



Notes

1. TOPOGRAPHIC INFORMATION CONDUCTED BY LESLIE M. HIGGINS SURVEYING LTD. RECEIVED OCTOBER 25, 2017. TOPOGRAPHIC SURVEY IS UTM 18. LIDAR INFORMATION CONDUCTED BY TULLOCH ENGINEERING ON JUNE 27, 2018. LIDAR SURVEY IS UTM 18. BEDROCK SURVEY INFORMATION PROVIDED BY PCL CONSTRUCTORS LTD. RECEIVED ON OCTOBER 31, 2017. EXISTING VEGETATION INFORMATION IS APPROXIMATE. PROVIDED FROM AERIAL IMAGERY. CONTRACTOR TO CONFIRM ALL TREE & SHRUB LOCATIONS ON SITE.
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5. IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENCROACH ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE OWNER AND CONTRACTOR AND A COPY IS TO BE KEPT ON FILE ON SITE PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
6. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY.
7. THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DRAINAGE AND MEASURES TO CONTROL WATER. THE SITE IS TO BE FINE GRADED/LEVELLED LEAVING THE SITE IN A NEAT APPEARANCE SUCH THAT POSITIVE DRAINAGE IS ACHIEVED EVERYWHERE PRIOR TO THE INSTALLATION OF SOLAR PANELS.
8. CONSTRUCTION TOWING RADIIUS LIMITS IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
9. CULVERTS ARE TO BE INSTALLED AS PER OPS 802.010. SOIL TYPE TO BE CONFIRMED ON SITE FOR DETERMINATION OF TRENCH WIDTH.
10. ALL AREAS WITHIN THE PROPOSED WORKS ARE TO BE RE-VEGETATED USING NATIVE TOPSOIL AND SEED. MIX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
11. CLEARING AND GRUBBING AND REMOVALS TO BE COMPLETED IN ACCORDANCE WITH OPS 201.
12. TEMPORARY EROSION CONTROL TO BE COMPLETED IN ACCORDANCE WITH OPS 577.
13. GRADING TO BE COMPLETED IN ACCORDANCE WITH OPS 206. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPS 1010.
14. CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPS 421. HEIGHT OF FILL TABLE FOR CSP CULVERTS TO COMPLY WITH OPS 800.010.
15. RIPRAP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPS 810.010 SECTION B-8.
16. ROCK SPILL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend

PROPOSED	EXISTING
TOPOGRAPHIC SURVEY CONTOUR	184.5
LIDAR CONTOUR	184.5
FENCE	
CULVERT	
SOLAR ARRAY BLOCK DELINEATOR	
INVERTER STATION	
SOLAR PANEL TABLE	
HARDENED SURFACE REFER TO C-500 FOR DETAILS	
AC CABLE TRENCH	
DC CABLE TRENCH	
SWALE	
POTENTIAL EXPOSED ROCK LOCATIONS	
TEMPORARY LAYDOWN AREA (MATERIAL STRUCTURE TO BE DETERMINED ON SITE)	
TREE/VEGETATION LINE	
RIP RAP	
FILL AREA	
ROCK CHECK SPREADER CUT AREA	
10m SETBACK LIMIT NO TOUCH ZONE	
AREA TO BE CLEARED OF TREES, GRADED AND SURVEYED TO CONFIRM PROPOSED PILE ELEVATIONS	

B	ISSUED FOR TENDER	DRR	DS	18.01.16
A	ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.21
Revision		By	Appd.	YY.MM.DD

File Name	DRR	DS	DRR	17.11.07
133560220_C-SP-BLOCK_D.dwg	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

LOYALIST RLP LP
LOYALIST SOLAR PROJECT

54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title

BLOCK C
SITE PLAN

Project No.

133560220

Drawing No.

C-013

Scale

0 12.5 37.5 62.5m
1:1250

Sheet

2 of 3

Revision

B



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[illegible]

B ISSUED FOR TENDER	DRR	DS	18.01.16
A ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.20
Revision	By	Appd.	YY.MM.DD

File Name: 133560220_C-SP-BLOCK_D.dwg	DRR	DS	DRR	17.11.07
	Dwn.	Chkd.	Dsan.	YY.MM.DD

Permit-Seal

54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

BLOCK C
SITE PLAN

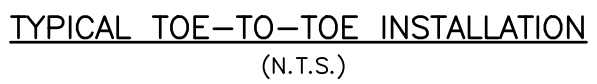
133560220

Drawing No.

Scale 0 12.5 37.5 62.5m

Sheet Revision

3



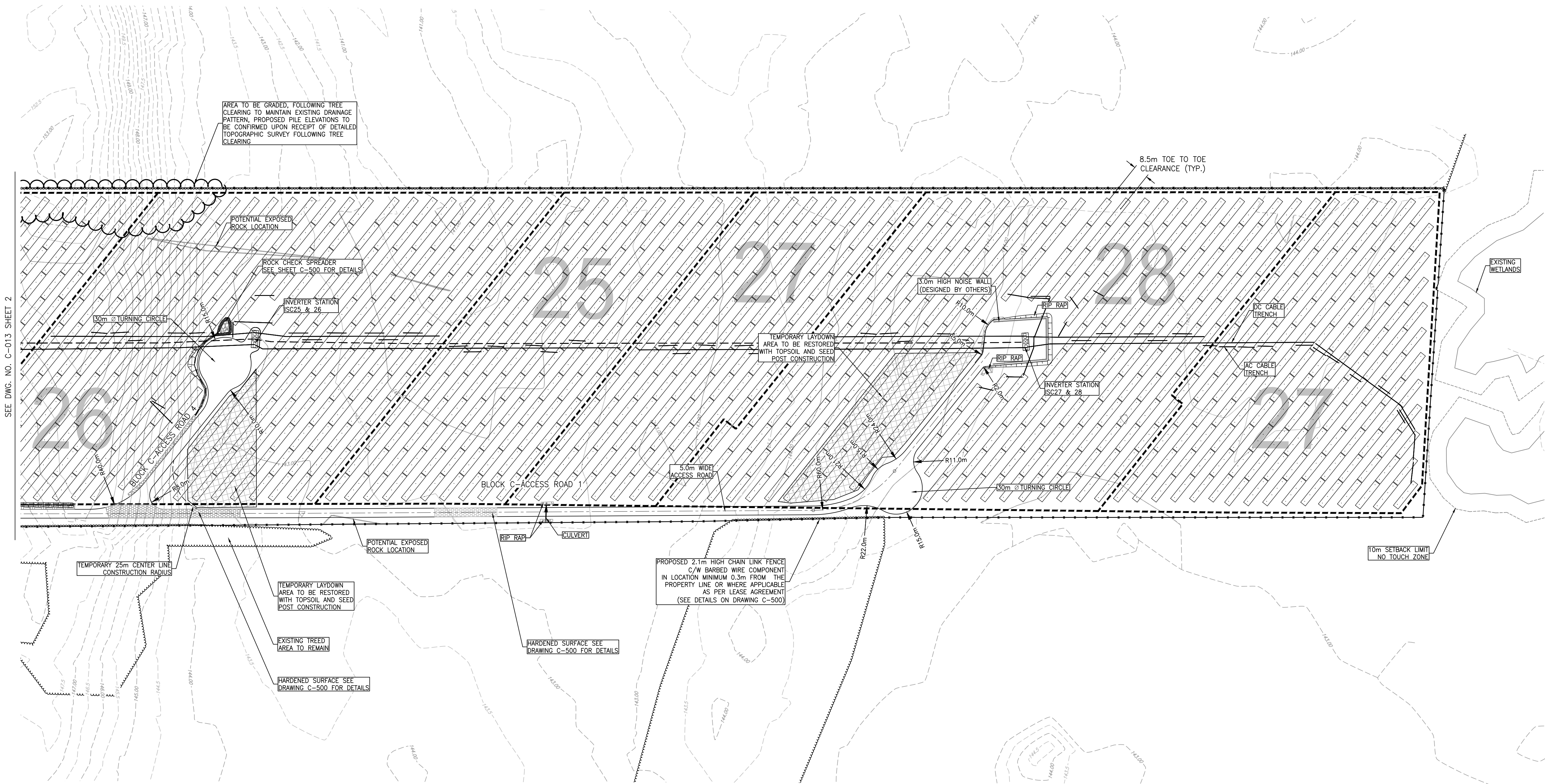
SITE STATISTICS	
BLOCK	AREA (ha)
22	4.1
23	4.2
24	4.0
25	4.0
26	4.1
27	4.0
28	4.4

20
BLOCK NUMBER

NOTE:

LIDAR HAS BEEN USED TO SUPPLEMENT THE TOPOGRAPHIC INFORMATION TO ILLUSTRATE EXTERNAL SITE DRAINAGE PATTERNS. CONTRACTOR IS RESPONSIBLE TO REVIEW ELEVATIONS PRIOR TO COMMENCEMENT OF ANY WORK AND ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER OF RECORD.

NOISE WALL CAN BE TEMPORARILY REMOVED
FOR POST CONSTRUCTION ACCESS TO
INVERTER STATIONS

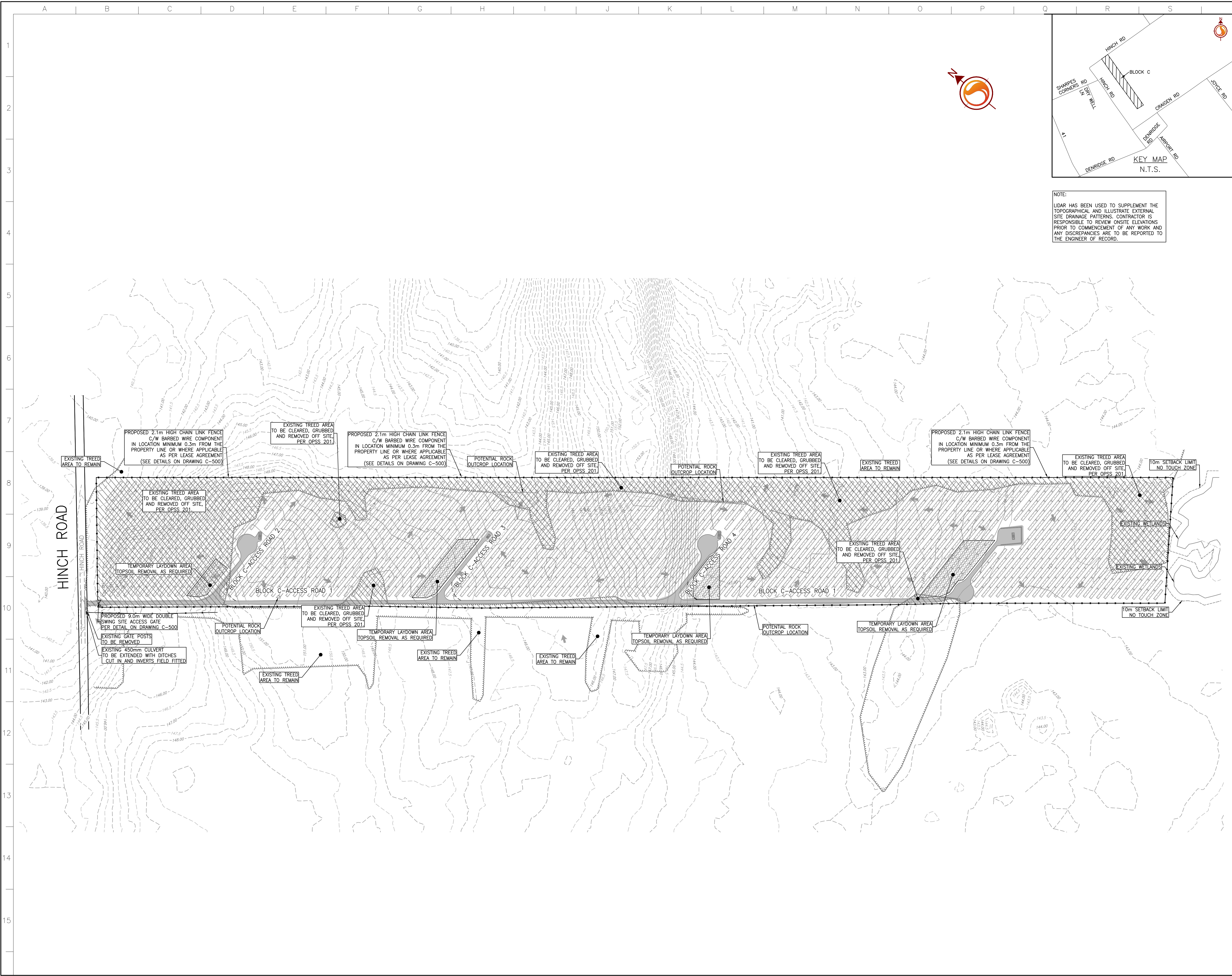


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2018/01/16 5:31 PM By: Rice, Demick

ORIGINAL SHEET - ARCH D

Version: 2.0 Modified By: Joel Veenstra Modified: 1/17/2018 10:36:58 AM Status: Open

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20/07/18 5:41 PM By: Rice, Derrick



NOTE:
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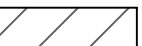




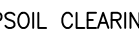






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CONSTRUCTION LEADERS

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 12. GRADING TO BE COMPLETED IN ACCORDANCE WITH OPSD 206. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPSD 1019.
 13. CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 421. HEIGHT OF FILL TABLE FOR CSP CULVERTS TO COMPLY WITH OPSD 805.010.
 14. RIPRAP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPSD 810.010 SECTION B-B.
 15. ALL SEEDING TO BE COMPLETE IN ACCORDANCE WITH OPSD 804.
 16. ROCK SPOIL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend

PROPOSED	EXISTING
	
	
	
	
	
	
	
	

B	ISSUED FOR TENDER	DRR	DS	18.01.16
A	ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.21
Revision		By	Appd.	YY.MM.DD

File Name:	133560220_C-05-Block_D.dwg	DRR	DS	DRR	17.11.06
		Dwn.	Chkd.	Dgn.	YY.MM.DD

Permit-Seal

Client/Project
LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT

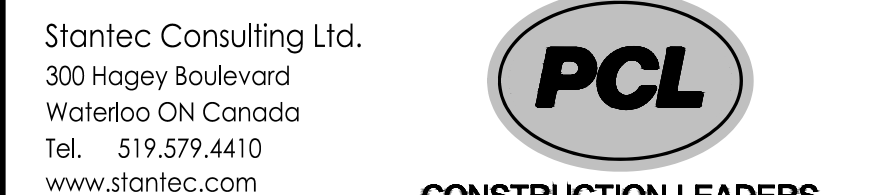
54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title
BLOCK C OVERALL
EXISTING CONDITIONS, CLEARING,
GRUBBING AND FENCING PLAN

Project No.	Scale
133560220	1:2500
Drawing No.	Sheet
	Revision

C-053 1 of 3 B



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[illegible]

PROPOSED

EXISTING

FENCE

TOPOGRAPHIC SURVEY CONTOUR

LIDAR CONTOUR

EXISTING TREES TO BE CLEARED

POTENTIAL ROCK OUTCROP LOCATION

TOPSOIL CLEARING LIMITS

TREE/VEGETATION LINE

OVERLAND FLOW DIRECTION

B ISSUED FOR TENDER	DRR	DS	18.01.1
A ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.2
Revision	By	Appd.	YY.MM.D

File Name: 133560220_C-DP-8LOCK_D.dwg	DRR	DS	DRR	17.11.0
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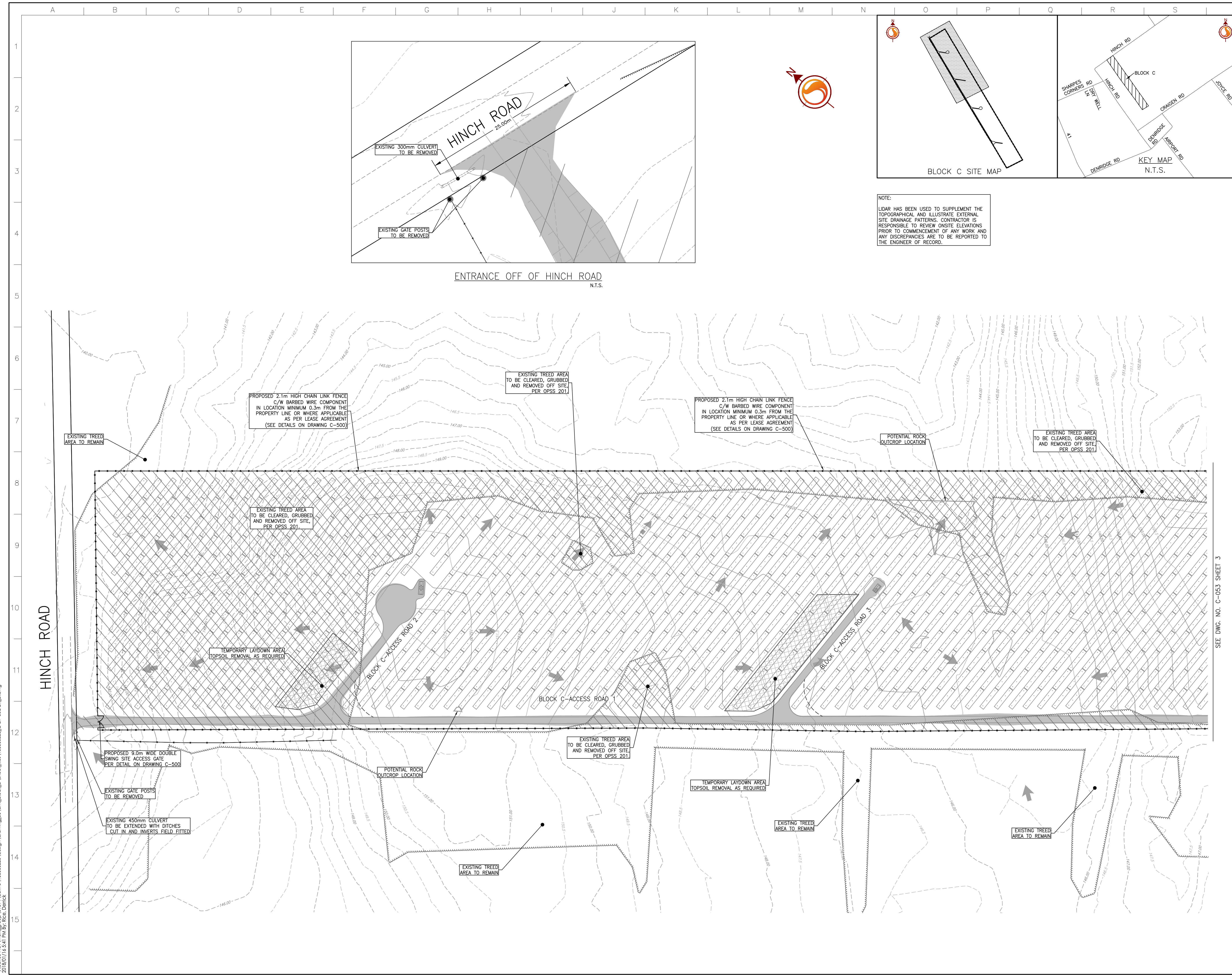
LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT
54MW GROUND-MOUNT SOLAR FARM

Title
BLOCK C
EXISTING CONDITIONS, CLEARING,
GRUBBING AND FENCING PLAN

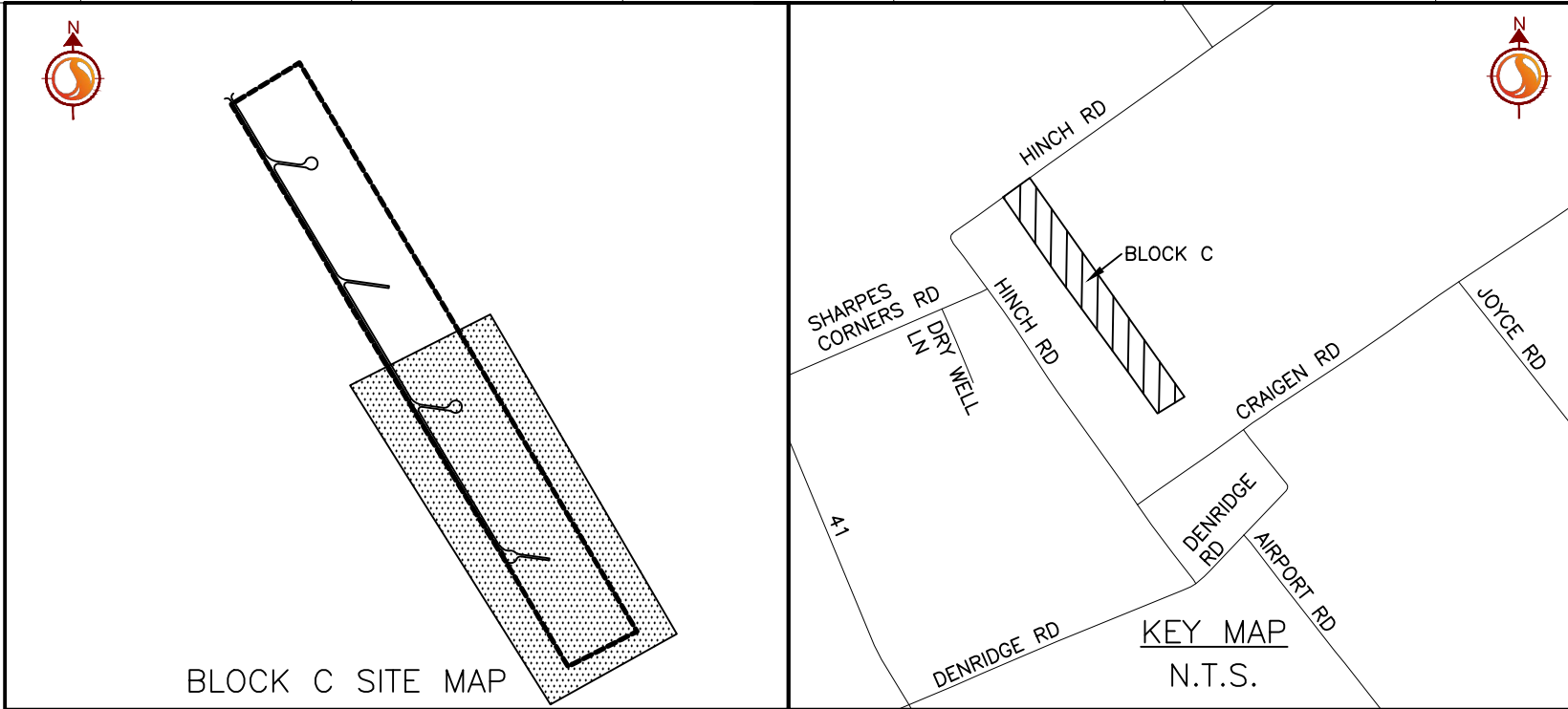
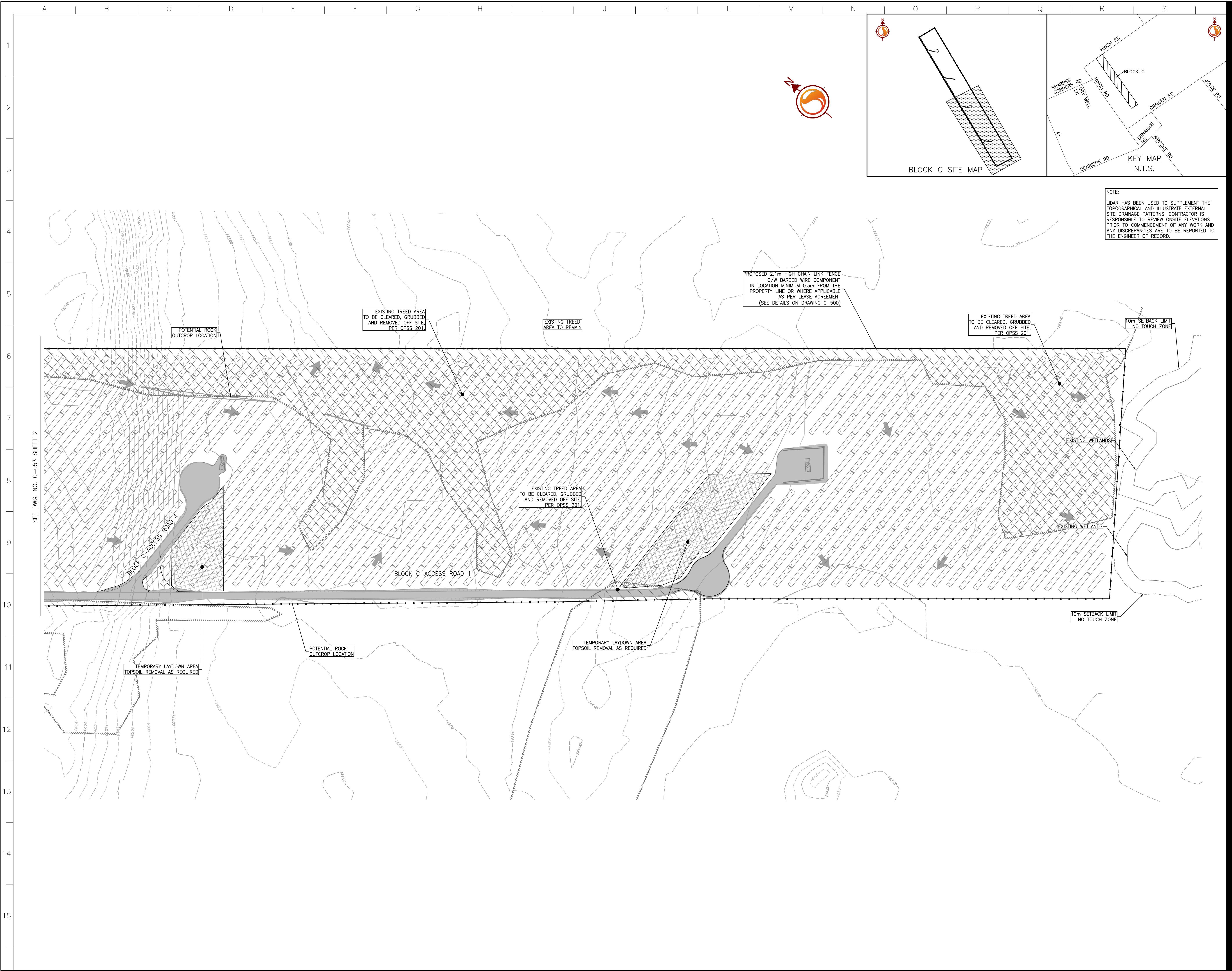
Project No.
133560220

Scale
0 20 60 100
1:2000

C-053 2 of 3 B



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2018/07/16 5:42 PM By: Rice, Derrick



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 12. GRADING TO BE COMPLETED IN ACCORDANCE WITH OPSS 206. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPSS 1010.
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 14. RIPRAP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPSS 810.010 SECTION B-B.
 15. ALL SEEDING TO BE COMPLETED IN ACCORDANCE WITH OPSS 804.
 16. ROCK SPOIL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend

PROPOSED	EXISTING
FENCE	295.5
TOPOGRAPHIC SURVEY CONTOUR	295.5
LIDAR CONTOUR	295.5
EXISTING TREES TO BE CLEARED	
POTENTIAL ROCK OUTCROP LOCATION	
TOPSOIL CLEARING LIMITS	
TREE/VEGETATION LINE	
OVERLAND FLOW DIRECTION	

B	ISSUED FOR TENDER	DRR	DS	18.01.16
A	ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.21
Revision		By	Appd.	YY.MM.DD

File Name:	133560220_C-053_BLOCK_C.dwg	DRR	DS	DRR	17.11.06
		Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT

54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

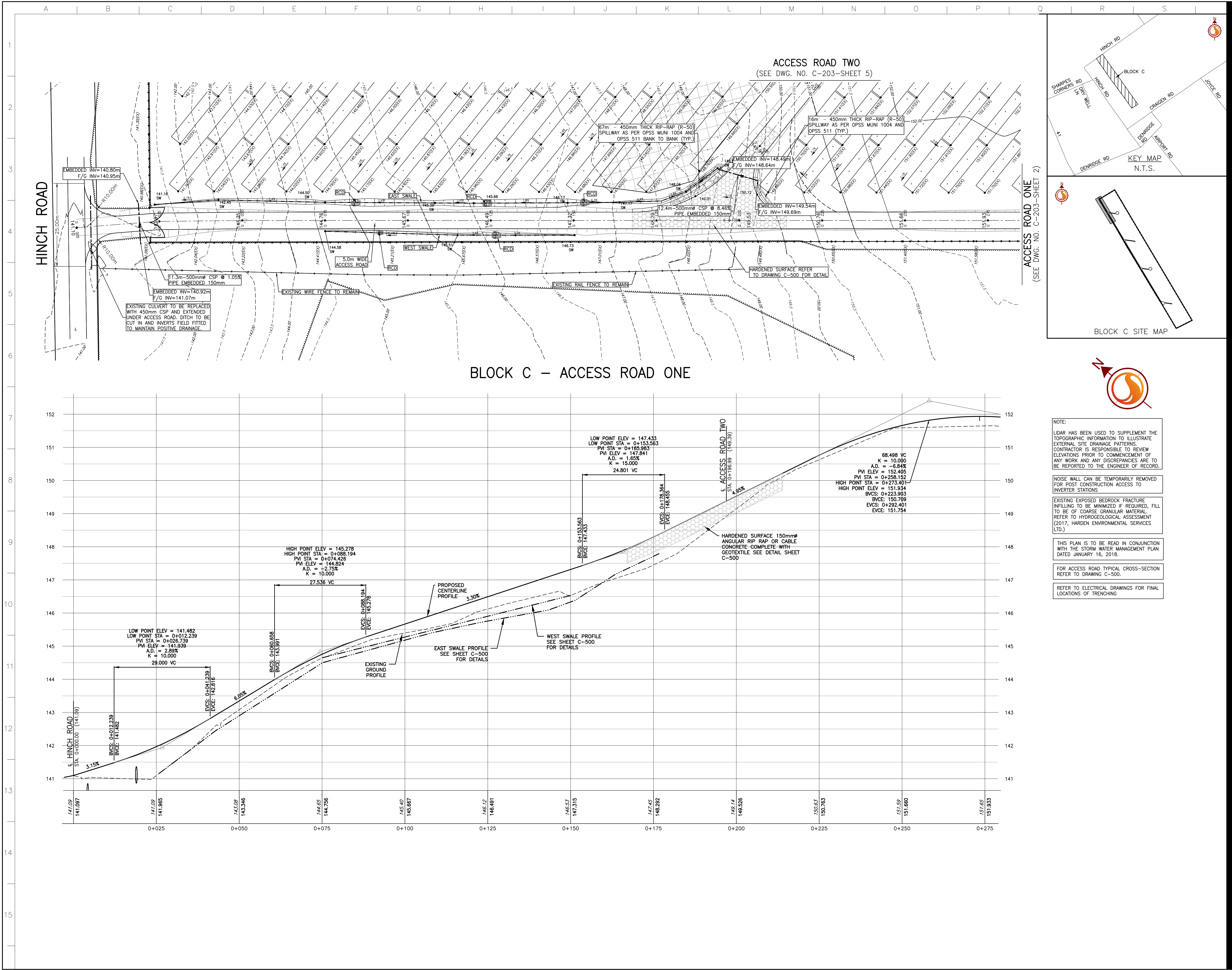
Title

BLOCK C
EXISTING CONDITIONS, CLEARING,
GRUBBING AND FENCING PLAN

Project No.	Scale
133560220	1:1250
Drawing No.	Sheet
	Revision

C-053 3 of 3 B

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2018/01/16 5:45 PM By: Rico Denick



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Legend

PROPOSED

EXISTING

• 185.19 ELEVATION • 185.19(EX)

• 185.19 SW SWALE ELEVATION

--- SWALE (SW)

--- TOPOGRAPHIC SURVEY CONTOUR

--- LIDAR CONTOUR

--- FENCE

--- RIP RAP

--- GRADE

--- SLOPE (3:1 UNLESS NOTED OTHERWISE)

--- HARDENED SURFACE

--- CULVERT

--- AC CABLE TRENCH

--- DC CABLE TRENCH

--- POTENTIAL EXPOSED ROCK LOCATIONS

--- ROCK CHECK SPREADER

--- ROLLED EROSION CONTROL PRODUCT (RECP)

--- ROCK CHECK DAM (RCD) (PER OPSS 219.210 SEE DETAILS ON C-650)

Revision

Rev	By	Appd.	YY.MM.DD	
B	ISSUED FOR TENDER	DRR	DS	18.01.16
A	ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.21

Permit-Seal

File Name: 133560220_C-S1-BLOCK.Dwg

DRR

DS

DRR

17.11.07

Dwn.

Chkd.

Dgn.

YY.MM.DD

Client/Project

LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT

54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title

BLOCK C - ACCESS ROAD ONE
PLAN & PROFILE
STA.0+000 - 0+275

Project No.

133560220

Drawing No.

Sheet

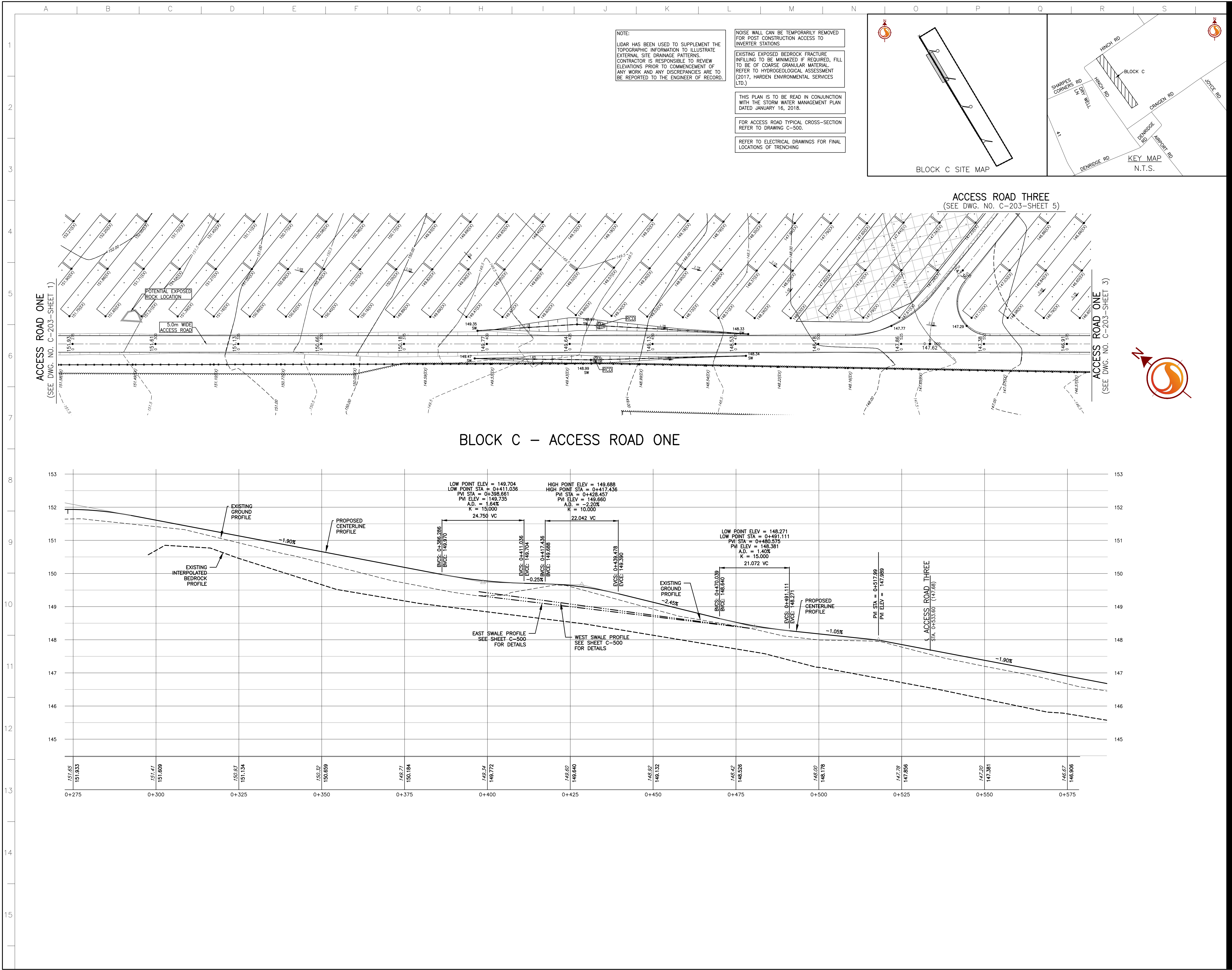
Revision

C-203

1 of 5

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2018/01/17 16:54:47 PM By: Rice, Derrick



Stantec

Stantec Consulting Ltd.
300 Hagley Boulevard
Waterloo ON Canada
Tel. 519.579.4410
www.stantec.com

PCL

CONSTRUCTION LEADERS

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Notes

1. TOPOGRAPHIC INFORMATION CONDUCTED BY LESLIE M. HIGGINS SURVEYING LTD. RECEIVED OCTOBER 25, 2017. TOPOGRAPHIC SURVEY IS UTM 18. LIDAR INFORMATION CONDUCTED BY TULLOCH ENGINEERING ON JUNE 27, 2018. LIDAR SURVEY IS UTM 18. BEDROCK SURVEY INFORMATION PROVIDED BY PCL CONSTRUCTORS LTD. RECEIVED ON OCTOBER 31, 2017. EXISTING VEGETATION INFORMATION IS APPROXIMATE, PROVIDED FROM AERIAL MAPS. CONTRACTOR TO CONFIRM ALL TREE & SHRUB LOCATIONS ON SITE.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS IN THIS SET PREPARED BY STANTEC CONSULTING LTD.
3. THE CONTRACTOR MUST CHECK AND VERIFY DIMENSIONS, OBTAIN ALL UTILITY LOCATES AND OBTAIN ALL REQUIRED PERMITS/LICENSES AND VERIFY ELEVATIONS OF EXISTING SERVICES BEFORE PROCEEDING WITH ANY WORK.
4. ALL CONSTRUCTION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (LATEST EDITION).
5. IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENCROACH ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE OWNER AND CONTRACTOR AND A COPY IS TO BE KEPT ON FILE ON SITE PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
6. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY.
7. THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DRAINAGE AND MEASURES TO CONTROL WATER. THE SITE IS TO BE FINE GRADED/LEVELLED LEAVING THE SITE IN A NEAT APPEARANCE SUCH THAT POSITIVE DRAINAGE IS ACHIEVED EVERYWHERE PRIOR TO THE INSTALLATION OF SOLAR PANELS.
8. CONSTRUCTION TURNING RADIUS LIMITS IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
9. CULVERTS ARE TO BE INSTALLED AS PER OPSD 802.010. SOIL TYPE TO BE CONFIRMED ON SITE FOR DETERMINATION OF TRENCH WIDTH.
10. ALL AREAS WITHIN THE PROPOSED WORKS ARE TO BE RE-VEGETATED USING NATIVE TOPSOIL AND SEED, MIX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
11. CLEARING AND GRUBBING AND REMOVALS TO BE COMPLETED IN ACCORDANCE WITH OPSD 201.
12. TEMPORARY EROSION CONTROL TO BE COMPLETED IN ACCORDANCE WITH OPSD 577.
13. GRADING TO BE COMPLETED IN ACCORDANCE WITH OPSD 206. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPSD 1010.
14. CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 421. HEIGHT OF FILL TABLE FOR CSP CULVERTS TO COMPLY WITH OPSD 805.010.
15. RIPRAP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPSD 810.010 SECTION B-B.
16. ALL SLOPING TO BE COMPLETED IN ACCORDANCE WITH OPSD 804.
17. ROCK SPOIL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend

PROPOSED

EXISTING

ELEVATION

SWALE ELEVATION

SWALE (SW)

TOPOGRAPHIC SURVEY CONTOUR

LIDAR CONTOUR

FENCE

RIP RAP

GRADE

SLOPE (3:1 UNLESS NOTED OTHERWISE)

HARDENED SURFACE

CULVERT

AC CABLE TRENCH

DC CABLE TRENCH

POTENTIAL EXPOSED ROCK LOCATIONS

ROCK CHECK SPREADER

ROLLED EROSION CONTROL PRODUCT (RECP)

ROCK CHECK DAM (RCD) (PER OPSD 219.210 SEE DETAILS ON C-650)

B ISSUED FOR TENDER

A ISSUED FOR CLIENT REVIEW

Revision

File Name: 133560220_C-St-BLOCK_D.dwg

Permit-Seal

Client/Project

LOYALIST LP
LOYALIST SOLAR PROJECT

54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title

BLOCK C - ACCESS ROAD ONE
PLAN & PROFILE
STA.0+275 - 0+575

Project No.
133560220

Drawing No.

Scale

1:500H
1:500V

Sheet

Revision

C-203

2 of 5

B

Version: 2.0 Modified By: Joel Veemstra Modified: 11/17/2018 10:36:56 AM Status: Open

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Notes

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2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS IN THIS SET PREPARED BY STANTEC CONSULTING LTD.
3. THE CONTRACTOR MUST CHECK AND VERIFY DIMENSIONS, OBTAIN ALL UTILITY LOCATES AND OBTAIN ALL REQUIRED PERMITS/LICENSES AND VERIFY ELEVATIONS OF EXISTING SERVICES BEFORE PROCEEDING WITH ANY WORK.
4. ALL CONSTRUCTION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (LATEST EDITION).
5. IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENCLOSED ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE OWNER AND CONTRACTOR AND A COPY IS TO BE KEPT ON FILE ON SITE PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
6. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY.
7. THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DRAINAGE AND MEASURES TO CONTROL WATER. THE SITE IS TO BE FINE GRADED/LEVELLED LEAVING THE SITE IN A NEAT APPEARANCE SUCH THAT POSITIVE DRAINAGE IS ACHIEVED OVERWIDE PRIOR TO THE INSTALLATION OF SOLAR PANELS.
8. CONSTRUCTION TURNING RADIUS LIMITS IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
9. CULVERTS ARE TO BE INSTALLED AS PER OPSD 602.010. SOIL TYPE TO BE CONFIRMED ON SITE FOR DETERMINATION OF TRENCH WIDTH.
10. ALL AREAS WITHIN THE PROPOSED WORKS ARE TO BE RE-VEGETATED USING NATIVE TOPSOIL AND SEED. MIX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
11. CLEARING AND GRUBBING AND REMOVALS TO BE COMPLETED IN ACCORDANCE WITH OPSD 201.
12. TEMPORARY EROSION CONTROL TO BE COMPLETED IN ACCORDANCE WITH OPSD 577.
13. GRADING TO BE COMPLETED IN ACCORDANCE WITH OPSD 206. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPSD 1010.
14. CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 421. HEIGHT OF FILL TABLE FOR CSP CULVERTS TO COMPLY WITH OPSD 602.010.
15. RIPRAP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPSD 810.010 SECTION B-B.
16. ROCK SPILL TO BE COMPLETED IN ACCORDANCE WITH OPSD 511.
17. ROCK SPILL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend

PROPOSED	EXISTING
• 185.19	ELEVATION • 185.19(EX)
• 185.19 SW	SWALE ELEVATION
—	SWALE (SW)
—	TOPOGRAPHIC SURVEY CONTOUR
—	LIDAR CONTOUR
—	FENCE
—	RIP RAP
—	GRADE
—	SLOPE (3:1 UNLESS NOTED OTHERWISE)
—	HARDENED SURFACE
—	CULVERT
—	AC CABLE TRENCH
—	DC CABLE TRENCH
—	POTENTIAL EXPOSED ROCK LOCATIONS
—	ROCK CHECK SPREADER
—	ROLLED EROSION CONTROL PRODUCT (RECP)
—	ROCK CHECK DAM (RCD) (PER OPSD 219.210 SEE DETAILS ON C-650)

B	ISSUED FOR TENDER	DRR	DS	18.01.16
A	ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.21
Revision	By	Appd.	YYMM.DD	

File Name:	133560220_C-S1-BLOCK-D.dwg	DRR	DS	DRR	17.11.07
		Dwn.	Chkd.	Dgn.	YYMM.DD

Permit-Seal

Client/Project

LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT
54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title

BLOCK C ACCESS ROAD ONE
PLAN & PROFILE
STA. 0+575 - 1+200

Project No.

133560220

Drawing No.

C-203

Scale

1:500H 0 5 15 25m
1:50V 0 0.5 1.5 2.5m

Sheet

Revision

3 of 5

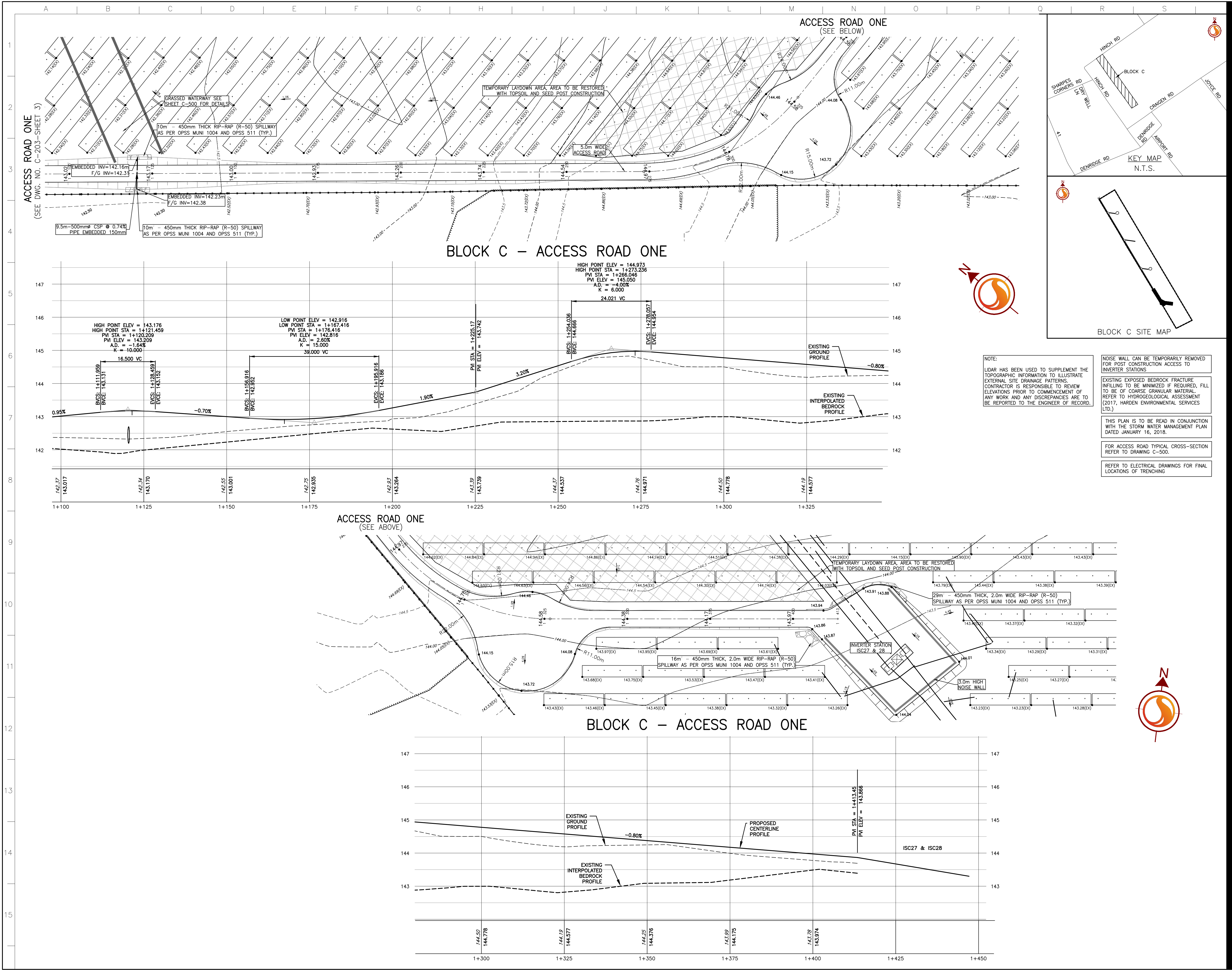
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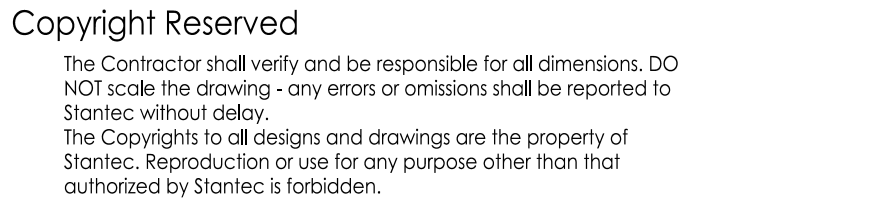
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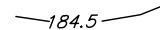
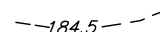
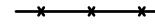


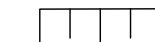





Version: 2.0 Modified By: Joel Veinstra Modified: 11/7/2018 10:36:56 AM Status: Open

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2018/07/16 5:45 PM By: Rice, Derrick





1. TOPOGRAPHIC INFORMATION CONDUCTED BY LESLIE L. HIGGINS SURVEYING LIA, RECEIVED DATE 05/25/2012, 11:58 AM, PROJECT NO. 12-0000, SHEET NO. 1 OF 1, PROJECT NAME: TULLOCH ENGINEERING ON JUNE 27, 2012. LIDAR SURVEY IS US 18, BEDROCK SURVEY INFORMATION PROVIDED BY PHC CONSULTORS LTD., RECEIVED ON OCTOBER 30, 2017, EXISTING UTILITIES INFORMATION PROVIDED BY PHC CONSULTORS LTD., RECEIVED ON OCTOBER 30, 2017. CONVEY ALL TRACES & SPOOLS LOCATIONS ON SITE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL OTHER DRAWINGS IN THE PROJECT AND CONVEY ALL TRACES & SPOOLS LOCATIONS ON SITE.
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY AND VERY DETAILED, OBTAIN ALL UTILITY LOCATIONS AND OBTAIN ALL REQUIRED PERMITS/LICENSES AND VERY ELEVATIONS OF EXISTING SERVICES BEFORE COMMENCEMENT OF WORK.
4. ALL CONSTRUCTION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CANADIAN NATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (LATEST EDITION).
5. IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENCROACH DURING THE CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO THE ADJACENT PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN PERMISSION FROM THE OWNER AND CONTRACTOR AND A COPY IS TO BE KEPT ON FILE ON SITE PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO OBTAIN PERMISSION SHALL BE THE ASPECT IN THE PROPERTY OWNERS OWN RISK.
6. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPALITY OF WILMOT.
7. THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DAMAGE AND MEASURES TO CONTROL WATER, EROSION, AND SEDIMENTATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF POSITIVE DRAINAGE IS ACHIEVED EVERYWHERE PRIOR TO THE INSTALLATION OF SOLAR PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF POSITIVE DRAINAGE TO BE ALLOWED TO REMAIN FOR ADEQUATE CATCHMENT FOR CONSTRUCTION VEHICLES.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF POSITIVE DRAINAGE TO BE ALLOWED TO REMAIN FOR ADEQUATE CATCHMENT FOR CONSTRUCTION VEHICLES.
9. FOR DETERMINATION OF TRENCH WIDTH:
10. ALL TRENCHES SHALL BE PROTECTED BY THE CONTRACTOR BY THE FOLLOWING MEANS:
11. SHIELD, MAX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
12. ALL GRASS, WEEDS, RUBBING AND REMOVALS TO BE COMPLETED IN ACCORDANCE WITH OPS 201.
13. TEMPORARY EROSION CONTROL TO BE COMPLETED IN ACCORDANCE WITH OPS 527.
14. ALL EROSION CONTROL MEASURES TO BE COMPLETED IN ACCORDANCE WITH OPS 527 TO BE USED IN ACCORDANCE WITH OPS 1010.
15. ALL EROSION CONTROL MEASURES TO BE COMPLETED IN ACCORDANCE WITH OPS 1010.
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PROPOSED		EXISTING
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	SWALE (SW)	
	TOPOGRAPHIC SURVEY CONTOUR	
	LIDAR CONTOUR	
	FENCE	
	RIP RAP	
2.0%	GRADE	
	SLOPE (3:1 UNLESS NOTED OTHERWISE)	
	HARDENED SURFACE	
	CULVERT	
---	AC CABLE TRENCH	
---	DC CABLE TRENCH	
---	POTENTIAL EXPOSED ROCK LOCATIONS	
	ROCK CHECK SPREADER	
	ROLLED EROSION CONTROL PRODUCT (RECP)	
	ROCK CHECK DAM (ROD) (PER OPSPD 219.210 SEE DETAILS)	

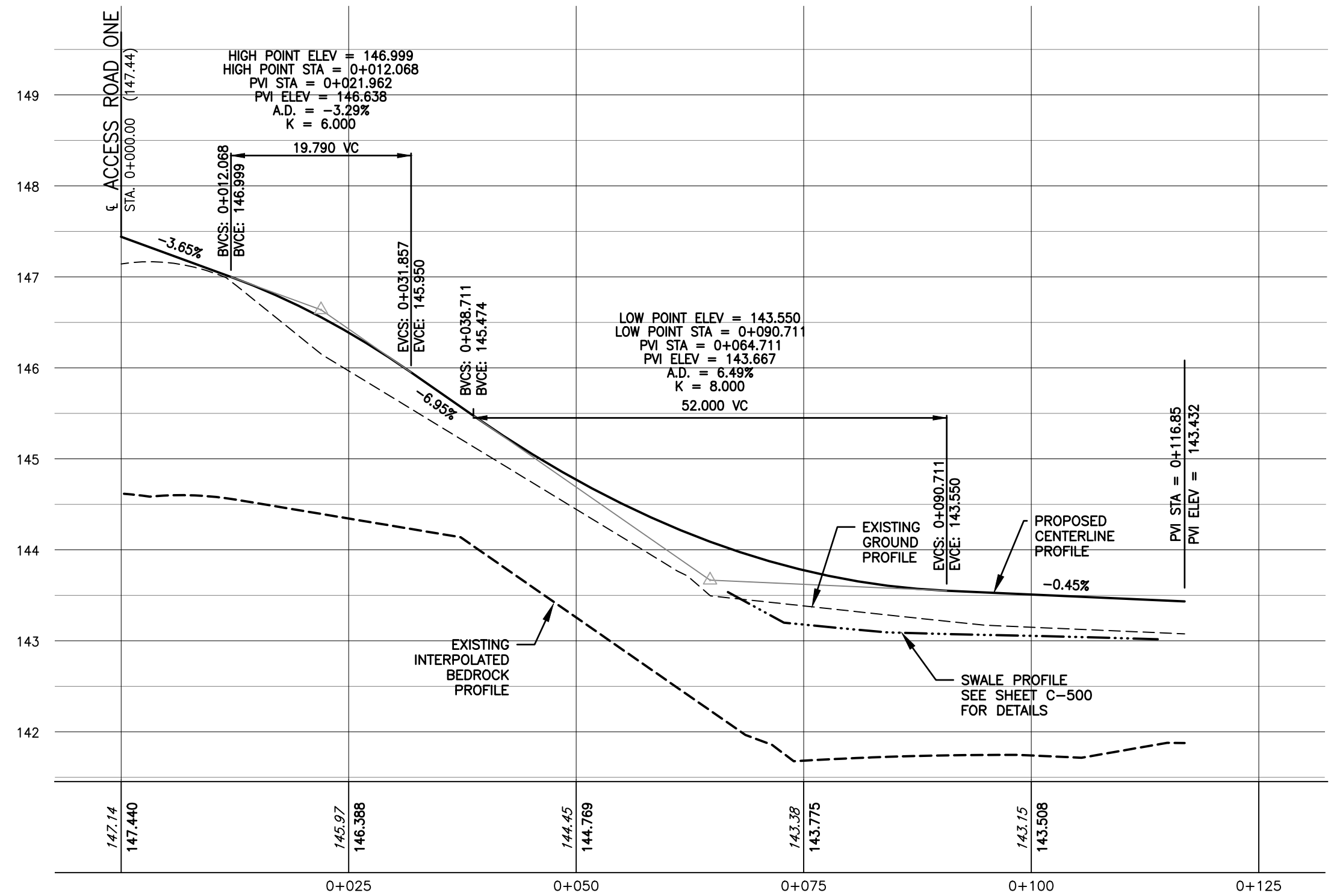
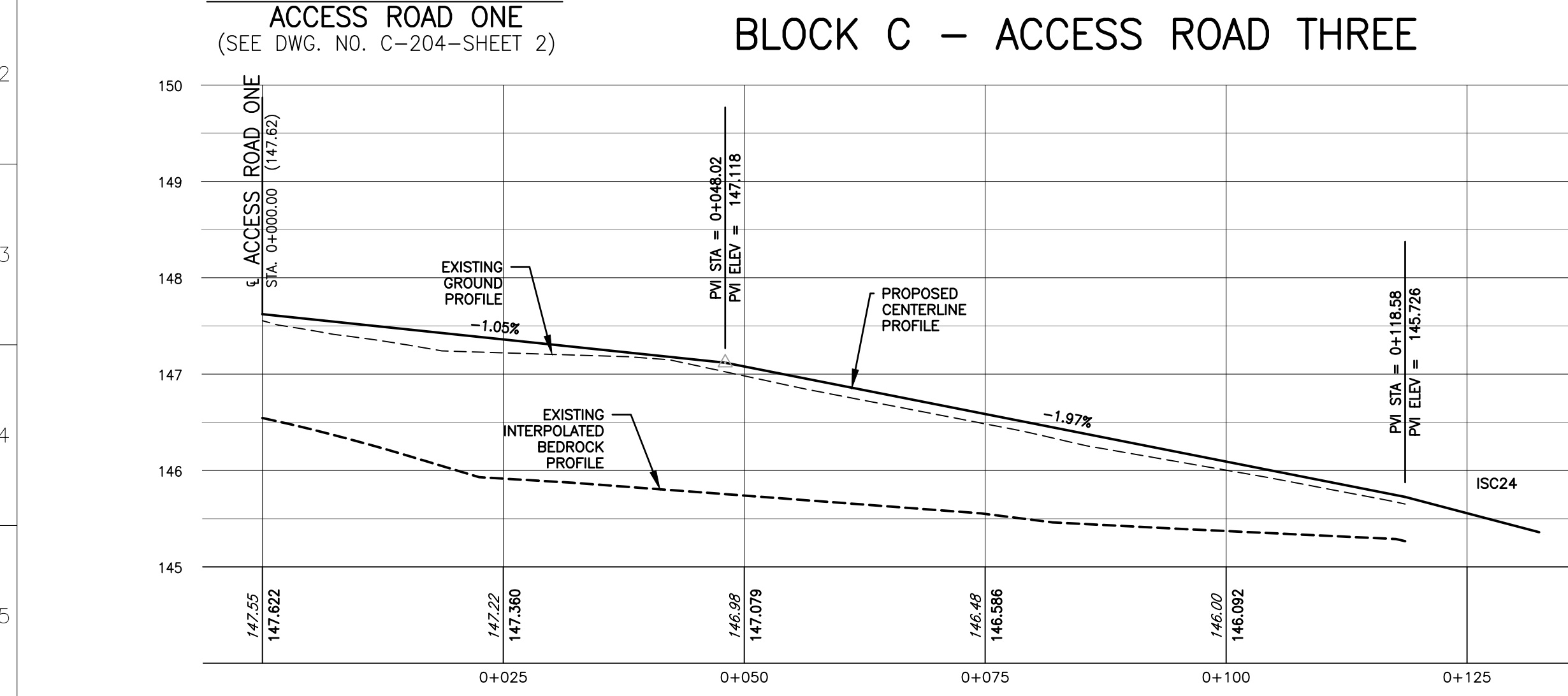
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Client/Project

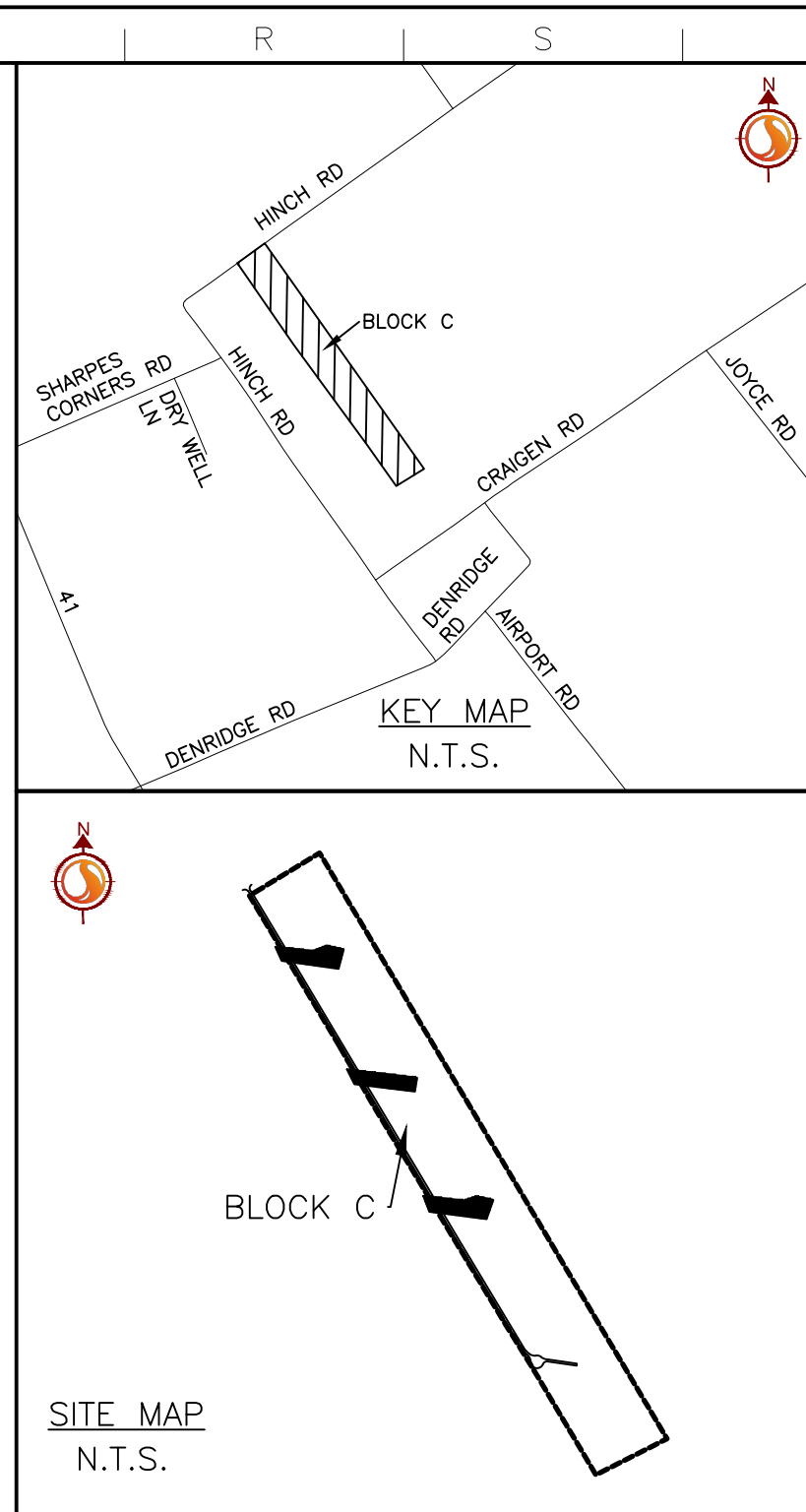
LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT

54MW GROUND-MOUNT SOLAR FARM

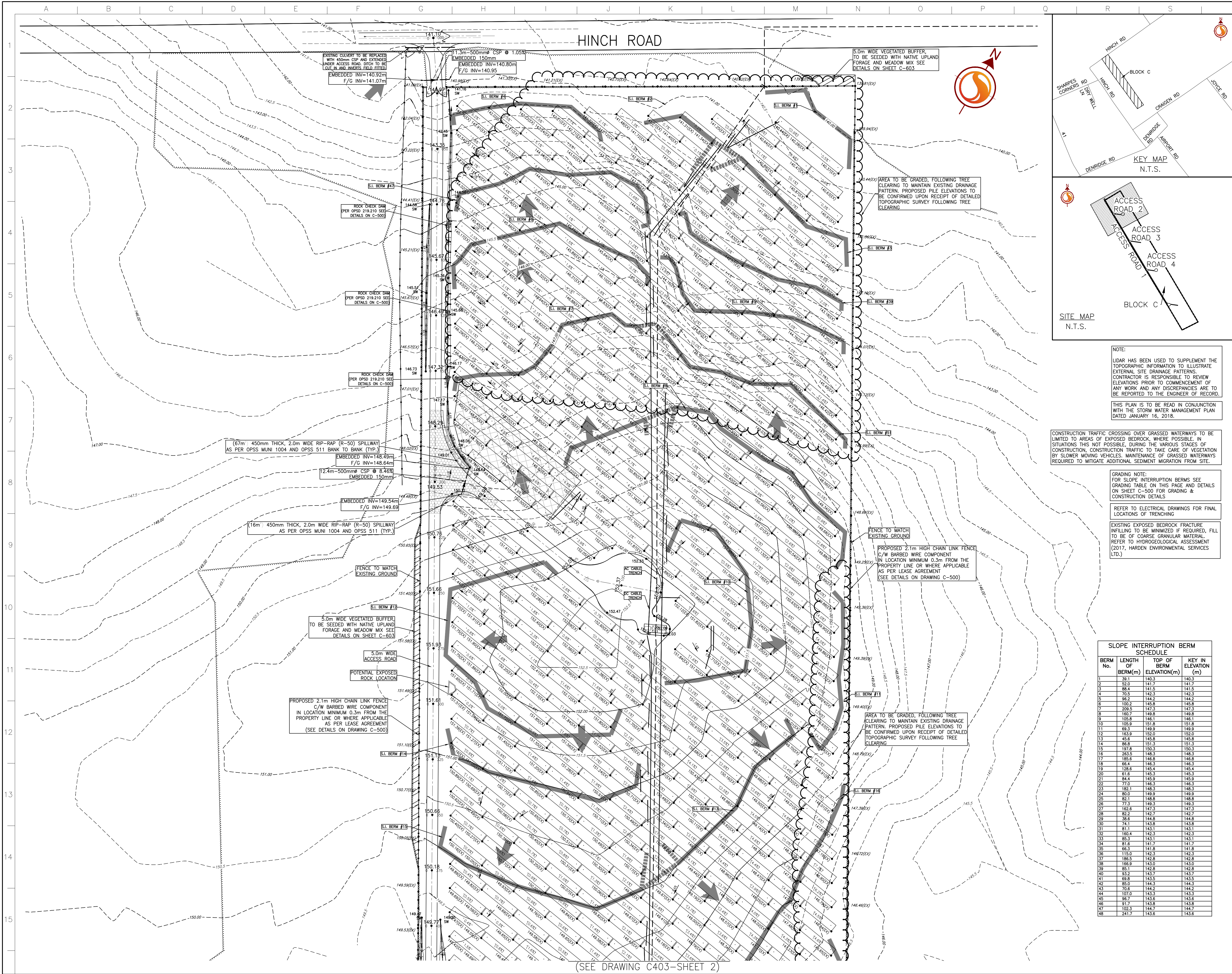
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Drawing No.	Sheet
	Revision



<p>NOTE: UJAR HAS BEEN USED TO SUPPLEMENT THE TOPOGRAPHIC INFORMATION TO ILLUSTRATE EXTERNAL SITE DRAINAGE PATTERNS. CONTRACTOR IS RESPONSIBLE TO REVIEW ELEVATIONS PRIOR TO COMMENCEMENT OF ANY WORK AND ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER OF RECORD.</p>	<p>NOISE WALL CAN BE TEMPORARILY REMOVED FOR POST CONSTRUCTION ACCESS TO INVERTER STATIONS</p>
	<p>EXISTING EXPOSED BEDROCK FRACTURE INFILLING TO BE MINIMIZED IF REQUIRED, FILL TO BE COARSE GRANULAR MATERIAL. REFER TO HYDROLOGICAL ASSESSMENT (2017, HARDEN ENVIRONMENTAL SERVICES LTD.)</p>
	<p>THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE STORM WATER MANAGEMENT PLAN DATED JANUARY 16, 2018.</p>
	<p>FOR ACCESS ROAD TYPICAL CROSS-SECTION REFER TO DRAWING C-500.</p>
	<p>REFER TO ELECTRICAL DRAWINGS FOR FINAL LOCATIONS OF TRENCHING</p>



\\c01004-01\work_group\01614\active\133560220\design\drawing\block\block_duvel\133560220_C-GR-Block_C.dwg
20/01/18 5:50 PM By: Rice, Duvel



(SEE DRAWING C403-SHEET 2)

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 5. IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENOUGH ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE OWNER AND CONTRACTOR AND A COPY IS TO BE KEPT ON FILE ON SITE PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
 6. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY.
 7. THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DRAINAGE AND MEASURES TO CONTROL WATER. THE SITE IS TO BE GRADED/LEVELLED LEAVING THE SITE IN A NEAT APPEARANCE SUCH THAT POSTING DRAINAGE IS ACHIEVED EVERYWHERE PRIOR TO THE INSTALLATION OF SOLAR PANELS.
 8. CONSTRUCTION TURNING RADIUS LIMITS IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
 9. CULVERTS ARE TO BE INSTALLED AS PER OPSD 802.010. SOIL TYPE TO BE CONFIRMED ON SITE FOR DETERMINATION OF TRENCH WIDTH.
 10. ALL AREAS WITHIN THE PROPOSED WORKS ARE TO BE RE-VEGETATED USING NATIVE TOPSOIL AND SEED. MIX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
 11. CLOPPING AND GRUBBING AND REMOVALS TO BE COMPLETED IN ACCORDANCE WITH OPSD 201.
 12. TEMPORARY EROSION CONTROL TO BE COMPLETED IN ACCORDANCE WITH OPSD 577.
 13. GRADING TO BE COMPLETED IN ACCORDANCE WITH OPSD 200. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPSD 101.
 14. CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 421. HEIGHT OF FILL TABLE FOR CSP TO COMPLY WITH OPSD 802.010.
 15. RIPRAP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPSD 810.010 SECTION B-8.
 16. ALL SEEDING TO BE COMPLETED IN ACCORDANCE WITH OPSD 804.
 17. ROCK SPOIL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

- Legend**
- PROPOSED**
● 185.19
● 185.19(EX)
- ELEVATION**
SWALE
TOPOGRAPHIC SURVEY CONTOUR
LIDAR CONTOUR
FENCE
OVERLAND FLOW DIRECTION
GRADE
SLOPE (3:1 UNLESS NOTED OTHERWISE)
HARDENED SURFACE
CULVERT
5.0M WIDE VEGETATED BUFFER
AC CABLE TRENCH
DC CABLE TRENCH
POTENTIAL ROCK OUTCROP LOCATIONS
TEMPORARILY REMOVED S.I. BERM (SEE NOTE ON C-603 DRAWING FOR DETAILS)
SLOPE INTERRUPTION BERM (SEE DETAIL ON SHEET C-500 FOR DETAILS)
TEMPORARY LAYDOWN AREA TO BE RESTORED WITH TOPSOIL AND SEED (PER OPSD 219.210 SEE DETAILS ON C-500)
PROPOSED FILL AREA
PROPOSED CUT AREA
GRASSED WATERWAY (SEE DETAIL ON SHEET C-500 FOR DETAILS)
ROLLED EROSION CONTROL PRODUCT (RECP)
RIP RAP

NOTE:
LIDAR HAS BEEN USED TO SUPPLEMENT THE TOPOGRAPHIC INFORMATION TO ILLUSTRATE EXTERNAL SITE DRAINAGE PATTERNS. CONTRACTOR IS RESPONSIBLE TO REVIEW ELEVATIONS PRIOR TO COMMENCEMENT OF ANY WORK AND ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER OF RECORD.
THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE STORM WATER MANAGEMENT PLAN DATED JANUARY 16, 2018.

CONSTRUCTION TRAFFIC CROSSING OVER GRASSED WATERWAYS TO BE LIMITED TO AREAS OF EXPOSED BEDROCK. WHERE POSSIBLE, IN SITUATIONS THIS NOT POSSIBLE, DURING THE VARIOUS STAGES OF CONSTRUCTION, CONSTRUCTION TRAFFIC TO TAKE CARE OF VEGETATION BY SLOWER MOVING VEHICLES. MAINTENANCE OF GRASSED WATERWAYS REQUIRED TO MITIGATE ADDITIONAL SEDIMENT MIGRATION FROM SITE.

GRADING NOTE:
FOR SLOPE INTERRUPTION BERMS SEE GRADING TABLE ON THIS PAGE AND DETAILS ON SHEET C-500 FOR GRADING & CONSTRUCTION DETAILS

REFER TO ELECTRICAL DRAWINGS FOR FINAL LOCATIONS OF TRENCHING

EXISTING EXPOSED BEDROCK FRACTURE INFILLING TO BE MINIMIZED IF REQUIRED, FILL TO BE OF COARSE GRANULAR MATERIAL. REFER TO HYDROLOGICAL ASSESSMENT (2017, HARDEN ENVIRONMENTAL SERVICES LTD.)

PROPOSED 2.1m HIGH CHAIN LINK FENCE C/W BARBED WIRE COMPONENT IN LOCATION MINIMUM 0.3m FROM THE PROPERTY LINE OR WHERE APPLICABLE AS PER LEASE AGREEMENT (SEE DETAILS ON DRAWING C-500)

AREA TO BE GRADED, FOLLOWING TREE CLEARING TO MAINTAIN EXISTING DRAINAGE PATTERN. PROPOSED PILE ELEVATIONS TO BE CONFIRMED UPON RECEIPT OF DETAILED TOPOGRAPHIC SURVEY FOLLOWING TREE CLEARING

SLOPE INTERRUPTION BERM SCHEDULE			
BERM No.	LENGTH OF BERM(m)	TOP OF BERM ELEVATION(m)	KEY IN ELEVATION (m)
1	39.1	140.3	140.3
2	52.0	141.7	141.7
3	88.4	141.5	141.5
4	70.5	142.3	142.3
5	99.2	144.2	144.2
6	100.2	145.8	145.8
7	229.5	142.3	142.3
8	160.7	149.8	149.8
9	105.8	146.1	146.1
10	105.9	151.8	151.8
11	69.3	149.9	149.9
12	163.9	152.0	152.0
13	45.6	145.8	145.8
14	86.8	151.3	151.3
15	121.8	150.3	150.3
16	263.5	148.3	148.3
17	185.8	146.8	146.8
18	66.4	146.3	146.3
19	128.6	145.4	145.4
20	61.8	145.3	145.3
21	84.4	145.9	145.9
22	77.0	146.3	146.3
23	189.1	148.3	148.3
24	80.0	149.9	149.9
25	85.1	148.8	148.8
26	77.3	149.3	149.3
27	162.6	147.3	147.3
28	82.2	142.7	142.7
29	38.6	144.8	144.8
30	74.1	143.8	143.8
31	81.1	143.1	143.1
32	160.4	142.3	142.3
33	85.3	143.1	143.1
34	81.6	141.7	141.7
35	66.3	141.8	141.8
36	115.0	142.3	142.3
37	186.5	142.8	142.8
38	166.9	143.0	143.0
39	85.1	142.8	142.8
40	93.2	143.7	143.7
41	69.8	143.5	143.5
42	85.0	144.3	144.3
43	70.8	144.2	144.2
44	107.0	143.3	143.3
45	99.7	143.6	143.6
46	91.7	143.8	143.8
47	102.3	144.7	144.7
48	241.7	143.6	143.6

(SEE DRAWING C403-SHEET 1)

(SEE DRAWING C403-SHEET 3)

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 7. THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DRAINAGE AND MEASURES TO CONTROL WATER. THE SITE IS TO BE FIRM, GRADED/LEVELLED LEAVING THE SITE IN A NEAT APPEARANCE SUCH THAT POSTING DRAINAGE IS ACHIEVED EVERYWHERE PRIOR TO THE INSTALLATION OF SOLAR PANELS.
 8. CONSTRUCTION TURNING RADIUS LIMITS IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
 9. CULVERTS ARE TO BE INSTALLED AS PER OPS 802.010. SOIL TYPE TO BE CONFIRMED ON SITE FOR DETERMINATION OF TRENCH WIDTH.
 10. ALL AREAS WITHIN THE PROPOSED WORKS ARE TO BE RE-VEGETATED USING NATIVE TOPSOIL AND SEED. MIX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
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 12. GRADING TO BE COMPLETED IN ACCORDANCE WITH OPS 206. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPS 101.
 13. CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPS 421. HEIGHT OF FILL TABLE FOR CSP.
 14. RIPRAP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPS 810.010 SECTION B-8.
 15. ALL SEEDING TO BE COMPLETED IN ACCORDANCE WITH OPS 804.
 16. ROCK SPOIL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend

PROPOSED
• 185.19
• 185.19(EX)

EXISTING
• 185.19
• 185.19(EX)

ELEVATION
SWALE
TOPOGRAPHIC SURVEY CONTOUR
LIDAR CONTOUR
FENCE
OVERLAND FLOW DIRECTION
GRADE
SLOPE (3:1 UNLESS NOTED OTHERWISE)
HARDENED SURFACE
CULVERT
5.0M WIDE VEGETATIVE BUFFER
AC CABLE TRENCH
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POTENTIAL ROCK OUTCROP LOCATIONS
TEMPORARILY REMOVED S.I. BERM (SEE NOTE ON C-603 DRAWING FOR DETAILS)
SLOPE INTERRUPTION BERM (SEE DETAIL ON SHEET C-500 FOR DETAILS)
TEMPORARY LAYDOWN AREA TO BE RESTORED WITH TOPSOIL AND SEED (PER OPS 219.210 SEE DETAILS ON C-500)
PROPOSED FILL AREA
PROPOSED CUT AREA
GRASSED WATERWAY (SEE DETAIL ON SHEET C-500 FOR DETAILS)
ROLLED EROSION CONTROL PRODUCT (RECP)
RIP RAP

SLOPE INTERRUPTION BERM SCHEDULE

BERM No.	LENGTH OF BERM(m)	TOP OF BERM ELEVATION(m)	KEY IN ELEVATION (m)
1	32.1	140.3	140.3
2	52.0	141.7	141.7
3	88.4	142.5	142.5
4	70.5	142.3	142.3
5	95.2	144.2	144.2
6	100.2	145.8	145.8
7	209.5	147.3	147.3
8	160.7	149.8	149.8
9	105.8	146.1	146.1
10	105.9	151.8	151.8
11	89.3	149.9	149.9
12	183.9	152.0	152.0
13	45.6	145.8	145.8
14	66.8	151.3	151.3
15	197.8	150.3	150.3
16	283.5	148.3	148.3
17	185.6	146.8	146.8
18	66.4	146.3	146.3
19	128.6	145.4	145.4
20	61.6	145.3	145.3
21	84.4	145.9	145.9
22	77.0	146.3	146.3
23	182.1	148.3	148.3
24	80.0	149.9	149.9
25	82.1	148.8	148.8
26	77.3	149.3	149.3
27	162.8	147.3	147.3
28	82.2	142.7	142.7
29	38.6	144.8	144.8
30	74.1	143.8	143.8
31	81.1	143.1	143.1
32	160.4	142.3	142.3
33	65.3	143.1	143.1
34	81.6	141.7	141.7
35	66.3	141.8	141.8
36	115.0	142.3	142.3
37	186.5	142.8	142.8
38	166.9	143.0	143.0
39	85.1	142.8	142.8
40	83.2	143.7	143.7
41	69.8	143.5	143.5
42	85.0	144.3	144.3
43	70.6	144.2	144.2
44	102.0	143.3	143.3
45	96.7	143.6	143.6
46	91.7	143.8	143.8
47	102.3	144.7	144.7
48	241.7	143.6	143.6

Client/Project
LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT
54MW GROUND-MOUNT SOLAR FARM
County of Lennox and Addington, Ontario

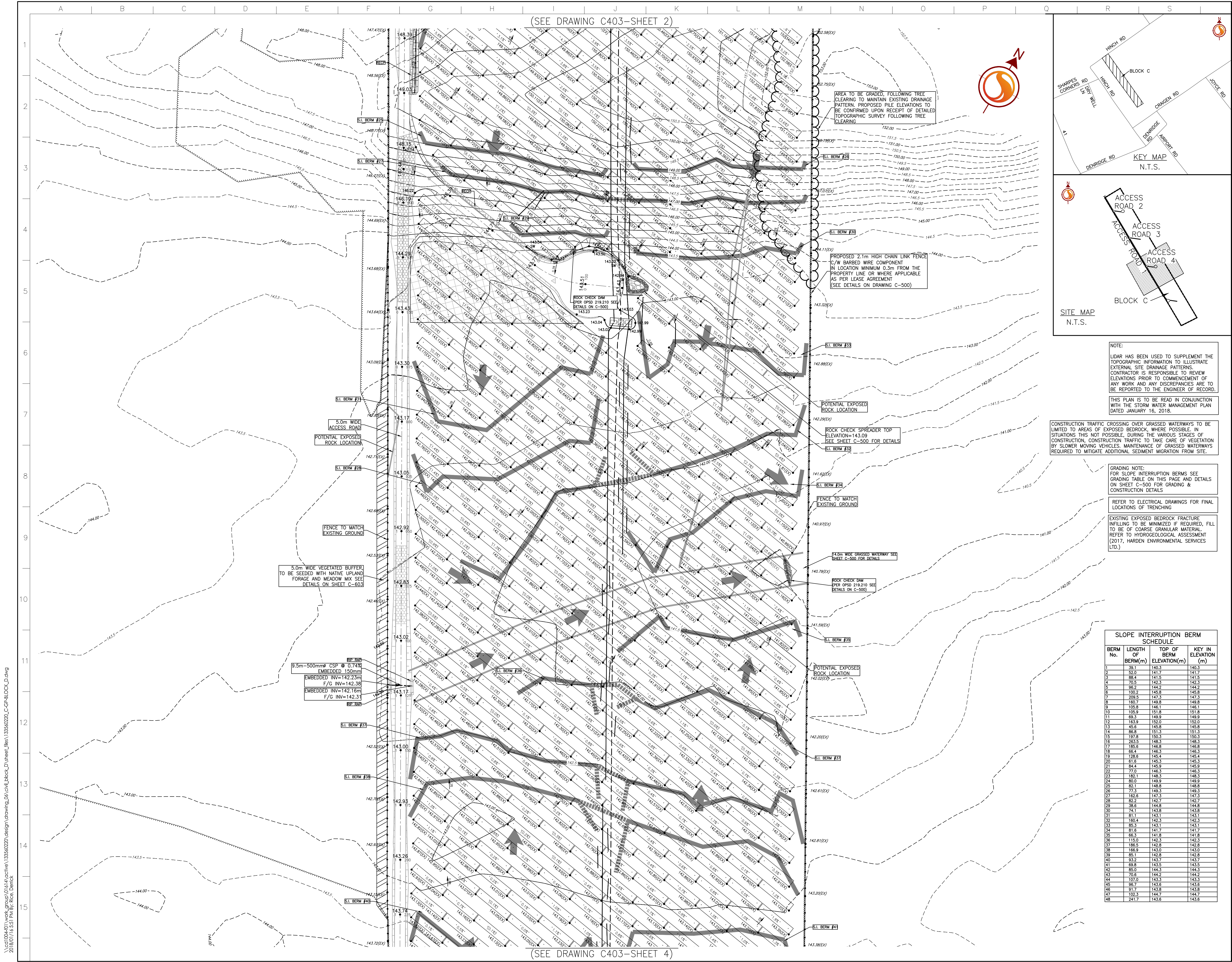
Title
BLOCK C
GRADING PLAN

Project No.
133560220

Scale
1:750

Sheet
22.5

Revision
37.5m



Stantec Consulting Ltd.
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Waterloo ON Canada
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 8. CONSTRUCTION TURNING RADII LIMITS IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
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 14. CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 421. HEIGHT OF FILL TABLE FOR CSP TO BE COMPLETED IN ACCORDANCE WITH OPSD 804.
 15. RIPRAP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPSD 810.010 SECTION B-8.
 16. ROCK SPOIL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend

PROPOSED	ELEVATION	EXISTING
185.19	SWALE	185.19(EX)
	TOPOGRAPHIC SURVEY CONTOUR	
	LIDAR CONTOUR	
	FENCE	
	OVERLAND FLOW DIRECTION	
	GRADE	
	SLOPE (3:1 UNLESS NOTED OTHERWISE)	
	HARDENED SURFACE	
	CULVERT	
	5.0M WIDE VEGETATED BUFFER	
	AC CABLE TRENCH	
	DC CABLE TRENCH	
	POTENTIAL ROCK OUTCROP LOCATIONS	
	TEMPORARILY REMOVED S.I. BERM (SEE NOTE ON C-603 DRAWING FOR DETAILS)	
	SLOPE INTERRUPTION BERM (SEE DETAIL ON SHEET C-500 FOR DETAILS)	
	TEMPORARY LAYDOWN AREA TO BE RESTORED WITH TOPSOIL AND SEED (PER OPSD 219.210 SEE DETAILS ON C-500)	
	PROPOSED FILL AREA	
	PROPOSED CUT AREA	
	GRASSED WATERWAY (SEE DETAIL ON SHEET C-500 FOR DETAILS)	
	ROLLED EROSION CONTROL PRODUCT (RECP)	
	RIP RAP	

SLOPE INTERRUPTION BERM SCHEDULE			
BERM No.	LENGTH OF BERM(m)	TOP OF BERM ELEVATION(m)	KEY IN ELEVATION (m)
1	32.1	140.3	140.3
2	52.0	141.7	141.7
3	88.4	141.5	141.5
4	70.5	142.3	142.3
5	96.2	144.2	144.2
6	100.2	145.8	145.8
7	209.5	147.3	147.3
8	160.7	149.8	149.8
9	105.8	146.1	146.1
10	105.9	151.8	151.8
11	89.3	149.9	149.9
12	183.9	152.0	152.0
13	45.6	145.8	145.8
14	86.8	151.3	151.3
15	197.8	150.3	150.3
16	283.5	148.3	148.3
17	185.6	146.8	146.8
18	66.4	146.3	146.3
19	128.8	145.4	145.4
20	61.6	145.3	145.3
21	84.4	145.9	145.9
22	77.0	146.3	146.3
23	182.1	148.3	148.3
24	80.0	149.9	149.9
25	82.1	148.8	148.8
26	77.3	149.3	149.3
27	162.6	147.3	147.3
28	82.2	142.7	142.7
29	38.6	144.8	144.8
30	24.1	143.8	143.8
31	81.1	143.1	143.1
32	160.4	142.3	142.3
33	65.3	143.1	143.1
34	81.6	141.7	141.7
35	66.3	141.8	141.8
36	115.0	142.3	142.3
37	186.5	142.8	142.8
38	166.9	143.0	143.0
39	85.1	142.8	142.8
40	83.2	143.7	143.7
41	69.8	143.5	143.5
42	85.0	144.3	144.3
43	70.6	144.2	144.2
44	127.0	143.3	143.3
45	96.7	143.6	143.6
46	91.7	143.8	143.8
47	102.3	144.7	144.7
48	241.7	143.6	143.6

Client/Project

LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT

54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title

BLOCK C
GRADING PLAN

Project No.
133560220

Scale
1:750

Drawing No.
Sheet

Revision
Revision

C-403

3 of 4

B

\\c01004-01\work_group\01616\active\133560220\design\drawing\66\civil\block_d\sheet\133560220_C-GR-BlockC.dwg
20/07/16 5:51 PM By: Rico Denick

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2018/01/16 16:53:17 PM By: R. Decker



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300 Hagley Boulevard
Waterloo ON Canada
Tel. 519.579.4410
www.stantec.com

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Notes

1. TOPOGRAPHIC INFORMATION CONDUCTED BY LESLIE M. HIGGINSON SURVEYING LTD. RECEIVED OCTOBER 25, 2017. TOPOGRAPHIC SURVEY IS UTM 18. LIDAR INFORMATION CONDUCTED BY TULLOCH ENGINEERING ON JUNE 27, 2016. LIDAR SURVEY IS UTM 18. BEDROCK SURVEY INFORMATION PROVIDED BY PCL CONSTRUCTORS LTD. RECEIVED ON OCTOBER 31, 2017. EXISTING VEGETATION INFORMATION IS APPROXIMATE. PROVIDED FROM AERIAL IMAGERY. CONTRACTOR TO CONFIRM ALL TREE & SHRUB LOCATIONS ON SITE.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS IN THIS SET PREPARED BY STANTEC CONSULTING LTD.
3. THE CONTRACTOR MUST CHECK AND VERIFY DIMENSIONS, OBTAIN ALL UTILITY LOCATES AND OBTAIN ALL REQUIRED PERMITS/LICENSES AND VERIFY ELEVATIONS OF EXISTING SERVICES BEFORE PROCEEDING WITH ANY WORK.
4. ALL CONSTRUCTION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (LATEST EDITION).
5. IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENDOORCH ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE OWNER AND CONTRACTOR AND A COPY IS TO BE KEPT ON FILE ON SITE PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
6. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY.
7. THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DRAINAGE AND MEASURES TO CONTROL WATER. THE SITE IS TO BE FINE GRADED/LEVELLED LEAVING THE SITE IN A NEAT APPEARANCE SUCH THAT POSTING DRAINAGE IS ACHIEVED EVERYWHERE PRIOR TO THE INSTALLATION OF SOLAR PANELS.
8. CONSTRUCTION TURNING RADIUS LIMITS IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
9. CULVERTS ARE TO BE INSTALLED AS PER OPSS 802.010. SOIL TYPE TO BE CONFIRMED ON SITE FOR DETERMINATION OF TRENCH WIDTH.
10. ALL AREAS WITHIN THE PROPOSED WORKS ARE TO BE RE-VEGETATED USING NATIVE TOPSOIL AND SEED. MIX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
11. CULVERTING AND GRUBBING AND REMOVALS TO BE COMPLETED IN ACCORDANCE WITH OPSS 201.
12. TEMPORARY EROSION CONTROL TO BE COMPLETED IN ACCORDANCE WITH OPSS 577.
13. GRADING TO BE COMPLETED IN ACCORDANCE WITH OPSS 206. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPSS 1011.
14. CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPSS 421. HEIGHT OF FILL TABLE FOR CSP TO COMPLY WITH OPSS 804.010.
15. RIPRAP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPSS 810.010 SECTION B-8.
16. ALL SEEDING TO BE COMPLETED IN ACCORDANCE WITH OPSS 804.
17. ROCK SPOIL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend

PROPOSED	ELEVATION	EXISTING
• 185.19	• 185.19(EX)	
SWALE	TOPOGRAPHIC SURVEY CONTOUR	
	LIDAR CONTOUR	
	FENCE	
	OVERLAND FLOW DIRECTION	
	GRADE	
	SLOPE (3:1 UNLESS NOTED OTHERWISE)	
	HARDENED SURFACE	
	CULVERT	
	5.0m WIDE VEGETATIVE BUFFER	
	AC CABLE TRENCH	
	DC CABLE TRENCH	
	POTENTIAL ROCK OUTCROP LOCATIONS	
	TEMPORARILY REMOVED S.I. BERM (SEE NOTE ON C-603 DRAWING FOR DETAILS)	
	SLOPE INTERRUPTION BERM (SEE DETAIL ON SHEET C-500 FOR DETAILS)	
	TEMPORARY LAYDOWN AREA TO BE RESTORED WITH TOPSOIL AND SEED (PER OPSS 219.210 SEE DETAILS ON C-500)	
	PROPOSED FILL AREA	
	PROPOSED CUT AREA	
	GRASSED WATERWAY (SEE DETAIL ON SHEET C-500 FOR DETAILS)	
	ROLLED EROSION CONTROL PRODUCT (RECP)	
	RIP RAP	

Revision	By	Appd.	YY.MM.DD	
B	ISSUED FOR TENDER	DRR	DS	18.01.16
A	ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.21

Permit-Seal

Client/Project

LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT

54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title

BLOCK C
GRADING PLAN

Project No.

133560220

Drawing No.

Sheet

Revision

Scale

0 7.5 22.5 37.5m
1:750

C-403

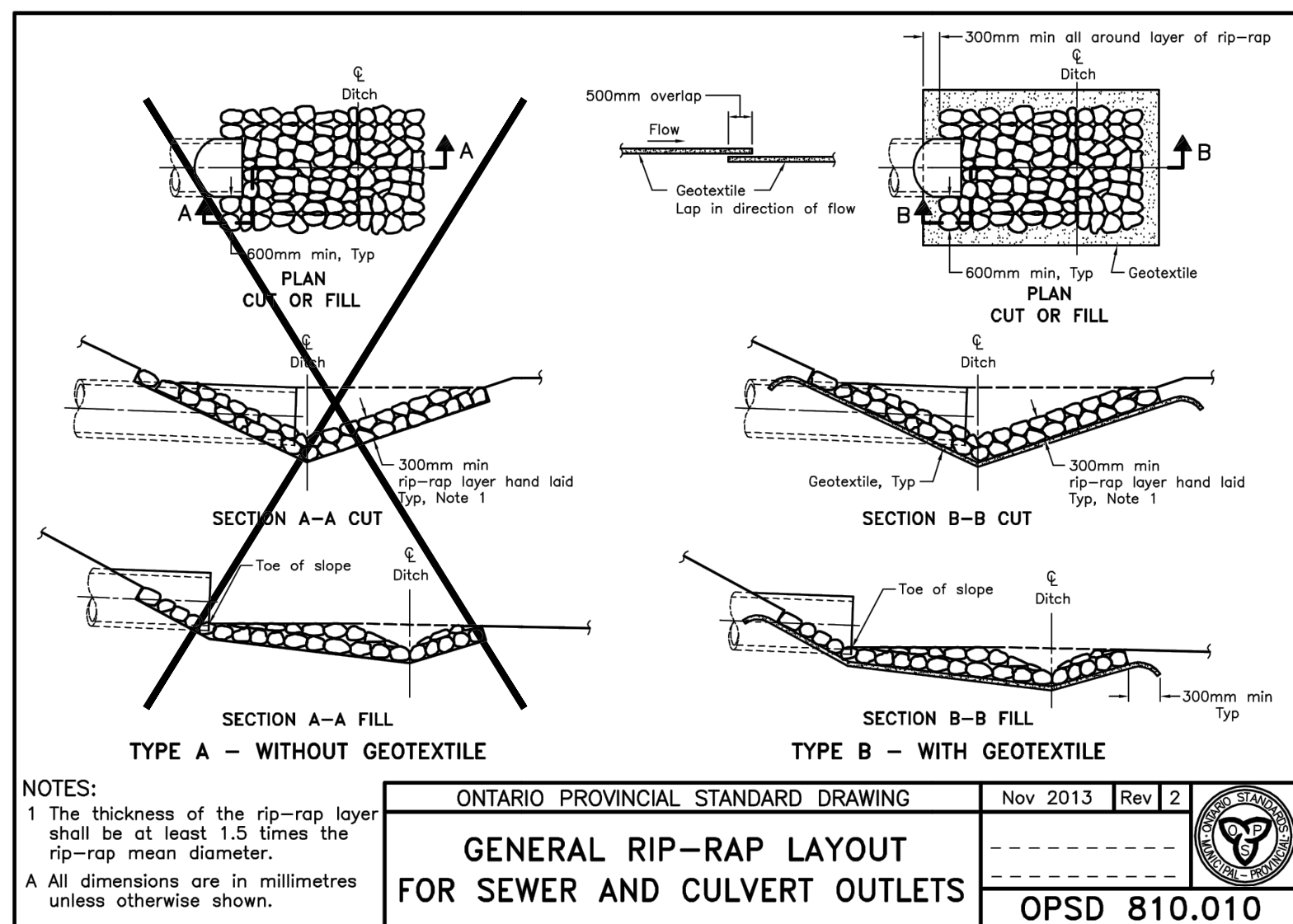
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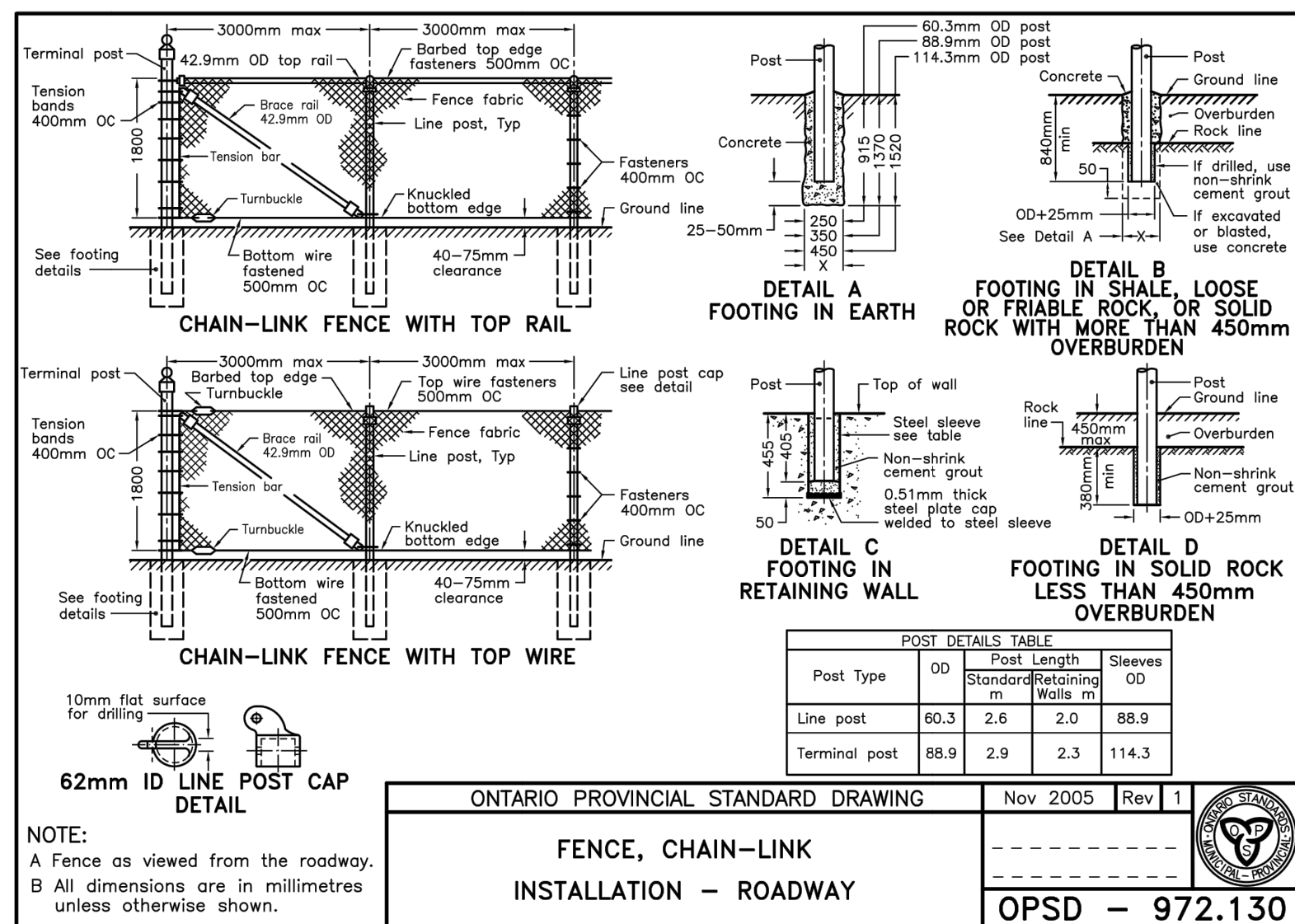
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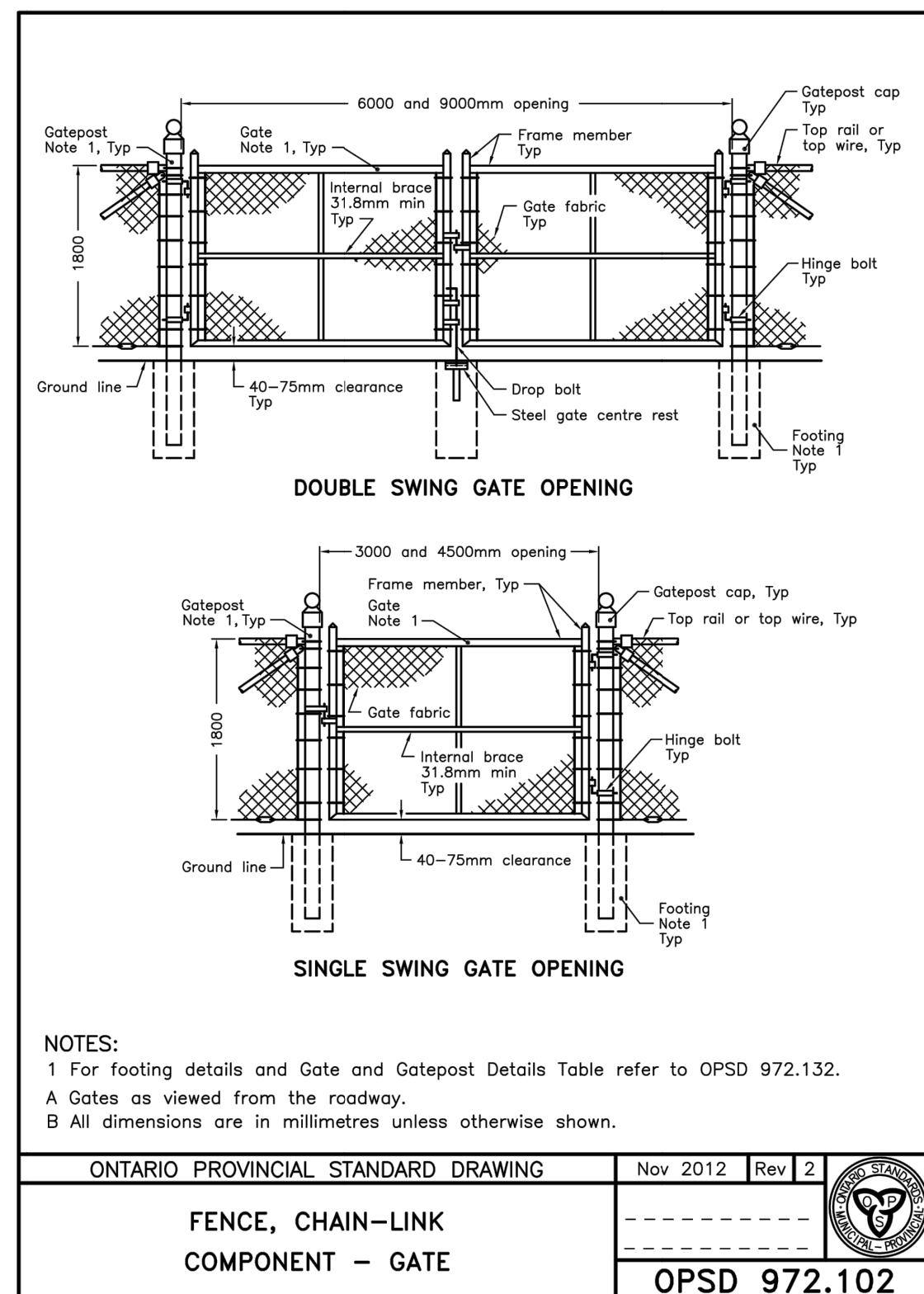
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- IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENCRoACH ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO STANTEC, PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
- THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY.
- THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DRAINAGE AND MEASURES TO CONTROL WATER. THE SITE IS TO BE FINE GRADED/AEVELED LEAVING THE SITE IN A NEAT APPEARANCE SUCH THAT POSITIVE DRAINAGE IS ACHIEVED OVERWIDE PRIOR TO THE INSTALLATION OF SOLAR PANELS.
- CONSTRUCTION TURNING RADIUS LIMITS IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
- CULVERTS ARE TO BE INSTALLED AS PER OPSD 802.010. SOIL TYPE TO BE CONFIRMED ON SITE FOR DETERMINATION OF TRENCH WIDTH.
- ALL AREAS WITHIN THE PROPOSED WORKS ARE TO BE RE-VEGETATED USING NATIVE TOPSOIL AND SEED. MIX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
- CLEARING AND GRUBBING AND REMOVALS TO BE COMPLETED IN ACCORDANCE WITH OPSD 201. TEMPORARY EROSION CONTROL TO BE COMPLETED IN ACCORDANCE WITH OPSD 217.
- GRAVING TO BE COMPLETED IN ACCORDANCE WITH OPSD 206. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPSD 1010.
- CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 421. HEIGHT OF FILL TABLE FOR CSP CULVERTS TO COMPLY WITH OPSD 802.010.
- RIPRAP SHALL BE IN ACCORDANCE WITH OPSD 810.010 SECTION B-B.
- ROCK SPILL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.



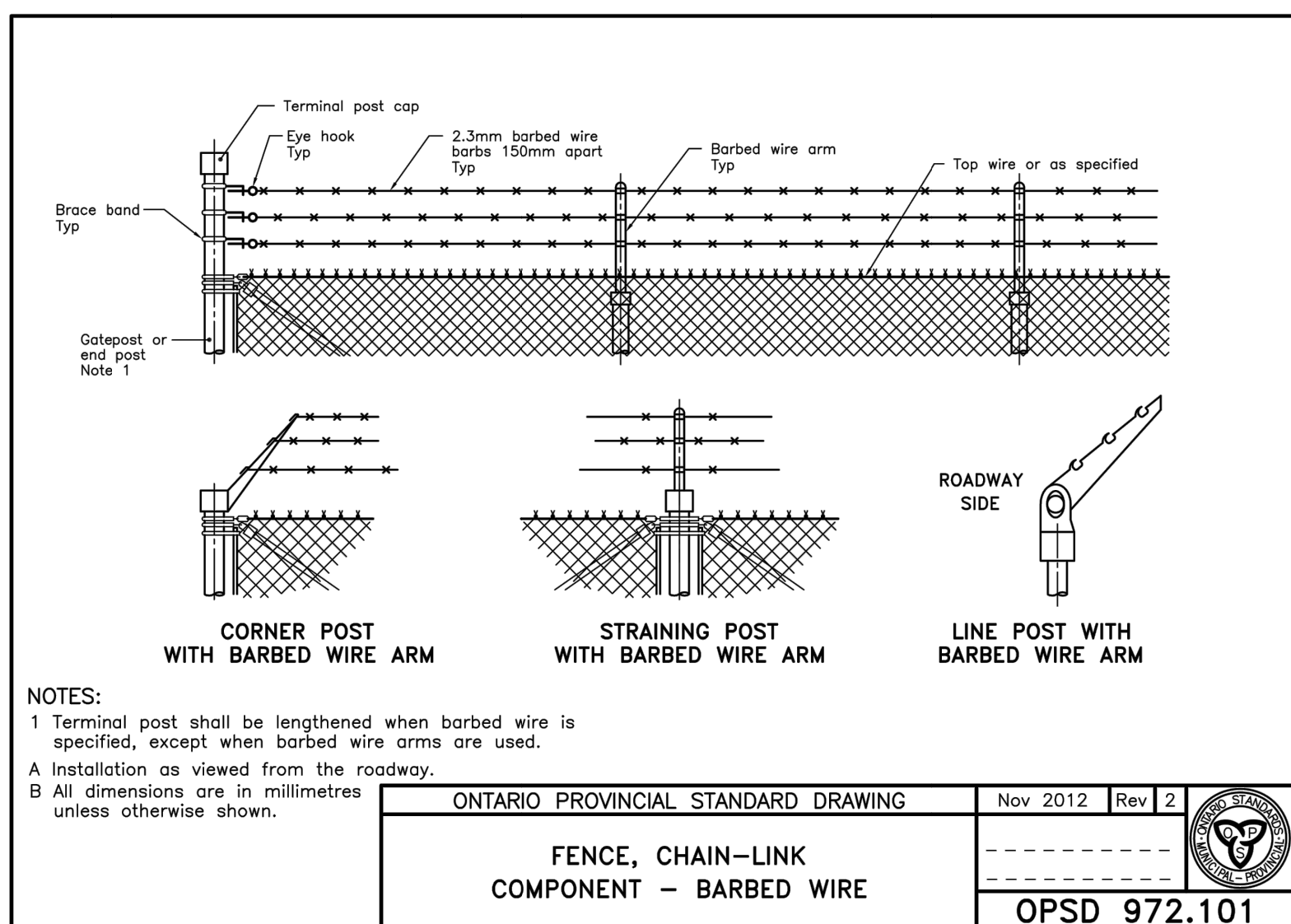
RIP-RAP TO BE PLACED:
-3 x THE CULVERT DIAMETER WIDE
-4 x THE CULVERT DIAMETER LONG
-FOR MULTIPLE CULVERTS THE WIDTH AND LENGTH ARE TO BE MULTIPLIED BY THE NUMBER OF CULVERTS. FOR THE WIDTH 0.5m BETWEEN CULVERTS IS TO BE ADDED



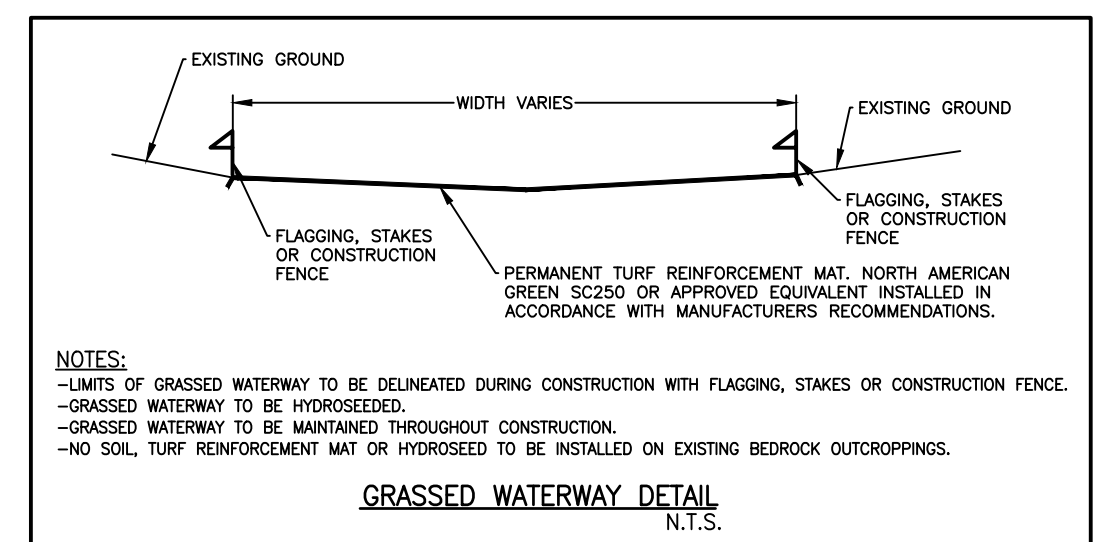
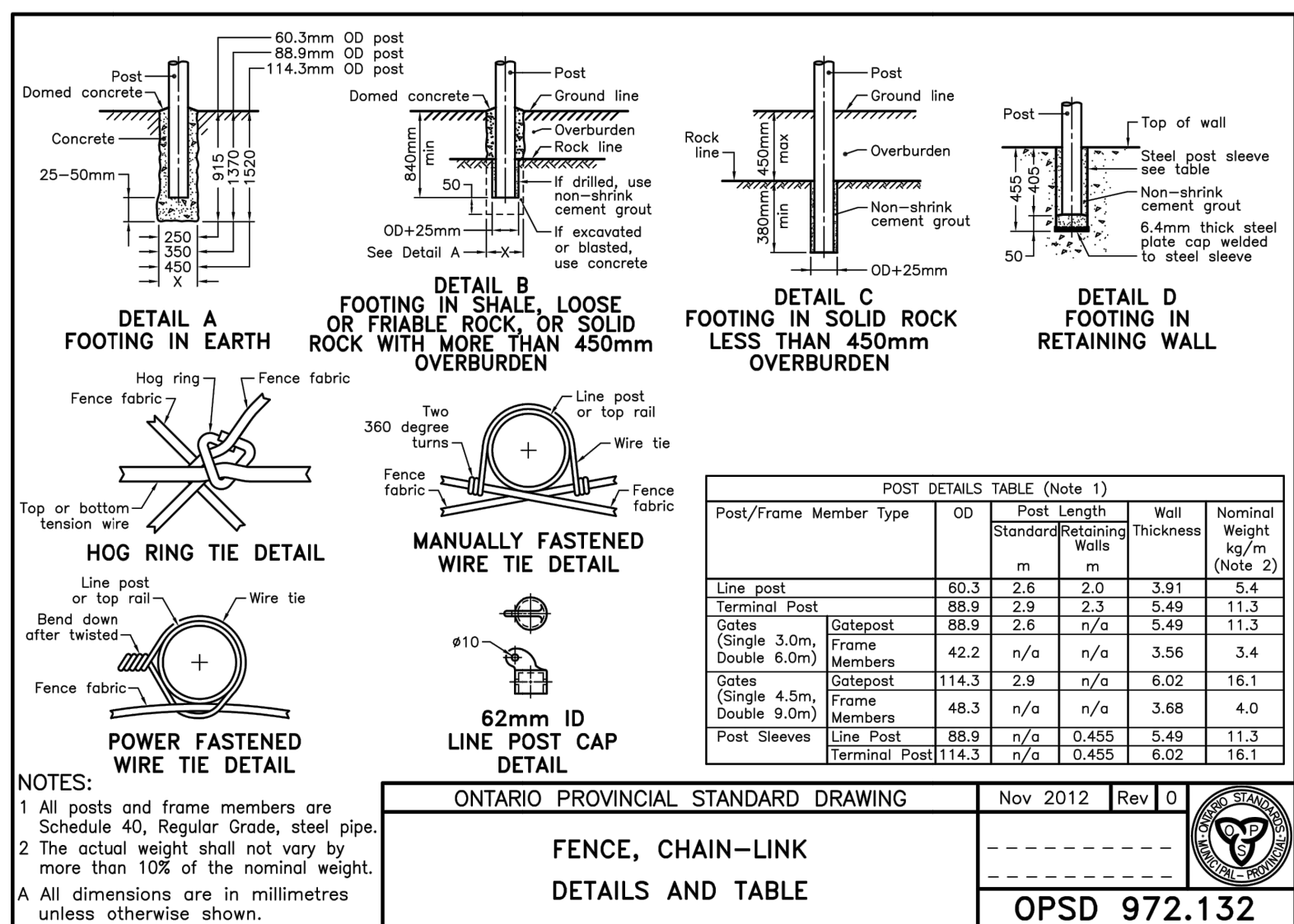
* NOTE: PERIMETER FENCE FABRIC IS TO BE BURIED A MINIMUM OF 100mm-200mm IN THE GROUND, WHERE SOIL DEPTHS ALLOW, TO PREVENT WILDLIFE FROM BURROWING UNDER AND ENTERING THE FACILITY. WHERE THE FENCE FABRIC IS INSTALLED OVER BEDROCK, THE BOTTOM OF THE FENCE FABRIC IS TO BE FLUSH WITH GROUND SURFACE AND ADDITIONAL MEASURES ARE TO BE INSTALLED TO PREVENT WILDLIFE ACCESS UNDER THE FENCE FABRIC. ADDITIONAL MEASURES CAN BE FOUND ON PERIMETER SILT FENCE DETAIL ON DRAWING C-650



NOTES:
1 For footing details and Gate and Gatepost Details Table refer to OPSD 972.132.
A Gates as viewed from the roadway.
B All dimensions are in millimetres unless otherwise shown.



NOTE:
THE PERIMETER FENCE IS TO HAVE CONTACT WITH THE GROUND SURFACE TO PREVENT ENTRY OF WILDLIFE. WHERE IT IS NOT FEASIBLE FOR THE FENCE TO DIRECTLY CONTACT THE GROUND, OTHER MEASURES WILL BE INSTALLED TO PREVENT WILDLIFE ACCESS UNDER THE FENCE. REFER TO PERIMETER SILT FENCE DETAIL ON DRAWING C-650 FOR SILT FENCE KEY-IN DEPTH TO PREVENT WILDLIFE ACCESS.



G. REVISED NOTES AND DETAILS	MALM	DS	18.01.16
F. REVISED NOTES AND DETAILS	DRR	DS	17.12.21
E. REVISED NOTES AND DETAILS	MALM	DS	17.12.15
D. REVISED NOTES AND DETAILS	DRR	DS	17.11.30
C. REVISED NOTES AND DETAILS	KDB	DS	17.11.23
B. ISSUED FOR TENDER	DRR	DS	17.11.23
A. ISSUED FOR CLIENT REVIEW	MALM	DS	17.10.31

Revision By Appd. YY.MM.DD

File Name:	133560220_C-DT.dwg	DRR	DS	DRR	17.10.18
		Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Secal

Client/Project
LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT
54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title
GENERAL DETAILS
AND NOTES

Project No.	Scale
133560220	AS NOTED
Drawing No.	Sheet
	Revision

C-500 1 of 2

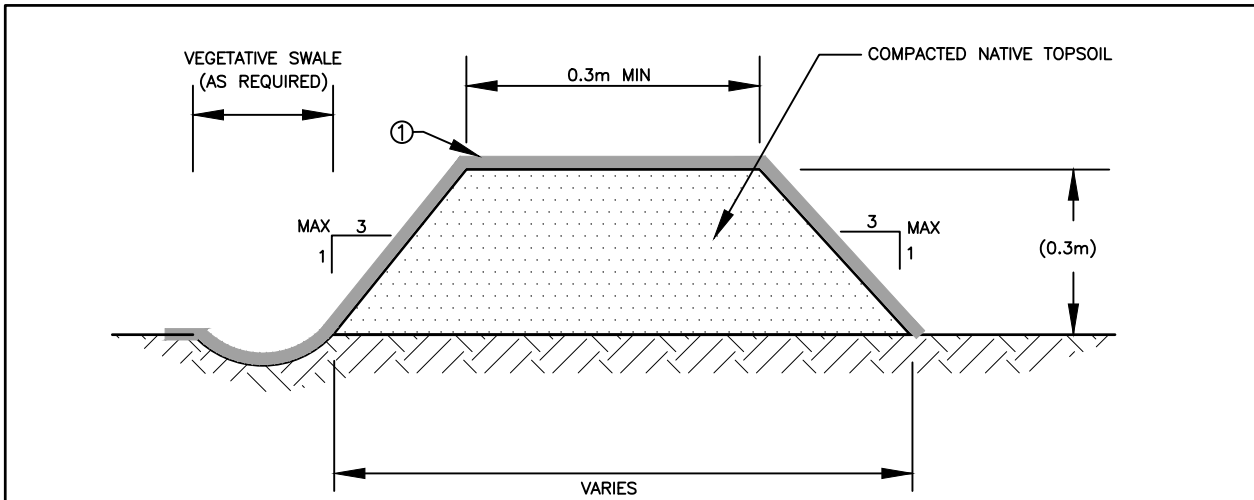
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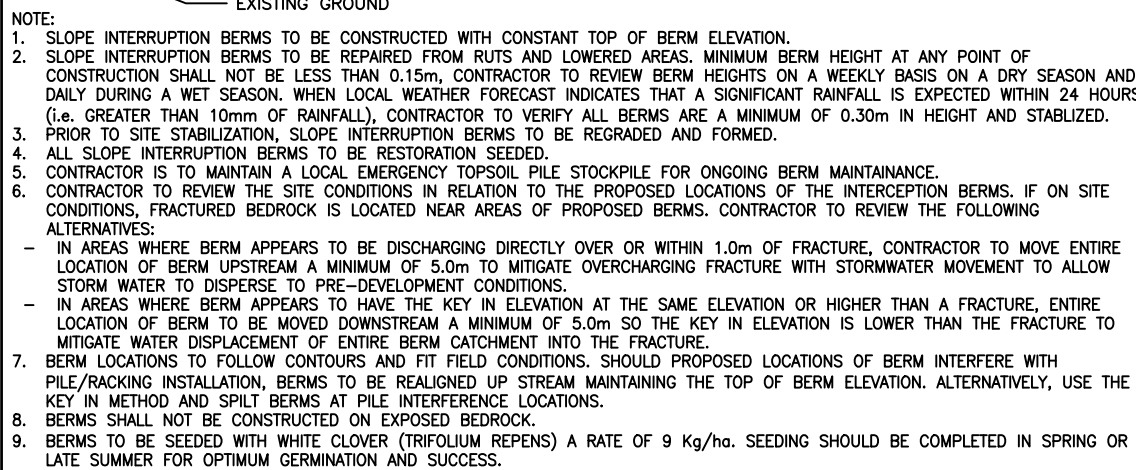
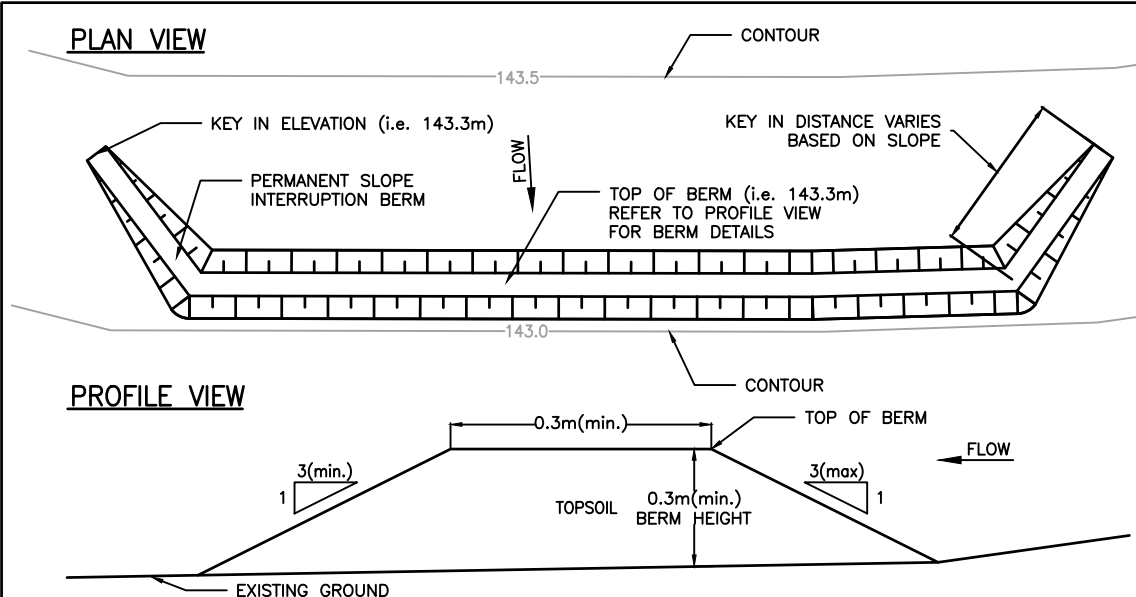
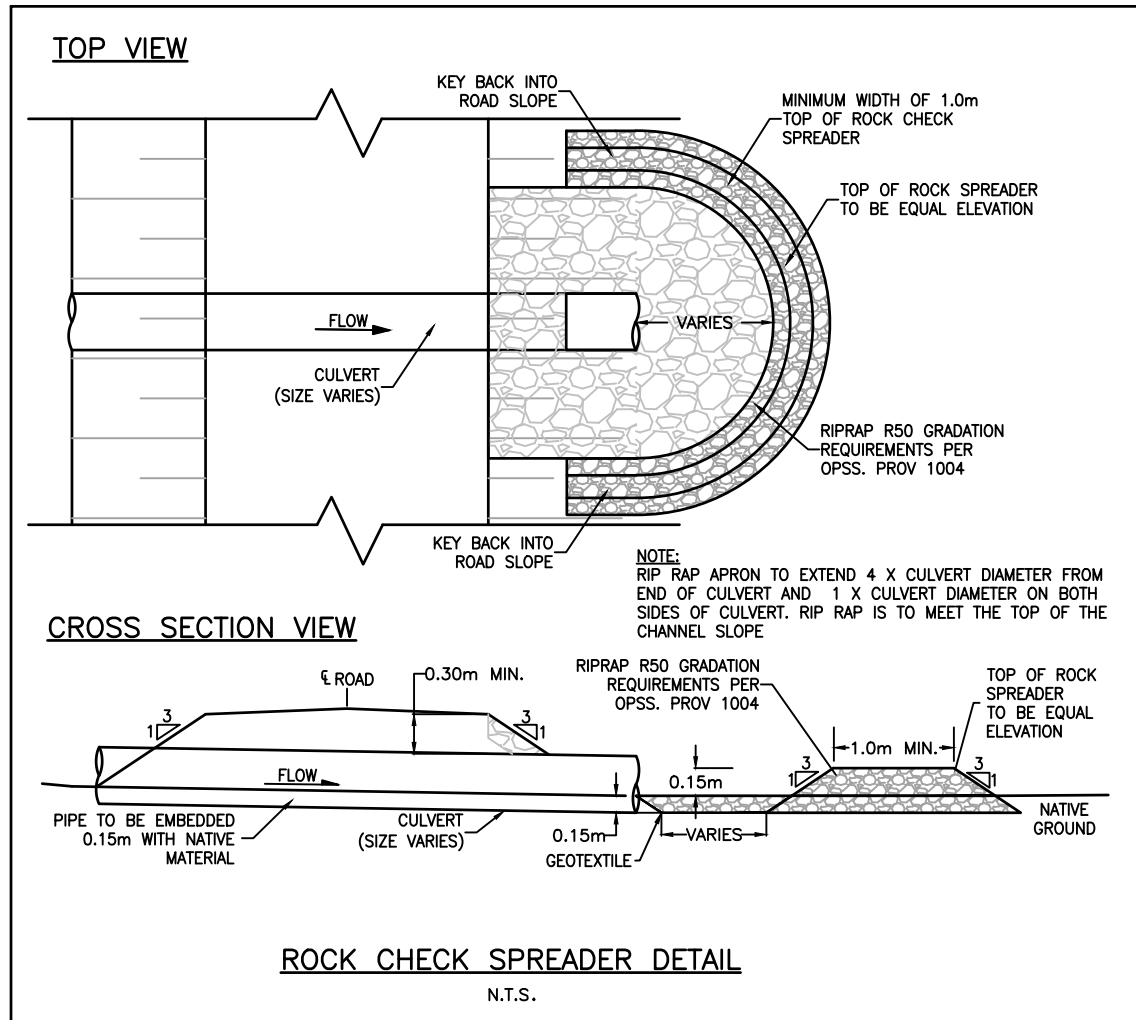
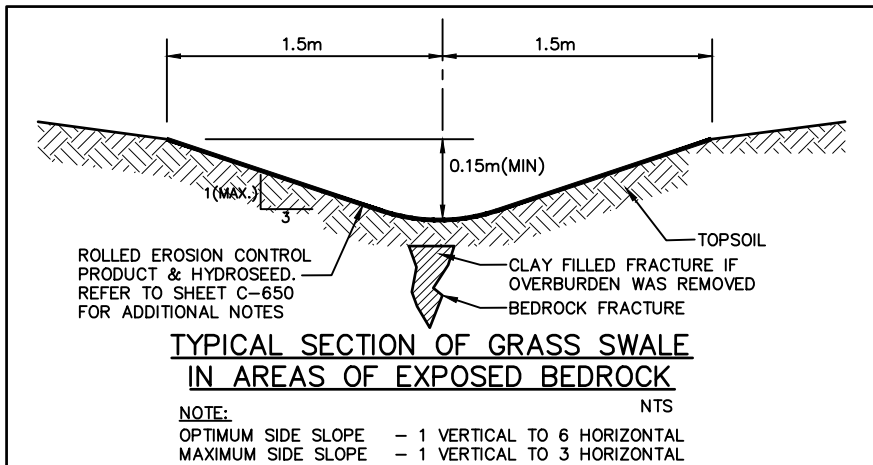
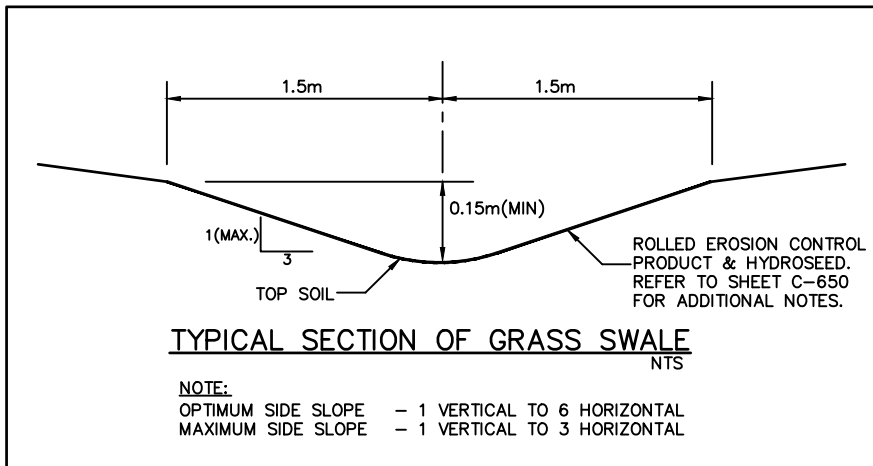
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

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 - GRADING TO BE COMPLETED IN ACCORDANCE WITH OPSS 206. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPSS 1010.
 - CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPSS 421. HEIGHT OF FILL TABLE FOR CSP CULVERTS TO COMPLY WITH OPSS 802.010.
 - RIPRAP SHALL BE IN ACCORDANCE WITH OPSS 810.010 SECTION B-B.
 - ROCK SPILL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

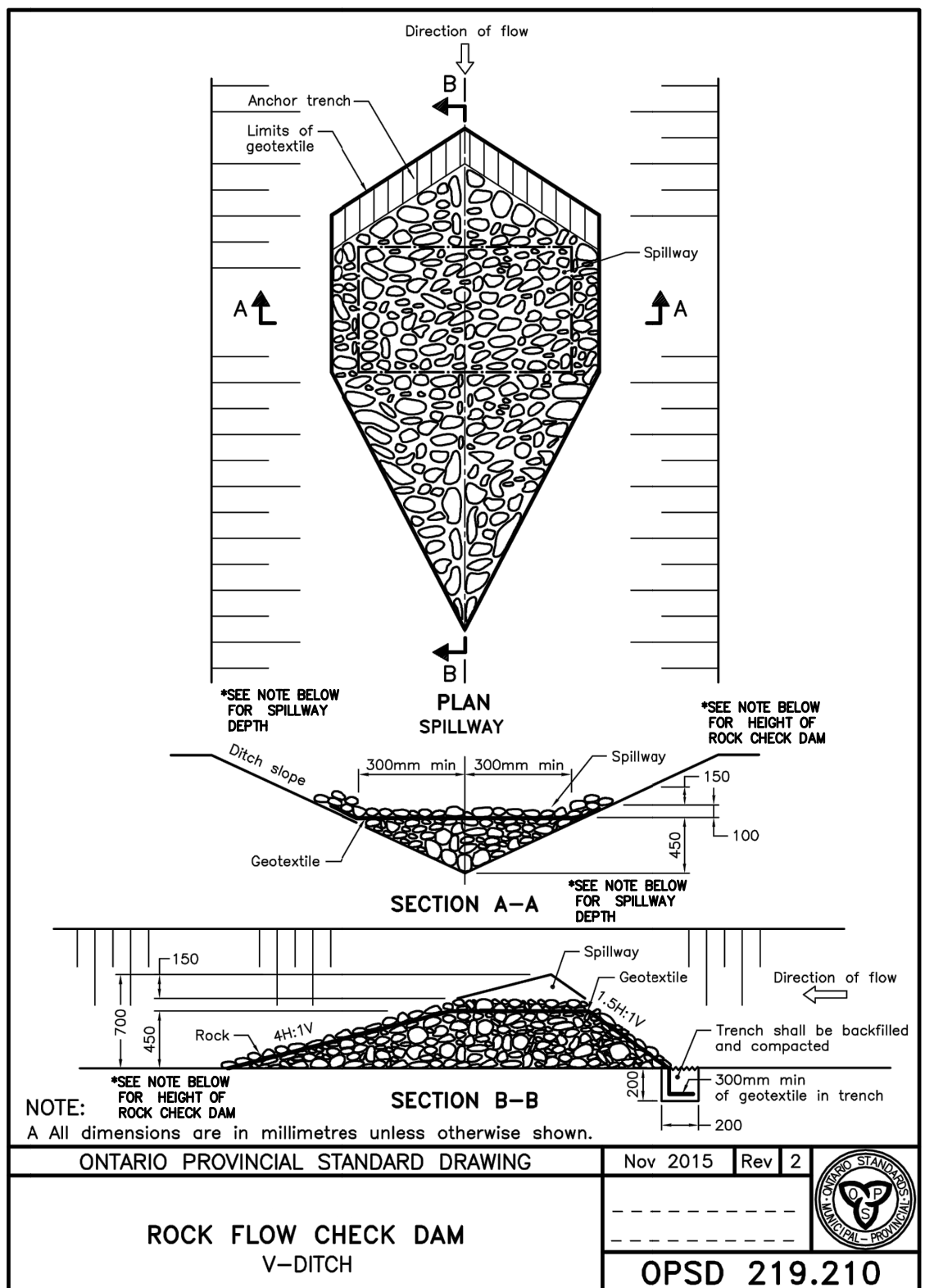


DIVERSION BERM AND VEGETATIVE SWALE

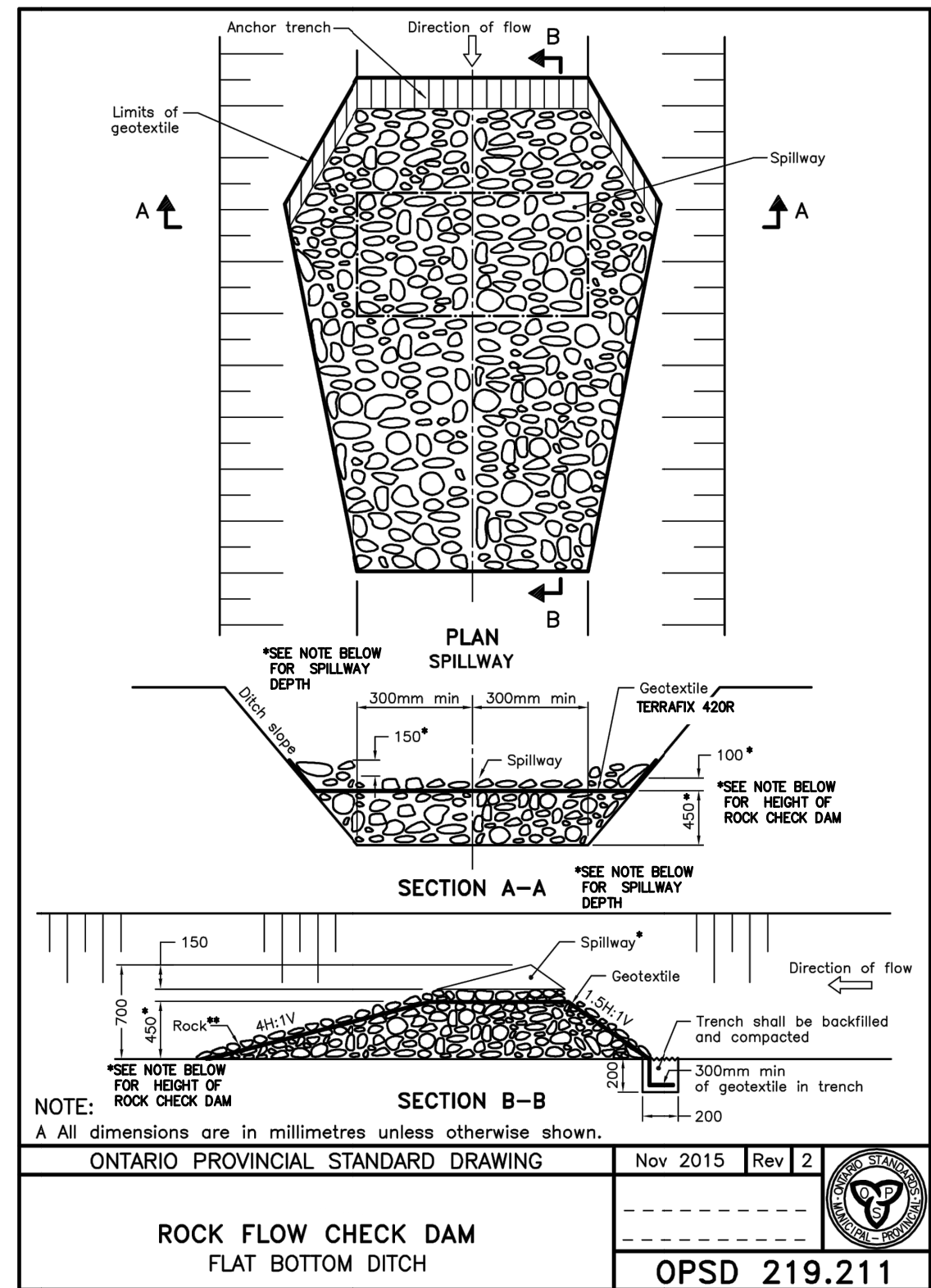


- ROAD CONSTRUCTION NOTES
- THE FOREGOING DESIGN ASSUMES THAT CONSTRUCTION IS CARRIED OUT DURING DRY PERIODS AND THE SUB-GRADE IS STABLE UNDER THE LOAD OF CONSTRUCTION EQUIPMENT. IF CONSTRUCTION IS CARRIED OUT DURING WET WEATHER AND HEAVING OR ROLLING OF THE SUB-GRADE IS EXPERIENCED, ADDITIONAL THICKNESS OF GRANULAR ROAD BASE MAY BE REQUIRED AND INSPECTED BY A QUALIFIED GEOTECHNICAL ENGINEER.
 - THE LONG-TERM PERFORMANCE OF THE ROAD BASE STRUCTURE IS HIGHLY DEPENDENT UPON THE SUB-GRADE SUPPORT CONDITIONS. STRINGENT CONSTRUCTION CONTROL PROCEDURES SHALL BE MAINTAINED TO ENSURE THAT UNIFORM SUB-GRADE MOISTURE AND DENSITY CONDITIONS ARE ACHIEVED. IF, DURING THE EXCAVATION PROCESS, NATIVE MATERIAL APPEARS SUITABLE TO BE USED AS ROAD SUB-BASE A GRAIN SIZE ANALYSIS MUST BE COMPLETED TO DETERMINE IF THE MATERIAL CAN BE LEFT IN PLACE AND WHETHER A REDUCTION IN DEPTH OF THE GRANULAR ROAD STRUCTURE IS WARRANTED. THE UNDERLYING SUB-GRADE SHALL BE FREE OF DEPRESSIONS AND IS TO BE SLOPED TO PROVIDE POSITIVE SURFACE DRAINAGE. SURFACE WATER SHALL NOT BE PERMITTED TO POND ADJACENT TO THE OUTSIDE EDGES.
 - AS PART OF THE SUB-GRADE PREPARATION, PROPOSED ROADWAYS SHALL BE STRIPPED OF TOPSOIL AND OBVIOUSLY UNSUITABLE MATERIAL. FILL REQUIRED TO RAISE THE SUB-GRADE TO DESIGN ELEVATIONS SHALL BE ORGANIC-FREE AND SHALL HAVE A MOISTURE CONTENT WHICH WILL PERMIT COMPACTION TO THE DENSITIES INDICATED. THE SUB-GRADE SHALL BE SHAPED, CROWNED AND THEN PROOF-ROLLED IN THE PRESENCE OF A GEOTECHNICAL CONSULTANT. SOFT OR SPONGY SUB-GRADE AREAS SHALL BE SUB-EXCAVATED AND REPLACED WITH SUITABLE APPROVED BACKFILL COMPACTED TO 98 PERCENT SPMD.
 - ACCESS ROAD CONSTRUCTION FROM MUNICIPAL ROAD TO SITE PERIMETER FENCING TO BE CONSTRUCTED WITH HARDENING COMPOUND (i.e. CALCIUM CHLORIDE) TO DISCOURAGE TURTLE NESTING. HARDENING COMPOUND USED MUST HAVE NO POTENTIAL TO CONTAMINATE GROUNDWATER OR DOMESTIC WELLS.

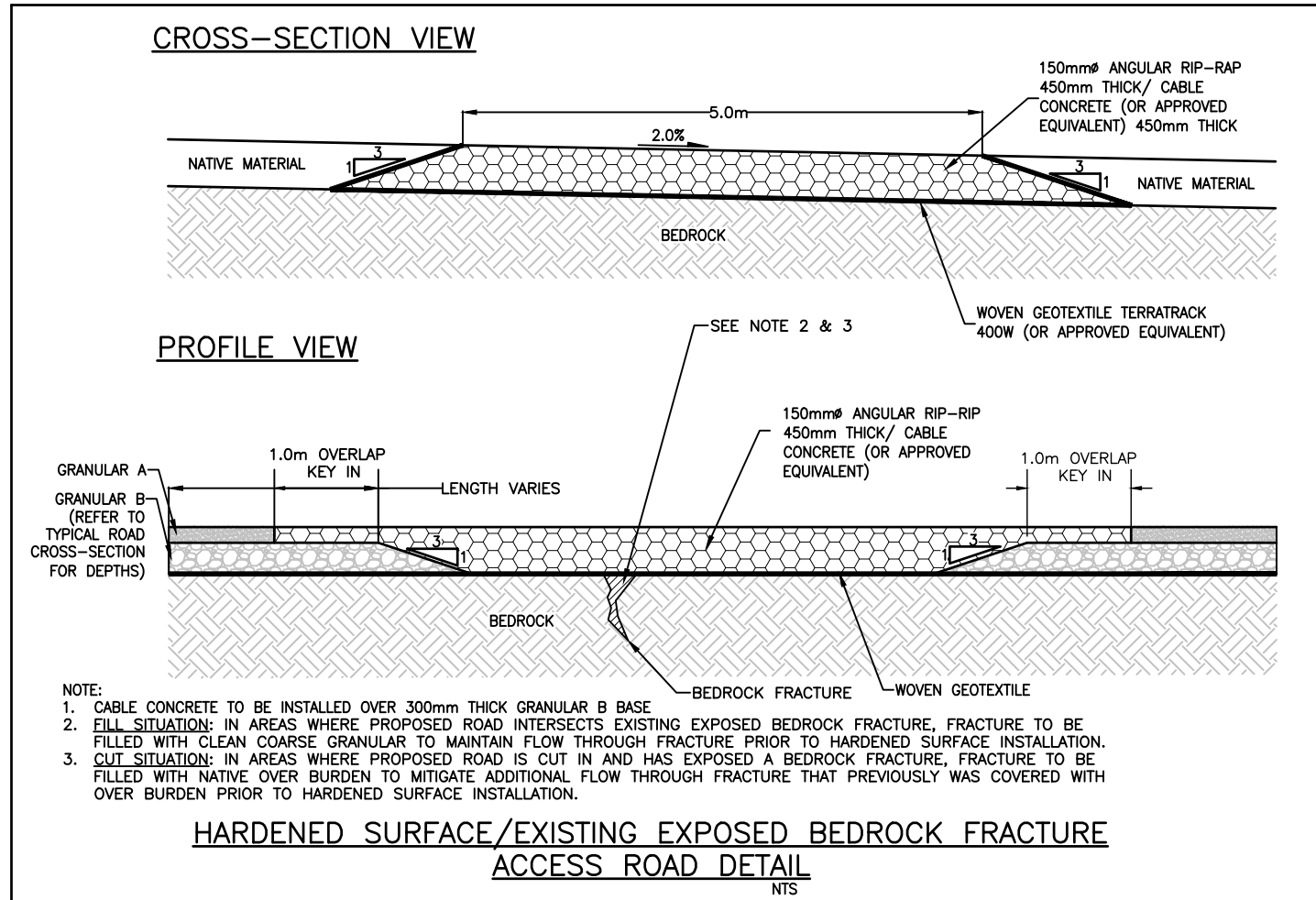
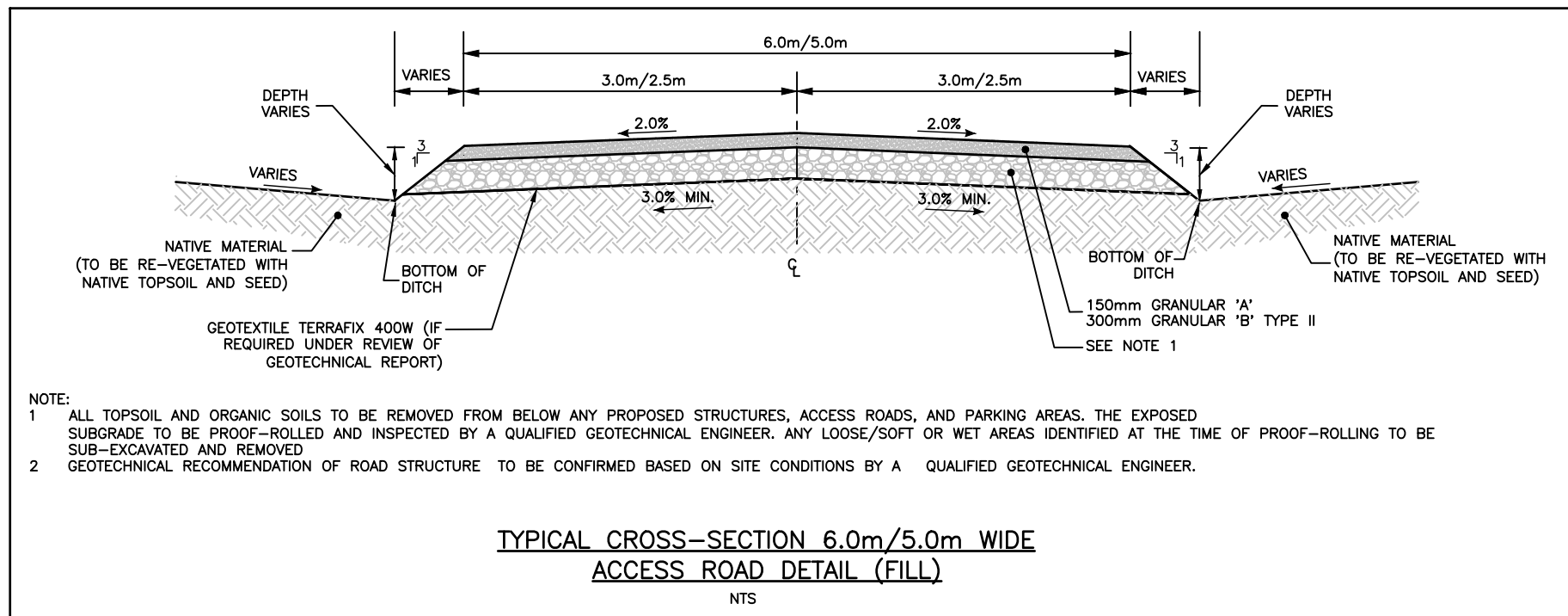
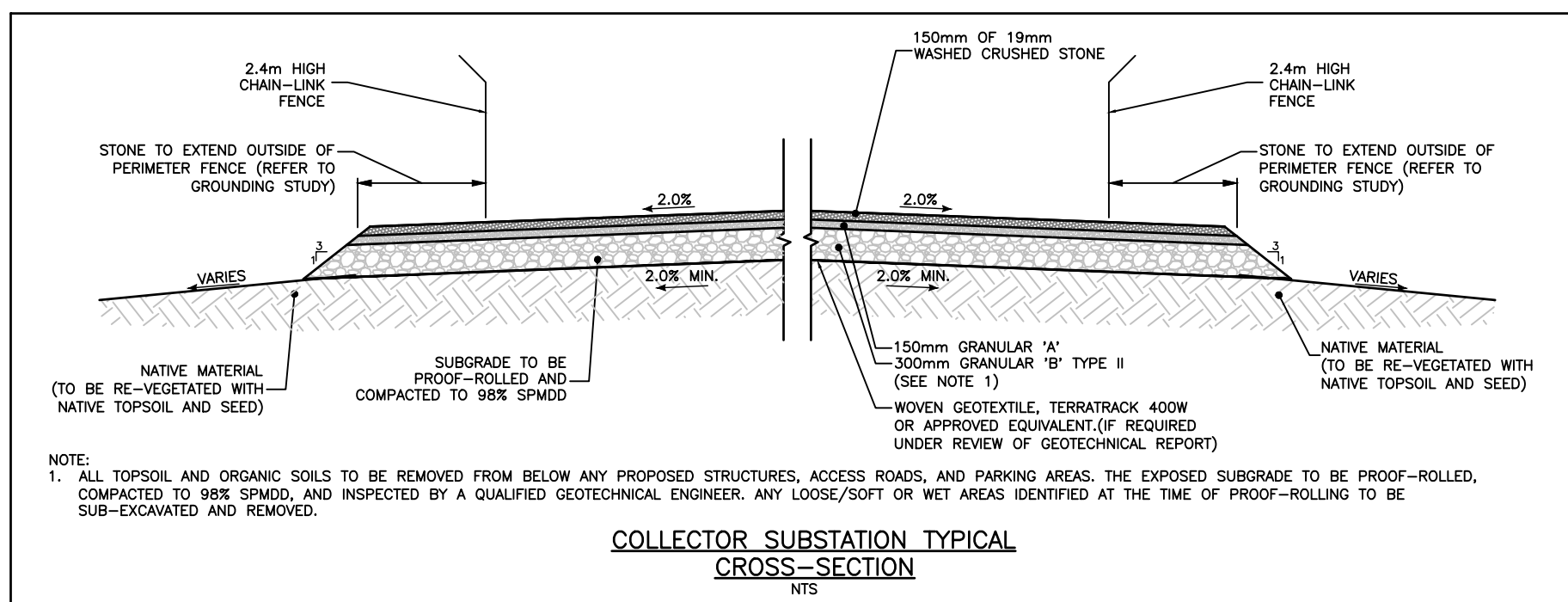
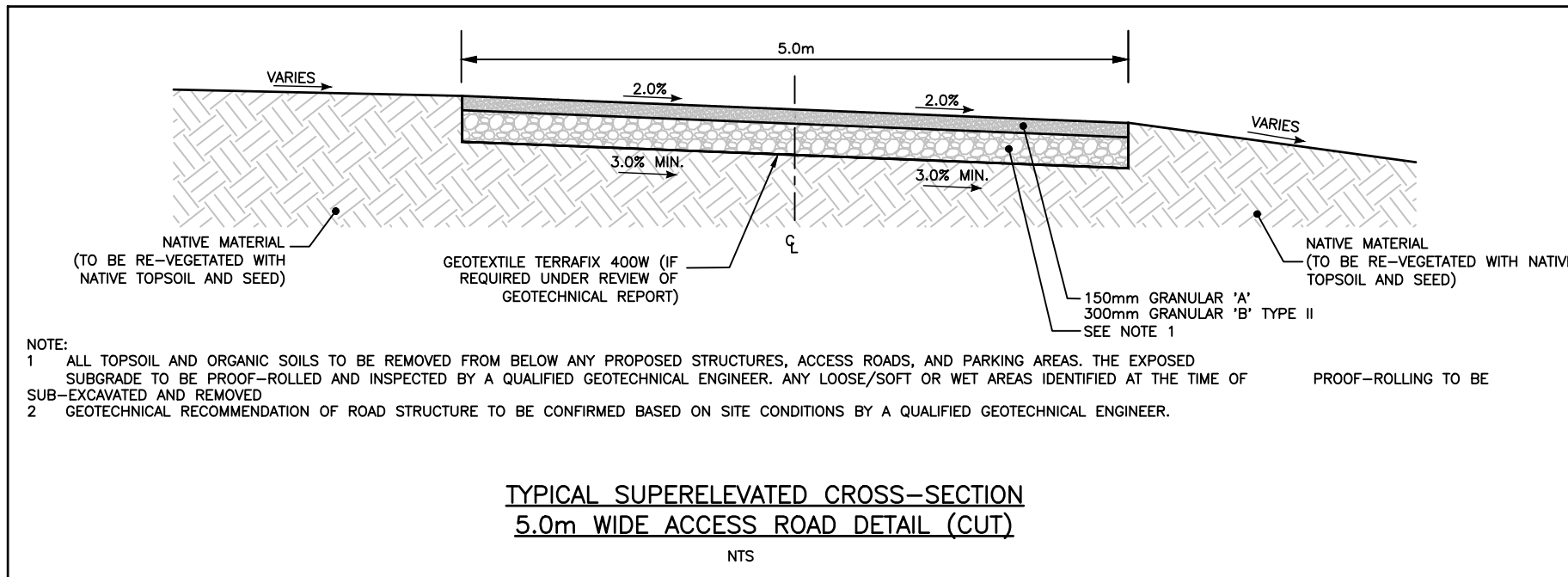
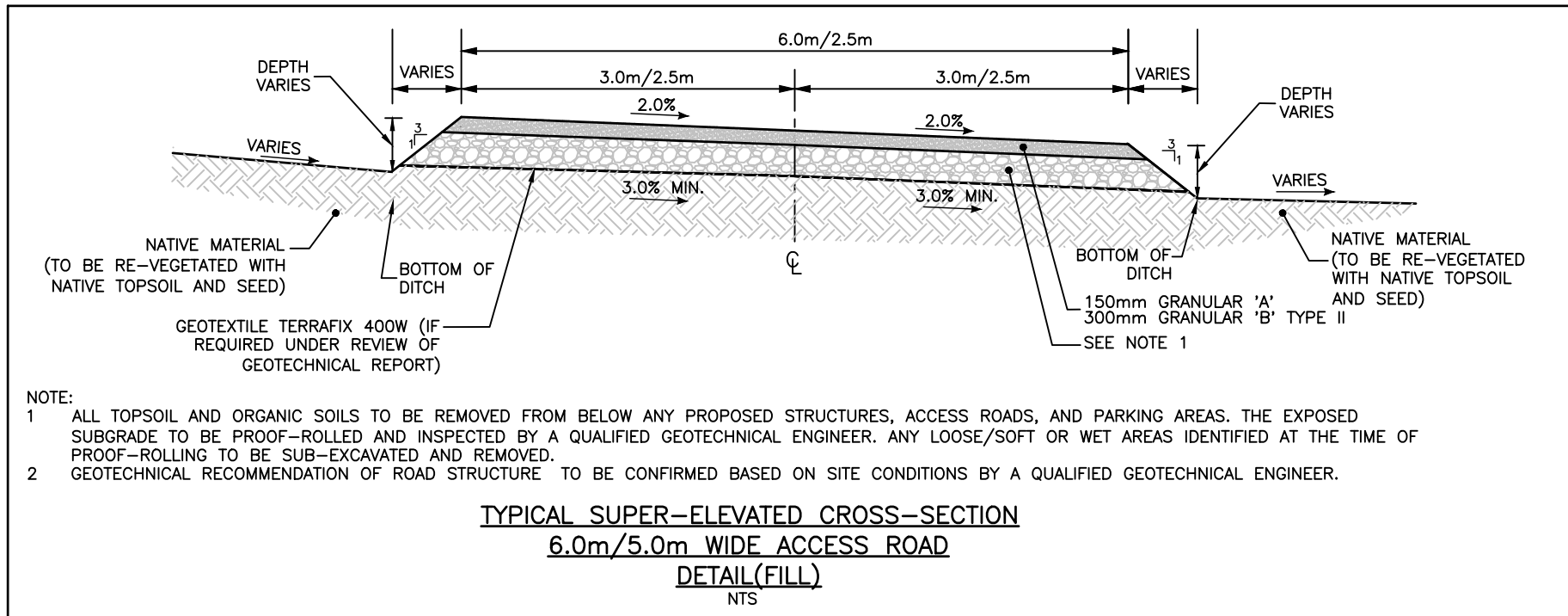
- AREA GRADING NOTES
- TOPSOIL IS TO BE STRIPPED ONLY IN AREAS REQUIRING EARTHWORKS AND PLACED IN TEMPORARY STOCKPILES, REFER TO ADDITIONAL NOTES ON C-550 REGARDING TOPSOIL STOCK PILING.
 - ALL TEMPORARY TOPSOIL STOCKPILES TO BE LOCATED IN CONSTRUCTION LAY DOWN AREAS AS SHOWN ON PLANS. SHOULD NO STOCKPILES LOCATIONS BE PROVIDED ON THE GRADING PLANS, LOCATIONS TO BE CONFIRMED WITH CONTRACT ADMINISTRATION.
 - ROADWAYS AND STONE BASE LAY DOWN AREAS ARE TO BE PLACED ON NATIVE GROUND AFTER TOPSOIL HAS BEEN STRIPPED.
 - ALL ADDITIONAL TOPSOIL IS TO BE SPREAD IN DESIGNATED FILL AREAS IDENTIFIED ON THE GRADING PLANS (INCREASE IF ADDITIONAL TOPSOIL IS AVAILABLE).
 - INFILLING OF BEDROCK SURFACE FRACTURES SHALL BE MINIMIZED AND WHERE FILLING IS REQUIRED, COARSE GRANULAR FILL SHALL BE USED.
 - SOARIFICATION TO BE PERFORMED AT THE END OF CONSTRUCTION, BEFORE RESTORATION SEEDING.



ROCK FLOW CHECK DAM
FLAT BOTTOM DITCH



ROCK FLOW CHECK DAM
FLAT BOTTOM DITCH



G. REVISED NOTES AND DETAILS	MALM	DS	18.01.16
F. REVISED NOTES AND DETAILS	DRR	DS	17.12.21
E. REVISED NOTES AND DETAILS	MALM	DS	17.12.15
D. REVISED NOTES AND DETAILS	DRR	DS	17.11.30
C. REVISED NOTES AND DETAILS	KDB	DS	17.11.23
B. ISSUED FOR TENDER	DRR	DS	17.11.23
A. ISSUED FOR CLIENT REVIEW	MALM	DS	17.10.31

Revision

File Name:	133560220_C-DT.dwg	DRR	DS	DRR	17.10.18
		Dwn.	Chkd.	Dgdn.	YY.MM.DD

Permit-Sec

Client/Project

LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT

54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title

GENERAL DETAILS
AND NOTES

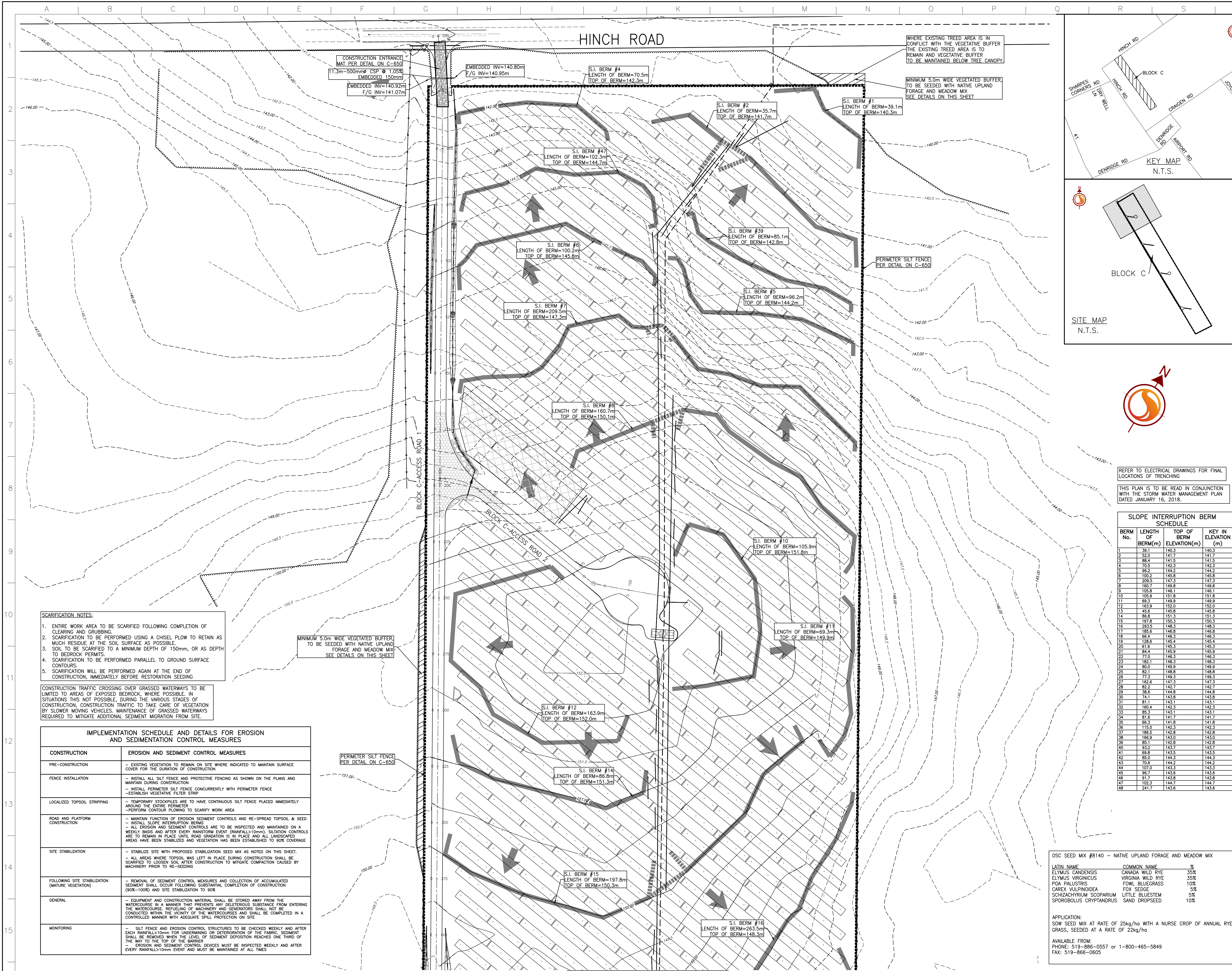
Project No.	Scale
133560220	AS NOTED
Drawing No.	Sheet
	Revision

C-500

2 of 2

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2018/01/16 4:25 PM By: Rice, Derrick



SCARIFICATION NOTES:

1. ENTIRE WORK AREA TO BE SCARIFIED FOLLOWING COMPLETION OF CLEARING AND GRUBBING.
2. SCARIFICATION TO BE PERFORMED USING A CHISEL PLOW TO RETAIN AS MUCH RESIDUE AT THE SOIL SURFACE AS POSSIBLE.
3. SOIL TO BE SCARIFIED TO A MINIMUM DEPTH OF 150mm, OR AS DEPTH TO BEDROCK PERMITS.
4. SCARIFICATION TO BE PERFORMED PARALLEL TO GROUND SURFACE CONTOURS.
5. SCARIFICATION WILL BE PERFORMED AGAIN AT THE END OF CONSTRUCTION, IMMEDIATELY BEFORE RESTORATION SEEDING

CONSTRUCTION TRAFFIC CROSSING OVER GRASSED WATERWAYS TO BE LIMITED TO AREAS OF EXPOSED BEDROCK, WHERE POSSIBLE. IN SITUATIONS THIS NOT POSSIBLE, DURING THE VARIOUS STAGES OF CONSTRUCTION, CONSTRUCTION TRAFFIC TO TAKE CARE OF VEGETATION BY SLOWER MOVING VEHICLES. MAINTENANCE OF GRASSED WATERWAYS REQUIRED TO MITIGATE ADDITIONAL SEDIMENT MIGRATION FROM SITE.

IMPLEMENTATION SCHEDULE AND DETAILS FOR EROSION AND SEDIMENTATION CONTROL MEASURES	
CONSTRUCTION	EROSION AND SEDIMENT CONTROL MEASURES
PRE-CONSTRUCTION	- EXISTING VEGETATION TO REMAIN ON SITE WHERE INDICATED TO MAINTAIN SURFACE COVER FOR THE DURATION OF CONSTRUCTION
FENCE INSTALLATION	- INSTALL ALL SILT FENCE AND PROTECTIVE FENCING AS SHOWN ON THE PLANS AND MAINTAIN DURING CONSTRUCTION - INSTALL PERIMETER SILT FENCE CONCURRENTLY WITH PERIMETER FENCE - ESTABLISH VEGETATIVE FILTER STRIP
LOCALIZED TOPSOIL STRIPPING	- TEMPORARY STOCKPILES ARE TO HAVE CONTINUOUS SILT FENCE PLACED IMMEDIATELY AROUND THE ENTIRE PERIMETER - PERFORM CONTOUR PLOWING TO SCARIFY WORK AREA
ROAD AND PLATFORM CONSTRUCTION	- MAINTAIN FUNCTION OF EROSION SEDIMENT CONTROLS AND RE-SPREAD TOPSOIL & SEED - ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSPECTED AND MAINTAINED ON A WEEKLY BASIS AND AFTER EVERY RAINSTORM EVENT (RAINFALLS>10mm). SILTATION CONTROLS ARE TO REMAIN IN PLACE UNTIL ROAD GRADATION IS IN PLACE AND ALL LANDSCAPED AREAS HAVE BEEN STABILIZED AND VEGETATION HAS BEEN ESTABLISHED TO 90% COVERAGE
SITE STABILIZATION	- STABILIZE SITE WITH PROPOSED STABILIZATION SEED MIX AS NOTED ON THIS SHEET. - ALL AREAS WHERE TOPSOIL WAS LEFT IN PLACE DURING CONSTRUCTION SHALL BE SCARIFIED TO LOOSEN SOIL AFTER CONSTRUCTION TO MITIGATE COMPACTION CAUSED BY MACHINERY PRIOR TO RE-SEEDING
FOLLOWING SITE STABILIZATION (MATURE VEGETATION)	- REMOVAL OF SEDIMENT CONTROL MEASURES AND COLLECTION OF ACCUMULATED SEDIMENT SHALL OCCUR FOLLOWING SUBSTANTIAL COMPLETION OF CONSTRUCTION (90%-100%) AND SITE STABILIZATION TO 90%
GENERAL	- EQUIPMENT AND CONSTRUCTION MATERIAL SHALL BE STORED AWAY FROM THE WATERCOURSE IN A MANNER THAT PREVENTS ANY DELETERIOUS SUBSTANCE FROM ENTERING THE WATERCOURSE. REFUELING OF MACHINERY AND GENERATORS SHALL NOT BE CONDUCTED WITHIN THE VICINITY OF THE WATERCOURSES AND SHALL BE COMPLETED IN A CONTROLLED MANNER WITH ADEQUATE SPILL PROTECTION ON SITE
MONITORING	- SILT FENCE AND EROSION CONTROL STRUCTURES TO BE CHECKED WEEKLY AND AFTER EACH RAINFALL>10mm FOR UNDERMINING OR DETRIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES ONE THIRD OF THE WAY TO THE TOP OF THE BARRIER. - EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL>10mm EVENT AND MUST BE MAINTAINED AT ALL TIMES

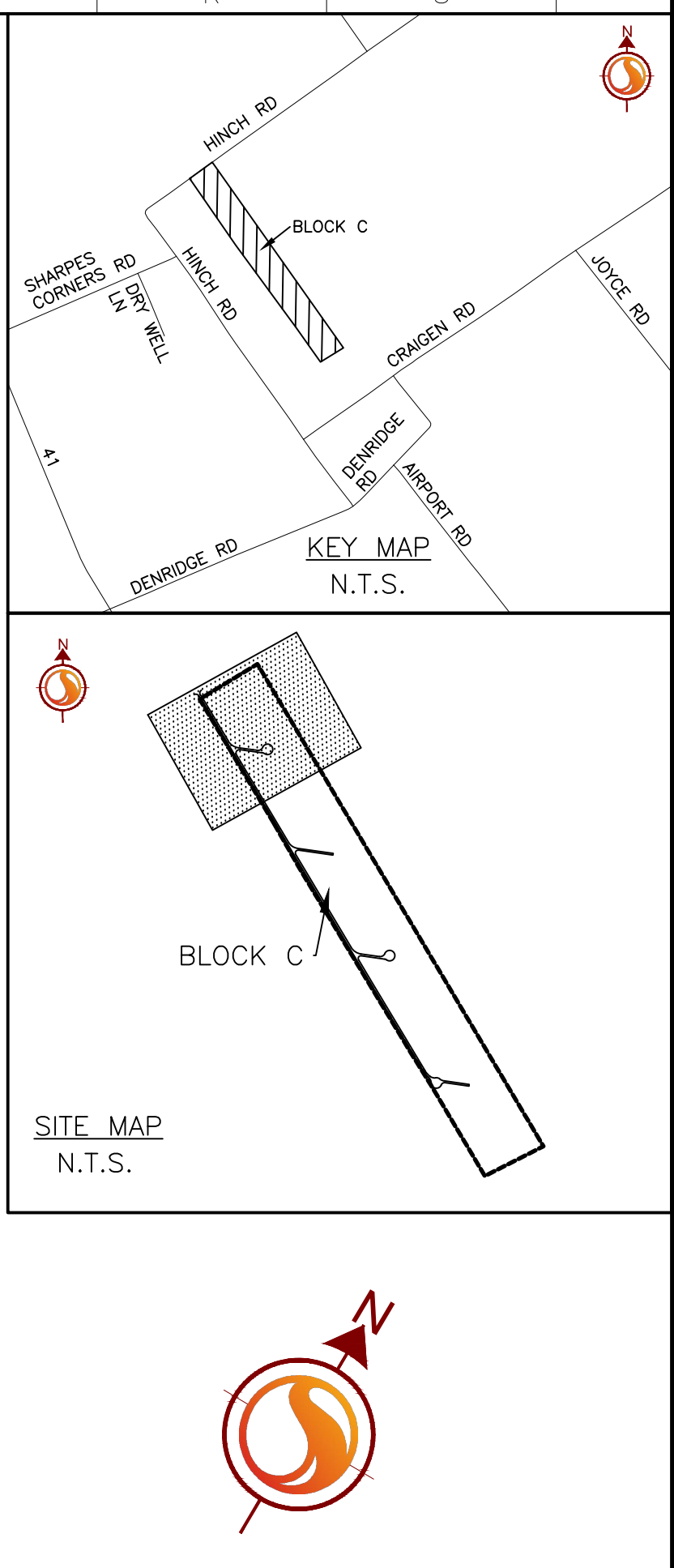
MINIMUM 5.0m WIDE VEGETATED BUFFER TO BE SEEDED WITH NATIVE UPLAND FORAGE AND MEADOW MIX SEE DETAILS ON THIS SHEET

PERIMETER SILT FENCE PER DETAIL ON C-650

(SEE DRAWING C603-SHEET 2)

SLOPE INTERRUPTION BERM SCHEDULE			
BERM No.	LENGTH OF BERM(m)	TOP OF BERM ELEVATION(m)	KEY IN ELEVATION (m)
1	36.1	140.3	140.3
2	52.0	141.7	141.7
3	88.4	141.5	141.5
4	70.5	142.3	142.3
5	96.2	144.2	144.2
6	100.2	145.8	145.8
7	209.5	147.3	147.3
8	160.7	149.8	149.8
9	105.8	146.1	146.1
10	105.9	151.8	151.8
11	69.3	149.9	149.9
12	163.9	152.0	152.0
13	45.6	145.8	145.8
14	86.8	151.3	151.3
15	191.8	150.3	150.3
16	263.5	148.3	148.3
17	185.8	146.8	146.8
18	66.4	146.3	146.3
19	128.6	145.4	145.4
20	81.6	145.3	145.3
21	84.4	145.9	145.9
22	77.0	146.3	146.3
23	182.1	148.3	148.3
24	80.0	149.9	149.9
25	82.1	148.8	148.8
26	77.3	149.3	149.3
27	162.6	147.3	147.3
28	82.2	142.7	142.7
29	38.6	144.8	144.8
30	74.1	143.8	143.8
31	81.1	143.1	143.1
32	160.4	142.3	142.3
33	85.3	143.1	143.1
34	81.6	141.7	141.7
35	66.3	141.8	141.8
36	115.0	142.3	142.3
37	186.5	142.8	142.8
38	166.9	143.0	143.0
39	85.1	142.8	142.8
40	93.2	143.7	143.7
41	69.8	143.5	143.5
42	85.0	144.3	144.3
43	70.6	144.2	144.2
44	107.0	143.3	143.3
45	96.7	143.6	143.6
46	91.7	143.8	143.8
47	109.3	144.7	144.7
48	241.7	143.6	143.6

OSC SEED MIX #140 - NATIVE UPLAND FORAGE AND MEADOW MIX		
LATIN NAME	COMMON NAME	%
ELYMUS CANDENSIS	CANADA WILD RYE	35%
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	35%
POA PALUSTRIS	FOWL BLUEGRASS	10%
CAREX VULPINOIDEA	FOX SEDGE	5%
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	5%
SPOROBOLUS CRYPTANDRUS	SAND DROPSSEED	10%
APPLICATION:		
SOW SEED MIX AT RATE OF 25kg/ha WITH A NURSE CROP OF ANNUAL RYE GRASS, SEEDED AT A RATE OF 22kg/ha		
AVAILABLE FROM:		
PHONE: 519-886-0557 or 1-800-465-4849		
FAX: 519-886-0605		



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- Notes**
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 2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS IN THIS SET PREPARED BY STANTEC CONSULTING LTD.
 3. THE CONTRACTOR MUST CHECK AND VERIFY DIMENSIONS, OBTAIN ALL UTILITY LOCATES AND OBTAIN ALL REQUIRED PERMITS/LICENSES AND VERIFY ELEVATIONS OF EXISTING SERVICES BEFORE PROCEEDING WITH ANY WORK.
 4. ALL CONSTRUCTION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (LATEST EDITION).
 5. IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENDOURCH ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE OWNER AND CONTRACTOR AND A COPY IS TO BE KEPT ON FILE ON SITE PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
 6. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY.
 7. THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DRAINAGE AND MEASURES TO CONTROL WATER. THE SITE IS TO BE FINE GRADED/LEVELLED LEAVING THE SITE IN A NEAT APPEARANCE SUCH THAT POSITIVE DRAINAGE IS ACHIEVED EVERYWHERE PRIOR TO THE INSTALLATION OF SOLAR PANELS.
 8. CONSTRUCTION FENCING INDICATES IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
 9. CULVERTS ARE TO BE INSTALLED AS PER OPS 802.010. SOIL TYPE TO BE CONFIRMED ON SITE FOR DETERMINATION OF TRENCH WIDTH.
 10. ALL AREAS WITHIN THE PROPOSED WORKS ARE TO BE RE-VEGETATED USING NATIVE TOPSOIL AND SEED. MIX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
 11. CLEARING AND GRUBBING AND REMOVALS TO BE COMPLETED IN ACCORDANCE WITH OPS 201.
 12. TEMPORARY EROSION CONTROL TO BE COMPLETED IN ACCORDANCE WITH OPS 577.
 13. GRADING TO BE COMPLETED IN ACCORDANCE WITH OPS 204. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPS 1010.
 14. CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPS 421. HEIGHT OF FILL TABLE FOR CSP CULVERTS TO COMPLY WITH OPS 805.010.
 15. BRIMP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPS 810.010 SECTION B-B.
 16. ALL SEEDING TO BE COMPLETE IN ACCORDANCE WITH OPS 804.
 17. ROCK SPOIL FROM PILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend	
PROPOSED	EXISTING
PROPERTY LINE	PROPERTY LINE
FENCE	FENCE
TOPOGRAPHIC SURVEY CONTOUR	TOPOGRAPHIC SURVEY CONTOUR
LIDAR CONTOUR	LIDAR CONTOUR
PERIMETER FENCE SILT FENCE (SEE DETAILS ON SHEET C-650)	PERIMETER FENCE SILT FENCE (SEE DETAILS ON SHEET C-650)
TEMPORARY REMOVAL OF S.I. BERM FOR TRENCH INSTALLATION. TRENCHES TO BE LINED WITH CLAY OR FILLED WITH CONCRETE IF INSTALLED IN BEDROCK CULVERT	TEMPORARY REMOVAL OF S.I. BERM FOR TRENCH INSTALLATION. TRENCHES TO BE LINED WITH CLAY OR FILLED WITH CONCRETE IF INSTALLED IN BEDROCK CULVERT
ROCK CHECK DAMS (SEE DETAILS ON SHEET C-650)	ROCK CHECK DAMS (SEE DETAILS ON SHEET C-650)
OVERLAND FLOW DIRECTION	OVERLAND FLOW DIRECTION
SLOPE INTERRUPTION BERM (SEE DETAIL ON SHEET 1 C-604)	SLOPE INTERRUPTION BERM (SEE DETAIL ON SHEET 1 C-604)
5.0M WIDE VEGETATIVE BUFFER	5.0M WIDE VEGETATIVE BUFFER
AC CABLE TRENCH	AC CABLE TRENCH
DC CABLE TRENCH	DC CABLE TRENCH
POTENTIAL ROCK OUTCROP LOCATIONS	POTENTIAL ROCK OUTCROP LOCATIONS
10m SETBACK LIMIT NO TOUCH ZONE	10m SETBACK LIMIT NO TOUCH ZONE
HARDENED SURFACE	HARDENED SURFACE
GRASSED WATERWAY (SEE DETAILS ON SHEET C-500 FOR DETAILS)	GRASSED WATERWAY (SEE DETAILS ON SHEET C-500 FOR DETAILS)

B	ISSUED FOR TENDER	DRR	DS	18.01.16
A	ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.21
Revision		By	Appd.	YY.MM.DD

File Name:	133560220_C-EC-BLOCK_D.dwg	DRR	DS	DRR	17.11.08
		Dwn.	Chkd.	Dgn.	YY.MM.DD

Permit-Seal

Client/Project
LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT
54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title
BLOCK C
SEDIMENTATION AND EROSION
CONTROL PLAN

Project No.	Scale
133560220	0 7.5 22.5 37.5m 1:750
Drawing No.	Sheet
C-603	Revision

(SEE DRAWING C603-SHEET 1)

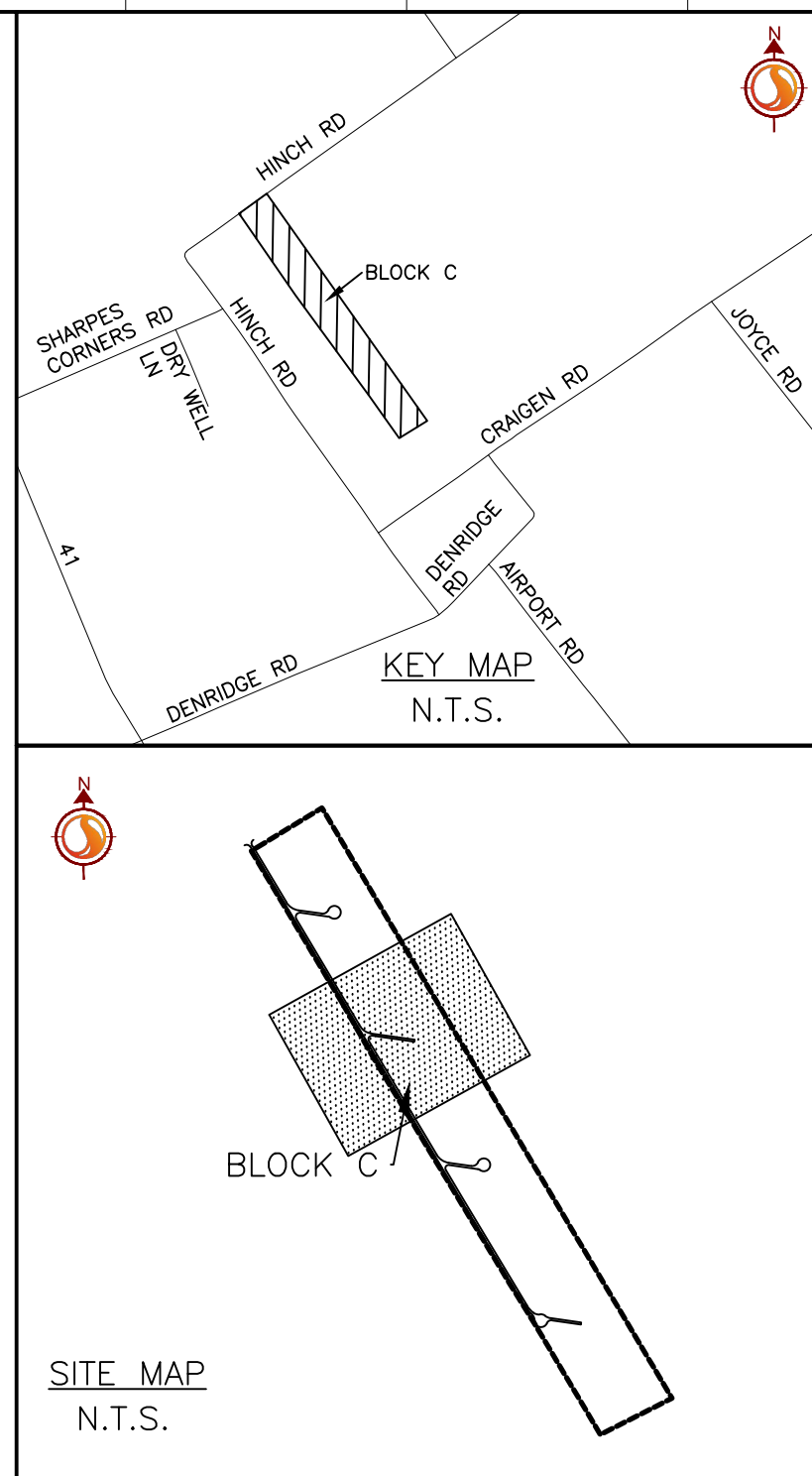
IMPLEMENTATION SCHEDULE AND DETAILS FOR EROSION AND SEDIMENTATION CONTROL MEASURES	
CONSTRUCTION	EROSION AND SEDIMENT CONTROL MEASURES
PRE-CONSTRUCTION	- EXISTING VEGETATION TO REMAIN ON SITE WHERE INDICATED TO MAINTAIN SURFACE COVER FOR THE DURATION OF CONSTRUCTION
FENCE INSTALLATION	- INSTALL ALL SILT FENCE AND PROTECTIVE FENCING AS SHOWN ON THE PLANS AND MAINTAIN DURING CONSTRUCTION - INSTALL PERIMETER SILT FENCE CONCURRENTLY WITH PERIMETER FENCE - ESTABLISH VEGETATIVE FILTER STRIP
LOCALIZED TOPSOIL STRIPPING	- TEMPORARY STOCKPILES ARE TO HAVE CONTINUOUS SILT FENCE PLACED IMMEDIATELY AROUND THE ENTIRE PERIMETER - PERFORM CONTOUR PLOWING TO SCARIFY WORK AREA
ROAD AND PLATFORM CONSTRUCTION	- MAINTAIN FUNCTION OF EROSION SEDIMENT CONTROLS AND RE-SPREAD TOPSOIL & SEED - INSTALL SLOPE INTERRUPTION BERMS - ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSPECTED AND MAINTAINED ON A WEEKLY BASIS AND AFTER EVERY RAINSTORM EVENT (RAINFALL>10mm). SILTATION CONTROLS ARE TO REMAIN IN PLACE UNTIL ROAD GRADATION IS IN PLACE AND ALL LANDSCAPED AREAS HAVE BEEN STABILIZED AND VEGETATION HAS BEEN ESTABLISHED TO 90% COVERAGE
SITE STABILIZATION	- STABILIZE SITE WITH PROPOSED STABILIZATION SEED MIX AS NOTED ON THIS SHEET. - ALL AREAS WHERE TOPSOIL WAS LEFT IN PLACE DURING CONSTRUCTION SHALL BE SCARIFIED TO LOOSEN SOIL AFTER CONSTRUCTION TO MITIGATE COMPACTION CAUSED BY MACHINERY PRIOR TO RE-SEEDING
FOLLOWING SITE STABILIZATION (MATURE VEGETATION)	- REMOVAL OF SEDIMENT CONTROL MEASURES AND COLLECTION OF ACCUMULATED SEDIMENT SHALL OCCUR FOLLOWING SUBSTANTIAL COMPLETION OF CONSTRUCTION (90%-100%) AND SITE STABILIZATION TO 90%
GENERAL	- EQUIPMENT AND CONSTRUCTION MATERIAL SHALL BE STORED AWAY FROM THE WATERCOURSE IN A MANNER THAT PREVENTS ANY DELETERIOUS SUBSTANCE FROM ENTERING THE WATERCOURSE. REFUELING OF MACHINERY AND GENERATORS SHALL NOT BE CONDUCTED WITHIN THE VICINITY OF THE WATERCOURSES AND SHALL BE COMPLETED IN A CONTROLLED MANNER WITH ADEQUATE SPILL PROTECTION ON SITE
MONITORING	- SILT FENCE AND EROSION CONTROL STRUCTURES TO BE CHECKED WEEKLY AND AFTER EACH RAINFALL>10mm FOR UNDERMINING OR DETRIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES ONE THIRD OF THE WAY TO THE TOP OF THE BARRIER. - EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL>10mm EVENT AND MUST BE MAINTAINED AT ALL TIMES

- SCARIFICATION NOTES:**
- ENTIRE WORK AREA TO BE SCARIFIED FOLLOWING COMPLETION OF CLEARING AND GRUBBING.
 - SCARIFICATION TO BE PERFORMED USING A CHISEL PLOW TO RETAIN AS MUCH RESIDUE AT THE SOIL SURFACE AS POSSIBLE.
 - SOIL TO BE SCARIFIED TO A MINIMUM DEPTH OF 150mm, OR AS DEPTH TO BEDROCK PERMITS.
 - SCARIFICATION TO BE PERFORMED PARALLEL TO GROUND SURFACE CONTOURS.
 - SCARIFICATION WILL BE PERFORMED AGAIN AT THE END OF CONSTRUCTION, IMMEDIATELY BEFORE RESTORATION SEEDING

THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE STORM WATER MANAGEMENT PLAN DATED JANUARY 16, 2018.

SLOPE INTERRUPTION BERM SCHEDULE			
BERM No.	LENGTH OF BERM(m)	TOP OF BERM ELEVATION(m)	KEY IN ELEVATION (m)
1	39.1	140.3	140.3
2	52.0	141.7	141.7
3	68.4	141.5	141.5
4	70.5	142.3	142.3
5	98.2	144.2	144.2
6	100.2	145.8	145.8
7	209.5	147.3	147.3
8	160.7	148.8	148.8
9	105.9	146.1	146.1
10	105.9	151.8	151.8
11	69.3	149.9	149.9
12	143.9	150.0	150.0
13	45.6	145.8	145.8
14	96.8	151.3	151.3
15	197.8	150.3	150.3
16	285.5	148.3	148.3
17	185.6	146.8	146.8
18	66.4	146.3	146.3
19	126.8	145.4	145.4
20	61.4	145.3	145.3
21	84.4	145.9	145.9
22	172.0	146.3	146.3
23	192.1	148.3	148.3
24	80.0	149.9	149.9
25	82.1	148.8	148.8
26	77.3	149.3	149.3
27	162.8	147.3	147.3
28	62.7	142.7	142.7
29	38.6	144.8	144.8
30	74.1	143.8	143.8
31	81.1	143.1	143.1
32	160.4	142.3	142.3
33	85.3	143.1	143.1
34	81.6	141.7	141.7
35	66.3	141.8	141.8
36	115.0	142.3	142.3
37	186.5	142.8	142.8
38	186.9	143.0	143.0
39	85.1	142.8	142.8
40	93.2	143.7	143.7
41	69.8	143.3	143.3
42	85.0	144.3	144.3
43	70.8	144.2	144.2
44	107.0	143.3	143.3
45	96.7	143.6	143.6
46	91.7	143.8	143.8
47	102.3	144.7	144.7
48	241.7	143.6	143.6

(SEE DRAWING C603-SHEET 3)



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- IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENDOURCH ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE OWNER AND CONTRACTOR AND A COPY IS TO BE KEPT ON FILE ON SITE PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
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- THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DRAINAGE AND MEASURES TO CONTROL WATER. THE SITE IS TO BE FINE GRADED/LEVELLED LEAVING THE SITE IN A NEAT APPEARANCE SUCH THAT POSITIVE DRAINAGE IS ACHIEVED EVERYWHERE PRIOR TO THE INSTALLATION OF SOLAR PANELS.
- CONSTRUCTION TURNING RADIIUS LIMITS IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
- COVERS ARE TO BE INSTALLED AS PER OPSD 805.010. SOIL TYPE TO BE CONFIRMED ON SITE FOR DETERMINATION OF TRENCH WIDTH.
- ALL AREAS WITHIN THE PROPOSED WORKS ARE TO BE RE-VEGETATED USING NATIVE TOPSOIL AND SEED. MIX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
- CLEARING AND GRUBBING AND REMOVALS TO BE COMPLETED IN ACCORDANCE WITH OPSD 201.
- TEMPORARY EROSION CONTROL TO BE COMPLETED IN ACCORDANCE WITH OPSD 517.
- GRADING TO BE COMPLETED IN ACCORDANCE WITH OPSD 204. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPSD 1010.
- COVER TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 421. HEIGHT OF FILL TABLE FOR CSP CULVERTS TO COMPLY WITH OPSD 805.010.
- BRIMP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPSD 810.010 SECTION B-B.
- ALL SEEDING TO BE COMPLETE IN ACCORDANCE WITH OPSD 804.
- ROCK SPOIL FROM FILE INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend

- | PROPOSED | EXISTING |
|--|--|
| PROPERTY LINE | PROPERTY LINE |
| FENCE | FENCE |
| TOPOGRAPHIC SURVEY CONTOUR | TOPOGRAPHIC SURVEY CONTOUR |
| LIDAR CONTOUR | LIDAR CONTOUR |
| PERIMETER FENCE SILT FENCE (SEE DETAILS ON SHEET C-650) | PERIMETER FENCE SILT FENCE (SEE DETAILS ON SHEET C-650) |
| TEMPORARY REMOVAL OF S.I. BERM FOR TRENCH INSTALLATION. TRENCHES TO BE LINED WITH CLAY OR FILLED WITH CONCRETE IF INSTALLED IN BEDROCK CULVERT | TEMPORARY REMOVAL OF S.I. BERM FOR TRENCH INSTALLATION. TRENCHES TO BE LINED WITH CLAY OR FILLED WITH CONCRETE IF INSTALLED IN BEDROCK CULVERT |
| ROCK CHECK DAMS (SEE DETAILS ON SHEET C-650) | ROCK CHECK DAMS (SEE DETAILS ON SHEET C-650) |
| OVERLAND FLOW DIRECTION | OVERLAND FLOW DIRECTION |
| SLOPE INTERRUPTION BERM (SEE DETAIL ON SHEET 1 C-604) | SLOPE INTERRUPTION BERM (SEE DETAIL ON SHEET 1 C-604) |
| 5.0M WIDE VEGETATIVE BUFFER | 5.0M WIDE VEGETATIVE BUFFER |
| AC CABLE TRENCH | AC CABLE TRENCH |
| DC CABLE TRENCH | DC CABLE TRENCH |
| POTENTIAL ROCK OUTCROP LOCATIONS | POTENTIAL ROCK OUTCROP LOCATIONS |
| 10m SETBACK LIMIT NO TOUCH ZONE | 10m SETBACK LIMIT NO TOUCH ZONE |
| HARDENED SURFACE | HARDENED SURFACE |
| GRASSSED WATERWAY (SEE DETAILS ON SHEET C-500 FOR DETAILS) | GRASSSED WATERWAY (SEE DETAILS ON SHEET C-500 FOR DETAILS) |

B	ISSUED FOR TENDER	DRR	DS	18.01.16
A	ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.21
Revision		By	Appd.	YYMMDD

File Name:	133560220_C-EC-BLOCK_D.dwg	DRR	DS	DRR	17.11.08
		Dwn.	Chkd.	Dgn.	YYMMDD

Permit-Seal

Client/Project

LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT

54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title

BLOCK C
SEDIMENTATION AND EROSION
CONTROL PLAN

Project No.

133560220

Drawing No.

Scale

0 7.5 22.5 37.5m

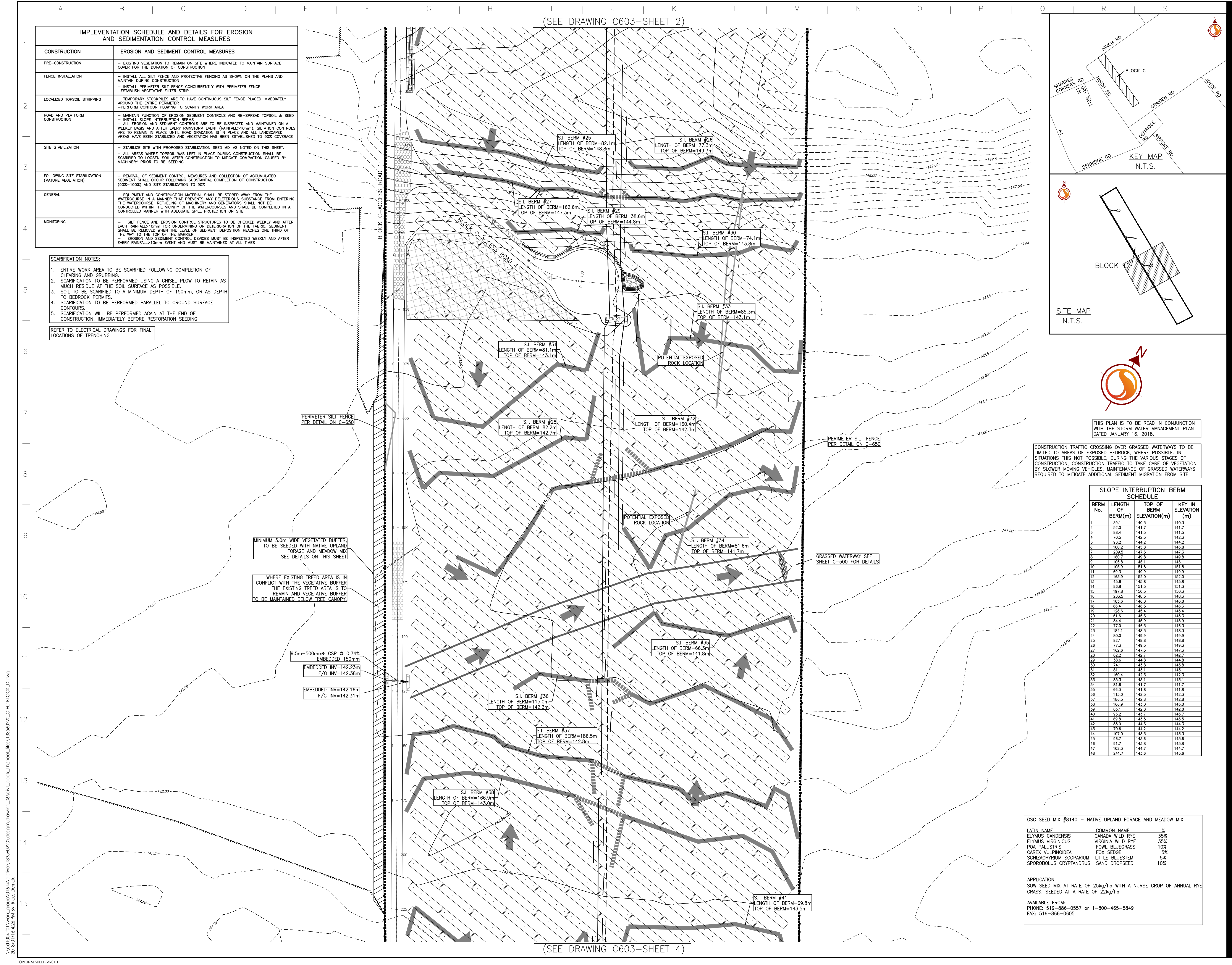
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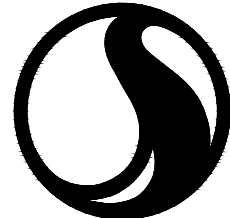
Revision

C-603


2 of 4

B





Stantec Consulting Ltd.
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www.stantec.com



CONSTRUCTION LEADERS

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- CONSTRUCTION TURNING RADIIUS LIMITS IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
- CULVERTS ARE TO BE INSTALLED AS PER OPSD 805.010. SOIL TYPE TO BE CONFIRMED ON SITE FOR DETERMINATION OF TRENCH WIDTH.
- ALL AREAS WITHIN THE PROPOSED WORKS ARE TO BE RE-VEGETATED USING NATIVE TOPSOIL AND SEED. MIX AND APPLICATION RATE/METHOD TO BE SUBMITTED AND APPROVED BY OWNER PRIOR TO IMPLEMENTATION.
- CLEARING AND GRUBBING AND REMOVALS TO BE COMPLETED IN ACCORDANCE WITH OPSD 201.
- TEMPORARY EROSION CONTROL TO BE COMPLETED IN ACCORDANCE WITH OPSD 537.
- GRADING TO BE COMPLETED IN ACCORDANCE WITH OPSD 206. GRANULAR MATERIAL TO BE USED IN ACCORDANCE WITH OPSD 1010.
- CULVERT TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 421. HEIGHT OF FILL TABLE FOR CSP CULVERTS TO COMPLY WITH OPSD 805.010.
- RIMPAP AT CULVERT OUTLETS SHALL BE IN ACCORDANCE WITH OPSD 810.010 SECTION B-B.
- ALL SEEDING TO BE COMPLETED IN ACCORDANCE WITH OPSD 804.
- ROCK SPILL FROM FILL INSTALLATION TO BE REMOVED FROM GROUND SURFACE PRIOR TO GROUND PREPARATION FOR RESTORATION SEEDING.

Legend

PROPOSED

EXISTING

PROPERTY LINE

FENCE

TOPOGRAPHIC SURVEY CONTOUR

LIDAR CONTOUR

PERIMETER FENCE SILT FENCE (SEE DETAILS ON SHEET C-650)

TEMPORARY REMOVAL OF S.I. BERM FOR TRENCH INSTALLATION. TRENCHES TO BE LINED WITH CLAY OR FILLED WITH CONCRETE IF INSTALLED IN BEDROCK CULVERT

ROCK CHECK DAMS (SEE DETAILS ON SHEET C-650)

OVERLAND FLOW DIRECTION

SLOPE INTERRUPTION BERM (SEE DETAIL ON SHEET 1 C-604)

5.0M WIDE VEGETATIVE BUFFER

AC CABLE TRENCH

DC CABLE TRENCH

POTENTIAL ROCK OUTCROP LOCATIONS

10m SETBACK LIMIT NO TOUCH ZONE

HARDENED SURFACE

GRASSSED WATERWAY (SEE DETAILS ON SHEET C-500 FOR DETAILS)

B	ISSUED FOR TENDER	DRR	DS	18.01.16		
A	ISSUED FOR CLIENT REVIEW	DRR	DS	17.12.21		
Revision		By	Appd.	YY.MM.DD		
File Name:		133560220_C-EC-BLOCK_D.dwg	DRR	DS	DRR	17.11.08
		Dwn.	Chkd.	Dgn.	YY.MM.DD	

Permit-Seal

Client/Project

LOYALIST SOLAR LP
LOYALIST SOLAR PROJECT

54MW GROUND-MOUNT SOLAR FARM

County of Lennox and Addington, Ontario

Title

BLOCK C
SEDIMENTATION AND EROSION
CONTROL PLAN

Project No.

133560220

Drawing No.

Sheet

Scale

0 7.5 22.5 37.5m

1:750

Revision

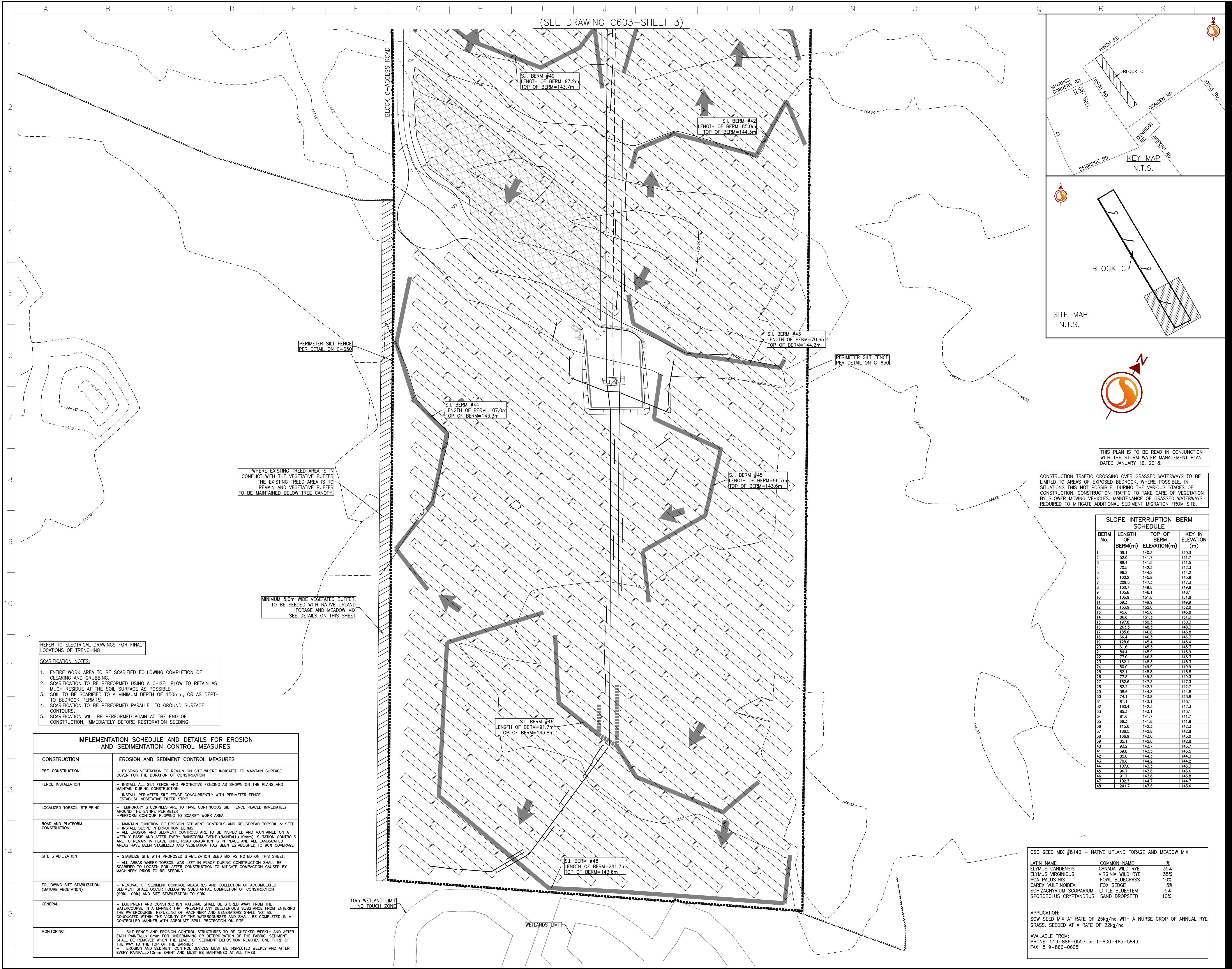
C-603

3 of 4

B

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2018/01/16 4:26 PM By: Rice, Derrick

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2018/01/16 4:26 PM By: R. Rice, Derrick



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The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

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- Notes
- TOPOGRAPHIC INFORMATION CONDUCTED BY LESLIE W. HEDGECOCK SURVEYING LTD. RECEIVED OCTOBER 25, 2017. TOPOGRAPHIC SURVEY IS UTM 18. LIDAR INFORMATION CONDUCTED BY TULLOCH ENGINEERING ON JUNE 27, 2018. LIDAR SURVEY IS UTM 18. BEDROCK SURVEY INFORMATION PROVIDED BY PCL CONSTRUCTORS LTD. RECEIVED ON OCTOBER 31, 2017. EXISTING VEGETATION INFORMATION IS APPROXIMATE, PROVIDED FROM AERIAL IMAGERY. CONTRACTOR TO CONFIRM ALL TREE & SHRUB LOCATIONS ON SITE.
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS IN THIS SET PREPARED BY STANTEC CONSULTING LTD.
 - THE CONTRACTOR MUST CHECK AND VERIFY DIMENSIONS, OBTAIN ALL UTILITY LOCATES AND OBTAIN ALL REQUIRED PERMITS/LICENSES AND VERIFY ELEVATIONS OF EXISTING SERVICES BEFORE PROCEEDING WITH ANY WORK.
 - ALL CONSTRUCTION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (LATEST EDITION).
 - IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENROACH ONTO PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE OWNER AND CONTRACTOR AND A COPY IS TO BE KEPT ON FILE ON SITE PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
 - THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY.
 - THE CONTRACTOR IS TO BE RESPONSIBLE FOR ALL DRAINAGE AND MEASURES TO CONTROL WATER. THE SITE IS TO BE FINE GRADED/LEVELLED LEAVING THE SITE IN A NEAT APPEARANCE SUCH THAT POSITIVE DRAINAGE IS ACHIEVED EVERYWHERE PRIOR TO THE INSTALLATION OF SOLAR PANELS.
 - CONSTRUCTION TURNING RADII IDENTIFY AREAS WHERE ADDITIONAL ROAD WIDTH IS REQUIRED TO ALLOW FOR ADEQUATE CLEARANCE FOR CONSTRUCTION VEHICLES.
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