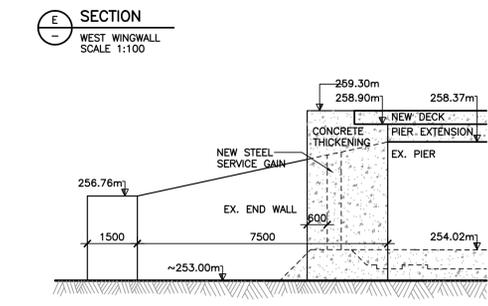
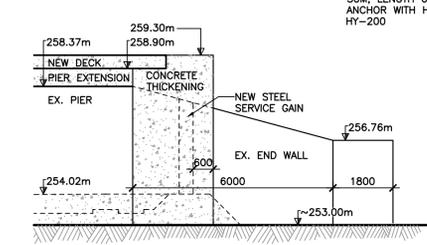
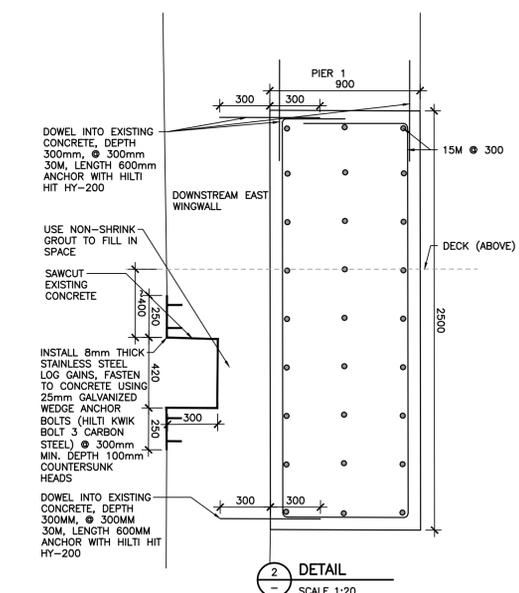
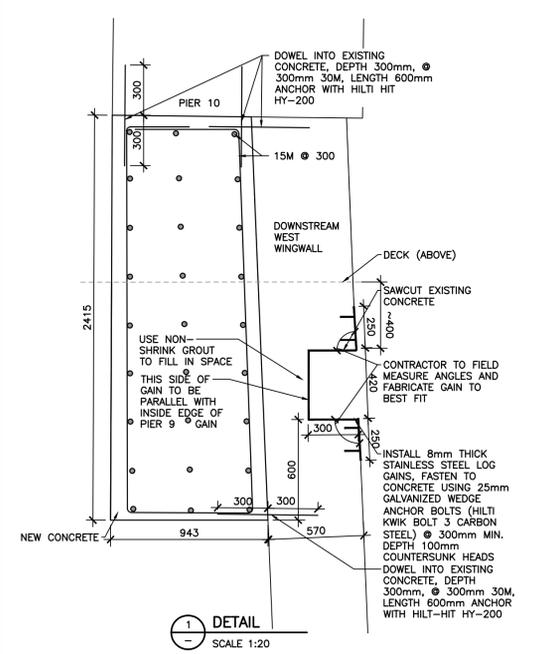
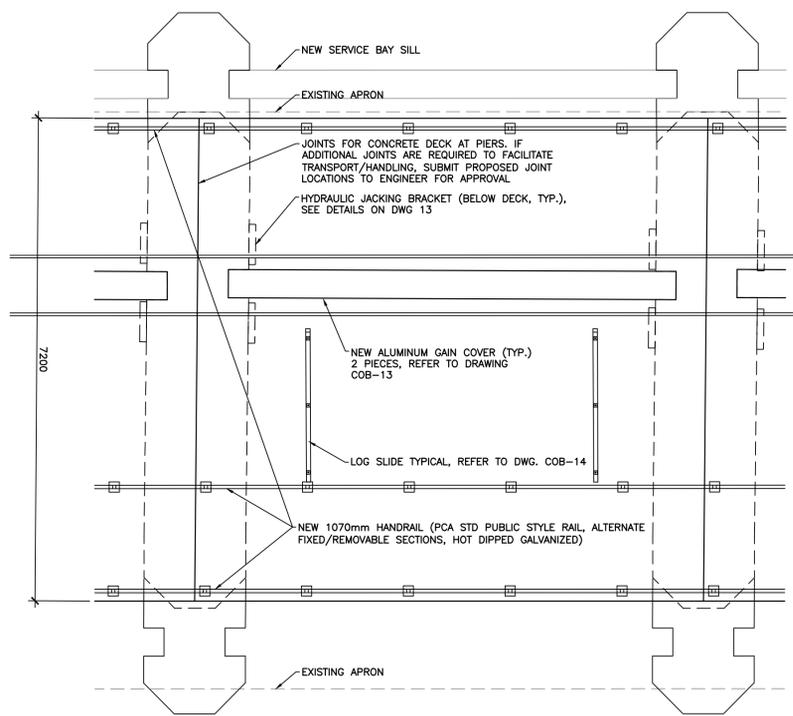
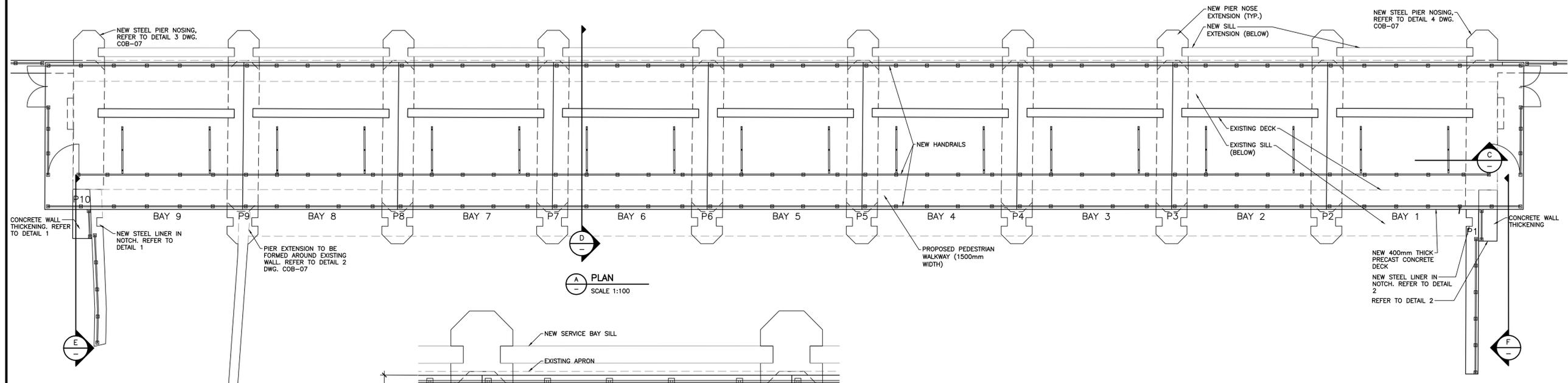


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Location:  
**COBOCONK DAM  
TRENT- SEVERN WATERWAY**

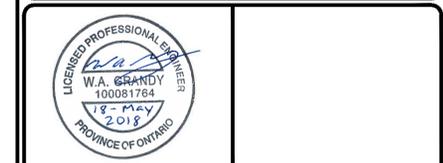
Title:  
**DAM REHABILITATION  
PLAN AND ELEVATION**

Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: AS NOTED	Date: JUNE 2016	Drawing No: COB-05
Project No.: BRM00605412a		



NOTE:  
1. ALL STEEL COMPONENTS WILL BE MILD STEEL EXCEPT WHERE NOTED, E.G. RAILINGS.

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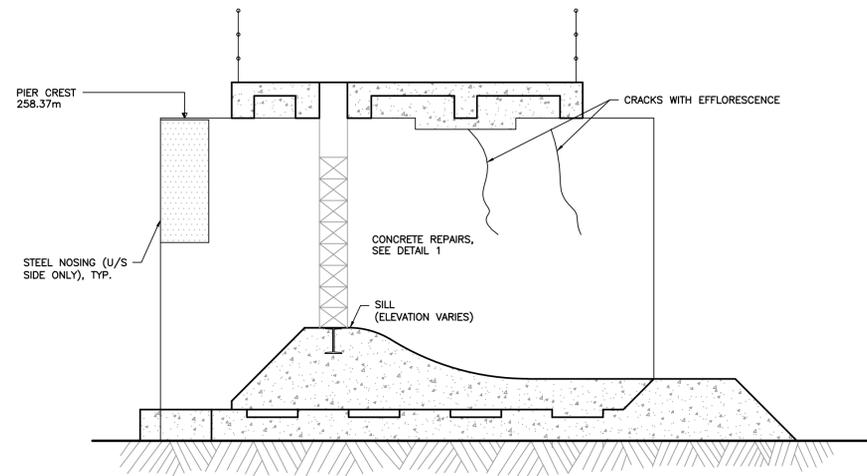
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**COBOCONK DAM  
TRENT-SEVERN WATERWAY**

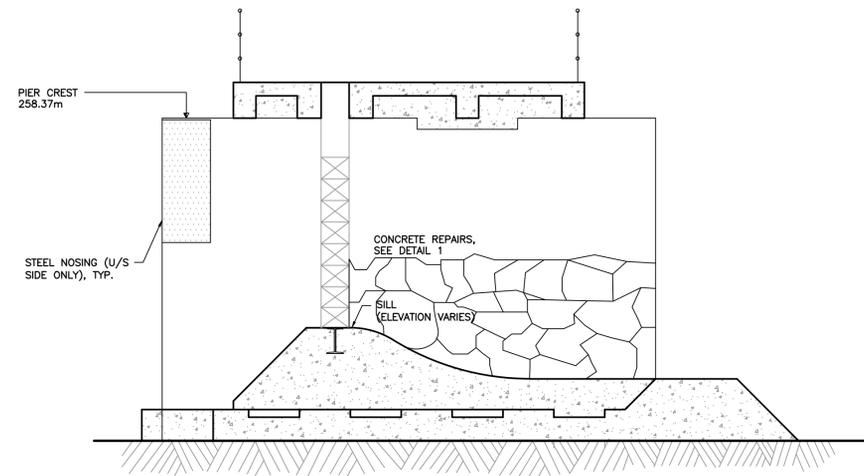
Title:  
**NEW CONCRETE DECK, PLAN AND  
ELEVATION**

Designed By: Drawn By: T.M. Checked By: W.A.G.  
 Scale: AS NOTED Date: JUNE 2016 Drawing No:  
 Project No.: BRM00605412a **COB-06**

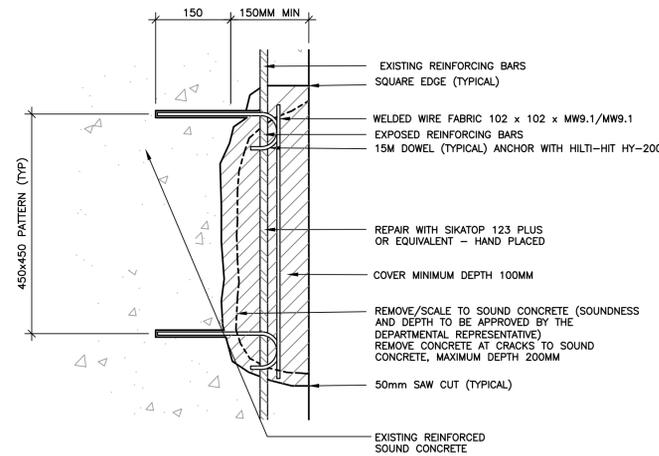




**A** SECTION - TYP. PIER (EXISTING)  
SCALE 1:50



**B** SECTION - (EXISTING)  
PIERS 5, 6, 7, 8 & 9  
SCALE 1:50  
ALL INSIDE PIER FACES HAVE CRACKING. PIER FACES OF PIERS 5, 6, 7, 8 & 9 HAVE DEEP PATTERN CRACKS, MAINLY BELOW NORMAL WATER LEVEL ELEVATION OF 256.33m



**1** DETAIL  
CONCRETE REPAIRS (DEPTH 150mm AND GREATER)  
SCALE NTS

**NOTES:**

1. SAWCUT STRAIGHT LINES FOR STRAIGHT REPAIR SECTIONS. SOUND CONCRETE MUST BE APPROVED BY DEPARTMENTAL REPRESENTATIVE.
2. ALL CONCRETE MUST ORIGINATE FROM THE SAME SOURCE.
3. CONCRETE LIFTS SHALL BE OF EQUAL HEIGHTS AND ELEVATION SO THAT THEY CORRELATE ACROSS ALL PIERS AND SLUICeways OF THE DAM.
4. PAYMENT FOR CONCRETE REPAIRS WILL BE UNIT PRICE BASED UPON FIELD MEASUREMENT BY DEPARTMENTAL REPRESENTATIVE. LOCATIONS OF CONCRETE REPAIR MUST BE APPROVED BY DEPARTMENTAL REPRESENTATIVE. MAXIMUM REMOVAL DEPTH FOR PAYMENT IS 150mm, UNLESS DEEPER REMOVAL AUTHORIZED BY DEPARTMENTAL REPRESENTATIVE.

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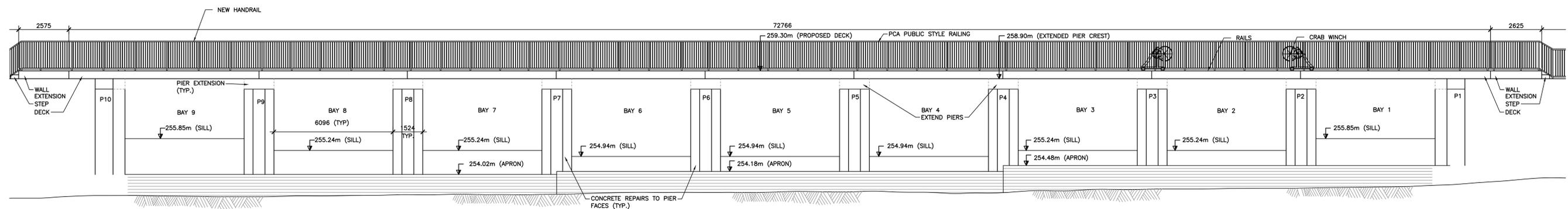
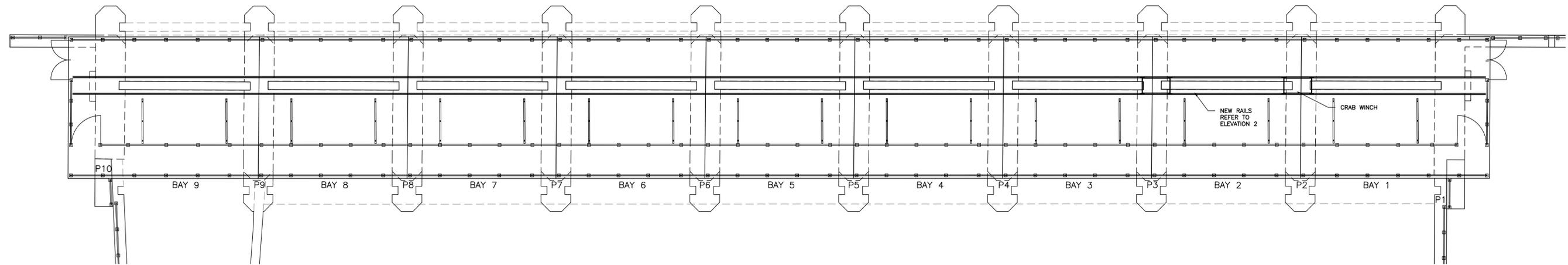
Location:

**COBOCONK DAM  
TRENT- SEVERN WATERWAY**

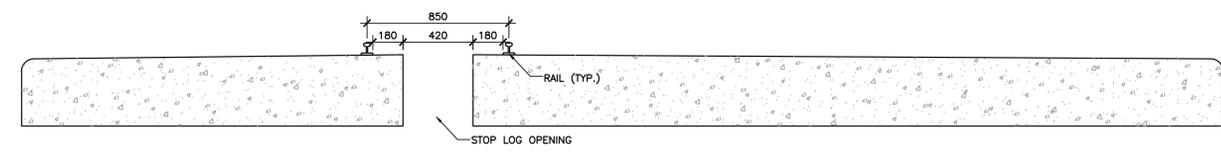
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**CONCRETE PIER REPAIRS**

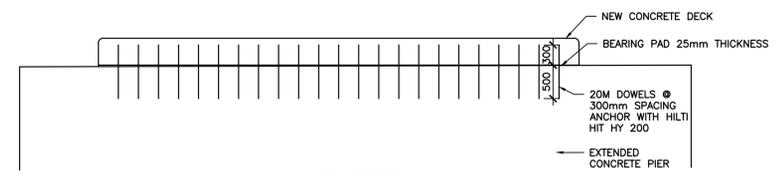
Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: AS NOTED	Date: JUNE 2016	Drawing No: COB-08
Project No.: BRM00605412a		



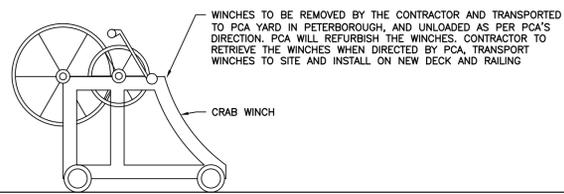
**B** DOWNSTREAM ELEVATION  
SCALE 1:100



**D** SECTION  
SCALE 1:20

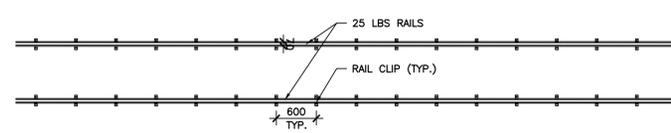


**F** SECTION  
SCALE 1:50

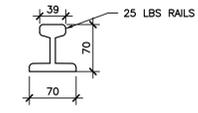


NEW RAILS TO BE SPACED TO FIT EXISTING CRAB WINCHES. 25 LBS RAILS, ASCE RAILS, C/W RAIL CLIPS (#114 @ 600MM), ANCHOR CLIPS TO CONCRETE DECK WITH 16mm DIAMETER CONCRETE ANCHOR BOLTS (ENSURE CLIPS DO NOT OVERLAP WITH GAIN COVER). INSTALL BUMPER STOPS (SB2 - 25 LBS) AT EACH END OF EACH RAIL.

**2** ELEVATION  
ROLLING WINCH  
SCALE 1:25



**E** PLAN  
RAILS  
SCALE 1:50



**1** SECTION  
RAIL  
SCALE 1:5

No.	REVISIONS	Date	By	App.
F	ISSUED FOR TENDER	MAY 18 2018	T.M.	WAG
E	ISSUED FOR FINAL REVIEW II	MAR. 7 2018	T.M.	WAG
D	ISSUED FOR FINAL REVIEW	AUG. 16 2017	T.M.	WAG
C	99% DESIGN SUBMISSION	FEB. 3 2017	T.M.	WAG
B	ISSUED FOR PRELIMINARY DESIGN RESUBMISSION	SEPT. 9 2016	TM	WAG
A	ISSUED FOR PRELIMINARY DESIGN SUBMISSION	AUG. 11 2016	TM	WAG



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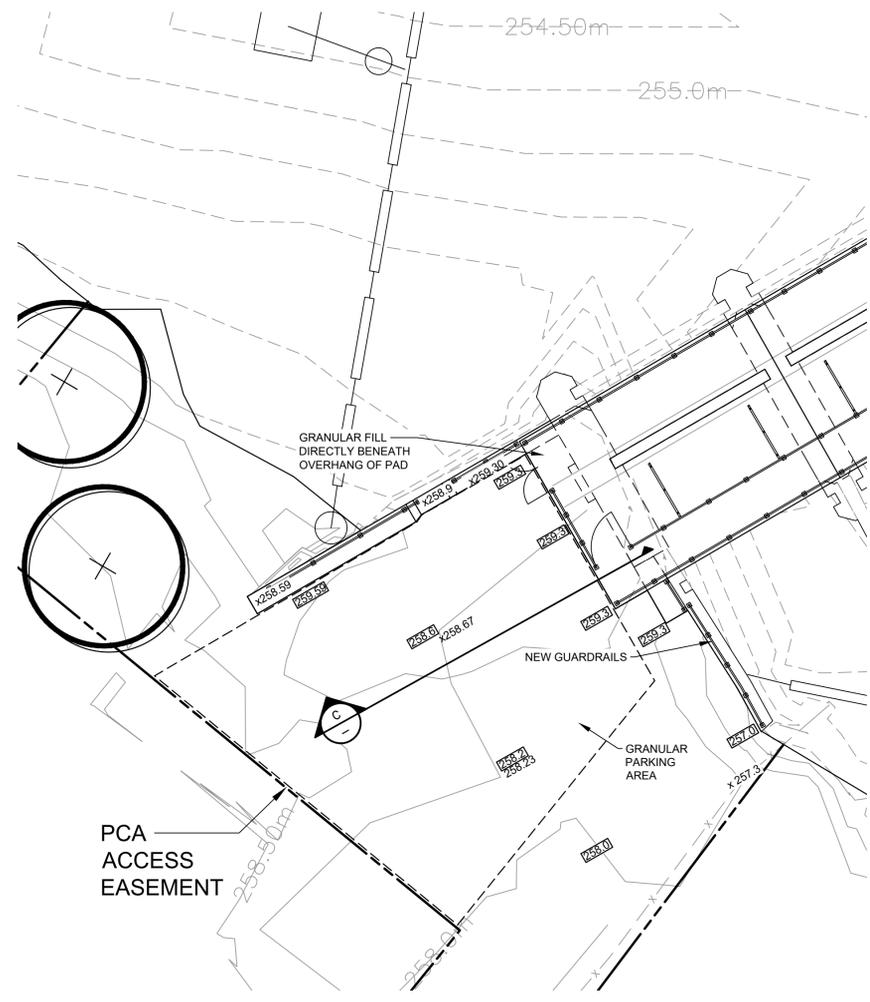
Owner/Client:  
 Parcs Canada  
 Parks Canada

**Canada**

Location:  
**COBOCONK DAM  
TRENT- SEVERN WATERWAY**

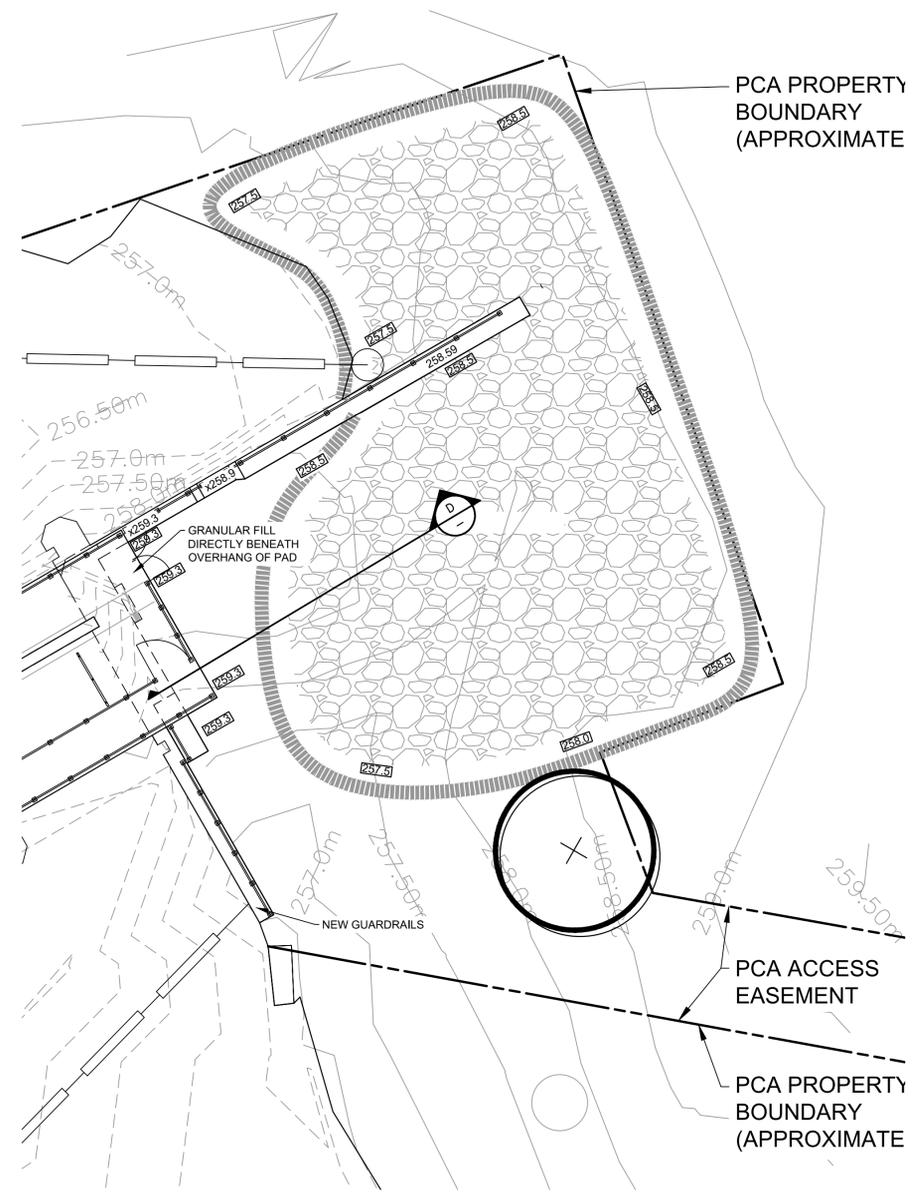
Title:  
**LOG LIFTING SYSTEM**

Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: AS NOTED	Date: JUNE 2016	Drawing No: COB-09
Project No.: BRM00605412a		

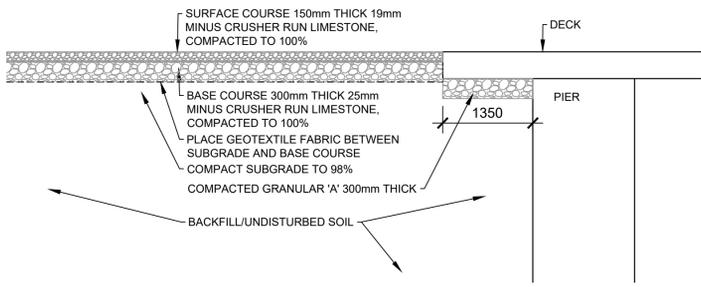


**A PARTIAL SITE PLAN**  
WEST SIDE  
SCALE 1:125

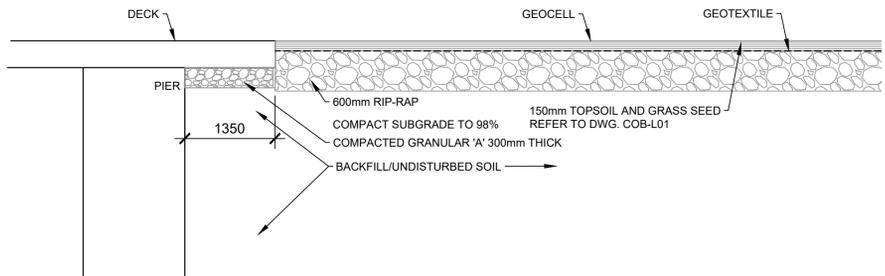
- LEGEND**
- EX. MANHOLE
  - EX. CATCHBASIN
  - EX. GUY WIRE
  - EX. HYDRO POLE
  - EX. PCA ROW PROPERTY LINE
  - PROPOSED EARTH ELEVATION
  - EXISTING EARTH ELEVATION/FINAL CONCRETE ELEVATION



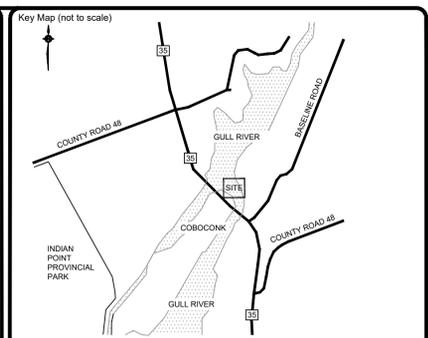
**B PARTIAL SITE PLAN**  
EAST SIDE  
SCALE 1:125



**C SECTION**  
SCALE 1:75



**D SECTION**  
SCALE 1:150



- RIPRAP NOTES:**
1. **EROSION PROTECTION:**
    - NOT MORE THAN 10% OF TOTAL VOLUME OF STONES WITH INDIVIDUAL SIZE LESS THAN 250mm (D MIN). MINIMUM SIZE SHALL HAVE A MEAN DIAMETER OF 200mm.
    - NOT LESS THAN 50% OF TOTAL VOLUME OF STONES WITH INDIVIDUAL SIZE OF 300mm (D MAX).
    - REMAINING PERCENTAGE OF TOTAL VOLUME TO HAVE UNIFORM DISTRIBUTION OF STONES BETWEEN 200mm AND 300mm SIZE.
    - LAYER THICKNESS TO BE 600mm.
  2. STONES ARE TO HAVE ANGULAR FACES AND BE SPHERICAL. NO ONE DIMENSION SHALL BE GREATER THAN 30% OF THE MEAN DIMENSION.
  3. STONES SHALL BE FREE OF SAND, SILT AND CLAY FRACTIONS. THE CONTRACTOR SHALL WASH THE STONE TO PROVIDE MATERIAL FREE OF ROCK FINES AND DUST AT THE SOURCE.
  4. TESTING AND CONFIRMATION OF THE ROCK THAT IT IS NON-ACID GENERATING WILL BE REQUIRED PRIOR TO STOCKPILING.
  5. RESTORE ANY AREA DAMAGED BY STOCKPILING AND HAULING OF RIPRAP.
  6. RIPRAP SHALL BE STOCKPILED ON-SITE IN A MANNER TO AVOID SEGREGATION.
  7. DEMONSTRATE TO THE SITE INSPECTOR THAT SUBGRADE ELEVATIONS HAVE BEEN ACHIEVED BEFORE PLACEMENT OF RIPRAP.
  8. PLACE RIPRAP IN A MANNER THAT MATERIALS ARE WELL GRADED.
  9. DEMONSTRATE THAT THE AREA OF PLACEMENT AND DEPTH OF RIPRAP HAVE BEEN ACHIEVED.

No.	REVISIONS	Date	By	App.
F	ISSUED FOR TENDER	MAY 18 2018	T.M.	WAG
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D	ISSUED FOR FINAL REVIEW	AUG. 16 2017	T.M.	WAG
C	99% DESIGN SUBMISSION	FEB. 3 2017	T.M.	WAG
B	ISSUED FOR PRELIMINARY DESIGN RESUBMISSION	SEPT. 9 2016	TM	WAG
A	ISSUED FOR PRELIMINARY DESIGN SUBMISSION	AUG. 11 2016	TM	WAG



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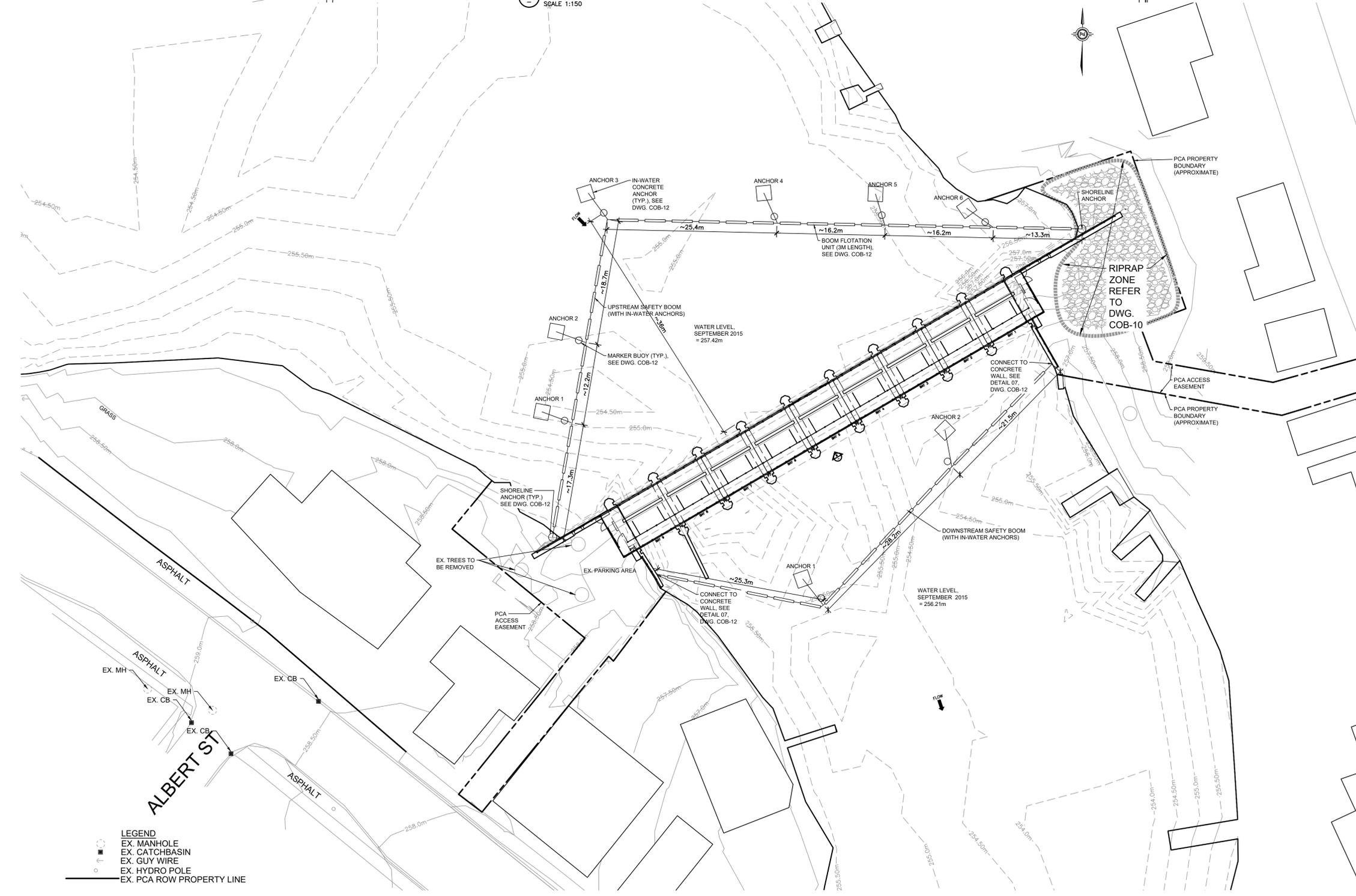
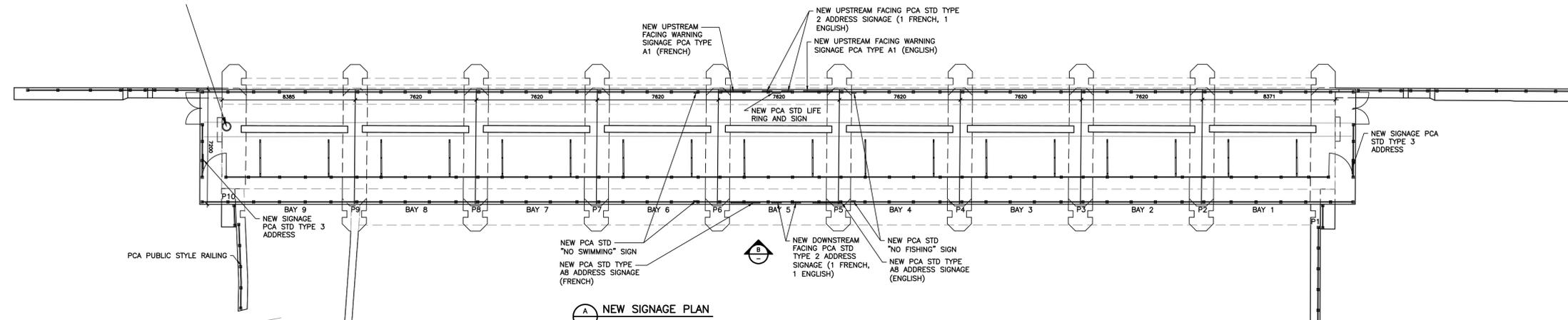
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Location:  
**COBOCONK DAM  
TRENT- SEVERN WATERWAY**

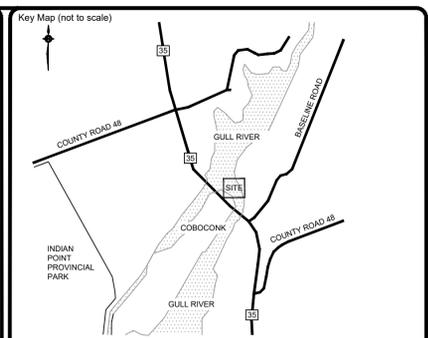
Title:  
**GRADING PLAN**

Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: AS NOTED	Date: JUNE 2016	Drawing No. COB-10
Project No.: BRM00605412a		

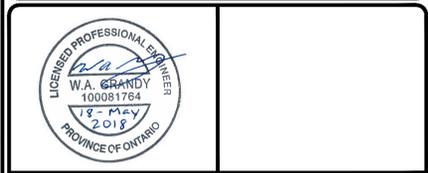


**LEGEND**

- EX. MANHOLE
- EX. CATCHBASIN
- EX. GUY WIRE
- EX. HYDRO POLE
- EX. PCA ROW PROPERTY LINE



No.	REVISIONS	Date	By	App.
F	ISSUED FOR TENDER	MAY 18 2018	T.M.	WAG
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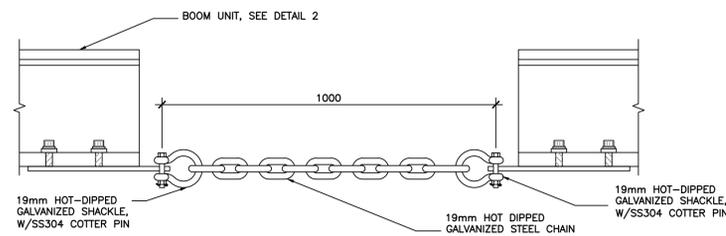


**Canada**

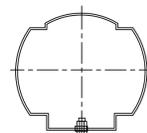
Location:  
**COBOCONK DAM  
 TRENT-SEVERN WATERWAY**

Title:  
**PUBLIC SAFETY MEASURES**

Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: 1:300	Date: JUNE 2016	Drawing No.:
Project No.: BRM00605412a		<b>COB-11</b>

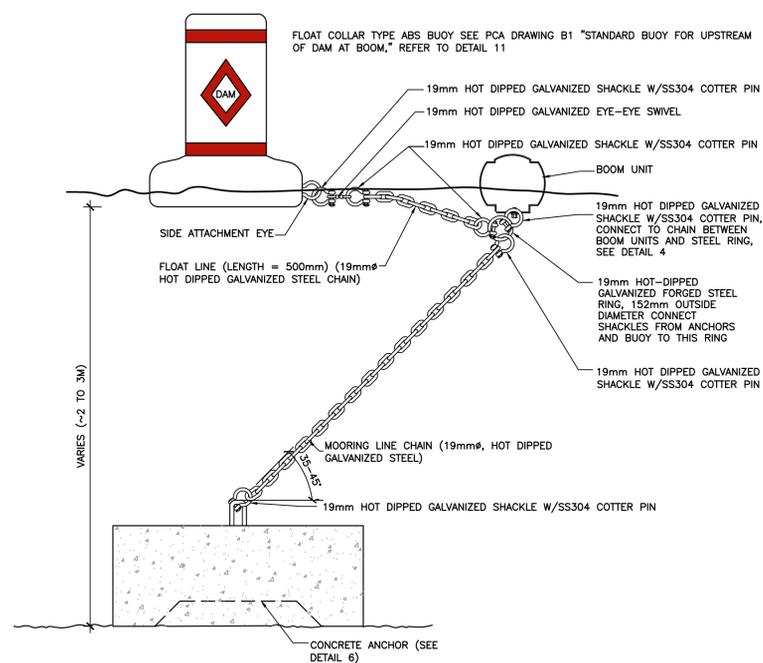


**01 DETAIL**  
ELEVATION SAFETY BOOM ASSEMBLY  
SCALE 1:10

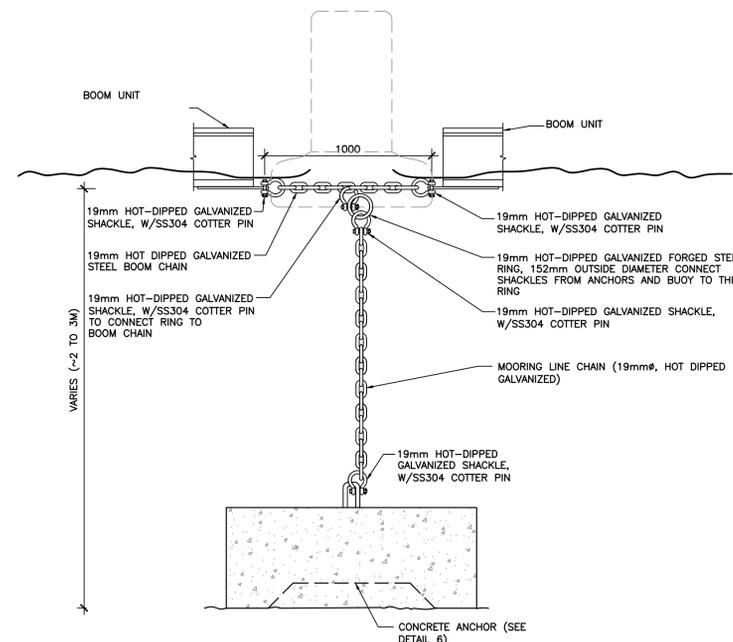


**02 DETAIL - SECTION**  
BOOM FLOTATION UNIT  
SCALE 1:10

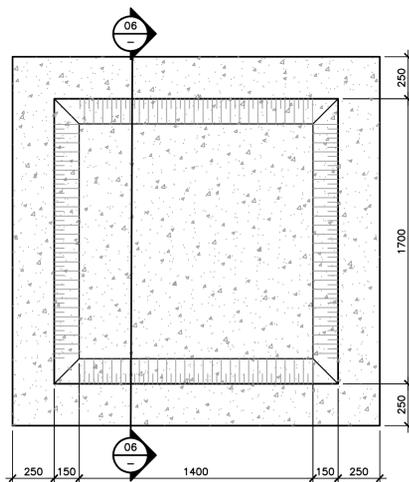
NAME: SAFETY BOOM FLOTATION UNIT  
TYPE: INTERNAL FOAM FILL CORE  
SHAPE: CYLINDRICAL  
LENGTH: 3.0M +/- 0.3M EACH  
DIAMETER: 0.4M +/- 0.5M EACH  
GRAPHICS ON FRONT FACE OF ALL UNITS TO ALTERNATE BETWEEN:  
◊ DANGER - DAM AHEAD - KEEP OUT ◊ AND  
◊ DANGER - BARRAGE DEVANT - NE PAS APPROCHER ◊  
GRAPHICS ON REAR FACE OF ALL UNITS TO BE:  
Parcs Parks  
Canada Canada  
COLOUR: YELLOW (FS-13655)



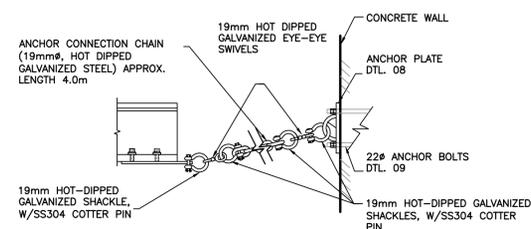
**03 DETAIL**  
ANCHOR-SAFETY BOOM-BUOY CONNECTIONS  
SCALE 1:20



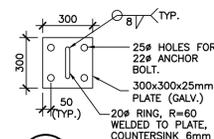
**04 DETAIL**  
ANCHOR-SAFETY BOOM CONNECTION  
SCALE 1:20



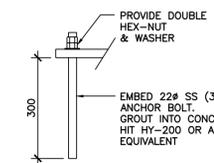
**05 PLAN - UNDERSIDE OF ANCHOR**  
ANCHOR INVERTED SHOWING CAVITY AT BASE  
SCALE 1:20



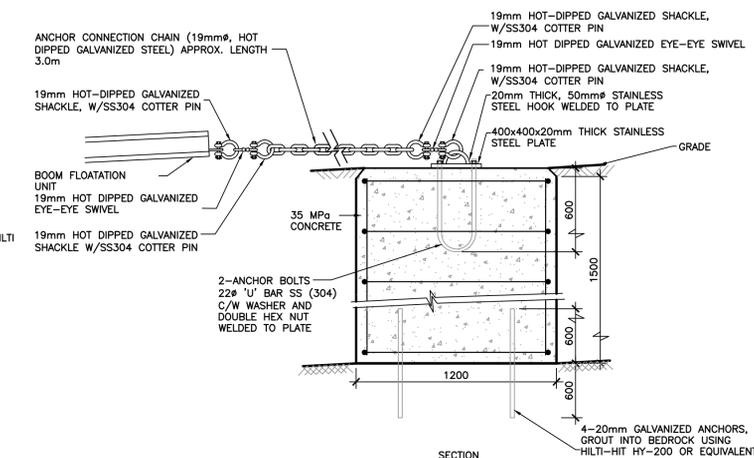
**07 DETAIL**  
BOOM ANCHOR PLATE SECTION  
SCALE N.T.S.



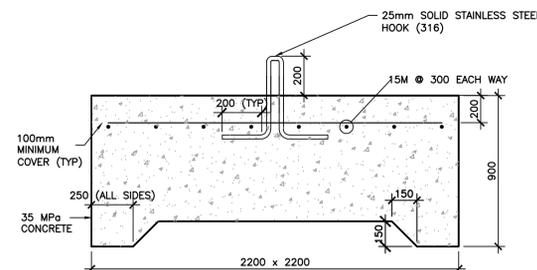
**08 DETAIL**  
ELEVATION BOOM ANCHOR PLATE  
SCALE N.T.S.



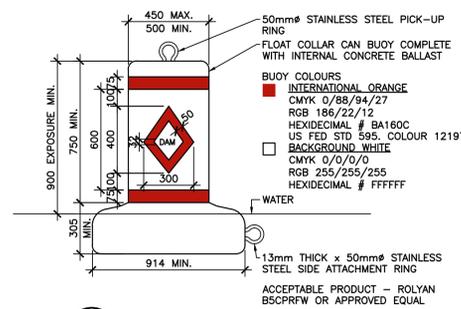
**09 DETAIL**  
SECTION ANCHOR BOLT  
SCALE N.T.S.



**10 SHORELINE ANCHOR DETAIL**  
PLAN & SECTION CONCRETE BOOM ANCHOR AT SHORE (BURIED)  
SCALE N.T.S.



**06 DETAIL - SECTION**  
CONCRETE ANCHOR-IN WATER  
SCALE 1:20



**11 DETAIL**  
FLOAT COLLAR CAN BUOY  
SCALE 1:20

**NOTE:**

1. WATER LEVEL AND RIVER BOTTOM LEVEL VARY. CONTRACTOR TO MEASURE REQUIRED LENGTH OF CHAIN PRIOR TO BOOM INSTALLATION AND ADJUST CHAIN ANGLE OF INCLINATION AS SHOWN ON DETAIL 3.

No.	REVISIONS	Date	By	App.
F	ISSUED FOR TENDER	MAY 18 2018	T.M.	WAG
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D	ISSUED FOR FINAL REVIEW	AUG. 16 2017	T.M.	WAG
C	99% DESIGN SUBMISSION	FEB. 3 2017	T.M.	WAG
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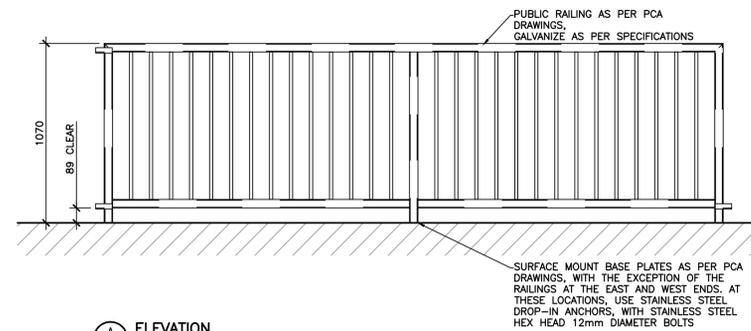
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COBOCONK DAM  
TRENT-SEVERN WATERWAY

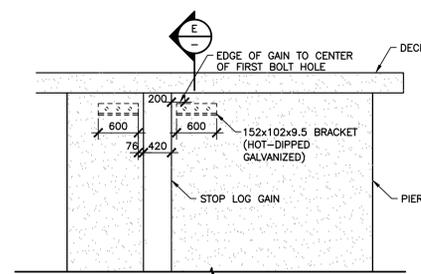
Title:

MISCELLANEOUS DETAILS

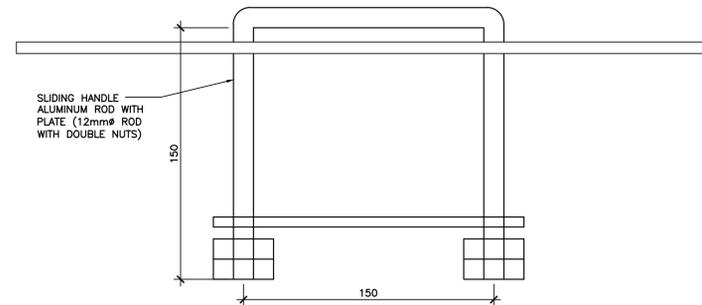
Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: AS NOTED	Date: JUNE 2016	Drawing No. COB-12
Project No.: BRM00605412a		



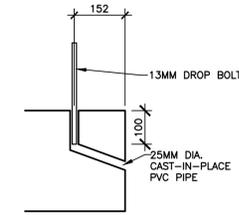
**A** ELEVATION  
RAILING  
SCALE 1:20



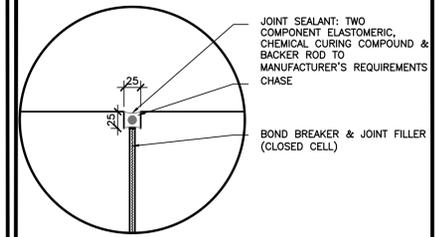
**D** ELEVATION  
HYDRAULIC JACKING BRACKETS  
SCALE 1:50



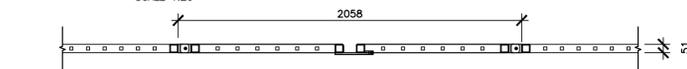
**1** DETAIL  
LIFTING HANDLE  
SCALE N.T.S.



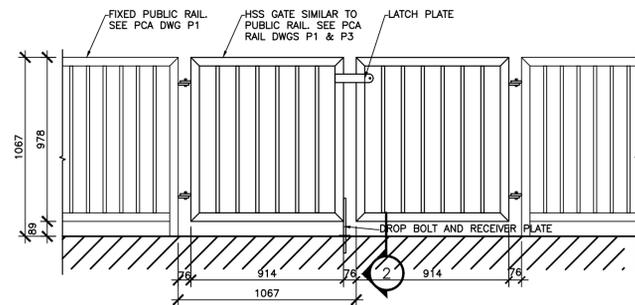
**2** DETAIL  
GATE DROP BOLT  
SCALE N.T.S.



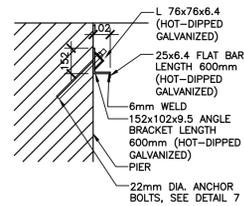
**3** DETAIL  
CONCRETE JOINT  
SCALE N.T.S.



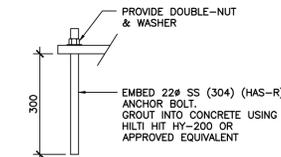
**B** PLAN  
DOUBLE GATE  
SCALE 1:20



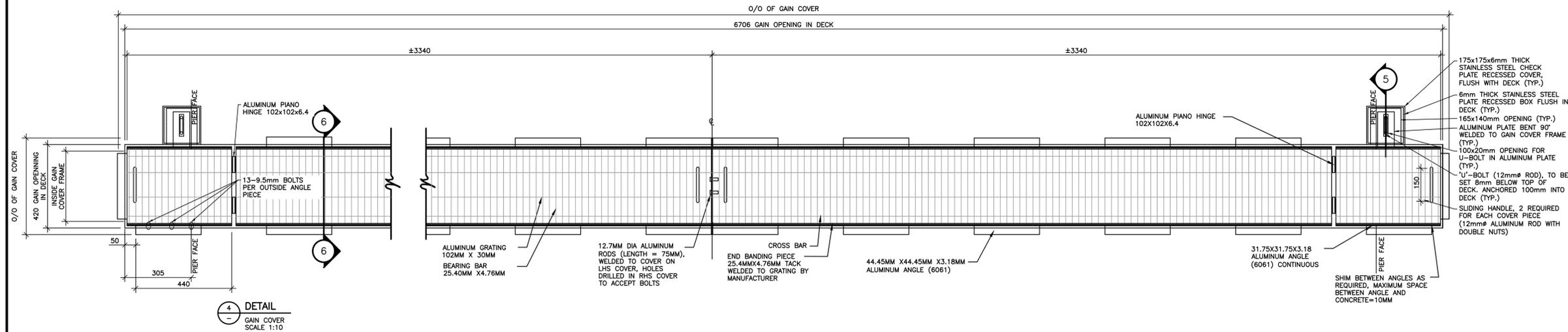
**C** ELEVATION  
DOUBLE GATE  
SCALE 1:20



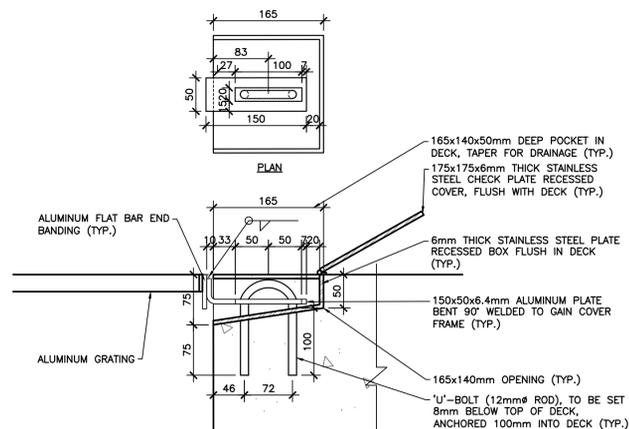
**E** SECTION  
HYDRAULIC JACKING BRACKETS  
SCALE 1:20



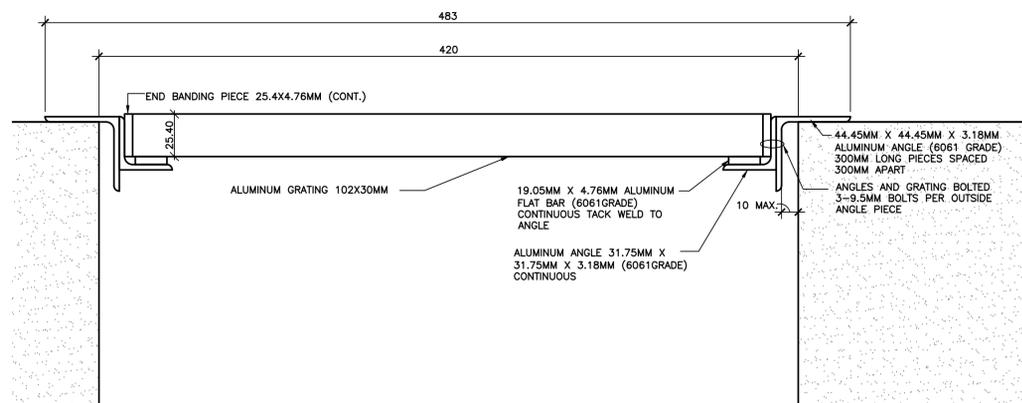
**7** DETAIL  
SECTION OF ANCHOR BOLT  
SCALE N.T.S.



**4** DETAIL  
GAIN COVER  
SCALE 1:10

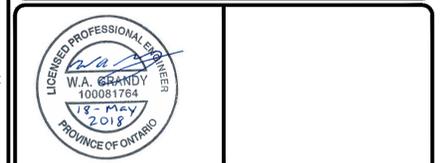


**5** SECTION  
GAIN COVER WITH LOCK DEVICE  
SCALE 1:5



**6** DETAIL  
GAIN COVER  
SCALE 1:2

No.	REVISIONS	Date	By	App.
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Owner/Cliet:

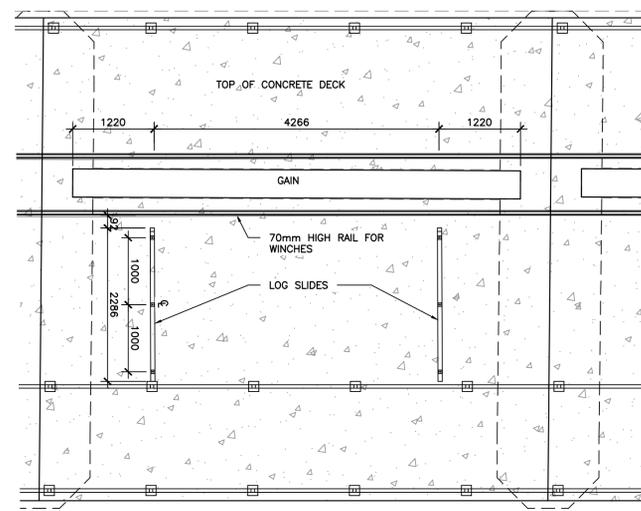
Parcs Canada Parks Canada

**Canada**

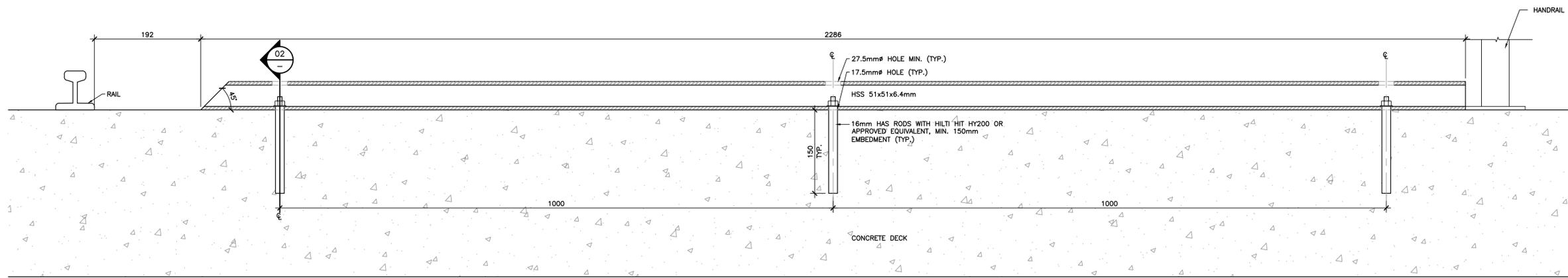
Location:  
**COBOCONK DAM  
 TRENT-SEVERN WATERWAY**

Title:  
**MISCELLANEOUS DETAILS**

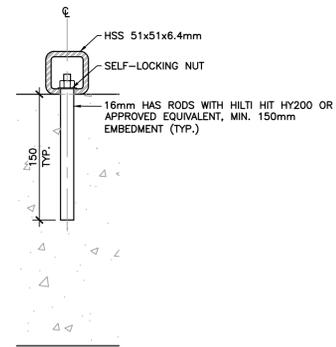
Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: AS NOTED	Date: JUNE 2016	Drawing No. COB-13
Project No.: BRM00605412a		



**A** LOG SLIDE PLAN  
SCALE 1:50



**01** LOG SLIDE SECTION  
SCALE 1:4



**02** LOG SLIDE SECTION  
SCALE 1:4

**NOTES:**  
1. HSS TO BE MILD STEEL.

No.	REVISIONS	Date	By	App.
C	ISSUED FOR TENDER	MAY 18 2018	TM	WAG
B	ISSUED FOR FINAL REVIEW II	MAR. 7 2018	TM	WAG
A	ISSUED FOR FINAL REVIEW	AUG. 16 2017	TM	WAG



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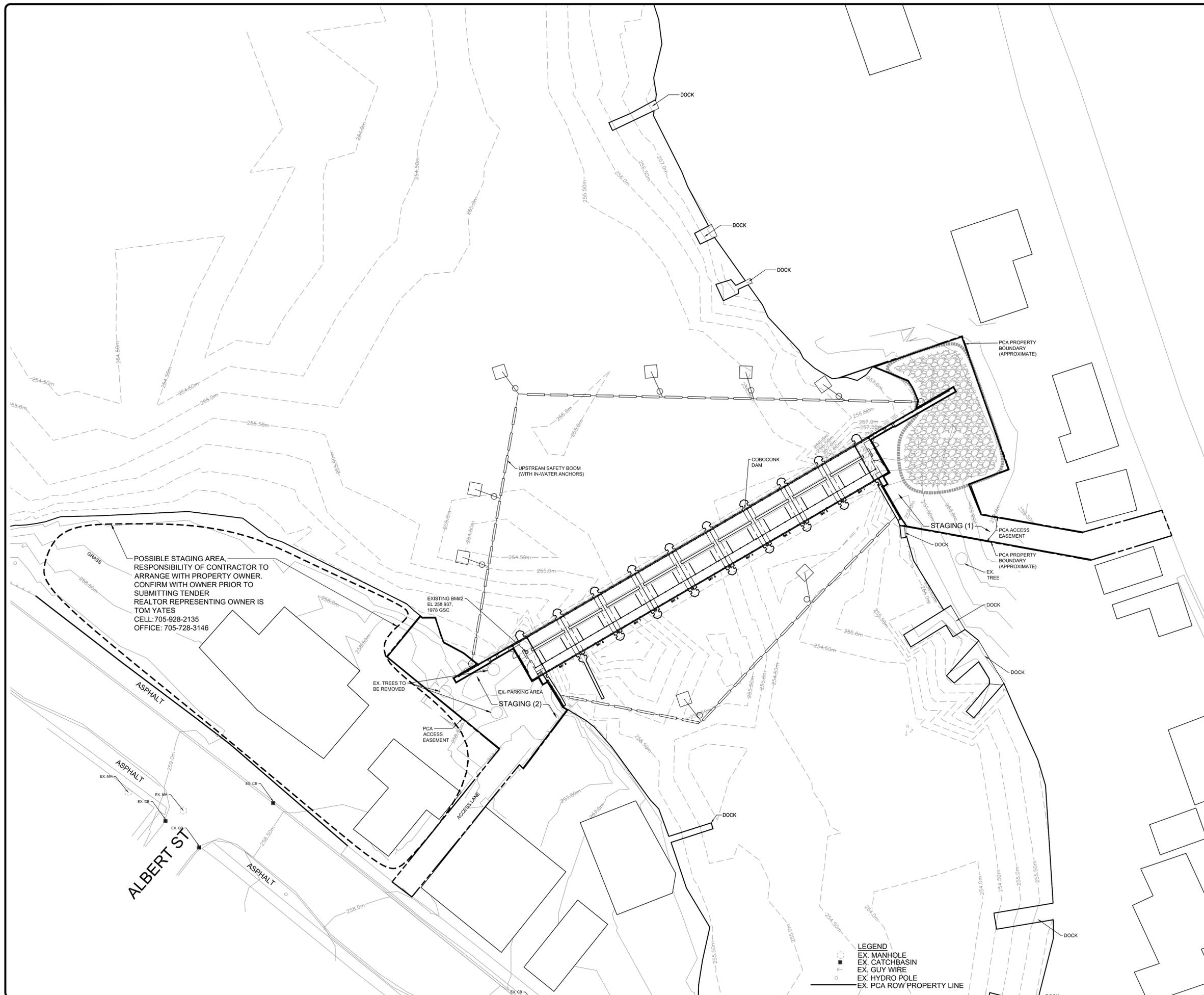


**Canada**

Location:  
**COBOCONK DAM  
TRENT- SEVERN WATERWAY**

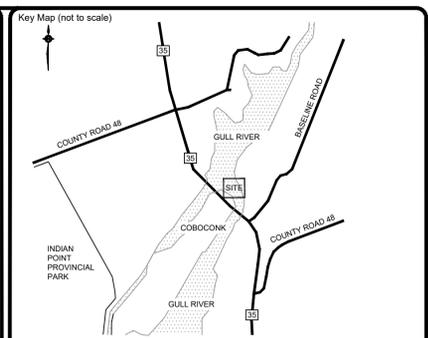
Title:  
**LOG SLIDERS**

Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: AS NOTED	Date: JUNE 2016	Drawing No:
Project No.: BRM00605412a		<b>COB-14</b>



POSSIBLE STAGING AREA,  
RESPONSIBILITY OF CONTRACTOR TO  
ARRANGE WITH PROPERTY OWNER.  
CONFIRM WITH OWNER PRIOR TO  
SUBMITTING TENDER  
REALTOR REPRESENTING OWNER IS  
TOM YATES  
CELL: 705-928-2135  
OFFICE: 705-728-3146

- LEGEND**
- EX. MANHOLE
  - EX. CATCHBASIN
  - EX. GUY WIRE
  - EX. HYDRO POLE
  - EX. PCA ROW PROPERTY LINE



- NOTES:**
- CONTRACTOR TO START WORK ON WEST SIDE FIRST.
  - AT LEAST 2 OF BAYS 3,4,5,6,7 MUST BE OPERATIONAL AT ALL TIMES.

No.	REVISIONS	Date	By	App.
B	ISSUED FOR TENDER	MAY 18 2018	T.M.	W.A.G.
A	ISSUED FOR FINAL REVIEW II	MAR. 7 2018	T.M.	W.A.G.



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Owner/Cliet:

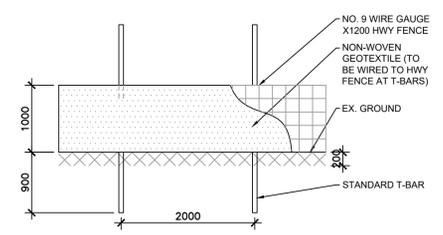
Parcs Canada Parks Canada

**Canada**

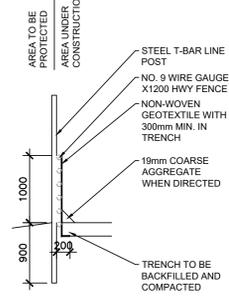
Location:  
**COBOCNCK DAM  
 TRENT- SEVERN WATERWAY**

Title:  
**PROPOSED CONSTRUCTION  
 STAGING AREA**

Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: 1:300	Date: DECEMBER 2017	Drawing No:
Project No.: BRM00605412a		<b>COB-15</b>

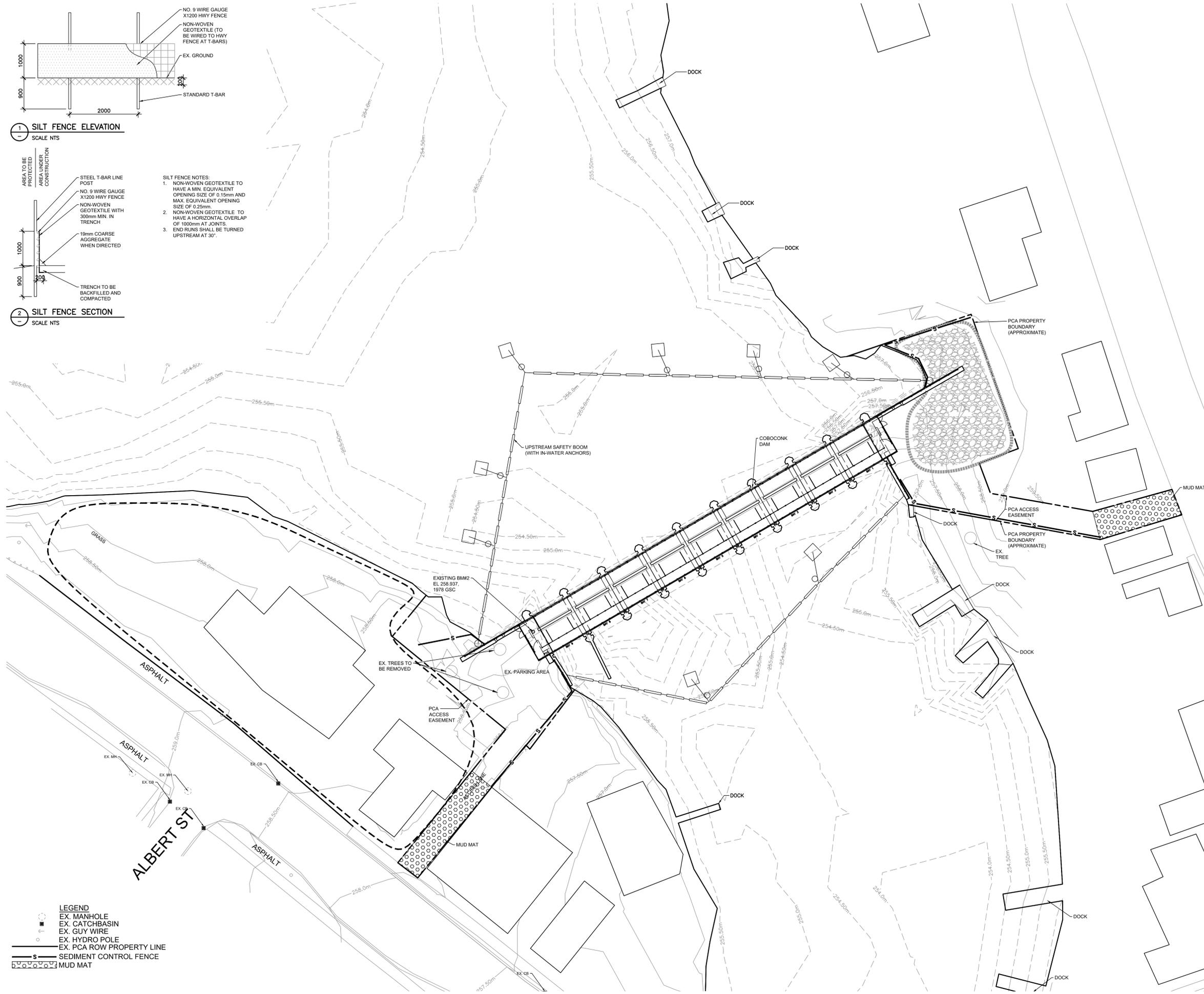


**1 SILT FENCE ELEVATION**  
SCALE NTS

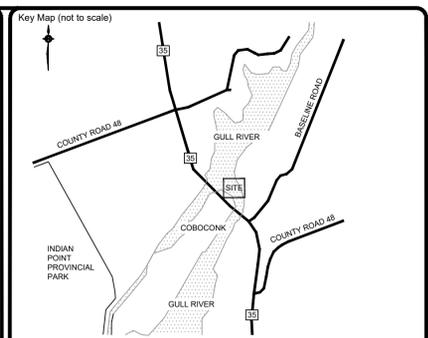


**2 SILT FENCE SECTION**  
SCALE NTS

- SILT FENCE NOTES:**
- NON-WOVEN GEOTEXTILE TO HAVE A MIN. EQUIVALENT OPENING SIZE OF 0.15mm AND MAX. EQUIVALENT OPENING SIZE OF 0.25mm
  - NON-WOVEN GEOTEXTILE TO HAVE A HORIZONTAL OVERLAP OF 100mm AT JOINTS.
  - END RUNS SHALL BE TURNED UPSTREAM AT 30°.



- LEGEND**
- EX. MANHOLE
  - EX. CATCHBASIN
  - EX. GUY WIRE
  - EX. HYDRO POLE
  - EX. PCA ROW PROPERTY LINE
  - SEDIMENT CONTROL FENCE
  - MUD MAT



**SEDIMENT AND EROSION CONTROL NOTES:**

- THE CONSTRUCTION ACCESS TO THE SITE SHALL BE ONLY FROM HIGHWAY 35 (WEST SIDE), ELIZABETH STREET (EAST SIDE).
- MUD MATS TO BE PROVIDED ON SITE AT ALL LOCATIONS WHERE CONSTRUCTION VEHICLES EXIT THE SITE. MUD MATS SHALL BE A MINIMUM OF 3.0m WIDE, 15.0m LONG AND 0.3m DEEP AND SHALL CONSIST OF 50-100mm CLEAR STONE MATERIAL OR APPROVED EQUIVALENT. CONTRACTOR TO ENSURE ALL VEHICLES LEAVE THE SITE VIA THE MUD MAT AND THAT THE MUD MAT IS MAINTAINED IN A MANNER TO MAXIMIZE EFFECTIVENESS AT ALL TIMES.
- TEMPORARY SEDIMENT CONTROLS TO BE INSTALLED PRIOR TO THE START OF CONSTRUCTION PER CONTRACTOR'S APPROVED PLAN.
- THE CONTRACTOR SHALL DELINEATE THE REQUIRED WORKING AREA ON-SITE PRIOR TO THE START OF WORK AND SHALL CONFINE OPERATIONS WITHIN THE DEFINED AREA. APPROXIMATE WORKING AREA LIMITS AS PER THIS DWG.
- TEMPORARY TOPSOIL AND/OR FILL MATERIAL STOCKPILE AREAS TO BE ENCLOSED WITH SILTATION CONTROL FENCE.
- LOCATION OF STOCK AREAS TO BE DETERMINED ON SITE PRIOR TO CONSTRUCTION AND APPROVED BY THE ENGINEER.
- WORKING AREAS, ACCESS REQUIREMENTS, AND TEMPORARY MATERIAL STORAGE AREAS TO BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR AT ALL TIMES. AREAS AFFECTED BY THE CONTRACTOR'S ACTIVITIES ARE TO BE REINSTATED TO THE EXISTING CONDITIONS OR BETTER.
- ON SITE EQUIPMENT REFUELING AND MAINTENANCE TO BE ONLY COMPLETED IN DESIGNATED AREAS.
- SEDIMENT CONTROLS TO BE INSPECTED WEEKLY AFTER EACH RAINFALL EVENT. SEDIMENT CONTROL TO BE MAINTAINED AND REPAIRED UNTIL COMPLETION OF CONSTRUCTION AND SITE RESTORATION. EROSION AND SEDIMENT CONTROL METHODS ARE TO BE CONTINUALLY EVALUATED AND UPGRADES ARE TO BE IMPLEMENTED WHEN NECESSARY.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MATERIALS SUCH AS SILT FENCING AND CLEAR STONE ARE TO BE KEPT ON SITE FOR EMERGENCIES AND REPAIRS.
- REMOVE TEMPORARY SEDIMENT CONTROLS FOLLOWING COMPLETION OF CONSTRUCTION AND SITE RESTORATION AND REINSTATE AFFECTED AREAS TO EXISTING CONDITIONS OR BETTER.
- FAST FENCE SHALL BE INSTALLED ON THE PERIMETER OF PROPERTY AND AT LOCATIONS DETERMINED BY THE DEPARTMENTAL REPRESENTATIVE. IT SHALL REMAIN IN PLACE UNTIL SUCH TIME AS OTHERWISE DIRECTED BY THE DEVELOPMENTAL REPRESENTATIVE.
- AN AFTER HOURS CONTACT LIST IS TO BE VISIBLY POSTED ON SITE FOR EMERGENCIES.
- THE CONTRACTOR MUST SUBMIT THEIR OWN SEDIMENT/EROSION CONTROL PLAN (SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO), WHICH MUST BE APPROVED BY THE OWNER.

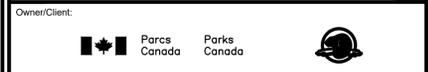
No.	REVISIONS	Date	By	App.
B	ISSUED FOR TENDER	MAY 18 2018	T.M. WAG	
A	ISSUED FOR FINAL REVIEW II	MAR. 3 2018	T.M. WAG	



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- INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •



**Canada**

Location:  
**COBOCONK DAM  
TRENT- SEVERN WATERWAY**

Title:  
**SEDIMENT AND EROSION  
CONTROL**

Designed By:	Drawn By: T.M.	Checked By: W.A.G.
Scale: 1:300	Date: DECEMBER 2017	Drawing No: COB-16
Project No.: BRM00605412a		

