PART 1 - GENERAL

1.1 Samples

.1 Submit to Departmental Representative minimum 1 litre sample of each paint to be used, in completely filled, air tight container. Carefully sample, just prior to application, from thoroughly mixed material.

1.2 Measurement for Payment

.1 Pavement marking will be measured in square metres of paint lines installed.

.2 Aplication and removal of temporay Runway Centre Line Pavement marking will be measured in square metres of paint lines installed.

PART 2 - PRODUCTS

2.1 Materials

.1 Paint:
.1 To CGSB 1-GP-74M, alkyd traffic paint.
.2 Colour: to CGSB 1-GP-12C, yellow 505-308, black 512-301, white 513-301.
.3 Contractor will supply a qualified product list of paints applicable to work to the Departmental Representative for review. Qualified paints may be used but Departmental Representative reserves right to perform further test.

PART 3 - EXECUTION

3.1 Equipment Requirements

.1 Paint applicator to be an approved pressure type mobile distributor capable of applying paint in single or double and dashed lines and that will ensure uniform application and having a positive shut-off.

.2 Distributor: capable of applying reflective glass beads as overlay on freshly applied paint.

3.2 Condition of Surfaces

.1 Pavement surface to be free from surface water, frost, ice, dust, oil, grease and other foreign materials.

3.3 Application

.1 Pavement markings will be laid out by Contractor.

.2 Unless otherwise approved by Departmental Representative, apply paint only when air temperature is above 10°C and no rain is forecast.

.3 Permanent pavement markings will not be applied to HMAC until 7 days after placement of the HMAC surface course.

.3 Apply temporary Runway Centre line pavement marking on each night's paved area, every morning. These lines will be removed before placement of surface coarse asphalt.

.4 Apply traffic paint using approved equipment evenly at a rate of 3 m^2/L.

.5 Do not thin paint.

.6 Symbols and letters to conform to dimensions indicated.

.7 Paint lines to be of uniform colour and density with sharp edges.

.8 Thoroughly clean distributor tank before refilling with paint of different colour.

3.4 Tolerance

.1 Paint markings to be within plus or minus 12 mm of dimensions specified.

3.5 Protection of Completed Work

.1 Protect pavement markings until dry.

END

PART 1 - GENERAL

1.1 Measurement Procedures

.1 Cold planing will be measured in accordance with Section 02 41 13.14.

.2 Removal of existing asphalt pavement upto 300mm thickness will be measured in square metres of surface actually removed regardless of depth removed or number of operations required including providing straight cut edge, and all operations involved in removing, hauling off airport. Payment under this item will include operations involved in sweeping/cleaning of remaining pavement.

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.
.4 Motor Vehicle Safety Act (MVSA), 1995.

PART 2 - PRODUCTS

2.1 Equipment

.1 Equipment and heavy machinery used to meet or exceed all applicable emission requirements operate in compliance with EPA CFR 86.098-10 and EPA CFR 86.098-11 and MVSA.

.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 Departmental Representative 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.

.3 Notify and obtain approval of utility companies before starting demolition.

.4 Establish condition of adjacent pavement and structures prior to commencing removal operations.

3.2 Removal Of Hazardous Wastes

.1 Remove contaminated or dangerous materials defined by authorities having jurisdiction, relating to environmental protection, from site and dispose of in safe manner to minimize danger at site or during disposal.

3.3 Removal Operations

.1 Remove items as indicated.

.2 Do not disturb items designated to remain in place.

.3 Removal of Pavements:
.1 Square up adjacent surfaces to remain in place by saw cutting or other method approved by Departmental Representative.
.2 Protect adjacent joints and load transfer devices.
.3 Protect underlying and adjacent granular materials.

.4 Prevent contamination with base course aggregates, when removing asphalt pavement for subsequent incorporation into hot mix asphalt concrete paving,

.5 Salvage.
.1 Dismantle items containing materials for salvage and stockpile salvaged materials at locations as provided by Departmental Representative.

3.3 Removal Operations (Cont'd)

.6 Disposal of Material.
.1 Dispose of materials not designated for salvage or reuse offsite.

.7 Backfill.
.1 Backfill in areas as indicated and in accordance with Section 31 23 33.01 - Excavating, Trenching and Backfilling.

3.4 Sweeping

.1 Sweep remaining surfaces clean of debris resulting from removal operations using suitable rotary power brooms, hand brooming as required or power washing.

3.5 Finish Tolerances

.1 Finished surfaces in areas where asphalt pavement has been removed by cold milling to be within ±5 mm of grade specified, but not uniformly high or low.

3.6 Restoration

.1 Restore areas and existing works outside areas of demolition to conditions that existed prior to beginning of Work.

.2 Use soil treatments and procedures which are not harmful to health, are not injurious to plants, and do not endanger wildlife, adjacent water courses or ground water.

3.7 Cleaning

.1 Remove debris, trim surfaces and leave work site clean, upon completion of Work

END

PART 1 - GENERAL

1.1 Section Includes

.1 Methods for removal of existing asphalt pavement.

1.2 Measurement Procedures

.1 Removal of existing asphalt pavement by roto milling upto 70mm thickness will be measured in square metres of surface actually removed regardless of depth removed or number of operations required including providing straight cut edge, all operations involved in removing, hauling off site. Payment under this item will include operations involved in sweeping/cleaning of remaining pavement surface and removal of any thin unbonded layers of underlying pavement.

1.3 Waste Management And Disposal

.1 Separate waste materials for reuse and recycling.

.2 Divert unused asphalt materials to local quarry or facility approved by Departmental Representative.

PART 2 - PRODUCTS

2.1 Equipment

.1 Use cold milling, planning or grinding equipment with automatic grade controls capable of operating from stringline or laser operated grade control system(Topcon or equivalent), and capable of removing part of pavement surface to depths or grades indicated.

PART 3 - EXECUTION

3.1 Preparation

.1 Prior to beginning removal operation, inspect and verify with Departmental Representative areas, depths and lines of asphalt pavement to be removed.

3.2 Protection

.1 Protect existing pavement not designated for removal, light units and structures from damage. In event of damage, immediately replace or make repairs to approval of Departmental Representative at no additional cost.

3.3 Laying out of Work

.1 Provide survey to confirm existing ground elevations and lay out design grades a minimum of two weeks prior to milling operations.

Notify Departmental Representative of any

3.4 Removal

.1 Remove existing asphalt pavement to lines and grades as indicated or established by Departmental Representative in field.

.2 Use equipment and methods of removal and hauling which do not damage or disturb underlying pavement.

.3 Prevent contamination of removed asphalt pavement by topsoil, underlying gravel or other materials.

.4 Provide for suppression of dust generated by removal process.

3.5 Placing and Grading Milled Material

.1 Haul, place, and grade milled material on airport roads or other areas.

3.6 Stockpiling Of Material

.1 Dispose of remaining removed asphalt pavement by stock-piling in locations designated by Departmental Representative.

.2 Dispose of other asphalt pavement (non milled) and rejected asphalt pavement off site.

3.7 Finish Tolerances

.1 Finished surfaces in areas where asphalt pavement has been removed to be within +/-5 mm of grade specified but not uniformly high or low.

3.8 Sweeping

.1 Sweep remaining asphalt pavement surfaces clean of debris resulting from removal operations using rotary power brooms and hand brooming as required.

END