

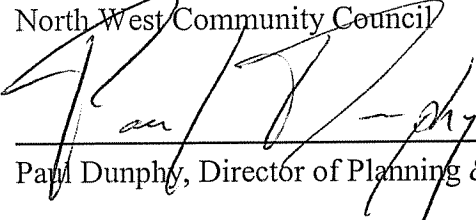
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P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

North West Community Council
November 24, 2005

TO: North West Community Council

SUBMITTED BY: 
Paul Dunphy, Director of Planning & Development Services

DATE: November 15, 2005

SUBJECT: Case 00730: Amendment to Development Agreement - 477 Cobequid Road

SUPPLEMENTARY REPORT

ORIGIN

Application by Metric Framing Limited.

RECOMMENDATIONS

It is recommended that North West Community Council:

1. Approve the proposed revised Amending Agreement, presented as Attachment A of this report.
2. Require that the Amending Agreement be signed within 120 days, or any extension thereof granted by Council on request of the applicant, from the date of final approval by Council and any other bodies as necessary, whichever is later; otherwise this approval will be void and obligations arising hereunder shall be at an end.

BACKGROUND

On November 8, 2005, North West Community Council moved Notice of Motion and scheduled a public hearing for November 24, 2005 to consider amendments to the Metric Framing Development Agreement. In moving the motion, it was requested that the following amendments be included in Clause 2.6 (i):

- *Should the property be paved, pre and post stormwater management flows shall be balanced on the site;*
- *A record of maintenance for the oil and grit separator shall be provided to the Development Officer on an annual basis and that the records be forwarded to the Halifax Watershed Advisory Board.*

These changes have been included in the revised amending agreement (Attachment A).

DISCUSSION

The addition of the additional wording necessitated minor changes to the text of the proposed amending agreement as shown in Attachment A.

Staff have reviewed the proposed changes and it is the opinion of staff that the proposal as amended reasonably meets the intent of the Municipal Planning Strategy.

BUDGET IMPLICATIONS:

None.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

1. Council may approve the amending agreement appended as Attachment A to permit an expansion to the commercial development at 477 Cobequid Road, Sackville. This is the recommended course of action.
2. Council may refuse to enter into the amending agreement, and in doing so, must provide reasons based on conflict with existing MPS Policy. This is not recommended.
3. Council may choose to request modifications to the amending agreement. Such modifications may require further negotiations with the developer. This alternative is not recommended as the agreement adequately addresses MPS policy.

ATTACHMENTS

Attachment A: Revised Amending Agreement

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Andrew Bone, Planner 1, Planning and Development Services, 869-4226

Attachment A - Revised Amending Agreement

THIS AMENDING AGREEMENT made this day of , 2005

BETWEEN:

METRIC FRAMING LIMITED
(hereinafter called the "Developer")

OF THE FIRST PART

-and-

HALIFAX REGIONAL MUNICIPALITY.
a body corporate, in the County of
Halifax, Province of Nova Scotia
(hereinafter called the "Municipality")

OF THE SECOND PART

WHEREAS the Developer is the registered owner of certain lands referred to as 477 Cobequid Road (PID 40296931) and which said lands are more particularly described in Schedule "A" to this Agreement (hereinafter called the "Lands");

AND WHEREAS the North West Community Council of the Municipality approved an application by the Developer to enter into a development agreement to allow for commercial building on the Lands, which said development agreement was registered at the Registry of Deeds in Halifax as Document Number (6388) in Book Number (6528) at Pages (595 to 613) on March 3, 2000 (hereinafter called the "Agreement");

AND WHEREAS the Developer has requested an amendment to the provisions of the Agreement to permit the expansion of Community Commercial uses and buildings on the site;

AND WHEREAS the North West Community Council for the Municipality approved this request at a meeting held on November XX, 2005, referenced as Municipal Case Number 00730;

THEREFORE in consideration of the benefits accrued to each party from the covenants herein contained, the parties agree as follows:

1. The Agreement shall be amended by deleting Schedule "B" and replacing it with a new Schedule "B", attached to this document as Schedule "B".

2. The Agreement shall be amended by adding a new Schedule, Schedule "D" - Erosion and Sedimentation Control Guidelines.
3. The Agreement shall be amended by adding a new Schedule, Schedule "E" - Lighting Guidelines.
4. Part 2, Section 2.1 of the Agreement shall be amended by adding the following words after the words "Elevation Plan":

"Schedule D Erosion and Sedimentation Control Guidelines
Schedule E Lighting Guidelines"

5. The Agreement shall be amended by deleting Part 2, Section 2.2 and replacing it with the following:

" **2.2 Land Use**

The Developer may develop the lands in manner, which, in the opinion of the Development Officer, is substantially in conformance with the Schedules attached to this agreement and the plans filed in the Halifax Regional Municipality Planning Services Department as Case 00148, and Case 00730 and the Land shall not use for another use than:

- (a) a maximum 22,000 square foot commercial building containing a maximum of eleven commercial spaces
- (b) permitted uses shall include and be limited to the uses listed as Schedule "C."

6. The Agreement shall be amended by deleting Part 2, Section 2.3.2 and replacing it with the following:

" **2.3.2 Building Size**

- (a) The gross floor area of the entire commercial building shall not exceed twenty two thousand (22,000) square feet."

7. The Agreement shall be amended by deleting Part 2, Section 2.3.3 and replacing it with the following:

" **2.3.3 Internal Features of Building**

- (a) The building may contain a maximum of eleven (11) individual commercial spaces.

- (b) The Development Officer may approve an increase or decrease in the number of individual commercial spaces provided the overall building footprint does not exceed 22,000 square feet and the architectural design and details of the building remain as generally illustrated on Schedule B.”
8. The Agreement shall be amended by adding the following words to Part 2, Section 2.3.4(a) after the words “35 feet”:
- “and be as generally illustrated on Schedule “B”.”
9. The Agreement shall be amended by deleting Part 2, Section 2.3.7 (b) and (c) and replacing it with the following:
- “
- (b) The area between the parking lot and the north property line (minimum 6m or 20ft) shall consist of existing vegetation and terrain. Existing trees and shrubs shall be preserved and maintained. The area located over the septic field shall be landscaped with grass.
- (c) A wooden 6 foot opaque privacy fence shall be provided between the proposed development and abutting, developed, residential properties (Lots 3 and 4) in order to minimize the visual impact of the commercial building and parking area on adjacent single unit dwellings. The developer shall provide additional privacy fencing if the adjacent to the undeveloped residential properties to the south (Lands of Annapolis Basin Pulp and Power Company Limited) become developed for residential uses. The development Officer may permit either chain link or wooden privacy fencing in this location “
10. The Agreement shall be amended by deleting Part 2, Section 2.3.7 (e) and replacing it with the following:
- “(e) All remaining lands behind the building shall be preserved, undisturbed and left in a natural state as generally illustrated by Schedule “B”. Notwithstanding Schedule “B”, the developer shall provide a treed buffer of 20 feet along the most southerly property line. This buffer may be made up of existing vegetation and may be supplemented with additional planting.”
11. The Agreement shall be amended by deleting Part 2, Section 2.3.9 (a) and replacing it with the following:
- “(a) Lighting shall be directed to driveways, parking areas, loading area, building entrances and walkways and shall be arranged so as to divert the light away from streets, adjacent lots and buildings.

- (b) The Developer shall prepare a lighting plan and submit it to the Development Officer for review to determine compliance with this agreement. The lighting plan shall contain, but shall not be limited to, the following:
 - (i) Plans indicating the location on the premises, and the type of illuminating devices, fixtures, lamps, supports, other devices.
 - (ii) Description of the illuminating devices, fixtures, lamps, supports and other devices. This description may include, but is not limited to, manufacturers' catalog cuts and drawings including sections where required.
 - (c) The lighting plan and description shall be sufficient to enable the Development Officer to ensure compliance with the requirements of this article will be secured. If such plan and description cannot enable this ready determination, by reason of the nature or configuration of the devices, fixtures or lamps proposed, the applicant shall submit evidence of compliance by certified test reports as performed by a recognized testing lab.
 - (d) The lighting plan and all lighting fixtures shall comply with Schedule "E" Lighting Guidelines.
 - (e) Should the applicant desire to substitute outdoor light fixtures or lamps and install them on the lands after a permit has been issued, the applicant shall submit all changes to the Development Officer for approval, with adequate information to assure compliance with this clause."
12. The Agreement shall be amended by deleting Part 2, Section 2.3.10 (a) and replacing it with the following:
- "(a) Outdoor storage may be permitted behind the building in the area identified as "Contracting Yard" or "Future Fenced Compound" as shown on Schedule "B"."
13. The Agreement shall be amended by deleting Part 2, Section 2.3.10 (b).
14. The Agreement shall be amended by deleting Part 2, Section 2.3.10 (f) and replacing it with the following:
- "(f) Refuse bins shall be permitted within the parking and loading zone areas (east side of building) and shall be screened with a combination of small shrubs and a four (4) foot high wooden fence around its perimeter."
15. The Agreement shall be amended by adding Part 2, Section 2.3.10 (g) after Part 2, Section 2.3.10 (f) as follows:

“(g) Non-operating or derelict vehicles or vehicle parts, shall not be permitted to be stored, kept or placed on any part of the property.”

16. The Agreement shall be amended by adding a new clause Part 2, Section 2.5 (b) as follows:

“2.5(b) “The Development Officer may permit the construction or relocation of the septic field to any portion of the site approved by the Nova Scotia Department of Environment and Labour.”

17. The Agreement shall be amended by deleting Part 2, Section 2.6 and replacing it with the following:

“**2.6 Environmental Protection**

- (a) The Developer agrees to have prepared by a Professional Engineer and submitted to the Municipality, as part of the Developer's application for a municipal development permit, a design for a Stormwater Management System for the Lands acceptable to the Development Engineer.
- (b) The Developer agrees to construct at its own expense, a Stormwater Management System on the Lands which conforms to the design accepted by the Engineer pursuant to Section (a). The Developer shall provide certification from a Professional Engineer that the system has been constructed in accordance with the approved design.
- (c) The Developer agrees to undertake, at its own expense, a regular maintenance program on any stormwater management plan components in accordance to the manufacturer's specifications.
- (d) The Developer agrees to have prepared by a Professional Engineer and submitted to the Municipality for review by the Development Engineer and the Department of Environment and Labour (if applicable), as part of the Developer's application for a municipal development permit, an Erosion and Sedimentation Control Plan for the Lands. The plan shall comply with the Erosion and Sedimentation Control Handbook for Construction Sites as prepared and revised from time to time by the Nova Scotia Department of Environment and Labour and generally reflects (Schedule “D”). Specifically, this plan should outline the temporary erosion and sedimentation control measures (vegetative and mechanical) to be used during active construction of the project with an emphasis on minimizing the amount of soil disturbed and the duration of exposed soil.
- (e) All earthworks and construction on the Lands shall comply with the requirements the stormwater management plan and the erosion and

sedimentation plan. The Development Officer shall require the Developer to post security in the amount of five thousand dollars (\$5,000.00) to ensure that the environmental protection measures are properly implemented and maintained. The security shall be in favour of the Municipality and may be in a form of certified cheque or irrevocable letter of credit issued by a chartered bank. The security shall be returned to the Developer within six months of the date of issuance of the final occupancy permit provided that all work for which environmental protection measures are required is satisfactorily complete.

- (f) The Developer agrees to observe and comply with the provisions of the Topsoil By-law, and further agrees not to commence any disturbance or removal of topsoil, trees or vegetation, excavation, grading or other site work on the Lands, until a permit has been issued by the Development Engineer.
- (g) Prior to any clearing, excavation or the placement of fill material on the Lands, the Developer shall submit a Grading and Drainage Plan indicating existing and proposed finished grades on the site and the effects of site drainage on the surface drainage of abutting properties and downstream receiving systems. All costs and all work associated with the stormwater drainage system shall be the responsibility of the Developer.
- (h) Any oil tank located on the Lands shall have a protective catchment device.
- (i) Paving of the outdoor storage area or parking area shall require that a new Stormwater Management Plan be submitted and reviewed for approval by the Development Engineer and Development Officer. *Should the property be paved, pre and post stormwater management flows shall be balanced on the site.* Such a Stormwater Management Plan shall include an appropriately sized oil/water separator (s) to treat stormwater before discharge into the environment. *A record of maintenance for the oil and grit separator shall be provided to the Development Officer on an annual basis and that the records be forwarded to the Halifax Watershed Advisory Board.*
- (j) Construction materials and other wastes shall not be buried or discarded on the lands.
- (k) A 30m (100 foot) undisturbed buffer area along Sucker Brook shall be maintained and preserved at all times. The 30 m (100 foot) undisturbed buffer area shall include all vegetation, soil and terrain and shall be measured from the ordinary high water mark as generally illustrated on Schedule "B".

18. The Agreement shall be amended by adding Part 2, Section 2.7 (b) as follows after the words "now removal.":

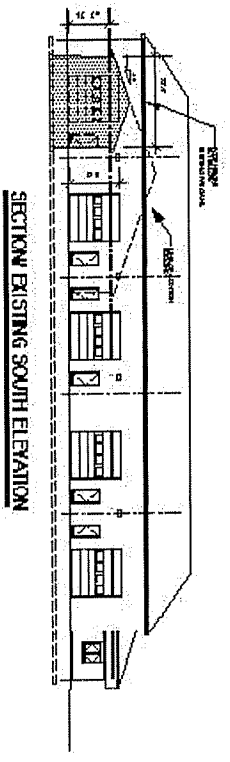
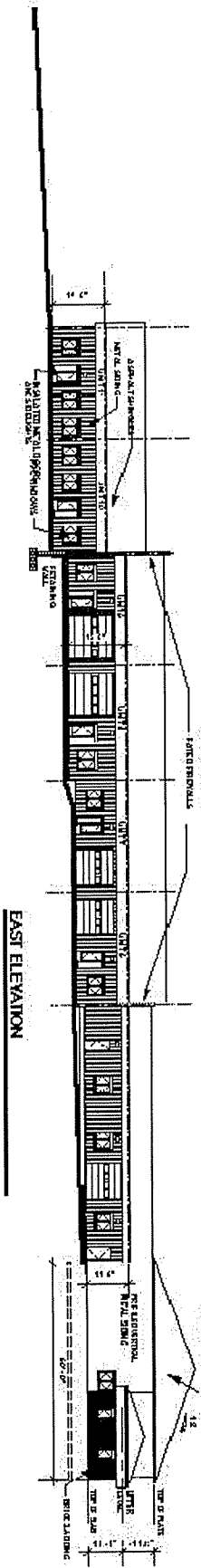
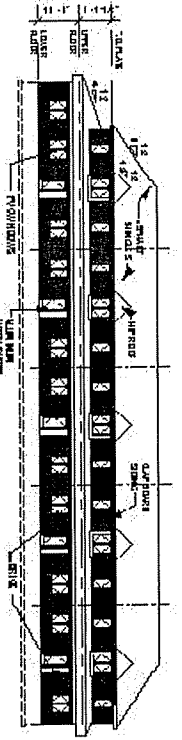
“ 2.7 (b) The Developer shall adopt appropriate dust control measures to minimize dust rising from the site and as required by the Development Officer.”

IN WITNESS WHEREOF the parties hereto have hereunto set their hands and seals on the day and year first above written:

Signed, sealed and delivered)	Metric Framing Limited
in the presence of:)	
)	
)	
per: _____)	per: _____
)	

Sealed, Delivered and Attested)	Halifax Regional Municipality
by the proper signing officers of)	
Halifax Regional Municipality)	
duly authorized on that behalf)	per: _____
in the presence of)	MAYOR
)	

_____)	per: _____
)	MUNICIPAL CLERK



SECTION EXISTING SOUTH ELEVATION

Schedule B - 1 of 2

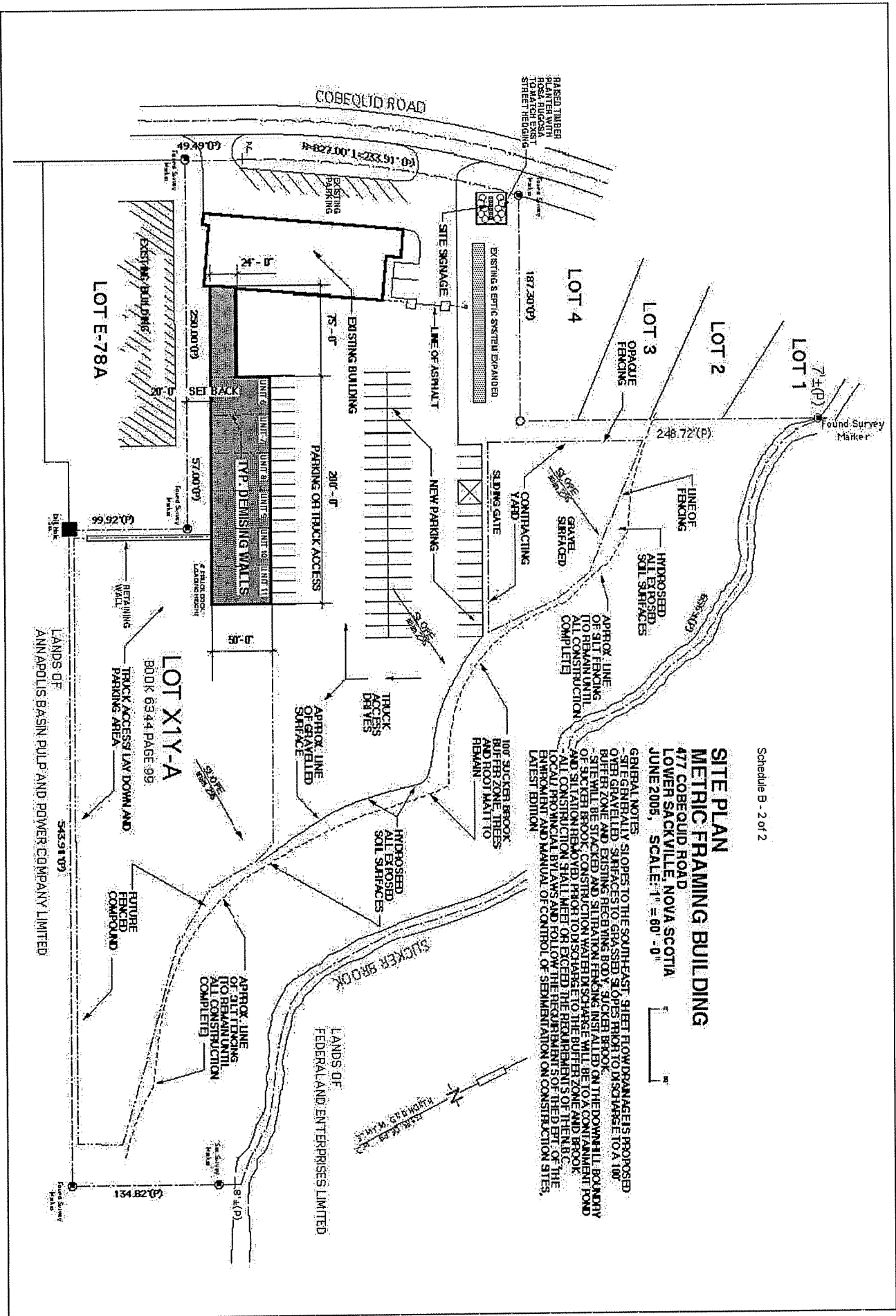
**BUILDING ELEVATIONS
METRIC FRAMING BUILDING**

477 COBEQUID ROAD
LOWER SACKVILLE, NOVA SCOTIA
JUNE 2005, SCALE 1" = 30'-0"
30'

GENERAL NOTES
- FIT FROM MATERIALS TO MATCH EXISTING IN COLOR, STYLE AND PROFILES
- ALL CONSTRUCTION SHALL MEET OR EXCEED THE REQUIREMENTS OF THE N.B.C.
- LOCAL AND PROVINCIAL CODES AND BYLAWS.

SITE PLAN
METRIC FRAMING BUILDING
 477 COBEQUID ROAD
 LOWER SACKVILLE, NOVA SCOTIA
 JUNE 2005, SCALE: 1" = 80' - 0"

GENERAL NOTES:
 - SITE GENERALLY SLOPES TO THE SOUTH-EAST. SHEET FLOW DRAINAGE IS PROPOSED OVER GRAVELLED SURFACES TO GRASSED SLOPES PRIOR TO DISCHARGE TO A 100' BUFFER ZONE AND EXISTING RECEIVING BODY, SUCKER BROOK.
 - SITE WILL BE STACKED AND SITUATION FENCING INSTALLED ON THE DOWN HILL BOUNDARY OF SACKER BROOK. CONSTRUCTION WATCHDOG SIGNS WILL BE TO A CONTAMINANT FUND AND SITUATION FENCING PROJECTED TO THE BUFFER ZONE AND SACKER BROOK.
 - ALL CONSTRUCTION SHALL BE ON LOCATED THE SURFACES OF THE SHEET OF THE EARTH AND MANUAL OF CONTROL OF SEWAGE TREATMENT ON CONSTRUCTION SITES, LATEST EDITION.



LANDS OF
ANNAPOLIS BASIN PULP AND POWER COMPANY LIMITED

LANDS OF
FEDERAL AND ENTERPRISES LIMITED

Schedule "D" - Erosion and Sedimentation Control Guidelines

EROSION AND SEDIMENTATION CONTROL ON CONSTRUCTION PROJECTS

A very important first step in reducing sedimentation of receiving water bodies is to develop a plan for controlling erosion before any earth-moving equipment disturbs a construction site. This plan is an integral part of the total site development plan and prescribes all the steps necessary, including scheduling, to assure erosion and sediment control during all phases of construction.

A knowledge of factors affecting erosion, as explained in Appendix B, provides the basis for technical erosion and sediment control principles. These principles can be utilized by the project planner in the design stake or readily implemented by a construction foreman in the field. Practical combinations of the five principle : outlined on the following pages should be utilized to the maximum extent possible on all construction projects.

2.1 ACCEPTED PRINCIPLES AND PRACTICES FOR REDUCING EROSION AND SEDIMENTATION

1. FIT THE ACTIVITY TO THE TOPOGRAPHY, SOILS, WATERWAYS, AND NATURAL VEGETATION OF A SITE.

- a) Costs for erosion control and maintenance can be minimized if a site is selected for a specific activity rather than attempting to modify the site to conform to the proposed activity.
- b) Detailed planning will assure that roadways, buildings and other permanent features related to the activity conform to the natural characteristics of the site.
 - Locate large graded areas on the most level portion of the site.
 - Avoid areas subject to flooding and make every effort to preserve all features of natural channels. **Note that any channel alterations require a permit from the Department of the Environment.**
 - Areas of steep slopes, erodible soils and soils with severe limitations of the intended uses should not be utilized without first overcoming the limitations through sound engineering practices.
 - limit the length and steepness of the designed slopes to reduce runoff volumes and velocities. Long, steep

slopes should be broken by benching, terracing or constructing diversion structures.

2. EXPOSE THE SMALLEST PRACTICAL AREA OF LAND FOR THE SHORTEST POSSIBLE TIME.

- a) Earth changes and the removal of natural vegetation leave an area susceptible to erosion and sedimentation; the larger the disturbed area and the longer it is left unsterilized, the more serious the problem becomes.
 - Plan the phases or stages of development so that only the areas which are actively being developed are exposed. All other areas should have a good cover of temporary or permanent vegetation or mulch.
- b) Complete grading as soon as possible after it is begun. Then, immediately after grading is complete, establish permanent vegetation and surface cover such as gravel, and erosion controls in the area.
 - Revegetate the slopes as work progresses - for example, as cut slopes are made, or as fill slopes are brought up to grade. This process is known as staged seeding.
 - Minimize grading of large or critical areas during the season of maximum erosion potential.

3. APPLY "SOIL EROSION" CONTROL PRACTICES AS A FIRST LINE OF DEFENSE AGAINST ON-SITE DAMAGE

- a) Applying erosion control practices on a site will prevent excessive sediment from being produced.
 - Keep soil covered as much as possible with temporary or permanent vegetation or with various mulch materials. Even project materials such as brush, logs and chippings can serve as mulch and help to control erosion.
 - Use special grading methods such as roughening a slope on the contour or tracking with a cleated dozer.
 - Roll and compact soil to make it less erodible.
 - Incorporate other practices such as diversion structures to divert surface runoff from exposed soils, and grade stabilization structures to control surface water.
- Effective erosion control and sediment reduction depends upon judicious selection of conservation practices, adequate design, accurate installation in a timely fashion, and sufficient maintenance to ensure the intended results.
- c) Prevent "gross" erosion in the form of gullies.
- d) **When erosion is not adequately controlled, sediment control is more difficult and expensive.**

4. APPLY "SEDIMENT CONTROL" PRACTICES AS A PERIMETER PROTECTION TO PREVENT OFF-SITE DAMAGE.

- a) The second line of defence is to control runoff and prevent sediment from getting off-site. Generally, this is done by either filtering runoff as it flows through an area or impounding the sediment-laden runoff for a period of time so that the soil particles settle out.
- Berms, sedimentation basins, sediment traps, and vegetative filters are some examples of practices used to control sediment and protect watercourses.
 - Vegetative and structural sediment control measures can be classified as either temporary or permanent depending on whether or not they will remain in use after development is complete.
- b) The best way to control sediment, however, is to prevent erosion at its source.

5. IMPLEMENT A THOROUGH MAINTENANCE AND FOLLOW-UP OPERATION.

This fifth principle is vital to the success of the four others. A site cannot be effectively controlled without thorough, periodic checks of the erosion and sediment control practices. These practices must be maintained just as construction equipment must be maintained, and materials checked and inventoried.

- Start a routine "end of day check" to make sure that all control practices are working properly.
- Check the weather forecast daily and be prepared if rain is predicted.
- Throughout construction keep an adequate inventory on hand of materials such as straw bales, polyethylene, gravel, or rock riprap, and scout the area for other sources of useful materials like hay, bark or sawdust for mulching.

Usually these five principles are integrated into an overall plan of vegetative and structural measures and management techniques aimed at preventing erosion and controlling sediment, as demonstrated by the flow chart, Figure 3. In most cases, a combination of limited grading, limited time of exposure and a judicious selection of erosion control practices and sediment trapping facilities will prove to be the most practical method of controlling erosion and the associated production and transport of sediment.

PREPARE EROSION AND SEDIMENTATION CONTROL PLAN

Consists if a written document and drawings based an accepted principles and practices and reducing erosion and sedimentation.

- Carry out a thorough soils analysis
- Fit the activity to the natural site featured particularly waterways
- Include a stormwater management plan
- Expose the smallest area for the shortest practical time
- Plan for erosion control materials and the time to apply them
- Plan the location for sedimentation control measures
- Prepare for contingencies - maintenance is very important

IMPLEMENT TEMPORARY EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION

SURFACE STABILIZATION (TEMPORARY)		DRAINAGE CONTROL (TEMPORARY)		
VEGETATIVE (1.5) BUFFER STRIPS	NONVEGETATIVE RIPRAP (1.1)	CHANNELS (DITCHES) (2.1)(2.2)	GRADING PRACTICES (1.0)	SEDIMENTATION PONDS (2.10) (TEMPORARY/ PERMANENT)
MULCHING	GABION BASKETS(1.2)	CHECK DAMS BRUSH (2.7A)		FILTER BARRIERS STRAW (2.8)
HYDROSEEDING	GEOTEXTILE FILTER FABRIC(1.3)	ROCK (2.7B)		FILTER FABRIC (2.9)
MATTING (1.4)	MATTING (1.4)			

IMPLEMENT MAINTENANCE PROGRAM THROUGHOUT CONSTRUCTION

DAILY ROUTINE CHECKS REPAIRS REPLACEMENTS INVENTORY OF CONTROL MATERIALS

PERMANENT EROSION CONTROL FOR FINISHED SITE

SURFACE STABILIZATION (PERMANENT)		DRAINAGE CONTROL (PERMANENT)		
VEGETATIVE (1.5) SEEDING	NONVEGETATIVE RIPRAP (1.1)	CHANNELS (DITCHES) (2.1)(2.2)	STORM DRAIN OUTLET PROTECTION (2.4)	CHECK DAMS ROCK (2.7B)
SODDING	GABION BASKETS (1.2)	BERMS TERRACES, FINAL GRADING (1.0)	SEEPAGE DRAINS (2.6)	EARTH SODDED (2.7 E)
MATTING (1.4)	GRAVELING PAVING	GRASSED WATERWAYS (2.3)	CHUTES AND DOWNDRAINS (2.5)	GABIONS (2.7C) WOODEN PLANKS (2.7B)
				SANBBAGS (2.7F)
				SEDIMENTATION PONDS (2.10)

MAINTAIN PERMANENT EROSION CONTROL

MAINTENANCE PROGRAM

ROUTINE CHECKS REPAIRS REPLACEMENTS INVENTORY OF CONTROL MATERIALS

FIGURE 3
STEPS TO FOLLOW IN PREPARING AN EROSION AND SEDIMENTATION CONTROL PROGRAM FOR CONSTRUCTION PROJECTS.
NOTE: NUMBERS IN BRACKETS REFER TO FACTSHEETS, SECTION 2.

Schedule "E" - Lighting Guidelines**1. Purpose**

The intent of these guidelines are to establish lighting levels for various typical uses to promote visual surveillance, reduce the potential for criminal activity, and meet energy constraints.

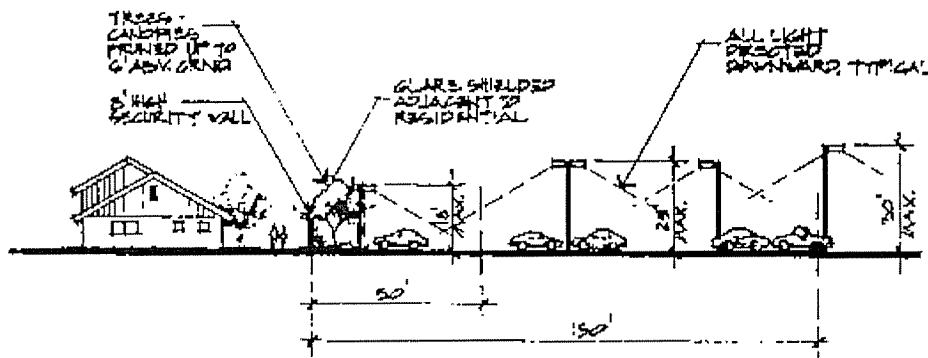
2. Lighting Configuration

- (a) The mounting of light fixtures shall be governed by the following:
 - (i) Building mounted light fixtures shall be attached only to walls and the top of the fixture shall not be higher than the top of the parapet or roof, whichever is greater; and
 - (ii) Freestanding light fixtures shall not exceed eighteen (18) feet in height in any residential zone or within fifty (50) feet of, any residential used or zoned property; and
 - (iii) Freestanding light fixtures shall not exceed twenty-five (25) feet in height within fifty (50) to one hundred fifty (150) feet of any residential used or zoned property; and
 - (iv) Freestanding light fixtures shall not exceed thirty (30) feet in all other locations; and
 - (v) For the purpose of this requirement, height shall be measured from the top of a light fixture to the adjacent grade at the base of the support for that light fixture.
- (b) Transitional lighting shall be incorporated in exterior areas going to and from the building(s) or use(s) within the site.
- (c) All exterior lighting shall be directed downward and away from adjoining property, with luminaires shielded to prevent unnecessary glare.
- (d) All exterior fixtures shall be illuminated from dusk until dawn, unless otherwise designated.
- (e) Details of exterior lighting shall be provided to ensure compliance with the minimum illumination guidelines. The details shall be shown on the landscape site plan drawn to scale. Photometric calculations shall be detailed on an exterior lighting plan. Photometric calculations should be based on the "mean" light output per the manufacturer's values of the specified lamp and luminaire photometry data formatted on Illumination Engineering Society (I.E.S.) file complied by an approved testing laboratory. The details provided for exterior lighting should include point-to-point photometric calculations at intervals of not

more than ten (10) feet, at ground level, and may also be required at six (6) feet above ground level, depending on the applicable risk factors.

- (f) Any exterior lighting device (luminaire) designed for security lighting shall be protected by weather and vandal-resistant covering, a managed light source, directed down, to minimize glare and intrusiveness.

The following illustration demonstrates how security lighting may be configured to shield adjoining property from unnecessary glare and conform to the outdoor light control provisions.



3. Minimum Illumination Guidelines

All minimum illumination guidelines, below, should be maintained from ground level to a height of six (6) feet. The minimum-to maximum uniformity ratio may range up to 6:1 in acceptable layouts.

The lighting levels specified are the minimum levels that are typically acceptable. In some circumstances, customer convenience, closed-circuit surveillance, and customer attraction may require a higher level of lighting. In addition, demographics, the crime index and other factors particular to a certain geographic area may require a higher level of lighting than listed below.

Activity Risk and Minimum FC	Land Use
High Risk Activity 4-5 FC	<ul style="list-style-type: none"> · ATM · Cluster Mail Boxes (minimum of 20' radius from edge of mail box) · Pay Phones · Gated Communities Entries · Pedestrian Tunnels and Covered Pedestrian Walkways · Bus/Transit Shelters · All exterior entrances (typically 5 FC of light will be the recommended minimum standard with a radius of 15' from the center of each door. However, each entrance will be assessed based upon use and risk)
Medium High Risk Activity 3-4 FC	<ul style="list-style-type: none"> · Convenience Stores · Covered Parking (carports) · Fast Food · Pharmacies · Pool Halls · Loading Docks/Areas · Grocery Stores (24 hour, immediate parking area) · Establishments Licensed for the Sale of Liquor · Parking Structures (10 FC daytime)(parking garages, multilevel)
Medium Risk Activity 2-3 FC	<ul style="list-style-type: none"> · Gas Stations (not convenience stores) · Entertainment/Amusement · Video Stores · Laundries · Banks · Restaurants (no liquor) · Hotels/Motels · Video Halls · Card/Telemarketing · Malls

Activity Risk and Minimum FC	Land Use
Medium Low Risk Activity 1-2 FC	<ul style="list-style-type: none"> · Multi-Housing · Health Care · Industrial (night use) · Preschools · Worship · Hospital · General Retail · Dental · Warehouse (night use) · Educational · Storage · General office (night use) · Grocery stores (non 24 hours)
Low Risk Activity .50-1	<ul style="list-style-type: none"> · Warehouse (day use) · Office (day use only) · Greenbelt · Car Dealers (after hours) · Parks · Industrial (day use) · Mini-storage · Retention areas · Walkways in Apartment Complexes

4. Filtering and Shielding.

All outdoor light fixtures except those exempted shall be fully shielded and shall have glass acrylic or translucent enclosures. (Quartz glass does not meet this requirement.)

Requirements for Shielding and Filtering

Fixture Lamp Type	Shielded	Filtered¹
Low Pressure Sodium ²	Fully	None
High Pressure Sodium	Fully	None
Metal Halide ³	Fully	Yes
Fluorescent	Fully ⁴	Yes ⁵
Quartz ⁶	Fully	None
Incandescent Greater than 100W	Fully	None
Incandescent 100W or Less	None	None
Mercury Vapor	Not Permitted	Not Permitted
Glass Tubes filled with Neon, Argon, Krypton	None	None

¹ Most glass, acrylic or translucent enclosures satisfy these filter requirements

² This is the preferred light source to minimize undesirable light into the night sky affecting astronomical observations.

³ Metal halide lamps shall be in enclosed luminaries.

⁴ Outdoor advertising signs of the type constructed of translucent materials and wholly illuminated from within do not require shielding.

⁵ Warm white natural lamps are preferred to minimize detrimental effects.

⁶ For the purposes of this article, quartz lamps shall not be considered an incandescent light source.

5. Definitions.

- (a) Outdoor light fixtures shall mean outdoor artificial illuminating devices, outdoor fixtures, lamps and other devices, permanent or portable, used for illumination or advertisement. Such devices shall include, but are not limited to, search, spot or flood lights for:
- (1) Buildings and structures, including canopies and overhangs;
 - (2) Parking lot lighting;
 - (3) Landscape lighting;
 - (4) Billboards and signs;
 - (5) Display and service areas.
- (o) Fully shielded shall mean fixtures that are shielded in such a manner that light rays emitted by the fixture, either directly from the lamp or indirectly from the fixture, are projected below a horizontal plane running through the lowest point on the fixture where light is emitted.

6. Restrictions.

- (a) Outdoor building, landscaping and signs. The unshielded outdoor illumination of any building or landscaping is prohibited except with incandescent fixtures with lamps of one hundred (100) watts or less. Lighting fixtures used to illuminate an outdoor advertising sign shall be mounted on the top of the sign structure and shall comply with the shielding requirements. All illuminated outdoor advertising signs shall be equipped with an automatic time controller that prevents the operation of the lighting fixtures between the hours of 11:00 p.m. and sunrise.
- (b) Mercury vapor. The installation of mercury vapor fixtures is prohibited.
- (c) Construction and emergency lighting. Lighting necessary for construction or emergencies is exempt from the provisions of this article, provided said lighting is temporary and is discontinued immediately upon completion of the construction work or abatement of the emergency necessitating said lighting.