



LOCATION MAP

1" = 100'

REQUESTED WAIVERS:  
PLANNING BOARD: RULES & REGULATIONS  
SECTION 204-5.B.1, LOCUS PLAN TO SHOW ROADS  
WITHIN 1,000' OF PROPERTY FOR THE SAKE OF CLARITY.  
CONSERVATION COMMISSION: RULES & REGULATIONS  
SECTION 23, ALLOW THE REMOVAL AND REPLACEMENT OF  
163 NATIVE TREES AS SHOWN ON THE LANDSCAPE PLAN.  
145 NATIVE TREES ARE TO BE PLANTED IN THE 100' BUFFER ZONE.  
189 NATIVE TREES ARE TO BE PLANTED OUTSIDE THE BUFFER ZONE.

ASSESSORS MAP 46, PARCEL 028

ZONING DISTRICT		AR-2
REQUIRED	PROPOSED	
AREA	30,000	241,175
FRONTAGE	150.00'	302.07'
FRONT YARD	35'	36'
SIDE YARD	15'	24'
REAR YARD	15'	18'
COVERAGE	30%	9%
BLDG HGT	35'	35'

MULTI FAMILY HOUSING OVERLAY

		REQUIRED	PROPOSED
AREA	30,000	241,175	
FRONTAGE	150.00'	302.07'	
FRONT YARD	35'	36'	
SIDE YARD	15'	24'	
REAR YARD	15'	18'	
COVERAGE	30%	9%	
BLDG HGT	40'	35'	
DWELLINGS	8 PER ACRE*	6 PER ACRE	
MAXIMUM #	24	16	

\*8 UNITS PER WHOLE AVAILABLE ACRES\*

CURRENT OWNER:  
**TORTCON BUILDERS, INC**  
**70 BETHANY ROAD**  
**FRAMINGHAM, MA 01701**  
**508-380-0068**

I, CLERK OF THE TOWN OF MEDWAY, MASSACHUSETTS, CERTIFY THAT THE  
NOTICE OF APPROVAL OF THIS PLAN BY THE DEPARTMENT OF PLANNING &  
ECONOMIC DEVELOPMENT HAS BEEN RECEIVED AND RECORDED AT THIS  
OFFICE AND THAT NO NOTICE OF APPEAL WAS RECEIVED DURING THE  
TWENTY DAYS NEXT AFTER SUCH RECORDING OF NOTICE.

CLERK, \_\_\_\_\_ DATE \_\_\_\_\_



USGS TOPOGRAPHIC MAP

SCALE: 1" = 200'

MOCKINGBIRD LANE

INDEX OF SHEETS

NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS
3	SITE PLAN
4	ROAD PLAN & PROFILE
5	STORMWATER MANAGEMENT PLAN (SWPPP)
6	PHASE 1 & 2 LAND DISTURBANCE
7	GRADING & DRAINAGE PLAN
8	UTILITIES & DIMENSION PLAN
9	LANDSCAPE PLAN
10	SITE DETAILS & SPECIFICATIONS
11	SITE DETAILS & SPECIFICATIONS
12	SOIL LOGS: O & M SPECIFICATIONS
13	LSI LIGHTING PLAN
14	EXCLUSIVE USE PLAN
15	PLANTING PLAN WITH NOTES
16	CULTEC DRAINAGE SYSTEM DETAILS
ADDENDUM #1 - LAND DISTURBANCE PLAN	

SITE PLAN APPROVAL  
MEDWAY PLANNING & ECONOMIC  
DEVELOPMENT BOARD

DATE OF APPROVAL \_\_\_\_\_

DATE OF ENDORSEMENT \_\_\_\_\_

FOR REGISTRY OF DEEDS USE ONLY



*Norman G. Hill, PE* 4-19-24

NORMAN G. HILL, PE DATE

LAND PLANNING, INC.

214 Worcester Street  
North Grafton, Massachusetts 01536



ROBERT G. MURPHY & ASSOC., INC.  
ENVIRONMENTAL CONSULTANTS  
214 Worcester Street  
No. Grafton, Massachusetts 01536  
(508) 839-0310

RGMEVIRON@VERIZON.NET

MOCKINGBIRD LANE  
COVER SHEET

56 SUMMER STREET, MEDWAY, MA

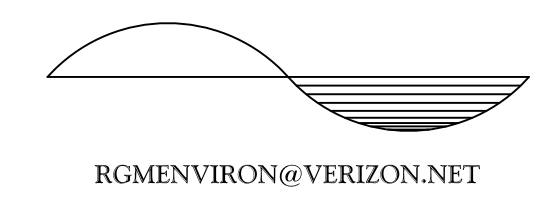
REVISION: SEE CONSERVATION COMM. REVIEW 11-14-2023 RGM & NGH 3-20-2024

REVISION: PLANNING BOARD REMOVAL OF TREE WAIVER 3-26-2024 RGM, NGH 3-28-2024

CE 216-1010



ROBERT G. MURPHY & ASSOC., INC.  
ENVIRONMENTAL CONSULTANTS  
214 Worcester Street  
No. Grafton, Massachusetts 01536  
(508) 839-0310  
Fax: (508) 839-5914



NOTES:

- 1.) ELEVATIONS REFER TO NAVD88 DATUM.
- 2.) COORDINATES REFER TO NAD83 DATUM.
- 3.) WETLANDS FLAGGED BY ROBERT G. MURPHY & ASSOCIATES.
- 4.) PROPERTY SHOWN ON THIS PLAN IS NOT CLASSIFIED AS 61A OR 61B.
- 5.) ROCK OUTCROPPINGS LOCATED WHERE VISIBLE, GROUND COVER OVER ENTIRE PROPERTY MAKING EXCAVATION THE ONLY WAY TO BE CERTAIN OF ALL ROCK OUTCROPPINGS.

LEGEND	
	15" DBH TREES OR LARGER
	VEGETATED WETLANDS
	POSSIBLE ROCK OUTCROPPING/BOULDER

LOT SHAPE FACTOR LINE  
AREA = 229,022 SF±  
PERIMETER = 2229.14'  
LOT SHAPE FACTOR = 21.7  
FORMULA: P<sup>2</sup>/A = LSF

ZONING DISTRICT: AR-2	
AREA	REQUIRED
AREA 2 FAMILY	22,500 SF
FRONTAGE	30,000 SF
FRONT YARD	150'
SIDE YARD	35'
REAR YARD	15'
COVERAGE	30%
MAX BLDG HGT	35'

ZONING DISTRICT OVERLAY: MULTIFAMILY HOUSING OVERLAY	
AREA	REQUIRED
AREA 2 FAMILY	22,500 SF
FRONTAGE	30,000 SF
FRONT YARD	150'
SIDE YARD	35'
REAR YARD	15'
COVERAGE	30%
MAX BLDG HGT	40'

SITE PLAN APPROVAL  
MEDWAY PLANNING BOARD

DATE OF APPROVAL \_\_\_\_\_

DATE OF ENDORSEMENT \_\_\_\_\_

I CERTIFY THAT THIS PLAN WAS CREATED BY AN INSTRUMENT SURVEY AND THAT ALL STRUCTURES ARE LOCATED ON THE GROUND AS SHOWN HEREON.

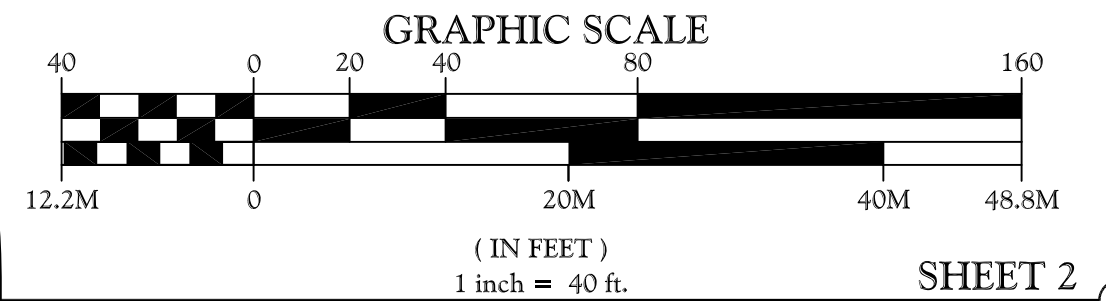


CHRISTOPHER CHARLTON P.L.S. No. 48649

OWNERS:  
TORTCON BUILDERS, INC.

REFERENCES:  
DEED: BOOK 39243, PAGE 398  
PLAN 257 OF 1946  
PLAN 561 OF 1947  
PLAN 36 OF 1948  
PLAN 505 OF 1952  
PLAN 940 OF 1981  
PLAN 725 OF 1983  
PLAN 7 OF 2004

EXISTING CONDITIONS  
PLAN OF LAND  
LOCATED AT  
56 SUMMER STREET  
ASSESSORS PARCEL #46-028  
MEDWAY, MA  
NORFOLK COUNTY  
CONTINENTAL LAND SURVEY, LLC  
105 BEAVER STREET, FRANKLIN, MA  
(508) 528 - 2528  
SCALE: 1"=40' FEBRUARY 2, 2022  
REVISED: MARCH 18, 2022  
REVISED: APRIL 27, 2022  
REVISED: MAY 22, 2022  
REVISED: OCTOBER 2, 2023  
REVISED: OCTOBER 31, 2023  
REVISED: NOVEMBER 16, 2023

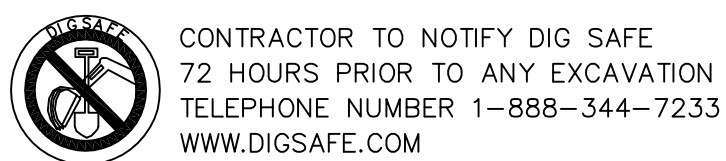


Reserved for Registry Use



EXIST SMH "A"  
RIM = 266.14  
8" INV = 258.65  
EXIST SMH "B"  
RIM = 264.55  
8" INV = 256.80  
SMH #1, 0+21  
RIM = 265.23  
INV = 258.50 in  
INV = 258.25 out  
SMH #2, 2+25  
RIM = 268.41  
INV = 260.55 8" in  
INV = 260.30 8" out  
SMH #3, 4+86  
RIM = 269.32  
INV 8" = 263.18  
CB #1  
STA 0+51, 12' R  
RIM = 264.84  
10" INV = 263.20  
SUMP = 259.20  
CB #2  
STA 1+27, 9' L  
RIM = 266.30  
8" INV = 263.80  
SUMP = 259.80  
CB #3  
STA 3+50, 9' R  
RIM = 267.64  
8" INV = 265.25  
SUMP = 261.25  
ADS #1  
RIM = 266.70  
8" OUT = 264.25  
SUMP = 260.25  
ADS #2  
RIM = 266.60  
8" OUT = 264.10  
SUMP = 260.40  
ADS #3  
RIM = 269.35  
8" OUT = 265.80  
SUMP = 261.80  
ADS #4  
RIM = 268.80  
8" OUT = 266.30  
SUMP = 262.30  
ADS #5, CB #5  
STA 3+50, 9' L  
RIM = 267.64  
8" IN = 265.00  
8" OUT = 264.75  
SUMP = 260.75  
ADS #6, CB #3  
STA 1+27, 9' R  
RIM = 266.30  
8" IN = 263.80  
8" OUT = 263.70  
SUMP = 259.70

SCHEDULE OF ELEVATIONS

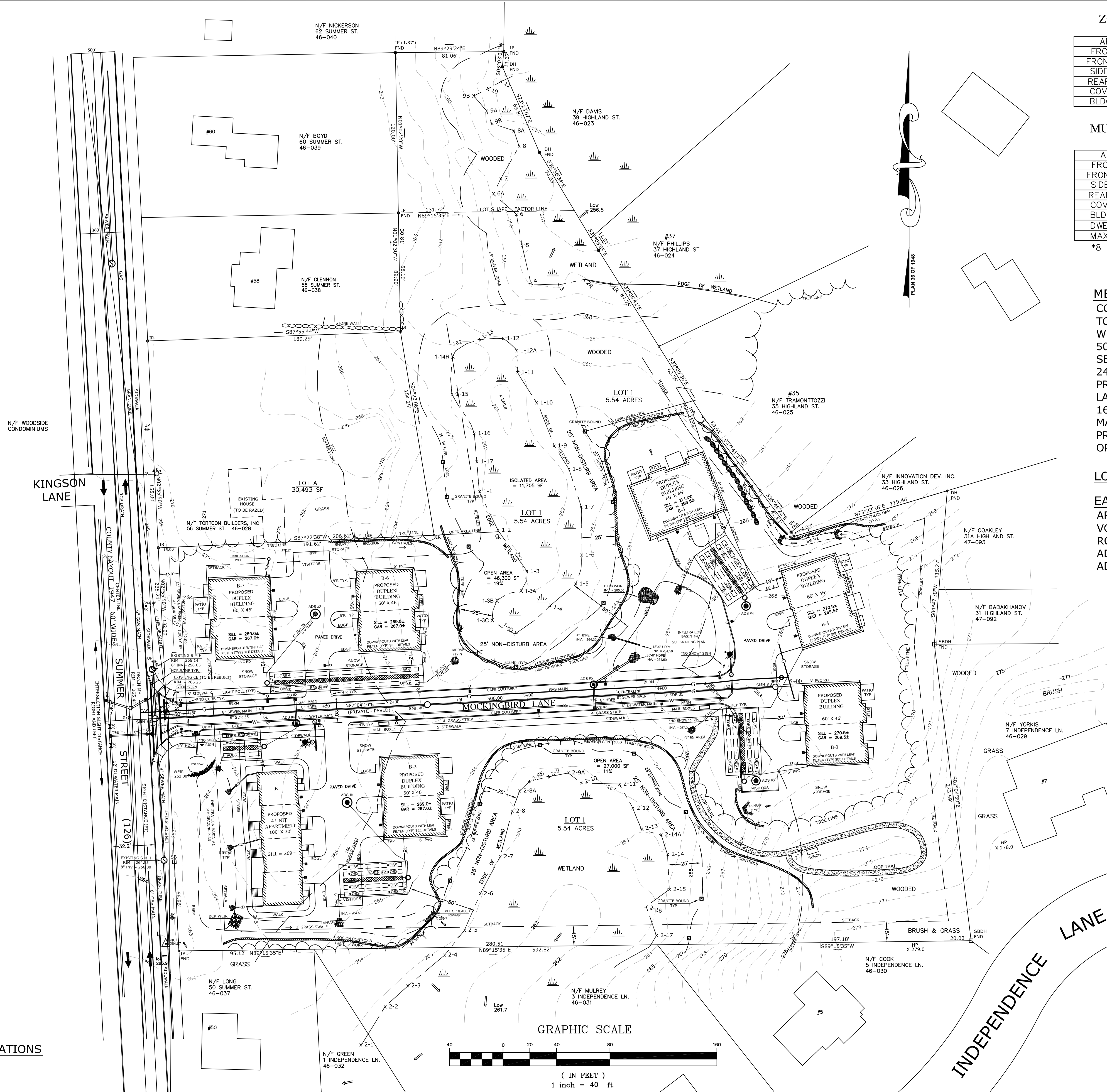


CONTRACTOR TO NOTIFY DIG SAFE  
72 HOURS PRIOR TO ANY EXCAVATION  
TELEPHONE NUMBER 1-888-344-7233  
WWW.DIGSAFE.COM

THE PROPOSED STRUCTURES ARE NOT  
LOCATED WITHIN A FEDERAL FLOOD ZONE  
FEMA Map 25021C0139E Dated 7-17-2012

SITE PLAN

1" = 40'



ZONING DISTRICT AR-2

	REQUIRED	PROPOSED
AREA	30,000	241,175
FRONTAGE	150.00'	302.07'
FRONT YARD	35'	36'
SIDE YARD	15'	24'
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DWELLINGS	8 PER ACRE*	6 PER ACRE
MAXIMUM #	24	18

\*8 UNITS PER WHOLE AVAILABLE ACRES\*

MEDWAY ZONING BYLAW, SECTION 5.6.4.D

COMPUTATION OF BUILDABLE AREA  
TOTAL AREA = 241,175 S.F.  
WETLAND JURISDICTION = 148,750 S.F.  
50% OF WETLAND JURISDICTION = 74,375 S.F.  
SEWER EASEMENT = 1,440 S.F.  
241,175 - 74,375 - 1,440 = 165,360 S.F.  
PROPOSED DEVELOPED AREA = 123,000 S.F. = 51%  
LAND AVAILABLE FOR DEVELOPMENT  
165,360 S.F. / 43,560 S.F. = 3.8 ACRES  
MAXIMUM NUMBER OF DWELLINGS = 8 X 3 = 24  
PROPOSED NUMBER OF DWELLINGS = 16  
OPEN SPACE = 35%+

LOT SHAPE FACTOR = 21.7, SECTION 6.2.C

EARTHWORK CALCULATIONS, SECTION 204-3.H & 3.I

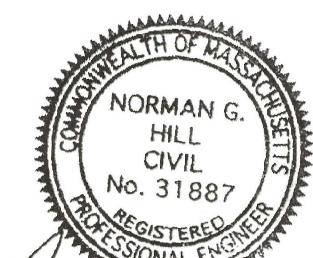
AREA TO BE STRIPPED OF TREES, ROCKS AND SOIL = 115,000 SF  
VOLUME OF EXCAVATED ROCKS AND SOIL = 4,500 YDS  
ROCKS AND SOIL ARE TO BE PROCESSED ON SITE  
ADDITIONAL CLEAN FILL REQUIRED = 9,250 YDS  
ADDITIONAL TOPSOIL REQUIRED = 900 YDS

CURRENT OWNER:  
TORTCON BUILDERS, INC  
70 BETHANY ROAD  
FRAMINGHAM, MA 01701  
508-380-0068

LEGEND



- SMH SEWER MANHOLE
- MH DRAIN MANHOLE
- CATCH BASIN
- EXISTING TOPO
- PROPOSED TOPO
- BUILDING SETBACK
- PROPOSED GRADE
- UTILITY POLE
- PROPOSED LIGHT
- DRAINAGE FLOW
- EROSION CONTROLS
- WATER LINE
- SEWER LINE
- ELECTRIC LINE
- LANDSCAPING

DATUM:  
NAVD88

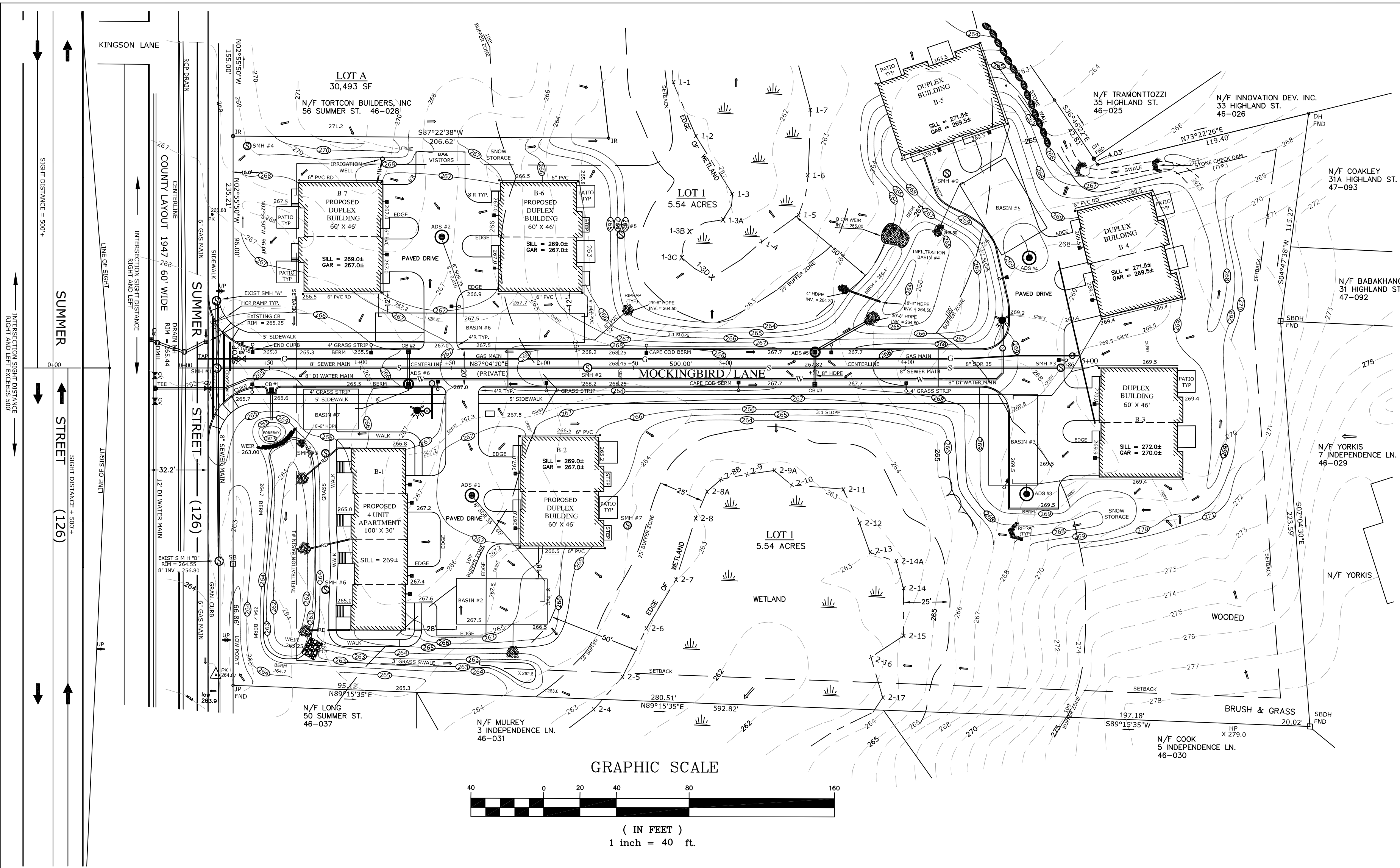


NORMAN G. HILL, PE 4-19-24  
DATE

LAND PLANNING, INC.  
214 Worcester Street  
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 3 OF 16
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: MAY 24, 2023
<div><div><div>Robert G. Murphy &amp; Associates, Inc. ENVIRONMENTAL CONSULTANTS</div></div><div>ROBERT G. MURPHY &amp; ASSOC., INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 RGMENVIRON@VERIZON.NET</div></div>		
<div>MOCKINGBIRD LANE SITE PLAN 56 SUMMER STREET, MEDWAY, MA</div>		
REVISION: SEE CONSERVATION COMM. REVIEW 11-14-2023 RGM & NGH 1-12-2024		CE 216-1010
REVISION: SEE CONSERVATION COMM. REVIEW 11-14-2023 RGM & NGH 3-20-2024		



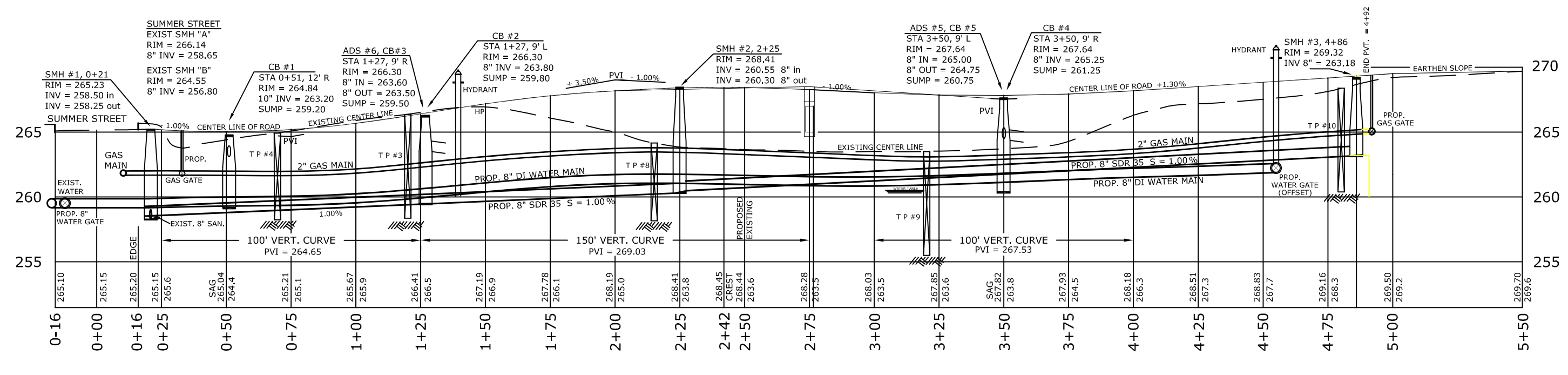


GRAPHIC SCALE



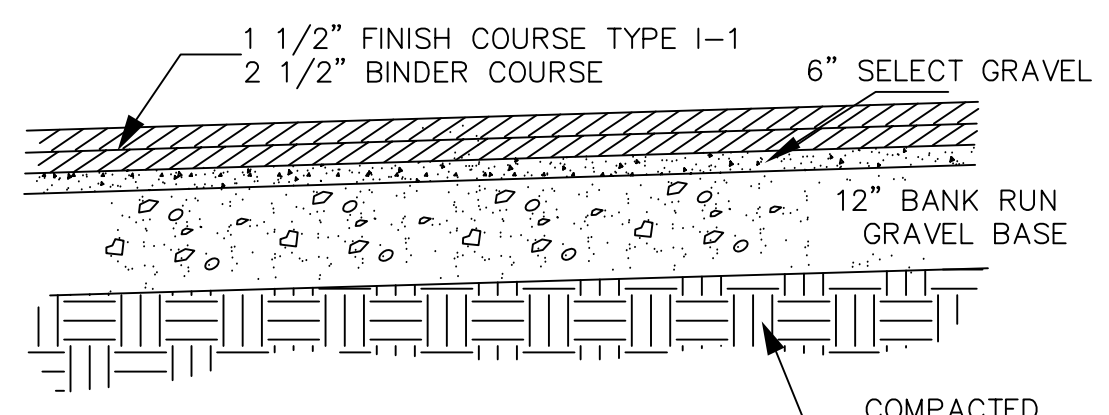
( IN FEET )  
1 inch = 40 ft.

PLAN  
1" = 40'



PROFILE

HOR. 1" = 40'  
VERT. 1" = 8'

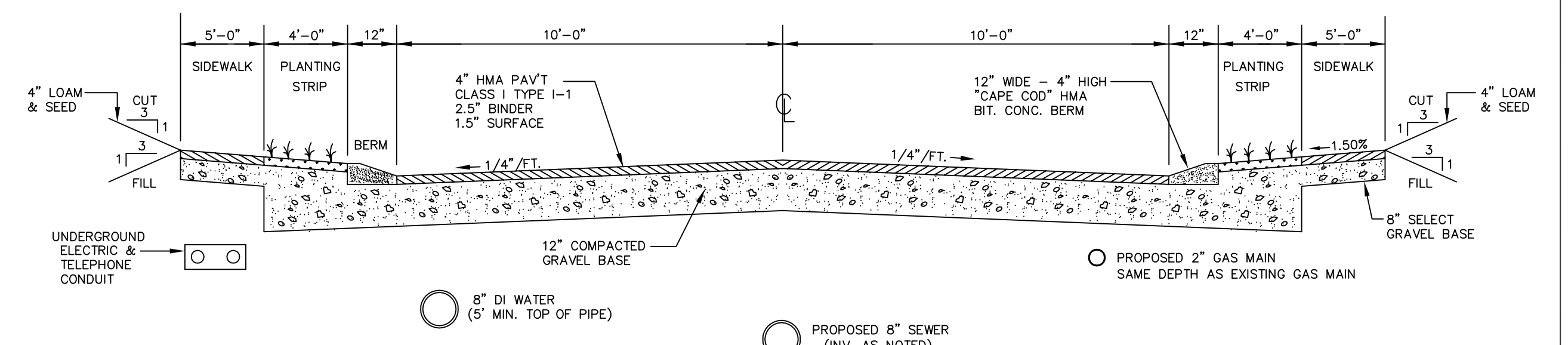


PAVEMENT DETAIL

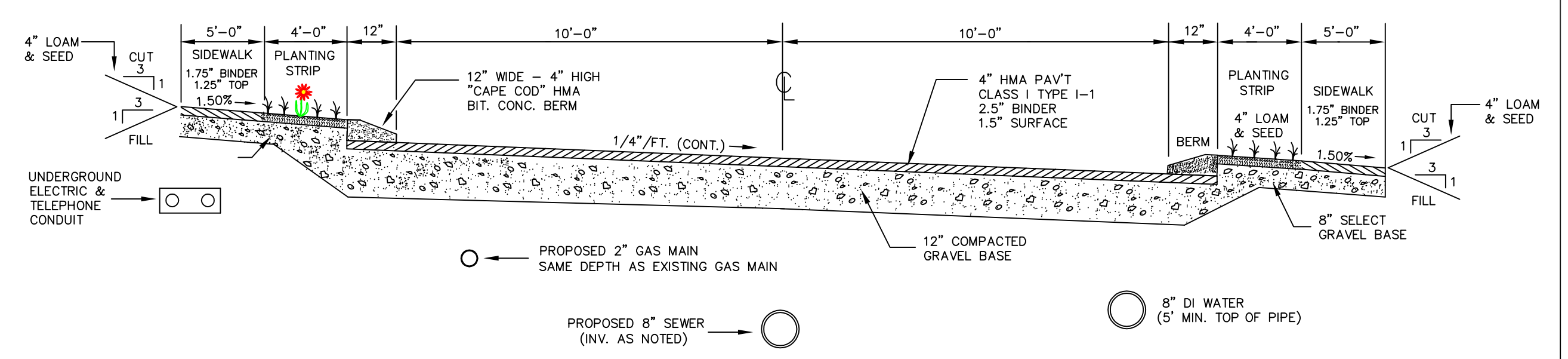
CURRENT OWNER:  
**TORTCON BUILDERS, INC**  
70 BETHANY ROAD  
FRAMINGHAM, MA 01701  
508-380-0068

FIRM COMMUNITY PANEL  
NO. 25021C0139E  
DATE: 07-17-2012

NOTES:  
LOCATION OF GAS AND ELECTRIC SERVICES  
IS TO BE DETERMINED BY EVERSOURCE ENERGY.  
ALL EXISTING UTILITIES ARE TO BE CONSIDERED  
AS APPROXIMATE ONLY. THE PROPOSED SITE IS  
TO BE SERVICED WITH MUNICIPAL WATER, SEWER,  
GAS, TEL. & ELECTRIC AS REQUIRED.



ROADWAY CROSS SECTION N.T.S.  
STA. 1+00 TO STA. 4+50



SUPERELEVATION SECTION N.T.S.  
STA. 0+16 TO STA. 1+00

- LEGEND
- SMH SEWER MANHOLE
  - MH DRAIN MANHOLE
  - CATCH BASIN
  - EXISTING TOPO
  - PROPOSED TOPO
  - BUILDING SETBACK
  - PROPOSED GRADE
  - UTILITY POLE
  - PROPOSED LIGHT
  - DRAINAGE FLOW
  - EROSION CONTROLS
  - W WATER LINE
  - S SEWER LINE
  - E ELECTRIC LINE
  - LANDSCAPING

DATUM:  
NAVD88

SITE PLAN APPROVAL  
MEDWAY PLANNING & ECONOMIC  
DEVELOPMENT BOARD

DATE OF APPROVAL \_\_\_\_\_  
DATE OF ENDORSEMENT \_\_\_\_\_

FOR REGISTRY OF DEEDS USE ONLY

**LEGEND**

SMH SEWER MANHOLE  
MH DRAIN MANHOLE  
CATCH BASIN  
EXISTING TOPO  
PROPOSED TOPO  
BUILDING SETBACK  
PROPOSED GRADE  
UTILITY POLE  
PROPOSED LIGHT  
DRAINAGE FLOW  
EROSION CONTROLS  
W WATER LINE  
S SEWER LINE  
E ELECTRIC LINE  
LANDSCAPING

DATUM:  
NAVD88

**ROBERT G. MURPHY & ASSOC., INC.**  
ENVIRONMENTAL CONSULTANTS  
214 Worcester Street  
North Grafton, Massachusetts 01536  
(508) 839-0310

**MOCKINGBIRD LANE  
ROAD PLAN & PROFILE**  
56 SUMMER STREET, MEDWAY, MA

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 4 OF 16
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: MAY 24, 2023
REVISION: SEE TETRA TECH REVIEW 10-23-2023 RGM & NGH 12-26-2023		
REVISION: SEE CONSERVATION COMM. REVIEW 11-14-2023 RGM & NGH 3-20-2024		

PLAN & PROFILE



MOCKINGBIRD LANE, MEDWAY, MA  
STORMWATER MANAGEMENT & SEQUENCE OF CONSTRUCTION

The following is a list of the proposed construction sequence and erosion controls for the development of the proposed Stormwater Management System to be located at Mockingbird Lane, Medway, Massachusetts. Due to the shallow topography within the site, the loamy soil and the close proximity to the Bordering Vegetated Wetlands, there are to be no land clearing activities performed within this site during frozen ground conditions, high groundwater conditions or periods of heavy rainfall. Strict compliance with the following specifications is required during the entire project.

- The contractor and all sub-contractors are to be made aware of the Stormwater Management Plan and the recorded Order of Conditions as issued by the Medway Conservation Commission. All construction personnel are required to be familiar with the plans and specifications applicable to this project. A copy of these documents are to be readily available on site at all times. The Massachusetts Department of Environmental Protection (DEP) file number is to be posted at the entrance to the site prior to commencement of construction. DEP File Number 216-1010.
- Prior to the commencement of construction, the owner of the project is to conduct an onsite predevelopment meeting with all concerned parties. Present at this meeting shall be an agent of the Medway Conservation Commission, the owner and or their legal representatives, the project superintendent for the general contractor, the environmental consultant and sub contractors responsible for the installation of the erosion and sedimentation controls. During this meeting, the limits of land clearing and perimeter of construction shall be clearly identified and agreed upon by all parties. The names and telephone numbers of these parties are to be supplied to the Medway Conservation Commission and Department of Public Works (DPW) in order to avoid time delays during emergency situations.
- The rough grading and crushed stone base for the entire central driveway is to be constructed as a single phased project. For this reason, all of the erosion controls are to be in place and inspected prior to the commencement of construction. The approved erosion controls and temporary construction entrance are to be installed where shown on the site plans. The erosion controls are to act as a limit of work and are to be maintained as such. The contractor is responsible for the daily maintenance of the erosion controls and to identify and correct all sources of erosion. Due to the possibility of high intensity rainfall during thunderstorms and hurricanes; a "proactive" approach to controlling erosion will be required. Attention to the weather forecasts is recommended during the period of land clearing and landscaping. Refer to the recorded Order of Conditions as issued by the Medway Conservation Commission.
- All tree removal and logging activities within the entire site are to be done with minimal amounts of scouring and removal of the existing topsoil to limit the potential for erosion. The staging areas for logging activities are to be located away from all wetland resource areas where possible. Additional erosion controls may be required along the perimeter of the temporary staging areas. Grinding of stumps is recommended along with the chipping of tree limbs to provide greater erosion control along exposed slopes. At no time are the chips to be directed into the adjacent wetlands. Construction materials are to be stockpiled away from the wetland buffer zone as shown on the Stormwater Pollution Prevention Plan and associated specifications (SWPPP).
- In places where the water table is encountered, special care is to be taken to avoid routing water through gullies toward the lower wetland resource areas. All utility trenches are to be filled on a daily basis. Under no circumstances are utility trenches to be left open for a period exceeding twenty-four hours. The contractor is to use proper judgment relative to construction practices during adverse weather conditions. No work is to be performed within 50 feet of the wetlands during periods of heavy rainfall. Staging areas for the fueling, maintenance and storage of construction equipment are to be located where they will not impact the wetland resource areas and all adjacent properties.
- Earth removal and rough grading for the cleared areas should commence in the upper eastern area away from the wetland resources where possible. Progressing in a westerly direction in a stepped manner will allow the contractor to identify the potential runoff drainage routes before they become a problem. Stabilization of disturbed slopes with wood chips and stump grindings will provide protection at this stage of construction. Temporary sedimentation basins are to be developed at this time. It should be noted that the contractor will be responsible for the "common sense" approach of maintaining a series of temporary detention basins during all phases of this project. Low spots with evidence of concentrated drainage flow are good indicators of where temporary basins should be located.
- All work within the Summer Street Right of Way (ROW) shall be performed in accordance with the 1988 edition of the Commonwealth of Massachusetts Highway Department Standards and Specifications for Highways and Bridges and the Supplemental Specifications dated December 11, 2002. The Medway Department of Public Works (DPW) is to be contacted prior to the installation of utilities within and adjacent to Summer Street.
- No construction equipment is allowed to operate adjacent to the bordering vegetated wetlands without written authorization from the Medway Conservation Commission. Staging areas for the fueling, maintenance and storage of construction equipment are to be located outside of the buffer zones where possible. All spillage of petroleum products is to be cleaned immediately and disposed of following DEP guidelines. All construction debris is to be stored in dumpster trailers and removed in a timely fashion. In areas where the erosion control barriers have been damaged, they are to be repaired immediately. Extra compost socks are to be stored on site for this purpose. All erosion control barriers shall be maintained at a minimum of five feet away from the proposed base of earthen slopes. At no time are the erosion control barriers to be used as retaining walls along the base of filled slopes. Staked 12" compost socks and silt fences are to be installed and maintained as shown on the Site Plans.
- The permanent subsurface infiltration basins and open infiltration basins are to be developed once the altered upland slopes have been stabilized. While these infiltration structures are under construction, they shall be completed expeditiously in a manner that will assure the earliest stabilization of the exposed trenches. A heavy fiber "Hydrosed" mixture of 50% Annual Ryegrass and 50% Native Grasses is recommended once the loamed areas have been raked to meet the final grades. It may be necessary to water the seeded areas during dry periods to prevent excessive seed mortality.
- All exposed slopes are to be stabilized as soon as possible. No slopes are to be left untreated for a period exceeding fifteen days. A heavy fiber "Hydrosed" mixture with a tackifier will limit the potential for erosion of fine sediments along graded slopes that are not yet completed. Special care is to be taken to limit drainage runoff from concentrating within the recently graded areas and channeling toward the lower wetland resource areas. Additional compost socks are to be installed along the lower slopes and in areas subject to erosion once the earthen slopes have been seeded.
- Once the grading of the driveway and crushed stone base has been completed, the mobilization of various construction vehicles throughout the site will be possible. For this reason, the daily stabilization of the exposed cut and fill slopes should be a priority over all the other construction activities from this point on. Vegetated areas should be planted and stabilized in an immediate succession to the completion of underground utilities. Vegetated slopes greater than 3 to 1 are to be stabilized with a layer of organic matting to limit fine soil particles from eroding along the earthen slopes. The installation of all underground utilities within the site will require a coordinated effort by the various subcontractors to assure the least amount of time that open trenches are exposed within the buffer zones. In areas where exposed trenches may project through the stabilized slopes, it may be necessary to install temporary erosion control barriers to limit routing drainage through the unstabilized soils. This applies to rip rap swales as well.
- During construction of the paved areas, the installation of the subsurface infiltration basins should commence furthest away from the lower slopes where possible. This action will keep the infiltration system clear of sediments while limiting flows in the direction of the wetlands. Temporary sediment basins will be helpful once the trench work enters the areas adjacent to the infiltration basins. It is imperative that all infiltration structures be protected from sedimentation during periods of exposure to assure compliance with the individual permits.
- Once the subsurface utilities have been completed and inspected, the binder course of pavement is to be installed. The paving shall be completed in two phases in order to allow the rear property to be used as a staging area and to protect the compacted sub-base within the driveway from sedimentation due to erosion. As a result of the introduction of the increased impervious area as well as the redirection of drainage flows within the immediate site, there will be an increase in short term flows to the downslope areas. Prevention of concentrated discharges from bypassing the stormwater detention controls will be necessary at this time. All of the erosion control barriers will need to be inspected and maintained on a daily basis during this period.

- During periods of heavy rainfall, there may be occurrences of erosion of the unstabilized slopes once the graded slopes have been loamed and seeded. Immediate attention to the maintenance of these eroded areas will further insure the successful stabilization of the down gradient slopes while limiting the impacts to the specific areas. Additional erosion controls should be readily available and immediately installed in these problem areas. Wood chips and stump grindings provide an excellent source for creating temporary check dams to control drainage runoff during high intensity storms. During the summer months, it is crucial for the protection of all vegetated slopes that concentrated flows of runoff be directed away from recently stabilized areas. For this reason, the general contractor will be responsible to delegate authority to at least one individual who will be available at a moment's notice (7 days a week) to initiate emergency erosion control procedures. The telephone number of this individual shall be forwarded to the Medway Conservation Commission and the Medway DPW prior to the commencement of construction.
- Periodic inspections of the entire construction site are to be performed by a competent representative who will insure the adherence to the regulations as set forth in the Clean Water Act, as amended (33 USC 1251). An authorized agent of the Medway Conservation Commission shall be allowed to conduct inspections of the jurisdictional areas and consult with the project engineer as necessary before, during and after the commencement of construction.
- Robert G. Murphy is to be granted authority by the owner of the project to monitor the erosion and sedimentation controls and to cease and desist all construction activities if, in his discretion, said activities are in violation of the recorded Order of Conditions and supporting documents. The contractor is to allow unimpeded access to the site by all members of the Medway Conservation Commission in order that they may view the construction procedures. Members of the Conservation Commission and or their Agents shall not engage in the direction of construction procedures or enter into areas of present construction activity without first notifying the General Contractor and or their representatives. All complaints and or concerns are to be done through the proper "chain of command". No unauthorized individuals are to enter the construction area without the expressed consent of the owner and or their representatives. All parties are to be properly insured (with adequate proof) before entering the construction site.
- It is the responsibility of the owner and the general contractor to verify that all construction permits for this project are obtained and kept up to date. Once the project has been completed, the owner is to notify the Medway Conservation Commission in order to obtain the required Certificate of Compliance. This Certificate of Compliance is to be recorded at the Norfolk Registry of Deeds. A copy of the Stormwater Management Plan and Specifications is to be referenced in the Order of Conditions and recorded along with the Deed.

STORMWATER MANAGEMENT SYSTEM  
OPERATION & MAINTENANCE SCHEDULE DURING CONSTRUCTION

The stormwater management system shall be owned, operated and maintained by the owners of the site. Prior to the sale of the Single Family Residences, the current owner is to prepare a Homeowners Association Covenant that outlines the responsibilities of the homeowners to properly operate and maintain the approved Stormwater Management System. The drainage system is to consist of catch basins, grass swales, five subsurface infiltration basins and two open infiltration basins as shown on the Stormwater Management Plan. A copy of the approved plans and specifications is to be provided to the current owners along with a copy of the Homeowners Association Covenant during all transfers of the property.

Periodic inspections and maintenance of the infiltration structures and erosion controls is critical in order to guarantee optimal performance. The applicant and their contractors are responsible to maintain these structures until all vegetated slopes have been stabilized. It is especially important to use proper judgment when working within erosion prone areas with respect to periods of heavy rainfall. In the event of rainfall greater than 1/2 inch during a twenty four hour period, there is to be an inspection of the entire site to identify problems. All areas subject to erosion are to be repaired immediately.

- All erosion and sediment controls are to remain in place for one complete growing season. Silt fences and inorganic fabrics are to be removed once the site has been properly stabilized. Accumulated sediments are to be removed from all erosion control devices as required. Problem areas identified during the construction phases are to be reviewed and corrected by the job supervisor. Ideally, all erosion and sediment controls should be checked for sedimentation and damage after major storms for the first few months after construction. Exposed slopes are to be stabilized as soon as possible and are to be repaired as required. All exposed slopes and erosion controls are to be inspected after each 1/2" rainfall and on a weekly basis. Problem areas subject to scouring may be repaired with organic turf mats.

- All contractors working within areas subject to regulation by the recorded Order of Conditions are to be made aware of the permits for this project as issued by the Medway Planning Board and Conservation Commission. A copy of these approved plans and specifications are to be readily available on site at all times. It is the responsibility of the owner and their contractors to assure that all work complies with the current permits and to coordinate the required inspections with the design engineer and town officials.

MAINTENANCE OF THE GRASS SWALES

- The accumulation of sediments within the various infiltration structures will seriously impede the percolation of water through the underlying porous soils. In order to avoid clogging of the porous soils, it is imperative that an aggressive maintenance plan be implemented for all infiltration drainage structures within this site.

- The vegetated swales with stone check dams are to be inspected after every major storm for the first six months to check for proper functioning and to remove sediments as required. At this time the swales should be checked to determine if they are working as designed. If there are low wet spots for extended periods (over 72 hours) the design engineer shall be contacted to identify, review and correct the problem. Proper maintenance of all vegetated slopes above the infiltration structures will extend the life span of the structures within the immediate downstream areas.

- Once the vegetation has stabilized, the infiltration structures are to be inspected at least twice a year to check for improper settlement, erosion and sedimentation, unwanted tree and shrub growth and accumulation of debris. Grass clippings are to be removed from the swales and not allowed to accumulate and form an impervious organic mat. Avoid driving vehicles over the open trenches in order to retain the porosity of the soil and associated infiltration qualities.

MAINTENANCE OF THE SUBSURFACE INFILTRATION BASINS

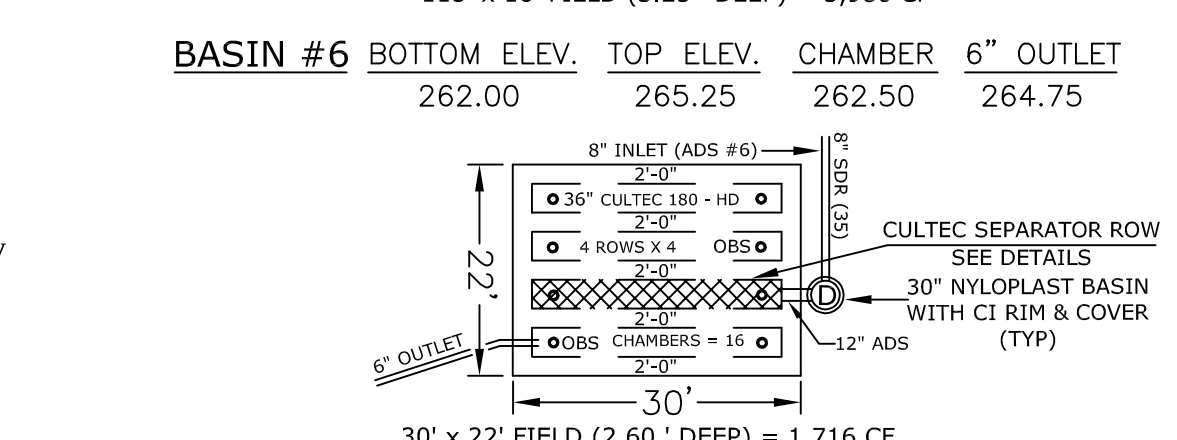
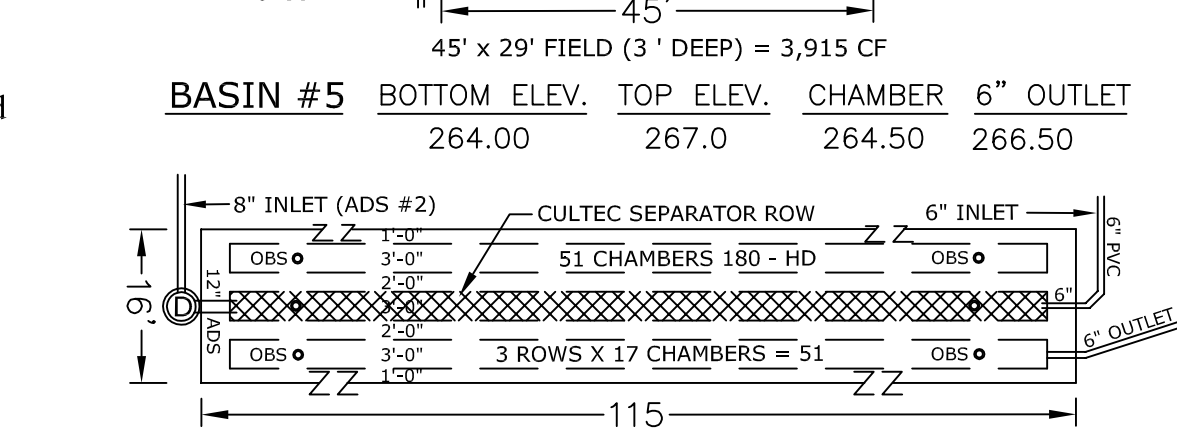
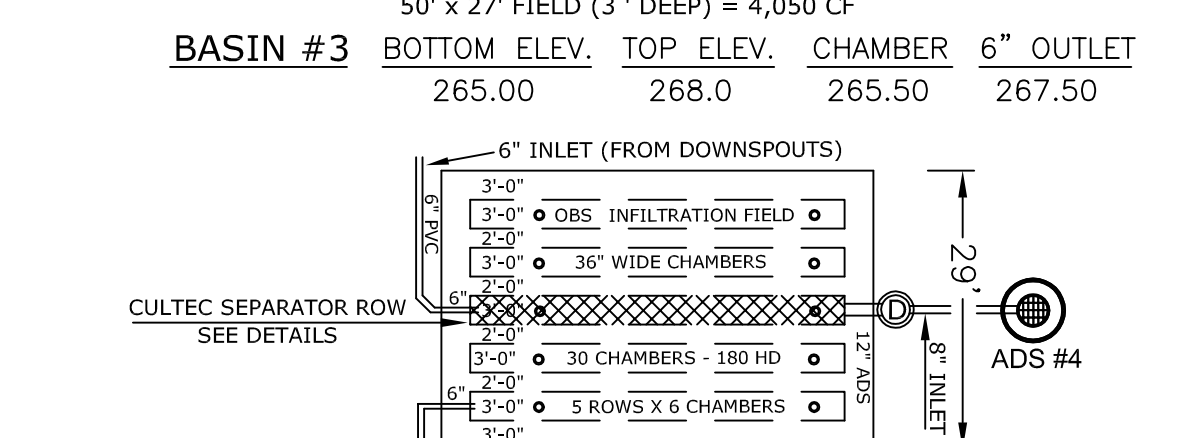
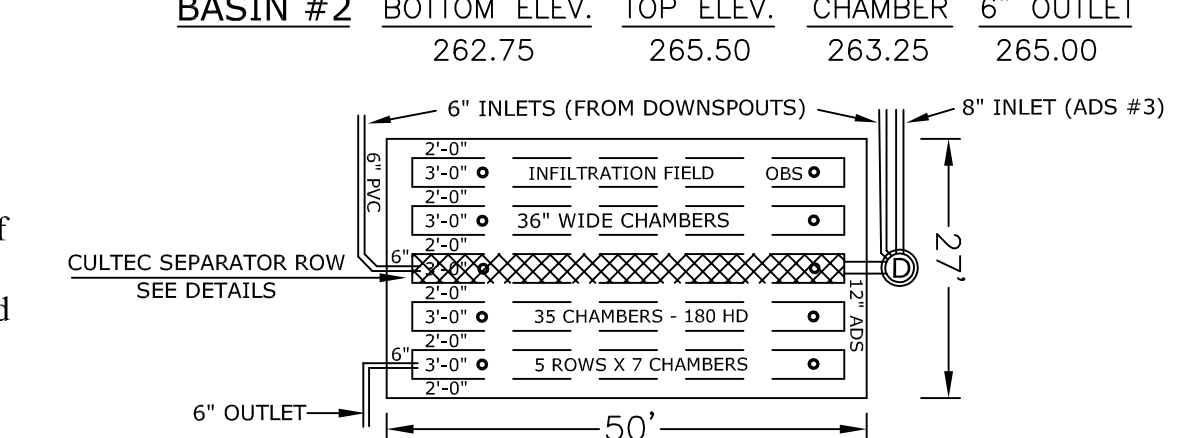
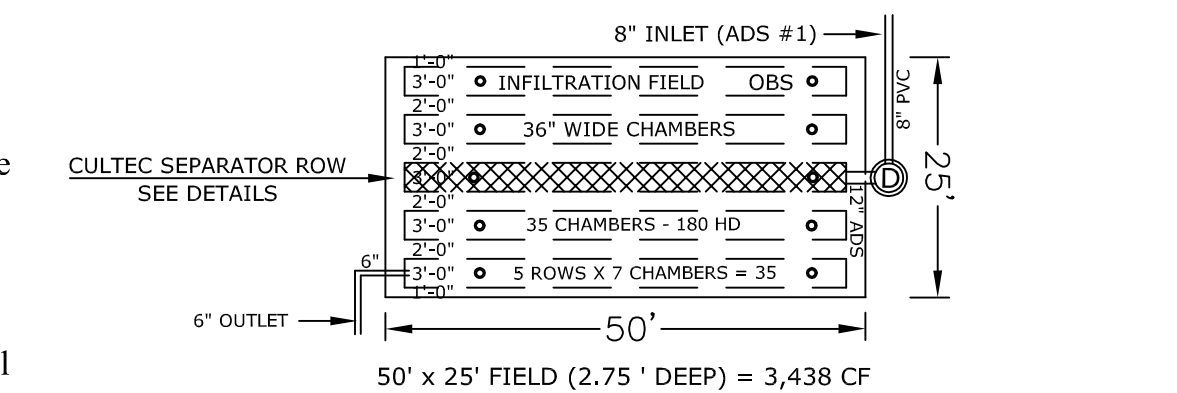
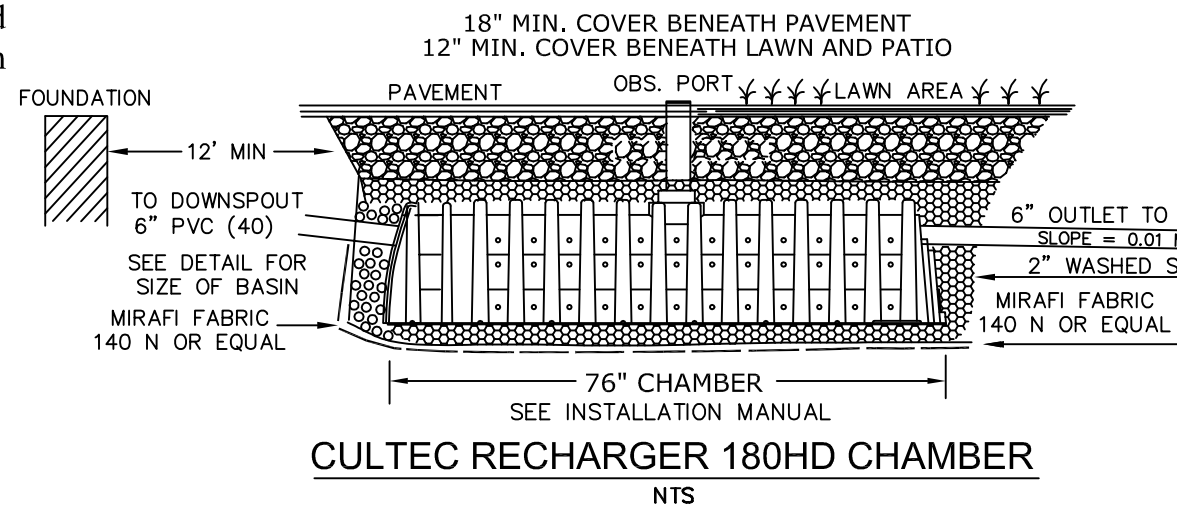
- Specifications for the maintenance of all stormwater management facilities within this site are taken from the Stormwater Management Guidelines (Volume Two) as prepared by the Massachusetts Department of Environmental Protection. All parties responsible for the drainage facilities should review this document in order to more fully understand the function of the various components. Additional information may be obtained by visiting the DEP website at [www.mass.gov/dep](http://www.mass.gov/dep).

- The proper installation of the infiltration basins and protection from sedimentation is the best assurance that the basin will function as designed. All work on the Subsurface Infiltration Basins is to be done by an experienced installer who is familiar with the DEP Stormwater Management Guidelines. No heavy equipment is to drive over the exposed excavation of the basin during the placement of the chambers and stone aggregate. This action will prevent the compaction of the base material (resulting in the reduction of soil porosity). The constructed basin is to be inspected by the design engineer and an agent of the Medway Conservation Commission prior to covering the system with mirafri fabric. Failure to comply with the required inspections will result in the denial of the Certification. The observation ports within the Subsurface Infiltration Basin should be inspected at least once a month (for 3 consecutive months) during wet weather conditions (if possible) to determine if the basin is functioning as designed. A minimum of two observation ports are required for each row of subsurface chambers as shown on the site plans.

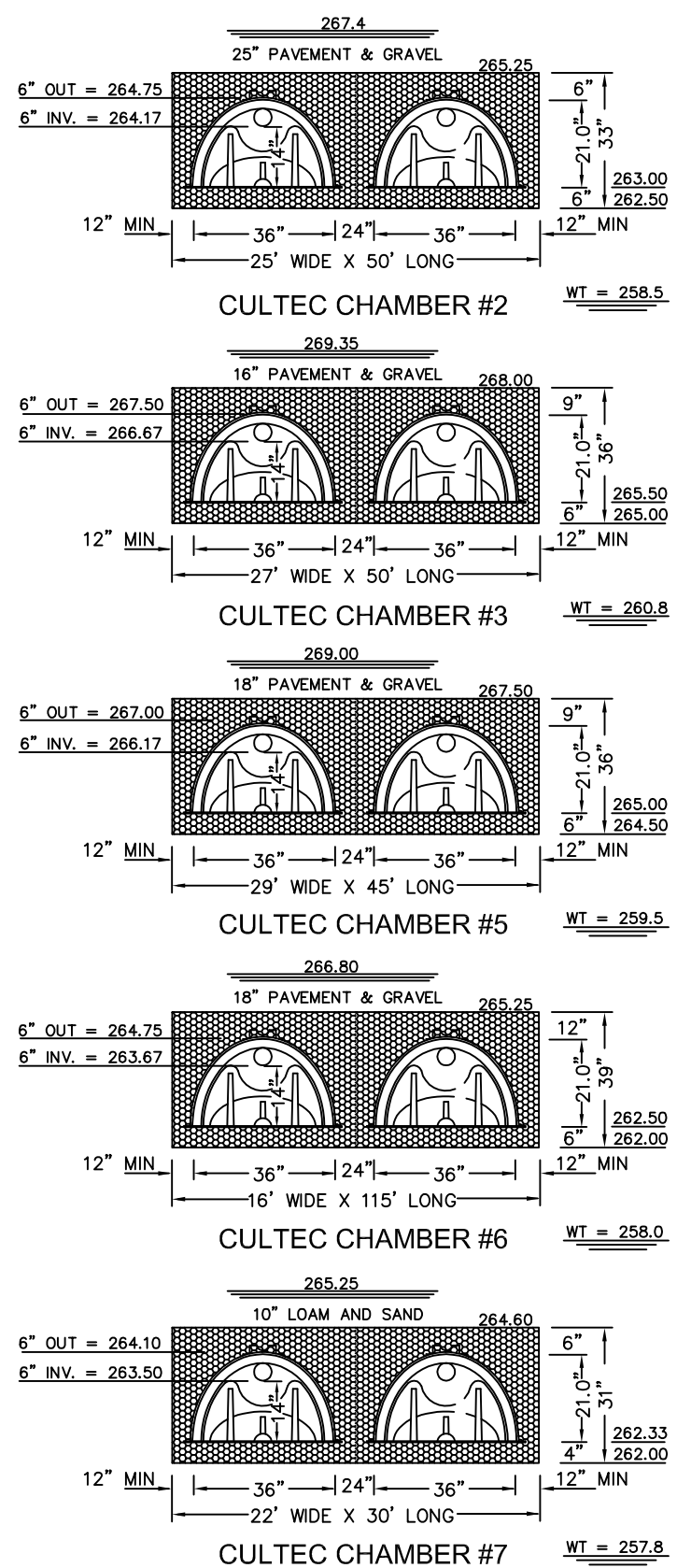
- Special care is to be taken during the construction of the drain inlets and landscape operations to avoid the contamination of the exposed drain inlets. Downspout filters have been added to the roof drains to assist in the removal of contaminants. Each of the downspouts filters should be inspected during the spring and fall to remove organic matter that has fallen into the roof gutters and found its way into the downspouts.

MAINTENANCE OF THE SURFACE AND SUBSURFACE INFILTRATION BASINS - MOCKINGBIRD LANE

- Specifications for the maintenance of all stormwater management facilities within this site are taken from the Stormwater Management Guidelines (Volume Two) as prepared by the Massachusetts Department of Environmental Protection. All parties responsible for the drainage facilities should review this document in order to more fully understand the function of the various components. Additional information may be obtained by visiting the DEP website at [www.mass.gov/dep](http://www.mass.gov/dep).
- While work is being conducted on the multi-family residential development, all completed infiltration structures shall be inspected on a bi-weekly basis (preferably during wet weather conditions) to determine if the basins are functioning as designed. The consultant engineer for the Town of Medway may need to be present to review the specific detention timing and overall performance of the inflow and outflow structures. Once the two phases of the residential development have been completed, the basins should be inspected and maintained at least twice a year for a minimum of three years. At this time, all of the downspout filters are to be inspected and cleaned as necessary. It will be the responsibility of the Condominium Association to insure that the required inspections are completed in a timely fashion. Proper maintenance of the entire drainage system will insure the extended life span of the subsurface drainage structures. The SWPPP Maintenance Schedule will assist the homeowners in keeping accurate inspection records.
- Standing water at low points for extended periods may signal the need to remove an accumulation of sediments within the bottom of the infiltration basin. When the basin is thoroughly dry and the threat of heavy rainfall is minimal, the sediments are to be removed with light excavation equipment in such a manner that will not compress the porous soils. Since the fine sediments are subject to migration during periods of heavy rainfall, it is imperative that all sediments within the entire system be removed at the same time when the infiltration basin is cleaned. For smaller amounts of sedimentation, it is recommended to use flat metal shovels to avoid compressing the underlying soils.
- At least twice a year during the growing season all vegetated slopes should be mowed to remove brush and tree saplings and inspected for erosion. The intent is to promote a healthy growth of native grasses and forbs that will serve to remove excess nutrients from the stormwater runoff. All vegetation that has been cut during mowing should be removed from the basin and properly disposed of. No trees should be allowed to grow on the earthen berm. Burrowing animals should be discouraged from tunneling within the earthen berms by placing large stones in the excavated entrance.
- Four times a year, all trash and debris should be removed from the infiltration basins. At that time the drainage swales and associated culverts should be checked for the accumulation of sediments and debris. It is especially important that the 6" outlet culvert and the broad crested weirs be inspected and cleaned on a regular basis in order to assure the optimum performance of the detention structures during periods of heavy rainfall. The detention basins have been designed to drain completely in less than 24 hours. Standing water within the basins for extended periods is a warning sign that the basins are not functioning properly and maintenance is required. Refer to the Stormwater Management Plan & Report.



CULTEC RECHARGER 180HD CHAMBER FIELDS  
WITH CULTEC SEPARATOR ROW TECHNOLOGY  
SCALE: 1" = 20'



SITE PLAN APPROVAL  
MEDWAY PLANNING & ECONOMIC  
DEVELOPMENT BOARD

DATE OF APPROVAL \_\_\_\_\_

DATE OF ENDORSEMENT \_\_\_\_\_

FOR REGISTRY OF DEEDS USE ONLY

CURRENT OWNER:  
TORTCON BUILDERS, INC  
70 BETHANY ROAD  
FRAMINGHAM, MA 01701  
508-380-0068

*Norman G. Hill, P.E.* 3-20-24  
NORMAN G. HILL, PE DATE  
LAND PLANNING, INC.  
214 Worcester Street  
North Grafton, Massachusetts 01536

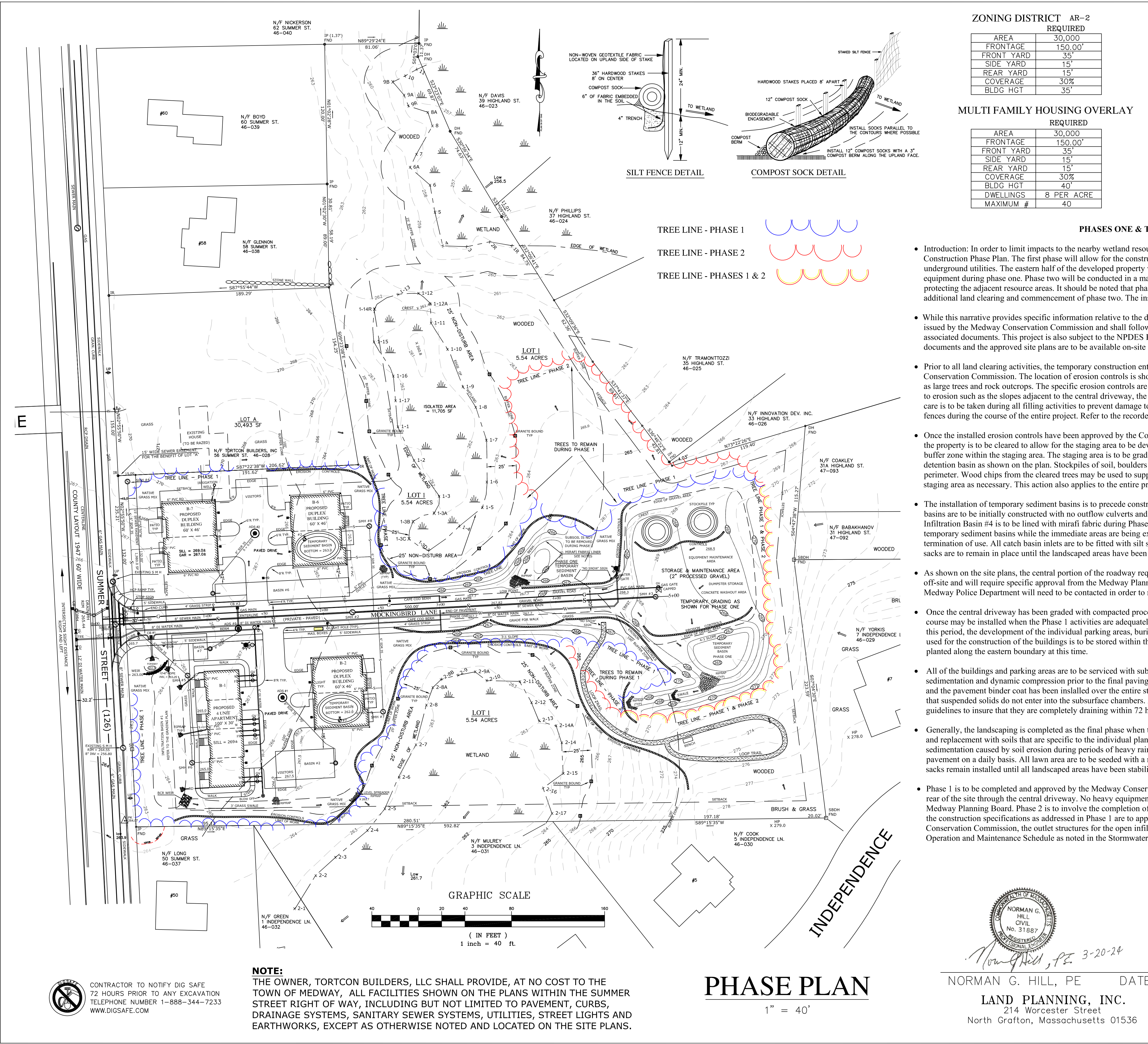
DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 5 OF 16
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: MAY 24, 2023

ROBERT G. MURPHY & ASSOC., INC.  
ENVIRONMENTAL CONSULTANTS  
214 Worcester Street  
No. Grafton, Massachusetts 01536  
(508) 839-0310  
RGMENVIRON@VERIZON.NET

MOCKINGBIRD LANE  
STORMWATER POLLUTION PREVENTION PLAN  
MOCKINGBIRD LANE, MEDWAY, MA

REVISION: SEE TETRA TECH REVIEW 10-23-2023 RGM & NGH 12-26-2023	SWPPP
REVISION: SEE CONSERVATION COMM. REVIEW 11-14-2023 RGM & NGH 3-20-2024	





ZONING DISTRICT AR-2

REQUIRED	
AREA	30,000
FRONTAGE	150.00'
FRONT YARD	35'
SIDE YARD	15'
REAR YARD	15'
COVERAGE	30%
BLDG HGT	35'

MULTI FAMILY HOUSING OVERLAY

REQUIRED	
AREA	30,000
FRONTAGE	150.00'
FRONT YARD	35'
SIDE YARD	15'
REAR YARD	15'
COVERAGE	30%
BLDG HGT	40'
DWELLINGS	8 PER ACRE
MAXIMUM #	40

SITE PLAN APPROVAL  
MEDWAY PLANNING & ECONOMIC  
DEVELOPMENT BOARD

DATE OF APPROVAL \_\_\_\_\_  
DATE OF ENDORSEMENT \_\_\_\_\_

FOR REGISTRY OF DEEDS USE ONLY

PHASES ONE & TWO - CONSTRUCTION SEQUENCE & EROSION CONTROLS

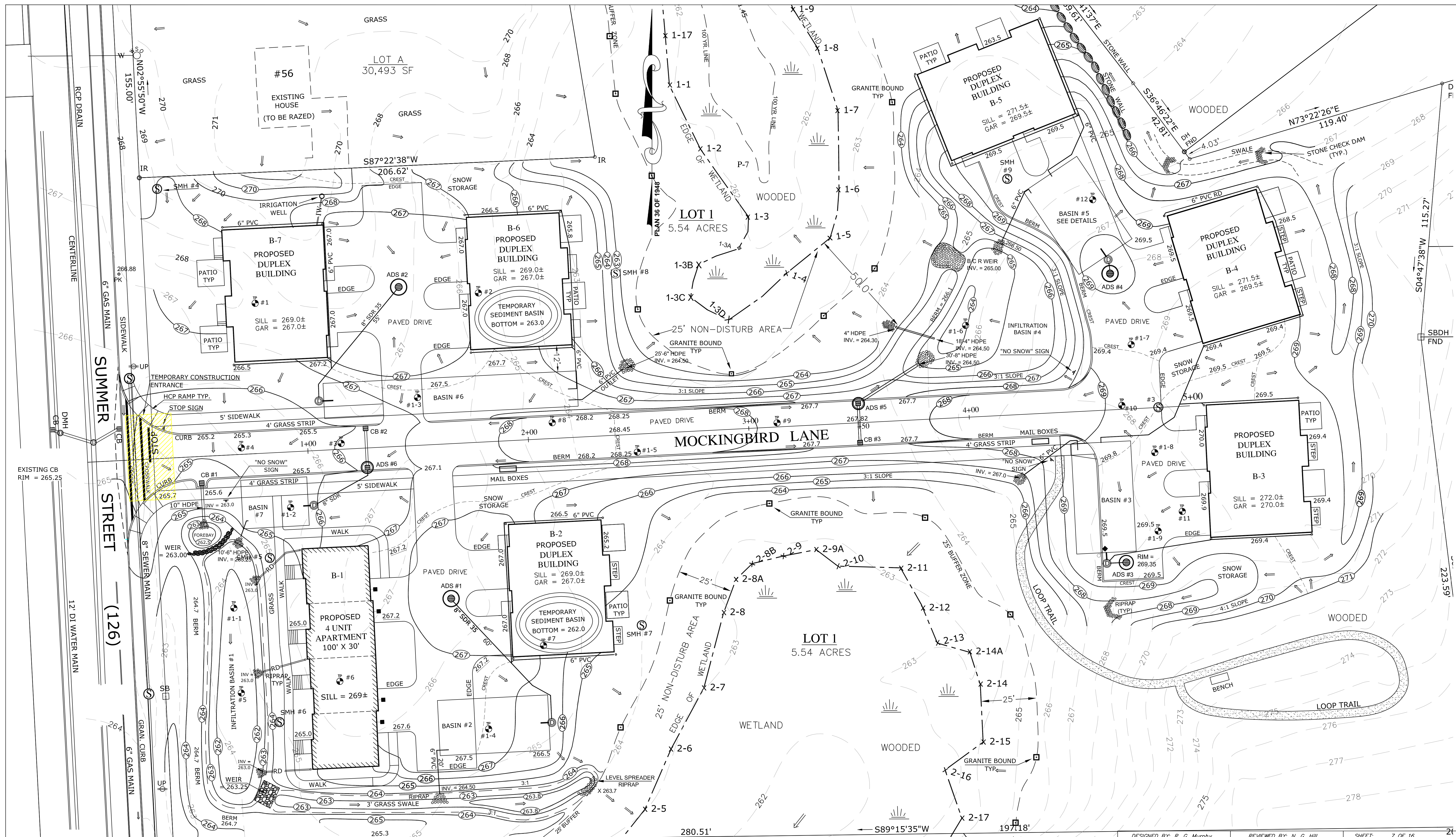
- Introduction: In order to limit impacts to the nearby wetland resource areas and adjacent woodlands, this project is to be conducted in two phases as shown on the Construction Phase Plan. The first phase will allow for the construction of four buildings within the western portion of the property as well as the central driveway and underground utilities. The eastern half of the developed property will serve as a staging area for the storage of construction materials and maintenance of construction equipment during phase one. Phase two will be conducted in a manner that will have no impacts upon the completed phase one portion of the project while also protecting the adjacent resource areas. It should be noted that phase one is to be completed and approved by the Medway Conservation Commission prior to the additional land clearing and commencement of phase two. The installation of underground utilities will follow the direction of the Medway Department of Public Works.
- While this narrative provides specific information relative to the development of the two phases, all construction personnel are to be aware of the Order of Conditions as issued by the Medway Conservation Commission and shall follow the additional specifications as outlined in the Stormwater Pollution Prevention Plan (SWPPP) and the associated documents. This project is also subject to the NPDES Permit as issued by the United States Department of Environmental Protection. Copies of these recorded documents and the approved site plans are to be available on-site at all times during the construction phases.
- Prior to all land clearing activities, the temporary construction entrance and erosion controls are to be installed as shown and approved by an agent of the Medway Conservation Commission. The location of erosion controls is shown in a general manner on the plans and may be moderately adjusted to preserve natural features such as large trees and rock outcrops. The specific erosion controls are to follow the topography where possible and are to be installed as shown on the details. In areas prone to erosion such as the slopes adjacent to the central driveway, the 12" compost socks are to be supplemented with silt fences to limit the potential for erosion. Special care is to be taken during all filling activities to prevent damage to the erosion controls. The contractor is responsible for the maintenance of the compost socks and silt fences during the course of the entire project. Refer to the recorded Order of Conditions for additional information.
- Once the installed erosion controls have been approved by the Conservation Commission, the land clearing activities may commence. The initial roadway to the rear of the property is to be cleared to allow for the staging area to be developed as shown on the Phasing Plan. All equipment is to be stored and maintained outside of the 100' buffer zone within the staging area. The staging area is to be graded in a manner that provides for the containment of all stormwater runoff within the temporary detention basin as shown on the plan. Stockpiles of soil, boulders and logs are to be located away from the basin where possible and contained within a 12" compost sock perimeter. Wood chips from the cleared trees may be used to supplement the erosion controls. The contractor is responsible for adjusting the erosion controls within the staging area as necessary. This action also applies to the entire project with reference to the adjustment of erosion controls relative to specific construction activities.
- The installation of temporary sediment basins is to precede construction activities as they progress throughout the development of this site. The permanent infiltration basins are to be initially constructed with no outflow culverts and are to be maintained as detention basins until the adjacent areas have been properly stabilized. Infiltration Basin #4 is to be lined with mirafi fabric during Phase 1 to prevent the clogging of the pervious soils. Excavated building foundations may also serve as temporary sediment basins while the immediate areas are being excavated and graded. All sediments are to be removed from the temporary sediment basins prior to their termination of use. All catch basin inlets are to be fitted with silt sacks in order to protect the subsurface infiltration systems during this phase of construction. The silt sacks are to remain in place until the landscaped areas have been completely stabilized. Bi-annual street sweeping is to commence at this time.
- As shown on the site plans, the central portion of the roadway requires gravel fill in order to properly grade the finished driveway. This fill is to be brought in from off-site and will require specific approval from the Medway Planning Board relative to the number of vehicle trips per day and the timing of the filling activities. The Medway Police Department will need to be contacted in order to regulate the movement of vehicles within the public right of way during peak traffic periods.
- Once the central driveway has been graded with compacted processed gravel, the utilities are to be installed as shown on the approved plans. The pavement binder course may be installed when the Phase 1 activities are adequately stabilized. The finish coat will not be installed until the entire project is nearing completion. During this period, the development of the individual parking areas, buried utilities and building foundations is to commence. All construction materials not being immediately used for the construction of the buildings is to be stored within the staging area to the rear of the property. It is also recommended that the trees within the buffer strip be planted along the eastern boundary at this time.
- All of the buildings and parking areas are to be serviced with subsurface infiltration basins. It is extremely important that these subsurface structures be protected from sedimentation and dynamic compression prior to the final paving of the driveways. No heavy equipment is to drive over the basins until the final grading is completed and the pavement binder coat has been installed over the entire structure. The silt sacks within the catch basins are to be inspected and maintained as necessary to insure that suspended solids do not enter into the subsurface chambers. All of the subsurface infiltration basins are to be inspected following the stormwater management guidelines to insure that they are completely draining within 72 hours. Each basin is to be inspected following rainfall events exceeding 1/2" in 24 hours.
- Generally, the landscaping is completed as the final phase when the need for the previous construction equipment is reduced. This allows for the excavation of gravel and replacement with soils that are specific to the individual plants. The landscape contractors are to be made aware of the need to protect the infiltration chambers from sedimentation caused by soil erosion during periods of heavy rainfall. All soil is to be stockpiled well away from the catch basins and excess soil is to be swept from the pavement on a daily basis. All lawn areas are to be seeded with a rapid germinating seed mix and supplemented with an organic tackifier. It is imperative that the silt sacks remain installed until all landscaped areas have been stabilized to a minimum of 90 %.
- Phase 1 is to be completed and approved by the Medway Conservation Commission prior to the commencement of Phase 2. All construction vehicles are to access the rear of the site through the central driveway. No heavy equipment is to enter into the previously completed parking areas of Phase 1 without the approval of the Medway Planning Board. Phase 2 is to involve the completion of the entire project and shall commence immediately after Phase 1 has been approved as noted. All of the construction specifications as addressed in Phase 1 are to apply to Phase 2. Once the entire project has been stabilized to the satisfaction of the Medway Conservation Commission, the outlet structures for the open infiltration basins are to be installed. At this point, the owner shall be responsible to implement the Operation and Maintenance Schedule as noted in the Stormwater Pollution Prevention Plan and associated documents.

PHASE PLAN  
1" = 40'

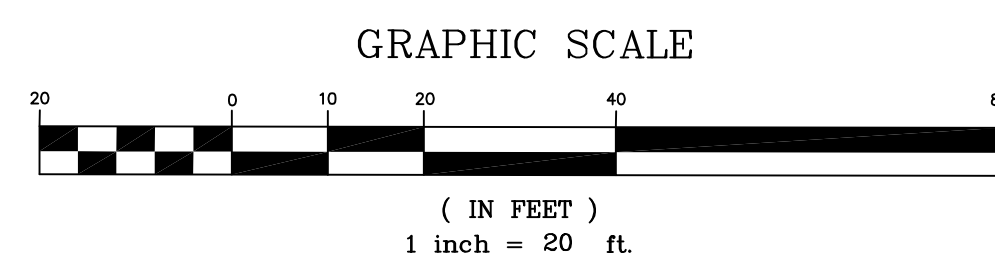
NORMAN G. HILL, PE 3-20-24  
NORMAN G. HILL, PE DATE  
LAND PLANNING, INC.  
214 Worcester Street  
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 6 OF 16
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: MAY 24, 2023
<b>ROBERT G. MURPHY &amp; ASSOC., INC.</b> ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 RGMENVIRON@VERIZON.NET		
<b>MOCKINGBIRD LANE</b> <b>PHASE 1 &amp; 2 LAND DISTURBANCE</b> 56 SUMMER STREET, MEDWAY, MA		
REVISION: SEE TETRA TECH REVIEW 10-23-2023 RGM & NGH 12-26-2023 REVISION: SEE CONSERVATION COMM. REVIEW 11-14-2023 RGM & NGH 3-20-2024		CE 216-1010



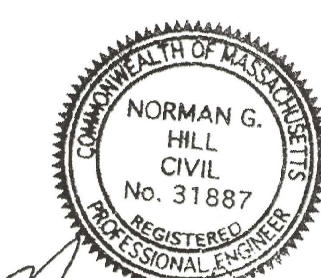


## GRADING & DRAINAGE PLAN



FIRM COMMUNITY PANEL  
NO. 25021C0139E  
DATE: 07-17-2012

DATUM:  
NAVD88



NORMAN G. HILL, PE DATE

LAND PLANNING, INC.  
214 Worcester Street  
North Grafton, Massachusetts 01536

SITE PLAN APPROVAL  
MEDWAY PLANNING & ECONOMIC  
DEVELOPMENT BOARD

DATE OF APPROVAL

DATE OF ENDORSEMENT

CURRENT OWNER:  
**TORTCON BUILDERS, INC**  
70 BETHANY ROAD  
FRAMINGHAM, MA 01701  
508-380-0068

DESIGNED BY: R. G. Murphy  
SCALE: 1" = 20'  
REVIEWED BY: N. G. Hill  
PLAN NO.: S-22-35  
SHEET: 7 OF 16  
DATE: OCT 10, 2023

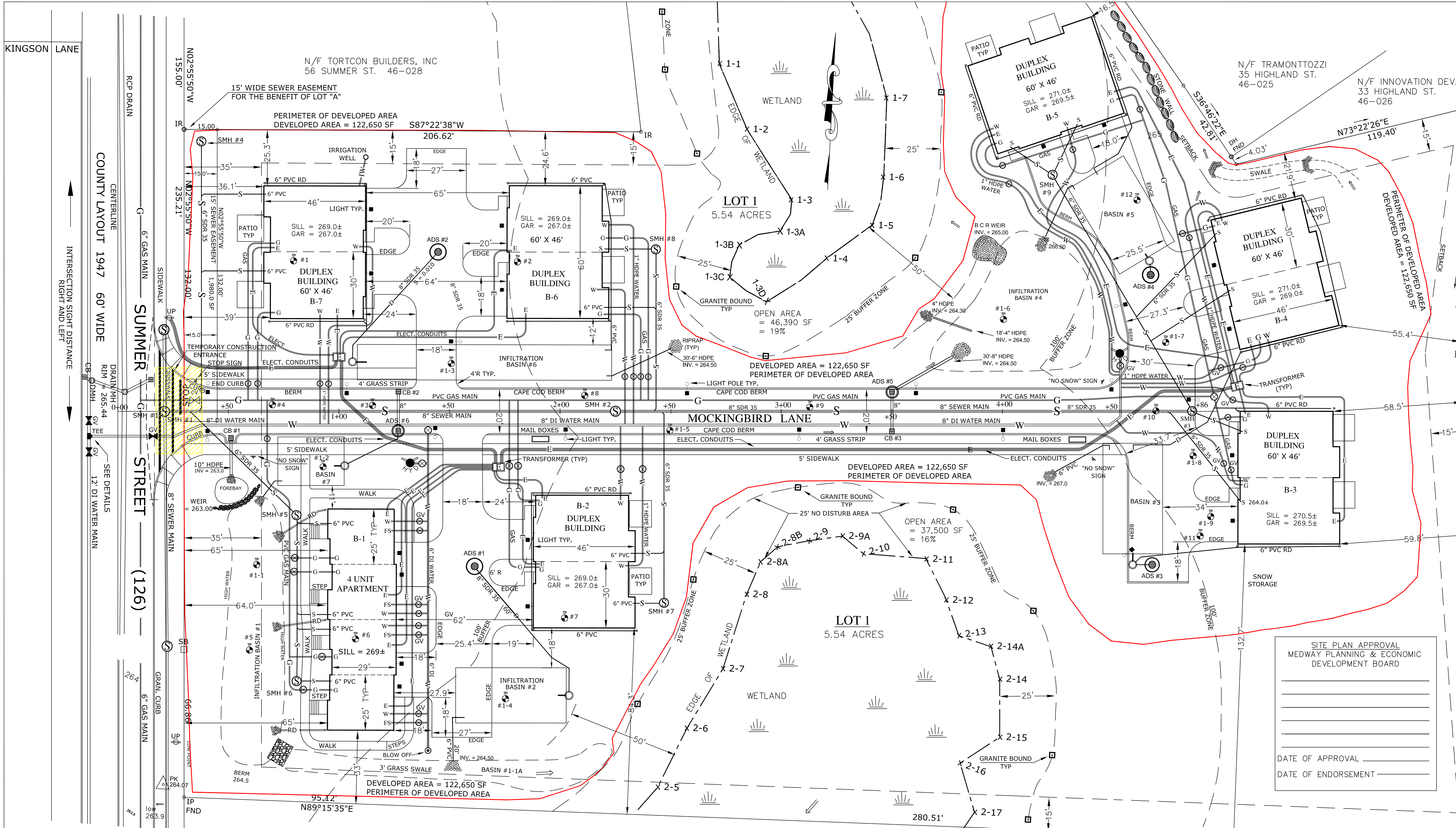
ROBERT G. MURPHY & ASSOC., INC.  
ENVIRONMENTAL CONSULTANTS  
214 Worcester Street  
No. Grafton, Massachusetts 01536  
(508) 839-0310  
RGMENVIRON@VERIZON.NET

**MOCKINGBIRD LANE**  
**GRADING & DRAINAGE PLAN**  
56 SUMMER STREET, MEDWAY, MA

REVISION: SEE TETRA TECH REVIEW 10-23-2023 RGM & NGH 12-26-2023  
REVISION: SEE CONSERVATION COMM. REVIEW 11-14-2023 RGM & NGH 3-20-2024  
GRADING & DRAINAGE

FOR REGISTRY OF DEEDS USE ONLY





NOTES: ALL IRRIGATION COMPONENTS ARE TO BE INSTALLED AFTER ALL OF THE BURIED UTILITIES ARE INSTALLED AND INSPECTED. THE DRILLED WELL IS NOT TO BE USED AS A SOURCE OF POTABLE WATER.

ALL EXISTING UTILITIES ARE TO BE CONSIDERED AS APPROXIMATE ONLY. THE PROPOSED SITE IS TO BE SERVICED WITH MUNICIPAL WATER, SEWER, GAS, TEL. & ELECTRIC AS REQUIRED.

GRAPHIC SCALE

20 0 10 20 40 80

( IN FEET )

1 inch = 20 ft

**UTILITIES & DIMENSION PLAN**

FIRM COMMUNITY PANEL  
NO. 25021C0139E  
DATE: 07-17-2012

FOR REGISTRY OF DEEDS USE ONLY

DESIGNED BY: R. G. Murphy  
SCALE: 1" = 20'

REVIEWED BY: N. G. Hill  
PLAN NO.: S-22-35

SHEET: 8 OF 16  
DATE: OCT 10, 2023

ROBERT G. MURPHY & ASSOC., INC.  
ENVIRONMENTAL CONSULTANTS  
214 Worcester Street  
No. Grafton, Massachusetts 01536  
(508) 839-0310  
RGMENVIRON@VERIZON.NET

**MOCKINGBIRD LANE  
UTILITIES & DIMENSION PLAN**  
56 SUMMER STREET, MEDWAY, MA

REVISION: SEE TETRA TECH REVIEW 10-23-2023 RGM & NGH 12-26-2023  
REVISION: SEE CONSERVATION COMM. REVIEW 11-14-2023 RGM & NGH 3-20-2024

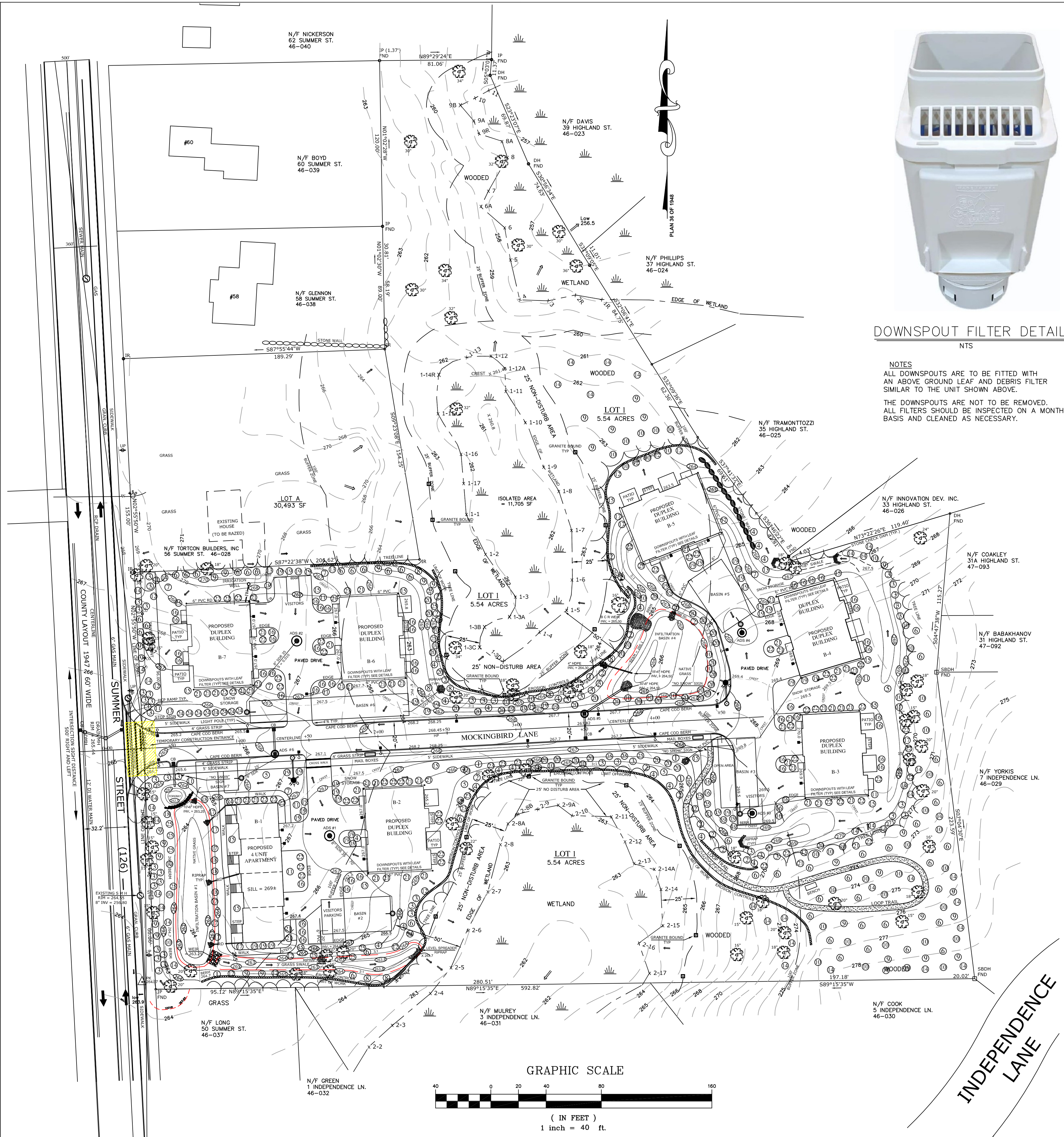
UTILITIES & DIMENSIONS

Norman G. Hill, PE 3-20-24

NORMAN G. HILL, PE DATE

LAND PLANNING, INC.  
214 Worcester Street  
North Grafton, Massachusetts 01536





DOWNSPOUT FILTER DETAIL

NOTES  
ALL DOWNSPOUTS ARE TO BE FITTED WITH AN ABOVE GROUND LEAF AND DERRIS FILTER SIMILAR TO THE UNIT SHOWN ABOVE.  
THE DOWNSPOUTS ARE NOT TO BE REMOVED. ALL FILTERS SHOULD BE INSPECTED ON A MONTHLY BASIS AND CLEANED AS NECESSARY.

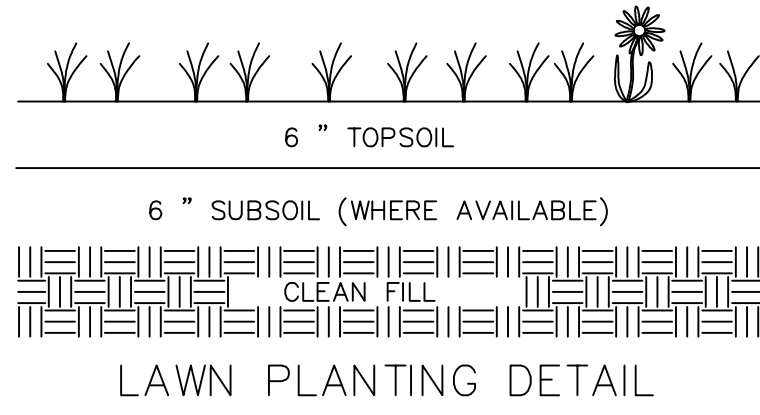
LIST OF PLANT MATERIALS

USE NATIVE PLANTS — LOCALLY GROWN IN NEW ENGLAND TEMPERATE ZONE 5

- TREES (334 Min) 2 1/2" Dia.
- 5 ① Amelanchier canadensis — Serviceberry 6–7'
  - 10 ② Betula nigra — Black Birch 6–7'
  - 50 ③ Betula populifolia — White Birch 6–7'
  - 18 ④ Carpinus caroliniana — Hornbeam 6–7'
  - 4 ⑤ Fagus grandifolia — American Beech — 2 1/2" Dia.
  - 45 ⑥ Juniperus virginiana — Red Cedar 6–7' (15 @ 10', 4" Min) (30 @ 6–7')
  - 5 ⑦ Cornus florida, Flowering Dogwood 2 1/2" Dia
  - 7 ⑧ Nyssa sylvatica — Black Tupelo 6–7'
  - 30 ⑨ Picea glauca — White Spruce (15 @ 10', 4" Min) (15 @ 6–7')
  - 55 ⑩ Pinus strobus — Eastern White Pine (15 @ 10', 4" Min) (40 @ 6–7')
  - 7 ⑪ Crataegus coccinea — Scarlet Hawthorn 5–6'
  - 10 ⑫ Quercus rubra — Red Oak 6–7' (3" Min)
  - 5 ⑬ Sorbus americana — Mountain ash 6–7'
  - 40 ⑭ Thuja standishii x P. — Green Giant Arborvitae (3 1/2")

SHRUBS (220 MIN)

- 15 ⑮ Buddleia davidii — Butterfly bush #3 pot
- 50 ⑯ Buxus sempervirens — Boxwood 24"
- 14 ⑰ Ilex opaca — American Holly 24"
- 5 ⑱ Ilex verticillata — Winterberry Holly 18"
- 50 ⑲ Juniperus wilsoni — Wiltoni Juniper 15"
- 35 ⑳ Kalmia latifolia — Mountain Laurel 18"
- 54 ㉑ Rhododendron catawba — Catawba Rhodo. 24"
- 52 ㉒ Rhododendron arborescens — Sweet Azalea 24"
- 5 ㉓ Sambucus canadensis — Elderberry 24"
- 10 ㉔ Syringa vulgaris — Purple Lilac 24"
- 18 ㉕ Vaccinium corymbosum — H. Blueberry 18"



PLANTING SPECIFICATIONS:

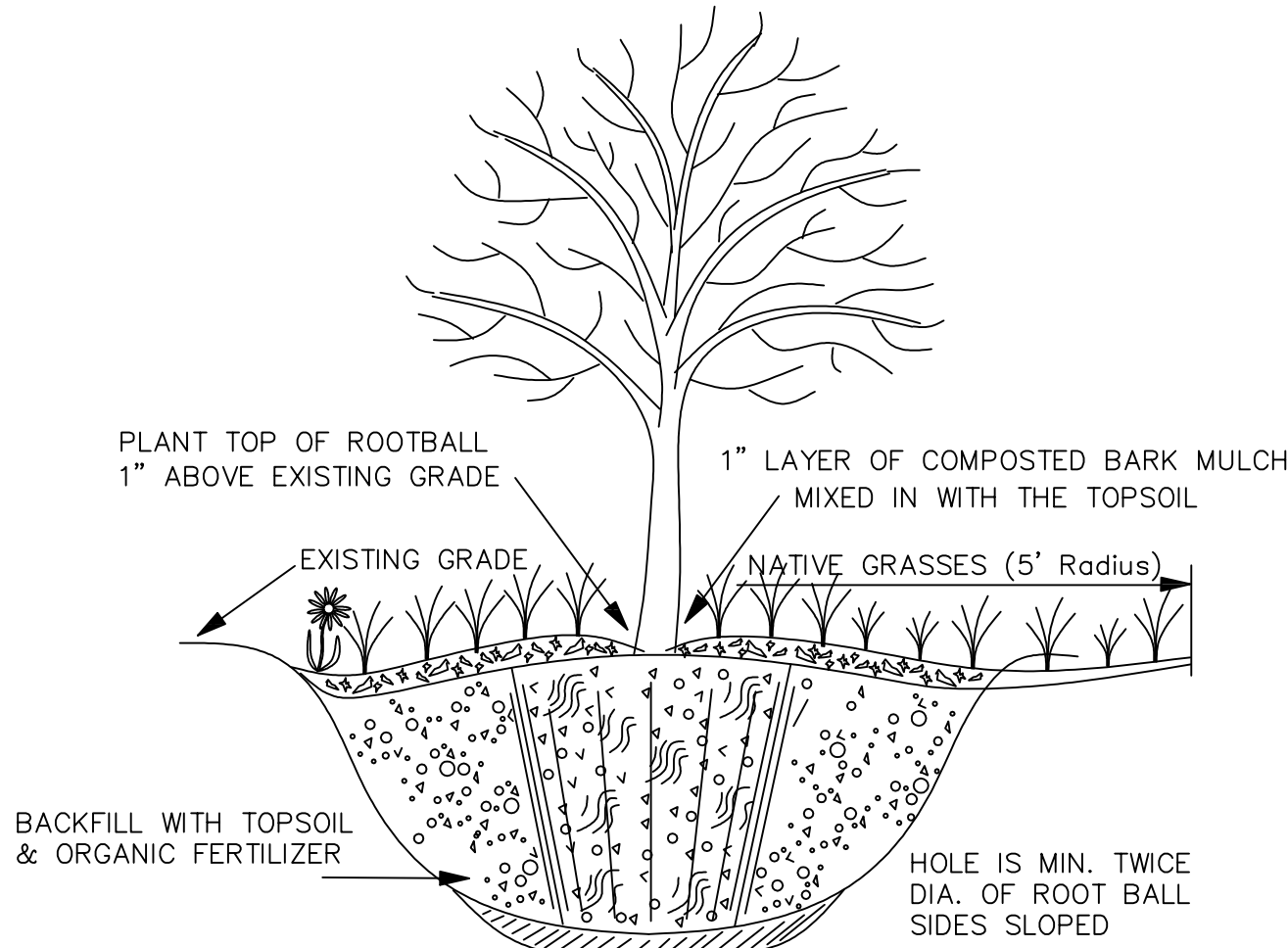
LOAM MAY BE SUPPLEMENTED WITH ORGANIC FERTILIZER. NO COMMERCIAL FERTILIZERS OR PESTICIDES ARE TO BE USED. SPREAD A MINIMUM OF 6 INCHES OF LOAM WITH A BASE OF 6" OF SUBSOIL (WHERE AVAILABLE) OVER EXISTING SOIL OR CLEAN FILL WITHIN ALTERED AREAS. APPLY SPECIFIED AMOUNT OF SEED WITH A MIXTURE OF 33% MERRIAM BLUEGRASS, 33% CHEWINGS FESCUE AND 33% ANNUAL RYEGRASS. DO NOT ALLOW THE SEEDING AREAS TO BECOME DESICATED DURING THE FIRST 3 WEEKS AFTER PLANTING. LOOSE HAY WILL PROVIDE PROTECTION AS WELL.

SITE PLAN APPROVAL  
MEDWAY PLANNING & ECONOMIC  
DEVELOPMENT BOARD

DATE OF APPROVAL \_\_\_\_\_  
DATE OF ENDORSEMENT \_\_\_\_\_

FOR REGISTRY OF DEEDS USE ONLY

USE NATIVE PLANTS — LOCALLY GROWN  
IN NEW ENGLAND TEMPERATE ZONE 5



LOOSEN 3" OF SOIL AT BASE OF HOLE  
AND TAMP FIRM WITH FOOT

RESTORATION PLANTING DETAIL

CURRENT OWNER:  
**TORTCON BUILDERS, INC**  
70 BETHANY ROAD  
FRAMINGHAM, MA 01701  
508-380-0068



NOTES: ALL IRRIGATION COMPONENTS ARE TO BE INSTALLED AFTER ALL OF THE BURIED UTILITIES ARE INSTALLED AND INSPECTED. THE DRILLED WELL IS NOT TO BE USED AS A SOURCE OF POTABLE WATER.  
EROSION CONTROLS ARE TO BE UPDATED AS REQUIRED DURING ALL CONSTRUCTION PHASES TO PREVENT SEDIMENTS FROM ENTERING THE ADJACENT WETLANDS.

LANDSCAPE PLAN

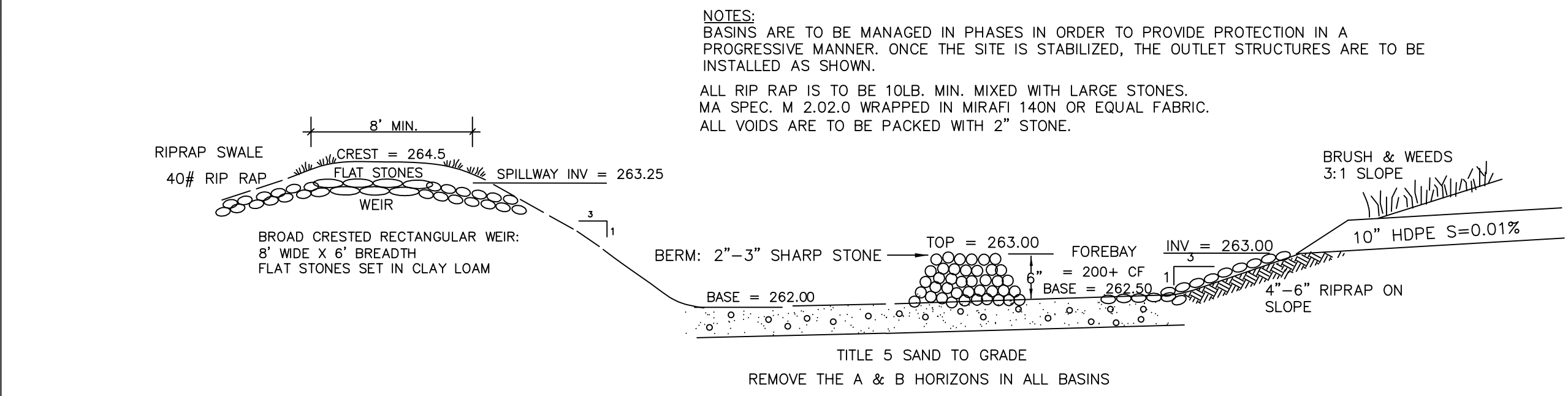
140 NATIVE TREES REPLACED IN THE 100' BUFFER ZONE

NOTES: PRIOR TO CONSTRUCTION, ALL TREES TO REMAIN ARE TO BE FLAGGED WITH ORANGE RIBBON. ALL TREES ALONG THE PERIMETER OF CONSTRUCTION TO REMAIN, ARE TO BE PROTECTED FROM DAMAGE WITH TREE PROTECTION FENCING. ALL PROTECTION FENCING IS TO BE PAINTED BRIGHT ORANGE.

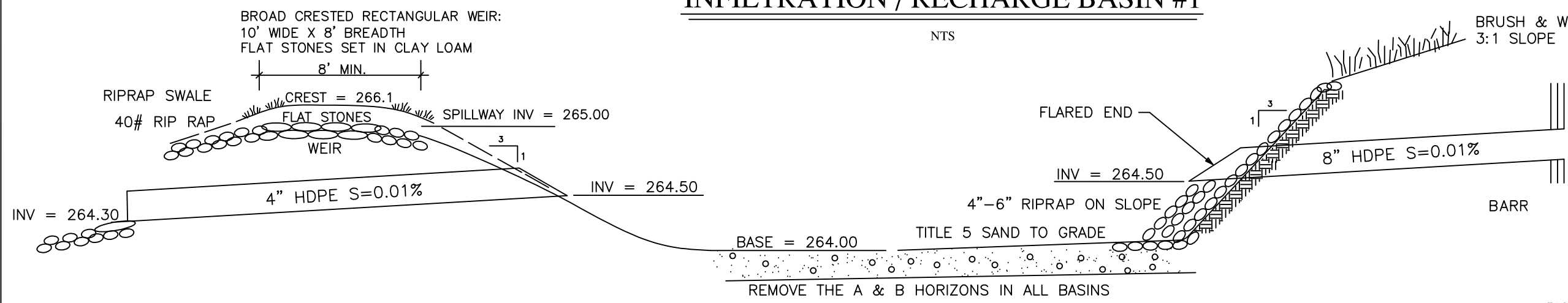
Professional seal and signature of Norman G. Hill, PE, dated 3-28-24. Includes company name: LAND PLANNING, INC. 214 Worcester Street North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy		REVIEWED BY: N. G. Hill	SHEET: 9 OF 16
SCALE: 1" = 40'		PLAN NO.: S-22-35	DATE: MAY 24, 2023
<div><div>Robert G. Murphy &amp; Associates, Inc. ENVIRONMENTAL CONSULTANTS</div></div> <div>ROBERT G. MURPHY &amp; ASSOC., INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 Fax: (508) 839-5914</div>			
RGMENVIRON@VERIZON.NET			
<div>MOCKINGBIRD LANE LANDSCAPE PLAN 56 SUMMER STREET, MEDWAY, MA</div>			
REVISION: REMOVED BUILDING & PLANTS FROM LOT "A" RGM & NGH 2-26-2024			LANDSCAPE
REVISION: PLANNING BOARD REMOVAL OF TREE WAIVER 3-26-2024 RGM, NGH 3-28-2024			

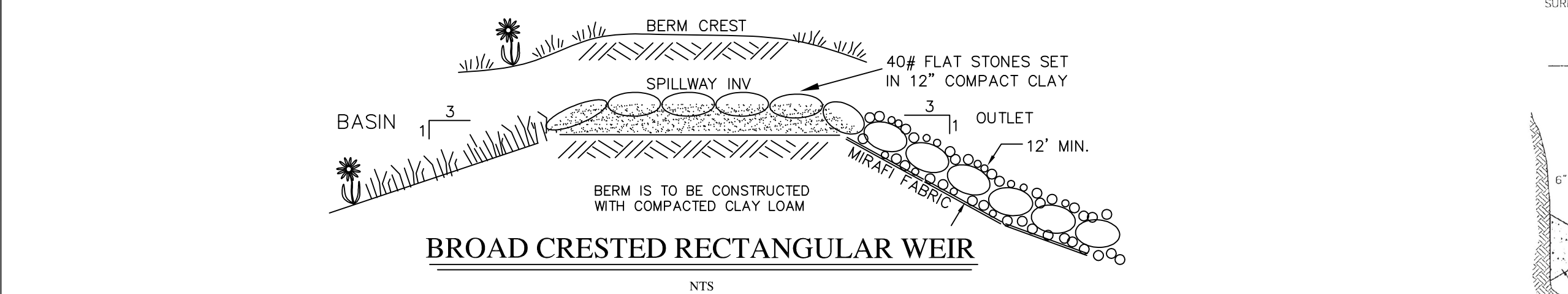




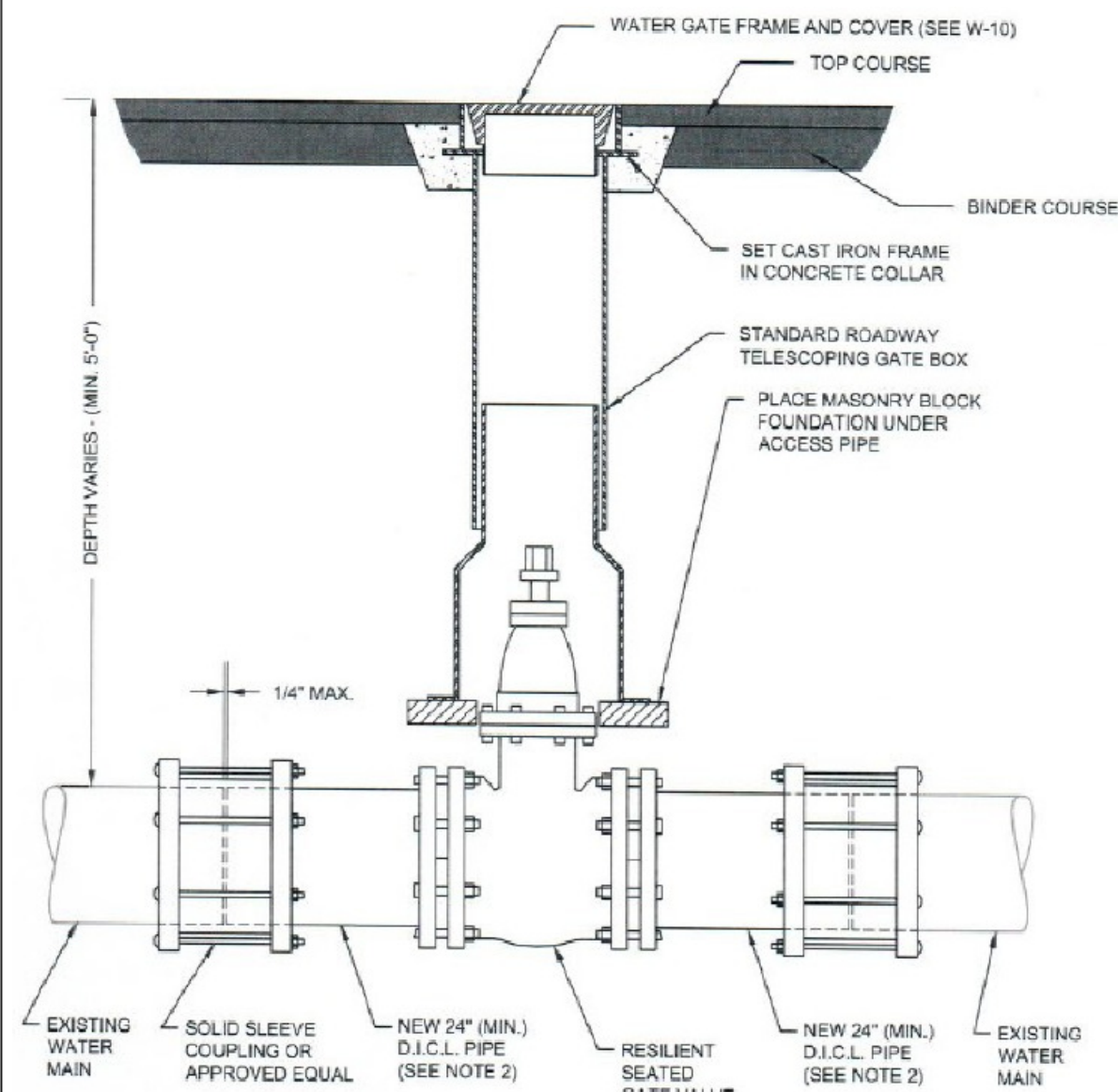
INFILTRATION / RECHARGE BASIN #1



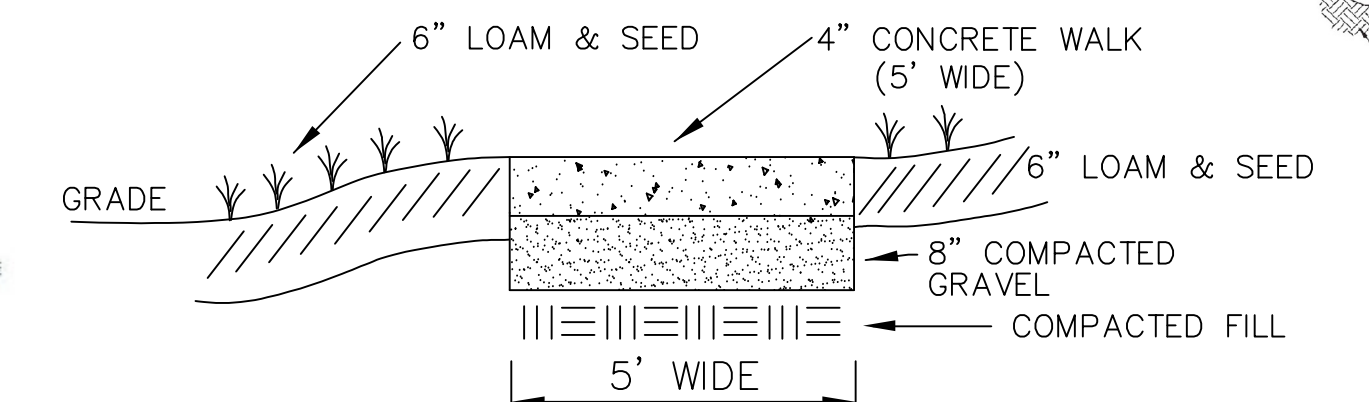
INFILTRATION / RECHARGE BASIN #4



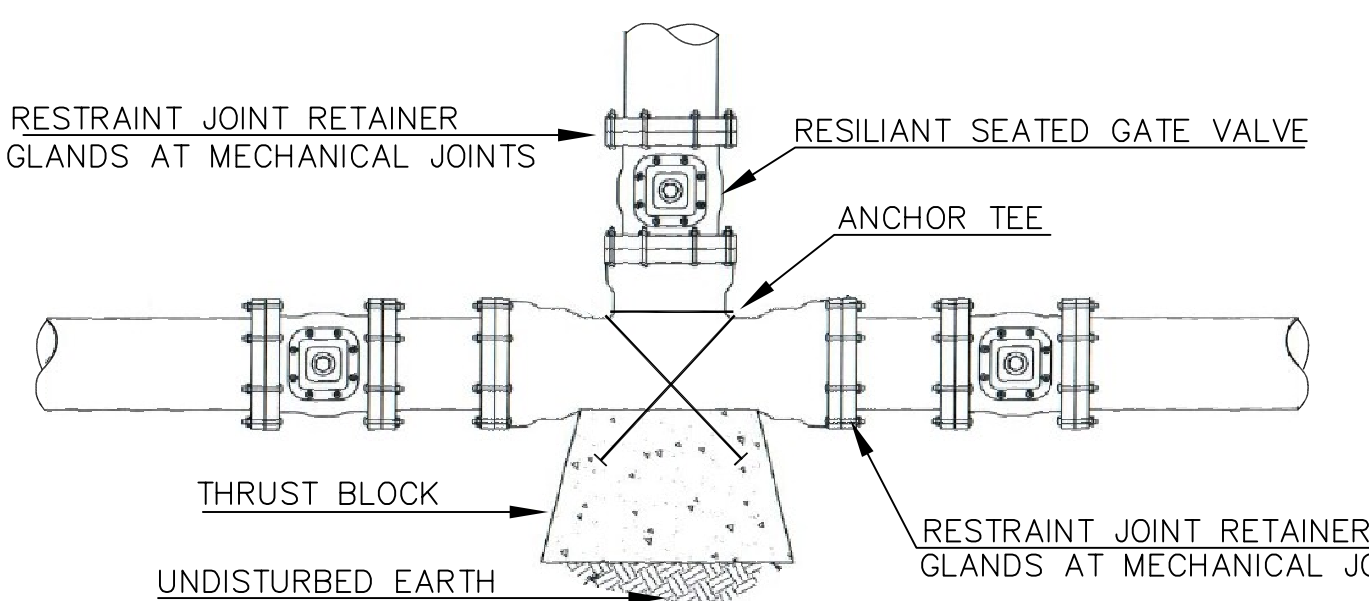
BROAD CRESTED RECTANGULAR WEIR



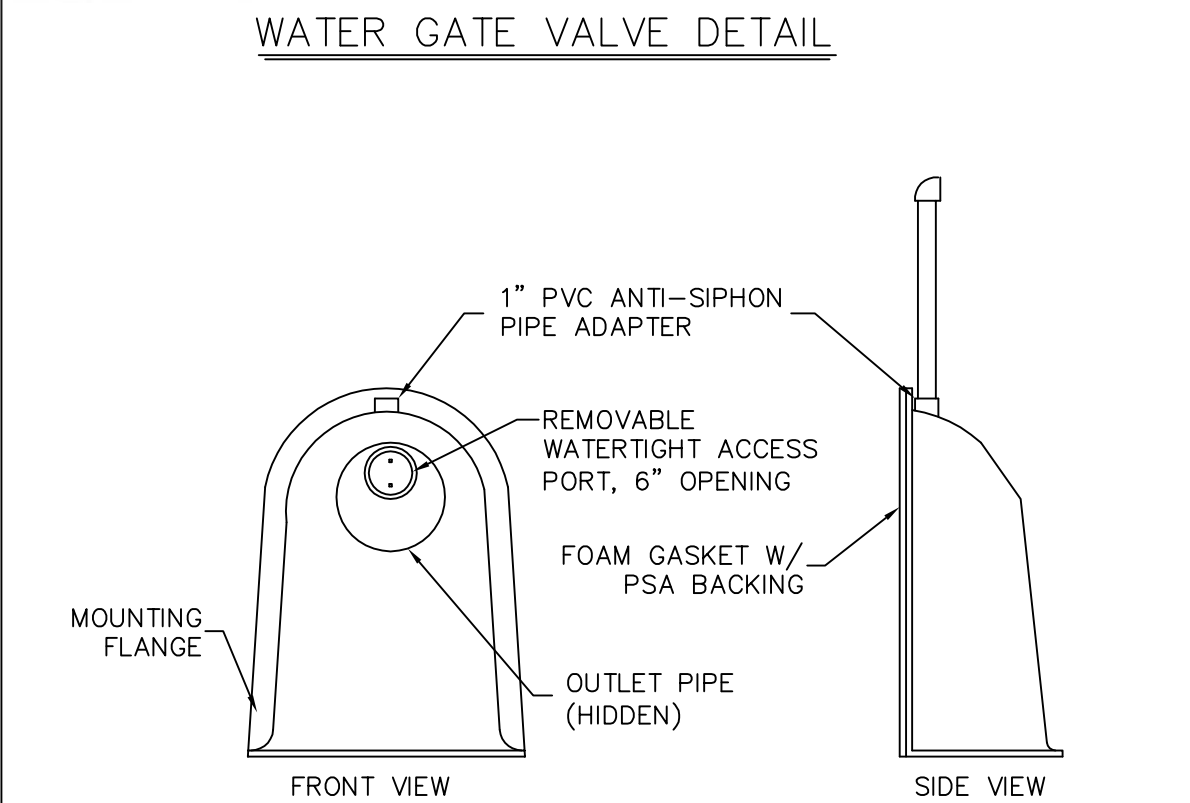
WATER GATE VALVE DETAIL



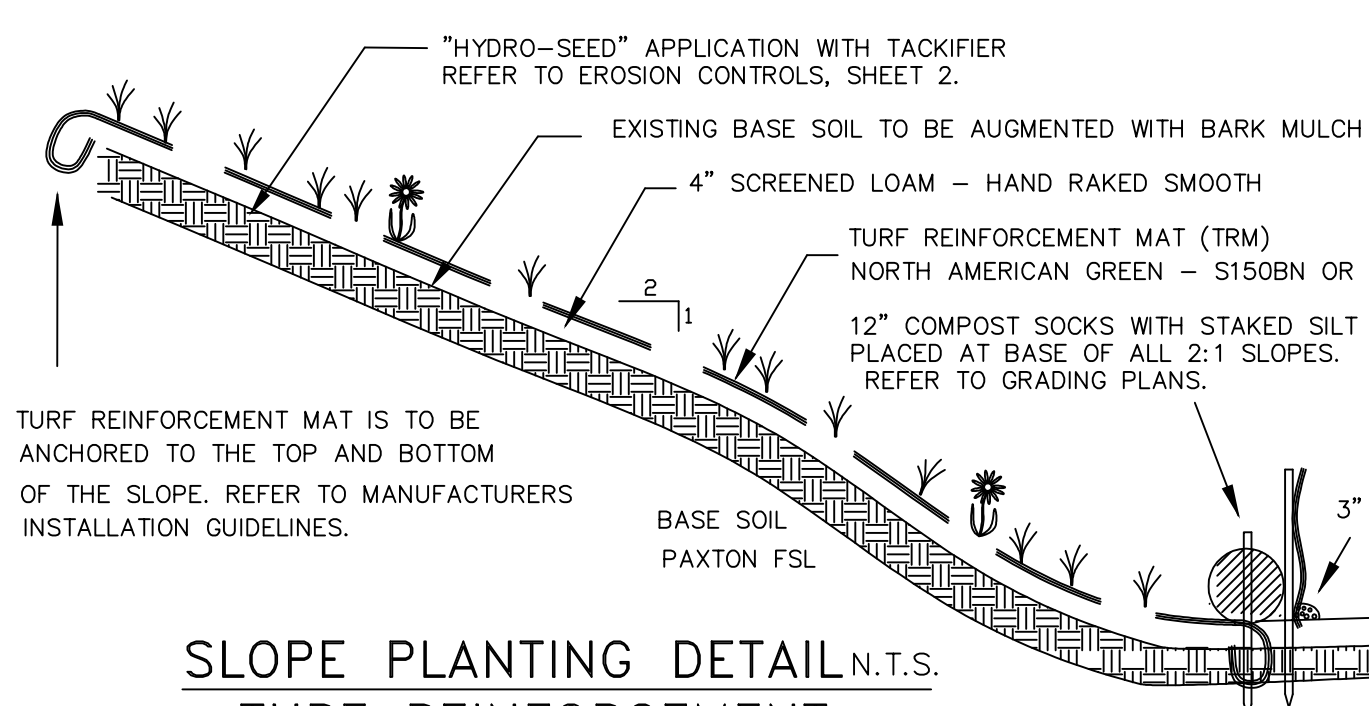
CONCRETE SIDEWALK N.T.S.



MECHANICAL JOINT TEE WITH 3 VALVES

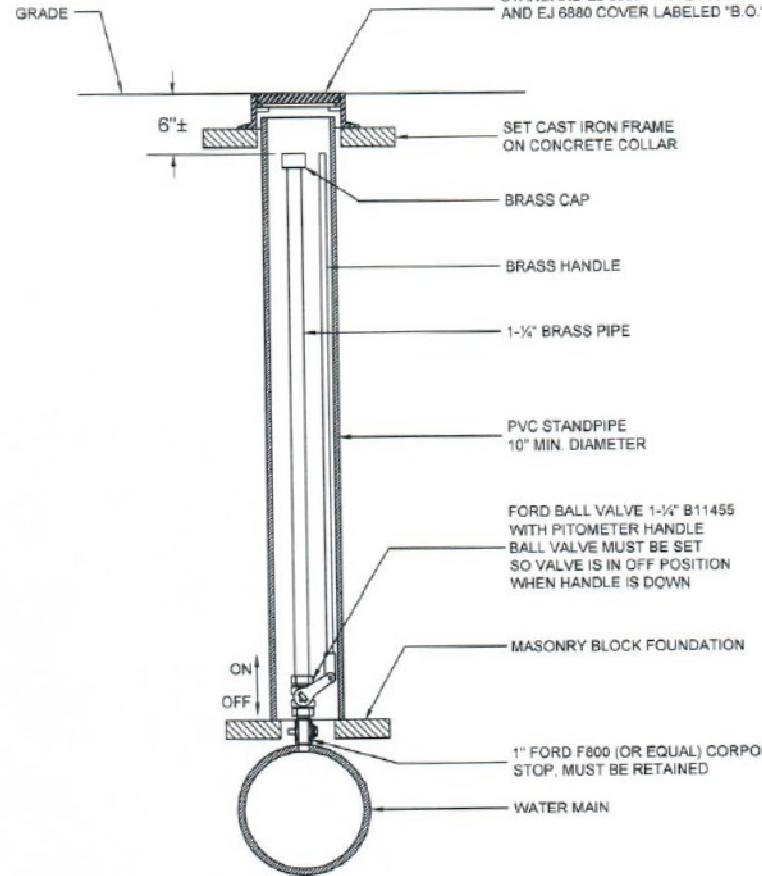


CATCHBASIN HOOD DETAIL

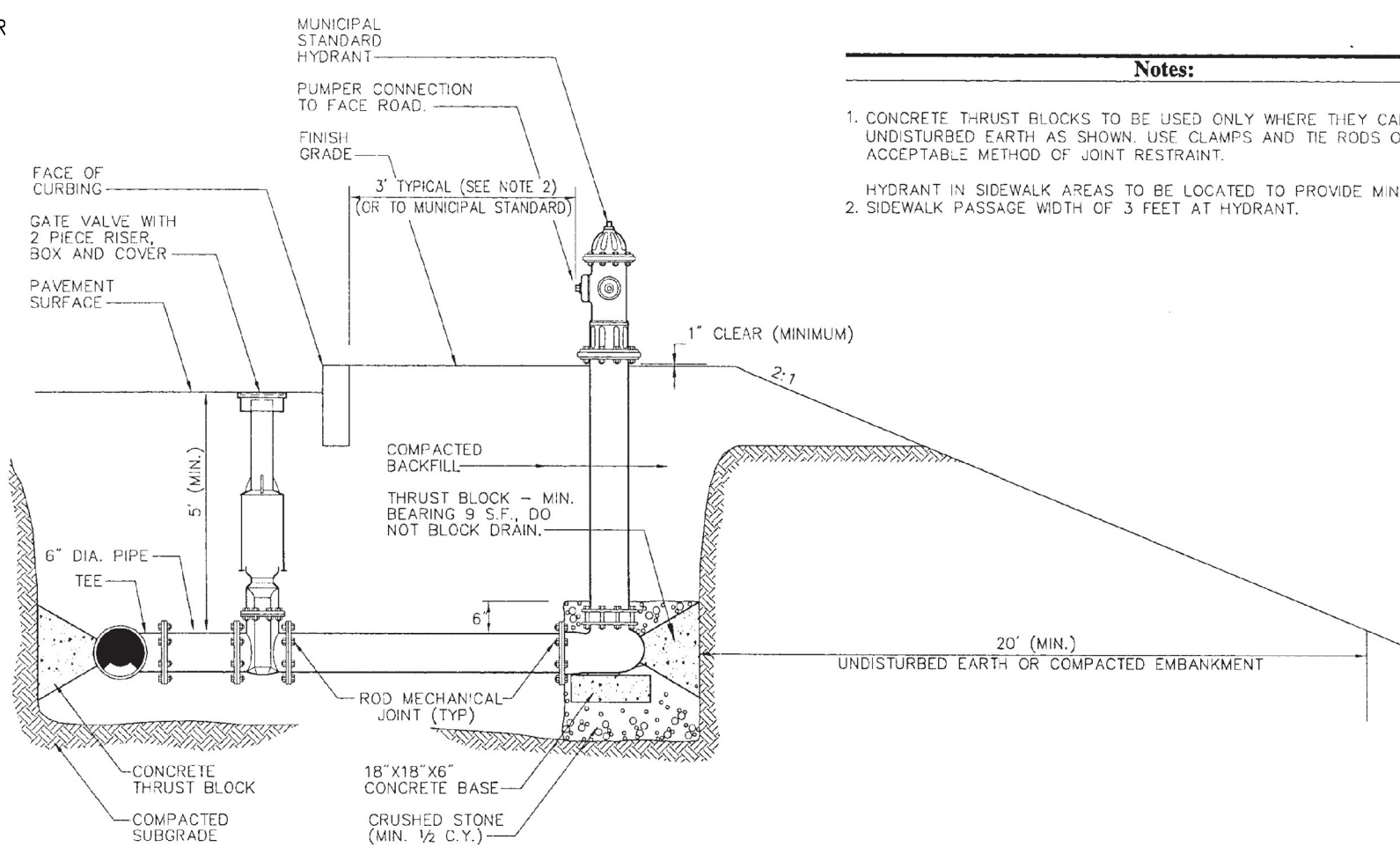


SLOPE PLANTING DETAIL N.T.S.  
TURF REINFORCEMENT

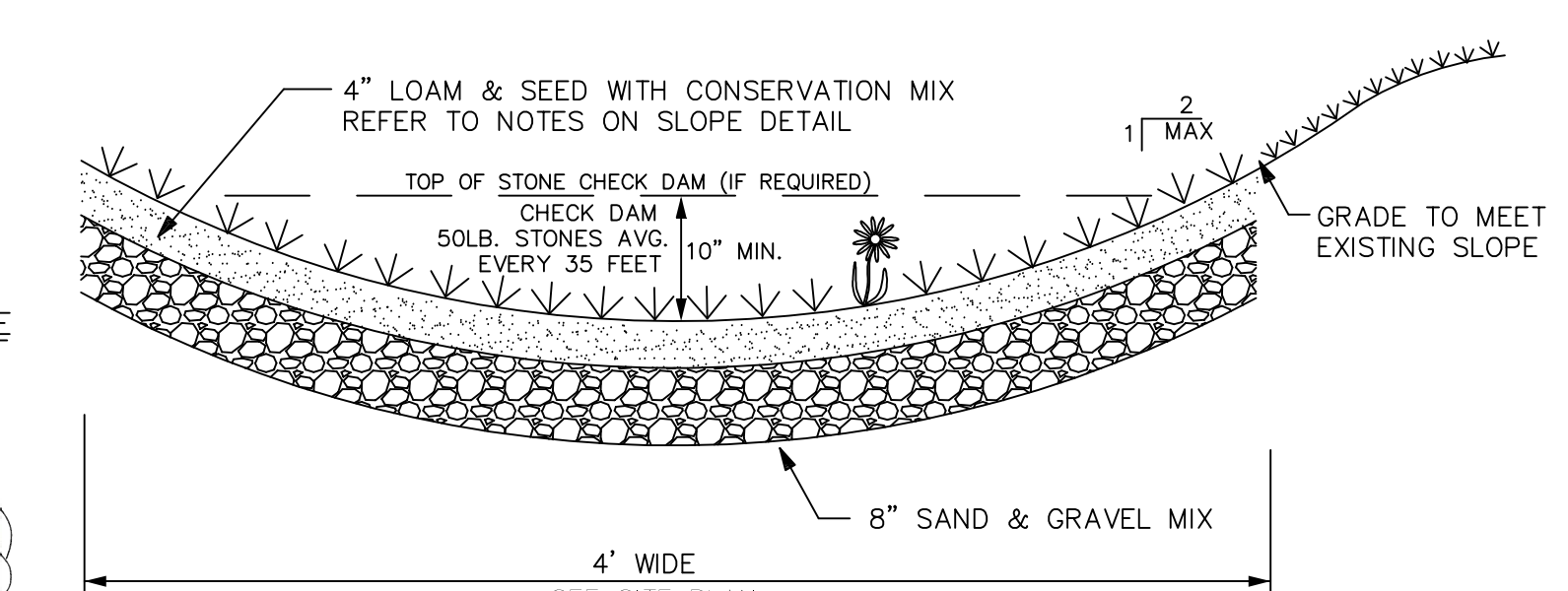
ALL SLOPES GREATER THAN 3:1 ARE TO BE STABILIZED WITH A TURF REINFORCEMENT MAT (TRM) MANUFACTURED TO MEET THE FOLLOWING SPECIFICATIONS.  
FUNCTIONAL LONGEVITY = 12 MONTHS  
MATERIAL - 100% STRAW/COCONUT FIBER MATRIX WITH BIODEGRADABLE NETTING  
100% BIODEGRADABLE WITHIN 30 MONTHS  
6' WIDE X 100' LONG ROLLS, MINIMUM  
TENSILE STRENGTH = 156 X 110 LBS/FT  
SHEAR STRESS = 1.80 LBS/FT<sup>2</sup>



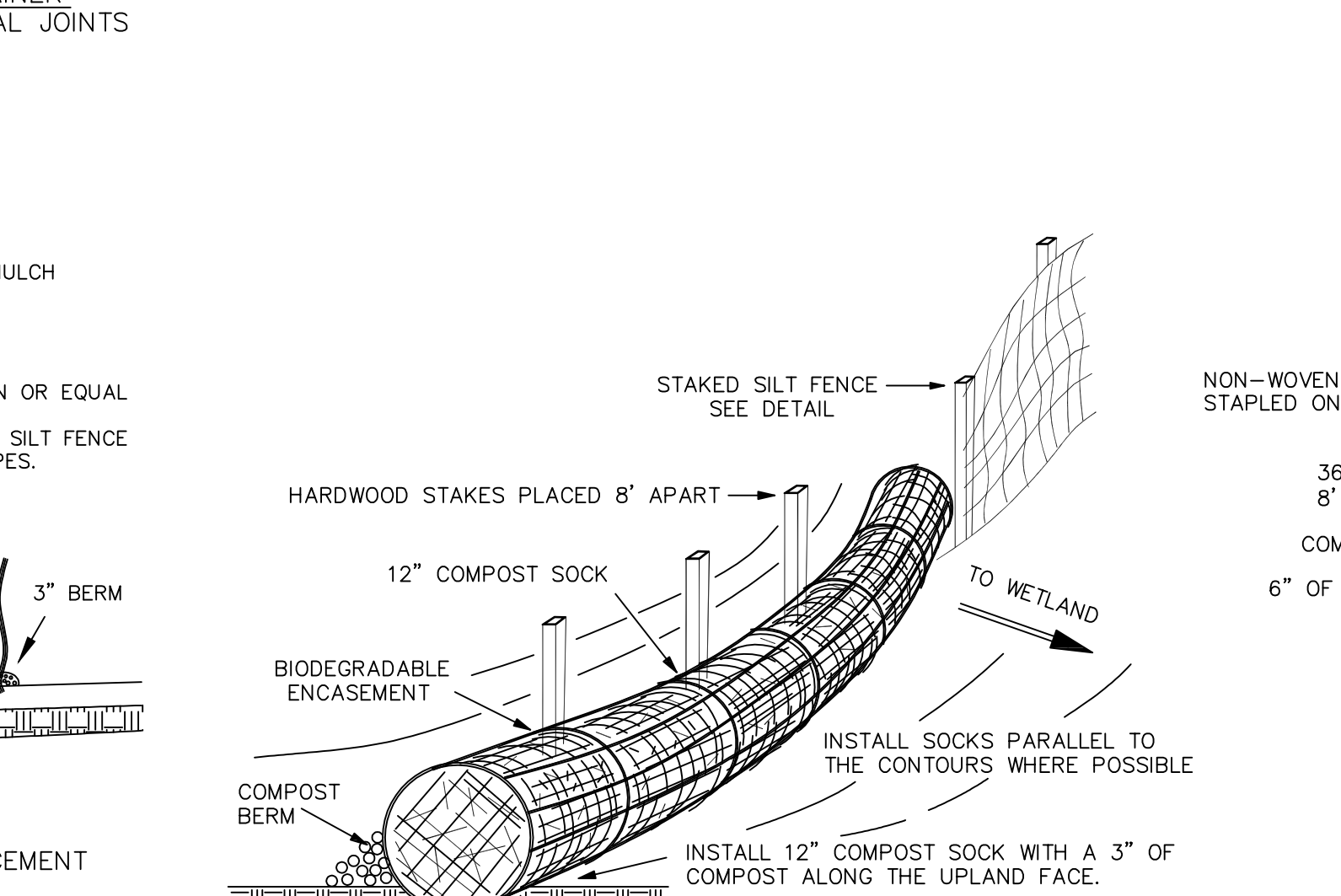
WATER MAIN BLOWOFF VALVE



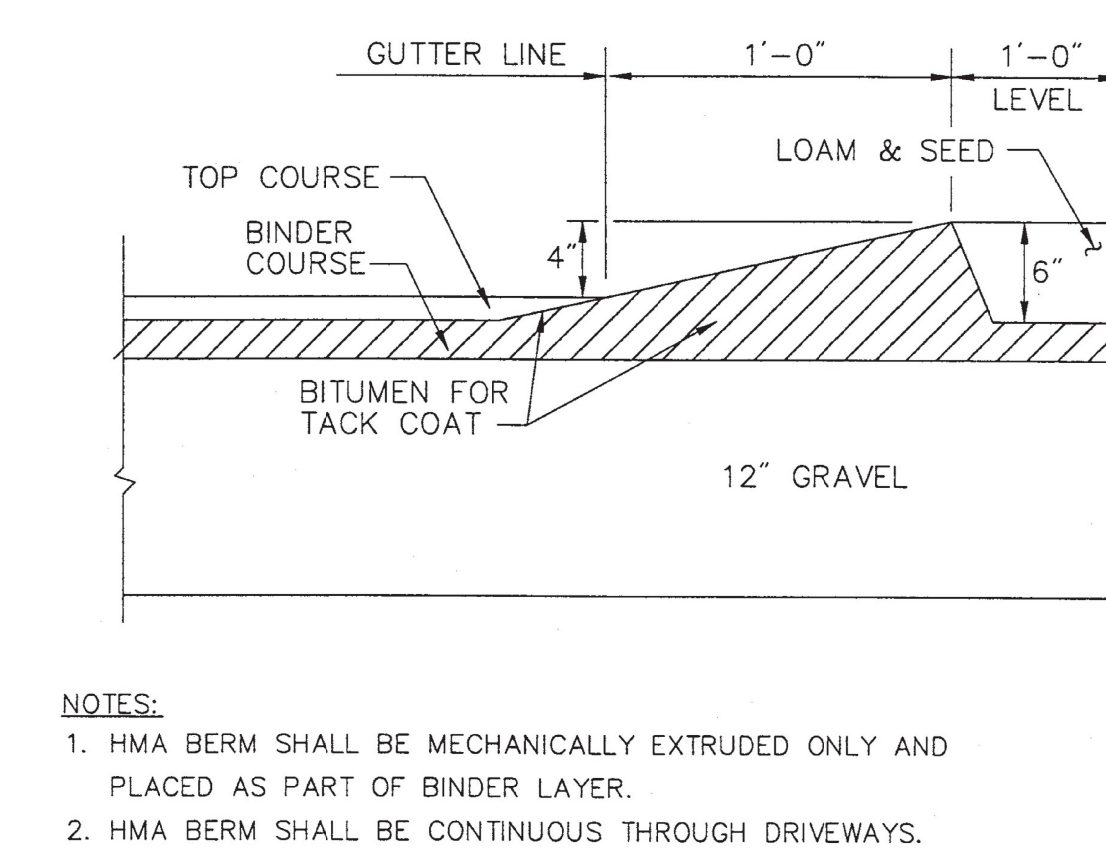
HYDRANT & GATE VALVE DETAIL



GRASSED CHANNEL DETAIL N.T.S.



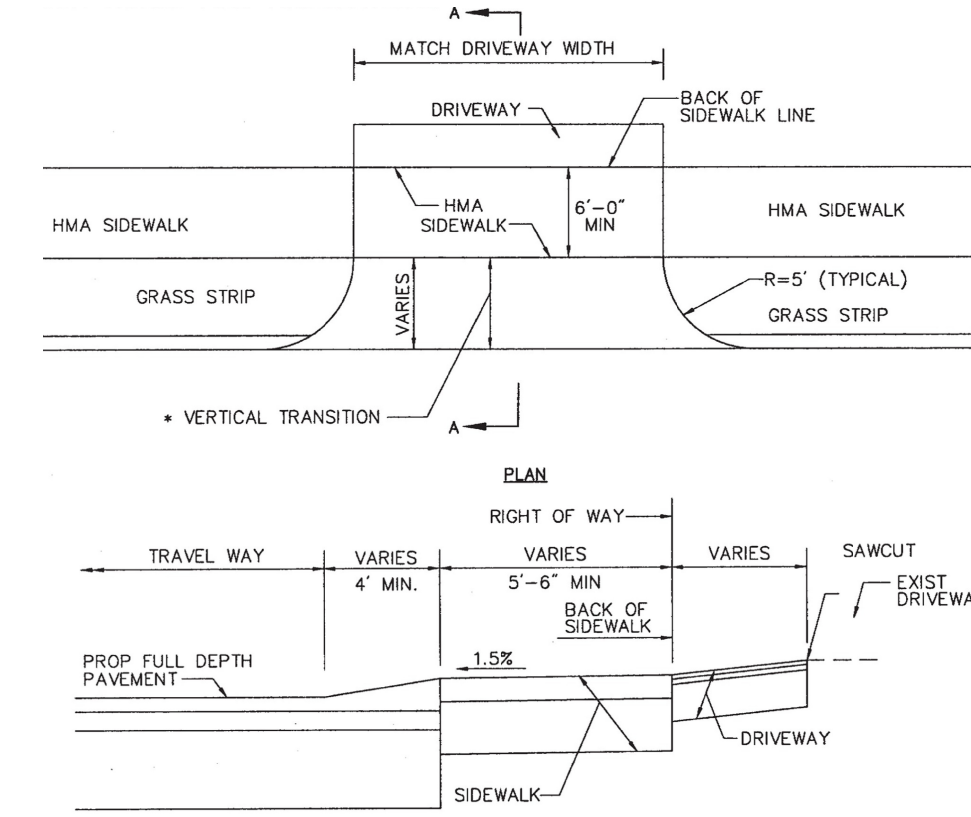
COMPOST SOCK DETAIL



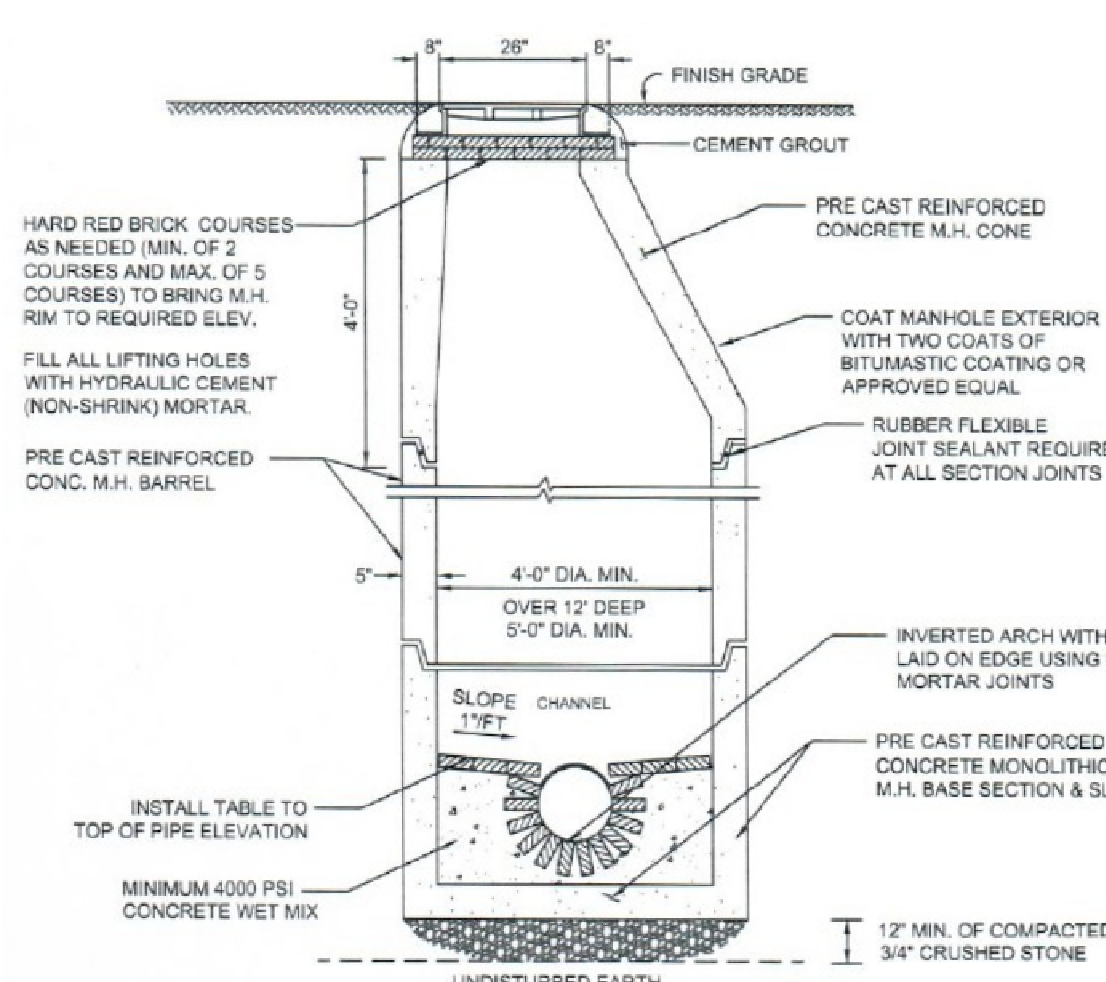
NOTES:

1. HMA BERM SHALL BE MECHANICALLY EXTRUDED ONLY AND PLACED AS PART OF BINDER LAYER.
2. HMA BERM SHALL BE CONTINUOUS THROUGH DRIVEWAYS.

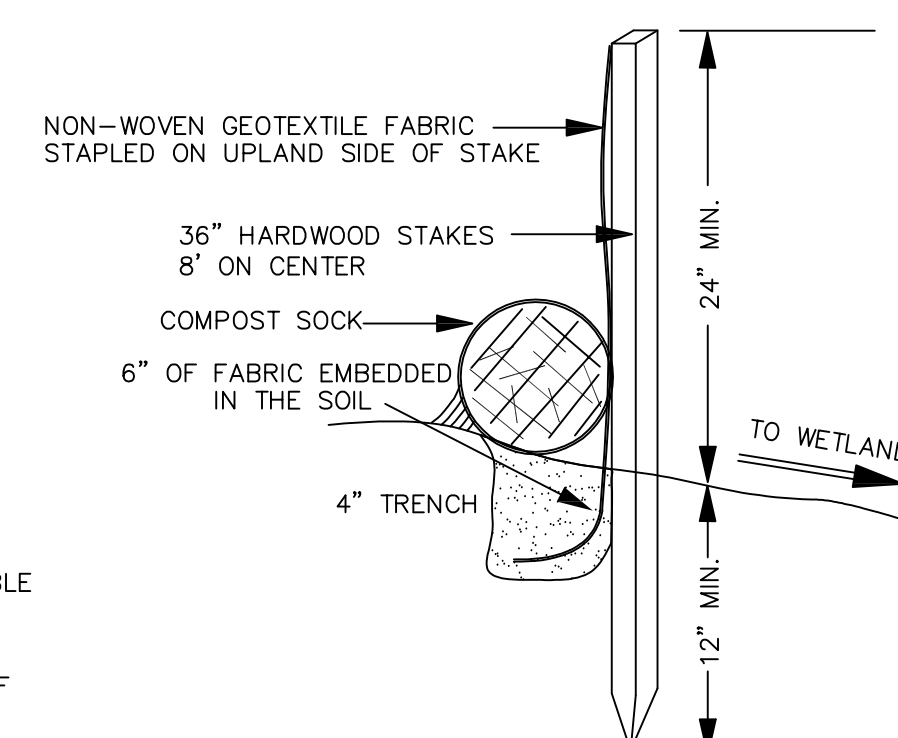
MODIFIED CAPE COD BERM



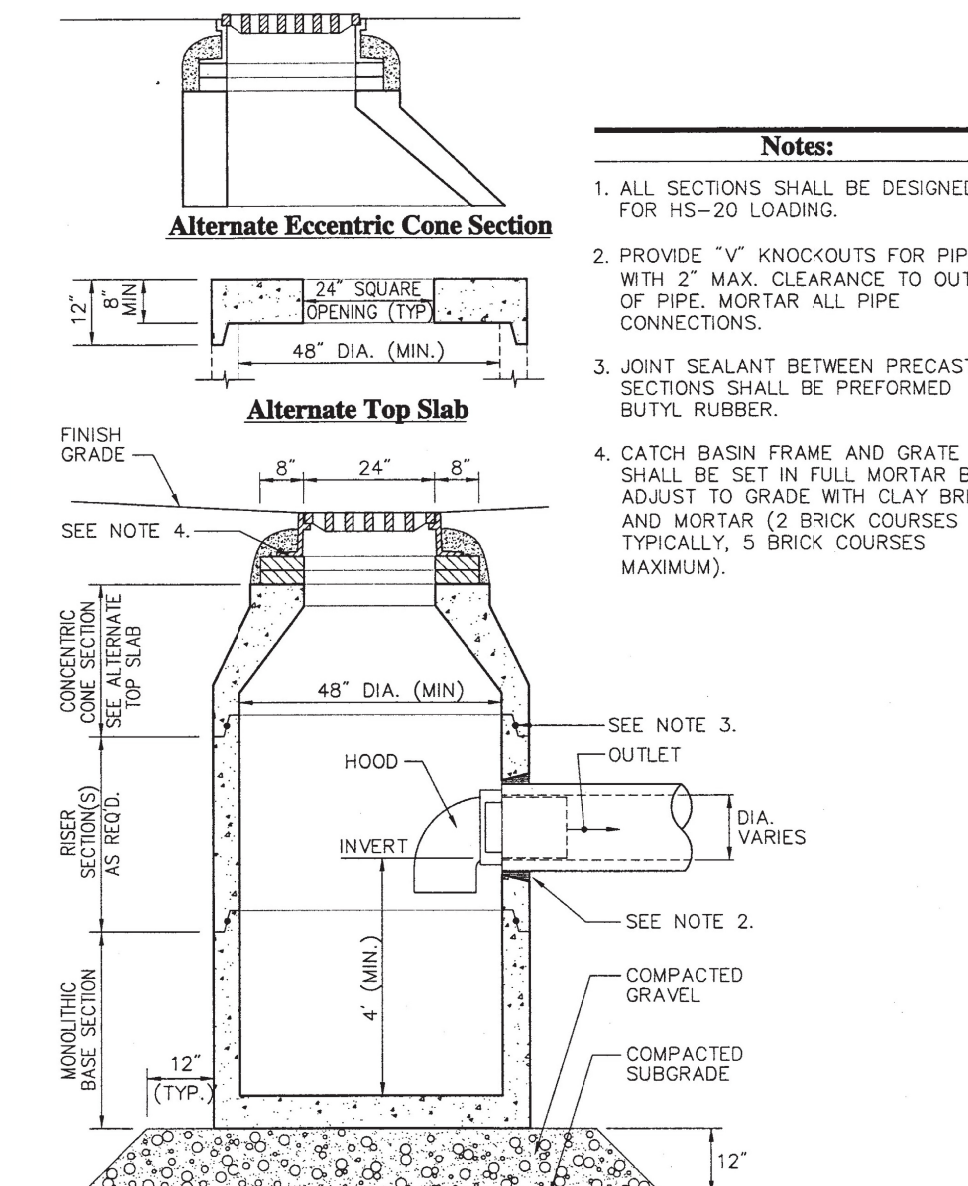
TYPICAL DRIVEWAY WITH SIDEWALK AND ASPHALT BERM



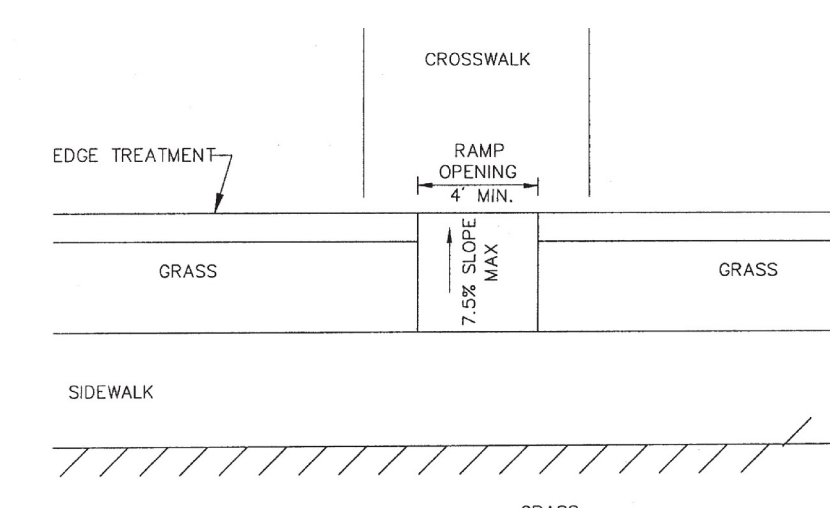
SEWER MANHOLE DETAIL



SILT FENCE DETAIL



CATCH BASIN DETAIL



NOTES:  
1. WHEEL CHAIR RAMPS SHALL COMPLY WITH CURRENT ARCHITECTURAL ACCESS BOARD REQUIREMENTS AT THE TIME OF CONSTRUCTION.  
2. REFER TO THE STANDARD WHEELCHAIR RAMP DETAIL FOR MATERIALS AND OTHER INFORMATION.

WHEELCHAIR RAMP WITH GRASS STRIP

SITE PLAN APPROVAL  
MEDWAY PLANNING & ECONOMIC  
DEVELOPMENT BOARD

DATE OF APPROVAL \_\_\_\_\_  
DATE OF ENDORSEMENT \_\_\_\_\_

FOR REGISTRY OF DEEDS USE ONLY

DESIGNED BY: R. G. Murphy  
SCALE: 1" = 40'

REVIEWED BY: N. G. Hill  
PLAN NO.: S-22-35

SHEET: 10 OF 16  
DATE: MAY 24, 2023

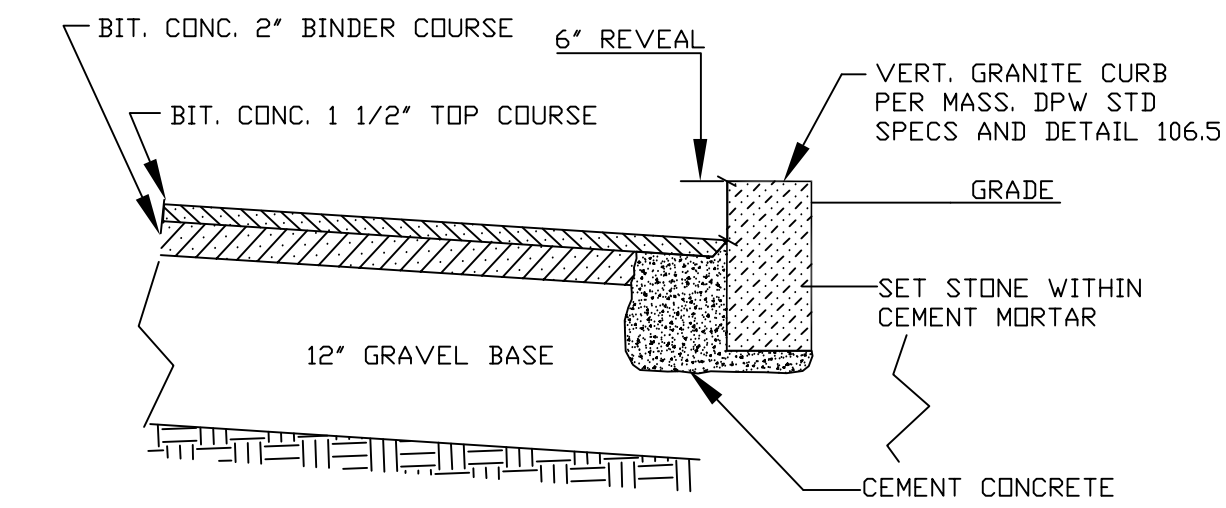
ROBERT G. MURPHY & ASSOC., INC.  
ENVIRONMENTAL CONSULTANTS  
214 Worcester Street  
North Grafton, Massachusetts 01536  
(508) 839-0310  
Fax: (508) 839-5914

MOCKINGBIRD LANE  
SITE DETAILS & SPECIFICATIONS  
MOCKINGBIRD LANE, MEDWAY, MA

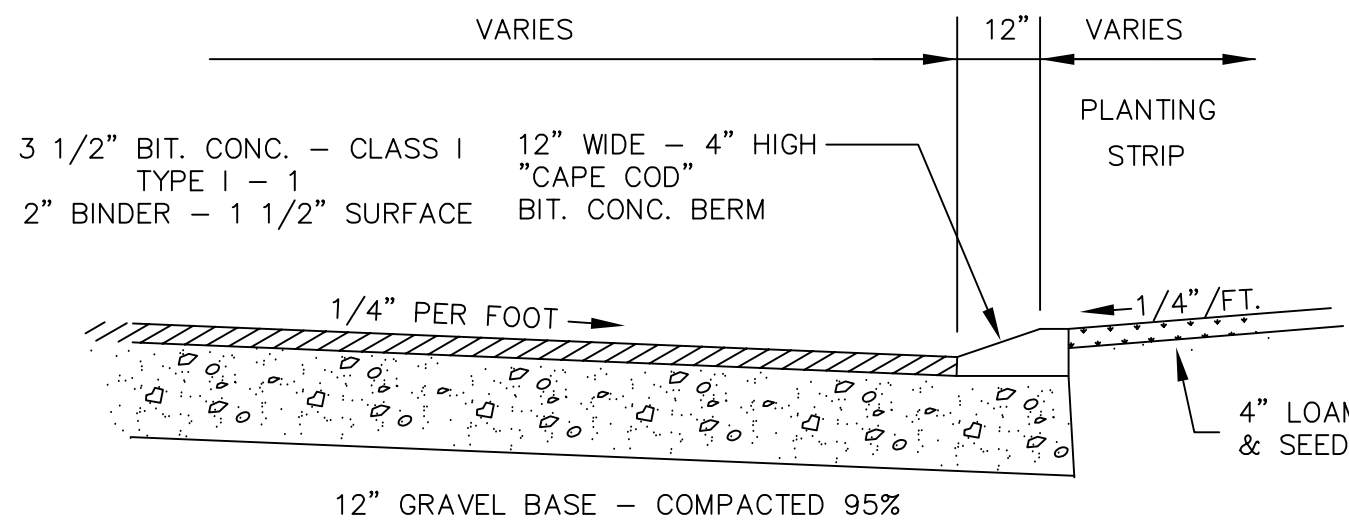
REVISION: SEE TETRA TECH REVIEW 10-23-2023 RGM & NGH 12-26-2023  
REVISION: ADDED DOWNSPOUT FILTER DETAIL RGM & NGH 3-30-2024

DETAILS-1

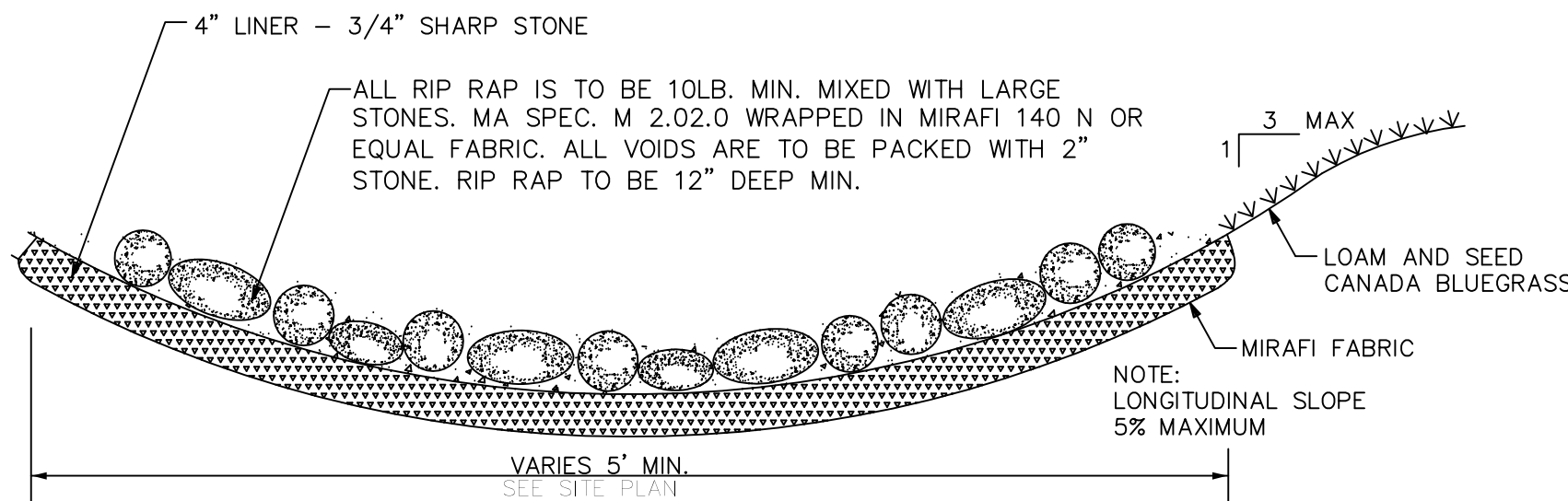




VERTICAL GRANITE CURB N.T.S.



PAVEMENT & CURB DETAIL  
NTS

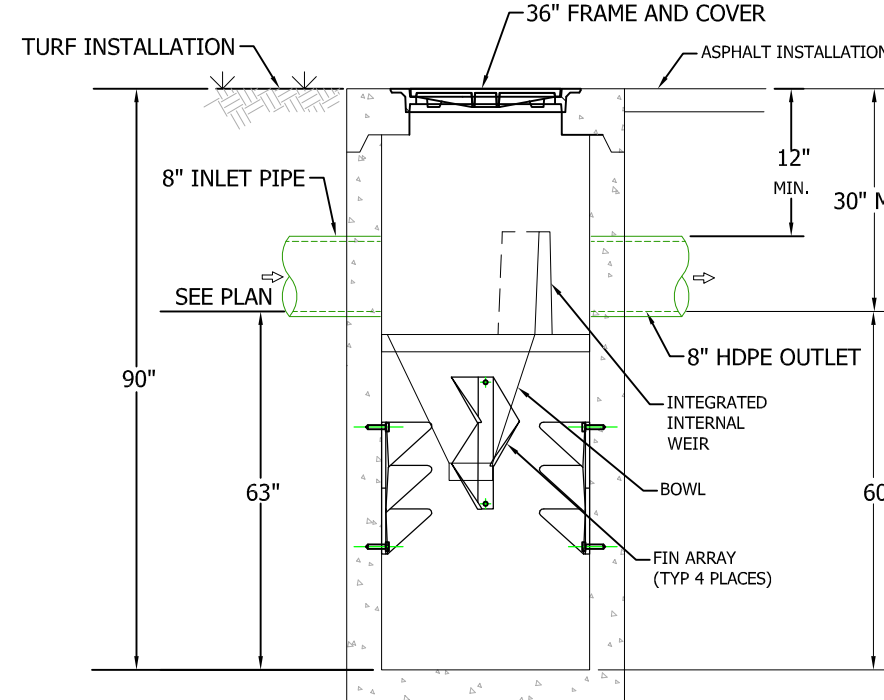


RIPRAP CHANNEL DETAIL N.T.S.

#### PRODUCT SPECIFICATIONS

THE STORMWATER TREATMENT UNIT SHALL BE AN INLINE UNIT CAPABLE OF CONVEYING 100 % OF THE DESIGN PEAK FLOW. IF PEAK FLOW RATES EXCEED MAXIMUM HYDRAULIC RATE, THE UNIT SHALL BE INSTALLED OFFLINE.

THE BARRACUDA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 80 % OF THE SUSPENDED SOLIDS ON AN ANNUAL AGGREGATE REMOVAL BASIS. SAID REMOVAL SHALL BE BASED ON FULL-SCALE THIRD PARTY TESTING USING OK-110 MEDIA GRADATION OR EQUIVALENT AND 300 mg/L INFLUENT CONCENTRATION. SAID FULL SCALE TESTING SHALL HAVE INCLUDED SEDIMENT CAPTURE BASED ON ACTUAL TOTAL MASS COLLECTED BY THE STORMWATER TREATMENT UNIT.

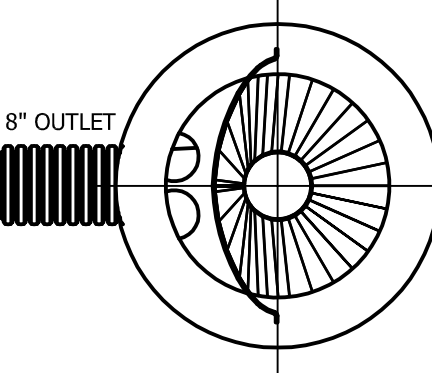


CONTRACTOR TO PROVIDE CRANE TO SET UNIT  
SECTION VIEW A-A  
SCALE: N.T.S.

**BARRACUDA S3**



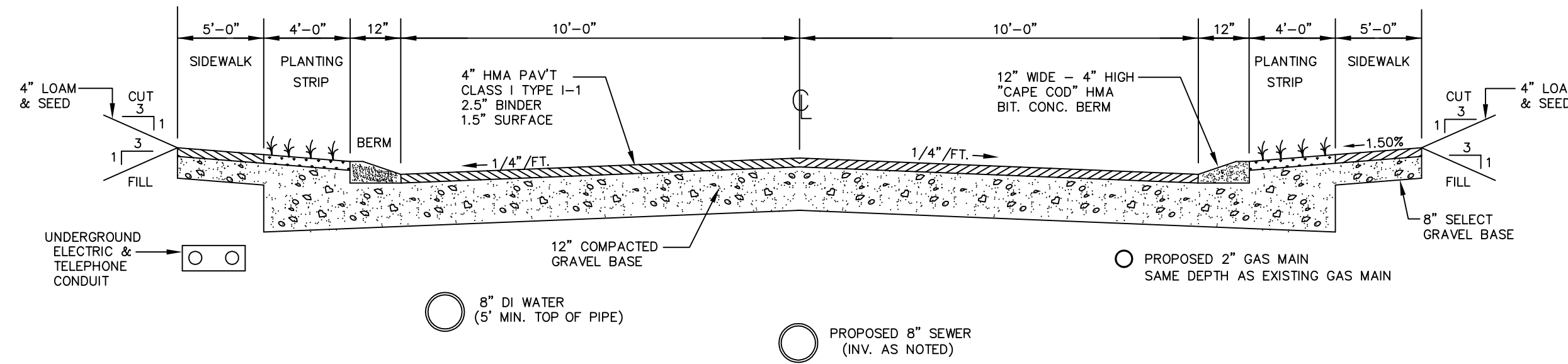
**BC-1**  
BARRACUDA S3  
(36" MANHOLE PROVIDED  
BY BAYSAYER OR APPROVED EQUAL



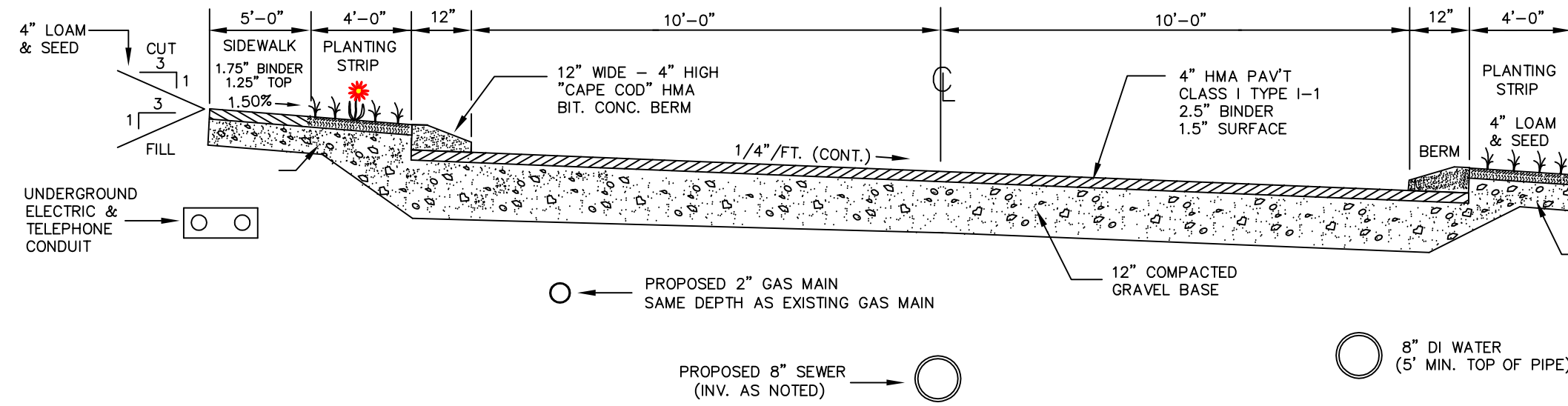
SITE SPECIFIC PLAN VIEW  
NTS



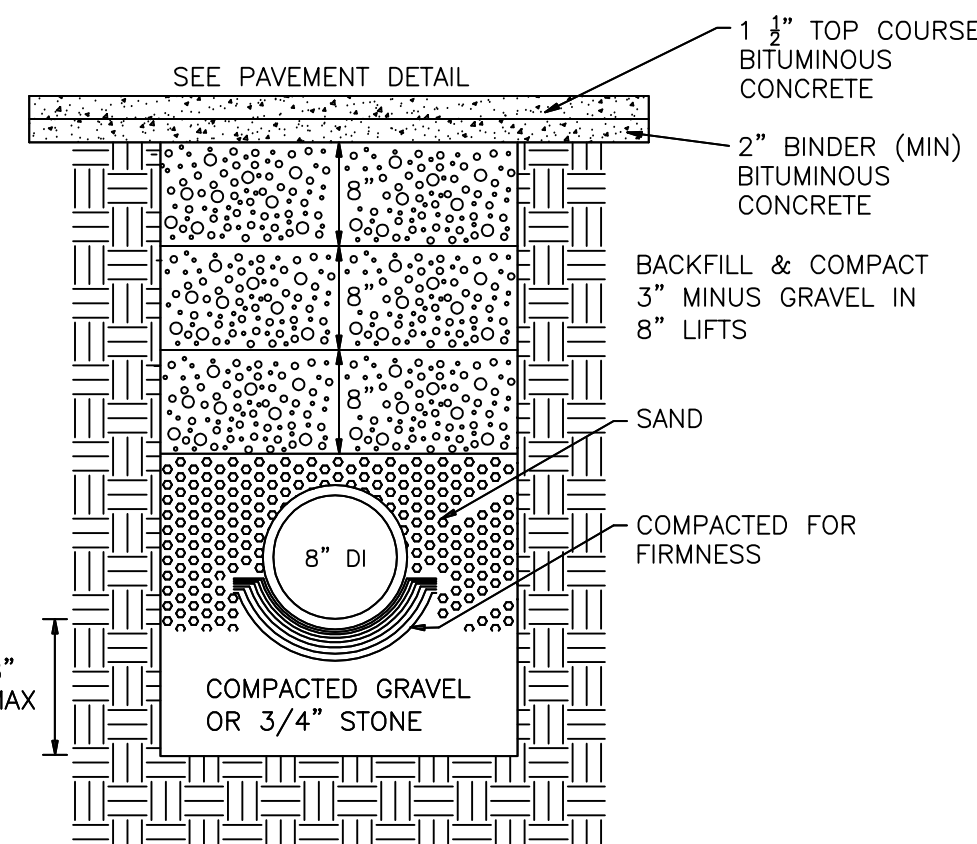
1030 Deer Hollow Drive  
Mount Airy, MD 21771  
1-800-BAYSAYER  
1-800-225-7253



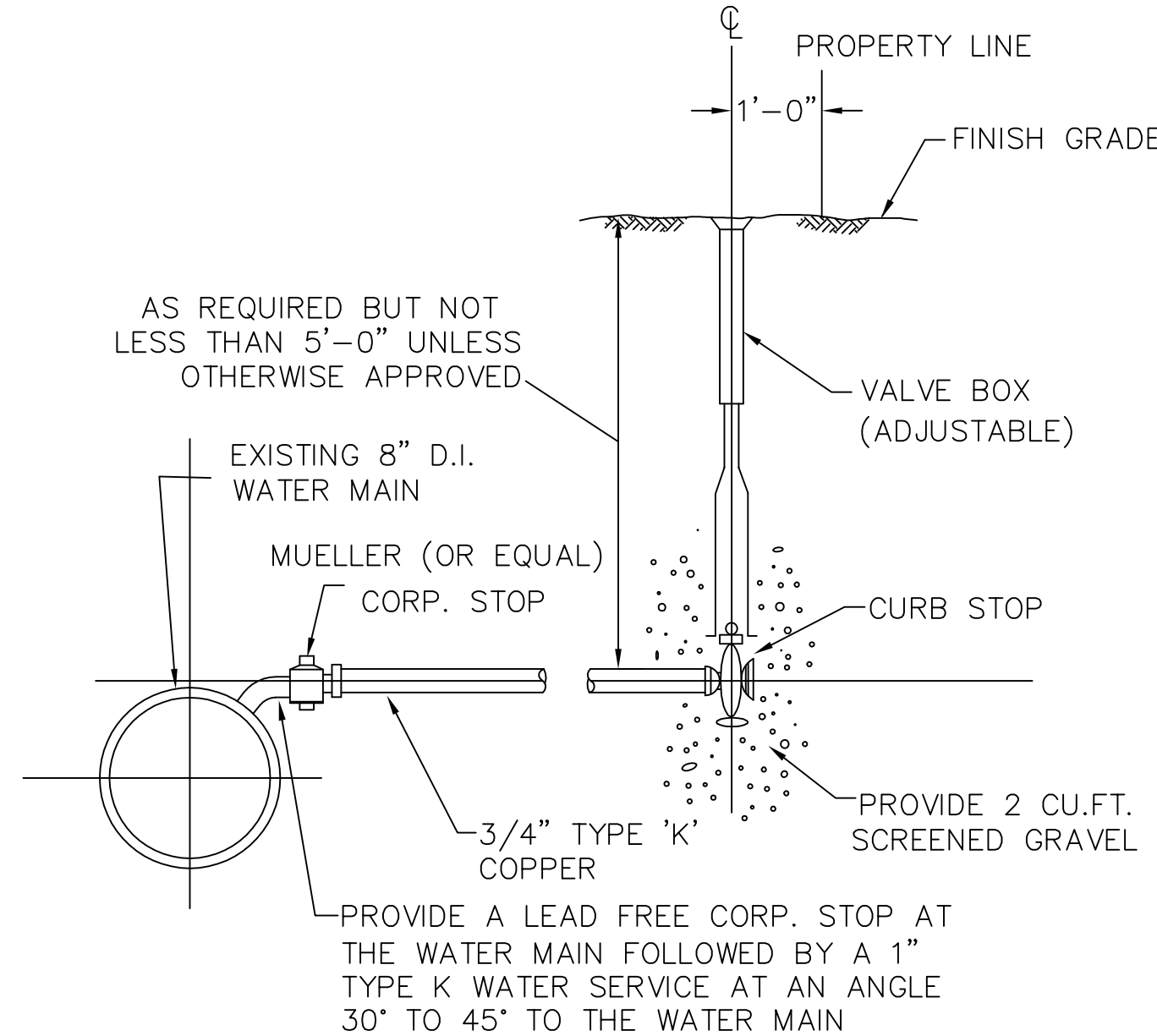
ROADWAY CROSS SECTION N.T.S.  
STA. 1+00 TO STA. 4+50



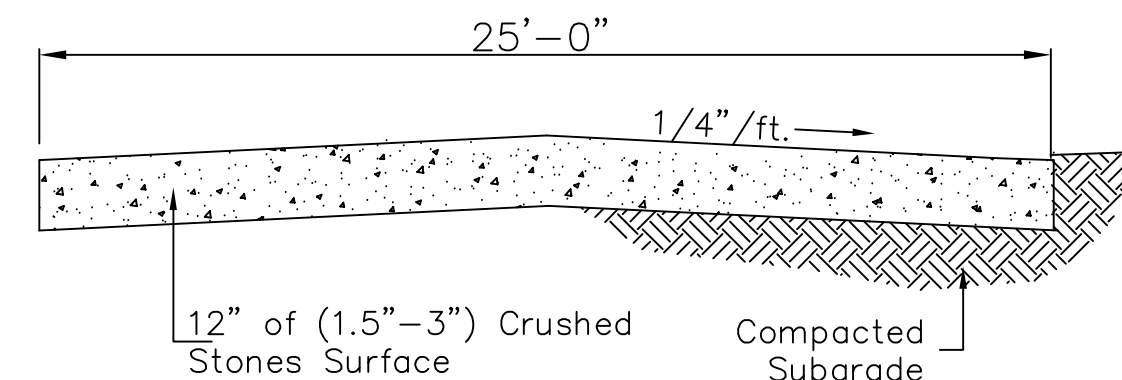
SUPERELEVATION SECTION N.T.S.  
STA. 0+16 TO STA. 1+00



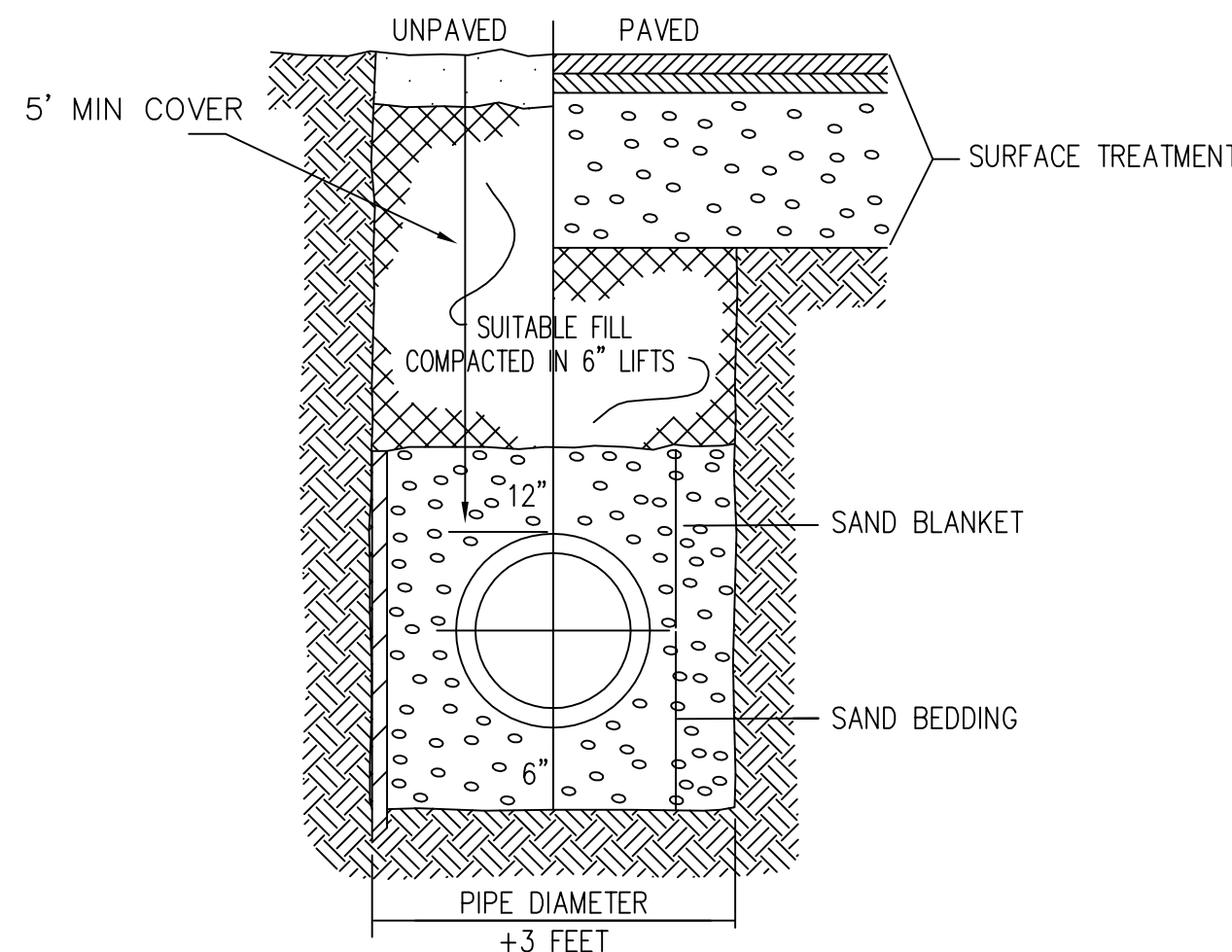
UTILITY TRENCH SECTION N.T.S.



TYPICAL PERMANENT SERVICE CONNECTION  
N T S



TEMPORARY 25' CONSTRUCTION ENTRANCE  
NTS

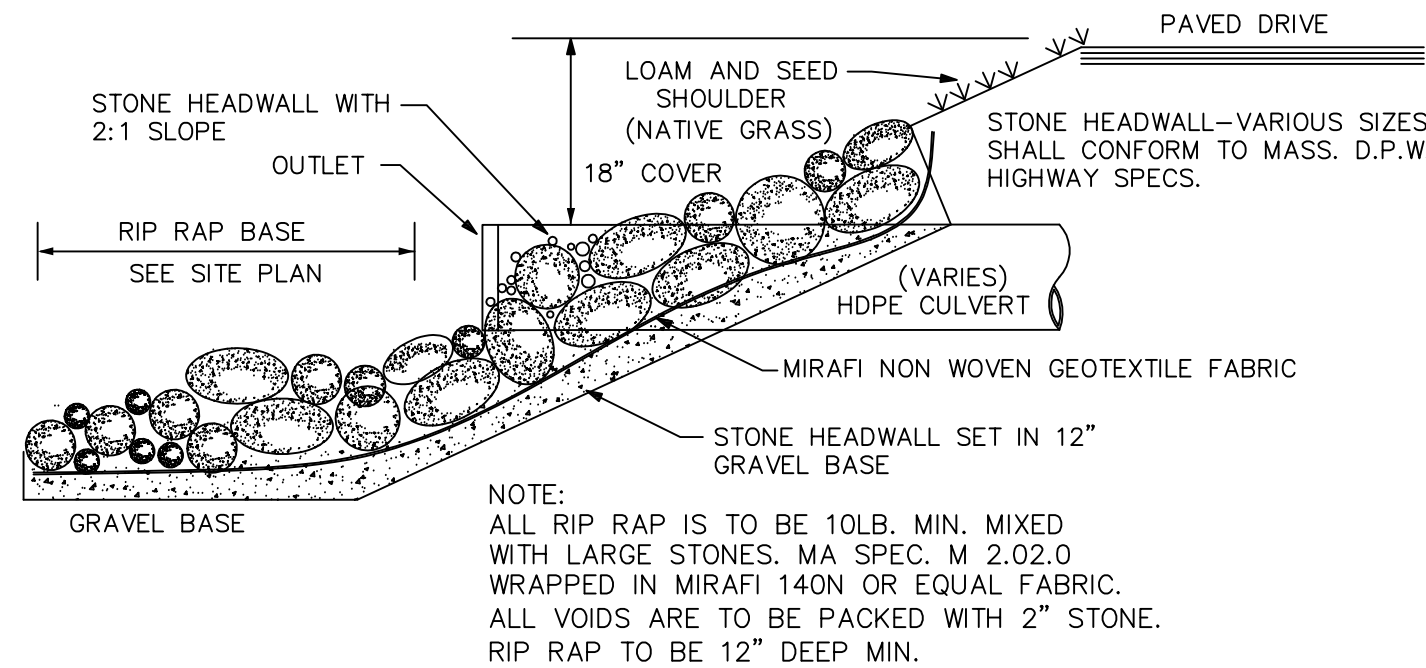


FOR SHEETED TRENCH  $W_s = 4/D + 32'$  OR 50', WHICHEVER IS GREATER. FOR UNSHEETED TRENCH  $W_u = 4/3 D + 18'$  OR 36', WHICHEVER IS GREATER.

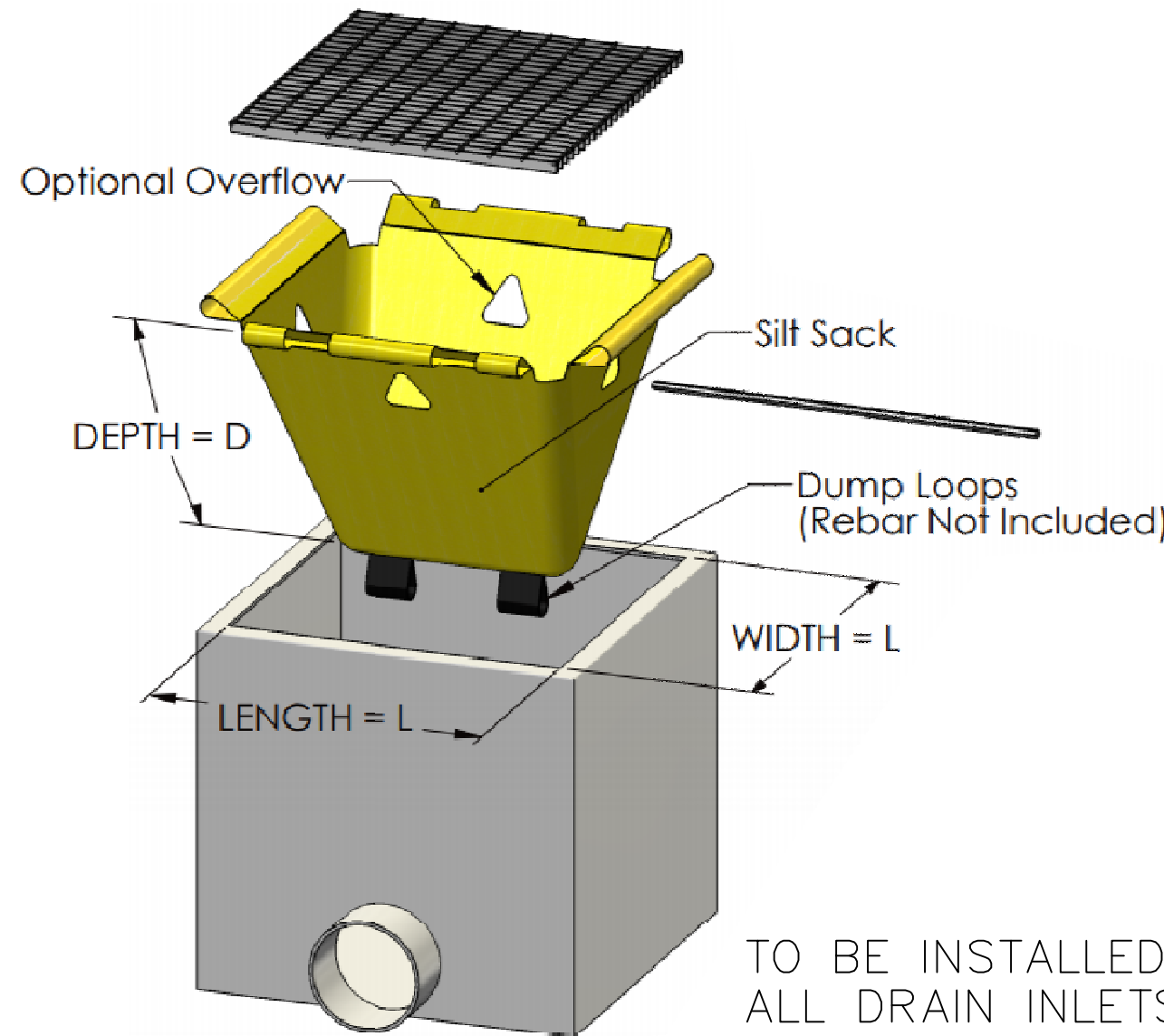
NOTES:

1. TRENCHES MAY BE EXCAVATED WIDER THAN THE TRENCH WIDTH  $W_s$  ABOVE THE "LINE OF NARROW TRENCH LIMIT".
2. BELOW THE "LINE OF NARROW TRENCH LIMIT" THE TRENCH SHALL NOT BE EXCAVATED BEYOND THE TRENCH WIDTH  $W_s$ .
3. SHEETING, IF USED, IN ALL CASES SHALL BE LEFT IN PLACE BELOW A LINE ONE FOOT ABOVE THE TOP OF THE PIPE, UNLESS OTHERWISE INDICATED OR DIRECTED.
4. "COVER" AT ANY POINT SHALL BE DEFINED AS THE VERTICAL DISTANCE FROM THE UPPERMOST POINT OF THE PIPE TO A LINE WHICH CONNECTS THE SURFACE OF UNDISTURBED GROUND AT EITHER SIDE OF THE TRENCH AND IS AT RIGHT ANGLES TO THE DIRECTION OF THE PIPE.
5. WHERE FUTURE EXTENSION OF A PLUGGED PIPE OR PLUGGED BRANCH WILL ENTAIL ROCK EXCAVATION, TRENCH EXCAVATION IN ROCK SHALL BE EXTENDED FOR A DISTANCE OF FIVE FEET BEYOND THE PLUG.

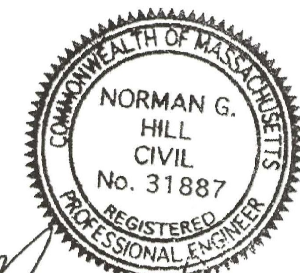
TYPICAL WATER MAIN TRENCH SECTION  
NOT TO SCALE



HDPE CULVERT- RIP RAP HEADWALL DETAIL N.T.S.




POLYPROPYLENE SILT SACK



*Norman G. Hill, PE* 3-20-24  
NORMAN G. HILL, PE DATE

**LAND PLANNING, INC.**  
214 Worcester Street  
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 11 OF 16
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: MAY 24, 2023
<div><div>Robert G. Murphy &amp; Associates, Inc. ENVIRONMENTAL CONSULTANTS</div><div>RGMENVIRON@VERIZON.NET</div></div> <div>ROBERT G. MURPHY &amp; ASSOC., INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 Fax: (508) 839-5914</div>		
<div>MOCKINGBIRD LANE SITE DETAILS &amp; SPECIFICATIONS MOCKINGBIRD LANE, MEDWAY, MA</div>		
REVISION: SEE TETRA TECH REVIEW 10-23-2023 RGM & NGH 12-26-2023		DETAILS-2
REVISION: SEE TETRA TECH REVIEW 1-25-2024 RGM & NGH 3-20-2024		



MAINTENANCE OF THE HYDRODYNAMIC DRAINAGE SEPARATORS

1) Barracuda S-3@ Maintenance Procedures

Maintenance of the Barracuda S-3 is performed using vacuum trucks. No entry into the unit is required for maintenance. The Vacuum Service Industry is a well established sector of the service industry which cleans underground tanks, sewers and catch-basins. Costs to clean the Barracuda S-3 vary based on the size of unit and transportation distances. The Barracuda unit must be cleaned by the contractor after the site is stabilized. Due to the need to protect the subsurface infiltration systems incorporated within the stormwater management sytem, there will be a recorded requirement to initiate a maintainance program once the catch basins are brought "on line". The Condominium Association will be responsible to provide the Medway Conservation Commission with documentation of the services as outlined below.

1.1 Maintenance Costs

A typical cleaning cost (equipment and personnel) is estimated to be approximately \$300 exclusive of the disposal costs. This cost is based on each unit. Economics of scale are expected where there are six units. The time to clean the Barracuda S-3 is approximately 3 hours (includes transportation/disposal). Disposal costs are estimated to be in the order of \$300 to \$500. The cost of the annual street sweeping will be approximately \$1,500 based on an annual agreement and is subject to change. These costs would be incurred during the maintenance of any stormwater quality structure and not just the Hydrodynamic Drainage Separators. The costs for maintaining the entire drainage facilities for Mockingbird Lane can be reduced by entering into a contractual agreement with a licensed waste management company. Prior to the sale of individual homes, the prospective buyers are to be made aware of all costs to be incurred for the annual maintenance of the multifamily residential complex.

1.2 Maintenance Frequency

Annual maintenance is recommended. Approximately 15 % of the Barracuda S-3 total sediment capacity will be reduced each year based on the maximum impervious drainage. Although it is recommended that annual maintenance be performed initially, the frequency of maintenance may need to be increased or reduced based on local conditions (i.e. the specific type of street sweeping, if the unit is filling up with sediment more quickly than projected, maintenance may be required semi-annually; conversely once the site has stabilized maintenance may only be required once every two or three years). The Condominium Association will be responsible to provide the Medway Conservation Commission with documentation of all the maintenance requirements of the Stormwater management system. Refer to the recorded Order of Conditions.

1.3 Spills

The Barracuda S-3 is often implemented in areas where the potential for spills is great. The Barracuda S-3 Hydrodynamic Drainage Separator should be cleaned immediately after a spill occurs by a licensed liquid waste hauler. All spills are to be reported to the Medway Board of Health.

1.4 Disposal

Disposal options for the sediment will probably range from disposal in a works yard to disposal in a sanitary landfill site. It is not anticipated that the sediment would be classified as hazardous waste. Petroleum waste products collected in the Barracuda Separators (oil/chemical/fuel spills) should be removed by a licensed waste management company. All spills are to be reported to the Medway Board of Health

1.5 Inspection

The Barracuda S-3 can be easily inspected from the surface by removing the maintenance cover. The presence of oil in the interceptor can be determined by inserting a tube dipstick in the 6" (150 mm) vent tube. Similarly, the depth of sediment can be measured from the surface without entry into the manhole via a dipstick tube equipped with a ball valve (Sludge Judge). Maintenance should be performed once the sediment depth exceeds the guideline values for the MAX S-3. The insert has been designed as a platform for maintenance personnel in the event that obstructions need to be removed, sewer flushing needs to be performed, or camera surveys are required.

STORMWATER MANAGEMENT ILLICIT DISCHARGE COMPLIANCE STATEMENT

The owner and developer, Tortcon Builders, Inc. has proposed a multifamily residential development on Summer Street (Route 126) in Medway, Massachusetts. As shown on the Site Plans as submitted with this application, the project is to be located along the easterly sideline of Summer Street approximately 800 feet north of Milford Street (Route 109).

The property consists of 5.54 acres of land within the RA-2 Zoning District and the Multifamily Housing Overlay District and is recorded on the Medway Assessors Map No 46 as Parcel 028. This proposed multifamily residential complex has been designed pursuant to Section 5.6.4 of the Medway Zoning Bylaw as amended on Nov. 14, 2022. The intent of the owner is to develop the property following the guidelines for a residential development in a manner consistent with the Multifamily Overlay District regulations.

The proposed construction of this property involves developing seven multifamily dwellings with associated driveways, utilities, grading and landscaping. During the design process, special attention has been given to the control of stormwater runoff and the protection of the wetland resource areas located to the north and south within this property. As shown in the published soil survey for Norfolk County, the majority of this site is classified as well drained Charlton Fine Sandy Loam and Canton Fine Sandy Loam with a limited percentage of impervious rock outcrop. The soil has been classified as hydrologic group "B" by the Natural Resources Conservation Service.

The paved driveway, parking areas and sidewalks are provided for local vehicular and pedestrian traffic. For this reason, the potential for hazardous discharges is deemed to be low. Once the project has been completed and occupied, the Homeowner's Association will be responsible for immediately cleaning up minor fuel spills that occur within the driveway and parking areas with oil absorbent powder. Petroleum based waste products collected in the Stormceptor® Catch Basins are to be removed by a licensed waste management company. The contact information for the emergency waste removal provider is to be readily available to the Condominium Association officers. A copy of the Stormwater Pollution Prevention Plan and associated documents are to be readily available on site as well.

The stormwater management system shall be owned, operated, and maintained by the collective owners of the private residential complex. The drainage system is to consist of ADS Barracuda® S-3 Hydrodynamic Drainage Separators and subsurface Infiltration Basins with numerous HD180 Cultec® Chambers, or approved equals. The ADS Barracuda® structures are often implemented in areas where the potential for a fuel spill warrants their installation. The owners of the residential dwellings are responsible to clean fuel spills immediately when detected to avoid contamination of the onsite subsurface drainage system.

All management personnel are to be aware of the Stormwater Pollution Prevention Plan and are to be prepared to implement the requirements contained therein on a moment's notice. The owners are responsible for having a modern and efficient oil spill kit on site that can handle a twenty gallon oil spill. Contact information necessary to procure the emergency services of a professional oil spill handler is to be readily available to all management personnel. In the case of a major fuel spill, the Medway Fire Department and Board of Health are to be notified.

An additional Best Management Practice will be the bi-annual sweeping of the paved areas to remove road sand and contaminants. The owners of the property are responsible for keeping the paved surfaces clean to avoid contamination of the onsite infiltration drainage systems. The Barracuda® manholes are to be inspected and cleaned on a bi-annual basis once the landscaped slopes have been stabilized. The subsurface infiltration basins have been designed with several inspection ports to view the condition of the basins if necessary. These inspection ports are to be maintained in a manner consistent with the DEP Stormwater Management guidelines.

All drainage from the rooftops is to be directed to the subsurface infiltration basins located adjacent to the individual buildings. While the runoff from these sources is considered to be uncontaminated, it will still be necessary to remove organic matter such as leaves, twigs and acorns from the downspouts. Therefore, downspout drainage filters are to be installed as shown on the detail plans where they can easily be inspected and maintained. The homeowners will easily be able to maintain the downspout filters.

The owners of the individual dwellings will be responsible for the storage of normal site maintenance materials such as fertilizer, de-icing chemicals, pesticides, herbicides, and landscape tools. These materials are to be stored and secured inside the building within a common maintenance area. The use of commercial fertilizers should be kept to a minimum to limit excess nutrients from flowing into the catch basins. The use of fertilizers containing phosphorous should be avoided. There is to be no exterior storage of waste products and hazardous chemicals within this property. As a result, there are to be no proposed illicit discharges into the subsurface stormwater infiltration system. All future uses of this property within the Multifamily Overlay District are to be approved by the Medway Planning and Zoning Boards and may require an additional special permit as stated in the Medway Zoning Bylaws.

PLANTING SPECIFICATIONS AND MAINTENANCE PROGRAM

The following is a list of the proposed landscape planting specifications and long term maintenance program for the development of the proposed multifamily residential complex to be located at Mockingbird Lane, Medway, Massachusetts. These specifications are to be followed during the entire construction of Phases 1 and 2 under the direction of the owner and general contractor. Once the Homeowners Association takes responsibility for the general management of the residential complex, the officers are to implement the continuation of the long term maintenance program. This document is to be recorded with the Homeowners Agreement at the Norfolk Registry of Deeds.

1. The contractor and all sub-contractors are to be made aware of the Construction Plans and the recorded Order of Conditions as issued by the Medway Conservation Commission. The primary landscape contractor shall have a Massachusetts Certified Arborist on their staff and all planting of trees and shrubs shall be done under the direct supervision of this individual. All construction personnel are required to be familiar with the plans and specifications applicable to this project. A copy of these documents are to be readily available on site at all times. The Massachusetts Department of Environmental Protection (DEP) file number is to be posted at the entrance to the site prior to commencement of construction. DEP File Number 216-1010.

2. Preparation for the commencement of all landscaping activities shall include but not be limited to the inspection of the erosion controls in the immediate area and to repair the erosion control structures as necessary. Refer to the sequence of construction on Sheet 5 of these documents. Special care is to be taken to identify all buried utilities and drainage systems prior to excavation. All landscape contractors are required to check in with the general contractor on a daily basis to coordinate their efforts with the ongoing construction.

3. All rough grading is to be completed in specific landscape areas prior to the introduction of plant materials. All grading within the site is to follow the approved grading plans. Erosion controls that are damaged during all phases of construction are to be repaired immediately. The erosion controls are to act as a limit of work and are to be maintained as such. Due to the possibility of high intensity rainfall during thunderstorms and hurricanes; a "proactive" approach to controlling erosion will be required. Attention to the weather forecasts is recommended during all periods of land clearing and landscaping. All exposed slopes are to be stabilized as soon as possible. No slopes are to be left untreated for a period exceeding fifteen days. The daily stabilization of the exposed cut and fill slopes should be a priority over all other construction activities from this point on. A heavy fiber "Hydrosed" mixture with a tackifier will limit the potential for erosion of fine sediments along graded slopes that are not yet stabilized. Special care is to be taken to limit drainage runoff from concentrating within the recently graded areas and channeling toward the lower wetland resource areas. Additional compost socks are to be installed along the lower slopes and in areas subject to erosion once the earthen slopes have been planted.

4. Many of the landscaped areas are located within the 100 foot buffer zone of the Bordering Vegetated Wetlands and come under the jurisdiction of the Medway Conservation Commission. Since the existing and proposed topography within this site grades toward the low-lying wetland resource areas, it is imperative that special attention be given to stabilizing the exposed soil as soon as possible. Grinding of stumps is recommended along with the chipping of tree limbs to provide additional erosion control materials along exposed slopes. At no time are the chips to be directed into the adjacent wetlands. Construction materials are to be stockpiled away from the wetland buffer zone as shown on the Two Phased Construction Plan and associated specifications. No heavy equipment is allowed past the approved erosion control barriers without the expressed consent of the Medway Conservation Commission.

5. In places where the grading of landscaped slopes along with the natural topography found here present the possibility of routing channelized stormwater runoff toward the lower wetland areas, it may be necessary to construct temporary settlement basins to control the potential for erosion. Temporary berms constructed with wood chips can be utilized to develop check dams to reduce the channelization of suspended sediments. It should be noted that the contractor will be responsible for the "common sense" approach of maintaining a series of temporary detention basins during all phases of this project. Low spots with evidence of concentrated drainage flow are good indicators of where temporary basins should be located. The contractor is to use proper judgment relative to construction practices during adverse weather conditions. No work is to be performed within 50 feet of the wetlands during periods of heavy rainfall. Staging areas for the fueling, maintenance and storage of construction equipment are to be located outside of the 100 foot buffer zone, where they will not impact the wetland resource areas and all adjacent properties.

6. Grading for the landscape areas should begin in the upper western area adjacent to Summer Street, away from the wetland resource areas where possible. Progressing in an easterly direction in a stepped manner will allow the contractor to identify the potential runoff drainage routes before they become a problem. As shown on the phasing plan, the four buildings closest to Summer Street (Phase 1) are to be constructed and occupied prior to the development of Phase 2. As these buildings are nearing completion, the initial landscape activities shall commence as noted above. If subsurface irrigation systems are to be proposed at this site, they should be installed and accurately identified at this time prior to the placement of plant materials.

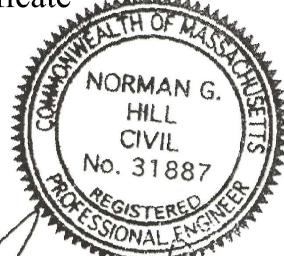
7. All exterior work associated with the construction of the specific buildings and utilities shall be completed and approved prior to the planting of trees, shrubs and lawns. The landscaped areas should be free of construction debris during all phases of landscaping. If the landscaping activities are to be completed during periods of dry weather, adequate steps shall be taken to avoid excessive dust emanating from the arid soils. No chemicals are to be used within the landscaped areas for the control of dust.

8. As previously stated, all planting of trees and shrubs is to be supervised by a Massachusetts Certified Arborist. Once the planting materials have been delivered to the site, they are to be inspected and deemed to be adequately healthy enough to be transplanted as shown on the Landscape Plan. If the specific species of plants are unavailable, they are to be supplemented with an alternative as approved by the Medway Conservation Commission. The location of all plants is to be supervised by a competent individual who is familiar with the planting specifications for the individual species. In areas where trees are to be planted along the perimeter of the site, special care is to be taken to avoid injuring the existing trees and shrubs. Existing topographic features in these areas may require adjustments to the approved plan. At no time should protected trees be removed without the consent of the Conservation Commission.

9. The planting of trees, shrubs and lawns shall be done in a manner consistent with the planting details and accepted construction practices for New England soils and temperate zone. Soil preparation for the individual plants shall include native topsoil, composted soil, organic fertilizers and supplements such as cow manure and bone meal. Vegetated slopes greater than 3 to 1 are to be stabilized with a layer of organic matting to limit fine soil particles from eroding along the earthen slopes. No chemical fertilizers are to be used for trees and shrubs. Where lawn areas are fertilized, they shall be done so following the manufacturers recommendations and monitored to assure the control of unnecessary runoff during periods of heavy rainfall. All temporary sediment basins are to be monitored on a daily basis during this period. All sediments removed from the permanent and temporary basins are to be reused in the landscape areas away from the buffer zones where possible. Refer to the tree, lawn and slope planting details.

10. Once the trees and shrubs have been planted and the planting beds have been graded to promote infiltration in a manner consistent with the grading plans, the exposed soil is to be immediately stabilized with a minimum of 1" of partially composted bark mulch and planted with native grasses. It is best to use locally composted organic bark mulch with no chemical additives or coloring agents. The bark mulch should be properly tamped down and watered to promote the beneficial bacterial action in the soil. At this point, the owner is responsible to assure that all planting beds and lawn areas are watered relative to existing weather conditions to avoid desiccation of the recently planted areas. It should be noted that the owner shall be responsible for the maintenance of the landscaped areas until the Homeowners Association assumes control of the property. All trees and shrubs shall be warranted for a minimum of one year.

11. As shown on the Drainage and Landscape Plans, the planting beds have been designed as an integral component of the stormwater management system. This allows the drainage patterns to be controlled in a manner that reduces the concentrated flows of stormwater runoff through the individual watershed areas. This action serves to reduce the suspension of sediments along the pervious and impervious surfaces throughout the site. The reduction of suspended solids in the runoff will provide additional protection to the subsurface infiltration basins and ultimately the adjacent wetland resource areas. For this reason, it will be necessary for the Homeowners Association to maintain the landscaped areas in a manner consistent with the "As Built" plans and the recorded Certificate of Compliance. Refer to the Long-Term Pollution Prevention Specifications and the Operation and Maintenance schedule.



NORMAN G. HILL, PE DATE  
LAND PLANNING, INC.  
214 Worcester Street  
North Grafton, Massachusetts 01536

SITE PLAN APPROVAL  
MEDWAY PLANNING & ECONOMIC  
DEVELOPMENT BOARD

DATE OF APPROVAL \_\_\_\_\_  
DATE OF ENDORSEMENT \_\_\_\_\_

FOR REGISTRY OF DEEDS USE ONLY

SOIL TEST DATA

APPLICANT: CHRIS TORTI ADDRESS: 56 SUMMER ST. MEDWAY, MA

I, Robert G. Murphy certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the attached analysis has been completed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017. I further certify that the results of the soil evaluation, as indicated on this construction detail sheet, are accurate in accordance with 310 CMR 15.100 through 15.107.

SE 1713

REFER TO SHEET 7 FOR LOCATION OF TEST PITS SOIL IS CHARLTON FINE SANDY LOAM

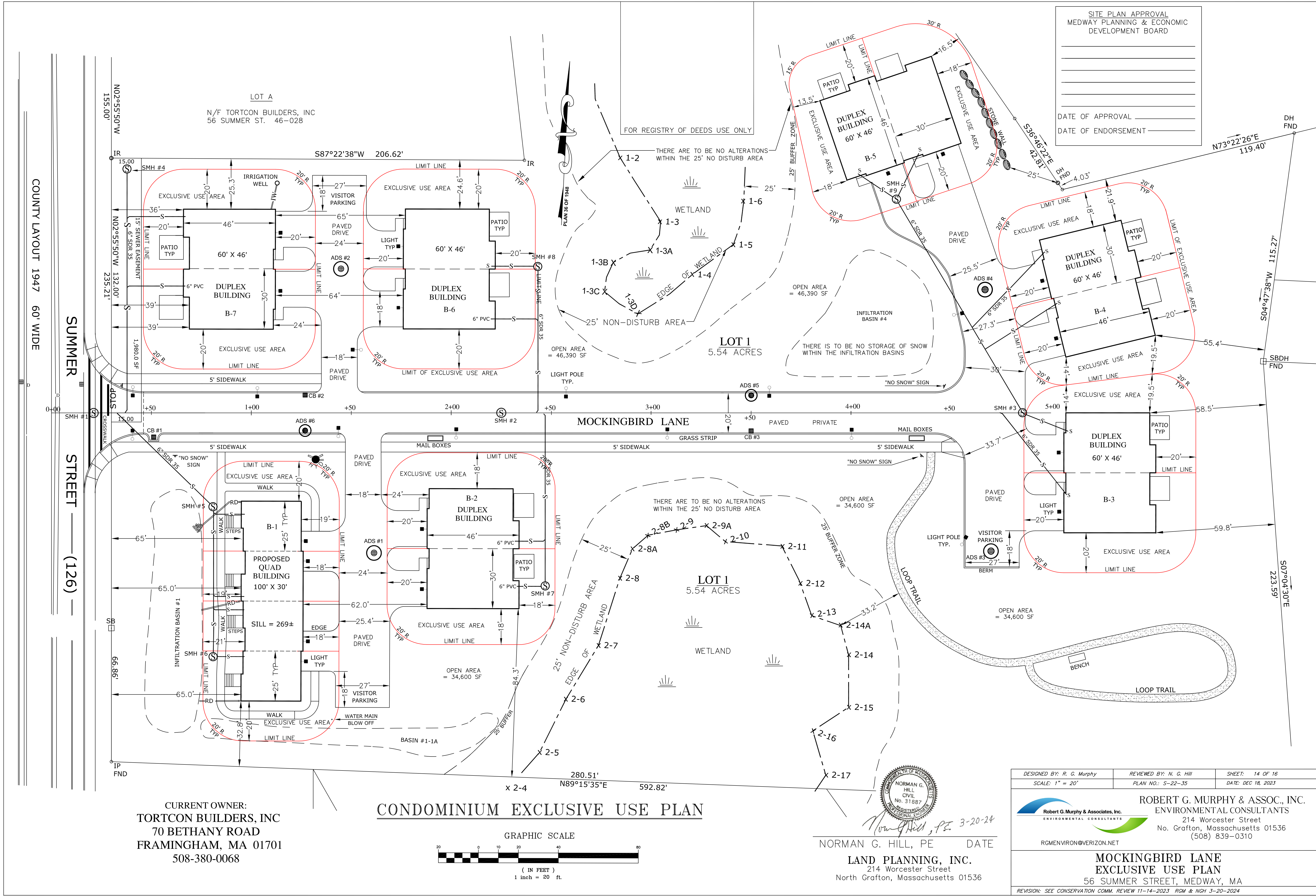
SOIL EVALUATION CONDUCTED ON AUGUST 5, 2022									
O.H. # ELEV.	Depth (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling (Redox)	Other (Structures, Stones, Boulders, Consistency)			
#1 267.6	0'-6"	A	SL	10YR 3/3		GRANULAR, FIRM	NONE	2.5 Y 6/4	LEDGE @ 84"
	6"-28"	Bw	SL	10YR 6/6		FIRM, BOULDERS			
	28"-84"	C	FLS	2.5 Y 6/4		LEDGE @ 84"			
#2 265.5	0'-6"	A	SL	10YR 3/3		GRANULAR, FIRM	NONE	2.5 Y 6/4	LEDGE @ 84"
	6"-28"	Bw	SL	10YR 6/6		FIRM, BOULDERS			
	28"-84"	C	FLS	2.5 Y 6/4		LEDGE @ 84"			
#3 266.4	0'-8"	A	SL	10YR 3/3		GRANULAR, FIRM	NONE	2.5 Y 5/4	FRIABLE, FIRM LEDGE @ 96"
	8"-30"	Bw	SL	10YR 6/6		FIRM, FIRM			
	30"-96"	C	FLS	2.5 Y 5/4		LEDGE @ 96"			
#4 265.2	0'-6"	A	SL	10YR 3/3		GRANULAR, FIRM	NONE	2.5 Y 6/4	FRIABLE, FIRM FIRM, BOULDERS
	6"-28"	Bw	SL	10YR 6/6		FIRM, FIRM			
	28"-84"	C	FLS	2.5 Y 6/4		LEDGE @ 84"			
#5 264.7	0'-8"	A	SL	10YR 3/3		GRANULAR, FIRM	108"	2.5 Y 5/4	FRIABLE, FIRM LEDGE @ 120", DRY
	8"-32"	Bw	SL	10YR 6/6		FIRM, FIRM			
	32"-120"	C	FLS	2.5 Y 5/4		LEDGE @ 120", DRY			
#6 266.4	0'-8"	A	SL	10YR 3/3		GRANULAR, FIRM	NONE	2.5 Y 6/4	FRIABLE, FIRM FIRM, BOULDERS
	8"-30"	Bw	SL	10YR 6/6		FIRM, FIRM			
	30"-96"	C	FLS	2.5 Y 6/4		LEDGE @ 96"			
#7 265.4	0'-8"	A	SL	10YR 3/3		GRANULAR, FIRM	108"	2.5 Y 5/4	FRIABLE, FIRM LEDGE @ 120", DRY
	8"-32"	Bw	SL	10YR 6/6		FIRM, FIRM			
	32"-120"	C	FLS	2.5 Y 5/4		LEDGE @ 120", DRY			
#8 264.5	0'-8"	A	SL	10YR 3/2		GRANULAR, FIRM	66"	2.5 Y 5/4	FRIABLE, FIRM LEDGE @ 96", DRY
	8"-30"	Bw	SL	10YR 6/6		FIRM, FIRM			
	30"-96"	C	FLS	2.5 Y 5/4		LEDGE @ 96"			
#9 263.4	0'-8"	A	SL	10YR 3/2		GRANULAR, FIRM	36"	2.5 Y 5/4	FRIABLE, FIRM LEDGE @ 96", DRY
	8"-30"	Bw	SL	10YR 6/6		FIRM, FIRM			
	30"-96"	C	FLS	2.5 Y 5/4		LEDGE @ 96"			
#10 268.1	0'-6"	A	SL	10YR 3/3		GRANULAR, FIRM	NONE	2.5 Y 5/4	FRIABLE, FIRM SHARP, BOULDERS, DRY
	6"-30"	Bw	SL	10YR 6/6		FIRM, FIRM			
	30"-96"	C	FLS	2.5 Y 5/4		LEDGE @ 96"			
#11 268.5	0'-8"	A	SL	10YR 3/3		GRANULAR, FIRM	NONE	2.5 Y 5/4	FRIABLE, FIRM LEDGE @ 120", DRY
	8"-32"	Bw	SL	10YR 6/6		FIRM, FIRM			
	32"-120"	C	FLS	2.5 Y 5/4		LEDGE @ 120", DRY			
#12 266.4	0'-6"	A	SL	10YR 3/3		GRANULAR, FIRM	NONE	2.5 Y 5/4	FRIABLE, FIRM LEDGE @ 96", DRY
	6"-30"	Bw	SL	10YR 6/6		FIRM, FIRM			
	30"-96"	C	FLS	2.5 Y 5/4		LEDGE @ 96"			

SOIL EVALUATION CONDUCTED ON OCTOBER 4, 2023									
#1-1 264.7	0"-8" 8"-30" 30"-124"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	NONE	GRANULAR, FIRM FRIABLE, FIRM LEDGE @ 124", DRY			
#1-2 265.6	0"-8" 8"-32" 32"-96"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM FRIABLE, FIRM BOULDER @ 96", DRY			
#1-3 266.6	0"-6" 6"-30" 30"-110"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	NONE	GRANULAR, FIRM FRIABLE, FIRM COBBLES, LEDGE, DRY			
#1-4 265.4	0"-6" 6"-32" 32"-100"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM FRIABLE, FIRM SHARP, FEW STONES			
#1-5 264.0	0"-8" 8"-32" 32"-90"	A Bw C	SL SL FLS	10YR 3/2 10YR 6/6 2.5 Y 5/4	66"	GRANULAR, FIRM FRIABLE, FIRM GRAVEL, WATER @ 80"			
#1-6 265.7	0"-8" 8"-32" 32"-84"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	68"	GRANULAR, FIRM FRIABLE, FIRM, COBBLES GRAVEL, WATER @ 74"			
#1-7 268.6	0"-6" 6"-30" 30"-96"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	NONE	GRANULAR, FIRM FRIABLE, FIRM BOULDER @ 96", DRY			
#1-8 268.5	0"-8" 8"-32" 32"-86"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM FRIABLE, FIRM COBBLES, LEDGE, DRY			
#1-9 268.5	0"-6" 6"-30" 30"-108"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM STONES, FIRM GRAVEL, DRY			







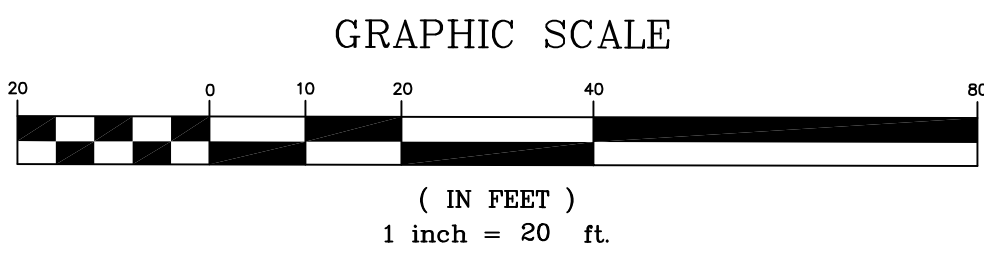


SITE PLAN APPROVAL  
MEDWAY PLANNING & ECONOMIC  
DEVELOPMENT BOARD


DATE OF APPROVAL \_\_\_\_\_  
DATE OF ENDORSEMENT \_\_\_\_\_

CURRENT OWNER:  
TORTCON BUILDERS, INC  
70 BETHANY ROAD  
FRAMINGHAM, MA 01701  
508-380-0068

CONDOMINIUM EXCLUSIVE USE PLAN



  
NORMAN G. HILL, PE DATE 3-20-24  
LAND PLANNING, INC.  
214 Worcester Street  
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 14 OF 16
SCALE: 1" = 20'	PLAN NO.: S-22-35	DATE: DEC 18, 2023
 ROBERT G. MURPHY & ASSOC., INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 RGMENVIRON@VERIZON.NET		
MOCKINGBIRD LANE EXCLUSIVE USE PLAN 56 SUMMER STREET, MEDWAY, MA		
REVISION: SEE CONSERVATION COMM. REVIEW 11-14-2023 RGM & NGH 3-20-2024		





NOTES: ALL IRRIGATION COMPONENTS ARE TO BE INSTALLED AFTER ALL OF THE BURIED UTILITIES ARE INSTALLED AND INSPECTED. THE DRILLED WELL IS NOT TO BE USED AS A SOURCE OF POTABLE WATER.  
EROSION CONTROLS ARE TO BE UPDATED AS REQUIRED DURING ALL CONSTRUCTION PHASES TO PREVENT SEDIMENTS FROM ENTERING THE ADJACENT WETLANDS.

## PLANTING PLAN

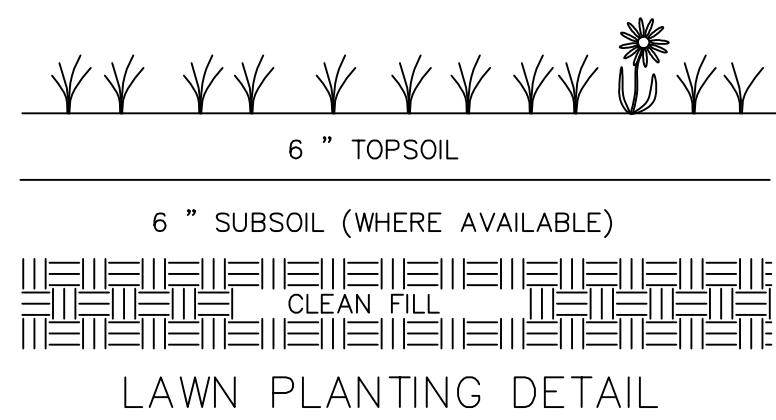
NOTES: PRIOR TO CONSTRUCTION, ALL TREES TO REMAIN ARE TO BE FLAGGED WITH ORANGE RIBBON.  
ALL TREES ALONG THE PERIMETER OF CONSTRUCTION TO REMAIN, ARE TO BE PROTECTED FROM DAMAGE WITH TREE PROTECTION FENCING ALONG THE DRIP LINE. ALL FENCING IS TO BE PAINTED BRIGHT ORANGE.

NATIVE GRASS SPECIFICATIONS  
MOCKINGBIRD LANE  
MEDWAY, MASSACHUSETTS

NEW ENGLAND WETLAND PLANTS  
14 PEARLE STREET  
SO. HADLEY, MA 01075  
413-548-8000

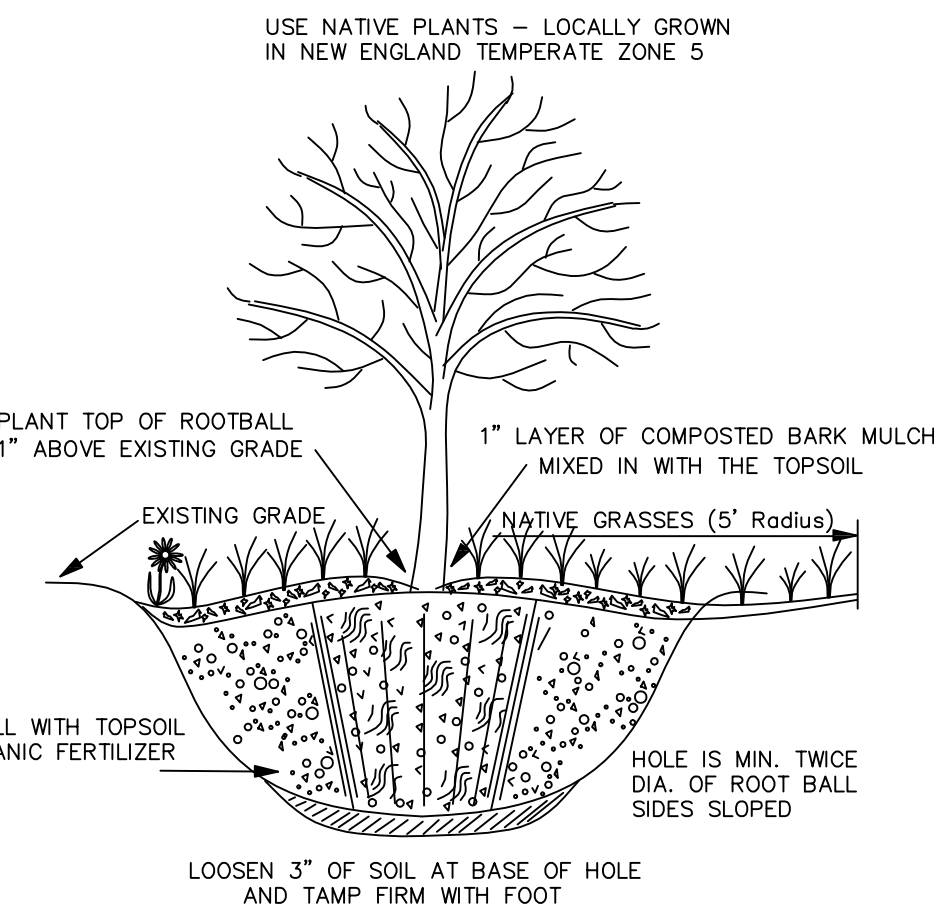
Festuca rubra - Red Fescue  
Schizachyrium scoparium - Little Bluestem  
Panicum virgatum - Switch Grass  
Andropogon gerardii - Big Bluestem  
Sorghastrum nutans - Indian Grass  
Chamaecrista fasciculata - Partridge Pea  
Agrostis perennans - Upland Bentgrass  
Juncus tenuis - Path Rush

Planting Specifications: Native grasses are to be planted as shown on the Planting Plan within the open infiltration basins, tree restoration areas and vegetated slopes found within the 100' wetland buffer zone.  
The topsoil is to be a minimum depth of 6" mixed with composted bark.  
All planting areas are to be hand graded with iron rakes.  
No heavy machinery is to pass over the planted areas.  
Watering may be necessary during dry periods. Refer to the planting details.  
Additional native upland grasses may be supplemented to replace unavailable species upon approval by the Medway Conservation Agent.

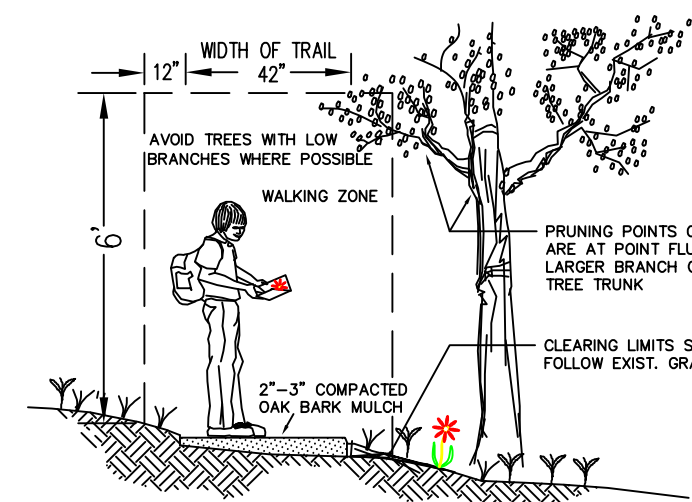


### PLANTING SPECIFICATIONS:

LOAM MAY BE SUPPLEMENTED WITH ORGANIC FERTILIZER. NO COMMERCIAL FERTILIZERS OR PESTICIDES ARE TO BE USED. SPREAD A MINIMUM OF 6 INCHES OF LOAM WITH A BASE OF 6" OF SUBSOIL (WHERE AVAILABLE) OVER EXISTING SOIL OR CLEAN FILL WITHIN ALTERED AREAS.  
APPLY SPECIFIED AMOUNT OF SEED WITH A MIXTURE OF 33% MERRIAM BLUEGRASS, 33% CHEWINGS FESCUE AND 33% ANNUAL RYEGRASS. DO NOT ALLOW THE SEEDING AREAS TO BECOME DESICATED DURING THE FIRST 3 WEEKS AFTER PLANTING. LOOSE HAY WILL PROVIDE PROTECTION AS WELL.



### RESTORATION PLANTING DETAIL

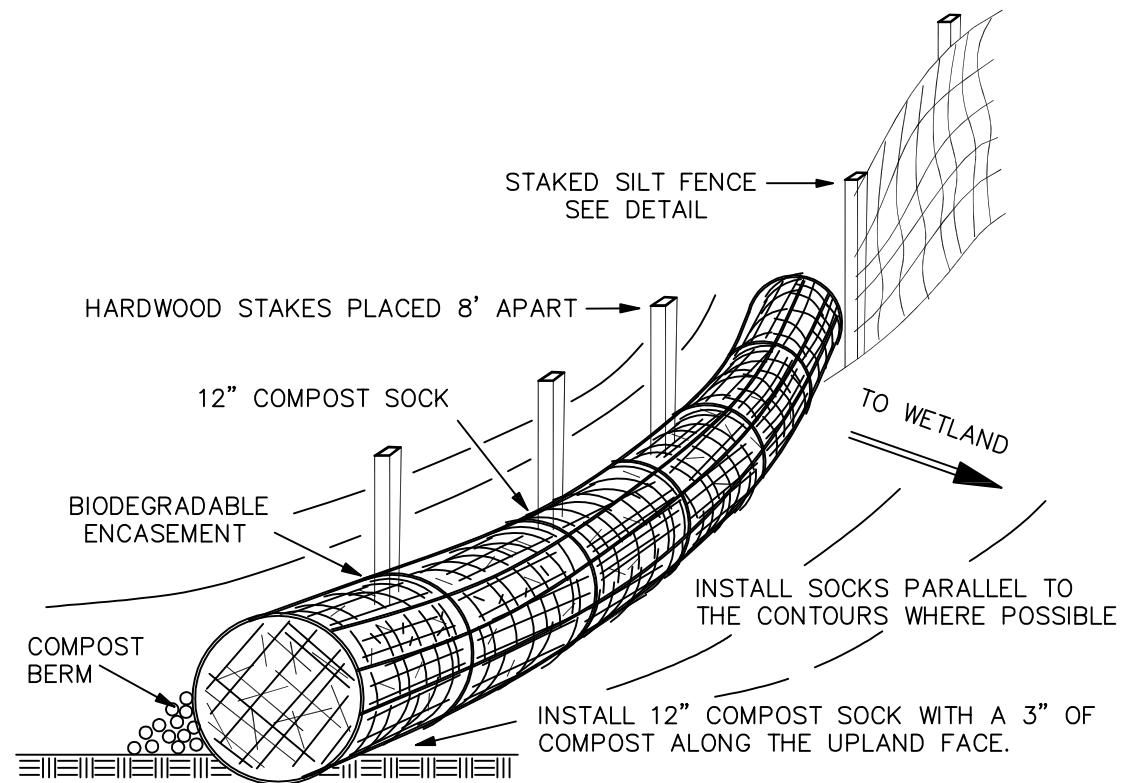


### TRAIL CLEARING LIMITS (SECTION)

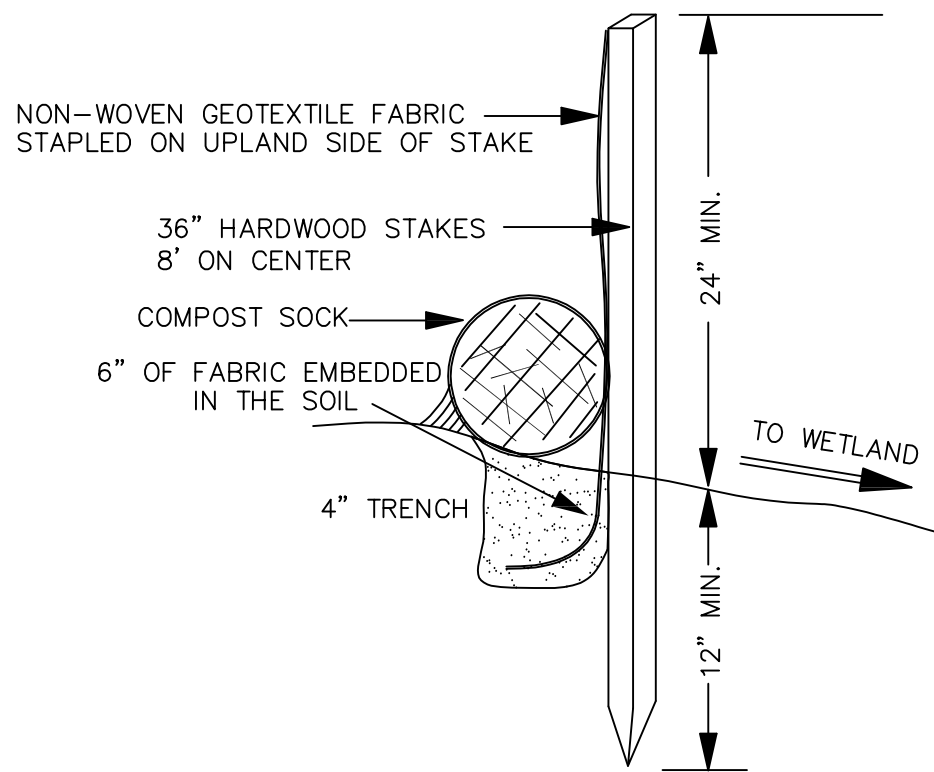
NOTES:  
- THESE ARE RECREATION TRAILS INTENDED FOR USE IN A RESIDENTIAL AREA.  
- ALL VEGETATION AND STONES ARE TO BE REMOVED WITH HAND TOOLS.  
- AVOID SHRUBS WHERE POSSIBLE. NO TREES ARE TO BE REMOVED.  
- ALL TOPSOIL AND SUBSOIL IS TO REMAIN UNDISTURBED.  
- TRAILS ARE TO BE SURFACED WITH FINE CHIPPED OAK BARK MULCH.  
- AREAS SUBJECT TO DRAINAGE SCOURING ARE TO BE SUPPLEMENTED WITH 2" CRUSHED STONE AND TAMPED IN PLACE.

### WALK AND TRAIL DETAILS

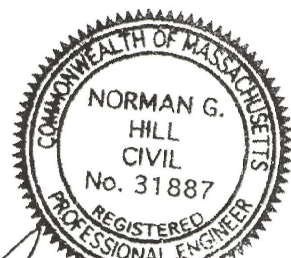
SCALE: AS SHOWN



### COMPOST SOCK DETAIL



### SILT FENCE DETAIL



Norman G. Hill, PE 3-20-24

NORMAN G. HILL, PE DATE

LAND PLANNING, INC.  
214 Worcester Street  
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 15 OF 16
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: JAN 19, 2024

<b>Robert G. Murphy &amp; Associates, Inc.</b> ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 Fax: (508) 839-5914 RGMENVIRON@VERIZON.NET	<b>ROBERT G. MURPHY &amp; ASSOC., INC.</b> ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 Fax: (508) 839-5914
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## MOCKINGBIRD LANE PLANTING PLAN (Ground Cover)

56 SUMMER STREET, MEDWAY, MA

REVISION: REMOVED BUILDING & PLANTS FROM LOT "A" RGM & NGH 1-26-2024	GROUND COVER
REVISION: ADDED LOOP TRAIL DETAILS RGM & NGH 3-20-2024	



