PROPOSED GARDEN APARTMENTS

30 SOUTH STREET
PLYMOUTH, CONNECTICUT

SUBMITTED FOR: WETLANDS

DECEMBER 15, 2025
REVISED: MARCH 4, 2026

OWNER

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

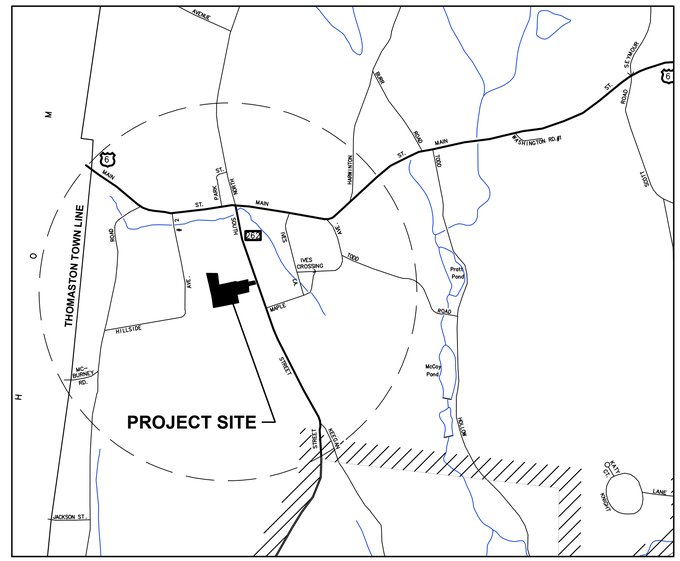
CONSULTANTS

benesch

Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

LIST OF DRAWINGS

HALF MILE VICINITY MAP



WETLANDS NOTE:

WETLANDS FLAGS SHOWN HEREON WERE SET IN THE FIELD BY REMA ECOLOGICAL SERVICES LLC IN JANUARY 2025 AND LOCATED BY ACCURATE SURVEY.

Survey Notes:

1. This map has been prepared within the "Minimum Standards For Surveys and Maps in the State of Connecticut" as adopted for use by the regulations of Connecticut state agencies on September 26, 1996. (CT Sections 20-300b-20).

   -Type Of Survey: Property Survey
   -Boundary Determination Category: Dependant Resurvey
   -Horizontal Accuracy Class: A-2 (NAD83)

   -Topographic Survey: Class T-2 (NAVD88)

2. Map References

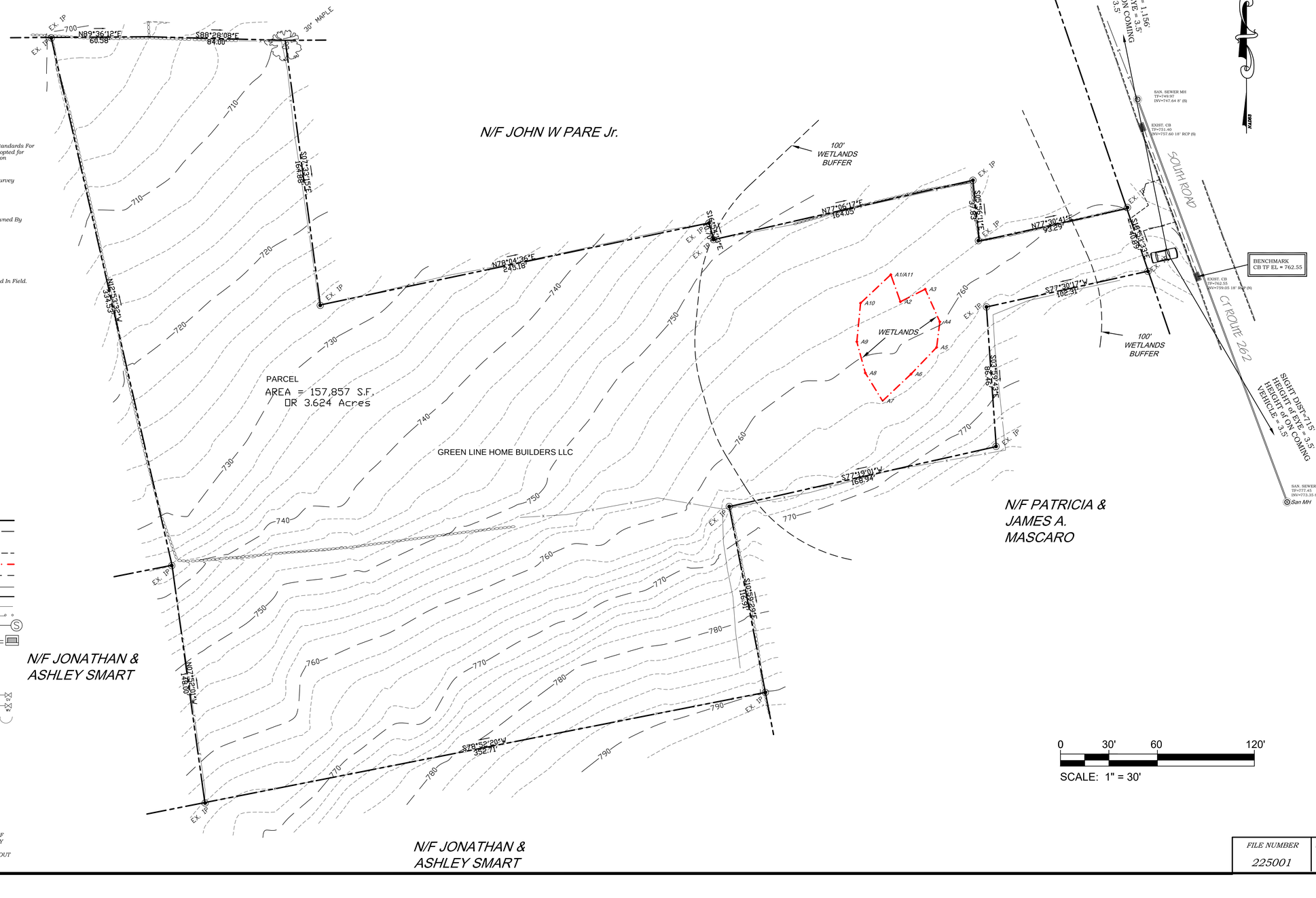
A. Proximity "Survey MapShowing Division Of Land Owned By Grace L. Douyard, Timothy & Susan D. Pare South Street,Plymouth, Conn. Scale 1"-40' Sept 8, 1988"

3. Bearings are based upon NAD83 Vertical Datum.

4. Elevations are based on NAVD88 Horizontal Datum.

4. Physical Evidence of Underground Utilities as Located In Field. All Underground Utilities Not Shown.

N/F????



LEGEND

- EX. PROPERTY LINE
- EX. EASEMENT LINE
- EX. PINS/MONS
- EX. E.O.P.
- EX. WETLANDS
- EX. WETLANDS BUFFER
- EX. CONTOUR (100)
- EX. STREAM
- EX. CHAIN LINK FENCE
- EX. GUARD RAIL
- EX. SANITARY SEWER (S)
- EX. STORM SEWER
- EX. UTILITY POLE
- EX. LIGHT POLE (SINGLE)
- EX. SANITARY CLEAN OUT
- EX. BOLLARD
- EX. GAS VALVE
- EX. GAS VALVE
- EX. TREELINE
- EX. TREE

0 30' 60 120'

SCALE: 1" = 30'

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

NOT VALID UNLESS EMBOSSED SEAL IS AFFIXED HEREON.

JAMES E. JONES CT. L.S. REG. NO. 12329 DATE

STATE OF CONNECTICUT • JAMES E. JONES • REGISTERED LAND SURVEYOR • 12329

REVISIONS:
DATE:
DATE:
DATE:
DATE:
DATE:
DATE:
DATE:
DATE:

JONES ENGINEERING LLC
CIVIL ENGINEERING & LAND SURVEYING
92 NORTH SUMMIT ST., SUITE 24
P.O. BOX 249
SOUTHINGTON, CT 06489
PHONE: (860) 621-0700
FAX: (860) 621-6066

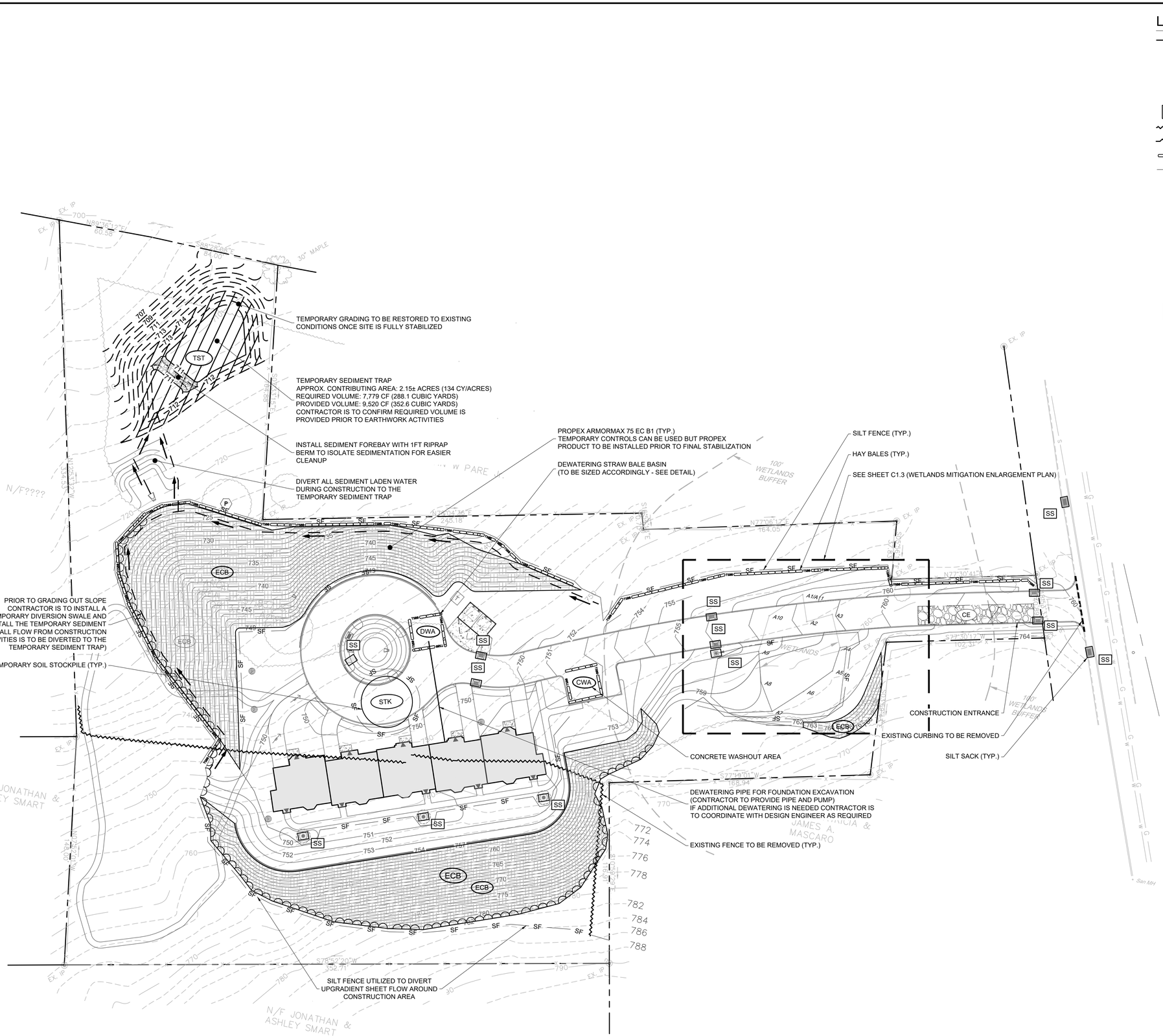
SCALE: 1"=30'
DATE: 01/13/2025
DRAWN BY: JEJ
CHECKED BY: BK

EXISTING CONDITIONS SURVEY
PREPARED FOR
GREENLINE CONSTRUCTION LLC
30 SOUTH STREET (CT RTE 262)
PLYMOUTH CONNECTICUT

FILE NUMBER	SHEET NUMBER
225001	1 of 1

JONES ENGINEERING LLC

P:\225\PRJ\KHOLOD-225001-PLYMOUT-SO\dwg\Exist Cond.dwg, 30 Scale, 1/17/2025 10:57:18 AM



LEGEND

- PROPERTY LINE
- EX. SITE ITEM TO BE REMOVED
- SITE ITEM TO BE PROTECTED
- PROTECT EXISTING TREE
- TREE TO BE REMOVED
- SILT SACK
- FENCE/WALL TO BE REMOVED
- PIPING TO BE FLOW FILLED
- HAY BALES
- SILT FENCE
- TEMPORARY SOIL STOCKPILE
- CONCRETE WASHOUT AREA
- CONSTRUCTION ENTRANCE
- TEMPORARY SEDIMENT TRAP
- PROPEX ARMORMAX 75 EC B1

Prepared by:

benesch

Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

DATE:	REVISION:

KEY PLAN

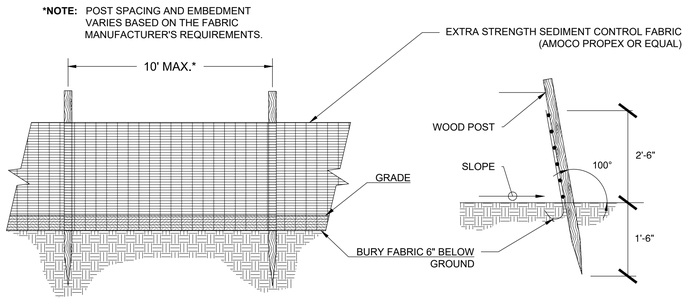
0 30' 60'
SCALE: 1" = 30'

PROJECT NO.: 0725-500103.01
SCALE: 1"=30'
DATE: 12/15/2025

DRAWN BY: GSL
CHECKED BY: WGW

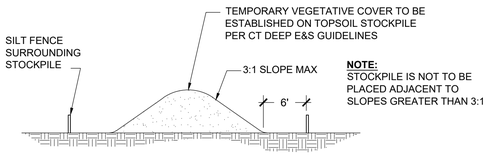
DEMOLITION & EROSION CONTROL PLAN

DRAWING NO.:
C1.0



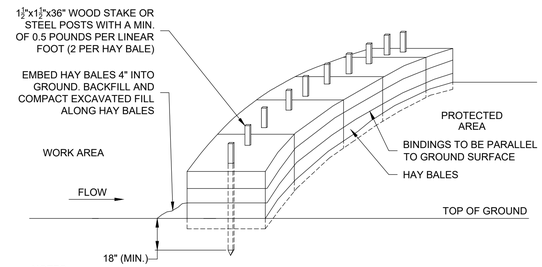
SILT FENCE BARRIER (SF)

N.T.S.



TEMPORARY STOCKPILE (STK)

N.T.S.

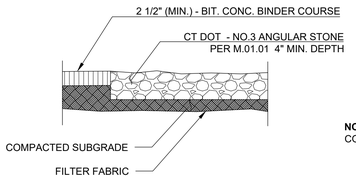


NOTES:

1. HAY BALES SHALL BE MADE OF HAY OR STRAW WITH 40 POUND MIN. WEIGHT AND 120 POUND MAX. WEIGHT HELD TOGETHER BY TWINE OR WIRE.
2. PLACE HAY BALES ON CONTOUR AND WING THE LAST HAY BALES UP SLOPE SO THAT THE TOP OF THE LAST SEVERAL HAY BALES ARE HIGHER THAN THE LINE OF HAY BALES.
3. DRIVE FIRST STAKE IN EACH BALE TOWARD THE PREVIOUSLY LAID BALE TO FORCE THEM TOGETHER.
4. PUT ONE HAY BALE PERPENDICULAR ALONG HAY BALE BARRIER EACH 100 FEET.

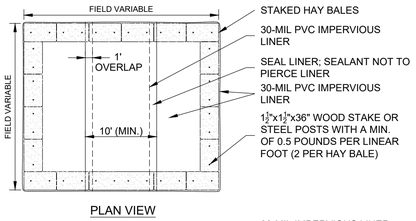
HAY BALE BARRIER (HB)

N.T.S.

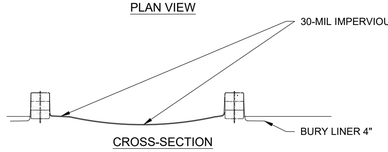


SECTION

NOTE: LOCATION TO BE DETERMINED IN THE FIELD BY THE CONSTRUCTION ADMINISTRATOR



PLAN VIEW



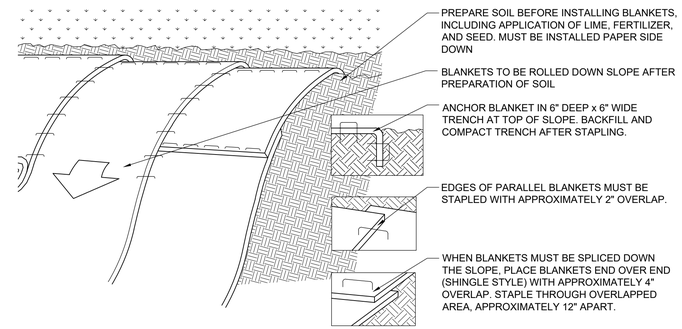
CROSS-SECTION

NOTES:

1. CONSTRUCT WASHOUT AREA LARGE ENOUGH TO ENSURE MATERIALS WILL BE CONTAINED WHERE WASTE CONCRETE CAN SOLIDIFY IN PLACE AND EXCESS WATER CAN SAFELY EVAPORATE.
2. WASHOUT AREA SHALL BE LARGE ENOUGH TO RETAIN ALL LIQUID AND WASTE CONCRETE MATERIALS FROM WASHOUT OPERATION.
3. WEEKLY INSPECTIONS OF WASHOUT AREAS SHALL BE CONDUCTED TO ASSESS THE HOLDING CAPACITY AND FUNCTIONALITY OF THE WASHOUT AREA.

TEMPORARY CONCRETE WASHOUT AREA (CWA)

N.T.S.



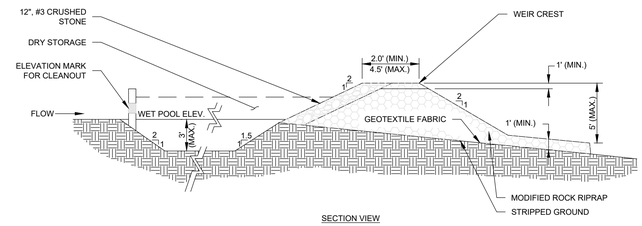
SLOPE STABILIZATION USING EROSION CONTROL BLANKET (ECB)

N.T.S.

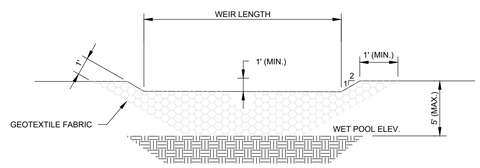
PLAN

CONSTRUCTION ENTRANCE (CE)

N.T.S.



SECTION VIEW



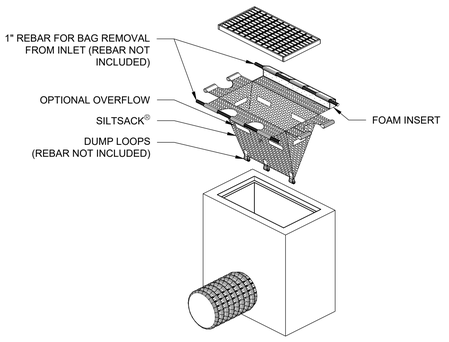
OUTLET SECTION

GENERAL NOTES

1. STABILIZE EARTHEN EMBANKMENT BY SEEDING OR PROVIDE STONE SLOPE PROTECTION IMMEDIATELY AFTER INSTALLATION.
2. NON-OVERFLOW PORTIONS AND ABUTMENTS OF TEMPORARY SEDIMENT TRAPS MAY BE CONSTRUCTED OF COMPACTED EARTHFILL.

TEMPORARY SEDIMENT TRAP

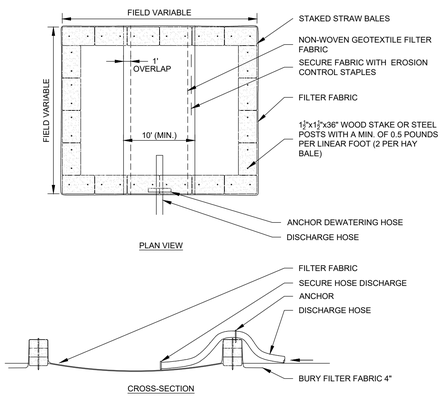
SCALE: NONE



'SILTSACK' SEDIMENT CONTROL DEVICE, TERRAFIX GEOSYNTHETICS INC. TORONTO, ONTARIO, CA WWW.TERRAFIXGEO.COM

SILT SACK DETAIL (SS)

N.T.S.



PLAN VIEW

CROSS-SECTION

GENERAL NOTES

1. NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
2. THE BASIN TO BE SIZED ACCORDING TO: CUBIC FEET OF STORAGE = PUMP DISCHARGE RATE(gpm) x 16.
3. SIZE SHOWN ON PLANS SHALL BE ADJUSTED AS REQUIRED FOR THE ACTUAL PUMPING RATE.
4. IF STRAINER BAG IS TO BE USED, IT MUST BE APPROVED BY ENGINEER.

DEWATERING STRAW BALE BASIN

N.T.S.

Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

DATE:	REVISION:

KEY PLAN

PROJECT NO.: 0725-500103.01
SCALE: AS SHOWN
DATE: 12/15/2025

DRAWN BY: JHL
CHECKED BY: WGW

EROSION CONTROL DETAILS

DRAWING NO.:
C1.1

EROSION AND SEDIMENTATION CONTROL NARRATIVE:

PER STATE OF CONNECTICUT
ALL APPLICABLE PRACTICES RECOMMENDED BY THE 2024 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL AS AMENDED.

DESCRIPTION

THE PROJECT CONSISTS OF CONSTRUCTION OF 5 GARDEN APARTMENTS AND ASSOCIATED PARKING AREAS, DRIVES, LANDSCAPE AND, OTHER AMENITIES. THE PROJECT WILL BE CONSTRUCTED IN ONE (1) PHASE.

SPECIFIC EROSION CONTROL CONCERNS INCLUDE THE FOLLOWING:

- SEDIMENT RUNOFF FROM THE SITE INTO THE WETLANDS ON THE EASTERN PORTION OF THE SITE AND ADJACENT DOWN GRADIENT PROPERTIES.
- TRACKED SEDIMENT ON TO THE ADJACENT ROADWAYS.
- WIND-BORNE SEDIMENT ACCUMULATING ON ADJACENT PROPERTIES.

A. GEOTEXTILE SILT FENCE (SF) - SHALL BE NON-WOVEN MATERIAL, MINIMUM 36" HIGH AND FASTENED TO WOOD STAKES. SILT FENCE SHALL BE INSTALLED WITH END RUNS TURNED UP GRADE AT 45 DEGREES FOR A DISTANCE OF 10 FEET (SEE DETAIL THIS SHEET).

B. TEMPORARY SEEDING (TS)

1. CONTRACTOR SHALL SCARIFY THE SOIL TO A DEPTH OF 2" BEFORE APPLYING FERTILIZER, LIMESTONE AND SEED.
2. SEED MAY BE APPLIED BY HAND OR MECHANICALLY. SEED APPLICATION SHALL BE UNIFORM. SEED RATE SHALL BE IN ACCORDANCE WITH THE 2024 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL AS AMENDED (INCREASE SEEDING RATES BY 10% WHEN HYDROSEEDING, LIMESTONE, FERTILIZER AND SEED MAY BE APPLIED IN SLURRY.)
3. CONTRACTOR SHALL MULCH AREA (MS) IMMEDIATELY FOLLOWING SEEDING. (NOTE: IN THE EVENT SEEDING OPERATIONS ARE NOT FEASIBLE DUE TO SEASONAL RESTRICTIONS OR EXTENDED INCLEMENT WEATHER PATTERNS, THE CONTRACTOR SHALL INSTALL AN EROSION CONTROL BLANKET OVER EXPOSED SOILS.)

C. PERMANENT SEEDING (PS)

1. CONTRACTOR SHALL APPLY TOPSOIL AND FINE GRADE ALL AREAS BEFORE THE APPLICATION OF PERMANENT SEED. APPLY LIMESTONE AND FERTILIZER AS NEEDED, IN ACCORDANCE WITH SOIL TESTS.
2. REMOVE ALL SURFACE STONES ½ INCH AND LARGER. REMOVE ALL OTHER DEBRIS AND RAKE SEED BED.
3. APPLY SEED WITHIN 7 DAYS AFTER ESTABLISHING FINAL GRADES. SEE PLANTING PLAN.

D. STRAW BALE BARRIER (HB) - SHALL BE MADE OF STRAW WITH 40 POUNDS MINIMUM WEIGHT AND 120 POUNDS MAXIMUM WEIGHT, HELD TOGETHER BY TWINE OR WIRE. (SEE DETAIL THIS SHEET.)

E. CONSTRUCTION ENTRANCE (CE) - SHALL BE AN ANGULAR STONE PAD, A MINIMUM OF 12' WIDE AND 50' LONG. (SEE DETAIL THIS SHEET.)

F. EROSION CONTROL BLANKET (ECB) - EROSION MAT SHALL BE PLACED ON ALL EXPOSED CUT/FILL SLOPES STEEPER THAN 3:1 (INCLUDING SWALES & DITCHES) TO PROTECT AGAINST RAINFALL AND HOLD MOISTURE CONTENT TO ENHANCE VEGETATION GROWTH IN SEEDED AREAS. MAT (OR BLANKETS) SHALL BE STRAW OR STRAW/COCONUT FIBER COMBINATION SEWN TOGETHER WITH LIGHTWEIGHT NETTING. USE PYRAMAT. S150 - SLOPES UP TO 3:1, SC150-SLOPES FROM 3:1 UP TO 2:1 OR GREATER. TEMPORARY HAY MULCH TO BE APPLIED TO AREAS LESS THAN 3:1 SLOPE AND ALL AREAS TO BE LEFT BARREN OVER THE WINTER, MULCH RATE TO BE 70 POUNDS/1000 S.F.

G. WETLANDS MITIGATION - THERE IS A POCKET OF WETLANDS (2,495 SF) ADJACENT THE PROPOSED ENTRANCE DRIVE, A PORTION OF WHICH WILL BE DISTURBED AND PERMANENTLY REMOVED (1,185 SF). THE REMAINING WETLANDS (1,470 SF) WILL BE ENHANCED AND NEW WETLANDS (2,585 SF) WILL BE CREATED.

APPLICATION/GENERAL PROCEDURES

SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO ANY SITE DISTURBANCE, AND DEVELOPMENT WILL PROCEED ACCORDING TO A SPECIFIC CONSTRUCTION SEQUENCE. THE OBJECTIVE IS TO MAXIMIZE THE REDUCTION OF SEDIMENT-LADEN RUNOFF THROUGH IMPLEMENTATION OF CONVENTIONAL SOIL SEDIMENTATION AND EROSION CONTROL PRACTICES CURRENTLY RECOMMENDED BY THE 2024 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL

A. EARTHWORK WILL BE SCHEDULED FOR PERIODS WHEN SOIL SATURATION IS LOW AND SOIL LOSS HAZARD IS AT A MINIMUM.

B. SUSPEND EARTHWORK FOR MAJOR STORM EVENTS AND IMPLEMENT ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS NECESSARY.

C. THERE SHALL BE NO CUTS OR FILL LEFT EXPOSED FOR LONGER THAN 30 DAYS. THE ESTABLISHED PROCEDURE OF TEMPORARILY SEEDING AND/OR COVER WITH EROSION PROTECTION (MAT OR STRAW) SHALL BE FOLLOWED TO INSURE MINIMAL SOIL LOSS.

D. THE DISCHARGE OF UNTREATED STORMWATER TO ANY THE ADJACENT WETLANDS IS NOT ALLOWED.

NOTE: THE CONTRACTOR SHALL NAME ONE INDIVIDUAL AS HIS SEDIMENT AND EROSION CONTROL SUPERVISOR WHOSE PRIMARY RESPONSIBILITY WILL BE THE MAINTENANCE OF ALL ON-SITE EROSION CONTROL MEASURES. HE WILL KEEP A DAILY LOG OF HIS ACTIVITIES AND AN UPDATED SCHEDULE OF PROPOSED CONSTRUCTION ACTIVITIES. THE LOG WILL BE MADE AVAILABLE TO INSPECTORS.

TOTAL AREA OF PROJECT SITE - 3.62 ACRES
TOTAL AREA OF SITE DISTURBANCE - 2.11 ACRES

PLANNED START OF CONSTRUCTION - APRIL 2026
PLANNED END OF CONSTRUCTION - AUGUST 2027

DOCUMENTS TO BE UTILIZED FOR EROSION CONTROL

- EROSION CONTROL PLANS (C-1.0 - C-1.2)
- STORMWATER MANAGEMENT REPORT - PROPOSED GARDEN APARTMENTS
- 2024 CT DEEP EROSION CONTROL GUIDELINES

PERMITS RELATED TO EROSION CONTROL - PERMIT CONDITIONS ARE PART OF THE EROSION CONTROL REQUIREMENTS

- TOWN OF PLYMOUTH INLAND WETLANDS AND WATERCOURSES COMMISSION - WETLANDS PERMIT
- TOWN OF PLYMOUTH PLANNING & ZONING COMMISSION - SITE PLAN/SPECIAL PERMIT

SITE PREPARATION NOTES:

1. CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" (1-800-922-4455) AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFICATION OF THE LOCATION AND NATURE OF ALL SUBSURFACE UTILITIES AT THE PROJECT WHICH MAY BE AFFECTED BY THE WORK. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION, AND INVERTS AS REQUIRED.
3. PROTECT ALL IMPROVEMENTS NOT INCLUDED WITHIN THE LIMITS OF WORK. ANY IMPROVEMENT WHICH IS DAMAGED SHALL BE REPAIRED OR REPLACED IN-KIND TO THE OWNER'S SATISFACTION.
4. DURING DEMOLITION, PROTECT ALL ADJACENT CURBING, SIDEWALKS, RAMPS, ABOVE-GRADE AND BELOW-GRADE UTILITIES, DRAINAGE STRUCTURES, LIGHT BASES, AND OTHER IMPROVEMENTS POTENTIALLY AFFECTED BY THE WORK. CLEARLY DELINEATE THE LIMITS OF WORK AND MARK, BARRICADE, OR OTHERWISE IDENTIFY THOSE IMPROVEMENTS THAT ARE TO BE PROTECTED AND/OR AVOIDED. ANY IMPROVEMENT WHICH IS DAMAGED SHALL BE REPAIRED OR REPLACED IN-KIND TO THE OWNER'S SATISFACTION.
5. THE LOCATIONS OF EXISTING SITE FEATURES AS SHOWN HAVE BEEN OBTAINED FROM MAPS, SURVEYS, FIELD INSPECTIONS, AND OTHER AVAILABLE INFORMATION. THEY MUST BE CONSIDERED APPROXIMATE BOTH TO LOCATION, SIZE, AND AS-BUILT CONDITION AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD CONDITIONS.
6. THE DIMENSIONS SHOWN ON THE PLANS, INCLUDING THE INTENDED DIMENSIONS OF THE WORK, MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASUREMENTS TO VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AS WELL AS OTHER DIMENSIONS HE MAY DEEM APPROPRIATE TO FACILITATE THE COMPLETION OF THE WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
7. IMPLEMENTING WORKER SAFETY AND/OR HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH RULES, LAWS, AND REGULATIONS PERTAINING TO CONSTRUCTION SAFETY AND/OR THE POTENTIAL AND/OR ACTUAL RISK OF EXPOSURE TO SITE-SPECIFIC PHYSICAL OR CHEMICAL HAZARDS IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
8. PRIOR TO THE TERMINATION, ABANDONMENT, OR REMOVAL OF ANY UTILITY, VERIFY THAT APPLICABLE NOTIFICATIONS HAVE BEEN MADE TO THE UTILITY OWNER/OPERATOR AND THAT THE UTILITY HAS BEEN PROPERLY TERMINATED, CAPPED, OR PLUGGED AS REQUIRED.
9. PROVIDE PAVEMENT SAWCUT AT THE EDGE OF EACH PAVEMENT REMOVAL AREA TO ESTABLISH A CLEAN EDGE WHERE NEW WORK WILL MEET EXISTING PAVEMENT. SAWCUT SHALL BE A MINIMUM OF 12 INCHES FROM EDGE OF PAVEMENT REMOVAL.
10. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL BE RESTORED WITH SIX (6) INCHES OF LOAM, SEEDED, FERTILIZED, AND MULCHED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED.

EROSION AND SEDIMENT CONTROL NOTES:

1. THIS PLAN IS FOR EROSION AND SEDIMENTATION (E&S) CONTROL ONLY. SEE OTHER PLANS FOR THE SCOPE OF CONSTRUCTION WORK.
2. THE MEASURES SPECIFIED HEREON ARE THE MINIMUM REQUIREMENTS FOR E&S CONTROL AND ARE SHOWN IN GENERAL SIZE AND LOCATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL E&S CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO ANY RESOURCE AREAS. ALL EROSION CONTROLS SHALL BE INSTALLED PRIOR TO ANY SITE WORK. CONTROLS SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAINFALL. EXCAVATED MATERIAL SHOULD NOT BE DISPOSED OF IN THE WETLAND AREA. PROVIDE ADDITIONAL E&S MEASURES AS REQUIRED TO CONTROL EROSION AND SILTATION THROUGHOUT THE DURATION OF THE CONSTRUCTION AS CONDITIONS DICTATE AND/OR AS DIRECTED BY THE OWNER OR THE ENGINEER.
3. MONITOR AND INSPECT ALL E&S MEASURES IN AN ONGOING MANNER THROUGHOUT THE WORK AND TAKE CORRECTIVE MEASURES, AS REQUIRED, TO MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO ANY RESOURCE AREAS.
4. ANY EROSION AND SEDIMENTATION MEASURE IMPLEMENTED BEYOND THAT SHOWN HEREON SHALL CONFORM TO APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT'S 2024 "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL."
5. ANY STOCKPILED MATERIAL SHALL BE SUBJECT TO EROSION CONTROL MEASURES THAT INCLUDE A MINIMUM OF SILT FENCE OR HAY BALE BARRIER. COVER STOCKPILES IF SIGNIFICANT RAINFALL IS PREDICTED.
6. ALL CATCH BASINS THAT ARE PLACED SHALL BE EQUIPPED WITH A FILTER BASKET, WHICH SHALL BE LEFT IN PLACE UNTIL THE SITE IS STABILIZED.
7. PROVIDE TEMPORARY SEEDING WITH MULCH ON ALL EXPOSED SOIL AREAS WHERE WORK WILL BE SUSPENDED FOR LONGER THAN 30 DAYS. APPLY SEED AND MULCH WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK. WHEN SEEDING IS NOT POSSIBLE DUE TO SEASONAL WEATHER CONDITIONS OR OTHER FACTORS, PROVIDE TEMPORARY STRUCTURAL SOIL PROTECTION SUCH AS MULCH, WOODCHIPS, EROSION CONTROL MATTING, OR COMPOST.
8. ALL TEMPORARY SLOPES IN EXCESS OF 3 (HORIZONTAL) TO 1 (VERTICAL) SHALL BE STABILIZED WITH EROSION CONTROL MATTING OR APPROVED EQUIVALENT.
9. NO RUNOFF SHALL BE ALLOWED TO DISCHARGE TO THE WETLANDS PRIOR TO TREATMENT FOR SEDIMENT REMOVAL.
10. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS. ALL TRASH SHALL BE CLEANED ON A DAILY BASIS AND THE SITE SHALL BE LEFT IN A NEAT CONDITION AT THE END OF EACH WORK DAY.
11. TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS AND ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION, CONTROL, AND RESPONSE.
12. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER AND MAINTAIN ADEQUATE MOISTURE LEVELS.
13. SWEEP ADJACENT ROADWAYS IF MUD OR SOIL IS TRACKED ON TO THEM.

SUGGESTED CONSTRUCTION SEQUENCE:

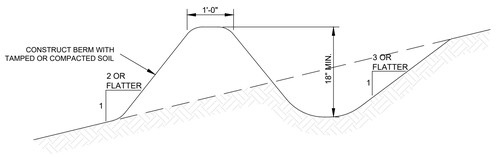
1. INSTALL CONSTRUCTION ENTRANCE.
2. INSTALL PERIMETER E&S CONTROLS.
3. CONSTRUCT TEMPORARY SEDIMENT TRAPS AND TEMPORARY DIVERSION SWALES.
4. PERFORM BULK EARTHWORK OPERATIONS.
5. BEGIN CONSTRUCTION OF BUILDING FOUNDATION.
6. CONSTRUCT UTILITIES. AS CATCH BASINS ARE PLACE, INSTALL SILT SACKS.
7. BOX OUT PAVED AREAS AND HARDSCAPE WITH IMPORTED BASE MATERIALS.
8. CONSTRUCT BOTTOM COURSE OF BITUMINOUS PAVEMENT.
9. CONSTRUCT LANDSCAPING AND OTHER SITE AMENITIES.
10. CONSTRUCT CURBING AND TOP COURSE OF BITUMINOUS PAVEMENT.
11. AFTER THE SITE IS STABILIZED, REMOVE THE TEMPORARY SEDIMENT TRAP AND ALL ADDITIONAL PERIMETER CONTROLS, DIVERSION SWALES, AND CATCH BASIN FILTER INSERTS.

TEMPORARY E&S MAINTENANCE MEASURES

FILTER INSERTS IN DRAINAGE SYSTEM	CLEAN CATCH BASIN GRATE, REMOVE SEDIMENT/DEBRIS FROM FILTER INSERTS	WEEKLY & WITHIN 24 HOURS AFTER STORM GENERATING A DISCHARGE
HAY BALES/ SILT FENCE BARRIER	REPAIR/REPLACE WHEN FAILURE OBSERVED, REMOVE SILT WHEN ACCUMULATION REACHES APPROX. HALF HEIGHT OF BARRIER	WEEKLY & WITHIN 24 HOURS AFTER STORM GENERATING A DISCHARGE
CONSTRUCTION ENTRANCE	SWEEP PAVED ROADWAY ADJACENT TO SITE ENTRANCE AS NECESSARY, REFRESH STONE AS NECESSARY, REMOVE SILTED GRAVEL	WEEKLY
MOISTEN EXPOSED SOILS	PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS AND KEEP TRAVELWAYS DAMP	DAILY
TEMPORARY SEDIMENT TRAP	CHECK AND REPAIR STONE OUTLET, CLEAN WHEN HALF FULL OF SEDIMENT (DEWATER IF NECESSARY), RESTORE TRAP TO ORIGINAL DIMENSIONS	WEEKLY & WITHIN 24 HOURS AFTER STORM GENERATING A DISCHARGE
TEMPORARY DIVERSION SWALE	REPAIR DAMAGED AREAS WITHIN 24 HOURS OF OBSERVED FAILURE	WEEKLY & WITHIN 24 HOURS AFTER STORM GENERATING A DISCHARGE. INSPECT DAILY WHEN CONSTRUCTION ACTIVITIES ARE IN CLOSE PROXIMITY

INSPECTION NOTE:

WEEKLY EROSION CONTROL INSPECTIONS ARE TO BE PERFORMED BY THE CONTRACTOR AND REPORTS (INCLUDING PHOTOS) ARE TO BE SUBMITTED TO THE TOWN.



GENERAL NOTES

1. INSTALL TEMPORARY DIVERSION SWALES TO CHANNEL WATER FROM DISTURBED AREAS TO THE TEMPORARY SEDIMENT BASIN. ADJUST SWALE LOCATIONS AS NECESSARY PER CHANGING SITE CONDITIONS.
2. CONTRIBUTING DRAINAGE AREA MUST NOT EXCEED ONE ACRE.

TEMPORARY DIVERSION SWALE

SCALE: NONE

Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

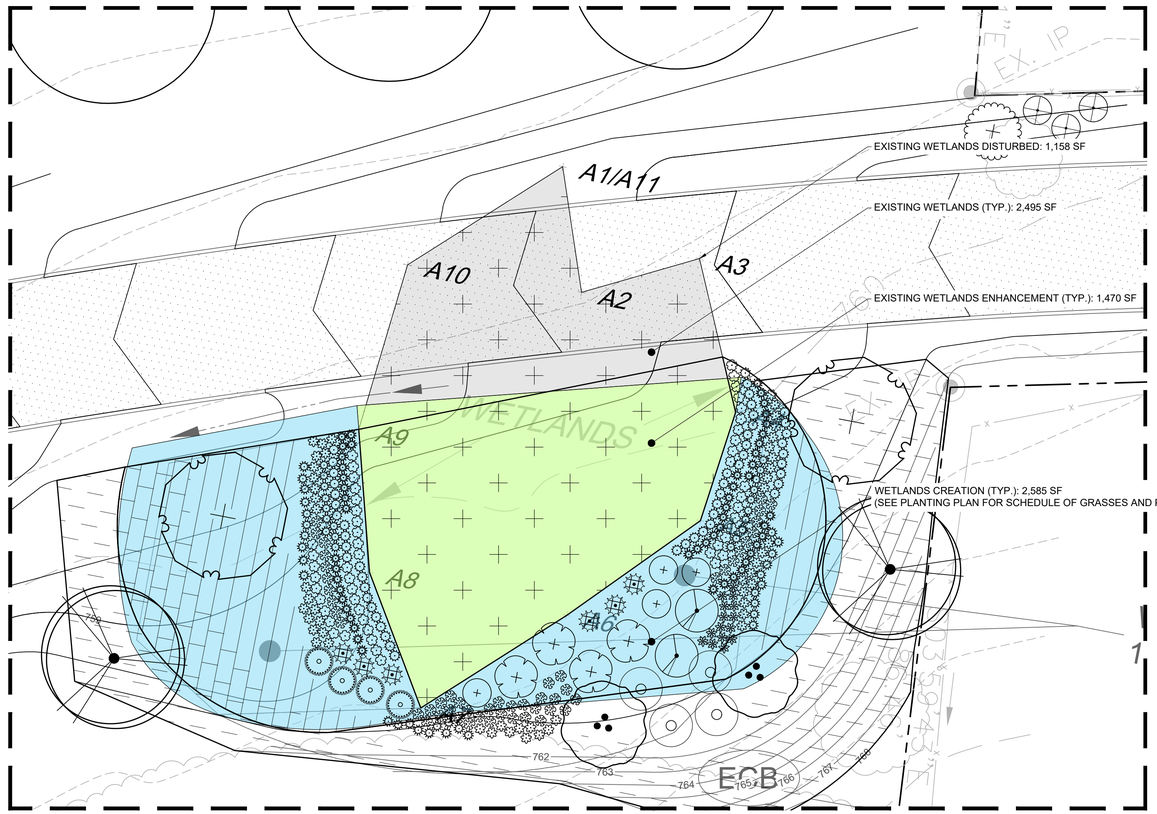
DATE:	REVISION:

KEY PLAN

PROJECT NO.: 0725-500103.01
SCALE: NONE
DATE: 12/15/2025
DRAWN BY: JHL
CHECKED BY: WGW

EROSION CONTROL NOTES

DRAWING NO.:
C1.2



GENERAL NOTES:
1. SEE REMA WETLANDS MITIGATION PLAN FOR ADDITIONAL INFORMATION.
2. SEE PLANTING PLAN FOR PLANTING SCHEDULE AND SPECIES DELINEATION.
3. COORDINATE ALL PLANTING WITHIN THE WETLANDS WITH REMA WETLANDS MITIGATION PLAN AND PLANTING PLAN.

MAINTENANCE NOTES:
1. ON-SITE WETLANDS ARE TO REMAIN CLEAR OF SEDIMENTATION AND DEBRIS, ONCE NOTICED, ACTION IS TO BE TAKEN BY THE OWNER TO REMOVE ANY BUILT UP DEBRIS OR SEDIMENTATION.
2. ON-SITE WETLANDS ARE NOT TO BE USED FOR SNOW STORAGE.
3. PERIODICALLY OBSERVE WETLANDS TO ENSURE THERE ARE NO INVASIVE SPECIES OVERTAKING NATIVES.
4. ENSURE YARD DRAIN IS FREE OF SEDIMENTATION AND DEBRIS TO PROVIDE SUFFICIENT OVERFLOW FOR ON-SITE WETLANDS.
5. REFER TO EPA 'STORMWATER WET POND AND WETLAND MANAGEMENT GUIDEBOOK' FOR ADDITION INFORMATION

SCALE: 1" = 10'

Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

DATE:	REVISION:

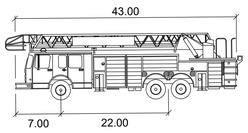
KEY PLAN

PROJECT NO.: 0725-500103.01
SCALE: 1" = 10'
DATE: 12/15/2025

DRAWN BY: GSL
CHECKED BY: WGW

WETLANDS MITIGATION ENLARGEMENT PLAN

DRAWING NO.:
C1.3



Aerial Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 33.3

LEGEND

- PROPERTY LINE
- SETBACK
- BUFFER
- CURB
- BITUMINOUS PAVEMENT
- CONCRETE PAVEMENT
- RECREATION AREA
- INFILTRATION BASIN

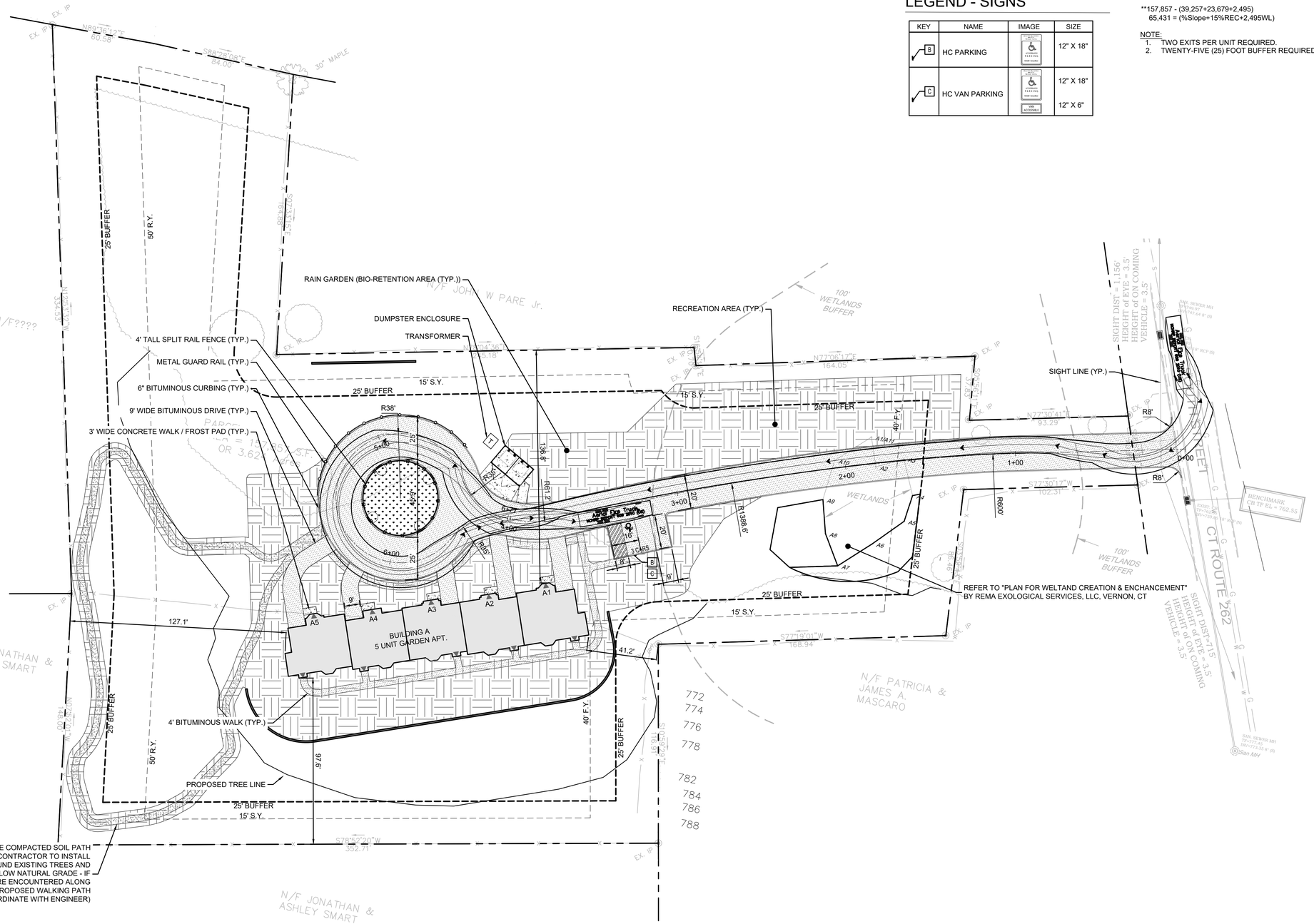
LEGEND - SIGNS

KEY	NAME	IMAGE	SIZE
B	HC PARKING		12" X 18"
C	HC VAN PARKING		12" X 18" 12" X 6"

ZONING INFORMATION		
ZONE R-20	REQUIRED	PROPOSED
USE	GARDEN APTS	GARDEN APTS
MIN LOT AREA/UNIT	10,000 SF	18,485 SF
MIN LOT AREA	100,000 SF	**157,857-65,431
MIN. LOT FRONTAGE	125 FT	165.2 FT
MIN. FRONT YARD	40'	41.2'
MIN. SIDE YARD	15'	97.6'
MIN. REAR YARD	50'	127.1'
MAX. HEIGHT	30'	<30'
MAX, BLG COVERAGE	15%	3.5%
MAX, LOT COVERAGE	30%	16.0%
USABLE OPEN SPACE	15%	21%
PARKING	2.5/UNIT	2.5/UNIT

**157,857 - (39,257+23,679+2,495)
65,431 = (%Slope+15%REC+2,495WL)

NOTE:
1. TWO EXITS PER UNIT REQUIRED.
2. TWENTY-FIVE (25) FOOT BUFFER REQUIRED SPECIAL PERMIT USE.



Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

DATE:	REVISION:

KEY PLAN

0 30' 60'
SCALE: 1" = 30'

PROJECT NO.: 0725-500103.01
SCALE: 1"=30'
DATE: 12/15/2025

DRAWN BY: JHL
CHECKED BY: WGW

SITE PLAN

DRAWING NO.:
C2.0

STORMWATER MANAGEMENT MAINTENANCE MEASURE TABLE

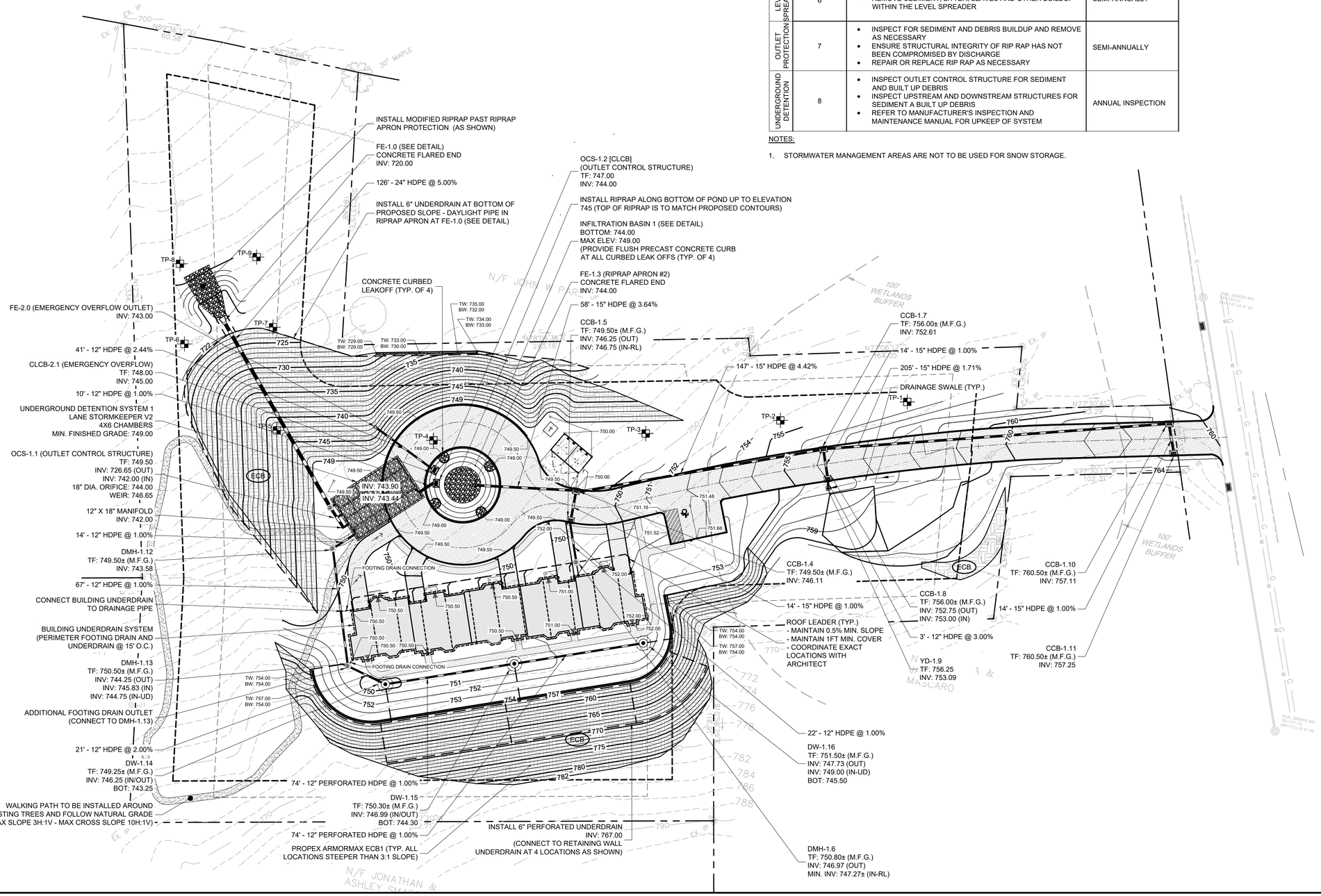
	MAINTENANCE MEASURE	ACTIVITY	SCHEDULE
INFILTRATION BASIN	1	• INSPECT FOR DAMAGE • NOTE SIGNS OF HYDROCARBON BUILDUP, AND REMOVE IF DETECTED • MONITOR FOR SEDIMENT ACCUMULATION • EXAMINE TO ENSURE THAT INLET AND OUTLET DEVICES ARE FREE OF DEBRIS AND OPERATION	ANNUAL INSPECTION
	2	• REPAIR UNDERCUT OR ERODED AREAS	AS-NEEDED MAINTENANCE
	3	• CLEAN AND REMOVE DEBRIS FROM INLET AND OUTLET STRUCTURES • MOW SIDES AND BOTTOM SEEDMIX	SPRING AND FALL
	4	• REMOVE SEDIMENT WHEN THE VOLUME HAS BEEN SIGNIFICANTLY REDUCED OR WHEN SIGNIFICANT ALGAL GROWTH IS OBSERVED	10-YEAR MAINTENANCE
CATCH BASIN	5	• INSPECT AND CLEAN WHEN THE SUMP IS HALF FULL OF SILT AND/OR DEBRIS	SEMI-ANNUALLY
LEVEL SPREADERS	6	• INSPECT FOR SEDIMENT AND LITTER • REMOVE SEDIMENT, LITTER, LEAVES AND OTHER BUILDUP WITHIN THE LEVEL SPREADER	SEMI-ANNUALLY
OUTLET PROTECTION	7	• INSPECT FOR SEDIMENT AND DEBRIS BUILDUP AND REMOVE AS NECESSARY • ENSURE STRUCTURAL INTEGRITY OF RIP RAP HAS NOT BEEN COMPROMISED BY DISCHARGE • REPAIR OR REPLACE RIP RAP AS NECESSARY	SEMI-ANNUALLY
UNDERGROUND DETENTION	8	• INSPECT OUTLET CONTROL STRUCTURE FOR SEDIMENT AND BUILT UP DEBRIS • INSPECT UPSTREAM AND DOWNSTREAM STRUCTURES FOR SEDIMENT A BUILT UP DEBRIS • REFER TO MANUFACTURER'S INSPECTION AND MAINTENANCE MANUAL FOR UPKEEP OF SYSTEM	ANNUAL INSPECTION

NOTES:

1. STORMWATER MANAGEMENT AREAS ARE NOT TO BE USED FOR SNOW STORAGE.

LEGEND

- STORM DRAINAGE PIPE (ADS N-12 HDPE)
- UNDERDRAIN / ROOF LEADER
- FOOTING DRAIN
- TYPE 'CL' CATCH BASIN
- TYPE 'C' CATCH BASIN
- DRAINAGE MANHOLE
- AREA DRAIN
- DRYWELL
- 1 — PROPOSED INTERMEDIATE CONTOUR
- 5 — PROPOSED INDEX CONTOUR
- DIRECTION OF SURFACE DRAINAGE FLOW
- 53.30 — PROPOSED SPOT GRADE



Prepared by:

benesch

Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

DATE:	REVISION:

KEY PLAN

SCALE: 1" = 30'

PROJECT NO.: 0725-500103.01
SCALE: 1"=30'
DATE: 12/15/2025

DRAWN BY: GSL
CHECKED BY: WGW

GRADING & DRAINAGE PLAN

DRAWING NO.:

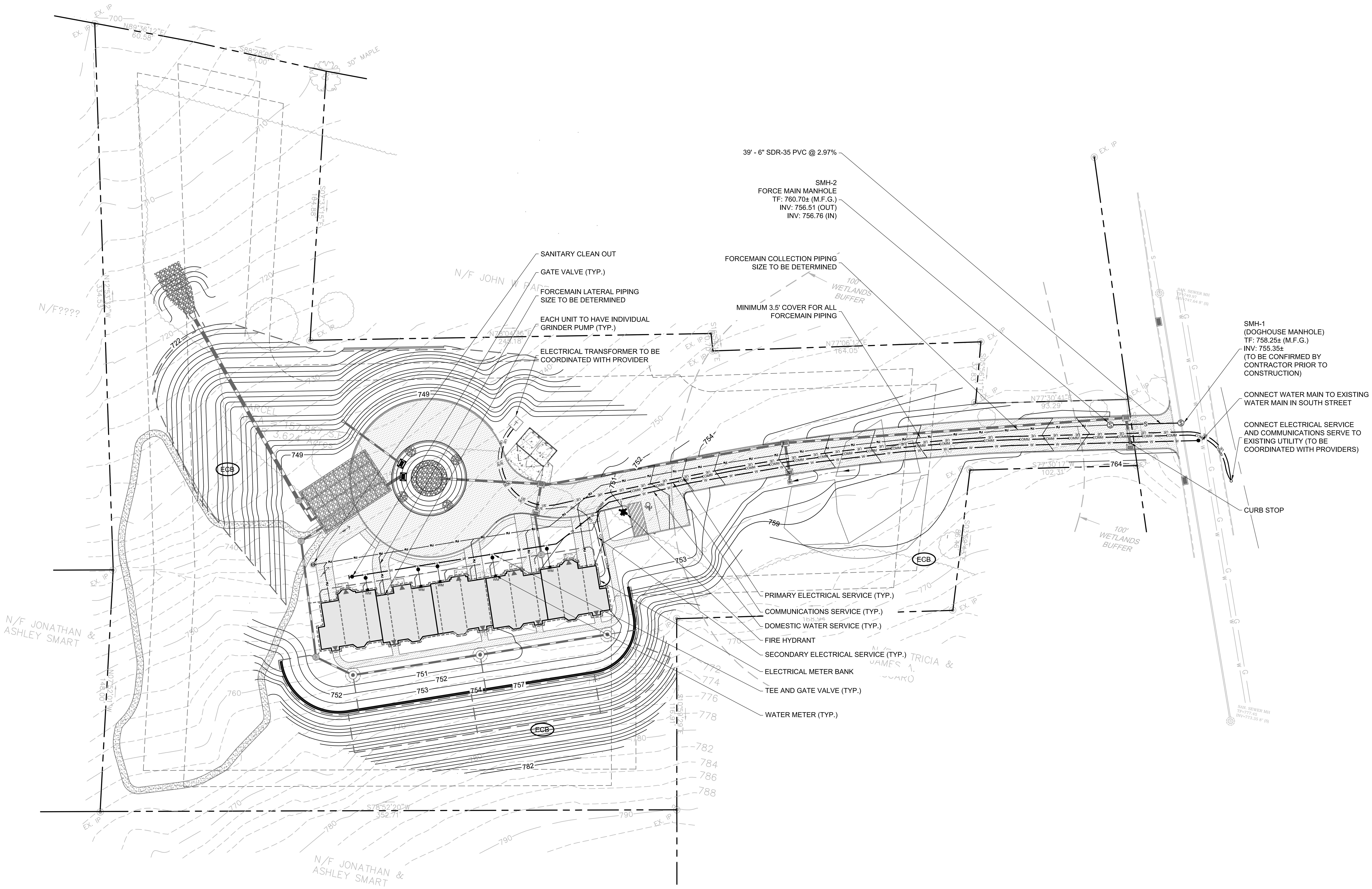
C3.0

1 2 3 4

A B C D

LEGEND

- UTILITY POLE
- SANITARY MANHOLE
- CLEANOUT
- GATE VALVE
- FIRE HYDRANT
- TEE
- TRANSFORMER
- FORCE MAIN
- UNDERGROUND ELECTRIC CONDUIT
- WATER LATERAL
- NATURAL GAS LATERAL



Prepared by:

benesch

Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

30 SOUTH STREET

PLYMOUTH, CT

DATE:	REVISION:

KEY PLAN

SCALE: 1" = 30'

PROJECT NO.: 0725-500103.01	DRAWN BY: GSL
SCALE: 1"=30'	CHECKED BY: WGW
DATE: 12/15/2025	

UTILITY PLAN

DRAWING NO.: **C3.1**

Native Steep Slope Mix w/Annual Ryegrass - ERNMX-181

	Botanical Name	Common Name	Price/Lb
29.00 %	*Andropogon gerardi, 'Bison'*	Big Bluestem, 'Bison'	12.89
20.00 %	*Lolium multiflorum*	Annual Ryegrass	1.30
15.50 %	*Sorghastrum nutans, 'Nebraska 54'*	Indiangrass, 'Nebraska 54'	16.23
13.40 %	*Elymus virginicus, Madison-NY Ecotype*	Virginia Wildrye, Madison-NY Ecotype	11.22
6.60 %	*Elymus canadensis*	Canada Wildrye	17.12
4.00 %	*Agrostis perennans, Albany Pine Bush-NY Ecotype*	Autumn Bentgrass, Albany Pine Bush-NY Ecotype	23.40
2.80 %	*Panicum clandestinum, Tioga*	Deertongue, Tioga	23.68
2.80 %	*Panicum virgatum, 'Habitat'-NJ Ecotype*	Switchgrass, 'Habitat'-NJ Ecotype	10.80
1.20 %	*Tridens flavus, Fort Indiantown Gap-PA Ecotype*	Purpletop, Fort Indiantown Gap-PA Ecotype	40.80
1.00 %	*Chamaecrista fasciculata, PA Ecotype*	Partridge Pea, PA Ecotype	13.00
1.00 %	*Rudbeckia hirta*	Blackeyed Susan	33.80
0.70 %	*Coreopsis lanceolata*	Lanceleaf Coreopsis	31.20
0.70 %	*Echinacea purpurea*	Purple Coneflower	46.80
0.60 %	*Heliopsis helianthoides, PA Ecotype*	Oxeye Sunflower, PA Ecotype	36.40
0.30 %	*Aster pilosus, PA Ecotype*	Heath Aster, PA Ecotype	234.00
0.20 %	*Monarda fistulosa, Fort Indiantown Gap-PA Ecotype*	Wild Bergamot, Fort Indiantown Gap-PA Ecotype	104.00
0.10 %	*Apocynum cannabinum, PA Ecotype*	Indianhemp, PA Ecotype	234.00
0.10 %	*Asclepias syriaca, PA Ecotype*	Common Milkweed, PA Ecotype	104.00
100.00 %		**Mix Price/Lb Bulk:**	**$14.02**

Seeding Rate: 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation; Grasses & Grass-like Species - Herbaceous Perennial; Herbaceous Flowering Species - Herbaceous Perennial

Rain Garden Mix - ERNMX-180

	Botanical Name	Common Name
25.60 %	*Schizachyrium scoparium, Fort Indiantown Gap-PA Ecotype*	Little Bluestem, Fort Indiantown Gap-PA Ecotype
20.00 %	*Elymus virginicus, Madison-NY Ecotype*	Virginia Wildrye, Madison-NY Ecotype
9.00 %	*Carex vulpinoidea, PA Ecotype*	Fox Sedge, PA Ecotype
8.00 %	*Echinacea purpurea*	Purple Coneflower
7.80 %	*Chasmanthium latifolium, WV Ecotype*	River Oats, WV Ecotype
6.80 %	*Panicum rigidulum, PA Ecotype*	Redtop Panicgrass, PA Ecotype
3.00 %	*Coreopsis lanceolata*	Lanceleaf Coreopsis
3.00 %	*Rudbeckia hirta*	Blackeyed Susan
2.50 %	*Verbena hastata, PA Ecotype*	Blue Vervain, PA Ecotype
2.00 %	*Chamaecrista fasciculata, PA Ecotype*	Partridge Pea, PA Ecotype
2.00 %	*Panicum clandestinum, Tioga*	Deertongue, Tioga
1.50 %	*Asclepias incarnata, PA Ecotype*	Swamp Milkweed, PA Ecotype
1.50 %	*Heliopsis helianthoides, PA Ecotype*	Oxeye Sunflower, PA Ecotype
1.30 %	*Persicaria digitalis, PA Ecotype*	Tall White Beardtongue, PA Ecotype
1.20 %	*Zizia aurea, PA Ecotype*	Golden Alexanders, PA Ecotype
0.70 %	*Pycnanthemum tenuifolium*	Narrowleaf Mountainmint
0.50 %	*Aster novae-angliae*	New England Aster
0.50 %	*Baptisia australis, Southern WV Ecotype*	Blue False Indigo, Southern WV Ecotype
0.50 %	*Juncus effusus*	Soft Rush
0.50 %	*Juncus tenuis, PA Ecotype*	Path Rush, PA Ecotype
0.50 %	*Senna hebecarpa, VA & WV Ecotype*	Wild Senna, VA & WV Ecotype
0.50 %	*Vernonia noveboracensis, PA Ecotype*	New York Ironweed, PA Ecotype
0.30 %	*Monarda fistulosa, Fort Indiantown Gap-PA Ecotype*	Wild Bergamot, Fort Indiantown Gap-PA Ecotype
0.20 %	*Aster lateriflorus*	Calico Aster
0.20 %	*Solidago nemoralis, PA Ecotype*	Gray Goldenrod, PA Ecotype
0.10 %	*Aster pilosus, PA Ecotype*	Heath Aster, PA Ecotype
0.10 %	*Eupatorium perfoliatum, PA Ecotype*	Boneset, PA Ecotype
0.10 %	*Mimulus ringens, PA Ecotype*	Square Stemmed Monkeyflower, PA Ecotype
0.10 %	*Solidago juncea, PA Ecotype*	Early Goldenrod, PA Ecotype
100.00 %		

Seeding Rate: 20 lb per acre with a cover crop. For sites that drain within 24 hours of a rain event use one of the following cover crops:Oats (1 Jan to 31 Jul; 30 lbs/acre), Japanese Millet (1 May to 31 Aug; 10 lbs/acre), or grain rye (1 Aug to 31 Dec; 30 lbs/acre).

NEW ENGLAND WETLAND PLANTS, INC
14 Pearl Lane South Hadley, MA 01075
PHONE: 413-548-8000 FAX 413-549-4000
EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM
New England Wetmix [Wetland Seed Mix]

Botanical Name	Common Name	Indicator
Carex radiposidea	Fox Sedge	OBL
Carex scoparia	Blunt Broom Sedge	FACW
Carex lurida	Lurid Sedge	OBL
Carex lupulina	Hop Sedge	OBL
Poa palustris	Fowl Bluegrass	FACW
Bidens frondosa	Beggar Ticks	FACW
Scirpus atrovirens	Green Bulrush	OBL
Asclepias incarnata	Swamp Milkweed	OBL
Carex crinita	Fringed Sedge	OBL
Vernonia noveboracensis	New York Ironweed	FACW+
Juncus effusus	Soft Rush	FACW+
Aster lateriflorus (Symphyotrichum lateriflorum)	Starved/Calico Aster	FACW
Iris versicolor	Blue Flag	OBL
Glyceria grandis	American Mannagrass	OBL
Mimulus ringens	Square Stemmed Monkey Flower	OBL
Eupatorium maculatum (Eutrochium maculatum)	Spotted Joe Pye Weed	OBL

APPLY: 18 LBS/ACRE :2500 sq ft/lb

The New England Wetmix (Wetland Seed Mix) contains a wide variety of native seeds that are suitable for most wetland restoration sites that are not permanently flooded. All species are best suited to moist ground as found in most wet meadows, scrub shrub, or forested wetland restoration areas. The mix is well suited for detention basin borders and the bottom of detention basins not generally under standing water. The seeds will not germinate under inundated conditions. If planted during the fall months the seed mix will germinate the following spring. During the first season of growth several species will produce seeds while other species will produce seeds after the second growing season. Not all species will grow in all wetland situations. This mix is comprised of the wetland species most likely to grow in created/restored wetlands and should produce more than 75% ground cover in two full growing seasons.

The wetland seeds in this mix can be sown by hand, with a hand-held spreader, or hydro-seeded on large or hard to reach sites. Lightly rake to insure good seed-to-soil contact. Seeding can take place on frozen soil, as the freezing and thawing weather of late fall and late winter will work the seed into the soil. If spring conditions are drier than usual watering may be required. If sowing during the summer months supplemental watering will likely be required until germination. A light mulch of clean, weed free straw is recommended.

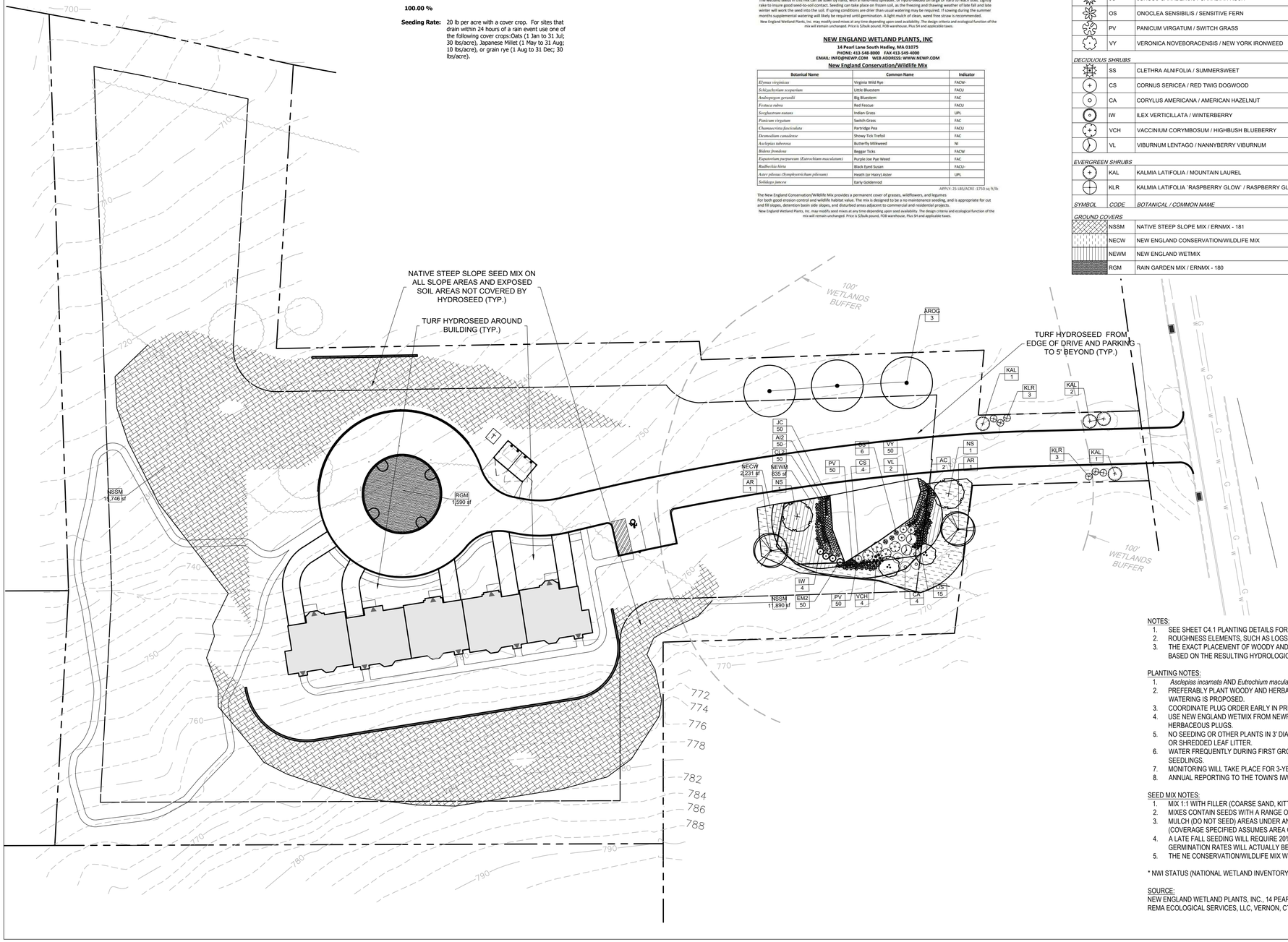
New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is $/bulk pound, FOB warehouse, Plus $H and applicable taxes.

NEW ENGLAND WETLAND PLANTS, INC
14 Pearl Lane South Hadley, MA 01075
PHONE: 413-548-8000 FAX 413-549-4000
EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM
New England Conservation/Wildlife Mix

Botanical Name	Common Name	Indicator
Elymus virginicus	Virginia Wild Rye	FACW-
Schizachyrium scoparium	Little Bluestem	FACU
Andropogon gerardii	Big Bluestem	FAC
Festuca rubra	Red Fescue	FACU
Sorghastrum nutans	Indian Grass	UPL
Panicum virgatum	Switch Grass	FAC
Chamaecrista fasciculata	Partridge Pea	FACU
Desmodium canadense	Showy Tick Trefoil	FAC
Asclepias tuberosa	Butterfly Milkweed	NI
Bidens frondosa	Beggar Ticks	FACW
Eupatorium purpureum (Eutrochium maculatum)	Purple Joe Pye Weed	FAC
Rudbeckia hirta	Black Eyed Susan	FACU-
Aster pilosus (Symphyotrichum pilosum)	Heath (or Hairy) Aster	UPL
Solidago juncea	Early Goldenrod	UPL

APPLY: 25 LBS/ACRE :1750 sq ft/lb

The New England Conservation/Wildlife Mix provides a permanent cover of grasses, wildflowers, and legumes
For both good erosion control and wildlife habitat value. The mix is designed to be a no maintenance seeding, and is appropriate for cut and fill slopes, detention basin side slopes, and disturbed areas adjacent to commercial and residential projects.
New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is $/bulk pound, FOB warehouse, Plus $H and applicable taxes.



PLANT SCHEDULE							
SYMBOL	*CODE*	*BOTANICAL / COMMON NAME*	*CONT*	*CAL*	*SIZE*		*QTY*
DECIDUOUS TREES							
	AR	ACER RUBRUM / RED MAPLE	B & B	1.5"CAL			2
	AROG	ACER RUBRUM 'OCTOBER GLORY' / OCTOBER GLORY RED MAPLE	B & B	2.5-3" CAL.			3
	NS	NYSSA SYLVATICA / SOUR GUM	B & B	1.5"CAL			2
ORNAMENTAL TREES							
	AC	AMELANCHIER CANADENSIS / SHADBLOW SERVICEBERRY	B&B OR CONT.	MULTI-TRUNK	4-6' HT.		2
SYMBOL	*CODE*	*BOTANICAL / COMMON NAME*	*SIZE*	*HEIGHT*	*SPREAD*		*QTY*
ANNUALS/PERENNIALS							
	AI2	ASCLEPIAS INCARNATA / SWAMP MILKWEED	PLUG				50
	CL2	CAREX LUPULINA / HOP SEDGE	PLUG				50
	EM2	EUTROCHIUM MACULATUM / SPOTTED JOE PYE WEED	PLUG				50
	JC	JUNCUS CANADENSIS / CANADIAN RUSH	PLUG				50
	OS	ONOCLEA SENSIBILIS / SENSITIVE FERN	PLUG				15
	PV	PANICUM VIRGATUM / SWITCH GRASS	PLUG				50
	VY	VERONICA NOVEBORACENSIS / NEW YORK IRONWEED	PLUG				50
DECIDUOUS SHRUBS							
	SS	CLETHRA ALNIFOLIA / SUMMERSWEET	3 GAL	3-4` HT.			6
	CS	CORNUS SERICEA / RED TWIG DOGWOOD	5 GAL	3-4` HT.			4
	CA	CORYLUS AMERICANA / AMERICAN HAZELNUT	3 GAL	3-4` HT.			4
	IW	ILEX VERTICILLATA / WINTERBERRY	5 GAL	3-4` HT.			4
	VCH	VACCINIUM CORYMBOSUM / HIGHBUSH BLUEBERRY	5 GAL	3-4` HT.			4
	VL	VIBURNUM LENTAGO / NANNYBERRY VIBURNUM	5 GAL	3-4` HT.			2
EVERGREEN SHRUBS							
	KAL	KALMIA LATIFOLIA / MOUNTAIN LAUREL	5 GAL	3-4` HT.	3-4` SPR.		4
	KLR	KALMIA LATIFOLIA `RASPBERRY GLOW` / RASPBERRY GLOW MOUNTAIN LAUREL	#5 CONT.	30-36" HT.	30-36" SPR.		6
SYMBOL	*CODE*	*BOTANICAL / COMMON NAME*	*CONT*	*HEIGHT*	*SPREAD*	*SPACING*	*QTY*
GROUND COVERS							
	NSSM	NATIVE STEEP SLOPE MIX / ERNMX - 181	SEED				27,636 SF
	NECW	NEW ENGLAND CONSERVATION/WILDLIFE MIX	SEED				2,231 SF
	NEWM	NEW ENGLAND WETMIX	SEED				977 SF
	RGM	RAIN GARDEN MIX / ERNMX - 180	SEED				1,590 SF

NOTES:
1. SEE SHEET C4.1 PLANTING DETAILS FOR IMPLEMENTATION NOTES PROVIDED BY REMA ECOLOGICAL SERVICES, LLC
2. ROUGHNESS ELEMENTS, SUCH AS LOGS AND BRANCHES WILL BE PLACED WITHIN CREATED WETLAND.
3. THE EXACT PLACEMENT OF WOODY AND HERBACEOUS SPECIES (PLUGS) WILL BE DIRECTED BY THE WETLANDS PROFESSIONAL, BASED ON THE RESULTING HYDROLOGIC CONDITIONS.

PLANTING NOTES:
1. *Asclepias incarnata* AND *Eutrochium maculatum* (NWI*) WERE SELECTED SPECIFICALLY TO ATTRACT MOTHS AND BUTTERFLIES.
2. PREFERABLY PLANT WOODY AND HERBACEOUS PLANTINGS BETWEEN APRIL 15 AND JUNE 15 OF A GIVEN YEAR, UNLESS WATERING IS PROPOSED.
3. COORDINATE PLUG ORDER EARLY IN PRIOR FALL, SO THAT FLATS OF ALL SPECIES ARE PLANTED (CONTRACT GROWING).
4. USE NEW ENGLAND WETMIX FROM NEWP (NEW ENGLAND WETLAND PLANTS), SOUTH HADLEY, MA, IN AREAS BETWEEN BEDS OF HERBACEOUS PLUGS.
5. NO SEEDING OR OTHER PLANTS IN 3' DIAMETER CIRCLE AROUND EACH SHRUB, TREE, AND PLUG BED, MULCHED WITH BARK MULCH OR SHREDDED LEAF LITTER.
6. WATER FREQUENTLY DURING FIRST GROWING SEASON; AS NECESSARY FOR ESTABLISHMENT OF PLUGS AND MANY OF THE SEEDLINGS.
7. MONITORING WILL TAKE PLACE FOR 3-YEARS FOLLOWING ESTABLISHMENT OF PLANTINGS.
8. ANNUAL REPORTING TO THE TOWN'S IWWA WILL BE PROVIDED FOR THE 3-YEAR, POST-IMPLEMENTATION MONITORING PERIOD.

SEED MIX NOTES:
1. MIX 1:1 WITH FILLER (COARSE SAND, KITTY LITTER) TO HELP CORRECTLY DIVIDE SEED PACKAGES AND FOR EVEN SPREADING.
2. MIXES CONTAIN SEEDS WITH A RANGE OF HYDROLOGIC TOLERANCE; DIFFERENT SPECIES WILL THRIVE IN DIFFERENT AREAS.
3. MULCH (DO NOT SEED) AREAS UNDER AND AROUND PLUG AND SHRUB CLUSTERS, TO EXCLUDE WEEDS AND HOLD MOISTURE. (COVERAGE SPECIFIED ASSUMES AREA OCCUPIED BY MULCHED WOODY PLANTINGS HAS BEEN SUBTRACTED.)
4. A LATE FALL SEEDING WILL REQUIRE 20% MORE SEED, BECAUSE SOME SEED WILL BE LOST TO WASH OFF AND HERBIVORY, BUT GERMINATION RATES WILL ACTUALLY BE HIGHER, DUE TO THE COLD WINTER STRATIFICATION OF THE SEED.
5. THE NE CONSERVATION/WILDLIFE MIX WILL EXTEND 20 TO 30 FT UPGRADIENT OF THE MITIGATION AREA.

* NWI STATUS (NATIONAL WETLAND INVENTORY; NATIONAL WWETLAND PLANT LIST: NORTHCENTRAL & NORTHEAST)

SOURCE:
NEW ENGLAND WETLAND PLANTS, INC., 14 PEARL LANE, SOUTH HADLEY, MASSACHUSETTS 01075; PHONE: 413-548-8000, PROVIDED BY: REMA ECOLOGICAL SERVICES, LLC, VERNON, CT

Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:
GREENLINE HOMEBUILDERS LLC
30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS
PLYMOUTH, CT
30 SOUTH STREET

DATE:	REVISION:

KEY PLAN

0 30' 60'
SCALE: 1" = 30'

PROJECT NO.: 0725-500103.01 DRAWN BY: JHL
SCALE: 1" = 30' CHECKED BY: WGW
DATE: 12/15/2025

PLANTING PLAN

DRAWING NO.:
C4.0

MITIGATION PLAN FOR CREATION OF WETLAND HABITATS

IMPLEMENTATION NOTES

1.0 INTRODUCTION

EMERGENT WETLAND (I.E., WET MEADOW AND SCRUB SHRUB SWAMP) CREATION BY EXCAVATION, AND HERBACEOUS AND WOODY PLANTINGS, WILL TAKE PLACE AT ONE LOCATION AT THE SUBJECT PROPERTY. ALSO, WETLAND ENHANCEMENT OF THE EXISTING LOW FUNCTIONING WETLAND THAT WOULD REMAIN AFTER CONSTRUCTION OF THE ENTRANCE DRIVEWAY.

SOILS AT THE WETLAND CREATION SITE ARE PREDOMINATELY MODERATELY WELL DRAINED FINE SANDY LOAMS TO A DEPTH OF 3 TO 4 FEET. IN THE CREATION WETLAND AREA SOIL EXPLORATION WITH HAND TOOLS CONFIRMED THE EXPECTED HYDROLOGICAL CONDITIONS, AND EVIDENCE OF A SUSTAINED SEASONAL HIGH GROUNDWATER TABLE.

THE GOAL FOR WETLAND CREATION AREA, IN REGARD TO HYDROLOGY, IS TO CREATE A SEASONALLY SATURATED HYDROLOGIC REGIME FROM THREE SOURCES: (1) DIRECT PRECIPITATION, (2) GROUNDWATER, AND (3) OVERLAND FLOW.

THE SELECTED CREATION AREA HAS RELATIVELY LOW HABITAT VALUE, AND FEW TREES. EVERY EFFORT WILL BE MADE TO AVOID ANY TREES 10 INCHES OR MORE IN DBH, TO THE EXTENT PRACTICABLE.

IN-KIND MITIGATION (I.E., CREATION) IS PROPOSED TO OFF-SET LOST FUNCTIONS & VALUES FROM THE PROPOSED IMPACT UPON AN ISOLATED WETLAND, WITH A SEASONALLY SATURATED HYDROLOGIC REGIME. THE GOAL IS TO CREATE AN ECOLOGICAL COMMUNITY WITH AT LEAST COMPARABLE, AND PREFERABLY HIGHER, FUNCTIONS AND COMPLIMENTARY WETLAND COVER TYPES TO THE WETLAND TO BE IMPACTED. THE INITIAL TARGET COVER TYPE RATIO FOR THE WETLAND CREATION SHALL BE 2/3^{RDS} EMERGENT (I.E., WET MEADOW) AND 1/3^{RDS} SCRUB SHRUB HABITATS. APPROXIMATELY ***2,585 SQUARE FEET*** OF PRODUCTIVE WETLAND CAN BE CREATED, AS WELL AS ***1,470 SQUARE FEET*** OF THE EXISTING WETLAND WILL BE ENHANCED THROUGH THE PROPOSED WOODY AND HERBACEOUS PLANTINGS. ADDITIONALLY, THE REMOVAL OF INVASIVE SPECIES WILL TAKE PLACE ON-SITE WITHIN 25-30 FEET OF THE WETLAND MITIGATION AREA.

THE WETLAND CREATION GOAL IS 100% COVER, AND 95% COVER BY NATIVE SPECIES, BY THE END OF THE THREE-YEAR (3) MONITORING PERIOD. PLANT SPECIES WERE SELECTED TO ENCOMPASS THE FOLLOWING CRITERIA: FOOD PLANTS FOR CATEPILLARS, BEETLES, AND OTHER INSECTS; FRUIT, SEED, AND NUT PRODUCTION IN DIFFERENT SEASONS, INCLUDING PERSISTENT WINTER FRUIT AND SPRING SEEDS; FORAGE FOR VERTEBRATE HERBIVORES;

SUITABLE MICRO-HABITATS FOR OVERWINTERING INSECTS; AND NECTAR AND POLLEN THROUGHOUT THE GROWING SEASON (SEE TABLE 3).

NOTE: *ALL WETLAND REPLICATION WORK, SHALL BE SUPERVISED BY AN ECOLOGIST (OR WETLAND SCIENTIST), INCLUDING INITIAL GRADING, PLANTING, MARKING INVASIVES IN ADJACENT UPLAND BUFFER AREAS, AND MARKING ANY NATIVE MATERIALS FOR SALVAGE OR RETENTION. A PRE-IMPLEMENTATION MEETING SHALL TAKE PLACE AT LEAST ONE MONTH PRIOR TO PLAN IMPLEMENTATION, BETWEEN THE WETLAND SCIENTIST, THE SITE CONTRACTOR, AND THE LANDSCAPER, AND THE TOWN'S WETLAND AGENT, AT THE TOWN'S DISCRETION.*

2.0 WETLAND CREATION

PREPARATION

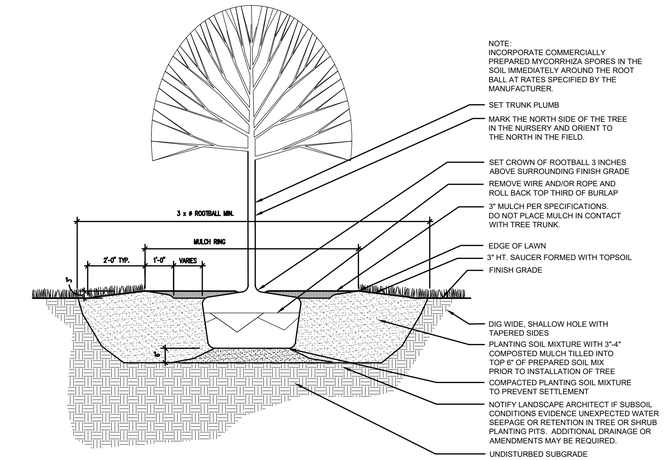
1. ORDER THE TRAYS OF HERBACEOUS PLUGS AND THE SEED MIX, FOR DELIVERY RIGHT AFTER COMPLETION OF GRADING. STORE IN SHADE WHEN THEY ARRIVE.
2. EARTHWORK FOR THE WETLAND MITIGATION AREA, WILL TAKE PLACE IN APRIL / MAY, OR IN AUGUST, SO THAT PLANTINGS CAN BE INSTALLED IMMEDIATELY AFTERWARDS, EITHER IN LATE SPRING OR VERY EARLY FALL SEASONS.
3. AS LONG AS THE EXISTING UPLAND TOPSOIL IS NOT UNDULY INFECTED BY INVASIVE PLANT SPECIES, IT CAN BE TEMPORARILY STOCKPILED TO BE USED FOR THE FINAL GRADE OF THE WETLAND CREATION AREA.
4. A ONE TO TWO INCH THICK "TOP-DRESSING" CONSISTING OF HIGH QUALITY TOPSOIL SHALL BE APPLIED TO THE FINAL GRADE AT THE WETLAND CREATION. THIS WILL BE ENHANCED WITH 2-YEAR OLD (MINIMUM) HIGH QUALITY COMPOST.
5. PRIOR TO ANY SOIL DISTURBANCE, INSTALL *PERIMETER EROSION CONTROLS* AROUND THE MITIGATION AREA, ESPECIALLY BETWEEN THE EXISTING WETLAND AND THE WETLAND CREATION AREA.

EARTHWORK

1. CLEAR AND GRUB THE WETLAND CREATION AREA.
   i. REMOVE THE EXISTING TOPSOIL FROM THESE LOCATIONS & PLACE IN A DESIGNATED SOIL STOCKPILE AREA
2. **EXCAVATION, GRADING, AND TRANSPLANTING** WILL TAKE PLACE UNDER THE DIRECTION OF THE WETLAND SCIENTIST. GRADING WILL BE BASED ON CONDITIONS OBSERVED AT THE FIELD BY THE WETLAND SCIENTIST, WHO MAY MAKE SMALL IN-FIELD ADJUSTMENTS TO ACHIEVE THE DESIRED WETLAND HYDROLOGY.
3. NO MACHINERY WILL BE ALLOWED WITHIN THE WETLAND CREATION AREA WHERE TOPSOIL HAS BEEN PLACED.

PLANTINGS

4. **ORDER** THE **WOODY PLANTING MATERIALS** FOR DELIVERY DURING THE PLANTING WINDOWS LISTED ABOVE (MID TO LATE SPRING OR EARLY FALL). STORE IN SHADE WHEN THEY ARRRIVE AND INSTALL WITHIN THREE DAYS OF DELIVERY. MAKE SURE THAT ALL DESIRED SPECIES ARE AVAILABLE AT TIME OF ORDERING. WETLAND SCIENTIST SHALL APPROVE ANY SUBSTITUTIONS.
5. **CHECK DELIVERY**. MAKE SURE SPECIES, SIZES, AND QUANTITIES ARE AS SPECIFIED.
6. A WETLAND PROFESSIONAL OR ECOLOGIST SHALL SPECIFY THE EXACT PLANTING AND SEEDING LOCATIONS, AND MARK ANY SHRUBS AND PERENNIAL HERBACEOUS PLANTS TO BE TRANSPLANTED AND PLANTED. THE PROFESSIONAL WILL DIRECT THE INSTALLATION, EITHER BY STAKING PLANTING LOCATIONS WITH A WIRE FLAG OR BAMBOO STAKE LABELED WITH THE SPECIES NAME OR CODE; OR POTTED STOCK MAY ALSO BE DIRECTLY PLACED AT PLANTING LOCATION.
7. **INSTALL THE PURCHASED WOODY MATERIALS FIRST, THEN THE HERBACEOUS PLUGS.**
8. **WOODY PLANTINGS AND LARGE HERBACEOUS PERENNIALS** (SEE TABLE 1 THROUGH TABLE 3) SHALL BE PLANTED IN SAME-SPECIES CLUSTERS, TWO TO THREE FEET APART FOR HERBACEOUS PERENNIALS, FIVE TO SIX FEET APART, FOR SHRUBS, TEN FEET APART FOR SMALL TREE SEEDLINGSS/SAPLINGS. LARGER TREES SHALL BE NO CLOSER THAN EIGHT FEET FROM A SHRUB OR SMALL TREE.
9. DIG HOLES *BY HAND* TO *MINIMIZE COMPACTION* OF SOIL (MECHANICAL AUGERS ARE PROHIBITED). WATER HOLES BEFORE PLANTING, UNLESS SOIL IS ALREADY MOIST. ADD *SLOW-RELEASE FERTILIZER* (OSMACOTE, MILORGANITE OR EQUIVALENT) TO PLANTING HOLE. PLACE PLANTS INTO HOLES AND REPLACE SOIL, SO THAT THERE IS FULL COVERAGE OF ROOTS, WITH *NO AIR SPACES* AND LEVEL SOIL AROUND THE PLANT. HOLES SHALL BE OVERSIZED (2X THE ROOT MASS DIAMETER) AND BACKFILLED WITH LOCAL TOPSOIL OR EXTRA TOPSOIL IN AN OVERSIZED TRANPLANT POT (NOT SUBSOIL REMOVED FROM BOTTOM PART OF HOLE).
10. MULCH WITH A TWO TO THREE-INCH LAYER OF WELL-ROTTED HARDWOOD MULCH, FREE FROM INVASIVE PLANT SPECIES (SEEDS/ROOT GRAGMENTS) TO REDUCE COMPETITION FROM MEADOW VEGETATION IN A THREE-FOOT DIAMETER CIRCLE. LEAVE A GAP OF TWO TO THREE INCHES AROUND EACH TRUNK OR STEM. FORM *SAUCERS* AROUND ALL MULCHED TREE AND SHRUB PLANTINGS, TWO TO THREE INCHES HIGH, 36" ACROSS FOR NURSERY STOCK. WATER RIGHT AFTER PLANTING, UNLESS RAIN IS EXPECTED WITHIN 48 HOURS.
11. **HERBACEOUS PLUGS:** PLANT IN MID- TO LATE AFTERNOON, OR UNDER SHADY CONDITIONS, *WATER* IMMEDIATELY AFTER PLANTING. SPACE PLUGS 24 TO 36 INCHES APART, PER PLAN (SEE TABLE 3) IN THE BARE SOIL AREAS, AND SPREAD A TWO-INCH LAYER OF WEED FREE STRAW MULCH IN A SIX-INCH CIRCLE AROUND EACH PLUG. PLANT IN SAME-SPECIES GROUPINGS OF VARIABLE SIZE AND SHAPE.



1 DECIDUOUS TREE PLANTING
1/2" = 1'-0"

12. **SEEDING:** AFTER MIXING 1:1 WITH NON-CLUMPING KITTY LITTER (CLAY BASED), SPREAD SEED OVER BARE SOIL AREAS, AVOIDING MULCHED CIRCLES AROUND PLUGS. IF GERMINATION RATES ARE LOW, OVER-SEED IN FALL IN YEAR 2.
13. FOR SPRING SEEDING IN MOIST, BUT NOT SATURATED SOIL, LIGHTLY RAKE IN SEED (LESS THAN ½ INCH DEEP), TAMP DOWN, AND LIGHTLY MULCH WITH STRAW (FREE OF SEEDS) TO HOLD MOISTURE FOR GERMINATION. FOR FALL SEEDING, WAIT UNTIL AFTER HARD FROST; SEED MAY SIMPLY BE SOWN. SNOW AND FROST WILL INCORPORATE INTO THE SOIL. NOTE THAT COLD STRATIFICATION WILL INCREASE GERMINATION RATES OF SOME SPECIES IN A FALL SEEDING, BUT MORE SEEDS WILL ALSO BE EATEN BY WILDLIFE OR WASHED AWAY. IF SOIL IS SATURATED, BROADCAST ON SOIL SURFACE WITHOUT RAKING.
14. SPREAD A THIN LAYER OF *STRAW MULCH* OVER ALL SEEDED AREAS WITHOUT STANDING WATER, ALLOWING SOME LIGHT PENETRATION
15. FOR PLUGS IN THE WET MEADOW PORTION OF THE CREATED WETLAND, AND FOR SEED GERMINATION, WATERING SEVERAL TIMES A WEEK IS ESSENTIAL, IN DRY WEATHER. FOR IRRIGATION, SET UP A PUMP DRAWING ON LOCAL WATER, OR FROM A WATER TANK BROUGHT TO THE SITE.

3.0 PROTECTION FROM HERBIVORY

1. WOODY PLANTINGS WILL BE MONITORED DURING THE FIRST AND SECOND GROWING SEASONS AFTER PLAN IMPLEMENTATION FOR EXCESSIVE HERBIVORY. IF OBSERVED, THE WETLAND ECOLOGIST MAY PROPOSE ADDITIONAL CONTROLS/METHODS TO REDUCE HERBIVORY.
2. AS AN INITIAL CONTROL, THE ORGANIC, SLOW-RELEASE FERTILIZER MILORGRANITE SHALL BE USED AT EACH SHRUB/TREE PLANTING, AND ALONG THE PERIMETER OF EACH OF THE MITIGATION AREA. THIS FERTILIZER IS A MILD TO MODERATE DETERENT TO HERBIVORY BY DEER. APPLICATION OF MILOGRANITE SHALL TAKE PLACE THREE TIMES DURING THE FIRST GROWING SEASON, SHOULD A DETERRENT BE NECESSARY.

4.0 INITIAL FOLLOW-UP AND MAINTENANCE

1. PROMPT SEEDING AND HAY MULCH APPLICATION FOLLOWING INITIAL GRADING IS KEY. TO PREVENT EROSION OF EXPOSED, RECENTLY GRADED SOILS. GRADING OF WETLAND CREATION AREA SHOULD BE TIMED TO PRECEDE A FORECAST RAIN-FREE PERIOD, EMCPOMPASSING THE SCHEDULED PLANTING DAY.
2. PERIMETER SEDIMENT CONTROLS. MAINTAIN PER THE 2024 CT E&S CONTROL GUIDELINES, CHECK AFTER EACH RAIN MORE THAN ONE INCH. REMOVE SILT FENCE AND/OR HAYBALES AS SOON AS GROUND IS VEGETATED (>80% COVER) TO PREVENT IMPEDING ANIMAL MOVEMENT TO AND FROM ADJACENT WETLANDS. SEDIMENT COLLECTED BY THESE DEVICES WILL BE REMOVED AND PLACED UPLAND IN A MANNER THAT PREVENTS ITS EROSION AND TRANSPORT TO A WATERWAY OR WETLAND.

3. IRRIGATION: WATER ALL SEEDED AREAS, PLANTINGS AND/OR TRANSPLANTS AT LEAST WEEKLY IN DROUGHTY PERIODS. MORE FREQUENT WATERING WILL INCREASE PLANTINGS' SUCCESS. FOR PLUGS, MORE FREQUENT WATERING COULD BE NEEDED.

5.0 WEED CONTROL

1. FOR 2-3 SEASONS FOLLOWING PLAN IMPLEMENTATION, CONTROL WEEDS IN A THREE-FOOT DIAMETER CIRCLE AROUND WOODY PLANTINGS. NECESSARY FREQUENCY WILL DEPEND ON RAINFALL AND SOIL SEED BANK, BUT AT LEAST MONTHLY FROM MAY TO JULY. MULCH HELPS CONTROL WEEDS, BUT IT IS NOT SUFFICIENT. THE SEED MIX AND OTHER NATURAL COLONIZERS NEEDS TO GERMINATE AND SPROUT IN THE MATRIX AROUND THE WOODY PLANTINGS.
2. FOR CONTROL OF SMALL SEEDLINGS USE A HOE.
3. FOR LARGER WEEDS USE A WEED WHACKER (POLE HEDGE TRIMMER), AS NECESSARY.
4. LANDSCAPER SHALL FOLLOW DIRECTION OF WETLANDS PROFESSIONAL WHO SHALL PROVIDE INITIAL GUIDANCE, BUT NEED NOT REMAIN ON SITE DURING MAINTENANCE.
5. THE WETLANDS PROFESSIONAL WILL POINT OUT TO THE LANDSCAPER CERTAIN WEEDS WHICH ARE BEST PULLED, TO WEAKEN ROOT SYSTEM AND REDUCE NEEDED FREQUENCY FOR WEEDING.
6. OUTSIDE THE THREE-FOOT DIAMETER CIRCLE, WEED ONLY SELECTED UNDESIRABLE COLONIZING PLANTS, INLCUDING INVASIVE SPECIES. THE WETLANDS PROFESSIONAL SHALL TRAIN THE LANDSCAPER TO RECOGNIZE AND AVOID NATIVE SPECIES. INITIALLY, FLAG DESIRABLE NATIVE SPECIES AS A TRAINING AID; ALSO, FOLLOWING ANY PERSONNEL CHANGES.

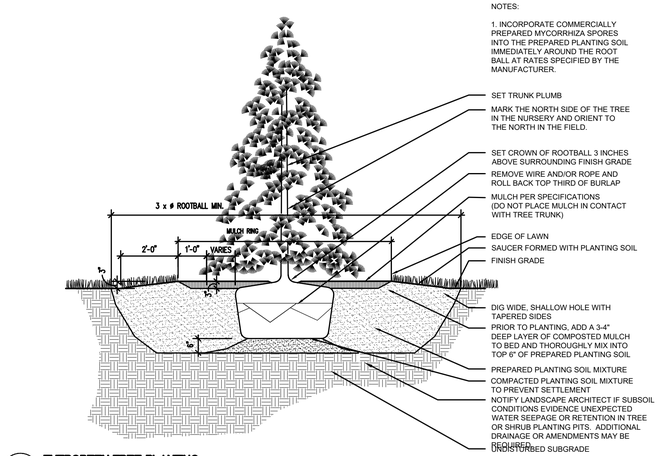
6.0 INVASIVE PLANT CONTROL

1. THE ECOLOGIST/WETLANDS PROFESSIONAL WILL FLAG WOODY INVASIVES TO BE REMOVED IN THE VICINITY OF THE WETLAND CREATION AREA (I.E., WITHIN 25-30 FEET) AT THE TIME OF PLAN IMPLEMENTATION, AND PREFERABLY JUST PRIOR TO ANY EARTHWORK.
2. TARGETED, RATHER THAN BROADCAST HERBICIDE APPLICATION METHODS, SHALL BE USED, AS NECESSARY. FOR SPRING TREATMENT, CUT EARLY IN GROWING SEASON (LATE APRIL TO MID MAY) AND TREAT SMALL RESPROUTS IN EARLY SUMMER USING A LOW VOLUME SPRAYER. IN EARLY FALL USE THE "CUT-AND-PAINT METHOD," APPLYING HERBICIDE TO A RECENTLY CUT STEM (WITHIN 10 MINUTES) ON BROADLEAF INVASIVES. USE A SELECTIVE HERBICIDE LIKE TRICLOPYR (FOUND IN BRUSH-B-GON, GARLON 3A OR 4A, AND OTHER PRODUCTS), RATHER THAN BROAD-SPECTRUM GLYPHOSATE, TO MINIMIZE IMPACTS ON NON-TARGET PLANTS AND SOIL FAUNA.
3. INVASIVE PLANT CONTROL WITHIN THE AREAS OF WETLAND CREATION SHALL TAKE PLACE FOR **THREE (3) YEARS** FOLLOWING THE YEAR OF PLAN IMPEMENTATION (I.E., YEARS 2 TO

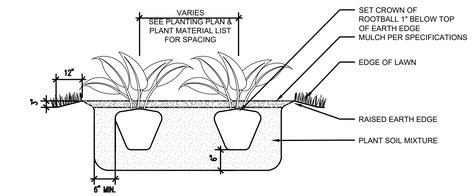
YEAR 4), FOLLOWING THE PROCEDURES PROMULGATED BY THE CT DEEP'S CONNECTICUT INVASIVE PLANT WORKING GROUP (CIPWG), AND/OR THE NATURE CONSERVANCY.

7.0 MONITORING

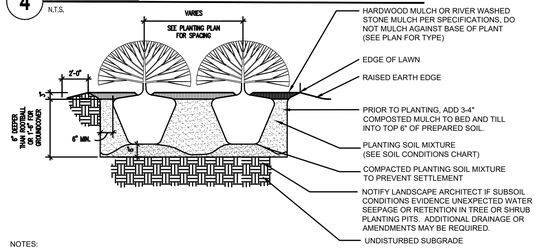
1. INSPECTIONS BY A QUALIFIED WETLANDS PROFESSIONAL OR ECOLOGIST SHALL TAKE PLACE DURING THE GROWING SEASON, THE THREE MONTHS FOLLOWING INSTALLATION (I.E., YEAR ONE), AND TWICE DURING EACH OF THE **THREE (3) NEXT GROWING SEASONS**, AT THE MITIGATION AREA (I.E., WETLANDS AND ADJACENT UPLANDS), ONCE IN LATE MAY THROUGH JUNE, AND ONCE IN EARLY FALL. ADDITIONAL INSPECTIONS MAY BE NECESSARY AT THE DISCRETION OF THE WETLANDS PROFESSIONAL TO ENSURE THE SUCCESS OF THE WETLAND CREATION, RESTORATION, AND ENHANCEMENT.
2. DURING INSPECTIONS, CHECK MITIGATION AREA FOR SEEDLINGS OF THE FOLLOWING *INVASIVE SPECIES* AND MECHANICALLY REMOVE: *JAPANESE KNOTWEED, COMMON REED, MORROW'S HONEYSUCKLE, AUTUMN OLIVE, MULTIFLORA ROSE, ASIATIC BITTERSWEET, JAPANESE BARBERRY, GLOSSY BUCKTHORN, BURNING BUSH, MUGWORT, AND GARLIC MUSTARD*. INSPECTIONS SHALL BE DONE BY THE WETLANDS PROFESSIONAL, WHO COULD ALSO IDENTIFY OTHER INVASIVE PLANT SPECIES, BUT PERSONNEL TRAINED BY THE PROFESSIONAL IN IDENTIFICATION OF INVASIVE SEEDLINGS MAY ASSIST WITH MECHANICAL REMOVAL (WEEDING).
3. *COMPETING PLANTS*: IF THE WETLANDS PROFESSIONAL DETERMINES THAT EXCESSIVE NUMBERS OF SEEDLINGS OF A PARTICULAR NATIVE SPECIES HAVE GERMINATED ON SITE (E.G., CATTAIL), REMOVE THEM BY HOEING OR HAND PULLING. COLONIZATION BY A VARIETY OF NATIVE SPECIES IS EXPECTED AND IS DESIRABLE.
4. *REMEDIAL MEASURES* SUCH AS REPLACEMENT PLANTINGS, HYDROLOGIC ADJUSTMENTS, AND *DEER BROWSING PROTECTION*, MAY BE RECOMMENDED AND SUPERVISED BY THE WETLANDS PROFESSIONAL AND IMPLEMENTED BY THE PROPERTY OWNER/MANAGER, FOR SIGNFICANT PROBLEMS.
5. A BRIEF *REPORT* TO THE TOWN'S INLAND WETLANDS AND WATERCOURSES AGENCY WILL SUBMITTED BY NOVEMBER 30TH OF THE MONITORING YEAR.



2 EVERGREEN TREE PLANTING
NOT TO SCALE



4 PERENNIAL PLANTING (CONTINUOUS PLANTING BED)
N.T.S.



NOTES:

1. FOR CONTAINER GROWN SHRUBS, GENTLY PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF CONTAINER.
2. FOR B&B SHRUBS, FOLD BURLAP FROM TOP OF ROOT BALL DOWN TO GROUND.
3. INCORPORATE COMMERCIALLY PREPARED MYCORRHIZA SPORES IN THE SOIL IMMEDIATELY AROUND THE ROOT BALL AT RATES SPECIFIED BY THE MANUFACTURER.
4. CONFIRM THAT WATER DRAINS OUT OF THE SOIL DURING THE DESIGN PHASE, DESIGN ALTERNATIVE DRAINAGE SYSTEMS, AS REQUIRED.

3 SHRUB PLANTING BED
N.T.S.

Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC
30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

DATE:	REVISION:

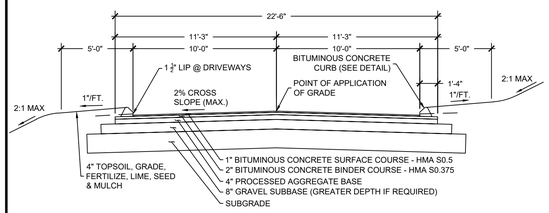
KEY PLAN

PROJECT NO.: 0725-500103.01
SCALE: AS SHOWN
DATE: 12/15/2025
DRAWN BY: JHL
CHECKED BY: WGW

PLANTING DETAILS

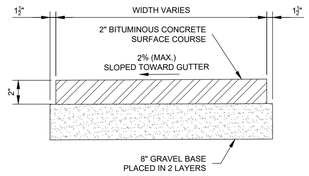
DRAWING NO.:
C4.1

A

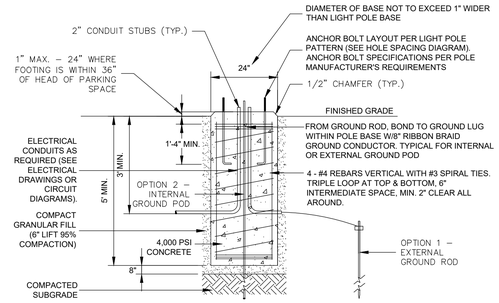


NOTES:
1. ALL MATERIAL THICKNESSES ARE FOR COMPACTED DEPTH.
2. IF BINDER COURSE IS LEFT AS A TOP COURSE FOR AN EXTENDED PERIOD, THE DIRECTOR OF PUBLIC WORKS MAY REQUIRE THAT A TACK COAT OF BITUMINOUS MATERIAL BE APPLIED BEFORE LAYING THE BITUMNOUS CONCRETE SURFACE COURSE.
3. SUBBASE DEPTH SHALL BE INCREASED TO 18 ICHES WHERE LEDGE ROCK IS ENCOUNTERED.
4. FOR CONSTRUCTION MATERIAL STANDARDS, REFER TO STATE OF CONNECTICUT , STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION, FORM 819, AS AMENDED.

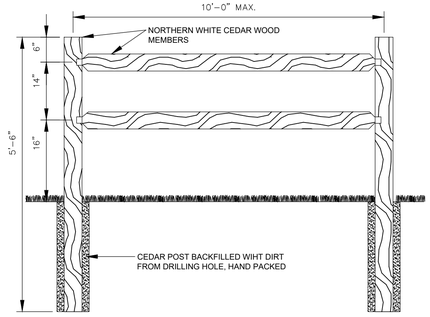
TYPICAL CROSS SECTION - MAIN DRIVE
SCALE: NONE



BITUMINOUS CONCRETE SIDEWALK
SCALE: NONE

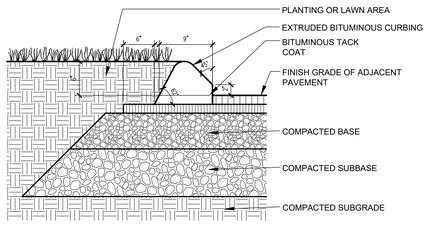


LIGHT POLE BASE
SCALE: NONE

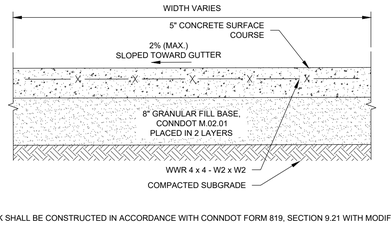


CEDAR POST FENCE (SPLIT RAIL)
SCALE: NONE

B



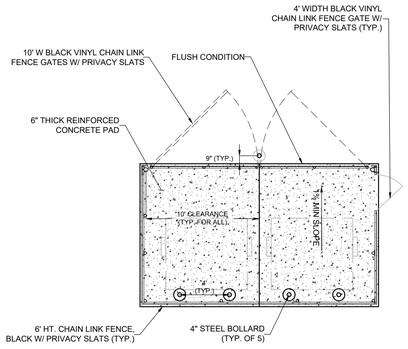
BITUMINOUS CONCRETE CURBING
SCALE: NONE



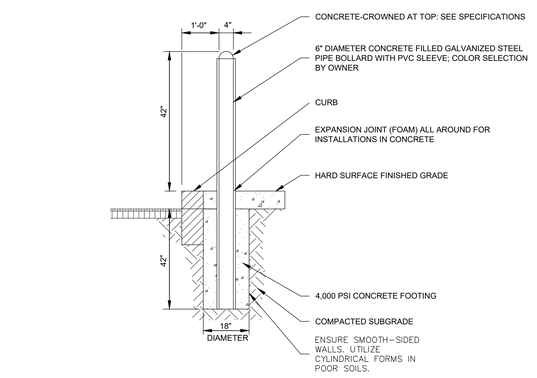
NOTES:

1. SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH CONNDOT FORM 819, SECTION 9.21 WITH MODIFICATIONS AS SHOWN.
2. TOOLED CONTROL JOINTS SHALL BE 1/4 SLAB THICKNESS. TOOL JOINTS EARLY IN FINISHING PROCESS AND RE-RUN TO ENSURE GROOVE BOND HAS NOT OCCURRED.
3. FULL-DEPTH JOINTS SHALL INCORPORATE FULL-DEPTH JOINT FILLER PER SPECIFICATIONS.
4. SIDEWALK SHALL HAVE LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.
5. FOR SIDEWALKS IN THE PUBLIC ROW, SEE CITY OF NEW BRITAIN STANDARDS.

CONCRETE SIDEWALK
SCALE: NONE



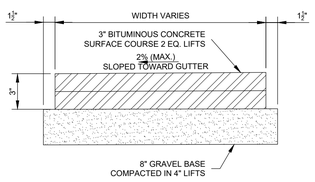
DUMPSTER PAD W/GATED ENCLOSURE
SCALE: NONE



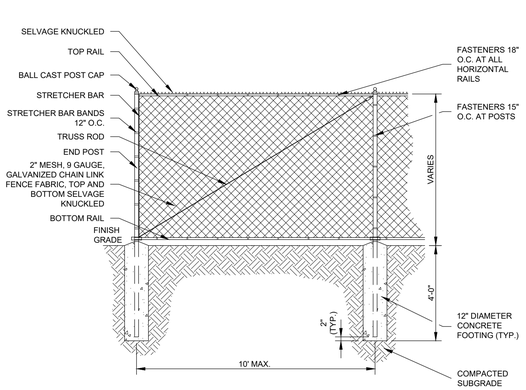
CONCRETE FILLED STEEL BOLLARD
SCALE: NONE

C

D



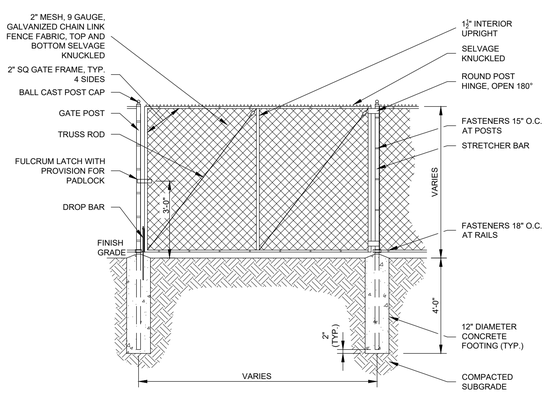
BITUMINOUS CONCRETE DRIVEWAY
SCALE: NONE



CHAIN LINK FENCE FRAMEWORK SCHEDULE

FABRIC HEIGHT	6' OR LESS	6' - 10'	10' OR MORE
END, CORNER & PULL POST	2.375" O.D.	2.875" O.D.	4" O.D.
LINE POST	1.900" O.D.	2.375" O.D.	2.875" O.D.
TOP AND BOTTOM RAIL	1.660" O.D.	1.660" O.D.	1.660" O.D.
MIDDLE RAIL	NONE	1.660" O.D.	1.660" O.D.

CHAIN LINK FENCE
SCALE: NONE



CHAIN LINK GATE FRAMEWORK SCHEDULE

GATE LEAF SINGLE WIDTH	6' OR LESS	6' - 12'
GATE POST	2.875" O.D.	4" O.D.
GATE FRAME (4 SIDES)	2" SQ	2" SQ
INTERIOR UPRIGHT	NONE	1 1/2" SQ

CHAIN LINK FENCE GATE
SCALE: NONE

Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

DATE:	REVISION:

KEY PLAN

PROJECT NO.: 0725-500103.01
SCALE: AS SHOWN
DATE: 12/15/2025

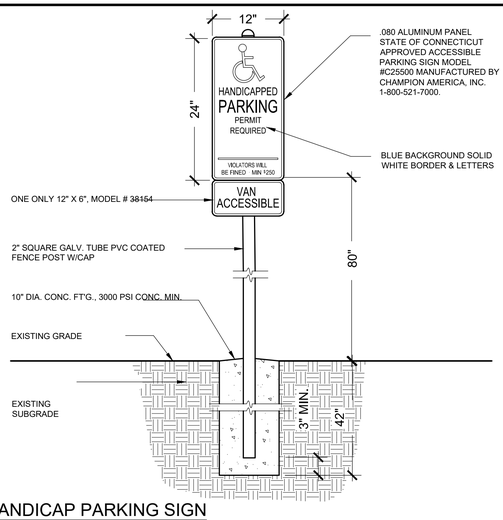
DRAWN BY: JHL
CHECKED BY: WGW

SITE DETAILS

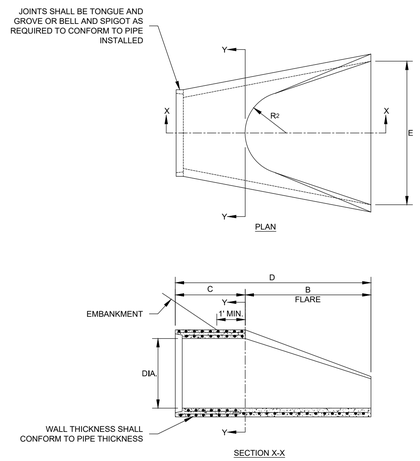
DRAWING NO.:
C5.0

1. MAXIMUM SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE SIDEWALK RAMP OR ACCESSIBLE ROUTE SHOULD NOT EXCEED 20:1.
2. CARE SHALL BE TAKEN TO ASSURE UNIFORM GRADE ON THE RAMP, FREE OF SAGS AND ABRUPT GRADE CHANGES.
3. ALL RAMPS SHALL BE CONSTRUCTED OF CONCRETE.
4. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE ALONG ACCESSIBLE ROUTES SHALL BE STABLE, FIRM AND SLIP RESISTANT IN COMPLIANCE WITH ADA ACCESSIBILITY GUIDELINES SECTION 4.5.
5. EXPANSION JOINTS IN CONCRETE SHALL MATCH THOSE IN ADJACENT SIDEWALKS BUT IN NO CASE SHALL THE SPACING BETWEEN EXPANSION JOINTS EXCEED 12' UNLESS OTHERWISE NOTED.
6. CURBING WITHIN THE LIMITS OF THE NEW SIDEWALK RAMP SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE REQUIREMENTS OF CONNDOT SPECIFICATIONS FORM 817 SECTIONS 8.11 AND 8.13.
7. HANDICAP RAMPS CONFORMING WITH CONNECTICUT GENERAL STATUTES, SEC. 7-118a, SHALL BE INCORPORATED IN ALL PROPOSED SIDEWALKS AT ALL STREET INTERSECTIONS, AND AT ALL OTHER LOCATIONS WHERE THE GRADE OF A DRIVEWAY OR OTHER FACILITY TAKES PRECEDENCE OVER THE GRADE OF THE PROPOSED SIDEWALK.
8. TRANSITION TO FULL HEIGHT CURB. INSTALL STONE CURBING IF ADJACENT CURBING IS STONE. INSTALL CONCRETE CURBING IF ADJACENT CURBING IS CONCRETE OR BITUMINOUS.
9. INSTALL THE EDGE OF THE DETECTABLE WARNING STRIP 6 INCHES FROM THE EDGE OF ROAD.
10. TO PERMIT WHEELCHAIR WHEELS TO ROLL BETWEEN DOMES OF THE DETECTABLE WARNING STRIPS, ALIGN DOMES ON A SQUARE GRID. IN THE DIRECTION OF PEDESTRIAN TRAVEL.

SIDEWALK RAMP NOTES
SCALE: NONE



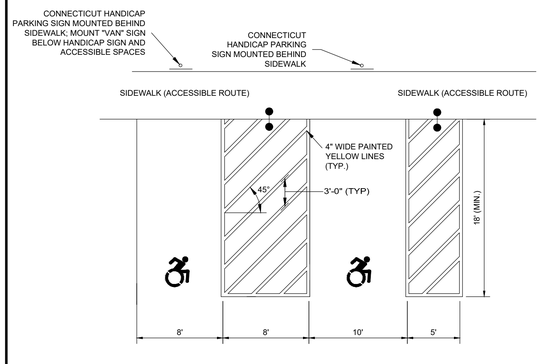
HANDICAP PARKING SIGN
SCALE: NONE



DIMENSIONS FOR REINFORCED CONCRETE CULVERT END									FLARE REINFORCEMENT ONE LAYER ONLY IN CENTER OF WALL	
DIA.	A	B	C	D	E	F	R_1	R_2	MIN. AREA OF LONG. STEEL SQ. IN. PER FT.	MIN. AREA OF TRANS. STEEL SQ. IN. PER FT.
12"	4"	2'-0"	4'-0⅜"	6'-0⅜"	2'-0"	1'-7¹⁵⁄₁₆"	10½"	9"	0.048	0.048
15"	6"	2'-3"	3'-10"	6'-1"	2'-6"	2'-0⅝"	1'-0½"	11"	0.054	0.054
18"	9"	2'-3"	3'-10"	6'-1"	3'-0"	2'-5"	1'-3½"	1'-0"	0.060	0.060
21"	9"	2'-11"	3'-2"	6'-1"	3'-6"	2'-7½"	1'-4"	1'-1"	0.066	0.066
24"	9½"	3'-7½"	2'-6"	6'-1½"	4'-0"	2'-9⁷⁄₁₆"	1'-4¹³⁄₁₆"	1'-2"	0.072	0.072
30"	1'-0"	4'-6"	1'-7½"	6'-1¾"	5'-0"	3'-1"	1'-6½"	1'-3"	0.084	0.084
36"	1'-3"	5'-3"	2'-10⅝"	8'-1⅜"	6'-0"	3'-11¹³⁄₁₆"	2'-0⁵⁄₁₆"	1'-8"	0.096	0.096
42"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	4'-5⅞"	2'-3½"	1'-10"	0.108	0.108
48"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	4'-8½"	2'-4½"	1'-10"	0.120	0.120
54"	2'-3"	5'-5"	2'-11"	8'-4"	7'-6"	5'-5½"	2'-9⅛"	2'-0"	0.132	0.132
60"	2'-9"	5'-0"	3'-3"	8'-3"	8'-0"	6'-0½"	3'-0¹⁷⁄₁₆"	2'-0"	0.144	0.144

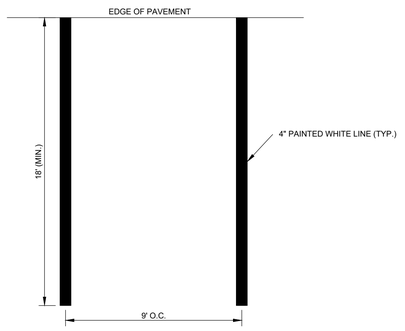
REINFORCED CONCRETE CULVERT END
SCALE: NONE
STM-115-CT

B

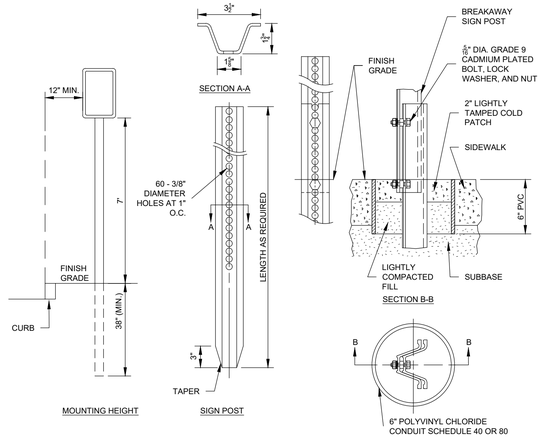


NOTES:
1. GRADING WITHIN HANDICAP SPACES SHALL BE LESS THAN 2.00%. IN ALL DIRECTIONS
2. SIGN LOCATION VARIES - SEE PLAN

ACCESSIBLE PARKING SPACES
SCALE: NONE



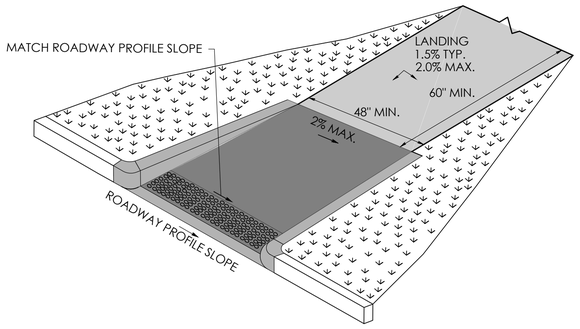
STANDARD PAINTED PARKING MARKINGS
SCALE: NONE



TYPICAL SIGN SUPPORT - BREAKAWAY TYPE II
SCALE: NONE

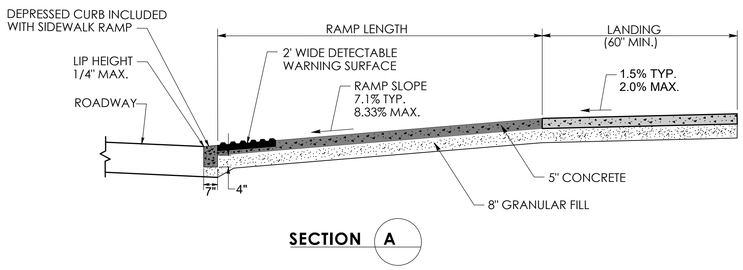
C

RAMP WARPING DETAIL
1. TRANSITION SIDEWALK RAMP TO MATCH ROADWAY PROFILE AS GRADUALLY AS POSSIBLE. DO NOT EXCEED 3 % PER FOOT CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.
2. COMPLETE TRANSITION TO ROADWAY PROFILE BEHIND DETECTABLE WARNING SURFACE.



SINGLE DIRECTION PERPENDICULAR RAMP (CONNDOT TYPE 16)
SCALE: NONE

D



Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

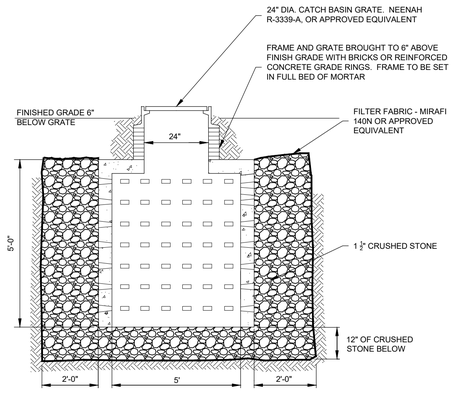
DATE:	REVISION:

KEY PLAN

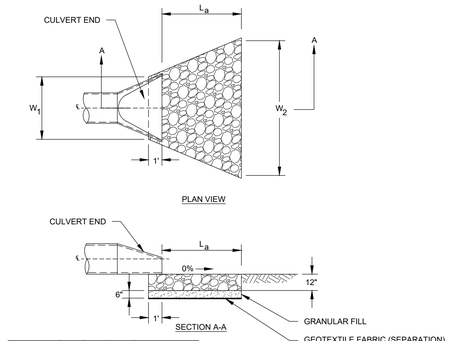
PROJECT NO.: 0725-500103.01
SCALE: AS SHOWN
DATE: 12/15/2025
DRAWN BY: JHL
CHECKED BY: WGW

SITE DETAILS

DRAWING NO.:
C5.1



DRY WELL
SCALE: NONE



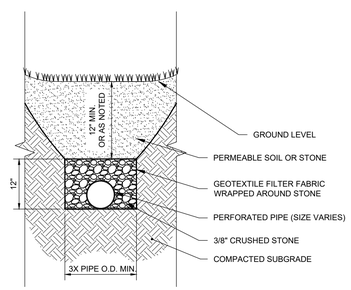
OUTLET ID	W_1	W_2	L_a	RIPRAP TYPE
FE-1.0	6'	15.65'	13.78'	MODIFIED

TYPE A RIPRAP APRON

La = ((1.80(Q-5))/Sp^1.5)+10
La = ((1.80(10.94-5))/2^1.5)+10
La = 13.78'

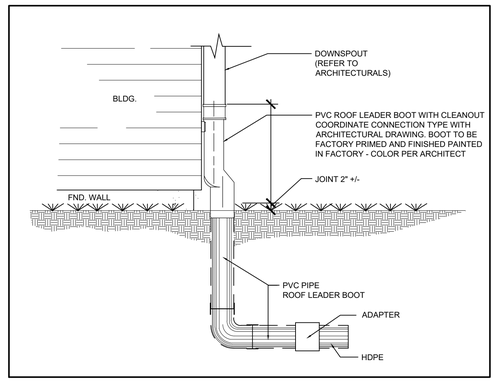
W1 = 3(Sp) = 3(2') = 6'
W2 = 3(SP)+0.7La = 3(2')+0.7(13.78') = 15.65'

RIP RAP OUTLET PROTECTION
SCALE: NONE



NOTE: THIS DETAIL IS ALSO TO BE USED AS REFERENCE FOR ANY HDPE PIPE SPECIFICALLY CALLED OUT TO BE PERFORATED

PERFORATED UNDERDRAIN
SCALE: NONE

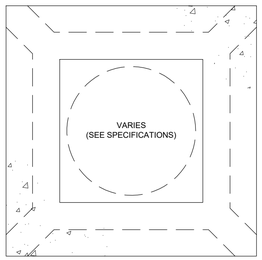


ROOF LEADER BOOT CONNECTION
SCALE: NONE

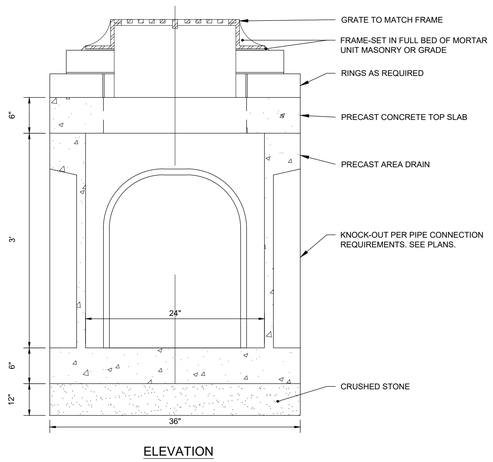
NOTES:

1. INLET SHALL BE 30"x30" CONCRETE AREA DRAIN, AS MANUFACTURED BY ARROW CONCRETE, OR ENGINEER APPROVED EQUAL. (18" DIA. GRATE)
2. CONCRETE STRENGTH SHALL BE 4,000 PSI AT 28 DAYS.
3. REINFORCING STEEL - ASTM 615 AND A82 OR A185 SPECIFICATIONS.
4. H-20 DESIGN LOADING PER AASHTO HS-20-44.
5. BUTYL RUBBER JOINT SEALANT - ASTM C990-91.
6. HEIGHT OF DRAIN BOX SHALL BE 3' (MODEL #ADBKO3) UNLESS DEPTH OF INVERT PIPE OUT REQUIRES THE USE OF 4' DRAIN BOX (MODEL #ADBK04).
7. FRAME AND GRATE PAIR SHALL BE ONE OF THE FOLLOWING:
   A. STANDARD GRATE SHALL BE NEENAH INLET FRAME/GRATE R-2570 OR ENGINEER APPROVED EQUAL.
   B. ADA STANDARD GRATE SHALL BE NEENAH INLET FRAME/GRATE R-2569 OR ENGINEER APPROVED EQUAL.
   C. STANDARD BEEHIVE GRATE SHALL BE NEENAH INLET FRAME/BEEHIVE GRATE R-2564 OR ENGINEER APPROVED EQUAL.
8. WHERE NOT USED, THE KNOCKOUTS OF EACH AREA DRAIN SHALL BE FILLED WITH BLOCK / BRICK / MORTAR TO MAINTAIN STRUCTURAL INTEGRITY.

- SEE DRAWINGS FOR SPECIFIC LOCATIONS OF TYPE SELECTED.

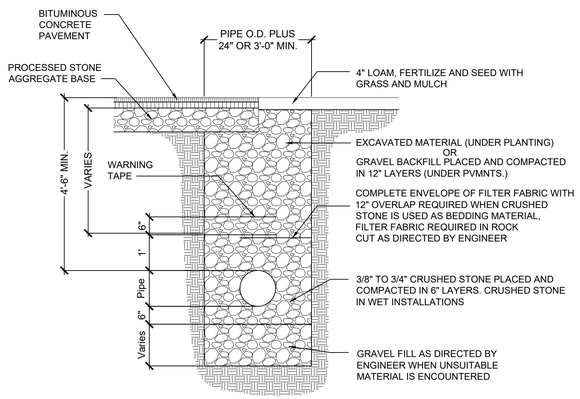


PLAN VIEW (TOP SLAB)

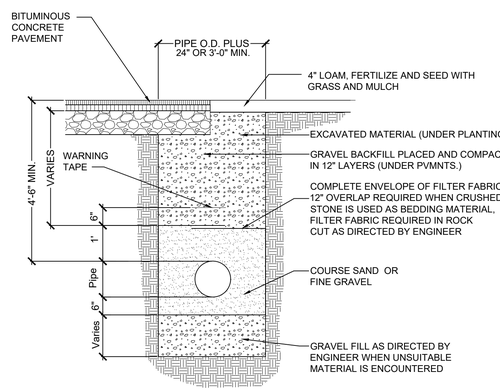


ELEVATION

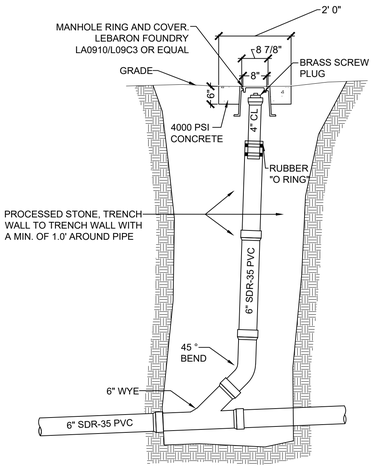
CONCRETE AREA DRAIN
SCALE: NONE



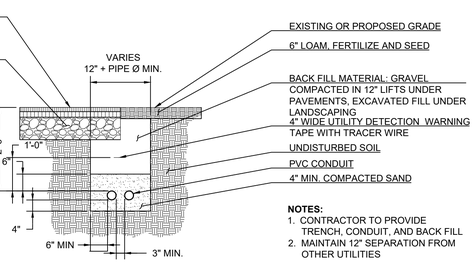
SANITARY TRENCH
SCALE: NONE



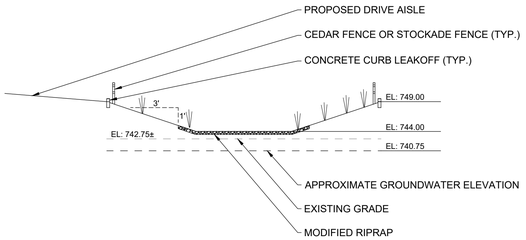
WATER TRENCH
SCALE: NONE



CLEANOUT TO GRADE
SCALE: NONE



ELECTRICAL CONDUIT TRENCH
SCALE: NONE



INFILTRATION BASIN 1
SCALE: NONE

Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

DATE:	REVISION:

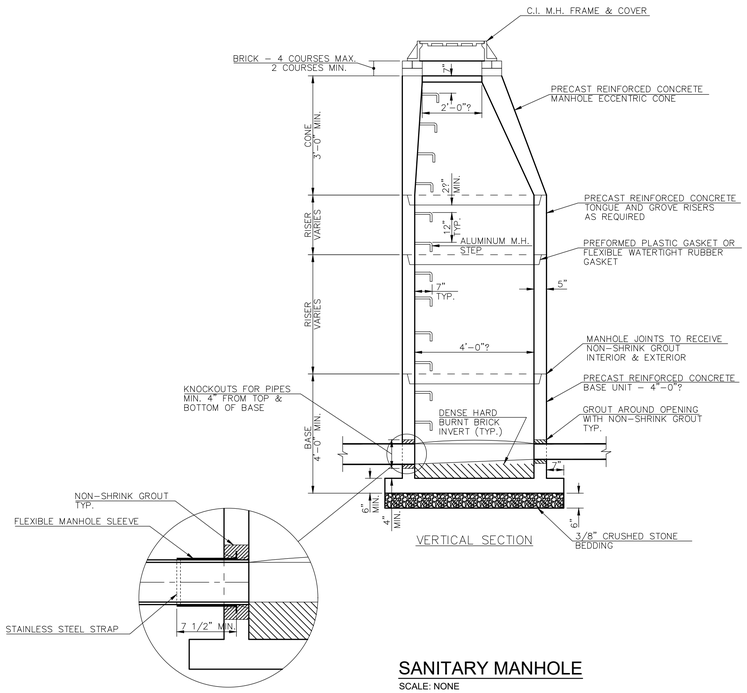
KEY PLAN

PROJECT NO.: 0725-500103.01
SCALE: AS SHOWN
DATE: 12/15/2025

DRAWN BY: GSL
CHECKED BY: WGW

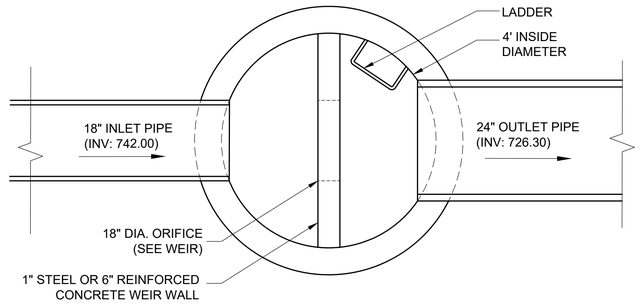
SITE DETAILS

DRAWING NO.:
C5.2



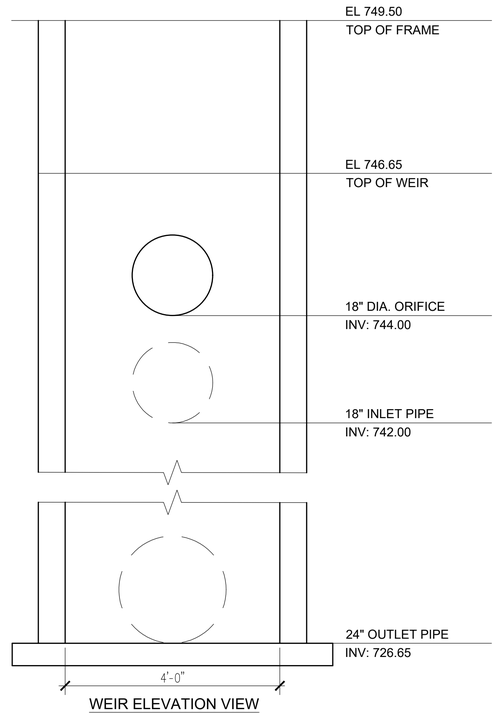
SANITARY MANHOLE

SCALE: NONE

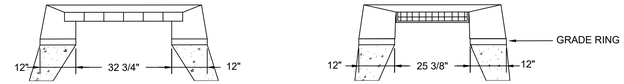


OUTLET CONTROL STRUCTURE

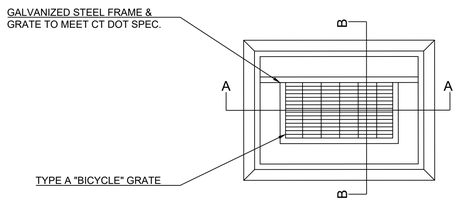
SCALE: NONE



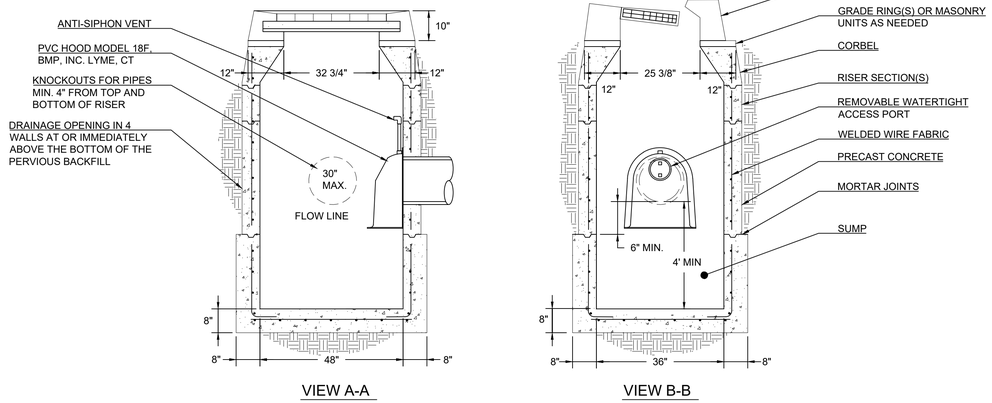
WEIR ELEVATION VIEW



TOP - TYPE 'CL'

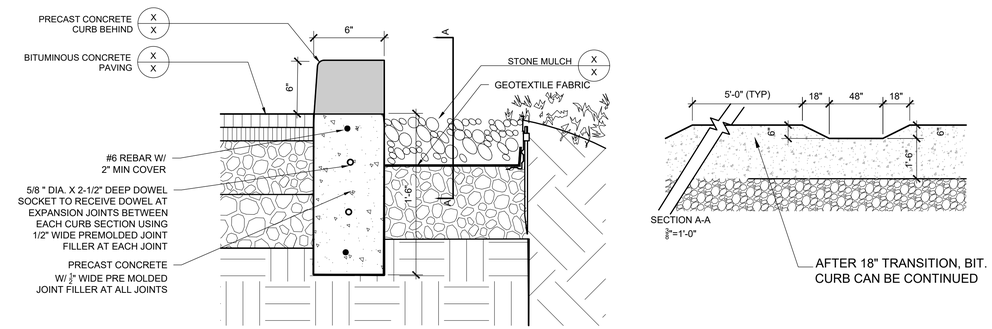


- DESIGN LOADING AASHTO H-20-44
- PRE-CAST CONCRETE, 4,000 PSI MIN.
- IN PAVEMENT AREAS THE NORMAL CROSS SLOPE OF THE GUTTER SHALL BE VARIED TO MATCH THE CROSS SLOPE OF THE GRATE.
- THE TOP OF THE SUMP UNIT SHALL BE A MINIMUM OF 6" BELOW THE LOWEST INVERT.
- WHERE NOT USED, CATCH BASIN KNOCKOUT SPACES SHALL BE FILLED WITH BLOCK/BRICK /MORTAR



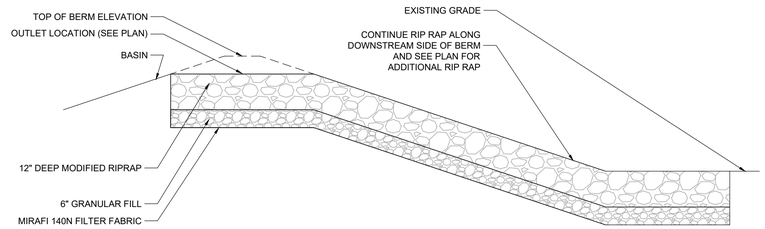
PRECAST CATCH BASIN

SCALE: NONE



CONCRETE CURBED LEAKOFF AT INFILTRATION BASIN 1

SCALE: NONE



RIPRAP OVERFLOW SPILLWAY

SCALE: NONE

Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

DATE:	REVISION:

KEY PLAN

PROJECT NO.: 0725–500103.01
SCALE: AS SHOWN
DATE: 12/15/2025

DRAWN BY: JHL
CHECKED BY: WGW

SITE DETAILS

DRAWING NO.:
C5.3

Prepared by:
benesch
Alfred Benesch & Company
120 Hebron Avenue, 2nd Floor
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

GREENLINE HOMEBUILDERS LLC

30 Latimer Lane
Simsbury, CT 06070-2749

PROPOSED GARDEN APARTMENTS

PLYMOUTH, CT

30 SOUTH STREET

DATE:	REVISION:

KEY PLAN

PROJECT NO.: 0725-500103.01
SCALE: AS SHOWN
DATE: 12/15/2025

DRAWN BY: GSL
CHECKED BY: WGW

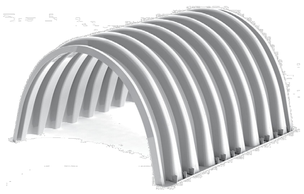
SITE DETAILS

DRAWING NO.:
C5.4

STORMKEEPER™
STORMWATER CHAMBER

StormKeeper SK180

The StormKeeper family of products are the highest quality and structurally sound stormwater chambers available on the market. The StormKeeper family of chambers are designed utilizing the most sophisticated and comprehensive techniques to meet the stringent AASHTO LRFD and ASTM requirements. Intended for use under traffic and nontraffic areas, StormKeeper provides a truly cost-effective and structurally superior system to provide underground stormwater storage saving valuable land and protecting the environment.



StormKeeper SK180

Nominal Dimensions

Size (L x W x H)	88.7" x 77.8" x 45.5"
Chamber Storage	113.6 cf
Min. Installed Storage	180.0 cf
Weight	127 lbs

StormKeeper SK180 End Caps

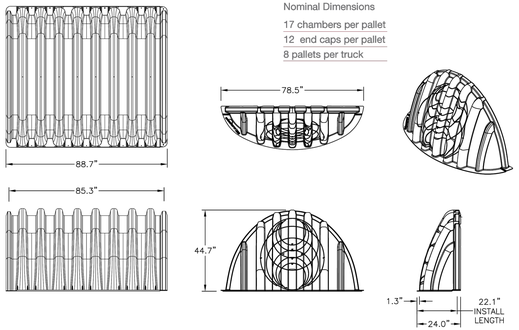
Nominal Dimensions

Size (L x W x H)	24.0" x 78.5" x 44.7"
End Cap Storage	15.3 cf
Min. Installed Storage	53.9 cf
Weight	52 lbs

Shipping

Nominal Dimensions

17 chambers per pallet
12 end caps per pallet
8 pallets per truck



StormKeeper SK180

Volume of Excavation Required Per Chamber/End Cap

	Stone Bedding Depth			
	9"	12"	15"	18"
StormKeeper SK180	11.4 cy	11.8 cy	12.3 cy	12.8 cy
StormKeeper SK180 End Cap	4.5 cy	4.7 cy	4.9 cy	5.1 cy

Assumes 8" of separation between chamber rows, 12" of perimeter in front of end caps, and 18" of cover minimum. Should depth of cover exceed 18" the volume of excavation will increase accordingly.

Storage Volume Per Chamber/End Cap

	Chamber Volume Only	Chamber and Stone Volume Stone Bedding Depths			
		9"	12"	15"	18"
StormKeeper SK180	113.6 cf	180.0 cf	185.0 cf	190.1 cf	195.2 cf
StormKeeper SK180 End Cap	15.3 cf	53.9 cf	55.9 cf	58.0 cf	60.0 cf

Assumes 11.5" of stone above chambers, 8" of stone between chambers and 40% stone porosity. End cap volume assumes 12" of perimeter stone.

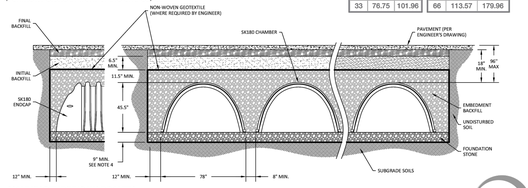
Amount of Stone Per Chamber/End Cap

	Stone Bedding Depth			
	9"	12"	15"	18"
StormKeeper SK180	6.1 cy	6.6 cy	7.1 cy	7.6 cy
StormKeeper SK180 End Cap	3.6 cy	3.8 cy	3.9 cy	4.1 cy

Assumes 11.5" of stone above, 8" row spacing, and 12" of perimeter stone in front of the end caps.

Stage vs. Storage for StormKeeper SK180

Depth (in)	Chamber Volume (cf)	Installed Volume (cf)	Depth (in)	Chamber Volume (cf)	Installed Volume (cf)
1	0.00	1.69	34	79.47	105.28
2	0.00	3.39	35	82.14	108.58
3	0.00	5.08	36	84.74	111.83
4	0.00	6.78	37	87.28	115.05
5	0.00	8.47	38	89.76	118.23
6	0.00	10.16	39	92.16	121.37
7	0.00	11.85	40	94.50	124.47
8	0.00	13.55	41	96.75	127.51
9	0.00	15.25	42	98.93	130.51
10	3.55	19.07	43	101.01	133.45
11	7.06	22.87	44	103.00	136.34
12	10.55	26.66	45	104.87	139.16
13	14.01	30.43	46	106.63	141.91
14	17.45	34.19	47	108.25	144.58
15	20.85	37.92	48	109.71	147.15
16	24.23	41.64	49	110.98	149.60
17	27.58	45.35	50	112.01	151.91
18	30.90	49.03	51	112.63	153.98
19	34.19	52.70	52	113.08	155.94
20	37.45	56.35	53	113.39	157.82
21	40.68	59.99	54	113.57	159.63
22	43.89	63.61	55	113.57	161.32
23	47.06	67.20	56	113.57	163.01
24	50.19	70.77	57	113.57	164.71
25	53.30	74.33	58	113.57	166.40
26	56.37	77.87	59	113.57	168.10
27	59.41	81.39	60	113.57	169.79
28	62.40	84.88	61	113.57	171.49
29	65.37	88.35	62	113.57	173.18
30	68.29	91.80	63	113.57	174.87
31	71.16	95.21	64	113.57	176.57
32	73.98	98.60	65	113.57	178.26
33	76.75	101.96	66	113.57	179.96



MANUFACTURER'S WARRANTY

Lane ensures, certifies and documents that SK180 StormKeeper Stormwater Chambers shipped to the job site meets the above claims and standards, and warranties the product is free of any material or workmanship defects.

LANE

Lane Enterprises, Inc.
275 Grandview Ave, Suite 300
Camp Hill, PA 17011
P: 717.761.8175 • F: 717.761.5055
lane-enterprises.com/StormKeeper

BUILD AMERICA BUY AMERICA

Lane's StormKeeper™ Chamber Systems meet the requirements of the **Build America, Buy America** (BABA) Act. This means everything is made in the United States—from sourcing raw materials to manufacturing and final assembly.

RAKZID-09/21