THE CORPORATION OF THE CITY OF WINDSOR
OFFICE OF THE CITY SOLICITOR

DAWN LAMONTAGNE **(519) 255-6272**
Manager of Purchasing (A) **TELEPHONE NUMBER**

ADDENDUM NO. 1
TENDER NO. 138-24
DERWENT PARK CRICKET FIELD

January 15, 2025

This addendum amends and forms part of the Tender Documents. The bidder shall insert the addendum behind the cover page of the Tender Documents.

CLOSING DATE

PLEASE NOTE: The closing date has been extended to ELEVEN-THIRTY FIFTY-NINE (11:30:59) A.M. (E.S.T.), FRIDAY, JANUARY 24, 2025.

The question deadline has been extended to Friday, January 17, 2025.

QUESTIONS AND CLARIFICATIONS

1. **Can you please clarify the questions below about the new storage shed (Euro Shed):**

   The specification calls for a "dark vinyl outswing double bore 4S Hinge"
   a. Does the door have to be vinyl, or can it be steel?
   b. When they say "dark", does that mean they want a Black Door, a White Primed Door painted to match the colour of the shed, or are they ok with a standard white door?
   c. Is the "4S Hinge" specified because they want it to be self closing?
   d. 36" Wide Door which is the widest available without going custom or double, is this width ok?

   Answers

   a. Please refer to spec item B19.0 – Supply and Place New Storage Shed. The door shall be steel as specified.
   b. The steel door shall be painted. The colour shall be coordinated with EuroShed to best match the colour of the Gray Seas stain colour. If Tenderer is specifying approved equal (not EuroShed), please include the cost to paint door to match the stain colour of the shed.
   c. The tenderers shall disregard the '4S' in front of the word hinge. The door hinge will be outswing on the left side of the door. The second bullet point of spec item B19.0 – Supply and Place New Storage Shed shall be replaced with the following: Steel door with dark vinyl cover and outswing double bore left side hinge.
   d. Tenderers shall include one 36" wide door.

2. **Please clarify the questions related to watermain:**

   a. They are asking for a 3" waterline PVC (On the documents it indicates 3" water). 3" is an odd size for watermain. we usually go 2" or 4". Can you please confirm which size is required; what I gather from the prints is it is feeding a shed with a water supply. can we please get clarified
   b. It also asks for a 6" self draining corp stop? Please clarify.

Answers

a. The Contractor shall use 4" PVC waterline in place of 3" PVC waterline to create the connection from the existing watermain to the proposed EuroShed.
b. Windsor Utilities Commission has been contacted to obtain their preference for connecting and terminating the proposed water line. The attached drawings represent their preference for completion of the watermain works. Figure 2 attached provides details pertaining to a water service manhole that will be installed immediately upstream of the EuroShed.

3. **Please clarify the questions related to electrical works:**

a. Detail D4, Drawing Sheet 2, states, "Refer to diagram D11, Table D11 in OESC." Please provide.
b. What grade of stainless (304 or 316), what gauge/thickness of material, is there more than one? It appears to be cast in place, are any holes or tabs needed to hold it in place. Could a sketch be included of what you think we might need.

Answer

The Contractor shall note that new Electrical Drawings have been issued.

- **22-040-06 Proposed Electrical Works** is attached hereto
- **22-040-07 Electrical Notes** is attached hereto

The Contractor shall also note that the proposed electrical conduit trench encircling the cricket field has been removed from the Contract. Drawing 22-040-02 has been amended to reflect this amendment.

4. **On this project the document state under the liquidated damages section that April 30th is the completion date, however in the special information to bidders section 23.0 it states the substantial date is June 30th. Can you please clarify which is the correct date?**

The specified completion date shall be June 30th, 2025.

QUESTIONS/COMMENTS/ANSWERS ARISING FROM PRE-TENDER MEETING (8 JANUARY 2025)

5. **How much topsoil is located on-site?**

The Contractor shall strip 150 mm of existing topsoil for reuse after grading of the site, prior to seeding. No new topsoil will be brought to site.

6. **What is the scope of work regarding installation of the spectator seating?**

Tenderers shall note that the spectator seating will be installed by the City of Windsor. Tenderers shall delete installation of spectator seating from the contract. Contractors will be required to supply and install the concrete bases.

7. **We are looking for details regarding the stainless stump box.**

The stainless-steel stump box will be replaced with a composite wood stump box. See Figure 1, attached, for details related to stump box construction and artificial turf fastening.

8. **Does the EuroShed get constructed on a concrete base?**

   The EuroShed shall be constructed on a concrete base. The details for the concrete pad have been amended and are depicted on sheet 22-040-03

The Contractor shall note that a complete drawing set has been reissued that reflects the changes brought forth in this addendum.

Except for the contents of this addendum, all other terms and conditions of this tender remain the same.

END OF ADDENDUM NO. 1

Yours truly,

THE CORPORATION OF THE CITY OF WINDSOR

Dawn Lamontagne
Manager of Purchasing (A)
DL/js

ADDENDUM NO. 1
TENDER NO. 138-24
DERWENT PARK CRICKET FIELD

January 15, 2025

I hereby acknowledge receipt of Addendum No. 1 to the Tender No. 138-24 (**14 pages**).

The information contained therein is hereby noted and account of same will be taken in our tender cost.

This information was received on the _____ day of _____, 20_____.

Signature _____

Name (Printed) _____

Company Name _____

***NOTE: You are required to acknowledge this addendum with your TENDER submission.**

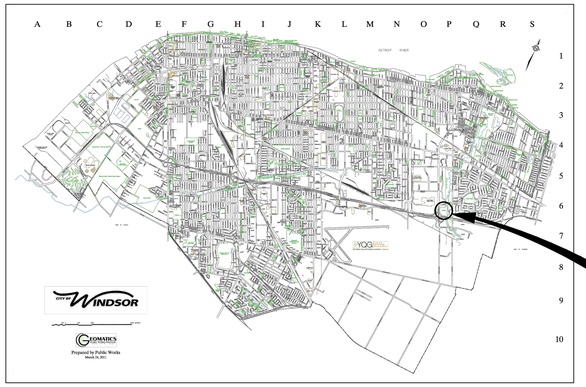
CONTRACT DRAWINGS FOR

DERWENT PARK CRICKET FIELD

CITY OF WINDSOR

THE CITY OF WINDSOR
ONTARIO, CANADA

DECEMBER 2024



KEY PLAN
N.T.S.

SITE LOCATION

GENERAL NOTES:

1. THE TOPOGRAPHIC INFORMATION DEPICTED IN THESE DRAWINGS IS BASED ON TOPOGRAPHIC SURVEYS CONDUCTED BY LANDMARK ENGINEERS INC AND HAS BEEN SUPPLEMENTED WITH OMAFRA LiDAR DATA (2017), IN ORDER TO SUPPORT THE DESIGN PROCESS.
2. LANDMARK ENGINEERS DOES NOT GUARANTEE THE ACCURACY OF THE INFORMATION DEPICTED HEREIN. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY ALL RELEVANT INFORMATION IN THE FIELD PRIOR TO PROCEEDING WITH THE WORK.
3. THE LOCATIONS OF EXISTING UTILITIES AND SERVICES SHOWN ON THESE PLANS ARE APPROXIMATE AND MUST BE VERIFIED BY FIELD LOCATES COORDINATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COORDINATE AND ARRANGE FOR FIELD LOCATES OF ALL UTILITIES IN THE VICINITY OF THE PROPOSED WORKS.
4. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE THE PROTECTION OF ANY UTILITIES AFFECTED BY THE PROPOSED WORKS UNLESS OTHERWISE SPECIFIED.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS RELEVANT TO THE PROPOSED WORK AND TO REPORT ANY DISCREPANCIES TO THE ENGINEER (IN WRITING) PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
6. BEFORE MOBILIZING ANY MATERIALS AND/OR EQUIPMENT TO THE SITE, THE CONTRACTOR SHALL PREPARE AND SUBMIT A DETAILED WRITTEN WORK PLAN AND PROJECT SCHEDULE TO BOTH THE OWNER AND THE ENGINEER, DESCRIBING THE METHODOLOGY, SEQUENCING, AND ANTICIPATED DURATION FOR EACH OF THE PRIMARY ELEMENTS OF THE PROPOSED WORKS.

CONSTRUCTION NOTES:

1. ALL WORK ASSOCIATED WITH THIS PROJECT SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND THE ASSOCIATED REGULATIONS FOR CONSTRUCTION PROJECTS.
2. THE CONTRACTOR SHALL CONFINE THEIR WORK TO THE PUBLIC RIGHT-OF-WAY AND THE ESTABLISHED LIMITS OF THE SITE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR CROSSING OR MAKING USE OF ANY PRIVATE PROPERTY OUTSIDE THE LIMITS OF THE SITE, IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
3. DURING REMOVALS OPERATIONS, THE CONTRACTOR SHALL PREVENT ANY DEBRIS AND / OR EFFLUENT FROM THE REMOVALS PROCESS FROM ENTERING THE ADJACENT WATERWAY(S). NO IN-WATER WORKS OR DISTURBANCE OF THE EXISTING RIVERBED SHALL BE PERMITTED UNLESS OTHERWISE SPECIFIED.
4. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY THE NEW CONSTRUCTION TO THEIR ORIGINAL CONDITION (AND TO THE SATISFACTION OF THE CITY OF WINDSOR) USING TOPSOIL, SEED & MULCH, AS SPECIFIED IN THE CONTRACT DRAWINGS.

Landmark
Engineers Inc.

2280 Ambassador Drive
Windsor, Ontario, Canada
N9C 4E4

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Fax: (519) 972-8644
www.landmarkengineers.ca

DRAWING LIST:

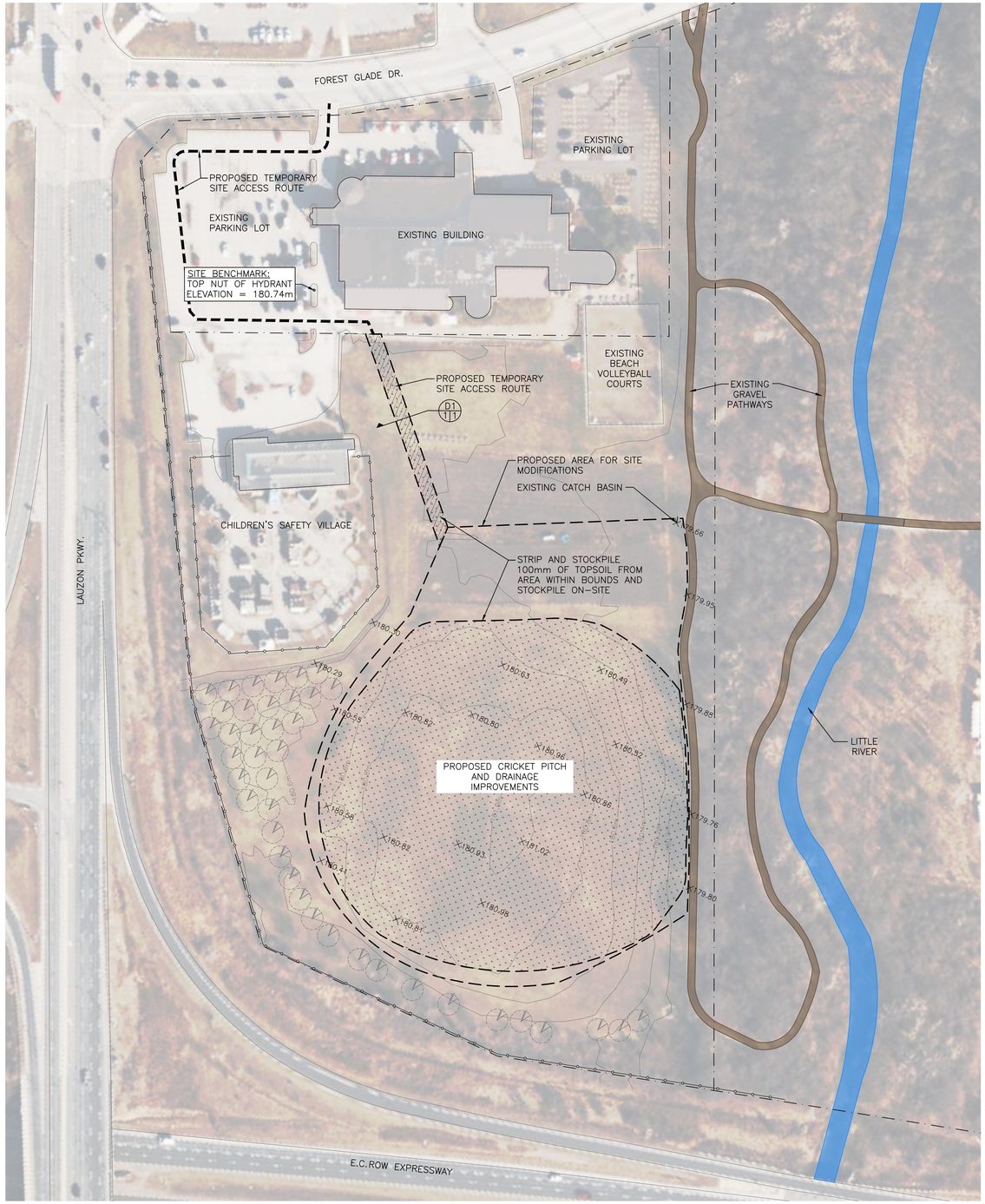
2

LICENSED PROFESSIONAL ENGINEER
D. M. KRUTSCH
PROVINCE OF ONTARIO

DATE: DECEMBER 2024

PROJECT NO.: 22-040

DERWENT PARK CRICKET FIELD
PROJECT NO.: 22-040



PLAN - SITE OVERVIEW
SCALE: 1:1000

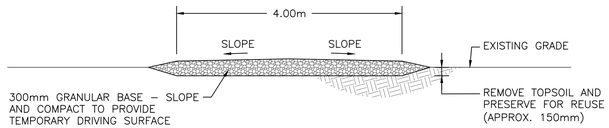
LEGEND:

- PROPERTY LINES
- EXISTING CHAIN-LINK FENCE
- EXISTING ELEVATION CONTOURS
- X 180.5 SPOT ELEVATIONS (LiDAR)
- PROPOSED AREA FOR SITE MODIFICATIONS
- PROPOSED TEMPORARY SITE ACCESS ROUTE
- APPROXIMATE LOCATION OF NEWLY PLANTED TREES (TO REMAIN)

NOTES:

SITE PREPARATION

1. ALL TOPSOIL STRIPPING SHALL BE DONE IN ACCORDANCE WITH OPSS 206 AND STOCKPILED ON-SITE (FOR RE-USE ON-SITE) IN ACCORDANCE WITH OPSS 570. THE STOCKPILE SHALL NOT INTERFERE WITH LOCAL DRAINAGE PATTERNS.
2. ROUGH GRADING OF THE SITE SHALL BE CARRIED OUT IN CONFORMANCE WITH OPSS 206.



D1 / 1 1 SECTION - TEMPORARY SITE ACCESS ROUTE
SCALE: 1:50

all dimensions are in METRES unless otherwise shown

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approved by

drawn by / date	JRZ / DEC. 2024
designed by / date	ADM / DEC. 2024
checked by / date	DMK / DEC. 2024

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seal

revisions

No.	Description	Date
0	ISSUED FOR REVIEW	NOV. 2024
1	ISSUED FOR TENDER	DEC. 2024
2		
3		
4		
5		
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NOTE: THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THIS DRAWING AND WHERE DISCREPANCIES OCCUR HE SHALL REPORT TO THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH ANY PORTION OF THE WORK IN THE CONTRACT.

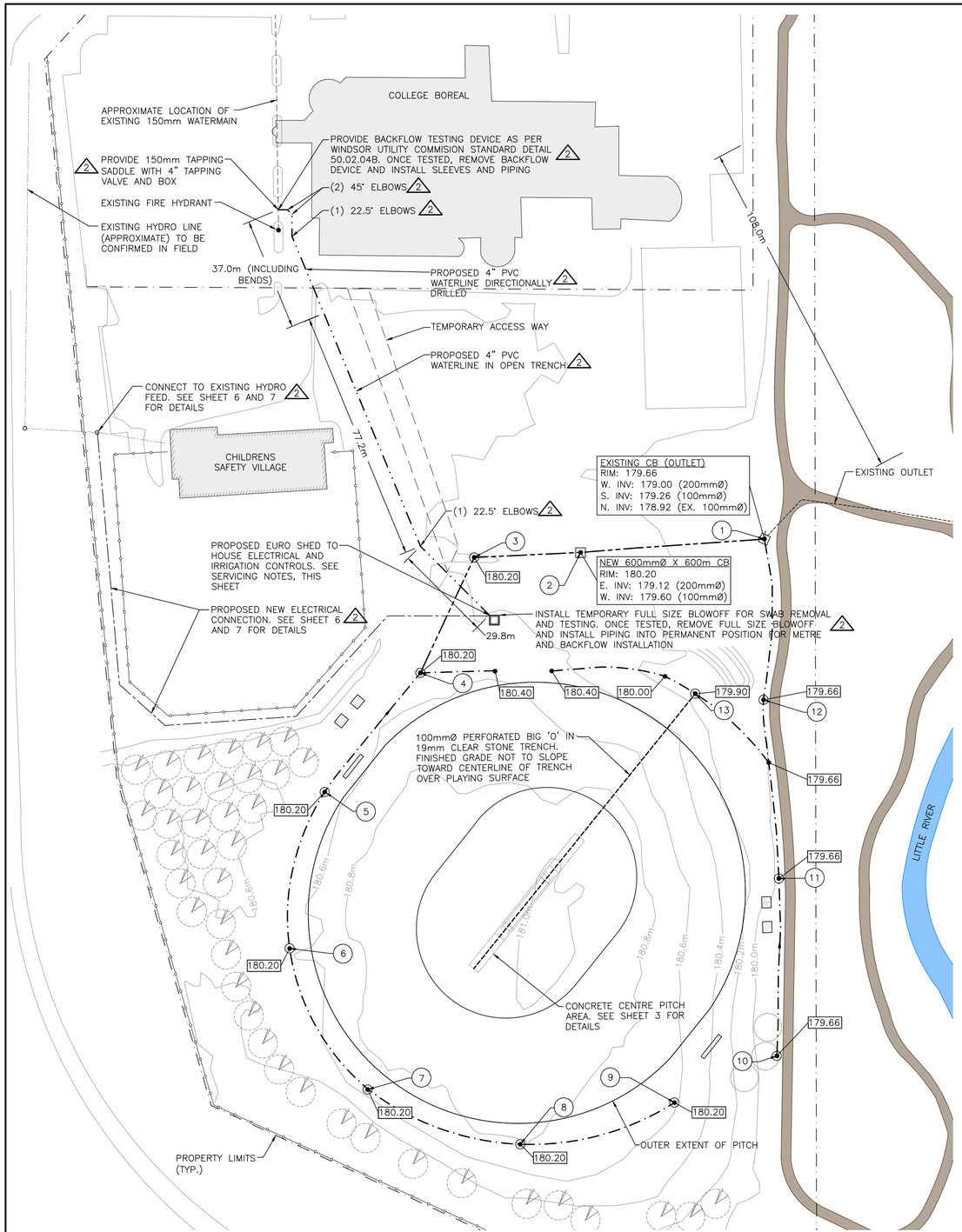
detail legend: A / B C
A DETAIL NO.
B SHEET WHERE DETAIL REQ'D
C SHEET DETAIL DRAWN ON

client: **CITY OF WINDSOR**

project: **DERWENT PARK CRICKET FIELD**

drawing title: **SITE LAYOUT PLAN**

project no. 22-040
drawing no. 22-40-01
sheet no. 1 of 7
scale AS SHOWN



DRAINAGE PLAN

SCALE: 1:750

LEGEND:

- 180.50 GRADE — EXISTING SPOT ELEVATION (2017 LiDAR)
- 180.50 — EXISTING ELEVATION CONTOUR
- SWALE WITH DRAINAGE TRENCH (SEE DETAIL D2, THIS SHEET)
- NEW 200mmØ SEWER PIPE (SEE DETAIL D3, THIS SHEET)
- NEW ELECTRICAL TRENCH (SEE SHEET 6 AND 7 FOR DETAILS)
- NEW 4" PVC WATERLINE (2)
- 179.75 — FINISHED SWALE INVERT
- CATCH BASIN RIM: 180.10 INV: 179.40 — NEW 600mm X 600mm CATCH BASIN (AS PER OPSD 705.010)
- 179.75 — NEW 450mm DIA. CATCH BASIN (SEE DETAIL D4, THIS SHEET)
- (1) — LAYOUT POINT
- EXISTING NEWLY PLANTED TREES TO REMAIN

LAYOUT TABLE (DRAINAGE):

POINT NUMBER	DESCRIPTION	NORTHING	EASTING
1	EXISTING CB	4684499.95	341364.43
2	NEW 600mm X 600mm CB	4684473.54	341314.64
3	NEW 450mmØ CB	4684458.98	341285.44
4	NEW 450mmØ CB	4684420.00	341284.61
5	NEW 450mmØ CB	4684374.80	341272.55
6	NEW 450mmØ CB	4684326.63	341282.05
7	NEW 450mmØ CB	4684296.74	341321.33
8	NEW 450mmØ CB	4684300.22	341370.82
9	NEW 450mmØ CB	4684330.92	341408.84
10	NEW 450mmØ CB	4684356.66	341431.76
11	NEW 450mmØ CB	4684406.61	341410.41
12	NEW 450mmØ CB	4684454.79	341384.06
13	NEW 450mmØ CB	4684448.19	341364.18

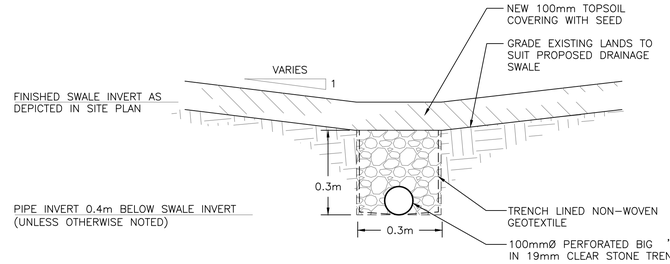
NOTES:

SEWERS

1. SEWER INSTALLATIONS SHALL BE CARRIED OUT IN CONFORMANCE WITH OPSS 401 & 410
2. ALL PIPE TRENCHES SHALL BE BACKFILLED TO FULL DEPTH WITH AN APPROVED GRANULAR MATERIAL (AS SPECIFIED)
3. PRECAST 600mm x 600mm CONCRETE CATCH BASINS SHALL CONFORM TO OPSD 705.010 AND BE COMPLETE WITH FRAME AND GRATE AS PER OPSD 400.010
4. ALL PRECAST CONCRETE COMPONENTS SHALL BE INSTALLED IN CONFORMANCE WITH OPSS 401 & 407.

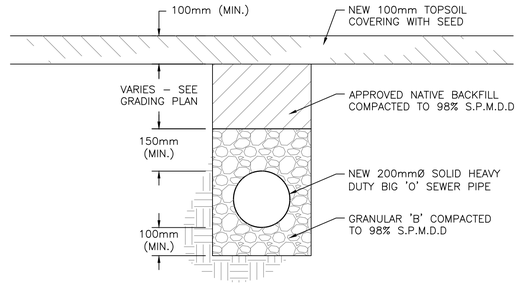
SERVICING NOTES

1. PROVIDE 1.5"Ø EMPTY PVC CONDUIT IMMEDIATELY BELOW THE PROPOSED IRRIGATION CONTROLLER (4' ABOVE FINISHED FLOOR GRADE AND EXTENDING HORIZONTALLY 24" FROM THE FACE OF THE BUILDING.)
2. PROVIDE 2.5"Ø PVC PIPE FROM THE WATER LINE THROUGH THE FLOOR (TO A POINT 24" FROM THE BUILDING FACE AND 12" BELOW FINISHED GRADE.)
3. PROVIDE 2" MUNICIPAL WATER METRE



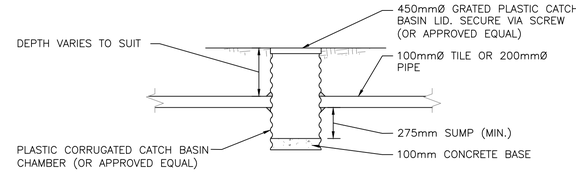
D2 / 2 2 SECTION DETAIL - DRAINAGE TRENCH WITH SWALE

SCALE: 1:10



D3 / 2 2 SECTION DETAIL - SEWER TRENCH WITHOUT SWALE

SCALE: 1:10



D4 / 2 2 SECTION DETAIL - 450mmØ CATCH BASIN

SCALE: 1:25

all dimensions are in METRES unless otherwise shown

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approved by

drawn by / date	JRZ DEC. 2024
designed by / date	ADM DEC. 2024
checked by / date	DMK DEC. 2024

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A DETAIL NO.
B SHEET WHERE DETAIL REQ'D
C SHEET DETAIL DRAWN ON

client: **CITY OF WINDSOR**

project: **DERWENT PARK CRICKET FIELD**

drawing title: **PROPOSED UNDERGROUND WORKS**

project no. 22-040

drawing no. 22-040-02

sheet no. 2 of 7

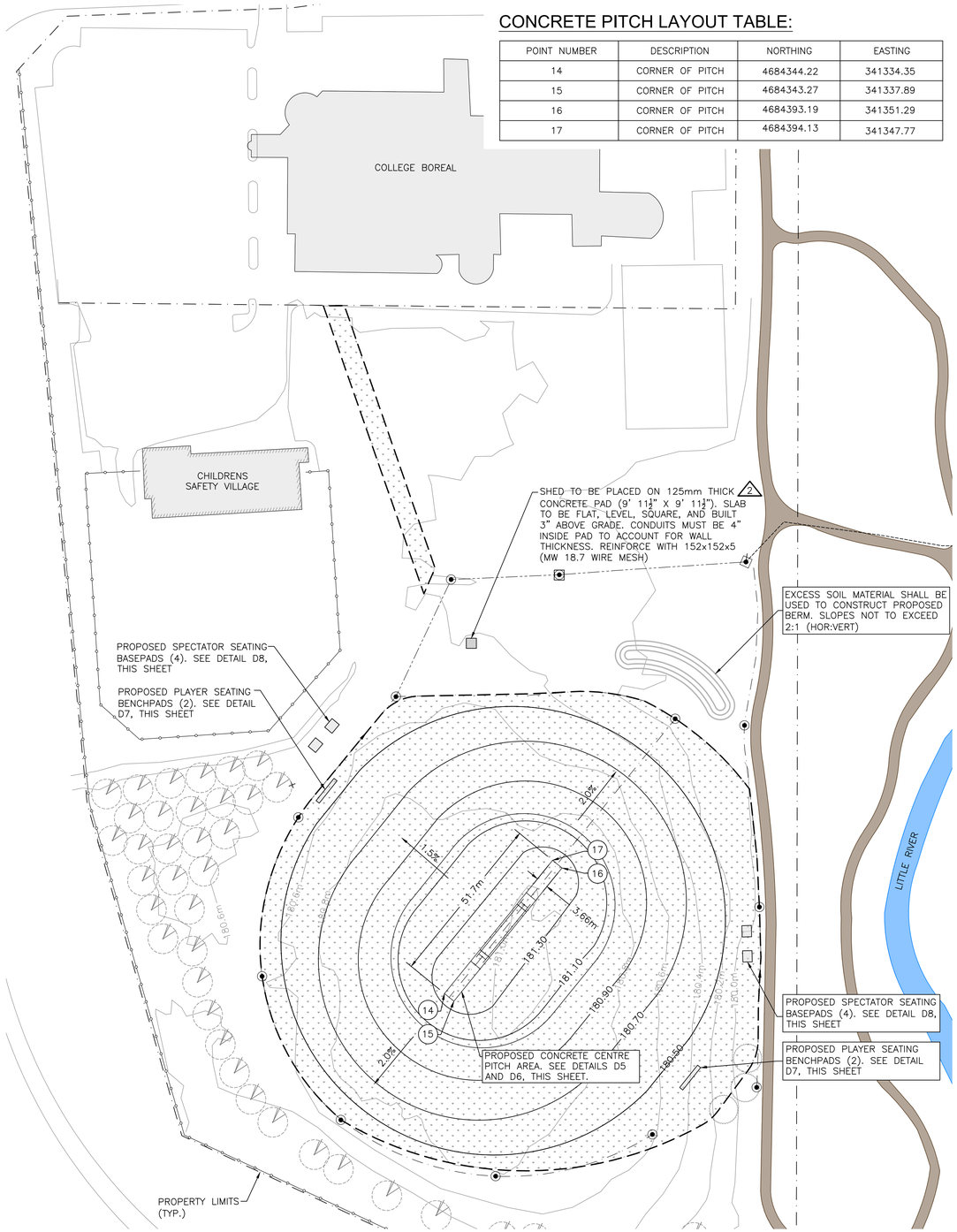
scale AS SHOWN

CONCRETE PITCH LAYOUT TABLE:

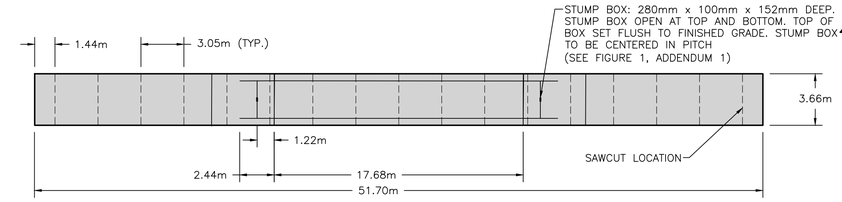
POINT NUMBER	DESCRIPTION	NORTHING	EASTING
14	CORNER OF PITCH	4684344.22	341334.35
15	CORNER OF PITCH	4684343.27	341337.89
16	CORNER OF PITCH	4684393.19	341351.29
17	CORNER OF PITCH	4684394.13	341347.77

LEGEND:

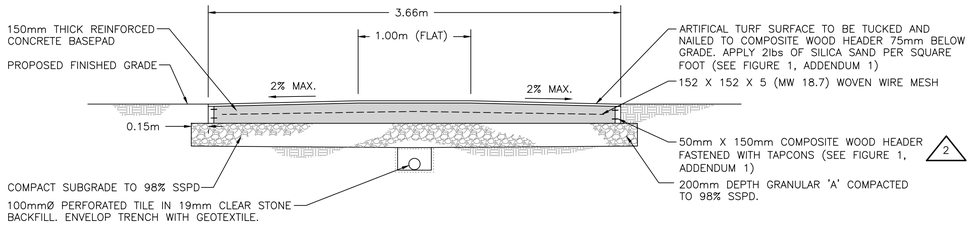
- 180.50 — EXISTING ELEVATION CONTOUR
- 180.50 — PROPOSED FINISHED ELEVATION CONTOUR
- SWALE WITH DRAINAGE TRENCH (SEE DETAIL D2, SHEET 2)
- NEW 200mmØ SEWER PIPE (SEE DETAIL D3, SHEET 2)
- NEW 600mm X 600mm CATCH BASIN (AS PER OPSD 705.010)
- NEW 450mm DIA. CATCH BASIN (SEE DETAIL D4, SHEET 2)
- EXISTING NEWLY PLANTED TREES TO REMAIN
- SEED AND MULCH



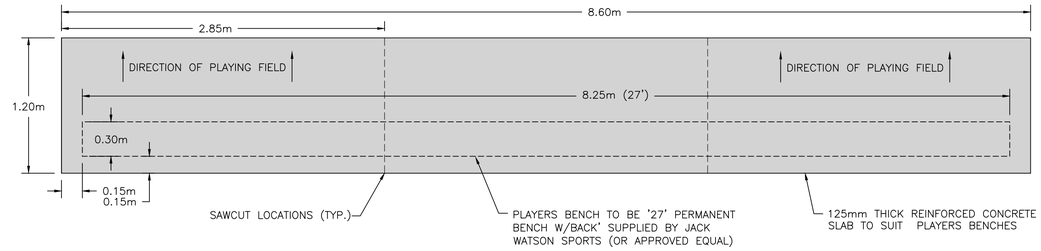
PLAN - SITE GRADING & RESTORATION
SCALE: 1:750



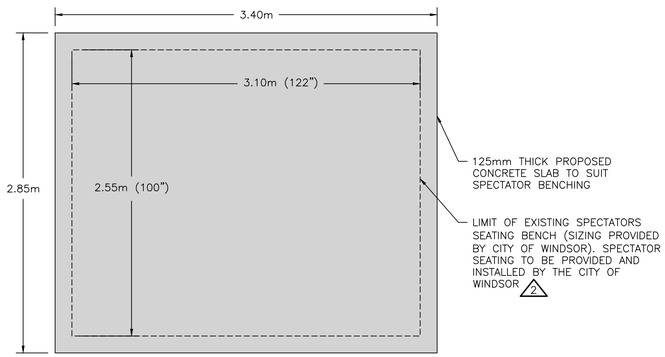
D5 4|4 DETAIL PLAN: CONCRETE CENTRE PITCH AREA
SCALE: 1:200



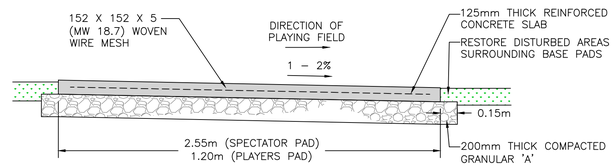
D6 4|4 DETAIL SECTION: CONCRETE CENTRE PITCH AREA
SCALE: 1:25



D7 4|4 DETAIL PLAN: PLAYER SEATING BASEPAD
SCALE: 1:100



D8 4|4 DETAIL PLAN: SPECTATOR SEATING BASEPAD
SCALE: 1:25



SECTION: SPECTATOR/PLAYER SEATING BASEPADS
SCALE: 1:100

all dimensions are in **METRES** unless otherwise shown

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revisions		
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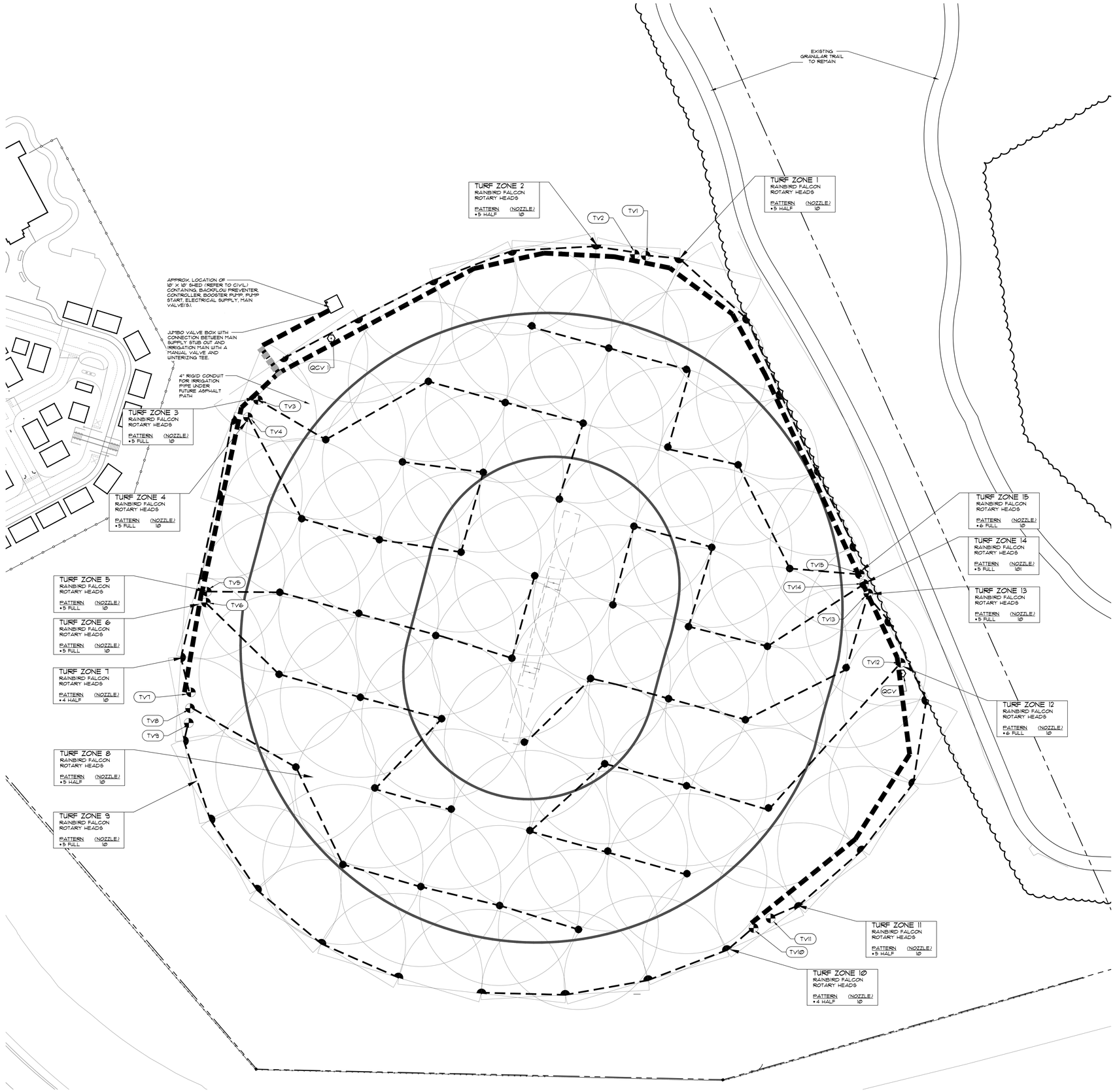
A DETAIL NO.
B SHEET WHERE DETAIL REQ'D
C SHEET DETAIL DRAWN ON

client: **CITY OF WINDSOR**

project: **DERWENT PARK CRICKET FIELD**

drawing title: **GRADING AND RESTORATION**

project no.	22-040
drawing no.	22-040-03
sheet no.	3 of 7
scale	AS SHOWN



REFER TO SHEET LA-2 FOR IRRIGATION NOTES AND DETAILS

IRRIGATION PLAN

ORIGINAL SHEET SIZE: 36" x 48"

SCALE 1:300

0 5m 10m 15m 20m 25m

North

BP
Bezaire Partners

Landscape Architects
Public Consultation
Project Management

2255 Pellissier Street
Windsor, ON N8X 1N5
cell: 519.791.1651
gbezaire@bezaire.ca

SEAL:

ASSOCIATION OF LANDSCAPE ARCHITECTS ONTARIO
GINO D. BEZAIRE
OALA
12/11/24
REVISED

ISSUED:

REVISIONS:

PROJECT:

DERWENT PARK

FOREST GLACE DR.
WINDSOR, ONTARIO

DRAWING TITLE:

IRRIGATION PLAN

SCALE:	AS NOTED
DRAWN BY:	GDB
CHECKED BY:	PLB
APPROVED BY:	
DATE:	SEPT. 2024

DRAWING NO:

LA-1

CAD file: 1703 Irr r3

Irrigation Legend

RAINBIRD
FALCON 6504 SERIES RAIN
CURTAIN ROTARY HEADS

- 360° SPRAY PATTERN
  NO. 10 NOZZLE
- 180° SPRAY PATTERN
  NO. 10 NOZZLE - ½ ZONE RUN TIME

USE RAINBIRD 4" POP UP HEIGHT
BODIES FOR ALL TURF HEADS.

INDICATES SPRAY PATTERN

USE APPROPRIATE NOZZLE FOR
SPECIFIC HEAD LOCATION, RADIUS
AND APPLICATION. ADJUST RADIUS
AND ARC TO SUIT LOCATION. REFER
TO THE CHART ABOVE.

RAINBIRD PEB SERIES 2" ELECTRIC
VALVES MODEL 200-PEB

1 ½" RAINBIRD QUICK COUPLING VALVE MODEL 5-RC
WITH VALVE KEY MODEL 33K-1 EACH WITH A HOSE
SWIVEL MODEL 34-1

MAINLINE PIPE
2 1/2" PVC CLASS 160 SDR 1PS SOLVENT
WELD PRESSURE PIPE

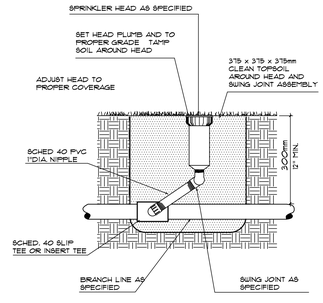
BRANCHLINE PIPE
2" PVC CLASS 160 IPS PIPE.

4" OR LARGER IRRIGATION SLEEVE
UNDER PAVEMENT AND/OR TRACK BASE

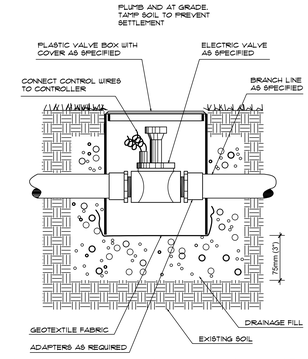
VALVE BOXES	RAINBIRD STANDARD VALVE BOX VB5TCH - GREEN LID AND LOCK RAINBIRD 12" RECTANGULAR VALVE BOX, VB12PBH FVB JUMBO VALVE BOX - GREEN LID AND LOCK
WIRE	LINE TO BE DIRECT BURIAL #14 OR LARGER
WIRE SPLICE	USE 3M DIRECT BURY SPLICE KIT DBRY-6 FOR ALL CONNECTIONS.
CONTROLLER	RAINBIRD ESP-LXME 2 8 STATION BASE UNIT EXPANDABLE TO 48 STATIONS (INCLUDE 1 - 8 STATION BASE MODULE AND 1 - 8 STATION EXPANSION MODULE) WITH PUMP START CIRCUIT, WALL MOUNT CASE, INCLUDING LNK2 WIFI MODULE AND LNKRFC-48 -LR2 WIRELESS RAIN/FREEZE SENSOR COMBO AND 48 HOUR RAIN DELAY.
BOOSTER PUMP	BERKELEY 3 HP TYPE C STRAIGHT CENTRIFUGAL PUMP MODEL C1-1/2TP48 (CAT. NO. B9B92328) WITH SINGLE-PHASE MOTOR. COORDINATE WITH ELECTRICAL FOR 115/230V INSTALLATION. INCLUDE UNIONS ON BOTH SIDES FOR EASY REMOVAL
PUMP START	RAINBIRD PSRP PUMP START RELAY MODEL NO. RSL-C24UG (1 or 2) WITH LOW PRESSURE SENSOR FIXED AT 20 PSI. COORDINATE WITH ELECTRICAL FOR 115/230V INSTALLATION.
WINTERIZING TEE	2.5Øx2.5Øx Ø.75IN. "TEE" WITH Ø .75 IN. HOSE BIB IN VALVE BOX
MAIN VALVE	SUPPLY AND INSTALL ADDITIONAL VALVE ON SUB-MAIN TO CRICKET PRACTICE FACILITY
BACKFLOW PREVENTER	2" PRESSURE VACUUM BREAKER WATTS MODEL LF288APTS INSTALLED 12" ABOVE HIGHEST POINT OF DOWNSTREAM PIPE
SWING JOINT ASSEMBLY	RAINBIRD 76J SERIES SWING JOINT ASSEMBLY SUITABLE FOR SPECIFIED IRRIGATION HEADS
FITTINGS	SCHEDULE 40 PVC

Branchline Pipe Size

1.0" PVC PIPE . . . . . 1-15 GPM
1.5" PVC PIPE . . . . . 16-35 GPM
2.0" PVC PIPE . . . . . 36-50 GPM
2.5" PVC PIPE . . . . . 51-80 GPM
3.0" PVC PIPE . . . . . 81-125 GPM*



Irrigation Head/Swing Joint NTS



Electric Valve/Valve Box NTS

General Notes

NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO COMMENCING WORK, AFTER STAKING THE LOCATIONS OF PROPOSED WORK, AND PRIOR TO BACKFILLING EXCAVATIONS.

NOTE ANY AND ALL DISCREPANCIES FROM THIS PLAN AND NOTIFY THE PROJECT MANAGER IMMEDIATELY.

DETERMINE AND VERIFY THE LOCATION AND EXISTENCE OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. ADVISE THE PROJECT MANAGER OF ANY CONFLICT BETWEEN THE PROPOSED WORK AND EXISTING UTILITIES. REPAIR ANY DAMAGE DONE AS A RESULT OF CONSTRUCTION. VERIFY THAT ALL EXISTING SITE CONDITIONS ARE AS SHOWN ON THE PLAN.

THE CONTRACTOR IS RESPONSIBLE TO THE OWNER OF ANY UTILITY FOR DAMAGE DONE TO THAT UTILITY THROUGH ANY ACT OF NEGLECT BY THE CONTRACTOR OR ANYONE ACTING UNDER HIS AUTHORITY.

ALL WORK TO BE PERFORMED IN COMPLIANCE WITH THE HEALTH AND SAFETY ACT 1980, ONTARIO Reg. 213/91, 114/82 LATEST REVISIONS.

RESTORE ANY AREA OF THIS SITE AND ADJACENT PROPERTIES DAMAGED AS A RESULT OF WORK ASSOCIATED WITH THIS PROJECT.

Scope of Work:

A. THIS IS A FULLY AUTOMATIC IRRIGATION SYSTEM FOR THE CRICKET FIELD AT DERWENT PARK.

B. THE NEW SYSTEM WILL CONSIST OF A 2.5 IN. CLASS 160 PVC MAINLINE INSTALLED IN AN OPEN TRENCH AND CONNECTED TO A 2.5 IN. PVC SUPPLY STUBBED OUT 24 IN. FROM THE FACE OF THE PUMP ENCLOSURE AT A DEPTH OF 12 IN.

C. SYSTEM DESIGN IS BASED ON THE FOLLOWING:

- 78 GPM WITH DEDICATED FLOW.
- 50 PSI STATIC PRESSURE IN THE WATERMAIN.
- 48 PSI BOOST FROM BOOSTER PUMP.
- WORKING PRESSURE IS 87 PSI
- 1.5 IN/WEEK IRRIGATION REQUIREMENT.

D. THOROUGHLY TEST AND BALANCE THE SYSTEM, ASSURE FULL HEAD -TO -HEAD COVERAGE OF IRRIGATION HEADS. REMOVE AND CLEAN ALL FILTERS WHERE PRESENT IN ANY IRRIGATION HEADS, VALVES, OR DRIP ZONE CONTROLS PRIOR TO HANDOVER.

E. RETURN TO THE SITE AND FULLY WINTERIZE THE SYSTEM IN THE FALL OF THE YEAR OF INSTALLATION F. RETURN TO THE SITE AND FULLY OPEN AND TEST THE SYSTEM IN THE SPRING OF THE FOLLOWING YEAR. REPLACE ANY DAMAGED OR DEFECTIVE EQUIPMENT UNDER WARRANTY.

Prior To Commencing Work:

A. DETERMINE AND VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK.

B. REVIEW INSTALLATION OF WATER SERVICE, ENCLOSURE, ST UBOUT S, ELECTRICAL SERVICE AND EQUIPMENT PRIOR TO COMMENCING WORK. VERIFY FLOW AND PRESSURE PRIOR TO PROCEEDING AND NOTIFY THE CONSULTANT OF ANY DISCREPANCY.

C. SUBMIT BONDS, INSURANCE AND PROJECT SCHEDULE AS SPECIFIED.

D. OBTAIN, PERMIT FOR WORK FROM BUILDING DEPARTMENT.

E. SUBMIT SHOP DRAWINGS/CATALOGUE CUTS OF:

- 6504 HEADS
- VALVES
- PUMP
- RAINBIRD ESP-LXME2 CONTROLLER
- PRESSURE TYPE BPP
- PUMP START

Installation Notes:

A. COMPLY WITH ALL APPLICABLE SAFETY CODES AND PRACTICES.

B. REQUEST EARLY INSPECTION TO VERIFY DEPTH OF PIPE FOR BOTH OPEN TRENCH AND PULLED PIPE, INSTALLATION OF VALVE BOXES.

C. A SMALL SHED WILL BE INSTALLED BY OTHERS ON A CONCRETE BASE TO ENCLOSE THE PUMP, PUMP START, BACKFLOW PREVENTER, MANUAL VALVES, CONTROLLER, AS WELL AS THE ELECTRICAL DISCONNECT AND DISTRIBUTION PANEL BY OTHERS.

D. A 2.5 IN. DIA CLASS 160 PVC PIPE AND A 1.5 IN. PVC CONDUIT WILL BE INSTALLED BY OTHERS VERTICALLY THROUGH THE CONCRETE PAD AND HORIZONTALLY STUBBED OUT TO 24IN. FROM THE FACE OF THE ENCLOSURE AT A DEPTH OF 12IN. UTILIZE THESE TO CONNECT THE PUMP. THE M A INLINE AND TO PROVIDE ACCESS FOR THE VALVE CONTROL WIRE. PROVIDE A JUMBO VALVE BOX FOR THE CONNECTIONS.

E. PROVIDE A 2.5 IN.X 2.5 IN.X Ø.75 IN. WINTERIZATION TEE WITH HOSE BIB AT THE POINT OF CONNECTION

F. INSTALL VALVE BOXES ON COMPACTED FREE DRAINING GRANULAR BASE. PROVIDE ADDITIONAL GRANULAR MATERIAL IN THE BOTTOM OF THE VALVE BOX AND THE COMPLETED INSTALLATION SHOULD BE FREE OF ANY DEBRIS OR SOIL.

G. FLUSH MAINLINE AND BRANCH LINES AS REQUIRED PRIOR TO INSTALLING IRRIGATION HEADS.

PROJECT CLOSEOUT :

A. INSTALL IRRIGATION HEADS PLUMB AND COMPACT SOIL AROUND EACH HEAD TO PREVENT MOVEMENT . NOTIFY THE CONSULTANT OF PROJECTED DATE OF COMPLETION AND REQUEST

B. FINAL INSPECTION. RECTIFY ALL NOTED DEFICIENCIES.

C. RESTORE ANY AREAS OR SURFACES DAMAGED AS A RESULT OF THE WORK CLEAN ALL SURFACES WITHIN AND ADJACENT TO THE IRRIGATED AREA.

D. DEMONSTRATE THE SYSTEM TO THE CONSULTANT AND ADJUST EQUIPMENT AS DIRECTED. PROVIDE BINDER WITH MARKED-UP AS -BUILT DRAWINGS OF SYSTEM, MANUALS, AND WARRANTIES.

E. DEMONSTRATE THE SYSTEM TO OUNER'S REPRESENTATIVE AND TRAIN ON USE OF CONTROLS.

F. PROVIDE BINDER WITH MARKED -UP AS -BUILT DRAWINGS OF SYSTEM, MANUALS, AND WARRANTIES. PROVIDE COPY OF RECORD DRAWINGS IN AUTOCAD DWG FORMAT. A COPY OF THE AUTOCAD DESIGN FILE OF THESE DRAWINGS WILL BE PROVIDED AS A BASE.

G. PROVIDE THE FOLLOWING SPARE PARTS:

- 4 6504 ROTARY HEADS WITH RANGE OF NOZZLES
- 2 PEB 2 IN. ELECTRIC VALVE
- 2 SWING ARM ASSEMBLIES

BP
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SEAL:

ASSOCIATION OF LANDSCAPE ARCHITECTS ONTARIO
GREGORY D. BEZAIRE
OALA
12/11/24
MEMBER

ISSUED:

REVISIONS:

PROJECT:

DERWENT PARK

FOREST GLACE DR.
WINDSOR, ONTARIO

DRAWING TITLE:

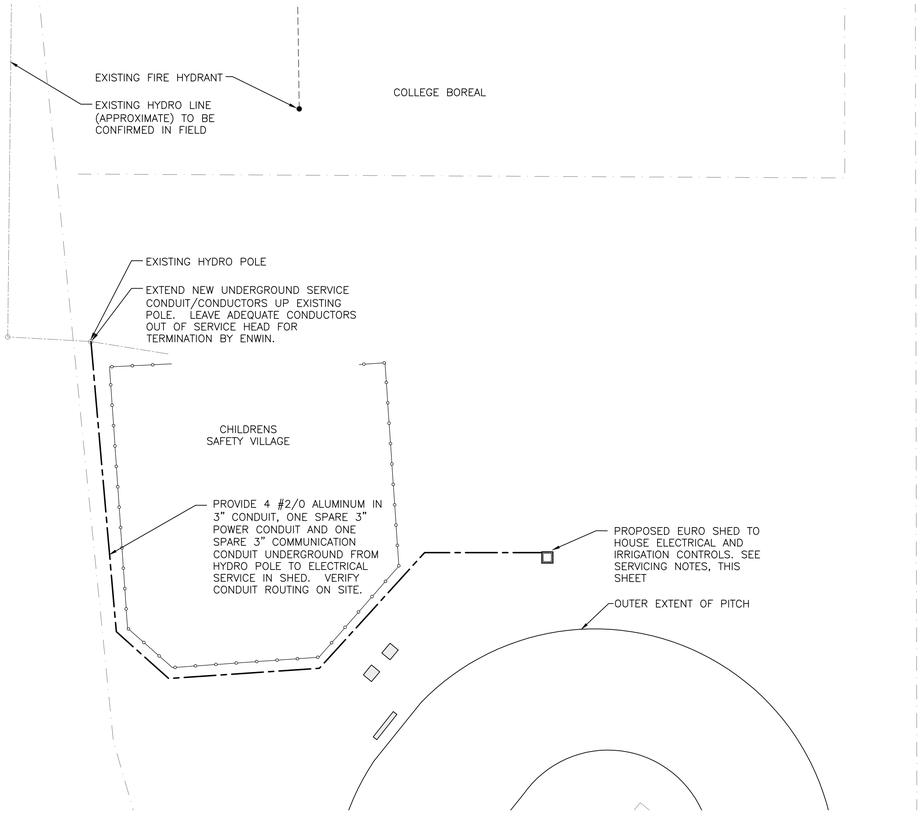
IRRIGATION NOTES AND DETAILS

SCALE:	AS NOTED
DRAWN BY:	GDB
CHECKED BY:	PLB
APPROVED BY:	
DATE:	SEPT. 2024

DRAWING NO:

LA-2

CAD file: 1703 Irr r3



ELECTRICAL PLAN

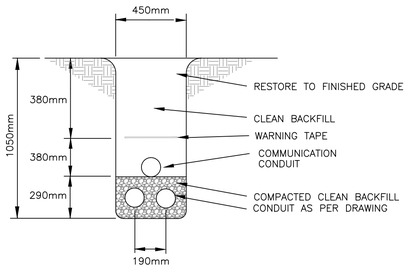
SCALE: 1:750

LEGEND:

- NEW ELECTRICAL TRENCH (SEE CONDUIT DETAIL, THIS SHEET)
- NEW 4" WATERLINE
- PROPERTY LIMIT

NOTE:

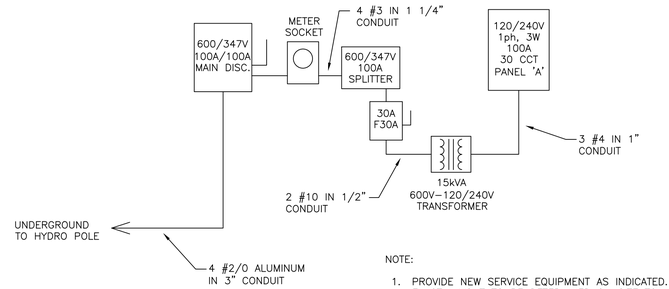
1. REFER TO CIVIL DRAWINGS AND SITE PLANS FOR DETAILS ON CONSTRUCTION, SITE LAYOUT, EXACT LOCATION OF CURBS, POLES, ETC.
2. SUPPLY AND INSTALL NEW ELECTRICAL SERVICE COMPLETE WITH EQUIPMENT, CONDUIT. CONDUCTORS, ETC. VERIFY EXACT LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
3. PRIOR TO INSTALLATION, MEET WITH ENWIN ON SITE TO REVIEW ALL SERVICE AND METERING DETAILS. REPORT ANY CONCERNS TO CONSULTANT FOR FURTHER DIRECTION.
4. COORDINATE ROUTING OF NEW UNDERGROUND CONDUIT WITH GENERAL ON SITE TO AVOID INTERFERENCE WITH OTHER SERVICES. PROVIDE MANHOLES/PULL BOXES AS REQUIRED TO ALLOW FOR INSTALLATION OF SERVICE CONDUCTORS.
5. PROVIDE 120V, 15A, DUPLEX RECEPTACLE IN SHED, UNDER PANEL.
6. PROVIDE LIGHT FIXTURE IN SHED COMPLETE WITH OCCUPANCY SENSOR. FIXTURE TO BE EQUAL TO ACUITY #FEM-L48-6000LM-IMAFL-MD-MVOLT-GZ10-40K-80CRI-SBOR10D3V. PROVIDE ALL REQUIRED MOUNTING HARDWARE.
7. PROVIDE POWER FEED TO PUMP CONTROL PANEL (240V, 3HP) AT SHED. CONTROLS BY SPRINKLER CONTRACTOR. COORDINATE REQUIREMENTS ON SITE.
8. PROVIDE SPARE CONDUITS IN SERVICE TRENCH AS SHOWN (ONE FOR FUTURE POWER AND ONE FOR FUTURE COMMUNICATIONS. TURN CONDUITS UP ABOVE GROUND AT POLE AND CAP FOR FUTURE USE. TURN CONDUITS UP ABOVE FLOOR IN SHED AND CAP FOR FUTURE USE.



NOTE: TYPICAL UNDERGROUND CONDUIT DETAIL SHOWN. REFER TO SITE DRAWINGS FOR DETAILS ON CONDUIT AND CONDUCTOR SIZES. ALL UNDERGROUND CONDUIT TO BE INSTALLED AS PER ONTARIO ELECTRICAL SAFETY CODE REQUIREMENTS. REFER TO DIAGRAM D11, TABLE D11 IN O.E.S.C.

TYPICAL UNDERGROUND CONDUIT DETAIL TWO CONDUITS + COMMUNICATION

N.T.S.



NOTE:

1. PROVIDE NEW SERVICE EQUIPMENT AS INDICATED. EXACT LAYOUT TO BE DETERMINED ON SITE TO SUIT AVAILABLE SPACE. COORDINATE WITH GENERAL.
2. VERIFY SERVICE AND METERING REQUIREMENTS WITH ENWIN PRIOR TO INSTALLATION.

SERVICE DETAIL

N.T.S.

GENERAL CONDITIONS

1. INSTRUCTIONS TO BIDDERS, FORM OF TENDER, FORM OF CONTRACT AND DIVISION 1 FORM PART OF THIS SECTION.
2. ALL DRAWINGS AND SPECIFICATIONS ARE AN INSTRUMENT OF SERVICE ONLY AND REMAIN THE PROPERTY OF THE ENGINEER.
3. PROVIDE ALL LABOUR AND MATERIAL REQUIRED TO COMPLETE ALL WORK SHOWN ON THE DRAWINGS AND SPECIFICATIONS. PERFORM THE ENTIRE INSTALLATION IN ACCORDANCE WITH THE LATEST EDITION, INCLUDING ALL BULLETINS, OF THE ONTARIO ELECTRICAL SAFETY CODE, THE ONTARIO BUILDING CODE, AND ALL OTHER RULES, ORDINANCES, CODES, LAWS OR REGULATIONS WHETHER THEY BE LOCAL, PROVINCIAL OR FEDERAL IN ORIGIN.

PERMITS, TESTS AND REGULATIONS

1. BEFORE TENDERING, BECOME FULLY ACQUAINTED WITH THE BY-LAWS OF ANY LOCAL OR OTHER AUTHORITY HAVING JURISDICTION. WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, MEET THE LATEST REGULATIONS OF THE ONTARIO ELECTRICAL SAFETY CODE AND LATEST MUNICIPAL, PROVINCIAL AND FEDERAL CODES AND REGULATIONS. THE CODE, REGULATION, STATUTE, BY-LAW OR THIS SPECIFICATION HAVING THE MOST STRINGENT REQUIREMENT APPLIES. SHOULD ANYTHING IN THE DRAWINGS OR SPECIFICATIONS NOT CONFORM WITH THIS, AND WHICH INVOLVES AN INCREASE OR DECREASE IN THE TENDER PRICE, NOTIFY THE ENGINEER IN WRITING AT THE TIME OF TENDER AND MAKE ALLOWANCE IN THE TENDER FOR CORRECTING THE SAME.
2. SUBMIT TO THE ELECTRICAL SAFETY AUTHORITY AND ELECTRICAL UTILITY AUTHORITY THE NECESSARY NUMBER OF WORKING DRAWINGS AND SPECIFICATIONS FOR EXAMINATION AND APPROVAL PRIOR TO COMMENCEMENT OF WORK. THESE DRAWINGS TO BE PROVIDED BY THE CONSULTANT AT NO EXTRA COST.
3. CARRY OUT ALL CHANGES AND ALTERATIONS REQUIRED BY THE AUTHORIZED INSPECTOR OF ANY AUTHORITY HAVING JURISDICTION WITHOUT DELAY TO THE PROGRESS OF THE WORK AND WITHOUT EXTRA COST.
4. OBTAIN AND PAY FOR ALL TEMPORARY AND PERMANENT PERMITS REQUIRED. ALL COSTS SHALL BE INCLUDED IN THE TENDER PRICE.
5. DELIVER A COPY OF ALL PERMITS TO THE ARCHITECT AND/OR PRIME CONSULTANT AS SOON AS THEY BECOME AVAILABLE.
6. ARRANGE FOR INSPECTION OF ALL ELECTRICAL WORK AS REQUIRED BY THE ELECTRICAL SAFETY AUTHORITY. PROVIDE ALL WARNING SIGNS AS SPECIFIED OR TO MEET THE REQUIREMENTS OF THE INSPECTION DEPARTMENT.
7. UPON COMPLETION OF THE CONTRACT, ISSUE TO THE OWNER A FORMAL CERTIFICATE OF COMPLETION OF THE WORK, A COPY OF THE FINAL ELECTRICAL INSPECTION CERTIFICATE FROM THE INSPECTION DEPARTMENT.

SUBMITTALS - DRAWINGS

1. WITHIN 30 DAYS OF THE DATE OF SYSTEM ACCEPTANCE, 3 SETS OF RECORD DRAWINGS OF THE ACTUAL INSTALLATION SHALL BE PROVIDED TO THE BUILDING OWNER, OR DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER. MARK ALL CHANGES IN RED INK. RECORD DRAWINGS SHALL INCLUDE, AS A MINIMUM:
   A. THE LOCATION, LUMINAIRE IDENTIFIER, CONTROL, AND CIRCUITING FOR EACH PIECE OF LIGHTING EQUIPMENT.
   B. A SINGLE LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM.
   C. FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION.
   D. DIMENSIONS SHOWING EXACT LOCATION OF ALL UNDERGROUND CONDUIT AND ELECTRICAL.
2. CERTIFY THESE PLANS AS 'AS-BUILT'. PLANS ARE NOT CONSIDERED CERTIFIED UNLESS THEY ARE SIGNED AND SEALED BY AN OFFICER OF THE SUBCONTRACTOR'S COMPANY.
3. OBTAIN ELECTRICAL DRAWINGS IN AUTOCAD FORMAT FROM THE CONSULTANT AND MAKE ALL CHANGES FOR A FINAL SET OF 'AS-BUILT' ELECTRONIC FILES. TURN OVER TO OWNER. ALL COSTS INVOLVED IN PREPARING THESE DRAWINGS AND FILES TO BE INCLUDED IN THE TENDER PRICE.

SUBMITTALS - MANUALS

1. WITHIN 30 DAYS OF THE DATE OF SYSTEM ACCEPTANCE, 3 SETS OF OPERATING AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER, OR DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER. THESE MANUALS SHALL INCLUDE, AS A MINIMUM:
   A. SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE, AND FOR EACH PIECE OF LIGHTING EQUIPMENT AND LIGHTING CONTROLS.
   B. OPERATION AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED. INCLUDE, AS A MINIMUM, A RECOMMENDED RE-LAMPING PROGRAM FOR ALL LIGHT FIXTURES A SCHEDULE FOR INSPECTING AND RECALIBRATING ALL LIGHTING CONTROLS.
   C. A COMPLETE NARRATIVE OF HOW EACH SYSTEM, INCLUDING LIGHTING CONTROL SYSTEMS, IS INTENDED TO OPERATE, INCLUDING RECOMMENDED SETTINGS.
   D. NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY.
   E. ESA AND OTHER INSPECTION REPORTS, FIRE ALARM VERIFICATION (WHERE REQUIRED), SHORT CIRCUIT AND/OR COORDINATION STUDY REPORTS (WHERE REQUIRED).

SHOP DRAWINGS

1. SUBMIT ELECTRONIC SET OF MANUFACTURER'S SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW. THESE SHOP DRAWINGS SHALL CONSIST OF ALL DISTRIBUTIONS EQUIPMENT, LIGHT FIXTURES, EXIT AND EMERGENCY LIGHTING, FIRE ALARM EQUIPMENT AND OTHER SPECIAL SYSTEM AND EQUIPMENT.
2. THE ENGINEER'S REVIEW OF SHOP DRAWING IS TO CHECK FOR CONFORMANCE WITH THE DESIGN INTENT AND SHALL NOT ALLEVIATE THE CONTRACTOR FROM HIS CONTRACTUAL RESPONSIBILITY FOR ITS CORRECTNESS AND COMPLIANCE WITH THE CONTRACT DOCUMENTS.

EXAMINATION OF SITE

1. VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH EXISTING SYSTEMS AND SITE CONDITIONS SO AS NOT TO OVERLOOK ANY CONDITIONS WHICH MAY AFFECT THE SCOPE OF WORK. FOR ANY SUCH ITEM WHICH COULD BE FORESEEN, NO EXTRA WILL BE ALLOWED.
2. NOTIFY THE ENGINEER, IN WRITING, OF ANY VARIATIONS OR DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS AND THE SITE CONDITIONS PRIOR TO SUBMITTING TENDER.

CHANGES AND EXTRAS

1. NO EXTRA CHARGES SHALL BE HONOURED EXCEPT WHERE THE CONTRACTOR RECEIVES A WRITTEN ORDER COUNTERSIGNED OR OTHERWISE APPROVED BY THE ARCHITECT OR ENGINEER. ALL CLAIMS FOR EXTRAS SHALL BE SUBMITTED FOR APPROVAL ALONG WITH ITEMIZED BREAKDOWNS OF ALL LABOUR AND MATERIAL.
2. AFTER THE APPROVAL OF DRAWINGS, THE RIGHT IS RESERVED TO MAKE REASONABLE CHANGES IN THE DESIGN OF THE WORK OR TO OMIT ANY SUCH PARTS AS THE OWNER MAY REQUIRE. IN THE CASE WHERE WORK OR MATERIAL IS ADDED TO, OR DEDUCTED FROM, THE WORK HEREIN SPECIFIED, A FAIR AND REASONABLE VALUATION OF THE SAME SHALL BE ADDED TO, OR DEDUCTED FROM, THE AMOUNT OF THIS CONTRACT.

GUARANTEE

1. GUARANTEE IN WRITING THAT ALL MATERIALS AND WORKMANSHIP USED ON THIS PROJECT ARE IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND WILL GIVE PROPER AND EFFICIENT OPERATION AND ARE FREE FROM MECHANICAL OR ELECTRICAL DEFECTS. REPAIR AND/OR REPLACE ANY DEFECTS WHICH MAY APPEAR IN ANY OF THE WORK WITHIN ONE YEAR AFTER THE WRITTEN ACCEPTANCE OF SAME BY THE OWNER, EXCEPT DUE TO ORDINARY WEAR AND TEAR, WITHOUT ADDITIONAL EXPENSE TO THE OWNER. NOTE THAT THE ONE YEAR PERIOD REFERRED TO ABOVE MAY EXCEED THE EQUIPMENT GUARANTEE APPRECIABLY, AND ALLOWANCE MUST BE MADE FOR THIS FACT. THIS GUARANTEE DOES NOT SUPERCEDE THE MANUFACTURER WARRANTY IF LONGER THAN THE ONE YEAR WARRANTY.

PRODUCT STORAGE AND HANDLING

1. REMOVE ALL DEBRIS AND KEEP THE SITE CLEAN AND CLEAR. STORE ALL WORK RELATED MATERIALS AND EQUIPMENT OUT OF THE PUBLIC EYE AT THE END OF EACH WORKDAY.
2. STORE PACKAGED MATERIALS AND EQUIPMENT IN ORIGINAL UNDAMAGED CONDITION WITH MANUFACTURER'S LABELS AND SEALS INTACT. PREVENT DAMAGE TO MATERIALS DURING HANDLING AND STORAGE.
3. THE MAINTENANCE AND OPERATION OF ALL EQUIPMENT INSTALLED WILL BE THE FULL RESPONSIBILITY OF THIS CONTRACTOR UNTIL ACCEPTANCE BY THE ENGINEER. PROTECT ALL EQUIPMENT TO PREVENT ITS MISUSE SINCE ALL DAMAGE WILL BE THE CONTRACTOR'S RESPONSIBILITY.

CLEAN-UP AND FINAL DOCUMENTS

1. ON COMPLETION OF THE WORK, REMOVE FROM THE PREMISES ALL SURPLUS WASTE MATERIALS, CLEAN ALL FIXTURES AND EQUIPMENT, AND LEAVE ALL ITEMS IN PERFECT ORDER AND READY FOR OPERATION.
2. UPON COMPLETION OF THE WORK, ISSUE TO THE OWNER THROUGH THE ARCHITECT OR ENGINEER:
   A. THREE COPIES OF 'AS-BUILT' DRAWINGS AND OPERATING AND MAINTENANCE MANUALS.
   B. ONE CD OF 'AS-BUILT' ELECTRONIC FILES IN AUTOCAD FORMAT.
   C. FINAL ELECTRICAL INSPECTION CERTIFICATE
   D. FIRE ALARM VERIFICATION, WHERE APPLICABLE
   E. FINAL COMPLETION AND GUARANTEE CERTIFICATES
   F. SHORT CIRCUIT AND/OR COORDINATION STUDY WHERE APPLICABLE.

   THE ENGINEER'S FINAL ACCEPTANCE OF THE WORK IS CONTINGENT UPON THESE BEING RECEIVED.

DRAWINGS

1. THIS CONTRACTOR SHALL HAVE REFERENCE TO ALL DRAWINGS ISSUED FOR THE CONSTRUCTION OF THIS PROJECT, INCLUDING THE ELECTRICAL DRAWING WHICH DETAIL THE WORK TO BE PERFORMED BY HIM. CARE HAS BEEN EXERCISED IN MAKING THE DRAWINGS AS ACCURATE AS POSSIBLE. HOWEVER, SHOULD ANY VARIATION EXIST BETWEEN MEASURED AND GIVEN DIMENSIONS, NO CLAIM FOR EXTRA PAYMENT WILL BE ALLOWED ON THIS CONTRACT.
2. THE DRAWINGS SHOW THE GENERAL DESIGN AND EXTENT OF THE WIRING AND OTHER SYSTEMS. THE MAINS AND DISCONNECTS ARE SHOWN MORE OR LESS IN DIAGRAM AND GENERAL LOCATION, EXCEPT IN CERTAIN CASES WHERE DETAILS SHOW EXACT LOCATIONS AND DIMENSIONS. ANY NECESSARY CHANGES REQUIRED TO ACCOMMODATE STRUCTURAL CONDITIONS ARE DONE WITHOUT ADDITIONAL CHARGE OR EXPENSE OT THE OWNER. NOTIFY THE ENGINEER IMMEDIATELY AND SECURE HIS WRITTEN AUTHORIZATION PRIOR TO PROCEEDING WITH THIS WORK.

DELIVERY DATES

1. ORDER ALL MATERIAL AND EQUIPMENT IMMEDIATELY AFTER THE AWARD OF THIS CONTRACT. SUBMIT A LIST OF DELIVERY DATES FOR EACH TYPE OF EQUIPMENT WITHIN 30 DAYS. LIST SHALL INCLUDE MANUFACTURER.

COORDINATION

1. START WORK AND PROCEED AS SOON AS POSSIBLE AFTER THE CONTRACT HAS BEEN AWARDED, AND IN ACCORDANCE WITH THE CONSTRUCTION SCHEDULE.
2. COOPERATE WITH OTHER TRADES WHOSE WORK IS AFFECTED BY THIS CONTRACT TO ENSURE A SATISFACTORY INSTALLATION AND TO AVOID DELAYS IN THE COMPLETION OF THE WORK.
3. COORDINATE WITH OTHER TRADES DURING PROGRESS OF THE WORK TO AVOID CONFLICTS OF LOCATION OF EQUIPMENT. WHERE SUCH CONFLICTS ARISE, IT SHALL BE SETTLED BY THE ENGINEER. WORK FORMING PART OF THE CONTRACT SHALL BE COMMENCED ONLY AFTER COORDINATION MEETINGS WITH OTHER TRADES UNDER THE DIRECTION OF THE ENGINEER. ALTERATIONS REQUIRED DUE TO FAILURE TO COMPLY WITH THIS CLAUSE SHALL BE DONE AT THIS CONTRACTOR'S EXPENSE.

all dimensions are in **METRES** unless otherwise shown

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approved by

drawn by
date

designed by
date

checked by
date

seal

seal

revisions

No.	Description	Date
0	ISSUED FOR TENDER	JAN. 2025
1		
2		
3		
4		
5		
6		

NOTE: THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THIS DRAWING AND WHERE DISCREPANCIES OCCUR HE SHALL REPORT TO THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH ANY PORTION OF THE WORK IN THE CONTRACT.

detail legend

A
B C

A DETAIL NO.
B SHEET WHERE DETAIL REQ'D
C SHEET DETAIL DRAWN ON

client
CITY OF WINDSOR

project
DERWENT PARK CRICKET FIELD

drawing title
PROPOSED ELECTRICAL WORKS

project no. 22-040

drawing no. 22-040-06

sheet no. 6 of 7

scale AS SHOWN

IDENTIFICATION

1. PROVIDE LAMACOID IDENTIFICATION NAMEPLATES FOR ALL ELECTRICAL DISTRIBUTION EQUIPMENT INCLUDING PANELBOARDS, DISCONNECT SWITCHES, TRANSFORMERS, METERING EQUIPMENT ETC. NAMEPLATES SHALL BE BLACK WITH WHITE ENGRAVED LETTERS OF SUITABLE SIZE AND INSTALLED WITH SCREWS.
2. EACH PANELBOARD SHALL HAVE A TYPEWRITTEN CIRCUIT DIRECTORY MOUNTED ON THE INSIDE DOOR WITH A METAL FRAME AND CLEAR PLASTIC COVER.

DEMONSTRATION OF SYSTEMS

1. DEMONSTRATE THE FUNCTION AND OPERATION OF EACH SYSTEM TO THE OWNER AS PART OF THIS CONTRACT.

CUTTING AND PATCHING

1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING, PATCHING, SLEEVE OPENINGS ETC. THIS CONTRACTOR IS RESPONSIBLE FOR INFORMING THE GENERAL CONTRACTOR OF ANY CUTTING, PATCHING AND SLEEVE OPENINGS PRIOR TO TENDER CLOSING SO THAT ALLOWANCES CAN BE MADE.
2. COORDINATE ALL SLEEVES AND OPENINGS WITH THE GENERAL CONTRACTOR PRIOR TO INSTALLATION. ANY CUTTING AND PATCHING WHICH IS REQUIRED AFTER WALLS HAVE BEEN ERECTED SHALL BE DONE SO BY THE GENERAL CONTRACTOR AT THIS CONTRACTOR'S EXPENSE.

EQUIPMENT AND MATERIAL

1. UNLESS OTHERWISE NOTED, ALL EQUIPMENT AND MATERIAL USED ON THIS PROJECT MUST BE NEW AND FREE FROM DEFECTS.
2. ALL EQUIPMENT INSTALLED MUST BE APPROVED BY THE CANADIAN STANDARDS ASSOCIATION, UNDERWRITERS LABORATORIES OF CANADA, WHERE APPLICABLE, AND/OR OTHER APPROVAL AGENCIES AS REQUIRED, AND SHALL BEAR THE APPROPRIATE LABELS.
3. ALL SERVICE EQUIPMENT SHALL BE RATED HEAVY DUTY INDUSTRIAL.
4. ALL FUSES TO BE HRC–1, CLASS J TYPE, UNLESS CONNECTED LOAD SPECIFIES OTHERWISE.

WORK FORCE

1. MAKE AVAILABLE A FOREMAN TO SUPERVISE THE ELECTRICAL INSTALLATION, WHO IS EXPERIENCED IN HANDLING JOBS OF THIS TYPE AND MAGNITUDE. THIS FOREMAN MUST COOPERATE FULLY WITH OTHER TRADES AND BE AVAILABLE AT ALL TIMES FROM THE TIME CONSTRUCTION COMMENCES UNTIL THE CONTRACT HAS BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER.
2. PERFORM ALL WORK AS REQUIRED TO MEET THE COMPLETION DATES AS SET OUT BY THE OWNER. COSTS OF ANY OVERTIME REQUIRED TO MEET THE SCHEDULE SHALL BE INCLUDED IN THE TENDER PRICE.

CONDUIT AND FITTINGS

1. MINIMUM CONDUIT SIZE SHALL BE 1/2" (12mm). OTHER SIZES SHALL BE AS INDICATED ON THE DRAWINGS OR AS REQUIRED BY THE OESC/CEC FOR THE NUMBER AND SIZE OF CONDUCTOR INSTALLED.
2. ALL CONDUIT IN FINISHED AREAS SHALL BE CONCEALED IN WALLS OR CEILING SPACES. ANY EXCEPTION SHALL BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION.
3. ALL SURFACE CONDUIT SHALL BE INSTALLED NEATLY, TO THE SATISFACTION OF THE ENGINEER.
4. ALL CONDUIT TO BE INSTALLED PARALLEL TO BUILDING LINES.
5. UNLESS OTHERWISE NOTED, CONDUITS INSTALLED FOR PANEL FEEDERS AND BRANCH CIRCUIT WIRING SHALL BE EMT.
6. CONDUIT INSTALLED BELOW GRADE, OR CONCRETE GRADE SLAB, SHALL BE RIGID PVC APPROVED AS ELECTRICAL RACEWAY.
7. CONDUITS SHALL BE INSTALLED A MINIMUM OF 6" FROM UNINSULATED HEATING PIPES AND CONDUITS CARRYING COMMUNICATION WIRING.
8. INSTALL CONDUIT AS A COMPLETE SYSTEM WITHOUT WIRES. CONTINUE CONDUIT FROM FITTING TO FITTING AND FASTEN SECURELY IN PLACE. CLEAN ALL CONDUIT INTERIORS REMOVING DEBRIS AND BURRS PRIOR TO INSTALLATION OF WIRING OR PULL STRINGS.
9. FASTEN SINGLE CONDUIT RUNS TO MASONRY OR STRUCTURAL STEEL WITH GALVANIZED ONE MALLEABLE IRON CONDUIT CLAMPS. USE PREFORMED GALVANIZED STEEL CHANNELS FOR MOUNTING OF GROUPED MULTIPLE CONDUIT RUNS AND FASTEN CONDUIT WITH GALVANIZED CONDUIT CLAMPS.
10. CUT ALL CONDUITS SQUARE AND REAM TO REMOVE ALL SHARP EDGES AND BURRS. FIT CONDUITS CLOSELY AND TIGHTLY ON COUPLINGS AND MAKE WATERTIGHT. ENSURE THAT THREADS ARE CLEAN AND SHARP TO PROVIDE A LOW RESISTANCE GROUND PATH.
11. UNLESS OTHERWISE NOTED OR APPROVED, ARMOURED CABLE 'BX' TO BE USED FOR FIXTURE AND DEVICE DROPS ONLY (MAXIMUM 10') AND TO BE INSTALLED NEATLY, IN A WORKMANLIKE MANNER.
12. SUPPORT ALL WIRING, CONDUITS AND CABLES INDEPENDENTLY OF ANY SUSPENDED CEILING COMPONENTS.
13. WHERE POWER OR LIGHTING PANELS ARE RECESSED IN WALLS, PROVIDE THREE 1" EMPTY CONDUITS FROM THE PANEL UP TO THE ACCESSIBLE CEILING SPACE AND TERMINATE IN A JUNCTION BOX.
14. USE FLEXIBLE METAL CONDUIT FOR CONNECTION TO MOTORS AND ANY EQUIPMENT SUBJECT TO VIBRATION OR MOVEMENT. WHEN ABOVE EQUIPMENT IS EXPOSED TO WET CONDITIONS, USE LIQUID TIGHT FLEXIBLE CONDUIT.
15. FOR COMMUNICATION, SIGNAL AND THERMOSTAT WIRING, WHERE COMPLETE CONDUIT SYSTEM IS NOT REQUIRED, PROVIDE CONDUIT TO ACCESSIBLE CEILING SPACE.
16. INSTALL PULL WIRE IN EACH EMPTY CONDUIT PROVIDED FOR FUTURE USE BY OTHERS.
17. CAP ALL CONDUITS DURING CONSTRUCTION.
18. OUTLET BOXES, JUNCTION BOXES, PANEL TUBS ETC. SHALL BE SUPPORTED INDEPENDENT OF THE CONDUITS RUNNING TO THEM.

PULL AND JUNCTION BOXES

1. PROVIDE PULL AND JUNCTION BOXES OF SIZE AND TYPE TO MEET OESC/CEC REQUIREMENTS.
2. PROVIDE PULL BOXES ON CONDUIT RUNS OF 100' OR MORE.

SUPPORTING DEVICES

1. PROVIDE ALL INCIDENTAL ACCESSORIES, MOUNTING HARDWARE AND MISCELLANEOUS MATERIALS REQUIRED FOR A COMPLETE ELECTRICAL SYSTEM INSTALLATION.
2. PROVIDE PREFORMED CHANNELS AND FITTINGS FOR MOUNTING OF PANELS, SWITCHES ETC.
3. PROVIDE ANY STRUCTURAL WORK REQUIRED FOR MOUNTING OF ELECTRICAL EQUIPMENT. MOUNT EQUIPMENT REQUIRED FROM A FRAME OR PLATFORM BRACKETED FROM THE WALL OR SUSPENDED FROM ABOVE. STRUCTURAL STEEL SHALL HAVE TWO COATS OF PRIMER AND TWO COA OF FINISH PAINT.
4. EMPLOY THE SERVICES OF A STRUCTURAL ENGINEER TO VERIFY THE STRENGTH OF WALL, CEILING AND FRAME OR PLATFORM IN QUESTION.
5. PROVIDE ALL BRACKETS , HANDERS, MISCELLANEOUS FITTINGS AND RODS, AS REQUIRED FOR INSTALLATION OF CABLE TRAYS.
6. ENSURE THAT ALL CUT PIECES OF MATERIAL HAVE A PRIME COAT OF ZINC–RICH PAINT BEFORE INSTALLATION.
7. HANGERS FOR ELECTRICAL CONDUITS SHALL BE GALVANIZED AFTER FABRICATION.
8. SUPPLY MATERIALS OF THE FOLLOWING MANUFACTURER:
   A. UNISTRUT
   B. CANTRUSS
   C. PILGRIM

WIRING AND CABLES

1. UNLESS OTHERWISE NOTED, ALL ELECTRICAL WIRES AND CABLES TO HAVE COPPER CONDUCTORS.
2. BRANCH WIRING, FEEDERS, SUB FEEDERS ETC. SHALL BE 600V MINIMUM, STRANDED COPPER CONDUCTORS WITH RW90 OT T90 TYPE INSULATION.
3. UNLESS OTHERWISE NOTED, MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG. #14 SHALL BE ACCEPTABLE FOR CONTROL WIRING.
4. CONDUCTOR SIZES SHALL BE IN ACCORDANCE WITH THE OESC/CEC AND/OR AS INDICATED ON THE DRAWINGS.
5. WHERE CONDUCTOR SIZES ARE NOT INDICATED, THEY SHALL BE SIZED TO ENSURE THE VOLTAGE DROP DOES NOT EXCEED THE REQUIREMENTS OF THE OESC/CEC.
6. ALL NEW WIRING SHALL BE CONCEALED IN WALL AND CEILING SPACES. ANY EXCEPTION SHALL BE APPROVED BY THE ARCHITECT. ALL SURFACE WIRING SHALL BE INSTALLED NEATLY IN CONDUIT.
7. WHERE NUMBER OF CONDUCTORS IS INDICATED FOR EQUIPMENT AND CONTROL WIRING ETC., THE QUANTITY IS INTENDED TO SHOW GENERAL SCHEME ONLY. REFER TO EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND DIAGRAMS FOR EXACT INSTALLATION REQUIREMENTS AND PRO AS SUCH. THE SPECIFICATION STANDARDS HEREIN SHALL NOT BE REDUCED.
8. FOLLOW NORMAL RECOMMENDED PRACTICES WHEN INSTALLING CABLES IN TRENCHES, CABLE TRAYS, DUCT BANKS ETC. TO AVOID DAMAGE TO CABLE SHEATHS, CONDUCTORS OR INSULATION. ENSURE THAT CABLES ARE NOT DAMAGED BY EXCESS TENSION WHEN PULLING.
9. PROVIDE SUITABLE ROLLERS, PULLEYS ETC. FOR PULLING CABLES AROUND SHARP CORNERS TO MAINTAIN BENDING RADIUS. REPLACE ANY DAMAGED AND REJECTED CABLES WITHOUT COST TO THE OWNER.
10. USE SUITABLE NON–HARDENING CABLE LUBRICANTS, WHERE REQUIRED, WHICH DO NOT CONTAIN ANY MATERIALS SUCH AS OIL, GREASE OR OTHER COMPOUNDS INJURIOUS TO RUBBER, PVC OR POLYETHYLENE.

GROUNDING

1. THE ENTIRE ELECTRICAL SYSTEM SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE OESC/CEC AND THE LOCAL UTILITY.

SERVICE AND DISTRIBUTION

1. SUPPLY AND INSTALL MAIN SERVICE AND DISTRIBUTION EQUIPMENT AS INDICATED ON THE DRAWINGS. COORDINATE SERVICE INSTALLATION WITH LOCAL SUPPLY AUTHORITY PRIOR TO COMMENCEMENT OF WORK. VERIFY ALL METERING AND SERVICE REQUIREMENTS WITH LOCAL SUPPLY AUTHORITY AND PROVIDE INSTALLATION ACCORDINGLY.
2. SUPPLY AND INSTALL ALL REQUIRED METER SOCKETS, METER CABINETS, C/T SPACES, REMOTE METERS ETC. AS PER LOCAL SUPPLY AUTHORITY REQUIREMENTS.
3. OBTAIN AVAILABLE FAULT CURRENT LEVELS AT DEMARCATION POINT FROM LOCAL UTILITY. BASE DON THIS INFORMATION AND MAIN FEEDER CONDUCTOR LAYOUT AND LENGTHS, VERIFY AVAILABLE FAULT CURRENT LEVELS AT MAIN, AND THROUGHOUT SYSTEM. PROVIDE EQUIPMENT OF SUITABLE RATINGS THROUGHOUT SYSTEM. RATING OF MAIN SERVICE EQUIPMENT NOT TO BE LESS THAN THAT SPECIFIED ON DRAWINGS.
4. SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE, QUICK–MAKE, QUICK–BREAK c/w VOIDABLE COVER INTERLOCK, LOCKABLE IN THE "OFF" POSITION WITH NEUTRAL BAR WHERE REQUIRED. FUSE HOLDERS SHALL BE AS REQUIRED TO SUIT RATING AND TYPE OF FUSE WITHOUT ADAPTERS.
5. ALL FUSES TO BE HRC–1, CLASS J UNLESS CONNECTED LOAD SPECIFIES OTHERWISE.
6. PROVIDE PANELBOARDS OF DEAD–FRONT CIRCUIT BREAKER TYPE, EEMAC 1 ENCLOSURE UNLESS OTHERWISE NOTED. PANELBOARDS TO BE COMPLETE WITH HINGED DOOR AND TYPEWRITTEN CIRCUIT DIRECTORY MOUNTED ON THE INSIDE OF THE DOOR IN METAL FRAME WITH CLEAR PLASTIC COVER. SUPPLY PANELS WITH BOLT–ON CIRCUIT BREAKERS. WHERE MULTIPLE UNIT BREAKERS ARE SPECIFIED, COMMON TRIP REQUIRED. HANDLE TIE BARS ARE NOT ACCEPTABLE.
7. PANELBOARDS TO BE OF VOLTAGE, MAIN BUS CAPACITY, CIRCUIT BREAKER RATINGS ETC. AS INDICATED ON THE DRAWINGS. ALL PANELBOARDS SHALL BE KEYED ALIKE AND SUFFICIENT KEYS SHALL BE PROVIDED TO THE OWNER.
8. CIRCUIT DIRECTORY SHALL INDICATE EQUIPMENT CONNECTED ON EACH CIRCUIT. DIRECTORIES SHALL BE LISTED IN TWO COLUMNS TO MATCH BREAKER LAYOUT.
9. CIRCUIT BREAKERS SHALL HAVE THERMAL MAGNETIC TRIP PROTECTION AND OVERLOAD PROTECTION. INTERRUPTING CAPACITY OF THE BREAKERS SHALL BE A MINIMUM OF 10kA OR AS REQUIRED TO MEET THE AVAILABLE FAULT CURRENT AT THE PANEL.
10. PROVIDE LOCK–ON DEVICES FOR BREAKERS FEEDING FIRE ALARM, EXIT AND EMERGENCY LIGHTING, DOOR OPERATORS, NIGHT LIGHTS AND ANY OTHER DEVICES AS REQUESTED.
11. BALANCE THE LOAD AT EACH PANEL SUCH THAT THE UNBALANCED LOAD IS LESS THAN 5%.
12. PERFORM SHORT CIRCUIT/COORDINATION STUDY AS REQUIRED ON MAIN DISTRIBUTION SYSTEM AND INCLUDE SETTING OF PROTECTION DEVICES, IF REQUIRED. SUBMIT COPY OF REPORTS TO THE OWNER, THROUGH THE ARCHITECT OR ENGINEER.
13. ALL SWITCHES AND ALL PANELBOARDS TO BE OF THE SAME MANUFACTURER AND EQUAL TO:
   A. EATON
   C. SQUARE D
   C. SIEMENS

INSTALLATION OF OUTLETS

1. THE DRAWINGS SHOW THE APPROXIMATE LOCATION OF DEVICES. DEVICES MAY BE MOVED UP TO 10' PRIOR TO INSTALLATION WITHOUT ADDITIONAL EXPENSE TO THE OWNER. FINAL LOCATION TO BE COORDINATED ON SITE WITH OTHER TRADES, ARCHITECTURAL DRAWINGS ETC. DEVICES REQUIRING RELOCATION DUE TO LACK OF COORDINATION SHALL BE DONE AT THIS CONTRACTOR'S EXPENSE.
2. FOR COMMUNICATION OUTLETS, PROVIDE DEVICE BOX c/w 3/4" CONDUIT TO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE INDICATED.
3. OUTLET BOXES ON EXTERIOR WALLS OR FEEDS TO OUTSIDE SHALL HAVE A VAPOUR SEAL COMPOUND TO PREVENT CONDENSATION IN THE RACEWAYS.
4. CHECK DIRECTION OF DOOR SWINGS ON SITE. MOUNT LIGHT SWITCHES ON LATCH SIDE OF DOORS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING HEIGHTS. UNLESS OTHERWISE NOTED, MOUNTING HEIGHT OF DEVICES FROM FINISHED FLOOR TO BOTTOM OF DEVICE SHALL BE:
   A. RECEPTACLES – 12"
   B. COMMUNICATION OUTLETS – 12"
   C. LIGHT SWITCHES – 48" (TO TOP OF SWITCH)
   D. OUTLETS IN SERVICE ROOMS – 48"
   E. PANELBOARDS – 6' (TO TOP OF PANEL)

WIRING DEVICES

1. ALL DEVICES TO BE COMMERCIAL SPECIFICATION GRADE, UNLESS SPECIFIED OTHERWISE OR REQUIRED OTHERWISE BY OESC/CEC.
2. DUPLEX RECEPTACLES SHALL BE U–GROUND TYPE RATED FOR 15A (OR 20A WHERE INDICATED), 120V.
3. SINGLE POLE, THREE WAY AND FOUR WAY LIGHT SWITCHES SHALL BE 20A, COMMERCIAL SPECIFICATION GRADE.
4. VERIFY COLOUR AND STYLE OF DEVICES WITH ARCHITECT PRIOR TO INSTALLATION.
5. PROVIDE PIGTAILS AT ALL OUTLETS FOR FIXTURES AND WIRING DEVICES. ALL NEUTRALS AND BRANCH CIRCUITS SHALL BE CONNECTED IN EACH OUTLET BOX TO A PIGTAIL IN ORDER TO AVOID A BREAK IN THE NEUTRAL OR LINE WHEN DISCONNECTING OUTLET.

LIGHT FIXTURES AND LAMPS

1. SUPPLY AND INSTALL FIXTURES AS SHOWN ON THE DRAWINGS AND FIXTURE SCHEDULE. ALL FIXTURES OF THE SAME TYPE SHALL BE OF THE SAME MANUFACTURER. PROPOSED ALTERNATE FIXTURES MUST BE EQUAL TO THE SPECIFIED FIXTURES. THIS CONTRACTOR MUST OBTAIN WRIT APPROVAL FROM THE ENGINEER PRIOR TO ORDERING ALTERNATE FIXTURES.
2. COORDINATE THE MOUNTING AND LOCATION OF LIGHT FIXTURES WITH OTHER TRADES TO AVOID CONFLICTS. CHECK THE AREA FOR INTERFERENCE FROM PIPING, DUCTWORK AND EQUIPMENT PRIOR TO INSTALLATION OF LIGHT FIXTURES.
3. INSTALL ALL FIXTURES ACCURATELY IN LINE AND LEVEL. ALIGN FIXTURES SHOWN IN CONTINUOUS ROWS AND IN STRAIGHT LINES.
4. PROVIDE AND INSTALL ANY ADDITIONAL SUPPORT BRACKETS, CLAMPS, CHANNELS, HANGERS, ETC. NECESSARY TO INSTALL THE FIXTURES WHERE SHOWN. DO NOT SUPPORT FIXTURES FROM DUCTS, PIPES, EQUIPMENT OR SUSPENDED CEILING SYSTEMS. ENSURE THAT ALL FIXTURES ARE ACCESSIBLE.
5. LED LAMPS TO BE OF COLOUR TEMPERATURE AND LUMEN OUTPUT AS SPECIFIED ON DRAWINGS AND FIXTURE SCHEDULE.

MECHANICAL EQUIPMENT

1. VERIFY VOLTAGE, HORSEPOWER, PHASE, LOADS ETC. WITH MECHANICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT OR ROUGH–IN OF ANY ELECTRICAL FEEDERS.
2. VERIFY ALL MOTOR CONNECTIONS WITH RESPECT TO VOLTAGE, PHASE, AMPERAGE, PHASE ROTATION ETC. PRIOR TO MAKING FINAL CONNECTIONS.
3. SUPPLY AND INSTALL ALL CONDUIT, WIRING AND RELATED EQUIPMENT FOR THE FEEDERS TO MECHANICAL EQUIPMENT. PROVIDE DISCONNECT SWITCHES AS REQUIRED.
4. LOW VOLTAGE CONTROL WIRING BY MECHANICAL CONTRACTOR.

MISCELLANEOUS

1. TIGHTEN ALL BOLTS, NUTS, SCREWS ETC. AND REPLACE ALL COVERS ON ELECTRICAL EQUIPMENT AND BOXES. RESTORE DAMAGED EQUIPMENT TO ITS ORIGINAL SHAPE. CLEAN AND PRIME ALL SCRATCHES AND BLEMISHES AND REFINISH THE EQUIPMENT TO MATCH THE ORIGINAL FINISH, ALL IN A NEAT AND WORKMANLIKE MANNER.
2. PROTECT EXPOSED LIVE EQUIPMENT SUCH AS PANEL MAINS AND OUTLET WIRING DURING CONSTRUCTION FOR PERSONNEL SAFETY.
3. SHIELD AND MARK ALL LIVE PARTS 'LIVE 208 VOLTS', OR WITH APPROPRIATE VOLTAGE.
4. ARRANGE FOR INSTALLATION OF TEMPORARY DOORS FOR ALL ROOMS CONTAINING ELECTRICAL DISTRIBUTION EQUIPMENT. KEEP THESE DOORS LOCKED AT ALL TIMES EXCEPT WHEN UNDER DIRECT SUPERVISION OF ELECTRICIAN.
5. CLEAN ALL EQUIPMENT AND BLOW OUT ALL DIRT FROM CONDUITS, TRANSFORMERS, PANEL TUBS ETC.

TESTING – GENERAL

1. TEST ALL WORK DONE UNDER THIS SECTION. REMEDY AND MAKE GOOD ANY DEFECTS DISCLOSED BY SUCH TESTS AND TEST THE WORK AGAIN.
2. TEST IN ACCORDANCE WITH APPROVED PROCEDURES.
3. TEST EACH POWER AND CONTROL CONDUCTOR FOR CONTINUITY AND GROUNDS. IMMEDIATELY FOLLOWING THIS TEST, CONNECT CONDUCTOR TO PERMANENT TERMINAL.
4. INSPECT ALL CONNECTIONS, PROTECTIVE AND SAFETY DEVICES PRIOR TO ENERGIZING ANT EQUIPMENT AND MAKE NECESSARY ADJUSTMENTS TO ASSURE PROPER OPERATION OF THE EQUIPMENT.

TESTING – LIGHTING CONTROL

1. LIGHTING CONTROL DEVICES AND CONTROL SYSTEMS SHALL BE TESTED TO ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED, AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. WHEN OCCUPANT SENSORS, TIME SWITCHES, PROGRAMMABLE SCHEDULE CONTROLS, OR PHOTOSENSORS ARE INSTALLED, AT A MINIMUM, THE FOLLOWING PROCEDURES SHALL BE PERFORMED:
   A. CONFIRM THAT THE PLACEMENT, SENSITIVITY AND TIME–OUT ADJUSTMENTS FOR OCCUPANCY SENSORS YIELD ACCEPTABLE PERFORMANCE, LIGHTS TURN OFF ONLY AFTER SPACE IS VACATED AND DO NOT TURN ON UNLESS SPACE IS OCCUPIED.
   B. CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF.
   C. CONFIRM THAT PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT LEVELS BASED ON THE AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.
2. ARRANGE AND PAY FOR A THIRD PARTY, NOT DIRECTLY INVOLVED IN EITHER THE DESIGN OR CONSTRUCTION OF THE PROJECT, SHALL COMPLETE TESTING AND SHALL PROVIDE DOCUMENTATION CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET OR EXCEED ALL DOCUMENTED PERFORMANCE CRITERIA. CERTIFICATION SHALL BE SPECIFIC ENOUGH TO VERIFY CONFORMANCE. THIS CERTIFIER SHALL BE FAMILIAR WITH THE SYSTEMS AND EQUIPMENT AND SHALL BE RECOMMENDED BY THE MANUFACTURER OF THE EQUIPMENT.

all dimensions are in
METRES
unless otherwise shown

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approved by

drawn by
date

designed by
date

checked by
date

seal

seal

revisions

No.	Description	Date
0	ISSUED FOR TENDER	JAN. 2025
1		
2		
3		
4		
5		
6		

NOTE: THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THIS DRAWING AND WHERE DISCREPANCIES OCCUR HE SHALL REPORT TO THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH ANY PORTION OF THE WORK IN THE CONTRACT.

detail legend

A
B C

A DETAIL NO.
B SHEET WHERE DETAIL REQ'D
C SHEET DETAIL DRAWN ON

client
CITY OF WINDSOR

project
DERWENT PARK CRICKET FIELD

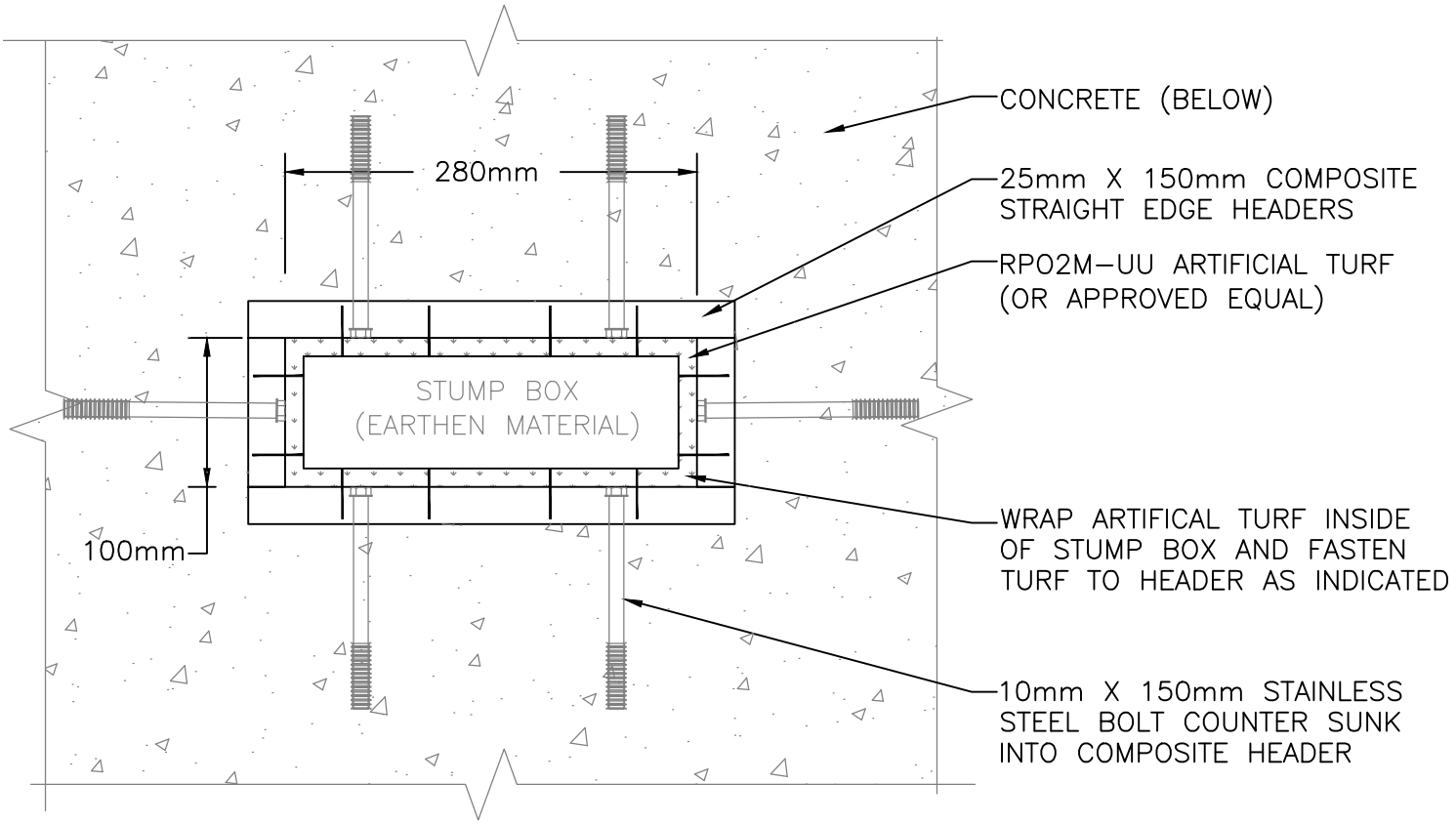
drawing title
ELECTRICAL NOTES

project no. 22-040

drawing no. 22-040-07

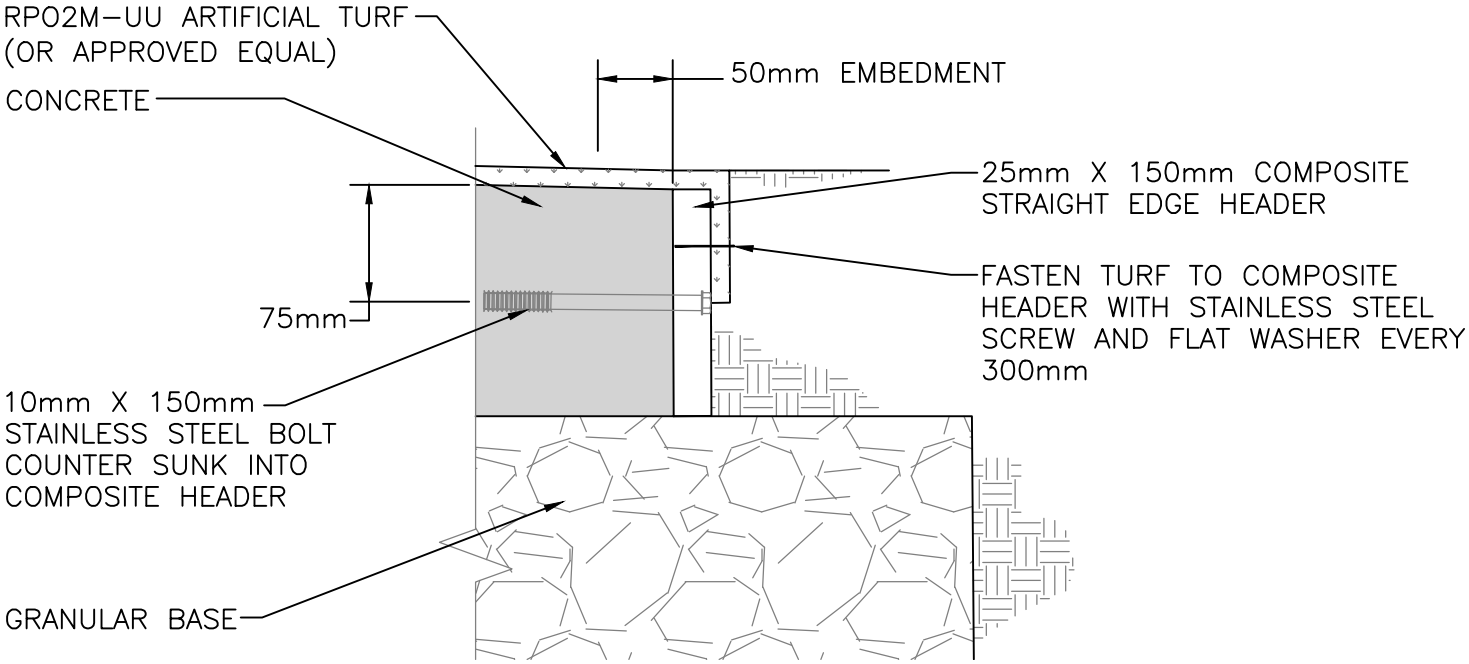
sheet no. 7 of 7

scale AS SHOWN



PLAN: STUMP BOX

SCALE: 1:5



TYPICAL CONNECTION

SCALE: 1:5

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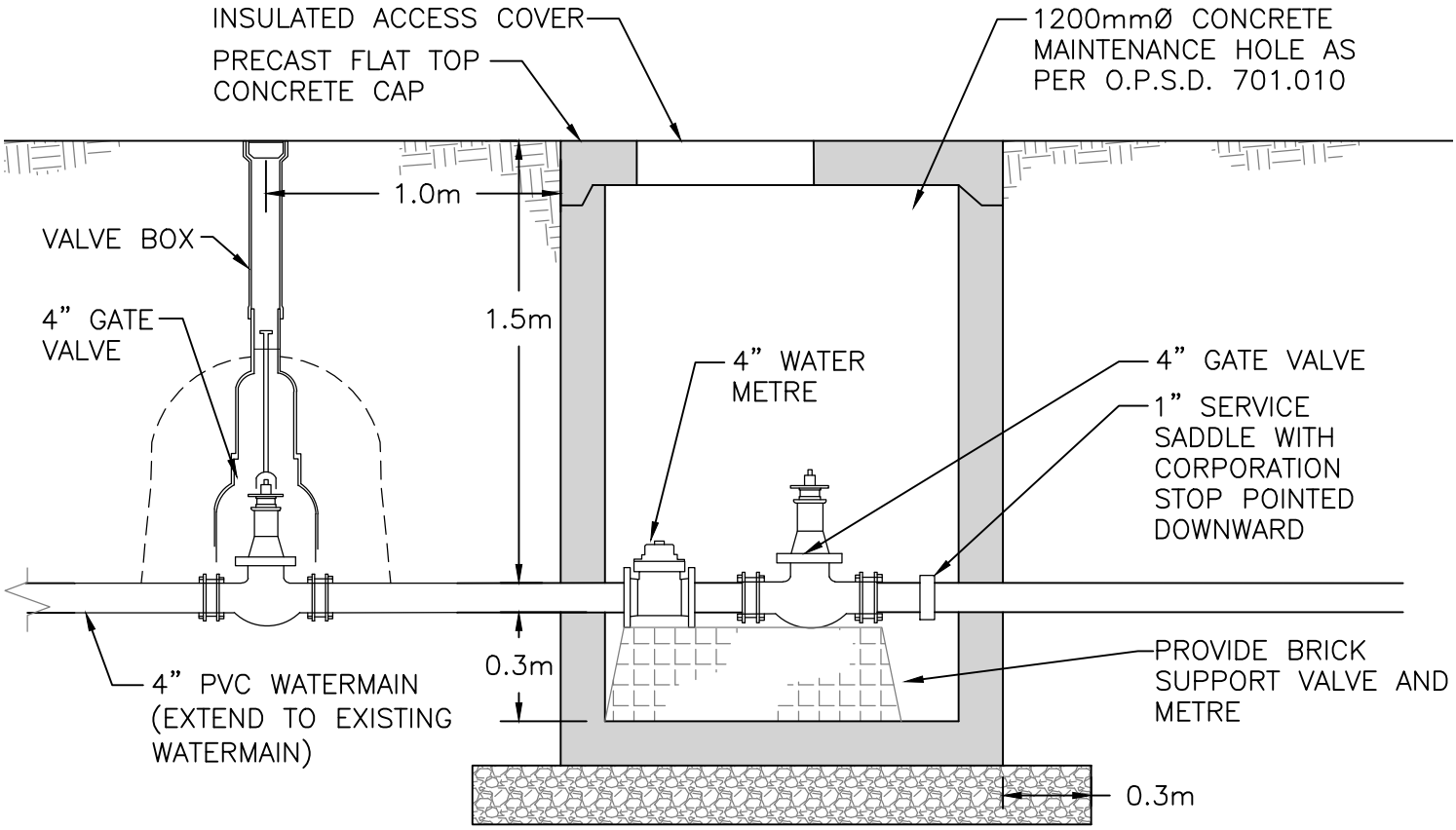
Title: ARTIFICIAL TURF / STUMP BOX DETAIL	Date: JANUARY 2025	FIGURE 1
Project: DERWENT PARK	Scale: AS SHOWN	
	Project No.: 22-040	



PROPOSED MANHOLE

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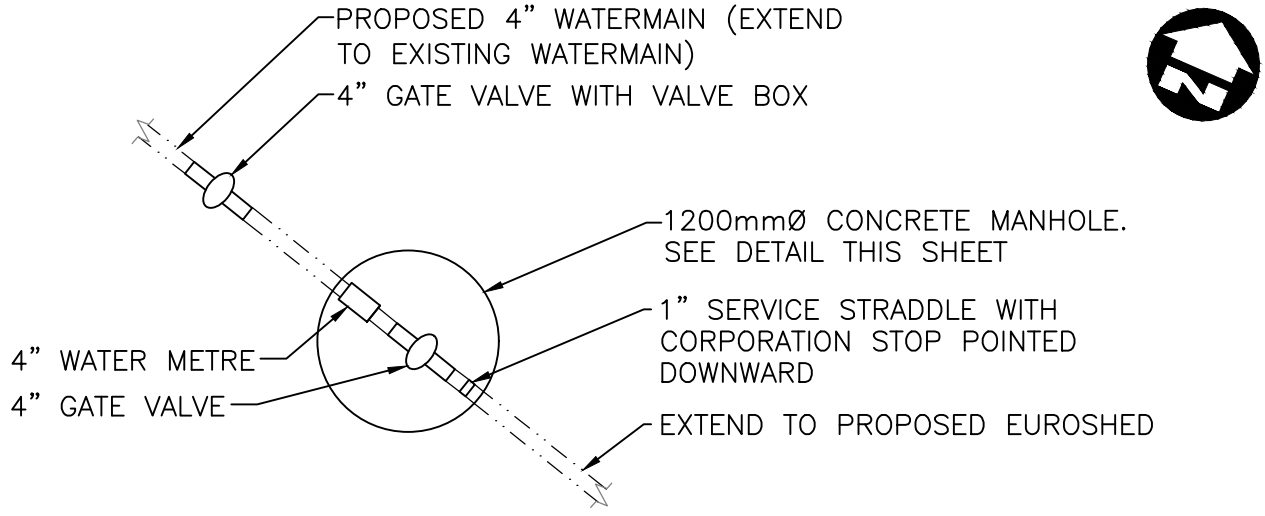

PLAN

SCALE: 1:50

Landmark Engineers Inc.

Title: WATERMAIN TERMINATION AT EUROSHED	Date: JANUARY 2025	FIGURE 2
Project: DERWENT PARK CRICKET FIELD	Scale: AS SHOWN	
	Project No.: 22-040	