WATER TRANSMISSION LINE DESIGN CHESTERFIELD INLET, NUNAVUT



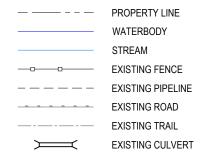
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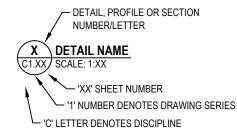




PROJECT NO.	OFFICE	DES	CKD	REV	DRAWING G1.00
WTRM03121-01	VANC	DNM	DNM	A	
DATE March 5, 2019	SHEET No.	DWN JDM	APP DNM	STATUS IFR	G1.00

LEGEND





GENERAL NOTES:

- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS, SPECIFICATIONS AND ANY RULES, REGULATIONS. STANDARDS OR SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS ALSO SUBJECT TO INSPECTION BY THE GOVERNMENT OF NUNAVUT (GON) OR ITS REPRESENTATIVE.
- THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, PROVINCIAL AND FEDERAL LAWS THAT ARE PERTINENT TO THIS WORK.
- 3. ALL CONSTRUCTION ACTIVITIES SHALL BE COMPLETED IN A MANNER SUITABLE FOR PUBLIC USE AND IN A CONDITION MEETING THE APPROVAL OF THE GON OR ITS REPRESENTATIVE.
- ALL CONSTRUCTION ACTIVITIES AFFECTING THE HAMLETS OPERATIONS SHALL BE DISCUSSED IN ADVANCE WITH THE HAMLETS AUTHORITIES AND ITS REPRESENTATIVE
- 5. ALL REGULATORY APPROVALS MUST BE IN PLACE BEFORE THE CONTRACTOR IS ALLOWED TO COMMENCE CONSTRUCTION ACTIVITIES.
- ALL MATERIALS OR EQUIPMENT SHIPPED TO CHESTERFIELD INLET SHALL BE DELIVERED TO AN APPROVED SITE ESTABLISHED AT THE PRF-CONSTRUCTION MEETING
- 7. THE CONTRACTOR IS RESPONSIBLE FOR THE SHIPMENT, LOADING AND UNLOADING OF ALL MATERIALS TRANSPORTED TO CHESTERFIELD INLET.
- THE CONTRACTOR IS RESPONSIBLE FOR RESTORING THE SITE FOLLOWING THE COMPLETION OF THE PROJECT, IT IS THE CONTRACTORS RESPONSIBILITY TO DOCUMENT THE EXISTING CONDITIONS AND REINSTATE ALL DISTURBED AREAS INCLUDING STAGING AND STORAGE AREAS TO EXISTING CONDITIONS OR BETTER.
- DEVELOPMENT AND IMPLEMENTATION OF A HEALTH AND SAFETY PLAN IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO FOLLOW ALL APPLICABLE REGULATIONS PRESCRIBED BY LOCAL. TERRITORIAL AND FEDERAL AGENCIES.

TRAFFIC MANAGEMENT:

- 1. THIS PROJECT INCLUDES CONSTRUCTION ACTIVITIES ON AN ACTIVE ROAD. ALL CONSTRUCTION ACTIVITIES SHALL BE UNDERTAKEN IN A MANNER APPROVED BY THE GON OR ITS REPRESENTATIVE.
- 2. THE CONTRACTOR SHALL SUBMIT A TRAFFIC MANAGEMENT PLAN PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
- 3. CONSTRUCTION MACHINERY AND VEHICLES SHALL COMPLY WITH ALL TRAFFIC REGULATIONS
- 4. FULL TIME PUBLIC ACCESS (SINGLE LANE) TO CHESTERFIELD HAMLET AND ITS FACILITIES SHALL BE MAINTAINED AT ALL TIMES.
- 5. CONTRACTOR SHALL POST A MAXIMUM SPEED LIMIT OF 30 km/h ON ALL TEMPORARY BYPASS ROADS.
- 6. CONTRACTOR IS TO USE APPROVED BARRICADES OR PYLONS TO DELINEATE OR DIRECT LOCAL TRAFFIC.
- 7. ALL CONTRACTOR VEHICLES AND TRAFFIC (UNLESS NOTED OTHERWISE) SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION LIMITS OR HAUL ROUTES.
- 8. IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE & OFF-SITE ROUTES AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE MAINTAINED IN WORKING ORDER AND MEET THE REQUIREMENTS OF THE GON OR ITS REPRESENTATIVE. ALL COSTS ASSOCIATED TO THE MAINTENANCE OF THE HAUL ROADS SHALL BE INCIDENTAL TO THE CONTRACT UNIT PRICES.

EROSION AND SEDIMENT CONTROL (ESC)

- 1. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO DEVELOP AND SUBMIT AN ESC PLAN TO THE GON OR ITS REPRESENTATIVE FOR APPROVAL DETAILING THE EROSION CONTROL MEASURES FOR EACH PHASE OF THE PROJECT.
- 2. THE IMPLEMENTATION OF ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETE.
- 3. THE ESC FACILITIES MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS AND ADJACENT PROPERTIES IS MINIMIZED.
- 4. DURING THE CONSTRUCTION PERIOD, ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS. (E.G., ADDITIONAL PUMPS, RELOCATION OF SWALES AND SILT FENCES, ETC.)
- 5. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE SITE SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.
- 6. ANY AREAS OF EXPOSED SOILS AND EMBANKMENTS THAT WILL NOT BE DISTURBED FOR TWO DAYS SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS. (E.G. SEEDING, MULCHING, PLASTIC COVERING, ETC.)
- 7. ANY AREA NEEDING ESC MEASURES NOT REQUIRING IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
- 8. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY-EIGHT (48) HOURS FOLLOWING A STORM EVENT.
- 9. CONTRACTOR SHALL ERECT SILT BARRIER FENCES AS REQUIRED OR AS DIRECTED BY THE GON OR ITS REPRESENTATIVE.
- 10. SILT FENCES/BARRIERS SHALL BE MANUFACTURED FROM A NON-WOVEN, SLIT FILM GEOTEXTILE MATERIAL WITH A SHINY TO SMOOTH SURFACE TEXTURE DESIGNED TO REDUCE VELOCITY OF RUNOFF TO POINT THAT SUSPENDED PARTICLES SETTLE OUT DUE TO REDUCTION OF HYDRAULIC ENERGY.
- 11. SILT BARRIERS SHALL BE PLACED IN A MANNER THAT WILL INTERCEPT RUNOFF AT OR CLOSE TO RIGHT ANGLES TO THE FLOW. IN AREAS WHERE PROBLEM IS SEVERE, ERECT TWO OR MORE SILT BARRIERS PARALLEL TO EACH OTHER UNTIL DEGREE OF CONTROL IS
- 12. SILT FENCES SHALL BE LIMITED TO HANDLE AN AREA EQUIVALENT TO A MAXIMUM OF 100 m² PER 3 m OF FENCE.
- 13. SILT BARRIERS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:

PROPERTY	VALUE		
Grab Tensile	500N		
Mullen Burst	1900 kPa		
Elongation at Break	25% Maximum		
Opening	600µm Maximum		
U.V. Rating @ 500 hrs	90% Retained		
Efficiency	>75% Minimum		
Construction	Woven (tape)		
Texture	Smooth, Shiny		
Posts	4 cm x 4 cm Treated		
Post Spacing	2 m Maximum		
Permittivity	10 l/s/m ²		

ENVIRONMENTAL PROTECTION

- 1. CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE AND PUMPING AS NECESSARY TO KEEP EXCAVATIONS AND SITE FREE FROM WATER.
- 2. CONTRACTOR SHALL NOT DISCHARGE WATER CONTAINING SUSPENDED MATERIALS INTO WATERCOURSES.
- 3. CONTRACTOR SHALL CONTROL DISPOSAL OR RUNOFF WATER CONTAINING SUSPENDED MATERIALS OR OTHER HARMFUL SUBSTANCES IN ACCORDANCE WITH FEDERAL, PROVINCIAL AND MUNICIPAL REQUIREMENTS.
- 4. CONTRACTOR SHALL NOT USE WATERCOURSE BEDS FOR BORROW MATERIAL.
- CONTRACTOR SHALL NOT DUMP EXCAVATED FILL, WASTE MATERIAL OR DEBRIS IN OR ADJACENT TO WATERCOURSES.
- 6. CONTRACTOR IS NOT PERMITTED TO PERFORM WORK WITHIN THE HIGHWATER LINE OF WATERWAYS WITHOUT WRITTEN APPROVAL FROM THE GON.
- CONTRACTOR IS TO COORDINATE WITH THE GON TO DETERMINE THE PERMITTING REQUIREMENTS FOR WORK ADJACENT TO WATERWAYS INCLUDING LAYING OF RIPRAP AND NECESSARY REQUIREMENTS.
- 8. IN THE EVENT THAT SPILLAGE, DEBRIS OR DUST BUILDS UP AS A RESULT OF HAULING, THE CONTRACTOR SHALL BE REQUIRED TO CLEAN AND REMOVE THE MATERIAL IMMEDIATELY

UTILITIES AND INFRASTRUCTURE:

- 1. AVAILABLE DOCUMENTATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE PROVIDED FOR REFERENCE ONLY. TETRA TECH CANADA AND THE GON ASSUME NO LIABILITY FOR THE ACCURACY OF THIS INFORMATION.
- 2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND FOR THEIR PROTECTION DURING THE CONSTRUCTION PERIOD.
- 3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE ACTIVE LOCAL COMMUNITY WATER SUPPLY THROUGHOUT THE CONSTRUCTION OF THE PROPOSED SYSTEM.

SURVEY CONTROL & CONSTRUCTION LAYOUT:

- CONTRACTOR TO DEVELOP A LAYOUT PLAN AND STAKE THE SITE PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL PROVIDE SUFFICIENT SURVEY CONTROL TO ALLOW FOR THE CONFIRMATION OF GRADES, ELEVATIONS AND QUANTITIES.
- THE VERTICAL CONTROL ON THIS PROJECT IS TIED TO BENCH MARKS LOCATED AT THE SITE. ALL EXISTING SURVEY MONUMENTS SHALL BE PROTECTED BY THE CONTRACTOR DURING CONSTRUCTION. ALL MONUMENTS DISTURBED BY THE CONTRACTORS OPERATIONS SHALL BE RESET BY A REGISTERED SURVEYOR AT THE CONTRACTORS EXPENSE.

DEMOLITION AND CLEARING:

- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING PIPE AND ASSOCIATED INFRASTRUCTURE. PRIOR TO OFFSITE DISPOSAL, THE CONTRACTOR SHALL PROVIDE AN OPPORTUNITY FOR THE GON OR ITS REPRESENTATIVE TO INSPECT AND SELECT ITEMS TO RETAIN FOR FUTURE USE.
- THE CONTRACTOR SHALL CLEAR ALL BRUSH AND VEGETATION FROM THE WORK AREA AND DISPOSE OFFSITE OR IN A LOCATION APPROVED BY THE GON OR ITS REPRESENTATIVE
- PRIOR TO CLEARING, CONTRACTOR TO VERIFY LIMITS OF CLEARING WITH THE GON OR ITS REPRESENTATIVE TO DETERMINE RESTRICTIONS REGARDING PRESERVATION OF EXISTING ITEMS.

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С	3/5/19	JDM	DNM	DNM	100% DESIGN - ISSUED FOR REVIEW			
В	1/31/19	JDM	DNM	DNM	50% DESIGN - ISSUED FOR REVIEW			
Α	1/17/19	JDM	DNM	DNM	50% DESIGN - ISSUED FOR REVIEW			
MUN	DATE	DWN	CKD	APR	DESCRIPTION			
	REVISIONS							



WATER TRANSMISSION LINE DESIGN **CHESTERFIELD INLET, NUNAVUT**

DRAWING INDEX AND GENERAL NOTES



PROJECT NO.	OFFICE	DES	CKD	REV	DRAWING
WTRM03121-01	VANC	DNM	DNM	С	
DATE	SHEET No.	DWN	APP	STATUS	G1.01
March 5, 2019	of	JDM	DNM	IFR	

PROFESSIONAL SEAL

MECHANICAL AND PIPING:

- THE MECHANICAL/PIPING CONTRACTOR MUST BE APPROVED BY THE GON OR ITS REPRESENTATIVE PRIOR TO THE AWARD OF THE CONTRACT. A PRE-CONTRACT INSPECTION OF THE CONTRACTORS FACILITY MAY BE CARRIED OUT AT THE DISCRETION OF THE GON OR ITS REPRESENTATIVE.
- 2. THE CONTRACT WORK WILL BE SUBJECT TO PRE-DELIVERY INSPECTIONS AND FINAL INSPECTIONS AT THE DISCRETION OF THE GON OR ITS REPRESENTATIVE.
- 3. PE PIPE SHALL BE MANUFACTURED TO ASTM F714 OR AWWA C906.
- 4. PIPE MATERIAL SHALL BE PE 4710.
- 5. DIMENSIONS AND WORKMANSHIP SHALL BE AS SPECIFIED BY ASTM F714.
- 6. HDPE FITTINGS AND TRANSITIONS SHALL MEET ASTM D3261.
- 7. HDPE PIPE SHALL HAVE A MINIMUM DENSITY OF 0.955 g/cm3.
- HDPE PIPE AND ACCESSORIES 4-INCH DIAMETER AND LARGER, SHALL BE 125 PSI AT 73.4°F MEETING THE REQUIREMENTS OF STANDARD DIMENSION RATIO (SDR) 17 MINIMUM STRENGTH.
- FABRICATED HDPE MITRED FITTINGS SHALL BE TO AWWA C906, SUITABLE FOR THE PRESSURE RATING AND SIZE SPECIFIED.
- MOULDED HDPE FITTING SHALL BE TO ASTM 3261, SUITABLE FOR PRESSURE RATING SPECIFIED AND FUSION TO MAIN PIPE.
- 11. ALL JOINTS SHALL BE HEAT BUTT FUSED TO DEVELOP FULL STRENGTH OF THE PIPE. FUSION SHALL BE TO ASTM D2657 AND SHALL BE FULLY IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS WHERE AVAILABLE.
- 12. CONTRACTOR SHALL HANDLE PIPE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. DO NOT USE CHAINS OR CABLES PASSED THROUGH PIPE BORE SO THAT WEIGHT OF PIPE BEARS ON PIPE ENDS.
- 13. CONTRACTOR TO LAY AND JOIN PIPES TO MANUFACTURERS INSTRUCTIONS AND SPECIFICATIONS EXCEPT IF OTHERWISE NOTED IN THE CONTRACT DOCUMENTS.
- 14. CONTRACTOR TO MAINTAIN VERTICAL TOLERANCE: +/- 25 mm FROM SPECIFIED GRADE.
- 15. CONTRACTOR TO LAY PIPES ON PREPARED BED, TRUE TO LINE AND GRADE.
 CONTRACTOR TO ENSURE BARREL OF EACH PIPE IS IN CONTACT WITH SHAPED BED
 THROUGHOUT ITS FULL LENGTH. PIPE TO BE LAID AS PER DETAIL 1/C3.00.
- 16. CONTRACTOR TO KEEP JOINTING MATERIALS AND INSTALLED PIPE FREE OF DIRT, WATER AND OTHER FOREIGN MATERIALS. WHENEVER WORK IS STOPPED, CONTRACTOR SHALL INSTALL A REMOVABLE WATERTIGHT BULKHEAD AT OPEN END OF LAST PIPE LAID TO PREVENT ENTRY OF WATER AND FOREIGN MATERIALS.
- 17. CONTRACTOR TO CUT PIPES AS REQUIRED TO MANUFACTURERS RECOMMENDATIONS. LEAVE SMOOTH END AT RIGHT ANGLES TO AXIS OF PIPE.
- 18. CONTRACTOR TO BUTT FUSE PIPE IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
- 19. WHERE BUTT FUSION IS TO OCCUR IN A LOCATION OTHER THAN IN THE INSTALLED LOCATION (E.G. AT TOP OF TRENCH AND DROPPED IN, OR AT END OF TRENCH AND DRAGGED/PUSHED INTO PLACE), THE CONTRACTOR SHALL SUBMIT A WRITTEN PLAN TO THE GON OR ITS REPRESENTATIVE PROVIDING SAFE WORK PROCEDURES AND QUALITY PROVISIONS.
- 20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTRAINING THE PIPE AS NECESSARY DURING CONSTRUCTION.
- 21. TRENCH BEDDING AND BACKFILL SHALL BE AS PER THE SUPPLIED DRAWINGS AND CONTRACT DOCUMENTS.
- 22. THE CONTRACTOR SHALL ENSURE THAT THE PRECAST HYDRAULIC STRUCTURES ARE IN PLACE AND PIPES ARE PROPERLY INSERTED IN THE COUPLERS PRIOR TO FUSING THE FIRST AND LAST PIPE SEGMENTS.

EXCAVATION & FILL PLACEMENT:

- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CLEAR AND GRADE THE BACKFILL AREA, REMOVING TOPSOIL, BRUSH, SOD AND OTHER ORGANIC DELETERIOUS MATERIALS. ANY UNSUITABLE SOILS SHALL BE OVER EXCAVATED AND REPLACED WITH COMPACTED BACKFILL MATERIAL TO PROJECT SPECIFICATIONS OR AS OTHERWISE DIRECTED BY THE GON OR ITS REPRESENTATIVE.
- BEFORE PLACEMENT OF ANY MATERIALS, EXPOSED SUBGRADES SHALL BE INSPECTED AND APPROVED BY THE GON OR ITS REPRESENTATIVE.
- 3. PRIOR TO PLACEMENT ALL SELECT FILL MATERIAL SHALL BE APPROVED BY THE GON OR ITS REPRESENTATIVE
- 4. SELECT FILL MATERIAL SHALL BE PLACED IN 300 mm LIFTS AND COMPACTED TO 95% SPMDD
- ALL EXCESS OR UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF SITE AT AN APPROVED FACILITY.

SELECT FILL MATERIAL GRADATION TABLE					
SIEVE SIZE (mm)	PERCENT PASSING (%)				
25	70 - 100				
5	25 - 63				
0.63	7 - 30				
0.08	2 - 8				

RIPRAP:

RIPRAP SHALL COMPLY WITH THE FOLLOWING:

- RIPRAP SHALL BE FREE OF POTENTIALLY ACID GENERATING ROCK. CONTRACTOR TO SUBMIT ROCK OR GRAVEL FOR MATERIALS TESTING PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. TESTING COSTS SHALL BE INCIDENTAL TO THE SUPPLY AND PLACEMENT OF FILL MATERIAL.
- RIPRAP SHALL BE FREE OF DELETERIOUS MATERIALS INCLUDING ORGANIC IMPURITIES, CLAY LUMPS, OR FRIABLE PARTICLES.
- 3. RIPRAP SHALL BE MADE OF SOUND ROCK PRODUCED BY A QUARRY.
- 4. MIN. SPECIFIC GRAVITY: 2.6.

PUMP:

- 1. REFER TO SECTION 33 21 20 PUMP STATION FOR PUMP SPECIFICATIONS.
- CONTRACTOR TO SUPPLY AND INSTALL PAINTED AND TESTED DIESEL PUMP WITH TRAILER PACKAGE c/w LIFTING RAIL, FUEL TANK AND AUTO CONTROL PANEL.
- 3. PUMP SYSTEM SHALL ALSO INCLUDE FLOW METER, PIPE HOSES AND A SCREEN.
- I. CONTRACTOR TO SUPPLY PUMP CURVES AND SPECIFICATIONS TO THE GON OR ITS REPRESENTATIVE FOR APPROVAL PRIOR TO ORDERING THE PUMP SYSTEM.

Community and Government Services - Government of Nunavut Quantity Estimate

Tetra Tech Project WTRM03121-01 - Chesterfield Inlet Water Transmission Line

Preliminaries	 }		Unit	Est Quantity
01 25 01	0-1	Mob / Demob, Temporary Facilities, Security, Quality Control, etc.	lump sum	1
01 35 14	0-2	Traffic Control, Barricades, and Temporary Signage	lump sum	1
01 71 00	0-3	Construction Surveys	lump sum	1
Site Services	3	·	Unit	Est Quantity
31 14 11	1-1	Gravel Removal	cu.m	500
31 14 11	1-2	Supply and Place Select Fill Material	cu.m	2,000
33 11 16	1-3	Supply and Install 200 mm DR11 HDPE Pipe	m	3,548
33 11 16	1-4	Supply and Install Air Release Valve	each	10
33 11 16	1-5	Supply and Install Drain Valve	each	15
31 14 11	1-6	Supply and Place Sand for Pumping Pad (Fuel Containment)	cu. m	15
33 42 13	1-7	Supply and Install 600 mm CSP Culvert	m	123
31 37 10	1-8	Supply and Place 50 kg Class Riprap	cu. m	105
31 32 21	1-9	Supply and Place Non-Woven Geotextile	sq. m	1,000
31 32 21	1-10	Supply and Install HDPE Liner	sq. m	75
33 11 16	1-11	Supply and Install Pipe Anchor	each	55
33 11 16	1-12	Supply and Install Pipe Casing	m	55
02 41 13	1-13	Culvert Removal and Off-Site Disposal	each	2
02 41 13	1-14	Shed Removal and Off-Site Disposal	lump sum	1
<i>l</i> lechanical			Unit	Est Quantity
33 21 20	2-1	Supply and Install Pump System c/s Trailer, Controls, and Flow Meter	lump sum	1
33 11 16	2-2	Supply 200 mm Diameter Flexible Hose	m	75
Miscellaneous		Unit	Est Quantity	
01 35 43	3-1	Dewatering	lump sum	1
01 35 43	3-2	Sediments and Erosion Control Measures	lump sum	1
02 41 13	3-3	Demolition and Off-Site Disposal of Existing Pipeline	m	3,200
33 11 16	3-4	Supply and Install Valve Box Marker with High U12 Pennant	each	25

1 Quantities shown on this table are estimates and provided for reference only.

LEGEND NOTES

E 4/10/19 JDM DNM DNM 100% DESIGN - ISSUED FOR REVIEW
D 4/11/19 JDM DNM DNM 100% DESIGN - ISSUED FOR REVIEW
C 3/14/19 JDM DNM DNM 100% DESIGN - ISSUED FOR REVIEW
B 3/5/19 JDM DNM DNM 100% DESIGN - ISSUED FOR REVIEW
A 2/26/19 JDM DNM DNM 100% DESIGN - ISSUED FOR REVIEW
NUM DATE DWN CKD APR DESCRIPTION
REVISIONS

LIENT



WATER TRANSMISSION LINE DESIGN CHESTERFIELD INLET, NUNAVUT

GENERAL NOTES AND QUANTITIES



PROJECT NO.	OFFICE	DES	CKD	REV	DRAWING
WTRM03121-01	VANC	DNM	DNM	E	
					G1.02
DATE	SHEET No.	DWN	APP	STATUS	G1.02
April 10, 2019	of	JDM	DNM	IFR	



