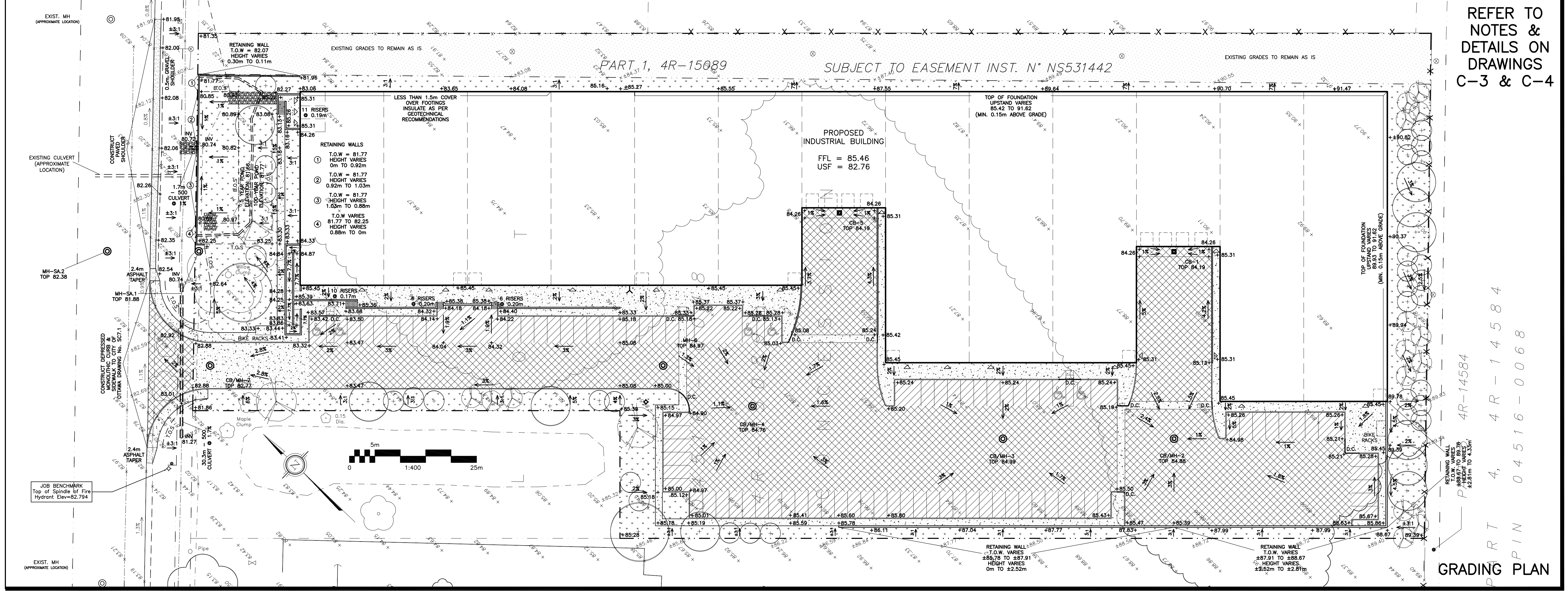
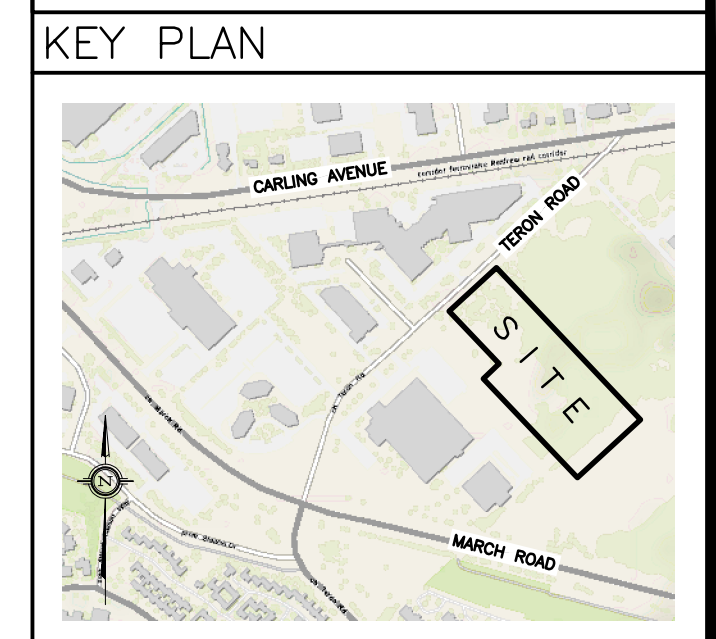


**DRAWING LEGEND**

CB	CATCH BASIN
MH	MANHOLE
CB/MH	CATCH BASIN/MANHOLE
SPL	SPRINGLINE OF PIPE
INV	INVERT OF PIPE
⊗	SUBDRAINS IN CB
⊗	SUBDRAINS IN CB/MH
SAN	SANITARY SEWER
ST	STORM SEWER
WS/W	WATER SERVICE/WATERMAIN
VB	VALVE & VALVE BOX
FD	FIRE HYDRANT
FDC	FIRE DEPARTMENT CONNECTION
WM	WATER METER
⊗	REMOTE WATER METER READOUT
+	EXISTING GRADE ELEVATION
+66.75	PROPOSED GRADE ELEVATION
0.5%	EXISTING SLOPE OF GRADE
0.5%	PROPOSED SLOPE OF GRADE
T.O.S.	TOP OF SLOPE
B.O.S.	BOTTOM OF SLOPE
---	PROPERTY LINE
D.C.	150mm CURB/DEPRESSED CURB
---	ASPHALT SHOULDER
---	LIGHT-DUTY PAVEMENT
---	HEAVY-DUTY PAVEMENT
---	CONCRETE
---	LANDSCAPE
FFL	FIRST FLOOR ELEVATION
USF	UNDERSIDE OF FOOTING



No.	DATE	REVISION
2	FEB 13-20	ISSUED FOR APPROVAL
1	FEB 11-20	ISSUED FOR COORDINATION

**D. B. GRAY ENGINEERING INC.**  
Stormwater Management - Grading & Drainage - Storm & Sanitary Sewers - Watermain  
 700 Long Point Circle  
 Ottawa, Ontario  
 613-425-8044  
 d.gray@dbgrayengineering.com

Project  
**PROPOSED 1 STOREY INDUSTRIAL WAREHOUSE**  
 1243 TERON ROAD  
 OTTAWA, ONTARIO

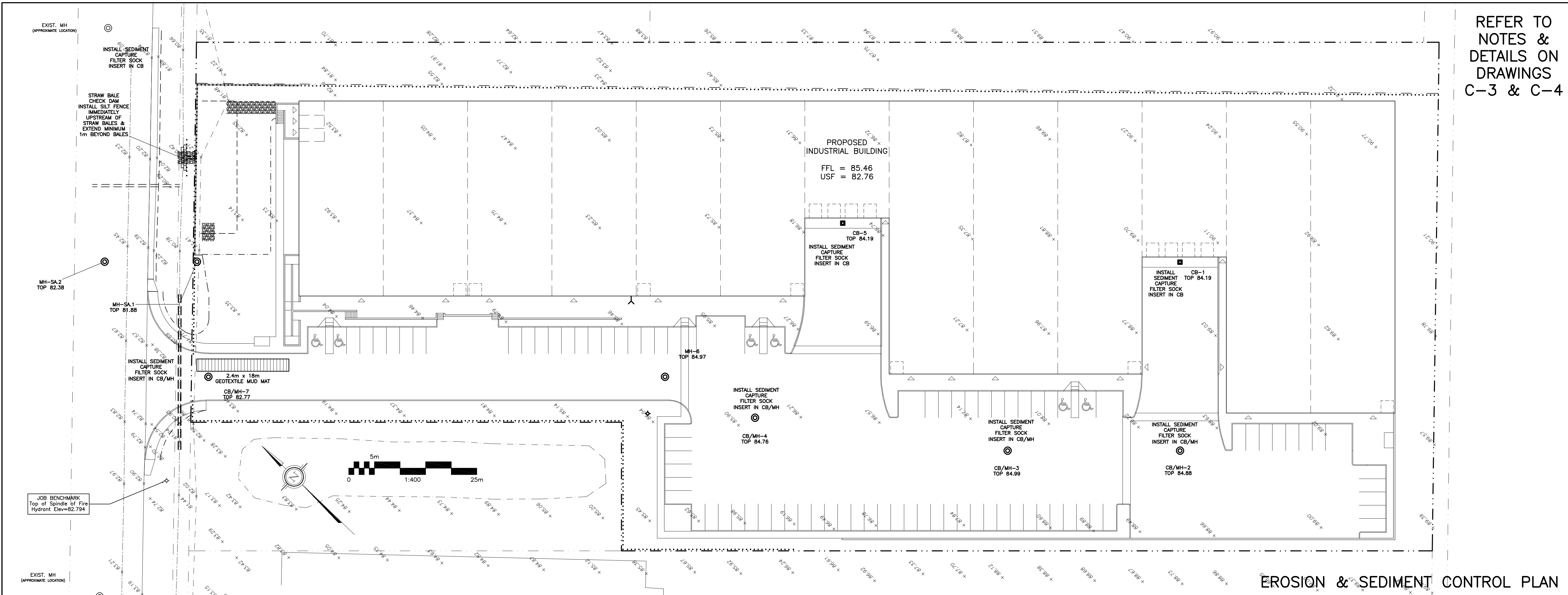
Drawing Title  
**SITE SERVICING PLAN & GRADING PLAN**

Engineer's Seal  
  
 NOT VALID UNLESS SIGNED & DATED

Drawn D.B.G.  
 Hor. Scale 1:400  
 Vert. Scale  
 Date OCT 18-19  
 Job No. 19057

Drawing No.  
**C-1 of 4**

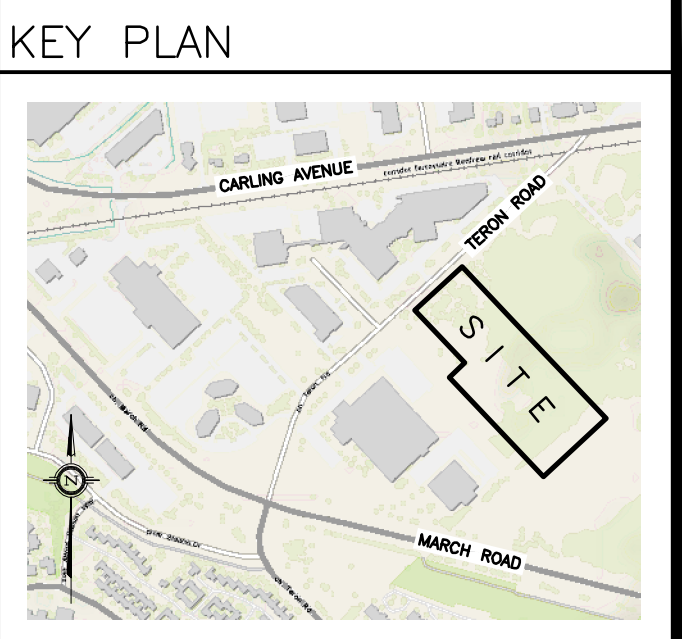
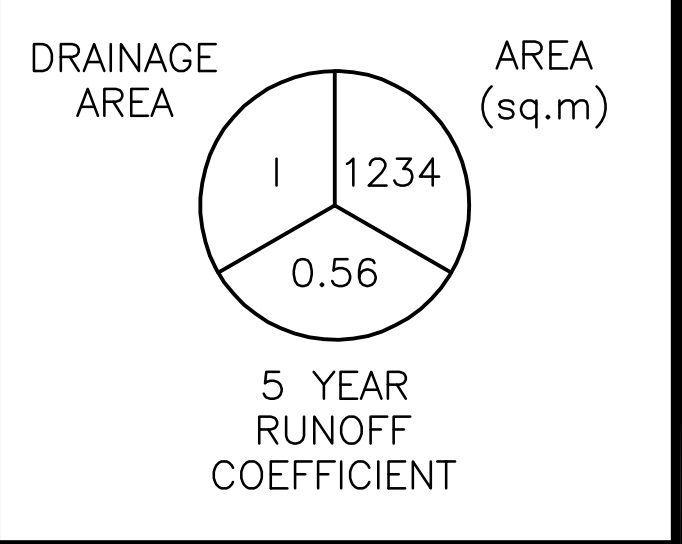




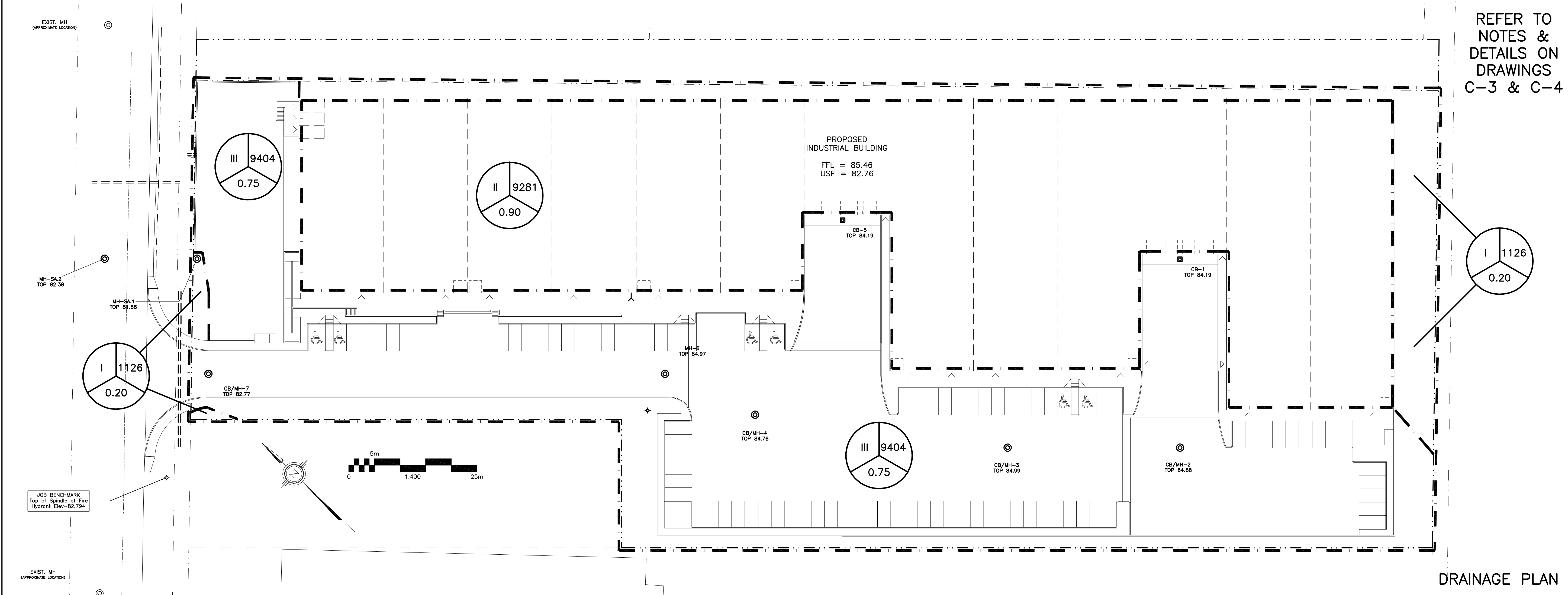
REFER TO  
NOTES &  
DETAILS ON  
DRAWINGS  
C-3 & C-4

**DRAWING LEGEND**

- CB CATCH BASIN
- MH MANHOLE
- CB/MH CATCH BASIN/MANHOLE
- FH FIRE HYDRANT
- $\times 66.75$  EXISTING GRADE ELEVATION
- T.O.S. TOP OF SLOPE
- B.O.S. BOTTOM OF SLOPE
- PROPERTY LINE
- SILT FENCE BARRIER
- D.C. 150mm CURB/DEPRESSED CURB
- FFL FIRST FLOOR ELEVATION
- USF UNDERSIDE OF FOOTING



EROSION & SEDIMENT CONTROL PLAN



REFER TO  
NOTES &  
DETAILS ON  
DRAWINGS  
C-3 & C-4

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Project  
**PROPOSED  
1 STOREY  
INDUSTRIAL WAREHOUSE  
1243 TERON ROAD  
OTTAWA, ONTARIO**

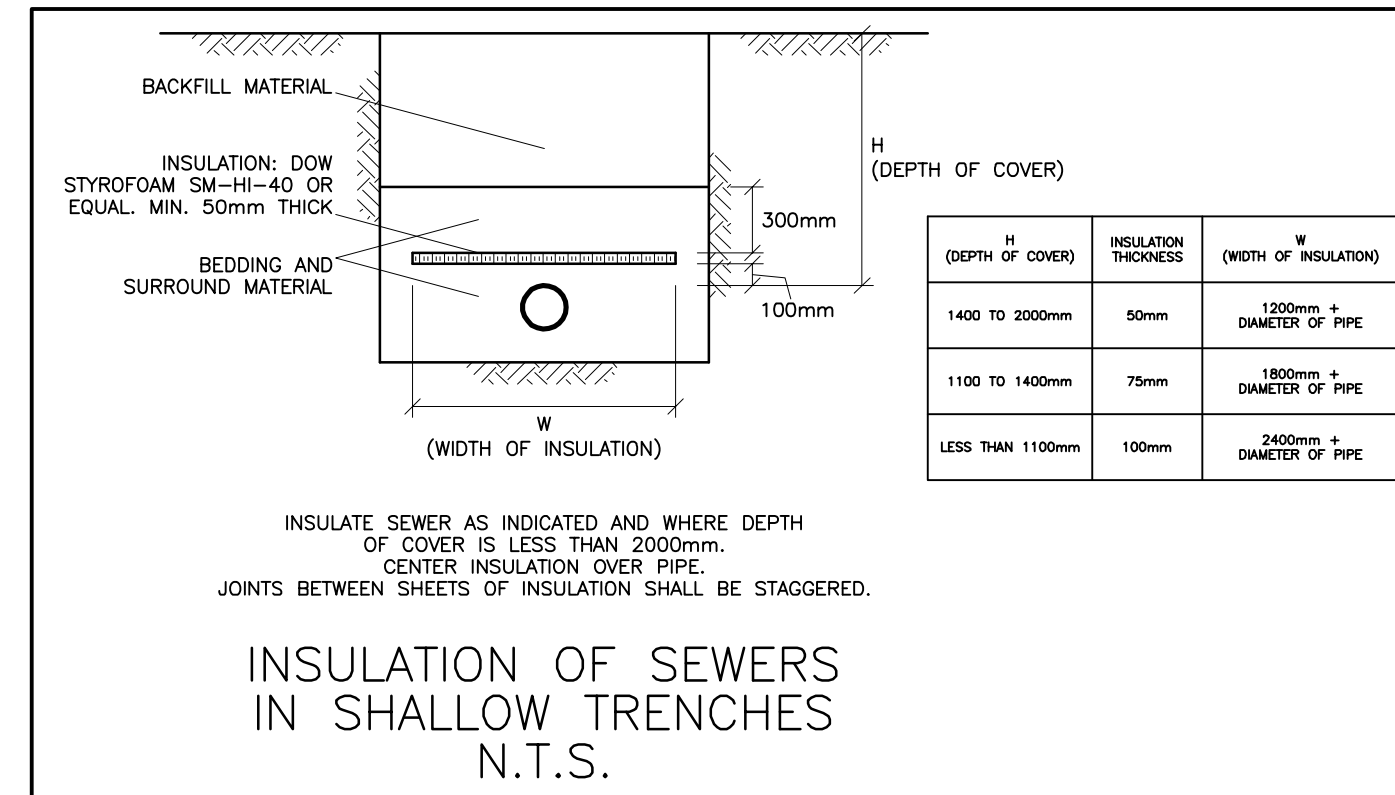
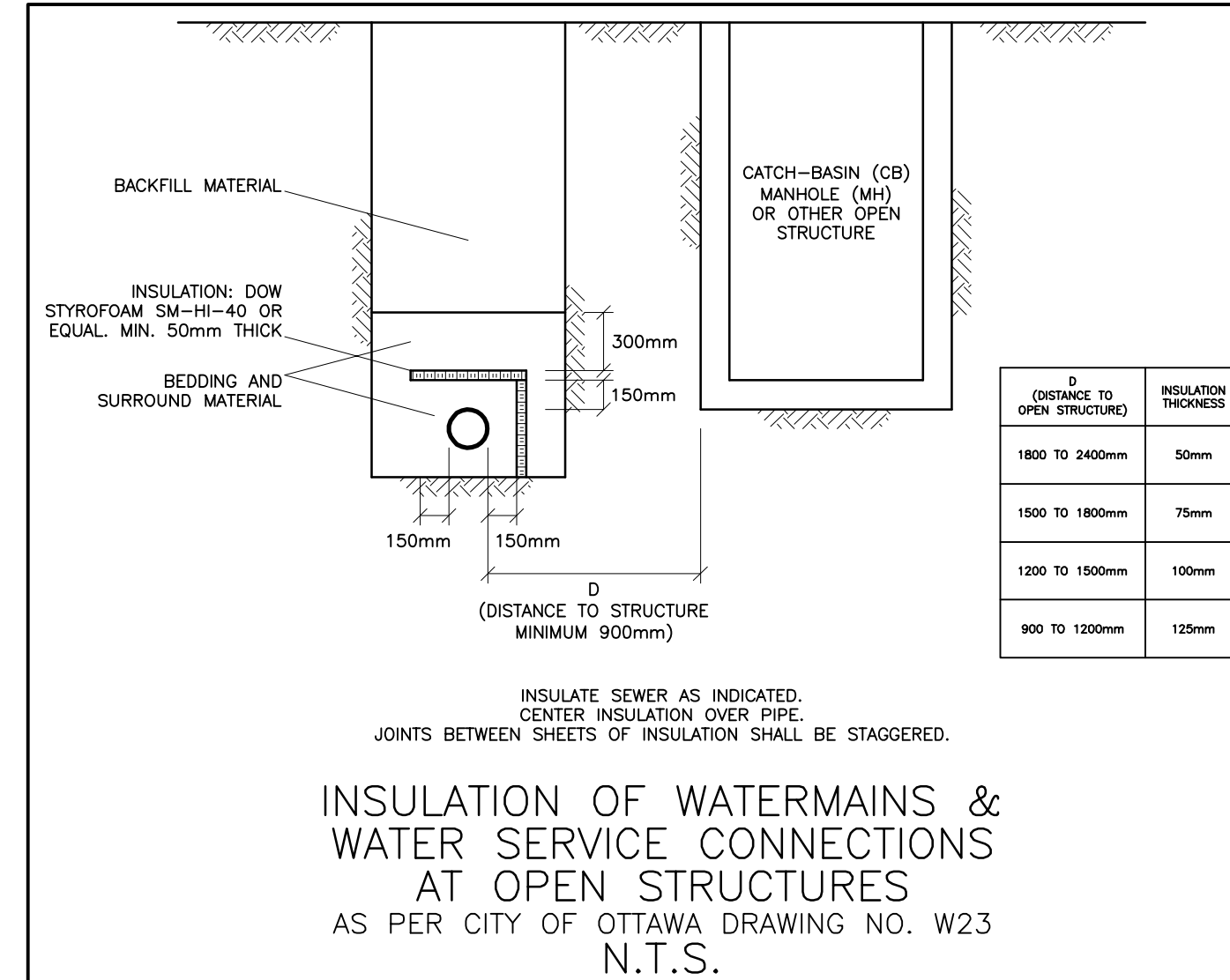
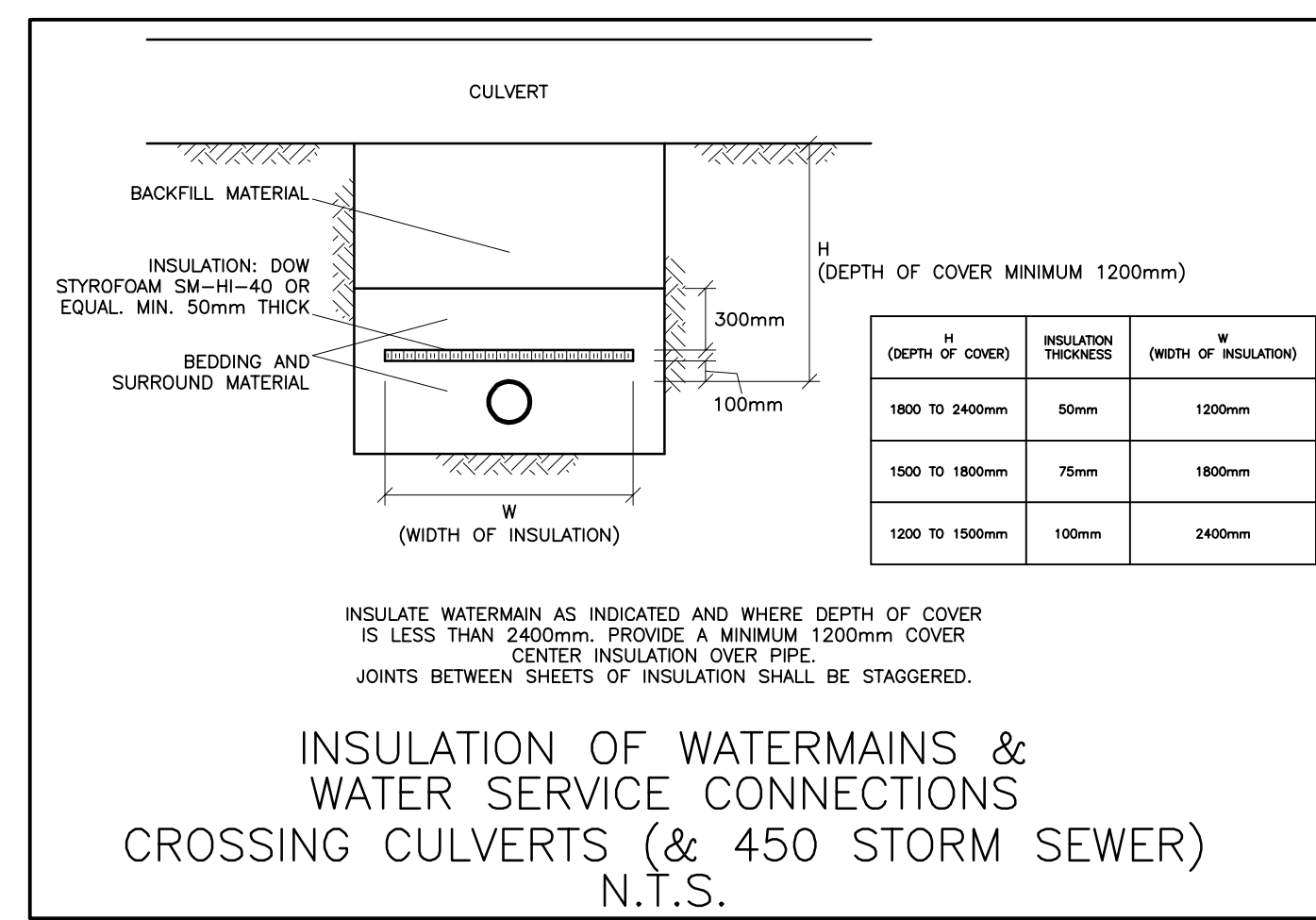
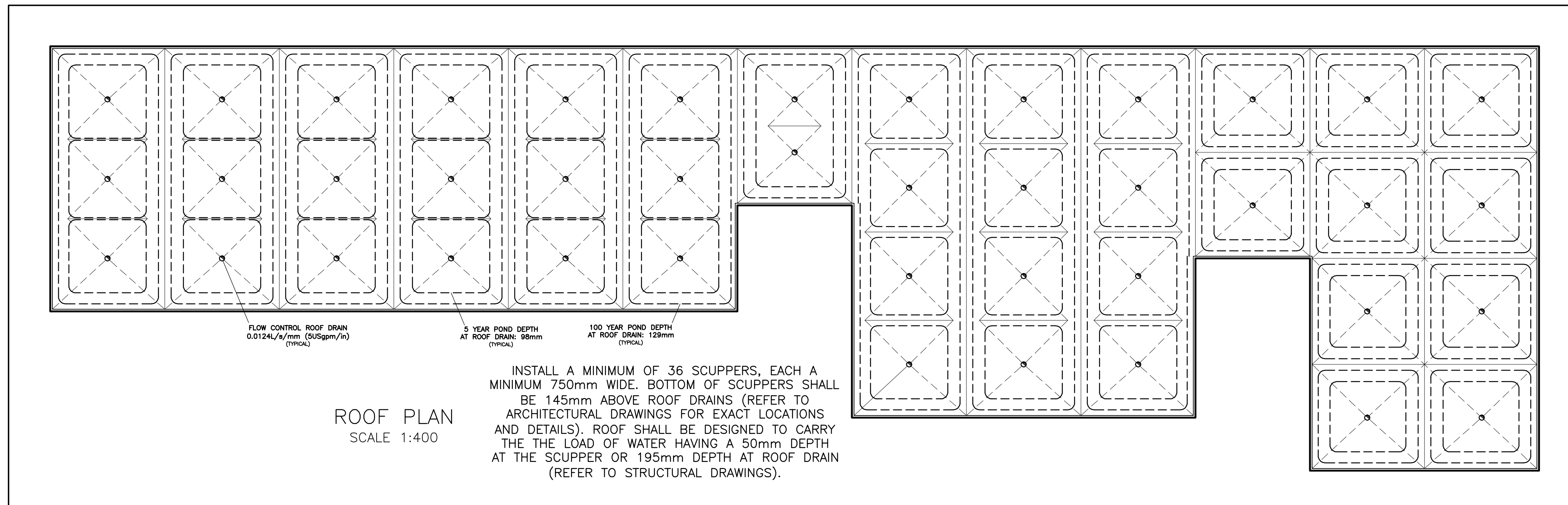
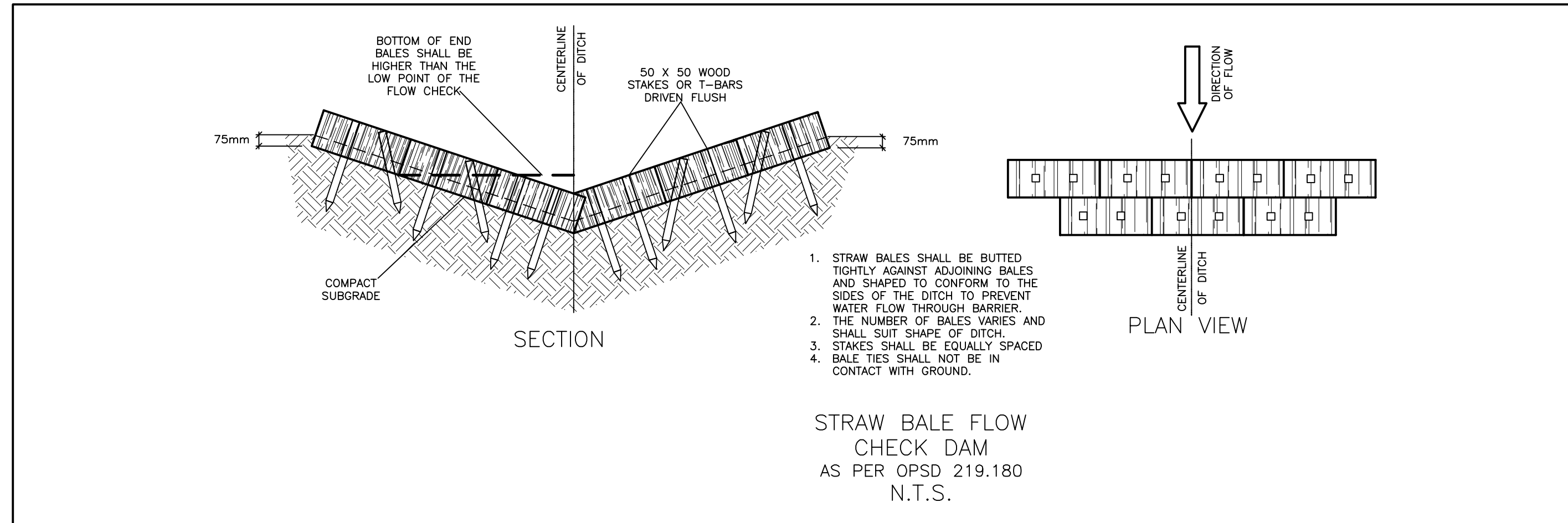
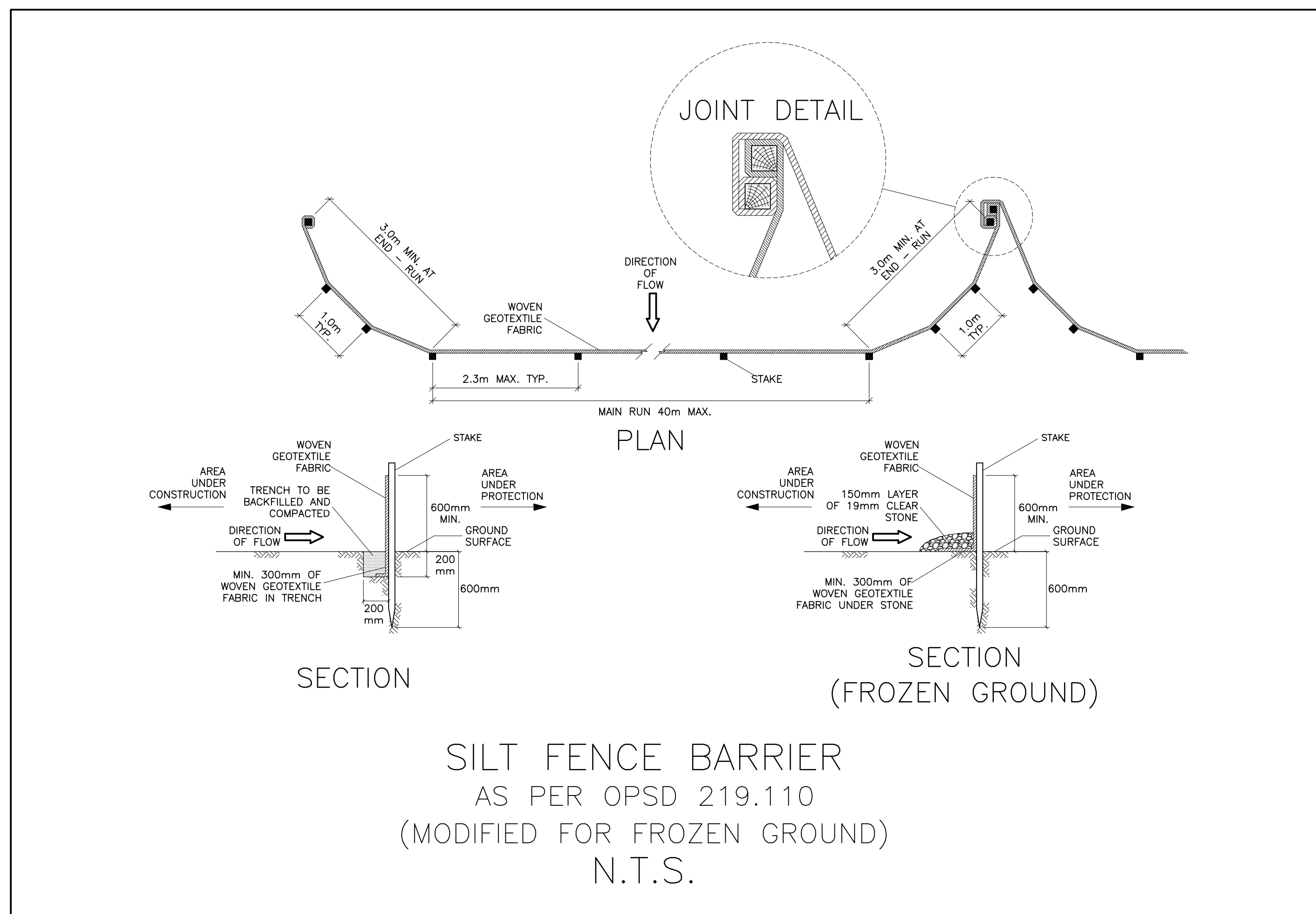
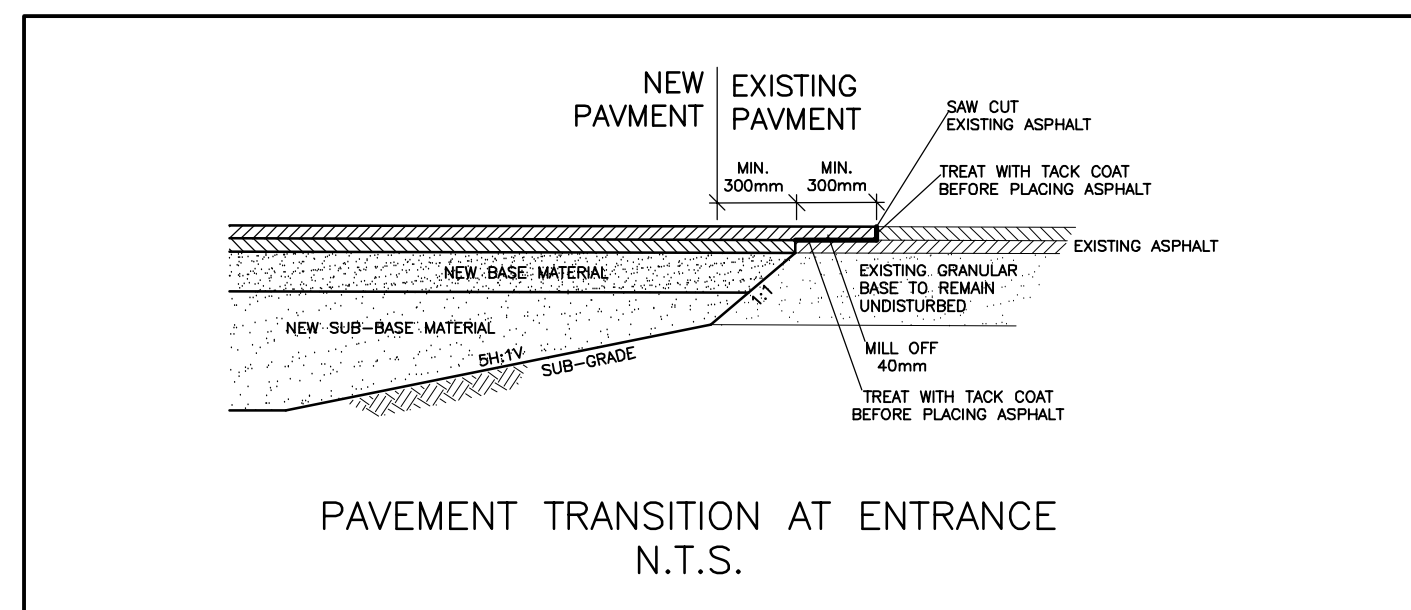
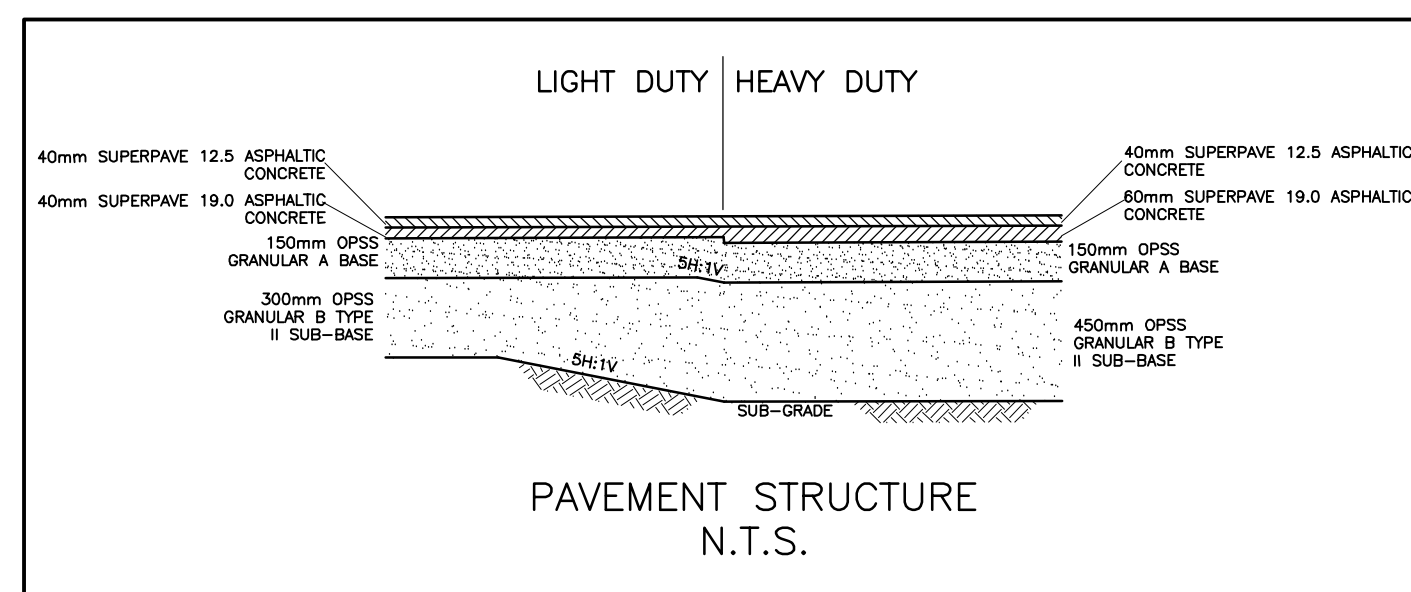
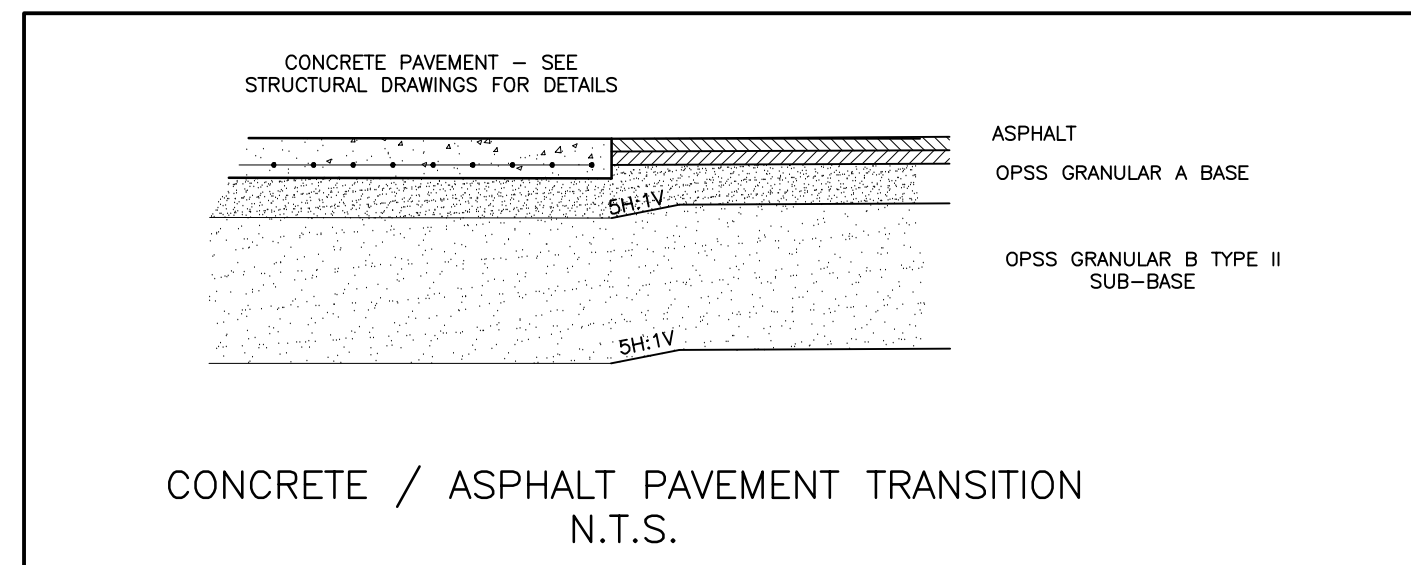
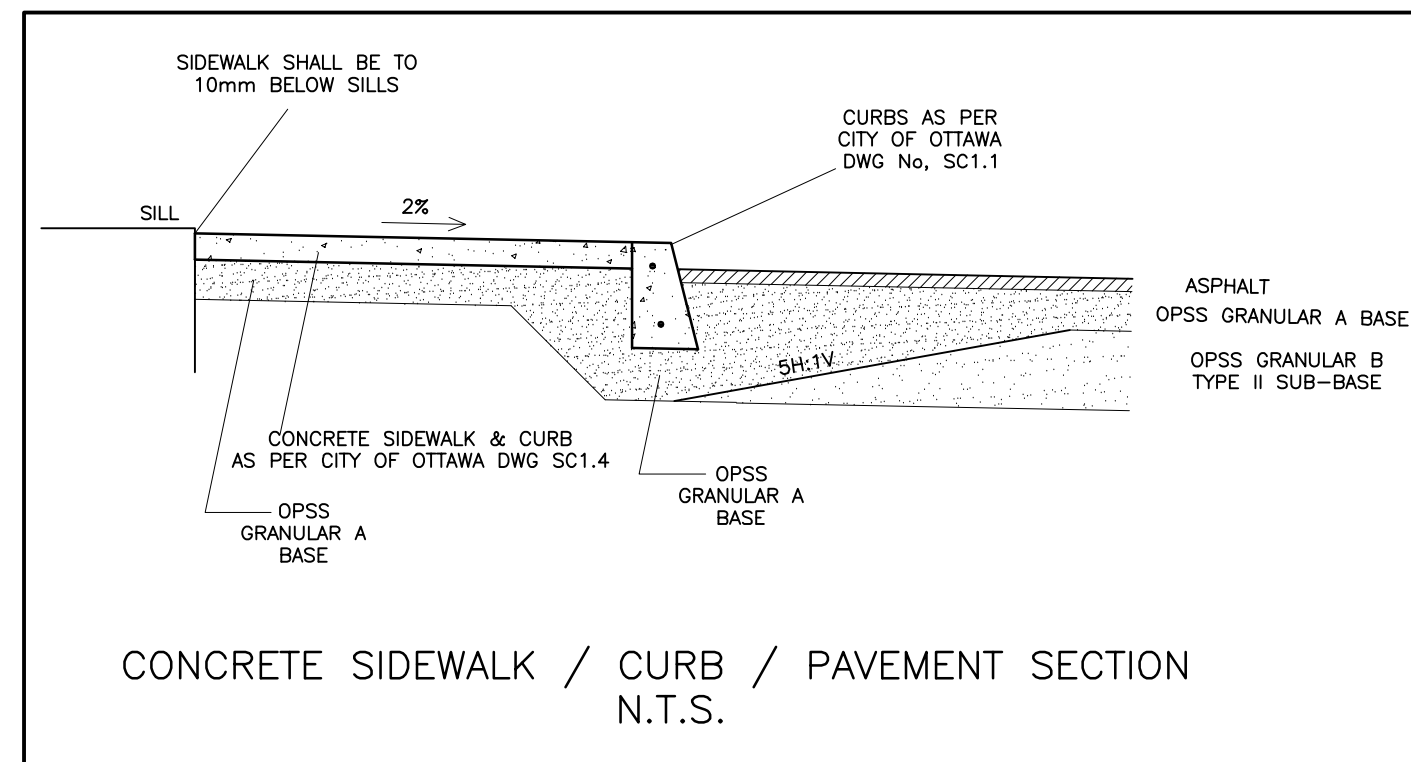
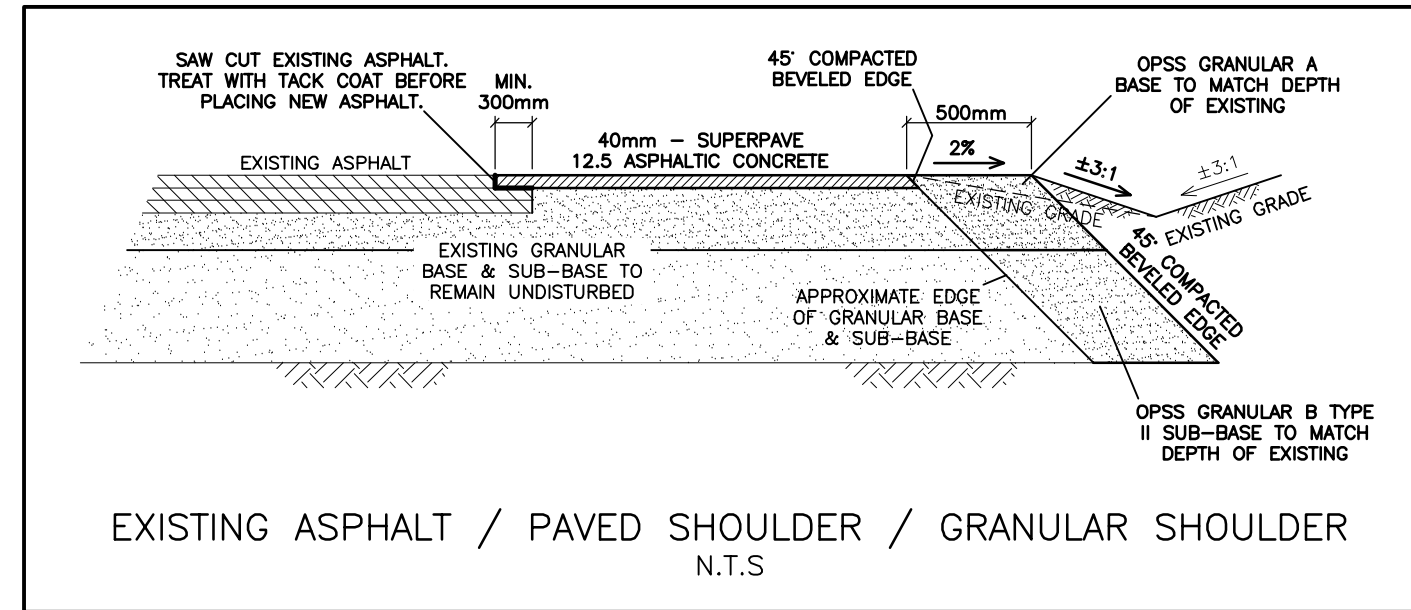
Drawing Title  
**EROSION & SEDIMENT  
CONTROL PLAN  
AND DRAINAGE PLAN**

Engineer's Seal  
  
NOT VALID UNLESS  
SIGNED & DATED

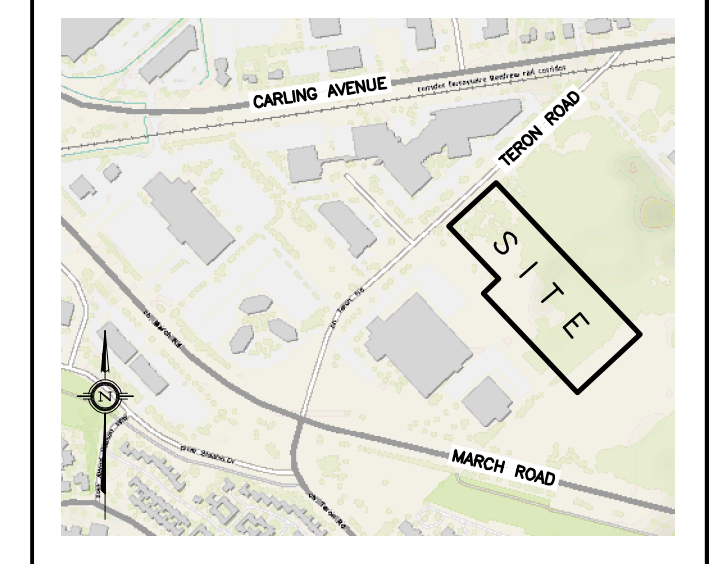
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Hor. Scale 1:400  
Vert. Scale  
Date OCT 18-19  
Job No. 19057  
Drawing No.  
**C-2  
of 4**

DRAINAGE PLAN





KEY PLAN



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1	FEB 11-20	ISSUED FOR COORDINATION

D. B. GRAY ENGINEERING INC.  
Stormwater Management - Grading & Drainage - Storm & Sanitary Sewers - Watermain  
700 Long Point Circle  
Ottawa, Ontario  
613-425-8044  
d.gray@dbgrayengineering.com

Project  
**PROPOSED 1 STOREY INDUSTRIAL WAREHOUSE**  
1243 TERON ROAD  
OTTAWA, ONTARIO

Drawing Title  
**DETAILS**

Engineer's Seal  
D.B. GRAY  
17016502  
FEB 13-20  
PROFESSIONAL ENGINEER  
PROVINCE OF ONTARIO

Drawn D.B.G.  
Hor. Scale  
Vert. Scale  
Date OCT 18-19  
Job No. 19057

Drawing No.  
**C-3**  
of 4

NOT VALID UNLESS SIGNED & DATED



1. GENERAL

- 1.1 USE BAR SCALE TO CONFIRM ACTUAL PLOT SCALE. EXISTING AND NEW ELEVATIONS AND INVERTS SHOWN ARE GEODETIC AND ARE IN METERS. ALL PIPE DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
1.2 UNLESS OTHERWISE STATED 'ENGINEER' REFERS TO D. B. GRAY ENGINEERING INC.
1.3 EXISTING ELEVATIONS AND LOCATIONS, INVERTS AND SIZES OF EXISTING SERVICES & UTILITIES ARE NOT NECESSARILY SHOWN ON PLAN AND THOSE SHOWN ARE DERIVED FROM AVAILABLE INFORMATION AND MUST BE CONFIRMED ON SITE BEFORE COMMENCING CONSTRUCTION...

2. EROSION AND SEDIMENT CONTROL PLAN

- 2.1 THE EROSION AND SEDIMENT CONTROL PLAN IS A 'LIVING DOCUMENT' AND SHALL BE REVISED IN THE EVENT THE SPECIFIED CONTROL MEASURES ARE NOT SUFFICIENT. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATER COURSE DURING CONSTRUCTION ACTIVITIES.
2.2 AT ANY MANHOLES OR CATCH BASINS THAT WILL RECEIVE DISCHARGE FROM DE-WATERING OPERATIONS AND ALL NEW CATCH BASINS AS THEY ARE INSTALLED: INSTALL SEDIMENT CAPTURE FILTER SOCK INSERTS (TERRAFIX GEOSYNTHETICS INC SILTSACK OR APPROVED EQUAL).
2.3 INSTALL A SILT FENCE BARRIER AROUND STOCKPILED SEDIMENT OR SOIL. PRIOR TO COMMENCEMENT OF CONSTRUCTION INSTALL A SILT FENCE BARRIER AS SHOWN ON PLANS...

3. GRADING & DRAINAGE

- 3.1 NEW GRADES TO MATCH EXISTING AT PROPERTY LINE. NO EXCESS DRAINAGE WILL BE DIRECTED TOWARDS THE ADJACENT PROPERTIES DURING AND AFTER CONSTRUCTION. THERE WILL BE NO ALTERATION TO EXISTING GRADE AND DRAINAGE PATTERNS ON PROPERTY LINE.
3.2 ALL AREAS SHALL BE GRADED TO ENSURE ADEQUATE DRAINAGE AWAY FROM BUILDINGS TO CATCH BASINS, SWALES, DITCHES AND OTHER APPROVED DISPOSAL AREAS. GRADING SHALL BE GRADUAL BETWEEN FINISHED SPOT ELEVATIONS SHOWN ON DRAWINGS TO PREVENT PONDING (OTHER THAN PONDING REQUIRED FOR STORMWATER MANAGEMENT).
3.3 CULVERTS SHALL BE HDPE TO CITY OF OTTAWA STANDARDS AND SPECIFICATIONS AND TO OPSS 1840 AND CSA B182.8 OR 182.6. MINIMUM 320 kPa STIFFNESS AT 5% DEFLECTION. JOINTS SHALL BE SOIL-TIGHT OR BETTER, BOSS 2000 OR APPROVED EQUAL.

4. SITE SERVICES

- 4.1 CONNECTION TO WATERMAIN BY CITY OF OTTAWA FORCES, CONTRACTOR SHALL PROVIDE EXCAVATION, BACKFILL AND REINSTATEMENT.
4.2 WATER METER SHALL BE INSTALLED AS PER CITY OF OTTAWA DWG. No. W31.
4.3 ALL WATER SERVICE MATERIALS AND CONSTRUCTION METHODS TO CITY OF OTTAWA STANDARDS AND ONTARIO PROVINCIAL STANDARDS SPECIFICATIONS (OPSS & OPSP). WATERMAIN / WATER SERVICE MATERIALS SHALL BE PVC PRESSURE CLASS 150 DR18.
4.4 PROVIDE THRUST BLOCKS AS PER CITY OF OTTAWA DWG. No. W23.3 & W25.4 AT ALL VALVES, TEES, CAPS, BENDS, REDUCERS AND HYDRANTS OR OTHER FITTINGS WHERE CHANGES OCCUR IN PIPE DIAMETER OR DIRECTION. RESTRAINING AS PER AS PER CITY OF OTTAWA DWG. No. 25.5 & 25.6-ALL CONNECTIONS, RESTRAINT RODS AND VALVE BOLTS TO BE STAINLESS STEEL. CATHODIC PROTECTION & ANODE INSTALLATION AS PER CITY OF OTTAWA DWG. No. 40, 42, 44 & 47.

5. CONSTRUCTION

- 5.1 PRIOR TO COMMENCING WORK:
A. OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE AUTHORITIES.
B. SIZE, DEPTH AND LOCATION OF EXISTING SERVICES, UTILITIES AND STRUCTURES AS INDICATED ON THE DRAWINGS ARE FOR GUIDANCE ONLY. ALL EXISTING SERVICES, UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. COMPLETENESS AND ACCURACY ARE NOT GUARANTEED, NOTIFY ALL APPLICABLE OWNERS, UTILITY COMPANIES AND AUTHORITIES HAVING JURISDICTION OF PROPOSED WORK AND LOCATE AND CLEARLY IDENTIFY ALL EXISTING SERVICES, UTILITIES AND STRUCTURES AND ADJACENT TO THE SITE UNDERGROUND LOCATES (INCLUDING ONTARIO ONE CALL 1-800-400-2255) SHALL BE CONDUCTED PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION.
5.2 MAINTAIN AND PROTECT FROM DAMAGE, SERVICES, UTILITIES AND STRUCTURES ENCOUNTERED.
5.3 PROTECT EXISTING BUILDINGS, TREES AND OTHER PLANTS, LAWNS, FENCING, SERVICE POLES, WIRES, PAVEMENT, SURVEY BENCH MARKS AND MONUMENTS AND OTHER SURFACE FEATURES FROM DAMAGE WHILE WORK IS IN PROGRESS. DO NOT DISTURB SOIL WITHIN BRANCH SPREAD OF TREES OR SHRUBS THAT ARE TO REMAIN.

CATCH BASIN & MANHOLE SCHEDULE

Table with columns: REF, TOP, SIZE, TYPE, INVERT AT INLET, INVERT AT OUTLET, NOTES. Contains entries for CB-1, CB/MH-2, CB/MH-3, CB/MH-4, CB-5, MH-6, CB/MH-7.

SANITARY SEWER

Table with columns: MH-SAN-1, MH-SAN-2, STATION, DESCRIPTION, GRADE ELEV., TOP OF PIPE, DEPTH OF COVER, COMMENTS.

WATER SERVICE PROFILE TABLE

MATERIAL: 250mm PVC PRESSURE CLASS 150 DR18

Main table with columns: STATION, DESCRIPTION, GRADE ELEV., TOP OF PIPE, DEPTH OF COVER, COMMENTS. Includes entries for A+00.0 to A+97.0.

MATERIAL: 150mm PVC PRESSURE CLASS 150 DR18

Table with columns: B+00.0, B+05.2, B+12.3, STATION, DESCRIPTION, GRADE ELEV., TOP OF PIPE, DEPTH OF COVER, COMMENTS.

MATERIAL: 150mm PVC PRESSURE CLASS 150 DR18

Table with columns: C+00.0, C+00.5, C+03.0, C+03.5, C+04.0, C+06.5, C+07.0, C+10.7, STATION, DESCRIPTION, GRADE ELEV., TOP OF PIPE, DEPTH OF COVER, COMMENTS.

KEY PLAN

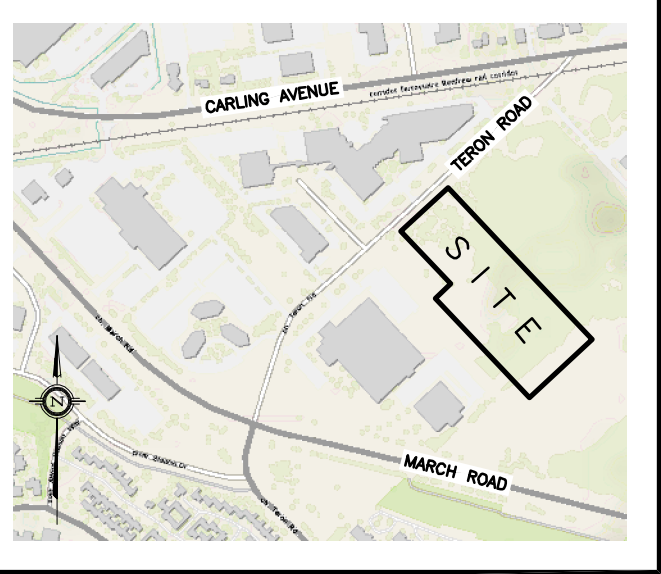


Table with columns: No., DATE, REVISION. Contains entries for 2 FEB 13-20 and 1 FEB 11-20.

D. B. GRAY ENGINEERING INC.
700 Long Point Circle
Ottawa, Ontario

PROJECT PROPOSED 1 STOREY INDUSTRIAL WAREHOUSE 1243 TERON ROAD OTTAWA, ONTARIO

NOTES & SCHEDULES

Professional Engineer Seal for D.B. Gray, License No. 17016502, FEB 13-20. Includes drawing title 'PROPOSED 1 STOREY INDUSTRIAL WAREHOUSE' and scale 'C-4 OF 4'.