PROPOSED SITE PLAN DOCUMENTS

FOR ——



INDUSTRIAL DEVELOPMENT

LOCATION OF SITE: UNIFIED PARKWAY, TOWN OF SUTTON WORCESTER COUNTY, MASSACHUSETTS

REFERENCES

9 EXECUTIVE PARK DR, SUITE 101 MERRIMACK, NH 03054

GEOTECHNICAL ENGINEERING REPORT: SANBORN HEAD & ASSOCIATES, INC. 1 TECHNOLOGY PARK DRIVE WETFORD, MA 01886 DATE: 03/08/2022

AND ELEVATION PLANS (11 SHEETS) GREGORY J. O'CONNOR ASSOCIATÉS, INC. 339 MAIN STREET (#510) WORCESTER, MA 01608 DATE: 03/21/2022

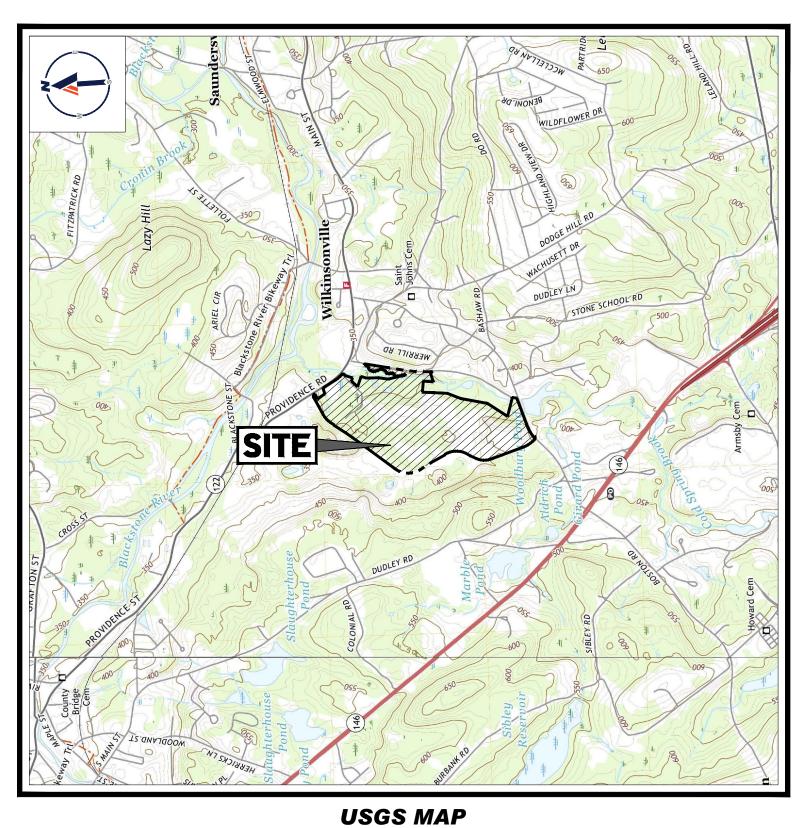
UN1F1ED BUILDING 3 PARTIAL FLOOR PLANS AND ELEVATION PLANS (7 SHEETS) GREGORY J. O'CONNOR ASSOCIATES, INC. 339 MAIN STREET (#510) WORCESTER, MA 01608

DATE: 03/21/2022 UN1F1ED BUILDING 2

AND 3 RENDERINGS (1 SHEET) GREGORY J. O'CONNOR ASSOCIATES, INC. 339 MAIN STREET (#510) WORCESTER, MA 01608 DATE: 03/21/2022

UN1F1ED PUMP HOUSE PLANS AND ELEVATIONS (1 SHEET) GREGORY J. O'CONNOR ASSOCIATES, INC. 339 MAIN STREET (#510) WORCESTER, MA 01608 DATE: 03/15/2022

* THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.



SCALE: 1" = 2,000'

SOURCE: WORCESTER SOUTH AND GRAFTON MASSACHUSETTS USGS QUADRANGLE

ZONE LINE (TYP.) VILLAGE **COLD SPRING** BROOK OFFICE LIGHT INDUSTRIAL PROPOSED BUILDING 2 RURAL RESIDENTIAL ZONE LINE

RURAL RESIDENTIAL

SITE MAP

SCALE: 1" = 600'

BOHLER/

WAIVER LIST:

TOWN OF SUTTON ZONING BYLAW

SECTION IV.B.1

DRIVEWAYS LOCATED IN SIDE YARD SETBACK

SECTION IV.B.2

LOADING AND UPLOADING SPACES SHALL NOT BE LESS THAN 14 FEET IN WIDTH

SECTION IV.B.3 (TABLE 4)

REQUIRED PARKING FOR WAREHOUSE AND/OR DISTRIBUTION USE

SECTION IV.B.4.e

MAXIMUM DRIVEWAY WIDTH OF 30 FEET FOR TWO-WAY TRAFFIC

SECTION IV.B.5.c.3

INTERIOR LANDSCAPED AREAS TO LIMIT UNBROKEN ROWS OF PARKING

SECTION IV.C.4

PLANS AT A SCALE OF 1"=20'

DRAWING SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101
GENERAL NOTES SHEET	C-102
ZONING COMPLIANCE PLAN	C-301
OVERALL LAYOUT PLAN	C-302
LAYOUT PLAN (A - D)	C-303 - C-306
OVERALL GRADING AND DRAINAGE PLAN	C-401
GRADING AND DRAINAGE PLAN (A - D)	C-402 - C-405
DRAINAGE SCHEDULE	C-406
OVERALL UTILITY PLAN	C-501
UTILITY PLAN (A - E)	C-502 - C-506
OVERALL EROSION AND SEDIMENT CONTROL PLAN	C-601
EROSION AND SEDIMENT CONTROL PLAN (A - E)	C-602 - C-606
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	C-607
OVERALL LANDSCAPE PLAN	C-701
LANDSCAPE PLAN (A - D)	C-702 - C-705
LANDSCAPE NOTES AND DETAILS	C-706
PROPOSED PHOTOMETRIC LIGHT PLAN (A - C)	C-707 - C-709
DETAIL SHEETS	C-901 - C-905
EXISTING CONDITIONS PLAN OF LAND (PREPARED BY WSP USA, INC.)	9 SHEETS
UN1F1ED BUILDING 2 PARTIAL FLOOR PLANS AND ELEVATION PLANS (PREPARED BY GREGORY J. O'CONNOR ASSOCIATES, INC.)	11 SHEETS
UN1F1ED BUILDING 3 PARTIAL FLOOR PLANS AND ELEVATION PLANS (PREPARED BY GREGORY J. O'CONNOR ASSOCIATES, INC.)	7 SHEETS
UN1F1ED BUILDING 2 & 3 RENDERINGS (PREPARED BY GREGORY J. O'CONNOR ASSOCIATES, INC.)	1 SHEET
UN1F1ED PUMP HOUSE PLANS AND ELEVATIONS (PREPARED BY GREGORY J. O'CONNOR ASSOCIATES, INC.)	1 SHEET

TOWN OF SUTTON PLANNING BOARD	
CHAIRMAN	SHE
	SHE
DATE	H

R	REVISIONS	
DATE	COMMENT	DRAWN BY
DATE	COMMENT	CHECKED BY
06/02/2022	COMMENTS	AJS
00/03/2022	COMMENTS	KC / JK
06/10/2022	WETLAND LINE	CFD
00/10/2022	REVISION	KC / JK
07/06/2022	DR COMMENTS	AJS
01/00/2022	FB COMMENTS	KC / JK
	DATE 06/03/2022 06/10/2022	06/03/2022 COMMENTS 06/10/2022 WETLAND LINE



PERMIT SET

S DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY

DRAWN BY:

CAD I.D.: PROJECT:

PROPOSED SITE **PLAN DOCUMENTS**



INDUSTRIAL DEVELOPMENT **UNIFIED PARKWAY TOWN OF SUTTON**

WORCESTER COUNTY,

MASSACHUSETTS

352 TURNPIKE ROAD **SOUTHBOROUGH, MA 01772**

Phone: (508) 480-9900 www.BohlerEngineering.com



COVER SHEET

C-101

REVISION 3 - 07/06/2022

PREPARED BY

	STORM	I STRU	JCTURE	SCH	IEDULI	<u> </u>
STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE SIZE	PIPE LENGTH	OUT. PIPE SLOPE
CB-103	378.00		376.00 (DMH-106)	12"	7'	2.81%
CB-104	378.00		374.00 (DMH-109)	12"	9'	1.15%
CB-200	383.80		379.00 (DMH-201)	12"	11'	1.74%
CB-200A	384.50		380.50 (DMH-200)	12"	54'	2.31%
CB-301	387.48		383.40 (DMH-608A)	12"	18'	1.11%
CB-304	381.72		377.00 (DMH-303)	12"	113'	1.15%
CB-500	383.44		378.00 (DMH-500)	15"	164'	0.67%
CB-503	385.82		382.00 (DMH-504)	12"	26'	1.17%
CB-503A	385.81		382.00 (DMH-504)	12"	18'	1.67%
CB-504	384.10		380.00 (DMH-507)	12"	10'	2.97%
CB-505	384.10		380.00 (DMH-507)	12"	91'	2.09%
CB-507	383.80		379.80 (DMH-505A)	12"	81'	2.00%
CB-508	390.08		383.50 (DMH-511)	12"	22'	1.33%
CB-509	390.08		383.50 (DMH-511)	12"	14'	2.10%
CB-510	385.10		381.10 (DMH-512)	12"	114'	0.53%
CB-511	384.90		381.50 (DMH-512)	12"	61'	0.81%
CB-512	384.20		381.20 (DMH-512)	12"	110'	0.64%
CB-602	392.43		389.00 (DMH-606)	12"	48'	3.09%
CB-604	386.33		381.50 (DMH-609)	12"	52'	0.95%
CB-605	384.97		381.50 (DMH-609)	12"	51'	0.98%

STORM STRUCTURE SCHEDULE

376.60 (DMH-603) 376.50 (DMH-605) 36"

387.50 (CB-602) 374.50 (DMH-607)

379.10 (DMH-604)

375.30 (DMH-606)

379.75 (UG3C)

382.90 (DMH-802) 18"

382.00 (DMH-802A)

383.00 (DCB-802) 383.70 (DCB-802A)

374.00 (DMH-608) 42"

379.20 (DMH-601)

375.40 (DMH-604) 386.00 (RD-601)

387.50 (DCB-603)

374.60 (DMH-605) 377.20 (HW-600)

374.10 (DMH-606)

385.00 (TD-3B)

INV. IN INV. OUT OUT.
PIPE PIPE LENGTH PIPE SLOPE

0.77%

0.80%

0.63%

0.51%

1.05%

0.82%

0.87%

0.54%

0.50%

0.49%

0.00% 0.00%

2.94%

0.00%

2.42%

125'

HW-9B

STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE	PIPE LENGTH	OU
CB-606	391.85		385.00 (DMH-610)	SIZE 12"	22'	SLC 1.78
			,			
CB-607	391.68		385.00 (DMH-610)	12"	15'	2.7
CB-702	393.65		388.00 (DMH-701)	12"	30'	2.68
CB-703	397.58		392.00 (DMH-701)	12"	90'	4.12
CB-800	393.33		388.50 (DMH-800)	12"	235'	1.87
CB-801	389.14		384.37 (DMH-800)	12"	53'	0.50
CB-803	385.04		382.50 (DMH-800A)	12"	33'	0.52
DCB-100	379.24		375.00 (DMH-100)	15"	197'	1.02
DCB-101	379.25		375.00 (DMH-100)	12"	11'	1.75
DCB-102	379.25		375.00 (DMH-101)	15"	50'	0.99
DCB-201	382.34		378.00 (DMH-111)	12"	144'	0.5
DCB-203	379.86		375.80 (DMH-111)	15"	34'	0.89
DCB-302	382.60		377.35 (DMH-608A)	15"	230'	0.50
DCB-303	379.20		375.25 (DMH-302)	15"	10'	1.57
DCB-305	379.20		375.20 (DMH-304)	15"	8'	1.24
DCB-400	379.24		375.20 (DMH-400)	15"	204'	0.78
DCB-401	379.30		375.00 (DMH-400)	15"	13'	1.58
DCB-402	379.24		372.20 (DMH-404)	15"	15'	3.02
DCB-403	379.27		372.20 (DMH-403)	15"	16'	2.80
DCB-501	382.26		377.00 (DMH-501)	12"	34'	1.18

STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE SIZE	PIPE LENGTH	OUT PIPE SLOP
DCB-502	382.15		377.00 (DMH-501)	12"	74'	0.54%
DCB-600	387.90		383.00 (DMH-600)	15"	19'	2.58%
DCB-601	389.28		383.00 (DMH-601)	15"	37'	1.35%
DCB-603	391.10		388.00 (DMH-606)	12"	13'	3.84%
DCB-700	387.70		384.30 (DMH-700)	18"	69'	0.72%
DCB-701	389.60		384.10 (DMH-700)	15"	53'	0.57%
DCB-802	387.80		383.80 (DMH-802A)	15"	157'	0.51%
DCB-802A	387.80		383.80 (DMH-802A)	15"	14'	0.71%
DMH-8	385.29		377.30 (DMH-8A)	15"	194'	0.93%
DMH-8A	384.87	375.50 (DMH-8)	375.50 (DMH-8B)	15"	128'	0.93%
DMH-8B	378.38	374.30 (DMH-8A) 374.30 (OCS-600)	374.30 (DMH-8C)	18"	256'	0.51%
DMH-8C	378.00	373.00 (DMH-8B)	372.55 (HW-7B)	18"	27'	2.04%
DMH-9	394.00	387.00 ()	387.00 (HW-8B)	36"	201'	0.50%
DMH-10B	403.40		399.00 (HW-10B)	18"	249'	1.21%
DMH-100	379.55	374.80 (DCB-101) 373.00 (DCB-100)	372.90 (DMH-101)	18"	196'	0.97%
DMH-101	380.64	371.00 (DMH-100) 374.50 (DCB-102) 371.00 (DMH-104)	370.90 (DMH-105)	30"	180'	1.05%
DMH-102	382.55	378.80 (RD-100)	378.70 (DMH-103)	18"	210'	1.24%
DMH-103	382.58	376.10 (DMH-102)	376.00 (DMH-104)	18"	212'	1.18%
DMH-104	382.56	378.80 (RD-101) 373.50 (DMH-103)	372.10 (DMH-101)	18"	73'	1.50%
DMH-105	381.53	369.00 (DMH-101)	368.90 (DMH-106)	30"	192'	0.99%

STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE SIZE	PIPE LENGTH	OU" PIP SLO
DMH-106	378.22	367.00 (DMH-105) 375.80 (CB-103)	366.90 (DMH-107)	30"	15'	1.029
DMH-107	378.35	370.90 (DMH-108) 366.75 (DMH-106)	356.35 (WQU-112)	36"	43'	0.819
DMH-108	380.17	377.20 (RD-202) 372.50 (DMH-109)	372.40 (DMH-107)	24"	100'	1.509
DMH-109	378.34	373.65 (DMH-110) 373.90 (CB-104)	373.40 (DMH-108)	18"	173'	0.52
DMH-110	379.74	376.50 (DMH-111)	374.20 (DMH-109)	15"	88'	0.639
DMH-111	380.55	375.50 (DCB-203) 377.20 (DCB-201)	377.10 (DMH-110)	15"	111'	0.549
DMH-200	385.65	379.25 (CB-200A) 379.00 (RD-200)	378.75 (DMH-201)	18"	105'	1.479
DMH-201	384.23	377.20 (DMH-200) 378.80 (CB-200)	377.10 (DMH-202)	18"	174'	2.01
DMH-202	382.81	373.60 (DMH-201) 376.50 (TD-2A)	373.50 (WQU-203)	18"	173'	2.02
DMH-300	383.40	378.90 (RD-300) 379.90 (TD-2B)	378.80 (DMH-301)	18"	80'	1.12
DMH-301	384.00	377.90 (DMH-300)	377.80 (DMH-302)	18"	225'	1.20
DMH-302	379.41	375.10 (DMH-301) 375.10 (DCB-303)	375.00 (DMH-305)	24"	48'	1.15
DMH-303	380.87	375.70 (CB-304) 376.70 (RD-301)	375.60 (DMH-304)	24"	82'	0.61
DMH-304	379.38	375.10 (DCB-305) 375.10 (DMH-303)	375.00 (DMH-305)	24"	112'	0.49
DMH-305	380.10	374.45 (DMH-304) 374.45 (DMH-302)	374.35 (WQU-306)	36"	15'	0.52
DMH-400	379.59	373.60 (DCB-400) 374.80 (DCB-401)	373.50 (DMH-401)	18"	150'	0.80
DMH-400A	374.00	369.60 (OCS-400)	368.25 (HW-400)	24"	21'	1.54
DMH-401	381.44	373.00 (DMH-409) 372.30 (DMH-400)	372.20 (DMH-402)	24"	15'	0.97
DMH-402	381.40	372.05 (DMH-401)	371.75 (OCS-400) 371.75 (UG2d)	24"	62'	0.00
DMH-403	379.69	371.75 (DCB-403)	371.75 (UG2d)	UNDERGR	I OUND SWMA REFI	R TO DE

		380.40 (DMH-600)			
DMH-602	391.37	387.50 (RD-600)	387.40 (DMH-601)	15"	
	STOR	M STRUC	CTURE S	SCHE	EI
STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE SIZE	L
TD-3B	392.00		388.00 (DMH-603)	12"	
UG2d		371.75 (DMH-404) 371.75 (DMH-405) 371.75 (DMH-403) 371.75 (DMH-402)	371.75 (OCS-400) 371.75 (DMH-406)	UNDERGR	OUI
UG2e		375.00 (DMH-505A) 375.00 (DMH-503)	375.00 (OCS-500)	UNDERGR	OUN
UG3C		379.75 (DMH-802) 379.75 (DMH-801) 379.75 (DMH-805)	379.75 (OCS-800)	UNDERGR	OUI
WQU-112	362.00	356.00 (DMH-107)	351.30 (FES-100)	36"	
WQU-203	378.09	370.00 (DMH-202)	368.10 (FES-200)	18"	
WQU-306	380.32	374.27 (DMH-305)	374.17 (FES-300)	36"	
WQU-611	385.59	373.32 (DMH-608)	373.22 (FES-600)	48"	
		202 0C (DMILL 700)	202.40 (EEQ.700)		

STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE	PIPE	OUT. PIPE
0114.	1411/1/ 0141	11,4,11,	11,4,001	SIZE	LENGTH	SLOPE
DMH-803	393.30	387.30 (RD-801)	387.20 (DMH-804)	18"	103'	2.13%
DMH-804	390.93	382.10 (DMH-806) 385.00 (DMH-803)	380.90 (DMH-805)	24"	37'	0.54%
DMH-805	390.14	380.70 (DMH-804)	379.75 (OCS-800) 379.75 (UG3C)	24" 3"	88' 124'	0.00% 0.00%
DMH-806	391.79	387.60 (RD-802)	384.90 (DMH-804)	18"	137'	2.04%
DMH-807	385.06	375.10 (OCS-800)	375.00 (DMH-506)	18"	285'	0.67%
FD-2A			383.00 (T-200A)	6"	41'	7.26%
FD-2B			383.00 (T-201A)	6"	41'	7.24%
FD-3A			392.00 (T-300A)	6"	34'	6.77%
FD-3B			392.00 (T-301A)	6"	34'	4.68%
FES-100		351.00 (WQU-112)				
FES-200		367.50 (WQU-203)				
FES-300		374.00 (WQU-306)				
FES-600		373.00 (WQU-611)				
FES-601		373.00 (FES-602)				
FES-602			373.00 (FES-601)	12"	91'	0.00%
FES-700		383.00 (WQU-701)				
FES-701		383.00 (WQU-705)				
HW-7B		372.00 (DMH-8C)				
HW-8B		386.00 (DMH-9)				

	STOR	M STRU	CTURE S	SCHE	EDULE	
STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE SIZE	PIPE LENGTH	OUT. PIPE SLOPE
HW-10B		396.00 (DMH-10B)				
HW-101		345.00 (OCS-100)				
HW-201		365.00 (OCS-200)				
HW-301		373.00 (OCS-300)				
HW-400		367.92 (DMH-400A)				
HW-500		372.00 (DMH-506)				
HW-600			377.50 (DMH-607)	24"	20'	1.50%
OCS-100	350.50		346.00 (HW-101)	18"	71'	1.40%
OCS-200	371.50		366.50 (HW-201)	12"	49'	3.04%
OCS-300	378.60		374.00 (HW-301)	12"	40'	2.49%
OCS-400	380.21	371.75 (DMH-402) 371.75 (UG2d)	371.75 (DMH-400A)	24"	142'	1.51%
OCS-500	385.52	375.00 (UG2e)	375.00 (DMH-506)	12"	75'	1.20%
OCS-600	376.60		374.65 (DMH-8B)	15"	59'	0.59%
OCS-700	386.35		383.00 (DMH-600)	24"	208'	0.96%
OCS-800	384.66	379.75 (DMH-805) 379.75 (UG3C)	379.15 (DMH-807)	18"	239'	1.70%
RD-100			379.00 (DMH-102)	18"	15'	1.32%
RD-101			379.00 (DMH-104)	18"	15'	1.31%
RD-200			380.00 (DMH-200)	15"	46'	2.17%
RD-202			378.00 (DMH-108)	18"	37'	2.16%
RD-300			379.00 (DMH-300)	18"	13'	0.79%

	STORN	A STRU	JCTURE	SCH	EDULE	
STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE SIZE	PIPE LENGTH	OUT. PIPE SLOPE
RD-301			379.00 (DMH-303)	18"	113'	2.04%
RD-400			379.00 (DMH-407)	18"	14'	1.42%
RD-403			379.00 (DMH-409)	18"	16'	1.25%
RD-600			388.00 (DMH-602)	15"	31'	1.64%
RD-601			387.00 (DMH-605)	15"	103'	0.98%
RD-700			387.00 (DMH-702)	15"	16'	3.02%
RD-800			388.00 (DMH-801A)	15"	25'	1.99%
RD-801			388.00 (DMH-803)	18"	33'	2.11%
RD-802			388.00 (DMH-806)	15"	15'	2.70%

STORM STRUCTURE SCHEDULE						
STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE SIZE	PIPE LENGTH	OUT. PIPE SLOPE
TD-2A	383.00		380.00 (DMH-202)	12"	142'	2.47%
TD-2B	383.00		380.00 (DMH-300)	12"	16'	0.62%
TD-3A	392.00		388.00 (DMH-703)	12"	156'	2.06%

STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE SIZE	PIPE LENGTH	OUT. PIPE SLOP
DMH-404	379.66	371.75 (DCB-402)	371.75 (UG2d)	UNDERGR	OUND SWMA REF	ER TO DETA
DMH-405	380.99	371.75 (DMH-406)	371.75 (UG2d)	UNDERGR	OUND SWMA REF	ER TO DETA
DMH-406	381.96	371.75 (UG2d)	371.75 (DMH-405)	24"	62'	0.00%
DMH-407	383.11	378.80 (RD-400)	378.70 (DMH-408)	18"	208'	1.20%
DMH-408	382.70	376.20 (DMH-407)	376.10 (DMH-409)	18"	210'	1.19%
DMH-409	382.56	378.80 (RD-403) 373.60 (DMH-408)	373.50 (DMH-401)	24"	48'	1.03%
DMH-500	384.60	376.90 (CB-500)	376.80 (DMH-501)	15"	159'	0.50%
DMH-501	382.82	376.60 (DCB-502) 376.00 (DMH-500) 376.60 (DCB-501)	375.90 (DMH-502)	24"	110'	0.50%
DMH-502	384.90	380.50 (DMH-504) 375.35 (DMH-501)	375.25 (DMH-505A)	24"	45'	0.56%
DMH-503	384.39	375.00 (DMH-507)	375.00 (DMH-505A) 375.00 (UG2e)	24"	126'	0.00%
DMH-504	385.82	381.70 (CB-503A) 381.70 (CB-503)	381.60 (DMH-502)	12"	55'	2.00%
DMH-505A	384.95	375.00 (DMH-503) 375.00 (DMH-502) 378.18 (CB-507)	375.00 (UG2e)	UNDERGROUND SWMA REFER TO DETAIL		
DMH-506	384.05	373.10 (DMH-807) 374.10 (OCS-500)	373.00 (HW-500)	18"	116'	0.86%
DMH-507	384.32	379.70 (CB-504) 378.10 (CB-505)	375.20 (DMH-503)	12"	8'	2.61%
DMH-511	390.45	383.20 (CB-509) 383.20 (CB-508)	378.90 (DMH-513)	18"	14'	0.70%
DMH-512	387.75	380.50 (CB-510) 381.00 (CB-511) 380.50 (CB-512)	380.40 (DMH-513)	18"	113'	0.80%
DMH-513	390.69	378.80 (DMH-511) 379.50 (DMH-512)	378.70 (DMH-610)	24"	83'	0.72%
DMH-600	388.32	381.00 (OCS-700) 382.50 (DCB-600)	380.90 (DMH-601)	24"	92'	0.54%
DMH-601	390.04	384.00 (DMH-602) 382.50 (DCB-601) 380.40 (DMH-600)	379.70 (DMH-603)	30"	43'	1.15%
DMH-602	391.37	387.50 (RD-600)	387.40 (DMH-601)	15"	163'	2.09%

STORM STRUCTURE SCHEDULE						
STR.	RIM/GRT	INV. IN	INV. OUT	OUT. PIPE SIZE	PIPE LENGTH	OUT. PIPE SLOPE
TD-3B	392.00		388.00 (DMH-603)	12"	143'	2.10%
UG2d		371.75 (DMH-404) 371.75 (DMH-405) 371.75 (DMH-403) 371.75 (DMH-402)	371.75 (OCS-400) 371.75 (DMH-406)	UNDERGROUND SWMA REFER TO DETAIL		
UG2e		375.00 (DMH-505A) 375.00 (DMH-503)	375.00 (OCS-500)	UNDERGROUND SWMA REFER TO DETAIL		
UG3C		379.75 (DMH-802) 379.75 (DMH-801) 379.75 (DMH-805)	379.75 (OCS-800)	UNDERGROUND SWMA REFER TO DETAIL		
WQU-112	362.00	356.00 (DMH-107)	351.30 (FES-100)	36"	38'	0.79%
WQU-203	378.09	370.00 (DMH-202)	368.10 (FES-200)	18"	33'	1.81%
WQU-306	380.32	374.27 (DMH-305)	374.17 (FES-300)	36"	25'	0.67%
WQU-611	385.59	373.32 (DMH-608)	373.22 (FES-600)	48"	45'	0.49%
WQU-701	390.13	383.26 (DMH-700)	383.16 (FES-700)	24"	32'	0.51%
WQU-705	390.74	383.36 (DMH-704)	383.26 (FES-701)	30"	52'	0.50%

TOWN OF SUTTON PLANNING BOARD	MASS REWHOLE RHODE MAIN
CHAIRMAN	SHEET TITLE:
	PR
	DR
	SC
	SHEET NUMBER

C-406

PROPOSED

DRAINAGE

REVISION 3 - 07/06/2022

374.60 (DMH-610) 373.63 (DMH-607) 373.53 (WQU-611) 48" DMH-608 387.87 379.00 (DMH-609) 375.30 (DMH-608A) 376.20 (DCB-302) 383.20 (CB-301) 376.10 (DMH-608) DMH-608A 388.00 158' 381.00 (CB-605) 380.90 (DMH-608) 132' DMH-609 381.00 (CB-604) 384.60 (CB-607) 384.60 (CB-606) 378.00 (DMH-608) DMH-610 392.06 323' 378.10 (DMH-513) 383.80 (DCB-700) 383.70 (WQU-701) 24" DMH-700 389.07 383.80 (DCB-701) 387.20 (CB-702) 385.10 (DMH-702) 385.00 (DMH-703) DMH-701 393.78 388.30 (CB-703) 386.53 (RD-700) 386.43 (DMH-701) 24" DMH-702 396.00 384.30 (DMH-701) 384.80 (TD-3A) DMH-703 391.35 DMH-704 391.39 383.66 (DMH-703) 383.56 (WQU-705) 30" 384.10 (CB-800) 384.10 (CB-801) DMH-800 388.74 384.10 (DMH-800A) 382.34 (DMH-802) DMH-800A 385.93 379.75 (DMH-802) 379.75 (UG3C) 92' 124' 382.00 (DMH-801A) DMH-801 390.16 DMH-801A 395.10 387.50 (RD-800) 387.40 (DMH-801) 183' 379.75 (DMH-801) 382.00 (DMH-800A)

STR. RIM/GRT

DMH-603 391.17

DMH-604 379.68

DMH-606 391.07

DMH-607 388.38

393.17

DMH-605

DMH-802

DMH-802A 388.11

UNIFIED PARKWAY TOWN OF SUTTON WORCESTER COUNTY, **MASSACHUSETTS** BOHLER/

REVISIONS

Know what's **below. Call** before you dig.

ALWAYS CALL 811 It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROPOSED SITE

PLAN DOCUMENTS

PROPOSED

352 TURNPIKE ROAD

SOUTHBOROUGH, MA 01772

Phone: (508) 480-9900

INDUSTRIAL DEVELOPMENT

KC / JAK

03/28/2022 W211141-CVL-3_GRAD

DRAWN BY:

DATE: CAD I.D.:

PROJECT:

CHECKED BY:

REV DATE COMMENT

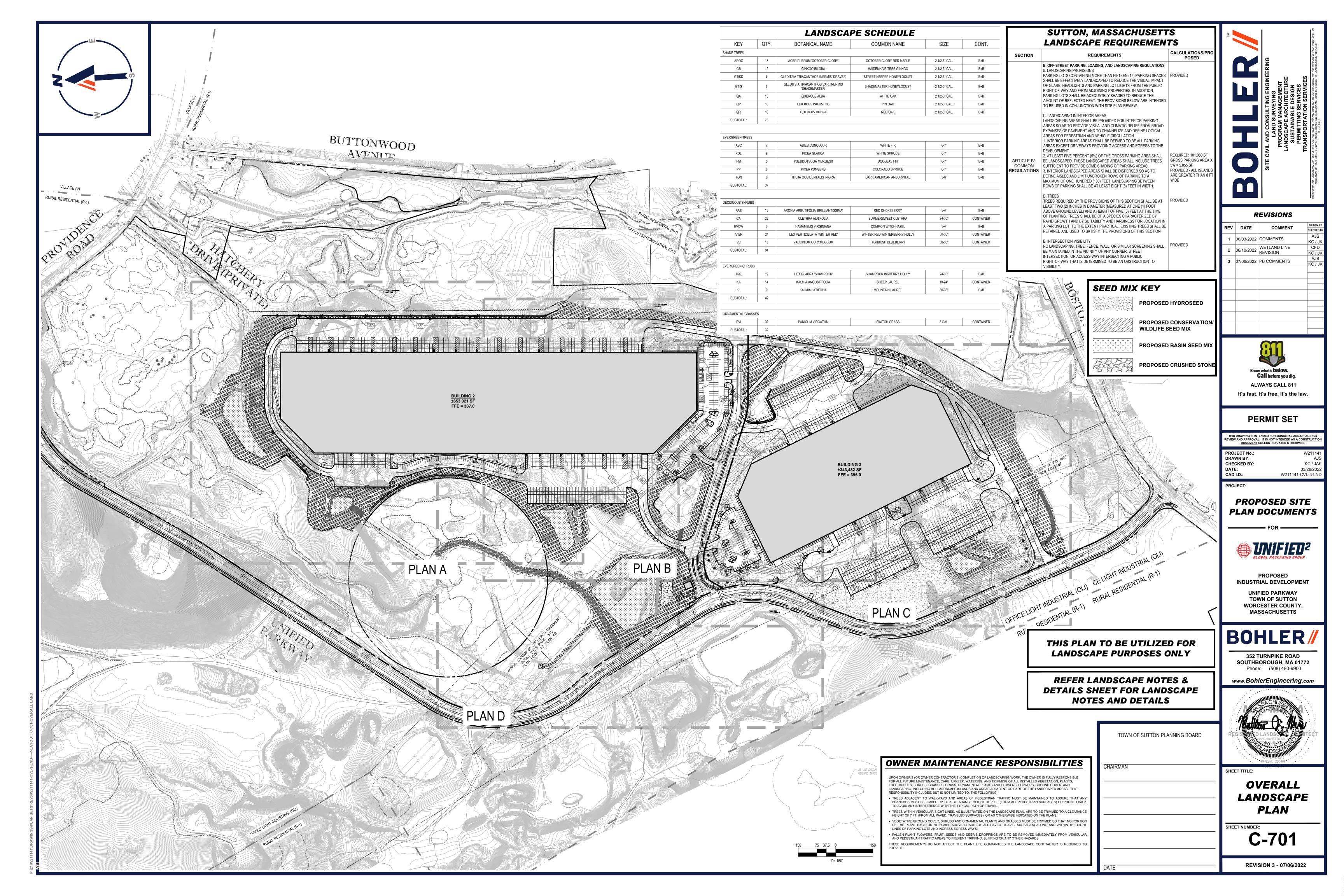
1 06/03/2022 COMMENTS

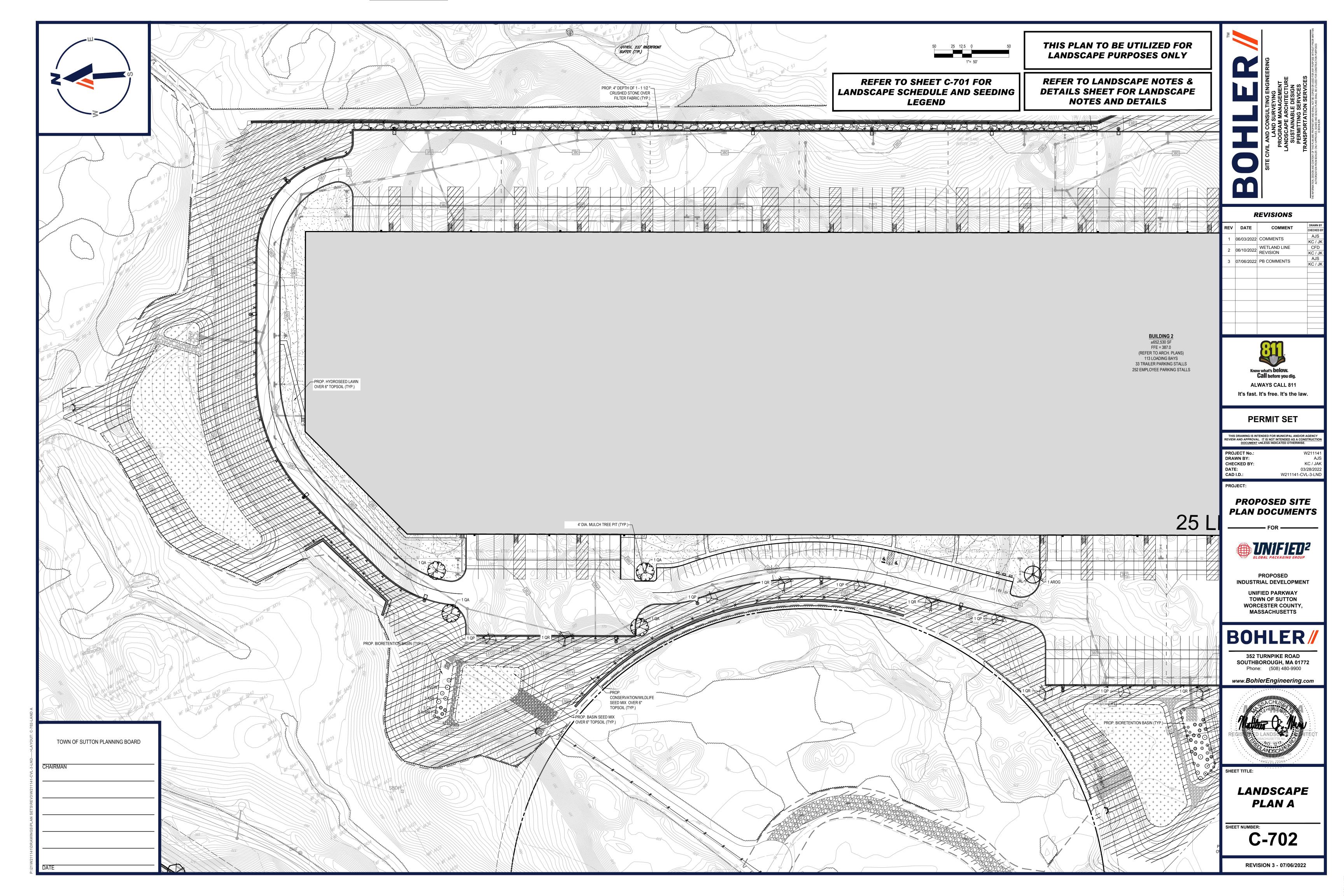
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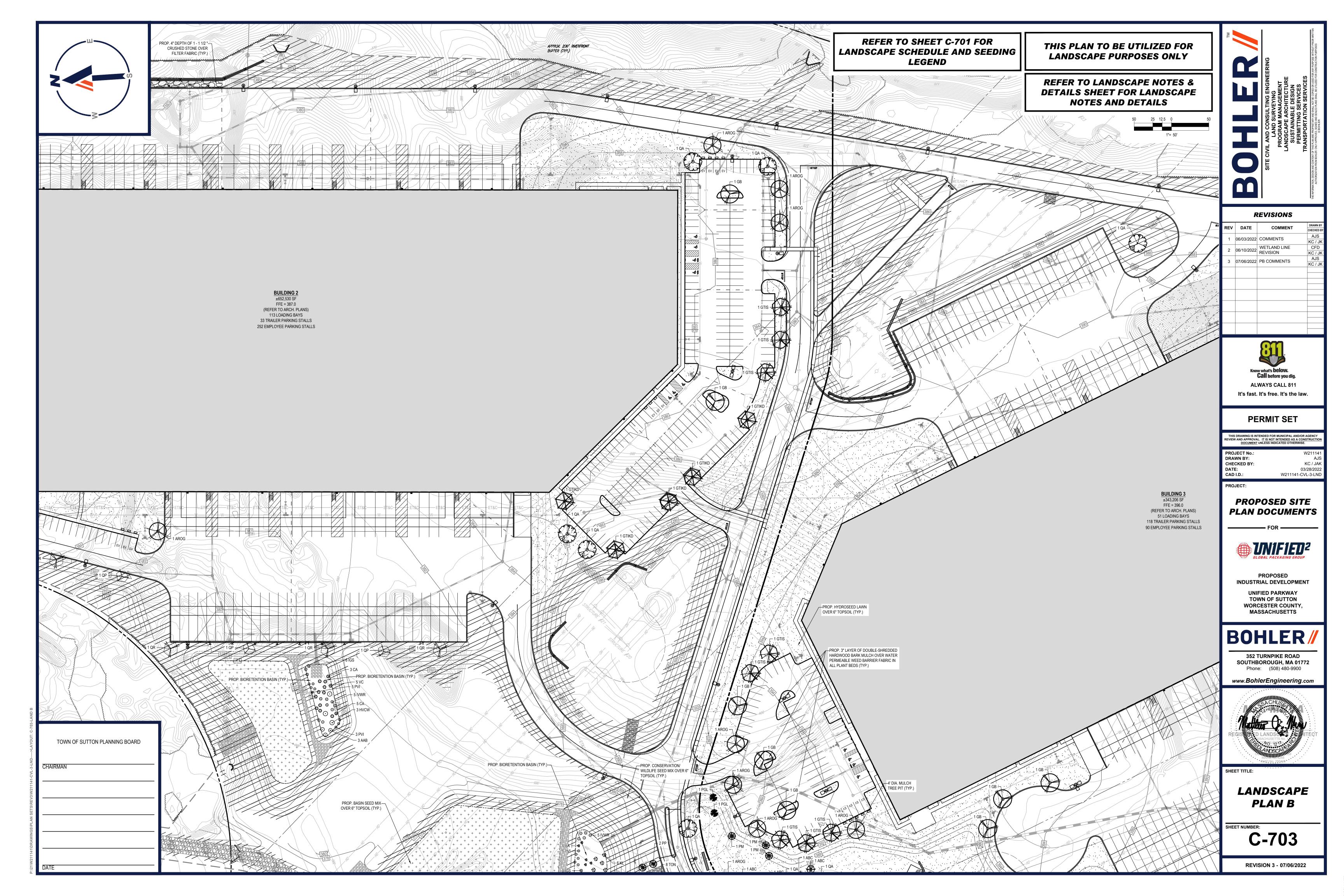
3 07/06/2022 PB COMMENTS

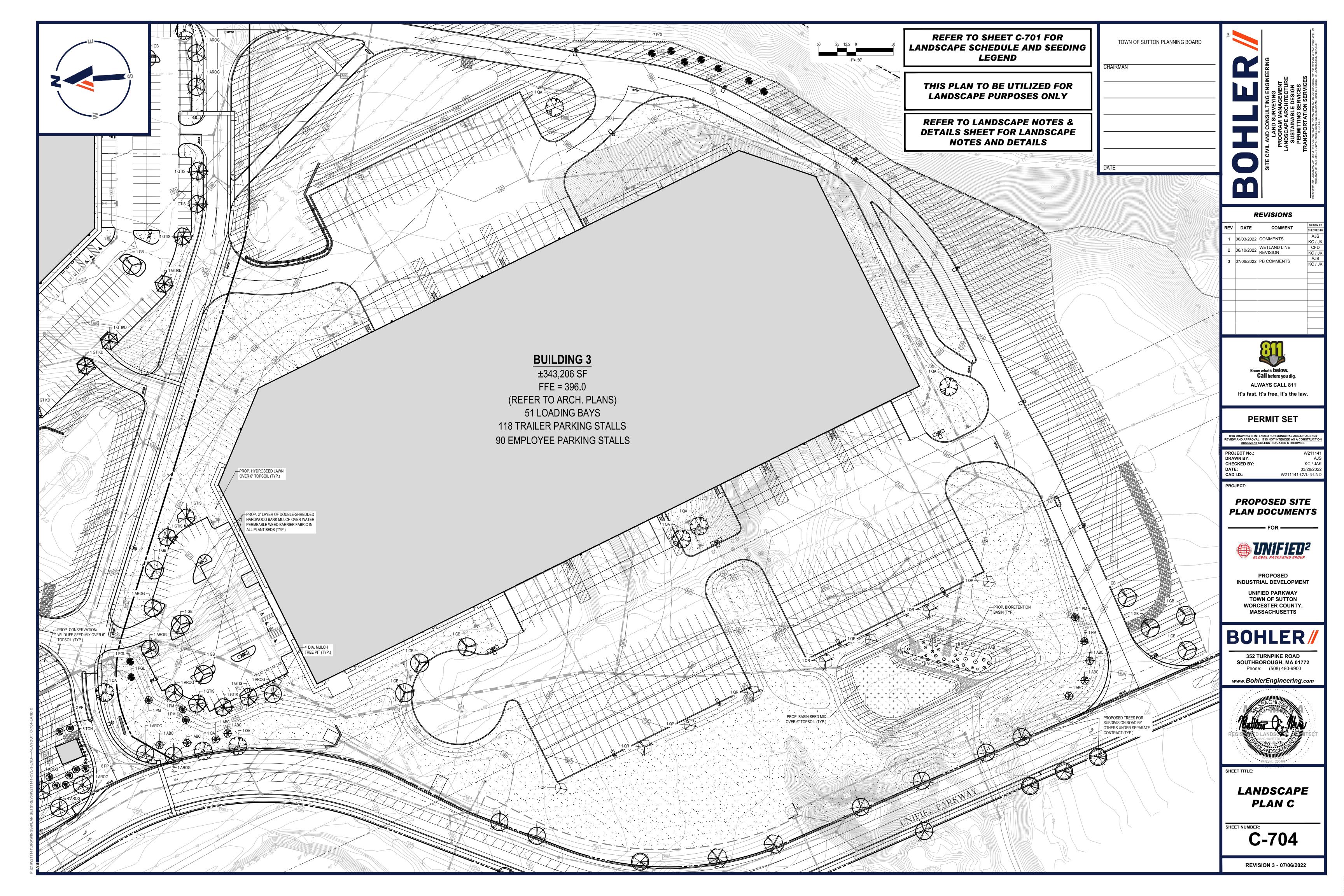
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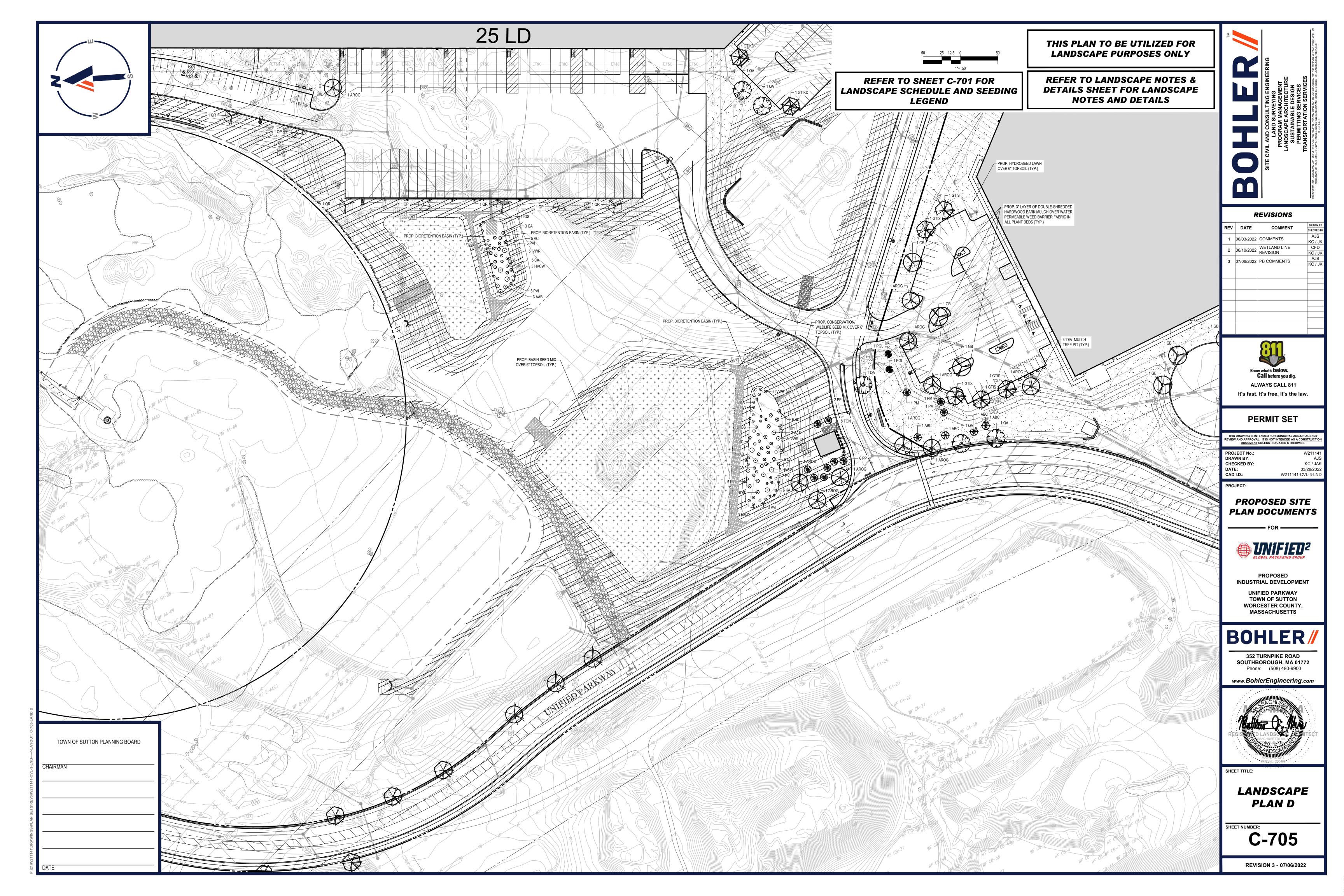
SCHEDULE











SPECIFIED ARBORTIE GREEN (OR WHITE) STAKING THIS END WRAPPED LANDSCAPE SPECIFICATIONS AND GUYING MATERIAL IS TO BE FLAT WOVEN AROUND TREE AFTER POLYPROPYLENE MATERIAL KNOT IS TIGHTENED 3/4" WIDE, 900 LB. BREAK STRENGTH. ARBORTIE SHALL BE FASTENED TO STAKES IN A MANNER **KOELREUTERIA QUERCUS VARIETIES** SCOPE OF WORK: WHICH PERMITS TREE MOVEMENT AND SUPPORTS LIQUIDAMBAR STYRACIFLUA TILIA TOMENTOSA THE TREE. THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR $\stackrel{<}{\scriptstyle{\sim}}$ this end to ZELKOVA VARIETIES LIRIODENDRON TULIPIFERA SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED > THIS FND TO MIN. OF THREE (3) GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY: THIS END TO TYPICAL GUYING STAKE STAKES TO EACH THIS END T INSTALLATION GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S 1 PART COMPOSTED COW MANURE BY VOLUME 3 PARTS TOPSOIL BY VOLUME TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF FOLLOW MOTION OF ARBORTIF AS TIE A SIMPLE KNOT 18-24" FROM SLIDE KNOT JUST COMPLETED UP TO THE ARBORKNOT PROVIDES SECURE, WRAP THIS END AROUND TREE DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS 1 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS SHOWN FINISHING THE KNOT BY EITHER END OF THE ARBORTIE. THE KNOT TIED IN STEP 1. FASTEN FREE GIRDLE FREE ATTACHMENT OF THE BEGIN A NEW KNOT BELOW THE PULLING TIGHTLY ON POINTS A AND B AT LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM 6" THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, END TO STAKE OR ANCHOR. (DEPENDING ON THE DIAMETER KNOT THAT WAS TIED IN STEP ARBORTIE TO TREE. 2 TABLETS PER 1 GALLON PLANT AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED ON THE LANDSCAPE PLAN THE SAME TIME. OF THE TREE) 3 TABLETS PER 5 GALLON PLANT 4 TABLETS PER 15 GALLON PLANT LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED. LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK 2.3.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 9.9. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY SHALL BE PEGGED TO HOLD SOD IN PLACE. 9.10. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON ARBORTIE STAKING DETAIL THE LANDSCAPE PLAN AND/OR LANDSCAPE PLAN NOTES /DETAILS. CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL. FERTILIZER 9.11. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7 2.5. FROM GRADE. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND 9.12. GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE. 1.) NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT AREA OF SITE CONSTRUCTION SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION. 2.) REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK 1/3 FROM ROOT BALL FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER 3.) PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY. 9.13. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS. 4.) THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH 9.14. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH TH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS TREE PROTECTION FENCE SHALL BE 5.) THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, INSTALLED TO FOLLOW TREE CANOPY NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE SUBSOIL. 9.15. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN. AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN). DRIP LINE OR PROPOSED LIMITS OF 6.) REFER TO THE CHART "GENERAL RANGE OF SOIL MODIFICATIONS & VOLUMES FOR VARIOUS SOIL CONDITIONS" TO DETERMINE MINIMUM WIDTH OF PREPARED IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL. REVISIONS 7.) SUBSTITUTE ARBORVITAE STAKING SYSTEM WHEN SPECIFIED AVOID PURCHASING TREES WITH TWO LEADER PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR 10.1. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT -4' HIGH WOOD & WIRE SNOW FENCE W/WOOD VERIFICATION PURPOSES DURING THE FINAL INSPECTION. OR REMOVE ONE AT PLANTING: OTHERWISE, DO COMMENT STAKES AT A MAXIMUM OF 8' ON CENTER AS AN REV DATE 10.2. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM NOT PRUNE TREE AT PLANTING EXCEPT FOR TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 11/4", WHICH HAVE NOT BEEN COMPLETELY OPTION. ORANGE/FLOURESCENT HIGH-DENSITY SPECIFIC STRUCTURAL CORRECTIONS. "VISI-FENCE" OR APPROVED EQUAL CAN BE USED. CALLUSED. SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES REINFORCED RUBBER HOSE (1/2" DIA. BLACK) -06/03/2022 COMMENTS 10.3. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY WETLAND LINE 06/10/2022 REVISION 10.4. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE. FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE. SET ROOT BALL FLUSH TO GRADE OR SEVERA FOLD BURLAP AWAY FROM TOP OF ROOT -10.5. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN. INCHES HIGHER IN POORLY DRAINING SOILS. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR -WOOD & WIRE SNOW FENCE USED AS TREE 07/06/2022 PB COMMENTS GUARD TO PREVENT DAMAGE FROM TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN 10.6. F TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE 12 GAUGE GALVANIZED WIRE GUYS TWISTED -REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES. CONSTRUCTION FQUIPMENT CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE. - 4" BUILT-UP EARTH SAUCER SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH. 2" DIA. HARDWOOD STAKES 2/3 TREE HT. 3 TREE DRIP LINE/TREE PROTECTION ZONE 3" DOUBLE SHREDDED HARDWOOD BARK TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL 11.1. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE -AREA WITHIN TREE PROTECTION ZONE TO REMAIN AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY MULCH (UNLESS OTHERWISE SPECIFIED) (DO GENERAL WORK PROCEDURES NOT PLACE MULCH IN CONTACT WITH TREE SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED. UNDISTURBED DURING CONSTRUCTION. TWICE THE WIDTH OF ROOTBALL FOR -CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE 11.2. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL PREPARED SOIL FOR TREES. AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF. NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES. LANDSCAPE FABRIC AS SPECIFIED —6' WOOD OR STEEL FENCE POSTS AT 8' MAXIMUM WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC PREPARED SOIL FOR TREES CENTER TO CENTER (MINIMUM 2' BELOW GRADE) 11.3. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE. 1 PART PEAT MOSS DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH. 1 PART COW MANURE 12. GUARANTEI 3 PARTS TOPSOIL BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN (RECOMMENDATION ONLY. SEE SOIL MOD. CHART) **ELEVATION** THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE UNDISTURBED SUBGRADE -AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, ALL PLANTING CONTAINERS, BASKETS AND TREE PROTECTION DURING SITE SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR NON-BIODEGRADABLE MATERIALS SHALL 12.2. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE DIG WIDE, SHALLOW HOLE WITH -ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR BE REMOVED FROM ROOT BALLS. CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. **CONSTRUCTION** TAMPED SIDES SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE. 12.3. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT Call before you dig MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK. TAMP SOIL SOLIDLY AROUND BASE -MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE. OF ROOT BALL SET ROOT BALL ON UNDISTURBED ANY TREE INSTALLED WITHIN 10 FT. OF NEW CONCRETE SIDEWALKS SHOULD **ALWAYS CALL 811** 12.4. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING SOIL IN BOTTOM OF HOLE BE INSTALLED WITH BIOBARRIER ROOT BARRIER FABRIC AS SHOWN SEE DECIDUOUS OR EVERGREEN TREE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH. ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS. . TREES SHALL BE INSTALLED ACCORDING TO THE APPROPRIATE PLANTING It's fast. It's free. It's the law. DETAIL FOR PLANTING PURPOSES DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE DETAIL 13.1. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS TREE PLANTING DETAIL EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED. CONC. SIDEWALK SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS **PERMIT SET** INDICATED WITHIN THE TREE PROTECTION DETAIL. 13.2. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE. N.T.S. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE 14. MAINTENANCE (ALTERNATIVE BID): CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY MAINTENANCE PERIOD HIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENC BIOBARRIER ROOT-CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED 18" STAKE INTO UNDISTURBED GROUND-VIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUC ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN BARRIER FABRIC OF DOCUMENT UNLESS INDICATED OTHERWISE EVERY 30" O.C. LAP JOINTS AS PER 5.4. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS EXPIRED. THE OWNER/OPERATOR MAY REQUIEST THAT RIDDERS SUBMIT AN ALTERNATE MAINTENANCE APPROVED EQUAL -UNDISTURBED SUBGRADE MANUFACTURERS RECOMMENDATION. BID FOR A MONTHLY MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED APPROPRIAT PROJECT No.: 6. SOIL MODIFICATIONS 3/16" x 4" BLACK-TO ENSURE THAT PLANT AND LAWN AREAS ARE HEALTHY AND MANICURED TO THE APPROVAL OF THE OWNER/OPERATOR. BIORARRIER ROOT BARRIER PREPARED SOIL FOR TREES ALUMINUM EDGING DRAWN BY: CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A FABRIC TO BE INSTALLED (SEE PLANTING DETAIL) CHECKED BY **BOTTOM OF STONE BASE** LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL CAD I.D.: W211141-CVL-3-LN COURSE OR 10" MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS. WHICHEVER IS GREATER PROJECT: THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY. -SET ROOT BALL FLUSH TO GRADE OR TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED UNDISTURBED SUBGRADE **BIOBARRIER ROOT BARRIER DETAIL** SEVERAL INCHES HIGHER IN POORLY PROPOSED SITE BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH DRAINING SOILS. IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5 **PLAN DOCUMENTS** TOWN OF SUTTON PLANNING BOARD -4" BUILT-UP EARTH SAUCER TO INCREASE DRAINAGE. MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL -SET ROOT BALL ON FIRM PAD IN CUT BACK SLOPE TO PROVIDE A-"NEW ENGLAND CONSERVATION/ WILDLIFE SEED MIX" APPLICATION RATE: 25LBS/ACRE | 1750 SQ FT/LB MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE BOTTOM OF HOLE FLAT SURFACE FOR PLANTING AS PREPARED BY: MINIMUM ORDER: 2 LBS **BLACK ALUMINUM EDGING** MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX. PROPOSED GRADE FOR PLANTING 6.3.3. -TOP SOIL FILL (COMPACTED AREA NOT TO EXCEED 2:1 N.T.S. SPECIES: VIRGINIA WILD RYE (ELYMUS VIRGINICUS) LITTLE RULESTEM (SCHIZACHYRIUM NEW ENGLAND WETLAND PLANTS. INC (SLOPE NOT TO EXCEED 2:1) 820 WEST STREET, AMHERST, MA 01002 SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII). RED FESCUE (FESTUCA RUBRA), SWITCH UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF GRASS (PANICUM VIRGATUM), PARTRIDGE PEA (CHAMAECRISTA FASCICULATA), PANICLEDLEAF TICK UNDISTURBED SUBGRADE-FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE EMAIL: INFO@NEWP.COM TREFOIL (DESMODIUM PANICULATUM), INDIAN GRASS (SORGHASTRUM NUTANS), BLUE VERVAIN NAME: 3/4" - 1" CRUSHED BLUESTONE GRAVEL (VERBENA HASTATA). BUTTERFLY MILKWEED (ASCLEPIAS TUBEROSA). BLACK EYED SUSAN DIG WIDE. SHALLOW HOLE-4"-6" DEEPER THAN ROOT BAL WEBSITE: WWW.NEWP.COM LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET COLOR; COLORS WILL BE GREYS WITH BLUISH TONES (RUDBECKIA HIRTA), COMMON SNEEZEWEED (HELENIUM AUTUNALE), HEATH ASTER WITH TAMPED SIDES THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"+) SIZE; STONE SIZES WILL RANGE FROM 3/4"" - 1" IN AT LEAST ONE (ASTERPILOSUS/SYMPHYOTRICHUM PILOSUM), EARLY GOLDENROD (SOLIDAGO JUNCEA), UPLAND ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN DIMENSION. STONE SIZING SHOULD BE UNIFORM WITH LITTLE BENTGRASS (AGROSTIS PERENNANS). **PROPOSED** TAMP SOIL SOLIDLY AROUND-VARIATION FROM THIS RANGE. THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT INDUSTRIAL DEVELOPMENT BASE OF ROOT BALL SILT CONTENT; STONE NEEDS TO BE CLEAN OF DEBRIS AND SILT EQUAL | EQUAL | EQUAL | EQUAL | EQUAL | EQUAL ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING AT TIME OF DELIVERY. **NEW ENGLAND CONSERVATION/ WILDLIFE** WATER SHALL NOT BE PERMITTED IN PLANTING BEDS. **UNIFIED PARKWAY TOWN OF SUTTON** REFER TO TREE PLANTING DETAIL FOR GENERAL PLANTING SPECIFICATIONS SEED MIX SPECIFICATIONS WORCESTER COUNTY, CONTRACTOR SHALL PROVIDE A 6" THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. **MASSACHUSETTS** TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" TREE DI ANTING DETAIL - ON SI ORE ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY N.T.S. REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION. FINISHED GRADE. SEE MATERIALS PLAN 2. PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN -WASHED CRUSHED BLUESTONE GRAVEL SEEDING RATES: THE MATERIALS SECTION ABOVE PERENNIAL RYEGRASS 1/2 LB/1000 SQ F ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED KENTUCKY BLUEGRASS 1 LB/1000 SQ FT REFER TO LANDSCAPE PLAN FOR SITE-SPECIFIC OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO RED FESCUE 1/2 LB/1000 SQ F **352 TURNPIKE ROAD** -FINISHED GRADE. SEE PLANS FOR ELEVATION DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY [SEE SPECIFICATION 6.A.]): SPREADING FESCUE 1/2 LB/1000 SQ F1 **SOUTHBOROUGH, MA 01772** FERTILIZER (16.32.16) 2 LB/1000 SQ FT 20 POUNDS 'GRO-POWER' OR APPROVED SOIL CONDITIONER/FERTILIZER Phone: (508) 480-9900 1 GAL/800 GAL DEPTH = 12" (MIN.) LIQUID LIME - PROPOSE 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER TANK TACKIFIER 35 I B/800 GAI WEED PROTECTION FABRIC 36" WIDE GRASS FILTER STRIP www.BohlerEngineering.com TANK FIBER MULCH 30 LB/1000 SQ F THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS. 12" WIDE STONE DIAPHRAGM . GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE —COMPACTED SUBGRADE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN LINPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP HYDROSEED SPECIFICATIONS PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING. **CRUSHED STONE BED**

"NATIVE DETENTION AREA MIX" AS PREPARED BY:

FRNST CONSERVATION SEEDS INC

PHONE: 800-873-3321 / 814-336-2404

EMAIL: SALES@ERNSTSEED.COM

WERSITE: WWW ERNSTSEED COM

8884 MERCER PIKE, MEADVILLE, PA 16335

APPLICATION RATE: 1/2 LB. / 1000 SQ. FT. (20 LBS. / ACRE)

1.0% JUNCUS EFFUSUS (SOFT RUSH)

BASIN SEED MIX SPECIFICATIONS

25.0% PANICUM VIRGATUM, 'SHELTER' (SWITCHGRASS, 'SHELTER')

24.0% PANICUM CLANDESTINUM 'TIOGA' (DEERTONGUE 'TIOGA')

22.0% CAREX VIJI PINOIDEA PA ECOTYPE (FOX SEDGE PA ECOTYPE)

21.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE)

1.0% PANICUM RIGIDULUM, PA ECOTYPE (REDTOP PANICGRASS, PA ECOTYPE)

6.0% AGROSTIS PERENNANS, ALBANY PINE BUSH-NY ECOTYPE (AUTUMN BENTGRASS, ALBANY PINE BUSH-NY

POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO

PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE

INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN

THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS

PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S

FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK

OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE

DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

POPULUS VARIETIES

PRUNUS VARIETIES

PYRUS VARIETIES

EXCAVATING PITS. MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

PLANTS: MARCH 15 TO DECEMBER 15

FALL PLANTING SEASON

ACER RUBRUM

BETULA VARIETIES

CARPINUS VARIETIES

CRATAEGUS VARIETIES

PLANTING SOIL

. PLANTING SOIL MIX SHALL CONSIST OF A MIXTURE OF SAND, COMPOST AND TOPSO

. SOIL pH SHALL RANGE BETWEEN 5.5 - 6.

SIEVE SIZE 2 INCH

PERCENT PASSING

0% SAND, 30-40% COMPOST AND 20-30% TOPSOIL PLANTING SOIL MIX SHALL BE UNIFORM AND FREE FROM STONES, ROOTS, STUMPS OR ANY

. SOILS SHALL CONSIST OF 1.5% - 3% ORGANIC CONTENT AND A MAXIMUM OF 500 ppm SOLUBLE SALTS

U.S. NO. 40 ...
U.S. NO. 200 ...
3
7. TOPSOIL SHALL BE A SANDY LOAM, LOAMY SAND OR LOAM TEXTURE.
8. COMPOST SHALL BE PROCESSED FROM YARD WASTE IN ACCORDANCE WITH GUIDELINES ISSUES FROM MADEP AND SHALL NOT CONTAIN BIOSOLIDS.

BIORETENTION AREA

6' WIDE BIORETENTION AREA (VARIES - SEE PLAN)

NOTE: 12" SAND BED

CROSS SECTION

LANDSCAPE **NOTES AND DETAILS**

REVISION 3 - 07/06/2022

