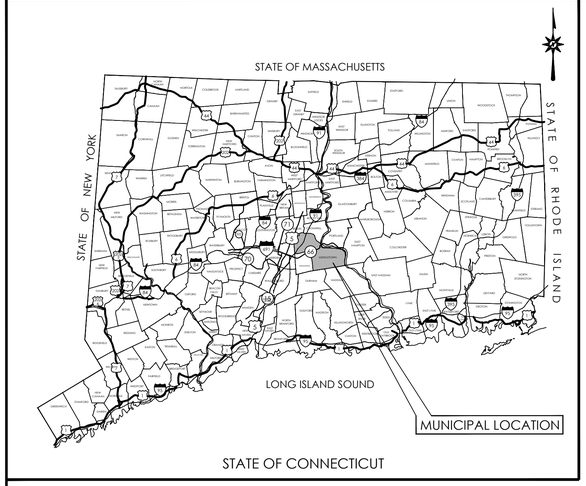
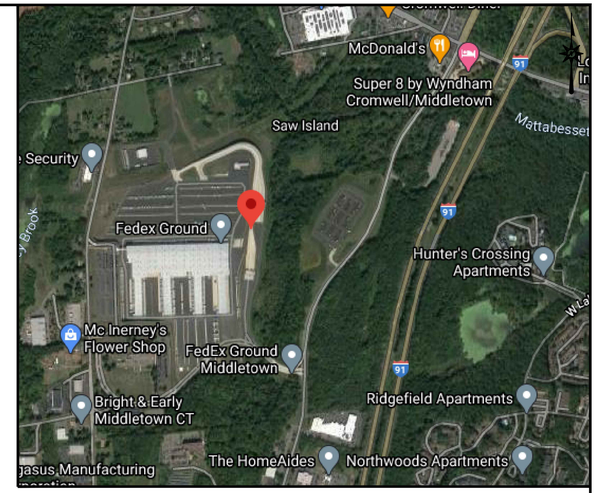


LOCATION MAP

N.T.S.

LAND DEVELOPMENT PLANS
ISSUED FOR PERMITTING



VICINITY MAP

SCALE: 1"=800'

HUB PARKING EXPANSION
FEDEX GROUND
49 FEDEX DRIVE
MIDDLETOWN, CT 06457

PREPARED FOR:

FEDEX GROUND PACKAGE SYSTEM INC.
1000 FEDEX DRIVE
MOON TOWNSHIP, PA 15108

CONTENTS

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GD-1	GRADING AND DRAINAGE PLAN
GD-2	GRADING AND DRAINAGE PLAN
SU-1	SITE UTILITIES PLAN
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EC-1	SEDIMENT AND EROSION CONTROL PLAN
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SA-1	SITE ANALYSIS PLAN - EARTHWORK
SA-2	SITE ANALYSIS PLAN - EARTHWORK

CAD FILE: CV200150701

PREPARED BY:

ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

BL Companies

100 CONSTITUTION PLAZA, 10TH FLOOR
HARTFORD, CONNECTICUT 06103
(860) 249-2200
(860) 249-2400 Fax

NOT FOR CONSTRUCTION
FOR PERMITTING PURPOSES ONLY

DEVELOPER:

FEDEX GROUND PACKAGE SYSTEM INC.
1000 FEDEX DRIVE
MOON TOWNSHIP, PA 15108

OWNER:

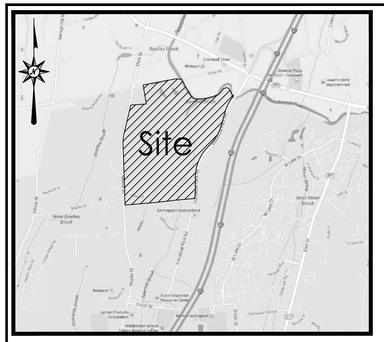
FEDEX GROUND PACKAGE SYSTEM INC
PO BOX 71850
PHOENIX, AZ 85050

STATE OF CONNECTICUT · MATTHEW T. BRUSTIA · No. 25058 · LICENSED PROFESSIONAL ENGINEER

DATES

ISSUE DATE: FEBRUARY 19, 2021
REVISION:

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LOCATION MAP

NOT TO SCALE

TITLE COMMITMENT INFORMATION

TITLE COMMITMENT REFERENCE NUMBER	RECORDING REFERENCE	DESCRIPTION	STATUS ON PLAT
(8)	Vol. 134 Pg. 541	TERMS AND PROVISIONS SET FORTH IN A CONTRACT	NOT PLOTTABLE
(9)	Vol. 244 Pg. 574 Vol. 245 Pg. 161 Vol. 334 Pg. 706 Vol. 336 Pg. 327 Vol. 336 Pg. 329 Vol. 983 Pg. 265	GRANT OF EASEMENT, IN FAVOR OF ALGONQUIN GAS TRANSMISSION COMPANY GRANT OF EASEMENT, IN FAVOR OF ALGONQUIN GAS TRANSMISSION COMPANY GRANT OF EASEMENT, IN FAVOR OF ALGONQUIN GAS TRANSMISSION COMPANY GRANT OF EASEMENT, IN FAVOR OF ALGONQUIN GAS TRANSMISSION COMPANY GRANT OF EASEMENT, IN FAVOR OF ALGONQUIN GAS TRANSMISSION COMPANY GRANT OF EASEMENT, IN FAVOR OF ALGONQUIN GAS TRANSMISSION COMPANY	PLOTTED PLOTTED PLOTTED PLOTTED PLOTTED PLOTTED
(10)	Vol. 329 Pg. 348	DENIAL OF ACCESS RIGHTS, AND DRAINAGE AND EXCAVATION RIGHTS	PLOTTED
(11)	Vol. 337 Pg. 323	RIGHTS OF ACCESS WAIVED	NOT PLOTTABLE
(12)	Vol. 369 Pg. 469	GRANT OF EASEMENT AND RIGHT-OF-WAY, IN FAVOR OF THE CITY OF MIDDLETOWN	PLOTTED
(13)	Vol. 369 Pg. 482	GRANT OF EASEMENT AND RIGHT-OF-WAY, IN FAVOR OF THE CITY OF MIDDLETOWN	DOES NOT AFFECT
(14)	Vol. 603 Pg. 275	BOUNDARY LINE AGREEMENT	PLOTTED
(15)	Vol. 622 Pg. 212	UNDERGROUND ELECTRIC DISTRIBUTION EASEMENT, IN FAVOR OF THE HARTFORD ELECTRIC LIGHT, CO.	DOES NOT AFFECT
(16)	Vol. 630 Pg. 15	RIGHTS TO SLOPE AND GRADE, DRAINAGE RIGHT OF WAY IN FAVOR OF CITY OF MIDDLETOWN	DRAINAGE ROW PLOTTED
(17)	Vol. 630 Pg. 18	RIGHTS TO SLOPE AND GRADE, DRAINAGE RIGHT OF WAY IN FAVOR OF CITY OF MIDDLETOWN	DOES NOT AFFECT
(18)	Vol. 665 Pg. 286	MULTIPLE EASEMENTS, IN FAVOR OF THE STATE OF CONNECTICUT	DRAINAGE ROW PLOTTED
(19)	Vol. 728 Pg. 203	DECLARATIONS OF EASEMENTS BY THE AETNA LIFE INSURANCE COMPANY	NOT PLOTTABLE
(20)	Vol. 883 Pg. 203	COVENANTS AND AGREEMENTS SET FORTH IN AN EASEMENT AGREEMENT, IN FAVOR OF AETNA LIFE INSURANCE COMPANY	DOES NOT AFFECT
(21)	Vol. 943 Pg. 53	CONDITIONS AND REQUIREMENTS SET FORTH, AND TRAFFIC INVESTIGATION REPORT	NOT PLOTTABLE
(22)	Vol. 1755 Pg. 574	WATER MAIN AND BOOSTER PUMP EASEMENT, IN FAVOR OF CITY OF MIDDLETOWN	DOES NOT AFFECT

REFERENCE: CHICAGO TITLE INSURANCE COMPANY COMMITMENT NO. CT 5067985 COHT DATED: 12/10/2014

TITLE COMMITMENT INFORMATION (1152 MIDDLE STREET)

TITLE COMMITMENT REFERENCE NUMBER	RECORDING REFERENCE	DESCRIPTION	STATUS ON PLAT
4	Vol. 245 Pg. 440	EASEMENT IN FAVOR OF THE ALGONQUIN GAS TRANSMISSION COMPANY.	PLOTTED
5	Vol. 358 Pg. 20	GRANT OF EASEMENT TO ALGONQUIN GAS TRANSMISSION COMPANY.	PLOTTED
6	Vol. 603 Pg. 275	TERMS AND PROVISIONS OF A BOUNDARY LINE AGREEMENT.	PLOTTED
7	Vol. 979 Pg. 722	EASEMENT IN FAVOR OF ALGONQUIN GAS TRANSMISSION COMPANY.	PLOTTED
8	Vol. 1962 Pg. 977	CONDITIONS CONTAINED IN A VARIANCE GRANTED BY THE ZONING BOARD OF APPEALS CITY OF MIDDLETOWN. (DOCUMENT NOT PROVIDED)	UNKNOWN

REFERENCE: CHICAGO TITLE INSURANCE COMPANY, FILE NO. 5067985, DATE: 04/29/2016

ZONING INFORMATION

LOCATION:	**MIDDLETOWN, MIDDLESEX, CONNECTICUT**		
ZONE:	**IT – INTERSTATE TRADE**		
USE:	**TRUCKING TERMINAL (PERMITTED USE UNDER SPECIAL EXCEPTION)**		
ITEM #	**ITEM**	**REQUIREMENTS**	**EXISTING**
1	MINIMUM LOT AREA	2 ACRES	204.84± ACRES
2	MINIMUM LOT WIDTH	200 FEET	2,274.7' AT MIDDLE ST 3,665' AT INDUSTRIAL PARK ROAD
3	MINIMUM LOT DEPTH	NONE REQUIRED	N/A
4	MINIMUM FRONT SETBACK	75 FEET	113.8 FEET (INDUSTRIAL PARK ROAD)
5	MINIMUM SIDE SETBACK	20 FEET	79.4 FEET
6	MINIMUM REAR SETBACK	25 FEET	N/A
7	MAXIMUM BUILDING HEIGHT	50 FT	50 FT
8	MAXIMUM BUILDING COVERAGE	40 PERCENT	5.8 PERCENT

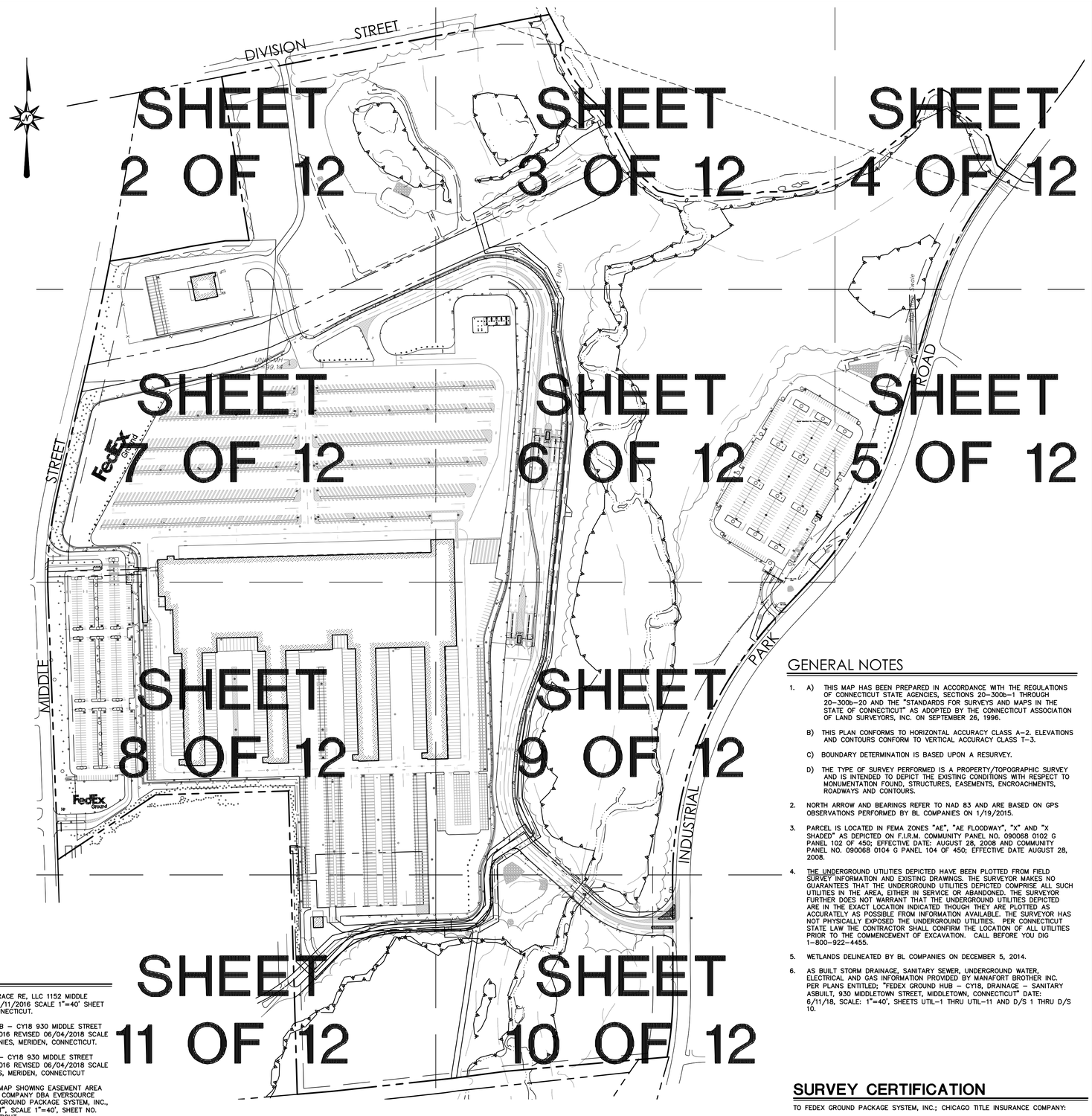
MAP REFERENCES

A. "ALTA/ACSM LAND TITLE SURVEY SILVER GRACE RE, LLC 1152 MIDDLE STREET MIDDLETOWN, CONNECTICUT" DATE 1/11/2016 SCALE 1"=40' SHEET NO. AL-1 BY BL COMPANIES, MERIDEN, CONNECTICUT.

B. "SUBDIVISION PLAN NEW FEDEX GROUND HUB – CY18 930 MIDDLE STREET MIDDLETOWN, CONNECTICUT" DATE 02/24/2016 REVISED 06/04/2018 SCALE 1"=200' SHEET NO. AL-0.03 BY BL COMPANIES, MERIDEN, CONNECTICUT.

C. "EASEMENT MAP NEW FEDEX GROUND HUB – CY18 930 MIDDLE STREET MIDDLETOWN, CONNECTICUT" DATE 02/24/2016 REVISED 06/04/2018 SCALE 1"=200' SHEET NO. EA-1 BY BL COMPANIES, MERIDEN, CONNECTICUT

D. "COMPILATION PLAN YGS FILE NO. W18121, MAP SHOWING EASEMENT AREA TO BE GRANTED TO YANKEE GAS SERVICES COMPANY DBA EVERSOURCE ENERGY ACROSS THE PROPERTY OF FEDEX GROUND PACKAGE SYSTEM, INC., 49 FEDEX DRIVE, MIDDLETOWN, CONNECTICUT", SCALE 1"=40', SHEET NO. EA-1 BY BL COMPANIES, MERIDEN, CONNECTICUT.



FOR STORM DRAINAGE INVERT INFORMATION SEE SHEET 12 OF 12
FOR ADDITIONAL UTILITY NOTES SEE SHEET 2 OF 12

GRAPHIC SCALE
200 100 0 200
SCALE IN FEET

GENERAL NOTES

1. A) THIS MAP HAS BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

   B) THIS PLAN CONFORMS TO HORIZONTAL ACCURACY CLASS A-2. ELEVATIONS AND CONTOURS CONFORM TO VERTICAL ACCURACY CLASS T-3.

   C) BOUNDARY DETERMINATION IS BASED UPON A RESURVEY.

   D) THE TYPE OF SURVEY PERFORMED IS A PROPERTY/TOPOGRAPHIC SURVEY AND IS INTENDED TO DEPICT THE EXISTING CONDITIONS WITH RESPECT TO MONUMENTATION FOUND, STRUCTURES, EASEMENTS, ENCROACHMENTS, ROADWAYS AND CONTOURS.

2. NORTH ARROW AND BEARINGS REFER TO NAD 83 AND ARE BASED ON GPS OBSERVATIONS PERFORMED BY BL COMPANIES ON 1/19/2015.

3. PARCEL IS LOCATED IN FEMA ZONES "AE", "AE FLOODWAY", "X" AND "X SHADED" AS DEPICTED ON F.I.R.M. COMMUNITY PANEL NO. 090068 0102 G PANEL 102 OF 450, EFFECTIVE DATE: AUGUST 28, 2008 AND COMMUNITY PANEL NO. 090068 0104 G PANEL 104 OF 450; EFFECTIVE DATE AUGUST 28, 2008.

4. THE UNDERGROUND UTILITIES DEPICTED HAVE BEEN PLOTTED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES DEPICTED ARE IN THE EXACT LOCATION INDICATED THOUGH THEY ARE PLOTTED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY EXPOSED THE UNDERGROUND UTILITIES. PER CONNECTICUT STATE LAW THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF EXCAVATION. CALL BEFORE YOU DIG 1-800-922-4455.

5. WETLANDS DELINEATED BY BL COMPANIES ON DECEMBER 5, 2014.

6. AS BUILT STORM DRAINAGE, SANITARY SEWER, UNDERGROUND WATER, ELECTRICAL AND GAS INFORMATION PROVIDED BY MANAFORT BROTHER INC. PER PLANS ENTITLED; "FEDEX GROUND HUB – CY18, DRAINAGE – SANITARY ASBUILT, 930 MIDDLETOWN STREET, MIDDLETOWN, CONNECTICUT" DATE: 6/11/18, SCALE: 1"=40', SHEETS UTIL-1 THRU UTIL-11 AND D/S 1 THRU D/S 10.

SURVEY CERTIFICATION

TO FEDEX GROUND PACKAGE SYSTEM, INC.; CHICAGO TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2,3,4,5,6(b),8,9,11,13-19 AND 20 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 11/9/2020.

DATED: _____ SIGNED: _____
JENNIFER MARKS L.S. NO. 17939

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355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

LAND OF
FEDEX GROUND PACKAGE SYSTEM, INC.
49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc:

Surveyed	AC/SB/JW
Drawn	STAFF
Reviewed	-
Scale	1"=200'
Project No.	2001507
Date	11/18/2020
CAD File:	AL200150701

Title

ALTA/NSPS
LAND TITLE
SURVEY

Sheet No. 1 Of 12

AL-1

Feb 18, 2021 3:39pm C:\Users\ac G:\JOBS\20\14\2001507\DWG\AL200150701.dwg Layout: AL-1 ANSI B (44.00 x 34.00) 1of12

Xref (s) : XY1-AC5115-Contours-2018-UAV ; XY1-AC5115-Contours-Spot-Parking 2018-UAV ; XY1-200150701 ; BS200150701

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LEGEND

Property Line		Utility Pole	
Easement Line		Utility Pole w/ Light	
Setback Line		Guy Wire	
Edge of Water		Guy Pole	
Limit of Wetlands		Light Pole	
Treeline		Flood Light	
Brushline	GV	Gas Valve	
Major Contour	CB	Catch Basin	
Minor Contour	MH	Manhole	
Major Contour (Unimproved Area)		Span Pole	
Minor Contour (Unimproved Area)		Fire Hydrant	
Retaining Wall	WV	Water Valve	
Guide Rail		Sign	
Fence		Bollard	
Underground Electric Line		Shrub	
Gas Line		Deciduous Tree	
Sanitary Sewer			
Storm Sewer		Coniferous Tree	
Water Line	EOI	End of Subsurface Geophysical Information	

UTILITY QUALITY LEVELS

MH(R) — E — E — E — E — Quality Level D

MH — E — E — E — E — Quality Level C

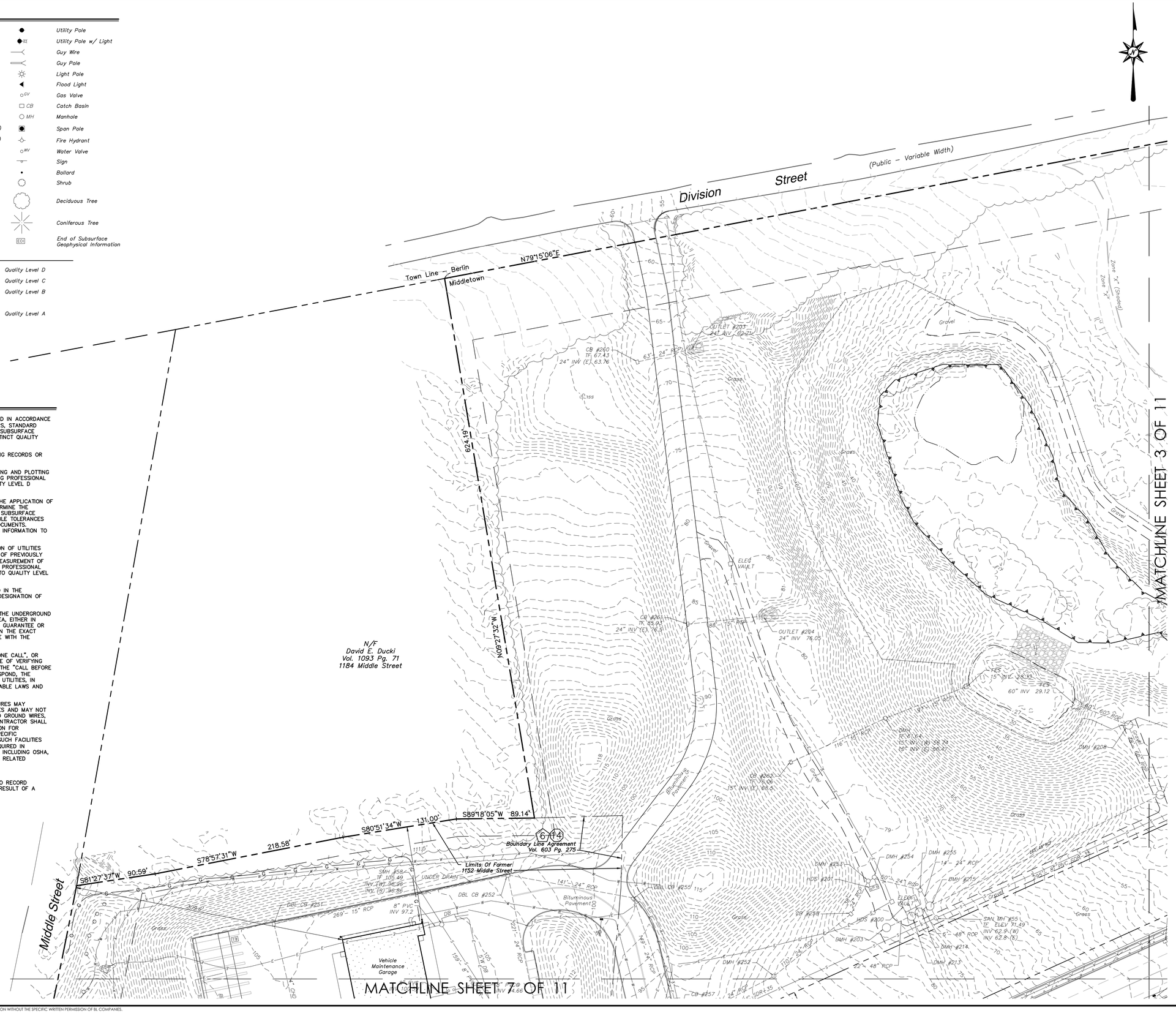
MH — E — E — E — E — Quality Level B
Point of Quality Level B Designation

MH — E — E — E — E — Quality Level A
Point of Quality Level A Designation

UTILITY NOTES

1. EXISTING SUBSURFACE UTILITY FEATURES HAVE BEEN DEPICTED IN ACCORDANCE WITH CI/ASCE 38-02, "AMERICAN SOCIETY OF CIVIL ENGINEERS, STANDARD GUIDELINE FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". THIS STANDARD HAS ESTABLISHED FOUR DISTINCT QUALITY LEVELS OF UTILITY MAPPING.
   - QUALITY LEVEL D – INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS.
   - QUALITY LEVEL C – INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION.
   - QUALITY LEVEL B – INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS. PROFESSIONAL JUDGMENT IS USED IN CORRELATING THIS INFORMATION TO QUALITY LEVEL C AND D INFORMATION.
   - QUALITY LEVEL A – HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE (OR VERIFICATION OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES, USUALLY AT A SPECIFIC POINT. PROFESSIONAL JUDGMENT IS USED IN CORRELATING THIS INFORMATION TO QUALITY LEVEL B, C AND D INFORMATION.

   ONE OR MORE OF THESE QUALITY LEVELS HAS BEEN UTILIZED IN THE PRODUCTION OF THIS SURVEY. REFER TO THE LEGEND FOR DESIGNATION OF QUALITY LEVELS.
2. THE SURVEYOR MAKES NO GUARANTEE OR WARRANTY THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT GUARANTEE OR WARRANT THAT THE UNDERGROUND UTILITIES DEPICTED ARE IN THE EXACT LOCATION INDICATED. UTILITIES ARE DEPICTED IN ACCORDANCE WITH THE STANDARD OF CARE, FROM INFORMATION AVAILABLE.
3. THE CONTRACTOR SHALL UTILIZE "CALL BEFORE YOU DIG", "ONE CALL", OR LOCAL EQUIVALENT, PRIOR TO EXCAVATION, FOR THE PURPOSE OF VERIFYING THE SUBSURFACE UTILITIES IN THE AREA. IN AREAS WHERE THE "CALL BEFORE YOU DIG", "ONE CALL", OR LOCAL EQUIVALENT DOES NOT RESPOND, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE EXISTING UTILITIES, IN ACCORDANCE WITH THE OWNER'S CONTRACT AND ALL APPLICABLE LAWS AND REGULATIONS, INCLUDING OSHA.
4. INDIVIDUAL COMPONENTS OF UTILITIES AND RELATED STRUCTURES MAY EXIST ABOVE OR BELOW GRADE ON OR NEAR THE STRUCTURES AND MAY NOT BE DEPICTED. THESE MAY INCLUDE BUT ARE NOT LIMITED TO GROUND WIRES, STRUCTURAL SUPPORT, AND CATHODIC PROTECTION. THE CONTRACTOR SHALL 1) CONTACT THE OWNER OF THE UTILITY PRIOR TO EXCAVATION FOR INSTRUCTION REGARDING HAZARDS ASSOCIATED WITH, AND SPECIFIC PRECAUTIONS TO BE UTILIZED WHEN WORKING AT OR NEAR, SUCH FACILITIES AND 2) EXERCISE THE APPROPRIATE STANDARD OF CARE REQUIRED IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS, INCLUDING OSHA, WHEN EXCAVATING IN THE VICINITY OF A UTILITY AND/OR ITS RELATED STRUCTURES.
5. DETERMINATION OF ABANDONMENT OF A UTILITY, INDICATED AS "ABANDONED" OR "ABAN", HAS BEEN MADE ACCORDING TO RECORD INFORMATION AND IS NOT TO BE CONSTRUED AS BEING THE RESULT OF A PHYSICAL EVALUATION BY BL COMPANIES.



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LAND OF
FEDEX GROUND PACKAGE SYSTEM, INC.
49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

No.	Date	REVISIONS	Desc.

Surveyed	AC/SB/JW
Drawn	STAFF
Reviewed	-
Scale	1"=50'
Project No.	2001507
Date	11/18/2020

CAD File:

Title

ALTA/NSPS
LAND TITLE
SURVEY

Sheet No. 2 Of 12

AL-1

Xref: (0) - XY:\4C\15-Contours-Spt-Parking 2018-UAV - XY:\2001\5070\ - (B20205070)

Feb 18, 2021 - 5:39pm - C:\Users\eve.GX-JOB5205\14\2001507\DWG\AL2005070.dwg
Layout: AL-1 - 24x36 - 2012

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LEGEND

Property Line	Utility Pole
Easement Line	Utility Pole w/ Light
Setback Line	Guy Wire
Edge of Water	Guy Pole
Limit of Wetlands	Light Pole
Treeline	Flood Light
Brushline	GV Gas Valve
50 Major Contour	CB Catch Basin
Minor Contour	MH Manhole
50 Major Contour (Unimproved Area)	Span Pole
Minor Contour (Unimproved Area)	Fire Hydrant
Retaining Wall	WV Water Valve
Guide Rail	Sign
X X Fence	Bollard
E E Underground Electric Line	Shrub
G G Gas Line	Deciduous Tree
S S Sanitary Sewer	Coniferous Tree
Storm Sewer	
W W Water Line	EOI End of Subsurface Geophysical Information

UTILITY QUALITY LEVELS

MH(R) E E E E	Quality Level D
MH E E E E	Quality Level C
MH E E E E (Point of Quality Level B Designation)	Quality Level B
MH E E E E (Point of Quality Level A Designation)	Quality Level A

Division Street (Public – Variable Width)

1057.73'

TOWN LINE – BERLIN ±194'
MIDDLETOWN

Apparent Enchroachment
Brownstone Bridge Abutement
Protrudes 17'± Southerly
Onto Property

TOWN LINE – CROMWELL
MIDDLETOWN

S71°12'56"E
1944.12'
(SURVEY TIE–LINE)

Mattabesset River

Zone "X" (Shaded)
Zone "AE"
Zone "AE" Floodway

MATCHLINE SHEET 2 OF 11

MATCHLINE SHEET 4 OF 11

MATCHLINE SHEET 6 OF 11

12 Sewer Easement
Vol. 369 Pg. 469

9 95' Gas Transmission Easement
Vol. 244 pg. 574
Vol. 245 pg. 161
Vol. 334 pg. 706
Vol. 336 pg. 327
Vol. 336 pg. 229
Vol. 983 pg. 265

12 20' Sewer Easement
Vol. 369 Pg. 469

20' Sewer Easement
To The Town Of
Middletown And In
Favor Of Lot 3
Vol. 1861 Pg. 923

EXISTING SAN MH
TF ELEV 35.36
INV 27.4
INV 30.31 DROP

SAN MH #27
TF ELEV 37.56
WV 26.58
INV 26.50

SAN MH #26
TF ELEV 31.72
INV 26.58
INV 26.50

SAN MH #25
TF ELEV 32.37
INV 27.05
INV 26.95

SAN MH #56
TF ELEV 45.80
INV 37.3 (W)
INV 37.2 (E)

DMH #207
DMH #202

CB #227
CB #228
CB #229

Sawmill Brook

Concrete Block Retaining Wall

Grass
Gravel
Concrete Pavement

GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

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Feb 18, 2021 - 5:40pm C:\Users\ac.GYJOBS20\1 IA\2001507\DWG\AL\2001507701.dwg
Layout: ALT CMDS_50*12

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LAND OF

FEDEX GROUND PACKAGE SYSTEM, INC.

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Surveyed	AC/SB/JW
Drawn	STAFF
Reviewed	-
Scale	1"=50'
Project No.	2001507
Date	11/18/2020

CAD File: AL200150701

Title

ALTA/NSPS
LAND TITLE
SURVEY

Sheet No. 3 Of 12

AL-1

Xref (s) - XY-I-4C3115-Contours-2018-IAV / XY-I-4C3115-Contours-Soil-Parking 2018-IAV / XY2001507(1 - 8)2001507701

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LEGEND

Property Line	Utility Pole
Easement Line	Utility Pole w/ Light
Setback Line	Guy Wire
Edge of Water	Guy Pole
Limit of Wetlands	Light Pole
Treeline	Flood Light
Brushline	GV Gas Valve
50 Major Contour	CB Catch Basin
Minor Contour	MH Manhole
50 Major Contour (Unimproved Area)	Span Pole
Minor Contour (Unimproved Area)	Fire Hydrant
Retaining Wall	WV Water Valve
Guide Rail	Sign
X Fence X	Bollard
E Underground Electric Line E	Shrub
G Gas Line G	Deciduous Tree
S Sanitary Sewer S	Coniferous Tree
Storm Sewer	EOI End of Subsurface Geophysical Information
W Water Line W	

UTILITY QUALITY LEVELS

- MH(R) — E — E — E — E — Quality Level D
- MH — E — E — E — E — Quality Level C
- MH — E — E — E — E — Quality Level B (Point of Quality Level B Designation)
- MH — E — E — E — E — Quality Level A (Point of Quality Level A Designation)

GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

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LAND OF
FEDEX GROUND PACKAGE SYSTEM, INC.
49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.:

Surveyed	AC/SB/JW
Drawn	STAFF
Reviewed	
Scale	1"=50'
Project No.	2001507
Date	11/18/2020
CAD File:	AL200150701

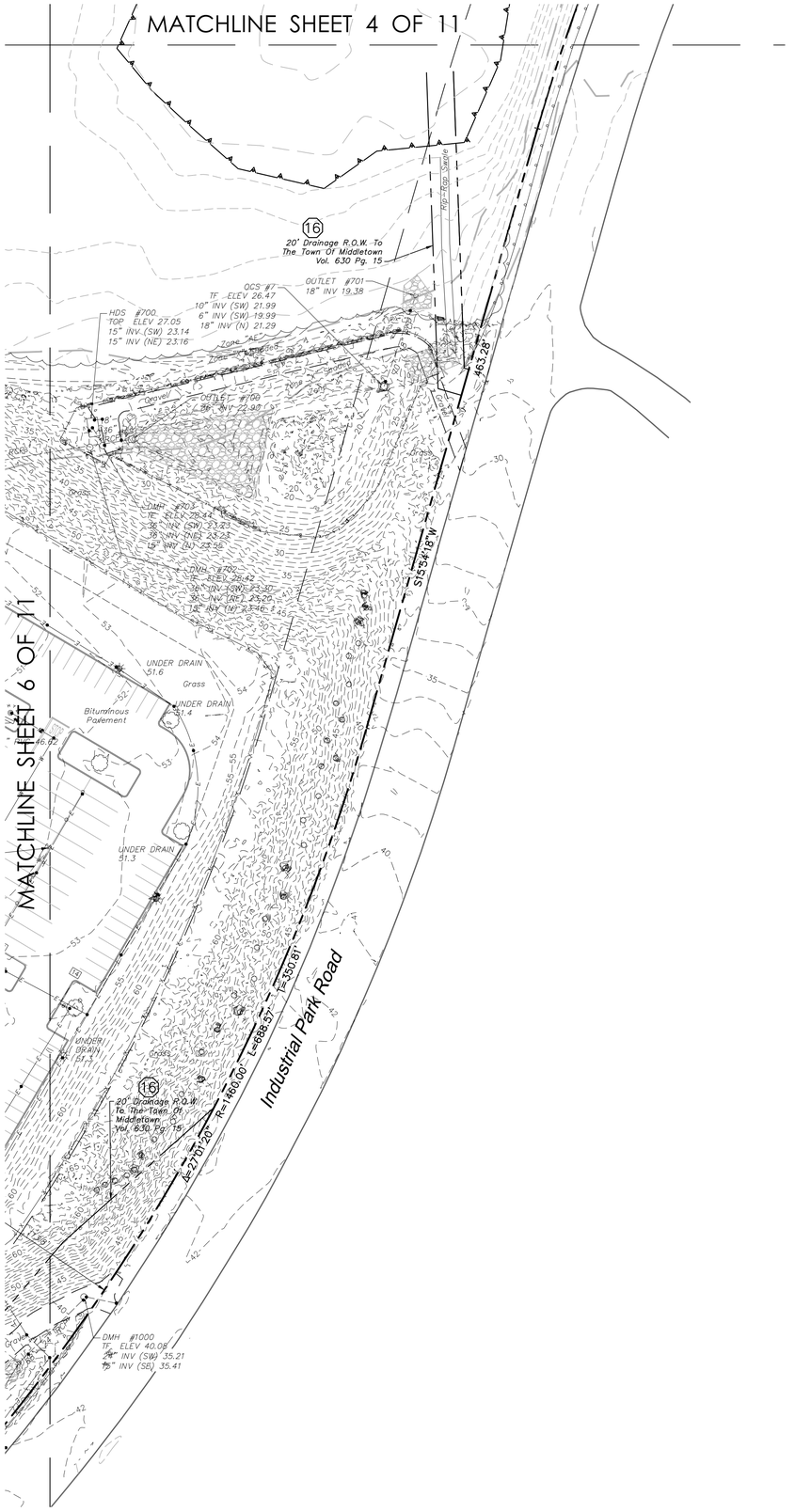
Title
ALTA/NSPS
LAND TITLE
SURVEY

Sheet No. 4 Of 12

AL-1

Xref (s): - XY-I-4C5115-Contours-Sat-Parking 2018-UAV : XY-I-4C5115-Contours2018-UAV : XY2001507I1 : BD200150701

Feb 18, 2021 - 2:45pm C:\Users\ca CS_DB\2001\1-A\2001507\DWG\AL200150701.dwg
Layout: AL-1 24x36 ANSI D



LEGEND

Property Line	Utility Pole
Easement Line	Utility Pole w/ Light
Setback Line	Guy Wire
Edge of Water	Guy Pole
Limit of Wetlands	Light Pole
Treeline	Flood Light
Brushline	GV Gas Valve
50 Major Contour	CB Catch Basin
Minor Contour	MH Manhole
50 Major Contour (Unimproved Area)	Span Pole
Minor Contour (Unimproved Area)	Fire Hydrant
Retaining Wall	WV Water Valve
Guide Rail	Sign
Fence	Bollard
Underground Electric Line	Shrub
Gas Line	Deciduous Tree
Sanitary Sewer	
Storm Sewer	Coniferous Tree
Water Line	EOI End of Subsurface Geophysical Information

UTILITY QUALITY LEVELS

- MH(R) — Quality Level D
- MH — Quality Level C
- MH — Quality Level B (Point of Quality Level B Designation)
- MH — Quality Level A (Point of Quality Level A Designation)

GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying

BL Companies

355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

LAND OF
FEDEX GROUND PACKAGE SYSTEM, INC.
49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

Surveyed	AC/SB/JW
Drawn	STAFF
Reviewed	-
Scale	1"=50'
Project No.	2001507
Date	11/18/2020
CAD File:	AL200150701

Title
ALTA/NSPS
LAND TITLE
SURVEY

Sheet No. 5 Of 12

AL-1

Feb 18, 2021 5:40pm C:\Heureux-G\...\D8520\1.4\2001507\DWG\AL200150701.dwg
Layout: AL-1 24x36 SHT2

Xref (s) : XY1-4C5115-Contours-2018-UAV : XY2001507-Contours-Sat-Parking 2018-UAV : XY2001507 : BD200150701

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MATCHLINE SHEET 3 OF 11

MATCHLINE SHEET 7 OF 11

MATCHLINE SHEET 5 OF 11

MATCHLINE SHEET 9 OF 11

LEGEND

- Property Line
- Easement Line
- Setback Line
- Edge of Water
- Limit of Wetlands
- Treeline
- Brushline
- Major Contour
- Minor Contour
- Major Contour (Unimproved Area)
- Minor Contour (Unimproved Area)
- Retaining Wall
- Guide Rail
- Fence
- Underground Electric Line
- Gas Line
- Sanitary Sewer
- Storm Sewer
- Water Line
- Utility Pole
- Utility Pole w/ Light
- Guy Wire
- Guy Pole
- Light Pole
- Flood Light
- Gas Valve
- Catch Basin
- Manhole
- Span Pole
- Fire Hydrant
- Water Valve
- Sign
- Bollard
- Shrub
- Deciduous Tree
- Coniferous Tree
- End of Subsurface Geophysical Information

UTILITY QUALITY LEVELS

- Quality Level D
- Quality Level C
- Quality Level B
- Point of Quality Level B Designation
- Quality Level A
- Point of Quality Level A Designation

Sawmill Brook

Sawmill Brook

20' Sewer Easement To The Town Of Middletown And In Favor Of Lot 3 Vol. 1861 Pg. 923

16 20' Drainage R.O.W. To The Town Of Middletown Vol. 630 Pg. 15

GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

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LAND OF

FEDEX GROUND PACKAGE SYSTEM, INC.

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

No.	Date	Desc.
REVISIONS		

Surveyed	AC/SB/JW
Drawn	STAFF
Reviewed	
Scale	1"=50'
Project No.	2001507
Date	11/18/2020
CAD File:	AL200150701

Title

ALTA/NSPS LAND TITLE SURVEY

Sheet No. 6 Of 12

AL-1

Feb 18, 2021 3:45pm CUrieureux G:\JOBS\2015 Land\2001507\DWG\AL200150701.dwg
Layout: AL-1 ANSI D 24x36

Xref Up: - XY-14x36115-Contours-2018-LiDAR - XY-14x36115-Contours-Soil-Parking 2018-LiDAR - XY2001507-01 - BD2001507-01

MATCHLINE SHEET 2 OF 11

MATCHLINE SHEET 6 OF 11

MATCHLINE SHEET 8 OF 11

Middle Street

Limits Of Former 1152 Middle Street

Δ=2°14'39"
R=11489.16'
L=450.00'
CHD=N1°21'16"E
449.97'

N13°17'35"E
16.10'

N1°17'36"E
425.02'

Δ=15°27'31"
R=1402.40'
L=378.37'
CHD=N5°33'51"E
377.23'

95' Gas Transmission Easement
Vol. 244 pg. 574
Vol. 245 pg. 161
Vol. 334 pg. 706
Vol. 336 pg. 327
Vol. 336 pg. 229
Vol. 983 pg. 265

95' Gas Transmission Easement
Vol., 245 pg. 440
Vol. 358 pg. 20
Vol. 979 pg. 722

Boundary Line Agreement
Vol. 603 Pg. 275

Yankee Gas Easement
Bk. 1928 Pg. 1009

Yankee Gas Easement

Distribution Center Building

GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

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Feb 18, 2021 5:40pm Clifeuvreux G:_PJ\8520\1.IA\8520\1.IA\8520\1.IA\8520\DWG\ALA\2001507\ALA2001507(1).dwg
Layout: ALT SURVEY

Xref (s) - XY=\4C3115-Contours-2018-UAV-XY=\4C3115-Contours-2018-UAV-XY=\4C3115-Contours-Soil-Parking 2018-UAV-XY=2001507(1) - 8520001507(1)

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LAND OF

FEDEX GROUND PACKAGE SYSTEM, INC.

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Surveyed	AC/SB/JW
Drawn	STAFF
Reviewed	-
Scale	1"=50'
Project No.	2001507
Date	11/18/2020
CAD File:	AL200150701

Title

ALTA/NSPS
LAND TITLE
SURVEY

Sheet No. 7 Of 12

AL-1

MATCHLINE SHEET 7 OF 11

MATCHLINE SHEET 9 OF 11

MATCHLINE SHEET 11 OF 11

Map 5 Lot 47
N/F
FedEx Ground Package System, Inc.
Vol. 1865 Pg. 880
#49 Fedex Drive

Area=8,922,649± S.F.
Or 204.84± Acres

Distribution Center Building

Map 5 Lot 3
N/F
AETNA Life Insurance Company
Vol. 630 Pg. 20
#930 Middle Street

Middle Street

GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

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LAND OF
FEDEX GROUND PACKAGE SYSTEM, INC.
49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

No.	Date	REVISIONS Desc.

Surveyed	AC/SB/JW
Drawn	STAFF
Reviewed	-
Scale	1"=50'
Project No.	2001507
Date	11/18/2020
CAD File:	AL200150701

Title

ALTA/NSPS
LAND TITLE
SURVEY

Sheet No. 8 Of 12

AL-1

Feb 18, 2021, 3:40pm CLiebeuxe G:\JOBS\20\1A\2001507\LDWG\ALS\2001507 01.dwg
Layout: ALT 24x36 50-1-2

Xref (S): - XY=1-AC\2115-Contours-2018-UAV - XY=1-AC\2115-Contours-Soil-Parking 2018-UAV - XY=2001507(1) - 8520001507(1)

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MATCHLINE SHEET 6 OF 11

MATCHLINE SHEET 8 OF 11

MATCHLINE SHEET 10 OF 11

SAN MH #29
TF ELEV 63.54
6" INV 53.64
6" INV 53.70

Concrete Block Retaining Wall

Bituminous Pavement

CB #350

CB #351

CB #344

CB #343

CB #342

CB #346

CB #341

CB #345

CB #348

CB #349

CB #347

CB #352

CB #353

CB #354

CB #355

CB #356

CB #357

CB #358

CB #359

CB #360

CB #361

CB #362

CB #363

CB #364

CB #365

CB #366

CB #367

CB #368

CB #369

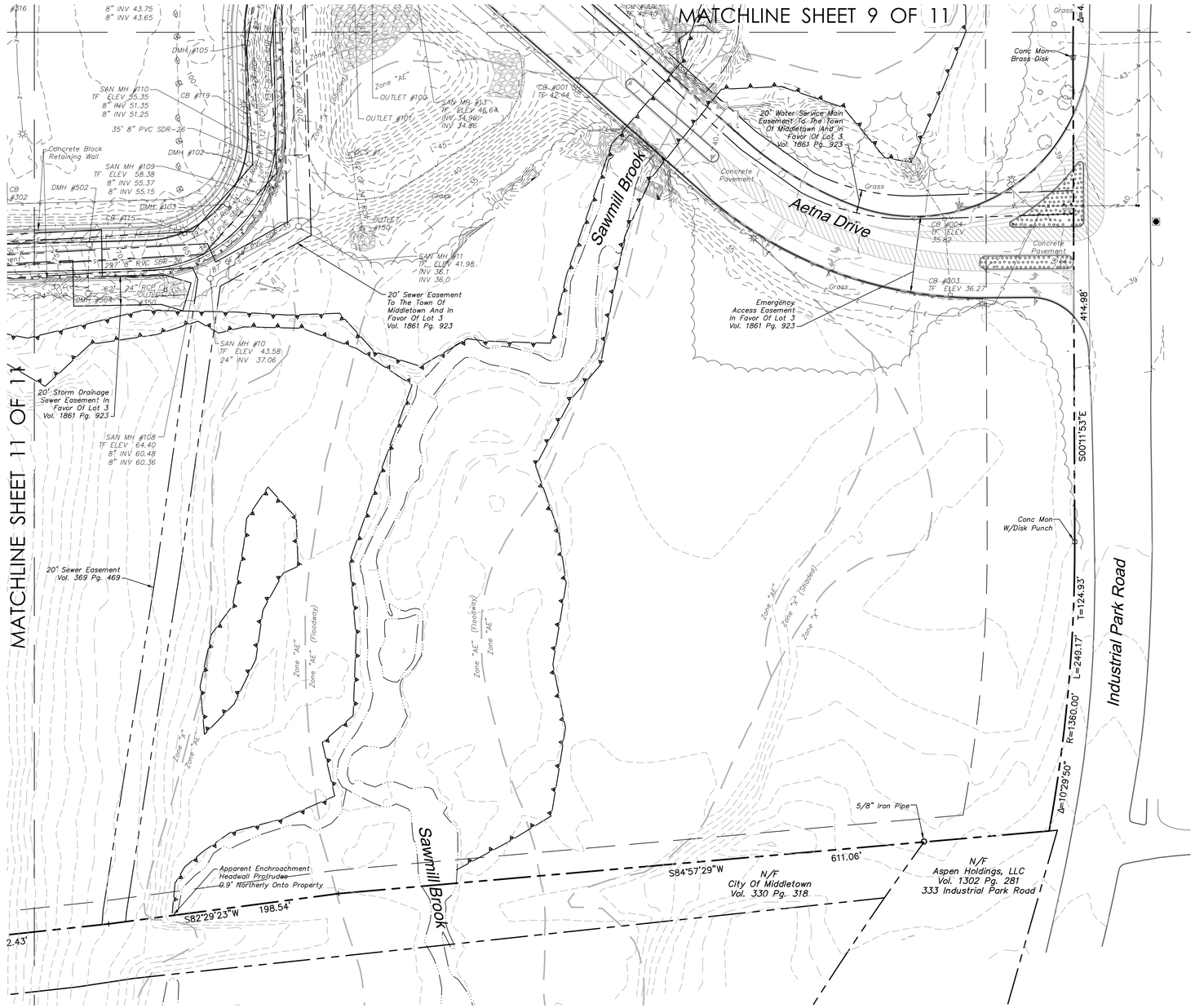
CB #370

CB #371

CB

MATCHLINE SHEET 9 OF 11

MATCHLINE SHEET 11 OF 11



LEGEND

- Property Line
- Easement Line
- Setback Line
- Edge of Water
- Limit of Wetlands
- Treeline
- Brushline
- Major Contour
- Minor Contour
- Major Contour (Unimproved Area)
- Minor Contour (Unimproved Area)
- Retaining Wall
- Guide Rail
- Fence
- Underground Electric Line
- Gas Line
- Sanitary Sewer
- Storm Sewer
- Water Line
- Utility Pole
- Utility Pole w/ Light
- Guy Wire
- Guy Pole
- Light Pole
- Flood Light
- Gas Valve
- Catch Basin
- Manhole
- Span Pole
- Fire Hydrant
- Water Valve
- Sign
- Bollard
- Shrub
- Deciduous Tree
- Coniferous Tree
- End of Subsurface Geophysical Information

UTILITY QUALITY LEVELS

- Quality Level D
- Quality Level C
- Quality Level B — Point of Quality Level B Designation
- Quality Level A — Point of Quality Level A Designation

GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

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LAND OF
FEDEX GROUND PACKAGE SYSTEM, INC.
49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Surveyed	AC/SB/JW
Drawn	STAFF
Reviewed	-
Scale	1"=50'
Project No.	2001507
Date	11/18/2020
CAD File:	AL200150701

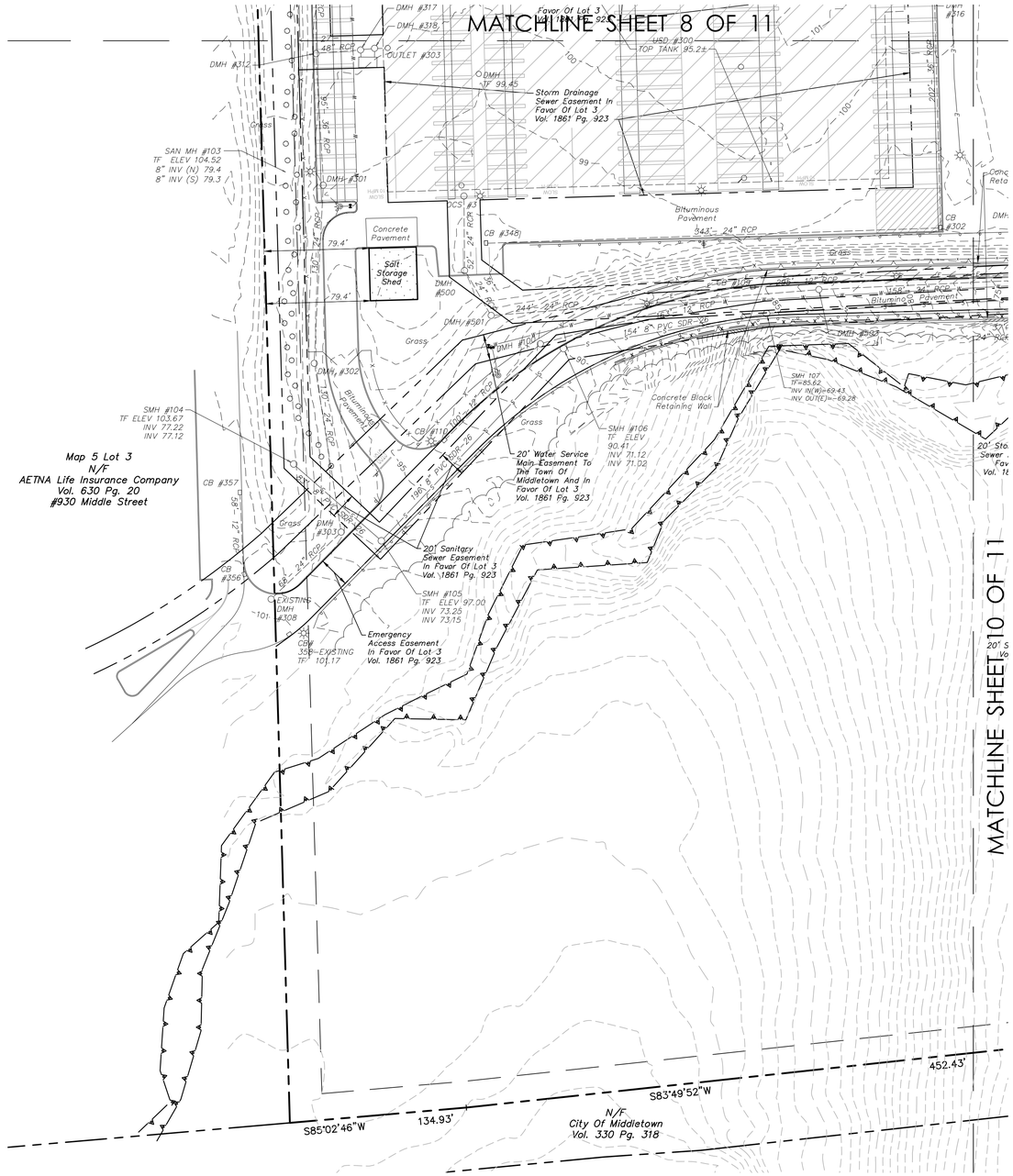
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ALTA/NSPS
LAND TITLE
SURVEY

Sheet No. 10 Of 12

AL-1

Feb 18, 2021 5:40pm C:\Heureux G\...\D8520\14\200150701\DWG\AL200150701.dwg
Layout: AL-1 ANSI D 00212

Xref (s): ...XY-14C5115-Contours-2018-UAV...XY200150701...BD200150701



LEGEND

Property Line	Utility Pole
Easement Line	Utility Pole w/ Light
Setback Line	Guy Wire
Edge of Water	Guy Pole
Limit of Wetlands	Light Pole
Treeline	Flood Light
Brushline	Gas Valve
Major Contour	Catch Basin
Minor Contour	Manhole
Major Contour (Unimproved Area)	Span Pole
Minor Contour (Unimproved Area)	Fire Hydrant
Retaining Wall	Water Valve
Guide Rail	Sign
Fence	Bollard
Underground Electric Line	Shrub
Gas Line	Deciduous Tree
Sanitary Sewer	
Storm Sewer	Coniferous Tree
Water Line	End of Subsurface Geophysical Information

UTILITY QUALITY LEVELS

- Quality Level D
- Quality Level C
- Quality Level B — Point of Quality Level B Designation
- Quality Level A — Point of Quality Level A Designation

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LAND OF

FEDEX GROUND PACKAGE SYSTEM, INC.

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS No.	Date	Desc.

Surveyed	AS/SS/SW
Drawn	STAFF
Reviewed	-
Scale	1"=50'
Project No.	[illegible]
Date	04/25/2018

CAD File: AL200150701

Title

ALTA/NSPS
LAND TITLE
SURVEY

Sheet No. 11 Of 12

AL-1

Feb 18, 2021 5:40pm C:\Heureux-G\...\AL200150701.dwg
Layout: ALT 24X36 1:1#12

Xref (s) : XY-14CS115-Contours-2018-UAV ; XY-14CS115-Contours-Soil-Parking 2018-UAV ; XY200150701 ; BD200150701

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STRUCTURE	TOP OF FRAME	INVERTS
CB #410	143.75	18" E 121.30
		18 " W 121.40
DMH #406	123.77	18" W 110.70
		18" E 110.60
DMH #409	102.94	18" W 99.00
		18" N 99.00
		18" E 98.00
CB #355	102.53	12" S 99.15
DMH #401	100.56	18" W 96.80
		18" S 96.60
CB #300	99.89	15" E 95.96
DMH #305	101.10	60" N 88.65
		24" E 88.89
		60" S 88.98
DMH #306	101.06	48" N 89.10
		15" W 95.10
		60" S 89.04
OUTLET #310	101.05	
DMH #311	106.66	15" E 96.10
DMH #310	100.09	15" W 95.90
		15" S 95.80
DMH #312	100.63	48" E 90.20
		15" N 94.80
		36" S 90.22
DMH #317	100.39	48" W 90.10
		18" N 89.85
		48" E 89.73
DMH #318	100.28	48" W 89.66
		18" S 89.67
		48" E 89.51
OUTLET #303		48" W 89.50
DMH #301	99.26	24" N 90.80
		24" S 92.20
DMH #302	99.42	24" S 92.37
		24" N 92.17
DMH #303	98.48	24" W 93.56
		24" N 93.49
EXISTING DMH #308	100.68	24" NE 94.30
EXISTING CB #358	101.17	
CB #356	100.38	12" N 96.64
CB #357	99.56	12" S 97.07
CB #110	93.74	12" N 89.75
DMH #100	91.30	12" W 87.60
		12" E 87.50
CB #109	95.37	24" W 81.60
		24" E 80.00
CB #115	64.45	12" W 60.60
		12" E 58.10
DMH #103	59.71	12" SW 56.00
		12" NE 53.45
DMH #102	56.26	12" S 52.20
		24" N 49.90
CB #119	51.29	24" S 48.60
		24" N 47.15
DMH #105	48.70	15" S 44.76
		15" N 44.66
DMH #104	46.98	15" S 42.35
		15" N 42.25
HDS #101`	45.40	18" E 40.50
		18" E 40.50
CB #122	46.29	15" W 40.73
		18" S 40.60
DMH #110	46.50	18" N 40.58
		18" S 40.55
		12" W 40.52
DMH #111	46.30	18" N 40.35
		18" S 40.48
		12" W 40.49
OUTLET #101		18" 39.93
OCS #1	44.02	24" 37.95
OUTLET #150		24" 33.95
OCS #3	98.40	48" N 85.76
		24" S 85.67
DMH #500	98.12	24" N 83.64
		24" S 83.80
DMH #501	93.13	24" NW 81.20
		24" E 81.10
DMH #503	83.77	24" E 78.80
		24" W 66.60
DMH #502	72.59	24" W 50.10
		24" S 48.80
DMH #504	52.82	24" N 48.62
		24" E 45.29
OUTLET #350		24" 43.98
CB #348	97.92	24" E 93.43
CB #302	98.16	24" W 91.75
		36" N 91.70
DMH #309	101.20	24" E 91.80
		36" W 90.49
		36" S 90.51
CB #354	97.27	24" W 92.90
DMH #315	100.84	36" W 90.59
		18" N 90.63
		36" E 90.50
HDS #302	100.95	18" SW 90.50
		18" SE 90.61
DMH #316	100.90	36" E 90.43
		36" W 90.38
COVER	95.92	
OUTLET #302		36" E 90.38
USD #300	95.2 +-	
DMH	99.45	
DMH #304	101.11	60" N 88.93
		24" E 88.85
		60" S 88.72
OUTLET #301		60" N 88.45
HDS #300	101.15	24" N 88.90
		24" S 88.80
CB #350	99.52	48" N 89.87
		48" W 89.82
		24" S 92.09
CB #307	99.50	24" W 92.99
CB #308	100.79	36" N 93.41
		36" W 90.41
		48" S 90.15
CB #309	101.26	12" W 93.90
		36" N 93.67
		36" S 93.60
CB #332	101.21	12" E 97.90
CB #333	101.21	12" W 97.10
		36" N 94.11
		36" S 94.07
CB #334	101.25	24" E 98.17
CB #338	101.29	12" W 97.17
		36" N 94.55
		36" S 94.40
CB #335	101.21	12" E 97.92
CB #339	101.23	12" W 97.19
		36" N 95.01
		36" S 94.95
CB #340	101.20	12" E 97.85
CB #336	101.45	24" W 95.70
		36" S 95.57
CB #337	101.42	24" E 96.07
OUTLET #301		48" N 89.32
COVER	99.89	
DMH #314	99.93	48" N 89.47
		24" W 89.29
		48" S 89.25
HDS #302	99.96	TOPTANK 94.07
		24" N 89.66
		24" S 89.38
DMH #313	99.64	48" N 93.92
		24" W 89.66
		48" S 89.83
CB #352	99.50	48" N 93.92
		15" E 93.38
		48" S 89.83
CB #353	100.79	15" E 95.20
		15" W 95.05
CB #301	101.15	15" W 97.05
CB #303	101.09	48" N 93.92
		15" E 93.38
		48" S 89.83
CB #304	101.52	36" N 93.58
		36" S 0.00
CB #305	101.51	36" N 94.13
		36" S 94.02
CB #326	101.56	36" N 94.34
		36" S 94.23
CB #327	101.47	36" N 94.65
		36" S 94.54
CB #328	101.53	36" N 94.91
		36" S 94.83
CB #329	101.44	36" N 0.00
		36" S 95.22
CB #330	101.50	36" N 94.71
		36" S 94.51
CB #331	101.45	36" S 95.90
CB #341	98.59	36" N 93.42
		36" W 93.20
CB #346	100.09	36" N 94.04
		36" S 94.06
CB #342	101.09	36" N 94.81
		36" S 94.25
CB #343	101.08	36" N 95.47
		36" S 95.28
CB #344	100.79	36" N 95.84
		36" S 95.77
CB #351	101.94	36" S 96.94
OUTLET #100		36" 38.10
DMH #107	47.22	36" N 42.16
		36" S 39.03
DMH #109	47.72	36" N 42.72
		36" S 42.59
		15" W 42.70
DMH #108	47.72	36" N 44.39
		36" S 42.77
		15" W 42.86
DMH #110	46.50	18" N 40.58
		18" S 40.55
		18" W 40.52
HDS #100	48.35	TOPTANK 47.50
		15" E 43.16
		15" E 43.18
CB #124	48.06	36" N 43.10
		36" S 42.95
		15" W 44.50
CB #125	48.08	12" W 45.26
DMH #106	49.94	36" N 45.31
		36" S 43.50
CB #126	52.73	24" N 48.14
		36" S 48.04
CB #127	52.68	12" W 49.66
CB #128	58.88	24" N 55.13
		24" S 54.99
		12" E 0.00
CB #129	59.72	12" W 56.65
CB #130	61.43	24" N 57.48
		24" S 57.03
		12" E 0.00
CB #131	62.79	12" 59.82
CB #132	65.20	24" N 61.29
		24" S 61.08
CB #133	65.06	15" W 62.15
CB #134	68.88	18" N 63.38
		24" E 63.38
		24" S 63.30
CB #135	67.89	24" W 64.18
CB #137	71.60	12" E 67.14
		15" N 67.17
		18" S 67.04
CB #136	70.76	12" W 67.79
CB #102	75.76	12" E 72.90
		15" S 72.60
CB #101	76.34	12" W 73.10
CB #253	104.40	18" E 100.20
CB #254	103.34	18" W 98.90
		24" N 98.80
DBL CB #251	104.14	15" E 100.33
DBL CB #252	103.24	15" W 98.65
		24" S 98.50
		24" E 93.80
DBL CB #255	97.92	24" W 93.40
		24" S 89.38
CB #257	93.32	15" E 88.50
		24" N 88.50
		24" E 84.10
CB #256	95.68	15" E 88.80
DMH #252	87.14	24" E 78.10
		24" W 76.80
CB #258	77.36	24" E 72.50
		24" W 72.40
DMH #253	77.85	24" SW 72.10
		24" SE 69.91
		18" S 70.09
DMH #254	77.49	24" SW 69.90
		24" SE 69.80
		18" S 69.91
HDS #201	78.24	TOPTANK 76.60
		18" NW 71.95
		18" NE 71.85
DMH #255	73.92	24" NW 68.80
		24" SE 51.94
DMH #215	72.28	48" SW 59.85
		48" NE 50.77
		24" N 51.12
DMH #214	74.64	48" SW 59.62
		48" NE 59.51
		24" N 59.92
DMH #213	78.41	48" SW 59.62
		48" NE 59.67
		24" N 59.96
HDS #200	SW 76.32	TOPTANK 65.00
		TOPVAULT 64.98
	NE 75.47	18" SW 59.98
		18" SE 59.93
DMH #203	78.76	48" NE 60.26
DMH #207	45.12	60" W 35.39
		60" N 34.41
DMH #208	39.91	60" S 30.87
		60" N 30.34
CB #201	101.86	24" N 96.30
CB #212	100.60	24" SW 94.09
		4" NW 96.94
		4" NE 96.67
		36" E 93.96
CB #211	98.91	36" S 91.20
		36" W 91.15
		36" E 91.00
CB #223	103.23	15" E 98.50
CB #224	101.92	15" W 96.48
		24" NE 96.30
CB #213	100.98	36" NE 93.92
		24" SW 94.01
CB #210	100.82	36"SW 91.96
		36" N 91.87
CB #234	101.94	24" NE 95.95
CB #209	100.94	24" SW 95.40
		24" NE 93.60
CB #205	100.68	24" 91.70
		36" 91.60
CB #208	99.58	36" W 88.30
		36" E 88.15
DMH #200	99.61	36"S 90.50
		36" W 87.80
		36" N 87.70
CB #207	103.15	8" S 99.00
DMH #206	103.84	18" N 98.81
		18: S 98.44
		24" E 98.39
DMH #220	104.41	24" W 96.29
		24" E 98.27
DMH #224	104.43	24" W 94.28
		24" E 98.59
		24" N 93.59
CB # 235	101.90	24" S 93.15
		24" NE 92.95
CB #206	101.10	24" SW 90.60
		24" NE 90.45
DMH #218	100.81	24" SW 90.95
		24" SE 88.60
CB #202	98.89	36" S 87.28
		36" N 87.18
CB #242	98.07	36" S 87.00
		42" W 84.40
		42" E 84.30
		36" N 84.20
CB #204	95.89	36" S 91.80
DMH # 209	98.53	60" N 82.10
		42" E 87.30
		42" W 83.20
DMH # 225	104.43	24" W 100.04
DMH #221	104.39	24" E 99.81
DMH #222	104.41	24" W 98.71
		24" E 96.84
		24" N 96.38
DMH #223	104.39	24" W 99.95
		8" E 100.20
CB # 236	102.06	24" S 95.40
		24" NE 95.30
CB # 203	101.36	24" SW 92.95
		24" NW 92.80
DMH #204	96.47	60" S 82.29
		42" E 73.28
		60" N 71.95
DMH #201	96.65	60" S 70.46
CB #200	94.10	42" W 74.47
		36" E 74.69
		15" N 87.83
CB #214	93.91	15" S 88.46
CB #225	87.87	18" N 75.80
		15" E 75.62
		36" W 75.50
CB #227	88.14	18" S 84.00
DMH #202	83.60	15" E 76.45
		15"W 76.35
CB #228	81.16	12" S 77.20
		12" W 77.10
CB #229	81.16	12" S 77.20
CB #237	102.07	18" NE 98.05
CB #218	101.36	18" SW 95.90
		18" E 95.10
		36" NW 94.89
CB #240	101.95	18" NW 98.03
CB #233	101.71	15" W 98.10
CB #215	101.39	15" E 96.30
		18" SE 95.80
		18" W 95.70
CB #205	97.81	36" S 91.03
		42" W 88.92
		24" N 89.02
		24" E 89.91
CB #220	97.50	24" N 89.20
		24" S 89.10
CB #219	92.43	24" S 89.45
DMH #210	98.49	24" E 91.65
		24" NE 91.55
		24" W 91.40
CB # 222	97.42	24" SE 92.65
		24 E 92.75
		12" SW 94.60
CB #221	97.50	24" W 93.45
CB #241	98.30	12" NW 95.40
CB #211	97.52	18" NE 92.25
		18" S 92.10
CB #226	96.74	18" NE 93.10
CB #401	138.45	12" S 134.53
DMH #400	136.97	24" S 130.76
		12" N 133.58
		24" E 130.88
CB #402	136.86	24"W 130.64
		24" E 130.54
DMH # 413	136.33	36" N 129.42
		36" S 129.30
		15" W 129.40
DMH #414	135.96	36" N 129.26
		15" W 129.34
CB # 409	135.96	36" S 130.10
		18" N 130.10
		24" W 129.90
CB #403	135.11	18" S 130.63
CB #413	135.46	24" W 131.75
CB #404	135.41	24" N 131.36
CB #406	137.10	15" N 133.60
		12" S 133.70
CB # 408	141.06	12" N 138.16
OUTLET #4	135.77	24" SE 124.60
DMH #411	135.47	15" N 124.70
		15" S 124.80
DMH #410	141.51	15" N 123.32
		15" S 123.21
DMH #408	142.83	12" N 121.80
		12" SW 131.20
		18" E 121.70
DMH #412	140.73	12" W 131.78
		12" NE 131.63
CB #412	136.22	12" N 132.80
CB #411	136.32	12" N 133.00
CB #403	137.13	24" N 130.50
		24" S 130.60
CB #405	135.23	18" S 131.30
		24" N 131.20
CB #414	137.95	18" N 134.45
		15" S 134.50
CB #407	139.70	15" N 136.50
CB #325	100.27	18" S 97.05
		4" W 98.20
CB #347	100.38	18" N 96.45
		18" S 96.35
		4" W 97.60
CB #324	100.39	18" N 95.60
		18" S 95.50
		4" W 98.10
CB #315	100.33	24" N 94.95
		24" S 94.85
CB #314	100.36	24" N 94.05
		36" E 93.90
CB #313	101.44	36" N 92.33
		36" W 92.30
		36" E 892.18
CB #349	101.02	36" N 93.16
		36" S 93.04
CB #312	101.64	12" E 97.58
		36" N 94.11
		36" S 94.07
CB #311	101.55	12" W 98.19
CB #310	101.64	12" E 97.38
		36" N 94.65
		36" S 94.55
CB #345	101.57	12" W 98.08
CB #317	101.51	12" E 97.51
		36" N 95.48
		36" S 95.35
CB #316	101.56	12" W 98.08
CB #318	101.56	12" W 98.13
CB #319	101.61	12" E 97.49
CB #321	101.64	12" E 97.44
		24" N 96.76
		24" S 96.69
CB #320	101.60	12" W 98.13
CB #322	101.59	12" E 97.79
		24" N 97.38
CB #323	101.59	12" W 98.20

Architecture
Engineering
Environmental
Land Surveying

BL Companies

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LAND OF

FEDEX GROUND PACKAGE SYSTEM, INC.

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Surveyed	AC/SB/JW
Drawn	STAFF
Reviewed	-
Scale	NONE
Project No.	2001507
Date	11/18/2020
CAD File:	AL200150701

Title

ALTA/NSPS
LAND TITLE
SURVEY

Sheet No. 12 Of 12

AL-1

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Layout: ALT ANSI 22x17

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SITE WORK GENERAL NOTES

1. THESE PLANS ARE FOR PERMITTING PURPOSES ONLY AND ARE NOT FOR CONSTRUCTION.

2. ALL CONSTRUCTION SHALL COMPLY WITH THE PROJECT SPECIFICATION MANUAL;FEDEX PACKAGE SYSTEM INC. CORPORATION STANDARDS, MUNICIPAL STANDARDS AND SPECIFICATIONS, CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS, 2010 ADA STANDARDS, AND STATE BUILDING CODE IN THE ABOVE REFERENCED INCREASING HIERARCHY. IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.

3. REFER TO OTHER PLANS BY OTHER DISCIPLINES, DETAILS AND PROJECT MANUAL FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL VERIFY ALL SITE AND BUILDING CONDITIONS IN THE FIELD AND CONTACT THE CIVIL ENGINEER AND ARCHITECT IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS, SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING. ANY CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONFIRMED WITH THE OWNER'S CONSTRUCTION MANAGER PRIOR TO BIDDING.

4. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER AND THE LOCAL MUNICIPALITIES. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.

5. THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR.

6. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORD DRAWINGS AND ELECTRONIC CAD FILES OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES AND STORMWATER SYSTEM) TO THE OWNER AT THE END OF CONSTRUCTION.

7. THE ARCHITECT OR ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ARCHITECT AND ENGINEER HAVE NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OR TO SUPERVISE SAFETY AND DOES NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.

8. THE CONTRACTOR SHALL COMPLY WITH CFR 29 PART 1926 FOR EXCAVATION, TRENCHING, AND TRENCH PROTECTION REQUIREMENTS.

9. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL OR COUNTY OR STATE RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UNDERGROUND AND OVERHEAD UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT CT CALL BEFORE YOU DIG (CBYD) 72 HOURS BEFORE COMMENCEMENT OF WORK AT (800) 922-4455 OR AT 811 AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS. THE CONTRACTOR SHALL EMPLOY THE USE OF A UTILITY LOCATING COMPANY TO PROVIDE SUBSURFACE UTILITY ENGINEERING CONSISTING OF DESIGNATING UTILITIES AND STORM PIPING ON PRIVATE PROPERTY WITHIN THE CONTRACT LIMIT AND CONSISTING OF DESIGNATING AND LOCATING WHERE PROPOSED UTILITIES AND STORM PIPING CROSS EXISTING UTILITIES AND STORM PIPING WITHIN THE CONTRACT LIMITS.

10. DO NOT SCALE DRAWINGS. DIMENSIONS GOVERN OVER SCALED DIMENSIONS.

11. IF PLANS AND OR SPECIFICATIONS ARE IN CONFLICT, THE MOST COSTLY SHALL APPLY.

12. ALL CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN COMPLETE DRAWING PLAN SETS FOR BIDDING AND CONSTRUCTION. PLAN SETS OR PLAN SET ELECTRONIC POSTINGS SHALL NOT BE DISASSEMBLED INTO PARTIAL PLAN SETS FOR USE BY CONTRACTORS AND SUBCONTRACTORS OF INDIVIDUAL TRADES. IT SHALL BE THE CONTRACTOR'S AND SUBCONTRACTOR'S RESPONSIBILITY TO OBTAIN COMPLETE PLAN SETS OR COMPLETE PLAN SET ELECTRONIC POSTINGS FOR USE IN BIDDING AND CONSTRUCTION.

13. ALL NOTES AND DIMENSIONS DESIGNATED "TYPICAL" APPLY TO ALL LIKE OR SIMILAR CONDITIONS THROUGHOUT THE PROJECT.

14. CONTRACTOR(S) TO TAKE AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE WORK AND BE RESPONSIBLE FOR COORDINATION OF SAME. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK.

15. BL COMPANIES WILL PREPARE FINAL CONSTRUCTION DOCUMENTS SUITABLE FOR BIDDING AND CONSTRUCTION. PROGRESS SETS OF THESE DOCUMENTS ARE NOT SUITABLE FOR THOSE PURPOSES. IF CLIENT ELECTS TO SOLICIT BIDS OR ENTER INTO CONSTRUCTION CONTRACTS UTILIZING CONSTRUCTION DOCUMENTS THAT ARE NOT YET FINAL, CONSULTANT SHALL NOT BE RESPONSIBLE FOR ANY COSTS OR DELAY ARISING AS A RESULT.

16. NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL APPROVAL OF THE FINAL PLANS IS GRANTED BY ALL GOVERNING AND REGULATORY AGENCIES.

17. THE OWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY ZONING PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT AND OBTAIN FROM MUNICIPAL SOURCES ALL CONSTRUCTION PERMITS, INCLUDING ANY STATE DOT PERMITS, SEWER AND WATER CONNECTION PERMITS, AND ROADWAY CONSTRUCTION PERMITS. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK EXCEPT CTDOT ENCROACHMENT PERMIT BOND.

18. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS AND MATERIALS PER PLANS AND SPECIFICATIONS TO THE OWNER AND CIVIL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.

19. THE CONTRACTOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION NOTES PROVIDED ON THE SEDIMENT AND EROSION CONTROL PLAN.

20. SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE CIVIL ENGINEER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.

21. ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURBS OR EDGE OF PAVING AS APPLICABLE UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE.

22. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF VEHICLES AND PEDESTRIANS CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES, TEMPORARY WALKWAYS, TRAFFIC CONTROLLERS AND UNIFORMED TRAFFIC OFFICERS AS REQUIRED OR AS ORDERED BY THE ENGINEER OR AS REQUIRED BY THE LOCAL GOVERNING AUTHORITIES OR AS REQUIRED BY PERMIT STIPULATIONS OR AS REQUIRED BY THE OWNER. CONTRACTOR SHALL MAINTAIN ALL TRAFFIC LANES AND PEDESTRIAN WALKWAYS FOR USE AT ALL TIMES UNLESS WRITTEN APPROVAL FROM THE APPROPRIATE GOVERNING AGENCY IS GRANTED.

23. TRAFFIC CONTROL SIGNAGE SHALL CONFORM TO THE STATE DOT STANDARD DETAIL SHEETS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. SIGNS SHALL BE INSTALLED PLUMB WITH THE EDGE OF THE SIGN 2' OFF THE FACE OF THE CURB, AND WITH 7' VERTICAL CLEARANCE UNLESS OTHERWISE DETAILED OR NOTED.

24. REFER TO DETAIL SHEETS FOR PAVEMENT, CURBING, AND SIDEWALK INFORMATION.

25. THE CONTRACT LIMIT IS THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE CONTRACT DRAWINGS.

26. THE CONTRACTOR SHALL SUBMIT A SHOP DRAWING OF THE PAVEMENT MARKING PAINT MIXTURE PRIOR TO STRIPING.

27. PAVEMENT MARKING KEY:

    4" SYDL 4' SOLID YELLOW DOUBLE LINE
    4" SYL 4" SOLID YELLOW LINE
    4" SWL 4" SOLID WHITE LINE
    12" SWSB 12" SOLID WHITE STOP BAR
    4" BWL 4" BROKEN WHITE LINE 10' STRIPE 30' SPACE

28. PARKING SPACES SHALL BE STRIPED WITH 4" SWL FOR CAR SPACES AND 4" SYL FOR TRAILER SPACES; HATCHED AREA SHALL BE STRIPED WITH 4" SWL AT A 45° ANGLE, 2' ON CENTER. HATCHING, SYMBOLS, AND STRIPING FOR HANDICAPPED SPACES SHALL BE PAINTED WHITE AND BLUE. OTHER MARKINGS SHALL BE PAINTED WHITE OR AS NOTED.

29. ALL PARKING SPACES AND HATCHED AREAS SHALL HAVE TWO COATS OF PAVEMENT MARKINGS APPLIED TO STRIPING.

30. PAVEMENT MARKINGS SHALL BE HOT APPLIED TYPE IN ACCORDANCE WITH STATE DOT SPECIFICATIONS, UNLESS WHERE EPOXY RESIN PAVEMENT MARKINGS ARE INDICATED.

31. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, DRAINAGE STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS, SWALE, PAVEMENT MARKINGS, OR SIGNAGE DISTURBED DURING DEMOLITION AND/OR CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE CIVIL ENGINEER, AND TO THE SATISFACTION OF THE OWNER, MUNICIPALITY, AND/OR STATE)

32. EXISTING BOUNDARY AND TOPOGRAPHY IS BASED ON DRAWING TITLED "LAND OF FEDEX GROUND PACKAGE SYSTEM INC. – 49 FEDEX DRIVE – MIDDLETOWN, CT". SCALE 1"=200', DATED 11/18/2020, BY BL COMPANIES INC.

33. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, CIVIL ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING PROCESS.

34. AN EROSION CONTROL BOND IS REQUIRED TO BE POSTED BY THE CONTRACTOR BEFORE THE START OF ANY ACTIVITY ON OR OFF SITE. THE AMOUNT OF THE EROSION CONTROL BOND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.

35. THE SITE IS CURRENTLY SERVICED BY PUBLIC WATER.

36. THE PROJECT PARCEL IS LOCATED PARTLY OR WHOLLY WITHIN A FEMA DESIGNATED FLOOD HAZARD AREA.

37. 12" SWSB (STOP BAR) AND 4" SYDL AND SWL PAVEMENT MARKINGS LOCATED IN DRIVEWAYS AND IN STATE HIGHWAY SHALL BE EPOXY RESIN TYPE ACCORDING TO CONNDOT SPECIFICATIONS.

38. FIRE LANES SHALL BE ESTABLISHED AND PROPERLY DESIGNATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FIRE DISTRICT FIRE MARSHAL.

39. THE CONTRACTOR SHALL REMOVE CONFLICTING PAVEMENT MARKINGS IN THE ROADWAY BY METHOD APPROVED BY THE AUTHORITY HAVING JURISDICTION OR DOT AS APPLICABLE FOR THE LOCATION OF THE WORK.

40. ALL ADA DESIGNATED PARKING STALLS, ACCESS AISLES AND PEDESTRIAN WALKWAYS SHALL CONFORM TO THE CURRENT VERSION OF THE AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN AND ANSI STANDARDS AND AS MAY BE SUPERCEDED BY THE STATE BUILDING CODE.

41. CONSTRUCTION OCCURRING ON THIS SITE SHALL COMPLY WITH NFPA 241 STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS, AND CHAPTER 16 OF NFPA 1 UNIFORM FIRE CODE.

42. CONTRACTOR SHALL SECURE ANY PERMITS, PAY ALL FEES AND PERFORM CLEARING AND GRUBBING AND DEBRIS REMOVAL PRIOR TO COMMENCEMENT OF GRADING OPERATIONS.

43. SEDIMENT AND EROSION CONTROLS AS SHOWN ON THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE INSTALLED BY THE DEMOLITION CONTRACTOR PRIOR TO START OF DEMOLITION AND CLEARING AND GRUBBING OPERATIONS.

44. REMOVE AND DISPOSE OF ANY SIDEWALKS, FENCES, STAIRS, WALLS, DEBRIS AND RUBBISH REQUIRING REMOVAL FROM THE WORK AREA IN AN APPROVED OFF SITE LANDFILL, BY AN APPROVED HAULER. HAULER SHALL COMPLY WITH ALL REGULATORY REQUIREMENTS.

45. THE CONTRACTOR SHALL SECURE ALL PERMITS FOR HIS DEMOLITION AND DISPOSAL OF HIS DEMOLITION MATERIAL TO BE REMOVED FROM THE SITE. THE CONTRACTOR SHALL POST BONDS AND PAY PERMIT FEES AS REQUIRED. BUILDING DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR PERMITS AND DISPOSAL OF ALL BUILDING DEMOLITION DEBRIS IN AN APPROVED OFF-SITE LANDFILL.

46. ASBESTOS OR HAZARDOUS MATERIAL, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIAL ABATEMENT CONTRACTOR.

47. THE CONTRACTOR SHALL PREPARE ALL MANIFEST DOCUMENTS AS REQUIRED PRIOR TO COMMENCEMENT OF DEMOLITION.

48. THE CONTRACTOR SHALL PROTECT ALL IRON PINS, MONUMENTS AND PROPERTY CORNERS DURING DEMOLITION AND CONSTRUCTION ACTIVITIES. ANY CONTRACTOR DISTURBED PINS, MONUMENTS, AND OR PROPERTY CORNERS, ETC. SHALL BE RESET BY A LICENSED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

49. THE DEMOLITION CONTRACTOR SHALL STABILIZE THE SITE AND KEEP EROSION CONTROL MEASURES IN PLACE UNTIL THE COMPLETION OF HIS WORK OR UNTIL THE COMMENCEMENT OF WORK BY THE SITE CONTRACTOR, WHICHEVER OCCURS FIRST, AS REQUIRED OR DEEMED NECESSARY BY THE ENGINEER OR OWNER'S REPRESENTATIVE. THE SITE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE MAINTENANCE OF EXISTING EROSION AND SEDIMENTATION CONTROLS AND FOR INSTALLATION OF ANY NEW SEDIMENT AND EROSION CONTROLS AS PER THE SEDIMENT AND EROSION CONTROL PLAN, AT THAT TIME.

50. THE CONTRACTOR SHALL PUMP OUT BUILDING FUEL AND WASTE OIL TANKS (IF ANY ARE ENCOUNTERED) AND REMOVE FUEL TO AN APPROVED DISPOSAL AREA BY A LICENSED WASTE OIL HANDLING CONTRACTOR IN STRICT ACCORDANCE WITH STATE REQUIREMENTS.

51. IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT.

52. THE CONTRACTOR IS RESPONSIBLE FOR SECURING A DEMOLITION PERMIT FROM THE CITY OF MIDDLETOWN BUILDING DEPARTMENT AND MUST FURNISH THE REQUIRED APPLICATION MATERIAL AND PAY ALL FEES.

53. THE CONTRACTOR SHALL REPAIR PAVEMENTS BY INSTALLING TEMPORARY AND PERMANENT PAVEMENTS IN PUBLIC RIGHTS OF WAYS AS REQUIRED BY LOCAL GOVERNING AUTHORITIES AND THE STATE AND MUNICIPALITY AND PER PERMIT REQUIREMENTS DUE TO DEMOLITION AND PIPE REMOVAL ACTIVITIES.

54. THE CONTRACTOR SHALL CUT AND REMOVE AT LUMINARE AND SIGN LOCATIONS ANY PROTRUDING CONDUITS TO 24" BELOW GRADE. THE CONTRACTOR SHALL REMOVE ALL CABLE AND CONDUCTORS FROM REMAINING LIGHTING AND SIGNING CONDUITS TO BE ABANDONED. ANY REMAINING LIGHTING TO REMAIN IN PLACE SHALL BE RECIRCUITED OR REWIRED AS NECESSARY TO REMAIN IN OPERATION.

55. NO WORK ON THIS SITE SHALL BE INITIATED BY THE CONTRACTOR UNTIL A PRE-CONSTRUCTION MEETING WITH OWNER AND THE CIVIL ENGINEER IS PERFORMED. THE CONTRACTOR SHOULD BE AWARE OF ANY SITE INFORMATION AVAILABLE SUCH AS GEOTECHNICAL AND ENVIRONMENTAL REPORTS. THE CONTRACTOR SHALL HAVE CALL BEFORE YOU DIG (CBYD) MARK OUTS OF EXISTING UTILITIES COMPLETED PRIOR TO MEETING.

56. THE CONTRACTOR SHALL ARRANGE FOR AND INSTALL TEMPORARY OR PERMANENT UTILITY CONNECTIONS WHERE INDICATED ON PLAN OR AS REQUIRED. MAINTAIN UTILITY SERVICES TO BUILDINGS OR TO SERVICES TO REMAIN. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDERS FOR INSTALLATION AND PAY UTILITY PROVIDER FEES.

57. THE CONTRACTOR SHALL NOT COMMENCE DEMOLITION OR UTILITY DISCONNECTIONS UNTIL AUTHORIZED TO DO SO BY THE OWNER.

58. THE CONTRACTOR OR DEMOLITION CONTRACTOR SHALL INSTALL TEMPORARY SHEETING OR SHORING AS NECESSARY TO PROTECT EXISTING AND NEW BUILDINGS, STRUCTURES AND UTILITIES DURING CONSTRUCTION AND DEMOLITION. SHEETING OR SHORING SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER, LICENSED IN THIS STATE AND EVIDENCE OF SUCH SUBMITTED TO THE OWNER PRIOR TO INSTALLATION.

59. NO SALVAGE SHALL BE PERMITTED UNLESS PAID TO THE OWNER AS A CREDIT.

60. ANY EXISTING POTABLE WELL AND ANY EXISTING SEPTIC TANKS/ABSORPTION AREAS SHALL BE ABANDONED AND REMOVED PER THE CTDPH AND HEALTH CODE REQUIREMENTS.

61. THE EXISTING BUILDING AND PARKING AREA AND DRIVEWAYS SHALL REMAIN OPEN FOR NORMAL BUSINESS OPERATIONS UNTIL COMPLETION AND OCCUPATION OF THE NEW BUILDING.

62. THE CONTRACTOR SHALL PRESERVE EXISTING VEGETATION WHERE POSSIBLE AND/OR AS NOTED ON DRAWINGS. REFER TO SEDIMENT AND EROSION CONTROL PLAN FOR LIMIT OF DISTURBANCE AND EROSION CONTROL NOTES.

63. TOPSOIL SHALL BE STRIPPED AND STOCKPILED ON SITE FOR USE IN FINAL LANDSCAPING.

64. THE CONTRACTOR SHALL COMPACT FILL IN LIFT THICKNESS PER THE GEOTECHNICAL REPORT UNDER ALL PARKING, BUILDING, DRIVE, AND STRUCTURE AREAS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557 (MODIFIED PROCTOR TEST), OR AS REQUIRED BY THE GEOTECHNICAL ENGINEER.

65. UNDERDRAINS SHALL BE ADDED, IF DETERMINED NECESSARY IN THE FIELD BY THE OWNER/GEOTECHNICAL ENGINEER, AFTER SUBGRADE IS ROUGH GRADED.

66. VERTICAL DATUM IS NAVD88.

67. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD AND APPROVED BY THE TOWN OF MIDDLETOWN AGENT PRIOR TO THE START OF WORK ON THE SITE.

68. PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS WITHIN THIS PARCEL SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR WETLANDS IN ACCORDANCE WITH THE REGULATIONS OF THE CT DEEP AND THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION. IN ADDITION, THE CONTRACTOR SHALL STRICTLY ADHERE TO THE SEDIMENT AND EROSION CONTROL PLAN CONTAINED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO POST ALL BONDS AS REQUIRED BY THE LOCAL MUNICIPALITIES WHICH WOULD GUARANTEE THE PROPER IMPLEMENTATION OF THE PLAN.

69. ALL SITE WORK, MATERIALS OF CONSTRUCTION, AND CONSTRUCTION METHODS FOR EARTHWORK AND STORM DRAINAGE WORK SHALL CONFORM TO THE SPECIFICATIONS AND DETAILS AND APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS MANUAL. OTHERWISE THIS WORK SHALL CONFORM TO THE CONNECTICUT DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND PROJECT GEOTECHNICAL REPORT IF THERE IS NO PROJECT SPECIFICATIONS MANUAL. ALL FILL MATERIAL UNDER STRUCTURES AND PAVED AREAS SHALL BE PER THE ABOVE STATED APPLICABLE SPECIFICATIONS, AND/OR PROJECT GEOTECHNICAL REPORT, AND SHALL BE PLACED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER. MATERIAL SHALL BE COMPACTED IN LIFT THICKNESSES PER THE PROJECT GEOTECHNICAL REPORT TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557 AT MOISTURE CONTENT INDICATED IN PROJECT GEOTECHNICAL REPORT.

70. ALL DISTURBANCE INCURRED TO MUNICIPAL AND STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE MUNICIPALITY AND/OR STATE AS APPLICABLE FOR THE LOCATION OF THE WORK.

71. ALL CONSTRUCTION WITHIN A DOT RIGHT OF WAY SHALL COMPLY WITH ALL DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

72. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE PROPOSED SANITARY SEWERS AND WHERE PROPOSED STORM PIPING WILL CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE CIVIL ENGINEER IN THE EVENT OF ANY DISCOVERED OR UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED SANITARY SEWERS, STORM PIPING AND UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.

73. UTILITY CONNECTION DESIGN AS REFLECTED ON THE PLAN MAY CHANGE SUBJECT TO UTILITY PROVIDER AND GOVERNING AUTHORITY STAFF REVIEW.

74. THE CONTRACTOR SHALL ENSURE THAT ALL UTILITY PROVIDERS AND GOVERNING AUTHORITY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY PROVIDER.

75. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY PROVIDERS FOR SERVICE INSTALLATIONS AND CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY PROVIDERS AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTIONS, RELOCATIONS, INSPECTIONS, AND DEMOLITION UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATIONS MANUAL AND/OR GENERAL CONDITIONS OF THE CONTRACT.

76. ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT. AFTER UTILITY INSTALLATION IS COMPLETED, THE CONTRACTOR SHALL INSTALL TEMPORARY AND/OR PERMANENT PAVEMENT REPAIR AS DETAILED ON THE DRAWINGS OR AS REQUIRED BY THE OWNER HAVING JURISDICTION.

77. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.

78. SANITARY LATERAL SHALL MAINTAIN (10' MIN. HORIZONTAL 1.5' VERTICAL MIN.) SEPARATION DISTANCE FROM WATER LINES, OR ADDITIONAL PROTECTION MEASURES WILL BE REQUIRED WHERE PERMITTED, WHICH SHALL INCLUDE CONCRETE ENCASEMENT OF PIPING UNLESS OTHERWISE DIRECTED BY THE UTILITY PROVIDERS AND CIVIL ENGINEER.

79. RELOCATION OF UTILITY PROVIDER FACILITIES SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY PROVIDER.

80. THE CONTRACTOR SHALL COMPACT THE PIPE BACKFILL IN 8" LIFTS ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS. A PIPE FOUNDATION SHALL BE USED PER THE TRENCH DETAILS AND IN AREAS OF ROCK EXCAVATION.

81. CONTRACTOR TO PROVIDE STEEL SLEEVES AND ANNULAR SPACE SAND FILL FOR UTILITY PIPE AND CONDUIT CONNECTIONS UNDER FOOTINGS.

82. BUILDING UTILITY PENETRATIONS AND LOCATIONS ARE SHOWN FOR THE CONTRACTOR'S INFORMATION AND SHALL BE VERIFIED WITH THE BUILDING MEP, STRUCTURAL, AND ARCHITECTURAL DRAWINGS AND WITH THE OWNER'S CONSTRUCTION MANAGER.

83. ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION FOR APPROVAL PRIOR TO BACKFILLING, IN ACCORDANCE WITH THE APPROPRIATE UTILITY PROVIDER REQUIREMENTS.

84. A ONE-FOOT MINIMUM VERTICAL CLEARANCE BETWEEN WATER, GAS, ELECTRICAL, AND TELEPHONE LINES AND STORM PIPING SHALL BE PROVIDED. A SIX-INCH MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN STORM PIPING AND SANITARY SEWER WITH A CONCRETE ENCASEMENT. AN 18-INCH TO 6-INCH VERTICAL CLEARANCE BETWEEN SANITARY SEWER PIPING AND STORM PIPING SHALL REQUIRE CONCRETE ENCASEMENT OF THE PROPOSED PIPING.

85. GRAVITY SANITARY SEWER PIPING AND PRESSURIZED WATERLINES SHALL BE LOCATED IN SEPARATE TRENCHES AT LEAST 10 FEET APART WHENEVER POSSIBLE. WHEN INSTALLED IN THE SAME TRENCH, THE WATER PIPE SHALL BE LAID ON A TRENCH BENCH AT LEAST 18 INCHES ABOVE THE TOP OF THE SANITARY SEWER PIPE AND AT LEAST 12 INCHES (PREFERABLY 18 INCHES) FROM THE SIDE OF THE SANITARY SEWER PIPE TRENCH.

86. SITE CONTRACTOR SHALL PROVIDE ALL BENDS, FITTINGS, ADAPTERS, ETC., AS REQUIRED FOR PIPE CONNECTIONS TO BUILDING STUB OUTS, INCLUDING ROOF/FOOTING DRAIN CONNECTIONS TO ROOF LEADERS AND TO STORM DRAINAGE SYSTEM.

87. MANHOLE RIMS AND CATCH BASIN GRATES SHALL BE SET TO ELEVATIONS SHOWN. SET ALL EXISTING MANHOLE RIMS AND VALVE COVERS TO BE RAISED OR LOWERED FLUSH WITH FINAL GRADE AS NECESSARY.

88. SITE CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND CABLES FOR SITE LIGHTING WITH THE BUILDING ELECTRICAL CONTRACTOR.

89. CONTRACTOR SHALL COORDINATE INSTALLATION FOR ELECTRICAL SERVICES TO PYLON SIGNS AND SITE LIGHTING WITH THE BUILDING ELECTRICAL CONTRACTOR.

90. THE CONTRACTOR SHALL ARRANGE AND COORDINATE WITH UTILITY PROVIDERS FOR WORK TO BE PERFORMED BY UTILITY PROVIDERS. THE CONTRACTOR SHALL PAY ALL UTILITY FEES UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATION MANUAL AND GENERAL CONDITIONS, AND REPAIR PAVEMENTS AS NECESSARY.

91. ALL WATER LINES TO HAVE A MINIMUM COVER OF 4'-6". ALL LINES SHALL BE BEDDED IN 6" SAND AND INITIALLY BACKFILLED WITH 12" SAND.

92. ALL WATER MAINS, WATER SERVICES AND SANITARY SEWER LATERALS SHALL CONFORM TO THE APPLICABLE WATER UTILITY PROVIDER SPECIFICATIONS, AND TO THE APPLICABLE SANITARY SEWER PROVIDER SPECIFICATIONS, AS WELL AS TO OTHER APPLICABLE INDUSTRY CODES (AWWA) AND PROJECT SPECIFICATIONS FOR POTABLE WATER SYSTEMS, AND FOR SANITARY SEWER SYSTEMS.

93. THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE OWNERS, THE CIVIL ENGINEER, UTILITY PROVIDERS AND GOVERNING AUTHORITIES.

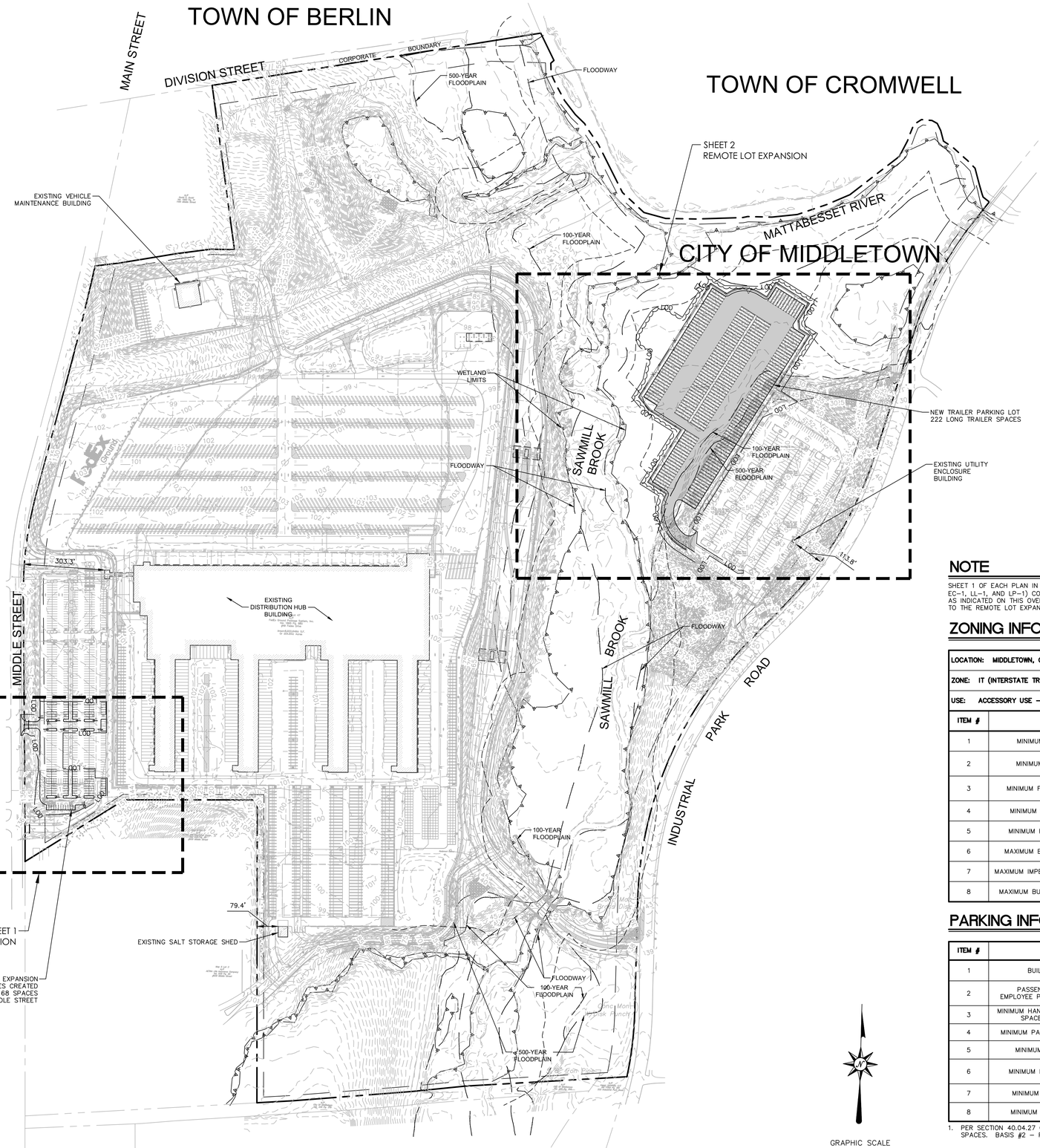
94. THE CONTRACTOR MAY SUBSTITUTE MASONRY STRUCTURES FOR PRECAST STRUCTURES IF APPROVED BY THE CIVIL ENGINEER AND ALLOWED BY THE GOVERNING AUTHORITY ENGINEER OR OTHER GOVERNING AUTHORITY.

95. PIPING SHALL BE LAID FROM DOWNGRADIENT END OF PIPE RUN IN AN UPGRADIENT DIRECTION WITH BELL END FACING UPGRADE IN THE DIRECTION OF PIPE LAYING.

96. ALL RCP SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-76; ALL RCP SHALL BE CLASS IV UNLESS OTHERWISE SHOWN. JOINTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-443.

97. MANHOLE SECTIONS AND CONSTRUCTION SHALL CONFORM TO ASTM C-478.

98. DUCTILE IRON PIPE SHALL CONFORM TO AWWA C151 FOR CLASS 52 WITH CEMENT LINING IN ACCORDANCE WITH ANSI A21.4 FOR WATER MAINS AND SERVICES 3" ID AND LARGER. JOINTS SHALL BE MADE WITH CONCRETE THRUST BLOCKS OR WITH MEGAULIG RETAINER GLANDS OR WITH RODDING IN ACCORDANCE WITH PROJECT MANUAL SPECIFICATIONS AND IN ACCORDANCE WITH WATER UTILITY PROVIDER REQUIREMENTS TO EXTEND A MINIMUM OF 2 PIPE LENGTHS IN EITHER DIRECTION FROM FITTINGS AND ELBOWS (40 FT MINIMUM). ALL OTHER JOINTS SHALL BE PUSH-ON WITH RUBBER GASKETS (TYTON). USE OF OTHER TY



NOTE

SHEET 1 OF EACH PLAN IN THIS LAND DEVELOPMENT PLAN SET (DM–1, SP–1, GD–1, SU–1, EC–1, LL–1, AND LP–1) CORRESPONDS TO THE EMPLOYEE PARKING EXPANSION LOCATION AS INDICATED ON THIS OVERALL PLAN. SIMILARLY, SHEET 2 OF EACH PLAN CORRESPONDS TO THE REMOTE LOT EXPANSION AREA AS INDICATED ON THIS OVERALL PLAN.

ZONING INFORMATION

LOCATION: MIDDLETOWN, CONNECTICUT

ZONE: IT (INTERSTATE TRADE)

USE: ACCESSORY USE – PAVED OFF–STREET PARKING (PERMITTED USE), MAIN USE – TRUCKING TERMINAL

ITEM #	ITEM	REQUIREMENTS	EXISTING	PROPOSED	VARIANCE
1	MINIMUM LOT AREA	2 AC.	204.8 AC.	204.8 AC.	NO
2	MINIMUM LOT WIDTH	200 FEET	2,275 FEET MIDDLE STREET 3,665 FEET INDUSTRIAL PARK ROAD	2,275 FEET MIDDLE STREET 3,665 FEET INDUSTRIAL PARK ROAD	NO
3	MINIMUM FRONT SETBACK	75 FEET	303.3 FEET MIDDLE STREET 113.8 FEET INDUSTRIAL PARK ROAD	303.3 FEET MIDDLE STREET 113.8 FEET INDUSTRIAL PARK ROAD	NO
4	MINIMUM SIDE SETBACK	20 FEET	79.4 FEET	79.4 FEET	NO
5	MINIMUM REAR SETBACK	25 FEET	N/A	N/A	NO
6	MAXIMUM BUILDING HEIGHT	50 FEET	50 FEET	50 FEET	NO
7	MAXIMUM IMPERVIOUS COVERAGE	NO REQUIREMENT	37.4 PERCENT	40.8 PERCENT	NO
8	MAXIMUM BUILDING COVERAGE	40 PERCENT	5.9 PERCENT	5.9 PERCENT	NO

PARKING INFORMATION

ITEM #	ITEM	REQUIREMENTS	EXISTING	PROPOSED	VARIANCE
1	BUILDING SIZE	NONE REQUIRED	±500,000 S.F.	±500,000 S.F.	NO
2	PASSENGER VEHICLE EMPLOYEE PARKING REQUIRED[1]	346 SPACES[1]	501 SPACES EMPLOYEE LOT 131 SPACES REMOTE LOT 632 SPACES TOTAL	569 SPACES EMPLOYEE LOT 131 SPACES REMOTE LOT 700 SPACES TOTAL	NO
3	MINIMUM HANDICAPPED PARKING SPACES REQUIRED	11 SPACES EMPLOYEE LOT 5 SPACES REMOTE LOT	12 SPACES EMPLOYEE LOT 6 SPACES REMOTE LOT	12 SPACES EMPLOYEE LOT 6 SPACES REMOTE LOT	NO
4	MINIMUM PARKING DIMENSIONS	9 FEET X 18 FEET	9 FEET X 19 FEET	9 FEET X 19 FEET	NO
5	MINIMUM AISLE WIDTH	24 FEET – 2–WAY	24 FEET – 2–WAY	25 FEET – 2–WAY	NO
6	MINIMUM FRONT SETBACK	75 FEET	82.1 FEET MIDDLE STREET 93 FEET INDUSTRIAL PARK ROAD	81.1 FEET MIDDLE STREET 93 FEET INDUSTRIAL PARK ROAD	NO
7	MINIMUM SIDE SETBACK	20 FEET	41.3 FEET	41.3 FEET	NO
8	MINIMUM REAR SETBACK	25 FEET	N/A	N/A	NO

1. PER SECTION 40.04.27 OF THE MIDDLETOWN ZONING REGULATIONS, PLANNING AND ZONING COMMISSION SHALL DETERMINE MINIMUM NUMBER OF PARKING SPACES. BASIS #2 – PREVIOUS EXPERIENCE WITH SIMILAR USES, AS PROVIDED BY FEDEX – HAS BEEN USED IN DETERMINING REQUIREMENT.

GRAPHIC SCALE
200 100 0 200
SCALE IN FEET

NOT FOR CONSTRUCTION
FOR PERMITTING PURPOSES ONLY

REFER TO SHEET GN-1 FOR
SITE WORK GENERAL NOTES

Architecture
Engineering
Environmental
Land Surveying

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STATE OF CONNECTICUT
MATTHEW J. BUDNEY
LICENSED PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date DWG.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	1"=200'
Project No.	2001507
Date	02/19/2021
CAD File: OP200150701	

Title

OVERALL PLAN

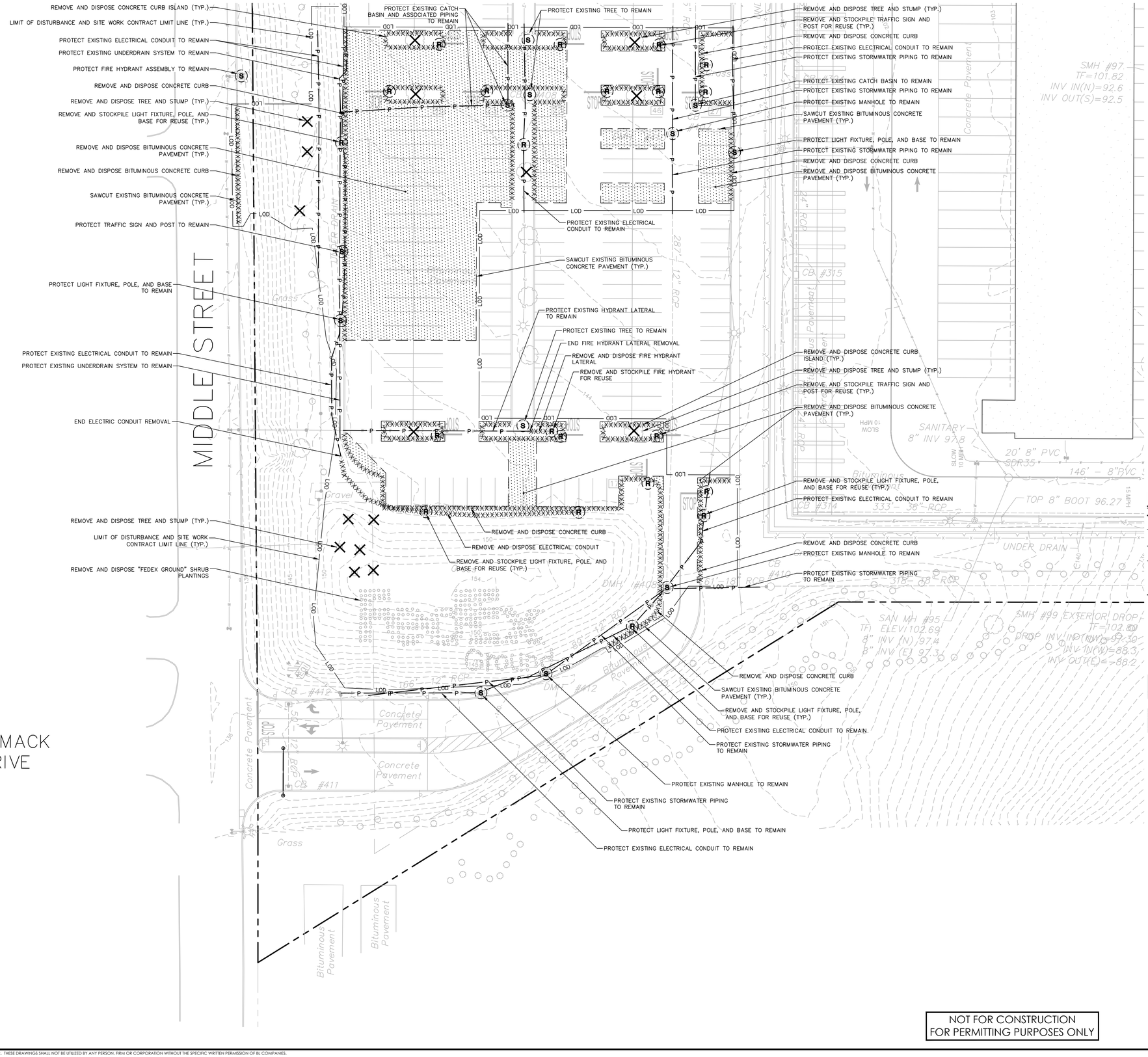
Sheet No.

OP-1

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Xref (s) - B2020150702 , XY2001507 01 , XY14CS115-Contours-2018-UAV , XY14CS115-Contours-Soil-Parking 2018-UAV , XC200150701



DEMOLITION PLAN LEGEND

———	PROPERTY LINE
——— LOD ———	LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE
~~	PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING
- - - - - -	SAWCUT LINE
XXXXXXXXXXXXXXXXXXXX	REMOVE AND DISPOSE OF UNDERGROUND STORMWATER OR UTILITY PIPE, CURB, FENCING, WALLS, OVERHEAD WIRES, ETC.
P P P	PROTECT EXISTING UTILITY LINE
X	REMOVE AND DISPOSE EXISTING STRUCTURE, FURNISHING, TREE, SHRUB, AND/OR STUMP
(S)	PROTECT EXISTING STRUCTURE/FURNISHING OR TREE TO REMAIN IN PLACE
(R)	REMOVE AND STOCKPILE STRUCTURE/FURNISHING FOR RE-USE
	REMOVE AND DISPOSE OF EXISTING BITUMINOUS CONCRETE PAVEMENT STRUCTURE
	REMOVE AND DISPOSE OF EXISTING VEGETATION AND STUMPS

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GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

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Engineering
Environmental
Land Surveying

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STATE OF CONNECTICUT
MATTHEW J. BRUSH
No. 26586
LICENSED PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	1"=30'
Project No.	2001507
Date	02/19/2021
CAD File: DM2001507O1	

Title

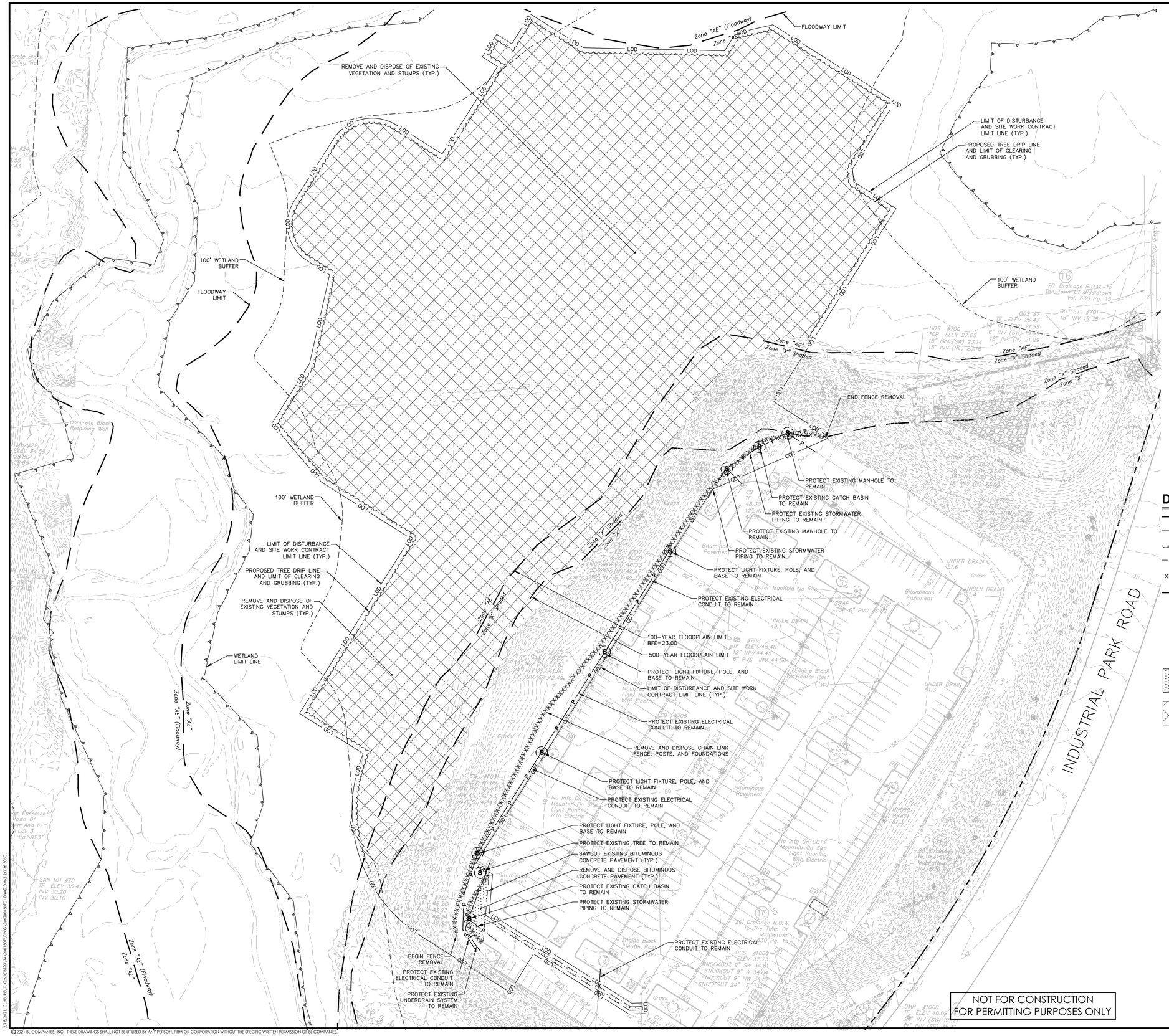
DEMOLITION PLAN

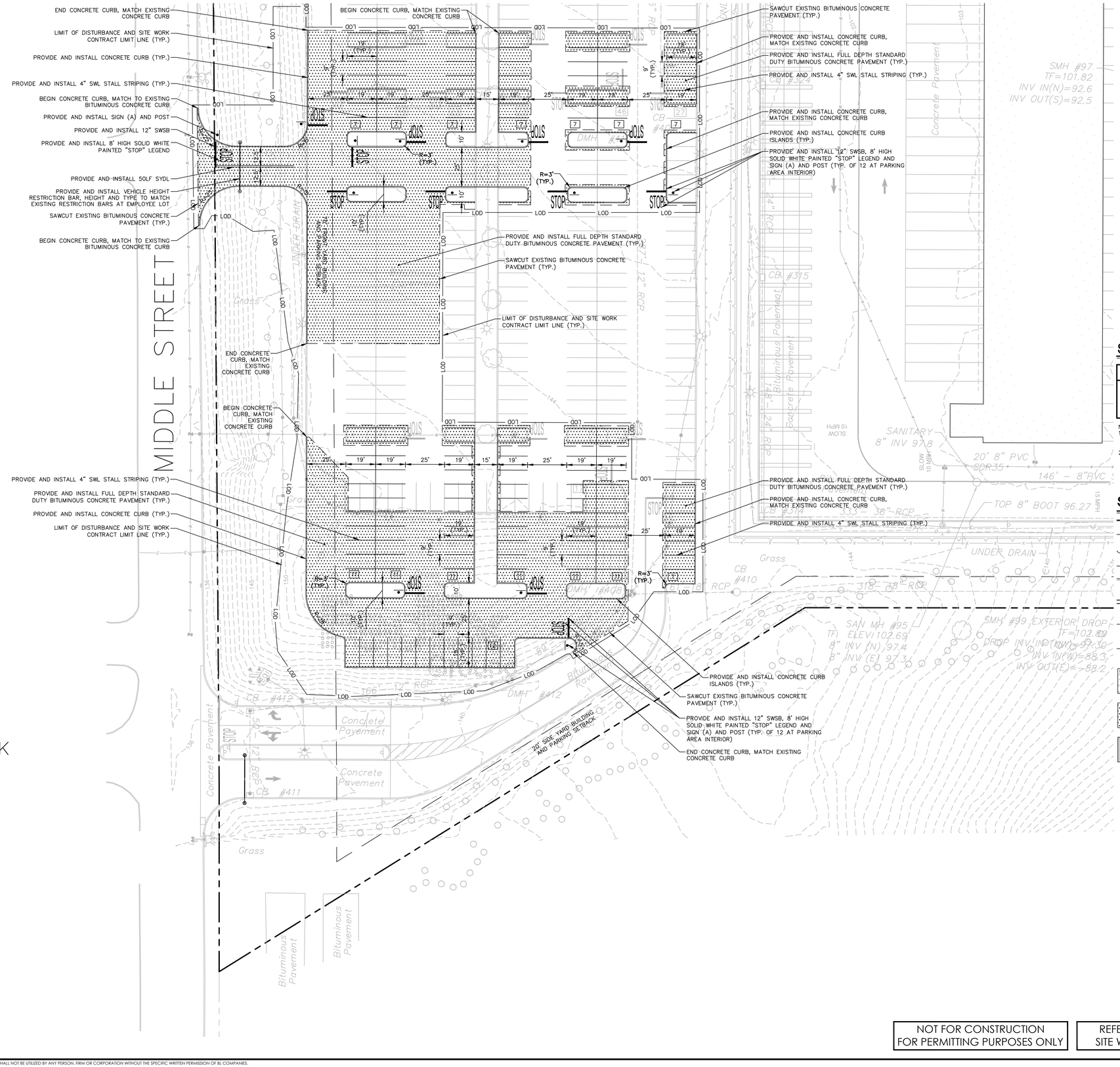
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Xref (s) - B2001507O2 : XY2001507O1 : XY-14C5115-Contours-2018-UAV : XY-14C5115-Contours-Sat-Parking 2018-UAV : XC2001507O6 : XC2001507O1

2/19/2021 - C:\DEVIEW\FIX C's VOR\2001 V4 VER\507\DWG\2001507O1.DWG, DM-1 24X36 ANSI C
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REMOVE AND DISPOSE OF EXISTING VEGETATION AND STUMPS (TYP.)
FLOODWAY LIMIT
Zone "AE" (Floodway)
Zone "AE"
LOD
100' WETLAND BUFFER
LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE (TYP.)
PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING (TYP.)
Zone "AE"
Zone "X" Shaded
Zone "X"
END FENCE REMOVAL
PROTECT EXISTING MANHOLE TO REMAIN
PROTECT EXISTING CATCH BASIN TO REMAIN
PROTECT EXISTING STORMWATER PIPING TO REMAIN
PROTECT EXISTING MANHOLE TO REMAIN
PROTECT EXISTING STORMWATER PIPING TO REMAIN
PROTECT LIGHT FIXTURE, POLE, AND BASE TO REMAIN
PROTECT EXISTING ELECTRICAL CONDUIT TO REMAIN
100-YEAR FLOODPLAIN LIMIT BFE=23.00
500-YEAR FLOODPLAIN LIMIT
PROTECT LIGHT FIXTURE, POLE, AND BASE TO REMAIN
LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE (TYP.)
PROTECT EXISTING ELECTRICAL CONDUIT TO REMAIN
REMOVE AND DISPOSE CHAIN LINK FENCE, POSTS, AND FOUNDATIONS
PROTECT LIGHT FIXTURE, POLE, AND BASE TO REMAIN
PROTECT EXISTING ELECTRICAL CONDUIT TO REMAIN
PROTECT LIGHT FIXTURE, POLE, AND BASE TO REMAIN
PROTECT EXISTING TREE TO REMAIN
SAWCUT EXISTING BITUMINOUS CONCRETE PAVEMENT (TYP.)
REMOVE AND DISPOSE BITUMINOUS CONCRETE PAVEMENT (TYP.)
PROTECT EXISTING CATCH BASIN TO REMAIN
PROTECT EXISTING STORMWATER PIPING TO REMAIN
BEGIN FENCE REMOVAL
PROTECT EXISTING ELECTRICAL CONDUIT TO REMAIN
PROTECT EXISTING UNDERDRAIN SYSTEM TO REMAIN
PROTECT EXISTING ELECTRICAL CONDUIT TO REMAIN
WETLAND LIMIT LINE
Zone "AE" (Floodway)
Zone "AE"
Zone "X" Shaded
Zone "X"
INDUSTRIAL PARK ROAD
Concrete Block Retaining Wall
Bituminous Pavement
Grass
Gravel
Water Manifold No Info
Engine Block Heater Post (Typ)
No Info On CCTV Mounted On Site Light Running With Electric
20' Drainage R.O.W. To The Town Of Middletown Vol. 630 Pg. 15
Easement Town Of Mt And In Lok 3 Pg 923
SAN MH #20 TF ELEV 35.47 INV 30.20 INV 30.10
DMH #1000 TF ELEV 40.09 INV (SW) 34.59 INV (NE) 34.58
CB #708 TF ELEV 48.46 12" INV 44.45 6" PVC INV 44.54
OCS #1009 TF ELEV 37.73 KNOCKOUT 9" SW 34.81 KNOCKOUT 9" W 34.94 KNOCKOUT 9" NW 34.81 KNOCKOUT 24" E 33.26
OUTLET #701 18" INV 19.38
HDS #700 TOP ELEV 27.05 15" INV (SW) 23.14 15" INV (NE) 23.16
OCS #7 TF ELEV 26.47 18" INV (S) 21.99 6" INV (SW) 21.79 18" INV (N) 21.29
UNDER DRAIN 51.6
UNDER DRAIN 51.4
UNDER DRAIN 41.3
UNDER DRAIN 49.1
SMH #706 TF ELEV 46.85 24" INV (N) 42.45 24" INV (S) 42.45 INV (E) 42.46
SMH #703 TF ELEV 41.25 24" INV (N) 41.30 INV (E) 41.30
SMH #702 TF ELEV 34.58 INV 29.65
SMH #701 TF ELEV 32.43 INV 28.23
Concrete Block Retaining Wall
Concrete Block Retaining Wall
Creek
Wetland
Wetland
Wetland



SIGN LEGEND

SIGN NO.	CT-DOT NO. OR MUTCD NO.	LEGEND
A	31-0552	STOP 30"

NOTES:
1. HANDICAPPED SIGNS TO BE INSTALLED IN PIPE BOLLARDS (SEE DETAIL). ALL HANDICAP SIGNAGE TO CONFORM TO LATEST BUILDING CODE.
2. THE CONTRACTOR SHALL REINSTALL STOCKPILED STOP SIGNS AND SIGN POSTS SALVAGE DURING SITE DEMOLITION. SIGNS THAT REMAIN IN GOOD CONDITION MAY BE USED, DAMAGED SIGNS AND SIGN POSTS SHALL BE REPLACED AS NECESSARY.

SITE PLAN LEGEND

- PROPERTY LINE
- LOD — LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE
- PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING
- SAWCUT LINE
- PROVIDE AND INSTALL CURB, SEE PLAN FOR MATERIAL TYPE
- PROVIDE AND INSTALL MODULAR BLOCK RETAINING WALL
- X — X — PROVIDE AND INSTALL 10' HIGH CHAIN LINK FENCE WITH BARBED WIRE
- PROVIDE AND INSTALL R-B 350 GUIDERAIL
- PROVIDE AND INSTALL CONCRETE PAVEMENT STRUCTURE
- PROVIDE AND INSTALL FULL DEPTH STANDARD DUTY BITUMINOUS CONCRETE PAVEMENT STRUCTURE
- PROVIDE AND INSTALL FULL DEPTH HEAVY DUTY BITUMINOUS CONCRETE PAVEMENT STRUCTURE
- PROVIDE AND INSTALL TRAFFIC SIGN
- # — STANDARD PARKING STALL COUNT

NOT FOR CONSTRUCTION FOR PERMITTING PURPOSES ONLY

REFER TO SHEET GN-1 FOR SITE WORK GENERAL NOTES

GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying

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STATE OF CONNECTICUT
MATTHEW J. BUDYN
No. 25551
LICENSED PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	1"=30'
Project No.	2001507
Date	02/19/2021
CAD File: SP200150701	

Title

SITE PLAN

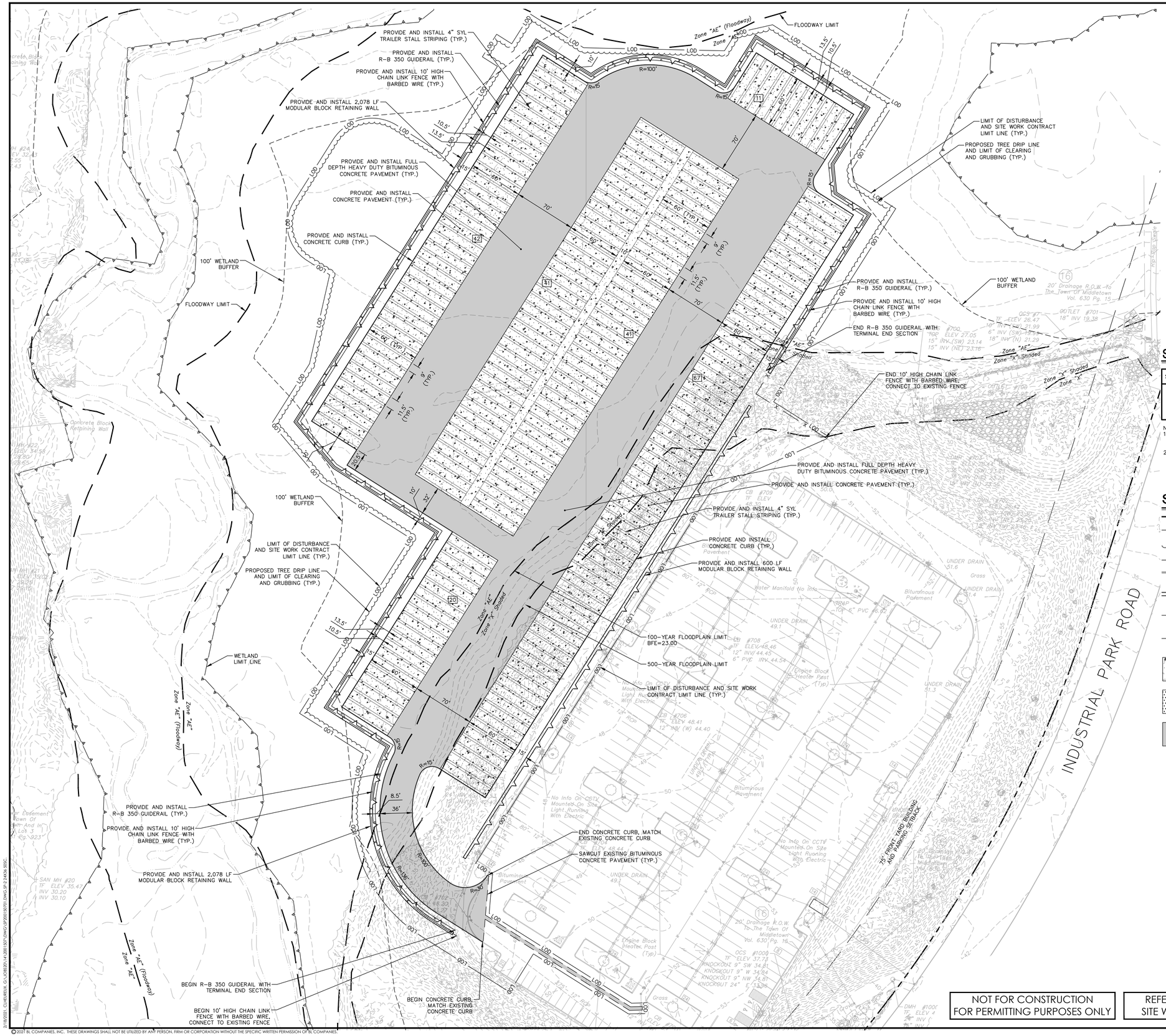
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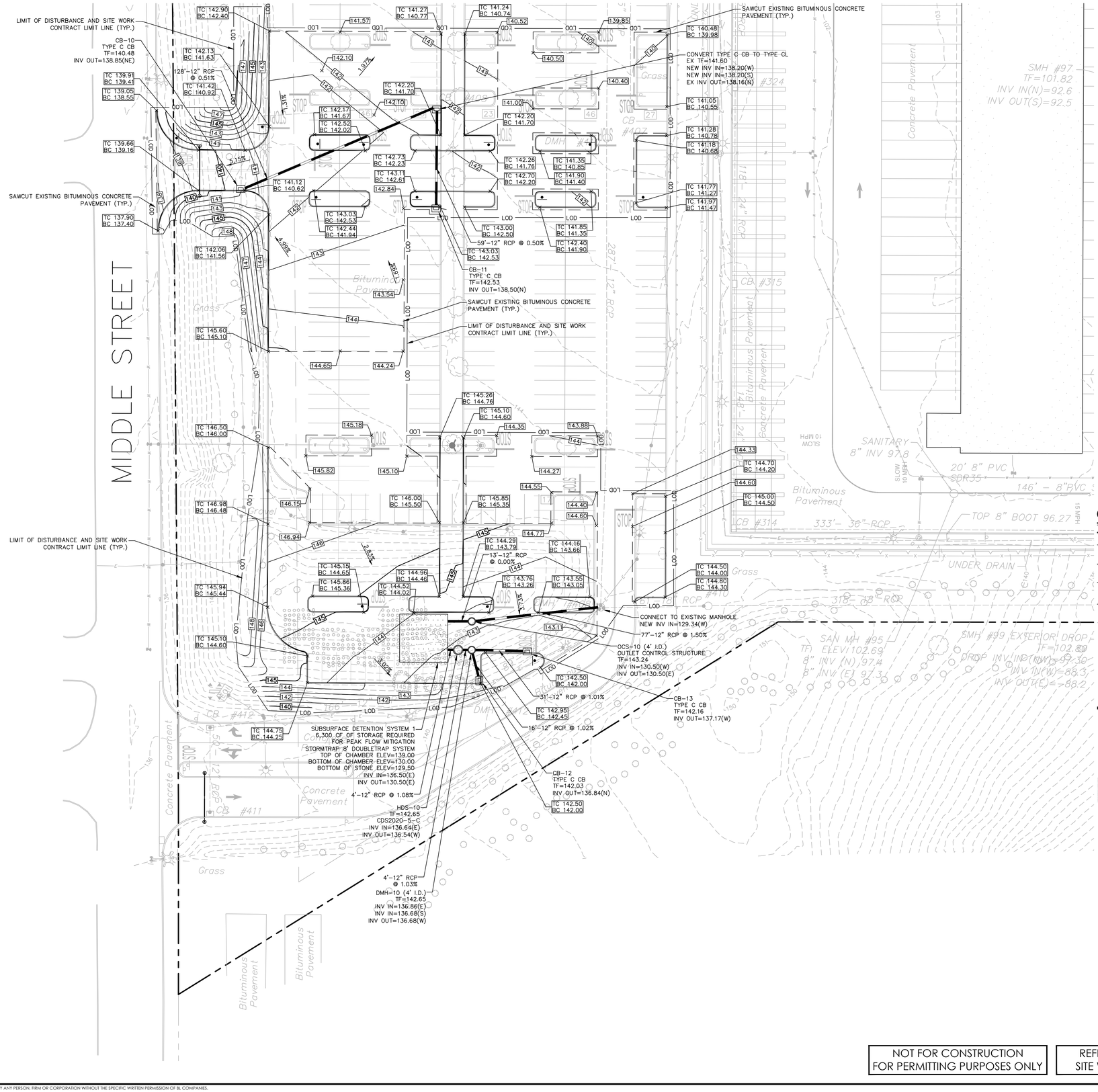
SP-1

Xref (s): B200150702 - XY-200150701 - XY-145115-Contours-2018-LAV - XY-145115-Contours-Sat-Parking 2018-LAV - XC200150701

21/8/2021, C:\MEWBW\K_G\JOBS\2014\2001507\DWG\SP200150701.DWG,SP-1,24X36,36SC

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PROVIDE AND INSTALL 4" SYL TRAILER STALL STRIPING (TYP.)
PROVIDE AND INSTALL R-B 350 GUIDERAIL (TYP.)
PROVIDE AND INSTALL 10' HIGH CHAIN LINK FENCE WITH BARBED WIRE (TYP.)
PROVIDE AND INSTALL 2,078 LF MODULAR BLOCK RETAINING WALL
PROVIDE AND INSTALL FULL DEPTH HEAVY DUTY BITUMINOUS CONCRETE PAVEMENT (TYP.)
PROVIDE AND INSTALL CONCRETE PAVEMENT (TYP.)
PROVIDE AND INSTALL CONCRETE CURB (TYP.)
100' WETLAND BUFFER
FLOODWAY LIMIT
LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE (TYP.)
PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING (TYP.)
WETLAND LIMIT LINE
BEGIN R-B 350 GUIDERAIL WITH TERMINAL END SECTION
BEGIN 10' HIGH CHAIN LINK FENCE WITH BARBED WIRE; CONNECT TO EXISTING FENCE
BEGIN CONCRETE CURB, MATCH EXISTING CONCRETE CURB
END R-B 350 GUIDERAIL WITH TERMINAL END SECTION
END 10' HIGH CHAIN LINK FENCE WITH BARBED WIRE; CONNECT TO EXISTING FENCE
END CONCRETE CURB, MATCH EXISTING CONCRETE CURB
SAWCUT EXISTING BITUMINOUS CONCRETE PAVEMENT (TYP.)
100-YEAR FLOODPLAIN LIMIT BFE=23.00
500-YEAR FLOODPLAIN LIMIT
FLOODWAY LIMIT
Zone "AE" (Floodway)
Zone "AE"
Zone "X" Shaded
Zone "X"
INDUSTRIAL PARK ROAD
75' FRONT YARD BUILDING AND PARKING SETBACK
20' Drainage R.O.W. To The Town Of Middletown Vol. 630 Pg. 15
Concrete Block Retaining Wall
Bituminous Pavement
Engine Block Heater Post (Typ.)
Grass
Water Manifold No Info
No Info On CCTV Mounted On Site Light Running With Electric
UNDER DRAIN 49.1
UNDER DRAIN 51.6
UNDER DRAIN 51.4
UNDER DRAIN 51.3
SAN MH #20 TF ELEV 35.47 INV 30.20 INV 30.10
CB #708 TF ELEV 48.46 12" INV 44.45 6" PVC INV 44.54
CB #706 TF ELEV 48.41 12" INV (W) 44.40
CB #709 ELEV 48.30
OCS #1000 ELEV 37.75 KNOCKOUT 9" SW 34.81 KNOCKOUT 9" W 34.94 KNOCKOUT 9" NW 34.81 KNOCKOUT 24" E 33.25
DMH #1000 TF ELEV
OCS #701 TF ELEV 26.47 18" INV 19.38
#700 TOP ELEV 27.05 15" INV (SW) 23.14 15" INV (NE) 23.16
OCS #702 TF ELEV 26.99 6" INV (SW) 18.99 18" INV (N) 21.99
Easement Town Of Mtn And In Lot 3 Es 923
Wetland ELEV 34.58
Wetland ELEV 28.80
Wetland ELEV 29.25
Wetland ELEV 32.43
Wetland ELEV 32.55
Wetland ELEV 31.43
Wetland ELEV 31.38
Wetland ELEV 31.23
Wetland ELEV 31.23
Wetland ELEV 31.23



GRADING AND DRAINAGE LEGEND

- PROPERTY LINE
- LOD — LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE
- PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING
- SAWCUT LINE
- 100 — PROPOSED CONTOUR LINE (1' INTERVAL)
- 100 — EXISTING CONTOUR LINE (1' INTERVAL)
- ×100.00 — PROPOSED SPOT GRADE

SPOT GRADE ABBREVIATIONS

BC	BOTTOM OF CURB
TC	TOP OF CURB
BL	BOTTOM OF LIP
TL	TOP OF LIP
BW	BOTTOM OF WALL
TW	TOP OF WALL
MEX	MEET EXISTING CONDITION

- PROVIDE AND INSTALL STORM PIPE
- PROVIDE AND INSTALL TYPE C–L CATCH BASIN
- PROVIDE AND INSTALL TYPE C CATCH BASIN
- PROVIDE AND INSTALL DRAINAGE MANHOLE OR OUTLET CONTROL STRUCTURE
- PROVIDE AND INSTALL RIPRAP

NOT FOR CONSTRUCTION FOR PERMITTING PURPOSES ONLY

REFER TO SHEET GN-1 FOR SITE WORK GENERAL NOTES

GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

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STATE OF CONNECTICUT
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EXISTING FEDEX GROUND HUB HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	1"=30'
Project No.	2001507
Date	02/19/2021
CAD File: GD200150701	

Title

GRADING AND DRAINAGE PLAN

Sheet No.

GD-1

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Xref (s) : BD200150702 : XY2001507.01 : XY : 14C2515-Contours-Spot Parking 2018-UAV : XC200150702 : XC2001507.01 : XC200150704

GRADING AND DRAINAGE LEGEND

- PROPERTY LINE
- LOD — LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE
- PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING
- SAWCUT LINE
- 100 — PROPOSED CONTOUR LINE (1' INTERVAL)
- 100 — EXISTING CONTOUR LINE (1' INTERVAL)
- ×100.00 — PROPOSED SPOT GRADE

SPOT GRADE ABBREVIATIONS

BC	BOTTOM OF CURB
TC	TOP OF CURB
BL	BOTTOM OF LIP
TL	TOP OF LIP
BW	BOTTOM OF WALL
TW	TOP OF WALL
MEX	MEET EXISTING CONDITION

- PROVIDE AND INSTALL STORM PIPE
- PROVIDE AND INSTALL TYPE C–L CATCH BASIN
- PROVIDE AND INSTALL TYPE C CATCH BASIN
- PROVIDE AND INSTALL DRAINAGE MANHOLE OR OUTLET CONTROL STRUCTURE
- PROVIDE AND INSTALL RIPRAP

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GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

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HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	1"=50'
Project No.	2001507
Date	02/19/2021
CAD File: GD200150701	

Title

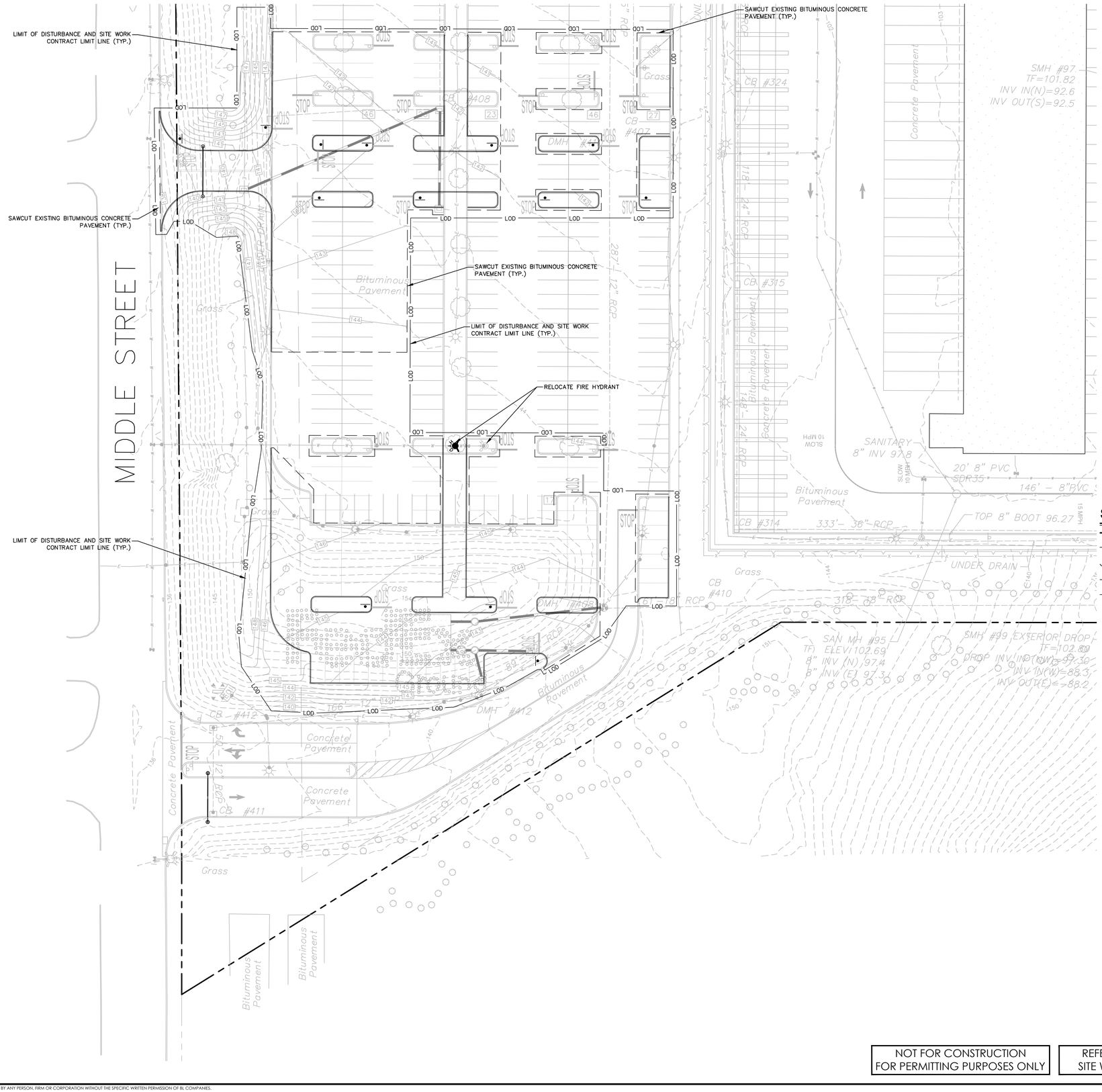
GRADING AND DRAINAGE PLAN

Sheet No.

GD-2

Xref Up1: - BD200150702 ; XY2001507O1 ; XY-1:4C5115-Contours-Soil-Parking 2018-UAV ; XC:2001507O2 ; XC2001507O1 ; XC2001507O4

2/19/2021, CHELMSFORD, CA, USA/BOSTON, MA, USA/BOSTON, MA, USA/BOSTON, MA, USA/BOSTON, MA, USA/BOSTON, MA, USA



SITE UTILITIES PLAN LEGEND

- PROPERTY LINE
- LOD — LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE
- PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING
- SAWCUT LINE
- W — W — W — PROVIDE AND INSTALL WATER UTILITY PIPING
- PROVIDE AND INSTALL OR RELOCATE FIRE HYDRANT ASSEMBLY

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REFER TO SHEET GN-1 FOR SITE WORK GENERAL NOTES

GRAPHIC SCALE
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SCALE IN FEET

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HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS		
No.	Date	Desc.

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Scale	1"=30'
Project No.	2001507
Date	02/19/2021
CAD File: SU200150701	

Title

SITE UTILITIES PLAN

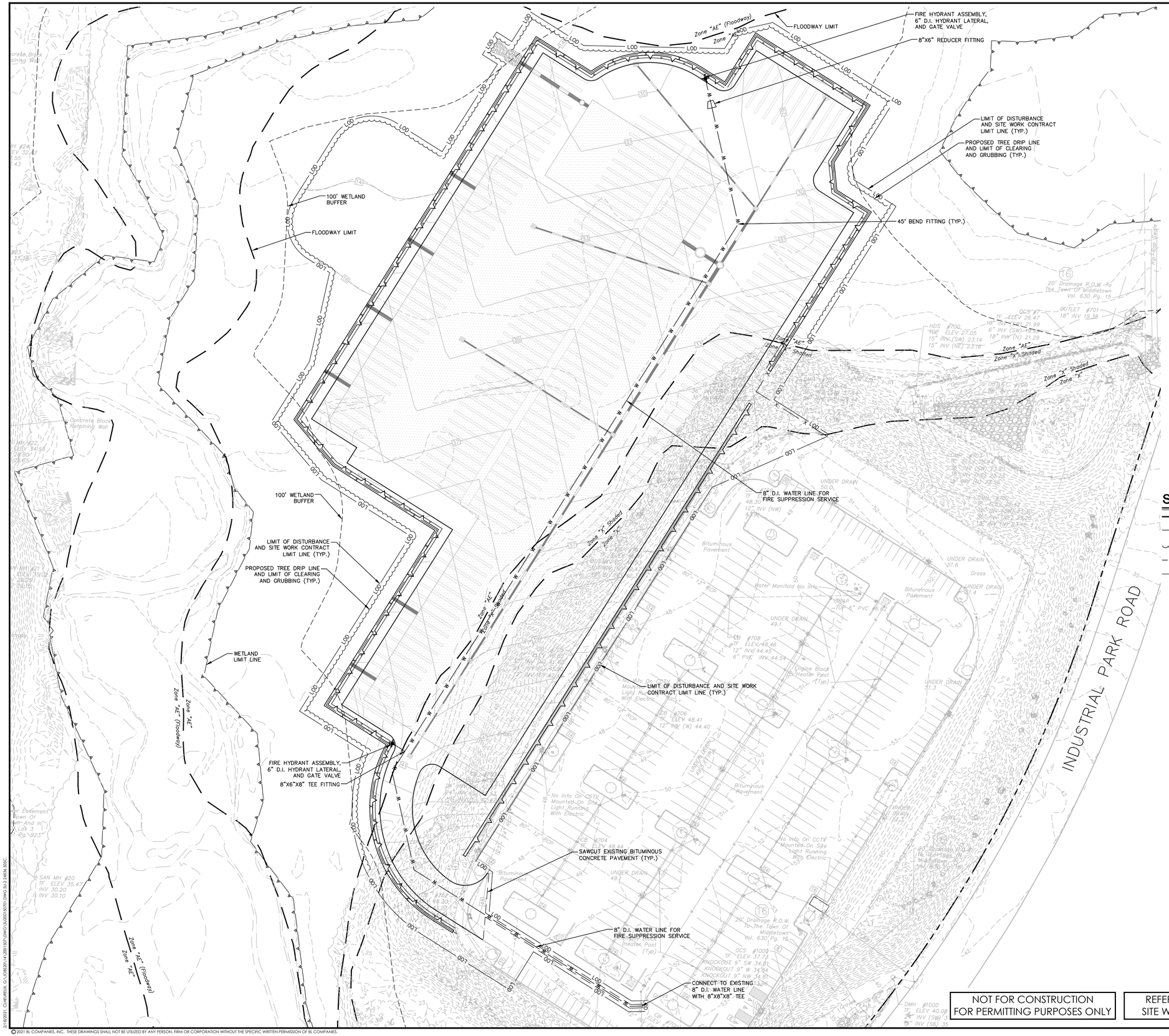
Sheet No.

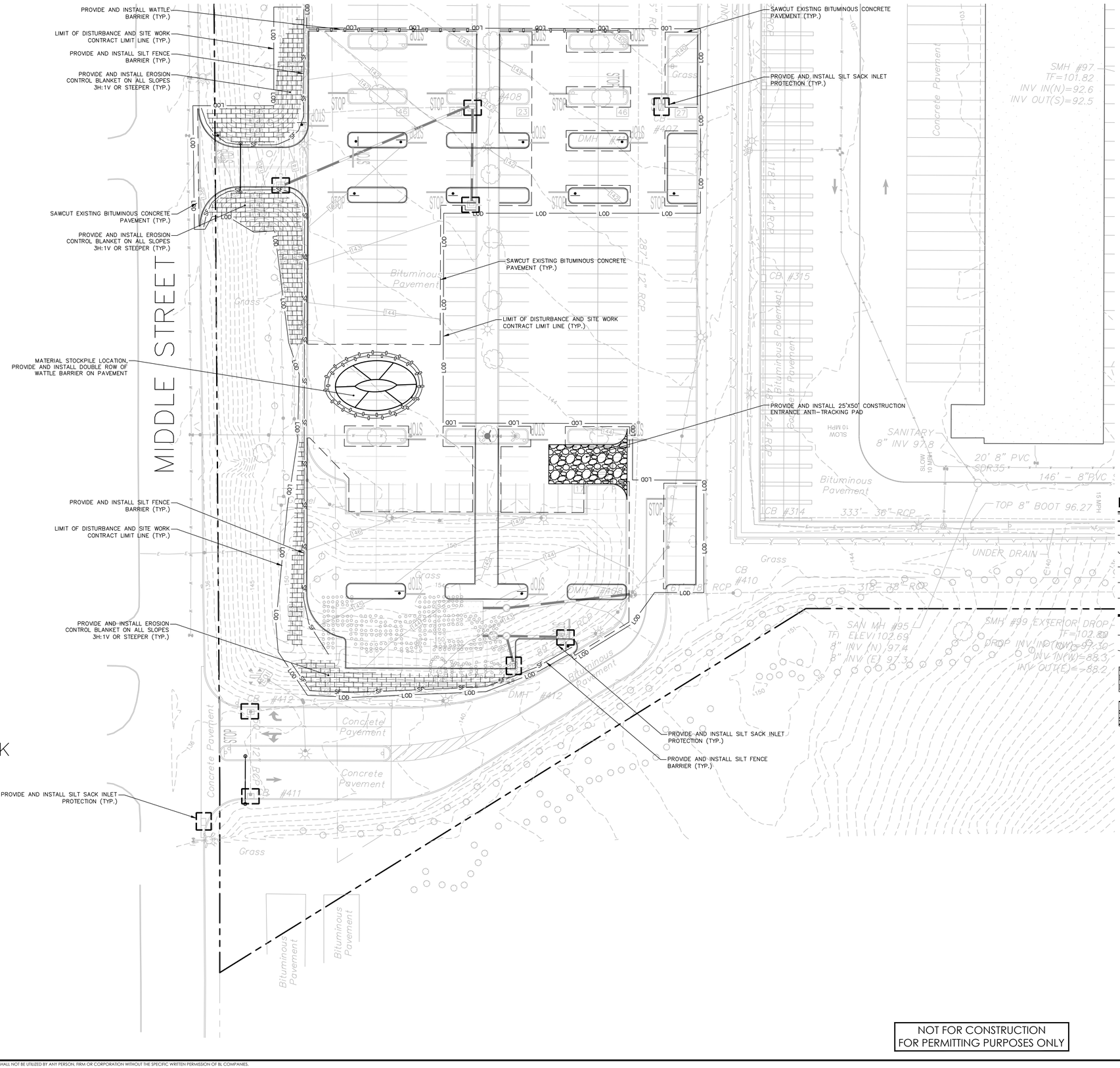
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Xref (s) : B0200150702 ; XY200150701 : XY-14C5115-Contours-2018-UAV ; XY-14C5115-Contours-Soil-Parking 2018-UAV ; XC200150704 ; XC200150701 ; XC200150702

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FIRE HYDRANT ASSEMBLY, 6" D.I. HYDRANT LATERAL, AND GATE VALVE
8"X6" REDUCER FITTING
FLOODWAY LIMIT
Zone "AE" (Floodway)
Zone "X"
LOD
LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE (TYP.)
PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING (TYP.)
45° BEND FITTING (TYP.)
100' WETLAND BUFFER
FLOODWAY LIMIT
100' WETLAND BUFFER
LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE (TYP.)
PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING (TYP.)
WETLAND LIMIT LINE
Zone "AE" (Floodway)
Zone "AE"
FIRE HYDRANT ASSEMBLY, 6" D.I. HYDRANT LATERAL, AND GATE VALVE
8"X6"X8" TEE FITTING
8" D.I. WATER LINE FOR FIRE SUPPRESSION SERVICE
Zone "X" Shaded
Zone "X"
Zone "AE"
LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE (TYP.)
SAWCUT EXISTING BITUMINOUS CONCRETE PAVEMENT (TYP.)
8" D.I. WATER LINE FOR FIRE SUPPRESSION SERVICE
CONNECT TO EXISTING 8" D.I. WATER LINE WITH 8"X8"X8" TEE
INDUSTRIAL PARK ROAD
20' Drainage R.O.W. To The Town Of Middletown Vol. 630 Pg. 15
Bituminous Pavement
UNDER DRAIN
Grass
Concrete Block Retaining Wall
Water Manifold No Info
No Info On CCTV Mounted On Site Light Running With Electric
Precast Concrete Light Pole Base With Electric
Engine Block Heater Post (Typ.)
SAN MH #20 TF ELEV 35.47 INV 30.20 INV 30.10
DMH #1000 TF ELEV 40.08 INV (SW) INV (SE)
OCS #1009 TF ELEV 37.73 KNOCKOUT 9" SW 34.81 KNOCKOUT 9" W 34.84 KNOCKOUT 9" NW 34.87
OUTLET #700 18" INV 19.38
OUTLET #701 18" INV 19.38
HDS #700 TF ELEV 27.05 15" INV (SW) 23.14 15" INV (NE) 23.16
OCS #1 TF ELEV 26.47 18" INV (SW) 19.54 18" INV (N) 21.99
CB #704 TF ELEV 48.41 12" INV (W) 44.40
CB #708 TF ELEV 48.46 12" INV 44.45 6" PVC INV 44.54
CB #702 TF ELEV 48.30 12" INV (NW) 44.39
SWAP TOP 6" PVC 46.62
UNDER DRAIN 49.1
UNDER DRAIN 51.6
UNDER DRAIN 51.4
UNDER DRAIN 51.3
Concrete Block Retaining Wall
Inv #22 ELEV 34.58 8" BOT 28.65
Pipe
Zone "AE" (Floodway)
Zone "AE"
Zone "AE" (Floodway)
Zone "AE"
Zone "X" Shaded
Zone "X"
Zone "X" Shaded
Zone "X"
Zone "AE"
Zone "X" Shaded
Zone "X"
Zone "AE"
Zone "X" Shaded
Zone "X"
Zone "AE



EROSION CONTROL LEGEND

- PROPERTY LINE
- LOD — LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE
- PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING
- SAWCUT LINE
- SF — SF — PROVIDE AND INSTALL SILT FENCE BARRIER
- PROVIDE AND INSTALL WATTLE BARRIER
- PROVIDE AND INSTALL STRAW BALE BARRIER
- INSTALL TEMPORARY DIVERSION SWALE
- 15 — TEMPORARY SEDIMENT TRAP CONTOUR
- PROVIDE AND INSTALL EROSION CONTROL BLANKET ON ALL SLOPES 3H:1V OR STEEPER
- PROVIDE AND INSTALL CONSTRUCTION ENTRANCE
- MATERIAL STOCKPILE LOCATION, PROVIDE AND INSTALL DOUBLE ROW OF SILT FENCE OR WATTLE BARRIER AROUND ENTIRE PILE
- PROVIDE AND INSTALL CONCRETE WASH PIT
- PROVIDE AND INSTALL SILT SACK INLET PROTECTION

GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

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EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	1"=30'
Project No.	2001507
Date	02/19/2021
CAD File: EC200150701	

Title

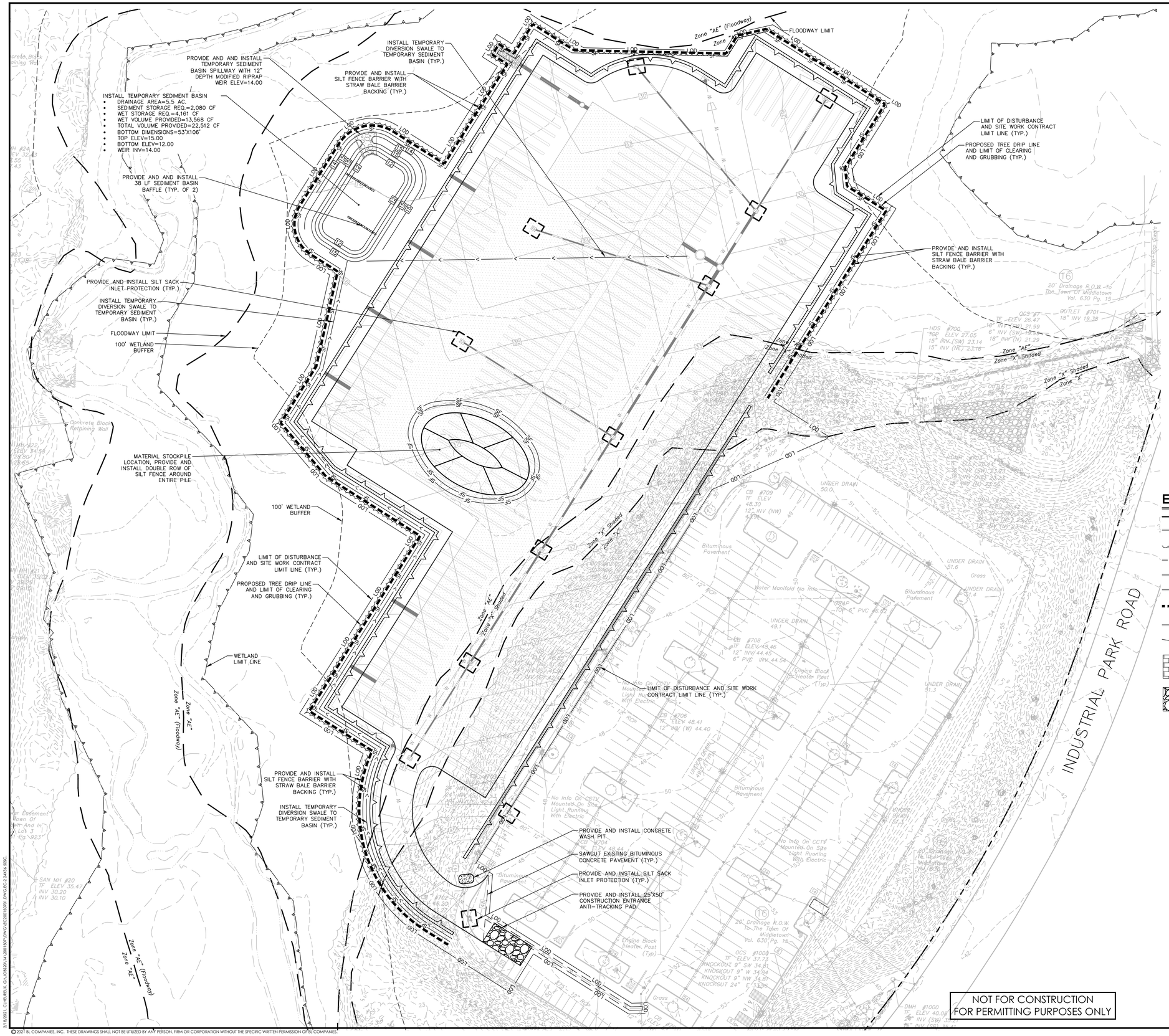
SEDIMENT AND EROSION CONTROL PLAN

Sheet No.

EC-1

Xref (s) : B200150702 ; XY200150701 ; XY-14C5115-Contours-2018-UAV ; XY-14C5115-Contours-Soil-Parking 2018-UAV ; XC200150704 ; XC200150705 ; XC200150701 ; XC200150702

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EROSION CONTROL LEGEND

- PROPERTY LINE
- LOD — LIMIT OF DISTURBANCE AND SITE WORK CONTRACT LIMIT LINE
- PROPOSED TREE DRIP LINE AND LIMIT OF CLEARING AND GRUBBING
- SAWCUT LINE
- SF SF — PROVIDE AND INSTALL SILT FENCE BARRIER
- PROVIDE AND INSTALL WATTLE BARRIER
- PROVIDE AND INSTALL STRAW BALE BARRIER
- INSTALL TEMPORARY DIVERSION SWALE
- 15 — TEMPORARY SEDIMENT TRAP CONTOUR
- PROVIDE AND INSTALL EROSION CONTROL BLANKET ON ALL SLOPES 3H:1V OR STEEPER
- PROVIDE AND INSTALL CONSTRUCTION ENTRANCE
- MATERIAL STOCKPILE LOCATION, PROVIDE AND INSTALL DOUBLE ROW OF SILT FENCE OR WATTLE BARRIER AROUND ENTIRE PILE
- PROVIDE AND INSTALL CONCRETE WASH PIT
- PROVIDE AND INSTALL SILT SACK INLET PROTECTION

NOT FOR CONSTRUCTION FOR PERMITTING PURPOSES ONLY

GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

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HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	1"=50'
Project No.	2001507
Date	02/19/2021
CAD File: EC200150701	

Title

SEDIMENT AND EROSION CONTROL PLAN

Sheet No.

EC-2

Xref (s) : B200150702 ; XY200150701 ; XY-14C5115-Contours-2018-UAV ; XY-14C5115-Contours-Soil-Parking 2018-UAV ; XC200150704 ; XC200150705 ; XC200150701 ; XC200150702

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SEDIMENT AND EROSION CONTROL NOTES

SEDIMENT AND EROSION CONTROL NOTES – CONNECTICUT

SEDIMENT & EROSION CONTROL NARRATIVE
THE SEDIMENT AND EROSION CONTROL PLAN WAS DEVELOPED TO PROTECT THE EXISTING ROADWAY AND STORM DRAINAGE SYSTEMS, ADJACENT PROPERTIES, AND ANY ADJACENT WETLAND AREA AND ANY ADJACENT WATER COURSE FROM SEDIMENT LADEN SURFACE RUNOFF AND EROSION. A CONSTRUCTION SEQUENCE IS PROVIDED TO PROVIDE SURFACE RUNOFF EROSION CONTROLS PRIOR TO THE BEGINNING OF PROJECT DEMOLITION AND/OR CONSTRUCTION.

CONSTRUCTION SCHEDULE
THE ANTICIPATED STARTING DATE FOR CONSTRUCTION IS SPRING 2021 WITH COMPLETION ANTICIPATED FALL 2021. APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES AS DESCRIBED HEREIN SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ALL DEMOLITION OR CONSTRUCTION ACTIVITY. SCHEDULE WORK TO MINIMIZE THE LENGTH OF TIME THAT BARE SOIL WILL BE EXPOSED.

CONTINGENCY EROSION PLAN
THE CONTRACTOR SHALL INSTALL ALL SPECIFIED SEDIMENT AND EROSION CONTROL MEASURES AND WILL BE REQUIRED TO MAINTAIN THEM IN THEIR INTENDED FUNCTIONING CONDITION. THE AGENTS OF THE MUNICIPALITY INLAND WETLANDS COMMISSION AND/OR CIVIL ENGINEER SHALL HAVE THE AUTHORITY TO REQUIRE SUPPLEMENTAL MAINTENANCE OR ADDITIONAL MEASURES IF FIELD CONDITIONS ARE ENCOUNTERED BEYOND WHAT WOULD NORMALLY BE ANTICIPATED.

CONSTRUCTION SEQUENCE
THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:

1. CONTACT MUNICIPALITY INLAND WETLANDS COMMISSION AGENT AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF ANY DEMOLITION, CONSTRUCTION OR REGULATED ACTIVITY ON THIS PROJECT.
2. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD AND APPROVED BY THE MUNICIPALITY INLAND WETLANDS COMMISSION AGENT PRIOR TO THE START OF WORK ON THE SITE. INSTALL TREE PROTECTION AND PERIMETER SILT FENCE.
3. CONSTRUCT STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS AT CONSTRUCTION ENTRANCES/EXITS AND INSTALL FILTER FABRIC AROUND GRATES OF CATCH BASINS OR INSTALL SILT SACKS ON CATCH BASIN INLETS ON OFF SITE ROADS. INSTALL SILT FENCE AND OTHER EROSION CONTROL DEVICES INDICATED ON THESE PLANS AT PERIMETER OF PROPOSED SITE DISTURBANCE AND INSTALL ALL EROSION CONTROL MEASURES AND TREE PROTECTION INDICATED ON THESE PLANS. INSTALL SEDIMENT BASINS AND SEDIMENT TRAPS IF REQUIRED AT LOW AREAS OF SITE OR AS ORDERED BY THE ENGINEER OR AS SHOWN ON THESE PLANS.
4. CLEAR AND GRUB SITE. STOCKPILE CHIPS. STOCKPILE TOPSOIL. INSTALL SEDIMENT AND EROSION CONTROLS AT STOCKPILES.
5. SITE DEMOLITION AND REMOVAL. PAVEMENT REMOVAL.
6. INSTALL SILT FENCE, CONSTRUCT DIVERSION SWALES AND SEDIMENT BASINS AND/OR SEDIMENT TRAPS. COMMENCE INSTALLATION OF STORM DRAINAGE SYSTEM.
7. COMMENCE EARTHWORK. CONSTRUCT FILL SLOPES AND RETAINING WALLS. INSTALL ADDITIONAL SEDIMENT AND EROSION CONTROLS AS WORK PROGRESSES AND CONTINUE STORM DRAINAGE SYSTEM CONSTRUCTION, TOPSOIL AND SEED SLOPES WHICH HAVE ACHIEVED FINAL SITE GRADING.
8. CONSTRUCTION STAKING OF ALL BUILDING CORNERS, UTILITIES, ACCESS DRIVES, AND PARKING AREAS.
9. ROUGH GRADING AND FILLING OF SUBGRADES AND SLOPES.
10. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
11. BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE CONTRACTOR MUST PROVIDE EVIDENCE THAT EACH SPOIL OR BORROW AREA HAS A SEDIMENT AND EROSION CONTROL PLAN APPROVED BY THE MUNICIPALITY INLAND WETLANDS COMMISSION AND WHICH IS BEING IMPLEMENTED AND MAINTAINED. THE CONTRACTOR SHALL ALSO NOTIFY THE MUNICIPALITY INLAND WETLANDS COMMISSION IN WRITING OF ALL RECEIVING SPOIL AND BORROW AREAS WHEN THEY HAVE BEEN IDENTIFIED.
12. CONTINUE INSTALLATION OF STORM DRAINAGE AS SUBGRADE ELEVATIONS ARE ACHIEVED.
13. BUILDING FOUNDATION SUBGRADE AND PAD SUBGRADE PREPARATION.
14. BUILDING FOUNDATION CONSTRUCTION. BEGIN BUILDING SUPERSTRUCTURE
15. THROUGHOUT CONSTRUCTION SEQUENCE, REMOVE SEDIMENT FROM BEHIND SILT FENCES, HAY BALES AND OTHER EROSION CONTROL DEVICES, AND FROM SEDIMENT BASINS AND/OR SEDIMENT TRAPS AS REQUIRED. REMOVAL SHALL BE ON A PERIODIC BASIS (EVERY SIGNIFICANT RAINFALL OF 0.25 INCH OR GREATER). INSPECTION OF SEDIMENT AND EROSION CONTROL MEASURES SHALL BE ON A WEEKLY BASIS AND AFTER EACH RAINFALL OF 0.25 INCHES OR GREATER. SEDIMENT COLLECTED SHALL BE DEPOSITED AND SPREAD EVENLY UPLAND ON SLOPES DURING CONSTRUCTION.
16. INSTALL UTILITIES. COMPLETE STORM DRAINAGE SYSTEM.
17. INSTALL SITE LIGHTING.
18. COMPLETE GRADING TO SUBGRADES AND CONSTRUCT PARKING AREA SUBGRADE.
19. CONSTRUCT CURBS, PAVEMENT STRUCTURE AND SIDEWALKS.
20. CONDUCT FINE GRADING.
21. CONSTRUCT OFF SITE ROADWAY AND SIGNAL IMPROVEMENTS IF REQUIRED.
22. PAVING OF PARKING AREAS AND DRIVEWAYS
23. FINAL FINE GRADING OF SLOPE AND NON-PAVED AREAS.
24. PLACE 4" TOPSOIL ON SLOPES AFTER FINAL GRADING IS COMPLETED. FERTILIZE SEED AND MULCH. SEED MIXTURE TO BE INSTALLED APRIL 15 – JUNE 1 OR AUGUST 15 – OCTOBER 1. USE EROSION CONTROL BLANKETS AS REQUIRED OR ORDERED FOR SLOPES 3:1 OR GREATER THAN 3:1 AND AS SHOWN ON LANDSCAPE PLANS OR EROSION CONTROL PLANS. FOR TEMPORARY STABILIZATION BEYOND SEEDING DATES USE ANNUAL RYE AT 4.0 LBS/1,000 S.F. FERTILIZE WITH 10-10-10 AT 1.0 LBS. OF NITROGEN PER 1,000 S.F. AND LIME AT 100 LBS/1,000 S.F. (MAX.).
25. LANDSCAPE ISLANDS, INTERIOR NON-PAVED AREAS, AND PERIMETER AREAS.
26. INSTALL SIGNING AND PAVEMENT MARKINGS
27. CLEAN STORM DRAINAGE PIPE STRUCTURES, DETENTION SYSTEMS AND WATER QUALITY DEVICES OF DEBRIS AND SEDIMENT.
28. UPON DIRECTION OF THE MUNICIPALITY INLAND WETLANDS COMMISSION AGENT, SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED FOLLOWING STABILIZATION OF THE SITE.

OPERATION REQUIREMENTS

CLEARING AND GRUBBING OPERATIONS
1. ALL SEDIMENT AND EROSION CONTROL MEASURES, INCLUDING THE CONSTRUCTION OF TEMPORARY SEDIMENTATION BASINS AND STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS, WILL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.
2. FOLLOWING INSTALLATION OF ALL SEDIMENT AND EROSION CONTROL MEASURES, THE CONTRACTOR SHALL NOT PROCEED WITH GRADING, FILLING OR OTHER CONSTRUCTION OPERATIONS UNTIL THE ENGINEER HAS INSPECTED AND APPROVED ALL INSTALLATIONS.
3. THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CLEARING AND GRUBBING OPERATIONS SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR SEDIMENT AND EROSION CONTROL DEVICES.
4. FOLLOWING THE COMPLETION OF CLEARING AND GRUBBING OPERATIONS, ALL AREAS SHALL BE STABILIZED WITH TOPSOIL AND SEEDING OR CRUSHED STONE AS SOON AS PRACTICAL.

ROUGH GRADING OPERATIONS

1. DURING THE REMOVAL AND/OR PLACEMENT OF EARTH AS INDICATED ON THE GRADING PLAN, TOPSOIL SHALL BE STRIPPED AND APPROPRIATELY STOCKPILED FOR REUSE.
2. ALL STOCKPILED TOPSOIL SHALL BE SEEDED, MULCHED WITH HAY, AND ENCLOSED BY A SILT FENCE.

FILLING OPERATIONS

1. PRIOR TO FILLING, ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE PROPERLY IMPLEMENTED, MAINTAINED AND FULLY INSTALLED, AS DIRECTED BY THE ENGINEER AND AS SHOWN ON THIS PLAN.
2. ALL FILL MATERIAL ADJACENT TO ANY WETLAND AREAS, IF APPLICABLE TO THIS PROJECT, SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN), SHALL BE PLACED IN LIFT THICKNESSES NOT GREATER THAN THAT SPECIFIED IN PROJECT SPECIFICATIONS AND/OR THE PROJECT GEOTECHNICAL REPORT. LIFTS SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS OR IN THE GEOTECHNICAL REPORT.
3. AS GENERAL GRADING OPERATIONS PROGRESS, ANY TEMPORARY DIVERSION DITCHES SHALL BE RAISED OR LOWERED, AS NECESSARY, TO DIVERT SURFACE RUNOFF TO THE SEDIMENT BASINS OR SEDIMENT TRAPS.

PLACEMENT OF DRAINAGE STRUCTURES, UTILITIES, AND BUILDING CONSTRUCTION OPERATIONS.

1. SILT FENCES SHALL BE INSTALLED AT THE DOWNHILL SIDES OF BUILDING EXCAVATIONS, MUD PUMP DISCHARGES, AND UTILITY TRENCH MATERIAL STOCKPILES. HAY BALES/STRAW BALES MAY BE USED IF SHOWN ON THE SEDIMENT AND EROSION CONTROL PLANS OR IF DIRECTED BY THE CIVIL ENGINEER.

FINAL GRADING AND PAVING OPERATIONS

1. ALL INLET AND OUTLET PROTECTION SHALL BE PLACED AND MAINTAINED AS SHOWN ON SEDIMENT AND EROSION CONTROL PLANS AND DETAILS, AND AS DESCRIBED IN SPECIFICATIONS AND AS DESCRIBED HEREIN.
2. NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS, OR JUTE MESH AND VEGETATION. ALL SLOPES SHALL BE SEEDED, AND ANY ROAD OR DRIVEWAY SHOULDER AND BANKS SHALL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.
3. PAVEMENT SUB-BASE AND BASE COURSES SHALL BE INSTALLED OVER AREAS TO BE PAVED AS SOON AS FINAL SUB-GRADES ARE ESTABLISHED AND UNDERGROUND UTILITIES AND STORM DRAINAGE SYSTEMS HAVE BEEN INSTALLED.
4. AFTER CONSTRUCTION OF PAVEMENT, TOPSOIL, FINAL SEED, MULCH AND LANDSCAPING, REMOVE ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES ONLY AFTER ALL AREAS HAVE BEEN PAVED AND/OR GRASS HAS BEEN WELL ESTABLISHED AND THE SITE IS STABLE AND HAS BEEN INSPECTED AND APPROVED BY THE MUNICIPALITY INLAND WETLANDS COMMISSION.

INSTALLATION OF SEDIMENTATION AND EROSION CONTROL MEASURES

I. SILT FENCE
A. DIG A SIX INCH TRENCH ON THE UPHILL SIDE OF THE DESIGNATED FENCE LINE LOCATION.

B. POSITION THE POST AT THE BACK OF THE TRENCH (DOWNHILL SIDE), AND HAMMER THE POST AT LEAST 1.5 FEET INTO THE GROUND.

C. LAY THE BOTTOM SIX INCHES OF THE FABRIC INTO THE TRENCH TO PREVENT UNDERMINING BY STORM WATER RUN-OFF.

D. BACKFILL THE TRENCH AND COMPACT.

II. HAY BALES/STRAW BALES
A. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, ORIENTED PARALLEL TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

B. BALES SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF FOUR INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE BARRIER.

C. EACH BALE SHALL BE SECURELY ANCHORED BY AT LEAST TWO (2) STAKES.

D. THE GAPS BETWEEN BALES SHALL BE WEDGED WITH STRAW TO PREVENT WATER LEAKAGE.

E. THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE, TO ENSURE THAT RUN-OFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER, BUT NOT AROUND IT.

OPERATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES
I. SILT FENCE
A. ALL SILT FENCES SHALL BE INSPECTED AS A MINIMUM WEEKLY OR AFTER EACH RAINFALL. ALL DETERIORATED FABRIC AND DAMAGED POSTS SHALL BE REPLACED AND PROPERLY REPOSITIONED IN ACCORDANCE WITH THIS PLAN.

B. SEDIMENT DEPOSITS SHALL BE REMOVED FROM BEHIND THE FENCE WHEN THEY REACH A MAXIMUM HEIGHT OF ONE FOOT.

II. HAY BALES/STRAW BALES
A. ALL HAY BALE/STRAW BALE RINGS SHALL BE INSPECTED FOLLOWING EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE PROMPTLY MADE AS NEEDED.

B. DEPOSITS SHALL BE REMOVED AND CLEANED-OUT IF ONE HALF OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED WITH SEDIMENT.

III. SEDIMENT BASINS/SEDIMENT TRAPS
A. CONTRACTOR TO KEEP WEEKLY CHECKLIST LOGS FOR INSPECTIONS OF ALL SEDIMENT AND EROSION CONTROL DEVICES AND HAVE THEM READILY AVAILABLE ON-SITE AT ALL TIMES FOR INSPECTION BY CTDEEP, LOCAL AUTHORITIES OR ENGINEER.

B. ALL SEDIMENT BASINS AND/OR SEDIMENT TRAPS SHALL BE INSPECTED FOLLOWING EACH RAINFALL. REPAIR OF SLOPES SHALL BE PROMPTLY MADE AS NEEDED.

C. SEDIMENT DEPOSITS SHALL BE REMOVED FROM SEDIMENT BASINS AND/OR SEDIMENT TRAPS WHEN THEY REACH A MAXIMUM HEIGHT OF ONE FOOT UNLESS OTHERWISE INDICATED ON THE EROSION CONTROL PLANS AND DETAILS TO BE AT A SPECIFIC ELEVATION PER CLEAN OUT MARKERS.

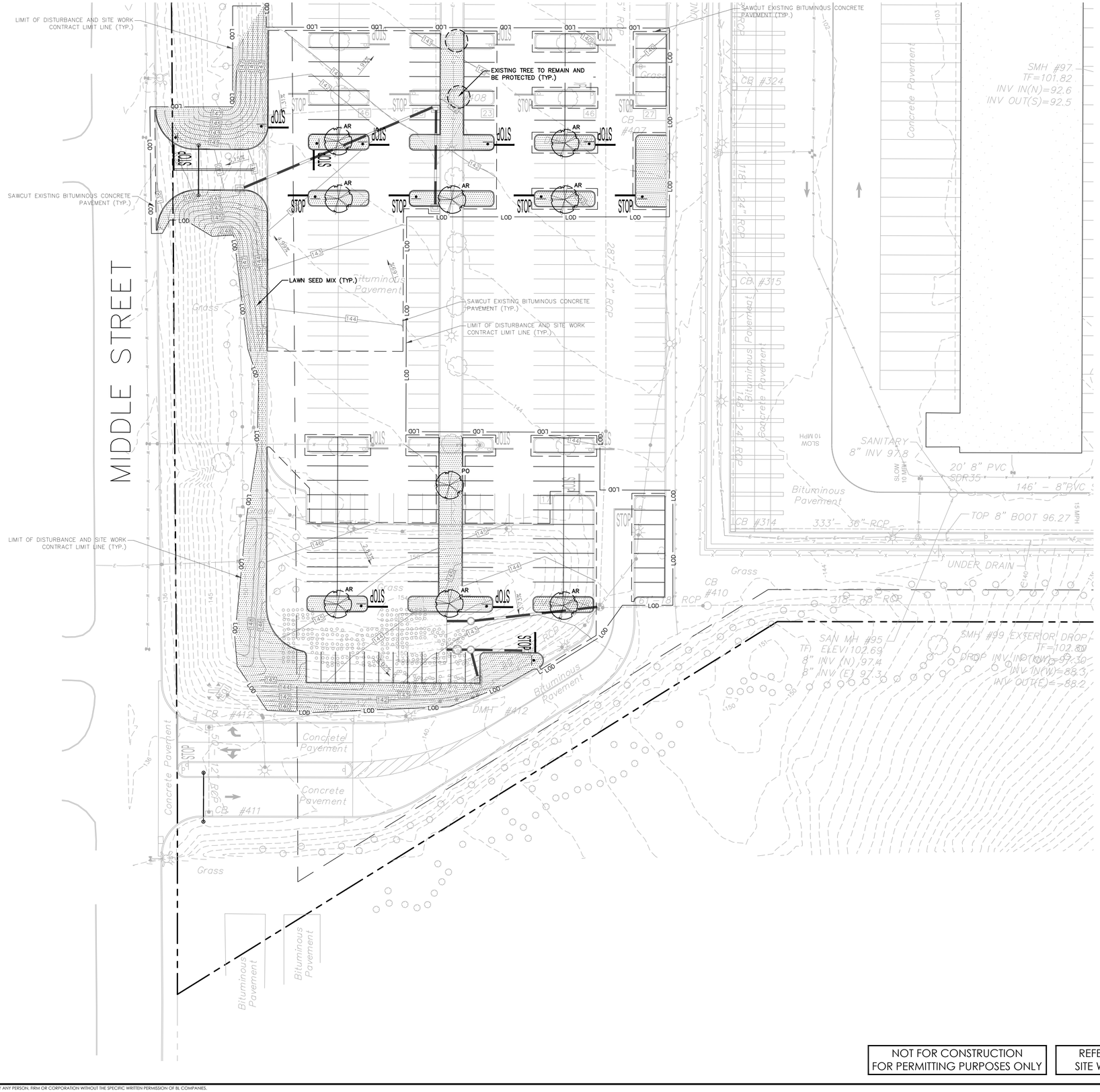
D. SEDIMENT SHALL BE DISPOSED OF ON-SITE OR AS DIRECTED BY THE ENGINEER AND LOCAL GOVERNING OFFICIALS. SEE SEDIMENT AND EROSION CONTROL NOTES HEREIN REGARDING DISPOSAL REQUIREMENTS FOR OFF SITE SPOIL DISPOSAL.

SEDIMENT AND EROSION CONTROL PLAN
1. HAY BALE/STRAW BALE FILTERS WILL BE INSTALLED AT ALL CULVERT OUTLETS IF CULVERT OUTLETS ARE APPLICABLE TO THIS PROJECT AND SILT FENCE INSTALLED ALONG THE TOE OF ALL CRITICAL CUT AND FILL SLOPES.
2. CULVERT DISCHARGE AREAS WILL BE PROTECTED WITH RIP RAP CHANNELS. ENERGY DISSIPATORS WILL BE INSTALLED AS SHOWN ON THESE PLANS AND AS NECESSARY.
3. CATCH BASINS WILL BE PROTECTED WITH HAY BALE/STRAW BALE FILTERS, SILT SACKS, SILT FENCE, OR OTHER INLET PROTECTION DEVICES PER DETAILS, THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED.
4. ALL SEDIMENT AND EROSION CONTROL MEASURES WILL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CTDEEP 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.
5. SEDIMENT AND EROSION CONTROL MEASURES WILL BE INSTALLED PRIOR TO DEMOLITION AND/OR CONSTRUCTION WHENEVER POSSIBLE.
6. ALL CONTROL MEASURES WILL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE DEMOLITION AND CONSTRUCTION PERIOD UNTIL THE SITE IS DETERMINED TO BE STABILIZED BY THE AUTHORITY HAVING JURISDICTION.
7. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD, IF NECESSARY OR REQUIRED OR AS DIRECTED BY THE CIVIL ENGINEER OR BY THE AUTHORITY HAVING JURISDICTION.
8. SEDIMENT REMOVED FROM EROSION CONTROL STRUCTURES WILL BE DISPOSED IN A MANNER WHICH IS CONSISTENT WITH THE INTENT AND REQUIREMENTS OF THE SEDIMENT AND EROSION CONTROL PLANS, NOTES, AND DETAILS.
9. THE CONTRACTOR IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS SEDIMENT AND EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, NOTIFICATION OF THE MUNICIPALITY INLAND WETLANDS COMMISSION OFFICE OR AUTHORITY HAVING JURISDICTION OF ANY TRANSFER OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE SEDIMENT AND EROSION CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.

SEDIMENT AND EROSION CONTROL NOTES
1. THE SEDIMENT AND EROSION CONTROL PLAN IS ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL TREATMENT FOR THIS SITE. SEE SEDIMENT AND EROSION CONTROL DETAILS AND CONSTRUCTION SEQUENCE. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.
2. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THIS SEDIMENT AND EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE PROPER INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED WITH CONSTRUCTION ON THE SITE OF THE REQUIREMENTS AND OBJECTIVES OF THIS PLAN, INFORMING THE AUTHORITY HAVING JURISDICTION OR INLAND WETLANDS AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY, AND FOR CONVEYING A COPY OF THE SEDIMENT & EROSION CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
3. AN EROSION CONTROL BOND MAY BE REQUIRED TO BE POSTED WITH THE CITY OF MIDDLETOWN TO ENSURE IMPLEMENTATION OF THE SEDIMENT AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF THIS BOND AND FOR INQUIRIES TO THE MUNICIPALITY INLAND WETLANDS AGENCY FOR INFORMATION ON THE METHOD, TYPE AND AMOUNT OF THE BOND POSTING UNLESS OTHERWISE DIRECTED BY THE OWNER.
4. VISUAL SITE INSPECTIONS SHALL BE CONDUCTED WEEKLY, AND AFTER EACH MEASURABLE PRECIPITATION EVENT OF 0.25 INCHES OR GREATER BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN SEDIMENT AND EROSION CONTROL, TO ASCERTAIN THAT THE SEDIMENT AND EROSION CONTROL (E&S) BMPS ARE OPERATIONAL AND EFFECTIVE IN PREVENTING POLLUTION. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT, AND INCLUDE:
A) A SUMMARY OF THE SITE CONDITIONS, E&S BMPS, AND COMPLIANCE; AND
B) THE DATE, TIME, AND THE NAME OF THE PERSON CONDUCTING THE INSPECTION
C) TURBIDITY TESTING AS REQUIRED BY THE GENERAL PERMIT (NPDES) AND CTDEEP.
5. THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE CTDEEP 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE MUNICIPALITY INLAND WETLANDS COMMISSION. THE CONTRACTOR SHALL KEEP A COPY OF THE GUIDELINES ON-SITE FOR REFERENCE DURING CONSTRUCTION.
6. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, SITE ENGINEER, MUNICIPALITY INLAND WETLANDS COMMISSION, OR GOVERNING AGENCIES. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED.
7. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS BEFORE AND AFTER EACH STORM (0.25 INCHES OR GREATER RAINFALL), OR AT LEAST WEEKLY, TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS WHERE NECESSARY.
8. THE CONTRACTOR SHALL KEEP A SUPPLY OF SEDIMENT AND EROSION CONTROL MATERIAL (HAY BALES, SILT FENCE, JUTE MESH, RIP RAP, ETC.) ON-SITE FOR MAINTENANCE AND EMERGENCY REPAIRS.
9. PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING AT THE DRIP LINE OR AS SHOWN WITH SNOW FENCE, ORANGE SAFETY FENCE, OR EQUIVALENT FENCING. ANY LIMB TRIMMING SHOULD BE DONE BEFORE CONSTRUCTION BEGINS IN THAT AREA; FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.
10. INSTALL PERIMETER SEDIMENT AND EROSION CONTROLS PRIOR TO CLEARING OR CONSTRUCTION. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SILT FENCE UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE FENCE.
11. STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS SHALL BE INSTALLED AT START OF CONSTRUCTION AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED.
12. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING. ALL EARTH STOCKPILES SHALL HAVE HAY BALES OR SILT FENCE AROUND THE LIMIT OF PILE. PILES SHALL BE TEMPORARILY SEEDED IF PILE IS TO REMAIN IN PLACE FOR MORE THAN ONE (1) MONTH.
13. SEDIMENT BASINS AND SEDIMENT TRAPS SHALL PROVIDE 134 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE CONTRIBUTING TO THE BASIN. PROVIDE BASIN VOLUMES FOR ALL DISTURBANCE ON SITE.
14. COMPLY WITH REQUIREMENTS OF CGS SECTION 22A 430B, FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES AND WITH CTDEEP RECORD KEEPING AND INSPECTION REQUIREMENTS.
15. STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY ON SITE EXCAVATION AND SHALL BE MAINTAINED DURING ALL DEMOLITION, EXCAVATION AND CONSTRUCTION ACTIVITIES.
16. MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (ONE WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKIFIER.
17. MAINTAIN EXISTING PAVED AREAS FOR CONSTRUCTION STAGING FOR AS LONG AS POSSIBLE.
18. SILT FENCE AND OTHER SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH CONTRACT DRAWINGS AND MANUFACTURER'S RECOMMENDATIONS PRIOR TO WORK IN ANY UPLAND AREAS.
19. EXCAVATED MATERIAL FROM TEMPORARY SILT TRAPS MUST BE STOCKPILED ON UPHILL SIDE OF SILT FENCE.
20. INSTALL SILT FENCE ACCORDING TO MANUFACTURER'S INSTRUCTION, PARTICULARLY, BURY LOWER EDGE OF FABRIC INTO GROUND. SILT FENCE SHALL BE TENCATE ENVIROFENCE, PROPEX GEOTEX OR EQUIVALENT APPROVED BY THE CIVIL ENGINEER. FILTER FABRIC USED SHALL BE TENCATE 140N OR 170N, OR APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR FURTHER INFORMATION.
21. WHERE INDICATED ON SEDIMENT AND EROSION CONTROL PLANS USE NEW HAY/STRAW BALES AND REPLACE THEM WHENEVER THEIR CONDITION DETERIORATES BEYOND REASONABLE USABILITY. STAKE BALES SECURELY INTO GROUND AND BUTT TIGHTLY TOGETHER TO PREVENT UNDERCUTTING AND BYPASSING.
22. INSTALL TEMPORARY DIVERSION DITCHES, PLUNGE POOLS, SEDIMENT BASINS, SEDIMENT TRAPS, CONCRETE WASH PITS AND DEWATERING PITS AS SHOWN AND AS NECESSARY DURING VARIOUS PHASES OF CONSTRUCTION TO CONTROL RUNOFF UNTIL UPHILL AREAS ARE DETERMINED TO BE STABILIZED BY THE AUTHORITY HAVING JURISDICTION. LOCATION OF TEMPORARY SEDIMENT BASINS WILL REQUIRE REVIEW AND APPROVAL BY THE CIVIL ENGINEER AND AUTHORITY HAVING JURISDICTION.
23. DIRECT ALL DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE SUCH AS TEMPORARY PITS, SEDIMENT TRAP, SEDIMENT BASINS OR GRASS FILTERS WITHIN THE APPROVED LIMIT OF DISTURBANCE. DISCHARGE TO STORM DRAINAGE SYSTEM OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR.
24. BLOCK THE OPEN UPSTREAM ENDS OF DETENTION BASIN/SEDIMENTATION BASIN OUTLET CONTROL ORIFICE UNTIL SITE IS STABILIZED. BLOCK END OF STORM SEWERS IN EXPOSED TRENCHES WITH BOARDS AND SANDBAGS AT THE END OF EACH WORKING DAY WHEN RAIN IS EXPECTED.
25. SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. OTHER DUST CONTROL MEASURES TO BE USED AS NECESSARY INCLUDE WATERING DOWN DISTURBED AREAS, USING CALCIUM CHLORIDE, AND COVERING LOADS ON DUMP TRUCKS.
26. PERIODICALLY CHECK ACCUMULATED SEDIMENT LEVELS IN THE SEDIMENT BASINS AND SEDIMENT TRAPS DURING CONSTRUCTION AND CLEAN ACCUMULATED SILT WHEN NECESSARY OR WHEN ONE FOOT OF SEDIMENT HAS ACCUMULATED OR PER SPECIFIC CLEANOUT MARKER ELEVATION. CLEAN ACCUMULATED SEDIMENT FROM CATCH BASIN SUMPS AS NECESSARY AND AS DIRECTED BY THE CIVIL ENGINEER OR OWNER'S CONSTRUCTION REPRESENTATIVE. REMOVE ACCUMULATED SEDIMENT FROM BEHIND HAY/STRAW BALES AND SILT FENCE WHEN LEVEL REACHES HALF THE HEIGHT OF THE BALE OR ONE FOOT AT SILT FENCE. DISPOSE OF SEDIMENT LEGALLY EITHER ON OR OFF SITE.
27. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
28. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS.
29. ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF UTILITY AND STORM PIPE TRENCHES SO AS TO ALLOW THE TRENCH TO INTERCEPT ALL SILT LADEN RUNOFF.
30. CONTRACTOR SHALL ONLY EXCAVATE AS MUCH UTILITY AND STORM PIPE TRENCH WORK AS CAN BE COMPLETED, BACKFILLED AND STABILIZED IN ONE DAY SO AS TO LIMIT THE AMOUNT OF OPEN, DISTURBED TRENCHING.
31. ANY STOCKPILES OF STRIPPED MATERIALS ARE TO BE PERIODICALLY SPRAYED WITH WATER OR A CRUSTING AGENT TO STABILIZE POTENTIALLY WIND-BLOWN MATERIAL. HAUL ROADS BOTH INTO AND AROUND THE SITE ARE TO BE SPRAYED AS NEEDED TO SUPPRESS DUST. TRUCKS HAULING IMPORT FILL MATERIAL ARE TO BE TARPED TO AID IN THE CONTROL OF AIRBORNE DUST. DURING HIGH WIND EVENTS (20 TO 30 MPH SUSTAINED) CONSTRUCTION ACTIVITY SHALL BE LIMITED OR CEASED IF DUST CANNOT BE CONTROLLED BY WETTING.
32. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS UNLESS OTHERWISE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
33. MAINTAIN ALL PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP PARKING LOT AND REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS WHEN AUTHORIZED BY AUTHORITY HAVING JURISDICTION. FILE NOT (NOTICE OF TERMINATION) WITH AUTHORITY HAVING JURISDICTION RESPONSIBLE FOR REGULATING STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES PER NPDES.

NOT FOR CONSTRUCTION
FOR PERMITTING PURPOSES ONLY

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REFER TO SHEET GN-1 FOR SITE WORK GENERAL NOTES

GRAPHIC SCALE
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SCALE IN FEET

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EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	W.E.V.
Drawn	W.E.V.
Reviewed	M.J.B.
Scale	1"=30'
Project No.	2001507
Date	02/19/2021
CAD File: LL200150701	

Title

LANDSCAPE PLAN

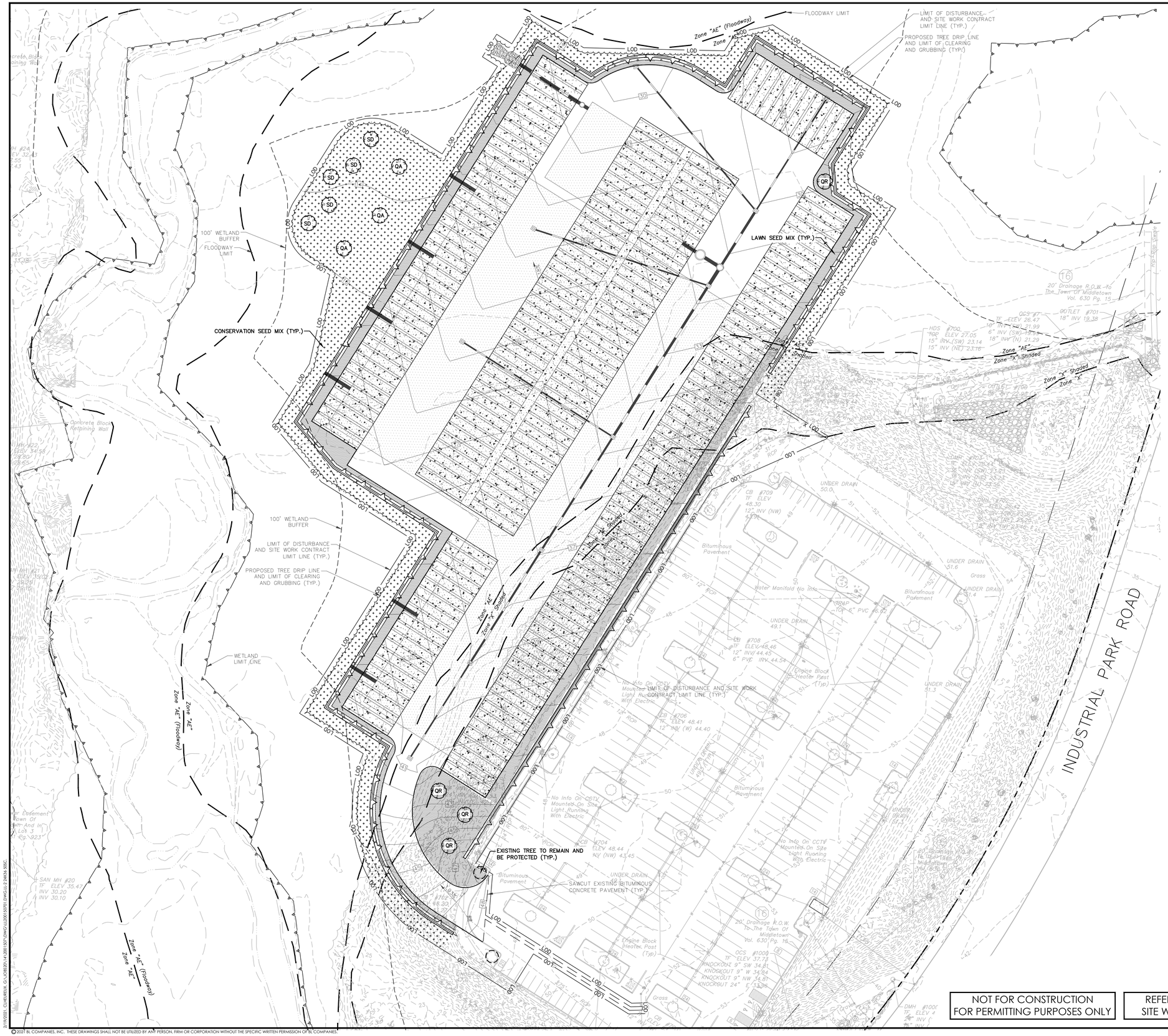
Sheet No.

LL-1

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Xref [8]: - BD200150702 - XY2001507 01 - XY1-HCS115-Contours 2018-UAV - XY1-HCS115-Contours-Spot Parking 2018-UAV - XC200150701 - XE200150701 - XL200150701 - XC200150702



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STATE OF CONNECTICUT
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EXISTING FEDEX GROUND HUB HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	W.E.V.
Drawn	W.E.V.
Reviewed	M.J.B.
Scale	1"=50'
Project No.	2001507
Date	02/19/2021
CAD File: LL200150701	

Title

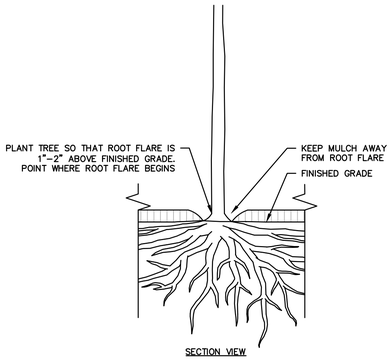
LANDSCAPE PLAN

Sheet No.

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Xref (s): - BD200150702 - XY2001507O1 - XY1-HCS115-Contours-2018-UAV - XC200150701 - XE200150701 - XL200150701 - XC200150702



ROOT FLARE DIAGRAM

N.T.S

LANDSCAPE PLANT SCHEDULE

TREES

KEY	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	COMMENTS
AR	8	Acer rubrum 'Franksred'	RED SUNSET RED MAPLE	B&B	2.5" CAL. MIN.	6' MIN. BRANCH HT.
PO	1	Platanus x acerifolia 'Morton's Circle'	EXCLAMATION! PLANETREE	B&B	2.5" CAL. MIN.	6' BRANCH HT. MIN.
QA	3	Quercus alba	WHITE OAK	B&B	2.5" CAL. MIN.	6' BRANCH HT. MIN.
QR	4	Quercus rubra	RED OAK	B&B	2.5" CAL. MIN.	6' BRANCH HT. MIN.
SD	5	Salix discolor	PUSSY WILLOW	B&B	2" CAL. MIN.	

NOTES:
1) ALL SUBSTITUTIONS MUST RECEIVE APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO DELIVERY TO SITE.

2) PROVIDE AND INSTALL ALL PLANTS SHOWN ON THE PLANTING PLAN DRAWINGS; THE QUANTITIES IN THE PLANT LIST ARE PROVIDED FOR THE CONTRACTOR'S CONVENIENCE ONLY. IF DISCREPANCIES OCCUR, THE LARGER QUANTITY SHALL APPLY.

3) IF THERE IS A DISCREPANCY BETWEEN BOTANICAL AND COMMON NAME, BOTANICAL NAME PREVAILS.

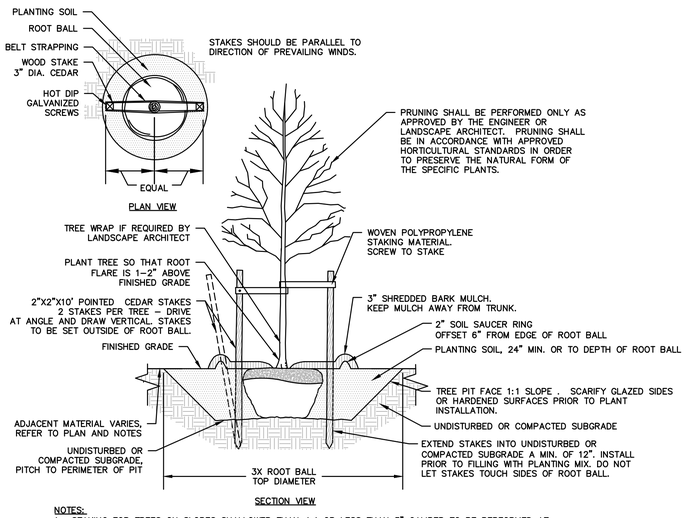
SEED MIX NOTES

A. LAWN SEEDING MIX:
15 % PERENNIAL RYEGRASS (BLEND OF 3 IMPROVED HYBRIDS)
25 % FINE LEAF OR CREEPING FESCUE (BLEND OF 3 IMPROVED HYBRIDS)
60 % KENTUCKY BLUEGRASS (BLEND OF 3 IMPROVED HYBRIDS)
SEEDING RATE: 5 LBS/1,000 S.F.
SEEDING DATES: AUGUST 15 – OCTOBER 1 AND APRIL 15 – JUNE 30 UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT.

B. CONSERVATION SEED MIX –
NEW ENGLAND CONSERVATION/WILDLIFE MIX
NEW ENGLAND WETLAND PLANTS INC. OR APPROVED EQUAL

SPECIES: VIRGINIA WILD RYE (ELYMUS VIRGNICUS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII), CREEPING RED FESCUE (FESTUCA RUBRA), SWITCH GRASS (PANICUM VIRGATUM), PARTRIDGE PEA (CHAMAECRISTA FASCICULATA), PANICLEDLEAD TICK TREFOIL (DESMODIUM PANICULATUM), INDIAN GRASS, (SORGHASTRUM NUTANS), BLUE VERVAIN (VERBENA HASTATA), BUTTERFLY MILKWEED (ASCLEPIAS TUBEROSA), BLACK EYE SUSAN (RUDBECKIA HIRTA), COMMON SNEEZEWEED (HELENIUM AUTUNALE), HEATH ASTER (ASTERPILOSUS/SYMPHYOTRICHUM PILOSUM), EARLY GOLDENROD (SOLIDAGO JUNCEA), UPLAND BENTGRASS (AGROSTIS PERENNANS).

APPLICATION RATE: 25 LBS/ ACRE (1 LB PER 1,750 SF)
SEEDING DATES: AUGUST 15 – OCTOBER 1 AND APRIL 15 – JUNE 30
UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT.



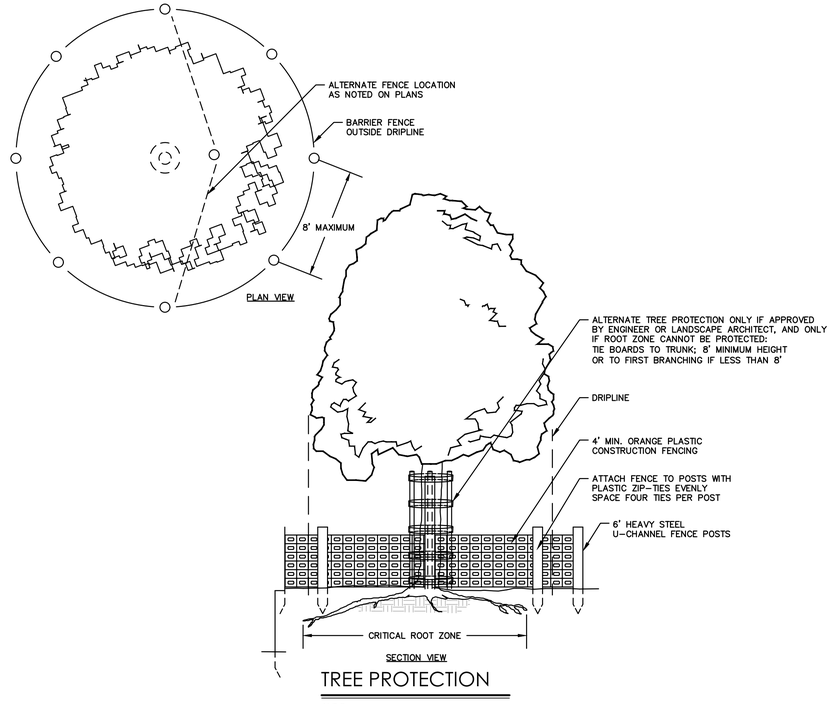
NOTES:
1. STAKING FOR TREES ON SLOPES SHALLOWER THAN 4:1 OR LESS THAN 3" CALIPER TO BE PERFORMED AT CONTRACTORS DISCRETION.

2. WOVEN POLYPROPYLENE STAKING MATERIAL SHALL BE DEEPROOT ARBORTIE (GREEN) OR APPROVED EQUIVALENT. MATERIAL SHALL BE LOOPED AROUND TREE THROUGH EACH OTHER, TWISTED, AND SECURED TO THE STAKE. INSTALL SPECIFIED MATERIAL IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.

3. BEFORE IN HOLE, REMOVE BOTTOM OF CAGE. ONCE IN HOLE, REMOVE REST OF CAGE FROM ROOT BALL. REMOVE TWINE AND BURLAP FROM TOP 1/3 OF ROOT BALL – SCORE REMAINING 2/3 OF BURLAP. IF BURLAP IS SYNTHETIC OR HAS BEEN TREATED WITH ANTI-DESSICANT, COMPLETELY REMOVE IT FROM ROOT BALL.

DECIDUOUS TREE PLANTING

N.T.S



TREE PROTECTION

N.T.S

NOT FOR CONSTRUCTION
FOR PERMITTING PURPOSES ONLY

REFER TO SHEET GN-1 FOR
SITE WORK GENERAL NOTES

Architecture
Engineering
Environmental
Land Surveying

BL Companies

100 Constitution Plaza
10th Floor
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

STATE OF CONNECTICUT
MATTHEW J. BRUSH
No. 25581
LICENSED PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB PARKING EXPANSION
49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	W.E.V.
Drawn	W.E.V.
Reviewed	M.J.B.
Scale	1"=50'
Project No.	2001507
Date	02/19/2021
CAD File: LL200150701	

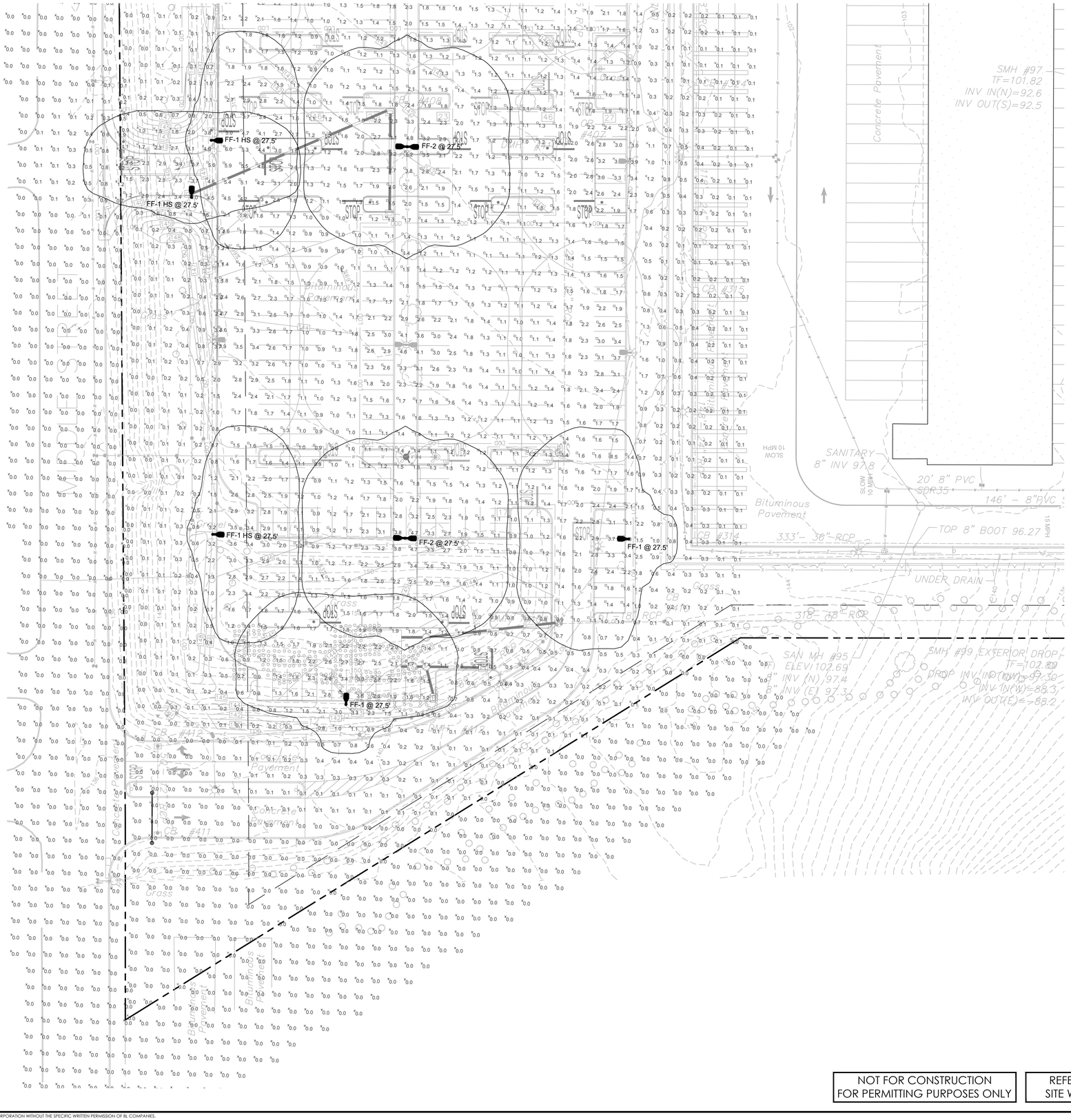
Title
LANDSCAPE NOTES AND DETAILS

Sheet No.
LL-3

Xref Ipl: - I:\2020\150702 - XY2001507\01 - XY-14CS115-Contour-2018-UAV - XC2001507\01 - XC2001507\01 - XL2001507\01 - XC2001507\02

2/19/2021 - CLARKBRUCE - C:\LCD\BCDS\LA\2001507\DWG\LL2001507\01.DWG LL-3 XREFs:N/S

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REFER TO SHEET GN-1 FOR
SITE WORK GENERAL NOTES

GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying

BL Companies

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STATE OF CONNECTICUT
MATTHEW J. BRUSH
No. 25886
LICENSED PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	J.S.D.
Drawn	J.S.D.
Reviewed	M.J.B.
Scale	1"=30'
Project No.	2001507
Date	02/19/2021

CAD File:
LP200150701

Title

SITE LIGHTING PLAN

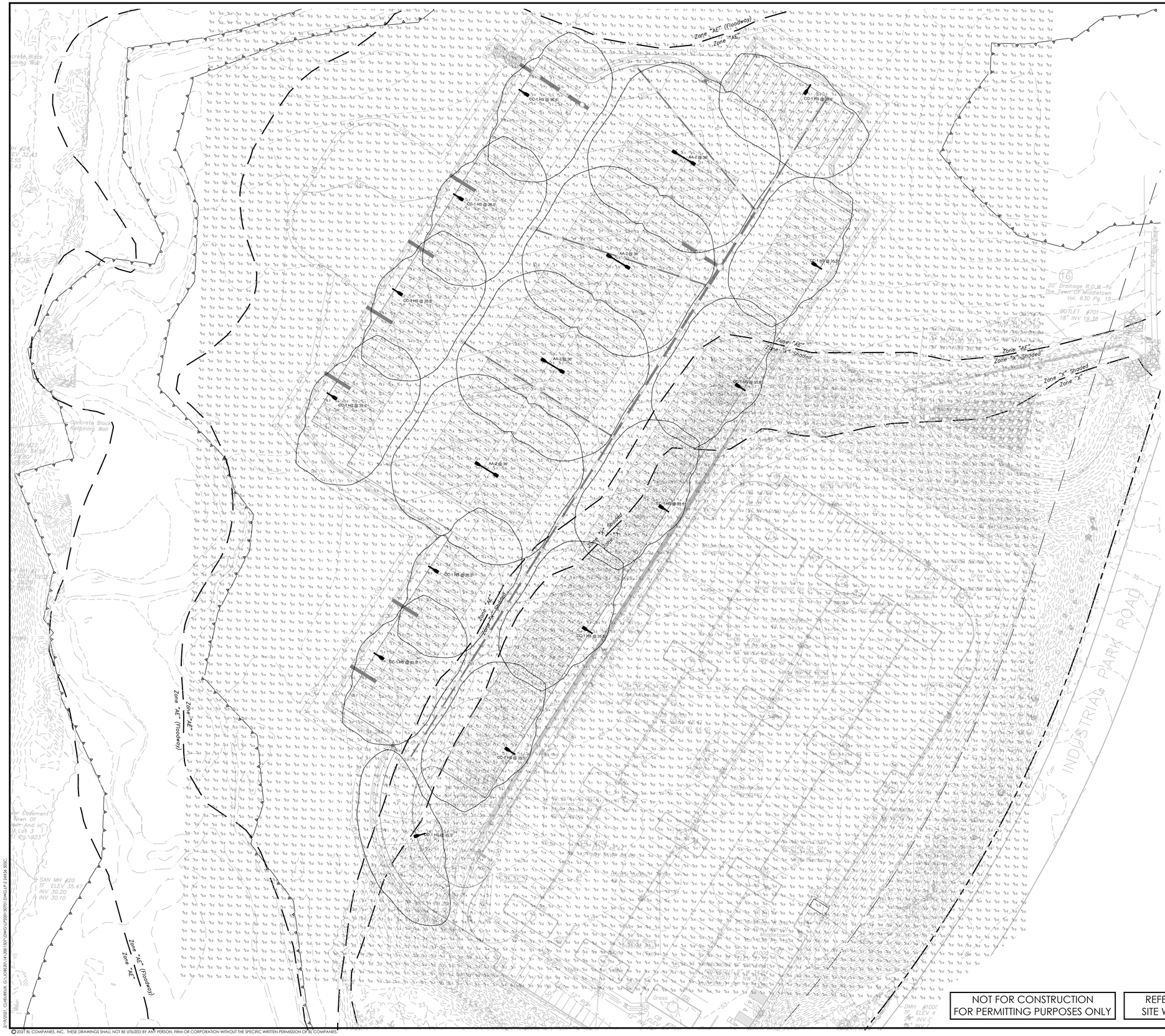
Sheet No.

LP-1

Xref (s) : I:\2020\150702_XY\200150701_XY-14C5115-Contours-2018-UAV_XC\200150701_XC200150702_XC200150704_XC200150702_XD200150701_XY-14C5115-Contours-Sat-Parking 2018-UAV

2/19/2021, CHELMSFIX, G:\JOBS\20\14\200150701\DWG\LP200150701.DWG,LP-1,2430x3050

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REFER TO SHEET GN-1 FOR SITE WORK GENERAL NOTES

GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

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2/19/2021 C:\MEUSERVR_CO\JOBS\2015\2001507\DWG\LP\2001507LP200.DWG LP-2 24X36 ISO

Xref (s): 2020201507.02 ; XY2001507.01 ; XY-14C5115-Contours-2018-UAV ; XY-14C5115-Contours-Soil-Parking 2018-UAV ; XC2001507.01 ; XC2001507.04 ; XC2001507.02 ; XE2001507.01

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STATE OF CONNECTICUT
MATTHEW J. BRUNO
No. 22559
LICENSED PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Descr.

Designed	J.S.D.
Drawn	J.S.D.
Reviewed	M.J.B.
Scale	1"=50'
Project No.	2001507
Date	02/19/2021
CAD File: LP200150701	

Title

SITE LIGHTING PLAN

Sheet No.

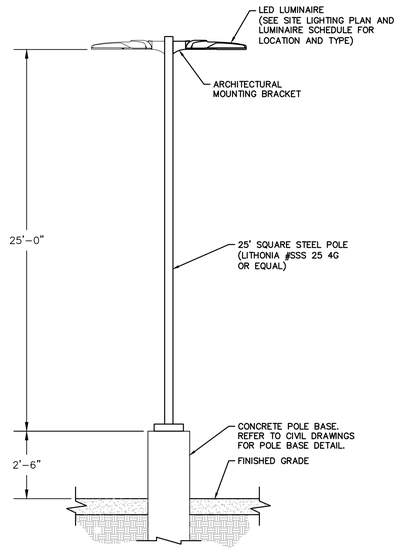
LP-2

Schedule											
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	LLF	Wattage
	AA-2	4	Lithonia Lighting	DSX2 LED P4 50K T4M MVOLT	DSX2 LED P4 50K T4M MVOLT	LED	1	DSX2_LED_P4_50K_T4M_MVOLT.ies	33096	0.88	540
	CC-1 HS	13	Lithonia Lighting	DSX2 LED P6 50K T4M MVOLT HS	DSX2 LED P6 50K T4M MVOLT with houseside shield	LED	1	DSX2_LED_P6_50K_T4M_MVOLT_HS.ies	31377	0.88	343
	DD-1 HS	1	Lithonia Lighting	DSX2 LED P4 50K T2M MVOLT HS	DSX2 LED P4 50K T2M MVOLT with houseside shield	LED	1	DSX2_LED_P4_50K_T2M_MVOLT_HS.ies	27647	0.88	270
	FF-1	5	Lithonia Lighting	DSX1 LED P7 50K T4M MVOLT	DSX1 LED P7 50K T4M MVOLT	LED	1	DSX1_LED_P7_50K_T4M_MVOLT.ies	20552	0.88	183
	FF-1 HS	5	Lithonia Lighting	DSX1 LED P6 50K T3S MVOLT HS	DSX1 LED P6 50K T3S MVOLT with houseside shield	LED	1	DSX1_LED_P6_50K_T3S_MVOLT_HS.ies	16009	0.88	163
	FF-2	4	Lithonia Lighting	DSX1 LED P4 50K T4M MVOLT	DSX1 LED P4 50K T4M MVOLT	LED	1	DSX1_LED_P4_50K_T4M_MVOLT.ies	14361	0.88	250

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking (Employee)	□	1.8 fc	6.0 fc	0.4 fc	15.0:1	4.5:1
Parking (Remote)	□	1.9 fc	4.6 fc	0.6 fc	7.7:1	3.2:1
Site/Landscape (Employee)	×	0.6 fc	5.1 fc	0.0 fc	N/A	N/A
Site/Landscape (Remote)	×	0.1 fc	3.9 fc	0.0 fc	N/A	N/A
Spill (Employee)	✳	0.0 fc	1.2 fc	0.0 fc	N/A	N/A

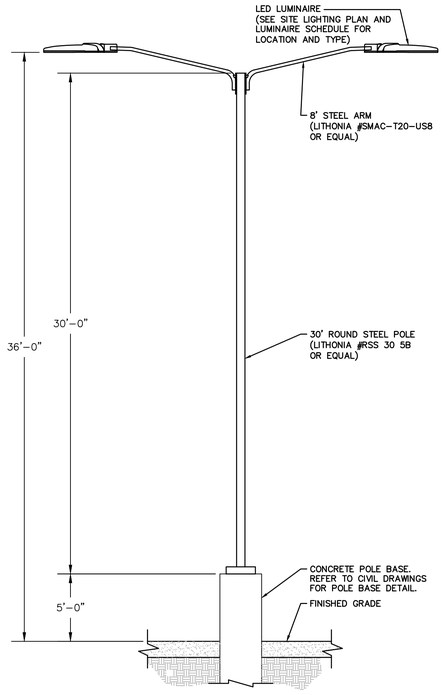
GENERAL LIGHTING NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH ALL REQUIREMENTS OF ANY LOCAL APPLICABLE CODES OR ORDINANCES, PUBLIC UTILITY COMPANY REGULATIONS, STATE CODE, AND NATIONAL ELECTRICAL CODE WITH INTERIM AMENDMENTS THERETO.
2. ALL MATERIALS SHALL CONFORM TO THE LATEST ISSUE OF ALL APPLICABLE STANDARDS AS ESTABLISHED BY EEI, NEMA, ASTM, IPCEA, NATIONAL BOARD OF FIRE UNDERWRITERS, AND UNDERWRITERS LABORATORIES INC.
3. THE CONTRACTOR SHALL TEST THE LIGHTING AFTER INSTALLATION WITH THE DEVELOPER/OWNER, AND PROVIDE TO DEVELOPER/OWNER WARRANTY AND MAINTENANCE INFORMATION. THE CONTRACTOR SHALL MAKE ADJUSTMENTS AND/OR MODIFICATIONS AS REQUIRED BY THE DEVELOPER/OWNER TO OBTAIN EVEN LIGHT DISTRIBUTION.
4. CONTRACTOR SHALL LEAVE ENTIRE ELECTRICAL SYSTEM INSTALLED BY THE CONTRACTOR IN PROPER WORKING CONDITION AND REPLACE WITHOUT ADDITIONAL CHARGE ALL WORK OR MATERIALS WHICH MAY DEVELOP DEFECTS WITHIN A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE BY THE ENGINEER.
5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, BASES AND CONDUITS TO SITE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO DELIVERY OF MATERIAL TO SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW. IF ALTERNATIVE LIGHTING IS PROPOSED SUBMIT A PHOTOMETRIC FOOT-CANDLE LAYOUT ALONG WITH ANNUAL MAINTENANCE REQUIREMENTS AND ANTICIPATED COSTS.
6. LIGHTS ARE DESIGNED TO PROVIDE EVEN LEVELS OF ILLUMINATION AND AVOID GLARE ONTO NEIGHBORING PROPERTIES. FINAL DESIGN MAY VARY PENDING MANUFACTURER'S RECOMMENDATIONS.
7. ALL LIGHTING CONTROLS, PANELS, CIRCUIT BREAKERS ETC. ARE TO BE PROVIDED UNDER A SEPARATE CONTRACT BY BUILDING CONTRACTOR. CAREFUL COORDINATION IS REQUIRED BETWEEN SITE CONTRACTOR AND BUILDING CONTRACTOR TO PROVIDE A COMPLETE INSTALLATION FOR SITE LIGHTING.
8. THE CONTRACTOR WILL PROVIDE AND INSTALL ALL MATERIAL NECESSARY TO COMPLETE THE SITE LIGHTING SYSTEM INCLUDING BUT NOT LIMITED TO CONDUIT, BASES, ANCHOR BOLTS, POLES SITE LIGHTS AND LAMPS. THE CONTRACTOR WILL COORDINATE WIRING AND POWERING OF LIGHTS WITH OWNER, ARCHITECT, AND BUILDING CONTRACTOR IF DIFFERENT FROM THE SITE CONTRACTOR.
9. ALL LIGHTS TO BE AS LISTED IN SCHEDULE OR APPROVED EQUIVALENT. LIGHTS SHALL BE MOUNTED ON STEEL POLES ATOP CONCRETE BASES THAT ARE SET 2', 5' OR 15' (CLEAR) BEHIND CURBS. ILLUMINATION ANALYSIS MODELED USING LIGHTING FIXTURES LISTED IN SCHEDULE.
10. LIGHT POLES, AND BRACKETS TO BE AS SHOWN ON DETAILS OR APPROVED EQUIVALENT.
11. WIRE AND CABLE SHALL BE COPPER AND CONFORM TO THE FOLLOWING NEC TYPE THHN/THWN SOLID FOR NO. 12 AND NO. 10. NEC TYPE THHN/THWN STRANDED FOR NO. 8 AND LARGER. RIGID STEEL CONDUIT SHALL BE GALVANIZED. FITTINGS SHALL BE CAST FERROUS MATERIAL WITH A CADMIUM OR ZINC PLATED FINISH.
12. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE TO NEC.
13. COORDINATE EXACT LUMINAIRE COUNT WITH LIGHTING PLAN.



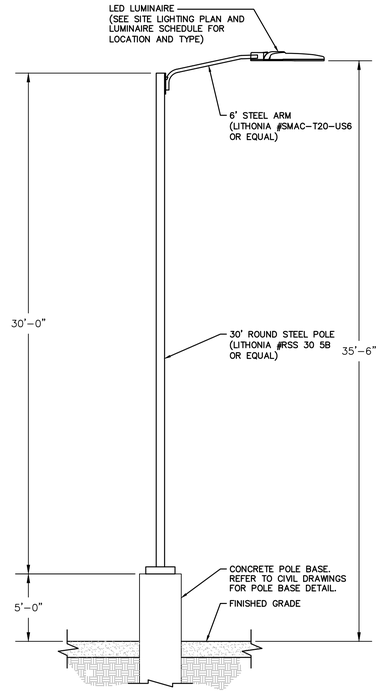
TYPICAL EMPLOYEE PARKING SINGLE AND DOUBLE HEAD LUMINAIRE MOUNTING DETAIL

N.T.S



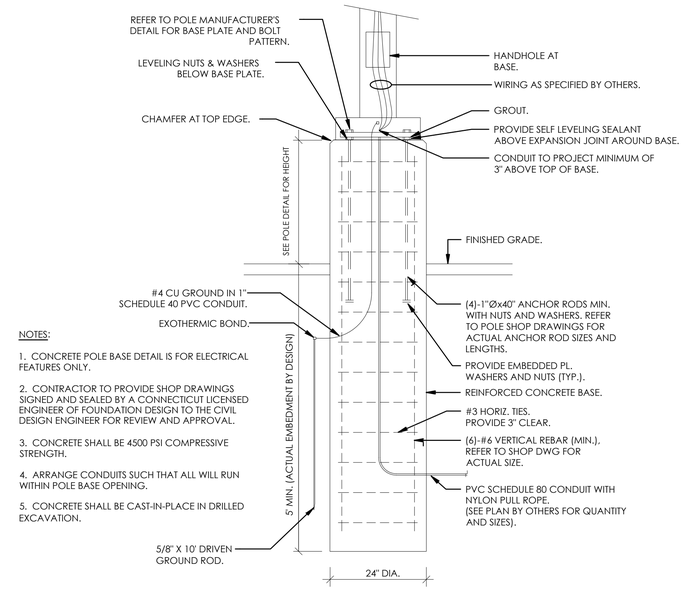
TYPICAL DOUBLE HEAD LUMINAIRE MOUNTING DETAIL

N.T.S



TYPICAL SINGLE HEAD LUMINAIRE MOUNTING DETAIL

N.T.S



NOTES:

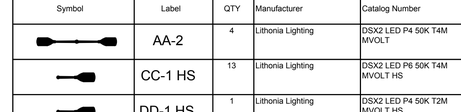
1. CONCRETE POLE BASE DETAIL IS FOR ELECTRICAL FEATURES ONLY.
2. CONTRACTOR TO PROVIDE SHOP DRAWINGS SIGNED AND SEALED BY A CONNECTICUT LICENSED ENGINEER OF FOUNDATION DESIGN TO THE CIVIL DESIGN ENGINEER FOR REVIEW AND APPROVAL.
3. CONCRETE SHALL BE 4500 PSI COMPRESSIVE STRENGTH.
4. ARRANGE CONDUITS SUCH THAT ALL WILL RUN WITHIN POLE BASE OPENING.
5. CONCRETE SHALL BE CAST-IN-PLACE IN DRILLED EXCAVATION.

TYPICAL CONCRETE LIGHT POLE BASE DETAIL

N.T.S

NOT FOR CONSTRUCTION FOR PERMITTING PURPOSES ONLY

REFER TO SHEET GN-1 FOR SITE WORK GENERAL NOTES



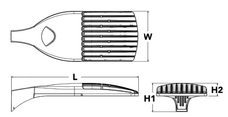
D-Series Size 1
LED Area Luminaire

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA: 1.01 ft² (0.09 m²)
Length: 33" (83.8 cm)
Width: 13" (33.0 cm)
Height H1: 7-1/2" (19.0 cm)
Height H2: 3-1/2"
Weight (max): 27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

A+ Capable options indicated by thin color background.

Ordering Information

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics** P1 P4 P7 P2 P5 P8 P3 P6 P9 **Rotated optics** P10¹ P12¹ P11¹ P13¹	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control[2] LCCO Left corner cutoff[2] RCCO Right corner cutoff[2]	MVOLT[3] 120 [4] 208 [4] 240 [4] 277 [4] 347 [4] 480 [4]	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor [5] RPUMBA Round pole universal mounting adaptor [5] **Shipped separately** KMAB DDBXD U Mast arm mounting bracket adaptor (specify finish) [6]

Control options		Other options		Finish (required)	
Shipped installed		**Shipped installed**		DDBXD	Dark bronze
NLTAIR2 nLight AIR generation 2 enabled [7]	PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc [8,9]	HS House-side shield [10]		DBLXD	Black
PIRHN Network, high/low motion/ambient sensor [8]	PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc [8,9]	SF Single fuse (120, 277, 347V) [4]		DNAXD	Natural aluminum
PER NEMA twist-lock receptacle only (controls ordered separate) [9]	PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc [8,9,11]	DF Double fuse (208, 240, 480V) [4]		DWHXD	White
PER5 Five-pin receptacle only (controls ordered separate) [9,10]	PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc [8,9,11]	L90 Left rotated optics [1]		DDBTXD	Textured dark bronze
PER7 Seven-pin receptacle only (controls ordered separate) [9,10]	FAO Field adjustable output [8]	R90 Right rotated optics [1]		DBLBXD	Textured black
DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) [12]		**Shipped separately**		DNATXD	Textured natural aluminum
DS Dual switching [12,13,14]		BS Bird spikes [10]		DWHGXD	Textured white
		EGS External glare shield [10]			

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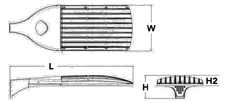
D-Series Size 2
LED Area Luminaire

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA: 1.1 ft² (0.10 m²)
Length: 40" (101.6 cm)
Width: 15" (38.1 cm)
Height 1: 7-1/4" (18.4 cm)
Height 2: (max): 3.5"
Weight: 36lbs



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. The Size 2 is ideal for replacing 400-1000W metal halide in area lighting applications with energy savings of up to 80% and expected service life of over 100,000 hours.

A+ Capable options indicated by thin color background.

Ordering Information

EXAMPLE: DSX2 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX2 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX2 LED	**Forward optics** P1 P5 P2 P6 P3 P7 P4 P8 **Rotated optics**[1] P10 P13 P11 P14 P12	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I Short T2S Type II Short T2M Type II Medium T3S Type III Short T3M Type III Medium T4M Type IV Medium TFTM Forward Throw Medium T5VS Type V Very Short T5S Type V Short T5M Type V Medium T5W Type V Wide BLC Backlight control [2] LCCO Left corner cutoff [2] RCCO Right corner cutoff [2]	MVOLT [3] 120 [4] 208 [4] 240 [4] 277 [4] 347 [4] 480 [4]	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor [5] RPUMBA Round pole universal mounting adaptor [5] **Shipped separately** KMAB DDBXD U Mast arm mounting bracket adaptor (specify finish) [6]

Control options		Other options		Finish (required)	
Shipped installed		**Shipped installed**		DDBXD	Dark bronze
NLTAIR2 nLight AIR generation 2 enabled [7]	PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enable at 5fc	HS House-side shield [10]		DBLXD	Black
PIRHN Network, Bi-Level motion/ambient sensor [8]	FAO Field Adjustable Output [8]	SF Single fuse (120, 277, 347V) [4]		DNAXD	Natural aluminum
PER NEMA twist-lock receptacle only (no controls) [9]		DF Double fuse (208, 240, 480V) [4]		DWHXD	White
PER5 Five-wire receptacle only (no controls) [9,10]		L90 Left rotated optics [1]		DDBTXD	Textured dark bronze
PER7 Seven-wire receptacle only (no controls) [9,10]		R90 Right rotated optics [1]		DBLBXD	Textured black
DMG 0-10V dimming extend out back of housing for external control (no controls) [11]		**Shipped separately**		DNATXD	Textured natural aluminum
DS Dual switching [12,13]		BS Bird spikes [10]		DWHGXD	Textured white
		EGS External glare shield [10]			

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STATE OF CONNECTICUT — MATTHEW J. BRUNO — No. 25,021 — LICENSED PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION
49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	J.S.D.
Drawn	J.S.D.
Reviewed	M.J.B.
Scale	NTS
Project No.	2001507
Date	02/19/2021
CAD File: LP200150701	

Title

LIGHTING NOTES AND DETAILS

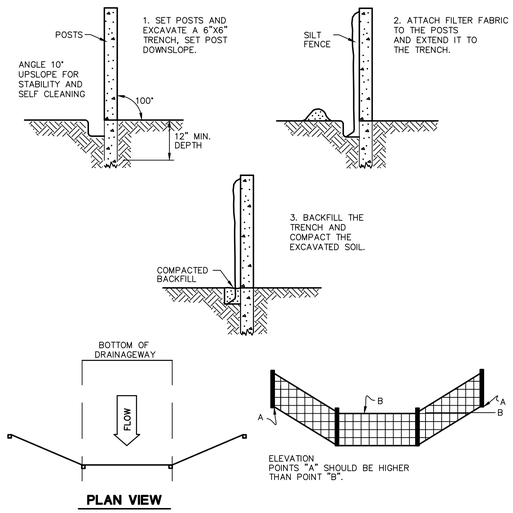
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LP-3

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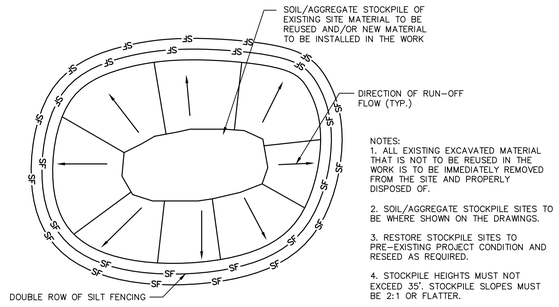
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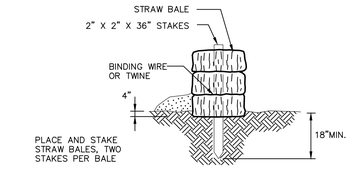
SILT FENCE BARRIER

N.T.S. CTEC–003



MATERIALS STOCKPILE DETAIL

N.T.S. BLEC–006



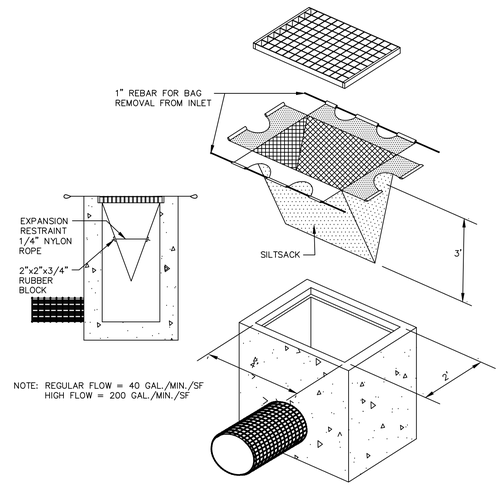
STRAW BALE BARRIERS SHOULD NOT BE USED FOR MORE THAN 3 MONTHS

SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE ABOVE GROUND HEIGHT OF THE BARRIER.

ANY SECTION OF STRAW BALE BARRIER WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.

STRAW BALE DETAIL

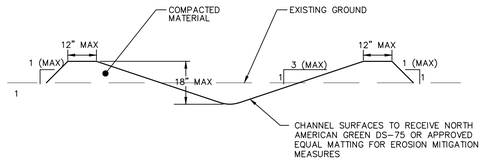
N.T.S. BLEC–007



NOTE: REGULAR FLOW = 40 GAL./MIN./SF
HIGH FLOW = 200 GAL./MIN./SF

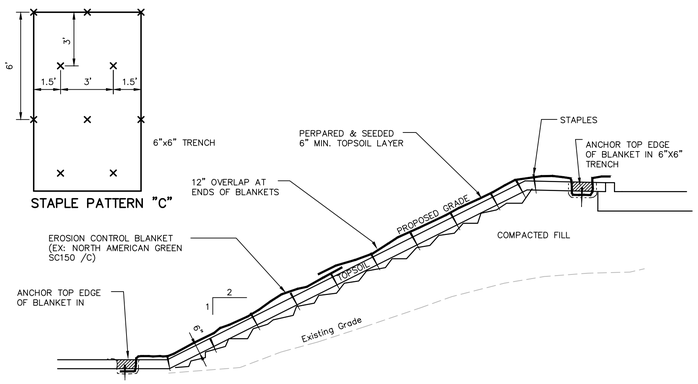
SILT SACK

N.T.S.



NON-ENGINEERED TEMPORARY DIVERSION DITCH DETAIL

N.T.S.



EROSION CONTROL BLANKET ON FILL SLOPE

N.T.S. BLEC–009

NOTES

1. CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED.

2. THE CONTRACTOR SHALL SUBMIT THE DESIGN, LOCATION AND SIZING OF THE CONCRETE WASHOUT AREA(S) WITH THE PROJECT'S EROSION AND SEDIMENTATION CONTROL PLAN AND SHALL BE APPROVED BY THE ENGINEER.

LOCATION: WASHOUT AREA(S) ARE TO BE LOCATED AT LEAST 50 FEET FROM ANY STREAM, WETLAND, STORM DRAINS, OR OTHER SENSITIVE RESOURCE. THE FLOOD CONTINGENCY PLAN MUST ADDRESS THE CONCRETE WASHOUT IF THE WASHOUT IS TO BE LOCATED WITHIN THE FLOODPLAIN.

SIZE: THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING, BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.

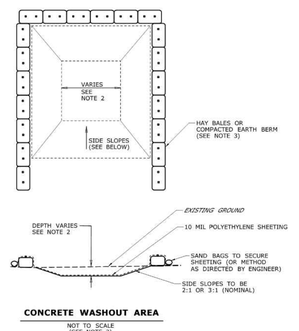
3. SURFACE DISCHARGE IS UNACCEPTABLE. THEREFORE, HAY BALES OR OTHER CONTROL MEASURES, AS APPROVED BY THE ENGINEER, SHOULD BE USED AROUND THE PERIMETER OF THE CONCRETE WASHOUT AREA FOR CONTAINMENT.

4. SIGNS SHOULD BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CONCRETE AREA(S) AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS. WASHOUT AREA(S) SHOULD BE FLAGGED WITH SAFETY FENCING OR OTHER APPROVED METHOD.

5. WASHOUT AREA(S) ARE TO BE INSPECTED AT LEAST ONCE A WEEK FOR STRUCTURAL INTEGRITY, ADEQUATE HOLDING CAPACITY AND CHECKED FOR LEAKS, TEARS, OR OVERFLOWS. (AS REQUIRED BY THE CONSTRUCTION SITE ENVIRONMENTAL INSPECTION REPORT) WASHOUT AREA(S) SHOULD BE CHECKED AFTER HEAVY RAINS.

6. HARDENED CONCRETE WASTE SHOULD BE REMOVED AND DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO HALF OF THE CONCRETE WASHOUT'S HEIGHT. THE WASTE CAN BE STORED AT AN UPLAND LOCATION, AS APPROVED BY THE ENGINEER. ALL CONCRETE WASTE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS, REGULATIONS, AND GUIDELINES.

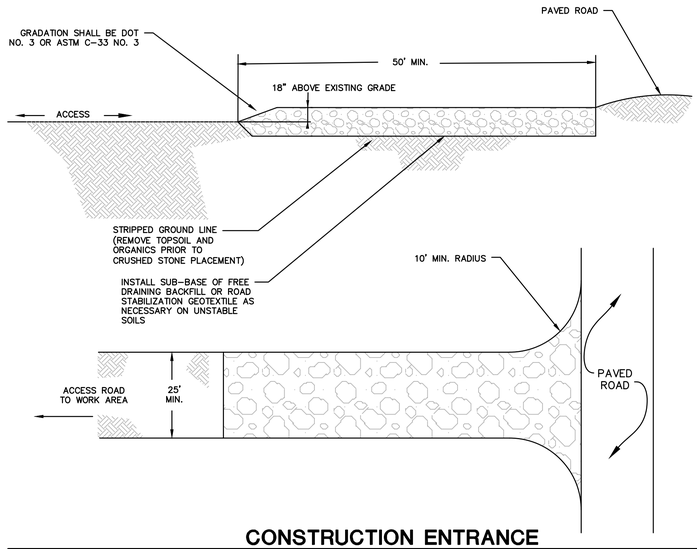
7. PAYMENT FOR THIS ITEM IS TO BE INCLUDED UNDER THE GENERAL COST OF THE WORK FOR THE PROJECT, INCLUDING SITE RESTORATION.



CONCRETE WASHOUT AREA
NOT TO SCALE
(SEE NOTE 2)

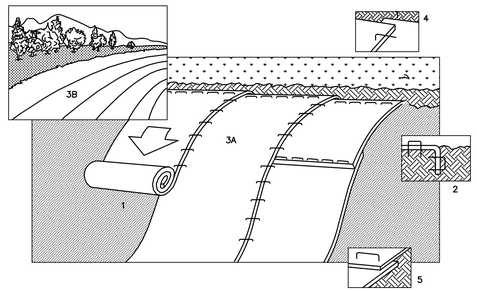
CONCRETE WASH PIT

N.T.S.



CONSTRUCTION ENTRANCE

N.T.S. CT DEEP CE–2



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER,AND SEED.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

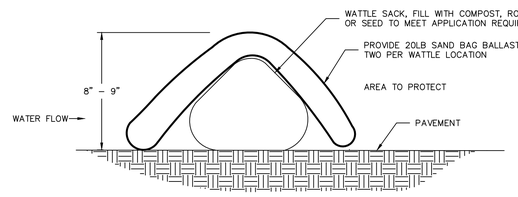
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.

5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

EROSION CONTROL BLANKET

N.T.S. BLEC–010



WATTLE BARRIER

N.T.S.

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HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	NONE
Project No.	2001507
Date	02/19/2021
CAD File: DN200150701	

Title

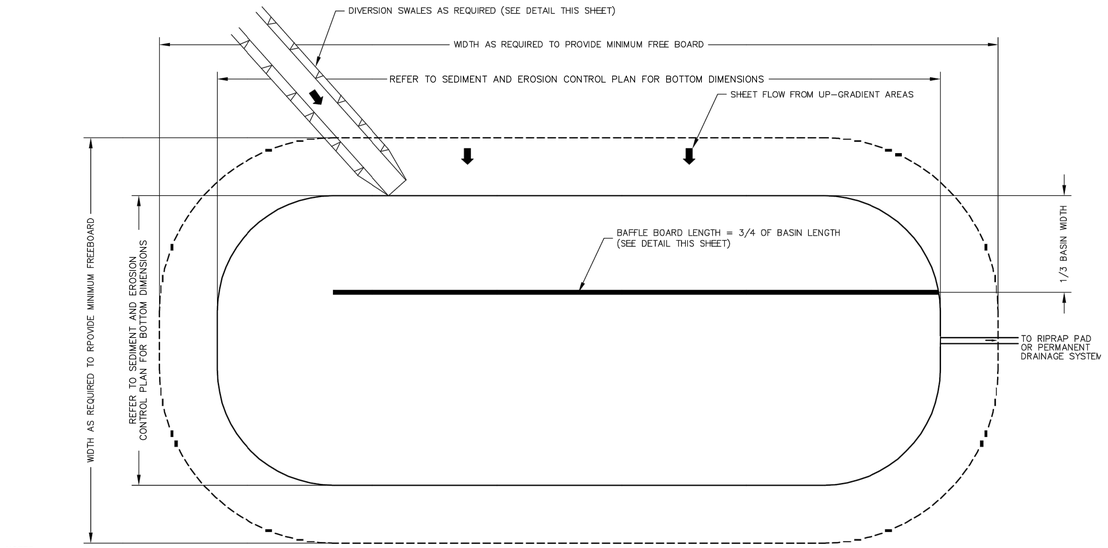
SITE DETAILS

Sheet No.

DN-1

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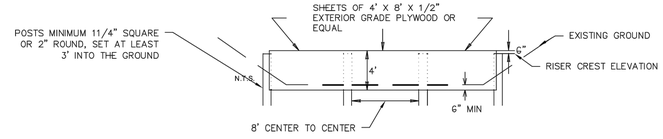
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NOTES:
1. REFER TO SIZING CALCULATIONS FOR BASIN BOTTOM DIMENSIONS.
2. OUTLET TO DISCHARGE VIA PERMANENT PROJECT DRAINAGE SYSTEM OUTLETS. USE PERMANENT PIPING AND STRUCTURES AS REQUIRED. PERMANENT OUTLET PROTECTION (RIP RAP SCOUR HOLE) MUST BE INSTALLED PRIOR TO ANY DISCHARGES FROM BASIN.
3. PROVIDE RIP RAP SPLASH PAD FOR ALL BASIN OUTLETS (OR TEMPORARY DIVERSION PIPES) NOT OUTLETING TO PERMANENT SCOUR HOLES. NO DISCHARGE FROM TEMPORARY SEDIMENT BASINS WILL BE PERMITTED OUTSIDE OF PROJECT ROADWAYS OR RETAINING WALL EXCEPT FOR OUTLETS AS SHOWN ON PLANS.

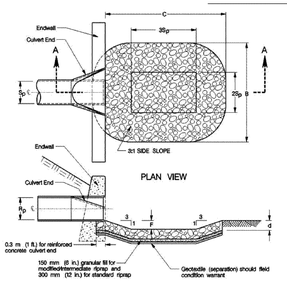
TEMPORARY SEDIMENTATION BASIN - PLAN

N.T.S.



TEMPORARY SEDIMENT BASIN BAFFLE BOARD

N.T.S.



LEGEND
- Sp = Max. inside pipe span (non-circular sections) / Inside pipe diameter (circular sections)
- Rp = Max. inside pipe rise (non-circular sections) / Inside pipe diameter (circular sections)
- d = 300 mm (12 in.) Modified Riprap; 450 mm (18 in.) Intermediate Riprap; 900 mm (36 in.) Standard Riprap
- Type 1 F = 0.5 Rp, C = Rp, B = 2Sp + 6F
- Type 2 F = Rp, C = 3Sp + 6F, B = 2Sp + 6F

Type of riprap required is as follows:

Modified	$d_{50} < 0.42$ ft
Intermediate	$0.42 \text{ ft} < d_{50} < 0.67$ ft
Standard	$0.67 \text{ ft} < d_{50} < 1.25$ ft
Special	$1.25 \text{ ft} < d_{50}$

Where d_{50} is calculated as follows:

Type 1 $d_{50} = (0.0125R_p^{2.5}/TW)(Q/R_p^{2.5})^{1.333}$

Type 2 $d_{50} = (0.0082R_p^{2.5}/TW)(Q/R_p^{2.5})^{1.333}$

Where TW= Tailwater depth in ft.

Shear Stress of riprap at outlet caclulated as follows:

$T=\gamma dS$ 2002 CTDOT Drainage Manual Eq. 7.12

T= Maximum Shear Stress (lb/ft^2)
γ= Unit Weight of Water (62.4 lb/ft^3)
d= Maximum flow depth (assumed to be 3/4 pipe diam.) (ft)
S= Average bed slope (assumed to be pipe slope) (ft/ft)

OUTLET NO.	Sp (Diameter, in.)	Pipe Slope (ft/ft)	Q (CFS)	V (FPS)	Type (number only)	F (ft.)	C (ft.)	B (ft.)	TW (ft.)	d_{50} (ft.)	Riprap Specification	Permissible Shear Stress (lb/ft^2)	Calculated Shear Stress (lb/ft^2)
O-20	36	0.029	13.16	2.52	1	1.50	18	15	2.08	0.04	Standard	5.00	4.07

Note: Preformed scour hole design calculations based off of standards provided by the Connecticut Department of Transportation Drainage Manual and the Connecticut Guidelines for Soil Erosion and Sediment Control. Permissible shear stress for riprap gound cover duplicated from the 2000 CTDOT Drainage Manual Table 7-4. All outlet pipe flows (Q), velocities (V), and tailwater depths (TW) represent the conditions during the 100-year storm event.

RIPRAP PREFORMED SCOUR HOLE

N.T.S

Temporary Sediment Basin Sizing - Wet Storage

From the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control:

V= VOLUME OF SEDIMENT TRAPPED
DA= DRAINAGE AREA (ACRES)
A = AVERAGE ANNUAL EROSION (FIGURE SB-1)
DR= DELIVERY RATIO (FIGURE SB-12)
TE= TRAP EFFICIENCY
γ= ESTIMATED SEDIMENT DENSITY (FIGURE SB-2)

$$V = \frac{(DA)(A)(DR)(TE)(2,000 \text{lbs./ton})}{(\gamma)(43,560 \text{sq.ft./ac})}$$

Wet Storage Required = 2V

Basin #	Drainage Area (DA) ft^2	DA ac	DA mi^2	Average Annual Erosion (A) ton/ac/yr	Delivery Ratio (DR) Decimal	Trap Efficiency (TE) Decimal	Est. Sediment Density (y) lb/ft^3	Volume of Sediment Trapped (V) ac/ft/yr	V ft^3/yr	Wet Storage Required ft^3
1	240,700	5.526	0.0086	50	0.400	0.80	85	0.048	2,080.38	4,161

Figure SB-1 Determining Erosion Rates

Land Use	Ave. Annual Erosion
Wooded area	0.2 ton/ac/yr
Developed urban areas, grassed areas, pastures, hay fields, abandoned fields with good cover	1.0 ton/ac/yr
Clean tilled cropland (corn, vegetables, etc.)	10 ton/ac/yr
Construction Areas	50 ton/ac/yr

Source: USDA-SCS

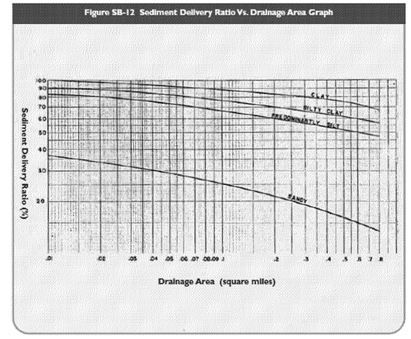
Figure SB-2 Estimated Sediment Density

Soil Texture *	γ_s Submerged (lbs/cu. ft.)
Clay	40-60
Silt	55-75
Clay-silt mixtures (equal parts)	40-65
Sand-silt mixtures (equal parts)	75-95
Clay-silt-sand mixtures (equal parts)	50-80
Sand	85-100
Gravel	85-125
Poorly sorted sand and gravel	95-130

* Use USDA soil data from county soil surveys or sieve analysis to determine soil texture.

Source: USDA-NRCS.

Figure SB-12 Sediment Delivery Ratio Vs. Drainage Area Graph



Sources: USDA-NRCS

Temporary Sediment Basin Sizing - Minimum Dimensions

From the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control:

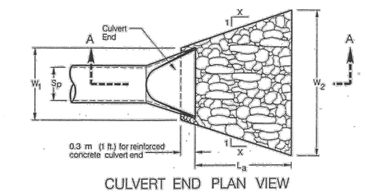
W= Minimum width of bottom of temporay sediment basin (feet) $W = 10\sqrt{Q_{25}}$
Q_{25}= Peak discharge from a 25-year frequency storm (cfs) $L = 2W$
L= Minimum length of bottom of temporary sediment basin (feet)

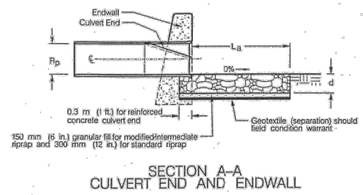
Basin #	Q_{25}* cfs	Min. Width (W) Feet	Min Length (L) Feet	Proposed Width Feet	Proposed Length Feet	Bottom Elevation Feet	Elevation Area ft^2	Outlet Elevation Feet	Outlet Elevation Area ft^2	Wet Storage Provided ft^2	Storage Required ft^3
1	28	53	106	53	106	12.00	5,494	14.00	8,074	13,568	4,161

* 25-year peak flow rates were determined using HydroCAD analysis of eah TSB drainage area.

TEMPORARY SEDIMENTATION BASIN - SIZING CALCULATIONS

N.T.S.





OUTLET NO.	Sp (Diameter, in.)	Q (CFS)	V (FPS)	Apron Type (letter only)	La (ft.)	W1 (ft.)	W2 (ft.)	Riprap Specification
O-20	36	13.16	2.52	B	15	9	15	Modified

Note: Riprap apron design calculations based off of standards provided by the Connecticut Department of Transportation Drainage Manual and the Connecticut Guidelines for Soil Erosion and Sediment Control.

Design: Type A: $La=[1.80(Q-5)/Sp^{1.5}]+10$, $W1=3Sp$, $W2=3Sp+0.7La$
Type B: $La=[3.0(Q-5)/Sp^{1.5}]+10$, $W1=3Sp$, $W2=3Sp+0.4La$

LEGEND
- Sp = Max. inside pipe span (non-circular sections) / Inside pipe diameter (circular sections)
- Rp = Max. inside pipe rise (non-circular sections) / Inside pipe diameter (circular sections)
- La = Length of riprap apron measured from the end of culvert end section or face of endwall
- d = 300 mm (12 in.) Modified Riprap; 450 mm (18 in.) Intermediate Riprap; 900 mm (36 in.) Standard Riprap

	X	W1	W2
Type A Riprap Apron	3	$3S_p$	$3S_p$+0.7 La
Type B Riprap Apron	5	$3S_p$	$3S_p$+0.4 La

RIRAP APRON OUTLET PROTECTION

N.T.S

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49 FEDEX DRIVE
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REVISIONS

No.	Date	Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	NONE
Project No.	2001507
Date	02/19/2021
CAD File: DN2001507O1	

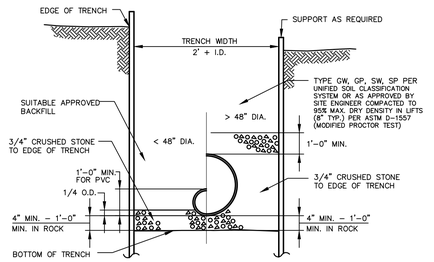
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SITE DETAILS

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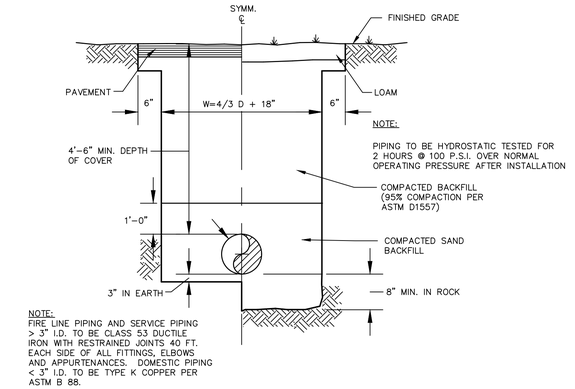
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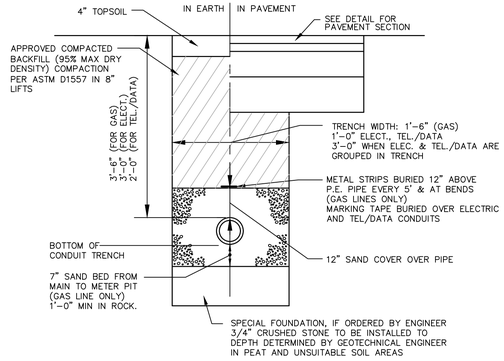
TYPICAL STORM SEWER TRENCH SECTION

N.T.S. BLDD-004



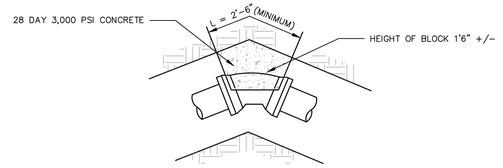
TYPICAL WATER MAIN AND SERVICE TRENCH DETAIL

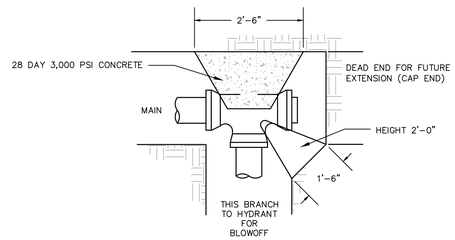
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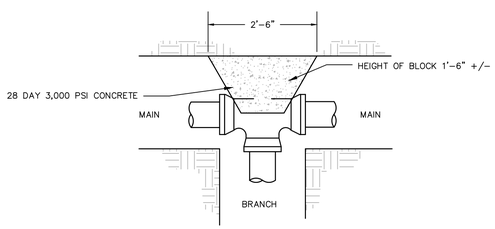


ELECTRICAL, TELEPHONE AND GAS TRENCH DETAIL

N.T.S. BLUD-001

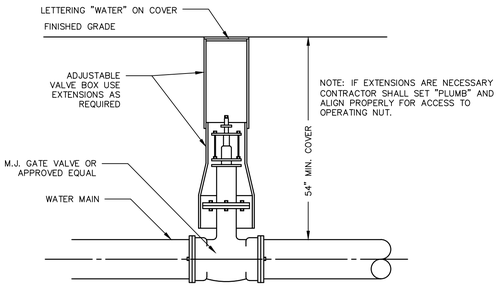






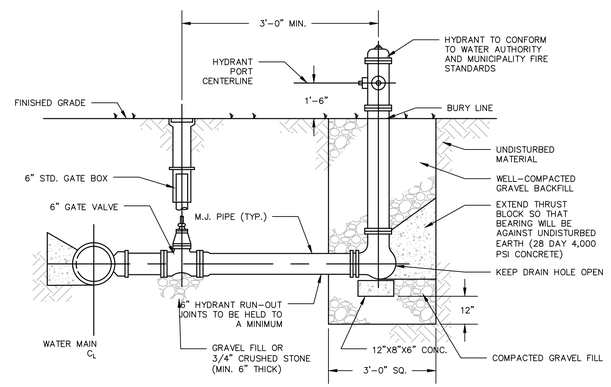
THRUST BLOCK FOR WATER LINES

N.T.S



TYPICAL GATE VALVE AND VALVE BOX DETAIL

N.T.S



FIRE HYDRANT WITH GATE VALVE AND BOX

N.T.S.

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STATE OF CONNECTICUT
MATTHEW J. BROOKS
No. 25554
LICENSED PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	NONE
Project No.	2001507
Date	02/19/2021
CAD File: DN200150701	

Title

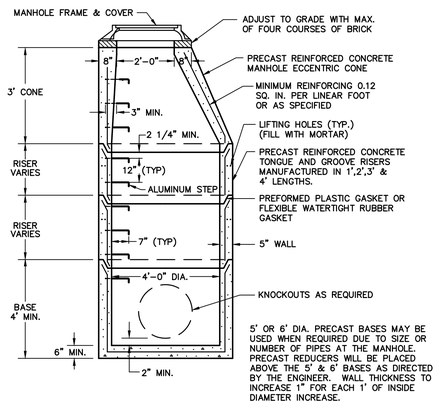
SITE DETAILS

Sheet No.

DN-3

Xref (s) : B200150702

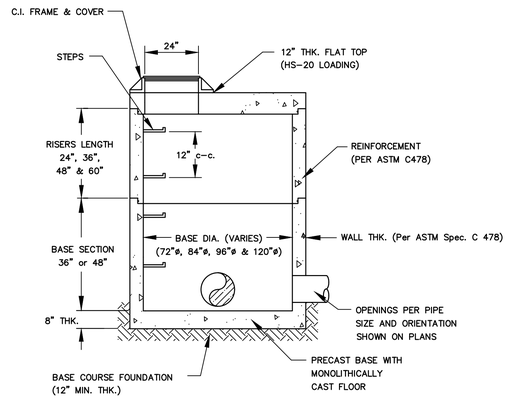
2/19/2021, C:\Users\cjl...\Civil\Plan\DN_CVR-DESIGN_(14.00)-EXP-DWG-DN200150701.DWG, DN-3 24X36



5' OR 6' DIA. PRECAST BASES MAY BE USED WHEN REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE THE 5' & 6' BASES AS DIRECTED BY THE ENGINEER. WALL THICKNESS TO INCREASE 1" FOR EACH 1' OF INSIDE DIAMETER INCREASE.

PRECAST STORM MANHOLE DETAIL

N.T.S. ZDD-049

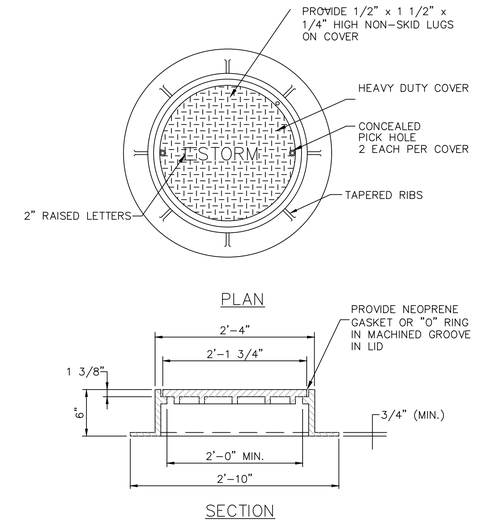


NOTES:

1. General specifications: A.S.T.M. C-478.
2. Cones Concentric (as shown).
3. Joints sealed with mastic.

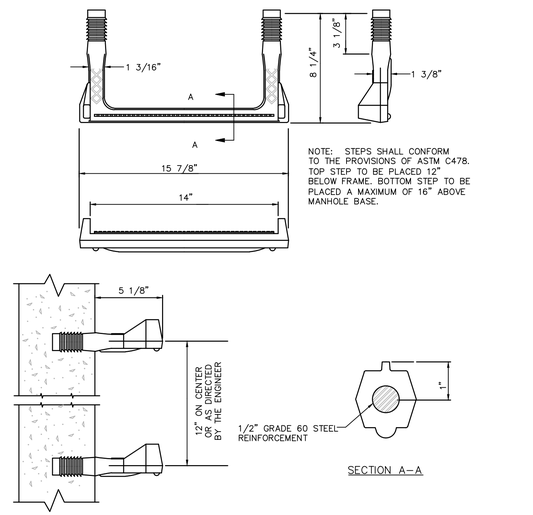
LARGE DIAMETER STORM MANHOLE

N.T.S



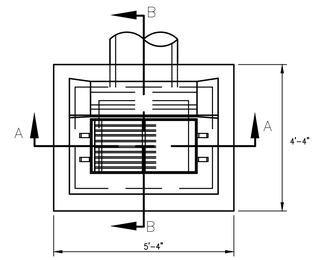
STORM SEWER MANHOLE FRAME AND COVER

N.T.S.

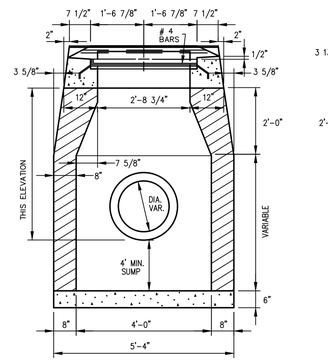


MANHOLE STEP

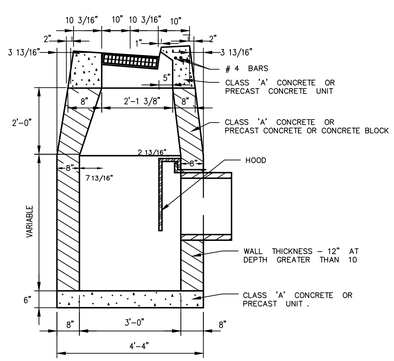
N.T.S.



NOTE:
1. DRAINAGE OPENINGS IN 4 WALLS AT OR IMMEDIATELY ABOVE THE BOTTOM OF THE PERVIOUS BACKFILL.
2. INSTALL 6" THICK BEDDING LAYER OF 3/4" CRUSHED STONE AT EACH CATCH BASIN LOCATION.
3. INSTALL PRECAST FRAME WITH CURB TYPE TO MATCH CURBING AT LOCATION INSTALLED (STANDARD OR PARK CURB, REFER TO PLANS)



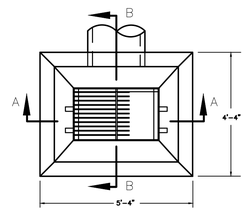
SECTION A-A



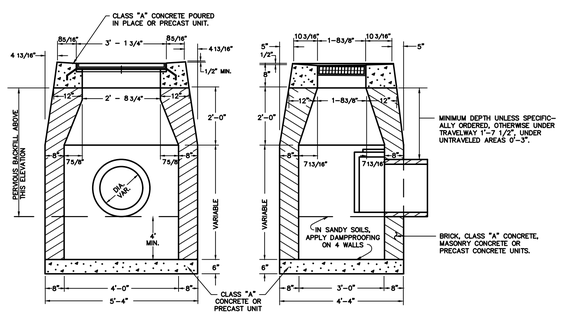
SECTION B-B

TYPE "C" CATCH BASIN WITH HOOD

N.T.S.



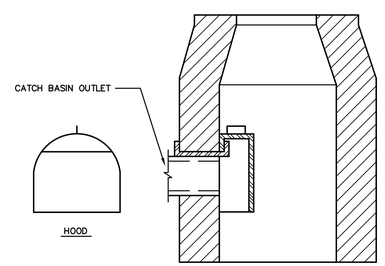
NOTE:
DRAINAGE OPENINGS IN 4 WALLS AT OR IMMEDIATELY ABOVE THE BOTTOM OF THE PERVIOUS BACKFILL.



SECTION A-A SECTION B-B

TYPE "C-L" CATCH BASIN WITH HOOD

N.T.S.



NOTE:
NEENAH - R-3711 OR EQUAL
TO BE INSTALLED IN ALL CATCH BASIN STRUCTURE OUTLETS

HOODED OUTLET

N.T.S. ZDD-002

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49 FEDEX DRIVE
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Sheet No.
DN-4

Xref (s) : B200150702

2/19/2021 - G:\REVIT\BUK - CIVIL\DRAWS\DN\DN200150701 SITE DETAILS.DWG, DN-4 24X36

STORMTRAP INSTALLATION SPECIFICATION

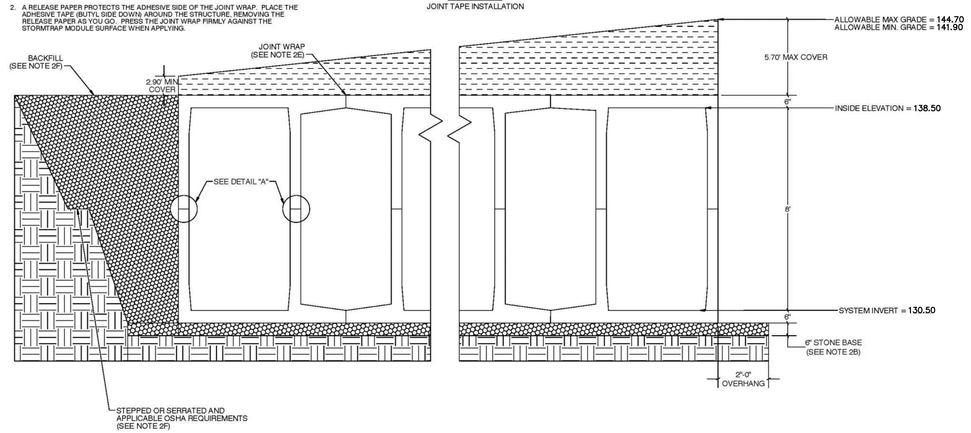
1. STORMTRAP MODULES SHALL BE MANUFACTURED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/ OUTLET PIPE OPENINGS.
2. STORMTRAP SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C891-09, STANDARD PRACTICE FOR INSTALLATION OF UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES. THE FOLLOWING ADDITIONS AND/OR EXCEPTIONS SHALL APPLY:
   A. SPECIFICATIONS ON THE ENGINEER'S DRAWINGS SHALL TAKE PRECEDENCE.
   B. STORMTRAP MODULES SHALL BE PLACED ON A LEVEL PAD OF 3/4" AGGREGATE, THAT EXTENDS 2'-0" PAST THE OUTSIDE OF THE SYSTEM, PER ASTM C891-09 STANDARD PRACTICE FOR INSTALLATION OF UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES.
   C. THE STORMTRAP MODULES SHALL BE PLACED SUCH THAT THE MAXIMUM SPACE BETWEEN ADJACENT MODULES DOES NOT EXCEED 3/4". IF THE SPACE EXCEEDS 3/4", THE MODULES SHALL BE RESET WITH APPROPRIATE ADJUSTMENT MADE TO LINE AND GRADE TO BRING THE SPACE INTO SPECIFICATION.
   D. THE HORIZONTAL JOINT BETWEEN THE TOP AND BASE UNIT LEG CONNECTION OF THE STORMTRAP MODULES SHALL BE SEALED WITH PREFORMED MASTIC JOINT SEALER ACCORDING TO ASTM C891-09, 9.8 AND 8.12. SEE DETAIL 'A'
   E. ALL EXTERIOR JOINTS BETWEEN ADJACENT STORMTRAP MODULES SHALL BE SEALED WITH 0'-8" PRE-FORMED, COLD-APPLIED, SELF-ADHERING ELASTOMERIC RESIN BONDED TO A WOVEN HIGHLY PUNCTURE RESISTANT POLYMER WRAP CONFORMING TO ASTM C891-09 AND SHALL BE 0'-8" INTEGRATED PRIMER SEALANT AS APPROVED BY STORMTRAP. THE ADHESIVE EXTERIOR JOINT WRAP SHALL BE INSTALLED ACCORDING TO THE FOLLOWING INSTALLATION INSTRUCTIONS:
      1. USE A BRUSH OR WET CLOTH TO THOROUGHLY CLEAN THE OUTSIDE SURFACE AT THE POINT WHERE THE JOINT WRAP IS TO BE APPLIED.
      2. A RELEASE PAPER PROTECTS THE ADHESIVE SIDE OF THE JOINT WRAP. PLACE THE ADHESIVE TAPE (BUTYL SIDE DOWN) AROUND THE STRUCTURE, REMOVING THE RELEASE PAPER AS YOU GO. PRESS THE JOINT WRAP FIRMLY AGAINST THE STORMTRAP MODULE SURFACE WHEN APPLYING.
   F. THE FILL PLACED AROUND THE STORMTRAP UNITS MUST BE DEPOSITED ON BOTH SIDES AT THE SAME TIME AND TO APPROXIMATELY THE SAME ELEVATION. AT NO TIME SHALL THE FILL BEHIND ONE SIDE WALL BE MORE THAN 2'-0" HIGHER THAN THE FILL ON THE OPPOSITE SIDE. BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY OR OTHERWISE SPECIFIED BY ENGINEER. CARE SHALL BE TAKEN TO PREVENT ANY WEDGING ACTION AGAINST THE STRUCTURE. AND ALL SLOPES BOUNDING OR WITHIN THE AREA TO BE BACKFILLED MUST BE STEPPED OR SERRATED TO PREVENT WEDGE ACTION. (REFERENCE ARTICLE 502.10 I.D.O.T. S.S.R.B.C.) CARE SHALL ALSO BE TAKEN AS NOT TO DISRUPT THE JOINT WRAP FROM THE JOINT DURING THE BACKFILL PROCESS. BACKFILL MATERIAL SHALL BE CLEAN, CRUSHED, ANGULAR No.5 (AASHTO M43) AGGREGATE.

STORMTRAP SPECIFICATION

1. TOTAL COVER: MIN. 2.90' MAX. 5.70' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
2. CONCRETE CHAMBER DESIGNED FOR AASHTO HS-20 HIGHWAY LOADING. MIN. SOIL PRESSURE 3000 PSF.
3. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
4. FOR STRUCTURA CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW THE SYSTEMS INVERT. IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.
5. FOR STRUCTURAL CALCULATIONS THE SOIL DENSITY IS ASSUMED TO BE 120 PCF.
6. FOR FLOTATION CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW THE SYSTEMS INVERT. IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.
7. STORMTRAP IS NOT WATERTIGHT. CON TACT STORMTRAP FOR WATERTIGHT OPTIONS. WATERTIGHT APPLICATION TO BE PROVIDED BY OTHERS.



DETAIL "A"
JOINT TAPE INSTALLATION



8'-0" DOUBLETRAP

*FOR STRUCTURAL & FLOTATION CALCULATIONS THE GROUND WATER TABLES ASSUMED TO BE BELOW THE SYSTEMS INVERT. IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.

UNDERGROUND DETENTION SYSTEM 1

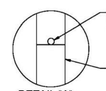
N.T.S

STORMTRAP INSTALLATION SPECIFICATION

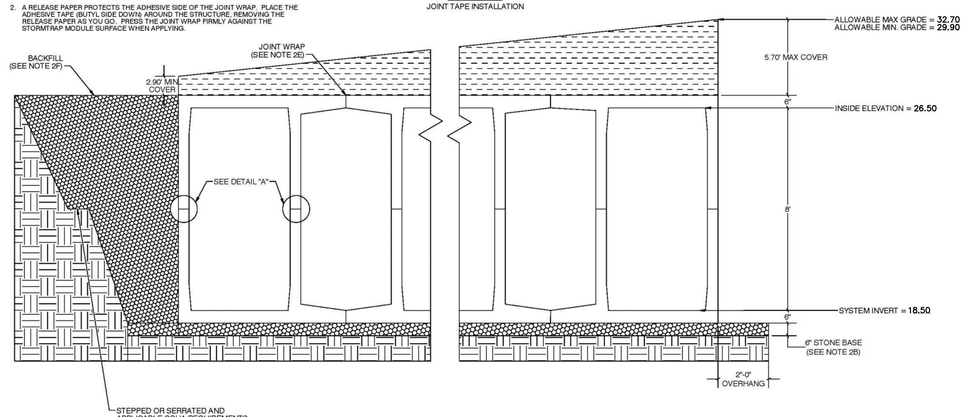
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JOINT TAPE INSTALLATION



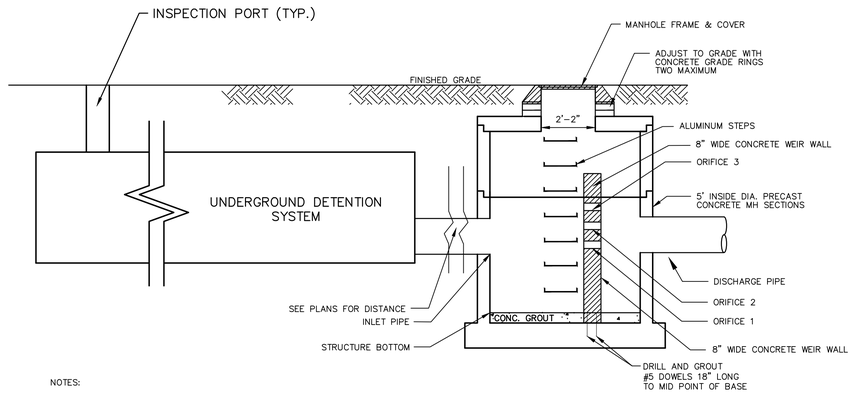
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UNDERGROUND DETENTION SYSTEM 2

N.T.S

Outlet Number	STRUCTURE BOTTOM ELEVATION (ft)	STRUCTURE TOP ELEVATION (FT)	ORIFICE 1 SIZE (in)	ORIFICE 1 ELEVATION (ft)	ORIFICE 2 SIZE (in)	ORIFICE 2 ELEVATION (ft)	ORIFICE 3 SIZE (in)	ORIFICE 3 ELEVATION (ft)	WEIR WALL ELEVATION (ft)	INLET PIPE DIAMETER (in)	INLET PIPE ELEVATION (ft)	DISHARGE PIPE DIAMETER (in)	DISHARGE PIPE ELEVATION (ft)
OCS-10	128.50	143.24	4 W X 4 H	133.00	4 W X 4 H	135.25	N/A	N/A	137.50	12	130.50	12	130.50
OCS-20	14.00	30.53	4 W X 4 H	20.00	4 W X 4 H	21.50	12 W X 6 H	23.00	25.00	36	18.50	36	16.00



NOTES:

1. SEE PLANS FOR UNDERGROUND DETENTION SYSTEM DETAILS. ALL UNITS TO BE INSTALLED TO THE MANUFACTURERS SPECIFICATIONS.
2. UNDERGROUND DETENTION SYSTEM, MANHOLE FRAMES AND COVERS TO BE HS20 QUALIFIED.

UNDERGROUND DETENTION OUTLET CONTROL STRUCTURE (OCS)

N.T.S

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Title

SITE DETAILS

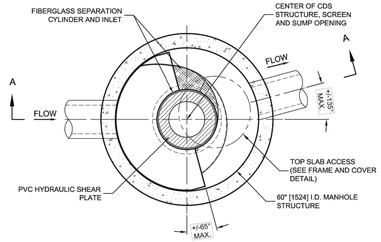
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DN-5

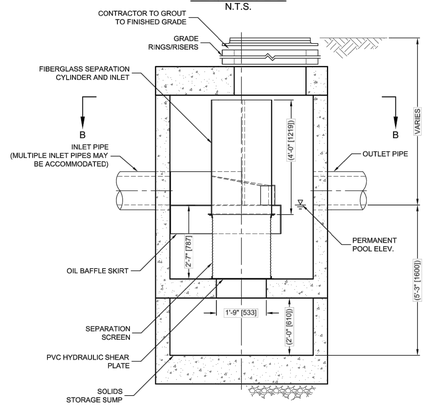
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2/19/2021 - CLEVELEX, CJL (C:\2001507\DWG\DN200150701.DWG) DN-5 2.4x36

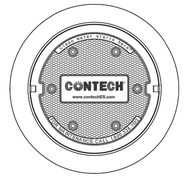


PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

CDS2020-5-C DESIGN NOTES
THE STANDARD CDS2020-5-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*
NOTES/SPECIAL REQUIREMENTS:			
* PER ENGINEER OF RECORD			

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

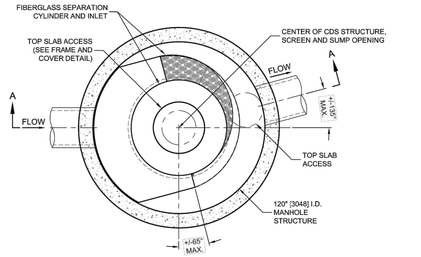
CONTECH® ENGINEERED SOLUTIONS LLC
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS2020-5-C
INLINE CDS
STANDARD DETAIL

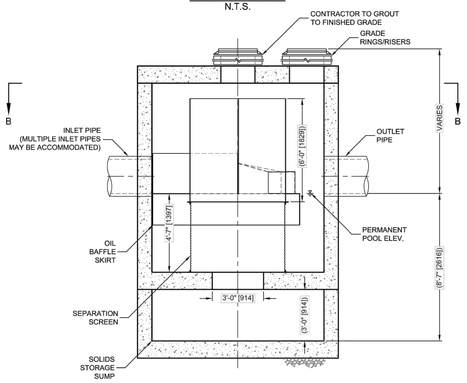
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CDS2020-5-C HYDRODYNAMIC SEPARATOR

N.T.S.

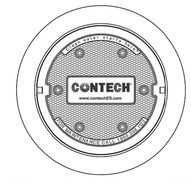


PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

CDS5640-10-C DESIGN NOTES
THE STANDARD CDS5640-10-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*
NOTES/SPECIAL REQUIREMENTS:			
* PER ENGINEER OF RECORD			

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

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CDS5640-10-C
INLINE CDS
STANDARD DETAIL

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CDS5640-10-C HYDRODYNAMIC SEPARATOR

N.T.S.

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EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	NONE
Project No.	2001507
Date	02/19/2021
CAD File: DN200150701	

Title

SITE DETAILS

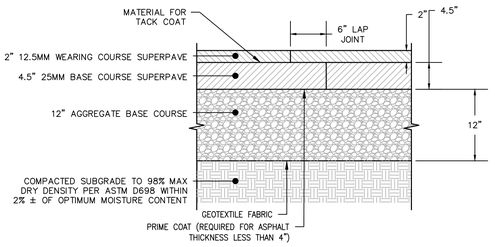
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DN-6

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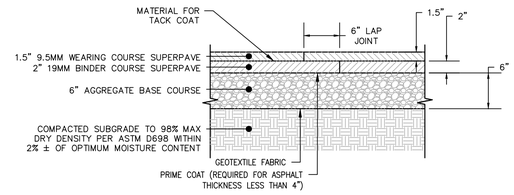
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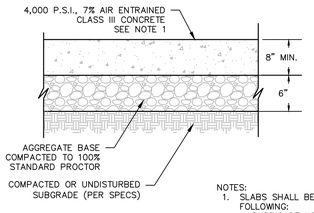
ASPHALT PAVEMENT - HEAVY DUTY

N.T.S



ASPHALT PAVEMENT - STANDARD DUTY

N.T.S

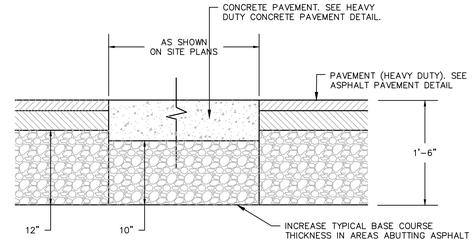


CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE FOLLOWING:
- SALT STORAGE CONCRETE PAD
- UTILITY STRUCTURE PAD
- PORTABLE GENERATOR CONCRETE PAD
- LINEHAUL DISPATCH CONCRETE PAD
- ELECTRICAL SWITCH GEAR CONCRETE PAD
- GAS UTILITY PADS
- CONCRETE LANDING PADS
- CONCRETE PAVEMENT PADS

NOTES:
1. SLABS SHALL BE TREATED WITH ONE OF THE FOLLOWING:
   - BARRICADE WB244, EUCLID CHEMICAL CO.
   - SS HARDEN X SI, SEALSOURCE INTERNATIONAL, LLC.
2. REINFORCE CONCRETE WITH MACRO SYNTHETIC FIBER REINFORCEMENT AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.
3. F'C=4,500 PSI MINIMUM.
4. REFER TO CONCRETE JOINTING LAYOUT DETAIL FOR JOINT SPACING.
5. USED FOR TRAILER PARKING, TRUCK ENTRANCE ROADWAY, VEHICLE MAINTENANCE ACCESS, LOAD AND UNLOAD DOORS, AND LINE HAUL DISPATCH PAD.

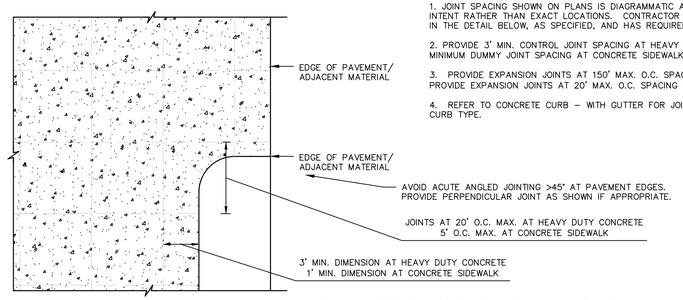
CONCRETE PAVEMENT - HEAVY DUTY

N.T.S



CONCRETE/ASPHALT INTERFACE

N.T.S



JOINTING LAYOUT NOTES:

1. JOINT SPACING SHOWN ON PLANS IS DIAGRAMMATIC AND IS MEANT TO DEMONSTRATE INTENT RATHER THAN EXACT LOCATIONS. CONTRACTOR SHALL LAYOUT JOINTS AS INDICATED IN THE DETAIL BELOW, AS SPECIFIED, AND HAS REQUIRED IN THE SEQUENCING OF WORK.

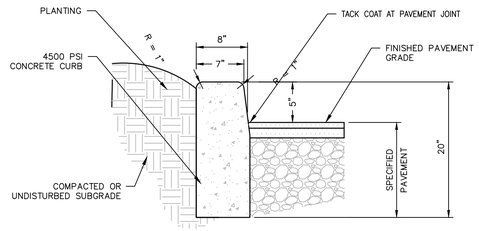
2. PROVIDE 3' MIN. CONTROL JOINT SPACING AT HEAVY DUTY CONCRETE, PROVIDE 2' MINIMUM DUMMY JOINT SPACING AT CONCRETE SIDEWALK.

3. PROVIDE EXPANSION JOINTS AT 150' MAX. O.C. SPACING FOR HEAVY DUTY CONCRETE, PROVIDE EXPANSION JOINTS AT 20' MAX. O.C. SPACING FOR CONCRETE SIDEWALK.

4. REFER TO CONCRETE CURB – WITH GUTTER FOR JOINTING LOCATIONS PARALLEL TO THIS CURB TYPE.

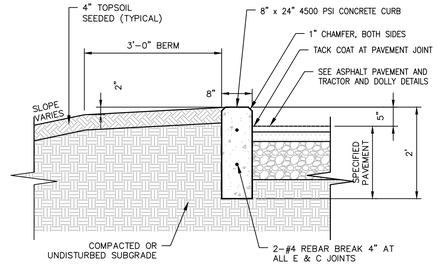
CONCRETE JOINTING LAYOUT

N.T.S



CONCRETE CURB AT EMPLOYEE PARKING

N.T.S

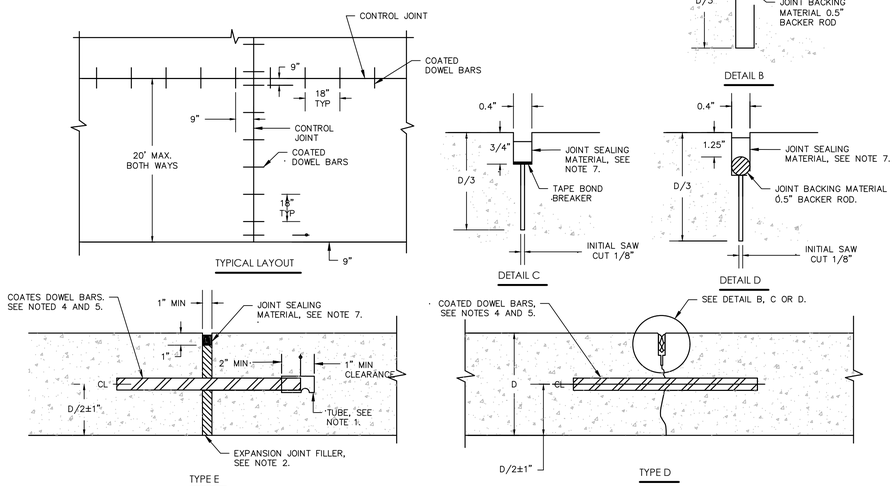


NOTE:
TRANSITION SIZE CAN VARY ACCORDING TO DOOR SPACING AND USAGE.

CONCRETE CURB AT TRACTOR AND DOLLY PARKING

N.T.S

FXG-02522-002



JOINTING NOTES:

1. PLACE A TUBE OVER THE LUBRICATED END OF ALL DOWEL BARS USED IN TYPE E JOINTS AND PROVIDE A MINIMUM 1" CLEARANCE POCKET ASSURED BY MEANS OF A POSITIVE SPACING DEVICE.

2. CUT EXPANSION JOINT FILLER MATERIAL TO CONFORM TO THE CROSS SECTION OF THE PAVEMENT AND FURNISH IN STRIPS EQUAL TO THE WIDTH OF THE PAVEMENT SLAB. MAKE THE TOP SURFACE SMOOTH AND HAVE HOLES PUNCHED FOR THE DOWEL BARS PROVIDE A SNUG FIT WITHOUT LOSS IN THICKNESS OF THE MATERIAL.

3. CONSTRUCT ALL JOINTS PERPENDICULAR TO THE CENTERLINE.

4. USE MINIMUM NO. 6($\frac{3}{4}$"x18") LONG DOWEL BARS ALTERNATE DOWEL BARS HAVING EQUIVALENT PROPERTIES TO CONVENTIONAL ROUND DOWEL BARS MAY BE USED.

5. PLACE DOWEL BARS PARALLEL TO THE CENTERLINE AND SURFACE OF THE SLAB.

6. USE ONLY APPROVED NEOPRENE SEALS. INSTALL NEOPRENE SEALS TO A UNIFORM DEPTH WITH THE TOP OF THE SEAL FROM $\frac{1}{4}$" TO 0.4" BELOW THE LEVEL OF THE PAVEMENT SURFACE. MAKE THE TOP EDGES OF THE CONTACT SURFACES ON BOTH SIDES OF THE SEAL AT THE SAME ELEVATION.

7. MAKE THE TOP OF THE JOINT SEALING MATERIAL FROM 0.1" TO $\frac{1}{4}$" BELOW THE SURFACE OF THE PAVEMENT. USE HEAT RESISTANT JOINT BACKING MATERIAL FOR HOT POURED JOINTS.

8. THE INITIAL SAW CUT FOR TYPE D JOINT IS NOT REQUIRED FOR CONSTRUCTION JOINTS.

9. SAW DEPTHS OF NEOPRENE SEALS:

SEAL SIZE	SAW CUT DEPTHS
1"	1.85"–2"
1.25"	2"–2.1"

10. ADJUST THE WIDTH OF THE SECOND SAW CUT ACCORDING TO THE SEAL SIZE AND PAVEMENT SURFACE TEMPERATURE AT THE TIME OF SAWING, AS FOLLOWS:

SEAL SIZE	<60°F	60°F TO 80°F	>80°F
1"	$\frac{5}{8}$"	0.55"	$\frac{1}{2}$"

11. WHEN SILICONE JOINT SEALING MATERIAL, USE HOT-MIX POLYMER OR LATEX MODIFIED ASPHALT SEALANT

CONCRETE CONTROL JOINT

N.T.S

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STATE OF CONNECTICUT
MATTHEW J. BRUSH
No. 26884
LICENSED PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	NONE
Project No.	2001507
Date	02/19/2021
CAD File: DN200150701	

Title

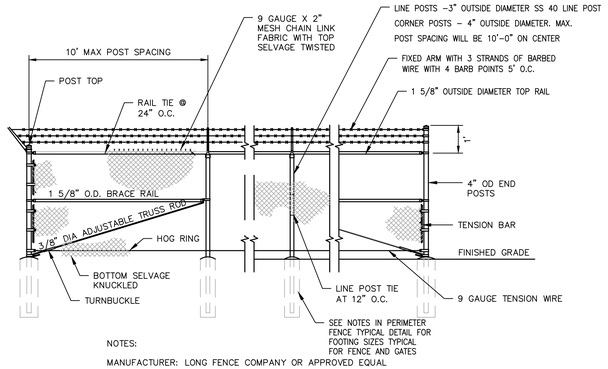
SITE DETAILS

Sheet No.

DN-7

Xref (s) : 1B200150702

2/19/2021 - C:\Users\CJL.GLOBAL\DESKTOP\WORK\DN200150701.DWG, DN-7 PLAN



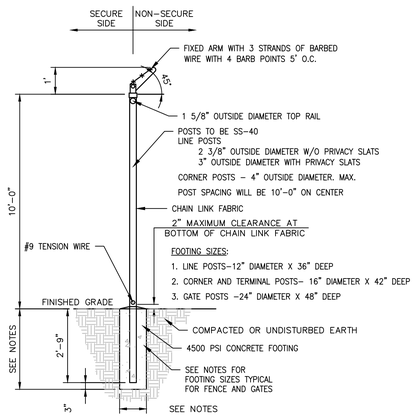
NOTES:

MANUFACTURER: LONG FENCE COMPANY OR APPROVED EQUAL

CONTACT: MIKE BAIRD
PHONE: (301) 662-1600x3119
FAX: (301) 874-2564

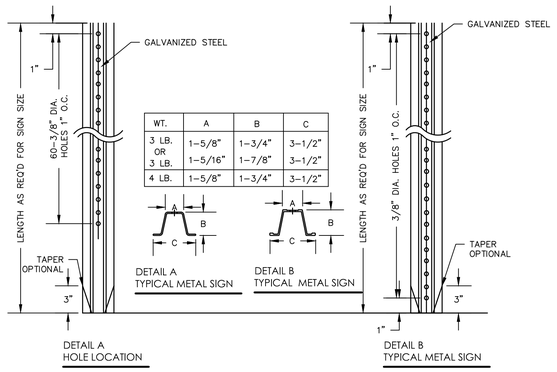
10' BARBED WIRE CHAIN LINK FENCE (ELEVATION)

N.T.S FXG-02830-006



10' BARBED WIRE CHAIN LINK FENCE (SECTION)

N.T.S



NOTES:
1. STEEL FOR POSTS SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A 499-81 GRADE 60 AND TO THE CHEMICAL REQUIREMENTS OF ASTM AI-76 CARBON STEEL TEE RAIL HAVING NOMINAL WEIGHT OF "30 LBS OR GREATER PER LINEAR FOOT.

2. AFTER FABRICATION ALL STEEL POSTS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A-123.

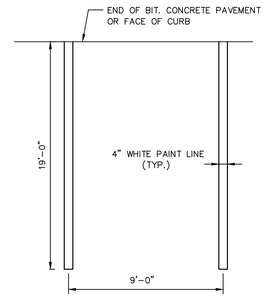
3. SIGN MOUNTING HEIGHT TO BE PER MUTCD REQUIREMENTS.

4. ALL SIGN POSTS SHALL HAVE "BREAK AWAY" FEATURES THAT MEET AASHTO REQUIREMENTS CONTAINED IN "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS". THE "BREAK AWAY" FEATURES SHALL BE STRUCTURALLY ADEQUATE TO CARRY THE SIGN SHOWN ON THE PLANS AT 60 MPH WIND LOADINGS. INSTALLATIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

5. ALL SIGN POSTS SHALL BE EMBEDDED 48" MINIMUM BELOW GRADE.

TYPICAL METAL SIGN POST

N.T.S

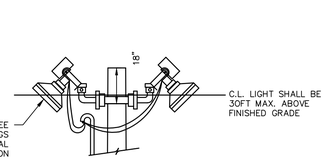


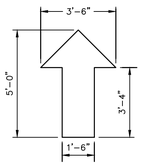
NOTE:
1. PROVIDE 2 COATS OF PAINT ON ALL SURFACES.

2. SEE PLAN FOR ACTUAL SPACE LOCATION AND DIMENSIONS.

TYPICAL EMPLOYEE PARKING SPACE DETAIL

N.T.S. BLPC-003

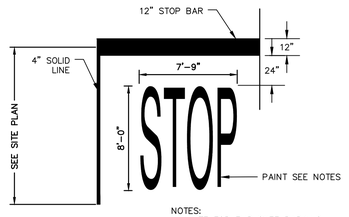




NOTES:
1. WHITE (ARROWS TO BE CENTERED IN TRAVEL LANE) FOR EMPLOYEE PARKING
2. YELLOW (ARROWS TO BE CENTERED IN TRAVEL LANE) FOR TRUCK TRAFFIC

PAINTED TRAFFIC ARROW DETAIL

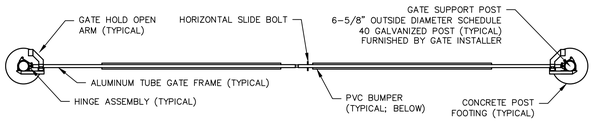
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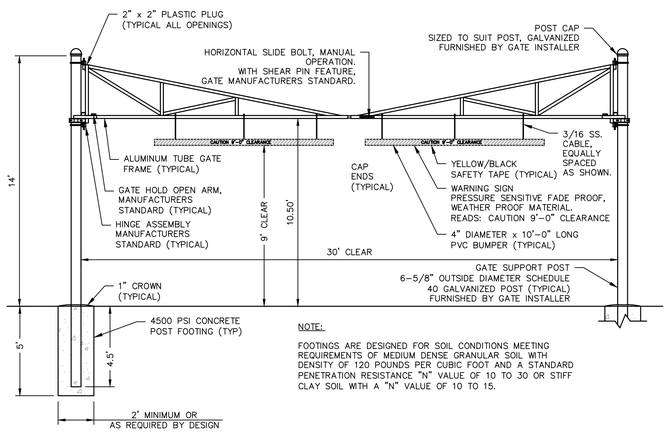


NOTES:
1. WHITE FOR EMPLOYEE PARKING
2. YELLOW FOR TRUCK TRAFFIC

STOP BAR DETAIL

N.T.S



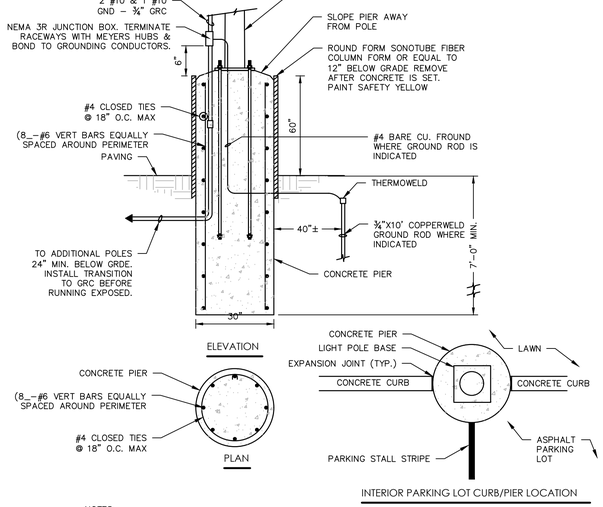


NOTE:

FOOTINGS ARE DESIGNED FOR SOIL CONDITIONS MEETING REQUIREMENTS OF MEDIUM DENSE GRANULAR SOIL WITH DENSITY OF 120 POUNDS PER CUBIC FOOT AND A STANDARD PENETRATION RESISTANCE "N" VALUE OF 10 TO 30 OR STIFF CLAY SOIL WITH A "N" VALUE OF 10 TO 15.

VEHICLE HEIGHT RESTRICTION BAR

N.T.S



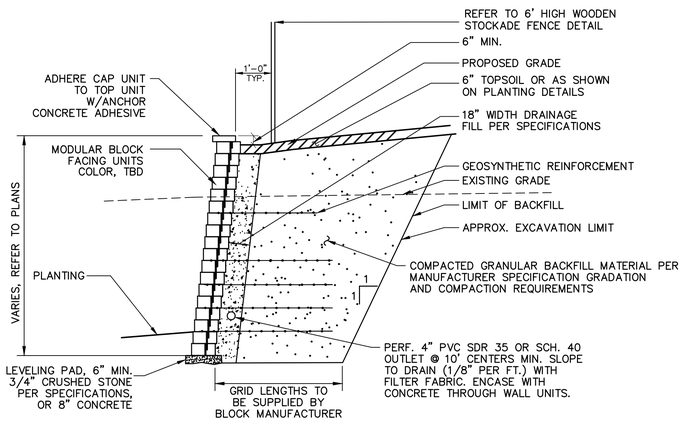
NOTES:

1. CONTRACTOR TO PROVIDE SHOP DRAWING SIGNED AND SEALED BY A CT LICENSED ENGINEER OF FOUNDATION DESIGN TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL.

2. CONCRETE SHALL BE 4500 PSI COMPRESSIVE STRENGTH

STEEL SITE LIGHTING POLE DETAIL WITH CONCRETE FOUNDATION IN PARKING LOT

N.T.S



NOTE:
CONTRACTOR TO SUBMIT DESIGN PLANS FOR THE PROPOSED RETAINING WALL INCLUDING CALCULATIONS, PREPARED AND STAMPED BY A CONNECTICUT LICENSED PROFESSIONAL ENGINEER PRIOR TO ORDERING.

MODULAR BLOCK RETAINING WALL (TYPICAL DETAIL)

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EXISTING FEDEX GROUND HUB HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	NONE
Project No.	2001507
Date	02/19/2021
CAD File: DN2001507O1	

Title

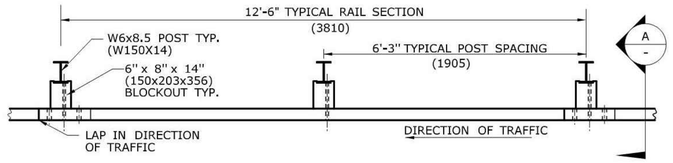
SITE DETAILS

Sheet No.

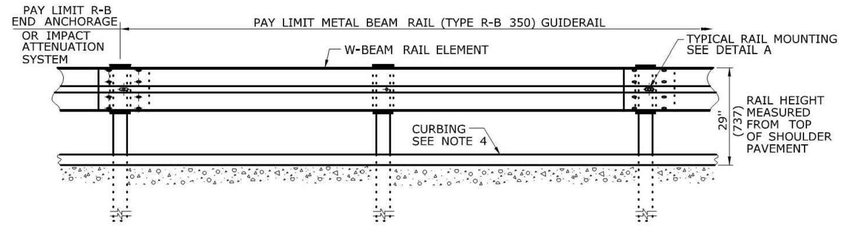
DN-8

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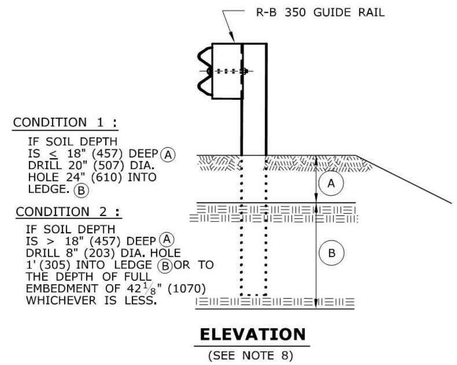


PLAN

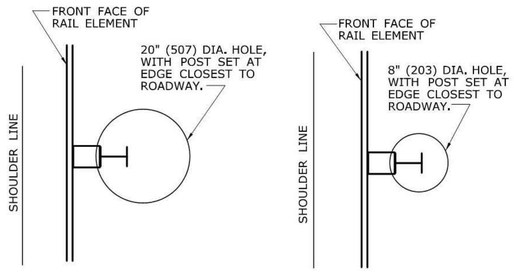


ELEVATION

METAL BEAM RAIL (TYPE R-B 350)



ELEVATION
(SEE NOTE 8)



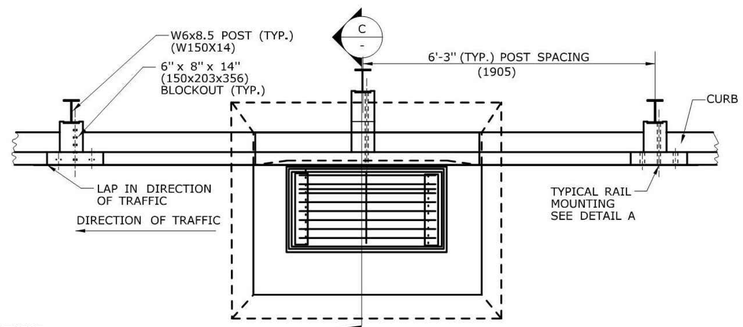
PLAN
CONDITION 1
(SEE NOTE 8)

PLAN
CONDITION 2
(SEE NOTE 8)

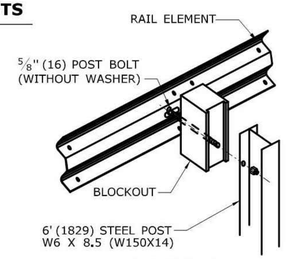
DRILLING IN ROCK FOR GUIDERAIL POSTS

GENERAL NOTES:

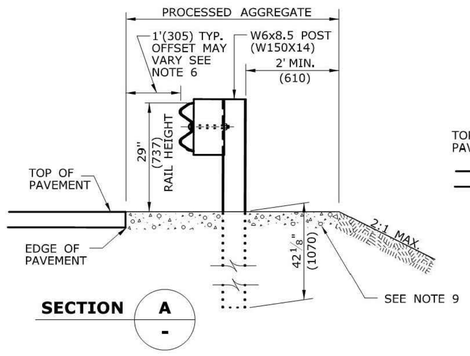
1. SEE SHEET HW-910_01 FOR HARDWARE AND DELINEATOR DETAILS.
2. MAXIMUM DESIGN DEFLECTION FOR R-B 350 GUIDERAIL AT THE STANDARD POST SPACING OF 6'-3"(1905) IS 4'-3"(1295). DEFLECTION REQUIREMENT IS MEASURED FROM THE BACK OF POST TO THE FACE OF OBJECT.
3. FOR CURVES WITH RADII OF 150'(45.7m) OR LESS, ALL RAIL ELEMENTS SHALL BE SHOP FABRICATED TO THE PROPER RADIUS AND GALVANIZED AFTER FABRICATION. RADIUS RAIL WHEN REQUIRED AND NOTED ON THE PLANS, IS INCLUDED IN THE PAY ITEM FOR GUIDERAIL.
4. RAIL HEIGHT WITH CURBING SHALL BE MEASURED FROM THE TOP OF PAVEMENT. ON HIGH SPEED ROADWAYS (≥45mph 72.4kph), 4"(102) CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED FLUSH WITH THE FACE OF CURB. ON LOW SPEED ROADWAYS (<45mph 72.4kph), 6"(152) CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED A MAXIMUM OF 9"(229) BEHIND THE FACE OF CURB.
5. THREE BLOCKOUTS MAY BE USED FOR ONE POST ONLY. TWO BLOCKOUTS MAY BE USED FOR A SERIES OF POSTS. THE COST OF ADDITIONAL BLOCKOUTS AND LONGER BOLTS SHALL BE INCLUDED IN THE BID PRICE PER FOOT OF GUIDERAIL. EXTRA BLOCKOUTS AT TRANSITION TO BRIDGE PARAPETS SHOULD BE AVOIDED.
6. W-BEAM GUIDERAIL MAY BE PLACED 1'(305) OR MORE FROM THE EDGE OF PAVEMENT ONLY ON SLOPES 10:1 OR FLATTER AND WITHOUT CURBING. IF THE RAIL IS INSTALLED WITHIN 2'(610) OF THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE SHOULDER SLOPE EXTENDED TO THE RAIL. IF THE RAIL IS INSTALLED BEYOND 2'(610) FROM THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE GROUND DIRECTLY BELOW THE RAIL.
7. ALL R-B 350 GUIDERAIL TYPES INSTALLED ON EXPRESSWAYS AND RAMPS SHALL USE CLASS B, TYPE-II (10 GAUGE) W-BEAM RAIL ELEMENTS.
8. 20" (507) DIA. EXCAVATED HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL, OR GRANULAR FILL COMPACTED IN 6" (150) LIFTS BEFORE DRIVING POST OR POSTS MAY BE SET IN EXCAVATED HOLE AND BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM). 8" (203) DIA. HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
9. AS DIRECTED BY THE ENGINEER AND WHERE PAVEMENT FOR RAILING IS NOT BEING INSTALLED, A MIN. 6" DEPTH OF PROCESSED AGGREGATE SHALL BE INSTALLED FROM THE PAVEMENT EDGE OR BACK OF CURB TO A MINIMUM OF 2'(610) BEHIND THE GUIDERAIL POST AND COMPACTED IN 6" (150) LIFTS.
10. MINIMUM RAIL HEIGHT FOR NEW CONSTRUCTION SHALL BE 29" (737) ± 1" (25).



PLAN

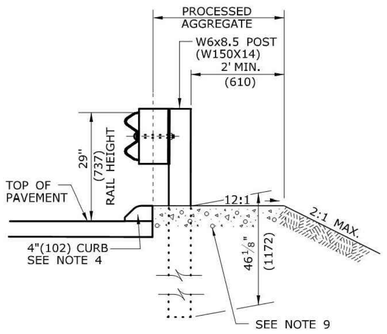


DETAIL A
RAIL MOUNTING



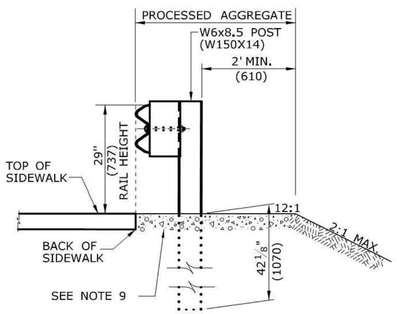
SECTION A -

NO CURB APPLICATION



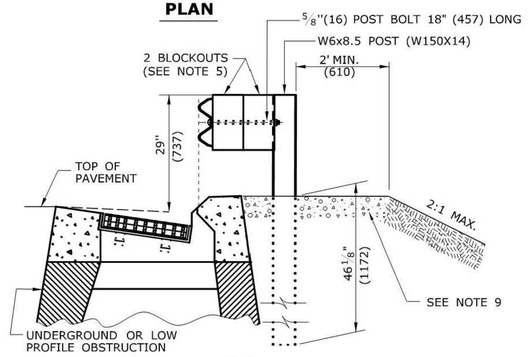
SECTION A -

CURB APPLICATION



SECTION A -

SIDEWALK APPLICATION



SECTION C -

MULTIPLE BLOCKOUT APPLICATION (MAY BE USED TO AVOID UNDERGROUND OR LOW PROFILE OBSTRUCTION)

ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

REV.	DATE	REVISION DESCRIPTION
1	6/11	REVISED NOTE 9 FOR USE OF PROCESSED AGGREGATE -
		AND REMOVED NOTE 6 FOR WEATHERING STEEL -
-	-	- -
-	-	- -
-	-	- -
-	-	- -

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 5/10/2011

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_HIGHWAY_STD_JUNE2011.dgn Model: 37- HW-910_02

SUBMITTED BY: NAME/DATE/TIME:

APPROVED BY: NAME/DATE/TIME:
James H. Norman
2011.06.09 15:12:46 -04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:
METAL BEAM RAIL (TYPE R-B 350) GUIDERAIL

STANDARD SHEET NO.:
HW-910_02

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STATE OF CONNECTICUT
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No. 26564
LICENSED
PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION
49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

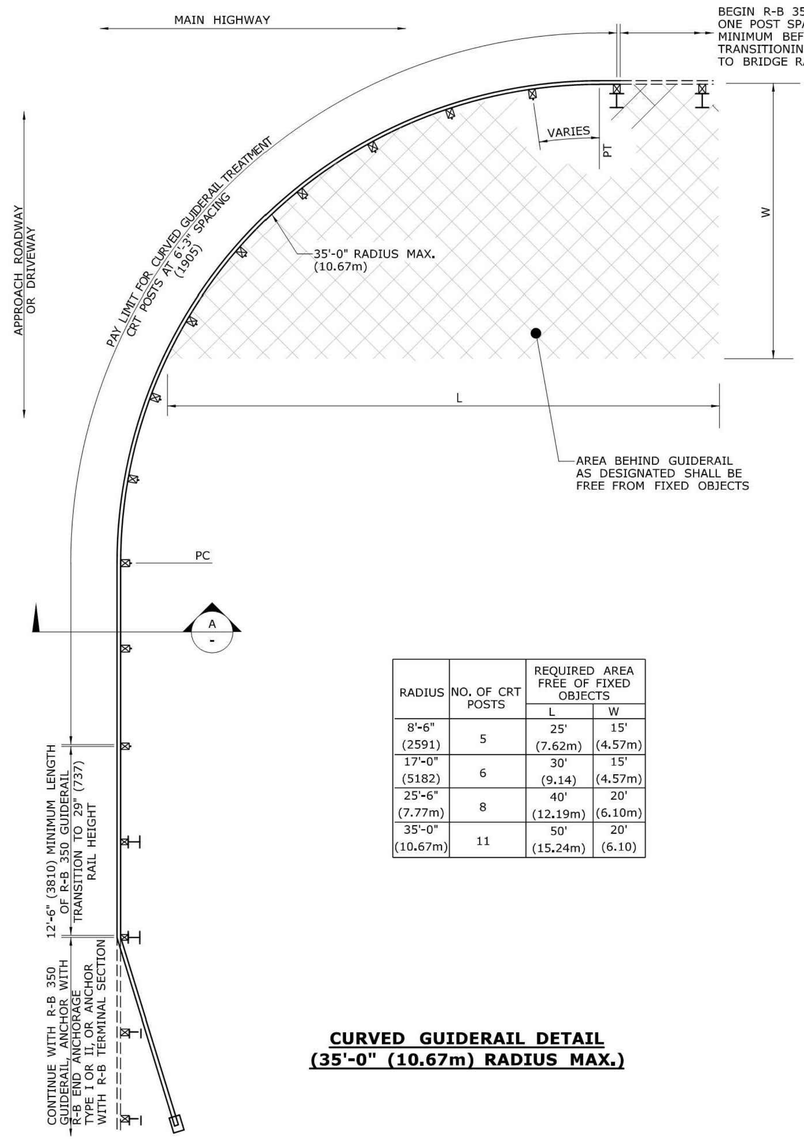
Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	NONE
Project No.	2001507
Date	02/19/2021
CAD File: DN200150701	

Title
SITE DETAILS

Sheet No.
DN-9

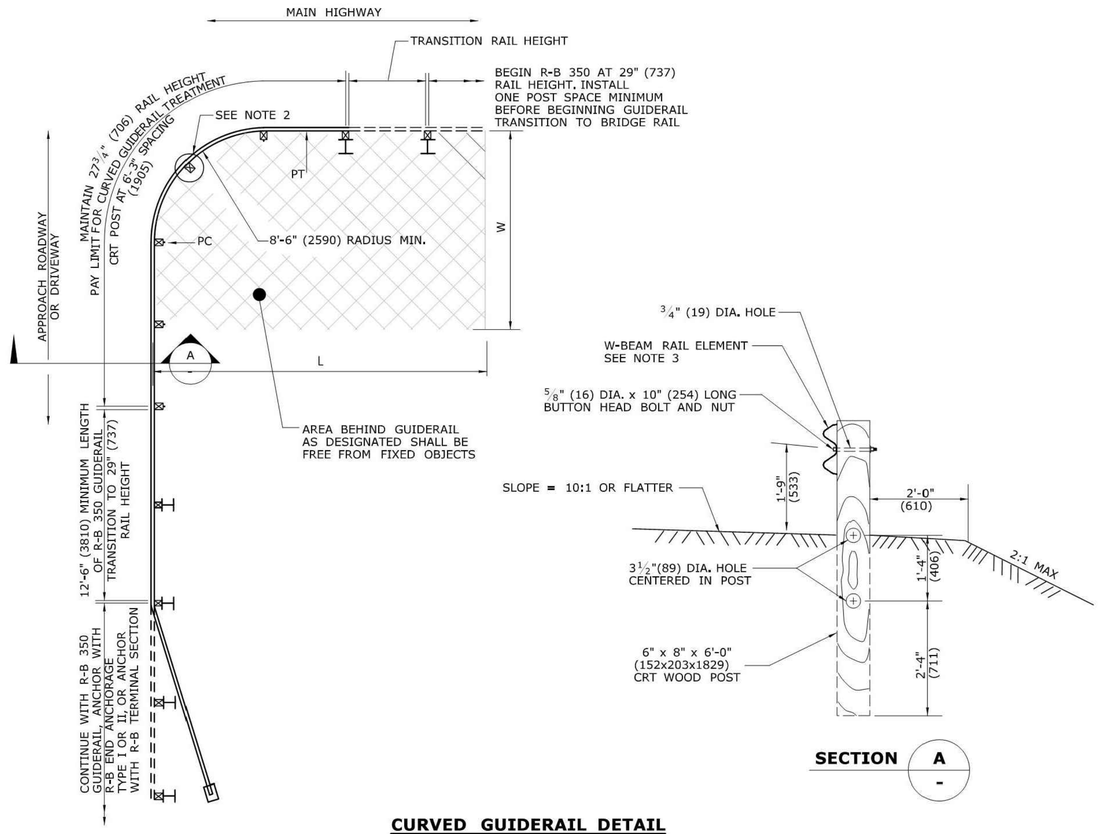
2/19/2021 - CLIENTFILES_CLV\2001507\CIVIL\HW910SHTS\HW910_02.DWG 24x36

Xref (s) : BD200150702



RADIUS	NO. OF CRT POSTS	REQUIRED AREA FREE OF FIXED OBJECTS	
		L	W
8'-6" (2591)	5	25' (7.62m)	15' (4.57m)
17'-0" (5182)	6	30' (9.14)	15' (4.57m)
25'-6" (7.77m)	8	40' (12.19m)	20' (6.10m)
35'-0" (10.67m)	11	50' (15.24m)	20' (6.10)

CURVED GUIDERAIL DETAIL
(35'-0" (10.67m) RADIUS MAX.)



CURVED GUIDERAIL DETAIL
(8'-6"(2590) RADIUS MIN.)

GENERAL NOTES:

1. NO WASHERS ARE USED ON THE 5/8" (16) DIA. BUTTON HEAD BOLTS CONNECTING THE RAIL TO THE CONTROLLED RELEASING TERMINAL (CRT) POSTS.
2. THE RAIL IS NOT BOLTED TO THE CRT POST AT THE CENTER OF THE NOSE AS SHOWN FOR THE 8'-6" (2590) RADIUS CURVED GUIDERAIL TREATMENT ONLY.
3. THE CURVED GUIDERAIL SECTION SHALL BE SHOP BENT.
4. THE SLOPE FROM THE EDGE OF THE SHOULDER TO THE FACE OF THE RAIL SHALL BE 10:1 OR FLATTER. NO CURBING SHALL BE INSTALLED WITHIN THE PAY LIMIT OF THE CURVED GUIDERAIL TREATMENT.
5. THIS SYSTEM SHALL BE USED ONLY ON ROADS WITH DESIGN SPEEDS ≤ 50 mph (80 kph).
6. MAINTAIN MINIMUM 27 3/4" (706) RAIL HEIGHT THROUGH RADIUS.

ALL METRIC DEMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

REV.	DATE	REVISION DESCRIPTION
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

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Plotted Date: 9/6/2011

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_HIGHWAY_STD_JUNE2011.dgn Model: 46 - HW-910_11

SUBMITTED BY: NAME/DATE/TIME:

Digitally signed by Lee Cummings
DN: cn=Lee Cummings, o=Connecticut Transportation Principal Engineer Skills and Foundations, ou=Bureau of Engineering and Highway Operations, email=lee.cummings@ct.gov, c=US
Reason: I am the author of this document
Date: 2012.07.25 10:26:58 -04'00'

APPROVED BY: NAME/DATE/TIME:

James H. Norman
2012.07.25 12:47:32 -04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

CURVED GUIDERAIL TREATMENT DETAIL

STANDARD SHEET NO.:

HW-910_11

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2/19/2021, C:\HIGHWAY\... G:\JOBS\2001507\ENGR\DGN\2001507_DWG-DN-10.DWG

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49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	NONE
Project No.	2001507
Date	02/19/2021
CAD File: DN200150701	

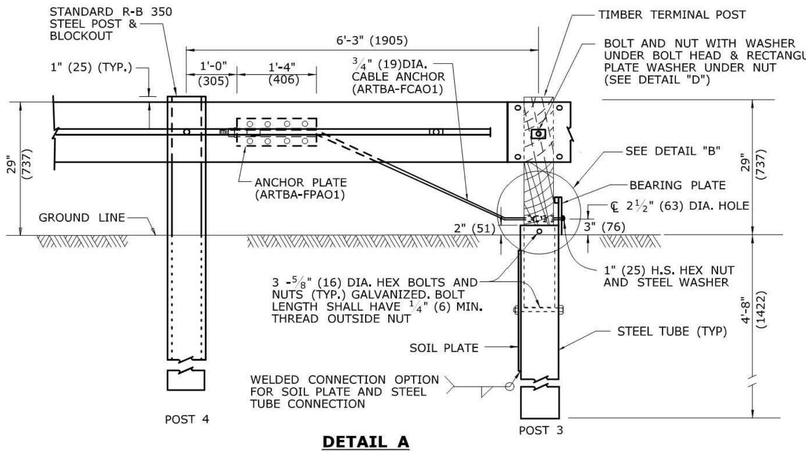
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SITE DETAILS

Sheet No.

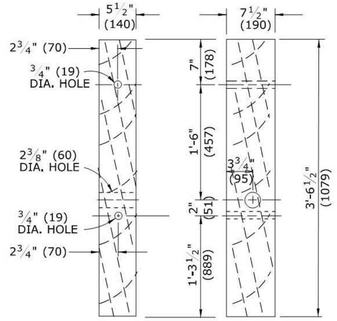
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Xref (s) : BD200150702



DETAIL A

CABLE ANCHORAGE ASSEMBLY

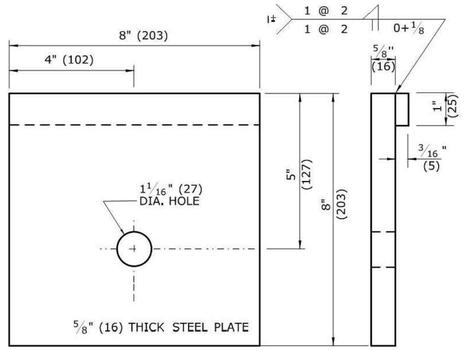


DETAIL C

TIMBER TERMINAL POST

(ARTBA-PDFO1)

(SEE NOTE 2)

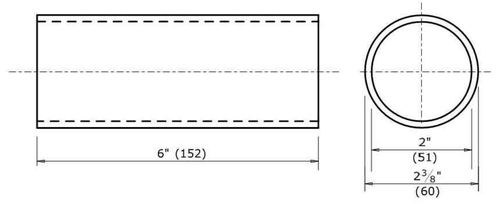


BEARING PLATE

(ARTBA-FPBO1)

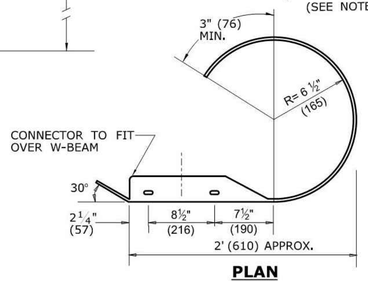
GENERAL NOTES:

1. APPROACH END R-B TERMINAL SECTION SHALL ONLY BE USED ON LOW SPEED (<45 MPH) ROADWAYS.
2. POSTS 1, 2 AND 3 ARE TIMBER TERMINAL POSTS (DETAIL "C") WITH STEEL TUBES. POSTS 4 AND 5 ARE STANDARD R-B 350 STEEL POSTS WITH BLOCKOUTS.
3. REFER TO CTDOT STANDARD SPECIFICATIONS FOR MATERIAL AND GENERAL CONSTRUCTION METHODS.
4. MINIMUM RAIL HEIGHT FOR NEW CONSTRUCTION SHALL BE 29" (737) + 1" (25).

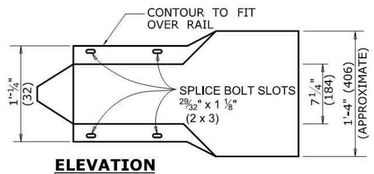


BREAKAWAY TERMINAL POST SLEEVE

(ARTBA-FMMO2)

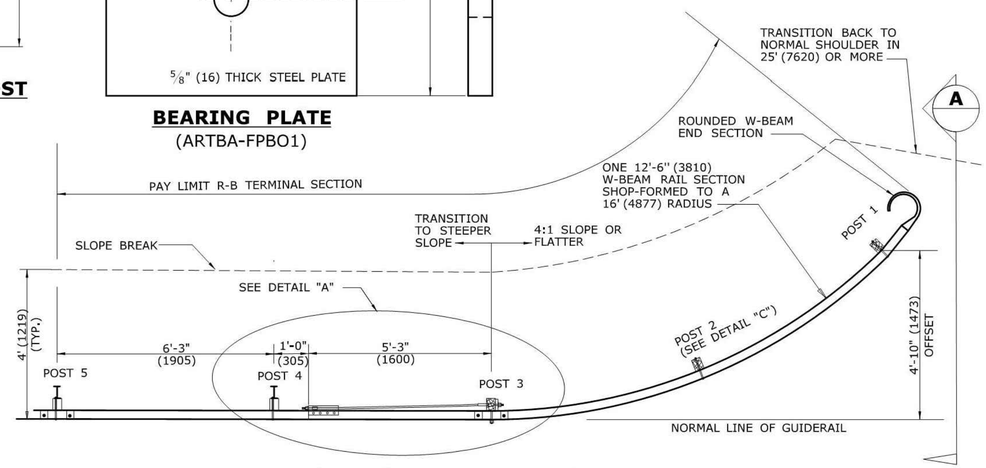


PLAN



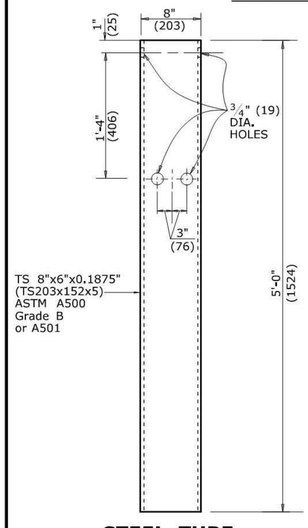
ELEVATION

ROUNDED W-BEAM END SECTION

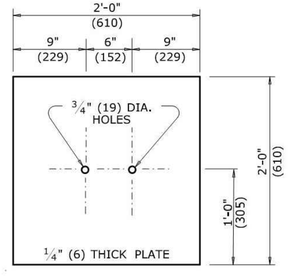


APPROACH END

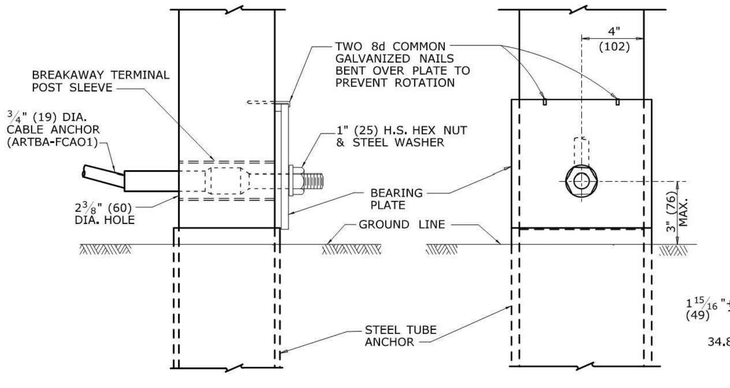
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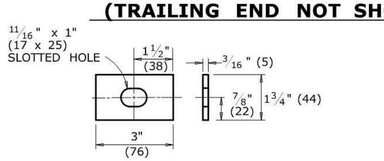
STEEL TUBE



SOIL PLATE (2 Req'd)

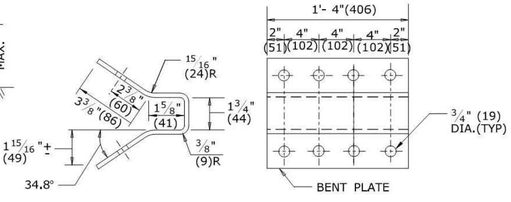


DETAIL B



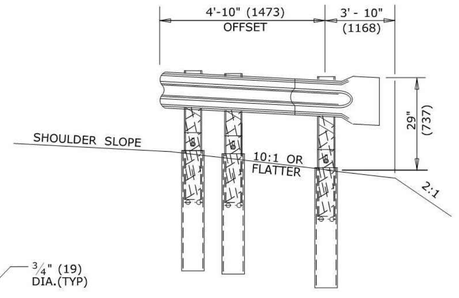
DETAIL D

RECTANGULAR PLATE WASHER



ANCHOR PLATE

(ARTBA-FPAO1)



SECTION A

-

ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

REV.	DATE	REVISION DESCRIPTION	
1	6/11	REVISE NOTE 1	-
2	7/13	SHOW SPLICE ON APPROACH END	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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Plotted Date: 6/13/2013

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_HIGHWAY_STD2013.dgn Model: 65 - HW-910_17

SUBMITTED BY: NAME/DATE/TIME:
Digitally signed by Leo L. Fontaine Date: 2013.07.24 10:58:08-04'00'

APPROVED BY: NAME/DATE/TIME:
James H. Norman 2013.07.24 14:53:17-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

R-B TERMINAL SECTION

STANDARD SHEET NO.:

HW-910_17

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EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION
49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	NONE
Project No.	2001507
Date	02/19/2021
CAD File: DN200150701	

Title

SITE DETAILS

Sheet No.

DN-11

Xref (S): BD200150702

2/19/2021 C:\HIGHWAY\DN_CD\DRSDN_M-200150701.DWG DN200150701 DWG,DN-11 2400x



EARTHWORK LEGEND

- CUT 12' TO 9' DEPTH
- CUT 9' TO 6' DEPTH
- CUT 6' TO 3' DEPTH
- CUT 3' TO 0' DEPTH
- FILL 0' TO 2' DEPTH

NOTES

- EARTHWORK VOLUMES CALCULATED AS SHOWN ON THIS SHEET DO NOT TAKE INTO ACCOUNT ANY ADDITIONAL EXPANSION OR SEITLING FACTORS. THE VOLUMES PROVIDED REPRESENT RAW EXISTING VERSUS PROPOSED SURFACE-TO-SURFACE EARTHWORK VOLUMES.
- PAVEMENT STRUCTURE VOLUME REMOVALS WERE INCLUDED IN THE VOLUME CALCULATION. FOR THE PURPOSE OF THE EARTHWORK VOLUME CALCULATION, THE PROPOSED GRADE OF PAVED AREAS WAS REDUCED BY THE THICKNESS OF THE PROPOSED PAVEMENT SECTION.
- ADDITIONAL CUT VOLUME FROM UTILITY TRENCHING WAS NOT CONSIDERED IN THE CALCULATION.
- THE PROPOSED UNDERGROUND STORMWATER DETENTION SYSTEM TO BE INSTALLED WITHIN THE EMPLOYEE PARKING LOT AREA ON THIS SHEET CREATES AN ADDITIONAL VOID SPACE OF APPROXIMATELY 306 CY. THIS INCREASES THE TOTAL NET CUT IN THE EMPLOYEE LOT AREA TO 6,563 CY WHEN ADDED TO THE SURFACE-TO-SURFACE TOTAL BELOW.

Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
VOLUME-EXISTING VS PROPOSED-EMPLOYEE LOT	full	1.00	1.00	56010.99	6305.73	49.28	6256.45<Cut>

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REFER TO SHEET GN-1 FOR SITE WORK GENERAL NOTES

GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

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49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	1"=30'
Project No.	2001507
Date	02/19/2021
CAD File: SA200150701	

Title

SITE ANALYSIS PLAN - EARTHWORK

Sheet No.

SA-1

Xref (s) : B200150702 ; XY200150701 ; XY-14C5115-Contours-2018-UAV ; XC200150702 ; XC200150701 ; XC200150704

2/19/2021, C:\HEWRUK, G:\VERSION 14\DBV\DBV\DWG\SA\DBV\DBV1 DWG SA-1 PARK.RVC

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EARTHWORK LEGEND

- CUT 12' TO 5' DEPTH
- CUT 5' TO 0' DEPTH
- FILL 0' TO 5' DEPTH
- FILL 5' TO 10' DEPTH
- FILL 10' TO 15' DEPTH
- FILL 15' TO 20' DEPTH
- FILL 20' TO 25' DEPTH

NOTES

- EARTHWORK VOLUMES CALCULATED AS SHOWN ON THIS SHEET DO NOT TAKE INTO ACCOUNT ANY ADDITIONAL EXPANSION OR SEITLING FACTORS. THE VOLUMES PROVIDED REPRESENT RAW EXISTING VERSUS PROPOSED SURFACE-TO-SURFACE EARTHWORK VOLUMES.
- PAVEMENT STRUCTURE VOLUME REMOVALS WERE INCLUDED IN THE VOLUME CALCULATION. FOR THE PURPOSE OF THE EARTHWORK VOLUME CALCULATION, THE PROPOSED GRADE OF PAVED AREAS WAS REDUCED BY THE THICKNESS OF THE PROPOSED PAVEMENT SECTION.
- ADDITIONAL CUT VOLUME FROM UTILITY TRENCHING WAS NOT CONSIDERED IN THE CALCULATION.
- THE PROPOSED UNDERGROUND STORMWATER DETENTION AND UNDERGROUND COMPENSATORY SYSTEMS TO BE INSTALLED WITHIN THE REMOTE PARKING LOT EXPANSION AREA ON THIS SHEET CREATE A VOID SPACE OF APPROXIMATELY 75,570 CY WITHIN THE REQUIRED FILL MATERIAL. THIS REDUCES THE TOTAL NET FILL IN THE REMOTE LOT EXPANSION AREA TO 80,220 CY WHEN SUBTRACTED FROM THE SURFACE-TO-SURFACE TOTAL BELOW.

Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
VOLUME-EXISTING VS PROPOSED-REMOTE LOT	full	1.00	1.00	324347.20	5562.18	161351.58	155789.40<Fill>

NOT FOR CONSTRUCTION FOR PERMITTING PURPOSES ONLY

REFER TO SHEET GN-1 FOR SITE WORK GENERAL NOTES

GRAPHIC SCALE
50 25 0 50
SCALE IN FEET

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Engineering
Environmental
Land Surveying

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No. 26884
LICENSED PROFESSIONAL ENGINEER

EXISTING FEDEX GROUND HUB
HUB PARKING EXPANSION

49 FEDEX DRIVE
MIDDLETOWN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	C.J.L.
Drawn	C.J.L.
Reviewed	J.A.B.
Scale	1"=50'
Project No.	2001507
Date	02/19/2021

CAD File:
SA200150701

Title

SITE ANALYSIS PLAN - EARTHWORK

Sheet No.

SA-2

Xref (s) : B0200150702 , XC200150701 , XY-14C5115-Contours-2018-LiAV , XC200150702 , XC200150704 , XY-14C5115-Contours-Sat-Parking 2018-LiAV , XC200150702 , XC200150704

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