

2024-130-P02024 Queen Mary Elementary School Playground Renovation

## Addendum 2

**Issued May 1, 2024** 

The following information changes the competitive process documents issued on Monday, April 15, 2024.

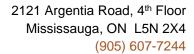
## **GENERAL INFORMATION**

Item 1: Refer to appended 'Addendum No. 2' from Rimkus dated April 29, 2024, issued by the Consultant (20 pages)

## **QUESTIONS AND RESPONSES**

Refer to General Information Item 1.

**End of Addendum 2** 





## ADDENDUM: NO. 2

PROJECT: 2024-130-P02024 Pavement Rehabilitation and Playground

Renovation

PROPERTY: Queen Mary Elementary school

ADDRESS: 1292 Cannon Street East, Hamilton, ON

MATTER NO.: 100241787 ISSUED DATE: April 29, 2024

This Addendum forms part of the Contract Documents and amends the original specifications and drawings documents as noted below. Ensure all parties submitting bids are aware of all items included in this Addendum. Acknowledge receipt of this Addendum by inserting its number on the Bid Form. Failure to do so may subject bidder to disqualification.

## **CONTRACTOR QUESTIONS AND RIMKUS RESPONSE:**

Q1. Please confirm if we should include for hydrovac excavation around the trees in the kindergarten area as we will most likely be excavating through existing tree roots.

# A1. Yes, the cost should include hydrovac excavation around tree roots in the kindergarten areas to avoid damage.

- Q2. Please confirm the height of the fencing around the kindergarten area as the note on drawing D3 states new 6' tall fence it also calls out 5' fence
- A2. All new chain link fence lines be 5 ft from the finished surface level. Refer to updated drawing #D3.
- Q3. Can an alternate drainage system be used underneath the turf areas as the specified product is typically more costly than a standard weeping tile drainage system
- A3. No alterations can be made, the turf drainage system should be built as specified.
- Q4. Please confirm the width of the section of curb in the kindergarden areas. The drawings call out 350mm wide curb, but in the specs under the turf scope of work it mentions 300mm wide curb

# A4. The drawings and specifications have been updated to reflect a 350mm wide curb.

Q5. Please advise if there is a specified turf product the school board would like to use, or if it just needs to match the given specs.

## A5. Refer to Sections 32 18 23.01 & 32 18 23.02 for the requested information.

- Q6. Please advise if an alternative shock absorption product can be used instead of the 100mm thick pad as noted in the drawings. Typically this thick of a product is quite costly and there are other alternatives that can be used that meet the same requirements
- A6. No, alternative shock absorption products can not be used. As work has to be performed as per the project specifications.
- Q7. Please confirm if a new drawing can be issued outlining each area of paving including dig out & granular depths
- A7. All drawings have been updated to have a clear picture of each specific work. Refer to the summary of work for the total removal, and granular placement depths.
- Q8. The drawings are not to scale, I believe we should price the tender as per quantities provided in summary of work, please confirm?
- A8. The quantities mentioned in drawing D0, and summary of work area approximate values only. It is the responsibility of the contractor the measure the actual quantities on site before submitting a lump sum price.
- Q9. There are trees in kindergarten artificial turf area, will those tree to remain or those trees will be removed and dispose off-site, please advise?
- A9. Yes, existing trees to remain in place.
- Q10. Length of new fence is crossing the 350mm Wide curb, the question is that that section of fence to be installed surface mounted or with concrete footings, please advise?
- A10. All new fence line should be installed in a concrete footing.
- Q11. Could we use recycled crushed concrete as it also falls under OPSS 1010 or we must use crusher run limestone, please advise?
- A11. Only new crusher-run limestone should be used for this project. All granular materials placed on site will be tested by the testing company.
- Q12. Does the school board require as-built drawings after project is completed, if yes, where should we carry the cost, please advise?
- A12. Final As-built drawing should be submitted by the contractor as a part of closeout document to process Hold-back invoices. This should be included in the lump sum cost.
- Q13. Could we block off the site using safety pylon with caution tape or we have to use 1.8m high construct fence, please advise?

- A13. The entire perimeter of the construction area should be secured with a 2.0m high construction fence before start of work without fail. Necessary fencing should also be provided to block building entrances.
- Q14. Is landscaping restoration the responsibility of the owner or contractor, please advise?
- A14. The contractor is responsible for restoring all damaged landscaping work, refer to general notes in drawing #D0 and summary of work.
- Q15. Could we assume excavated dirt is clean fill and falls under table-1, please advise?
- A15. Refer to the provided geotechnical report for soil characteristics information.
- Q16. Will the owner will take care of the cost for excess soil management and QP, if not, could you please create a cash allowance, please advise?
- Q16: The submitted quote should include all necessary testing and allocating QP for the disposal of excess soil.
- **Q17.** The Artificial Turf in playground and kindergarten area needs 8 years of warranty. Can you please confirm it is correct?

## A17: Yes, it is correct.

- **Q18.** We will need more information about the playground turf. What is the use of the Playground Artificial turf area? We ask because it is listed as a playground but in the specifications it lists some specs of G force and mentions soccer? Is this area open to the public? If it is a field are they wearing cleats? If it is a field, what sports? We would need a sport specific turf with proper infill. We would need the usage in order to determine the solution (amount of time and sport or cleats etc).
- A18: The Playground Artificial Turf area is a multi-use sports Field. And yes, it is open to the public. The Playground Artificial Turf area should be built similar to actual sport field.
- Q19. Could you please confirm that all the rails to be welded, not mechanically fastened, please advise.
- A19. Yes. All top rails are to be welded.

## **UPDATES**

1. Drawing Sets D0, D1, D2	, D3, D4, D5, D6 & I	D7 have been is:	sued to replace the	e original
tender drawing set.				

2. Updated Summary of work.

NOTES AND GENERAL SCOPE OF WORK THE WORK AS SHOWS ON DRAWING D1,D2,D3,D4,D5,D6,AND D7 AND AS NOTED HEAR AND IN THE PROJECT SPECIFICATIONS CONSTITUTES THE GENERAL SCOPE OF THE STIPULATED LUMP SUM CONTRACT PRICE FOR THIS PROJECT SUBJECT TO ADJUSTMENT BY UNIT RATE AS APPLICABLE

- QUANTITIES INDICATED AREA APPROXIMATE, BIDS SHALL BE SUBMITTED FOR THE ENTIRETY OF THE WORK INDICATED AND/OR OTHERWISE DESCRIBED IN THESE NOTED AND ON THE DRAWINGS. ESTIMATED GRANULAR BASE REPAIR QUANTITIES AND GRANULAR TONNAGE INDICATED HEREIN ARE TO BE INCLUDED IN THE BASE BID AND AREA SUBJECT TOP ADJUSTMENT BASED ON ACTUAL AREAS COMPLETED/TONNAGE USED.
- SITE PLAN HAD BEEN PREPARED BASED ON SITE PLAN PROVIDED BY HWDSB AND GOOD FARTH, SCALE IS APPROXIMATE AND THE CONTRACTORS AREA RESPONSIBLE TO VERIFY ALL MEASUREMENTS AS MAY BE APPROVED FRO BIDDING PURPOSES.
- SOIL EXISTING SOIL CHARACTERISTICS AND GEOTECHNICAL INVESTIGATION, REFER TO INVESTIGATION COMPLETED BY SOIL-MAT ON MARCH 2024.
- MOBILIZATION AND DEMOBILIZATION TO COMPLETE ALL WORK MENTIONED IN DRAWINGS D1 TO D7.
  INSTALLATION OF TEMPORARY FREE STANDING METALLIC FENCING OF MINIMUM 2.0 METER HIGH TO ENCLOSE THE CONSTRUCTION AREA

### ASPHALT WORK - REFER TO DRAWING D1

- MILL/SAWCUT/EXCAVATE AND DISPOSE OF OFF-SITE 230MM 250MM THICKNESS OF EXISTING ASPHALT PAVEMENT, CONCRETE PAD, INTERLOCK, BASE/SUBBASE GRANULAR, EARTH, TOPSOIL, TIMBER CURBS, SOD AND DISPOSE IT OFF-SITE AT APPROVED LOCATION. (APPROXIMATE AREA 3,700 SQ.M)
- MINIMUM 300MM THICK BASE/SUBBASE REPAIRS IN ASPHALT PAVEMENT AREAS WITH NEW 19MM CRUSHER RUN LIME STONE. (APPROXIMATE AREA 1,250 SQ.M)
- SUPPLY PLACE AND COMPACT 150MM THICK 19 MM CRUSHER RUN LIMESTONE FOR BASE GRANULAR AND GRADING IN THE ASPHALT REHABILITATION AREA. (APPROXIMATE QUANTITIES 1,225 M.T) .
- SUPPLY, PLACE AND COMPACT 60 MM OF HL 8 (LIGHT DUTY) BASE COURSE ASPHALT. (APPROXIMATE AREA: 3,700 SQ.M)
- TACK COAT APPLICATION. (APPROXIMATE AREA 3,700 SQ.M).
- SUPPLY, PLACE AND COMPACT 40MM OF HL 3 SURFACE ASPHALY, (APPROXIMATE AREA 3.700 SQ.M).
- PAYEMENT LINE MARKING, SIGNAGE, SYMBOLS, MISCELLANEOUS AS PER OPSS STANDARDS AND AS PER SCHOOL REPRESENTATIVE DIRECTIONS DURING CONSTRUCTION. THE EXACT LAYOUT WILL BE PROVIDED TO THE SELECTED CONTRACTOR DURING THE TIME OF WORK.
- REMOVE AND DISPOSE OFF EXISTING STEEL BOLLARD ALONG WITH FOUNDATION AND INSTALL NEW 8" STEEL BOLLARD ALONG WITH FOUNDATION IN THE EXACT SAME LOCATION. THE COST SHOULD ALSO INCLUDE NECESSARY EXCAVATION, SUPPLYING AND INSTALLING YELLOW REFLECTIVE
- SLEEVES OVER THE NEWLY INSTALLED BOLLARD, AND OTHER FIXTURES AS REQUIRED. SEE ATTACHED DRAWING D1 AND #2AC13.
  ASPHALT EXTENSION AREA: REMOVE AND DISPOSE OFF SITE SOOD, EARTH AND NECESSARY GRANULAR AND REPLACE IT WITH A 100MM THICK ASPHALT (60MM HL8, 40MM HL3) PLACED ON 150MM THICH COMPACTED 19MM CRI GRANULAR BASE, REFER TO DRAWING D1.
- SAWCUT, EXCAVATE, REMOVE AND DISPOSED OFF SITE EXISTING CONCRETE PAD ALONG WITH INTERLOCK STRIP AND REPLACE WITH NEW 150MM THICK CONCRETE PAD USING CSA 32 Mpg (C-2) CONCRETE WITH ONE LAYER OF WELDED METALLIC WIRE MESH AS REINFORCEMENT. THE NEW CONCRETE PAD SHOULD BE CONSTRUCTED ON 200MM THICH COMPACTERD GRANULAR A (19MM CRUSHER RUN LIMESTONE) REFER TO DRAWING #2CR05. THE COST SHOULD INCLUDE ALL NECESSARY EXCAVATION REQUIRED TO PERFORM THE WORK.

## ASPHALT DRAINAGE WORK

- ALL CATCH BASINS (CB) TO BE FROST TREATMENT INCLUDING REMOVAL OF GRANULAR MATERIAL AROUND EXISTING CB AND INSTALLING SUB-DRAINS (WEEPING TILES) RINGED AROUND THE EXISTING CB. THE COST WILL ALSO INCLUDE SUPPLY AND INSTALLING OF NEW FRAME AND GRATE AS PER OPSD STANDARDS AND MODULOC ADJUSTMENT TO MATCH SURROUNDING ASPHALT LEVEL AS REQUIRED. SEE ATTACHED DRAWINGS # 2AC09, #2AC10 & OPSD 400.020.
  ADJUST HEIGHT OF THE ALL WATER VALVE IN THE AREA OF WORK TO MATCH THE NEW ASPHALT LEVEL. THE COST SHOULD INCLUDE ALL
- NECESSARY FITTING, CONNECTIONS, AND REPLACEMENT OF DAMAGED VALVES AS NECESSARY.
- REPLACEMENT OF DAMAGED MANHOLE/STORM SEWER FRAME AND GRATE AS NECESSARY IN THE AREA OF WORK AS PER OPSD 401.010. ALL MANHOLES AND STORM SEWERS SHOULD BE ADJUSTED TO MATCH NEW ASPHALT LEVEL.

- REMOVE AND DISPOSE OFF EXISTING CHAIN LINK FENCE ALONG WITH FOUNDATION AND INSTALL NEW 5 FT FENCE TO MATCH EXISTING LAYOUT. THE COST SHOULD INCLUDE INSTALLING ALL NECESSARY LINE, TERMINAL, CORNER AND GATE POSTS WITH FOUNDATIONS AND FITTING, FASTENS AND MESH AS PER LOCAL AND OPSS STANDARDS. SEE ATTACHED DRAWING #D3 AND #D7. THE HEIGHT OF THE NEW FENCE FROM THE FINISHED ASPHALT LEVEL SHOULD BE 5 FT(APPROXIMATE LENGTH - 275 L.M)
- REMOVE AND DISPOSE OFF EXISTING CHAIN LINK FENCE GATES AND REPLACE WITH NEW 5' FENCE GATES. TOTAL OF 4 4' WIDE PERSON GATE AND 1 - 12' WIDE MAINTENANCE GATE ( 2 X 10' SECTIONS). THE COST SHOULD INCLUDE ALL NECESSARY POST WITH FOUNDATION, FITTING, FASTENERS, MESH, DEAD BOLT INSIDE CONCRETE FOOTING, ETC. AS PER LOCAL AND OPSS STANDARDS. SEE ATTACHED DRAWING #D3 AND #D7.

## **DRAWINGS:**

- D0 NOTES AND GENERAL SCOPE OF WORK
- D1 ASPHALT WORK SITE PLAN
- D2 OTHER WORKS
- D3 CHAIN LINK FENCE LAYOUT DETAILS
- D4 CONCRETE CURB LAYOUT AND DETAILS
- D5 ARTIFICIAL TURF LAYOUT AND DRAINAGE DETAILS
- D6 CONCRETE CURB AND ARTIFICIAL TURF GRANULAR STRUCTURE DETAILS
- D7 CHAIN LINK FENCE DETAILS

PLAYGROUND ARTIFICIAL TURF WORK (APPROXIMATE AREA 720 SQ.M).

- MILL/SAWCUT/FXCAVATE AND DISPOSE OF OFF-SITE FXISTING ASPHALT AND GRANULAR TO THE REQUIRED DEPTH AND SUPPLY AND INSTALL BASE GRANULAR AND DRAINAGE SYSTEM INCLUDING ALL NECESSARY DRAIN PIPES AND CONNECTIONS TO THE EXISTING STRUCTURE. REFER TO DRAWING #D5, D6-2AT01.
- INSTALL NEW 150MM WIDE CONCRETE CURB FLUSHED TO THE SURROUNDING NEW ASPHALT LEVEL AND ARTIFICIAL TURF LEVEL USING CSA 32MPA (C-2) CONCRETE WITH REFERENCE TO DRAWING D6, 2ACO7- A & D4. THE COST SHOULD INCLUDE INSTALLING NAILER BOARDS FOR TURF INSTALLATION AND ALL NECESSARY EXCAVATION AND BACKFILLING AS REQUIRED. (APPROXIMATE LENGTH 100 L.M)
- 3. INSTALL NEW 350MM WIDE CONCRETE CURB BELOW THE FENCE LINE FLUSHED TO THE SURROUNDING NEW ASPHALT/ ARTIFICIAL TURF LEVEL USING CSA 32MPA (C-2) CONCRETE WITH REFERENCE TO DRAWING D6, 2ACO7- B & D4. THE COST SHOULD INCLUDE INSTALLING NAILER BOARDS FOR TURF INSTALLATION AND ALL NECESSARY EXCAVATION AND BACKFILLING AS REQUIRED (APPROXIMATE LENGTH 20 L.M).
- 4. SUPPLY AND INSTALL PLAYGROUND ARTIFICIAL TURF AND INFILL.

## KINDERGARTEN ARTIFICIAL TURF WORK (APPROXIMATE AREA 300 SQ.M).

- MILL/SAWCUT/EXCAVATE AND DISPOSE OF OFF-SITE EXISTING ASPHALT AND GRANULAR, MULCH, TIMBER CURBS, WOODEN DECK, PLANTER BOXES TO THE REQUIRED DEPTH AND SUPPLY AND INSTALL BASE GRANULAR AND DRAINAGE SYSTEM INCLUDING ALL NECESSARY, NAILER BOARD, SHOCK PAD, DRAIN PIPES AND CONNECTIONS TO THE EXISTING STRUCTURE. REFER TO DRAWING #D5 & D6. THE COST SHOULD INCLUDE USING VAC-TRUCK FOR REMOVAL AROUND TREE ROUTS AS REQUIRED.
- INSTALL NEW 150MM WIDE BARRIER CONCRETE CURB FLUSHED WITH NEW ARTIFICIAL TURF LEVEL USING CSA 32MPA (C-2) CONCRETE WITH REFERENCE TO DRAWING D6, 2ACO7- A & D4. THE COST SHOULD INCLUDE ALL NECESSARY EXCAVATION AND BACKFILLING AS REQUIRED. THE CONCRETE CURB SHOULD NE DOWELED AT 500MM C/C WHEN IT IS PLACED ALONG THE BUILDING FACE. (APPROXIMATE LENGTH: 80 L.M)
- INSTALL NEW 350MM WIDE CONCRETE CURB BELOW THE FENCE LINE FLUSHED TO THE SURROUNDING NEW ASPHALT/ ARTIFICIAL TURF LEVEL USING CSA 32MPA (C-2) CONCRETE WITH REFERENCE TO DRAWING D6, 2ACO7- B & D4. THE COST SHOULD INCLUDE INSTALLING NAILER BOARDS FOR TURF INSTALLATION AND ALL NECESSARY EXCAVATION AND BACKFILLING AS REQUIRED. (APPROXIMATE LENGTH: 60 L.M).
- 4. SUPPLY AND INSTALL PLAYGROUND ARTIFICIAL TURE AND SHOCK PAD

## OTHER WORK - REFER TO D2.

- REMOVE, STORE ON SITE EXISTING BLACKBOARD AND PLAY STRUCTURE AND REINSTATE IN THE EXACT SAME LOCATION AS PER THE DIRECTIONS OF OWNER AFTER COMPLETION OF WORK.
- REMOVE AND DISPOSE OFF SITE EXISTING WOODEN STRUCTURE IN THE KINDERGARTEN PLAY AREA.
- REMOVE AND DISPOSE OFF SITE EXISTING WOODEN DECK, TIMBER CURB, TIMBER LOGS AND ALL OTHER ITEMS IN THE KINDERGARTEN AREA THAT AREA REQUIRED TO COMPLETE THE WORK
- REMOVE AND REINSTALL EXISTING BENCH AT A NEW LOCATION AS DIRECTED BY THE CONSULTANT AND OWNER.
- REMOVE, STORE ON-SITE EXISTING SIGN POST AND SIGNAGE AND INSTALL IN THE EXACT SAME LOCATION AFTER COMPLETION OF ALL WORK.
- CLEAR ALL DEBRIS AND SETTLEMENT FORM THE EXISTING KINDERGARTEN PLAY AREA CATCH BASIN USING VAC-TRUCK THE WORK SHOULD BE PERFORMED DURING THE PRESENCE OF CONSULTANT BEFORE STARTING ANY ASPHALT REMOVAL.
- REMOVE AND DISPOSE OFF SITE DEBRIS/SETTLEMENTS USING VAC TRUCK FROM EXISTING CATCH BASINS LOCATED IN THE AREA OF REHABILITATION AFTER COMPLETION OF ALL ASPHALT WORK.
- LANDSCAPING RESTORATION FOR THE ENTIRE BOUNDRY OF WORK AREA. THE COST SHOULD INCLUDE NECESSARY, EXCAVATION, GRANULAR BACKFILLIN 300MM TOP SOIL RESTORATION AND INSTALLATION OF FRESH SOD



MISSISSAUGA ONTARIO I 5N 2X4 EXPERT@RIMKUS.COM

NORTH

EGENDS:

	ISSUED FOR:	DATE (Y-M-D):
1.	ADDENDUM - 2	2024-04-29
2.		
3.		
4.		

### SHEET TITLE

NOTES AND GENERAL SCOPE OF WORK

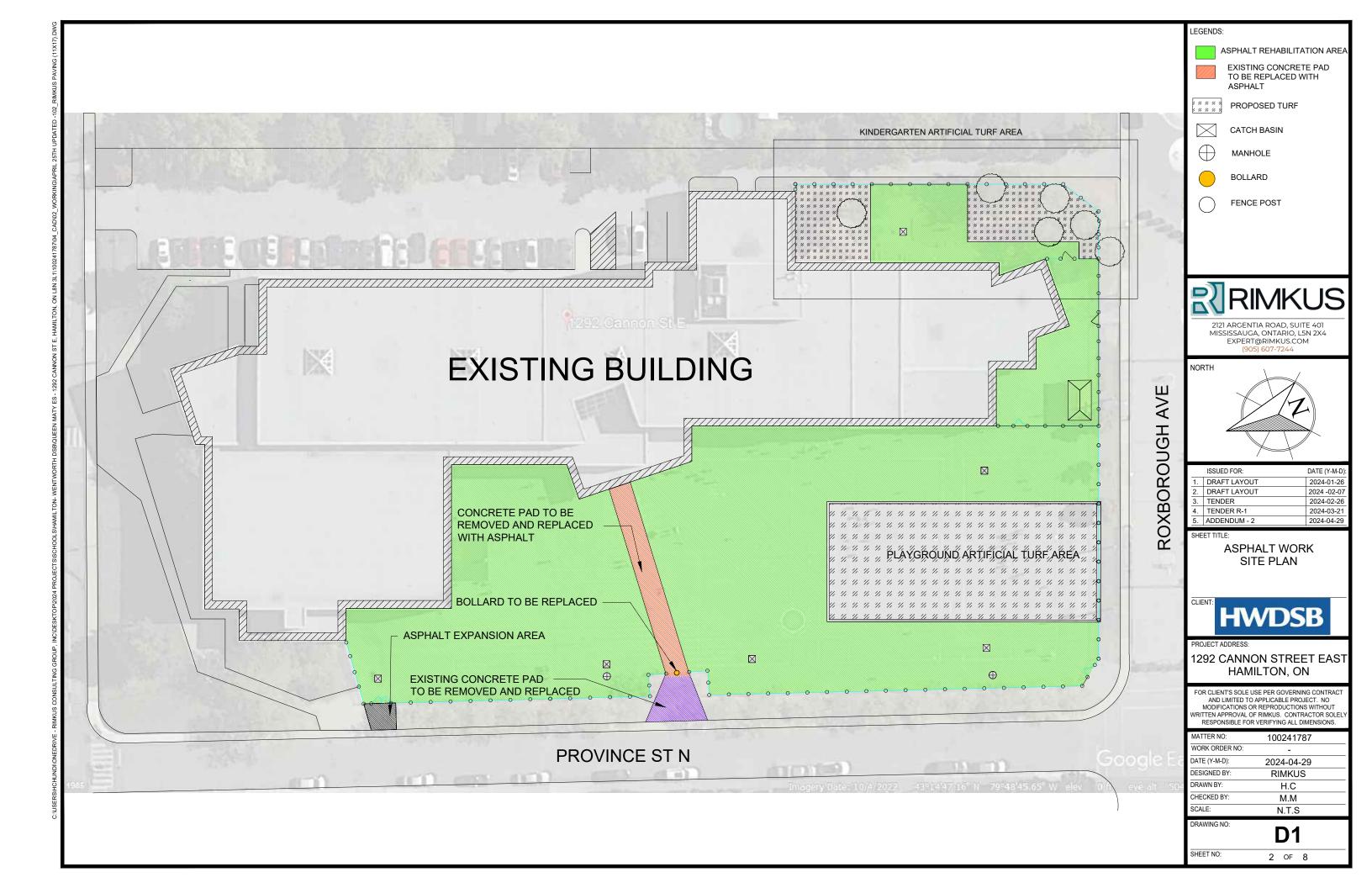


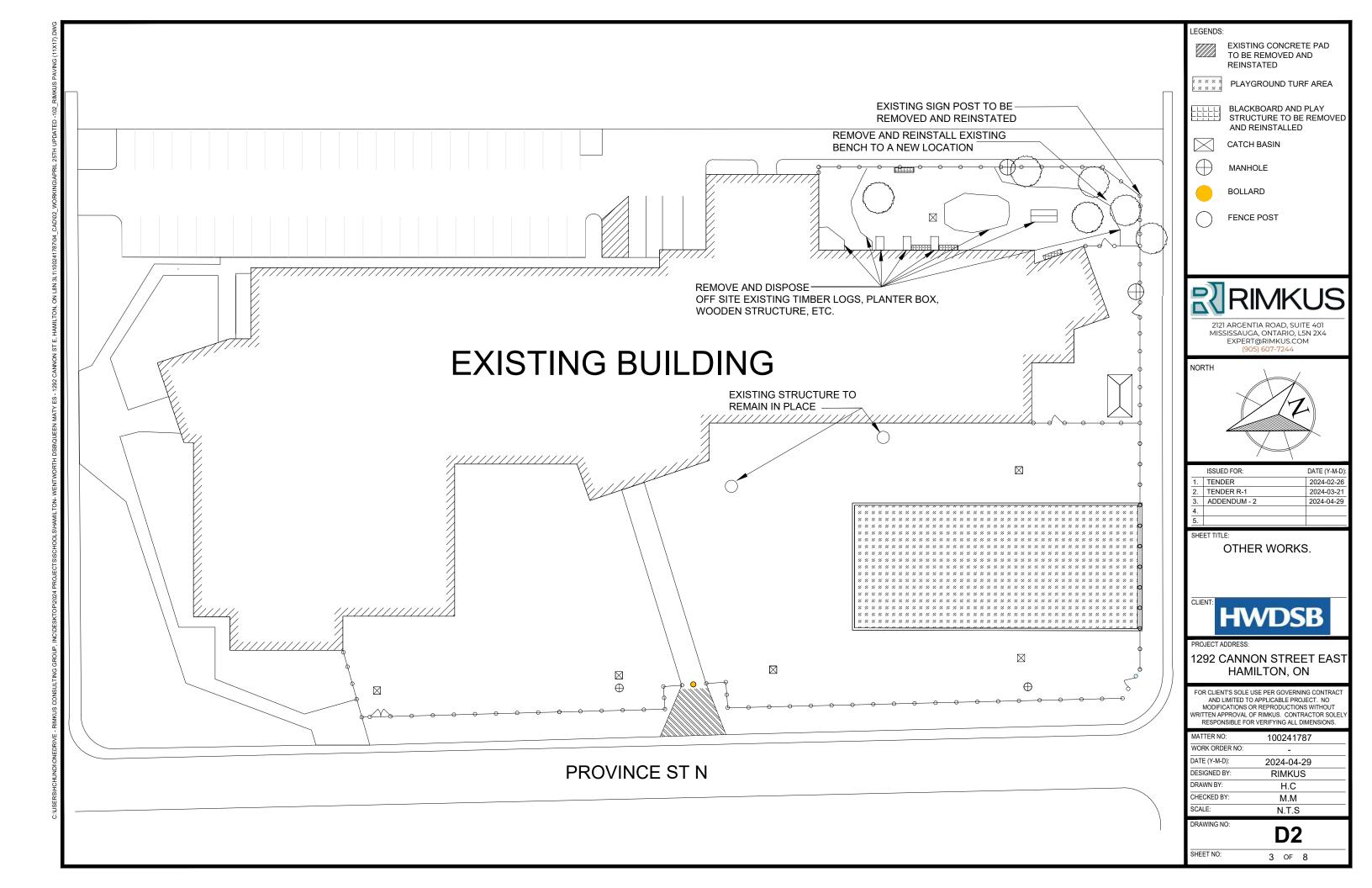
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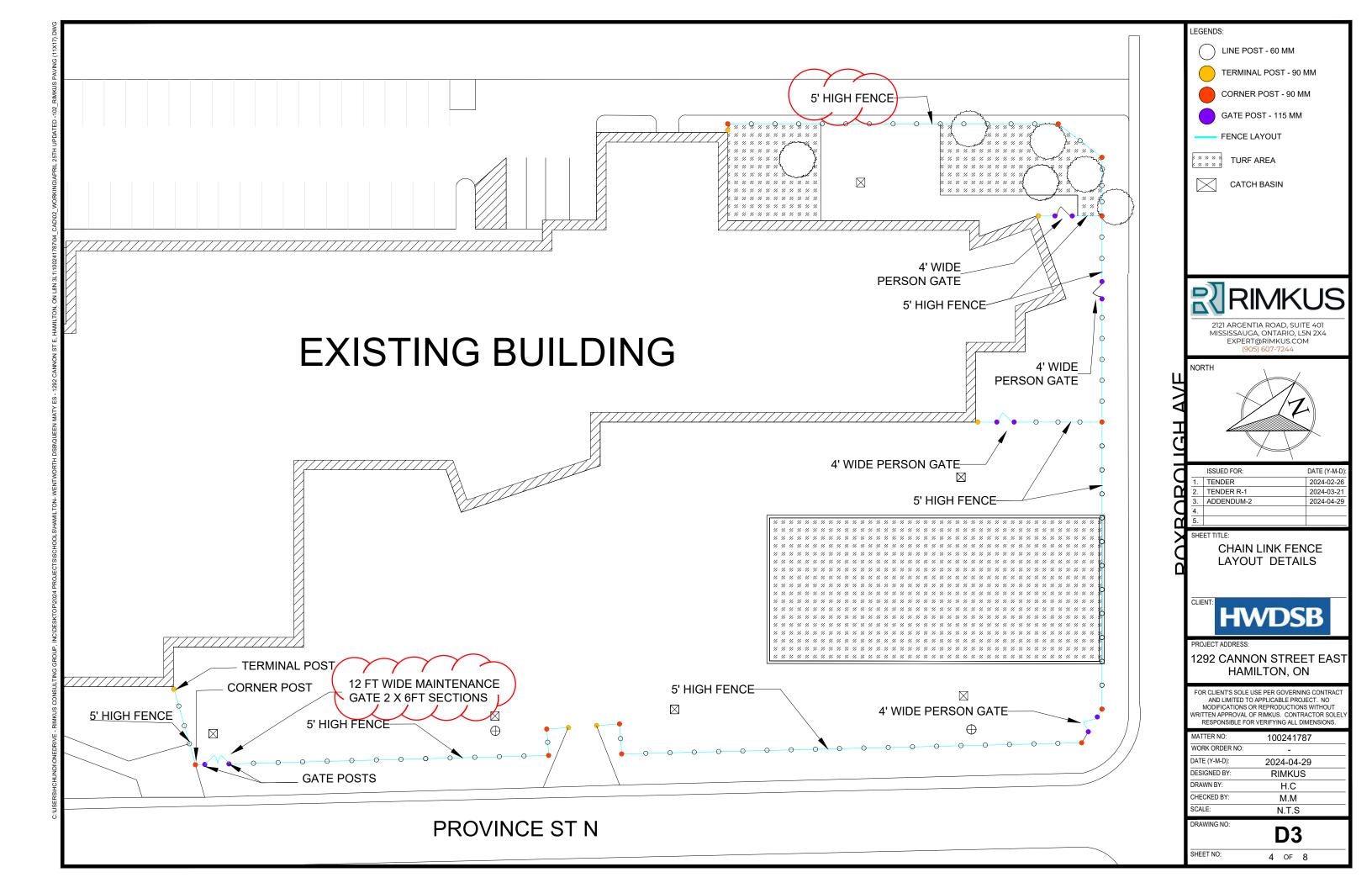
FOR CLIENT'S SOLE USE PER GOVERNING CONTRAC AND LIMITED TO APPLICABLE PROJECT. NO MODIFICATIONS OR REPRODUCTIONS WITHOUT RITTEN APPROVAL OF RIMKUS. CONTRACTOR SOLE

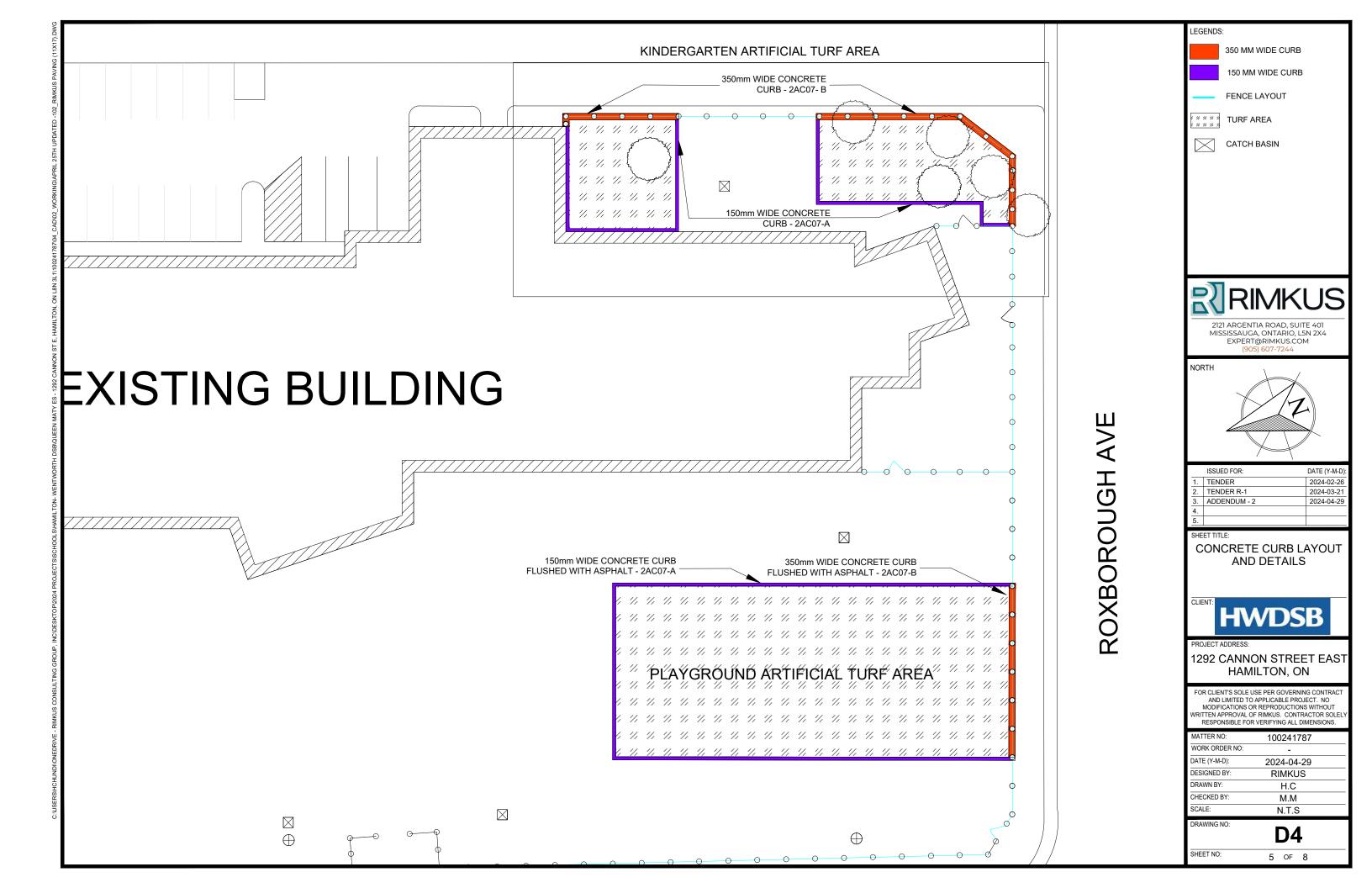
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WORK ORDER NO:	-	
DATE (Y-M-D):	2024-04-29	
DESIGNED BY:	RIMKUS	
DRAWN BY:	H.C	
CHECKED BY:	M.M	
SCALE:	NTS	

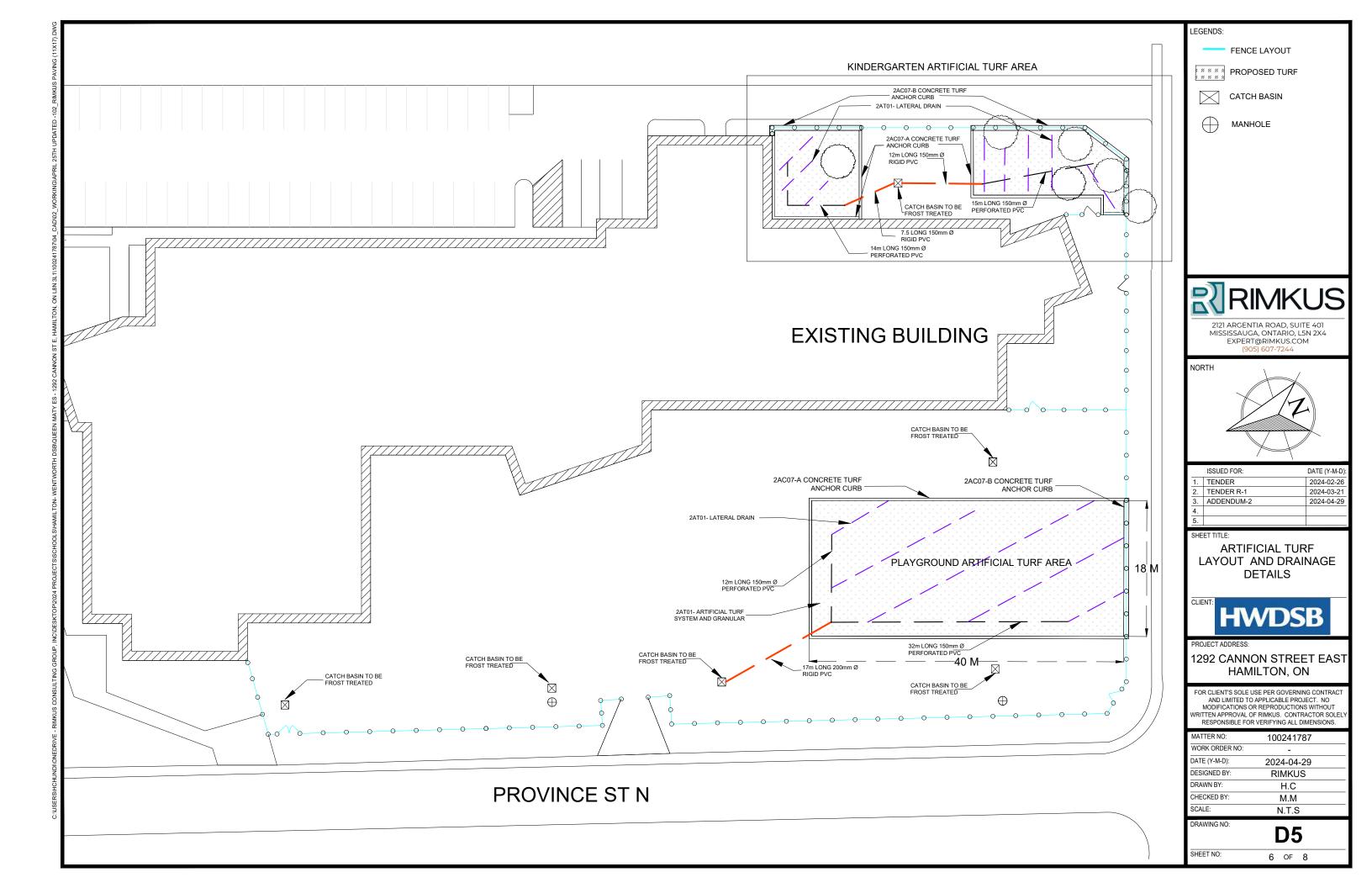
D01 OF 8

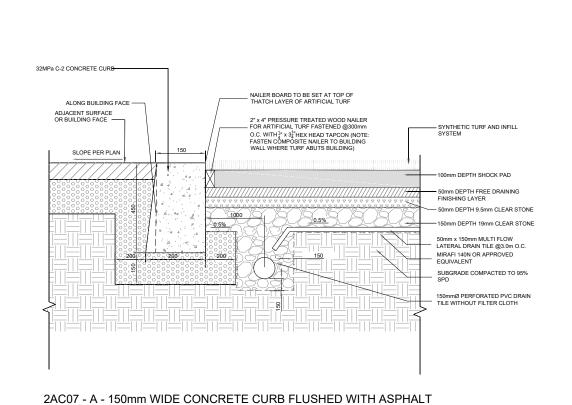


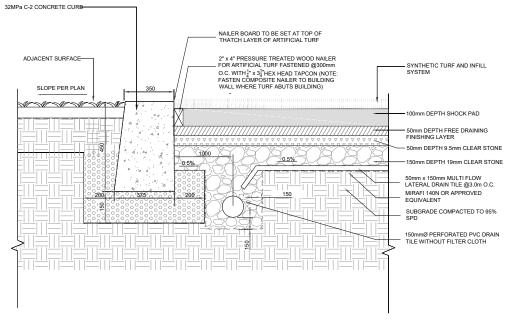










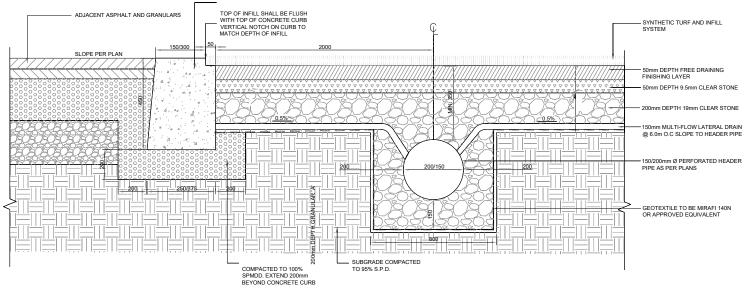




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2AC07 - B - 300mm WIDE CONCRETE CURB FLUSHED WITH ASPHALT



2AT01 - ARTIFICIAL TURF SYSTEM AND GRANULAR STRUCTURE

	ISSUED FUR.	DATE (T-IVI-D
1.	TENDER	2024-02-26
2.	TENDER R-1	2024-03-21
3.	ADDENDUM -2	2024-04-29
4.		
5.		

SHEET TITLE

CONCRETE CURB AND ARTIFICIAL TURF GRANULAR STRUCTURE DETAILS



PROJECT ADDRES

1292 CANNON STREET EAST HAMILTON, ON

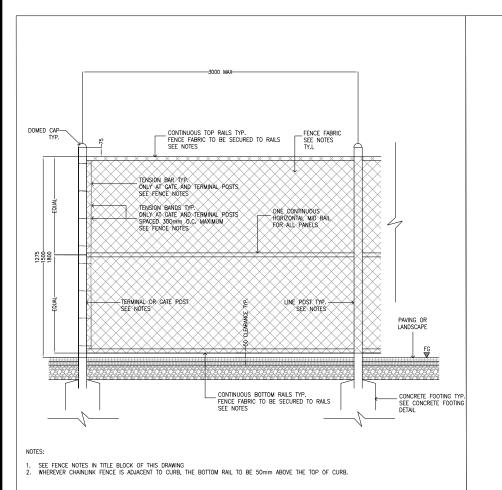
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MATTER NO:	100241787	
WORK ORDER NO:	-	
DATE (Y-M-D):	2024-04-29	
DESIGNED BY:	RIMKUS	
DRAWN BY:	H.C	
CHECKED BY:	M.M	
SCALE:	N.T.S	

DRAWING NO:

D6

SHEET NO: 7 OF 8



PAVING OR LANDSCAPE

PAVING OR LANDSCAPE

PITCH TOP OF FOOTING SLIGHTLY FOR DRAINAG TOP OF FOOTING TO HAVE MIN 150mm COVEP

FG

AUGURED CONCRETE FOOTING

USE SONOTUBE FOR TOP 600mm

CONCRETE COMPRESSIVE

STRENGTH ZSMPO @ 28 DAYS

5% TO 8% AIR ENTRAINED

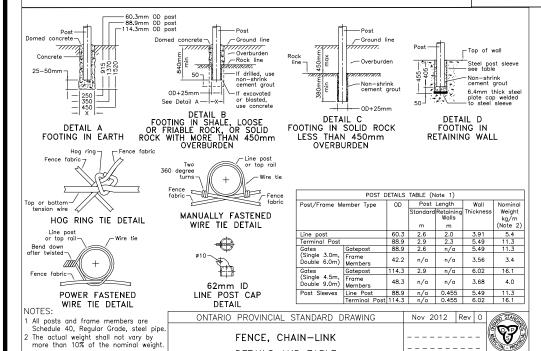
300 DIA FOR GATE POST

450 DIA FOR GATE POST

COMPACT EXISTING SUBGRADE TO

98% SPMDD

## CONCRETE FOOTING FOR CHAIN-LINK FENCE & GATES



DETAILS AND TABLE

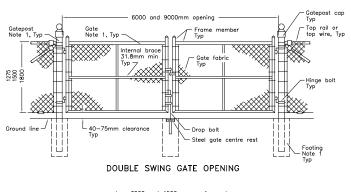
OPSD 972.132

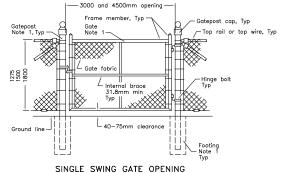
CHAIN-LINK FENCE

A All dimensions are in millimetres

## CHAINLINK FENCE SPECS:

- 1. ALL FENCE POSTS, FENCE POSTS CAPS AND FABRIC COMPONENTS SHALL BE NEW AND HOT DIPPED GALVANIZED, ZINC PAINTED.
- 2. ALL RAILS AND BRACES TO BE WELDED TO POSTS.
- 3. FENCE FABRIC TO BE 50mm X 50mm WOVEN MESH No.6 GAUGE.
- 4. FASTEN FABRIC TO RAILS, BRACES AND POSTS WITH No.7 GAUGE STEEL FENCE TIES 200mm O.C. MAX.
- 5. CHAINLINK FABRIC SHALL BE FASTENED TO THE POSTS FACING THE SCHOOL PLAY YARD.
- ALL ACCESSORIES TO BE RUST RESISTANT GALVANIZED (TENSION BARS, POST CAPS, BANDS, CLAMPS, SLEEVES, ETC.)
- 7. TOP, BOTTOM, MIDRAILS AND BRACES TO BE CONTINUOUS PIPE.
- ALL POSTS TO BE ±60mm OUTSIDE DIAMETER WITH WEIGHT 15.3kg/m AND THICKNESS OF ±7.6mm
- ALL TOP, BOTTOM AND MID RAILS TO BE ±47mm OUTSIDE DIAMETER, BUTT WELDED, SCHEDULE 40 PIPE.





#### NOTES

- 1 For footing details and Gate and Gatepost Details Table refer to OPSD 972.132.
- A Gates as viewed from the roadway.

B All dimensions are in millimetres unless otherwise shown

ONTARIO PROVINCIAL STANDARD DRAWING
FENCE, CHAIN-LINK
COMPONENT - GATE

Nov 2012 Rev 2

10. DROP BOLT TO BE 28MM DIA INTO PIPE SLEEVES
CAST IN 300MM WIDE AND 450MM DEEP CONCRETE



2121 ARGENTIA ROAD, SUITE 401 MISSISSAUGA, ONTARIO, L5N 2X4 EXPERT@RIMKUS.COM

NORTH

EGENDS:

	ISSUED FOR:	DATE (Y-M-D)
1.	TENDER	2024-02-26
2.	ADDENDUM - 2	2024-04-29
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CHAIN LINK FENCE DETAILS



PROJECT ADDRE

## 1292 CANNON STREET EAST HAMILTON, ON

FOR CLIENT'S SOLE USE PER GOVERNING CONTRACT AND LIMITED TO APPLICABLE PROJECT. NO MODIFICATIONS OR REPRODUCTIONS WITHOUT WRITTEN APPROVAL OF RIMKUS. CONTRACTOR SOLEI RESPONSIBLE FOR VERIFYING ALL DIMENSIONS.

MATTER NO:	100241787
WORK ORDER N	0: _
DATE (Y-M-D):	2024-04-29
DESIGNED BY:	RIMKUS
DRAWN BY:	H.C
CHECKED BY:	M.M
SCALE:	N.T.S

DRAWING NO:

D7

SHEET NO: 8 OF 8

## **PART 1 - GENERAL**

## 1.01 SECTION INCLUDES

- .1 Contractor's use of premises.
- .2 Owner occupancy.
- .3 Scope of Work.
- .4 Contractor submissions prior to construction for approval

## 1.02 CONTRACTOR'S USE OF PREMISES

- .1 Contractor to limit use of premises for work, for storage, and access.
- .2 Coordinate use of premises under direction of Owner and Consultant.
- .3 Obtain and pay for use of additional storage or work areas needed for operations under this Contract.

## 1.03 OWNER OCCUPANCY

- .1 Owner will occupy premises during entire construction period for execution of normal operations.
- .2 Cooperate with Owner in scheduling operations to minimize conflict and to facilitate Owner usage.

## 1.04 CONTRACTOR SUBMISSIONS PRIOR TO CONSTRUCTION FOR APPROVAL:

- .1 Phasing plan for the rehabilitation work.
- .2 Itemized project schedule (Gantt chart) coinciding with the phasing plan.

## 1.05 SUMMARY OF WORK:

All work shall be performed as per general scope of work – drawing #D0, summary of work mentioned below and respective sections.

## .1 Construction field testing Allowance:

An allowance is provided for obtaining third-party quality assurance testing and inspections of all materials placed on site. Allowance is to include for preparation of a report detailing testing and results, which will be submitted to consultant. The contractor is responsible for coordinating and scheduling testing company to do all necessary asphalt, concrete, compaction, and proof roll testing as per standard requirements. Work performed under this item will be paid upon submission of testing company invoice, no over heads will be paid on top of the invoice amount.

## .2 General Items (Mobilization/demobilization & Fencing):

- .1 Mobilization and demobilization of all tools, materials, and labour required to perform the Work as outlined in drawing #D0. Specifically, it is expected that Contractor will:
  - .1 Go beyond the minimum to ensure safe and proper execution of public routing, including ensuring temporary access to fire exits if and when affected as part of the Work.
  - .2 All materials/equipment stored on site to be in a secured area with construction fence. Owner/consultant will not be responsible for any damage, theft or vandalism of contractors property.
  - .3 Coordinate all trades to ensure the Work is completed as soon as possible.
  - .4 Perform all work in accordance with all Ministry of Labour requirements.
  - .5 Install temporary protection at all locations of the Work as required to ensure safe, clean, orderly removal and disposal work, and to provide protection for all property, building components, vehicles, pedestrians, and occupants.
  - .6 Apply and pay for all construction permits required to perform and completed the Work.
  - .7 Obtain all service and utility locates for private and public services prior to any excavations.
  - .8 Dispose of all materials at landfill site authorized by authorities having jurisdiction.
  - .9 Accept that weather conditions are considered incidental to the Work and will not be considered additional cost to Bid Price.
  - .10 Maintain safe access to city sidewalk at all times with necessary signage to divert pedestrian traffic as per the city requirements.
  - .11 Provide all flagman, barriers, and pylons as required to secure work areas and to provide safe access for patrons and pedestrians.
  - .12 Perform daily and final clean-up of work areas and surrounding areas of site.
  - .13 Include for re-instating site to its original condition or better with the approval of Owner prior to demobilization.
- .2 Installation of temporary free standing metallic fence of minimum 2.0 meter high to enclose the construction area in every phase to protect the safety of pedestrians and property.
  - .1 No construction work will be allowed to be performed without providing temporary construction fence.

.2 All construction fences should be secured in place to withstand localized shocks, winds and other factors.

## .3 Asphalt Work (Refer to Drawing - D1):

- .1 Remove and dispose off site existing asphalt pavement, concrete pad, interlock, base/subbase granular, earth, topsoil, sod in accordance with Section 32 12 16, in the area of rehabilitation and as delineated in drawing D1 (Approximate Area: 3700 m²). Specifically:
  - .1 Saw cut/mill/excavate/remove 230mm to 250mm thickness of the existing asphalt pavement, base/subbase granular, earth, topsoil, sod and dispose it off-site at an approved location. Site measure and confirm the area to be removed prior to starting work with the Consultant.
  - .2 Dress the existing surface, proof-roll, re-grade, and compact granular material, as directed by the Consultant.
  - .3 It is the responsibility of the contractor to dispose all excavated materials in appropriate locations as per O.Reg 406/19 soil management requirements. Refer to attached soil characteristics and chemical testing.
- .2 Excavate and properly dispose of contaminated or inadequate base and/or subbase and/or subgrade, and to supply and reinstate with new granular material in accordance with Section 32 12 16 (Approximate Area: 1250 m²) Specifically:
  - .1 Once the asphalt has been removed and the base material exposed, all areas are to be proof roll under the supervision of an experienced geotechnical engineer. Any visibly soft areas would be considered contaminated or of inadequate base, subbase, and/or subgrade.
  - .2 Remove 300 mm of granular subbase and/or subgrade is to be removed from these areas and properly disposed of off-site.
  - .3 Once areas of full-depth removal are completed, the geotechnical engineer and consultant will review excavated areas to determine if additional removal of contaminated subbase and/or subgrade is required.
  - .4 Supply new 300 mm compacted depth of new Crusher Run Limestone (19mm) consolidated to meet specified densities
- .3 Supply, place and compact 150mm of Crusher Run Limestone (19mm) as base granular and grading in the area of rehabilitation and perform fine grading (Refer #D1). The work should be completed as per OPSS 301 (Approximate 1225 M.T). The contractor has to ensure that:
  - .1 All areas should be re-graded to minimize the necessity for underground drainage system(s), and allow surface water to flow naturally to roads or drainage inlets without excessive concentration.
  - .2 The contractor should always ensure that all areas exhibit positive slope to allow storm water to flow naturally towards the catch basins to minimize puddling/ponding issues.

- .3 The finished level of any building area shall be designed to ensure a desirable surface grading of 1.5% (1% minimum) oriented in the direction of the drainage system designed to cater for its catchment.
- .4 Supply, place and compact Binder Course Asphalt, by machine to 60 mm HL8 (light-duty pavement) compacted thickness in accordance with Section 32 12 16 (Refer #D1). The cost should include ramping up the asphalt levels to match existing as needed (Approximate 3700 m²).
- .5 Apply undiluted SS-1 emulsion (tack coat) to all of the surfaces at a rate of 0.5 L/m2. Allow the tack coat to dry and place asphalt against the emulsion while it remains "tacky" (Refer #D1). Tack coat to be applied in accordance with Section 32 12 16 (Approximate 3700 m²).
- 6 Supply, place, and compact Surface Course Asphalt, by machine to 40 mm HL3 compacted thickness in accordance with Section 32 12 16 (Approximate 3700 m²). The height of the finished surface course of HL3 asphaltic concrete should be flush with the curb at all curb cuts and surrounding pavement areas (Refer #D1).
- .7 Reinstate all line-markings, symbols, arrows, dividers, and signage in accordance with Section 32 12 18 or according to local bylaw requirements or site-specific variances. The line painting layout will be provided to the contractor during the time of construction
- .8 Remove and dispose off-site existing steel bollards and install new 8" steel bollards in the exact same location. The cost should include all necessary excavation, foundation, and installation and securing yellow reflective sleeve cover on top of newly installed bollards. See Attached Drawing #D1 & #2AC13B.
- .9 Asphalt expansion Area
  - .1 Remove and dispose off site existing earth, topsoil, sod, base/subbase granular of total depth 220mm to 250mm. refer to drawing #D1 (Approximate 35 m²).
  - .2 Supply, place and compact 150mm of new Crusher Run Limestone (19mm) as base granular and grading in the area of rehabilitation and perform fine grading. The work should be completed as per OPSS 301. It is the responsibility of the contractor to maintain proper slopes.
  - .3 Supply place and compact 60mm layer of HL8 base Asphalt.
  - .4 Supply place and compact 40mm layer of HL 3 surface Asphalt.

## **Concrete Pad Work (Refer to Drawing D1):**

.10 Sawcut, Remove and dispose off the existing concrete pad/sidewalk/structure along with the interlock strip and install 150mm thick concrete pad/sidewalk/structure using CSA 32 Mpa (C-2) high early concrete with welded metallic wire mesh as reinforcement placed on 200mm thick compacted granular A. The height of the new concrete pad should match the existing one and should be fused with the city

sidewalk and new asphalt levels. Refer to 2CR05. The cost should also include. The work should be performed in accordance with Section 32 16 00.

## .4 Asphalt Area Drainage Work (Refer to Drawing D5):

- .1 Perform frost treatment of each single catch basin/manhole (6 units) as delineated in Drawing 2AC10, and as per the item description.
  - .1 The cost to remove and dispose off site existing frame and grate and supply and install new frame and grate as per the provincial standards OPSD 400.020. The cost to Perform Frost Treatment on each new Catch Basin as per Drawing 2AC10.
  - .2 The work for this item will include all labour, equipment and material necessary to raise or lower manhole and/or catch basin frames and covers where required to meet the finished pavement grade. The work will also include the saw cutting, coring, parging and removal and reinstating of the adjacent pavement structure including granular and asphalt along with line paintings around the catch basin/manhole to a distance of 1.2 m away and install sub-drains ringed around and connected to existing catch basins as detailed in Drawing 2AC09 in accordance with Section 32 01 21.
  - .3 The work and cost for this item will also include the replacement of damaged and the installation of new moduloc structures and parging as necessary.
- Adjust the height of the water valve in the area of work to match the new asphalt level. The cost should include all necessary fitting, connections, and replacement of damaged valves as necessary (Refer #D5).
- .3 Raise or lower existing manhole covers and to remove and dispose off-site existing damaged manhole/storm sewer frame and grate and replace it with a new frame and grate as per OPSD 401.010 (to match existing) as necessary. The cost should include adjustment of all moduloc or replacement of damaged to match the new asphalt height including saw-cutting and parging of existing/new moduloc (Refer #D5).

## .5 Chain Link Fence Work (Refer to drawings D3 & D7):

- .1 Remove and dispose off site existing chain link fence along with foundation and install new 5' fence to match existing layout in accordance with Section 32 31 00. The cost should include supply and installing all necessary line, terminal, corner and gate posts with foundations and fitting, fastens and mesh OPSS Standards.. Approximate Length of fence 275 meters.
- .2 Remove and dispose off site existing chain link fence gates and replace with new 5' fence gates in accordance with Section 32 31 00. Total of 4 4' wide person gate and 1 12' wide maintenance gate (2 x 6' sections). The cost should include all necessary post with foundation, fitting, fasteners, mesh, etc. as per local and OPSS standards.

## .6 Playground Artificial Turf Work (Refer to Drawing D4, D5, D6):

- .1 Sawcut, excavate, and dispose off site existing asphalt pavement and granular to the required depth and supply and install base granular and drainage systems. Refer to drawing D5 for drainage layout, and D6-2AT01 for excavation depths calculations and turf area structure. The cost should include supply and installation of all necessary drainpipes, geotextile fabric and other connections as required. The contractor is responsible for calculating the quantities required to complete the work (Approximate 720 m²).
- .2 Install a new 150mm wide concrete curb flushed to the surrounding new asphalt and artificial turf using CSA 32MPa (C-2) concrete as per the layout mentioned in drawings D4, Refer to Drawing D6 2AC07- A for curb details. The cost should include installing Nailer boards for turf installation and all necessary excavation, backfilling, and curb cuts as required. Approximate Length: 100 meters.
- .3 Install new 350mm wide concrete curb below the fence line flushed to the surrounding sod / artificial turf level using CSA 32MPa (C-2) concrete as per the layout mentioned in drawings D4, Refer to Drawing D6 2AC07- B for curb details. The cost should include installing Nailer boards for turf installation and all necessary excavation, backfilling and curb cuts as required. Approximate length: 20 meters.
- .4 Supply and install playground artificial turf and infill in accordance to section 32 18 23.01. The cost should include supply of all necessary materials, turf structure as per D6-2AT01, and installation as per industry standards. Refer to drawing #D5 for layout & D6 for turf structure. The contractor should make sure not to use discontinued or end of the line products and submit all necessary samples and documents as per Section 32 18 23.01. (Approximate area: 720 m²)

Note: The contractor is responsible for providing an 8-year warranty period for all work related to Turf Installation including workmanship.

## .7 Kindergarten Artificial Turf Work (Refer to Drawing D2, D4, D5, D6)

- .1 Sawcut, excavate using vac-truck, and dispose off site existing asphalt pavement, granular. Mulch, top soil, sod, bushes, shrubs, subdrains, etc. to the required depth and supply and install base granular and drainage systems. Refer to drawing D5 for drainage layout, and D6-2AT01 for excavation depths calculations and turf area structure. The cost should include supply and installation of all necessary drainpipes, geotextile filter fabric and other connections as required. The contractor is responsible for calculating the quantities required to complete the work. The drain layout can be modified to avoid damaging the existing tree root system with prior approval from consultant. (Approximate 300 m²)
- .2 Install new 150mm wide barrier concrete curb below the fence line flushed with new artificial turf level using CSA 32MPa (C-2) concrete. Refer to drawing D4 for curb layout, D6-2AC07-A for curb structure. The curb adjacent to the building phase should be dowelled at 450mm c/c to the building. The cost should include all necessary excavation and backfilling and curb cuts as required. Approximate 50 meters.
- .3 Install new 350mm wide barrier concrete curb flushed with new artificial turf level using CSA 32MPa (C-2) concrete with reference to drawing D4 for curb layout, D6- 2AC07-B for curb structure. The cost should include installing Nailer boards for

- turf installation and all necessary excavation and backfilling as required. Approximate 60 meters.
- .4 Supply and install kindergarten artificial turf and shock pad in accordance to section 32 18 23.02. The cost should include supply of all necessary materials, turf layout as per drawing D5, Turf structure as per Drawing D6 and necessary installation. The contractor is responsible to install bender boards to secure the turf around existing tree trunks and installation of wooden Nailer board along the perimeter where the turf meets the building. The contractor should make sure not to use discontinued or end of the line products and submit all necessary samples and documents as per Section 32 18 23.02. (Approximate 300 m²)

## Note:

- 1. The contractor is responsible for providing an 8-year warranty period for all work related to Turf Installation including workmanship.
- 2. <u>Contractor is responsible for taking all measures to avoid any damage to existing trees and tree root system.</u>

## .8 Other Work (Refer to Drawing D2):

- .1 Remove and store on site existing blackboard and play structure. Reinstate in the exact same location or at a new location as per the directions of owner after completion of work.
- .2 Remove and dispose off site existing wooden structure in the kindergarten play area.
- .3 Remove and dispose off site existing wooden deck, timber curbs, timber logs, and all other items in the kindergarten area as per the directions of the consultant and owner.
- .4 Remove and reinstall existing bench at a new location as directed by the consultant and owner. The cost should include saw cutting, welding, existing foundation removal, backfill excavated areas with un-shrinkable fill, installing new foundation and all necessary connections. All damaged caused by the contractor during the relocation process should be fixed by the contractor at their own cost. The height of the bench installed should match existing
- .5 Remove, store on site existing sign post and signage and install in the exact same location after completion of rehabilitation work. The cost should include all necessary labour, materials and connections required to secure the post in place.
- .6 Clear all debris and settlement from the existing catch basin in the kindergarten play area using vac-truck. This work should be performed in the presence of consultant before staring any asphalt and turf related work in kindergarten area.
- .7 Clear all debris and settlement from all existing catch basin in the rehabilitation area using vac-truck. This work should be performed after completion of all asphalt work in the presence of consultant. The cost also includes supplying and placing clear stone for gravity drain catch basin which will be determined after clearing the catch basins.

.8 Supply and restore topsoil 300mm and install new sodd all around the rehabilitation area as necessary in accordance to section 32 92 00. The cost should include all excavation, grading, and compaction as necessary to complete the work.

**END OF SECTION 01 11 00**