ᑲᑐᑎᓗᒍ ᓄᓇᕗᑦ ᐱᕈᖅᐸᓕᐊᑎᓪᓗᒍ
Building Nunavut Together
Nunavuliuqatigiingniq
Bâtir le Nunavut ensemble

ᑭᓇᓕᓐᓂ ᒐᕙᒪᒃ ᑯᓂᑦ ᐃ ᐱᔾᔪᑦᓯᕐᕋᖅᑎᒃ ᑯᑦ
Department of Community and Government Services
Nunalingni Kavamatkunnilu Pivikhaqautikkut
Ministère des Services Communautaires et gouvernementaux

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Phone: (867) 360-6338, Ext. 27
Fax: (867) 360-6369
Email: licensing@nunavutwaterboard.org

January 30, 2014

**Re: Proposed Amendment of the Cape Dorset Water Licence 3BM-CAP 0810.**

Dear Ms. Beaulieu,

We submitted the renewal Water Licence application for the Hamlet of Cape Dorset on August 23, 2013 where a Plan for Compliance prepared in March 2013 was attached. Following our recent meeting with AANDC on January 24, 2014, we are requesting to amend the renewal process considering the following recommendation.

Item H-6: Thermistor depth:
Consider thermistor depth 18.8m instead of minimum 20 -25m indicated in the licence. The reason is that Canadil is the only boring contractor in Nunavut. Their available boring equipment at site could not dig more than 18.80m. The first set of temperature data was analyzed by AMEC and submitted to NWB in 2010. The thermistors were inactive due to non-functional of the several beads. Recently those were repaired and brought back to normal operation. The recent temperature data is attached. We feel that temperature reading up to 18.8m depth should be sufficient enough to satisfy the geotechnical design requirements. Therefore this item H-6 is recommended to be amended to 18.8m depth.

Item D-8: Toxicity Test:
Hamlet of Cape Dorset is using an accredited lab named Cauecon Environmental Laboratories in Ottawa. This is one of the biggest labs in Ottawa. They and their neighbourhood labs in Ottawa are not capable doing this kind of toxicity test. Their branch office in Windsor can perform this test. There is no way Hamlet can manage to ship the samples within 24 hours to Windsor lab.

Again, Item D- 8 is a monitoring requirement, not a compliance requirement. We feel that removing item D-8 from the water licence does not have any adverse impact on the licence. Therefore, it is recommended not to include item D-8 in the Proposed new licence.

Item E-5: Summary of as built drawings:
All the as- built drawings have been stamped and signed by an Engineer. Each drawing sheet has its own summary like name of the drawing, date of originally prepared and date of revision. A summary sheet of all the as-built drawings is attached in appendix-A.

Item H-7: The results of Thermistors Reading:
The thermistors temperature readings were analyzed by AMEC Geotechnical Engineer. Their stamped and engineer's signed document was submitted to NWB in 2010. In this report in item 6: conclusions and recommendations: they positively supported the berm foundation Design in favour. The foundation design Report is attached in appendix-B and Temperature data analyzing report is attached in Appendix-C.

All the thermistors were repaired in September 2013 and updated to function properly. The thermistors readings for November 2013 are attached in Appendix- D. The thermistors will be maintained and their readings will be collected at every 4 months interval as indicated in the 0&M manual in order to monitor the ground temperature. Based on this information, the berm of the new Lagoon (2007) will be repaired prior to commissioning.

We request to accept this letter and accommodate this information to expedite the Water licence renewal process.

Please contact me if you have any issue or concern with this application. I will appreciate if you keep me in the loop for the approval process.

Thanking You.

**Bhabesh Roy, M.A.Sc., P.Eng.**
Municipal Planning Engineer
Community Government Services
Baffin Region, Government of Nunavut
P.O.Box 379, Pond Inlet, X0A 0S0
Ph-867 899 7314
Fax-867 899 7328
E-mail: broy@gov.nu.ca

Copy: Ralph Ruediger, Director, Community Development
Timoon Toonoo, Regional Director
Wayne Thistle, A. Senior Manager, Projects and Asset Management Divisions
Bill Westwell, Senior Manager Municipal Planning, Capital Planning
Pat Fuentes, Regional Manager Projects
Mike Haywards, SAO, Hamlet of Cape Dorset

# APPENDIX-A:

## The Summary of the As-Built drawings

## Item-E-5: Summary of the As- built Drawings of the Hamlet of Cape Dorset new Sewage Lagoon

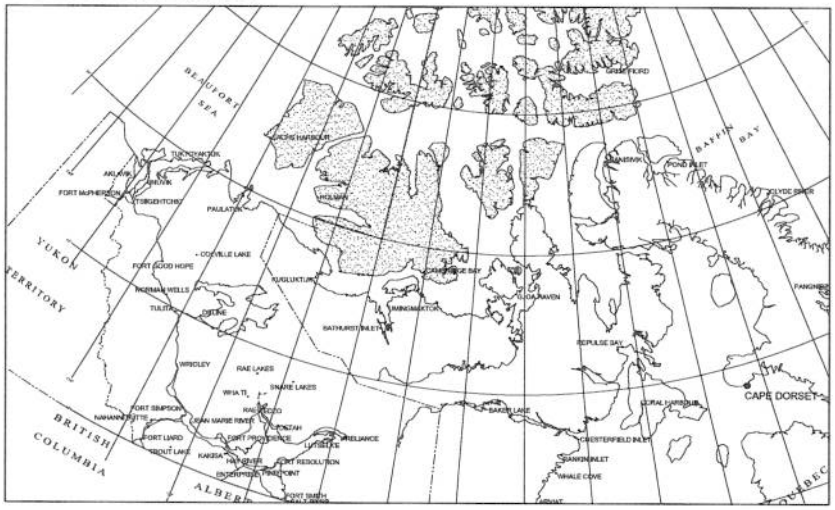
| Drawing Number | Name of the Drawing | 75% Completion | 95% Completion | Issued for Tender | Issued for Construction | Re-issued for Construction | Record | Revision | Signed |
|---|---|---|---|---|---|---|---|---|---|
| 100 | Site Plan | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 101 | Lagoon Containment Berms and Truck Around Pad | 10/26/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 102 | Road Plan and Profile stataion | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/24/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 103 | Road Plan and Profile station | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 104 | Road plan and Profile station | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 105 | Design cross section | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 106 | Design cross section | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 107 | Lagoon Road Plan and Prifile station | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 108 | Lagoon Road cross section station | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 109 | Earthworks and Sewage Discharge Details and Sections | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 110 | Berm Plan and Elevations | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | | 10/24/2007 | Nov.07 | Nov.12/07 |
| 111 | Guard rail and gate details | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 112 | Lagoon Berm Sections and Details | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 113 | Access Manhole details | 10/28/2005 | 1/20/2006 | 3/7/2006 | 9/7/2006 | 12/21/2006 | 10/24/2007 | Nov.07 | Nov.12/07 |
| 114 | Thermistors location | | | 3/7/2006 | 9/7/2006 | 12/21/2006 | 5/1/2009 | May , 2009 | May, 2009 |

# APPENDIX A

# RECORD DRAWINGS

# THE GOVERNMENT OF NUNAVUT
# COMMUNITY AND GOVERNMENT SERVICES

PROJECT: P LAKE AREA - SEWAGE LAGOON SYSTEM RECORD DRAWINGS
LOCATION: CAPE DORSET, N.U.
PROJECT NO: 3439
DATE: NOVEMBER 2007




LOCATION PLAN

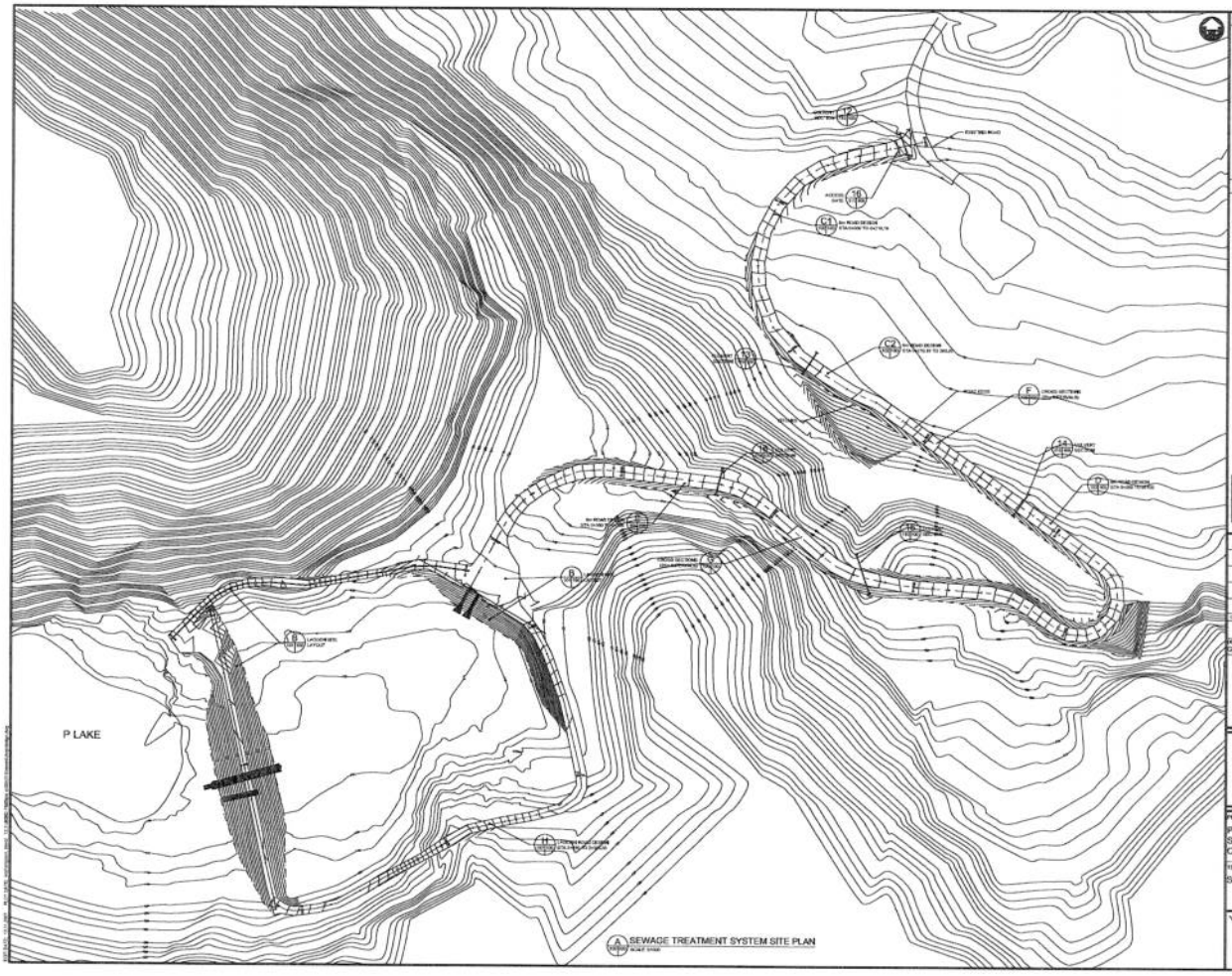
Drawing List

| Sheet Number | Sheet Title |
|---|---|
| 000 | Cover |
| 100 | Site Plan |
| 101 | Lagoon Containment Berms and Truck Turnaround Pad |
| 102 | Road Plan and Profile Station 0+000 to 0+300 |
| 103 | Road Plan and Profile Station 0+350 to 0+700 |
| 104 | Road Plan and Profile Station 0+750 to 0+922.55 |
| 105 | Design Cross Sections Station 0+000 to 0+600 |
| 106 | Design Cross Sections Station 0+625 to 0+922.55 |
| 107 | Lagoon Road Plan and Profile Station 2+000 to 2+306.06 |
| 108 | Lagoon Road Cross Sections Station 2+000 to 2+300 |
| 109 | Berm Plans and Elevations |
| 110 | Earthworks & Sewage Discharge Details and Sections |
| 111 | Overload - Dollmeter - Gate Details and Sections |
| 112 | Lagoon Gate Sections and Details |
| 113 | Access Manhole Details |

RECORD DRAWING

DILLON CONSULTING

DRAWING NUMBER 000




LEGEND

PLAN:

EXISTING:
MINOR CONTOUR (1m)
MAJOR CONTOUR (5m)

DESIGN:
ROAD CENTERLINE
ROAD EDGE
TOE OF SLOPE
CUT LIMITS
GUARDRAIL
DELINEATOR
LAGOON CONTAINMENT LIMIT
BOLLARD
FLOW DIRECTION

FILL AREA

CUT AREA

NOTES

DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE

DETAIL MARKER

DETAIL REFERENCED (SEE DRAWING SHEET)

RECORD DRAWING

DRAWING REDUCED NOT TO SCALE

| | | | |
|---|---|---|---|
| 5 | 10/24/07 | RECORD | GS |
| 4 | 12/21/06 | RE-ISSUED FOR CONSTRUCTION | GS |
| 3 | 08/01/06 | ISSUED FOR CONSTRUCTION | GS |
| 2 | 03/01/06 | ISSUED FOR TENDER | GS |
| 1 | 01/26/06 | 90% SUBMISSION | GS |
| CHANGE | DATE | DESCRIPTION | CHECK |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | GS | NOV 07 |

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF THE NORTHWEST TERRITORIES
PERMIT HOLDER
DILLON CONSULTING LIMITED

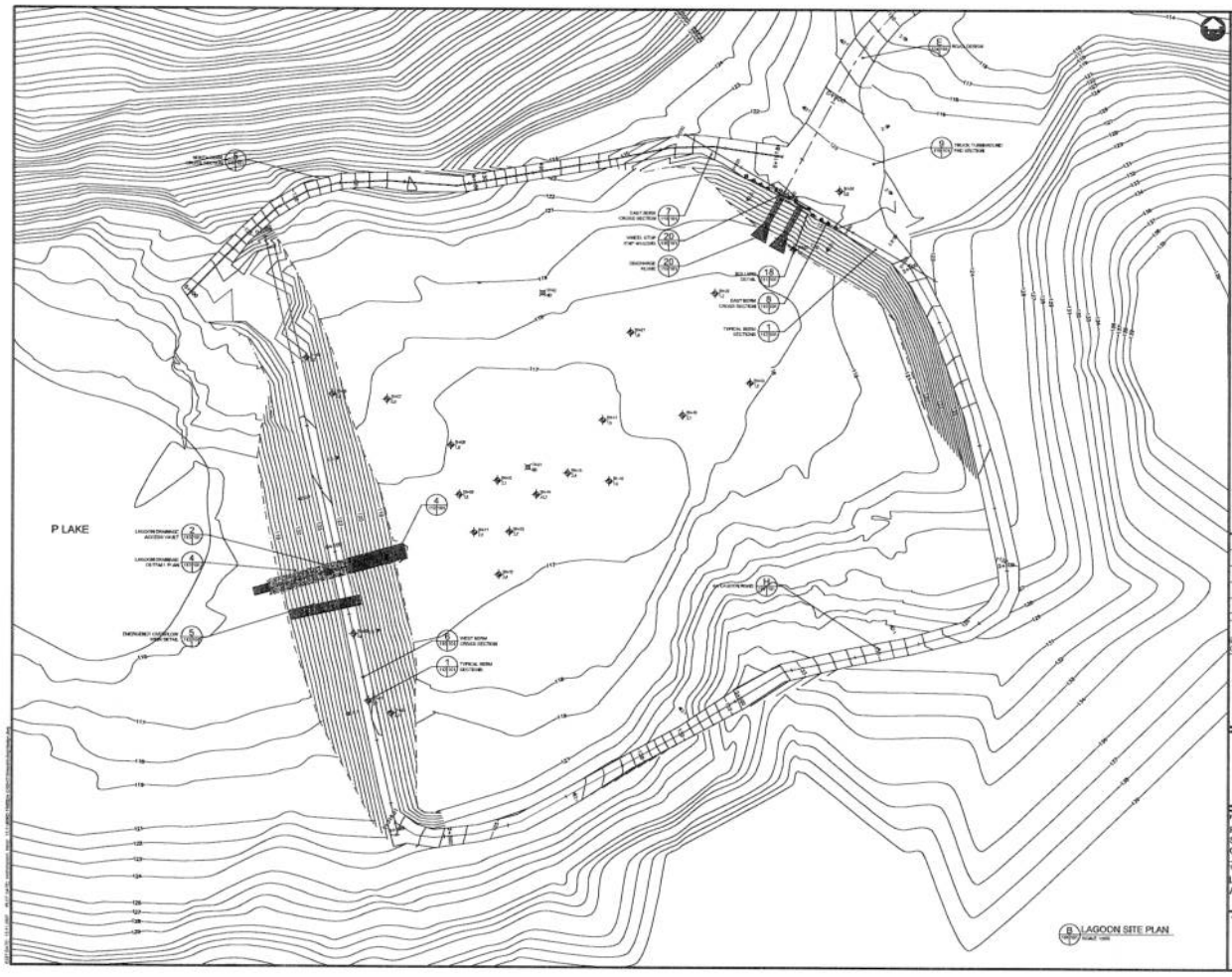
Nunavut

PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

TITLE
SITE PLAN

DILLON CONSULTING

SCALE: AS SHOWN
DILLON PROJECT NUMBER: 05-4319-0000
CLIENT PROJECT NUMBER: 3420
DRAWING NUMBER: 100




LEGEND

PLAN:

EXISTING
MINOR CONTOUR (1m)
MAJOR CONTOUR (5m)

DESIGN
ROAD CENTERLINE
ROAD EDGE
TOP OF SLOPE
CUT LINE
GUARDRAIL
DRUMMATOR
LAGOON CONTAINMENT UNIT
BOLLARD
FLOW DIRECTION

FILL AREA

CUT AREA

NOTES

DRAWINGS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE

DETAIL NUMBER
DRAWING SHEET WHERE DETAIL IS SHOWN
DETAIL REFERENCED (THIS DRAWING SHEET)

TEST PIT LOCATION
DEPTH TO IMPERVIOUS LAYER (IF SHOWN)

TEST PIT LOCATION
DEPTH TO WORKS

RECORD DRAWING

DRAWING REDUCED NOT TO SCALE

| REV. | DATE | DESCRIPTION | CHECK |
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| 5 | 12/21/06 | RE-ISSUED FOR CONSTRUCTION | GS |
| 4 | 05/07/06 | ISSUED FOR CONSTRUCTION | GS |
| 3 | 03/07/06 | ISSUED FOR TENDER | GS |
| 2 | 01/20/06 | 90% SUBMISSION | GS |
| 1 | 01/20/06 | 60% SUBMISSION | GS |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | GS | NOV 07 |

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PERMIT NUMBER
P-069
DILLON CONSULTING LIMITED

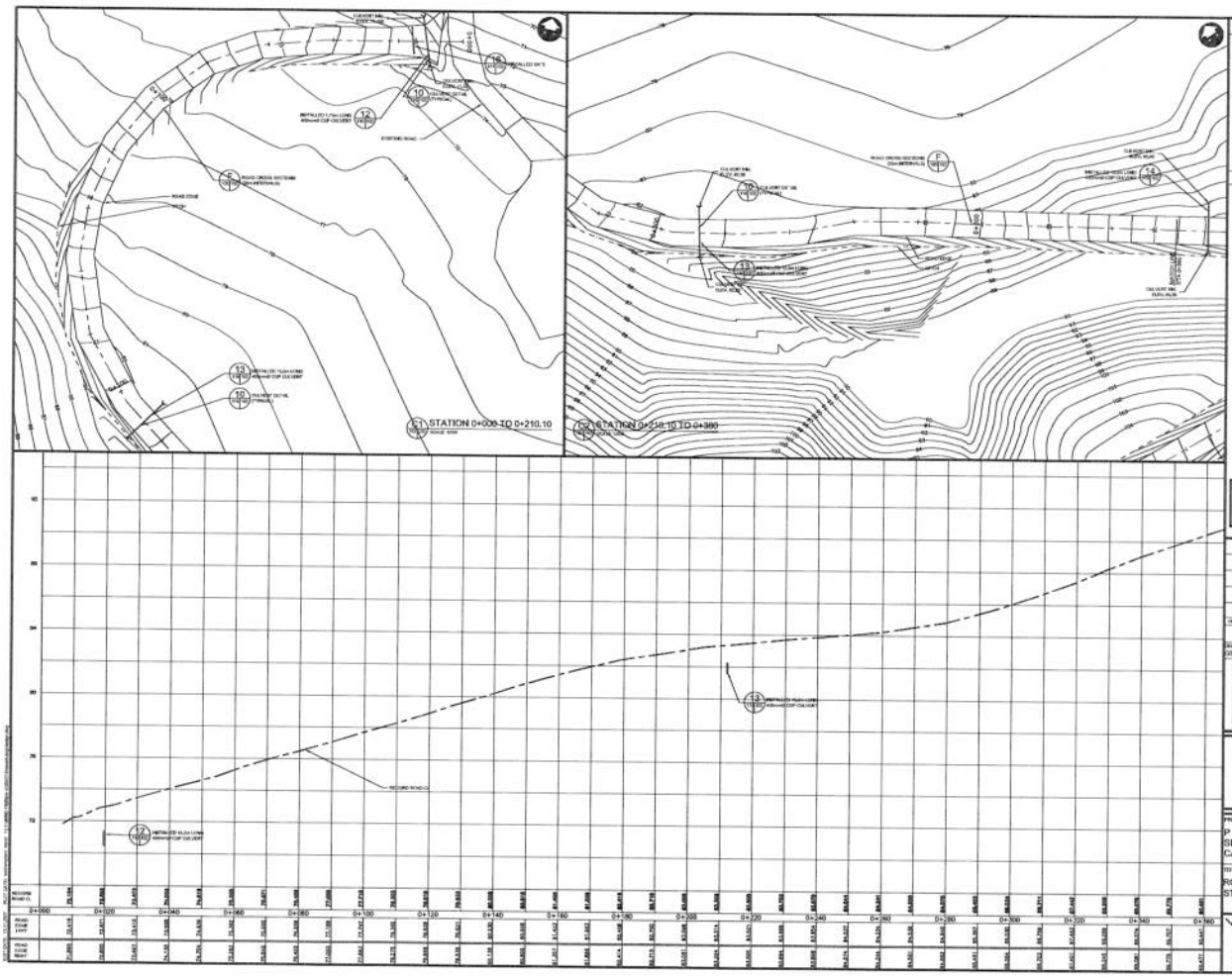
Nunavut

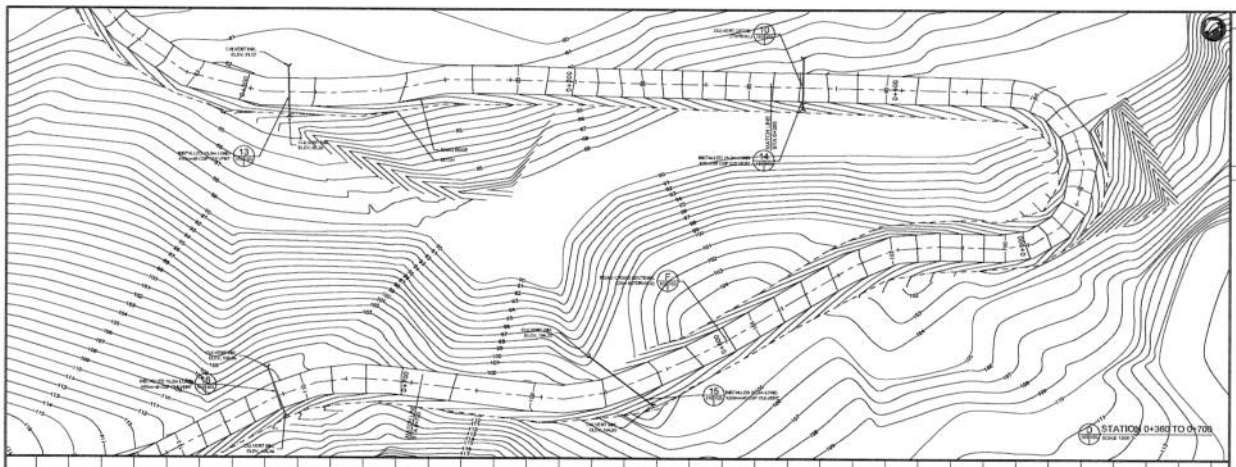
PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

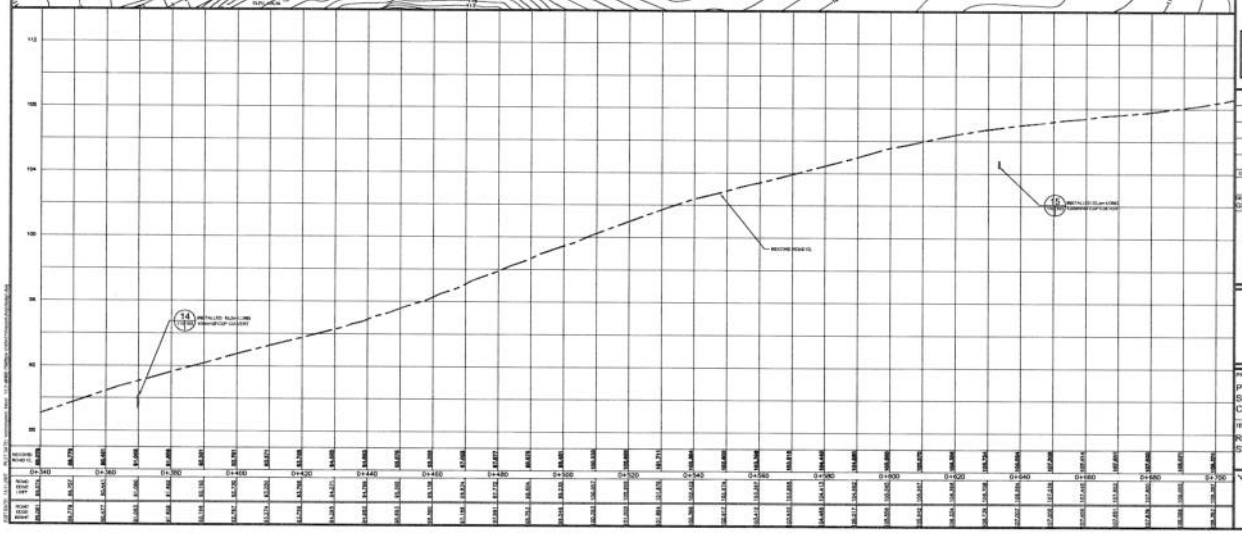
TITLE
LAGOON CONTAINMENT BERMS
AND TRUCK TURNAROUND PAD

DILLON CONSULTING

SCALE: AS SHOWN
DILLON PROJECT NUMBER: 05-4313-0000
CLIENT PROJECT NUMBER: 3435
REVISION NUMBER: 101


STATION 0+000 TO 0+210.10
STATION 0+210.10 TO 0+360
LEGEND
PLAN:
PROFILE:
NOTES
RECORD DRAWING
DRAWING REDUCED NOT TO SCALE
REVISIONS
Nunavut
PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET
TITLE
ROAD PLAN AND PROFILE
STATION 0+000 TO 0+360
DILLON CONSULTING
AS SHOWN
05-4319-3000
3400
102



LEGEND

PLAN:

EXISTING:
MINOR CONTOUR (1m)
MAJOR CONTOUR (5m)

ASBUILT:
ROAD CENTERLINE
ROAD EDGE
TOE OF SLOPE
DITCH

PROFILE:

EXISTING:
ROAD CENTERLINE

NOTES

DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.

DETAIL NUMBER

"DESCRIPTION OF DETAIL" DRAWING SHEET WHERE DETAIL IS SHOWN

DETAIL REFERENCES (THIS DRAWING SHEET)

RECORD DRAWING

**DRAWING REDUCED NOT TO SCALE**

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| 5 | 12/21/06 | RE-ISSUED FOR CONSTRUCTION | GS |
| 3 | 08/07/06 | ISSUED FOR CONSTRUCTION | GS |
| 4 | 02/07/06 | ISSUED FOR TENDER | GS |
| 2 | 01/20/06 | SITE SUBMISSION | GS |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | GS | NOV 07 |

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PERMIT HOLDER
DILLON CONSULTING LIMITED

Nunavut

PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

TITLE
ROAD PLAN AND PROFILE
STATION 0+360 TO 0+700

DILLON CONSULTING

SCALE: AS SHOWN
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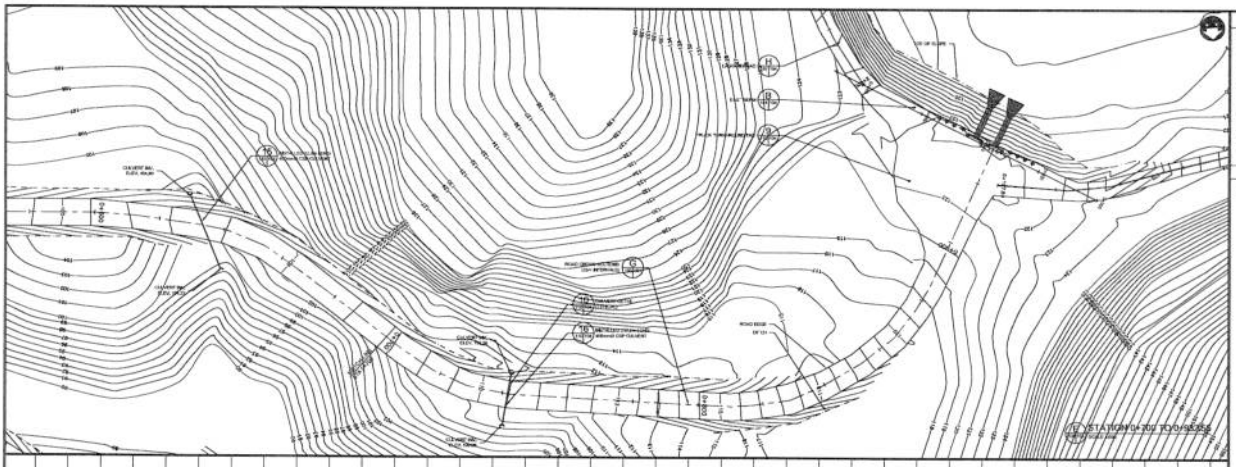
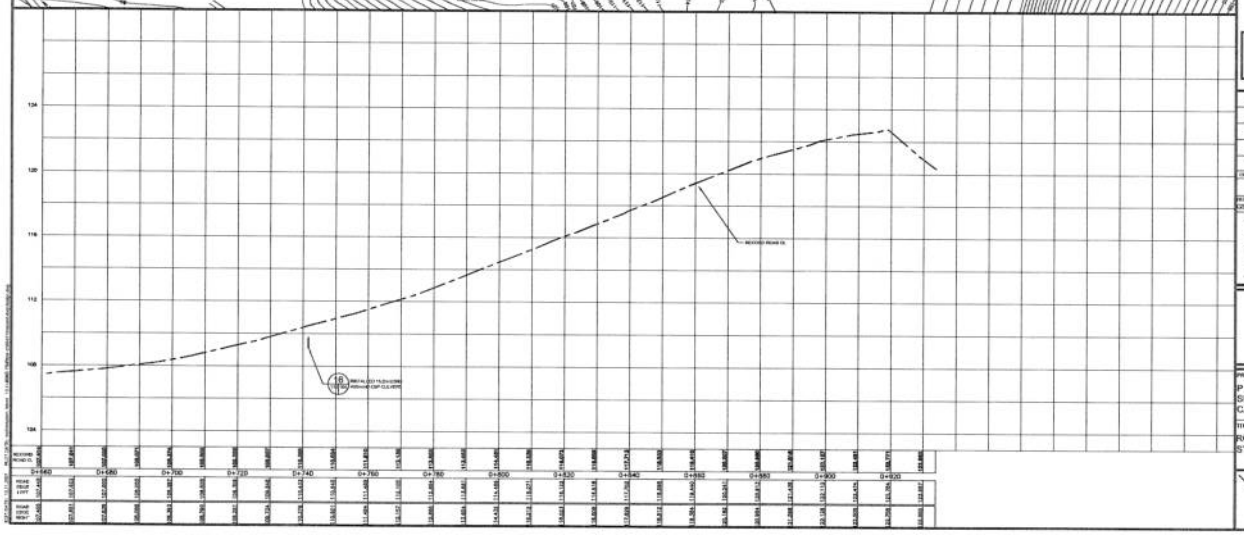
CLIENT PROJECT NUMBER: 3430
DRAWING NUMBER: 103




LEGEND

PLAN:

EXISTING:
MINOR CONTOUR (1m)
MAJOR CONTOUR (5m)

AS-BUILT:
ROAD CENTERLINE
ROAD EDGE
TOE OF SLOPE
DITCH

PROFILE:

EXISTING:
ROAD CENTERLINE

NOTES

DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE

DETAIL NUMBER

DETAIL REFERENCED (THIS DRAWING ONLY)

DRAWING UNLIST (WHERE DETAILS OWNS)

RECORD DRAWING

DRAWING REDUCED NOT TO SCALE

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| 5 | 12/01/06 | RE-ISSUED FOR CONSTRUCTION | GS |
| 4 | 05/01/06 | ISSUED FOR CONSTRUCTION | GS |
| 3 | 03/07/05 | ISSUED FOR TENDER | GS |
| 2 | 01/20/05 | 90% SUBMISSION | GS |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | GS | NOV 07 |

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF THE NWT AND NUNAVUT
PERMIT NUMBER P 00
DILLON CONSULTING LIMITED

Nunavut

PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

TITLE
ROAD PLAN AND PROFILE
STATION 0+700 TO 0+932.55

DILLON CONSULTING

SCALE: AS SHOWN
ELECTRONICALLY SUBMITTED
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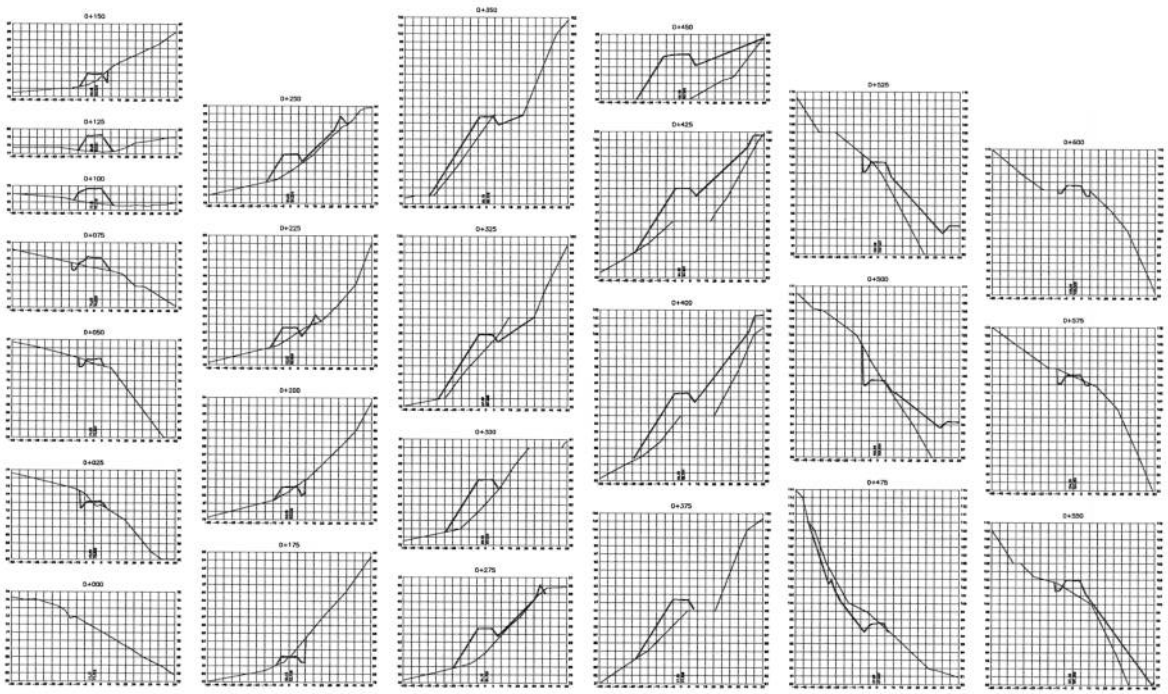
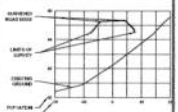
CLIENT PROJECT NUMBER: 3430
DRAWING NUMBER: 104



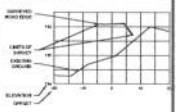

ROAD CROSS SECTIONS 0+000 TO 0+600

LEGEND

TYPICAL SECTION



TYPICAL SECTION



NOTES

RECORD DRAWING

DRAWING REDUCED NOT TO SCALE

| | | | |
|---|---|---|---|
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| 3 | 12/01/06 | RE-ISSUED FOR CONSTRUCTION | GS |
| 2 | 06/07/06 | ISSUED FOR CONSTRUCTION | GS |
| 1 | 03/07/06 | ISSUED FOR TENDER | GS |
| 0 | 31/05/06 | 90% SUBMISSION | GS |
| CHANGE | DATE | DESCRIPTION | CHECK |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | GS | NOV 07 |

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF THE NORTHWEST TERRITORIES
PERMIT NUMBER
P 019
DILLON CONSULTING LIMITED

NUNAVUT TERRITORY

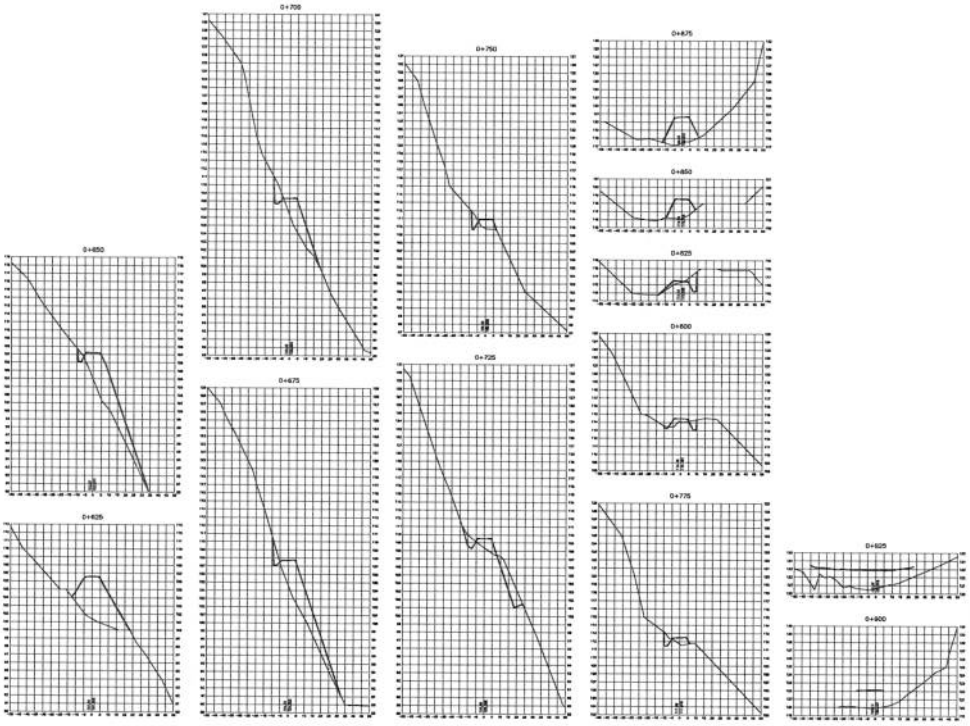
Nunavut

PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

TITLE
DESIGN CROSS SECTIONS
STATION 0+000 TO 0+600

DILLON CONSULTING

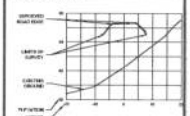
SCALE: AS SHOWN
DILLON PROJECT NUMBER: 05-4319-3000
CLIENT PROJECT NUMBER: 3439
DRAWING NUMBER: 105



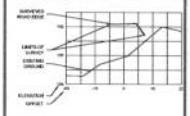

G ROAD CROSS SECTIONS 0+625 TO 0+932.56
SCALE 1:500(H) 1:200(V)

LEGEND

TYPICAL SECTION




TYPICAL SECTION




-GRAVEL SURFACE IS 100mm DEEP 75mm MINUS
-RIP RAP IS 300mm DEEP 5mm MINUS

NOTES

RECORD DRAWING

DRAWING REDUCED NOT TO SCALE

| | | | |
|---|---|---|---|
| 5 | 10/24/07 | RECORD | KS |
| 4 | 12/21/06 | RE-ISSUED FOR CONSTRUCTION | KS |
| 3 | 09/01/06 | ISSUED FOR CONSTRUCTION | KS |
| 2 | 05/01/06 | ISSUED FOR TENDER | KS |
| 1 | 01/26/06 | 90% SUBMISSION | KS |
| CHANGE | DATE | DESCRIPTION | CHECK |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | GS | NOV 07 |

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF NUNAVUT AND NORTHWEST TERRITORIES
PERMIT TO PRACTICE
DILLON CONSULTING LIMITED

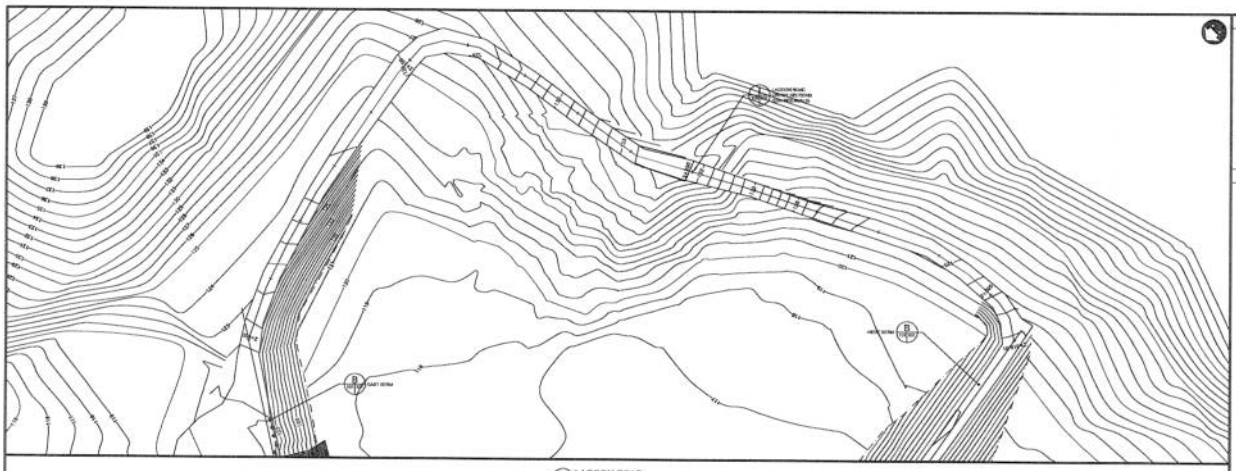
Nunavut

PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

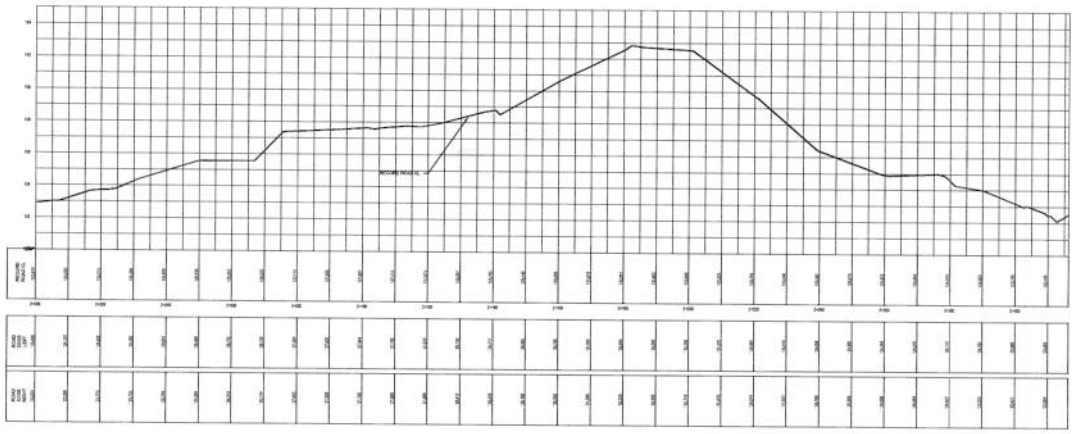
TITLE
DESIGN CROSS SECTIONS
STATION 0+625 TO 0+933.75

DILLON CONSULTING

SCALE: AS SHOWN
DILLON PROJECT NUMBER: 05-4318-0000
CLIENT PROJECT NUMBER: 3455
DRAWING NUMBER: 106



H LAGOON ROAD
SCALE 1:500



LEGEND

PLAN:

EXISTING:
MINOR CONTOUR (1m)
MAJOR CONTOUR (5m)

DESIGN:
ROAD CENTERLINE
ROAD EDGE
TOE OF SLOPE
DITCH

PROFILE:

EXISTING:
ROAD CENTERLINE

NOTES

DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.

DETAIL NUMBER
DESCRIPTION OF DETAIL
DRAWING SHEET WHERE DETAIL IS SHOWN
DETAIL REFERENCES (THIS DRAWING SHEET)

RECORD DRAWING

**DRAWING REDUCED NOT TO SCALE**

| CHANGE | DATE | DESCRIPTION | CHECK |
|---|---|---|---|
| 6 | 10/24/07 | RECORD | GS |
| 5 | 12/21/06 | RE-ISSUED FOR CONSTRUCTION | GS |
| 4 | 09/01/06 | ISSUED FOR CONSTRUCTION | GS |
| 3 | 03/31/06 | ISSUED FOR TENDER | GS |
| 2 | 01/20/06 | 90% SUBMISSION | GS |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | GS | NOV 07 |

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS and GEOPHYSICISTS OF THE NORTHWEST TERRITORIES
PERMIT NUMBER P-018
DILLON CONSULTING LIMITED

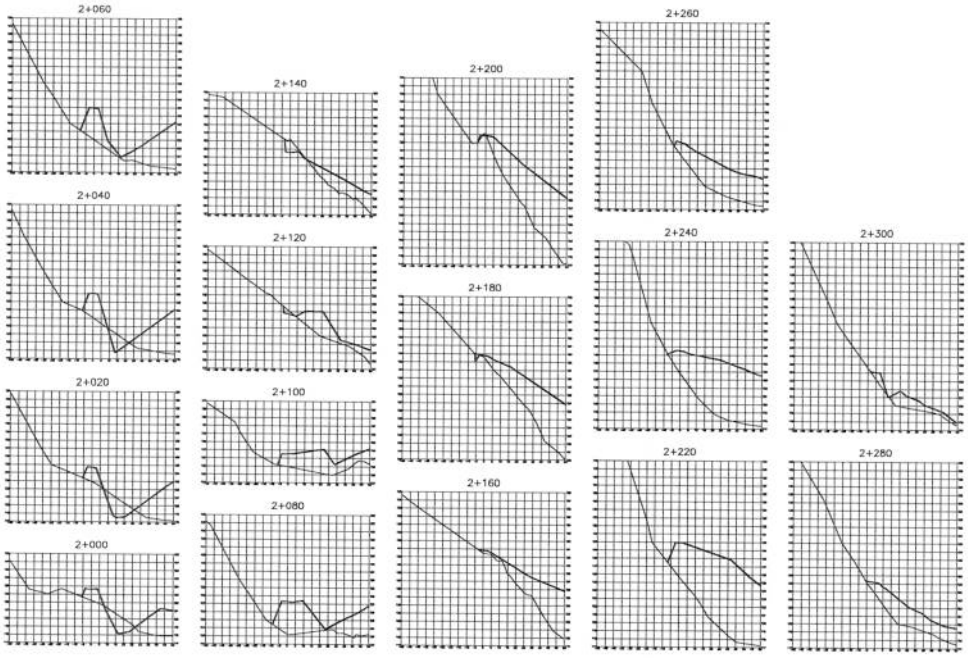
Nunavut

PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

TITLE
LAGOON ROAD PLAN AND PROFILE
STATION 2+000 TO 2+306.05

SCALE: AS SHOWN
DILLON PROJECT NUMBER: 05-4313-0000
CLIENT PROJECT NUMBER: 3439
DRAWING NUMBER: 107

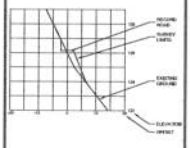
DILLON CONSULTING




LAGOON ROAD CROSS SECTIONS 2+000 TO 2+300

LEGEND

TYPICAL SECTION



NOTES

RECORD DRAWING

DRAWING REDUCED NOT TO SCALE

| | | | |
|---|---|---|---|
| 6 | 14/24/07 | RECORD | GS |
| 5 | 12/21/06 | RE-ISSUED FOR CONSTRUCTION | GS |
| 3 | 09/07/06 | ISSUED FOR CONSTRUCTION | GS |
| 4 | 03/07/06 | ISSUED FOR TENDER | GS |
| 2 | 01/20/06 | 90% SUBMISSION | GS |
| CHANGE | DATE | DESCRIPTION | CHECK |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | GS | NOV 07 |

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF THE NORTHWEST TERRITORIES
PERMIT HOLDER
P-956
DILLON CONSULTING LIMITED

NWT & NUNAVUT ASSOCIATION OF ARCHITECTS
MEMBER
A. MICHAEL GALLAGHER
NWT
2159

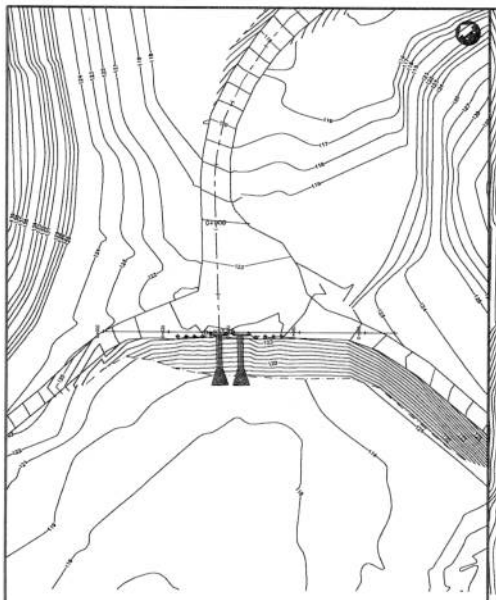
Nunavut

PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

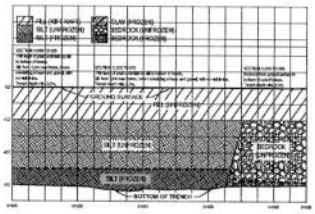
TITLE
LAGOON ROAD CROSS SECTIONS
STATION 2+000 TO 2+300

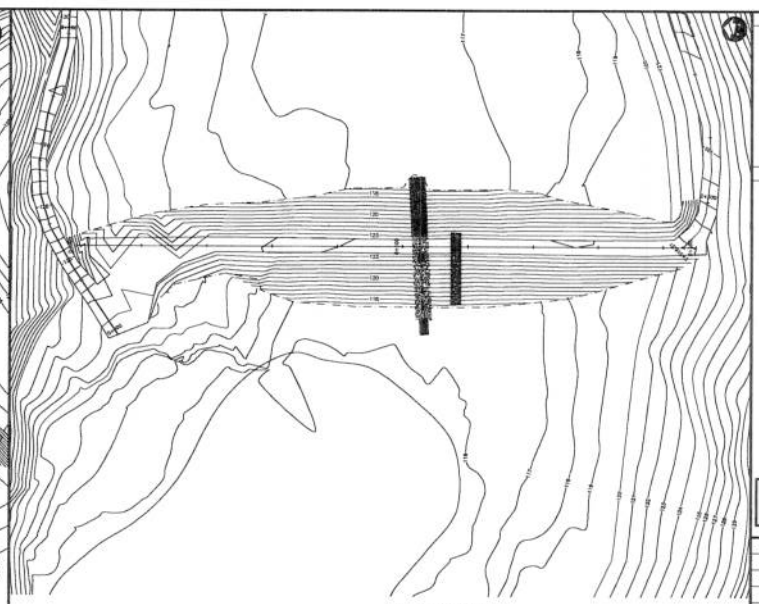
SCALE: AS SHOWN
DILLON PROJECT NUMBER: 05-4113-3000
CLIENT PROJECT NUMBER: 3435
DRAWING NUMBER: 108

DILLON CONSULTING

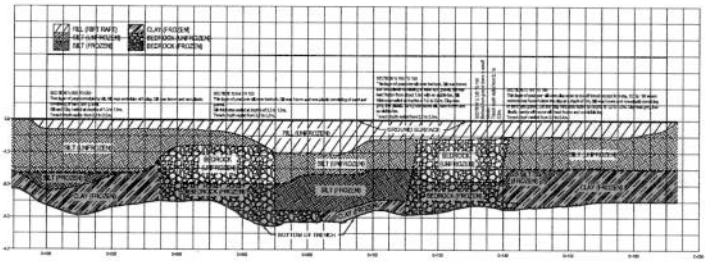


NORTH BERM



SOUTHWEST BERM




LEGEND

PLAN:

EXISTING:
MINOR CONTOUR (1m)
MAJOR CONTOUR (5m)

DESIGN:
ROAD CENTERLINE
ROAD EDGE
TOE OF SLOPE
DITCH

PROFILE:

EXISTING:
ROAD CENTERLINE

NOTES

DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE

DETAIL NUMBER

DESCRIPTION OF DETAIL

DRAWING DIRECT WHERE DETAIL IS SHOWN

DETAIL REFERENCED (THIS DRAWING OR PT.)

RECORD DRAWING

DRAWING REDUCED NOT TO SCALE

| CHANGE | DATE | DESCRIPTION | CHECK |
|---|---|---|---|
| 6 | 10/24/97 | RECORD | GS |
| 5 | 12/21/96 | RE-ISSUE FOR CONSTRUCTION | GS |
| 4 | 06/03/96 | ISSUED FOR CONSTRUCTION | GS |
| 3 | 03/01/96 | ISSUED FOR TENDER | GS |
| 2 | 01/29/96 | 80% SUBMISSION | GS |
| 1 | 12/15/95 | 50% SUBMISSION | GS |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | GS | NOV 97 |

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF THE NUNAVUT TERRITORY
PERMIT NUMBER
DILLON CONSULTING LIMITED

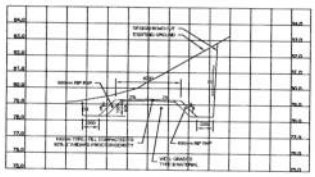
Nunavut

PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

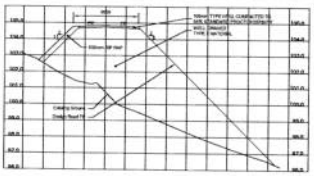
TITLE
BERM PLANS AND ELEVATIONS

DILLON CONSULTING

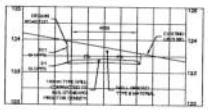
SCALE: AS SHOWN
DILLON PROJECT NUMBER: 05-4319-3000
CLIENT PROJECT NUMBER: 3400
DRAWING NUMBER: 100



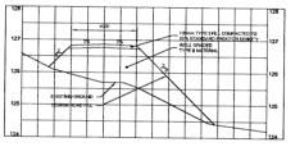
1 TYPICAL ROAD SECTION (CUT)



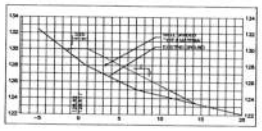
2 TYPICAL ROAD SECTION (FILL)



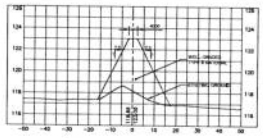
3 LAGOON ROAD SECTION (CUT)



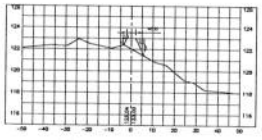
4 LAGOON ROAD SECTION (FILL)



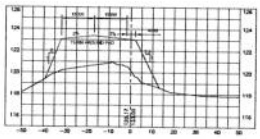
5 NORTH BERM SECTION 0+025



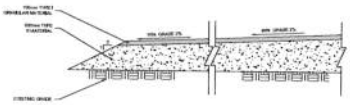
6 WEST BERM SECTION 0+140



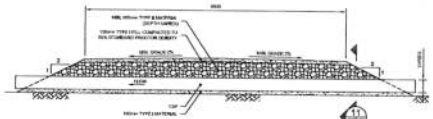
7 EAST BERM SECTION 0+010



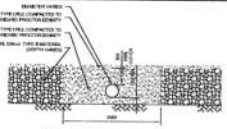
8 EAST BERM SECTION 0+050



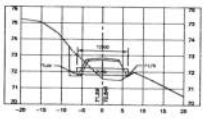
9 TRUCK TURNAROUND PAD SECTION



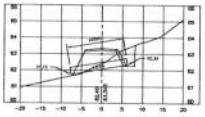
10 TYPICAL CULVERT DETAIL



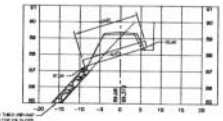
11 CULVERT SECTION



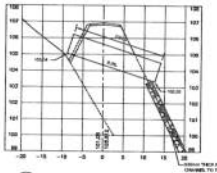
12 CULVERT SECTION AT 0+011.15



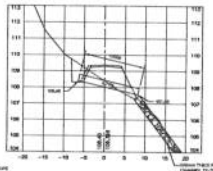
13 CULVERT SECTION AT 0+211.94



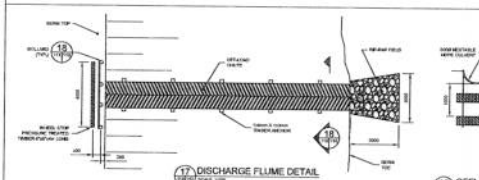
14 CULVERT SECTION AT 0+369.61



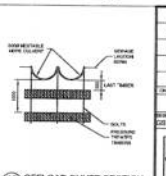
15 CULVERT SECTION AT 0+633.34



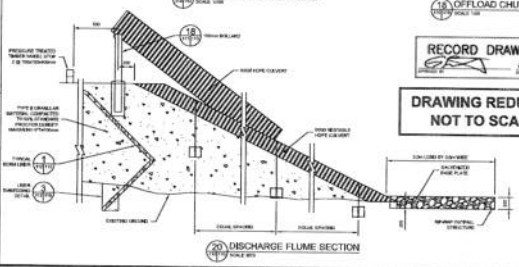
16 CULVERT SECTION AT 0+741.63



17 DISCHARGE FLUME DETAIL



18 OFFLOAD CHUTE SECTION



20 DISCHARGE FLUME SECTION

RECORD DRAWING

DRAWING REDUCED NOT TO SCALE

| | | | |
|---|---|---|---|
| 5 | 06/07/08 | ISSUED FOR CONSTRUCTION | GS |
| 4 | 05/07/08 | ISSUED FOR TENDER | GS |
| 3 | 01/29/08 | 90% SUBMISSION | GS |
| 2 | 10/29/05 | 75% SUBMISSION | GS |
| 1 | 09/11/05 | ISSUED FOR CLIENT REVIEW | GS |
| CHANGE | DATE | DESCRIPTION | CHECK |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | JG | NOV 07 |

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF THE NORTHWEST TERRITORIES
PERMIT MEMBER
P-016
DILLON CONSULTING LIMITED

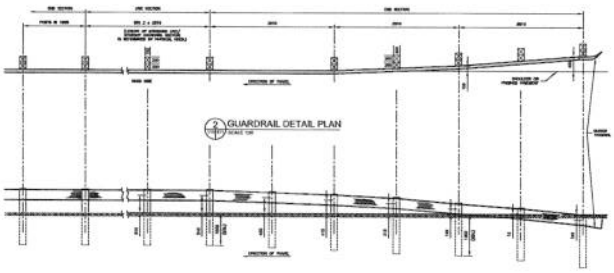
Nunavut

PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

TITLE
EARTHWORKS & SEWAGE DISCHARGE DETAILS AND SECTIONS

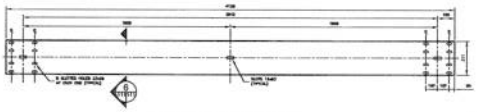
DILLON CONSULTING

SCALE AS SHOWN
DILLON PROJECT NUMBER 05-4515-0000
CLIENT PROJECT NUMBER 3439
DRAWING NUMBER 110



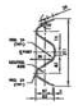
2 GUARDRAIL DETAIL PLAN

3 GUARDRAIL DETAIL SECTION

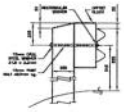


4 STRAIGHT SECTION (BEAM)

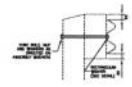
5 WING TERMINAL SECTION



6 GUARDRAIL SECTION

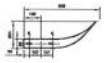


7 POST DETAIL



8 ARRANGEMENT AT POST

9 OFFSET BLOCK DETAIL

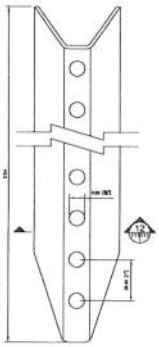


10 WING TERMINAL PLAN

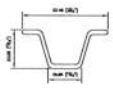
11 RECTANGULAR WASHER

1 GUARDRAIL DETAILS

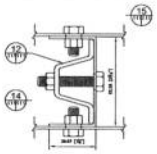
NOTES



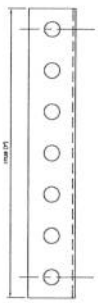
11 DELINEATOR POST SECTION



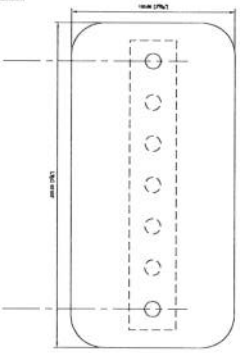
12 DELINEATOR POST DETAIL



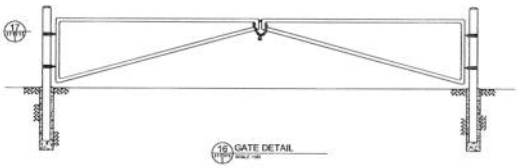
13 MOUNTING BRACKET DETAIL



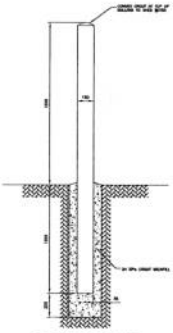
14 MOUNTING BRACKET SECTION



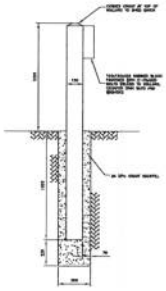
16 DELINEATOR FLASHING



16 GATE DETAIL



17 GATE POST DETAIL



18 BOLLARD DETAIL

RECORD DRAWING

DRAWING REDUCED NOT TO SCALE

| | | | |
|---|---|---|---|
| 6 | 15/04/07 | RECORD | KS |
| 5 | 12/01/06 | RE-ISSUED FOR CONSTRUCTION | GS |
| 5 | 06/07/05 | ISSUED FOR CONSTRUCTION | GS |
| 4 | 03/03/05 | ISSUED FOR TENDER | GS |
| 3 | 01/25/05 | MDE SUBMISSION | GS |
| CHANGE | DATE | DESCRIPTION | CHECK |

REVISIONS

| DESIGN | DRAWN | CHECKED | DATE |
|---|---|---|---|
| GS | TPW | GS | NOV 07 |

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF THE NORTHWEST TERRITORIES
PERMIT NUMBER
P 019
DILLON CONSULTING LIMITED

Nunavut

PROJECT
P LAKE AREA
SEWAGE LAGOON SYSTEM
CAPE DORSET

TITLE
GUARDRAIL - DELINEATOR - GATE DETAILS AND SECTIONS

DILLON CONSULTING

SCALE: AS SHOWN
CLIENT PROJECT NUMBER: 05-4519-0000
DILLON PROJECT NUMBER: 3439
DRAWING NUMBER: 111