

May 10, 2024

(10 pages)

ADDENDUM NO. 2

BID CALL NO. T2024-036

REPLACEMENT OF COMPLETE POWER DISTRIBUTION, ASPHALT PAVEMENT, LIGHT STANDARD AND ELEVATOR UPGRADE AT PROFESSOR'S LAKE RECREATION CENTRE

This Addendum is part of the Bid Document.

1. Bid Closing:

The Closing Date has been extended from NOT LATER THAN 2:00:00 pm LOCAL TIME on THURSDAY MAY 16, 2024, TO:

NOT LATER THAN 2:00:00 O'CLOCK P.M. LOCAL TIME ON WEDNESDAY MAY 22, 2024.

2. Questions and Responses

Q.1 Please provide the geotechnical report referenced in the drawings 'Pavement Structure Design is as noted in Geotechnical report prepared by soils engineers ltd. dated Nov 11, 2020 reference no 2008-S006.

A.1 Refer to attached geotechnical report. (Total 7 pages).

Q.2 Regarding the pavement spec titled "Boat Ramp" can you clarify where and what the extents of the Boat Ramp Paving are? The drawings do not show a hatch indicating the extents. Please confirm.

A.2 The boat ramp area is from the water to the parking lot.

Q.3 Please confirm if the base coat and top coat will be done in the same mobilization?

A.3 Yes, provided that the base coat cools/sets prior to the installation of the top coat.

Q.4 At Parking Lot A, can you confirm where the "Parking Area" pavement spec will be used? Will only the parking stalls use the "Parking Area"

Spec and the drive aisles between the stalls use the "Drive-way & Drive Aisle" spec? If not, clarify where the "Parking Area" pavement spec is applicable to?

A.4 *Parking Area refers to areas with parking spots, the Drive Aisle is between the stalls.*

Q.5 Subtrades are asking the railing lumber size, we don't know what size is for 76 X 250 X 50?

A.5 *The size above is in mm but there is a typo, the last number should be 2500.*

Q.6 Please advise below railing lumber size is acceptable. 2" (thickness) X 10" (width) X 95" (length).

A.6 *Yes, a 2" x 10" as a common size is acceptable.*

Q.7 Addendum# 1, RFI#2.1.3, the response noted to scale drawing as shown, please clarify what scale can be used.

- drawings marked scale 1:200 which is not to get the dimensions as shown on drawing S.03.
- if we can calibrate the drawing scale with provided dimensions on drawing S.03?

Or is a new water service required? And what will the water service be used for?

A.7 *The drawings are in metric. The dimensions shown are in millimetres. For every 1 millimetre measured in paper space, it equates to 200 millimetres n site.*

Q.8 On drawing E-200 on distribution panel DP-1 on the branch circuits there is a designation not sure what it means a zero with a slash through it.

A.8 *It means Phase. For example, the below highlighted means panel is three phase panel. It is common practice to show it in this way.*

NEW DISTRIBUTION PANEL 'DP-1'
400A, 120/208V, **3Ø**, 4W, 10KA, 42CCTS

Q.9 What is the tentative schedule for Alectra to replace transformer and install High Voltage Cabling?

A.9 *The schedule should be provided by contractor and coordinated by Alectra.*

Q.10 Addendum# 1, RFI# 2.1.7, the response noted to follow instruction in the drawings, the noted #1 noted ducts to be abandoned by electrical contractor, please clarify if this is to refer to existing ducts can be left as is?

A.10 *Confirmed. Please follow the note N-1 of E102.*

All other terms & conditions remain unchanged.

If you have any questions, please do not hesitate to contact the undersigned.

Bidders are required to acknowledge all Addenda.

Santosh Mishra, CSCMP
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Soil Engineers Ltd.

CONSULTING ENGINEERS

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November 11, 2020

Reference No. 2008-S006

Page 1 of 6

Smith and Anderson Consulting
100 Sheppard Avenue East
Suite 1100
Toronto, Ontario
M2N 6N5

Attention: Mr. Amir Aghakhani, M.Sc., P.Eng., Senior Designer - Electrical

**Re: Limited Geotechnical Investigation - Pavement Rehabilitation
Professor's Lake Recreation Centre
1600 North Park Drive
City of Brampton**

Dear Sir:

Further to your email authorization on October 21, 2020, we have completed a corehole investigation for the captioned project and herein present our findings and recommendations.

BACKGROUND

The existing parking lot and access roadways at the captioned site have deteriorated and require rehabilitation. Furthermore, ponding on water was also encountered within a portion of the parking area. The purpose of this investigation is to determine the pavement thickness and, where possible, the subgrade condition and provide schemes for rehabilitation of the existing parking lot and access roadway.

FIELD WORK

Due to difficulties in locating the private utility services entering the community centre, the proposed field work, consisting of boreholes advancing to depth of 3.0 m from grade could not be completed. The actual fieldwork, consisting of 6 shallow core holes up to 0.6 m in depth, was completed on October 24, 2020, using an electric coring equipment, at the locations shown on the Core Hole Location Plan, Drawing No. 1, enclosed. The asphalt and granular bases thicknesses were recorded and samples were recovered for further inspection.



The ground elevation at each core hole location was referred to the prevailing ground surface at each of the core hole locations.

SUBSURFACE CONDITION

The results of the core holes are summarized in the following table:

Core Hole No.	Pavement Thickness (mm)			Subgrade Condition
	Asphaltic Concrete	Granular Fill	Total	
1	90	240*	330	Silty Clay Fill
2	93	305	398	Silty Clay Fill
3	82	420	502	Silty Sand Fill
4	69	370	439	Silty Sand Fill
5	91	260	351	Silty Sand Fill
6	67	185	252	Silty Sand Fill

* 20 and 50 mm Crusher Run Limestone

The granular fill from Borehole 1 consists of 20 mm and 50 mm Crusher Run Limestone; while all other boreholes consist of pit run Granular 'A' and Granular 'B' material.

Due to difficulty in recovering segregated granular samples, no gradations were completed to confirm whether the existing granular fill material on site meets OPS specification for Granular Base and Sub bases. Bulk samples on the granular fill can be collected during construction for gradation analysis to verify its suitability for reuse as granular subbase.

The subgrade material recovered below the granular fill consists of silty clay or silty sand, with a variable amount of topsoil inclusions and pockets. In places, the fill contains shale fragments.

ASSESSMENT AND RECOMMENDATIONS

The Community Centre consists of a main parking lot accessible through an access road through a green space. The main parking lot is supplemented by two overflow parking lots (east and west lot) at the entrance of the community centre adjacent to North Park Drive. The observed condition for each parking lot, the access driveway and boat ramp is discussed herein:



Access Driveway (Core Holes 1 and 3)

The main access driveway from North Park Drive connects the east and west overflow parking lot and the main parking lot adjacent to the community centre in the north end of the property through the green space. The driveway is provided with a gravel shoulder and ditch line on both sides.

Visual inspection indicates alligator and line cracks throughout the driveway. Weed growth was noted in some of the crevices on the pavement. Potholes and some uneven low spots were noted during the inspection, generally within the travelled lanes.

Main Parking Lot (Core Holes 4 and 5)

The main parking lot is located in the north end of the property, abutting the community centre and Professor's Lake, which is heavily used by visitors. Various, frequent alligator and line cracks were noted throughout the parking lot. It is understood that in the southeast corner of the main parking lot experiences flooding during wet seasons, which is also reflected in the condition in that specific area and accumulation of debris and topsoil wash out found at the time of inspection. No curbs or catch basins were noted in the parking area. The adjacent grading surrounding the parking lot, particularly the wooded area, appears to be on grade with the parking lot.

East Parking Lot

The east parking lot is in a fair condition, with some linear cracks within the parking lot. Some defects were noted on the surface of the asphalt, likely due to heavy use. A catch basin is located adjacent to the main access road. The surrounding grading beyond the edge of pavement is at or slightly above the pavement surface.

West Parking Lot (Core Hole 2)

The west parking lot is generally in a poor to fair condition. Alligator cracks were observed in front of the garbage collection area, likely due to heave loading from the garbage truck movement around the collection area. Line cracks and patched potholes were also observed in the vicinity. The area along the edge of pavement appears to be at or slightly above the pavement surface.



Boat Ramp (Core Hole 6)

A boat ramp is located adjacent to the community centre building. It is gated. The pavement condition appears to be in fair condition; however, vegetation/weed growth was noted within the crevice between the walking trail and the boat ramp in front of the gate. It appears the end of the ramp has been eroded by wave action from the lake.

Parking Lot Rehabilitation/Replacement

Based on a review of the RFP for the project, it is understood that the asphalt pavement at the main parking lot, the main driveway and drive aisle and the boat ramp, will be replaced. Accordingly, the recommended pavement structures for the main parking lot, the main driveway and drive aisle are presented below:

Course	Thickness (mm)	OPS Specifications
Asphalt Surface	40	HL-3
Asphalt Binder	50	HL-8
Granular Base	150	19-mm Crusher Run Limestone
Granular Sub-base		50-mm Crusher Run Limestone
Parking Area	250	
Driveway and Drive Aisle	300	

In preparation of pavement subgrade, any organics and compressible material should be removed, and the subgrade must be proof-rolled using a heavy roller. Any soft spot as identified must be rectified by subexcavation and replacing with selected dry inorganic material, compacted to the specified density. The subgrade should be crowned and graded towards catch basins or swales for proper drainage.

All the granular bases should be compacted in 150 to 200 mm lifts to 100% Standard Proctor Dry Density.

In order to prevent infiltrated precipitation from seeping into the granular bases, since this may inflict frost damage on the pavement, a swale or an intercept subdrain system should be installed along the perimeter where surface runoff may drain onto the pavement. In paved areas, catch basins with stub drains in all four directions should be provided. The stub drains and subdrains should be connected into the catch basin through filter-sleeved weepers. The invert of the subdrains should be at least 0.3 m beneath the underside of the granular sub-base and should be backfilled with free-draining granular material.



Boat Ramp

It is understood that the pavement structure for the boat ramp will be replaced. The recommended pavement structure is provided:

Course	Thickness (mm)	OPS Specifications
Asphalt Surface	75	HL-3
Granular Base	250	19-mm Crusher Run Limestone

East Parking Lot

The cracks and crevices within the east parking lot should be routed and sealed.

The area abutting the green space should be graded such that any water will not be collected between the green space and the edge of pavement.

West Parking Lot

At the west parking lot, the cracks and crevices should be routed and sealed. In the area where alligator cracks are prevalent in front of the waste disposal area, the asphalt should be removed and the top 150 mm of the granular fill be replaced with 150 mm of 19-mm Crusher Run Limestone, compacted to 100% or + Standard Proctor Dry Density.

At the joint between the existing pavement structure and the new pavement, the surface and the binder courses must overlap the existing pavement with step joints of 300 mm in width, to ensure proper transition and to avoid any water penetration at the joint.



LIMITATIONS OF REPORT

This report was prepared by Soil Engineers Ltd. for the account of Smith and Andersen Consulting and for review by the designated consultants, contractors, financial institutions, and government agencies. The material in the report reflects the judgment of Kelvin Hung, P.Eng., and Bernard Lee, P.Eng., in light of the information available to it at the time of preparation.

Prospective contractors may be asked to assess the subsurface conditions for soil cuts and dewatering by digging test pits to the intended depth of trench excavation. These test pits should be allowed to remain open for a period of at least 4 hours to assess the trenching conditions and to assess the proper dewatering scheme for the planned excavations.

SOIL ENGINEERS LTD.

Kelvin Hung, P.Eng.



Bernard Lee, P.Eng.
KH/BL:kh



ENCLOSURES

Core Hole Location Plan.....

Drawing No. 1

c. Soil Engineers Ltd. (Mississauga)

PROFESSOR'S LAKE

PROFESSOR'S LAKE RECREATION CENTRE

CH.6

CH.5

CH.4

CH.3

CH.1

CH.2



N PARK DRIVE
JAMESON CRESCENT

PENNINGTON PI



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CORE HOLE LOCATION PLAN

SITE: 1660 North Park Drive, City of Brampton

DESIGNED BY: -	CHECKED BY: -	DWG NO.: 1
SCALE: 1:1250	REF. NO.: 2008-S006	DATE: November 2020
		REV -