

# CITY OF SANFORD EMERSON STREET PARKING FACILITY SANFORD, MAINE YORK COUNTY WIN 026306.00 PARK AND RIDE FACILITY

### PLAN LEGEND

Town, County, State	-----	Catch Basins	▣ Existing	▣ Proposed
Property Lines	-----	Manholes	○ Existing	● Proposed
R/W Lines-Existing	-----	Proposed Underdrain	-----	
R/W Lines-Proposed	-----	Proposed Ditch	-----	
Culvert-Existing	-----	Existing Ditch	-----	
Culvert Proposed	-----	Utility Poles	⊕ Existing	⊕ Proposed
Curbing	Existing Proposed	Fire Hydrants	⊕ Existing	⊕ Proposed
Type 1	-----	Existing Water Line	-----	
Type 3	-----	Existing San. Sewer	-----	
Type 5	-----	Existing San. Sewer Manhole	⊙	
Outline of Bodies of Water	-----	Guardrail-Existing	-----	
Exposed Bedrock	-----	Guardrail-Proposed	-----	
Buildings	-----	Guardrail-Cable, Other	-----	
Trees	Conifer Deciduous	Centerline-Existing	-----	
Tree Line	-----	Centerline-Proposed	-----	
Clearing Limit Line	-----	Travelway-Existing	-----	
Railroad	-----	Travelway-Proposed	-----	
Boring	HB-XXX-###	Probe	P-#. #X	
Pavement Core	PC-#		#.# = Depth	
Test Pit	TP-XXX-###		X = W (Weathered Rock)	
			R (Refusal)	
			NR (No Refusal)	

### INDEX OF SHEETS

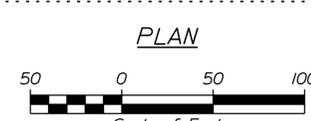
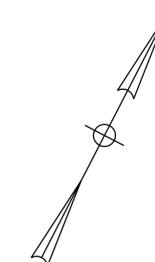
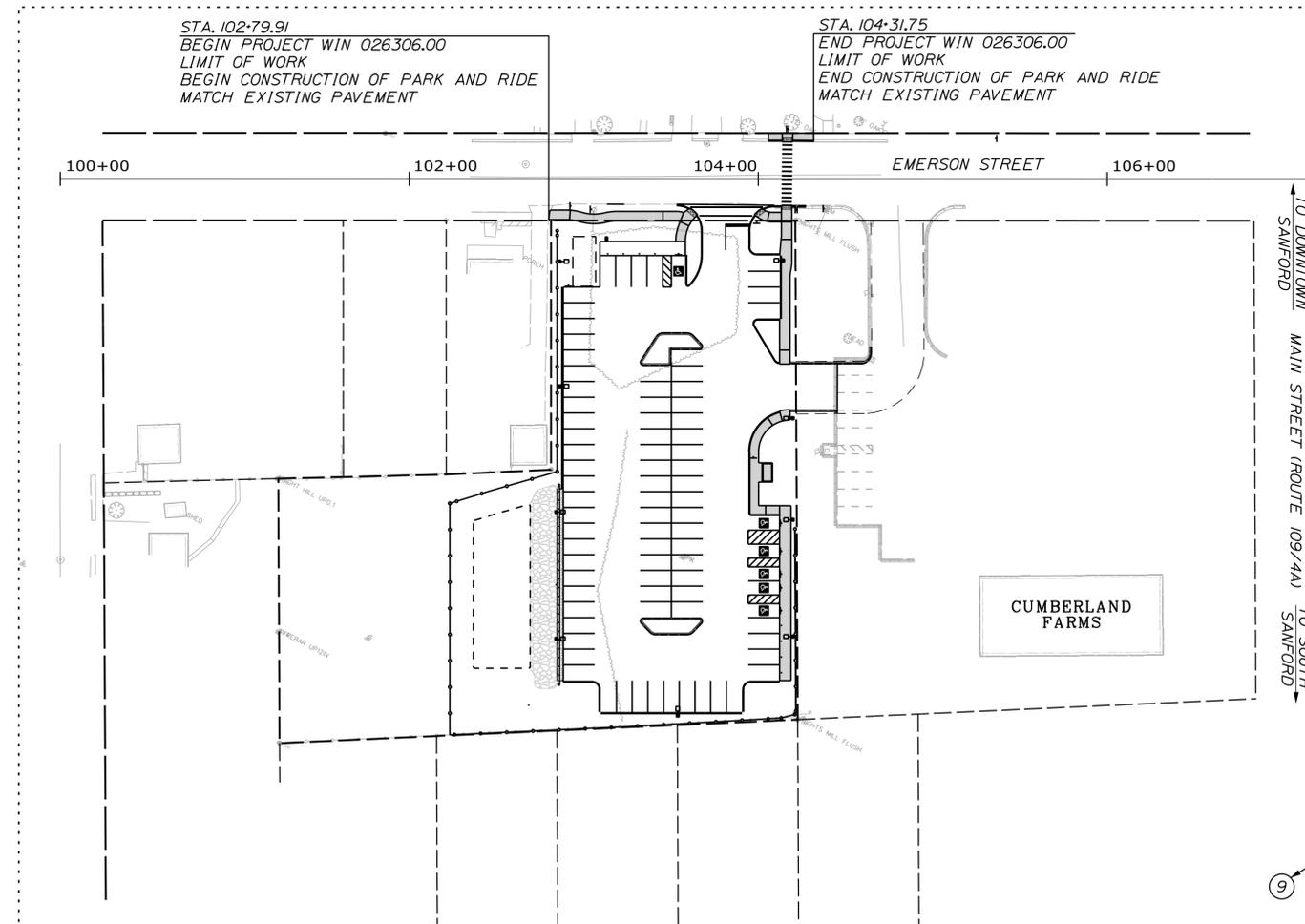
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CITY OF SANFORD  
919 MAIN STREET  
SANFORD, MAINE 04073

WIN  
026306.00

PROGRESS PLANS  
SEPTEMBER 3, 2024

**NOTE:**  
ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL BE GOVERNED BY AND BE IN CONFORMITY WITH THE MAINEDOT STANDARD SPECIFICATIONS (MARCH 2020 EDITION), AND THE MAINEDOT STANDARD DETAILS (MARCH 2020), EXCEPT AS MODIFIED BY THE PLANS OR SPECIAL PROVISIONS AND ANY AND ALL CORRECTIONS, REVISIONS, OR ADDITIONS ISSUED BY MAINEDOT.



<b>PROJECT LOCATION:</b>	The project is located on Emerson Street, directly west of Cumberland Farms, in Sanford, Maine.
<b>PROGRAM AREA:</b>	Multimodal Program - LAP
<b>SCOPE OF WORK:</b>	The project will include design of a new parking facility, drainage and sidewalk accommodations. Work will include new gravel, pavement, curbed sidewalk, lighting, landscaping and a transit stop with bus shelter.

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SANFORD  
EMERSON STREET  
PARKING FACILITY  
TITLE SHEET

SHEET NUMBER

1  
OF 11

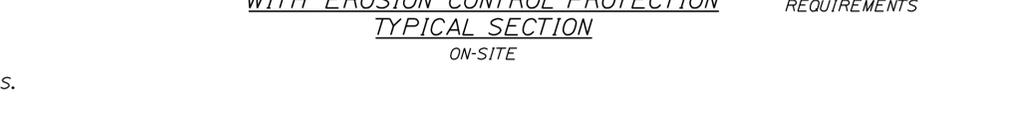
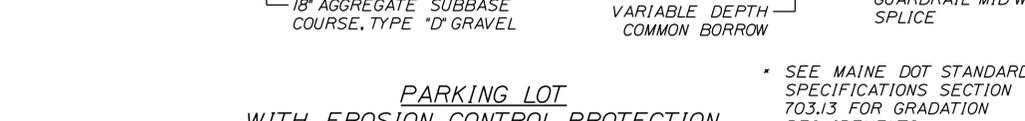
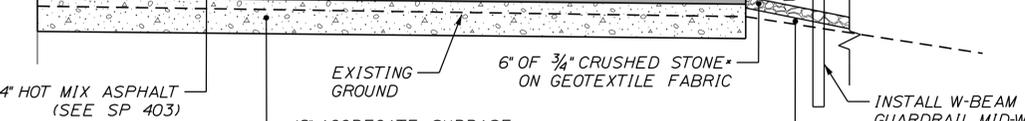
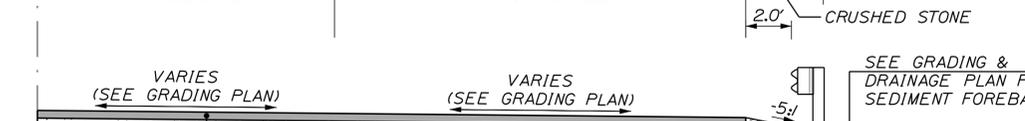
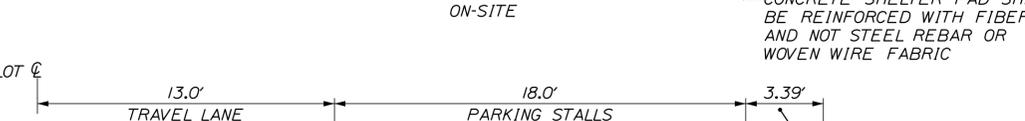
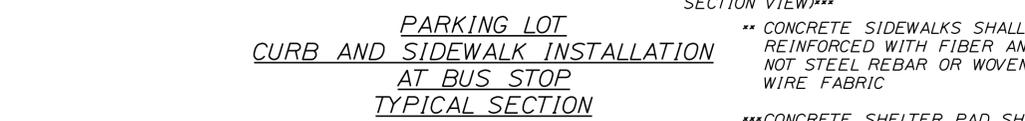
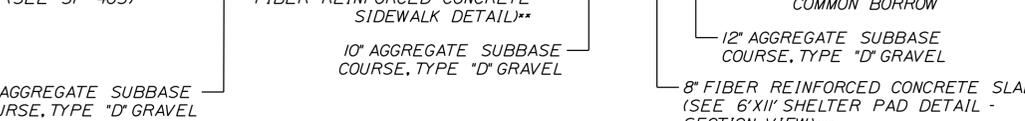
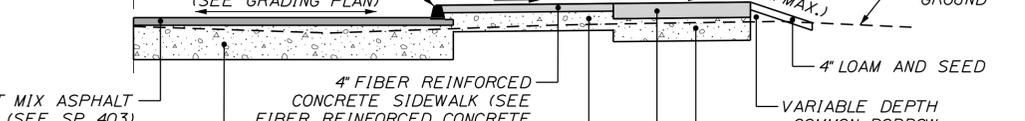
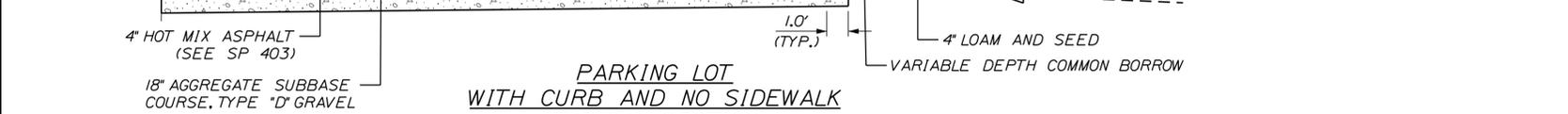
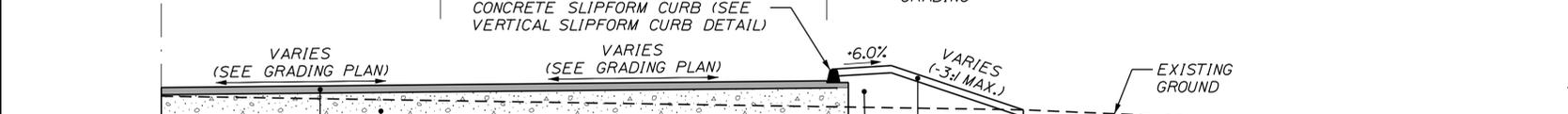
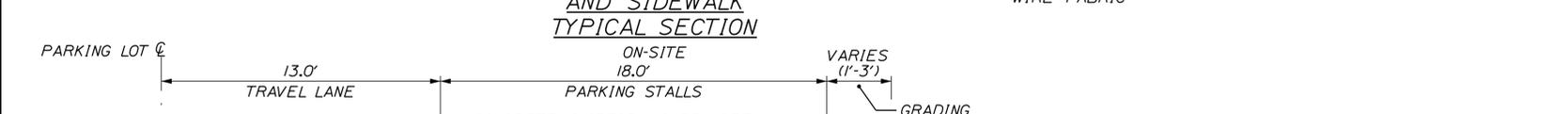
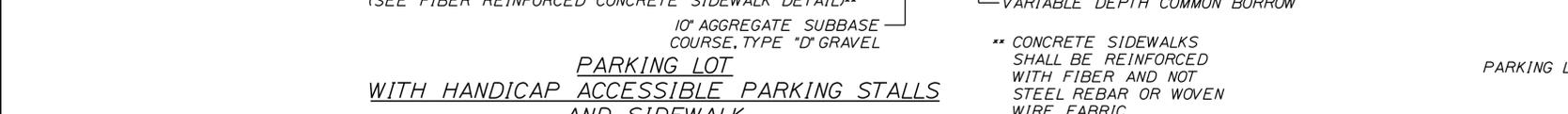
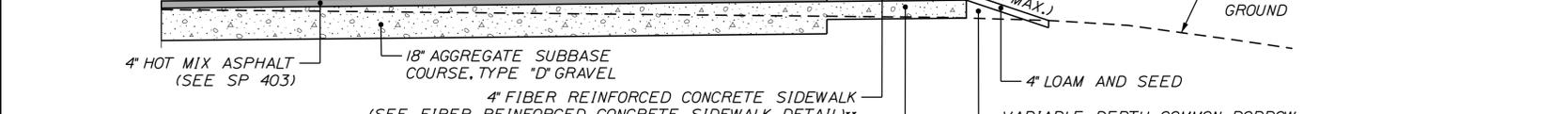
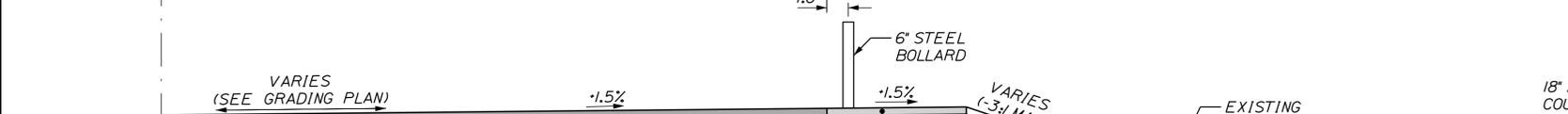
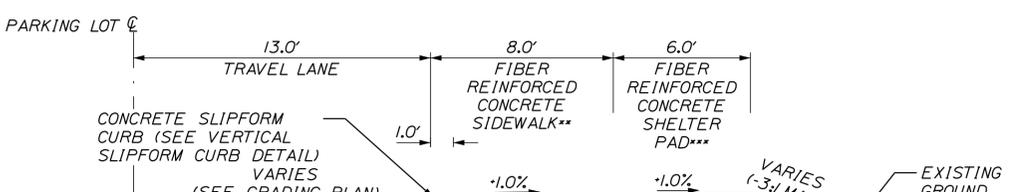
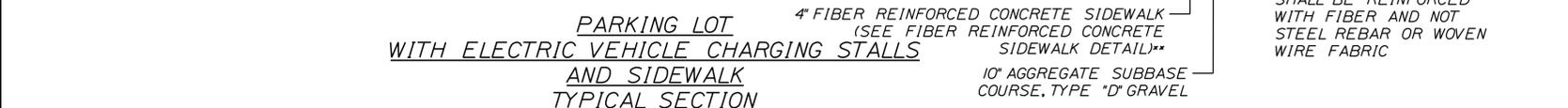
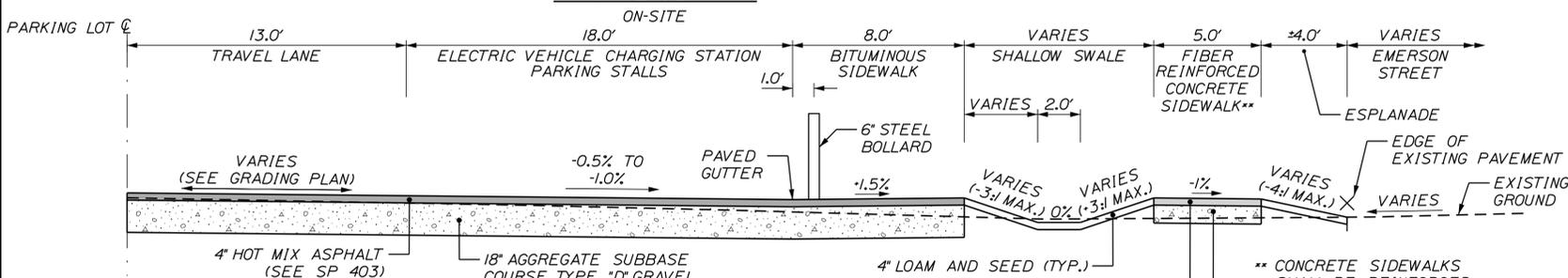
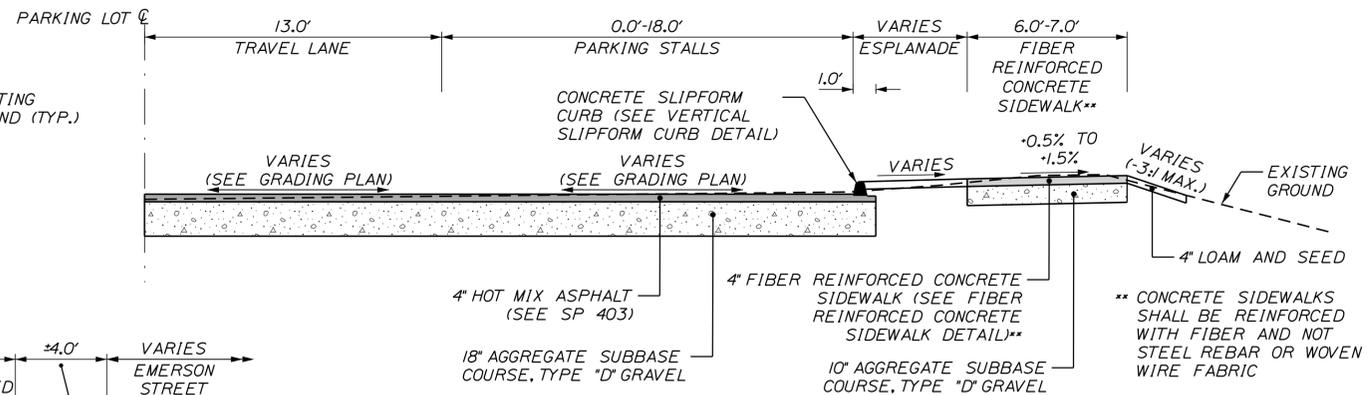
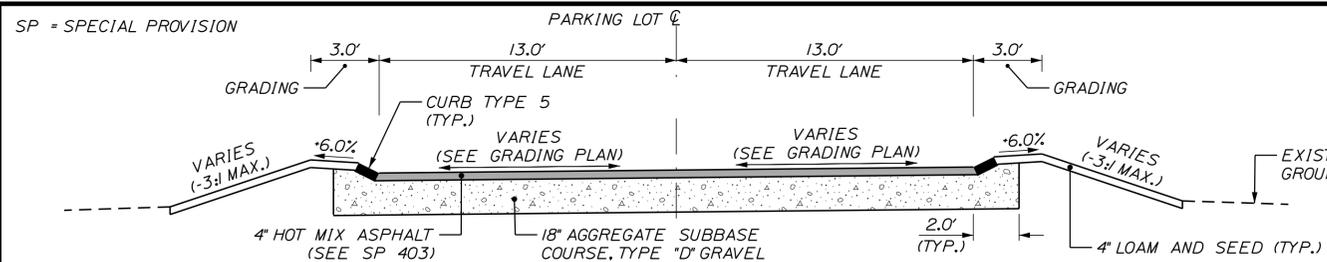
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Date: 9/3/2024  
Username: Mike.Cundiff  
Division: HIGHWAY  
Filename: ... \000\Highway\001\_Title.dgn  
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SP = SPECIAL PROVISION

NOT TO SCALE



- TYPICAL SECTION NOTES:**
1. THE PAVEMENT, BASE, AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
  2. CONCRETE SLIPFORM CURB, MOLD 1 SHALL BE PLACED ON BASE PAVEMENT. THE SURFACE PAVEMENT SHALL BE PAVED UP TO THE FACE OF CURB.
  3. THE SHOULDER PAVEMENT THICKNESS SHALL BE THE SAME AS THE TRAVELWAY PAVEMENT THICKNESS FOR ALL ROADWAYS, UNLESS OTHERWISE NOTED.
  4. SAWCUT LOCATIONS SHALL BE 2' INSIDE PROPOSED CURB OR EDGE OF EXISTING PAVEMENT, WHICHEVER IS CLOSEST TO THE ROADWAY CENTERLINE, UNLESS OTHERWISE NOTED ON THE PLANS. COORDINATE WORK WITH THE INSPECTOR.
  5. PROPOSED CURB REVEAL MAY VARY IN AREAS OF SIDEWALK RAMPS AND LANDINGS. SEE CURBING PLAN FOR ADDITIONAL INFORMATION.
  6. CROWNS FOR BOTH NORMAL AND SUPERELEVATED SECTIONS FOR ALL COURSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
  7. THE STATIONING UNDER EACH TYPICAL SECTION IS APPROXIMATE.

CITY OF SANFORD  
919 MAIN STREET  
SANFORD, MAINE 04073

WIN  
026306.00

PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
T. WARREN	08/24	M. CUNDIFF	08/24			
J. WILSON		D. ETTINGER				

SANFORD  
EMERSON STREET  
PARKING FACILITY

TYPICAL SECTIONS

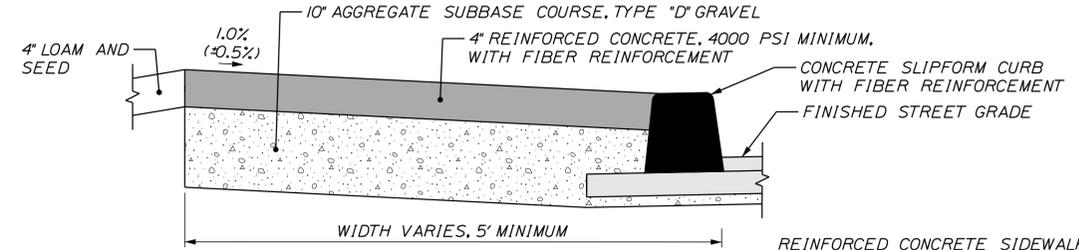
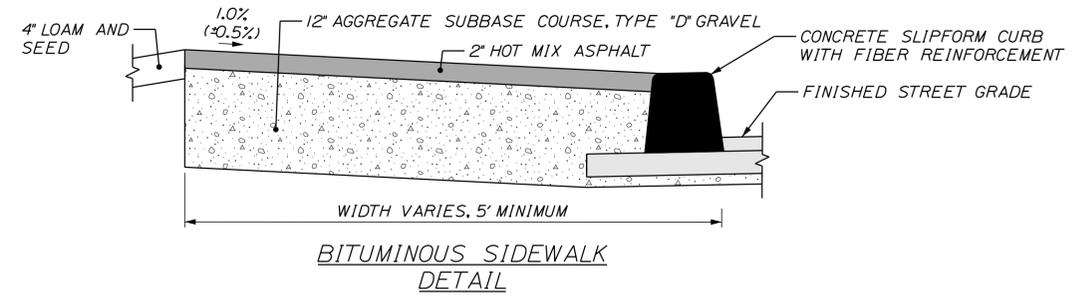
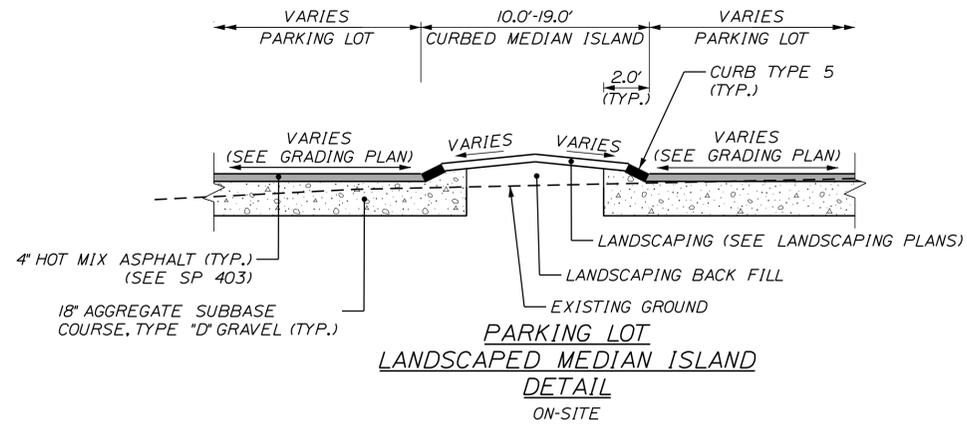
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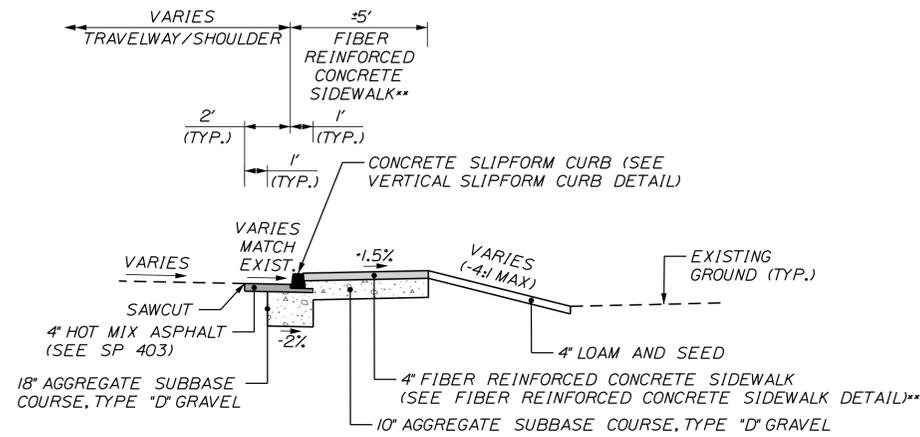
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Date: 9/3/2024  
 Username: Mike.Cundiff  
 Division: HIGHWAY  
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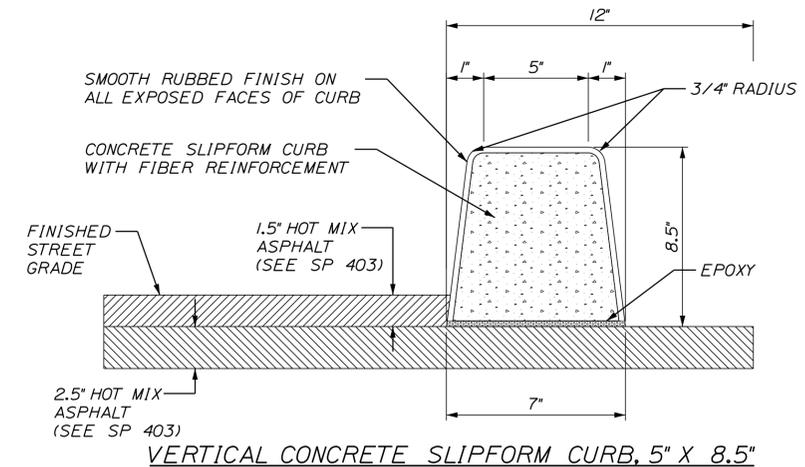


- REINFORCED CONCRETE SIDEWALK NOTES:**
1. PERPENDICULAR EXPANSION JOINTS SHALL BE CUT INTO THE CONCRETE SIDEWALK EVERY 5 FEET ON CENTER. EXPANSION BOARD JOINTS SHALL OCCUR EVERY 30 FEET.
  2. CONCRETE SIDEWALKS SHALL BE REINFORCED WITH FIBER AND NOT STEEL REBAR OR WOVEN WIRE FABRIC.

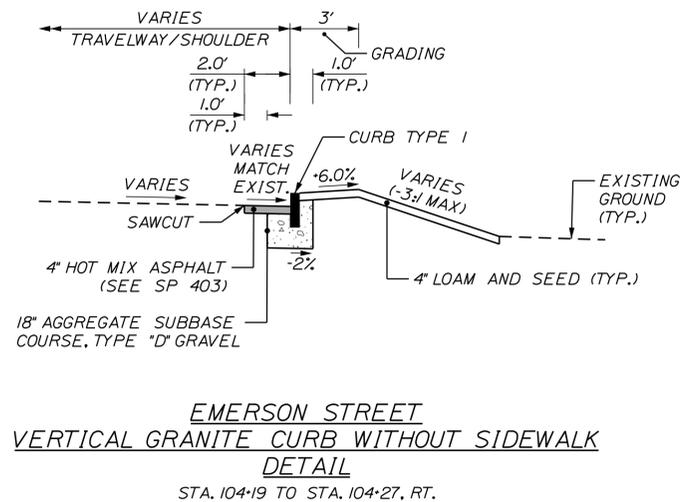


**EMERSON STREET  
CONCRETE SLIPFORM CURB  
WITH CONCRETE SIDEWALK  
DETAIL**  
STA. 104+06 TO STA. 104+32, LT.

\*\* CONCRETE SIDEWALKS SHALL BE REINFORCED WITH FIBER AND NOT STEEL REBAR OR WOVEN WIRE FABRIC



- VERTICAL CONCRETE SLIPFORM CURB NOTES:**
1. SEE MAINE DOT STANDARD DETAIL 609(10) FOR TERMINAL SECTION EXCAVATION DETAIL REQUIREMENTS TO ANCHOR CURB TERMINAL.
  2. TRANSITION LENGTHS FOR THE SIDEWALKS (6' WIDE OR LESS) ARE EIGHT (8) FEET LONG TYPICALLY. FOR ADDITIONAL INFORMATION REGARDING TIPDOWN LENGTHS SEE CURBING PLANS.



**EMERSON STREET  
VERTICAL GRANITE CURB WITHOUT SIDEWALK  
DETAIL**  
STA. 104+19 TO STA. 104+27, RT.

Date: 9/3/2024

Username: Mike.Cundiff

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CITY OF SANFORD  
919 MAIN STREET  
SANFORD, MAINE 04073

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PROJ. MANAGER	M. HILL	BY	DATE
DESIGN-DETAILED	T. WARREN	M. CUNDIFF	08/24
CHECKED-REVIEWED	J. WIMPEBACH	D. LETTINGER	08/24
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SANFORD  
EMERSON STREET  
PARKING FACILITY

DETAILS SHEET

SHEET NUMBER

3

OF 11

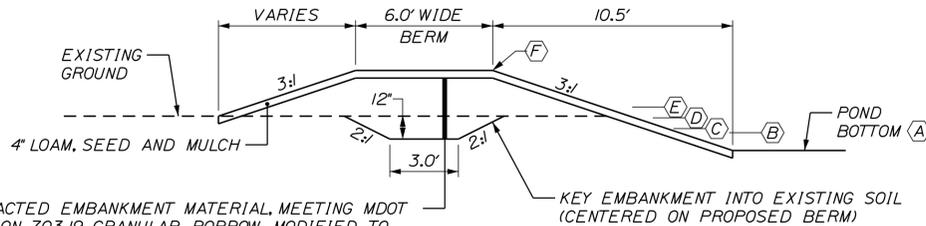


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NOTES:

- EMBANKMENT FOOTPRINT SHALL BE CLEARED OF TRASH/DEBRIS AND ANY ROCKS GREATER THAN 6". BE FREE OF ANY STANDING WATER, BE GRADED TO BE NO STEEPER THAN 1H:1V, BE SCARIFIED PRIOR TO EMBANKMENT FILL PLACEMENT, AND BE INSPECTED AND APPROVED BY THE INSPECTOR BEFORE FILL PLACEMENT BEGINS.



COMPACTED EMBANKMENT MATERIAL, MEETING MDOT SECTION 703.19 GRANULAR BORROW MODIFIED TO HAVE 100% PASSING THE 6" SIEVE. (COMPACTED TO 95% OF MODIFIED PROCTOR). SUBMIT EMBANKMENT MATERIAL GRADATION TO THE INSPECTOR PRIOR TO CONSTRUCTING EMBANKMENT.

**BERM CONSTRUCTION**

SCHEDULE B - EMBANKMENT SCHEDULE	
ITEM DESCRIPTION	DIMENSION/ELEVATION
A POND BOTTOM ELEVATION	294.00
B PEAK ELEVATION - CHANNEL PROTECTION VOLUME	294.78
C PEAK ELEVATION - 2 YEAR STORM	294.96
D PEAK ELEVATION - 10 YEAR STORM	295.43
E PEAK ELEVATION - 25 YEAR STORM	295.90
F TOP OF BERM	297.50

TYPICAL POND ELEVATIONS

TABLE 1 LOAMY COARSE SAND	
SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100
*20	70-100
*60	15-40
*200	8-15
*200 CLAY SIZE	<2.0

TABLE 2 MEDOT SPECIFICATIONS FOR UNDERDRAIN TYPE B (MEDOT #703.22)	
SIEVE SIZE	% PASSING BY WEIGHT
1"	95-100
1/2"	75-100
*4	50-100
*20	15-80
*50	0-15
*200	0-5

TABLE 3 SANDY LOAM TOPSOIL	
SIEVE SIZE	% PASSING BY WEIGHT
*4	75-95
*10	60-90
*40	35-85
*200	20-70
*200 CLAY SIZE	<2.0

UNDERDRAINED SOIL FILTER NOTES:

SOIL SPECIFICATIONS:

- THE SOIL FILTER MEDIA SHALL BE ONE OF THE FOLLOWING OPTIONS CONSISTING OF THE FOLLOWING FROM THE BOTTOM:

OPTION 1 - SOIL FILTER MEDIA

SOIL FILTER MEDIA CONSISTS OF A SILTY SAND SOIL OR SOIL MIXTURE COMBINED WITH A MATURE, MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH 20% TO 25% BY VOLUME (NO LESS THAN 10% BY DRY WEIGHT). THE RESULTING MIXTURE SHOULD HAVE 8% TO 12% PASSING THE NO. 200 SIEVE AND A CLAY CONTENT OF LESS THAN 2%. THE PROPORTIONS OF THE MIXTURE CAN BE ADJUSTED SO IT WILL CONTAIN SUFFICIENT FINES AND ORGANIC MATTER. THE FOLLOWING IS AN EXAMPLE MIXTURE:

- 50% SAND.
- 20% SANDY LOAM TO FINE SANDY LOAM, SEE TABLE 3.
- 30% MATURE COMPOSTED WOOD FIBERS AND FINE SHREDDED BARK, SUPERHUMUS OR EQUIVALENT.

OPTION 2 - LAYERED SYSTEM WITH TOPSOIL

- 12" OF LOAMY COARSE SAND, SEE TABLE 1.
- LAYER OF TOPSOIL (SEE "C" BELOW) ROTOTILLED INTO THE TOP 2" OF THE LOAMY COARSE SAND LAYER.
- 6" OF NON-CLAYEY, LOAMY TOPSOIL SUCH AS USDA SANDY LOAM TOPSOIL WITH 5-8% HUMIFIED ORGANIC MATTER. SUPERHUMUS OR EQUIVALENT MAY BE ADDED TO THE TOPSOIL TO INCREASE ORGANIC CONTENT, SEE TABLE 3.

SUBMITTALS:

- SUBMIT RESULTS OF FIELD AND LABORATORY TESTING TO INSPECTOR.
- SUBMIT 75 LB. SAMPLE OF EACH TYPE OF MATERIAL; SUBMIT IN AIR TIGHT CONTAINERS TO SOIL TESTING FACILITY.
- THE FOLLOWING MATERIAL SHALL BE SUBMITTED:
  - IF OPTION 1 IS USED:
    - SOIL MIXTURE.
    - UNDERDRAIN BEDDING MATERIAL.
  - IF OPTION 2 IS USED:
    - LOAMY COARSE SAND.
    - SANDY LOAM TOPSOIL.
    - UNDERDRAIN BEDDING MATERIAL.
- PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 - STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES; 1996a ON EACH TYPE OF THE SAMPLE MATERIAL AND SUBMIT RESULTS TO INSPECTOR.
- PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90% TO 92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698. SUBMIT RESULTS TO THE INSPECTOR.
- PERFORM ONE COMPACTION DENSITY TEST ON THE IN PLACE SOIL FILTER FOR EVERY 2,000 SQUARE FEET OF FILTER SURFACE AREA. TEST SHALL CONFORM TO ASTM D 2922 - STANDARD TEST METHODS FOR DENSITY OF SOIL AND SOIL-AGGREGATE IN PLACE BY NUCLEAR METHODS (SHALLOW DEPTH); 1996. SUBMIT RESULTS TO THE INSPECTOR.
- PERFORM HYDROMETER TEST TO DETERMINE CLAY CONTENT.

CONSTRUCTION:

- SOIL FILTER MEDIA AND UNDERDRAIN BEDDING MATERIAL SHALL BE COMPACTED TO BETWEEN 90% AND 92% STANDARD PROCTOR.
- PERFORATED UNDERDRAIN PIPE SHALL BE 4" SLOTTED PIPE, SPACED 15 FEET ON CENTER MAXIMUM.
- TRIBUTARY AREAS SHALL BE STABILIZED PRIOR TO INSTALLATION OF THE SOIL FILTER MEDIA MIXTURE AND UNDERDRAIN. STABILIZED IS DEFINED AS PAVED IF IN A PARKING AREA OR ROADWAY, AND 90% GRASS CATCH IF IN A VEGETATED AREA.
- OUTFLOW OF THE VEGETATED UNDERDRAIN SHALL BE CONTROLLED BY A 4" DUCTILE IRON GATE VALVE WITH VALVE WRENCH AND EXTENSION (AVAILABLE FROM E.J. PRESCOTT OR EQUIVALENT). A THREE PIECE VALVE BOX (AVAILABLE FROM E.J. PRESCOTT OR EQUIVALENT) SHALL BE INSTALLED OVER THE VALVE.
- ALL EQUIPMENT USED WITHIN THE LIMITS OF THE VEGETATED UNDERDRAIN SHALL BE LOW GROUND PRESSURE VEHICLES (LESS THAN 2.0 PSI) WHEN FULLY LOADED.
- UPON COMPLETION OF THE INSTALLATION OF THE SOIL FILTER MEDIA AND THE ESTABLISHMENT OF A 90% CATCH OF GRASS OVER THE FILTER MEDIA, THE CONTRACTOR SHALL FLOOD THE VEGETATED UNDERDRAIN TO THE DESIGN ELEVATION WITH CLEAN WATER ADJUST THE VALVE TO OBTAIN 24 HOUR TO 32 HOUR RELEASE TIME.

CONSTRUCTION OVERSIGHT:

INSPECTION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE INSPECTOR WITH REQUIRED REPORTING TO THE DEP. AT A MINIMUM, INSPECTIONS WILL OCCUR:

- AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
- AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
- AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED.
- AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS.
- ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE INSPECTOR AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.

NOTE:

- CONTRACTOR SHALL NOTIFY INSPECTOR 48 HOURS PRIOR TO THE MILESTONES LISTED ABOVE TO ALLOW FOR INSPECTION.

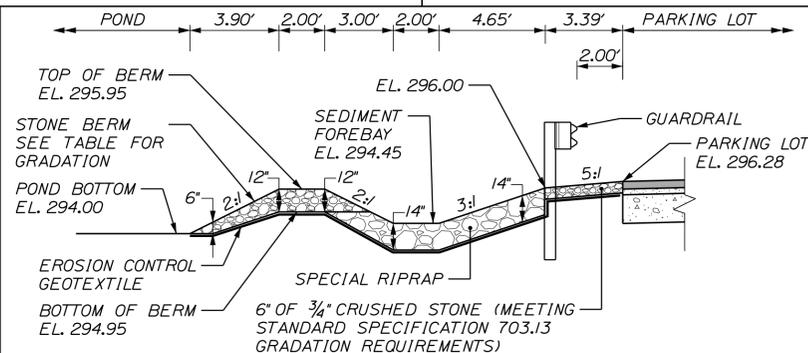
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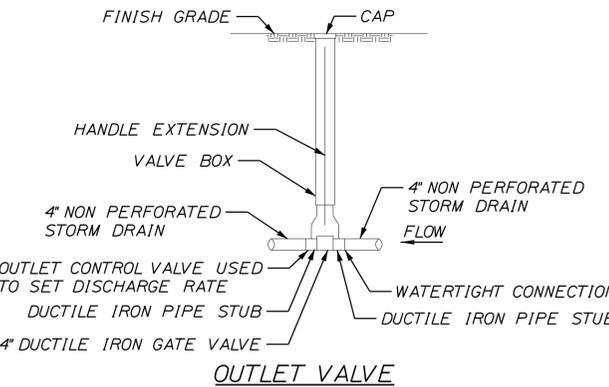
NOTES:

- OUTFLOW OF THE UNDERDRAINED SOIL FILTER SHALL BE CONTROLLED BY A THREE PIECE VALVE BOX (AVAILABLE FROM E.J. PRESCOTT OR EQUIVALENT) SHALL BE INSTALLED OVER THE VALVE.
- UPON STABILIZATION OF THE UNDERDRAINED SOIL FILTER, CONSTRUCTION OF A STABILIZED OUTLET, AND APPROVAL BY THE PROJECT ENGINEER, THE CONTRACTOR SHALL FLOOD THE POND WITH CLEAN WATER TO THE CHANNEL PROTECTION ELEVATION, 294.78 AND ADJUST THE VALVE TO OBTAIN A 24 TO 48 HOUR RELEASE TIME. THE FLOW FROM THE UNDERDRAIN SHOULD BE APPROXIMATELY 0.02 CFS.
- CONTRACTOR SHALL PROVIDE VALVE WRENCH AND HANDLE EXTENSION TO OWNER UPON COMPLETION OF THE UNDERDRAINED SOIL FILTER.



SEDIMENT FOREBAY

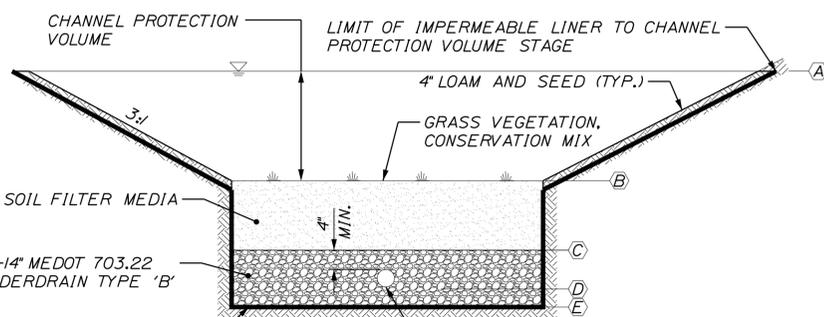
BERM STONE SIZE	
SIEVE DESIGNATION (US CUSTOMARY)	PERCENT BY WEIGHT PASSING
12 IN	100
6 IN	84-100
3 IN	68-83
1 IN	42-55
NO. 4	8-12



OUTLET VALVE

SCHEDULE A	
ITEM DESCRIPTION	GRASSED UNDERDRAIN DIMENSION/ELEVATION
A CHANNEL PROTECTION VOLUME STAGE	294.78
B TOP SOIL FILTER	294.00
C TOP UNDERDRAIN BEDDING STONE	292.50
D PIPE INVERT: 4" PERF. UD	291.80
E BOTTOM UNDERDRAIN BEDDING	291.50

GRASS VEGETATION	
CREeping RED FESCUE	20 LBS/ACRE
TALL FESCUE	20 LBS/ACRE
BIRD'SFOOT TREEFOIL	8 LBS/ACRE



GRASSED UNDERDRAINED SOIL FILTER DETAIL

SEE UNDERDRAINED SOIL FILTER NOTES

30 MIL. LINEAR LOW DENSITY POLYETHYLENE LINER INSTALLED PER MANUFACTURER'S SPECIFICATIONS (BOTTOM AND SIDES)

4" SLOTTED UNDERDRAIN PIPE (15' ON-CENTER MAX. SPACING), SEE GRADING AND DRAINAGE PLAN FOR LAYOUT

Date: 9/3/2024

Username: Mike.Cundiff

Division: HIGHWAY

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PARKING FACILITY

SOIL FILTER DETAILS SHEET

SHEET NUMBER

5

OF 11

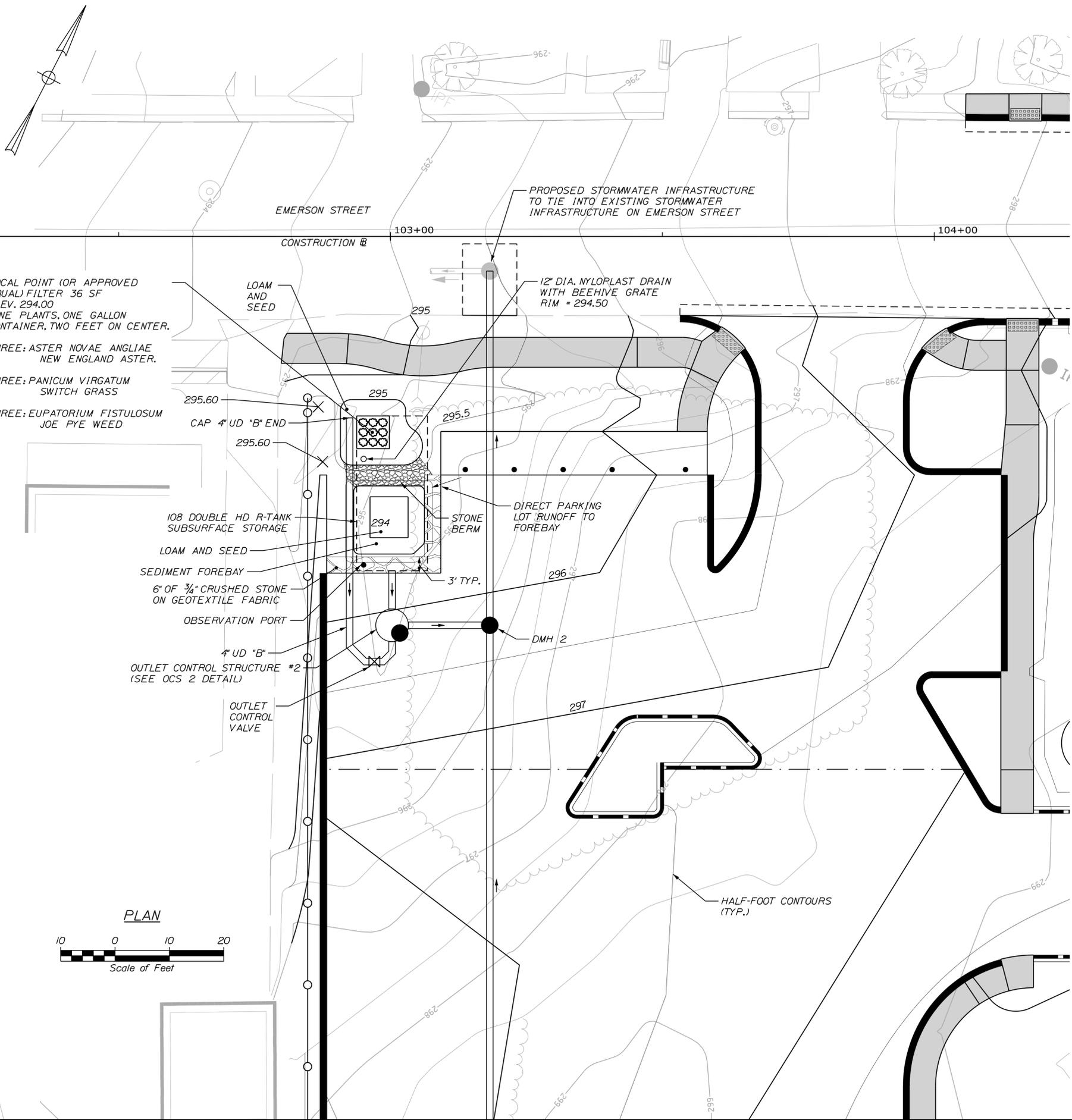
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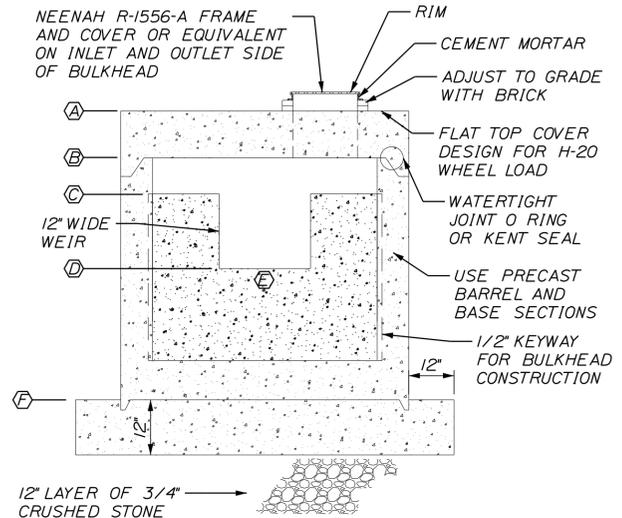


**CONSTRUCTION OVERSIGHT:**

1. THE FOCAL POINT SYSTEM (OR APPROVED EQUAL) SHALL BE INSTALLED UNDER THE SUPERVISION OF A MANUFACTURERS REPRESENTATIVE.
2. ALL PLANT MATERIAL SHALL BE APPROVED BY THE MANUFACTURERS REPRESENTATIVE.
3. CONTRACTOR SHALL FLOOD CHAMBER TO ELEVATION OF WATER QUALITY VOLUME, 291.19, WITH OUTLET VALVE CLOSED, AND THEN OPEN OUTLET VALVE TO ACHIEVE A 24-48 HOUR RELEASE RATE.

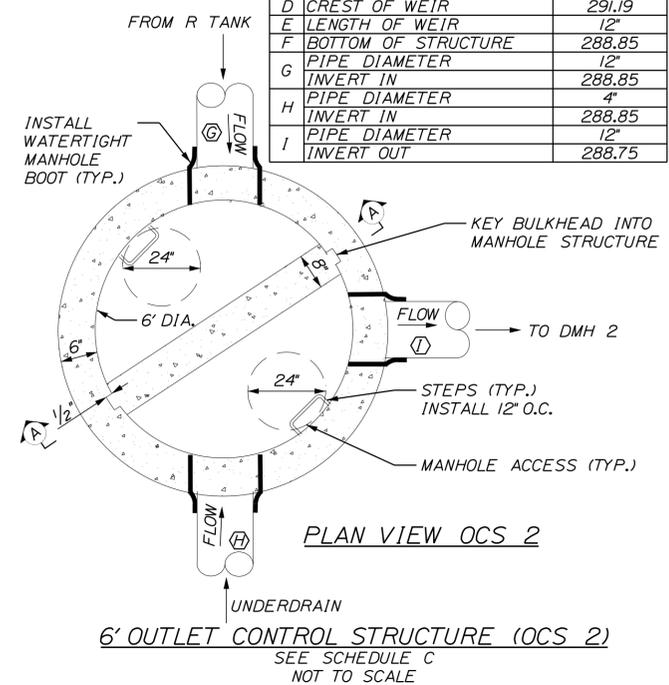
**NOTES:**

1. FOCAL POINT (OR APPROVED EQUAL) SHALL BE PLANTED WITH APPROVED PLANTINGS SPACED 24" ON CENTER.
2. LANDSCAPING SUBSTITUTIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL FOCAL POINT (OR APPROVED EQUAL) MATERIAL SHALL BE PROVIDED BY THE MANUFACTURER. PLANT MATERIAL IS SUPPLIED BY GENERAL CONTRACTOR.
4. INSTALL SYSTEM PER MANUFACTURERS SPECIFICATIONS.



SECTION A-A

SCHEDULE C	
ITEM DESCRIPTION	DIMENSION/ELEVATION
	OCS 2
A TOP OF STRUCTURE	295.41
B UNDERSIDE TOP SLAB	294.74
C TOP CONCRETE BULKHEAD	292.00
D CREST OF WEIR	291.19
E LENGTH OF WEIR	12"
F BOTTOM OF STRUCTURE	288.85
G PIPE DIAMETER	12"
H INVERT IN	288.85
I PIPE DIAMETER	4"
	288.85
	12"
	288.75



PLAN VIEW OCS 2

6' OUTLET CONTROL STRUCTURE (OCS 2)  
SEE SCHEDULE C  
NOT TO SCALE

CITY OF SANFORD  
919 MAIN STREET  
SANFORD, MAINE 04073

WIN  
026306.00

PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN DETAILED	08/24	J. ATTANASE	08/24			
CHECKED/REVIEWED		M. CUNDIFF				
DESIGN DETAILED		J. WIMBACH				
DESIGN DETAILED		W. HASKELL				
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						

SANFORD  
EMERSON STREET  
PARKING FACILITY  
STORMWATER FILTER  
DETAIL SHEETS

SHEET NUMBER

6

OF 11

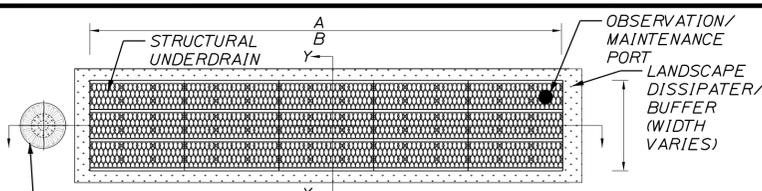
Date: 9/3/2024

Username: Mike.Cundiff

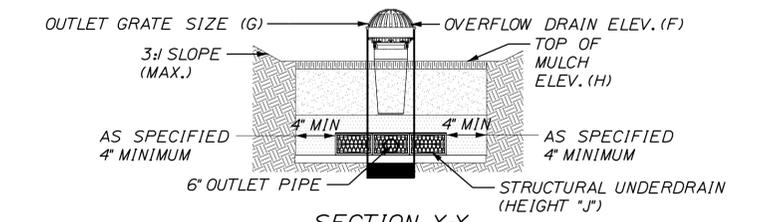
Division: HIGHWAY

Filename: ...Highway\007\_GradingPlan03.dgn

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PLAN VIEW



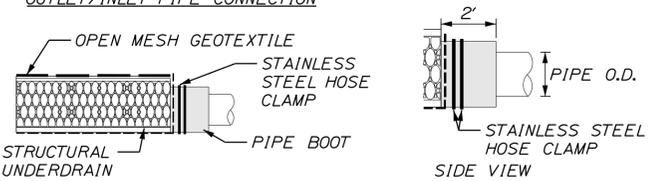
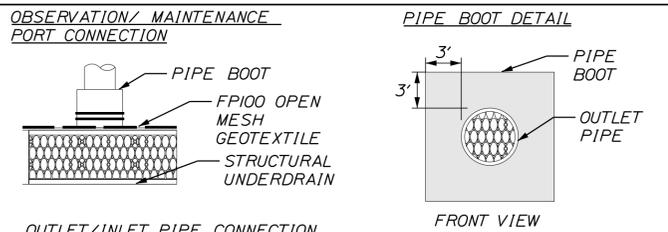
SECTION Y-Y

(A) DRAINAGE STRUCTURE CONSTRUCTION GUIDE N.T.S.

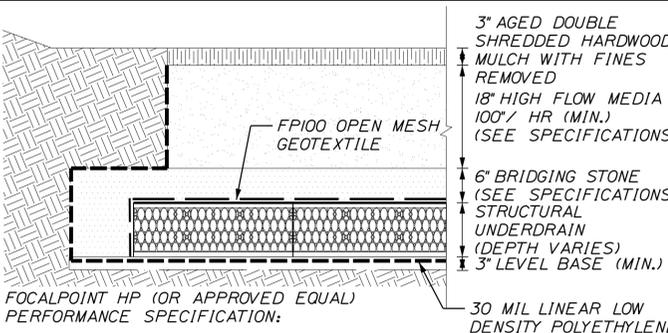
STRUCTURAL KEY DIMENSIONAL DATA

STRUCTURE ID		
A	STRUCTURE LENGTH	6'
B	* UNDERDRAIN LONG	12
C	STRUCTURE WIDTH	6'
D	* UNDERDRAIN WIDE	9
E	WATER QUALITY VOLUME	712 CF
F	OVERFLOW ELEVATION	294.50
G	OUTLET GRATE SIZE	12" DIA
H	TOP OF MULCH	294.00
J	UNDERDRAIN HEIGHT	DOUBLE

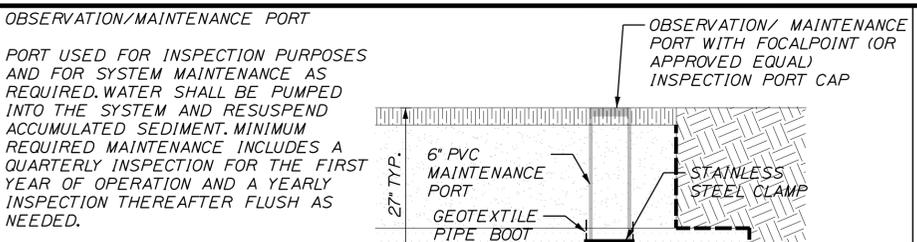
(B) DRAINAGE STRUCTURE KEY DIMENSIONAL DATA N.T.S.



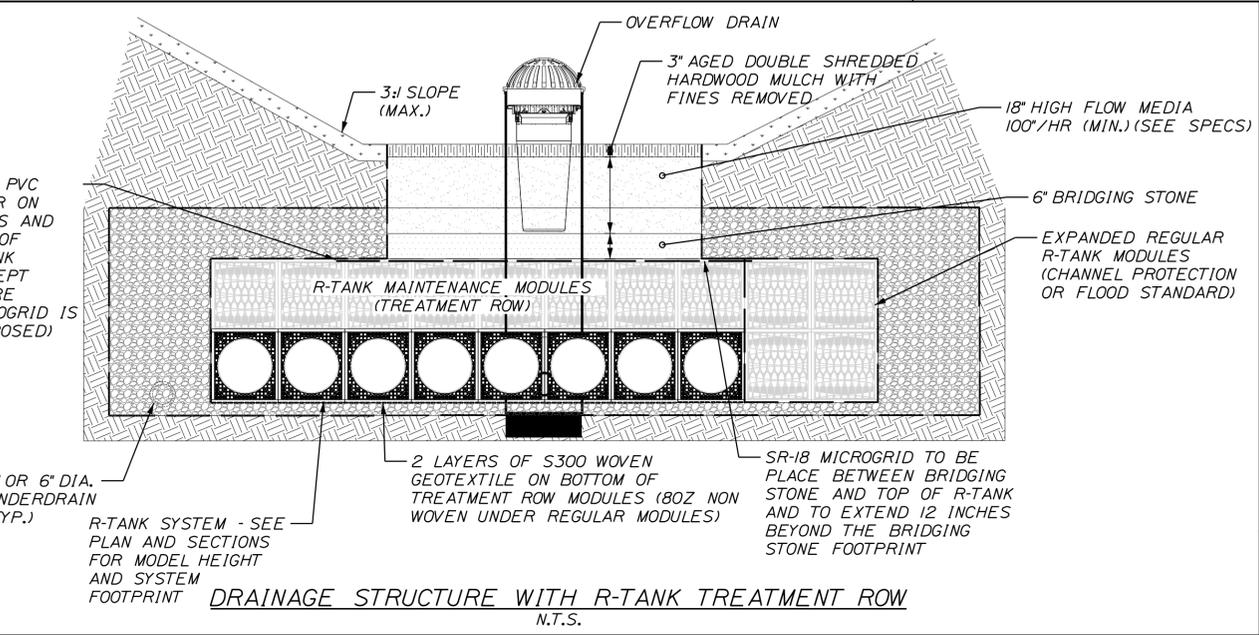
(C) DRAINAGE STRUCTURE PIPE CONNECTION DETAIL N.T.S.



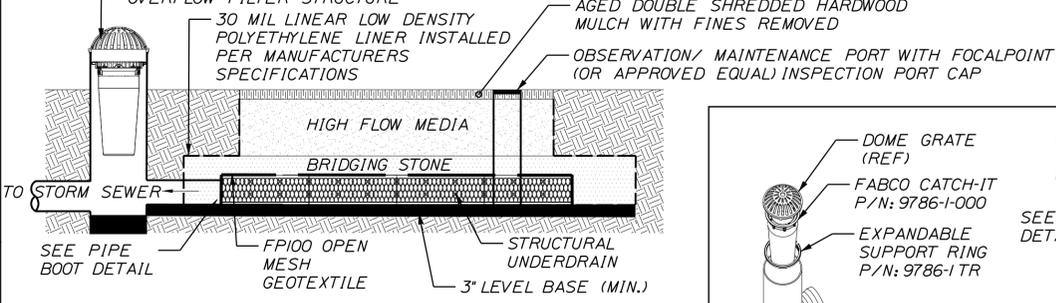
(D) DRAINAGE STRUCTURE PIPE DETAILED CROSS SECTION N.T.S.



(E) DRAINAGE STRUCTURE OBSERVATION PORT DETAIL N.T.S.



(F) DRAINAGE STRUCTURE WITH R-TANK TREATMENT ROW N.T.S.

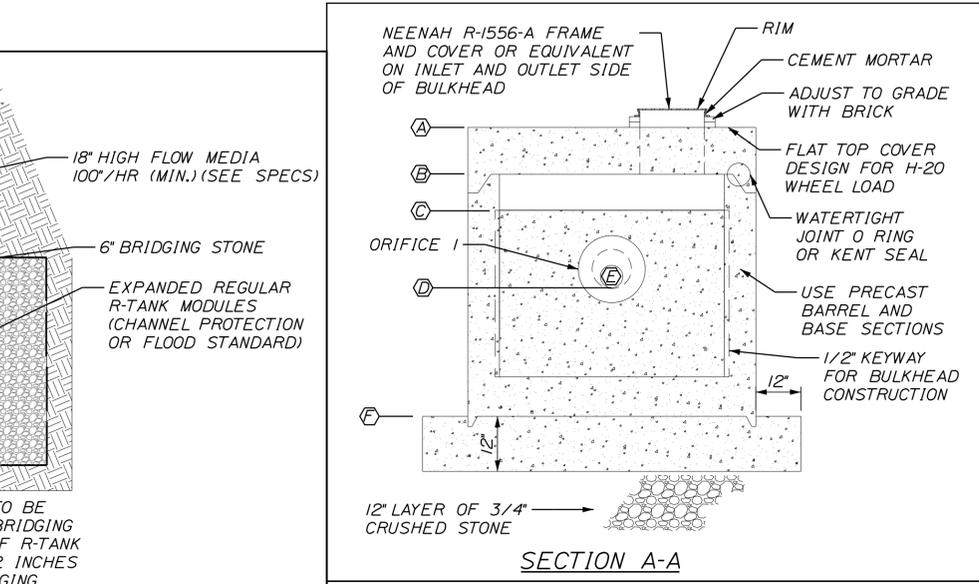
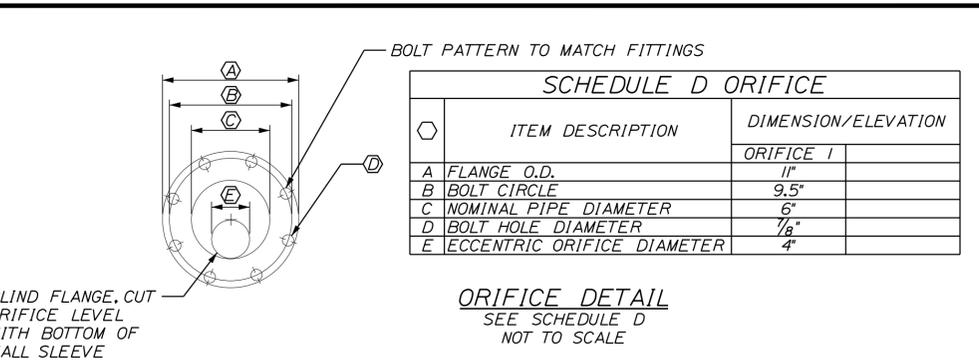


(G) DRAINAGE STRUCTURE SECTION X-X N.T.S.

- NOTES:  
1. STORMSACK WEIGHT (EMPTY): 12 LB MAX  
2. MATERIAL:  
A) SHROUD: HIGH DENSITY POLYETHYLENE (TYPICAL WALL THICKNESS .125")  
B) SUPPORT HUB: CRS, POWDER COATED  
C) STORMSACK: WOVEN POLYPROPYLENE GEOTEXTILE (GEOTEX 117F)  
D) HARDWARE: ALUMINUM POP-RIVETS  
3. RECOMMENDED MINIMUM VAULT DEPTH: 2-IN BELOW CARTRIDGE  
4. TYPICAL INSTALLATION: RAISE STORM GRATE, PUSH CATCH-IT SHROUD DOWN ON FRAME SUPPORT LEDGE UNTIL LOCKING-CLIPS CLICK IN PLACE, LOWER STORM GRATE.  
5. USE ONLY WITH FABCO REPLACEABLE STORMSACK

STRUCTURAL DIAMETER (INCHES)	DEBRIS CAPACITY (CF)	FILTERED FLOWRATE (CFS)	BYPASS FLOWRATE (CFS)	TOTAL SYSTEM FLOWRATE (CFS)
12	0.77	2.2	1.2	3.4
18	1.65	2.5	1.0	3.5
24	3.60	4.9	2.4	7.3
30	6.20	4.9	2.4	7.3

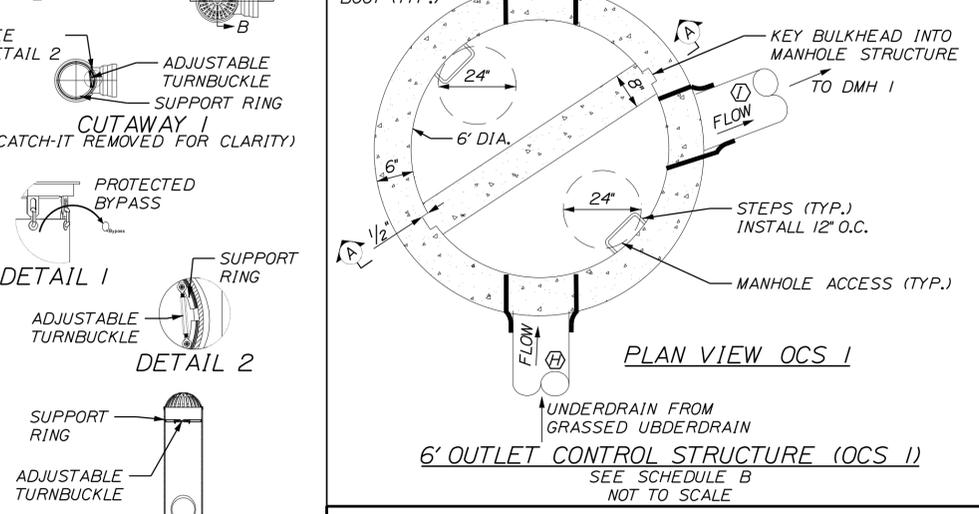
(H) ACF/HARCO DOMED OVERFLOW FILTER RISER N.T.S.



(I) SECTION A-A

SCHEDULE B

ITEM DESCRIPTION	DIMENSION/ELEVATION
A TOP OF STRUCTURE	OCS 1
B UNDERSIDE TOP SLAB	297.50
C TOP CONCRETE BULKHEAD	296.83
D ORIFICE INVERT	295.90
E ORIFICE DIAMETER	4"
F BOTTOM OF STRUCTURE	291.70
G PIPE DIAMETER	15"
H INVERT IN	293.85
I PIPE DIAMETER	4"
J INVERT IN	291.80
K PIPE DIAMETER	15"
L INVERT OUT	291.70



(J) PLAN VIEW OCS 1



CITY OF SANFORD  
919 MAIN STREET  
SANFORD, MAINE 04073

PROJ. MANAGER	DATE	BY	M. HILL	DATE	REVISIONS	DATE	DESCRIPTION
J. ATTANASE	08/24	M. CUNDIFF			1		SIGNATURE
W. HASKELL	08/24				2		P.E. NUMBER
					3		DATE
					4		FIELD CHANGES

SANFORD  
EMERSON STREET  
PARKING FACILITY

STORM WATER FILTER  
DETAIL SHEETS

SHEET NUMBER  
7  
OF 11

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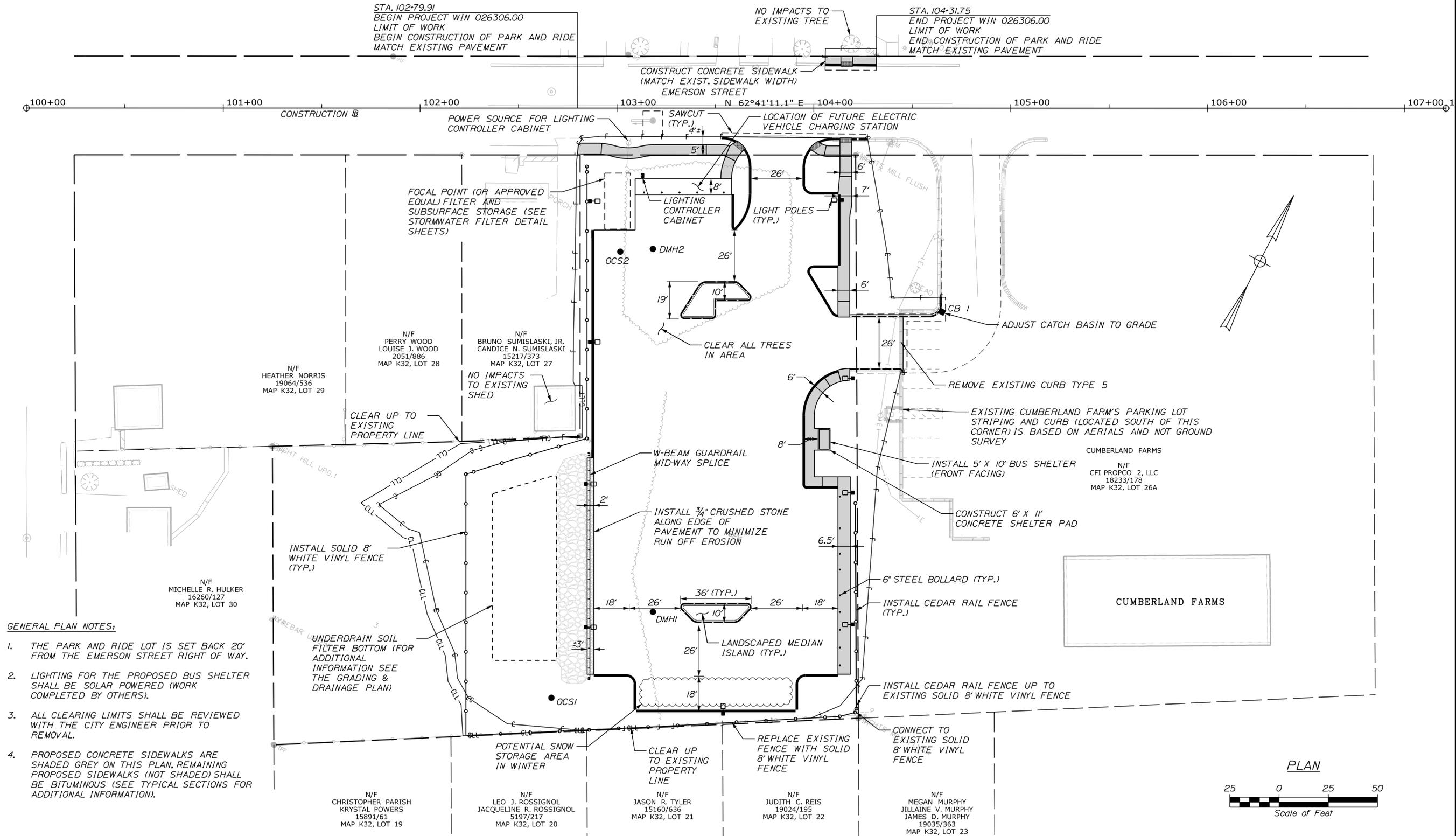
Date: 9/3/2024

Username: Mike.Cundiff

Division: HIGHWAY

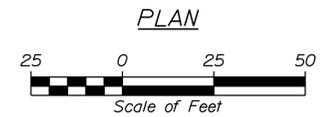
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**GENERAL PLAN NOTES:**

1. THE PARK AND RIDE LOT IS SET BACK 20' FROM THE EMERSON STREET RIGHT OF WAY.
2. LIGHTING FOR THE PROPOSED BUS SHELTER SHALL BE SOLAR POWERED (WORK COMPLETED BY OTHERS).
3. ALL CLEARING LIMITS SHALL BE REVIEWED WITH THE CITY ENGINEER PRIOR TO REMOVAL.
4. PROPOSED CONCRETE SIDEWALKS ARE SHADED GREY ON THIS PLAN. REMAINING PROPOSED SIDEWALKS (NOT SHADED) SHALL BE BITUMINOUS (SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION).



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 919 MAIN STREET  
 SANFORD, MAINE 04073

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PROJ. MANAGER	M. HILL	BY	DATE
DESIGN-DETAILED	T. WARREN	M. CUNDIFF	08/24
CHECKED-REVIEWED	J. WARBACH	D. EITINGER	08/24
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

**SANFORD  
 EMERSON STREET  
 PARKING FACILITY**

**GENERAL PLAN**

SHEET NUMBER

9

OF 11



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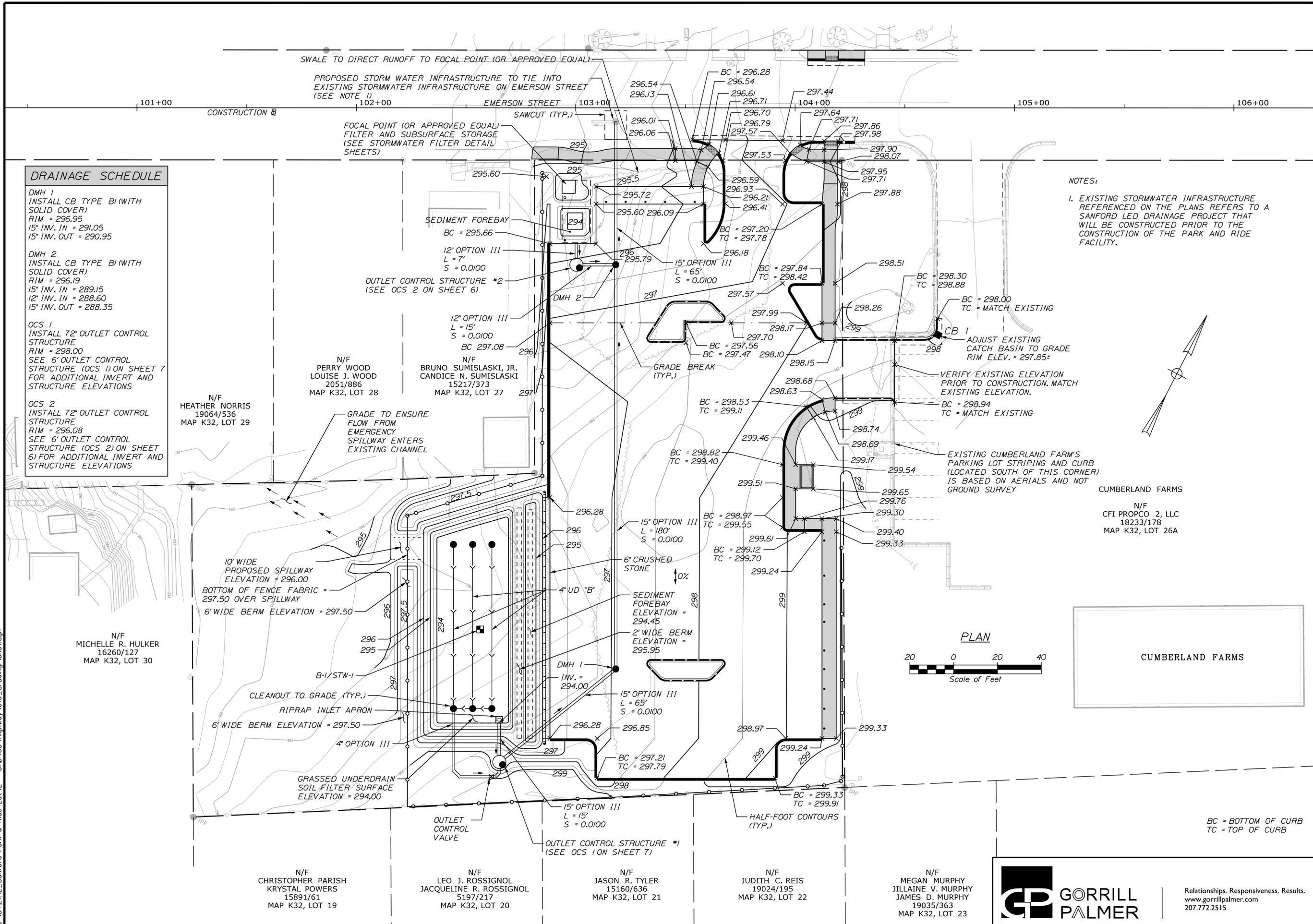
Date: 9/3/2024

Username: Mike.Cundiff

Division: HIGHWAY

Filename: ...Highway\010\_GradingPlan01.dgn

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**DRAINAGE SCHEDULE**

**DMH 1**  
 INSTALL CB TYPE BI (WITH SOLID COVER)  
 RIM = 296.95  
 15' INV. IN = 291.05  
 15' INV. OUT = 290.95

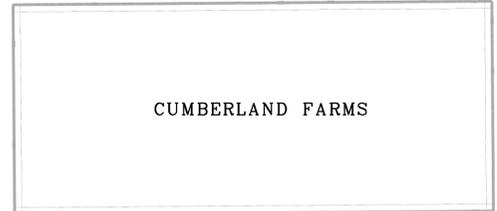
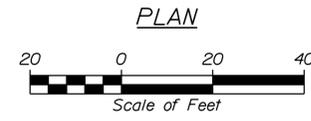
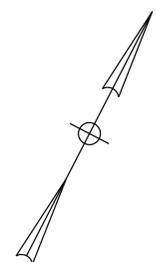
**DMH 2**  
 INSTALL CB TYPE BI (WITH SOLID COVER)  
 RIM = 296.19  
 15' INV. IN = 289.15  
 12' INV. IN = 288.60  
 15' INV. OUT = 288.35

**OCS 1**  
 INSTALL 72" OUTLET CONTROL STRUCTURE  
 RIM = 298.00  
 SEE 6" OUTLET CONTROL STRUCTURE (OCS 1) ON SHEET 7 FOR ADDITIONAL INVERT AND STRUCTURE ELEVATIONS

**OCS 2**  
 INSTALL 72" OUTLET CONTROL STRUCTURE  
 RIM = 296.08  
 SEE 6" OUTLET CONTROL STRUCTURE (OCS 2) ON SHEET 6 FOR ADDITIONAL INVERT AND STRUCTURE ELEVATIONS

**NOTES:**

1. EXISTING STORMWATER INFRASTRUCTURE REFERENCED ON THE PLANS REFERS TO A SANFORD LED DRAINAGE PROJECT THAT WILL BE CONSTRUCTED PRIOR TO THE CONSTRUCTION OF THE PARK AND RIDE FACILITY.



CITY OF SANFORD  
 919 MAIN STREET  
 SANFORD, MAINE 04073

PROJ. MANAGER	M. HILL	BY	DATE
DESIGN-DETAILED	J. ATTANASE	M. CUNDIFF	08/24
CHECKED-REVIEWED	W. HASKELL	W. HASKELL	08/24
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE	P.E. NUMBER	DATE

**SANFORD STREET EMERSON STREET PARKING FACILITY**

**GRADING & DRAINAGE PLAN**

SHEET NUMBER

**10**

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Date: 9/3/2024

Username: Mike.Cundiff

Division: HIGHWAY

Filename: ...\\000\Highway\011\_ShpPlan01.dgn

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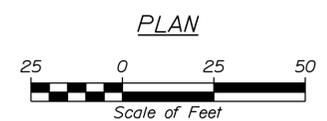
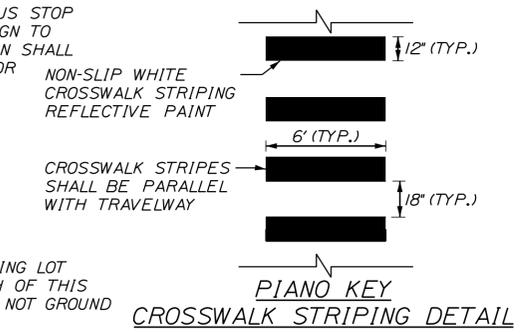
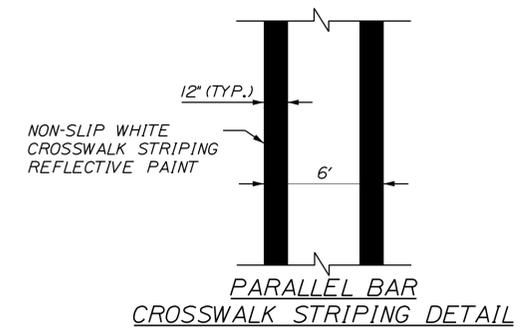
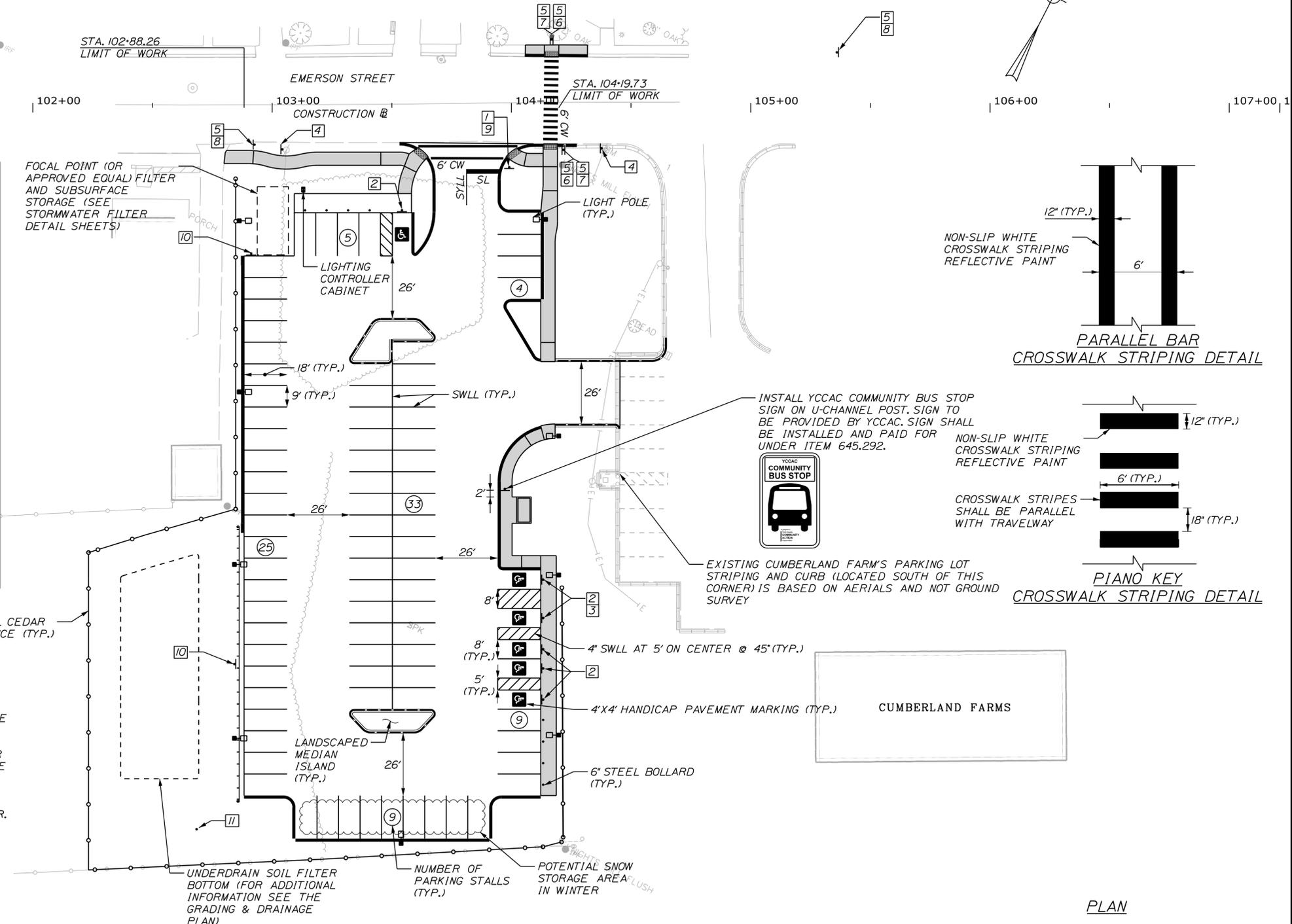
STRIPING LEGEND	
SYLL = 4" SINGLE YELLOW LANE LINE	
SWLL = 4" SOLID WHITE LANE LINE	
SL = STOP LINE (24" WIDE)	
CW = CROSS WALK (2 X 12" WIDE PARALLEL BARS)	

SIGNING LEGEND	
1 STOP R1-1 30" X 30" QUANTITY: 1	6 W16-7P(L) 24" X 12" QUANTITY: 2
2 RESERVED PARKING R7-8 12" X 18" QUANTITY: 6	7 W16-7P(R) 24" X 12" QUANTITY: 2
3 VAN ACCESSIBLE R7-8P 18" X 9" QUANTITY: 2	8 AHEAD W16-9P 24" X 12" QUANTITY: 2
4	9 D3-1 12" X VARIES QUANTITY: 1
5	10 SNOW STORAGE PROHIBITED OVER STORMWATER FACILITIES SP-1 18" X 36" QUANTITY: 2
	11 REFLECTORIZED DELINEATOR POST QUANTITY: 1

\* SIGN SHALL BE INSTALLED ON 6" STEEL BOLLARD.  
 \*\* SIGN TO BE INSTALLED ON UTILITY POLE.

**SIGNING & STRIPING NOTES:**

- REMOVAL OF EXISTING ROADSIDE SIGNS AND RELOCATION OF ROADSIDE SIGNS/POSTS, SHALL BE CONSIDERED INCIDENTAL TO THE 645 PAY ITEMS.
- ADDITIONAL PARK AND RIDE SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS PROVIDED IN THE BID BOOK.
- FINAL STRIPING FOR THE PROJECT SHALL BE DONE BY THE CONTRACTOR PER THE STRIPING LAYOUT IN THE CONTRACT DOCUMENTS OR AS PROVIDED BY THE CITY. PAYMENT SHALL BE MADE UNDER APPROPRIATE CONTRACT ITEMS.
- THE CONTRACTOR SHALL REMOVE ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED MARKINGS, BY MEANS APPROVED BY THE INSPECTOR. PAYMENT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- SIGNS FOR ITEM 645.292 SHALL BE CONSTRUCTED OF SHEET ALUMINUM.
- ALL SIGNING AND STRIPING MATERIALS AND PLACEMENT SHALL CONFORM TO THE MAINE DOT STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND STANDARD DETAILS AND WITH THE FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- ALL PAVEMENT MARKINGS SHALL BE MAINTAINED TO 70% RETROREFLECTIVITY OR BETTER FOR A PERIOD OF ONE YEAR FOLLOWING PROJECT COMPLETION.
- SIGN SUPPORTS SHALL CONFORM TO MAINE DOT STANDARD SPECIFICATION 645 REGARDING MATERIALS AND PLACEMENT. TYPICALLY, GALVANIZED U-CHANNEL POSTS AND WOOD ARE PREFERRED TYPES.
- SIGNS W11-2, W16-7P, AND W16-9P SHOULD BE FLOURESCENT GREEN-YELLOW IN COLOR.
- FINAL SIGN LOCATIONS SHALL BE COORDINATED IN THE FIELD WITH THE INSPECTOR.
- SIGN 11, REFLECTORIZED DELINEATOR POST, SHALL BE PAID FOR AS ITEM 606.356 UNDERDRAIN DELINEATOR POST (EA).



CITY OF SANFORD  
 919 MAIN STREET  
 SANFORD, MAINE 04073

PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
T. WARREN	08/24	M. CUNDIFF	08/24			
J. WINGENBACH		D. EITINGER				

DESIGN DETAILED	DESIGN REVIEWED	DESIGN DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES

**SANFORD  
 EMERSON STREET  
 PARKING FACILITY**

**SIGNING & STRIPING PLAN**

SHEET NUMBER

**11**  
 OF 11



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