LA MODIFICATION SUIVANTE APPORTÉE AUX DOCUMENTS D'APPEL D'OFFRES ENTRE EN VIGUEUR IMMÉDIATEMENT. L'ADDENDA DOIT FAIRE PARTIE DES DOCUMENTS CONTRACTUELS.

# AMENDEMENT AU SPECIFICATIONS ET DESSINS

# Mise à niveau de l'infrastructure

# Passe migratoire de la rivière Terra Nova, T.-N.-L.

Les modifications et mises à jour décrites dans le présent addenda incluent, sans s'y limiter :

- Le réfrigérateur actuellement dans le hangar d'entreposage doit être retiré du site et éliminé dans une installation approuvée à cette fin. Tous les autres articles dans le hangar d'entreposage actuel seront transférés dans le nouveau hangar dès qu'il sera construit.
- 2. Les entrepreneurs ont le droit d'utiliser l'immeuble à logements existant pendant la période du contrat de construction.
- 3. Les entrepreneurs sont informés qu'une évaluation des risques a révélé la présence d'amiante et de moisissures sur le site. Voir l'annexe C pour plus de détails. Les entrepreneurs doivent éliminer les matières dangereuses conformément à tous les règlements applicables. Le plan de sécurité propre au site établi par les entrepreneurs doit comprendre leurs procédures et une liste du personnel qualifié.
- Aux fins de soumissions, les entrepreneurs doivent inclure l'enlèvement et le remplacement de la totalité du revêtement en contreplaqué du toit de l'immeuble à logements.
- Les batteries qui seront fournies par le Canada arriveront à Stephenville (T.-N.-L.).
- 6. Les réparations au mur de dérivation en béton ne sont plus incluses dans la portée des travaux. Ce projet ne nécessite pas de béton.
- 7. Les 50 heures d'hélicoptère sont calculées sur la base d'un hélicoptère ayant une capacité de levage de 2 000 lb.
- 8. La construction doit être pratiquement terminée d'ici le 28 février 2018.
- Tous les autres points sont notés dans les dessins révisés ou dans les spécifications énumérées ci-dessus. Tous les changements sur les dessins ont été définis.

Les entrepreneurs doivent savoir que le présent addenda comprend tous les points susmentionnés, ainsi que tous les changements inscrits sur les dessins et les spécifications énumérées ci-dessous. Les entrepreneurs doivent examiner les nouveaux dessins et les sections de spécifications pour s'assurer de connaître tous les changements apportés. Les entrepreneurs doivent noter que tous les travaux associés à ce projet doivent être inclus dans le prix de la soumission pour ce travail. Les entrepreneurs doivent inclure l'ensemble des installations, de l'équipement, des matériaux et de la main-d'œuvre nécessaires pour ce travail.

# Dessins :

1. Remplacer :

Remplacer les dessins suivants dans les documents de construction par les dessins correspondants ci-joints :

C1 de 7 C2 de 7 C3 de 7 C4 de 7 C5 de 7 C7 de 7

# **Spécifications :**

1. Remplacer :

Remplacer les sections des spécifications suivantes dans les documents de construction par les sections correspondantes ci-jointes :

Indice Section 01 10 10 – Instructions générales Section 01 16 10 – Matériel fourni par le Canada Section 01 35 29 – Exigences en matière de santé et sécurité

2. Supprimer :

Supprimer les sections des spécifications suivantes dans les documents de construction :

Section 03 10 00 – Coffrage à béton et accessoires

Section 03 20 00 – Armature en béton Section 03 30 00 – Béton coulé sur place Section 03 35 00 – Finissage du béton Section 35 00 00 – Assèchement

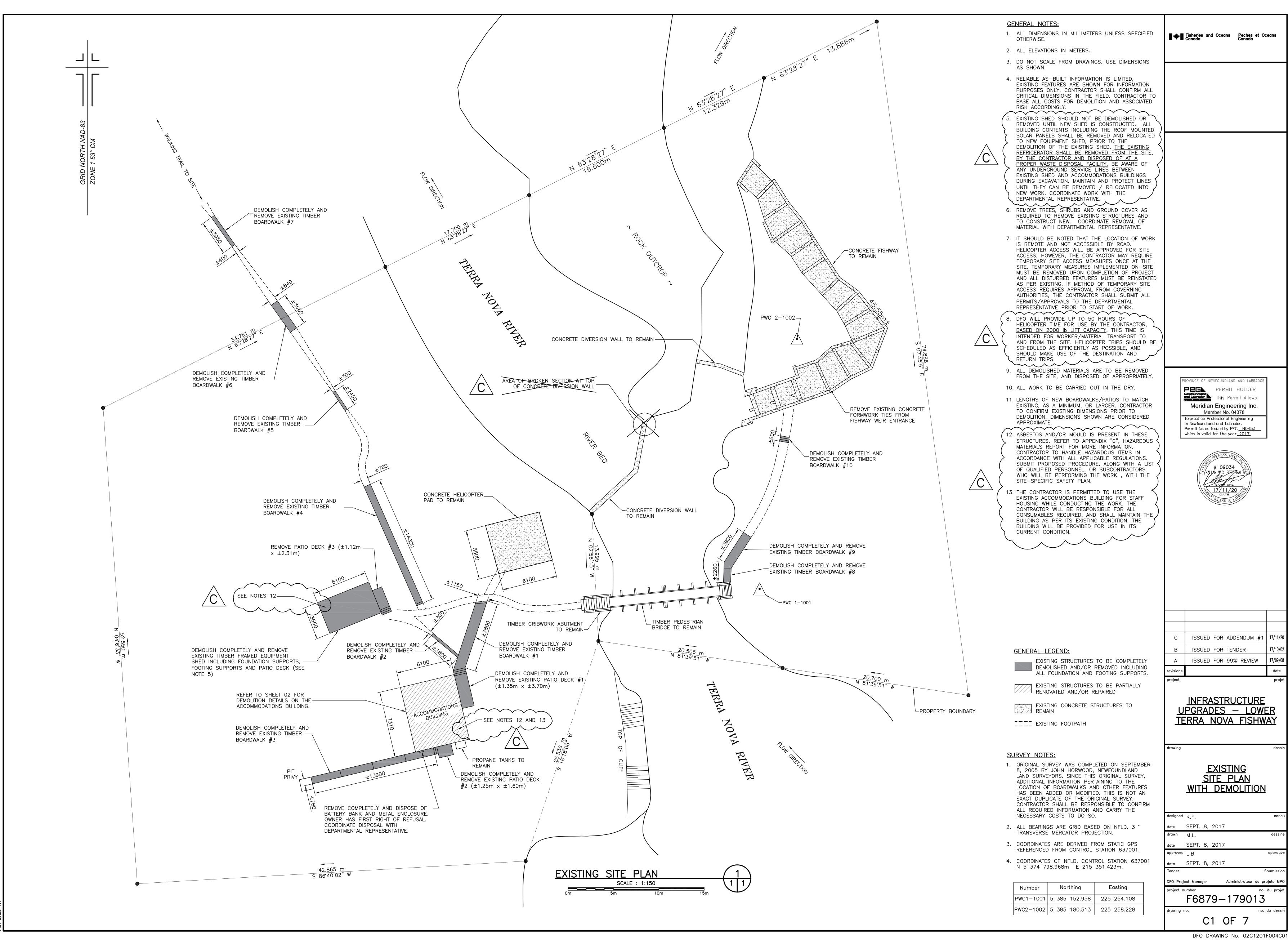
3. Ajouter :

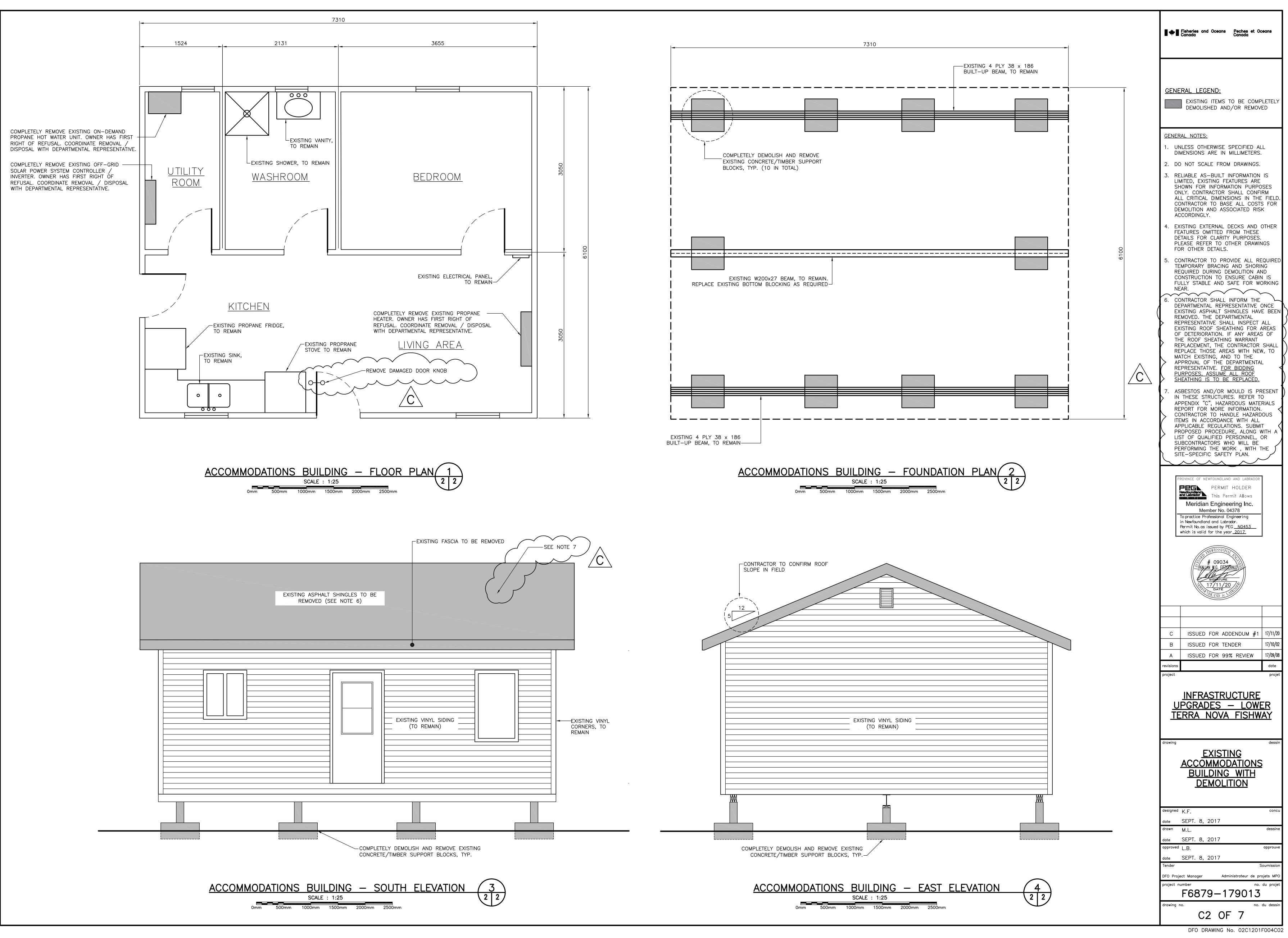
Ajouter les sections des spécifications suivantes dans les documents de construction :

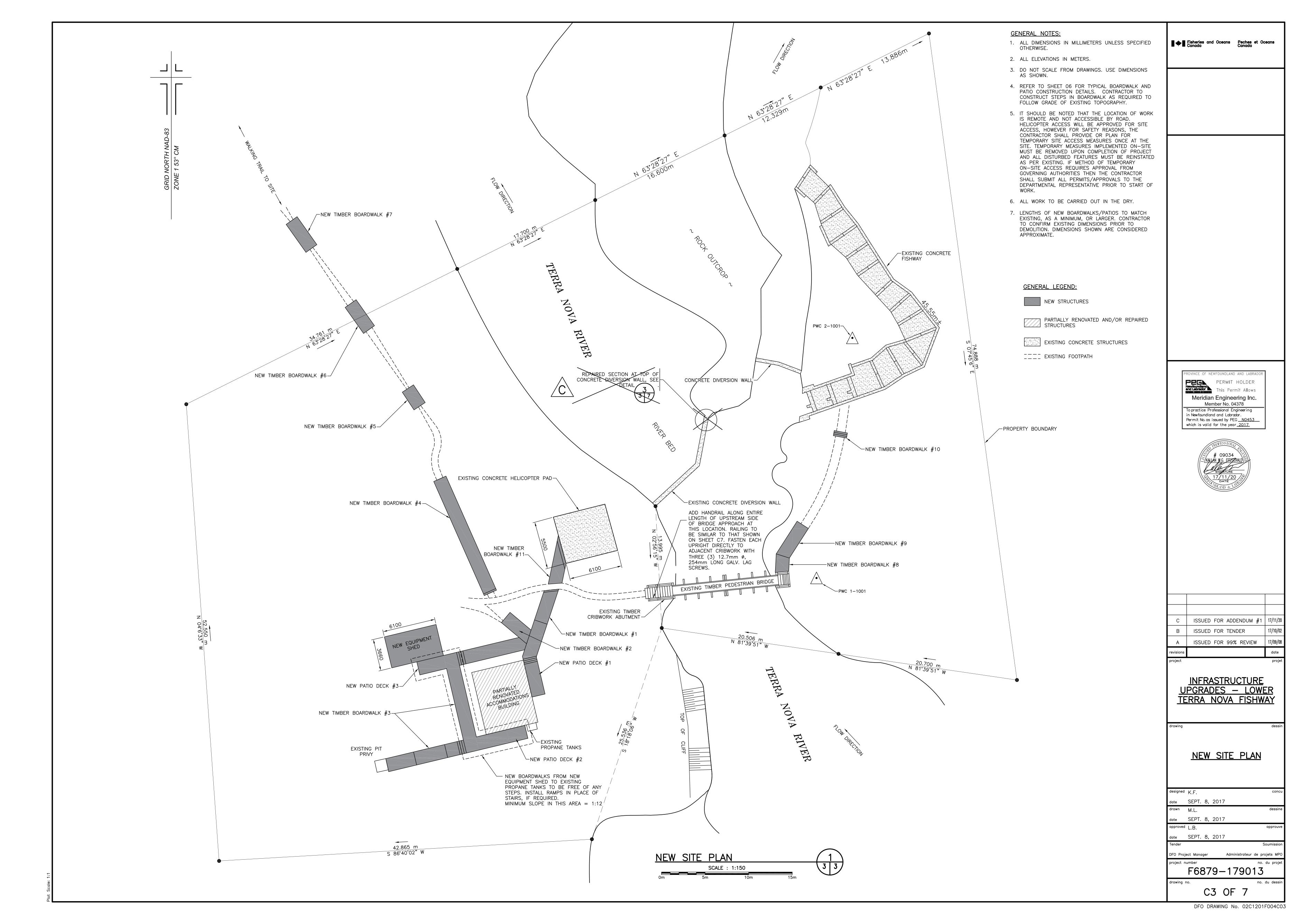
Annexe C – Rapport sur les matières dangereuses

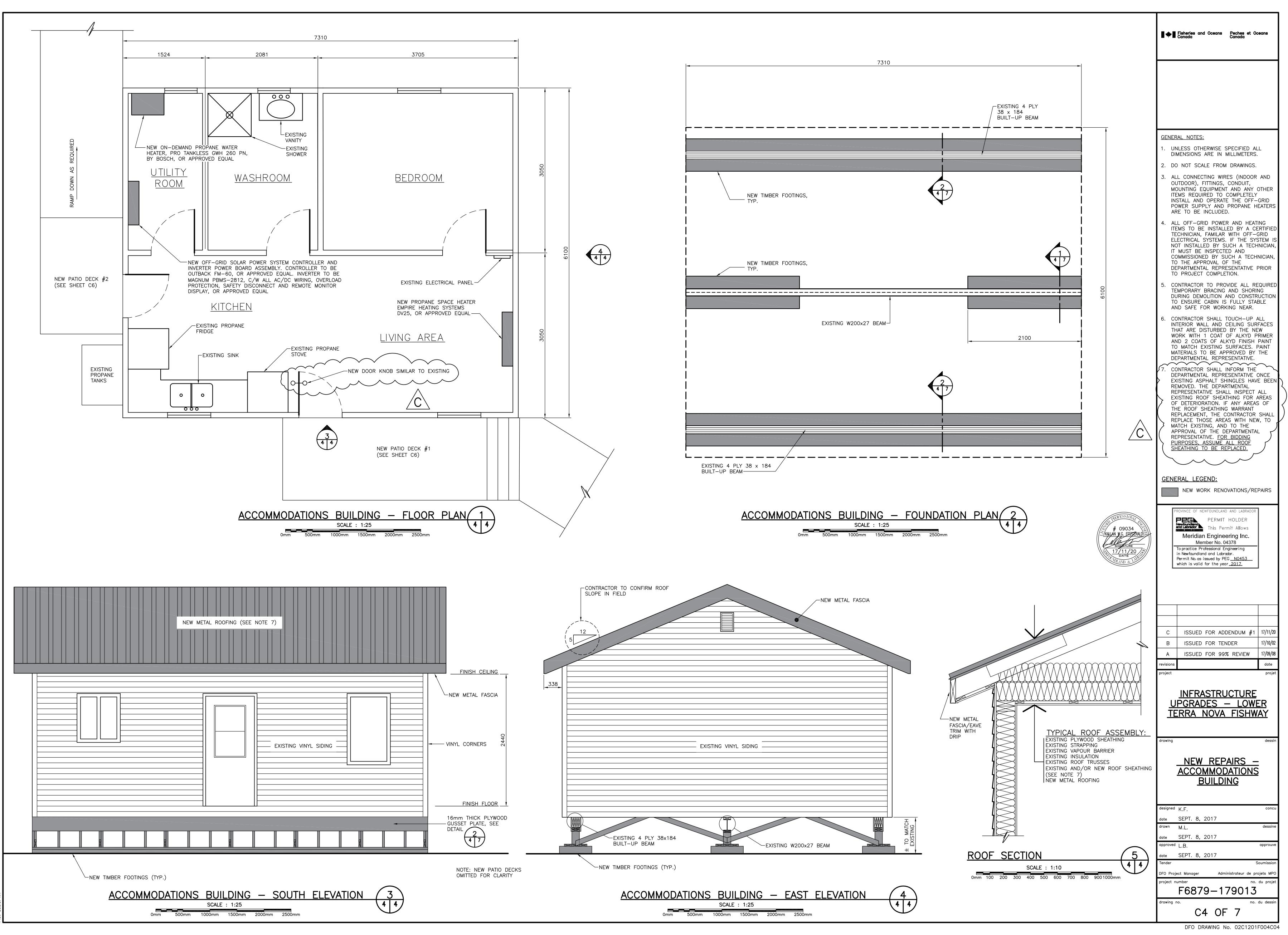
En présentant une soumission, le soumissionnaire confirme qu'il a lu et comprend les exigences énoncées dans l'ensemble des addendas et qu'il a inclus tous les coûts de ces exigences dans le montant total de sa soumission.

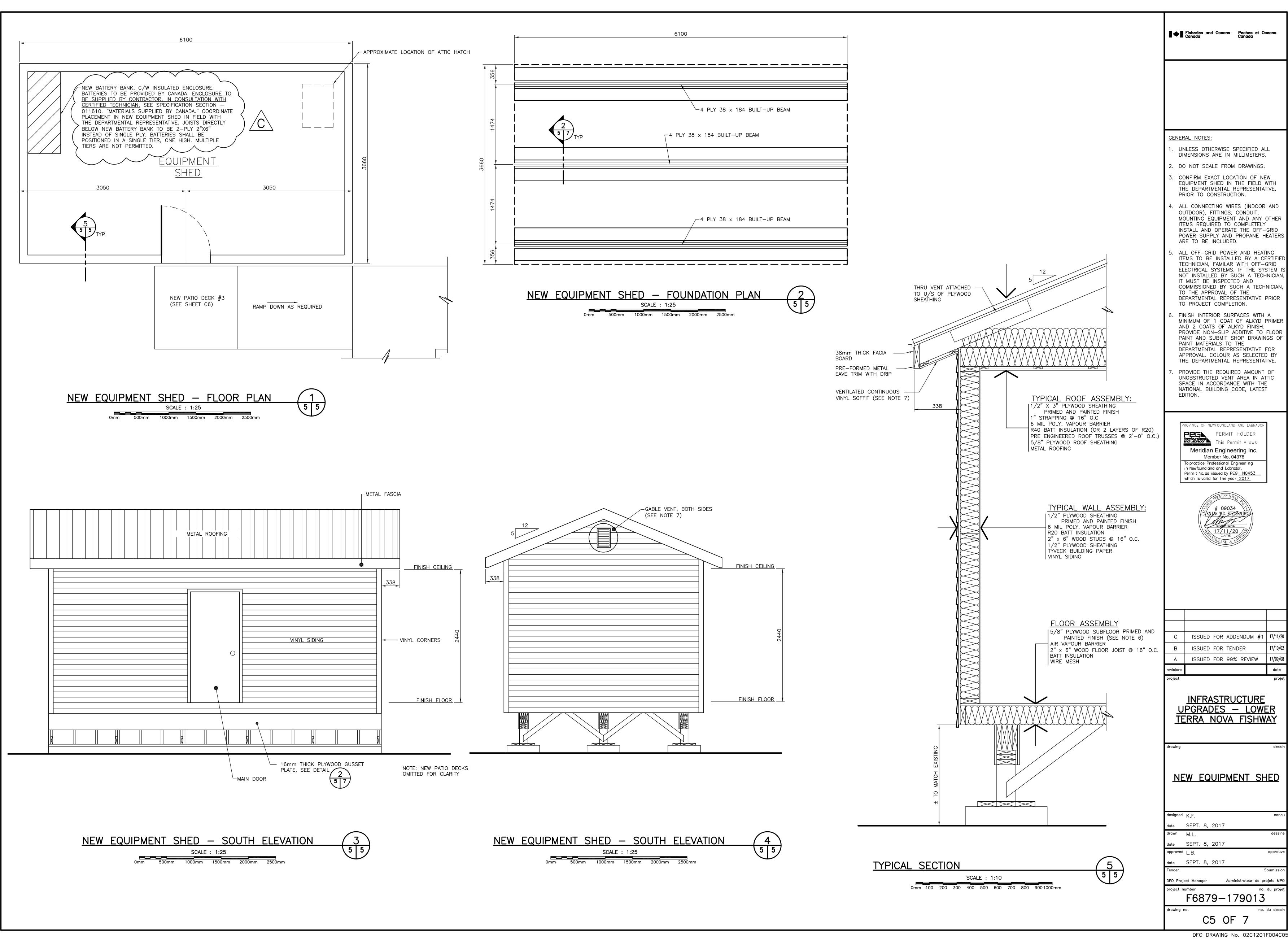
Toutes les autres conditions demeurent inchangées.

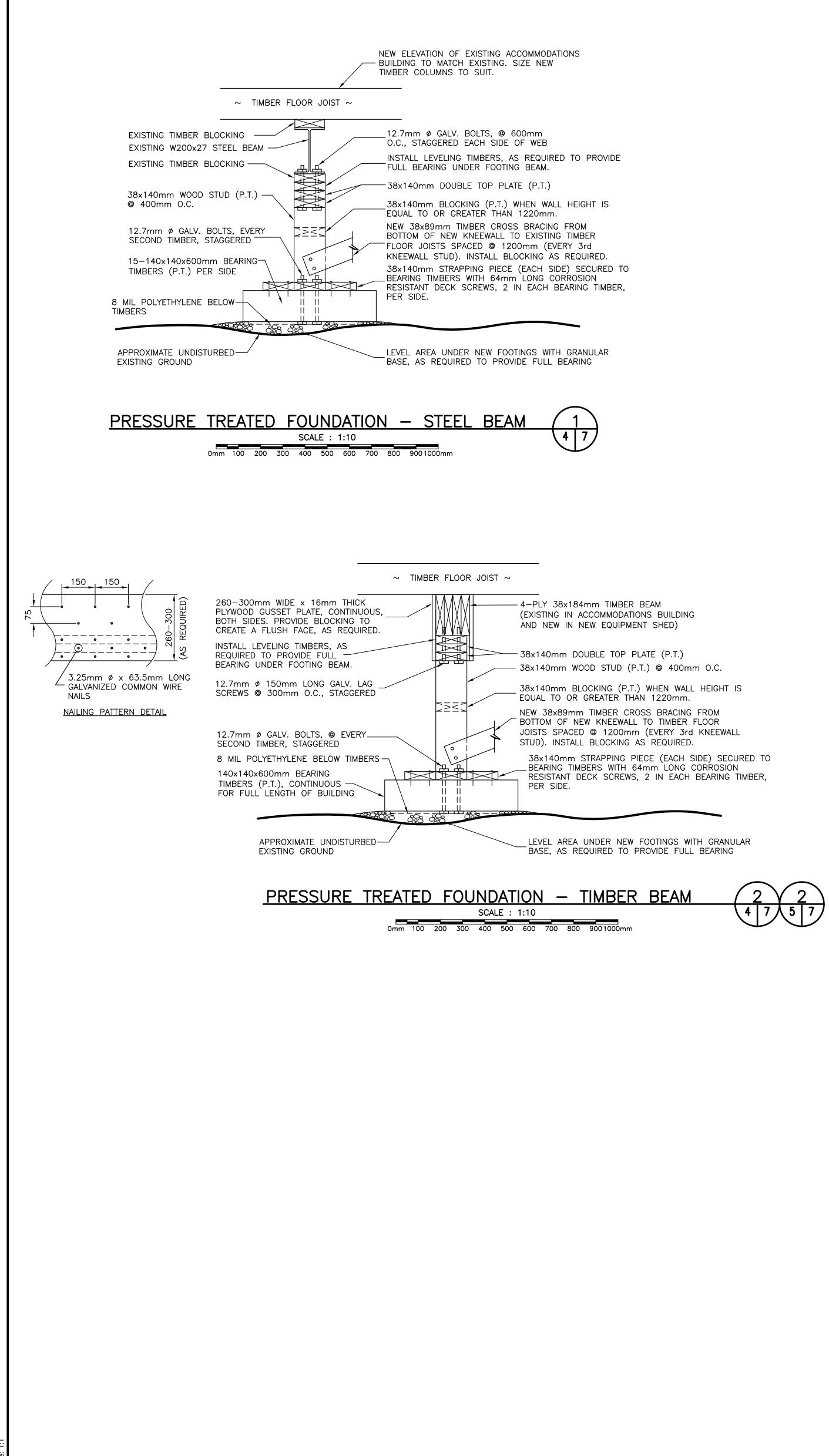








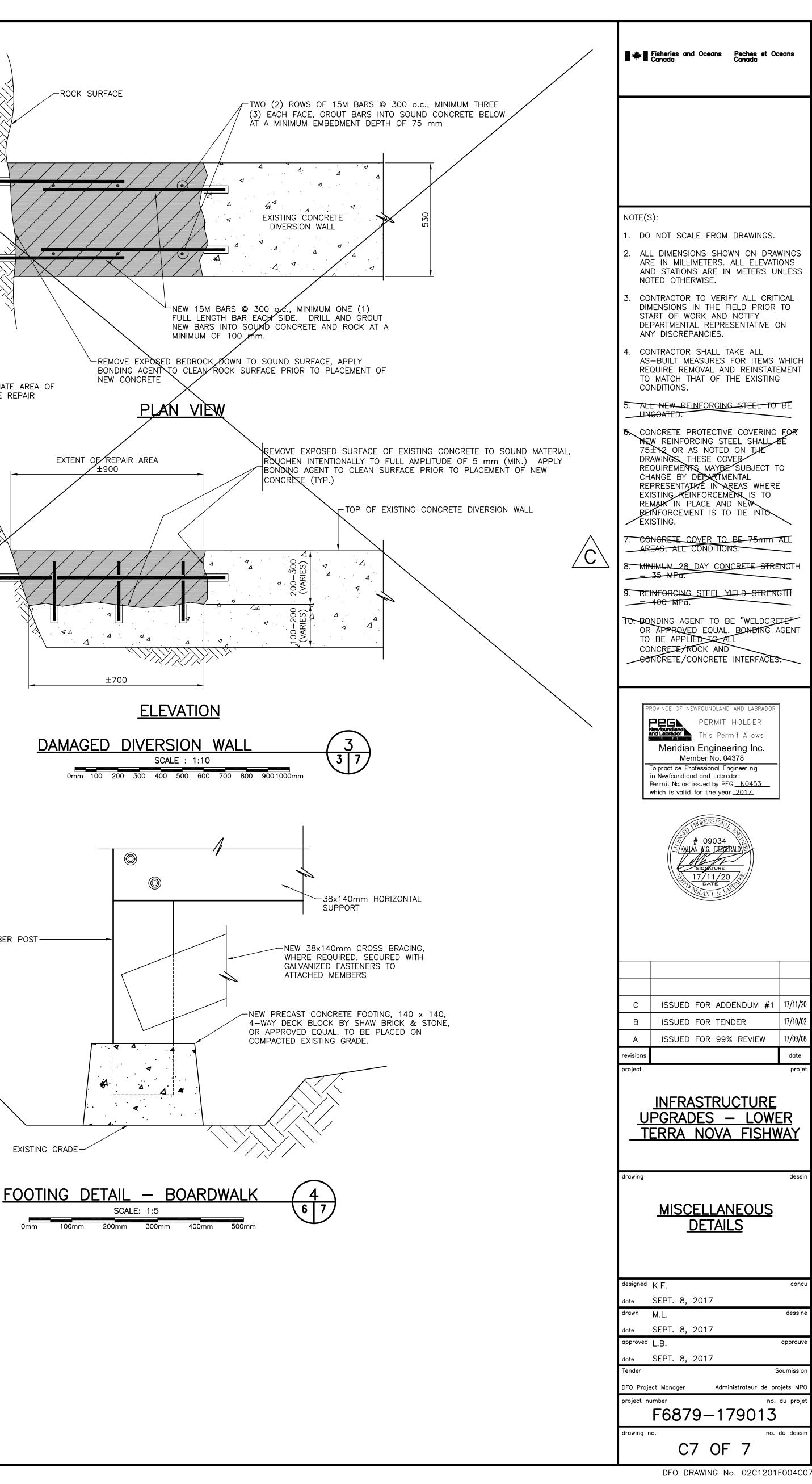




APPROXIMATE AREA OF APPROXIMATE AREA CONCRETE REPAIR EXISTING ROCK FACE- $\sqrt{C}$ 

NEW 140 x 140 TIMBER POST-

EXISTING GRADE



### DFO Lower Terra Nova Infrastructure Upgrades PROJECT NO. F6879-179013

#### \_\_\_\_\_

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SECTION	TITLE PAGE(S)	
	Title Page	1
	List of Drawings	1
01 10 10	General Instructions	10
01 16 10	Material Supplied by Canada	3
01 29 83	Payment Procedures for Testing Laboratory Services	2
01 32 18	Construction Progress Schedules - Bar (GANTT) Chart	3
01 33 00	Submittal Procedures	5
01 35 24	Special Procedures on Fire Safety Requirements	4
01 35 25	Special Procedures on Lockout Requirements	6
01 35 29	Health & Safety Requirements	10
01 35 43	Environmental Procedures	7
01 45 00	Testing and Quality Control	4
01 50 00	Temporary Facilities	2
01 56 00	Temporary Barriers and Enclosures	1
01 61 00	Common Product Requirements	4
01 74 11	Cleaning	2
01 74 21	Construction/Demolition Waste Management & Disposal	5
01 77 00	Closeout Procedures	2
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02 41 16	Demolition and Removal	1
06 10 00	Rough Carpentry	5
13 34 23.01	Building Structures & Equipment	7
32 01 91	Tree & Shrub Preservation	2
32 11 23	Aggregate Base Courses	2

## List of Appendices

Appendix A	-	Contractor's Copy of the Regulatory Approvals
Appendix B	-	Photos
Appendix C	-	Hazardous Materials Reports

DFO	General Instructions	Section 01 10 10
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PART 1 - GENERAL

1.1 SCOPE .1 The work covered under this project consists of the furnishing of all plant, labour, equipment, hardware and materials, complete and in strict accordance with specifications and accompanying drawings and subject to all terms and conditions of contract. Bidders are advised that opportunities and requirements may arise that may warrant changes to the work that are in keeping with this general scope of work. Such changes will be made through the change order processes as outlined in the contract documents.

.1

- 1.2 DESCRIPTION
- The work will generally consist of but will not necessarily be limited to the following:
  - .1 Demolition and removal of the existing timber boardwalks, patio decks, and equipment shed, as indicated on the drawings;
  - .2 Removal of the existing formwork tie rods located at the existing fishway entrance, as indicated on the drawings;
  - .3 Repairs to the accommodations building, including replacement of underlying footings and new metal roofing and underlying roof sheathing, as indicated on the drawings;
  - .4 Construction of new timber boardwalks and patio decks, as indicated on the drawings;
  - .5 Construction of a new equipment shed, as indicated on the drawings;
  - .6 Replacement of the existing on-demand propane water heater and propane space heater, as indicated on the drawings;
  - .7 Upgrades to the off-grid power supply system (solar power system), as indicated on the drawings, including replacement of the charge controller/regulator, batteries and insulated enclosure, and inverter power board assembly;
  - .8 Proper removal and disposal of hazardous materials, as indicated on the drawings and in Appendix C. Handling of ant hazardous materials to be carried out in accordance with all applicable regulations and by properly trained and certified personnel;
  - .9 Construction of handrailing on one side of existing timber bridge approach, as indicated on the drawings;
  - .10 Site clean-up;
  - .11 Note: See Part 1.7 Examination of Site and Part 1.16 Site Access for details regarding DFO provided helicopter services.
  - .12 Note: See part 1.5 scheduling and work methodology for construction deadline details.

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110,000 100, 100,0 1,0010		

- 1.3 FISH HABITAT/DOMESTIC .1 Contractors are advised that this project is being carried out in an area where fish habitat may be affected. The contractor will perform the work to conform with all rules and regulations governing fish habitat and in accordance with governing authorities.
  - .2 There shall be no fishing in and around the construction site during the regulated fishing season, even if the employees are in possession of a legal fishing license.
  - .3 The Contractor shall confirm the times, dates, and extent of work required with local fish habitat authorities.
  - .4 Contact the Department of Fisheries and Oceans (DFO) at least 48 hours in advance of starting any work on site.
  - .5 For inquiries regarding fish habitat please contact the Departmental Representative (Contracting Officer).
- 1.4 SITE OF WORK .1 Work will be carried out at the existing site at Lower Terra Nova Fishway, NL, in the location as shown on the accompanying drawings. The Lower Terra Nova Fishway site is located on the Terra Nova River approximately 9km upstream from Glovertown, NL. The work site is remote and not accessible by road. For the purpose of this work, DFO will be providing helicopter services. Refer to part 1.16 of this section for additional information.

1.5 SCHEDULING AND

WORK METHODOLOGY

- .1 Construction must be substantially complete by February 28, 2018, which requires work to be completed during the winter of 2017/2018.
  - .2 All work must be carried out in the dry. Where berms are required to accomplish this, the design of such berms is to be carried out by a professional engineer licensed to practice in Newfoundland and Labrador. Drawings of the berm design, stamped by the engineer, are to be submitted to the Departmental Representative before any work starts.
- <u>1.6 DATUM</u> .1 All bearings on the Drawings are grid based on NFLD 3 Transverse Mercator Projection. Coordinates are derived from static GPS referenced from control station 637001 (N 5,374,798.968 E 215,351.423). PWC control

DFO General Instructions Section 01 10 10 Lower Terra Nova Infrastructure Upgrades Page 3 of 10 Project No. F6879-179013 point coordinates are listed on the drawing.

- .2 Bidders are advised to consult the Department of Environment and Conservation and the Government of Canada Wateroffice in order to make sure of changing water level conditions affecting work.
- 1.7 EXAMINATION OF SITE .1
- Before submitting a bid, it is mandatory that bidders .1 visit the site and its surroundings to review and verify the form, nature and extend of work, materials necessary for the completion of the works, the means of access to the site, severity, exposure and uncertainty of weather, soil conditions, any accommodations they may require, and in general shall obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. No allowance shall be made subsequently in this connection on account of error or negligence to properly observe and determine the conditions that will apply. DFO will provide helicopter services for the mandatory pre-tender site visit. See below.
  - .2 DFO will schedule a site visit during the tender period. The site visit will occur over a one day period with helicopter flights leaving from and returning to Clarenville. Contractor is responsible for all costs associated with getting to and from Clarenville. Specific meeting location will be clarified at the tender stage. Departmental Representative will pay for helicopter services associated with the one day site visit held during the tender period. Contractors wishing to visit site shall contact the Departmental Representative to obtain flight times/schedule. Please note the following:
    - If weather doesn't permit flying on the scheduled site visit day, it will occur on the following day.
    - A maximum of 1 person per Contractor will be permitted.
    - Time allocated on site will be a maximum of 2 hours.
    - 2 days advance notice is to be given to the Departmental Representative with respect to the company and individuals attending the visit.
    - The Site visit will occur within 8 calendars days after the project is tendered.
  - .3 Contractors, bidders or those they invite to site are to review specification Section 01 35 29 - Health and Safety Requirements before visiting site. Take all appropriate safety measures for any visit to site, either before or after acceptance of bid.

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- 1.8 ARCHIVAL PHOTOGRAPHS .1 Archival photographs of the existing site are included in Appendix B. These photos are intended to give the contractors an appreciation of site conditions and general understanding of the project scope of work. These photos should in no way be considered a replacement to an actual site visit. Contractors are required to visit the site as per part 1.7 of this specification section. Any interpretations and/or assumptions made with respect to these photos are the contractor's responsibility.
- <u>1.9 TERMS</u>...1 Unless specifically stated otherwise, the term Engineer where used in the Specifications and on the Drawings shall mean the Department Representative as defined in the General Conditions of the Contract.
  - .2 In cases where submittals are required to be submitted under seal of a professional Engineer licensed to practice in NL, this does refer to an Engineer, and not the Departmental Representative.
- 1.10 COST BREAKDOWN .1 Before submitting first progress claim submit breakdown of Contract price in detail as directed by Departmental Representative and aggregating contract price.
  - .2 Provide cost breakdown in same format as the numerical and subject title system used in this specification and thereafter sub-divided into major work components as directed by Departmental Representative.
  - .3 Upon approval by Departmental Representative, cost breakdown will be used as basis for progress payment.
  - .4 This project will be lump sum. All work items and costs to be included.
- 1.11 WORK SCHEDULE .1 Submit within seven (7) working days of notification of acceptance of bid, a construction schedule showing commencement and completion of all work within the time stated on the bid and acceptance form and the date stated in the bid acceptance letter.
  - .2 Provide sufficient details in schedule to clearly illustrate entire implementation plan, depicting efficient coordination of tasks and resources, to achieve completion of work on time and permit effective monitoring of work progress in relation to established

DFO	General Instructions	Section 01 10 10
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Infrastructure Upgrades		Page 5 of 10
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	milestones.	

As a minimum, work schedule to be prepared and submitted in the form of bar (GANTT) charts, indicating work activities, tasks and other project elements, their anticipated durations and planned dates for achieving key activities and major project milestones provided in sufficient details and supported by narratives to demonstrate a reasonable plan for completion of project within designated time (e.g., show target dates for completion of each structure element, if applicable). Breakdown the structure elements to indicate target dates for completion of each element. Generally, bar charts derived from commercially available computerized project management systems are preferred but not mandatory.

.4 Submit schedule updates on a minimum monthly basis and more often, when requested by Departmental Representative, due to frequent changing project conditions. Provide a narrative explanation of necessary changes and schedule revisions at each update.

.5 The schedule, including all updates, shall be to the Departmental Representative's approval. Take necessary measures to complete work within approved time. Do not change schedule without Departmental Representative's approval.

.6 All work on the project will be completed within the time indicated on the Bid and Acceptance Form.

.7 Should contractor find that he cannot maintain schedule as originally intended, he will immediately submit a revised schedule without being requested to do so by Departmental Representative.

.8 Work schedule to be consistent with scheduling and methodology restrictions previously noted in Part 1.5.

.1 Following abbreviations of standard specifications have been used in this specification and on drawings.

CGSB - Canadian Government Specifications Board CSA - Canadian Standards Association NLGA - National Lumber Grades Authority ASTM - American Society for Testing and Materials.

.2 Where these abbreviations and standards are used in this project, latest edition in effect on date of tender call will be considered as applicable.

1.12 ABBREVIATIONS

DFO		General Instructions	Section 01 10 10
Lower Terra Nova Infrastructure Upgrades Project No. F6879-179013			Page 6 of 10
1.13 LAYOUT OF WORK	.1		n detail from control points epartmental Representative.
	.2	Assume full responsibility layout of work to location indicated or as directed b Representative.	s, lines and elevations
	.3	Provide devices needed to	layout and construct work.
	.4	Supply such devices as str required to facilitate Dep inspection of work.	
	.5	Supply stakes and other su laying out work.	arvey markers required for
	.6	Contractor will be respons as-built survey of all new	ible to complete and submit work.
1.14 QUARRY AND EXPLOSIVES	.1	authorities and owners of p quarrying and transportation	crangements with Provincial private properties, for the on of rock and all materials c work over their property, may be.
1.15 SITE OPERATIONS	.1	for conduct of operations, so on. Exercise care so as public or private property for space and access will to the approval of the De	ce adjacent to project site storage of materials and s not to obstruct or damage in area. All arrangements be made by contractor and partmental Representative. ng work, including tree ccordance with applicable
	. 2	condition. Damage to gro repaired by contractor. materials, residue, excess	store area to its original ound and property will be Remove all construction a, etc., and leave site in epartmental Representative.
	, 3		ired to maintain safe access damage existing structures ations of others.
1.16 SITE ACCESS	.1		ay. Therefore, helicopter r site access. The

DFO	General Instructions Section 01 10 10
Lower Terra Nova Infrastructure Upgrades Project No. F6879-179013	Page 7 of 10
	Plan/Timeline to the Departmental Representative no later than seven (7) days following the contract award.
	2 DFO will provide helicopter services for slinging purposes, to a maximum of 50 hours helicopter flying time. Any additional helicopter time required to complete the work in accordance with the contract documents will be at the Contractor's expense. Coordinate all helicopter service work with the Departmental Representative.
	3 The Contractor may require temporary site access measures, once at the site. These on-site measures must be removed upon completion of the project, and all distributed features must be reinstated, as per the existing conditions. If any temporary on-site access measures require approval from governing authorities, it is the responsibility of the Contractor to obtain these approvals/permits and submit them to the Departmental Representative prior to the start of work.
1.17 PROJECT MEETING	1 Departmental Representative will arrange project meetings and assume responsibility for setting times and recording minutes.
	2 Project meetings will take place on site of work unless so directed by Departmental Representative.
	3 Departmental Representative will assume responsibility for recording minutes of meetings and forwarding copies to all parties present at meetings.
	4 Have a responsible member of firm present at all Project Meetings.
1.18 PROTECTION	l Store all materials and equipment to be incorporated into work to prevent damage by any means.
	Repair or replace all materials or equipment damaged in transit or storage to the satisfaction of, and at no cost to, the Departmental Representative.
1.19 DOCUMENTS REQUIRED .	<ol> <li>Maintain at job site, one (1) copy each of the following:         <ol> <li>Contract drawings.</li> <li>Specifications.</li> <li>Addenda.</li> <li>Reviewed shop drawings.</li> <li>List of outstanding shop drawings.</li> <li>Change Orders.</li> </ol> </li> </ol>

- .6 Change Orders.
- .7 Other modifications to contract.

DFO	General Instructions Section 01 10 10
Lower Terra Nova Infrastructure Upgrades Project No. F6879-179013	Page 8 of 10
	<ul> <li>.8 Field test reports.</li> <li>.9 Copy of approved work schedule.</li> <li>.10 Site specific Health and Safety Plan and other safety related documents.</li> <li>.11 Permits and Regulatory Approvals and Requirements.</li> <li>.12 Other documents as stipulated elsewhere in the Contract Documents.</li> </ul>
1.20 TAXES AND PERMITS .	1 Obtain and pay for all permits, certificates and licenses as required by Municipal, Provincial, Federal and other authorities.
	2 Provide appropriate notifications of project to Municipal and Provincial inspection authorities.
	3 Obtain compliance certificates as prescribed by legislative and regulatory provisions of Municipal, Provincial and Federal authorities as applicable to the performance of work.
	4 Submit to Departmental Representative, copy of application submissions and approval documents received for above referenced authorities.
	5 Submit to Departmental Representative, copy of quarry permit, if applicable, prior to start of quarry operations.
	6 Comply with all requirements, recommendations and advice by all regulatory authorities unless otherwise agreed in writing by Departmental Representative. Make requests for such deviations to these requirements sufficiently in advance of related work.
	7 See Appendices for Regulatory Approvals and Responses already obtained by Canada for this project.
1.21 EXISTING . SUB-SURFACE CONDITIONS	1 There is no previous information pertaining to the existing sub-surface conditions.
1.22 CONTRACTOR'S USE .1 OF SITE	The contractor is advised that the construction operations, including storage of materials, for this contract must not interfere with the normal operations at the site.
.2	The contractor will be solely responsible for arranging the storage of materials on or off the site.
.3	Exercise care so as not to obstruct or damage public

)FO	General Instructions	Section 01 10 10
Lower Terra Nova		
Infrastructure Upgrades		Page 9 of 10
Project No. F6879-179013		
	or private property in the	area.
1.23 WORK COMMENCEMENT .	1 Mobilization to project site after acceptance of bid and s Safety Plan, unless otherwis Representative.	submission of site specific
	2 Construction activities/pro as soon as possible after no a continuous reasonable wor directed by Departmental Re	tice of tender award, with kforce unless otherwise
	Weather conditions, winter restrictions, delivery chall deadlines (substantially co 2018), and the location of the use of longer working day to complete the project withi time.	lenges, project completion mplete by February 28, the work site may require 's and additional workforce
	4 Make every effort to ensure and equipment is delivered possible date after acceptan as required.	to site at the earliest
.24 ACCEPTANCE .	Prior to the issuance of the Performance, in company wit Representative, make a check discrepancies before final i	h Departmental of all work. Correct all
.25 WORKS COORDINATION .	l Responsible for coordinatin trades, where the work of su each other.	
	2 Convene meetings between tra and ensure that they are ful the extent of where interface each trade with the plans a interfacing trade, as requi planning and carrying out t	lly aware of the areas and cing is required. Provide nd specifications of the red, to assist them in
	3 Canada will not be responsib for any extra costs incurred to carry out coordination we various trades as a result o of the areas and extent of i sole responsibility of the Ge be resolved at no extra cos	as a result of the failure ork. Disputes between the f their not being informed nterface work shall be the eneral Contractor and shall

DFO	Gene	ral	Instructions	Section 01 10 10
Lower Terra Nova Infrastructure Upgrades Project No. F6879-179013				Page 10 of 10
1.26 INTERPRETATION OF .1 DOCUMENTS	01 te	sec hni	ementary to the General Co tions of the specificatio cal specification in oth Fications.	ns take precedence over
1.27 BIODEGRADABLE HYDRAULIC OILS	be spe are she	ecif ecif eas. eets	ent working in and adjac quipped with biodegrad Fically intended for env Contractor shall submit on hydraulic oil to be u emental Representative.	lable hydraulic oils ironmentally sensitive MSDS and Technical Data

## PART 2 - PRODUCTS

2.1 NOT USED

## PART 3 - EXECUTION

3.1 NOT USED

Lower 5	Terra	Nova
Infras	tructi	ıre Upgrades
PROJEC	T NO.	F6879-179013

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#### PART 1 - GENERAL

DFO

1.1 <u>GENERAL</u> .1 Canada will supply certain materials in the Contract for installation and incorporation into the Work by the Contractor.

1.2 <u>MATERIAL SUPPLIED</u> .1 Canada will supply: New Solar Batteries - 12 x Deca Solar Photovoltaic Batteries, Cell Type AVR95-25L.

> The above materials supplied by Canada is not a complete list required to complete the work in accordance with the drawings and specifications. Additional accessories may be required, including wiring, conduit, etc., any of these items are the responsibility of the Contractor, and may not be supplied by Canada.

.2 The materials supplied by Canada are to be picked-up by the Contractor and delivered to the site. The location of all Canada supplied materials to be picked-up, is at the CCG Base in Stephenville, NL. The contact person is Jackie Rodway (709-772-6409). Contractor to provide three (3) day notice prior to pick-up of materials.

1.3 <u>DELIVERY</u> REQUIREMENTS

- .1 Materials supplied by Canada will be available for pick-up following acceptance of Bid. Once turned over to the Contractor, the Contractor will be responsible for delivery to the work site.
- .2 The Contractor will become responsible to supply all missing materials and repair or replace damaged items and missing parts discovered during transportation to site.
- .3 Failure of the Contractor to make a complete check of the Canada-supplied material and to acknowledge receipt of same once picked up at the CCG Base in

DFO	Mat	cerial	Supplied by Canada SECTION 01 16 10
	Terra Nova		
	structure Upgrades CT NO. F6879-179013		Page 2 of 3
11001	NO. 10079 179013		Stephenville, NL, shall not relieve him of this contractual responsibility to replace or repair any item subsequently found to be missing or damaged.
		.4	Departmental Representative will make final determination as to whether an item can be repaired or must be replaced.
1.4	CONTRACTOR'S DUTIE	<u>s</u> .1	Pick-up Canada-supplied material, at the CCG Base in Stephenville, NL.
		.2	Take possession of Canada-supplied material immediately upon pick-up and be responsible for transportation to site.
		.3	Obtain and pay for services to load and transport to site.
		• 4	Unload and handle at site, including lifting, uncrating, etc.
		.5	Store material on site at a location approved by Departmental Representative. Provide protection against inclement weather and site damage by use of appropriate covers.
		.6	Be responsible for the protection of such material against damage, loss, theft and fire from date of receipt, during transportation, loading, unloading, temporary storage and until final installation of work is accepted by the Departmental Representative.
		.7	Any damage or loss of such material shall result in the Contractor being responsible for replacement or repair of equipment at no cost to Canada.
		.8	The decision as to whether damaged items may be repaired or must be replaced with new equipment shall be the Departmental Representative's decision.
		0	Install such material and incomposed

.9 Install such material and incorporate into the work. Perform assembly and

DFO	Material	Supplied by	Canada	SECTION 01 16 10
Lower Terra Nova				
Infrastructure Upgrad	es			
PROJECT NO. F6879-179	013			Page 3 of 3
			connections functional.	as required to
	.10	-	covering	rs, crating and off site as Departmental

Representative.

DFO	HEALTH AND SAFETY	Section 01 35 29
Lower Terra Nova		
Infrastructure Upgrades		Page 1 of 10
<u>Project No: F6879-179013</u>	REQUIREMENTS	
1.1 RELATED WORK	.1 Section 01 35 24 - Special Procee Safety Requirements.	dures on Fire
1.2 DEFINITIONS	.1 COSH: Canada Occupational Health Regulations made under Part II of Code.	-
	<ul> <li>.2 Competent Person: means a person with and experience to perform assigned that will ensure the health and separsons in the workplace, and;</li> <li>.2 Knowledgeable about the provision occupational health and safety staregulations that apply to the Work apply to the Work about potential or health or safety associated with</li> <li>.3 Medical Aid Injury: any minor information medical treatment was provided and which is covered by Workers' Compation which the injury</li> </ul>	nowledge, training ed work in a manner safety of ns of tatutes and rk and; actual danger to the Work. jury for which nd the cost of pensation Board of
	.4 PPE: personal protective equipment	ıt.
	.5 Work Site: where used in this see areas, located at the premises wh undertaken, used by Contractor to the activities associated with th the Work.	nere Work is o perform all of
1.3 SUBMITTALS	.1 Make submittals in accordance wit 01 33 00.	ch Section
	<ul> <li>.2 Submit site-specific Health and Sa commencement of work.</li> <li>.1 Submit within (5) work days of Bid and Acceptance Form.</li> <li>.2 Departmental Representative will and Safety Plan and provide comments.</li> <li>.3 Revise the Plan as appropriate within five (5) work days after a comments.</li> <li>.4 Departmental Representative's a made of the Plan shall not be commenders.</li> <li>.4 Departmental Representative is a made of the Plan shall not be commenders.</li> <li>.4 Departmental Representative or implied kind by Canada and does not reduce overall responsibility for Occupation Safety of the Work.</li> </ul>	notification of ll review Health ents. and resubmit receipt of review and comments nstrued as an warranty of any ce Contractor's

Safety of the Work. .5 Submit revisions and updates made to the Plan during the course of Work.

DFO	HEALTH AND SAFETY	Section 01 35 29
Lower Terra Nova Infrastructure Upgrades Project No: F6879-179013	REQUIREMENTS	Page 2 of 10
	.6 Plan shall include procedure of qualified personnel, for ha materials (asbestos/mould. Pla applicable regulations.	ndling hazardous n shall adhere to all
	3 Submit name of designated Healt Representative and support doc in the Health and Safety Plan.	umentation specified
	4 Submit building permit, complia other permits obtained.	nce certificates and
	<ul> <li>5 Submit copy of Letter in Good S Provincial Workers Compensation of labour organization.</li> <li>.1 Submit update of Letter in G expiration date occurs during</li> </ul>	n or other department cood Standing whenever
	6 Submit copies of reports or dir Federal, Provincial and Territ safety inspectors.	
	7 Submit copies of incident repor	ts.
	8 Submit WHMIS MDS - Material Saf unless otherwise directed by t Representative.	-
1.4 COMPLIANCE REQUIREMENTS	1 Comply with the Occupational H for the Province of Newfoundla the Occupational Health and Sa pursuant to the Act.	nd and Labrador, and
	<ul> <li>2 Comply with Canada Labour Code Occupational Health and Safety Occupational Health and Safety as well as any other regulation the Act.</li> <li>.1 The Canada Labour Code can b www.http://laws.justice.gc.ca/</li> <li>.2 COSH can be viewed at: www.http://laws.justice.gc.ca 304/ne.html.</li> <li>.3 A copy may be obtained at: Ca Government Publishing Public Government Services Canada Ot K1A OS9 Tel: (819) 956-4800 ( Publication No. L31-85/2000 E</li> </ul>	<pre>c) and the Canada Regulations (COSH) ns made pursuant to e viewed at: en/L-2/ /eng/SOR-86- nadian Works &amp; tawa, Ontario, 1-800-635-7943)</pre>

.3 Observe construction safety measures of: .1 Part 8 of National Building Code.

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	<ul> <li>.2 Municipal by-laws and or</li> <li>.4 In case of conflict or discrep specified requirements, the mo apply.</li> </ul>	ancy between any
	.5 Maintain Workers Compensation standing for duration of Contr through submission of Letter i	act. Provide proof
	.6 Medical Surveillance: Where pre legislation or regulation, obt worker medical surveillance do	ain and maintain
1.5 RESPONSIBILITY	.1 Be responsible for health and site, safety of property and for persons and environment adjace extent that they may be affect Work.	or protection of nt to the site to
	.2 Comply with and enforce compli- sub-contractors and other pers- work site with safety requirem Documents, applicable Federal, local by-laws, regulations, an- with site specific Health and	ons granted access to ents of Contract Provincial, and d ordinances, and
1.6 SITE CONTROL AND ACCESS	<ul> <li>.1 Control the Work and entry point Approve and grant access only authorized persons. Immediatel non-authorized persons.</li> <li>.1 Departmental Representative those persons authorized by Dep Representative to enter onto W ensure that such authorized pe required knowledge and training Safety pertinent to their reass site, however, Contractor rema for the health and safety of a while at the Work Site.</li> </ul>	to workers and y stop and remove will provide names of partmental ork Site and will rsons have the g on Health and on for being at the ins responsible
	<ul> <li>.2 Isolate Work Site from other arby use of appropriate means.</li> <li>.1 Erect fences, hoarding, barr lighting as required to effective Work Site, stop non-authorized pedestrians and vehicular traff adjacent to the Work and create</li> <li>.2 Post signage at entry points locations indicating restricted conditions for access.</li> <li>.3 Use professionally made sign message in the 2 official lang</li> </ul>	icades and temporary vely delineate the entry, and to protect ic around and a safe environment. and other strategic access and s with bilingual

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		~~~~~~	
		international known graphic s	ymbols.
	.3	Provide safety orientation ses granted access to Work Site. safety rules to be observed wh	Advise of hazards and
	.4	Ensure persons granted site ac PPE. Supply PPE to inspection require access to conduct test inspections.	authorities who
	.5	Secure Work Site against entry unoccupied and to protect pers Provide security guard where a cannot be achieved by other me	ons against harm. dequate protection
	.6	Given the remote location of t Contractor shall provide or pl site access and communication emergency.	lan for a method of
1.7 PROTECTION	.1	Give precedence to safety and protection of environment ove considerations for Work.	
	.2	Should unforeseen or peculiar or condition become evident d Work, immediately take measur situation and prevent damage Departmental Representative v writing.	luring performance of res to rectify or harm. Advise
1.8 FILING OF NOTICE	.1	<pre>File Notice of Project with pe Provincial health and safety a beginning of Work. .1 Departmental Representativ locating address in needed.</pre>	uthorities prior to
1.9 PERMITS	.1	Post permits, licenses and co specified in section 01 10 10	-
	.2	Where a particular permit or cannot be obtained, notify De Representative in writing and proceed before carrying out a work.	partmental lobtain approval to
1.10 HAZARD ASSESSMENTS	.1	Perform site specific health assessment of the Work and it	

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	.2 Carryout initial assessme of Work with further asse progress of work, includi subcontractors arrive on	essments as needed during ing when new trades and
	.3 Record results and addres Safety Plan.	ss in Health and
	.4 Keep documentation on site the Work.	e for entire duration of
1.11 PROJECT/SITE CONDITIONS	<pre>and safety hazards at sit involve contact with: .1 Isolated site locat .2 Wet and slippery co .3 Inclement weather c .4 Working during the .5 Heavy lifting. .6 Falls. .7 Drowning. .8 Working at heights. .9 Cutting tools and o tools. .10 Working in close pr contractors. .11 Flooding and high w .12 Rapid flowing water .13 River falls and ster .14 Sharp objects.</pre>	tion. nditions. onditions. winter. ther construction power oximity with other ater levels.
	.2 Above items shall not be complete and inclusive of safety hazards encountered	f potential health, and
	.3 Include above items into h	nazard assessment process.
1.12 MEETINGS	<ul> <li>.1 Contractor to hold pre-construction safety meeting prior to operate the set of the set</li></ul>	commencement of Work. d Health & Safety Site and Safety Site
	.2 Conduct regularly schedule safety meetings during the Occupational Health and S	e Work in conformance with

.3 Keep documents on site.

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1.13 HEALTH AND SAFETY PLAN		Tety Plan specific to the cain, and enforce Plan for the cain of the case of t
	Site Representative and his/her competence and Contractor's company. .6 Names, competence an other supervisory perso occupational health and .7 Procedures and list	a and safety hazards assessment. ed to mitigate risks d. and Emergency ecified below. on Plan as specified a designated Health & Safety d information showing proof of reporting relationship in ad reporting relationship of onnel used in the Work for d safety purposes. of qualified personnel for erials (asbestos/mould).
	<pre>shall include: .1 Operational procedur communication process event of an emergency. .2 Evacuation Plan: sit showing escape routes, alarm notification meth firefighting equipment .3 Name, duties and res designated as Emergency .4 Emergency Contacts: number of officials .1 General Contractors. .2 Pertinent Feder Departments and jurisdiction. .3 Local emergency organizations. .5 Harmonize Plan with and Evacuation Plan.</pre>	<pre>te and floor plan layouts marshaling areas. Details on hods, fire drills, location of and other related data. sponsibilities of persons v Warden(s) and deputies. name and telephone from: ctor and cal and Provincial d Authorities having v resource Facility's Emergency Response Departmental Representative c data including name of PWGSC</pre>

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	emergency and evacuation r .2 List of critical work	of work related safety d subcontractors, including measures. activities to be y Manager which have a risk
	.5 Address all activities of of subcontractors.	the Work including those
	.6 Review Health and Safety Work. Update as condition emerging risks and hazar trade or subcontractor a	ns warrant to address ds, such as whenever new
	where deficiencies or co	ve will respond in writing, ncerns are noted and may the Plan with correction rns.
	.8 Post copy of the Plan, an Work Site.	d updates, prominently on
1.14 SAFETY SUPERVISION	.1 Employ Health & Safety S responsible for daily su Safety of the Work.	-
	responsibility and autho .1 Implement, monitor and with health and safety r .2 Monitor and enforce Co Health and Safety Plan. .3 Conduct site safety or persons granted access t .4 Ensure that persons al knowledgeable and traine pertinent to their activ escorted by a competent Site.	Work or other person and shall be assigned the rity to: enforce daily compliance equirements of the Work ntractor's site-specific ientation session to o Work Site. lowed site access are d in health and safety
	health and safety. .2 Have site-related work activities of the Work.	esentative must: tent person in occupational ing experience specific to times during execution of

the Work.

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	.4 All supervisory personnel shall also be competent persons .5 Inspections:	
	<ul> <li>.1 Conduct regularly scheinspections of the Work basis. Record deficience taken.</li> <li>.2 Conduct Formal Inspection monthly basis. Use standinspection forms. Distrisubcontractors.</li> <li>.3 Follow-up and ensure of the subcontractors.</li> </ul>	on a minimum daily ies and remedial action tions on a minimum dardized safety ibute to
	<ul> <li>.5 Follow up and ensure taken.</li> <li>.6 Keep inspection reports an documentation on site.</li> <li>.7 Cooperate with Facility's Safety representative showing the second sec</li></ul>	d supervision related Occupational Health &
	by the Departmental Repre-	-
1.15 TRAINING	.1 Use only skilled workers on a effectively trained in occup safety procedures and practi- assigned task.	ational health and
	.2 Maintain employee records and received. Make data available Representative upon request.	
	.3 When unforeseen or peculiar so or condition occur during per follow procedures in place fo Refuse Work in accordance wit of Province having jurisdicti Departmental Representative v	formance of Work, or Employee's Right to Ch Acts and Regulations on and advise
	.4 All workers dealing with haza required to provide evidence accordance with Provincial re	of training, in
1.16 MINIMUM SITE SAFETY RULES	.1 Notwithstanding requirement to federal and provincial health regulations; ensure the follow safety rules are obeyed by per access to Work Site:	and safety wing minimum
	<ul> <li>.1 Wear appropriate PPE pertine Work or assigned task; mine safety footwear, safety glass hearing protection.</li> <li>.2 Immediately report unsafe near-miss accident, injury as .3 Maintain site and storage condition free of hazards cast.</li> <li>.4 Obey warning signs and safe</li> </ul>	imum being hard hat, ses safety vest and condition at site, nd damage. areas in a tidy using injury.

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	.2	Brief persons of disciplinary pr for non-compliance. Post rules	
1.17 CORRECTION OF NON-COMPLIANCE	.1	Immediately address health and compliance issues identified by jurisdiction or by Departmental	authority having
	.2	Provide Departmental Representat report of action taken to corre health and safety issues identi	ct non-compliance of
	.3	Departmental Representative will compliance of health and safety corrected in a timely manner.	
1.18 INCIDENT REPORTING	.1	<pre>Investigate and report the foll Departmental Representative: .1 Incidents requiring notificat Department of Occupational Safe Workers Compensation Board or t Agency. .2 Medical aid injuries. .3 Property damage in excess of .4 Interruptions to facility ope an operational lost to a fed excess of \$5,000.</pre>	ion to Provincial ty and Health, o other regulatory \$10,000.00. erations resulting in
	.2	Submit report in writing.	
1.19 HAZARDOUS PRODUCTS	.1	Comply with requirements of Wor Materials Information System WH	
	.2	Keep MSDS data sheets for all prosite. .1 Post on site. .2 Submit copy to Departmental Re	
1.20 BLASTING	.1	Blasting or other use of explosion on site (without prior receipt permission and instructions from Representative).	of written
1.21 POWDER ACTUATED DEVICES	.1	Use powder actuated fastening de receipt of written permission f Representatives.	
1.22 CONFINED SPACES	.1	Abide by occupational health and regarding work in confined space	

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1.23 SITE RECORDS .1 Maintain on Work Site copy of safety related documentation and reports stipulated to be produced in compliance with Acts and Regulations of authorities having jurisdiction and of those documents specified herein.

- .2 Upon request, make available to Departmental Representative or authorized Safety Officer for inspection.
- 1.24 POSTING OF
   .1
   Ensure applicable items, articles, notices and orders are posted in conspicuous location on Work Site in accordance with Acts and Regulations of Province having jurisdiction.
  - .2 Post other documents as specified herein, including:.1 Site specific Health and Safety Plan..2 WHMIS data sheets.
- 1.25 DIVING OPERATIONS .1 All diving work to comply fully with the requirements of the latest editions of CSA Standard Z275.2 "Occupational Safety Code for Diving Operations", CSA Z275.4, "Competency Standards for Diving Operations", and CSA Z180.1, "Compressed Breathing Air and Systems".
  - .2 Dive personnel must meet the minimum competency requirements of the latest edition of CSA Z275.4 and all divers must possess a valid Category I Diving Certificate, or an unrestricted surface supply certificate.
  - .3 Diving in free-swim mode is not permitted at the work site.
  - .4 Divers must have a current (less than one year) validated medical examination certificate from a licensed diving physician in Newfoundland and Labrador, who is knowledgeable and competent in diving and hyperbaric medicine, for all dives.

# Appendix C

Hazardous Materials Reports

Table C-1: Bulk Sample Descriptions and Asbestos Analytical Results (Terra Nova Fishway - Cabin) DRAFT

Sample ID	Material (Layer) Analyzed	Detailed Material Description	Sample Location	Room (Photo No.)	Analytical Result
CB-AS-1-Shingle	shingle	Black asphalt shingle and tar	Roof	Cabin - Exterior	ND
CB-AS-1-Tar	tar	tar	Roof	Cabin - Exterior	10% Chrysotile
CB-AS-2	concrete	Concrete block	Under Cabin	Cabin - Exterior	ND
CB-AS-3	cinder block	Cinder block	Under Cabin	Cabin - Exterior	ND
CB-AS-4	caulking	Grey caulking	Exterior (propane line)	Cabin - Exterior	ND
CB-AS-5	caulking	White caulking	Door frame	Cabin - Exterior	ND
CB-AS-6	DJC	Drywall joint compound (painted white)	Wall (exterior)	Cabin - Room 1	ND
CB-AS-7	DJC	Drywall joint compound (painted white)	Ceiling	Cabin - Room 1	ND
CB-AS-8	DJC	Drywall joint compound (painted white)	Wall (interior)	Cabin - Room 1	ND
CB-AS-9	caulking	White caulking	Shower	Cabin - Room 3	ND

Notes:

\*Caulking/sealant sample was also analyzed for PCBs

ND: Non-detect (≤1% asbestos)

ACM: Asbestos-containing material

Shaded value >1% asbestos (dry weight) is considered to be an ACM as outlined in the NL Asbestos Abatement Regulations (Reg. 111/98)

Table C-2: Bulk Sample Descriptions and Asbestos Analytical Results (Terra Nova Fishway - Outhouse) DRAFT

Sample ID	Material (Layer) Analyzed	Detailed Material Description	Sample Location	Room (Photo No.)	Analytical Result
OH-AS-1-Roofing Material roofing material Roofing material (black) and tar (black)		Roofing material (black) and tar (black)	Roof	Outhouse Exterior	ND
OH-AS-1-Tar	tar	tar (black)	Roof	Outhouse Exterior	5.1% Chrysotile

Notes:

ND: Non-detect (≤1% asbestos)

ACM: Asbestos-containing material

Shaded value >1% asbestos (dry weight) is considered to be an ACM as outlined in the NL Asbestos Abatement Regulations (Reg. 111/98)

Table C-3: Bulk Sample Descriptions and Asbestos Analytical Results (Terra Nova Fishway - Equipment Building) DRAFT

Sample ID	Material (Layer) Analyzed	Detailed Material Description	Sample Location	Room (Photo No.)	Analytical Result
EB-AS-1-Shingle	shingles	Black asphalt shingles and tar	Roof	Equiptment Bulding - Exterior	ND
EB-AS-1-Tar	tar	Tar	Roof	Equiptment Bulding - Exterior	ND
EB-AS-2A*	caulking	White caulking	Clapboard	Equiptment Bulding - Exterior	ND
EB-AS-3	cinder block	Cinder block	Under Equipment Building	Equiptment Bulding - Exterior	ND
EB-AS-4	drywall	Drywall	Ceiling	Equiptment Bulding - Room 1	ND
EB-AS-5	drywall	Drywall	Wall (interior)	Equiptment Bulding - Room 1	ND
EB-AS-6	drywall	Drywall	Wall (exterior)	Equiptment Bulding - Room 2	ND

#### Notes:

\*Caulking/sealant sample was also analyzed for PCBs ND: Non-detect (<1% asbestos) ACM: Asbestos-containing material

Shaded value >1% asbestos (dry weight) is considered to be an ACM as outlined in the NL Asbestos Abatement Regulations (Reg. 111/98)

Table C-4: Paint Sample Descriptions and Lead Analytical Results (Terra Nova Fishway - Cabin) DRAFT

Sample ID	Colour Description	Substrate	Sample Location	Room No. (Photo No.)	RDL (mg/kg)	Total Lead (mg/kg)
CB-PS-1	Light grey	Wood	Patio	Cabin Exterior	5.0	5.2
CB-PS-DUP1	Light grey	Wood	Patio	Cabin Exterior	5.0	7.3
CB-PS-2*	Dark grey	Wood	Baseboard	Cabin - Room 1	5.0	<5.0
CB-PS-3	Light grey over dark grey	Wood	Floor	Cabin - Room 1	50.0	<50
CB-PS-4	White	Drywall	Wall	Cabin - Room 1	5.0	7.3

Notes

CB-PS-DUP1 is a blind field duplicate of paint sample CB-PS-1 \*Paint sample included substrate RDL: Reportable detection limit <X: non detect Bold and underlined value exceeds Federal HPA criterion (90 mg/kg) Shaded value exceeds former Federal HPA criterion (5,000 mg/kg)

Table C-5: Paint Sample Descriptions and Lead Analytical Results (Terra Nova Fishway - Outhouse) DRAFT

Sample ID	Colour Description	Substrate	Sample Location	Room No. (Photo No.)	RDL (mg/kg)	Total Lead (mg/kg)
OH-PS-1	White	Wood	Wall	Outhouse	5.0	<5.0
OH-PS-2	Grey	Wood	Floor	Outhouse	5.0	72
Notes						

RDL: Reportable detection limit <X: non detect

Bold and underlined value exceeds Federal HPA criterion (90 mg/kg) Shaded value exceeds former Federal HPA criterion (5,000 mg/kg)

#### Table C-6: Paint Sample Descriptions and Lead Analytical Results (Terra Nova Fishway - Equipment Building) DRAFT

Sample ID	Colour Description	Substrate	Sample Location	Room No. (Photo No.)	RDL (mg/kg)	Total Lead (mg/kg)
EB-PS-1	White	Wood	Clapboard	Equiptment Building - Exterior	5.0	37
EB-PS-2	White	Drywall	Wall	Equiptment Building - Room 1	5.0	50
EB-PS-3	Dark green	Wood	Floor	Equiptment Building - Room 1	5.0	21

Notes RDL: Reportable detection limit

<X: non detect

Bold and underlined value exceeds Federal HPA criterion (90 mg/kg) Shaded value exceeds former Federal HPA criterion (5,000 mg/kg)

Table C-7: Paint Sample Descriptions and Mercury Analytical Results (Terra Nova Fishway - Cabin) DRAFT

Sample ID	Colour Description	Substrate	Sample Location	Room No. (Photo No.)	RDL (mg/kg)	Total Mercury (mg/kg)
CB-PS-1	Light grey	Wood	Patio	Cabin Exterior	1.0	<1.0
CB-PS-DUP1	Light grey	Wood	Patio	Cabin Exterior	1.0	<1.0
CB-PS-2*	Dark grey	Wood	Baseboard	Cabin - Room 1	1.0	<1.0
CB-PS-3	Light grey over dark grey	Wood	Floor	Cabin - Room 1	1.0	2.0
CB-PS-4	White	Drywall	Wall	Cabin - Room 1	1.0	<1.0
Notos						

Notes

CB-PS-DUP1 is a blind field duplicate of paint sample CB-PS-1 \*Paint sample included substrate RDL: Reportable detection limit <X: Not detected CCME: Canadian Council of Ministers of the Environment CSQG: Canadian Soil Quality Guideline HPA: Hazardous Products Act Bold and underlined value exceeds Federal HPA criterion (10 mg/kg)

Shaded value exceeds CCME CSQG for an industrial site (50 mg/kg)

Table C-8: Paint Sample Descriptions and Mercury Analytical Results (Terra Nova Fishway - Outhouse) DRAFT

Sample ID	Colour Description	Substrate	Sample Location	Room No. (Photo No.)	RDL (mg/kg)	Total Mercury (mg/kg)
OH-PS-1	White	Wood	Wall	Outhouse	1.0	1.1
OH-PS-2	Grey	Wood	Floor	Outhouse	1.0	<1.0
Notes						
RDL: Reportable detect	tion limit					
<x: detected<="" not="" td=""><td></td><td></td><td></td><td></td><td></td><td></td></x:>						
CCME: Considian Court	ocil of Ministors of the Environme	ot				

CCME: Canadian Council of Ministers of the Environment CSQG: Canadian Soil Quality Guideline HPA: Hazardous Products Act Bold and underlined value exceeds Federal HPA criterion (10 mg/kg)

Shaded value exceeds CCME CSQG for an industrial site (50 mg/kg)

Table C-9: Paint Sample Descriptions and Mercury Analytical Results (Terra Nova Fishway - Equipment Building) DRAFT

Sample ID	Colour Description	Substrate	Sample Location	Room No. (Photo No.)	RDL (mg/kg)	Total Mercury (mg/kg)
EB-PS-1	White	Wood	Clapboard	Equiptment Building - Exterior	1.0	<1.0
EB-PS-2	White	Drywall	Wall	Equiptment Building - Room 1	1.0	<1.0
EB-PS-3	Dark green	Wood	Floor	Equiptment Building - Room 1	1.0	<1.0
Notes						

RDL: Reportable detection limit <X: Not detected CCME: Canadian Council of Ministers of the Environment CSQG: Canadian Soil Quality Guideline HPA: Hazardous Products Act Bold and underlined value exceeds Federal HPA criterion (10 mg/kg) Shaded value exceeds CCME CSQG for an industrial site (50 mg/kg)

		Paint	
Sample ID	OH-PS-1	OH-PS-2	
Sample Location and Room No.	Outhouse	Outhouse	
Colour Description	White	Grey	
Substrate	wood	wood	
Location (Photo No.)	wall	floor	RDL
Parameter			(mg/kg)
Aroclor 1016	<5.0	<5.0	5.0
Aroclor 1221	<5.0	<5.0	5.0
Aroclor 1232	<5.0	<5.0	5.0
Aroclor 1248	<5.0	<5.0	5.0
Aroclor 1242	<5.0	<5.0	5.0
Aroclor 1254	<5.0	<5.0	5.0
Aroclor 1260	<5.0	<5.0	5.0
Total PCB (Calculated)	<5.0	<5.0	5.0
Notes:			

#### Table C-10: Sample Descriptions and PCB Analytical Results (Terra Nova Fishway - Outhouse) DRAFT

RDL: Reportable detection limit

<X: Non-detect

CCME: Canadian Council of Ministers of the Environment CSQG: Canadian Soil Quality Guideline Shaded value exceeds CCME CSQG for an industrial site (33 mg/kg)

		Pain	t		Caulkir	וg
Sample ID	EB-PS-1	EB-PS-2	EB-PS-3		EB-AS-2B	
Sample Location and Room No.	Equipment Building - Exterior	Equipment Building - Room 1	Equipment Building - Room 1		Equipment Building - Exterior	
Colour Description	White	White	Dark green		White	
Substrate	Wood	Drywall	Wood		Wood	
Location (Photo No.)	Clapboard	Wall	Floor	RDL	Clapboard	RDL
Parameter				(mg/kg)		(mg/kg)
Aroclor 1016	<5.0	<5.0	<5.0	5.0	<0.50	0.50
Aroclor 1221	<5.0	<5.0	<5.0	5.0	<0.50	0.50
Aroclor 1232	<5.0	<5.0	<5.0	5.0	<0.50	0.50
Aroclor 1248	<5.0	<5.0	<5.0	5.0	<0.50	0.50
Aroclor 1242	<5.0	<5.0	<5.0	5.0	<0.50	0.50
Aroclor 1254	<5.0	<5.0	<5.0	5.0	<0.50	0.50
Aroclor 1260	<5.0	<5.0	<5.0	5.0	<0.50	0.50
Total PCB (Calculated)	<5.0	<5.0	<5.0	5.0	<0.50	0.50
Notes:						

#### Table C-11: Sample Descriptions and PCB Analytical Results (Terra Nova Fishway - Equipment Building) DRAFT

Notes:

RDL: Reportable detection limit

<X: Non-detect

CCME: Canadian Council of Ministers of the Environment

CSQG: Canadian Soil Quality Guideline Shaded value exceeds CCME CSQG for an industrial site (33 mg/kg)

Table C-12: Mould Sample Descriptions and Analytical Results (Terra Nova Fishway - Equipment Building) DRAFT

Sample ID	Detailed Material Description	Sample Location / Room No. (Photo No.)	Mould Identified	Analytical Result
EB-MS-1	Mould on wall	Equipment Building - Room 1	Cladosporium Ulocladium Aspergillus Phoma	Abundant
Notes:				

1. Mould growth is subjectively assessed with description terms sparse, moderate and abundant.

 The presence of spores (lacking other fungal structures associated) is assessed as following: a few spores (< 10 spores average per microscopic field at 400X), some spores (10 - 100 spores average per microscopic field at 400X), many spores (> 100 spores average per microscopic field at 400X).

3. The presence of a few spores generally represents settled spores on the surface of the sample rather than indicating mould growth.