GENIVAR

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September 2, 2010

Jim Millard, M. Sc., P. Geo.
Environmental Superintendent
Mary River Project
Baffinland Iron Mines Corporation
Suite 1016, 120 Adelaide Street West
Toronto, Ontario M5H 1T1

Dear Jim,

RE:

MARY RIVER PROJECT
MARY RIVER LANDFILL
QA/QC REPORT (As-Built Report)
OUR REFERENCE NO. 09-162

Genivar Consultants LP (Genivar) was retained by Baffinland Iron Mines Corporation (BIMC) to design the Solid Waste Landfill and its associated access road in Nunavut, provide QA/QC services during construction and subsequently to compile the required documentation of as-built conditions of the facility.

BACKGROUND

Part J, Part J (3), of the Water Licence (#2BB-MRY0710) for the Mary River Project issued by the Nunavut Water Board (NWB) states that:

> *"The Licensee shall provide as-built plans and drawings, stamped and sealed by a professional Engineer registered in Nunavut, within ninety (90) days of completion of all construction works, …"*

Additionally, Qikiqtani Inuit Association (QIA) in their letter of August 27, 2009 entitled "QIA Response, BIMC Request to Commence Inert Landfill Construction and Operation" have made some requirements for As-Built conditions of the landfill which is the subject of this report.

The Construction of the Access Road and the landfill commenced in the first week of July 2010 and was completed within 3 weeks.

PROPOSED DESIGN OF THE ACCESS ROAD AND LANDSFILL

Figure 1 shows the site map indicating the Mary River Project sites from Steensby in the south to Mary River Camp in the north and Milne Inlet Camp in the north. Figure 2 shows the site plan arrangements of the Acess Road and Landfill at Mary River Site.

As shown in the related drawings in Appendix 1, the Access Road was designed to take off from the existing Explosives Magazines Road. This access road crosses two low areas where culverts were needed to allow for drainage. The Access Road was designed to be constructed of granular material from the nearby borrow pits and the quality of the granular material were to be observed visually by the site engineer performing QA/QC during construction.

The landfill was designed to have containment berms constructed of geanular material. The containment berms are approximately 2-m in height with 3:1 inside slopes and 2:1 outside slopes.

AS-CONSTRUCTED CONDITIONS OF THE FACILITY

Genivar provided full-time QA/QC inspection of the construction activities for the Access Road and the Landfill containment berms. Attached in Appendix 2 are the As-Constructed Drawings and photographs of construction activities.

Access Road construction

The Access Road was constructed in general conformance to the design. Granular material was brought in from nearby borrow pits and placed and compacted. Two culverts at station 0+118 and at station 0+383 were constructed. It should be noted that from Station 0+500 to station 0+600, the road was constructed of blasted inert waste rock for better compaction and drainage. For details on the as-built profile and sections of the Access Road, please refer to drawings AC1 and AC2 in Appendix 2.

Containment construction

The containment for the Landfill Facility was constructed in general conformance with the design. For details on the plans and sections of the containment construction, please refer to drawings AC1 and AC2 in Appendix 2.

The material used for the containment berms and base was obtained from nearby borrow sources. The material was free of any deleterious substances and was reviewed by Genivar QA/QC inspector.

It is our opinion that the Landfill Facility containment was designed and built in general conformance with our original design.

We trust this report is satisfactory and meets your requirements. However, should you have any questions, please do not hesitate to contact the undersigned for further discussion.

Yours truly,

Genivar Consultants LP

M. G. Kord

Marz G. Kord, P. Eng., M.Sc., MBA

➢ APPENDIX 1

- **DESIGN BRIEFS**
- **DESIGN DRAWINGS**

GENIVAR

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August 7, 2009

Dick Matthews
Director, Technical Services
Baffinland Iron Mines Corporation
Suite 1016, 120 Adelaide Street West
Toronto, Ontario M5H 1T1

Dear Dick,

RE:

MARY RIVER PROJECT
ACCESS ROAD TO SOLID WASTE DISPOSAL SITE
DESIGN REPORT
OUR REFERENCE NO. 09-162

Genivar Consultants LP (Genivar) has been retained by Baffinland Iron Mines Corporation (BIMC) to design the access road to the solid waste disposal site at their Mary River Camp site in Nunavut. The purpose of this report is to provide you with the design parameters as well as the methodology in the construction of the access road.

PROPOSED DESIGN OF THE FACILITIES AT MARY RIVER CAMP SITE

Figure C01 shows the site plan including a key map indicating the access road to the proposed solid waste disposal site. Figures C02 to C05 show the plan, profiles and sections of the road including the culverts associated with our design.

The access road shall be built over relatively flat stony surfaced areas of the tundra with two lower areas where water may migrate under the road.

The intent is not to excavate into the tundra but to build on top of the stony surface on the flat areas and the minor organics in the depressed areas.

This should minimize to the melting of wedge ice or tabular ice below the surface of the road if it should exist in the permafrost.

Although there is no specification available for the select granular fill, the Contractors have been constructing roads on site with this material including the road to the bulk sample pit on top of the ore body as well as roads about the site.

There are two types of fill found in the borrow pits that have been used in construction in the past. One is a sandy fill with little gravel and the other is a well graded gravel with just adequate fines to construct a stable base that packs readily with the travel from the bulldozers and trucks. This material is what we term as select granular fill and it was identified in the nearby designated borrow pit to mine personnel and was approved by the engineer to be used on the road base and wearing surface.

As shown in the related drawings in Appendix 1, the access road requires two culverts to be installed at two locations to ensure proper drainage away from the road. These culverts were sized based on the precipitation information provided from the nearest measuring station (Pond Inlet) and the availability of culverts at the site. We enclose our design basis for the calculation of culverts to this letter.

The following is a summary of the required material for the proposed access road:

Road Length:	660 meters
Culverts:	1 @ 1-m dia. CSP culverts 11 meters
	1 @ 0.3 m dia. CSP culvert 10 meters
Cut:	0 C.M.
Fill (Road base aggregate)	2332 C.M. select granular fill.

The 1.0m culvert being utilized is considerably larger than required but is used due to availability on site.

An explosive magazine designed for 20,000 kg of explosive is located approximately 70 meters from the proposed access road to the solid waste disposal (SWD) site.

Although a majority of the 20,000 kg of explosives were used during the bulk sampling program in 2008, we have ensured that the access road to the SWD site meets the guidelines for Quality Distance to Explosives storage as set out by Natural Resources Canada (NRC).

We trust this report is satisfactory and meets your requirements. However, should you have any questions, please do not hesitate to contact the undersigned for further discussion.

Yours truly,

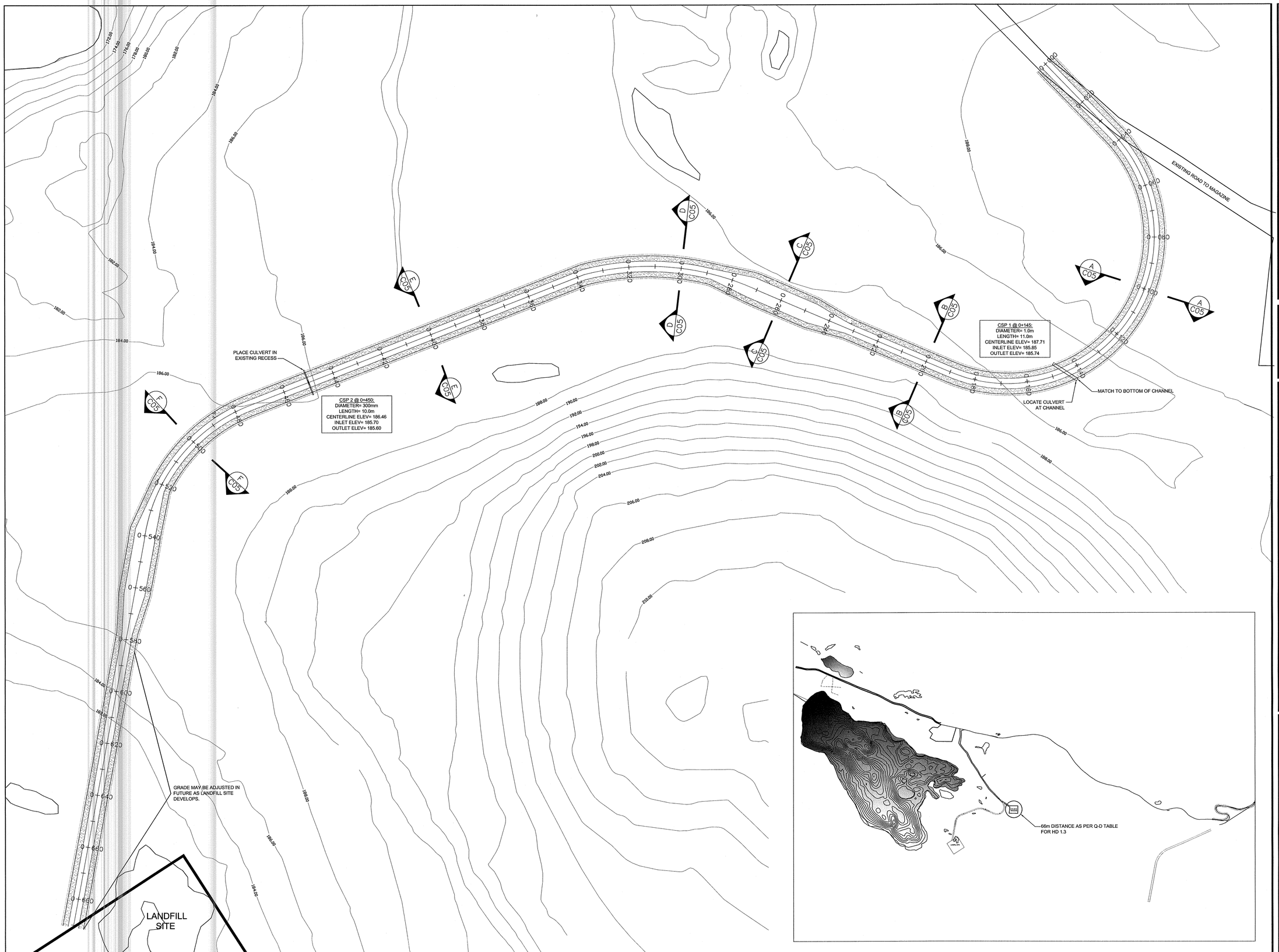
Genivar Consultants LP

Barry H. Martin, P. Eng., MRAIC
BHM/jw
c.c. Derek Chubb
Dave McCann

➢ APPENDIX 1

DRAWINGS

(Forwarded July 20, 2009)



Description	Date	No.
Revisions and Issues		

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REGISTERED PROFESSIONAL ENGINEER
B.H. MARTIN
LICENSEE
PROVINCE OF NUNAVUT

MECHANICAL

ELECTRICAL

Project

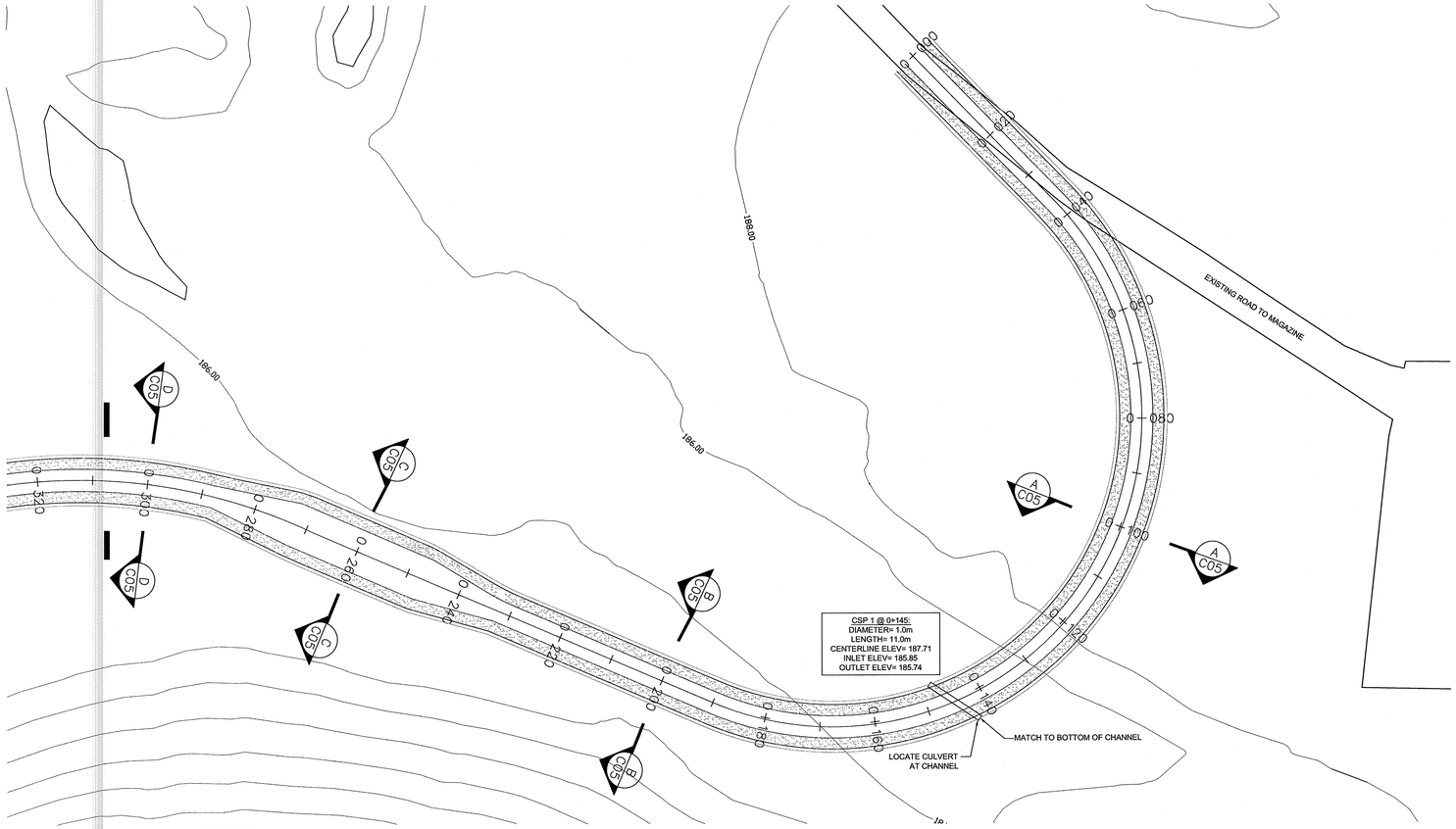
MARY RIVER PROJECT
BAFFINLAND IRON MINES CORPORATION

BAFFINLAND NUNAVUT

Drawing

NEW ROAD TO LANDFILL SITE PLAN VIEW

Date	CADD File Number
JUNE 2009	design\new road sections.dwg
Scale: AS NOTED	Job Number: **09-162**
Drawn: S.S.	
Checked: B.M.	Drawing Number: **C01**
Approved: B.M.	



NEW ROAD- PLAN VIEW

SCALE 1:125

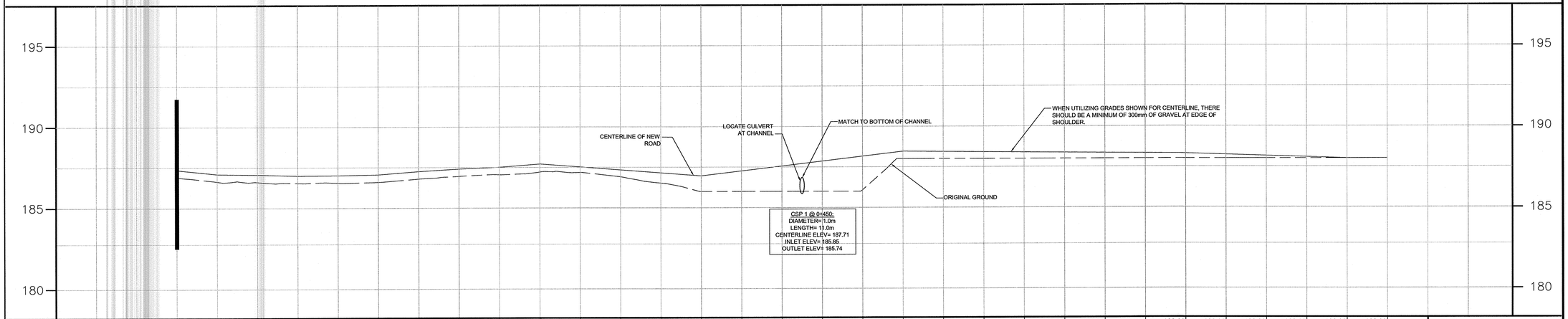
SCALES

20m 0 20m

Horizontal

5m 0 5m

Vertical



STATION	0+300	0+290	0+280	0+270	0+260	0+250	0+240	0+230	0+220	0+210	0+200	0+190	0+180	0+170	0+160	0+150	0+140	0+130	0+120	0+110	0+100	0+090	0+080	0+070	0+060	0+050	0+040	0+030	0+020	0+010	0+000	STATION
ORIGINAL GROUND ELEVATION	186.90	186.64	186.60	186.53	186.55	186.60	186.79	186.95	187.05	187.21	187.18	186.92	186.52	186.00	186.00	186.00	186.00	186.00	188.00	188.00	188.00	188.00	188.00	188.00	188.00	188.00	188.00	188.00	188.00	188.00	188.00	ORIGINAL GROUND ELEVATION
CENTERLINE ELEVATION	187.36	187.10	187.06	186.99	187.01	187.06	187.25	187.41	187.51	187.71	187.52	187.34	187.15	186.96	187.26	187.56	187.86	188.16	188.46	188.44	188.42	188.39	188.37	188.35	188.32	188.30	188.23	188.15	188.08	188.00	188.00	CENTERLINE ELEVATION
CENTERLINE GRADE	+0.7%	+2.6%	+0.4%	+0.7%	−0.2%	−0.5%	−1.9%	−1.6%	−1.0%	−2.0%	+1.9%	+1.8%	+1.9%	+1.9%	−3.0%	−3.0%	−3/0%	−3.0%	−3.0%	+2.0%	+2.0%	+3.0%	+2.0%	+2.0%	+3.0%	+0.2%	+0.7%	+0.8%	+0.7%	+0.8%	0.%	CENTERLINE GRADE
AS CONSTRUCTED NOTES																																AS CONSTRUCTED NOTES

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MECHANICAL ELECTRICAL

Project

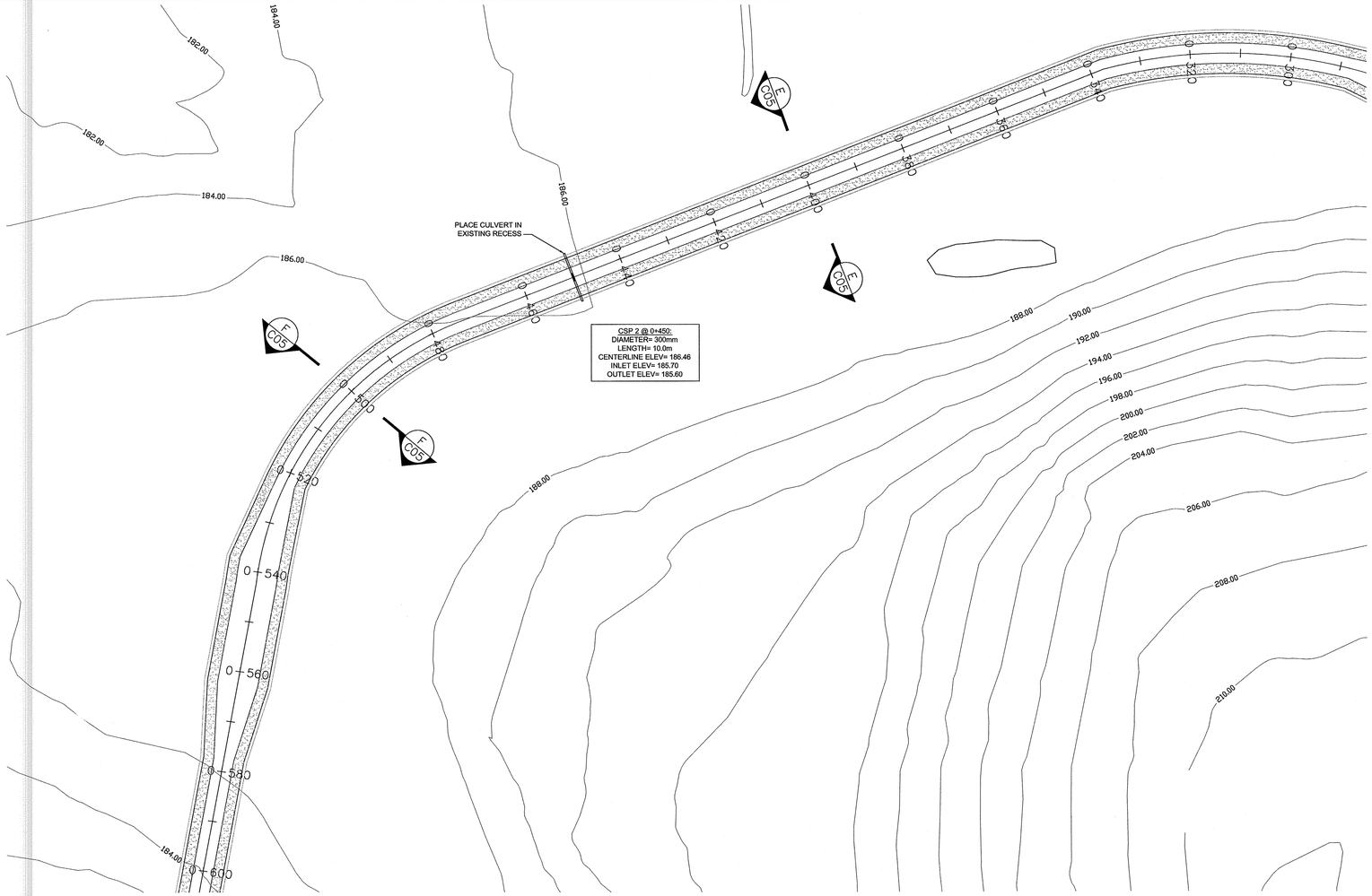
MARY RIVER PROJECT
BAFFINLAND IRON MINES CORPORATION

BAFFINLAND NUNAVUT

Drawing

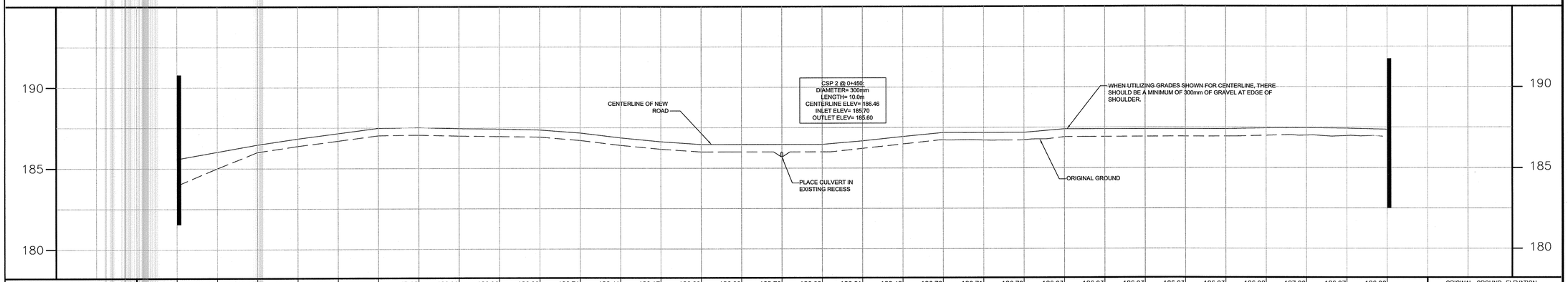
PLAN AND PROFILE
STA. 0+000 to 0+300

Date	CADD File Number
JUNE 2009	civil\design\plan and profile
Scale AS NOTED	Job Number **09-162**
Drawn S.S.	
Checked B.M.	Drawing Number **C02**
Approved B.M.	



NEW ROAD- PLAN VIEW
SCALE 1:125

SCALES
20m 0 20m
Horizontal
5m 0 5m
Vertical



STATION	0+600	0+590	0+580	0+570	0+560	0+550	0+540	0+530	0+520	0+510	0+500	0+490	0+480	0+470	0+460	0+450	0+440	0+430	0+420	0+410	0+400	0+390	0+380	0+370	0+360	0+350	0+340	0+330	0+320	0+310	0+300
ORIGINAL GROUND ELEVATION	183.95	185.00	186.00	186.37	186.66	187.02	187.05	186.99	186.96	186.90	186.71	186.41	186.17	186.00	186.00	185.70	186.00	186.21	186.48	186.72	186.71	186.72	186.93	186.93	186.93	186.93	186.93	186.98	187.00	186.97	186.90
CENTERLINE ELEVATION	185.58	186.02	186.46	186.83	187.12	187.48	187.51	187.45	187.42	187.36	187.17	186.87	186.63	186.46	186.46	186.46	186.46	186.67	186.94	187.18	187.17	187.18	187.36	187.36	187.36	187.36	187.36	187.44	187.46	187.43	187.36
CENTERLINE GRADE	−4.4%	−4.4%	−4.4%	−3.7%	−2.9%	−3.6%	−0.3%	+0.6%	+0.3%	+0.6%	+1.9%	+3.0%	+2.4%	+1.7%	0%	0%	0%	−2.1%	−2.7%	−2.4%	+0.1%	−0.1%	−1.8%	0%	0%	0%	0%	−0.8%	−0.2%	+0.3%	+0.7%
AS CONSTRUCTED NOTES																															

Description	Date	No.

Revisions and Issues

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BAFFINLAND NUNAVUT

Drawing
PLAN AND PROFILE
STA. 0+300 to 0+600

Date	CADD File Number
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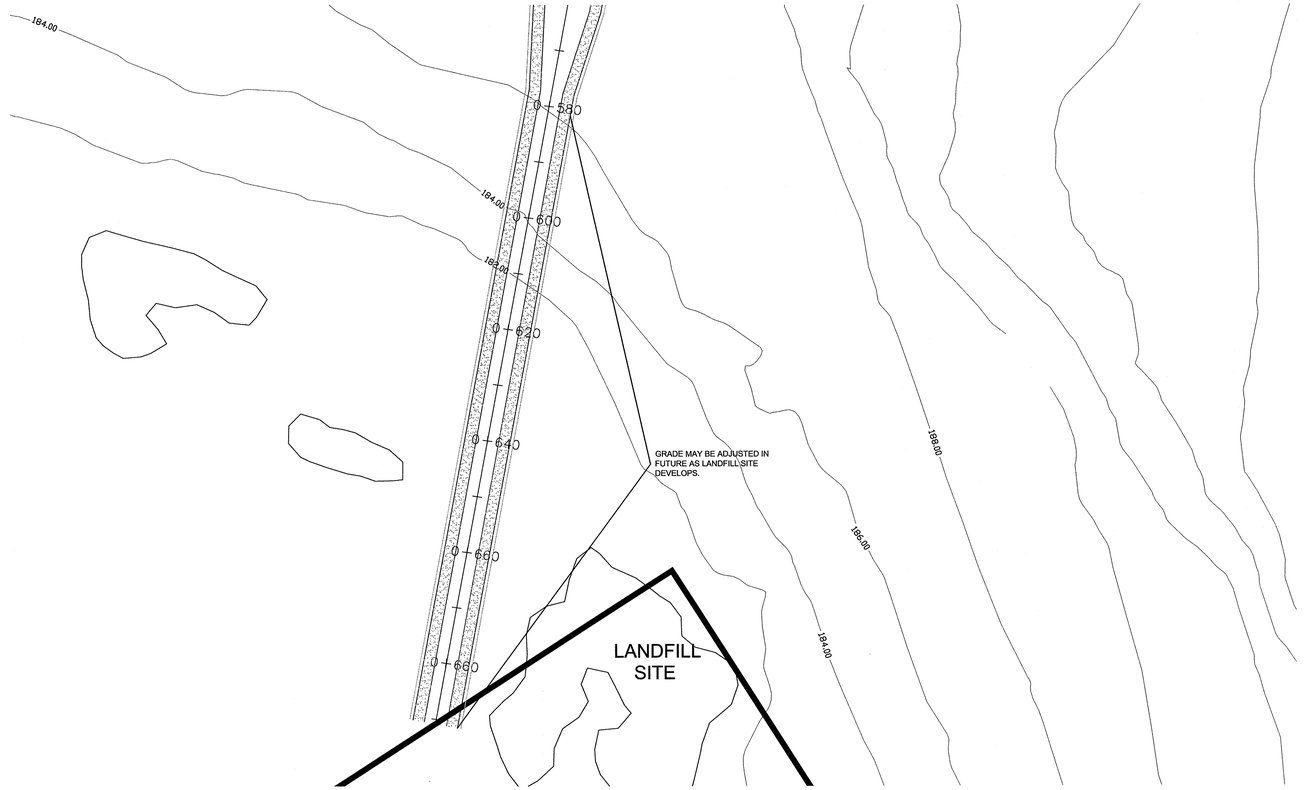
Scale: AS NOTED	Job Number: **09-162**
Drawn: S.S.	
Checked	Drawing Number: **C03**
Approved	



NEW ROAD- PLAN VIEW

SCALE 1:125

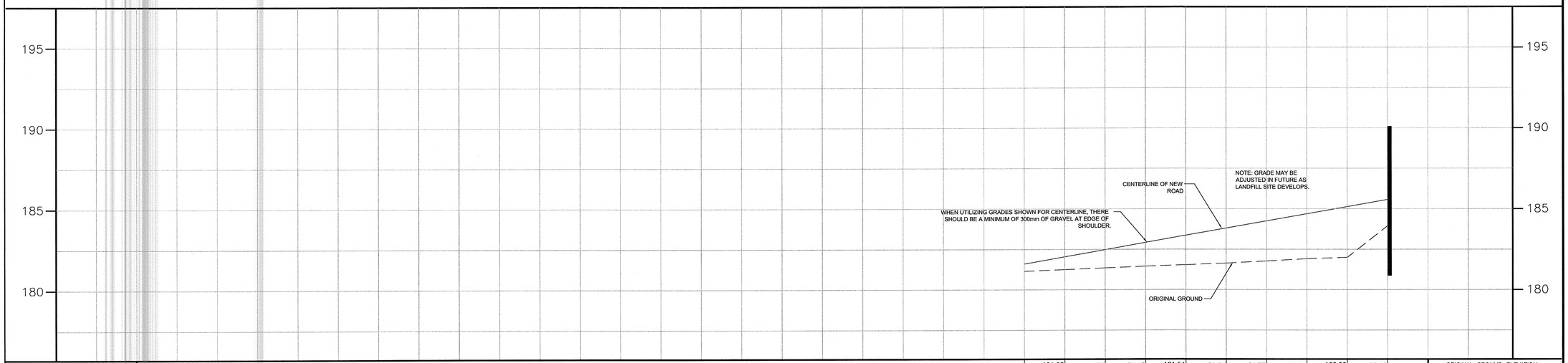
SCALES

20m 0 20m

Horizontal

5m 0 5m

Vertical



ORIGINAL GROUND ELEVATION	181.15	181.25	181.35	181.45	181.54	181.64	181.77	181.91	182.00	183.95	ORIGINAL GROUND ELEVATION
CENTERLINE ELEVATION	181.60	182.04	182.50	182.92	183.37	183.81	184.25	184.70	185.14	185.58	CENTERLINE ELEVATION
CENTERLINE GRADE		−4.4%	−4.6%	−4.2%	−4.5%	−4.4%	−4.4%	−4.5%	−4.4%	−4.4%	CENTERLINE GRADE
STATION	0+690	0+680	0+670	0+660	0+650	0+640	0+630	0+620	0+610	0+600	STATION
AS CONSTRUCTED NOTES											AS CONSTRUCTED NOTES

Description	Date	No.
Revisions and Issues		

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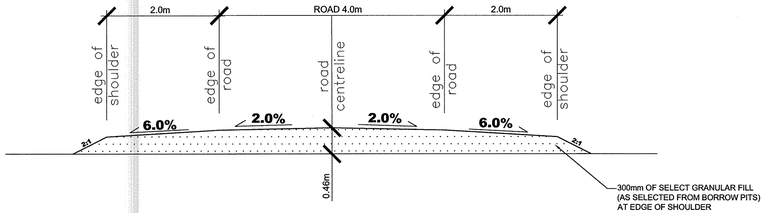
MARY RIVER PROJECT
BAFFINLAND IRON MINES CORPORATION

BAFFINLAND NUNAVUT

Drawing

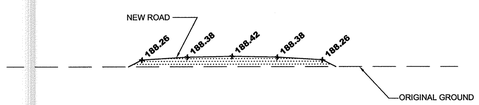
PLAN AND PROFILE
STA. 0+600 to 0+690

Date: JUNE 2009	CADD File Number: civil\design\plan and profile
Scale: AS NOTED	Job Number: **09-162**
Drawn: S.S.	
Checked	Drawing Number: **C04**
Approved	



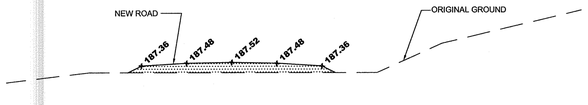
NEW ROAD SECTION TYPICAL

SCALE 1:100 — 1 / C05



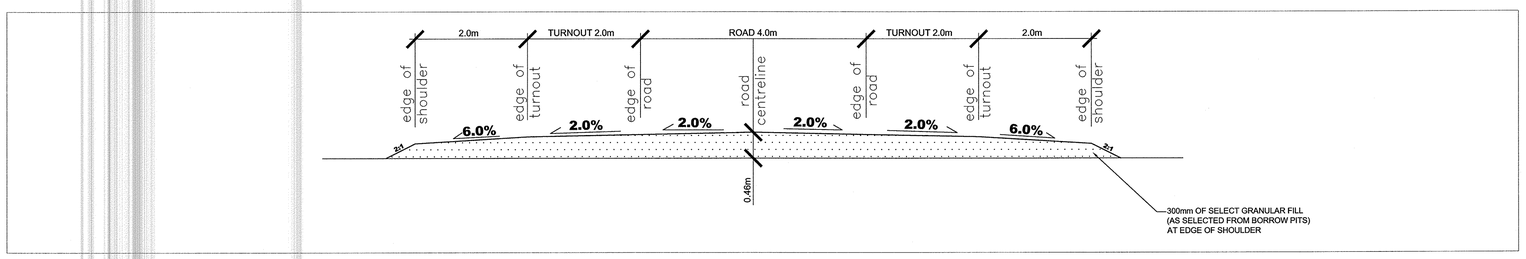
STATION 0+100

SCALE 1:125 — A / C05



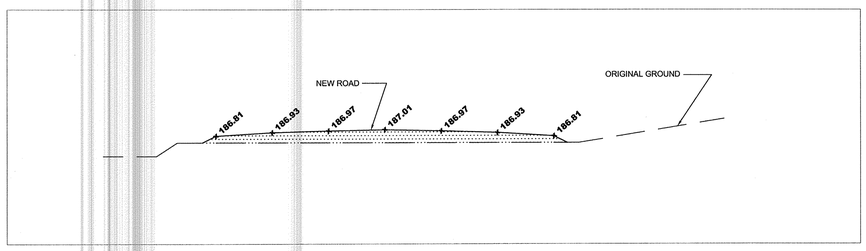
STATION 0+200

SCALE 1:125 — B / C05



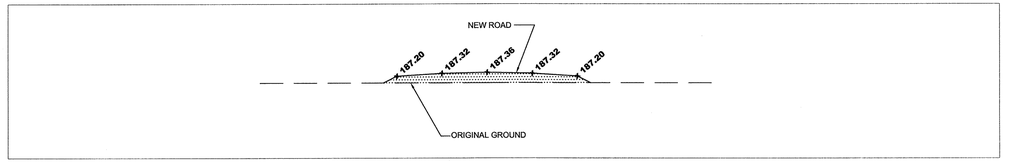
NEW ROAD SECTION W/ TURNOUT TYPICAL

SCALE 1:100 — 2 / C05



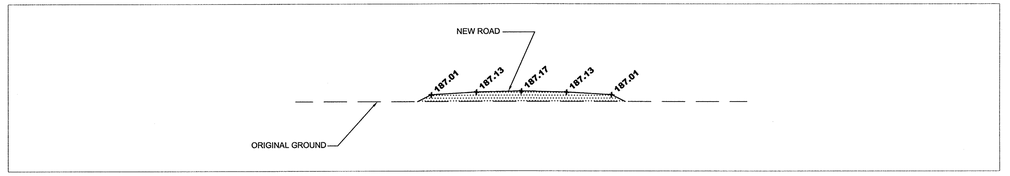
STATION 0+260 W/ TURNOUT

SCALE 1:100 — C / C05



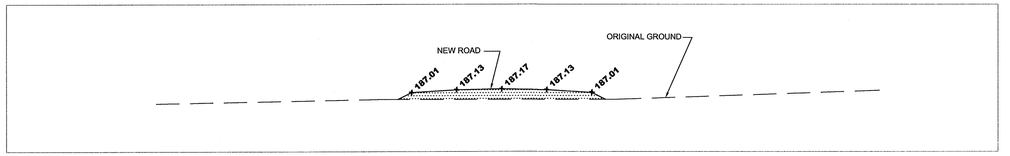
STATION 0+300

SCALE 1:125 — D / C05



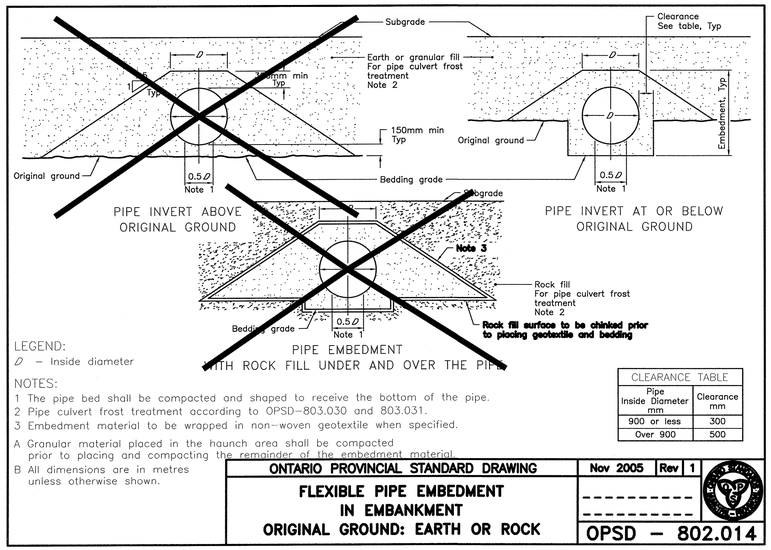
STATION 0+400

SCALE 1:125 — E / C05



STATION 0+500

SCALE 1:125 — F / C05



LEGEND:
∅ – Inside diameter

NOTES:
1 The pipe bed shall be compacted and shaped to receive the bottom of the pipe.
2 Pipe culvert frost treatment according to OPSD–803.030 and 803.031.
3 Embedment material to be wrapped in non–woven geotextile when specified.

A Granular material placed in the haunch area shall be compacted prior to placing and compacting the remainder of the embedment material.
B All dimensions are in metres unless otherwise shown.

CLEARANCE TABLE	
Pipe Inside Diameter mm	Clearance mm
900 or less	300
Over 900	500

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2005	Rev 1
FLEXIBLE PIPE EMBEDMENT IN EMBANKMENT ORIGINAL GROUND: EARTH OR ROCK		OPSD – 802.014

Description	Date	No.
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ARCHITECT — STRUCTURAL/CIVIL

REGISTERED PROFESSIONAL ENGINEER — Brit MARTIN — LICENSEE

MECHANICAL — ELECTRICAL

Project
MARY RIVER PROJECT
BAFFINLAND IRON MINES CORPORATION
BAFFINLAND — NUNAVUT

Drawing
CROSS SECTIONS & CULVERT DETAIL

Date	CADD File Number
JUNE 2009	design\new road sections.dwg
Scale: AS NOTED	Job Number: **09-162**
Drawn: S.S.	
Checked	Drawing Number: **C05**
Approved	

Design Chart 1.07: Runoff Coefficients (Continued)

- Rural

Land Use & Topography[3]	Soil Texture		
	Open Sand Loam	Loam or Silt Loam	Clay Loam or Clay
CULTIVATED			
Flat 0 - 5% Slopes	0.22	0.35	0.55
Rolling 5 - 10% Slopes	0.30	0.45	0.60
Hilly 10- 30% Slopes	0.40	0.65	0.70
PASTURE			
Flat 0 - 5% Slopes	0.10	0.28	0.40
Rolling 5 - 10% Slopes	0.15	0.35	0.45
Hilly 10- 30% Slopes	0.22	0.40	0.55
WOODLAND OR CUTOVER			
Flat 0 - 5% Slopes	0.08	0.25	0.35
Rolling 5 - 10% Slopes	0.12	0.30	0.42
Hilly 10- 30% Slopes	0.18	0.35	0.52
BARE ROCK	COVERAGE[3]		
	30%	50%	70%
Flat 0 - 5% Slopes	0.40	0.55	0.75
Rolling 5 - 10% Slopes	0.50	0.65	0.80
Hilly 10- 30% Slopes	0.55	0.70	0.85
LAKES AND WETLANDS	0.05		

[2] Terrain Slopes

[3] Interpolate for other values of % imperviousness

Sources: American Society of Civil Engineers - ASCE (1960)
U.S. Department of Agriculture (1972)

CULVERT @ STATION 0+145

Total Area= 4.85 ha

Two Areas

Area 1 (A1)= 2.40 ha
Area 2 (A2)= 2.45 ha

Flow Line

A1= 172m
A2= 224m

A1 Slope (Equivalent Slope Method):

Elevation	Fall (m)	Length (m)	Sn (m/m)	Sn^-0.5
212.00	1.22	43	0.028	5.98
210.78	4.07	43	0.095	3.24
206.71	17.89	43	0.416	1.55
188.82	2.82	43	0.066	3.89
186.00				
Total	**26.00**	**172**		**14.66**

Sw:

= 100 (n/Sn_{total}^-0.5)^2
= 100 x (4 / 14.66)^2
= 7.45%

Time of Concentration (tc):

= (0.057 x L) / (S^0.2 x A^0.1)
= (0.057 x 172) / (7.45^0.2 x 2.40^0.1)
= 6.01 minutes

A2 Slope (Equivalent Slope Method):

Elevation	Fall (m)	Length (m)	Sn (m/m)	Sn^-0.5
190.00	0.58	56	0.010	10.00
189.42	0.66	56	0.012	9.13
188.76	0.76	56	0.014	8.45
188.00	2.00	56	0.036	5.27
186.00				
Total	**4.00**	**224**		**32.85**

Sw:

= 100 (n/Sn_{total}^-0.5)^2
= 100 x (4 / 32.85)^2

= 1.48%

Time of Concentration (tc):

= (0.057 x L) / (S^0.2 x A^0.1)
= (0.057 x 224) / (1.48^0.2 x 2.45^0.1)
= 10.79 minutes

Weighted Average tc:
= [(2.40 x 6.01) + (2.45 x 10.79)] / (2.40 + 2.45)
= 8.43 minutes

Using IDF Curve, Rainfall Intensity= 9.6 mm/hr

Flow, Q: = 2.78 x At x I x C
= 2.78 x 4.85 x 9.6mm/hr x 0.22
= 28.48 L/s
= 0.029 m^3/s

Culvert Calculator @ Station 0+145

All calculator output should be verified prior to design use

Entered Data:

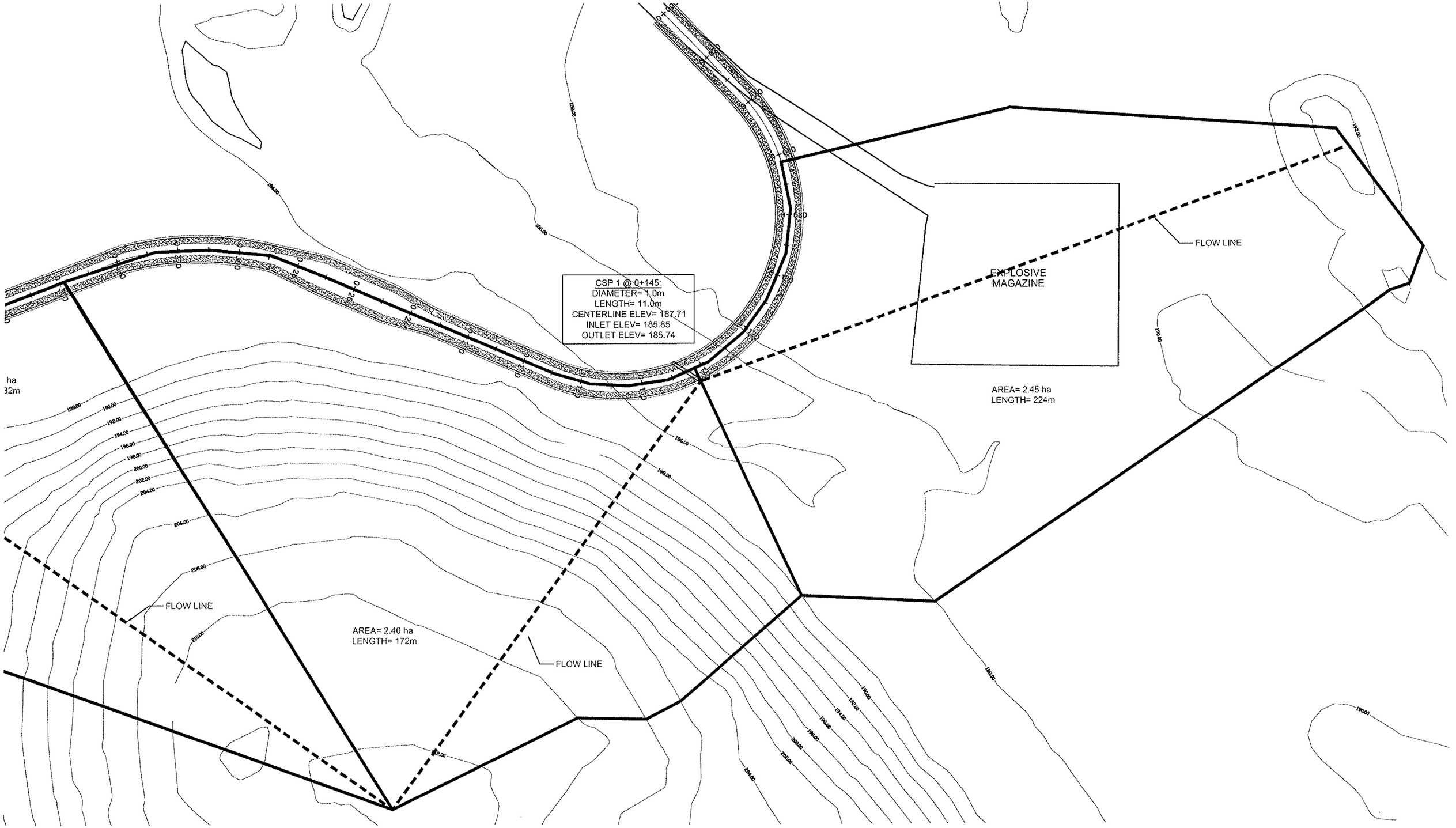
Shape	Circular
Number of Barrels	1
Solving for	Headwater
Chart Number	2
Scale Number	3
Chart Description	CORRUGATED METAL PIPE CULVERT
Scale Description	PIPE PROJECTING FROM FILL
Overtopping	Off
Flowrate	0.0290 cms
Manning's n	0.2600
Roadway Elevation	187.7100 m
Inlet Elevation	185.8500 m
Outlet Elevation	185.7400 m
Diameter	1000.0000 mm
Length	11.0000 m
Entrance Loss	0.0000
Tailwater	1.0000 m

Computed Results:

Headwater	186.7465 m Outlet Control
Slope	0.0100 m/m
Velocity	0.0369 mps

Messages:

Outlet head > Inlet head.
Computing Outlet Control headwater.
Outlet submerged.
Full flow.
Headwater depth computed using FHWA equation.
Headwater: 186.7465 m


CSP 1 @ 0+145:
DIAMETER= 1.0m
LENGTH= 11.0m
CENTERLINE ELEV= 187.71
INLET ELEV= 185.85
OUTLET ELEV= 185.74
EXPLOSIVE MAGAZINE
FLOW LINE
AREA= 2.45 ha
LENGTH= 224m
AREA= 2.40 ha
LENGTH= 172m
FLOW LINE
FLOW LINE
ha
32m

CULVERT @ STATION 0+450

Total Area= 1.84 ha

Flow Line= 232m

Slope (Equivalent Slope Method):

Elevation	Fall (m)	Length (m)	Sn (m/m)	Sn^-0.5
212.00	1.5	58	0.026	6.20
210.50	5.5	58	0.095	3.24
205.00	12.5	58	0.216	2.15
192.50	4.9	58	0.085	3.43
187.60				
Total	**24.40**	**232**		**15.02**

Sw:

= 100 (n/Sn_{total}^-0.5)^2
= 100 x (4 / 15.02)^2
= 7.09%

Time of Concentration (tc):

= (0.057 x L) / (S^0.2 x A^0.1)
= (0.057 x 232) / (7.09^0.2 x 1.84^0.1)
= 8.41 minutes

Using IDF Curve, Rainfall Intensity= 9.6 mm/hr

Flow, Q: = 2.78 x At x I x C
= 2.78 x 1.84x9.6mm/hr x 0.22
= 10.80 L/s
= 0.011m³/s

Culvert Calculator @ Station 0+450

All calculator output should be verified prior to design use

Entered Data:

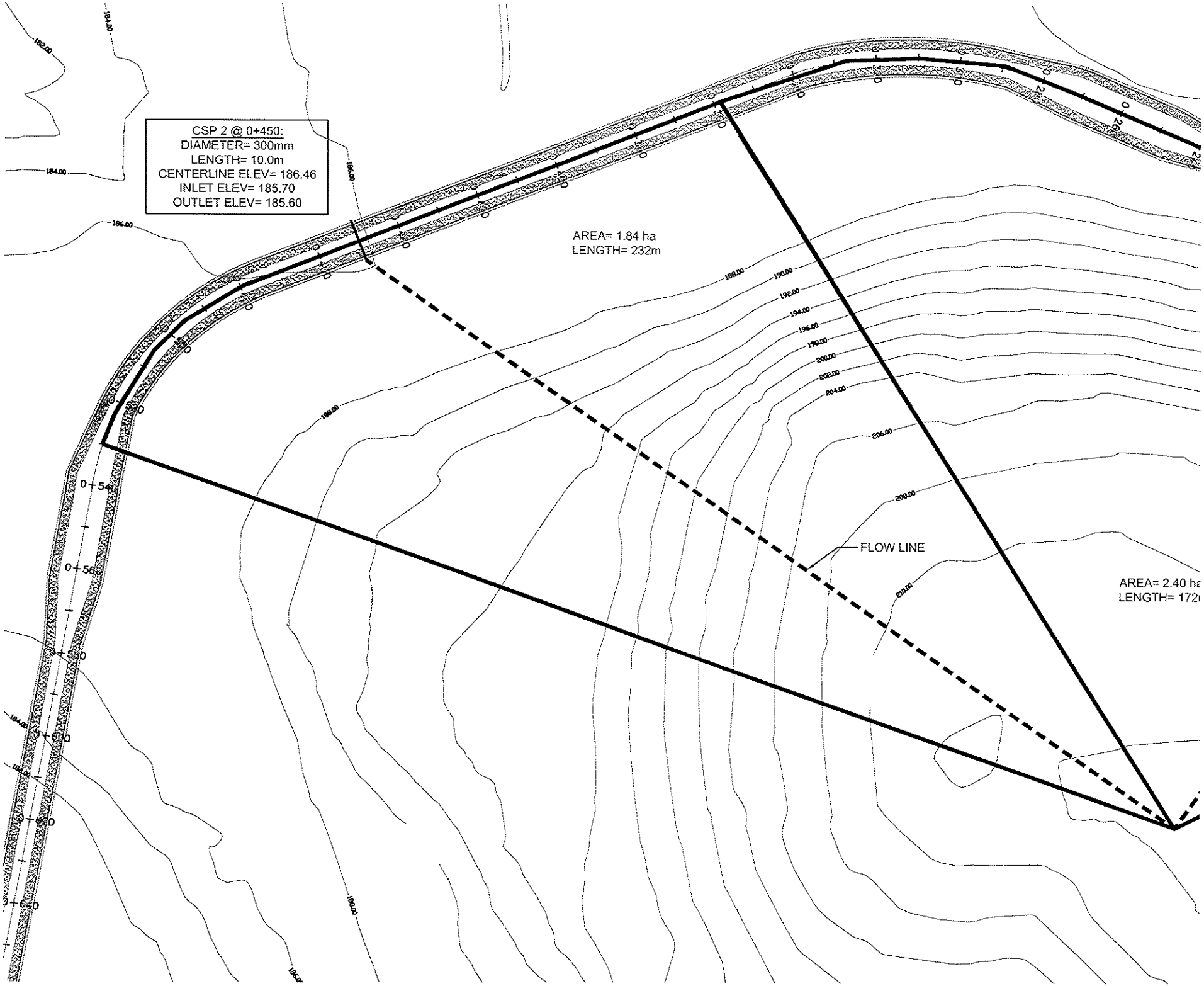
Shape	Circular
Number of Barrels	1
Solving for	Headwater
Chart Number	2
Scale Number	3
Chart Description	CORRUGATED METAL PIPE CULVERT
Scale Description	PIPE PROJECTING FROM FILL
Overtopping	Off
Flowrate	0.0110 cms
Manning's n	0.2600
Roadway Elevation	186.4600 m
Inlet Elevation	185.7000 m
Outlet Elevation	185.6000 m
Diameter	300.0000 mm
Length	10.0000 m
Entrance Loss	0.0000
Tailwater	0.3000 m

Computed Results:

Headwater	186.4163 m Outlet Control
Slope	0.0100 m/m
Velocity	0.1556 mps

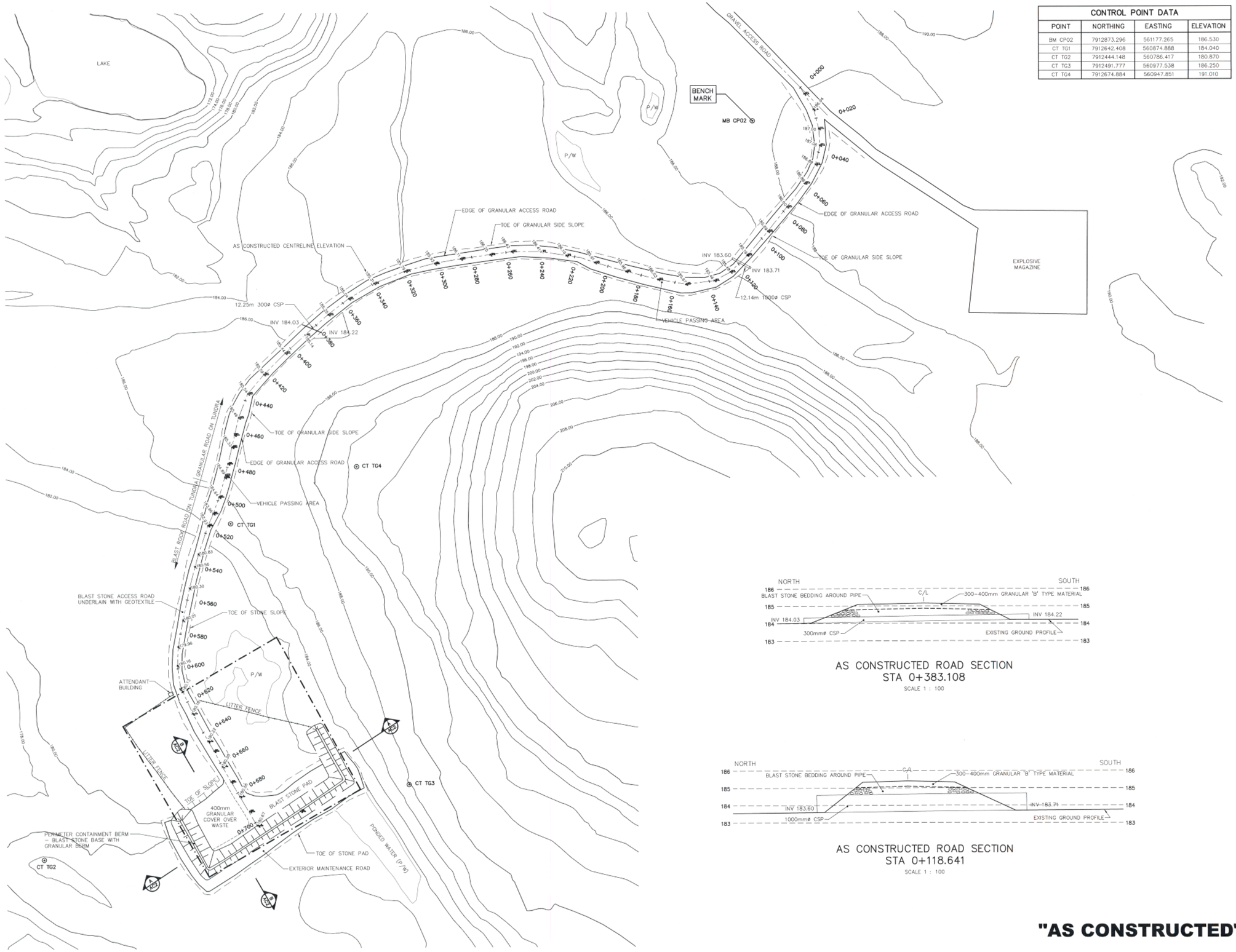
Messages:

Outlet head > Inlet head.
Computing Outlet Control headwater.
Outlet submerged.
Full flow.
Headwater depth computed using FHWA equation.
Headwater: 186.4163 m


CSP 2 @ 0+450:
DIAMETER= 300mm
LENGTH= 10.0m
CENTERLINE ELEV= 186.46
INLET ELEV= 185.70
OUTLET ELEV= 185.60
AREA= 1.84 ha
LENGTH= 232m
FLOW LINE
AREA= 2.40 ha
LENGTH= 172
0+540
0+560
0+580
0+600
0+620
0+640
0+660

➢ APPENDIX 2

- **AS-CON STRUCTED DRAWINGS**
- **CONSTRUCTION PHOTOGRAPHS**



CONTROL POINT DATA			
POINT	NORTHING	EASTING	ELEVATION
BM CP02	7912873.296	561177.265	186.530
CT TG1	7912642.408	560874.888	184.040
CT TG2	7912444.148	560786.417	180.870
CT TG3	7912491.777	560977.538	186.250
CT TG4	7912674.884	560947.851	191.010

AS CONSTRUCTED ROAD SECTION
STA 0+383.108
SCALE 1 : 100

AS CONSTRUCTED ROAD SECTION
STA 0+118.641
SCALE 1 : 100

"AS CONSTRUCTED"

Description	Date	No.
Revisions and Issues		

NORTH

Date Printed

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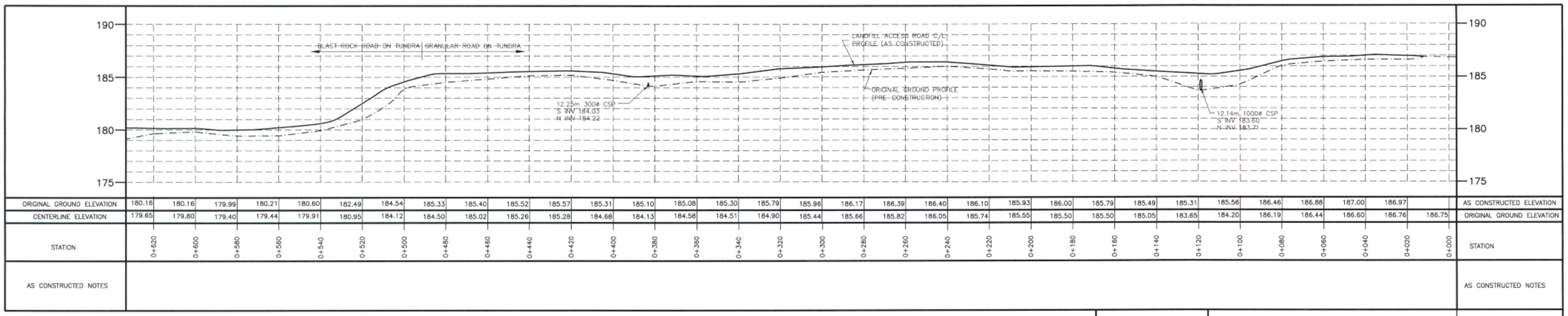
MECHANICAL | ELECTRICAL

Project
MARY RIVER PROJECT
NUNAVUT, CANADA

Drawing
LANDFILL
ACCESS ROAD AND CONTAINMENT

Date: AUG 20, 2010	CADD File Number: 0916200-AC1
Scale: 1 : 1000	Job Number: **09-162**
Drawn: T.C.G.	
Checked:	Drawing Number: **AC1**
Approved: B.H.M.	



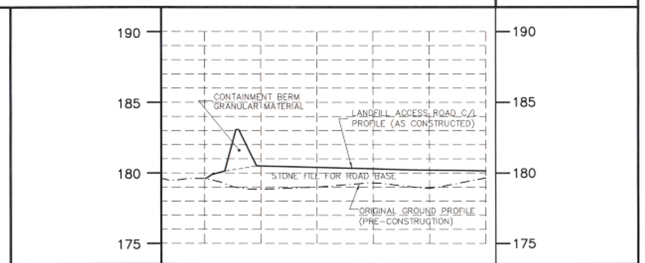
ORIGINAL GROUND ELEVATION	180.16	180.16	179.99	180.21	180.60	182.49	184.54	185.33	185.40	185.52	185.57	185.31	185.10	185.08	185.30	185.79	185.96	186.17	186.39	186.40	186.10	185.93	186.00	185.79	185.49	185.31	185.56	186.46	186.88	187.00	186.97		AS CONSTRUCTED ELEVATION
CENTERLINE ELEVATION	179.65	179.80	179.40	179.44	179.91	180.95	184.12	184.50	185.02	185.26	185.28	184.68	184.13	184.58	184.51	184.90	185.44	185.66	185.82	186.05	185.74	185.55	185.50	185.50	185.05	183.65	184.20	186.19	186.44	186.60	186.76	186.75	ORIGINAL GROUND ELEVATION
STATION	0+620	0+600	0+580	0+560	0+540	0+520	0+500	0+480	0+460	0+440	0+420	0+400	0+380	0+360	0+340	0+320	0+300	0+280	0+260	0+240	0+220	0+200	0+180	0+160	0+140	0+120	0+100	0+080	0+060	0+040	0+020	0+000	STATION
AS CONSTRUCTED NOTES																																	AS CONSTRUCTED NOTES

LANDFILL ACCESS ROAD PROFILE

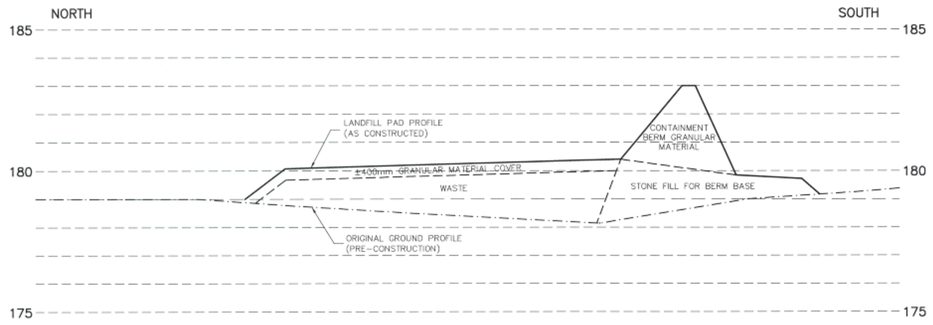
SCALES

40m 0 40m
Horizontal

5m 0 5m
Vertical

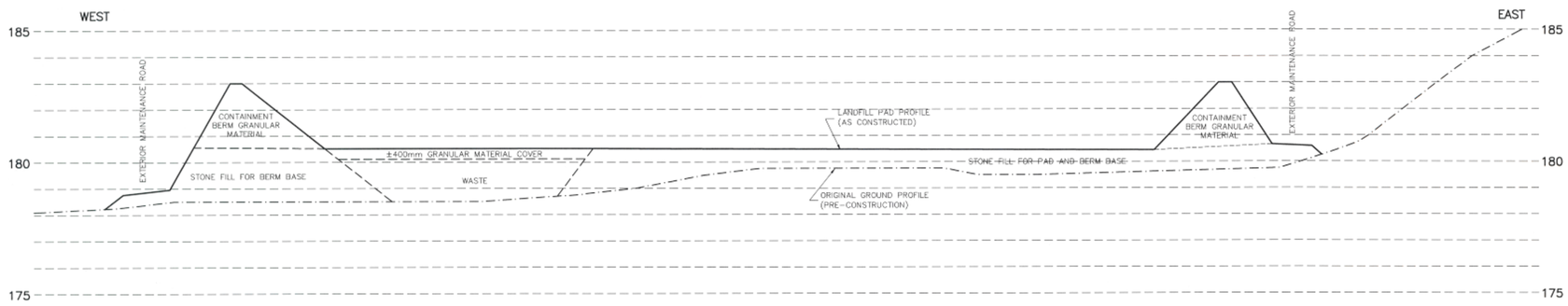


ORIGINAL GROUND ELEVATION		180.50	180.40	180.27	180.21	180.15	AS CONSTRUCTED ELEVATION
CENTERLINE ELEVATION		178.85	179.00	179.33	178.87	179.65	ORIGINAL GROUND ELEVATION
STATION	0+720	0+700	0+680	0+660	0+640	0+620	STATION
AS CONSTRUCTED NOTES							AS CONSTRUCTED NOTES



LANDFILL CONTAINMENT BERM SECTION B/AS1

1 : 250 HORIZONTAL
1 : 100 VERTICAL



LANDFILL CONTAINMENT BERM SECTION A/AS1

1 : 250 HORIZONTAL
1 : 100 VERTICAL

"AS CONSTRUCTED"

Description	Date	No.
Revisions and Issues		

NORTH Date Printed

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MECHANICAL ELECTRICAL

Project
MARY RIVER PROJECT
NUNAVUT, CANADA

Drawing
LANDFILL
ACCESS ROAD PROFILE
CONTAINMENT SECTIONS

Date: AUG 20, 2010	CADD File Number: 0916200-AC1
Scale: 1 : 1000	Job Number: **09-162**
Drawn: T.C.G.	
Checked:	Drawing Number: **AC2**
Approved: B.H.M.	

Photo 1: Access Road to landfill from the existing Explosive Magazine

Photo 2: Access Road at the landfill, landfill containment berm seen in background

Photo 3: Access Road at the landfill. The containment berm is seen in the back.

Photo 4: Another view of the completed Access Road

Photo 5: Completed Access Road to landfill, the attendant shack can be seen.

Photo 6: small Culvert at Station 0+118

Photo 7: Large culvert at Station 0+500

Photo 8: Large Culvert at Station 0+500

Photo 9: Inside the landfill containment

Photo 10: Landfill access and fence