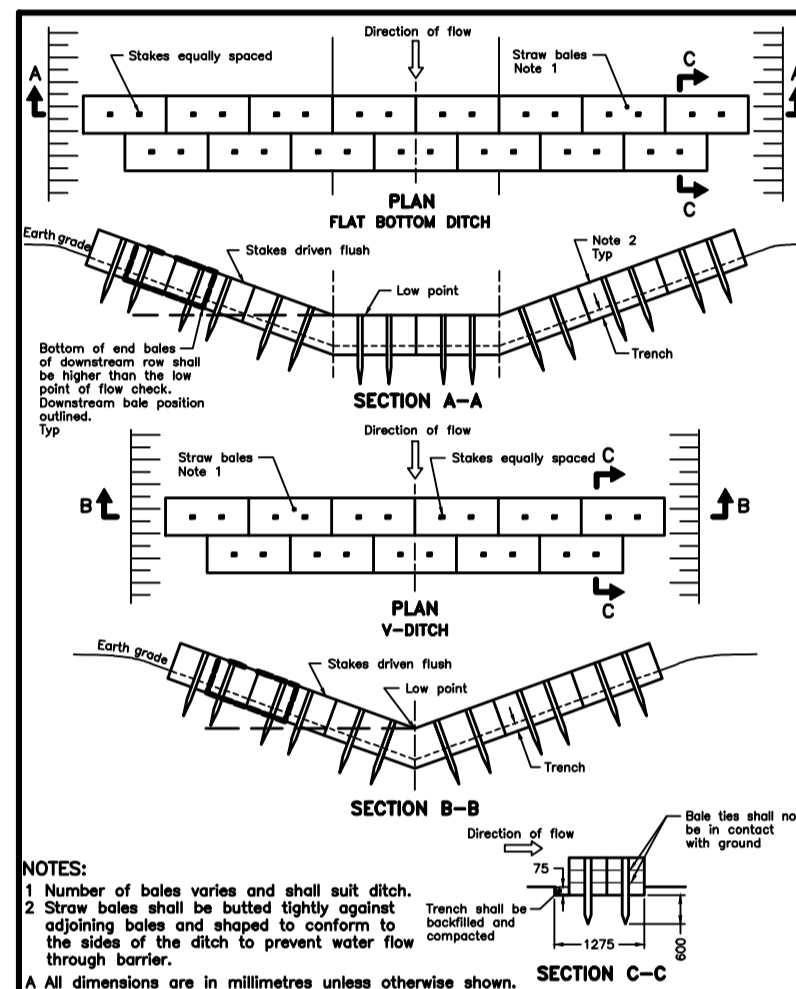


HEAVY-DUTY SILT FENCE BARRIER
OPSD 219.130



STRAW BALE FLOW CHECK DAM
OPSD 219.180

LEGEND:

- EXISTING PROPERTY LINE TO REMAIN
- PROPOSED ENTRANCE
- +50.00 PROPOSED ELEVATION
- +50.00(C) PROPOSED TOP OF CURB ELEVATION
- +50.00(B) PROPOSED BOTTOM OF CURB ELEVATION
- +50.00 EXISTING ELEVATION
- ➔ PROPOSED OVERLAND MAJOR FLOW ROUTE
- PROPOSED SILT FENCE AS PER OPSD 219.130
- PROPOSED 250mm PERFORATED SUBDRAIN
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
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- PROPOSED PIPE INSULATION AS PER W22
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- WS-XX WATERSHED NAME
- CNR OR % IMPERVIOUS
- HA AREA IN HECTARES
- PROPOSED GRASS AREA
- PROPOSED CONCRETE FEATURES/SLAB
- PROPOSED HEAVY DUTY ASPHALT
- PROPOSED LIGHT DUTY ASPHALT
- ⊙ PROPOSED WATER METER
- PROPOSED SIEMSE CONNECTION
- PROPOSED DRAIN OUTLET

EROSION AND SEDIMENT CONTROL MEASURES:

** CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MONITORING, REPAIR AND REMOVAL OF ALL EROSION AND SEDIMENT CONTROL FEATURES **

1. PRIOR TO START OF CONSTRUCTION:

- 1.1. PRIOR TO THE REMOVAL OF ANY VEGETATIVE COVER, MOVING OF ANY SOIL, AND CONSTRUCTION:
 - 1.1.1. INSTALL SILT FENCE IMMEDIATELY DOWNSTREAM FROM AREAS TO BE DISTURBED (SEE PLAN FOR LOCATION).
 - 1.1.2. INSTALL GEOSOCK INSERTS WITH AN OVERFLOW IN ALL THE DOWNSTREAM CATCH BASINS AND MANHOLES.
 - 1.1.3. INSTALL SILT/SOCK FILTERS IN ALL CONCRETE CATCH BASIN STRUCTURES.
 - 1.1.4. INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.

2. DURING CONSTRUCTION:

- 2.1. WORK TO BE DONE IN THE VICINITY OF MAJOR WATERWAYS TO BE CARRIED OUT FROM JULY TO SEPTEMBER ONLY.
- 2.2. MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE.
- 2.3. PROTECT DISTURBED AREAS FROM RUNOFF.
- 2.4. PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA WILL NOT BE REHABILITATED WITHIN 30 DAYS.
- 2.5. INSPECT SILT FENCE, FILTER CLOTHS, AND CATCH BASIN SUMPS WEEKLY AND AFTER EVERY MAJOR STORM EVENT. CLEAN AND REPAIR WHEN NECESSARY.
- 2.6. PLAN TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION.
- 2.7. EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STOCKPILES.
- 2.8. DO NOT LOCATE TOPSOIL PILES AND EXCAVATION

MATERIAL CLOSER THAN 2.5m FROM ANY PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEEDED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (30 DAYS)

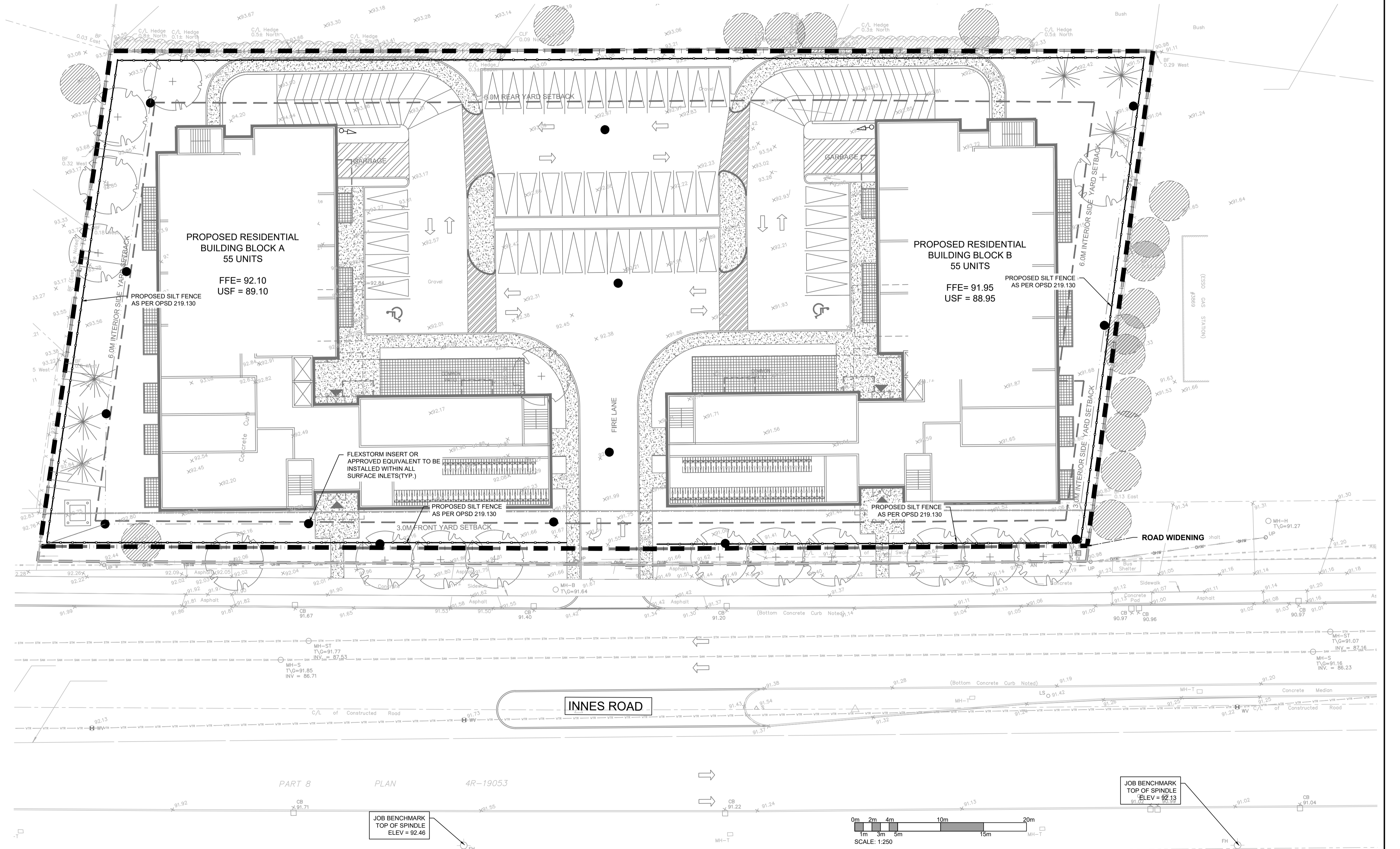
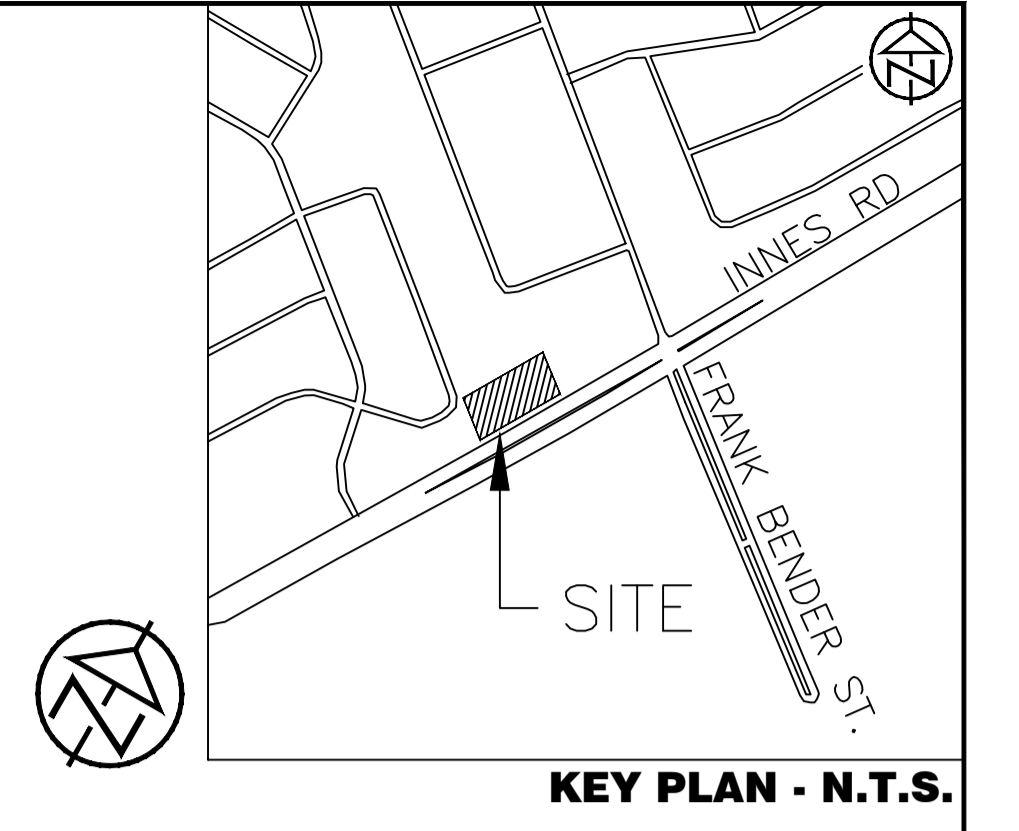
- 2.9. CONTROL WIND-BLOWN DUST OFF SITE TO ACCEPTABLE LEVELS BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY (PROVIDE WATERING AS REQUIRED).
- 2.10. ALL EROSION CONTROL STRUCTURE TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER.
- 2.11. NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THIS CONSULTING ENGINEER AND THE CITY DEPARTMENT OF PUBLIC WORKS. TO PREVENT UNNECESSARY SEDIMENT DISCHARGE, THE CONTRACTOR IS PERMITTED TO PLACE ADDITIONAL SEDIMENT AND

EROSION CONTROL MEASURES IN A TIMELY MANNER, IF REQUIRED, THE CONTRACTOR TO ADVISE CONSULTANT ONCE INSTALLED FOR INSPECTION.

- 2.12. CONTRACTOR RESPONSIBLE FOR CITY ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING ETC. AT THE END OF EACH WORK DAY.
- 2.13. PROVIDE GRAVEL ENTRANCE WHEREVER EQUIPMENT LEAVES THE SITE TO PREVENT MUD TRACKING ONTO PAVED SURFACES. GRAVEL BED SHALL BE A MINIMUM OF 15m LONG, 4m WIDE AND 0.3m DEEP AND SHALL CONSIST OF COARSE (50mm CRUSHER-RUN LIMESTONE). MAINTAIN GRAVEL ENTRANCE IN CLEAN CONDITION.
- 2.14. DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE SCRAPPED.
- 2.15. ANY MUD/MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR RUBBER TIRE LOADER.

3. AFTER CONSTRUCTION:

- 3.1. PROVIDE PERMANENT COVER CONSISTING OF TOPSOIL AND SEED TO DISTURBED AREA.
- 3.2. REMOVE STRAW BALE FLOW CHECK DAMS, SILT FENCES AND FILTER CLOTHS ON CATCH BASINS AND MANHOLE COVERS AFTER DISTURBED AREAS HAVE BEEN REHABILITATED AND STABILIZED.
- 3.3. INSPECT AND CLEAN CATCH BASIN SUMPS AND STORM SEWERS.



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BENCHMARK2: FIRE HYDRANT LOCATED ON SOUTH SIDE OF INNES ROAD, SOUTHEAST OF SITE(90.0m EAST FROM BENCHMARK 1) TOP OF SPINDLE ELEV=92.13

No.	REVISION DESCRIPTION	DATE	ENGINEER STAMP
1.	ISSUED FOR SPA	OCT. 2022	

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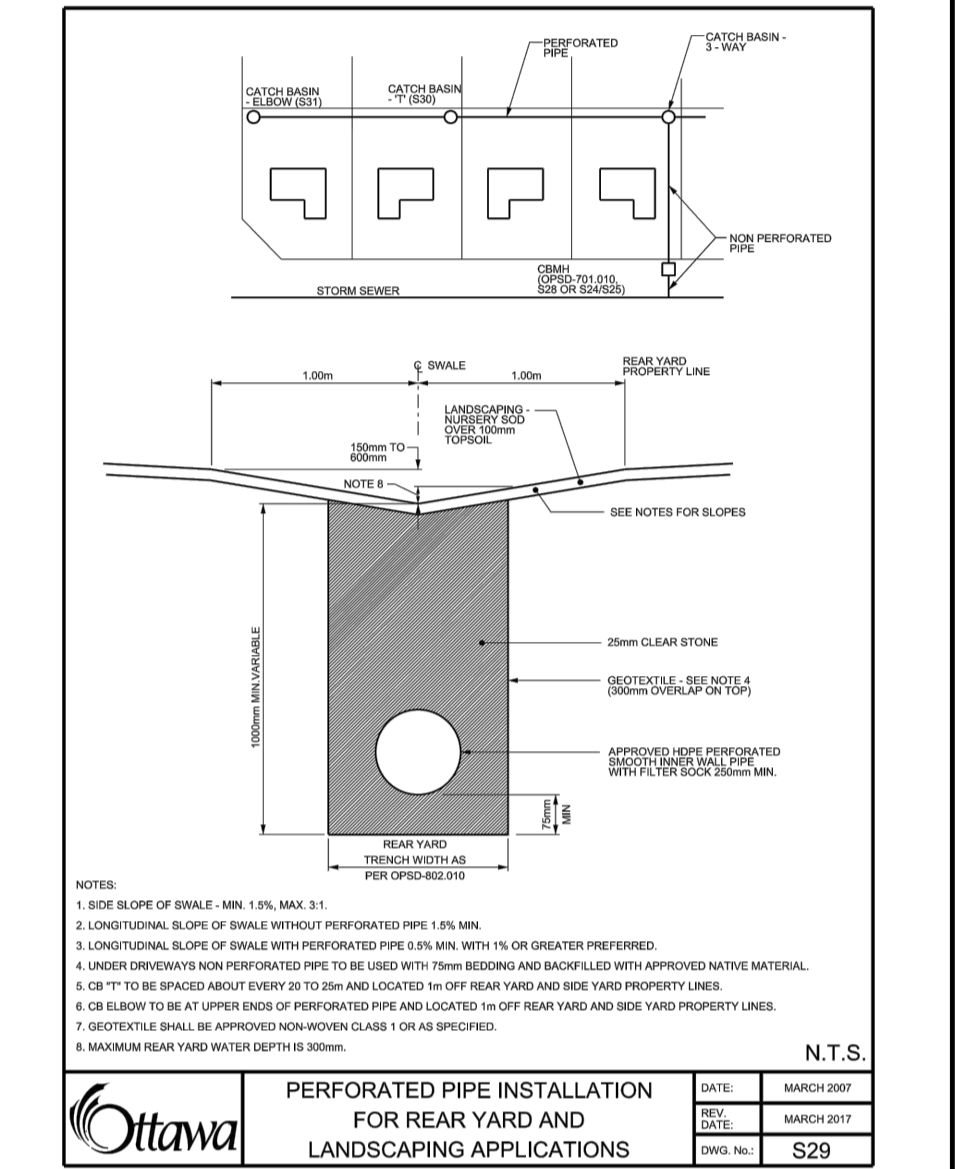
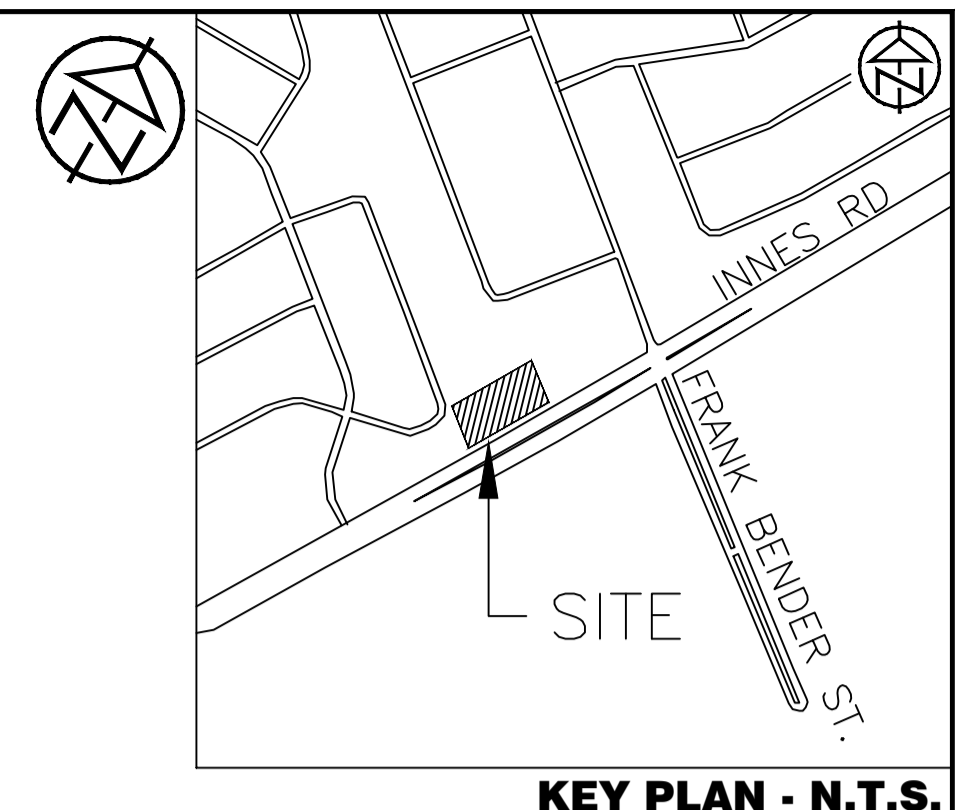
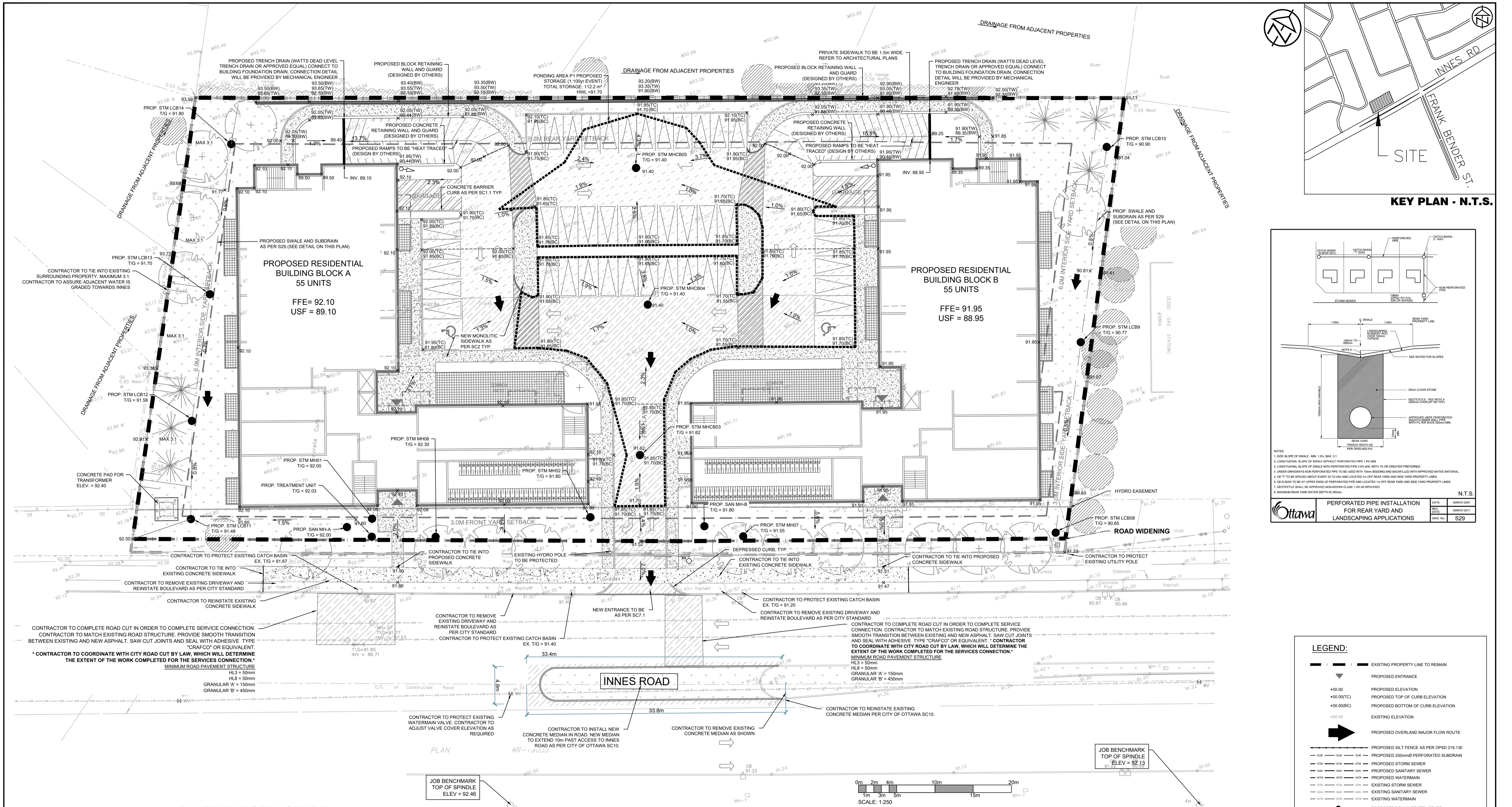
ENGINEER STAMP

BRIDOR DEVELOPMENTS
3817-3843 INNES ROAD
CITY OF OTTAWA

SEDIMENT & EROSION CONTROL PLAN

TATHAM ENGINEERING

DESIGN: HY/GC FILE: 522676 DWG: C100
DRAWN: HY DATE: OCT 2022
CHECK: GC SCALE: 1:250

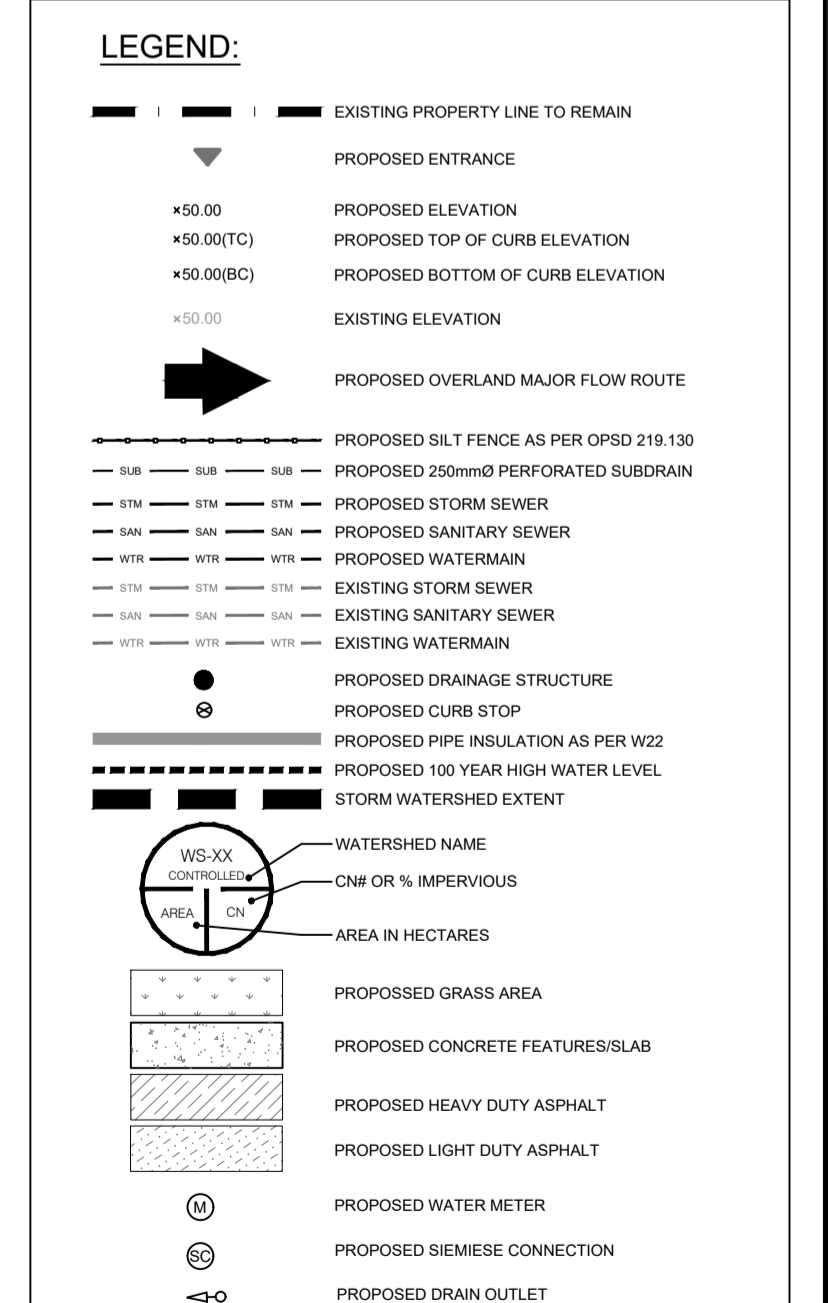


PAVEMENT STRUCTURE

COURSE	MATERIAL	THICKNESS (mm)	
		LIGHT DUTY	HEAVY DUTY
SURFACE	HL 3 A/C (PG 58-28)	50	40
BINDER	HL 8 A/C (PG 58-28)	-	50
BASECOURSE	GRANULAR "A"	150	150
SUBBASE	GRANULAR "B" TYPE II	300	400

PONDING TABLE
100 year storm HWL = 91.70

PONDING AREA	VOLUME (m3)	DEPTH (mm)
P1	107.8	300



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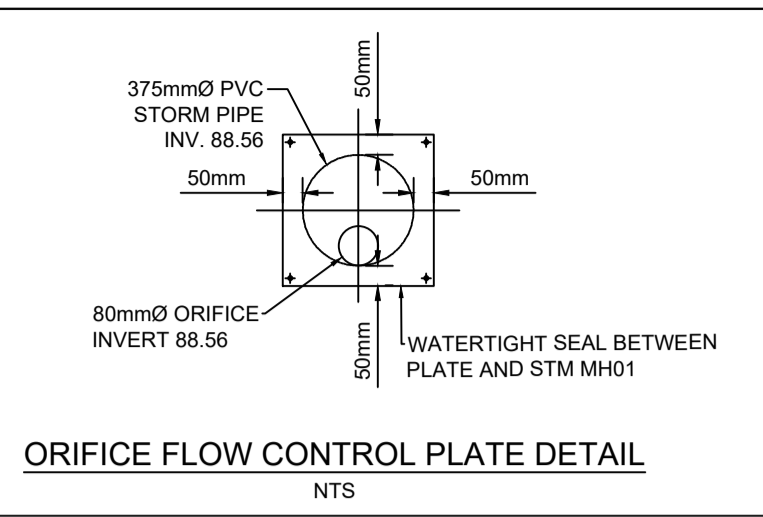
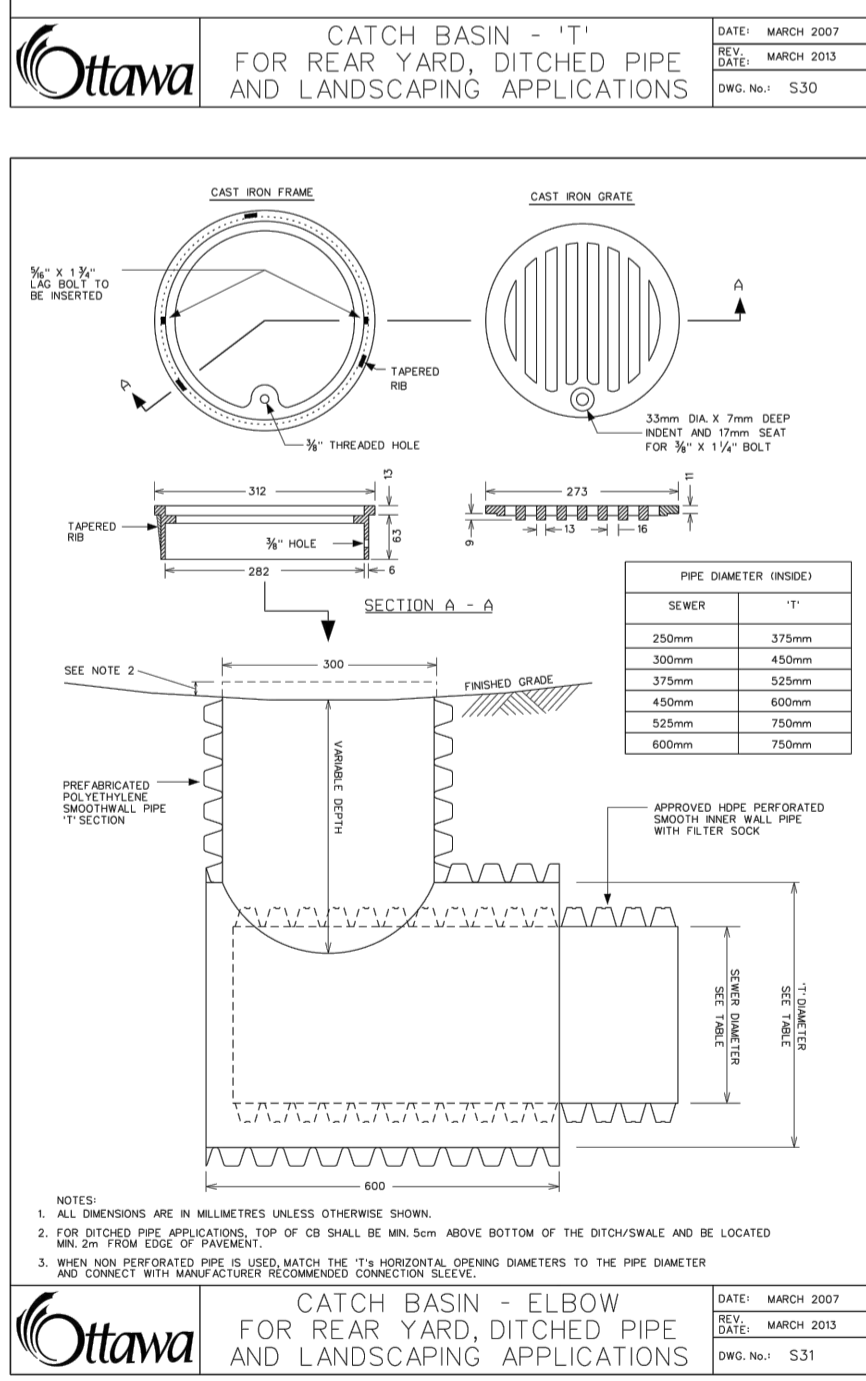
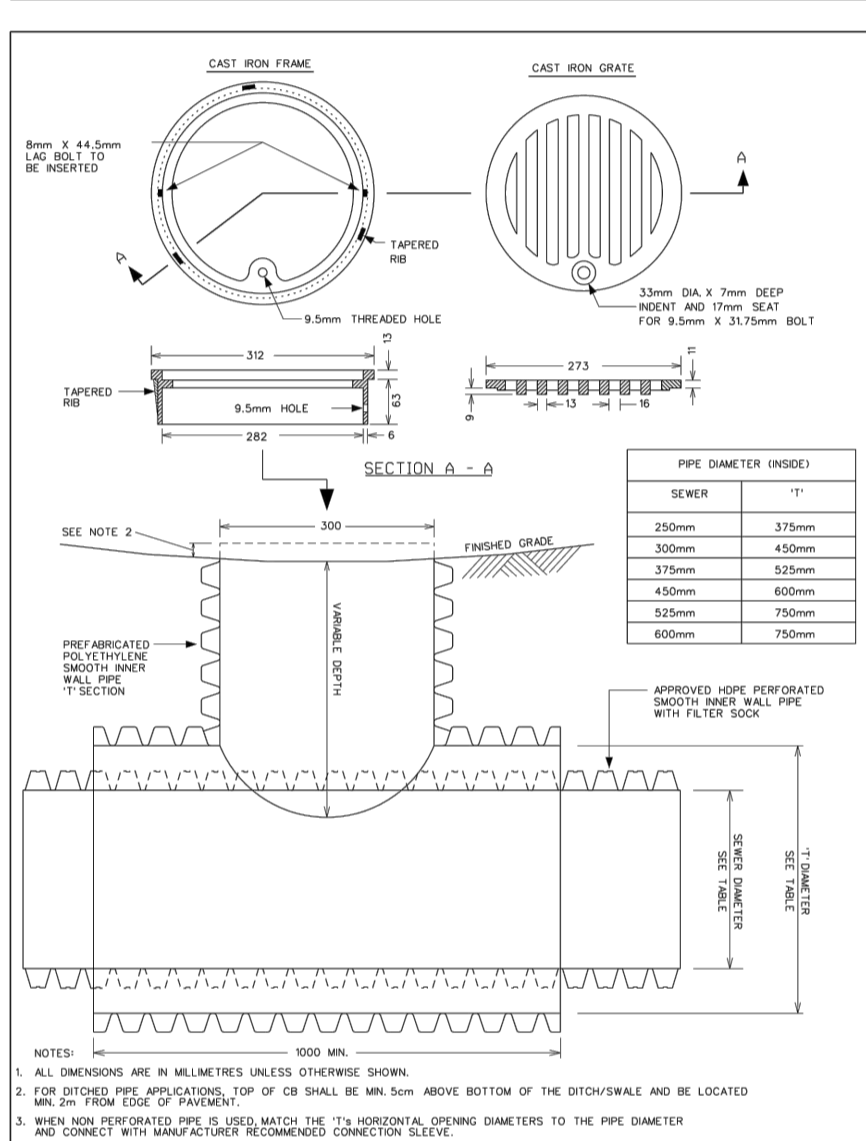
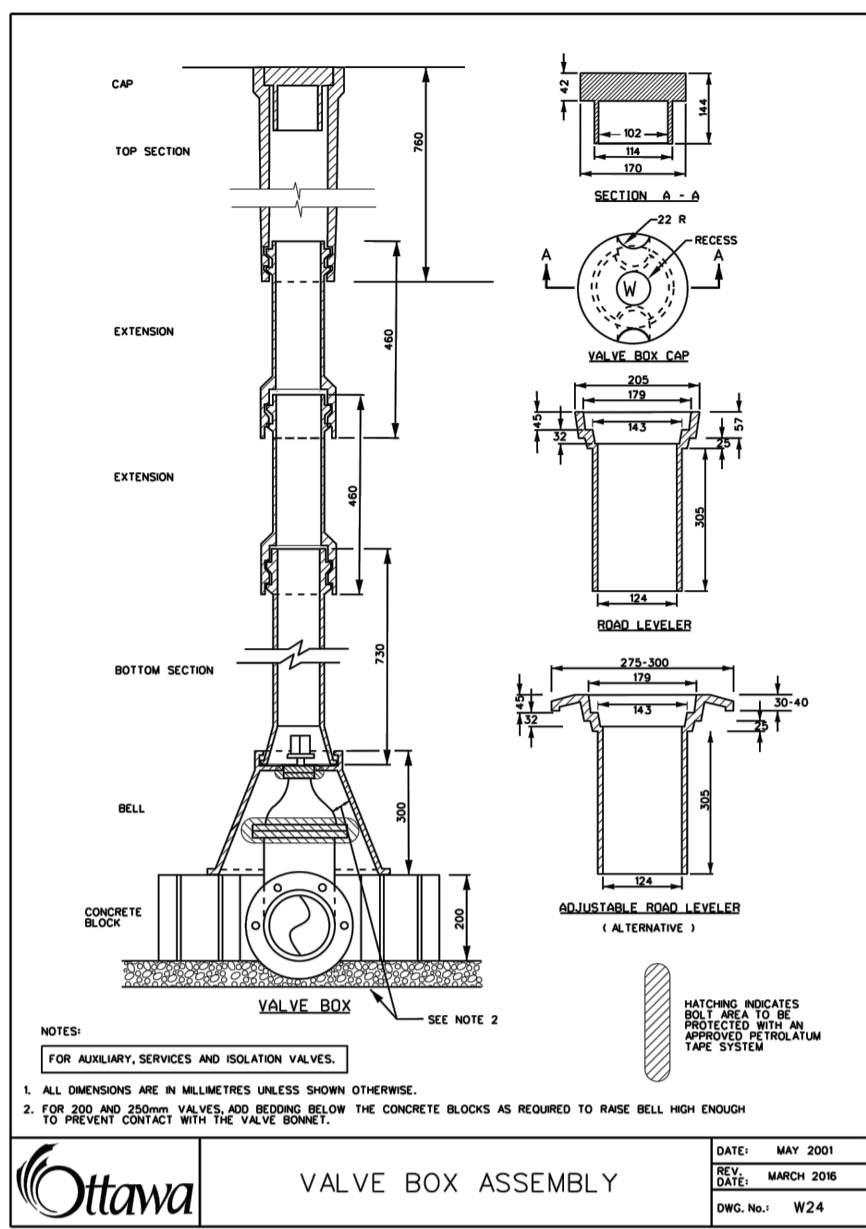


BRIDOR DEVELOPMENTS
3817-3843 INNES ROAD
CITY OF OTTAWA

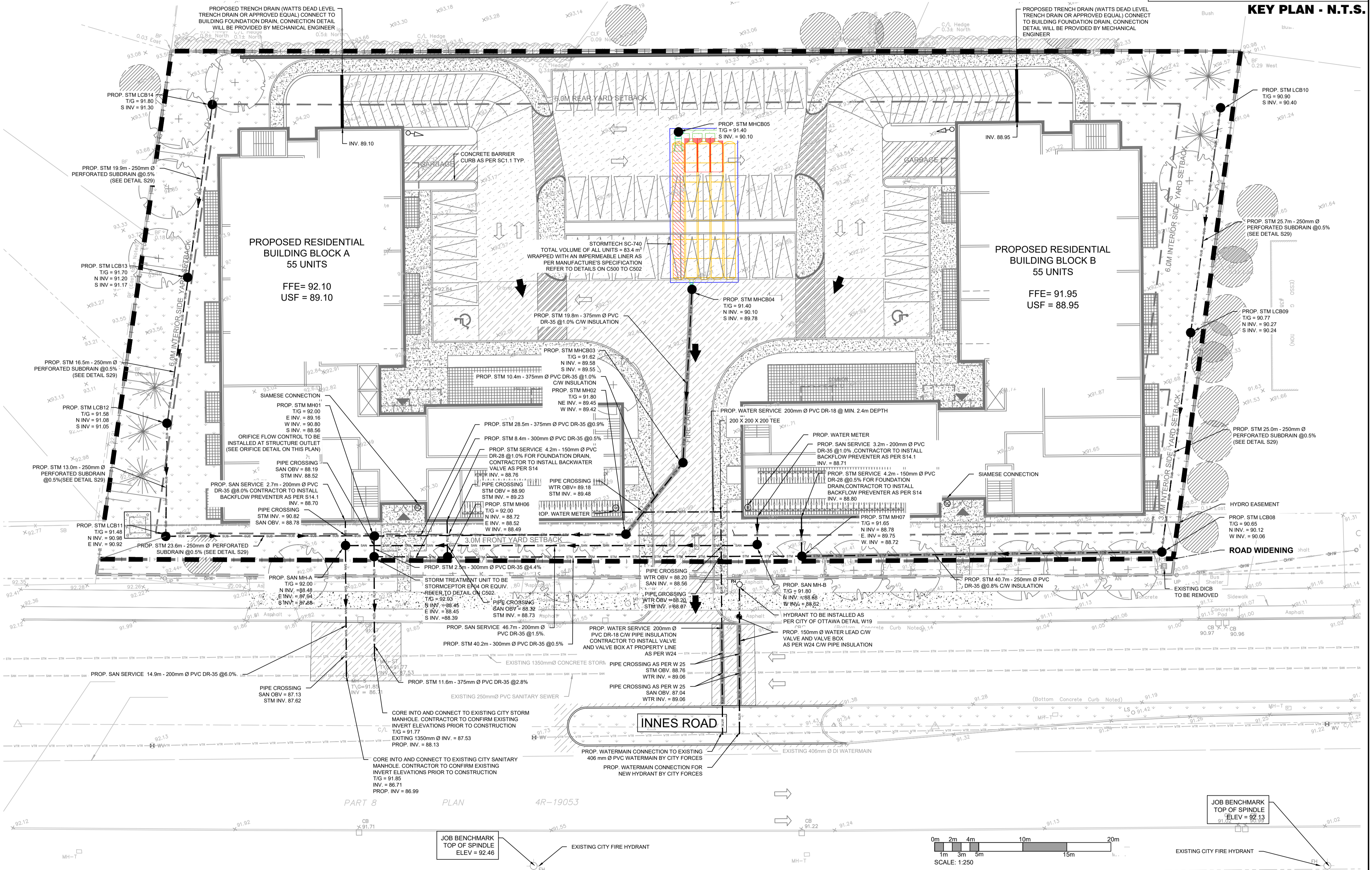
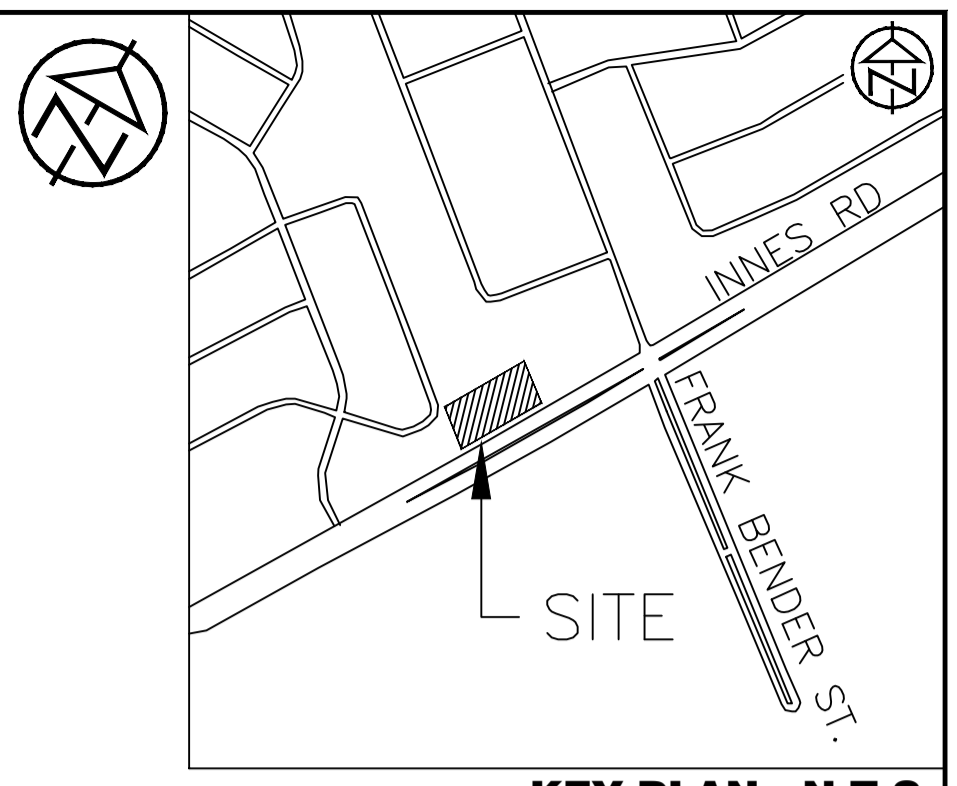
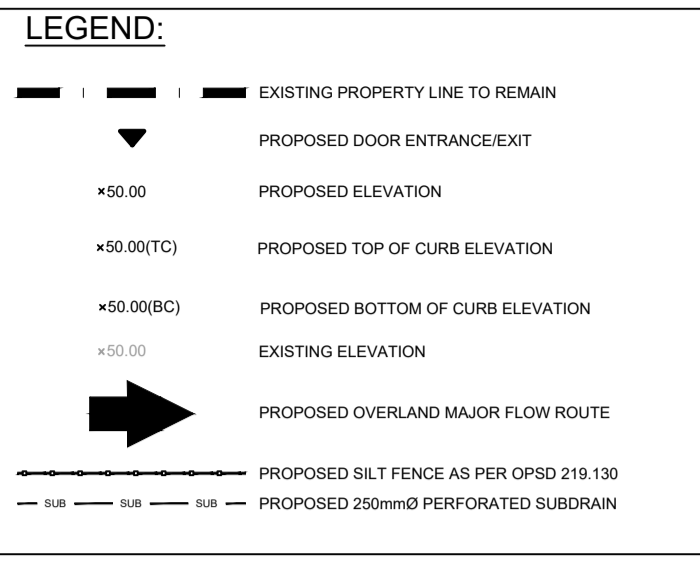
SITE GRADING PLAN

TATHAM ENGINEERING

DESIGN: HY/GC FILE: 522676 DWG: **C200**
DRAWN: HY DATE: OCT 2022
CHECK: GC SCALE: 1:250



MANHOLE TABLE		
STORM		
MH Number	Size	Cover
STM MH01	1200mm	S24.1
STM MH02	1200mm	S24.1
MHCB03	1200mm	S28.1
MHCB04	1200mm	S28.1
MHCB05	1200mm	S28.1
STM MH06	1200mm	S24.1
STM MH07	1200mm	S24.1
LCB08 TO LCB14		S30 AND S31
SANITARY		
MH Number	Size	Cover
MHA	1200mm	S24
MHB	1200mm	S24



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BRIDOR DEVELOPMENTS
 3817-3843 INNES ROAD
 CITY OF OTTAWA

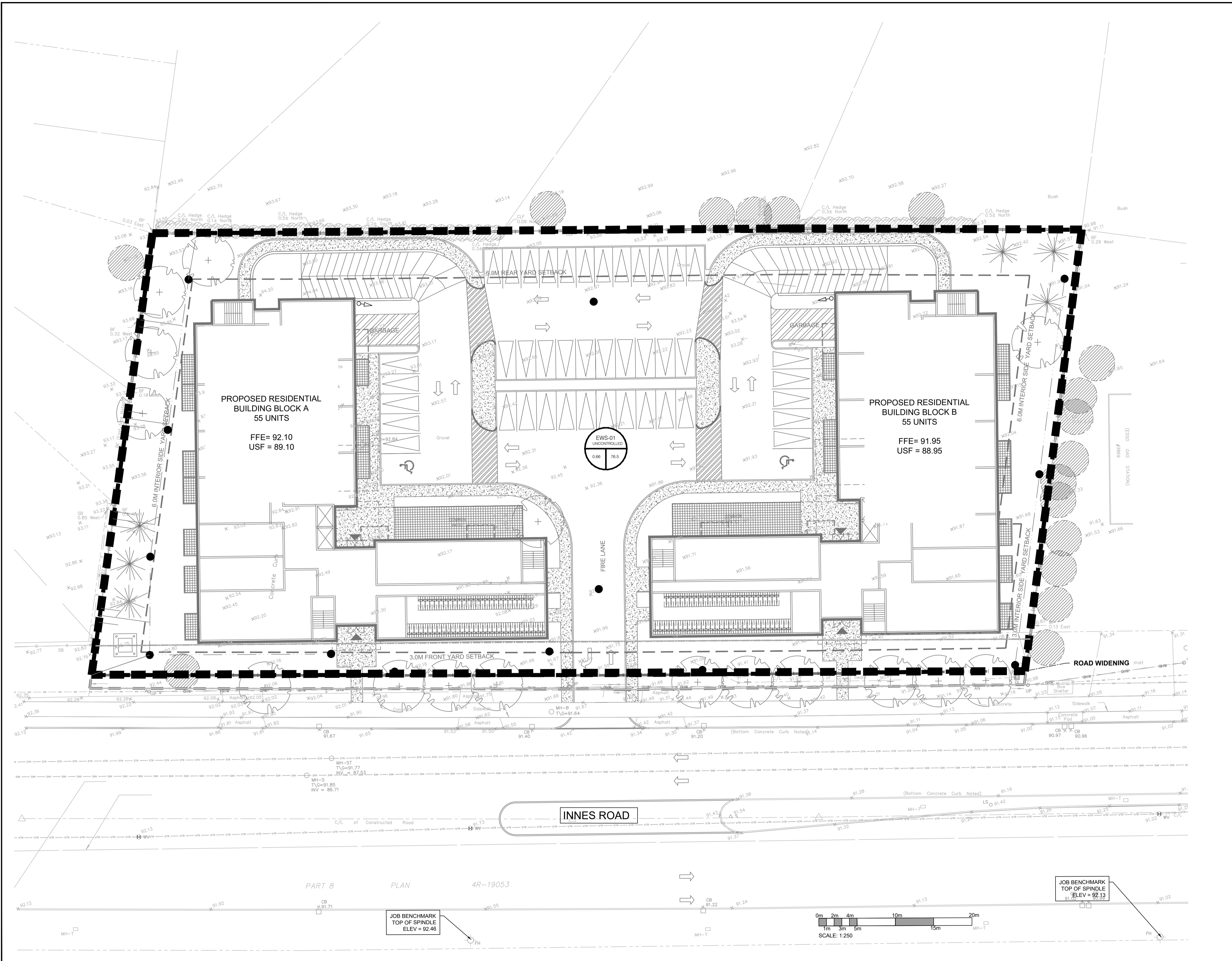
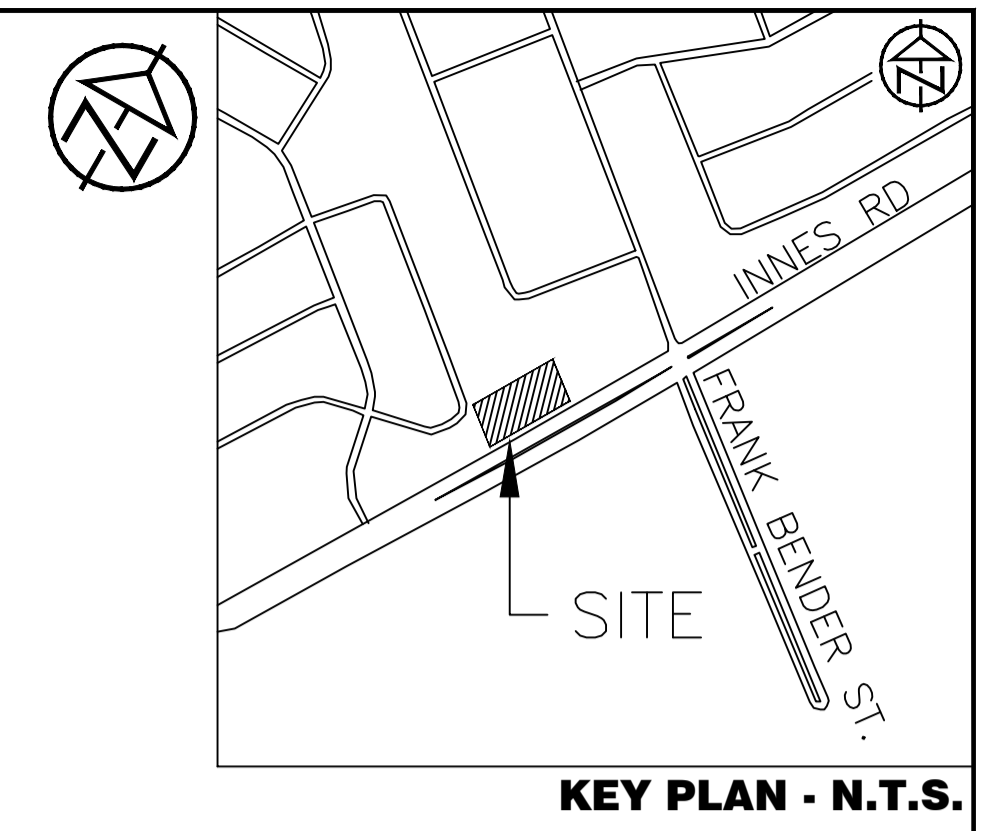
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DESIGN: HY/GC FILE: 522676 DWG:
 DRAWN: HY DATE: OCT 2022 **C300**
 CHECK: GC SCALE: 1:250

BRIDOR DEVELOPMENTS
 3817-3843 INNES ROAD
 CITY OF OTTAWA

TATHAM ENGINEERING

DESIGN: HY/GC FILE: 522676 DWG:
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 CHECK: GC SCALE: 1:250



LEGEND:

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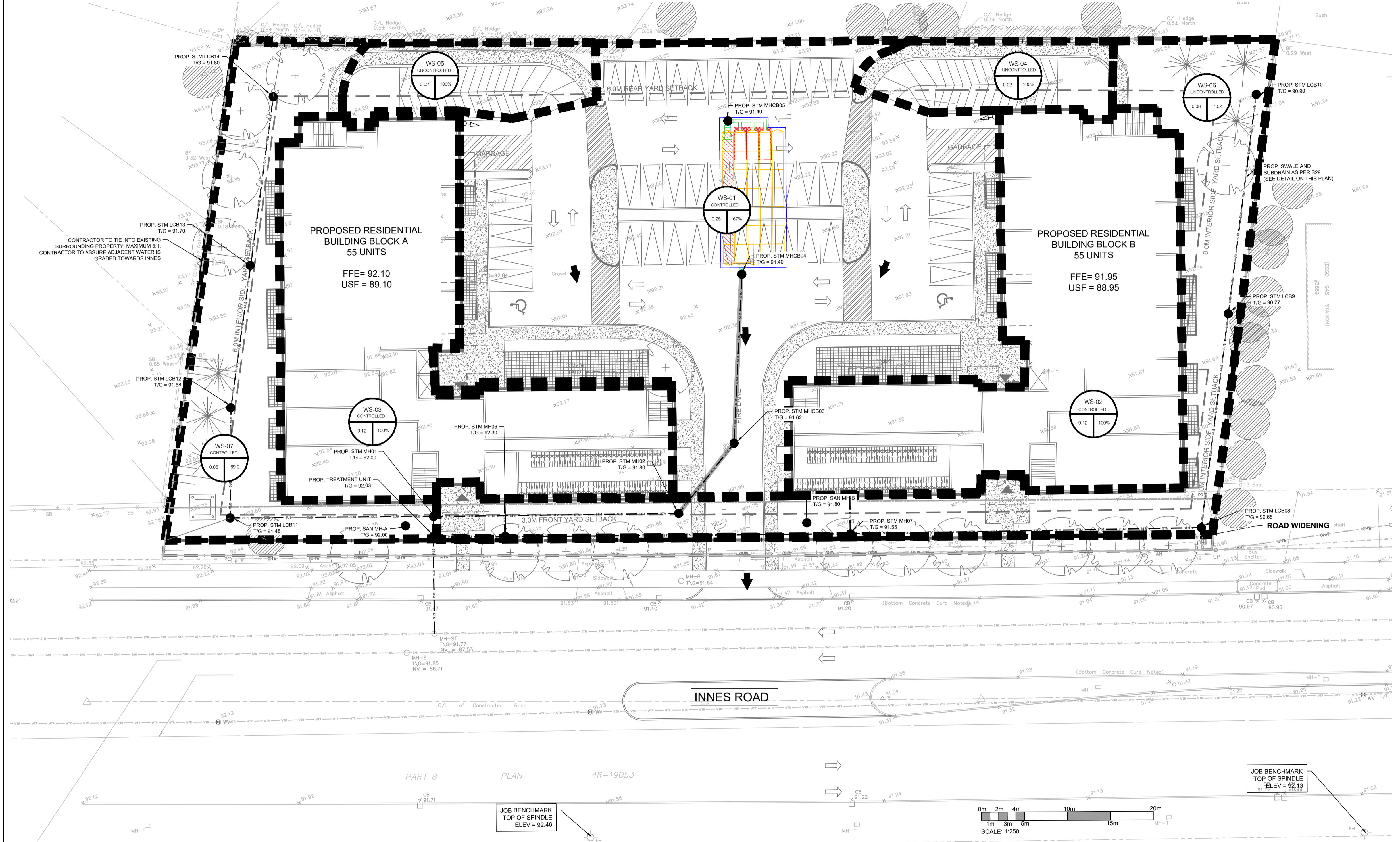
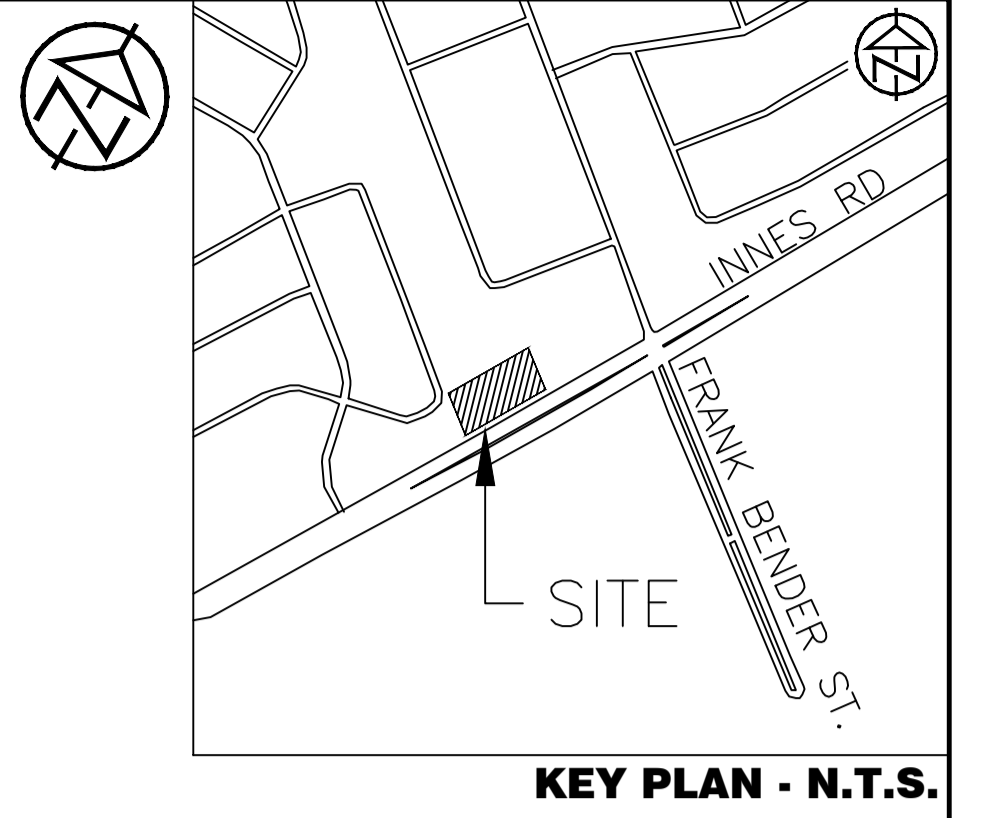
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BRIDOR DEVELOPMENTS
3817-3843 INNES ROAD
CITY OF OTTAWA

PRE DEVELOPMENT DRAINAGE PLAN

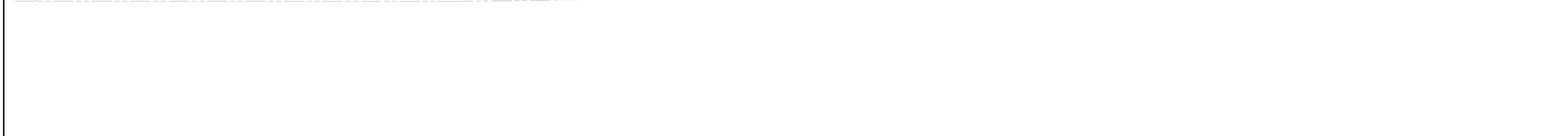
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LEGEND:

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3817-3843 INNES ROAD
CITY OF OTTAWA

POST DEVELOPMENT
DRAINAGE PLAN

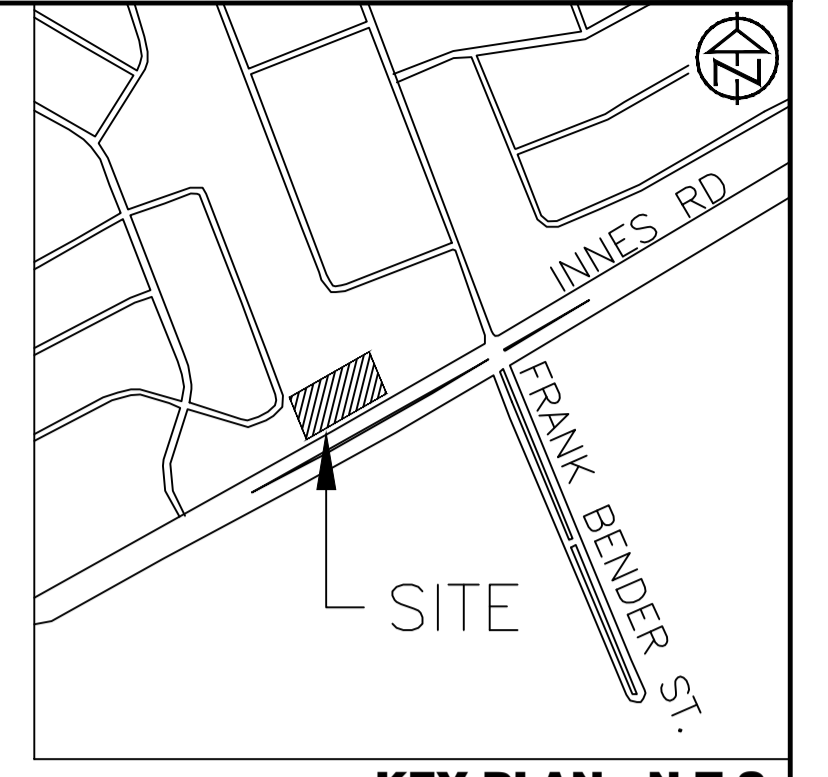
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 CHECK: GC SCALE: 1:250

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	



3817 INNES ROAD
OTTAWA, CANADA



SC-740 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740 COPOLYMERS.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL BE CERTIFIED TO CSA B184, "POLYMERIC SUB-SURFACE STORMWATER MANAGEMENT STRUCTURES", AND MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE CSA S6 CL-625 TRUCK AND THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LINE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 50 mm (2").
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION: a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT², AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 23° C / 73° F), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.85 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

- STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS: STONESHOOTER LOCATED OFF THE CHAMBER BED, BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE, BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 150 mm (6") SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 20-50 mm (3/4-2").
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - FULL 900 mm (36") OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.**
- CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT		CONCEPTUAL ELEVATIONS		PART TYPE		ITEM ON LAYOUT		DESCRIPTION		*INVERT ABOVE BASE OF CHAMBER	
35	STORMTECH SC-740 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT) (UNPAVED)	3.353								
10	STORMTECH SC-740 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)	1.524								
152	STONE ABOVE (mm)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)	1.372	PREFABRICATED EZ END CAP	A	800 mm BOTTOM PREFABRICATED EZ END CAP, PART#: SC740ECCZ / TYP OF ALL 600 mm				3 mm	
152	STONE BELOW (mm)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT)	1.372	FLAMP	B	INSTALL FLAMP ON 600 mm ACCESS PIPE / PART#: SC74024RAMP					
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)	1.372	FLAMP	C	620 mm x 300 mm TOP MANIFOLD, ADS N-12				318 mm	
83.4	INSTALLED SYSTEM VOLUME (m ³) (PERIMETER STONE INCLUDED)	TOP OF STONE	0.06	MANIFOLD IS	D	754 mm DIAMETER (610 mm SLUMP MIN)					161 L/s IN
	(COVER STONE INCLUDED)	800 mm x 300 mm TOP MANIFOLD INVERT	0.470	PLUS ROW	E	754 mm DIAMETER (DESIGN BY ENGINEER)					57 L/s OUT
	(BASE STONE INCLUDED)	600 mm BOTTOM CONNECTION INVERT	0.150								
132.1	SYSTEM AREA (m ²)	600 mm ISOLATOR ROW PLUS INVERT	0.150								
50.4	SYSTEM PERIMETER (m)	BOTTOM OF SC-740 CHAMBER	0.150								
		BOTTOM OF STONE	0.020								

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #8-32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- *NOT FOR CONSTRUCTION: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

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SHEET 2 OF 6

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BENCHMARK1: FIRE HYDRANT LOCATED ON SOUTH SIDE OF INNES ROAD, SOUTH OF SITE. TOP OF SPINDLE ELEV=92.46
BENCHMARK2: FIRE HYDRANT LOCATED ON SOUTH SIDE OF INNES ROAD, SOUTHEAST OF SITE(90.0m EAST FROM BENCHMARK 1) TOP OF SPINDLE ELEV=92.13

No.	REVISION DESCRIPTION	DATE	ENGINEER STAMP
1.	ISSUED FOR SPA	OCT. 2022	

BRIDOR DEVELOPMENTS
3817-3843 INNES ROAD
CITY OF OTTAWA

DETAILS - 1

DESIGN: HY/GC
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FILE: 522676
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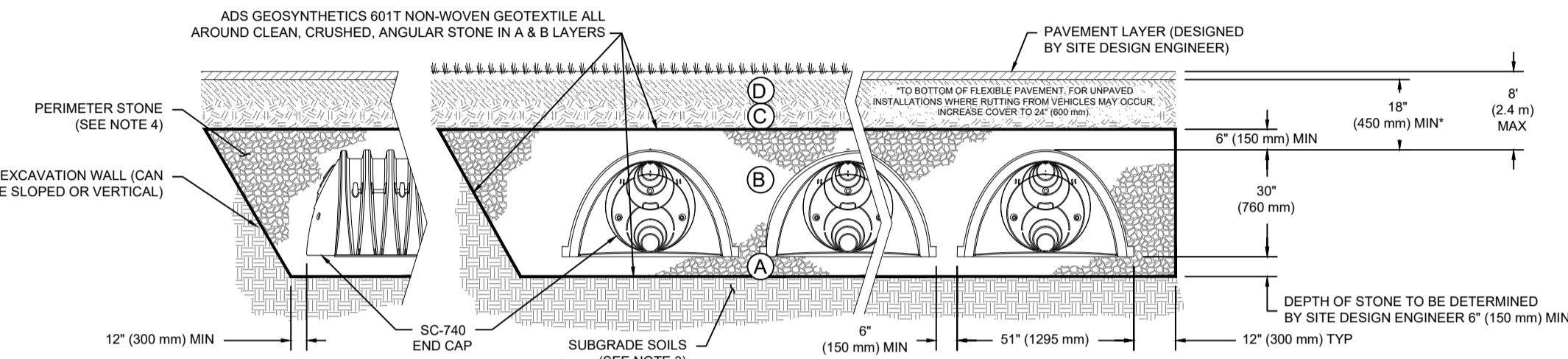
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DWG: **C500**

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE 2.3

PLEASE NOTE:
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

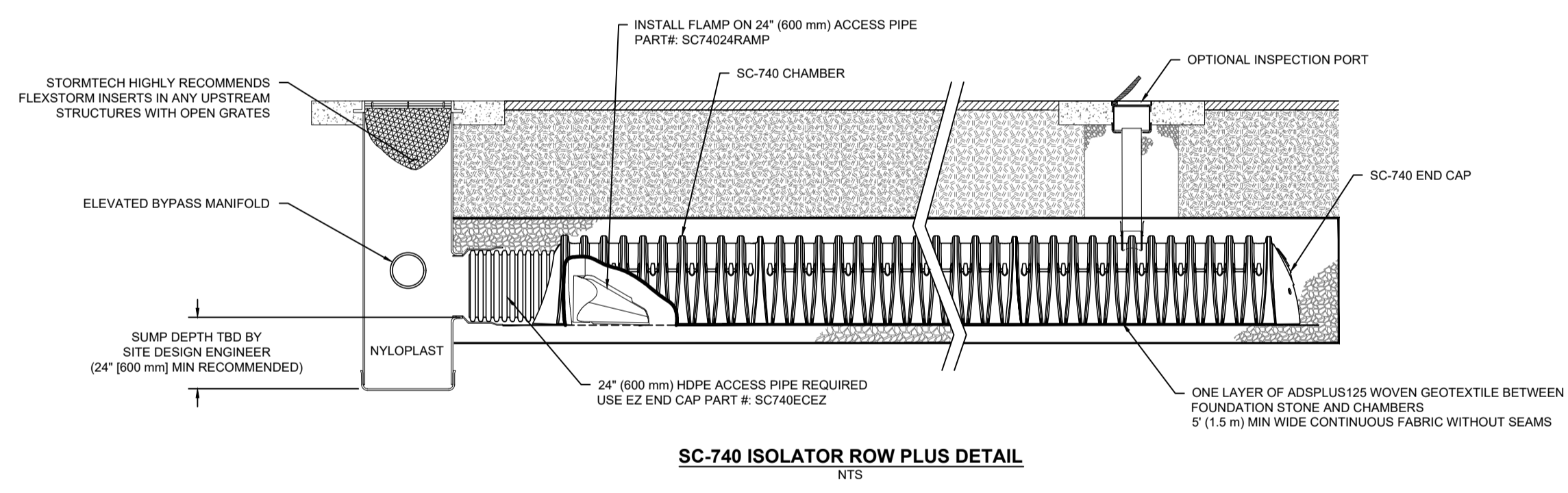
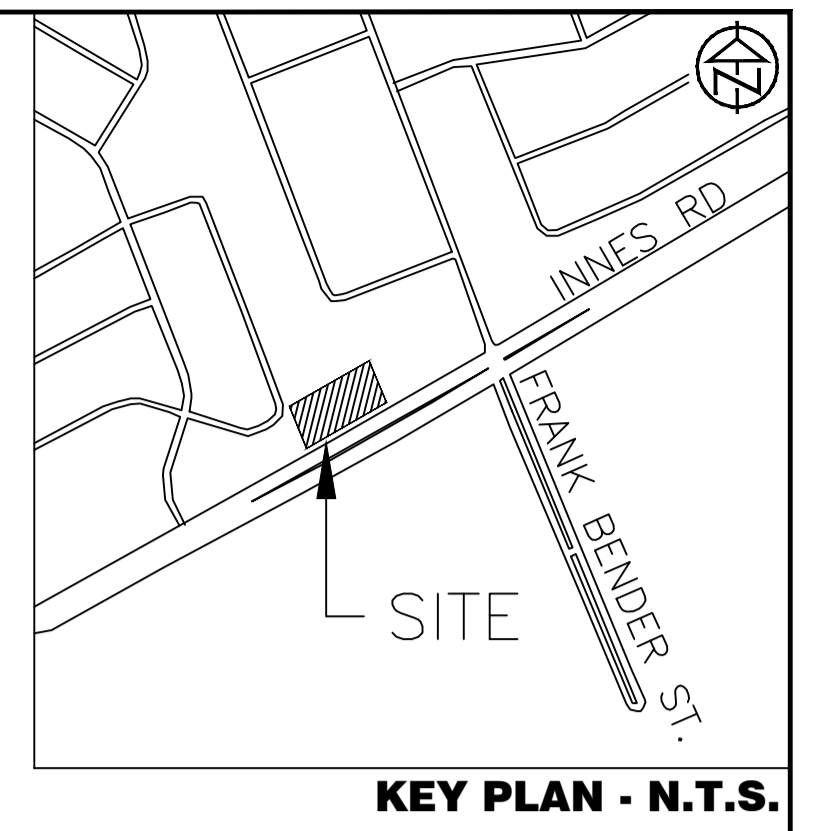
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT². THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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SHEET 3 OF 6



INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
 - REMOVE/OPEN LID ON NYLOPLAST IN-LINE DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2; IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2; IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - VACUUM STRUCTURE SUMPS AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS, RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION, ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

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SHEET 4 OF 6

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BRIDOR DEVELOPMENTS
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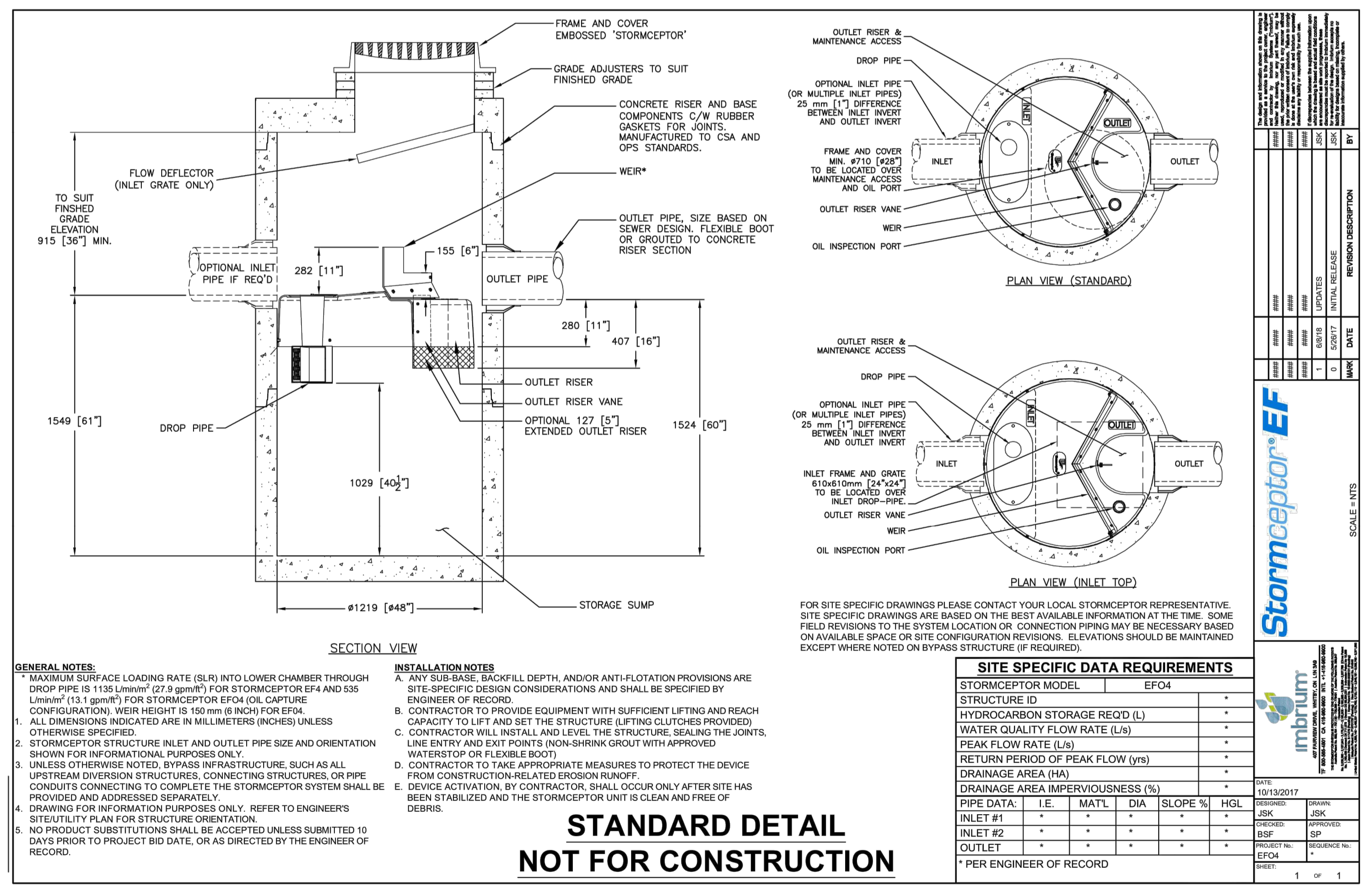
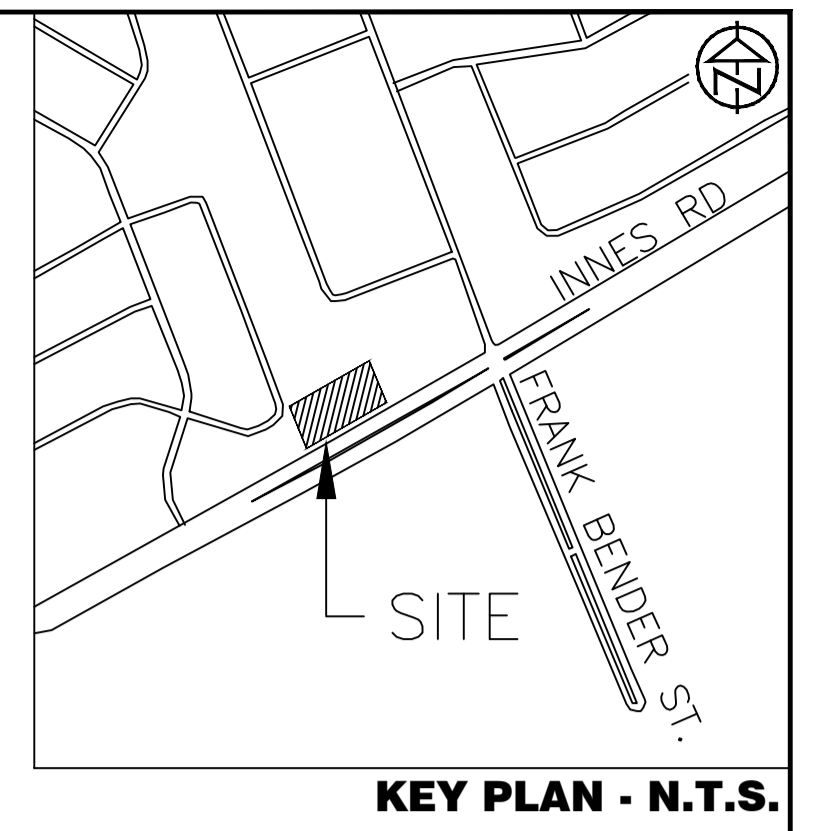
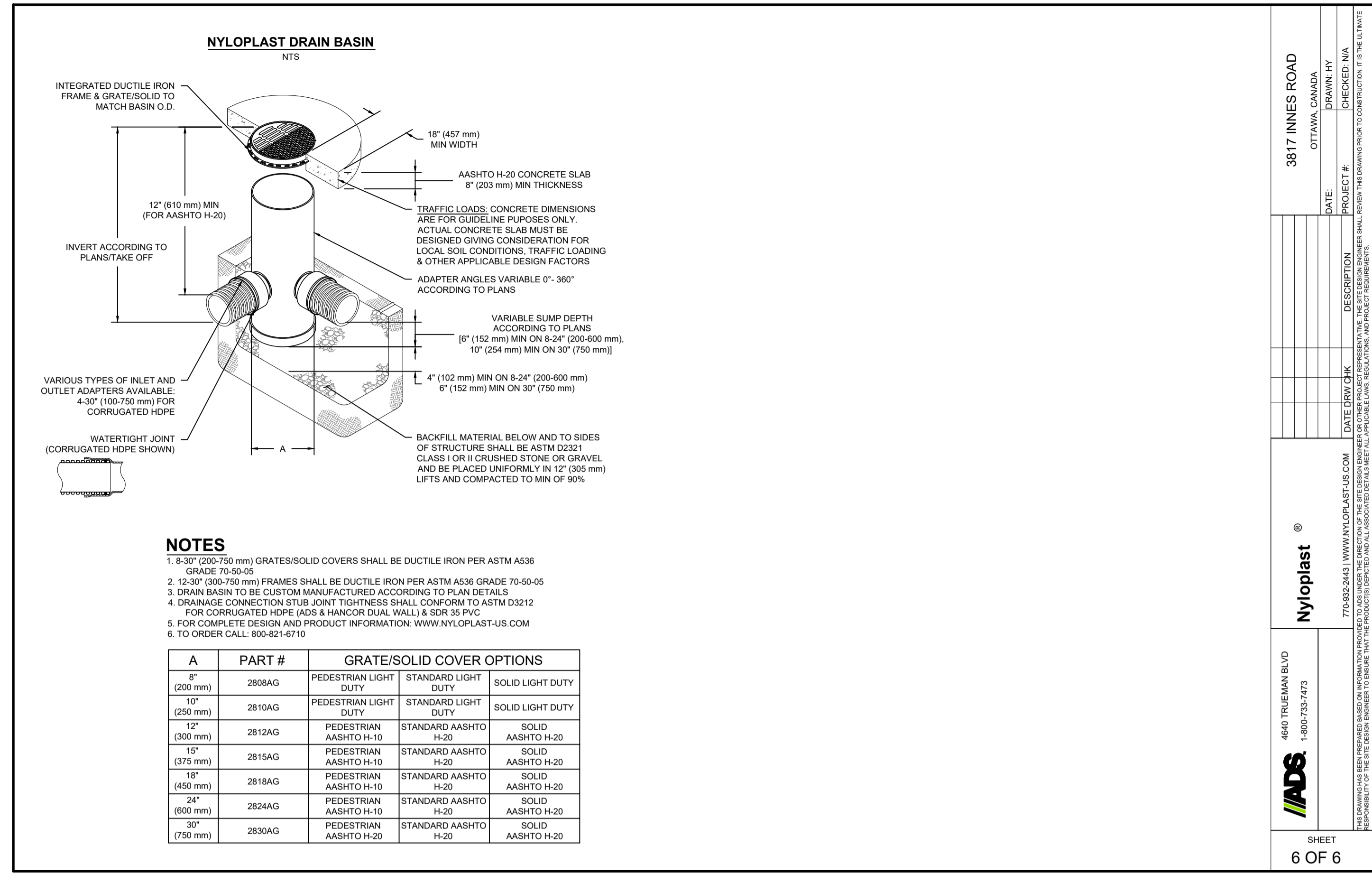
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DETAILS - 2

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DETAILS - 3

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