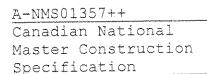
- .4 Keep no more than 45 litres of flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use. Store all flammable and combustible liquids in approved safety cans bearing the Underwriters' Laboratory of Canada or Factory Mutual seal of approval. Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires the written approval of the Consultant.
- .5 Transfer of flammable and combustible liquids is prohibited within buildings.
- .6 Transfer of flammable and combustible liquids will not be carried out in the vicinity of open flames or any type of heat-producing devices.
- .7 Flammable liquids having a flash point below 38° C, such as naphtha or gasoline, will not be used as solvents or cleaning agents.
- .8 Store flammable and combustible waste liquids for disposal in approved containers located in a safe, ventilated area. Keep quantities to a minimum.
- .9 Observe smoking regulations at all times. Smoking is prohibited in any area where hazardous materials are stored, used, or handled.
- .10 Abide by the following storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids, and 5 litres for liquids:
 - .1 Store hazardous materials and wastes in closed and sealed containers, which are in good condition.
 - .2 Label containers of hazardous materials and wastes in accordance with WHMIS.
 - .3 Store hazardous materials and wastes in containers compatible with that material or waste.
 - .4 Segregate incompatible materials and wastes.
 - .5 Ensure that different hazardous materials or hazardous wastes are not mixed.
 - .6 Store hazardous materials and wastes in a secure storage area with controlled access.
 - .7 Maintain a clear egress from storage area.
 - .8 Store hazardous materials and wastes in a manner and location, which will prevent them from spilling into the environment.



Hazardous Materials

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.9 Have appropriate emergency spill response equipment available near the storage area, including personal protective equipment.

.10 Maintain an inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.

- 11 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements.
- .12 Report spills or accidents immediately to Consultant.

 Submit a written spill report to Consultant within 24 hours of incident.

1.7 Transportation

- .1 Transport hazardous materials and wastes in accordance with federal Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.
- .2 If hazardous waste is generated on site:
 - .1 Coordinate transportation and disposal with Consultant.
 - .2 Ensure compliance with applicable provincial/territorial laws and regulations for generators of hazardous waste.
 - .3 Use only a licensed carrier authorized by provincial/territorial authorities to accept subject material.
 - .4 Prior to shipping material, obtain written notice from intended hazardous waste treatment or disposal facility that it will accept material and that it is licensed to accept this material.
 - .5 Label containers with legible, visible safety marks as prescribed by federal and provincial regulations.
 - .6 Ensure that only trained personnel handle, offer for transport, or transport dangerous goods.
 - .7 Provide a photocopy of all shipping documents and waste manifests to Consultant.
 - .8 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide a

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Hazard	ous	Mate	rials

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photocopy of completed manifest to Consultant.

.9 Report any discharge, emission, or escape of hazardous materials immediately to Consultant and appropriate provincial/ territorial authority. Take reasonable measures to control release.

PART 2 - PRODUCTS

2.1 Materials

- .1 Only bring on site the quantity of hazardous materials required to perform work.
- .2 Maintain MSDSs in proximity to where the materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

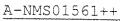
PART 3 - EXECUTION

3.1 Disposal

- .1 Dispose of hazardous waste materials in accordance with applicable federal and provincial/territorial acts, regulations, and guidelines.
- .2 Recycle hazardous wastes for which there is an approved, cost effective recycling process available.
- .3 Send hazardous wastes only to authorized hazardous waste disposal or treatment facilities.
- .4 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.
- .5 Disposal of hazardous materials in waterways, storm or sanitary sewers, or in municipal solid waste landfills is prohibited.
- .6 Dispose of hazardous wastes in a timely fashion in accordance with applicable provincial/territorial

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regulations.



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Environmental Protection

Section 01561 Page 1 2002-12-04

PART 1 - GENERAL

1.1 Fires Fires and burning of rubbish on site not permitted. .1 1.2 Disposal of Do not bury rubbish and waste materials on site. .1 Wastes .2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers. 1.3 Drainage Provide temporary drainage and pumping as necessary to .1 keep excavations and site free from water. .2 Do not pump water containing suspended materials into waterways, sewer or drainage systems. Control disposal or runoff of water containing suspended .3 materials or other harmful substances in accordance with local authority requirements. 1.4 Site Clearing Protect trees and plants on site and adjacent properties .1 and Plant where indicated. Protection Wrap in burlap, trees and shrubs adjacent to construction .2 work, storage areas and trucking lanes, and encase with protective wood framework from grade level to height of 2 m.

Protect roots of designated trees to dripline during excavation and site grading to prevent disturbance or damage. Avoid unnecessary traffic, dumping and storage

Minimize stripping of topsoil and vegetation.

of materials over root zones

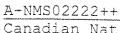
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Specification			2002-12-04				
	.5	Restrict tree removal to areas indi Engineer.	cated or designated by				
1.5 Work Adjacent	.1	Do not operate construction equip	oment in waterways.				
to Waterways	.2	Do not use waterway beds for borrow material.					
	.3	Do not dump excavated fill, waste material or debris in waterways.					
	.4	Design and construct temporary crossings to minimize erosion to waterways.					
	.5	Do not skid logs or construction mwaterways.	naterials across				
	.6	Avoid indicated spawning beds w temporary crossings of waterways					
· ·							
1.6 Pollution Control	.1	Maintain temporary erosion and prinstalled under this contract.	pollution control features				
	.2	Control emissions from equipmer authorities emission requirements	nt and plant to local s.				
	.3	Prevent sandblasting and other e contaminating air beyond applica temporary enclosures.	xtraneous materials from tion area, by providing				

.4

Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.



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Demolition of Structures

Section 02222 Page 1

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PART 1 - GENERAL

1.1 Related Sections

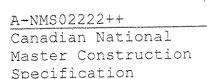
.1 Section 01356 - Procedures for Deconstruction of Structures.

1.2 References

- .1 Canadian Federal Legislation
 - .1 Canadian Environmental Protection Act (CEPA), 1988.
 - .2 Canadian Environmental Assessment Act (CEAA), 1995.
 - .3 Transportation of Dangerous Goods Act (TDGA), 1992.
- .2 Canadian Standards Association (CSA).
 - .1 CSA S350-M1980, Code of Practice for Safety in Demolition of Structures.

1.3 Existing Conditions

- .1 List of items to be salvaged for reuse:
- .1 Nunavut Airports may want to identify items that they woild like to salvage.
- .2 Structures to be demolished to be based on their condition on date that tender is accepted.



Demolition of Structures

Section 02222 Page 2

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1.4 Protection

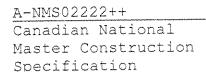
- .1 Prevent movement, settlement or damage of adjacent structures, services, walks, paving, landscaping, adjacent grades and parts of existing building to remain. Provide bracing, shoring and underpinning as required. Repair damage caused by demolition as directed by Consultant.
- .2 Support affected structures and, if safety of structure being demolished or adjacent structures or services appears to be endangered, take preventative measures and then cease operations and notify Consultant.
 - .1 Perform all work in accordance with Section 01561
 - Environmental Protection.
- Prevent debris from blocking surface drainage system, elevators, mechanical and electrical systems which must remain in operation.
- .4 Ensure that demolition work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.
- .5 Fires and burning of waste or materials is not permitted on site and is strongly discouraged off of site.
- .6 Do not bury waste or materials on site.
- .7 Do not dispose of waste or volatile materials such as: mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into watercourses, storm or sanitary sewers. Ensure proper disposal procedures are maintained throughout project.
- .8 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers, or onto adjacent properties.
- .9 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities.
- .10 Protect trees, plants and foliage on site and adjacent properties where indicated.
- .11 Prevent extraneous materials from contaminating air beyond application area, by providing temporary enclosures during demolition work.

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Canadian National Master Construction Specification		Demolition of Structures	Section 02222 Page 3 1999-01-26
de la seconda de	.12	Cover or wet down dry materials a blowing dust and debris. Control or roads.	and waste to prevent dust on all temporary
1.5 Submittals	.1	The Contractor is responsible for e requirements are fulfilled to the sa	ensuring all reporting itisfaction of Consultant.
	.2	Submit copies of certified weigh be receipts from authorized disposal recycling facilities for all material recycling facilities.	sites and reuse and
1.6 Regulatory Requirements	.1	Ensure work is performed in comp CEAA, TDGA, MVSA, and all appl regulations.	liance with CEPA, icable terratorial
and the second s	:		
PART 3 - EXECUTION			
3.1 Preparation	,1	Disconnect and re-route electrical a lines entering facilities to be demoli signs on electrical lines and equipm remain energized to serve other pro-	ished. Post warning nent which must

- of demolition. Disconnect and cap designated mechanical services. .2
- .3 Do not disrupt active or energized utilities designated to remain undisturbed.

3.2 Safety Code

Blasting operations not permitted during demolition. .1



Demolition of Structures

Section 02222 Page 4 1999-01-26

3.3 Demolition

- .1 Stockpile materials in a location as directed by Consultant. Eliminate double handling where possible.
- Notify Consultant in writing of any materials identified as not suitable for alternate disposal. Provide written reasons prior to approval for disposal.
- .3 At end of each day's work, leave work in safe and stable condition. Protect interiors of parts not to be demolished from exterior elements at all times.
- .4 Demolish to minimize dusting. Keep materials wetted as directed by Consultant.
- .5 Dispose of materials as directed by Consultant.
- .6 Removal from site.
 - .1 Remove stockpiled material as directed by Consultant, when it interferes with operations of project construction.
 - .2 Remove stockpiles of like materials by an alternate disposal option once collection of materials is complete.
 - .3 Contain all fibrous materials (e.g. Insulation) to minimize release of airborne fiber while being transported within facility.
- .7 Remove and dispose of demolished materials except where noted otherwise and in accordance with authorities having jurisdiction.
- .8 Prior to the start of any demolition work remove contaminated or hazardous materials as defined by authorities having jurisdiction from site and dispose of in safe manner and in accordance with the TDGA, 1980. Refer to 1.3, Existing Conditions
- Use natural lighting to work by wherever possible. Shut off all lighting except those required for security purposes at the end of each day.

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Sitework Demolition and Removal

Section 02225 Page 1

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PART 1 - GENERAL

1.1 Related Sections

Section 02222 - Demolition of Structures.

1.2 References

- .1 Canadian Federal Legislation
 - Canadian Environmental Protection Act (CEPA), .1. 1988.
 - Canadian Environmental Assessment Act (CEAA), .2 1995.
 - Transportation of Dangerous Goods Act (TDGA), .3 1992.

1.3 Storage and Protection

- Perform all work in accordance with Section 01561 -.1 Environmental Protection.
- .2 Protect existing items designated to remain and items designated for salvage. In event of damage to such items, immediately replace or make repairs to approval of Consultant and at no cost to Owner.
- In all circumstances ensure that demolition work does not .3 adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.
- Do not dispose of waste of volatile materials such as, 4 mineral spirits, oil, petroleum based lubricants, or toxic

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Canadian National		Sitework Demolition and	Section	02225
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		cleaning solutions into watercours sewers. Ensure proper disposal p maintained throughout the projec	rocedures are	nitary
	.5	Do not pump water containing su watercourses, storm or sanitary s properties.	spended materia ewers or onto ac	als into djacent
	.6	Control disposal or runoff of water materials or other harmful substated local authorities.	r containing sus nces in accorda	pended nce with
	.7	Protect trees, plants and foliage of properties where indicated.	on site and adjac	ent
1.4 Existing Conditions	.1	Prior to the start of any demolitio contaminated or hazardous mate Consultant from site and dispose accordance with TDGA and all or requirements.	erials as directed of in safe mann	er in
1.5 Regulatory Requirements	.1	Ensure all work is performed in one CEPA, CEAA, TDGA, MVSA, and regulations.	compliance with d all applicable to	erratorial
1.6 Submittals	.1	Supply certified weigh bills, bills authorized disposal sites and reafor all material removed from site	use and recycling	ipts from g facilities

PART 2 - PRODUCTS

Canadian National Master Construction Specification	Sitework Demolition and Removal	Section 02225 Page 3 1999-01-26
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2.1 Equipment

- Equipment and heavy machinery used to meet or exceed all applicable emission requirements.
- .2 Leave machinery running only while in use, except where extreme temperatures prohibit shutting machinery down.

PART 3 - EXECUTION

3.1 Preparation

- .1 Inspect site with Consultant and verify extent and location of items designated for removal, disposal, alternative disposal, recycling, salvage and items to remain.
- .2 Locate and protect utilities. Preserve active utilities traversing site in operating condition.
- Notify and obtain approval of utility companies before starting demolition.

3.2 Sequences of Operation

.1 Removal

- .1 Remove items as indicated.
- .2 Do not disturb items designated to remain in place.

.2 Removal From Site

- .1 Interim removal of stockpiled material will be required by Consultant, if it is deemed to interfere with operations of Consultant or other contractors.
- .2 Remove stockpiles of like materials by an alternate disposal option once collection of that material is complete.
- .3 Only dispose of specified material by selected alternative disposal option as provided by Consultant or for own use. Do not dispose of these materials in a landfill or a waste stream destined for landfill. Additional disposal options will be provided by Consultant's, on-site waste diversion representative prior to disposal.

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Specification				1999-01-2	26
			iterial destined for a thorized facilities.	ilternate disposal	must be
					. r
3.3 Restoration	.1	Restore area demolition to areas.	as and existing work match condition of	s outside areas d adjacent, undistu	ਸ irbed
	.2	harmful to he	I treatments and pro ealth, are not injurio Idlife, adjacent wate	us to plants, and	do not
				·	
3.4 Cleanup	.1		etion of work, remor ork site clean.	ve debris, trim sui	faces
	.2	harmful to he	aning solutions and ealth, are not injurio Idlife, adjacent wate	ous to plants, and	do not
3.5 Reporting	.1	provide follow to Consultar .1 Time .2 Type .3 Weigh	ite removal of debriwing information rent within 24 hours. and date of removation material:. ht and quantity of matestination of material.	garding removed al:. naterials:.	

.2

The Contractor is responsible for ensuring all reporting requirements are fulfilled to the satisfaction of Consultant.

