SLATE UPPER SCHOOL

5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

REGULATORY SUBMISSION

OCTOBER 27, 2020 (INLAND WETLANDS)
REVISED: NOVEMBER 6, 2020 (PLANNING AND ZONING)
REVISED: FEBRUARY 17, 2021

811
Know what's **below.**
Call before you dig.
www.cbyd.com

GENERAL NOTES

1. BOUNDARY INFORMATION IS BASED UPON A MAP ENTITLED PROPERTY/ TOPOGRAPHIC SURVEY, SHEET 1 OF 1, CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHIC ACCURACY CLASS T-2, CONDUCTED BY: MILONE AND MACBROOM INC., PREPARED FOR THE SLATE SCHOOL, INC. AT A SCALE OF 1"=40', DATED: MAY 19, 2020.
2. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 1-800-922-4455 or 811.
3. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER OR LANDSCAPE ARCHITECT FOR RESOLUTION.
4. MILONE & MACBROOM, INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
5. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OR LANDSCAPE ARCHITECT.
6. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" TOPSOIL IN LAWN AREAS, AND BE SEEDED , AS SHOWN ON THE PLANS, UNLESS THE AREA IS A MULCHED PLANT BED WHICH SHALL RECEIVE A MINIMUM OF 12" OF TOPSOIL.
7. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.
8. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO TOWN OF NORTH HAVEN REQUIREMENTS AND TO THE THE APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 817 AND ADDENDUMS
9. THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER COMPANY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODE.
10. ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS USED DURING CONSTRUCTION SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS.
11. COMPLIANCE WITH THE PERMIT CONDITIONS IS THE RESPONSIBILITY OF BOTH THE CONTRACTOR AND THE PERMITTEE.
12. THE PROPERTY OWNER AND/OR HIS/HER AGENTS MUST MAINTAIN (REPAIR/REPLACE) WHEN NECESSARY THE SILTATION CONTROL MEASURES UNTIL ALL DEVELOPMENT ACTIVITY IS COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
13. SOIL AND EROSION CONTROLS SHALL BE INSPECTED BY THE ZONING ENFORCEMENT OFFICER BEFORE COMMENCEMENT OF WORK.
14. THE PROPERTY OWNER AND/OR HIS/HER AGENTS MUST MAINTAIN, (REPAIR/REPLACE) WHEN NECESSARY, THE SILTATION CONTROL UNTIL ALL DEVELOPMENT ACTIVITY IS COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
15. ANY PROPOSED SIGNAGE OR FENCING WILL REQUIRE THE FILING OF APPLICATIONS WITH THE ZONING ENFORCEMENT OFFICER.
16. AT PROJECT COMPLETION AN AS-BUILT SURVEY WILL BE PREPARED AND SUBMITTED FOR BOND RELEASE.
17. THE PROPERTY IS IN THE AQUIFER PROTECTION AREA.

CONSTRUCTION SEQUENCE

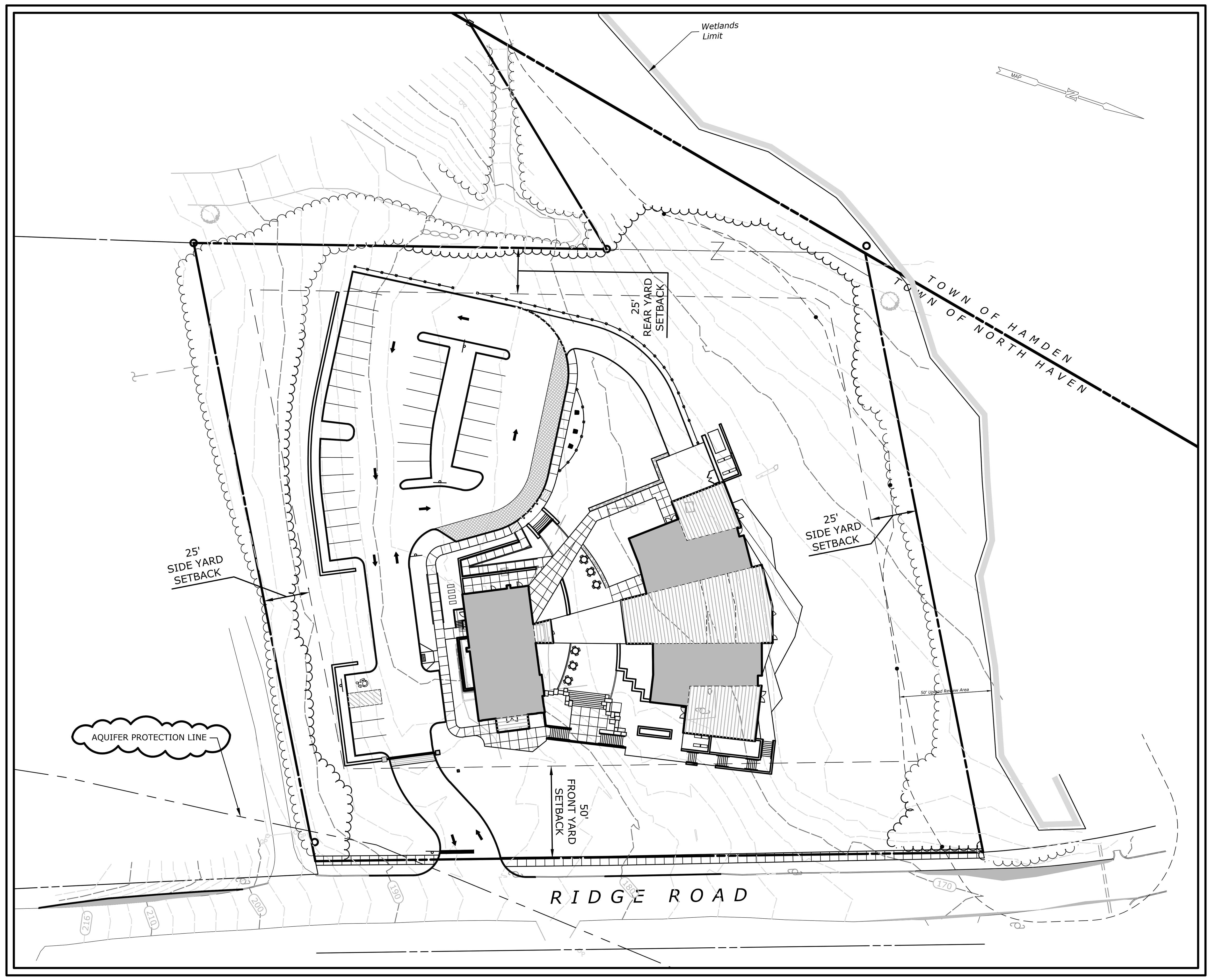
1. PRIOR TO COMMENCEMENT OF WORK A PRECONSTRUCTION MEETING SHALL BE HELD WITH TOWN STAFF AND REPRESENTATIVES OF THE CONTRACTOR AND OWNER. AT THIS MEETING, ONE PERSON WILL BE PLACED IN CHARGE OF SEDIMENT AND EROSION CONTROL FOR THE ENTIRE SITE.
2. CONTRACTOR TO STAKE OUT LIMIT OF DISTURBANCE AND VEGETATION TO BE RETAINED. NO DISTURBANCE IS TO TAKE PLACE BEYOND THE LIMITS OF WORK SHOWN.
3. CONTRACTOR TO INSTALL SEDIMENT AND EROSION CONTROLS ALONG THE PERIMETER, AND STABILIZED CONSTRUCTION ENTRANCES.
4. CLEAR AND GRUB SITE, STOCKPILE TOPSOIL, AND DEMOLISH EXISTING STRUCTURES THAT ARE TO BE REMOVED. PLACE SEDIMENT FILTER FENCE AND HAYBALES AROUND ALL STOCKPILES.
5. CONTRACTOR TO INSTALL ALL EROSION & SEDIMENT CONTROLS PER THE SEDIMENT AND EROSION CONTROL PLAN.
6. INITIATE MASS EARTHWORK OPERATIONS AFTER ALL BASINS, BERMS, SWALES, SILT FENCE & HAYBALES ARE INSTALLED.
7. COMMENCE BUILDING FOUNDATION WORK.
8. SLOPES ARE TO BE ESTABLISHED AS SOON AS PRACTICAL BEFORE UTILITY INSTALLATION. STABILIZE ALL SLOPES IMMEDIATELY AFTER THEIR ESTABLISHMENT.
9. INSTALL UTILITIES, CURBS AND ROADS/ DRIVEWAYS.
10. COMPLETE BUILDING CONSTRUCTION.
11. PAVE PARKING LOT AND INSTALL SIDEWALKS AND SITE FEATURES.
12. ESTABLISH LAWNS, AND INSTALL LANDSCAPING.
13. OWNER MUST MAINTAIN (REPAIR/REPLACE WHEN NECESSARY) THE SILTATION CONTROL UNTIL ALL REGULATED ACTIVITY IN COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.

CONSTRUCTION NOTES

1. TEMPORARY SEDIMENT BASINS SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER. CLEAN THE SEDIMENT BASIN WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18 INCHES, WHICHEVER IS ACHIEVED FIRST.
2. SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER.
3. THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AND THE TOWN'S DESIGNATED REPRESENTATIVE AS NECESSITATED BY CHANGING SITE CONDITIONS
4. INSPECTION OF THE SITE FOR EROSION SHALL CONTINUE FOR A PERIOD OF THREE MONTHS AFTER COMPLETION WHEN RAINFALLS OF ONE INCH OR MORE OCCUR.
5. ALL DEWATERING WASTE WATERS SHALL BE DISCHARGED IN A MANNER WHICH MINIMIZES THE DISCOLORATION OF THE RECEIVING WATERS.
6. THE SITE SHOULD BE KEPT CLEAN OF LOOSE DEBRIS, LITTER, AND BUILDING MATERIALS SUCH THAT NONE OF THE ABOVE ENTER WATERS OR WETLANDS.
7. A COPY OF ALL PLANS AND REVISIONS, AND THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MAINTAINED ON-SITE AT ALL TIMES DURING CONSTRUCTION.

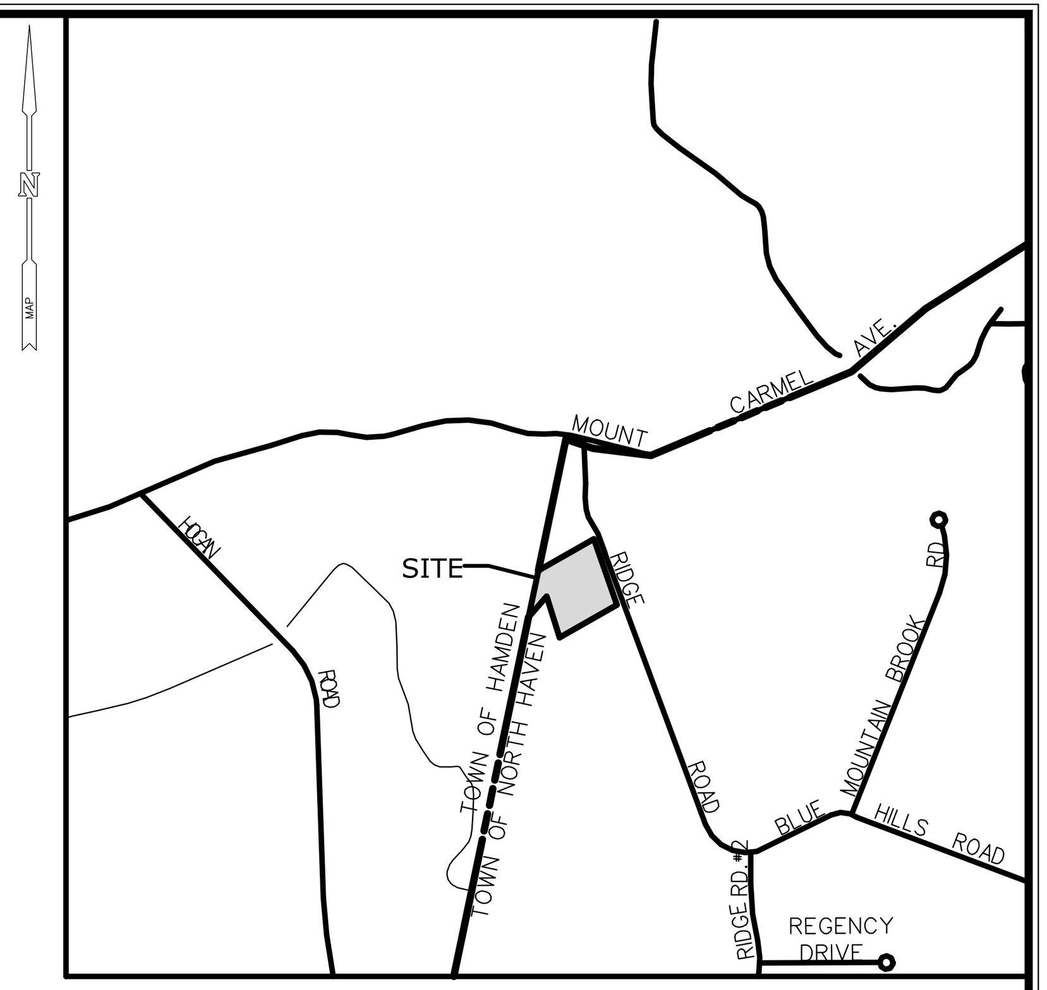
ZONING DATA TABLE

		EXISTING ZONE	
	ZONE	R-40	
	MAP-BLOCK-LOT	NHA 970/002	
	REQUIREMENT	**REQ'D/PERMITTED**	**PROVIDED**
MINIMUM	MINIMUM LOT AREA	40,000 S.F.	129,185 S.F. (2.966 A.C.)
	LOT WIDTH	150 FT.	363.27 FT.
	FRONT YARD	50 FT.	50 FT.
	SIDE YARDS	25 FT.	25 FT.
	REAR YARD	25 FT.	25 FT.
MAXIMUM	BUILDING HEIGHT	35 FT.	27 FT. (from average grade)
	BUILDING COVERAGE	15%	10,440 S.F. (8%)



PROJECT SITE VICINITY MAP:

SCALE 1" = 60'



LOCATION MAP:

SCALE 1" = 1000'

LEGEND

EXISTING		PROPOSED
	STREET LINE	
	PROPERTY LINE	
	SETBACK LINE	
70	MAJOR CONTOUR	100
68	MINOR CONTOUR	98
× 70.5	SPOT GRADE	+ 70.5
	TREE LINE	
	TREE/ SHRUB	
	STONEWALL	
	SITE LIGHT	
	HYDRANT	
WV	WATER VALVE	WV
GV	GAS VALVE	GV
	CATCH BASIN	
	MANHOLE/YARD DRAIN	
	SANITARY SEWER W/MANHOLE	SAN
	STORM DRAIN	
	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
ETC	ELECTRIC, TELEPHONE, CABLE	ETC
	UTILITY POLE	
	TRAFFIC SIGN	
	IRON PIPE	
	MONUMENT	
	EDGE OF PAVEMENT W/CURB	
	GUARD RAIL	
	CHAIN LINK FENCE	
	WATERCOURSE	
	WETLAND	
	WIRE FENCE	
	WOOD FENCE	
	WELL	
IP	IRON PIPE FOUND	
IPIN	IRON PIN FOUND	
MON	CONCRETE MONUMENT FOUND	
FP	FENCE POST	

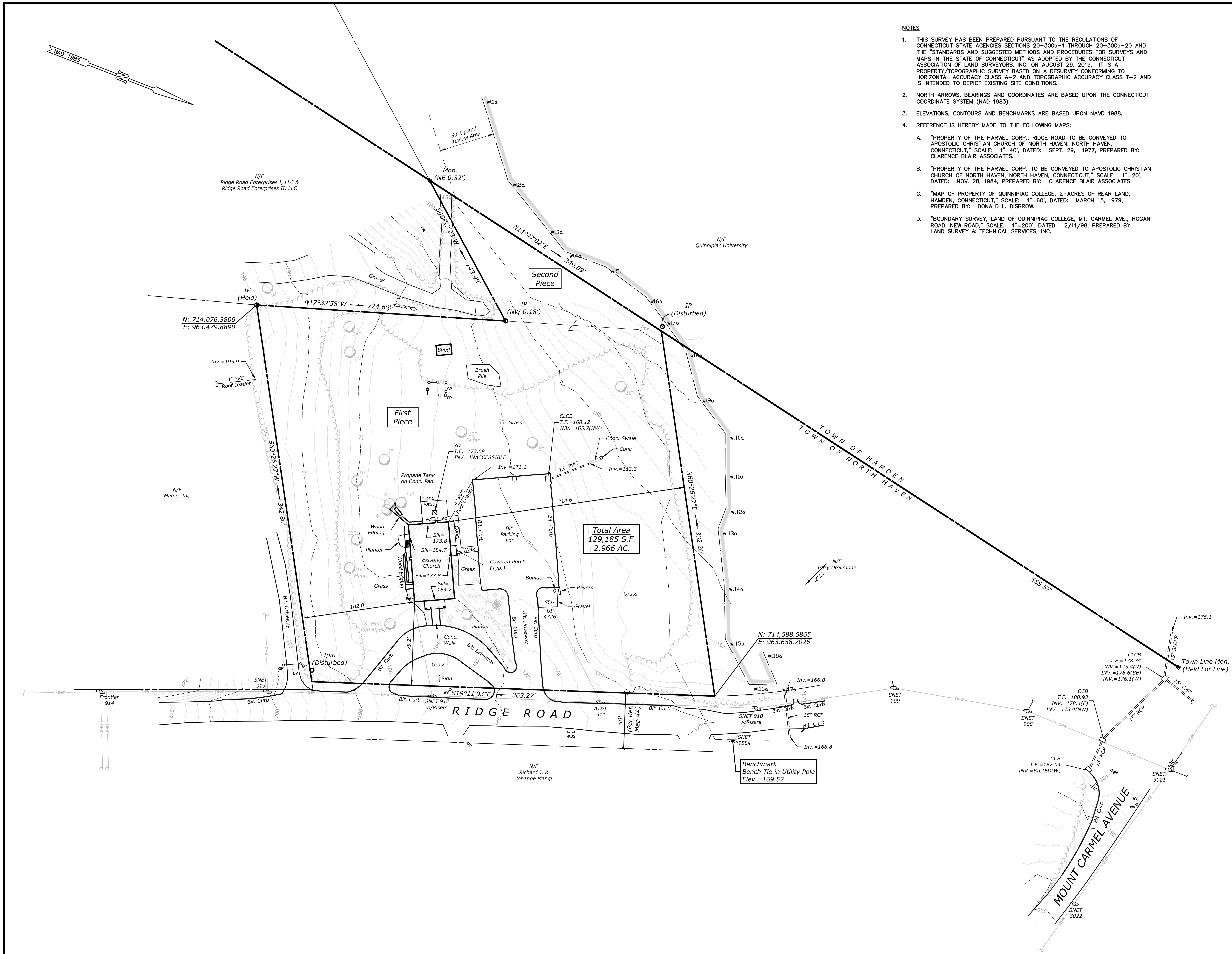
LIST OF DRAWINGS

PREPARED BY:

MILONE & MACBROOM
195 CHURCH STREET, 7TH FLOOR
NEW HAVEN, CT 06510
203.344.7887
WWW.MMINC.COM

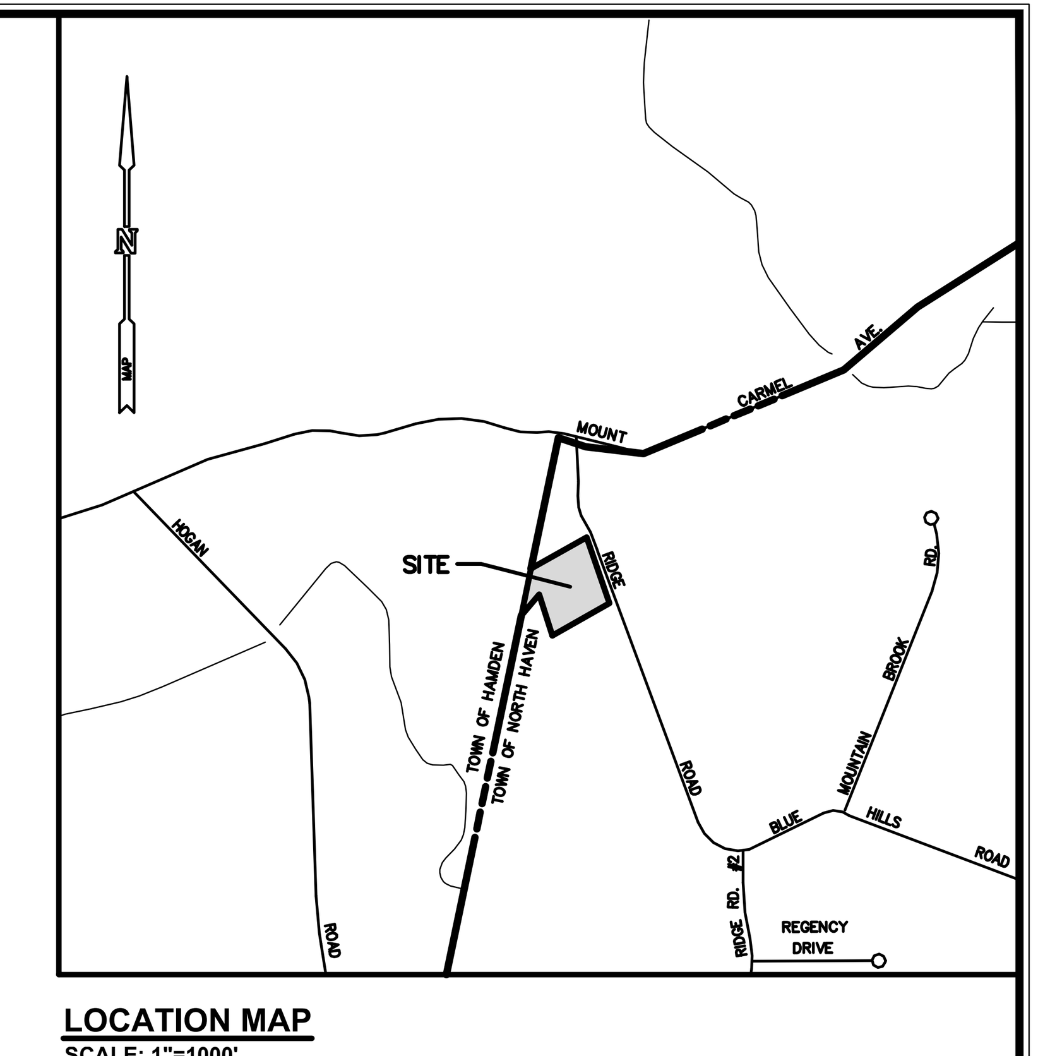
PREPARED FOR:

THE SLATE SCHOOL, INC.
124 MANSFIELD ROAD
NORTH HAVEN, CT 06473



NOTES

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019. IT IS A PROPERTY/TOPOGRAPHIC SURVEY BASED ON A RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHIC ACCURACY CLASS T-2 AND IS INTENDED TO DEPICT EXISTING SITE CONDITIONS.
2. NORTH ARROWS, BEARINGS AND COORDINATES ARE BASED UPON THE CONNECTICUT COORDINATE SYSTEM (NAD 1983).
3. ELEVATIONS, CONTOURS AND BENCHMARKS ARE BASED UPON NAVD 1988.
4. REFERENCE IS HEREBY MADE TO THE FOLLOWING MAPS:
   A. "PROPERTY OF THE HARWEL CORP., RIDGE ROAD TO BE CONVEYED TO APOSTOLIC CHRISTIAN CHURCH OF NORTH HAVEN, NORTH HAVEN, CONNECTICUT," SCALE: 1"=40', DATED: SEPT. 29, 1977, PREPARED BY: CLARENCE BLAIR ASSOCIATES.
   B. "PROPERTY OF THE HARWEL CORP. TO BE CONVEYED TO APOSTOLIC CHRISTIAN CHURCH OF NORTH HAVEN, NORTH HAVEN, CONNECTICUT," SCALE: 1"=20', DATED: NOV. 28, 1984, PREPARED BY: CLARENCE BLAIR ASSOCIATES.
   C. "MAP OF PROPERTY OF QUINNIPIAC COLLEGE, 2¬ACRES OF REAR LAND, HAMDEN, CONNECTICUT," SCALE: 1"=60', DATED: MARCH 15, 1979, PREPARED BY: DONALD L. DISBROW.
   D. "BOUNDARY SURVEY, LAND OF QUINNIPIAC COLLEGE, MT. CARMEL AVE., HOGAN ROAD, NEW ROAD," SCALE: 1"=200', DATED: 2/11/98, PREPARED BY: LAND SURVEY & TECHNICAL SERVICES, INC.



LOCATION MAP
SCALE: 1"=1000'

LEGEND

- TOWN LINE
- STREET LINE
- PROPERTY LINE
- STONEWALL
- TREELINE
- FENCE
- ELECTRIC LINE
- OVERHEAD WIRES
- CATCH BASIN
- YARD DRAIN
- WATER VALVE
- GATE POST
- POST
- ELECTRIC VAULT
- ELECTRIC METER
- UTILITY POLE
- GUY WIRE
- HYDRANT
- LIGHT POST
- SIGN
- MAILBOX
- IRON PIPE FOUND
- IRON PIN FOUND
- MONUMENT FOUND

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

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

MICHAEL F. MANSFIELD L.S. #70120

MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND EMBOSSED SEAL.

DATE	REVISION
June 9, 2020	Inland-Wetlands Limit Added

PROPERTY/TOPOGRAPHIC SURVEY

PREPARED FOR:
THE SLATE SCHOOL, INC.
5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

FIELD	DRAWN	CHECKED
JG/RC	MDP	MFM

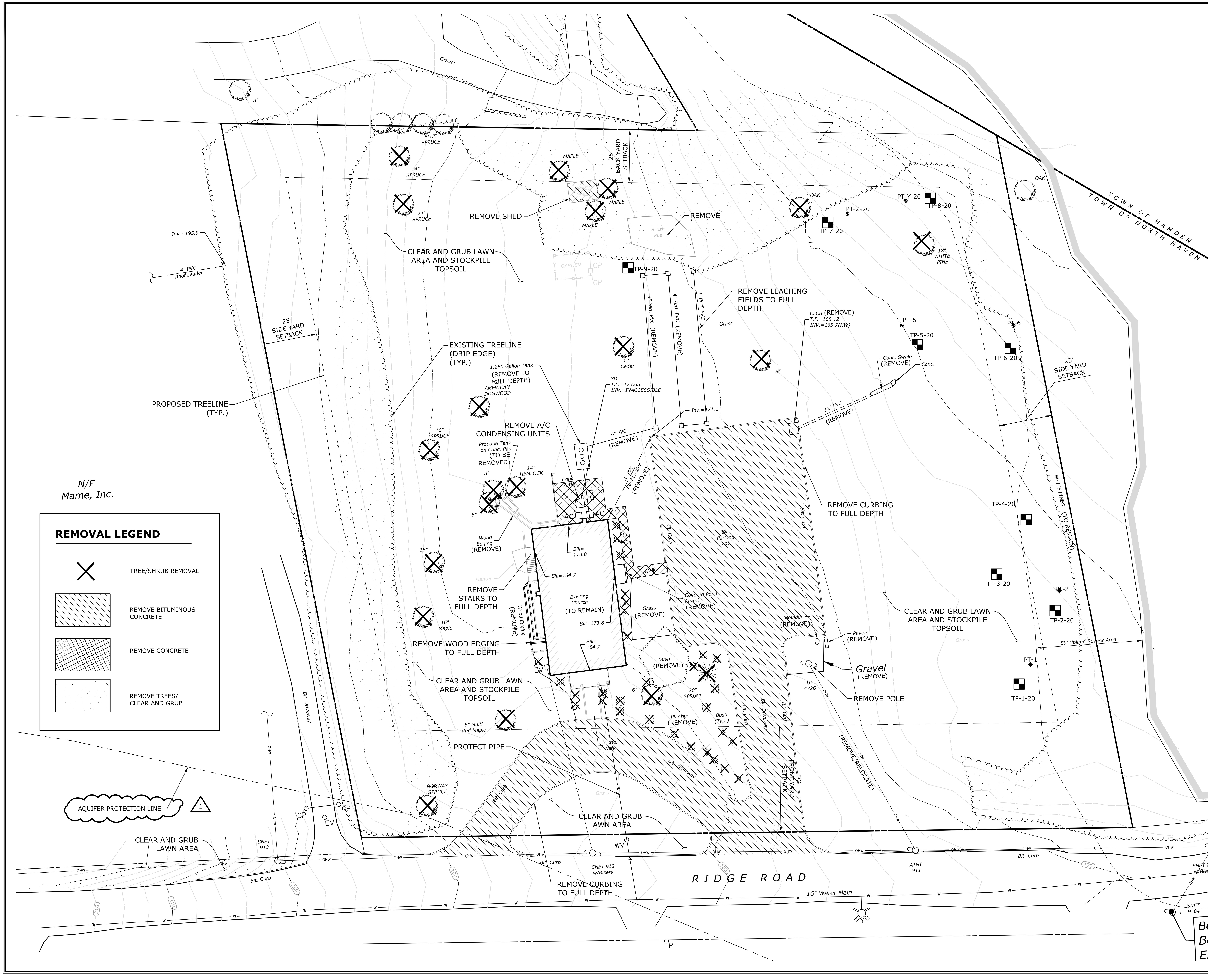
SCALE 1"=40'

DATE MAY 19, 2020

MILONE & MACBROOM
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM

PROJECT NO. 6156-03

SHEET NO. 1 OF 1



SOIL TEST PIT DATA

TP-1-2020
0"-8" TOPSOIL
8"-36" MEDIUM BROWN FINE SILTY LOAM
36"-78" RED SANDY HARDPAN
LEDGE: N/A
WATER: 71"
MOTTLING: N/A

TP-2-2020
0"-5" TOPSOIL
5"-29" MEDIUM BROWN FINE SILTY LOAM
29"-72" RED SANDY HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-3-2020
0"-7" TOPSOIL
7"-32" MEDIUM BROWN FINE SILTY LOAM
32"-80" RED SANDY HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-4-2020
0"-6" TOPSOIL
6"-32" MEDIUM BROWN FINE SILTY LOAM
32"-75" RED SANDY HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-5-2020
0"-6" TOPSOIL
6"-27" BROWN SANDY LOAM
27"-76" RED SANDY HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-6-2020
0"-6" TOPSOIL
6"-20" MEDIUM BROWN SANDY LOAM
20"-31" DECOMPOSED ROCK - FRACTURED
31"-58" RED SANDY HARDPAN
LEDGE: 58"
WATER: N/A
MOTTLING: N/A

TP-7-2020
0"-8" TOPSOIL
8"-36" MEDIUM BROWN SANDY LOAM
36"-74" RED SANDY HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-8-2020
0"-13" TOPSOIL
13"-36" MEDIUM BROWN SANDY LOAM
36"-71" RED BROWN FINE SANDY LOAM
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-9-2020
0"-3" TOPSOIL
3"-24" MEDIUM BROWN FINE SANDY LOAM
24"-56" RED BROWN HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

0' 10' 20'
0 1/2" 1"

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DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	AWG
TOWN COMMENTS	12/10/20	MCB
1 WETLANDS HEARING RESPONSE	02/17/21	JW

EXISTING CONDITIONS AND REMOVAL PLAN

SLATE UPPER SCHOOL
PROJECT NAME 2

5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

JW	BK	JW
DESIGNED	DRAWN	CHECKED

SCALE: 1"=20'

DATE: OCTOBER 27, 2020

PROJECT NO.: 6156-03

SHEET NAME: EX-1

TRAFFIC SIGN LEGEND

1. INSTALL 31-1177 (ONE WAY)
2. INSTALL CUSTOM 12" X 24"
3. INSTALL 31-0552 (STOP)

PAVER LEGEND

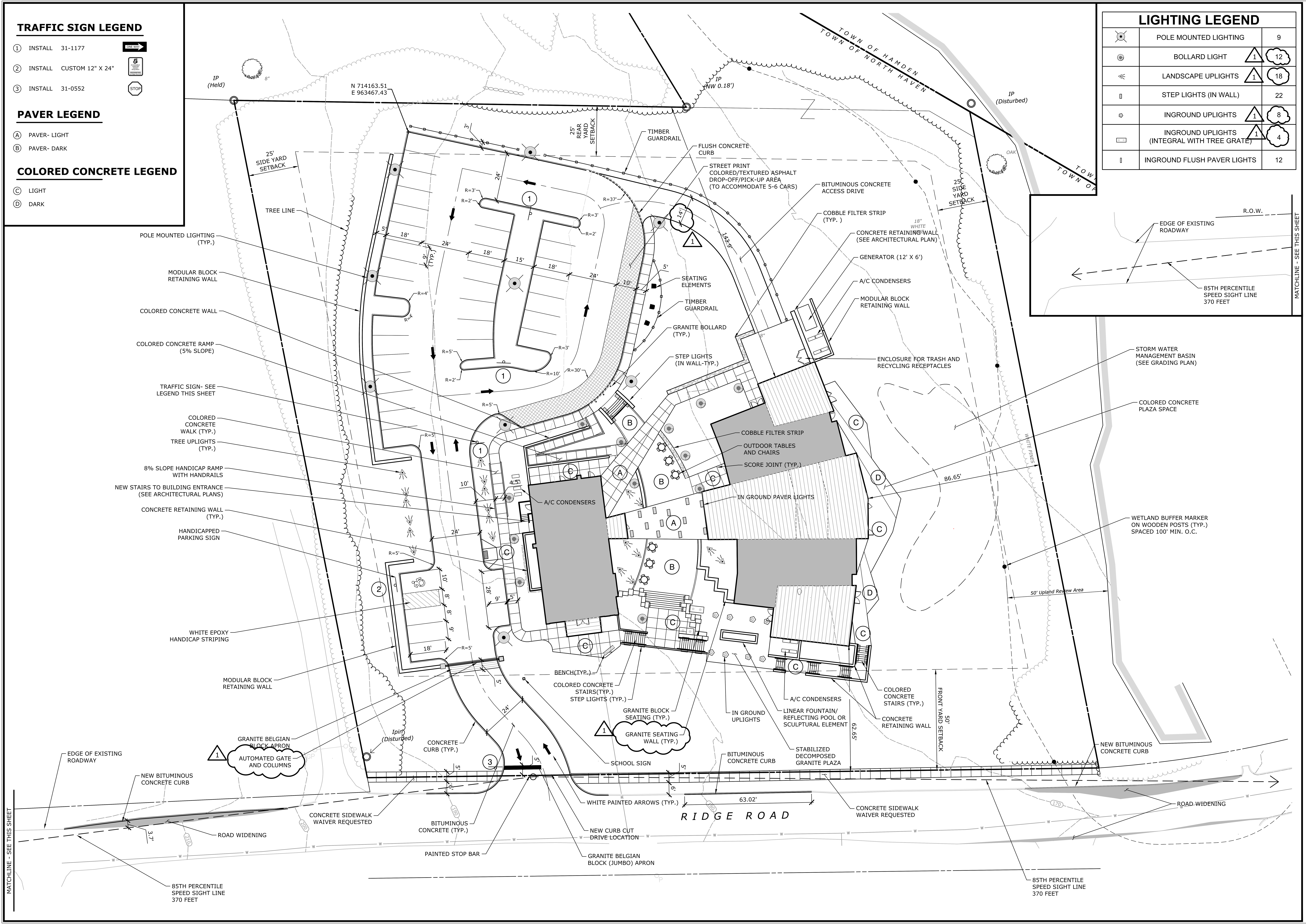
A. PAVER- LIGHT
B. PAVER- DARK

COLORED CONCRETE LEGEND

C. LIGHT
D. DARK

LIGHTING LEGEND

	POLE MOUNTED LIGHTING	9
	BOLLARD LIGHT	1 12
	LANDSCAPE UPLIGHTS	1 18
	STEP LIGHTS (IN WALL)	22
	INGROUND UPLIGHTS	1 8
	INGROUND UPLIGHTS (INTEGRAL WITH TREE GRATE)	1 4
	INGROUND FLUSH PAVER LIGHTS	12



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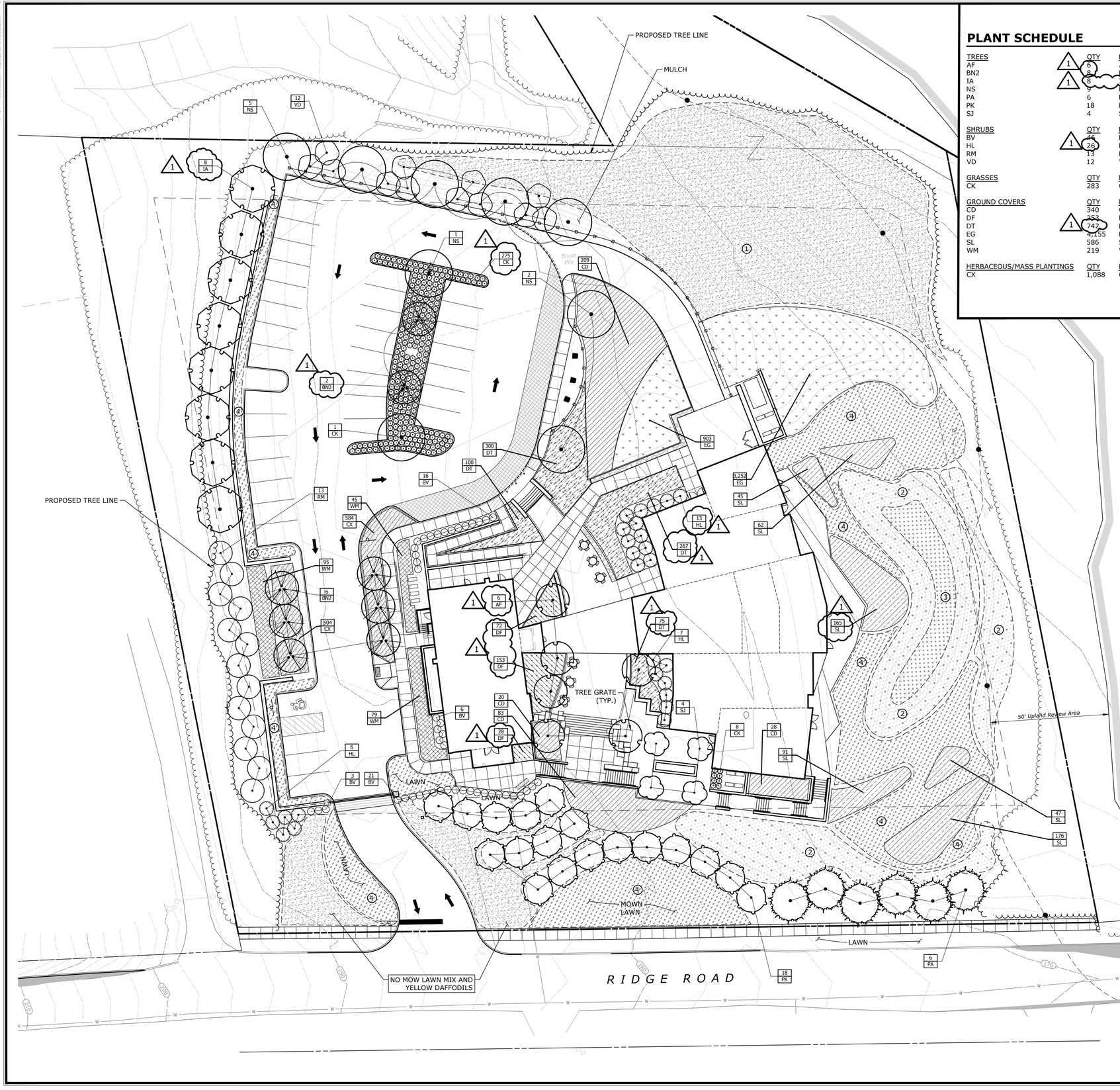
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM

DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	JW
TOWN COMMENTS	12/10/20	AWG
1 WETLANDS HEARING RESPONSE	02/17/21	JW

SITE PLAN - LAYOUT
SLATE UPPER SCHOOL
5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

DESIGNED	DRAWN	CHECKED
JW/BK	BK	JW

SCALE: 1"=20'
DATE: OCTOBER 27, 2020
PROJECT NO.: 6156-03
SHEET NO.: 04 OF 15
SHEET NAME: LA-1



PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	COMMENTS
AF	6	Acer shirasawanum	Fullmoon Maple	3"-4" Cal.	B & B	
BN2	8	Betula nigra `Heritage`	Heritage River Birch	8`/10` HT.		
IA	8	Ilex opaca	American Holly	7`/8` HT.		
NS	9	Nyssa sylvatica	Sour Gum	2"-2.5" Cal.		
PA	6	Picea abies	Norway Spruce	10`/12` HT.	B & B	
PK	18	Prunus serrulata `Kwanzan`	Flowering Cherry	2"-2.5" Cal.		
SJ	4	Styrax japonicus	Japanese Snowbell	24"-30" HT.	B&B	

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	COMMENTS
BV	46	Buxus sempervirens `Variegata`	Variegated Common Boxwood	---	#3	
HL	26	Hydrangea paniculata `Limelight`	Limelight Hydrangea	6`/7` HT.	#3	
RM	13	Rhododendron maximum	Rose Bay	---	B&B	FULL & DENSE
VD	12	Viburnum plicatum tomentosum `Mariesii`	Mariesii Double File Viburnum	---	#5	FULL & DENSE

GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	COMMENTS
CK	283	Calamagrostis acutiflora `Karl Foerster`	Feather Reed Grass	#3		

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONT
CD	340	Caryopteris x clandonensis `Dark Knight`	Dark Knight Bluebeard	seed
DF	253	Dennstaedtia punctilobula	Eastern Hay-scented Fern	#1
DT	742	Deschampsia cespitosa	Tufted Hair Grass	#1
EG	4,155	Euthamia graminifolia	Grass Leafed Golden Rod	plug
SL	586	Schizachyrium scoparium	Little Bluestem Grass	seed
WM	219	Weigela florida `Midnight Wine` TM	Weigela	#3

HERBACEOUS/MASS PLANTINGS	QTY	BOTANICAL NAME	COMMON NAME	CONT
CX	1,088	Carex flacca `Blue Zinger`	Blue Sedge	#1

PLANTING NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATING PLANT PITS.
2. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A 6" MINIMUM DEPTH OF TOPSOIL FOR ALL LAWN AREAS. WATER AS NECESSARY TO ESTABLISH TURF. ALL PLANTING BEDS SHALL HAVE 12" MINIMUM DEPTH OF TOPSOIL.
3. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A 4" MIN. DEPTH OF SHREDDED CEDAR MULCH OVER ALL PLANTING BEDS AND TREE PLANTINGS. NO DYED MULCH SHALL BE ACCEPTED.
4. ALL PLANT MATERIAL IS SUBJECT TO INSPECTION AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO AND AFTER PLANTING.
5. PLANT SPECIES MAY BE ADJUSTED BASED ON AVAILABILITY AT TIME OF PLANTING. ALL PLANT MATERIAL SUBSTITUTIONS ARE SUBJECT TO REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND THE TOWN OF NORTH HAVEN.
6. ALL PLANT MATERIALS SHALL CARRY A FULL GUARANTEE FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE, TO INCLUDE PROMPT TREATMENT OR REMOVAL AND REPLACEMENT OF ANY PLANTS FOUND TO BE IN AN UNHEALTHY CONDITION BY THE LANDSCAPE ARCHITECT. ALL REPLACEMENTS SHALL BE OF THE SAME KIND AND SIZE OF PLANTS SPECIFIED IN THE PLANT LIST.
7. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND SHALL CONTINUE UNTIL ACCEPTANCE BY THE LANDSCAPE ARCHITECT. MAINTENANCE SHALL INCLUDE WATERING, MULCHING, TIGHTENING & REPLACING OF GUYS, REPLACEMENT OF SICK OR DEAD PLANTS, RESETTING PLANTS TO PROPER GRADE OR UPRIGHT (PLUMB) POSITION, RESTORATION OF SAUCERS, AND ALL OTHER CARE NEEDED FOR PROPER GROWTH OF THE PLANTS.
8. WHERE A SIZE RANGE IS SPECIFIED AT LEAST 50% OF PLANTS PROVIDED SHALL BE OF THE LARGER SIZE.
9. CONTRACTOR TO REMOVE TREE STAKES AFTER ONE GROWING SEASON.
10. PLACEMENT OF PLANTS ARE SUBJECT TO FINAL VERIFICATION IN THE FIELD BY THE DIRECTING LANDSCAPE ARCHITECT. QUANTITIES SHALL NOT BE REDUCED. ANY ADJUSTMENTS REQUIRE TOWN APPROVAL.
11. ALL TREES SHALL BE SOURCED AND PROPAGATED BY NEW ENGLAND OR MID-ATLANTIC NURSERIES
12. ALL SEED MIXES SHALL BE CERTIFIED BY THE GROWER TO NOT BE PRODUCED THROUGH GENETIC ENGINEERING.
13. ALL SOD SHALL BE SOURCED FROM AN ORGANIC FARM OR NURSERY.

SEED MIX LEGEND

1. NEW ENGLAND SHOWY WILDFLOWER MIX
Seed Rate: 23 LB/ACRE

2. CUSTOM PANICUM VIRGATUM/ BIG BLUESTEM MIX (DRY)
Seed Rate: 23 LB/ACRE

3. NEW ENGLAND EROSION CONTROL/ RESTORATION FOR DETENSION BASINS AND MOIST SITES
Seed Rate: 23 LB/ACRE

4. LAWN SEED
JONATHAN GREEN BLACK BEAUTY 'ULTRA' SEED BLEND, CONSISTING OF:

	PERCENT BY WEIGHT
DAKOTA TALL FESCUE	30%
MONTANA TALL FESCUE	30%
TOMBSTONE TALL FESCUE	30%
BLUE-TASTIC KENTUCKY BLUEGRASS	10%
FRONTIER PERENNIAL RYEGRASS	10%

-OR APPROVED EQUIVALENT

SEED MIXTURES SHALL HAVE NO NOXIOUS WEEDS. OTHER CULTIVARS OF PERENNIAL RYEGRASS, TALL FESCUE AND KENTUCKY BLUEGRASS MAY BE SUBSTITUTED FOR THE ABOVE LISTED CULTIVARS WITH THE APPROVAL OF THE OWNER. HOWEVER, THE SAME NUMBER OF SPECIES AND CULTIVARS WITH THEIR PERCENTAGE BY WEIGHT IN THE MIXTURES MUST REMAIN THE SAME AS SPECIFIED ABOVE.

AS MANUFACTURED BY:
NEW ENGLAND WETLAND PLANTS INC., AMHERST, MA
TEL. 413-548-8000

MILONE & MACBROOM
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM

DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	JW
TOWN COMMENTS	12/10/20	AWG
WETLANDS HEARING RESPONSE	02/17/21	JW

SITE PLAN - LANDSCAPING
SLATE UPPER SCHOOL
5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

DESIGNED	DRAWN	CHECKED
JW	BK	JW

SCALE: 1"=20'
DATE: OCTOBER 27, 2020
PROJECT NO.: 6156-03
SHEET NO.: 05 OF 15
SHEET NAME: LS-1

MILONE & MACBROOM
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM

DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	JW
TOWN COMMENTS	12/10/20	NK
1 WETLANDS HEARING RESPONSE	02/17/21	JW

SITE PLAN - GRADING

SLATE UPPER SCHOOL

5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

DESIGNED	DRAWN	CHECKED
JW	BK	JW

SCALE: 1"=20'

DATE: OCTOBER 27, 2020

PROJECT NO.: 6156-03

SHEET NO.: 06 OF 15

SHEET NAME: GR-1

STORM WATER MAINTENANCE PROGRAM

UPON SITE DEVELOPMENT, THERE WILL BE A NEED TO PERIODICALLY MAINTAIN STORMWATER SYSTEMS ON THE PROPERTY. THE STORMWATER SYSTEM CONSISTS OF PIPING AND CATCH BASINS.

IN ORDER TO ENSURE OPTIMAL PERFORMANCE OF THE SYSTEM, THE FOLLOWING STORMWATER MAINTENANCE PROGRAM HAS BEEN ESTABLISHED. THE PROPERTY OWNER WILL BE RESPONSIBLE FOR IMPLEMENTATION OF THIS PROGRAM. A LOG OF ALL INSPECTIONS, CLEANING AND REPAIRS SHALL BE MAINTAINED BY THE PROPERTY OWNER AND BE AVAILABLE FOR REVIEW.

A. CATCH BASINS/YARD DRAINS/AREA DRAINS

CATCH BASINS ARE DESIGNED WITH 2-FOOT MINIMUM DEPTH SUMPS FOR THE PURPOSE OF COLLECTING COARSE SEDIMENT. ALL CATCH BASINS SHOULD BE INSPECTED TWO TIMES PER YEAR, TYPICALLY WHEN THE SITE IS SWEPT IN THE SPRING AFTER WINTER SANDING AND IN THE FALL AFTER ALL THE LEAVES HAVE FALLEN. SITE SWEEPING SHALL BE PROVIDED BETWEEN APRIL 15 AND MAY 15 EACH SPRING.

SEDIMENT SHOULD BE REMOVED WHEN IT EXTENDS TO WITHIN 6 INCHES OF THE OUTLET PIPE INVERT OR NOT LESS THAN ONCE PER YEAR. CLEANOUT WITH A VACUUM TRUCK IS GENERALLY THE BEST AND MOST CONVENIENT METHOD. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED OFF-SITE LOCATION IN ACCORDANCE WITH TOWN AND STATE REQUIREMENTS.

B. PAVEMENT SWEEPING

THE PARKING AREA AND ROADWAY SHALL BE SWEPT ANNUALLY. SWEEPING SHOULD OCCUR IN THE SPRING AFTER WINTER SANDING, BETWEEN APRIL 15 AND MAY 15. SALT ALTERNATIVES SHALL BE USED DURING WINTER MONTHS FOR DEICING.

C. STORMWATER BASIN

MOWING: THE UPPER STAGE, SIDE SLOPES, AND EMBANKMENT OF STORMWATER POND MUST BE MOWED AT LEAST ONCE PER YEAR TO DISCOURAGE WOODY GROWTH AND CONTROL WEEDS. AREAS THAT LIE WITHIN THE UPLAND REVIEW AREA ARE NOT TO BE MOWN BUT MUST BE MONITORED YEARLY FOR WOODY GROWTH. IF PRESENT, WOODY GROWTH TO BE REMOVED BY HAND.

INSPECTIONS: BASIN SHOULD BE INSPECTED TWICE PER YEAR(SPRING AND FALL) TO ENSURE THAT THE STRUCTURE OPERATES IN THE MANNER ORIGINALLY INTENDED. WHEN POSSIBLE, INSPECTIONS SHOULD BE CONDUCTED DURING WET WEATHER TO DETERMINE IF THE BASIN IS MEETING THE TARGETED DETENTION TIMES PER APPROVED DESIGN. IN PARTICULAR, THE OUTLET CONTROL DEVICE SHOULD BE REGULARLY INSPECTED FOR EVIDENCE OF CLOGGING OR, CONVERSELY, FOR TOO RAPID A RELEASE, AND THE FLOW PATH SHOULD BE CHECKED FOR EROSION PROBLEMS. OTHER PROBLEMS THAT SHOULD BE CHECKED FOR INCLUDE SUBSIDENCE, OUTLET WATER TURBIDITY, BANK/BED/OUTLET EROSION, CRACKING, OR TREE GROWTH ON THE EMBANKMENT; THE ACCUMULATION OF SEDIMENT AROUND THE OUTLET; THE ADEQUACY OF UPSTREAM/DOWNSTREAM CHANNEL EROSION CONTROL MEASURES; AND MODIFICATIONS TO THE BASIN OR ITS CONTRIBUTING WATERSHED THAT MAY INFLUENCE BASIN PERFORMANCE. INSPECTIONS SHOULD BE CARRIED OUT WITH DESIGN PLANS IN HAND.

DEBRIS AND LITTER REMOVAL: DEBRIS AND LITTER WILL ACCUMULATE NEAR THE OUTLET CONTROL DEVICEAND SHOULD BE REMOVED DURING REGULAR INSPECTION AND/OR MOWING OPERATIONS. PARTICULAR ATTENTION SHOULD BE PAID TO FLOATABLE DEBRIS THAT COULD EVENTUALLY CLOG THE CONTROL DEVICE OR RISER.

SEDIMENT REMOVAL: WHEN PROPERLY DESIGNED, DETENTION/WATER QUALITY BASINS WILL ACCUMULATE SEDIMENT OVER TIME. HOWEVER, MOST OF THE SEDIMENT WILL BE TRAPPED IN THE SEDIMENT CHAMBERS AND CATCH BASIN SUMP UNITS BEFORE REACHING THE BASIN. THE REMAINDER WILL ACCUMULATE IN THE STORMWATER POND. ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE BASIN EVERY 5 YEARS, AFTER ONE HALF (15"±) OF THE SEDIMENT STORAGE CAPACITY IN THE FOREBAY HAS BEEN FILLED, AFTER 4 INCHES OF SEDIMENT HAS ACCUMULATED IN THE MAIN PORTION OF THE BASIN, OR WHEN SIGNIFICANT ALGAL GROWTH IS OBSERVED. A PERMANENT MEASURING DEVICE SHALL BE INSTALLED IN THE MIDDLE OF THE FOREBAY AND IN THE MAIN PORTION OF THE BASIN. THE MARKER SHALL DELINEATE INCHES UP FROM THE BOTTOM OF THE BASIN SO THE DEPTH OF SEDIMENT CAN EASILY BE MEASURED. MORE FREQUENT SPOT CLEANOUTS MAY BE NEEDED AROUND THE OUTLET CONTROL DEVICE OR THE SEDIMENT FOREBAY.

SEDIMENT REMOVAL OPERATIONS ARE RELATIVELY SIMPLE. FRONT-END LOADERS, BACKHOES, OR VACUUM TRUCKS CAN BE USED TO REMOVE THE ACCUMULATED SEDIMENT FOLLOWED BY MANUAL REMOVAL OF SEDIMENT DEPOSITED AROUND THE OUTLET CONTROL DEVICE. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED OFF-SITE LOCATION IN ACCORDANCE WITH TOWN AND STATE REQUIREMENTS. THE DISTURBED AREA SHOULD BE IMMEDIATELY SEEDED WITH APPROPRIATE GRASS SEED AND MULCHED WITH HAY AFTER REMOVAL OPERATIONS ARE COMPLETED TO PREVENT THE OUTLET CONTROL DEVICE FROM CLOGGING.

D. UNDERGROUND DETENTION SYSTEMS

UNDERGROUND DETENTION SYSTEMS SHALL BE INSPECTED QUARTERLY AND SEDIMENT SHALL BE REMOVED AS NEEDED TO ENSURE PROPER FUNCTIONING OF STRUCTURES. AREAS OF DISTURBANCE THAT MAY BE AS A RESULT OF CLEANING SHALL BE SEEDED AND PLANTED IN ACCORDANCE WITH THE ORIGINAL PLANTING PLAN. THESE STRUCTURES WILL BE MAINTAINED YEARLY, OR MORE FREQUENTLY AS REQUIRED. WASTE MATERIAL WILL BE PROPERLY DISPOSED OF OFF-SITE.

ISOLATOR ROW

THE ISOLATOR ROWS INTEGRATED TO THE STORMWATER CHAMBERS SYSTEMS SHOULD BE MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. AT A MINIMUM, THE MAINTENANCE SCHEDULE SHOULD INCLUDE THE FOLLOWING:

1) THE ISOLATOR ROW UNIT SHALL BE COMPLETELY CLEANED OF ACCUMULATED DEBRIS AND SEDIMENTS AT THE COMPLETION OF CONSTRUCTION.
2) THE ISOLATOR ROW SHALL BE INSPECTED EVERY 6 MONTHS FOR THE FIRST YEAR OF OPERATION.
3) FOR SUBSEQUENT YEARS, THE INSPECTION SHOULD BE ADJUSTED BASED UPON PREVIOUS OBSERVATION OF SEDIMENT DEPOSITION. AT A MINIMUM, THE ISOLATOR ROW SHALL BE INSPECTED ANNUALLY.
4) IF UPON VISUAL INSPECTION THE SEDIMENT DEPOSIT ALONG THE LENGTH OF THE ISOLATOR ROW EXCEEDS 3 INCHES, CLEANOUT SHALL BE PERFORMED.
5) MAINTENANCE IS ACCOMPLISHED WITH THE JETVAC PROCESS.

E. PROPRIETARY HYDRODYNAMIC SEPARATOR

BEFORE BEING DISCHARGED TO THE STORMWATE BASIN, STORMWATER RUNOFF FROM THE ROADWAY AND BUILDING WILL BE DIRECTED TO A HYDRODYNAMIC SEPARATOR. THIS STRUCTURE WILL REMOVE SUSPENDED SOLIDS, DEBRIS AND FLOATABLES CONSTITTUENTS FROM STORMWATER. OIL, SCUM, AND SEDIMENT WILL EVENTUALLY ACCUMULATE AND CAN BE REMOVED THROUGH A MANHOLE LOCATED AT THE TOP OF THE SEPARATOR. THIS STRUCTURE WILL BE MAINTAINED YEARLY, OR MORE FREQUENTLY AS REQUIRED. THE UNIT SHOULD BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. WASTE MATERIAL WILL BE PROPERLY DISPOSED OF OFF THE SITE.

F. LAWN AND VEGETATED AREAS

VEGETATED COVER SHALL BE MAINTAINED ON ALL EARTH SURFACES TO MINIMIZE SOIL EROSION. USE OF FERTILIZER SHOULD BE MINIMIZED AND APPLIED USING PRUDENT ORGANIC APPLICATION PROCESSES/METHODS.

G. ROOF GUTTERS

REMOVE ACCUMULATED DEBRIS AND INSPECT FOR CLOGGING AND/OR DAMAGE AT LEAST ONCE A YEAR, TYPICALLY IN THE FALL AFTER THE LEAVES HAVE FALLEN. ANY DAMAGE SHOULD BE REPAIRED AS REQUIRED.

H. AFTER COMPLETION OF CONSTRUCTION THE PROPERTY OWNERS WILL ASSUME RESPONSIBILITY FOR OPERATION AND MAINTENANCE PLAN.

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DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	AWG
TOWN COMMENTS	12/10/20	AWG
WATER LINE REVISIONS	2/04/21	AWG
WETLANDS HEARING RESPONSE	2/17/21	FAB

SITE PLAN - UTILITIES

SLATE UPPER SCHOOL

5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

DESIGNED	DRAWN	CHECKED
FAB	AWG	TD

SCALE: 1"=20'

DATE: OCTOBER 27, 2020

PROJECT NO.: 6156-03

SHEET NO.: 07 OF 15

SHEET NAME: UT-1

SOIL TEST PIT DATA

TP-1-2020
0"-8" TOPSOIL
8"-36" MEDIUM BROWN FINE SILTY LOAM
36"-78" RED SANDY HARDPAN
LEDGE: N/A
WATER: 71"
MOTTLING: N/A

TP-2-2020
0"-5" TOPSOIL
5"-29" MEDIUM BROWN FINE SILTY LOAM
29"-72" RED SANDY HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-3-2020
0"-7" TOPSOIL
7"-32" MEDIUM BROWN FINE SILTY LOAM
32"-80" RED SANDY HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-4-2020
0"-6" TOPSOIL
6"-32" MEDIUM BROWN FINE SILTY LOAM
32"-75" RED SANDY HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-5-2020
0"-6" TOPSOIL
6"-27" BROWN SANDY LOAM
27"-76" RED SANDY HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-6-2020
0"-6" TOPSOIL
6"-20" MEDIUM BROWN SANDY LOAM
20"-31" DECOMPOSED ROCK - FRACTURED

31"-58" RED SANDY HARDPAN
LEDGE: 58"
WATER: N/A
MOTTLING: N/A

TP-7-2020
0"-8" TOPSOIL
8"-36" MEDIUM BROWN SANDY LOAM
36"-74" RED SANDY HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-8-2020
0"-13" TOPSOIL
13"-36" MEDIUM BROWN SANDY LOAM
36"-71" RED BROWN FINE SANDY LOAM
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

TP-9-2020
0"-3" TOPSOIL
3"-24" MEDIUM BROWN FINE SANDY LOAM
24"-56" RED BROWN HARDPAN
LEDGE: N/A
WATER: N/A
MOTTLING: N/A

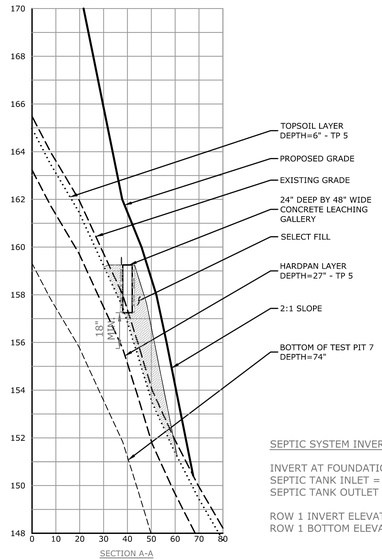
PERCOLATION TEST RESULTS:

DATE: 5-22-20

PERC TEST 1-20	AT 21"	> 60.0 MIN/INCH
PERC TEST 2-20	AT 22"	10.1-20.0 MIN/INCH
PERC TEST 5-20	AT 22"	10.1-20.0 MIN/INCH
PERC TEST 6-20	AT 21"	10.1-20.0 MIN/INCH

DATE: 12-31-2020

PERC TEST Y-2020	AT 24"	10.1-20.0 MIN/INCH
PERC TEST Z-2020	AT 24"	10.1-20.0 MIN/INCH



SECTION A-A
1"=30' HORIZONTAL - 1"=3' VERTICAL

SEPTIC SYSTEM INVERT ELEVATIONS:

INVERT AT FOUNDATION WALL = 157.0
SEPTIC TANK INLET = 156.0
SEPTIC TANK OUTLET = 155.75

ROW 1 INVERT ELEVATION = 159.25
ROW 1 BOTTOM ELEVATION = 157.25

SYSTEM DESIGN

DESIGN BASIS
CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS REVISED JANUARY 1, 2018

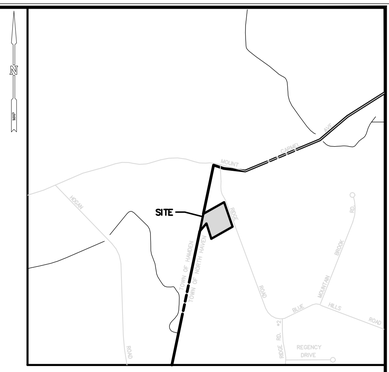
DESIGN FLOW
9 GPD (JUNIOR HIGH/ STUDENT)* x 30 STUDENTS = 270 GPD
12 GPD (HIGH SCHOOL/ STUDENT)* x 60 STUDENTS = 720 GPD
DESIGN FLOW = 270 GPD + 720 GPD = 990 GPD
* TAKEN FROM TABLE 4 OF CT DPH

PERC RATE - 10.1 - 20.0 MIN/INCH
EFFECTIVE LEACHING AREA (ELA) REQUIRED = 990 GPD/1.2 GPD PER SQ FT OF ELA* = 825 SQ FT
* TAKEN FROM TABLE 8 OF CT DPH (NON RESIDENTIAL WITH NON PROBLEMATIC SEWAGE)

RESTRICTIVE LAYER (RL) = (42"+42"+36"+20")/4 = 35" (AVERAGE OF DEPTH FROM TOP OF LEACHING ROW TO RL IN TPs 5 & 7 AND DEPTH TO RL IN TPs 5 & 8)
SLOPE = 10.1-15.0%
HYDRAULIC FACTOR (HF) = 20
FLOW FACTOR (FF) =3.3
PERCOLATION FACTOR (PF) = 1.25
MLSS = 82.5'

PRIMARY AREA - USE 1 ROW OF 112 LF OF 24" X 48" CONCRETE GALLERIES WITH TOP DISTRIBUTION PIPE
EFFECTIVE LEACHING AREA PROVIDED = 851.2 SQ FT (112 LF x 7.6 SQ FT/LF)

RESERVE AREA - USE 1 ROW OF 75 LF OF 18" X 36" MANTIS 536-8
EFFECTIVE LEACHING AREA PROVIDED = 825 SW FT (75 LF X 11.0 SQ FT/LF)



LOCATION MAP:

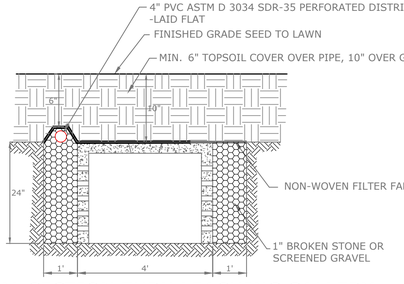
SELECT FILL MATERIAL:

SELECT FILL PLACED WITHIN AND ADJACENT TO LEACHING SYSTEM AREAS SHALL BE COMPRISED OF CLEAN SAND, OR SAND AND GRAVEL, FREE OF ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY A PROFESSIONAL ENGINEER FOR USE WITHIN THE LEACHING AREA:

1. THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THREE (3) INCH SIEVE.
2. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE (THIS IS THE GRAVEL PORTION OF THE SAMPLE).
3. THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
4. THE REMAINING SAMPLE SHALL MEET THE FOLLOWING GRADATION CRITERIA:

SIEVE SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70-100	70-100
#40	10-50*	10-75
#100	0-20	0-5
#200	0-5	0-2.5

* PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.



TYPICAL SECTION THRU LEACHING GALLERY

N.T.S.

GENERAL NOTES

1. BOUNDARY/TOPOGRAPHIC INFORMATION IS BASED UPON A MAP ENTITLED PROPERTY/TOPOGRAPHIC SURVEY, SHEET 1 OF 1 CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHIC ACCURACY CLASS T-2 CONDUCTED BY: MILONE AND MACBROOM INC., PREPARED FOR THE SLATE SCHOOL, INC. AT A SCALE OF 1"=40', DATED: MAY 19, 2020, REVISED TO JUNE 9, 2020.
2. NORTH ARROW IS BASED UPON THE CONNECTICUT COORDINATE SYSTEM (NAD 1983).
3. ELEVATIONS AND CONTOURS ARE BASED UPON NGVD 1988.
4. MILONE & MACBROOM, INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
5. THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER COMPANY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODE.
6. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 1-800-922-4455.
7. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
8. A STABLE BENCH MARK SHALL BE SET BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE PROPOSED LEACHING SYSTEM. ANY CHANGES MADE TO THE BENCHMARK SHALL ONLY BE BY THE DESIGN ENGINEER OR THE LICENSED SURVEYOR.
9. SITE PREPARATION OF THE SELECT FILL SHALL BE DONE BY A CT LICENSED SEPTIC INSTALLER AND SHALL BE INSPECTED AND APPROVED BY QVHD BEFORE A BUILDING PERMIT RECOMMENDATION CAN BE MADE TO THE BUILDING OFFICIAL. SUBSURFACE SEPTIC SYSTEM SHALL BE INSTALLED BY A CT LICENSED SEPTIC INSTALLER AND IN ACCORDANCE WITH THE CT PUBLIC HEALTH CODE.
10. DESIGN ENGINEER SHALL BE AVAILABLE IF NEEDED BY THE INSTALLER AND SHALL SUBMIT AN ENGINEERED AS-BUILT.
11. THE LICENSED INSTALLER SHALL COMPLETE AND SUBMIT AN AS-BUILT ON FORM PROVIDED BY QVHD.
12. SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THE PERMIT PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED.
13. ABANDONMENT OF SUBSURFACE SEPTIC SYSTEM SHALL BE PERFORMED IN ACCORDANCE WITH THE CT PUBLIC HEALTH CODE. HOLLOW STRUCTURES SHALL BE EMPTIED OF ALL SEPTAGE AND FILLED WITH SAND OR GRAVEL, CRUSHED IN PLACE, OR REMOVED FROM THE SITE.
14. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" TOPSOIL, AND BE SEEDED WITH GRASS OR SODDED, AS SHOWN ON THE PLANS, UNLESS THE AREA IS A MULCHED PLANT BED.
15. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.
16. ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS USED DURING CONSTRUCTION SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS.
17. COMPLIANCE WITH THE PERMIT CONDITIONS IS THE RESPONSIBILITY OF BOTH THE CONTRACTOR AND THE PERMITTEE.
18. THE PROPERTY OWNER AND/OR HIS/HER AGENTS MUST MAINTAIN (REPAIR/REPLACE) WHEN NECESSARY THE SILTATION CONTROL MEASURES UNTIL ALL DEVELOPMENT ACTIVITY IS COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
19. SOIL AND EROSION CONTROLS MUST BE INSPECTED BY THE ZONING ENFORCEMENT OFFICER BEFORE WORK MAY COMMENCE
20. STUDENT POPULATION NOT TO EXCEED 90. THERE WILL BE NO SHOWERS PROVIDED. PROPOSED USE OF "KITCHEN" - SHALL NOT INCLUDE MEAL PREPARATION FOR STAFF OR STUDENTS.
21. ALL BUILDINGS TO BE CONNECTED TO PUBLIC WATER SUPPLY.

ENGINEER'S CERTIFICATION

THIS SUBSURFACE SEWAGE DISPOSAL SYSTEM CONFORMS TO APPLICABLE HEALTH CODES AND CURRENT DESIGN PRACTICE. NO OTHER WARRANTY IS GIVEN OR IMPLIED BY THE ENGINEER.

RYAN J. McEVOY CONN. P.E. 25786

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DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	AWG
TESTPIT LOCATION	11/16/2020	ACD
TOWN COMMENTS	12/4/20	AWG
ADDITIONAL PERC TESTS	1/08/2020	ACD
CONVERSION TO ONE SEPTIC TANK	2/02/2021	ACD

SUBSURFACE SEWAGE DISPOSAL PLAN

SLATE UPPER SCHOOL

5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

RJM	AWG	TD
DESIGNED	DRAWN	CHECKED

1"=30'
SCALE

OCTOBER 27, 2020
DATE

6156-03
PROJECT NO.

08 OF 15
SHEET NO.

SS-1
SHEET NAME

SOIL EROSION AND SEDIMENT CONTROL NARRATIVE

SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT - 2002, TOWN OF NORTH HAVEN STANDARDS, AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.

1. PURPOSE AND DESCRIPTION OF PROJECT
A.) CONSTRUCTION OF A PROPOSED SCHOOL BUILDING
B.) DISTURBED AREA: ±2.6 AC.

2. IDENTIFICATION OF EROSION AND SEDIMENT CONTROL CONCERNS
A.) CUTS AND FILLS ASSOCIATED WITH CONSTRUCTION.
B.) PROTECTION OF OFF SITE WETLANDS.

3. IDENTIFICATION OF OTHER POSSIBLE PERMITS
THE PERMITS REQUIRED FOR THE PROJECT ARE LOCAL INLAND WETLANDS, AND PLANNING AND ZONING PERMITS

4. RESPONSIBLE PARTY
TBD

TEMPORARY SEDIMENT TRAP SIZING SUMMARY

TRAP NO.	ACRES	VOLUME STORAGE REQUIRED	DEPTH STORAGE	TRAP DIMENSIONS	VOLUME PROVIDED
#1	2.1	282 CY	5 FT	50'L x 35'W x 5'D	324 CY

*134 CY STORAGE VOLUME REQUIRED PER ACRE CONTRIBUTING AREA TO TST
*VOLUME OF STORAGE DISPLAYED EQUAL TO WET STORAGE VOLUME.

EROSION CONTROL LEGEND

CE	CONSTRUCTION ENTRANCE
IP	INLET PROTECTION (TYP. OF ALL INLETS)
HB	HAY BALES
GSF	SEDIMENT FILTER FENCE
STK	TEMPORARY SOIL STOCKPILE AREA SURROUNDED WITH SEDIMENT FILTER FENCE
CD	STONE CHECK DAM
DB	TEMPORARY DIVERSION BERM WITH STONE CHECK DAM 75' O.C.
TST	TEMPORARY SEDIMENT TRAP
ECB	EROSION CONTROL BLANKET OR APPROVED EQUAL

0' 10' 20'
0 1/2" 1"

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SEDIMENT AND EROSION CONTROL PLAN

SLATE UPPER SCHOOL

5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

DESIGNED	DRAWN	CHECKED
AWG	AWG	TD

SCALE 1"=20'

DATE OCTOBER 27, 2020

PROJECT NO. 6156-03

SHEET NO. 09 OF 15

SHEET NAME SE-1

SEDIMENT & EROSION CONTROL SPECIFICATIONS

GENERAL:

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION, AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE **PROJECT.**

IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INSOFAR AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT, INSOFAR AS POSSIBLE, EROSION ON THE SITE.

LAND GRADING

GENERAL:

1. THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES, SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
   a. THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
   b. THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
   c. THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1:4).
   d. PROVISION SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM DRAINS TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
   e. EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING, OR CRACKING.
   f. NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS.
   g. PRIOR TO ANY REGRADING, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE.

TOPSOILING

GENERAL:

1. TOPSOIL SHALL BE SPREAD OVER ALL EXPOSED AREAS IN ORDER TO PROVIDE A SOIL MEDIUM HAVING FAVORABLE CHARACTERISTICS FOR THE ESTABLISHMENT, GROWTH, AND MAINTENANCE OF VEGETATION.
2. UPON ATTAINING FINAL SUBGRADES, SCARIFY SURFACE TO PROVIDE A GOOD BOND WITH TOPSOIL.
3. REMOVE ALL LARGE STONES, TREE LIMBS, ROOTS AND CONSTRUCTION DEBRIS.
4. APPLY LIME ACCORDING TO SOIL TEST OR AT THE RATE OF TWO (2) TONS PER ACRE.

MATERIAL:

1. TOPSOIL SHOULD HAVE PHYSICAL, CHEMICAL, AND BIOLOGICAL CHARACTERISTICS FAVORABLE TO THE GROWTH OF PLANTS.
2. TOPSOIL SHOULD HAVE A SANDY OR LOAMY TEXTURE.
3. TOPSOIL SHOULD BE RELATIVELY FREE OF SUBSOIL MATERIAL AND MUST BE FREE OF STONES (OVER 1" IN DIAMETER), LUMPS OF SOIL, ROOTS, TREE LIMBS, TRASH, OR CONSTRUCTION DEBRIS. IT SHOULD BE FREE OF ROOTS OR RHIZOMES SUCH AS THISTLE, NUTGRASS, AND QUACKGRASS.
4. AN ORGANIC MATTER CONTENT OF SIX PERCENT (6%) MINIMUM, TWENTY PERCENT (20%) MAXIMUM IS REQUIRED. AVOID LIGHT COLORED SUBSOIL MATERIAL.
5. SOLUBLE SALT CONTENT OF OVER 500 PARTS PER MILLION (PPM) IS LESS SUITABLE. AVOID TIDAL MARSH SOILS BECAUSE OF HIGH SALT CONTENT AND SULFUR ACIDITY.
6. THE pH SHOULD BE MORE THAN 6.0. IF LESS, ADD LIME TO INCREASE pH TO AN ACCEPTABLE LEVEL.

APPLICATION:

1. AVOID SPREADING WHEN TOPSOIL IS WET OR FROZEN.
2. SPREAD TOPSOIL UNIFORMLY TO A DEPTH OF AT LEAST SIX INCHES (6"), OR TO THE DEPTH SHOWN ON THE LANDSCAPING PLANS.

TEMPORARY VEGETATIVE COVER

GENERAL:

1. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL UNPROTECTED AREAS THAT PRODUCE SEDIMENT, AREAS WHERE FINAL GRADING HAS BEEN COMPLETED, AND AREAS WHERE THE ESTIMATED PERIOD OF BARE SOIL EXPOSURE IS LESS THAN 12 MONTHS. TEMPORARY VEGETATIVE COVER SHALL BE APPLIED IF AREAS WILL NOT BE PERMANENTLY SEEDED BY SEPTEMBER 1.

SITE PREPARATION:

1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
3. APPLY LIME ACCORDING TO SOIL TEST OR AT A RATE OF ONE (1) TON OF GROUND DOLOMITIC LIMESTONE PER ACRE (5 LBS. PER 100 SQ. FT.).
4. APPLY FERTILIZER ACCORDING TO SOIL TEST OR AT THE RATE OF 300 LBS. OF 10-10-10 PER ACRE (7 LBS. PER 1,000 SQ. FT.) AND SECOND APPLICATION OF 200 LBS. OF 10-10-10- (5 LBS. PER 1,000 SQ. FT.) WHEN GRASS IS FOUR INCHES (4") TO SIX INCHES (6") HIGH. APPLY ONLY WHEN GRASS IS DRY.
5. UNLESS HYDROSEEDED, WORK IN LIME AND FERTILIZER TO A DEPTH OF FOUR (4") INCHES USING A DISK OR ANY SUITABLE EQUIPMENT.
6. TILLAGE SHOULD ACHIEVE A REASONABLY UNIFORM LOOSE SEEDBED. WORK ON CONTOUR IF SITE IS SLOPING.

ESTABLISHMENT:

1. SELECT APPROPRIATE SPECIES FOR THE SITUATION. NOTE RATES AND SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
2. APPLY SEED UNIFORMLY ACCORDING TO THE RATE INDICATED BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
3. UNLESS HYDROSEEDED, COVER RYEGRASS SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL USING SUITABLE EQUIPMENT.
4. MULCH IMMEDIATELY AFTER SEEDING IF REQUIRED. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW.) APPLY STRAW OR HAY MULCH AND ANCHOR TO SLOPES GREATER THAN 3% OR WHERE CONCENTRATED FLOW WILL OCCUR.

PERMANENT VEGETATIVE COVER

GENERAL:

1. PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS VARIOUS SECTIONS OF THE PROJECT ARE COMPLETED IN ORDER TO STABILIZE THE SOIL, REDUCE DOWNSTREAM DAMAGE FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE AESTHETIC NATURE OF THE SITE. IT WILL BE APPLIED TO ALL CONSTRUCTION AREAS SUBJECT TO EROSION WHERE FINAL GRADING HAS BEEN COMPLETED AND A PERMANENT COVER IS NEEDED.

SITE PREPARATION:

1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
3. PERFORM ALL PLANTING OPERATIONS PARALLEL TO THE CONTOURS OF THE SLOPE.
4. APPLY TOPSOIL AS INDICATED ELSEWHERE HEREIN.
5. APPLY FERTILIZER ACCORDING TO SOIL TEST AND AS SPECIFIED.

VEGETATIVE COVER SELECTION & MULCHING

TEMPORARY VEGETATIVE COVER:

PERENNIAL RYEGRASS 3 LBS./1,000 SQ.FT.
(IOLUIUM PERENNE)

PERMANENT VEGETATIVE COVER: SEE LANDSCAPING PLAN

TEMPORARY MULCHING:

STRAY OR HAY 70-90 LBS./1,000 SQ.FT.
(TEMPORARY VEGETATIVE AREAS)

WOOD FIBER IN HYDROMULCH SLURRY 25-50 LBS./1,000 SQ. FT.

ESTABLISHMENT:

1. SMOOTH AND FIRM SEEDBED WITH CULTIPACKER OR OTHER SIMILAR EQUIPMENT PRIOR TO SEEDING (EXCEPT WHEN HYDROSEEDING).
2. SELECT ADAPTED SEED MIXTURE FOR THE SPECIFIC SITUATION. NOTE RATES AND THE SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPEC. BELOW).
3. APPLY SEED UNIFORMLY ACCORDING TO RATE INDICATED, BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
4. COVER GRASS AND LEGUME SEED WITH NOT MORE THAN 1/4 INCH OF SOIL WITH SUITABLE EQUIPMENT (EXCEPT WHEN HYDROSEEDING).
5. MULCH IMMEDIATELY AFTER SEEDING, IF REQUIRED, ACCORDING TO TEMPORARY MULCHING SPECIFICATIONS. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
6. USE PROPER INOCULANT ON ALL LEGUME SEEDINGS, USE FOUR (4) TIMES NORMAL RATES WHEN HYDROSEEDING.
7. USE SOD WHERE THERE IS A HEAVY CONCENTRATION OF WATER AND IN CRITICAL AREAS WHERE IT IS IMPORTANT TO GET A QUICK VEGETATIVE COVER TO PREVENT EROSION.

MAINTENANCE:

1. TEST FOR SOIL ACIDITY EVERY THREE (3) YEARS AND LIME AS REQUIRED.
2. ON SITES WHERE GRASSES PREDOMINATE, BROADCAST ANNUALLY 500 POUNDS OF 10-10-10 FERTILIZER PER ACRE (12 LBS. PER 1,000 SQ. FT.) OR AS NEEDED ACCORDING TO ANNUAL SOIL TESTS.
3. ON SITES WHERE LEGUMES PREDOMINATE, BROADCAST EVERY THREE (3) YEARS OR AS INDICATED BY SOIL TEST 300 POUNDS OF 0-20-20 OR EQUIVALENT PER ACRE (8 LBS PER 1,000 SQ. FT.).

EROSION CHECKS

GENERAL:

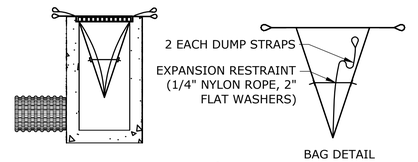
1. TEMPORARY PERVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND OR GEOTEXTILE FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

CONSTRUCTION:

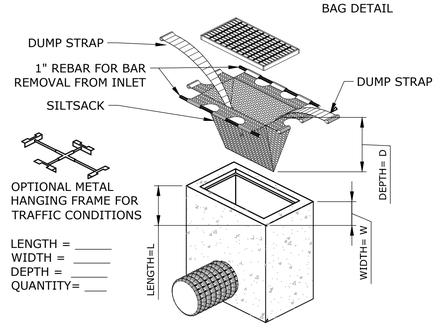
1. BALES SHOULD BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED INTO THE SOIL A MINIMUM OF FOUR (4") INCHES.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY WOOD STAKES OR REINFORCEMENT BARS DRIVEN THROUGH THE BALES AND INTO THE GROUND. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. GEOTEXTILE FABRIC SHALL BE SECURELY ANCHORED AT THE TOP OF A THREE FOOT (3') HIGH FENCE AND BURIED A MINIMUM OF FOUR INCHES (4") TO THE SOIL. SEAMS BETWEEN SECTIONS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF TWO FEET (2').

INSTALLATION AND MAINTENANCE:

1. BALED HAY EROSION BARRIERS SHALL BE INSTALLED AT ALL STORM SEWER INLETS.
2. BALED HAY EROSION BARRIERS AND GEOTEXTILE FENCE SHALL BE INSTALLED AT THE LOCATION INDICATED ON THE PLAN AND IN ADDITIONAL AREAS AS MAY BE DEEMED APPROPRIATE DURING CONSTRUCTION.
3. ALL EROSION CHECKS SHALL BE MAINTAINED UNTIL ADJACENT AREAS ARE STABILIZED.
4. INSPECTION SHALL BE FREQUENT (AT MINIMUM MONTHLY AND BEFORE AND AFTER HEAVY RAIN) AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. EROSION CHECKS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE.



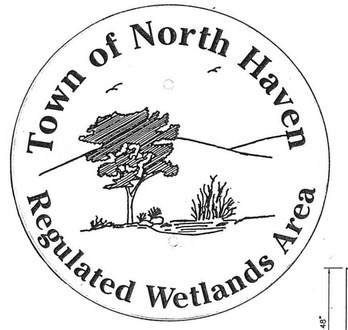
BAG DETAIL



INLET PROTECTION (IP)

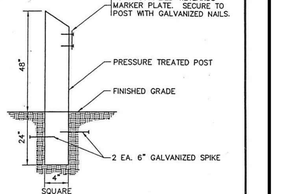
NOT TO SCALE

INLAND WETLANDS MARKER AND POST DETAILS

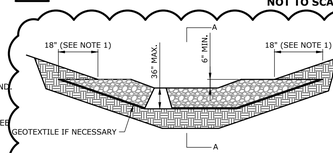


MARKER PLATE DETAIL
NTS

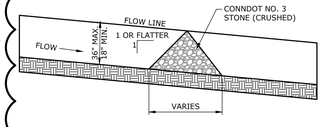
Note: This marker post should be installed along the wetland buffer line (50 ft outside the actual wetlands) at a max. distance of 75 ft. appart, and/or at points of curvature, changes in alignment or angle points.



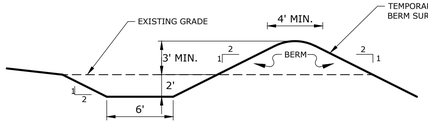
POST DETAIL
NTS



STONE CHECK DAM UPSTREAM

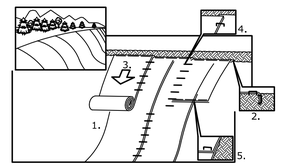


SECTION A-A



TEMPORARY DIVERSION BERM/SWALE (DB)

NOT TO SCALE



NOTES:

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING SCC225, DO NOT SEED PREPARED AREA. SCC225 MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAP AREA, APPROXIMATELY 12" APART.

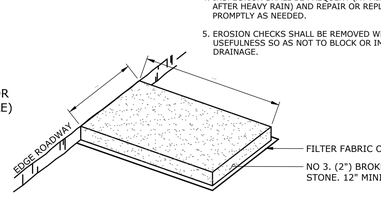
REFER TO GENERAL STAPLE PATTERN GUIDE IN NORTH AMERICAN GREEN CATALOG FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

APPLICATION OF EROSION CONTROL BLANKET ON SLOPES

NOT TO SCALE

SEDIMENT FILTER FENCE (GSF)

NOT TO SCALE

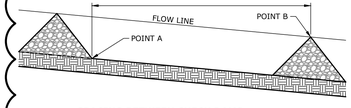


NOTES:

1. CONSTRUCTION ENTRANCE PAD SHALL BE INSTALLED AND MAINTAINED DURING OPERATIONS WHICH GENERATE VEHICULAR TRACKING OF MUD.

CONSTRUCTION ENTRANCE PAD (CE)

NOT TO SCALE



SPACING BETWEEN CHECK DAMS

NOTES:

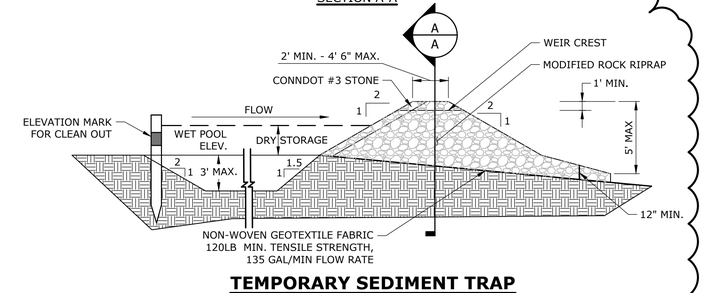
1. KEY STONE INTO THE DITCH BANKS AND EXTEND INTO THE ABUTMENTS A MINIMUM OF 18" TO PREVENT FLOW FROM FLANKING THE CHECK DAM.
2. THE MINIMUM DESIGN CAPACITY SHALL CONVEY A 2 YEAR-24 HOUR PEAK FLOW.

STONE CHECK DAM (CD)

NOT TO SCALE

EROSION CONTROL MAINTENANCE INTERVALS

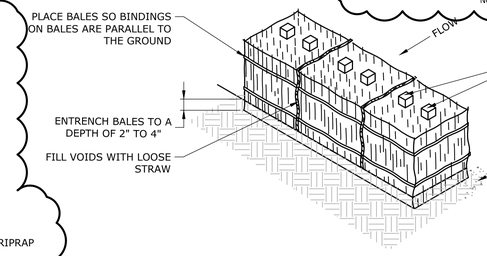
EROSION CONTROL MEASURE	CONTROL OBJECTIVE	INSPECTION/MAINTENANCE	FAILURE INDICATORS	REMOVAL
TEMPORARY SEDIMENT TRAP (TST)	- DETAIN SEDIMENT-LADEN RUNOFF FROM SMALL DISTURBED AREAS LONG ENOUGH TO ALLOW A MAJORITY OF THE SEDIMENT TO SETTLE OUT.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. STONE OUTLET SHOULD BE AT LEAST 1 FOOT BELOW CREST OF EMBANKMENT. SEDIMENT MUST BE REMOVED WHEN ACCUMULATION REACHES ½ OF THE REQUIRED WET STORAGE.	- TURBID WATER - EXCESSIVE SEDIMENT ACCUMULATION - OVERTOPPING EVIDENCE	TST MAY BE REMOVED ONCE THE CONTRIBUTING DRAINAGE AREA IS PERMANENTLY STABILIZED.
TEMPORARY SEDIMENT BASIN (DETENTION BASIN) (SB/PST)	- INTERCEPT/RETAIN SEDIMENT DURING CONSTRUCTION. - PREVENT TRANSPORT AND DEPOSITION OF SEDIMENT OFF CONSTRUCTION SITE.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCHES OR GREATER. CLEAN OUT SEDIMENT WHEN ACCUMULATION EXCEEDS ½ OF THE WET STORAGE CAPACITY OR WHEN DEPTH OF AVAILABLE POOL IS REDUCED TO 18. PLACE STAKES OR OTHER MEANS TO INDICATE THE THRESHOLD ELEVATION FOR SEDIMENT CLEANOUT.	- TURBID WATER - EXCESSIVE SEDIMENT ACCUMULATION - OVERTOPPING EVIDENCE - EROSION OF EMBANKMENTS	TEMPORARY SEDIMENT BASINS THAT ARE NOT TO FUNCTION AS PERMANENT DETENTION BASINS MAY BE REMOVED ONCE THE CONTRIBUTING DRAINAGE AREA IS PERMANENTLY STABILIZED.
SILT FENCE (SF) (RELATED: IP, STK)	- INTERCEPT, AND REDIRECT/DETAIN SMALL AMOUNTS OF SEDIMENT FROM SMALL DISTURBED AREAS. - DECREASE VELOCITY OF SHEET FLOW. - PROTECT SENSITIVE SLOPES OR SOILS FROM EXCESSIVE WATER FLOW.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. ACCUMULATED SEDIMENT MUST BE REMOVED ONCE ITS DEPTH IS EQUAL TO ½ THE TRENCH HEIGHT. INSPECT FREQUENTLY DURING PUMPING OPERATIONS IF USED FOR DEWATERING OPERATIONS.	- PHYSICAL DAMAGE OR DECOMPOSITION - EVIDENCE OF OVERTOPPED OR UNDERCUT FENCE - EVIDENCE OF SIGNIFICANT FLOWS EVADING CAPTURE - REPETITIVE FAILURE	SILT FENCE MAY BE REMOVED AFTER UPHILL AND SENSITIVE AREAS HAVE BEEN PERMANENTLY STABILIZED.
HAY BALES (HB)	- INTERCEPT, AND REDIRECT/DETAIN SMALL AMOUNTS OF SEDIMENT FROM SMALL DISTURBED AREAS. - DECREASE VELOCITY OF SHEET FLOW. - PROTECT SENSITIVE SLOPES OR SOILS FROM EXCESSIVE WATER FLOW.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. ACCUMULATED SEDIMENT MUST BE REMOVED ONCE THE DEPTH OF SEDIMENT IS EQUAL TO ½ THE HEIGHT OF THE BARRIER. INSPECT FREQUENTLY DURING PUMPING OPERATIONS IF USED FOR DEWATERING OPERATIONS.	- PHYSICAL DAMAGE OR DECOMPOSITION - EVIDENCE OF OVERTOPPED OR UNDERCUT FENCE - EVIDENCE OF SIGNIFICANT FLOWS EVADING CAPTURE - REPETITIVE FAILURE	HAY BALES MAY BE REMOVED AFTER UPHILL AREAS HAVE BEEN PERMANENTLY STABILIZED.
CONSTRUCTION ENTRANCE (CE)	- REDUCE THE TRACKING OF SEDIMENT OFF-SITE ONTO PAVED SURFACES.	INSPECT AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. PERIODIC ADDITION OF STONE, OR LENGTHENING OF ENTRANCE MAY BE REQUIRED AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES AS A RESULT OF INEFFICIENCY OF CONSTRUCTION ENTRANCE SHALL BE IMMEDIATELY REMOVED.	- SEDIMENT IN ROADWAY ADJACENT TO SITE	CONSTRUCTION ENTRANCE MAY BE REMOVED ONCE THE SITE HAS BEEN PERMANENTLY STABILIZED, AND ALL OTHER SECTIONS OF ROADWAY HAVE BEEN PERMANENTLY PAVED.
CATCH BASIN INLET PROTECTION (IP)	- PROHIBIT SILT IN CONSTRUCTION-RELATED RUNOFF FROM ENTERING STORM DRAINAGE SYSTEM.	INSPECT AFTER ANY RAIN EVENT. IF FILTER BAG INSIDE CATCH BASIN CONTAINS MORE THAN 6: OF SEDIMENT, REMOVE SEDIMENT FROM BAG. CHECK SURROUNDING SILT FENCE AND HAY BALES PER NOTED ABOVE.	- RIPPED BAG - FAILED HAY BALES / SILT FENCE - SIGNIFICANT SILT PRESENCE IN STORM DRAINAGE SYSTEM OUTFLOW.	INLET PROTECTION MAY BE REMOVED ONCE THE SITE HAS BEEN PERMANENTLY STABILIZED, AND ALL SECTIONS OF ROADWAY HAVE BEEN PERMANENTLY PAVED.
STOCKPILE PROTECTION (STK)	- RETAIN SOIL STOCKPILE IN LOCATIONS SPECIFIED, AND REDUCE WATER-TRANSPORT.	INSPECT SILT FENCE AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES, PERIODIC REINFORCEMENT OF SILT FENCE, OR ADDITION OF HAY BALES MAY BE NECESSARY.	- EVIDENCE OF STOCK PILE DIMINISHING DUE TO RAIN EVENTS - FAILURE OF SILT FENCE	STOCKPILE PROTECTION MAY BE REMOVED ONCE THE STOCKPILE IS USED OR REMOVED.



SECTION A-A

TEMPORARY SEDIMENT TRAP

NOT TO SCALE



NOTES:

1. IDEALLY BALES SHOULD BE ENTRENCHED 2 TO 4 INCHES AND TIGHTLY BUTTED TOGETHER. BALES CAN BE SUCCESSFULLY PLACED WITHOUT A TRENCH IF GOOD GROUND CONTACT IS MADE. REMOVE HEAVY BRUSH AND FILL ALL VOIDS WITH LOOSE STRAW.
2. BALES SHALL BE ONLY USED AS A TEMPORARY BARRIER AND FOR NO LONGER THAN 60 DAYS.
3. WHEN SEDIMENTATION DEPOSITS REACH WITHIN 3" OF THE TOP OF BALES, REMOVE THE SEDIMENTATION OR ADD ADDITIONAL BALES ON SEDIMENTATION DIRECTLY BEHIND FIRST ROW OF BALES AS DIRECTED BY THE ENGINEER.
4. UPON ESTABLISHMENT OF GROUND COVER ON DISTURBED AREAS AND WHEN DIRECTED BY THE ENGINEER, HAY BALES WILL BE REMOVED AND USED AS MULCH. ANY SEDIMENTATION WILL BE THINLY SPREAD UPON ESTABLISHED GROUND COVER.

HAY BALE BARRIER PROTECTION

NOT TO SCALE

MILONE & MACBROOM
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM

DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	AWG
TOWN COMMENTS	12/10/20	AWG
WETLANDS HEARING RESPONSE	2/17/21	AWG

SEDIMENT AND EROSION CONTROL SPECIFICATIONS AND DETAILS

SLATE UPPER SCHOOL

5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

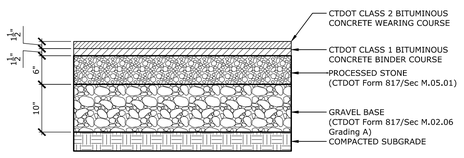
AS NOTED
SCALE

OCTOBER 27, 2020
DATE

6156-03
PROJECT NO.

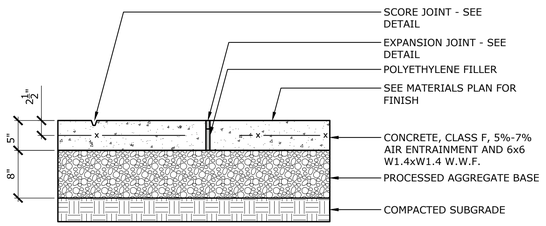
10 OF 15
SHEET NO.

SE-2
SHEET NAME



BITUMINOUS CONCRETE DRIVEWAY

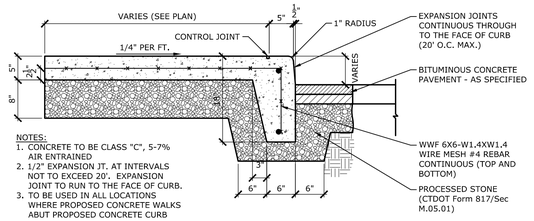
NOT TO SCALE



NOTES:
1. EXPANSION JOINTS 20' O.C. MAX. OR AS PER PLAN.
2. SCORE JOINTS 6' O.C. TYP (OR AS SHOWN ON PLANS).
3. PROVIDE CONCRETE MOCK-UP PANELS FOR COLOR AND TEXTURE APPROVAL BY OWNER AND LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. COLOR AND SEALANT AS MANUFACTURED BY L.M. SCOFIELD CO., DOUGLASSVILLE, GA. TEL 770-920-6060 *OR APPROVED EQUIVALENT*
5. PROVIDE PREFORMED EXPANSION JOINT AT ALL CONSTRUCTION JOINTS, WALLS, BUILDINGS, OR WHERE CONCRETE ABUTS EXISTING CONCRETE.
6. PROVIDE COLOR SAMPLES OF EXPANSION JOINT CAULKING TO LANDSCAPE ARCHITECT FOR APPROVAL.

COLORIZED CONCRETE PAVEMENT

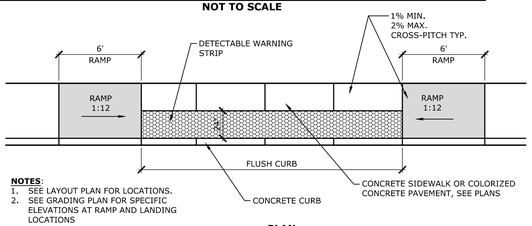
N.T.S. P-SC-5993.02-24



NOTES:
1. CONCRETE TO BE CLASS "C", 5-7% AIR ENTRAINED
2. 1/2" EXPANSION JT. AT INTERVALS NOT TO EXCEED 20'. EXPANSION JOINT TO RUN TO THE FACE OF CURB.
3. TO BE USED IN ALL LOCATIONS WHERE PROPOSED CONCRETE WALKS ABUT PROPOSED CONCRETE CURB

INGEGRAL CONCRETE WALK & CURB WITH REVEAL

NOT TO SCALE

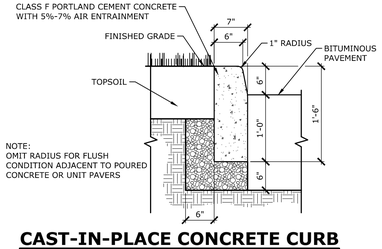


NOTES:
1. SEE LAYOUT PLAN FOR LOCATIONS.
2. SEE GRADING PLAN FOR SPECIFIC ELEVATIONS AT RAMP AND LANDING LOCATIONS

PLAN

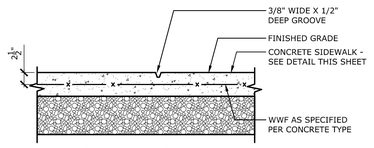
ACCESSIBLE DROP RAMP - TYPE D

NOT TO SCALE



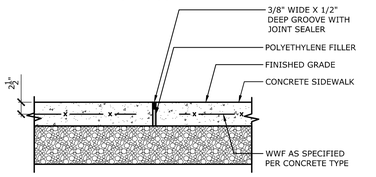
CAST-IN-PLACE CONCRETE CURB

NOT TO SCALE



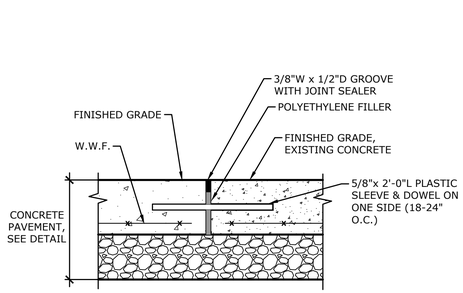
SCORE JOINT

NOT TO SCALE



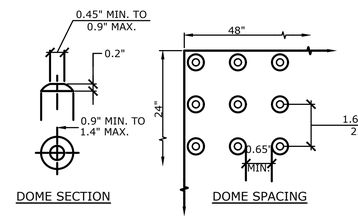
EXPANSION JOINT

NOT TO SCALE



DOWELLED EXPANSION JOINT

NOT TO SCALE P-SC-5993.02-08

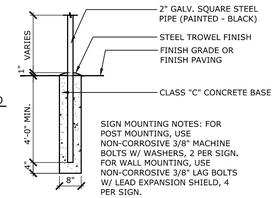


NOTES:

THE DETECTABLE WARNING STRIP SHALL BE A PREFABRICATED DETECTABLE WARNING SURFACE TILE THAT IS CAST IN PLACE AND REPLACEABLE SUCH AS MANUFACTURED FROM ALERTTILE DETECTABLE WARNING SYSTEMS, ADA SOLUTIONS, OR APPROVED EQUAL. THE TILE SHALL HAVE A BRICK RED HOMOGENEOUS COLOR IN COMPLIANCE WITH FEDERAL STANDARD 595A COLOR #2144 OR APPROVED EQUAL

DETECTABLE WARNING STRIP

NOT TO SCALE

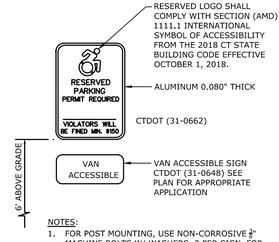


SIGN MOUNTING NOTES: FOR POST MOUNTING, USE NON-CORROSIVE 3/8" MACHINE BOLTS W/ WASHERS, 2 PER SIGN. FOR WALL MOUNTING, USE NON-CORROSIVE 3/8" LAG BOLTS W/ LEAD EXPANSION SHIELD, 4 PER SIGN.

NOTES:
1. BOTTOM OF FOOTING TO BE 1'-0" BELOW FROST LINE, EXISTING UNDISTURBED GRADE OR FINISHED GRADE, WHICHEVER IS GREATER.
2. FOR WAY-FINDING SIGNS SEE SHEET LA-1

TRAFFIC SIGN POST

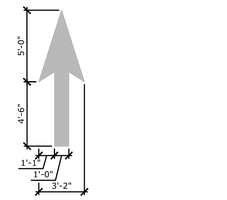
NOT TO SCALE



NOTES:
1. FOR POST MOUNTING, USE NON-CORROSIVE ⅜" MACHINE BOLTS W/ WASHERS, 2 PER SIGN. FOR FENCE MOUNTING, USE NON-CORROSIVE FASTENERS, 2 PER SIGN

RESERVED PARKING SIGN

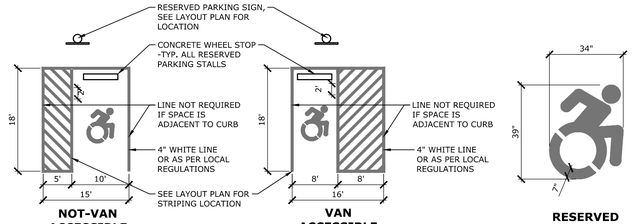
NOT TO SCALE



REFLECTIVE WHITE EPOXY PAINT PAVEMENT MARKINGS. ARROWS SHALL BE CENTERED IN TRAVEL LANE.

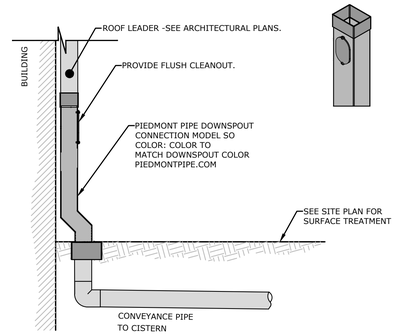
PAINTED DIRECTIONAL ARROW

NOT TO SCALE



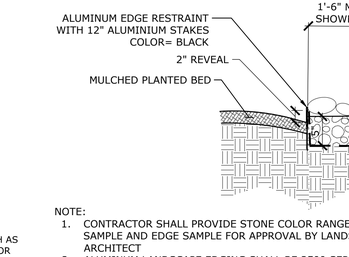
ACCESSIBLE (RESERVED) PARKING

NOT TO SCALE



ROOF LEADER ADAPTER

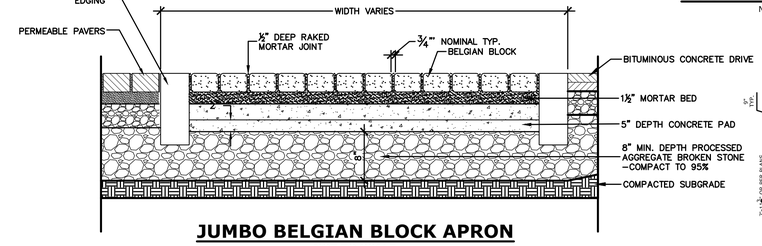
NOT TO SCALE



NOTE:
1. CONTRACTOR SHALL PROVIDE STONE COLOR RANGE SAMPLE AND EDGE SAMPLE FOR APPROVAL BY LANDSCAPE ARCHITECT
2. ALUMINUM LANDSCAPE EDGING SHALL BE 3500 SERIES, AS MANUFACTURED BY CURV-RITE, OR APPROVED EQUIVALENT

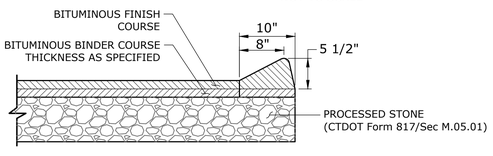
COBBLE DRIP EDGE

N.T.S.



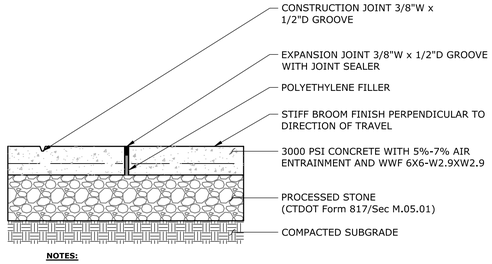
JUMBO BELGIAN BLOCK APRON

NOT TO SCALE



SLOPED BITUMINOUS CONCRETE LIP CURB

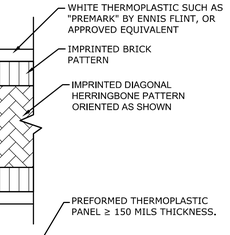
NOT TO SCALE



NOTES:
1. EXPANSION JOINTS 20' O.C. MAXIMUM CONSTRUCTION JOINTS 5' O.C. TYPICAL (OR AS SHOWN ON PLANS).

CONCRETE SIDEWALK

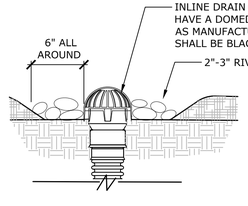
NOT TO SCALE



NOTE:
1. SURFACE TO BE INSTALLED OVER NEWLY INSTALLED BITUMINOUS CONCRETE. REFER TO MANUFACTURERS RECOMMENDATIONS FOR BITUMINOUS CONCRETE CURING PERIOD BEFORE INSTALLING SURFACE THERMOPLASTIC MARKING TREATMENTS.
2. CONTRACTOR TO PROVIDE COLOR SAMPLES FOR APPROVAL

DECORATIVE CROSSWALK

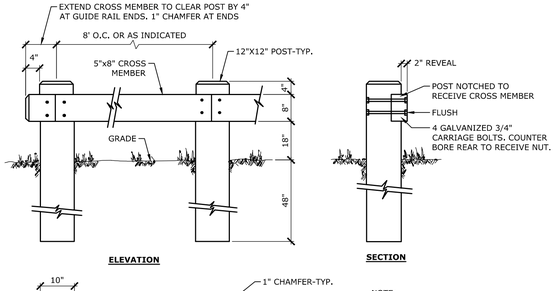
NOT TO SCALE



NOTE:
GRATE SHALL BE 12" AT YARD DRAIN PER "STORMWATER ISLAND AT ACCESS LOOP" DETAIL, SHEET SD-3

AREA DRAIN GRATE IN LANDSCAPED BED

N.T.S. P-SC-5993.02-107



NOTE:
ALL WOOD TO BE PRESSURE TREATED SOUTHERN YELLOW PINE

NOTES:
1. ALL RAIL AND POST LUMBER SHALL BE COMMERCIAL GRADE, NO.1 DENSE, (Fb=10.3 FPo) OR BETTER, CONFORMING TO NOMINAL SIZES AND DIMENSIONS SHOWN AND TO AASHTO SPECIFICATION M168. ALL TIMBER SHALL BE TREATED WITH A PRESSURE IMPREGNATED PRESERVATIVE IN ACCORDANCE WITH AASHTO SPECIFICATION M133.
2. BOLTS SHALL BE 3/4" DIAM., ASTM 307, WITH APPROPRIATE NUTS AND WASHERS (ALL HOT DIPPED GALVANIZED)
3. BACKFILL AROUND EACH POST WITH SUITABLE NATIVE MATERIAL IN 1' LIFTS
4. CONTRACTOR TO PROVIDE 90°, 45° OR END POSTS WHERE REQUIRED.
5. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ENTIRE SYSTEM.

TIMBER GUIDE RAIL

NOT TO SCALE P-SC-5993.02-18

MILONE & MACBROOM
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM

DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	AWG
TOWN COMMENTS	12/10/20	AWG

SITE DETAILS
SLATE UPPER SCHOOL
5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

AS NOTED
SCALE

OCTOBER 27, 2020
DATE

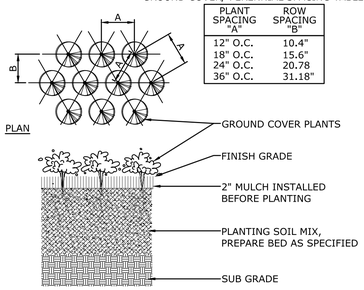
6156-03
PROJECT NO.

11 OF 15
SHEET NO.

SD-1
SHEET NAME

GROUND COVER/ PERENNIAL SPACING TABLE

PLANT SPACING "A"	ROW SPACING "B"
12" O.C.	10.4"
18" O.C.	15.6"
24" O.C.	20.78
36" O.C.	31.18"

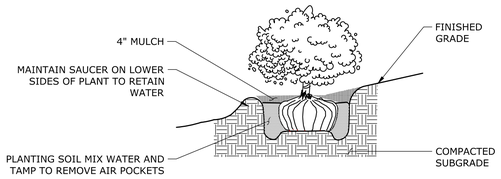


NOTES:
1. ALL GROUND COVERS/MASS PLANTINGS TO BE PLANTED IN A TRIANGULAR PATTERN. SEE LANDSCAPE PLAN

GROUNDCOVER / PERENNIAL PLANTING

NOT TO SCALE

P-SC-5993.02-30

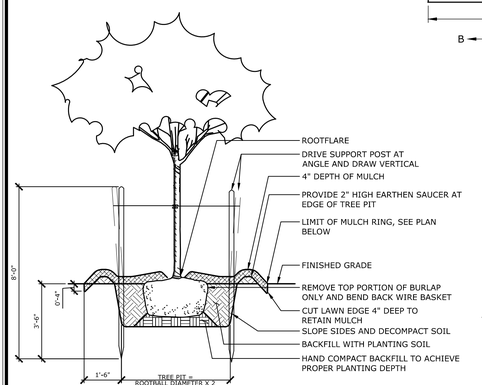


NOTES:

1. UNLESS OTHERWISE DIRECTED SHREDDED MULCH SHALL BE PLACED TO A LIMIT OF ONE FOOT BEYOND THE CENTER OF THE OUTERMOST SHRUBS IN SHRUB BED.

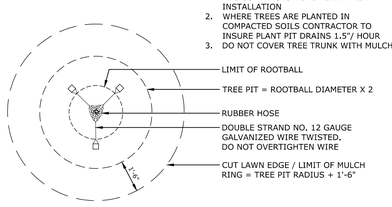
SHRUB PLANTING

NOT TO SCALE



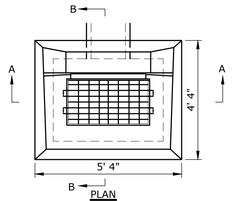
NOTES:

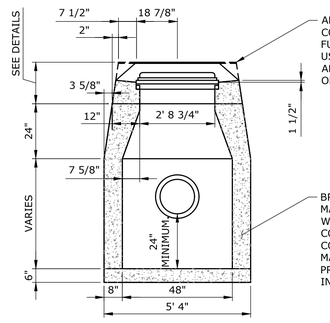
1. SUPPORT POSTS SHALL BE REMOVED BY THE CONTRACTOR ONE YEAR AFTER INSTALLATION
2. WHERE TREES ARE PLANTED IN COMPACTED SOILS CONTRACTOR TO INSURE PLANT PIT DRAINS 1.5"/ HOUR
3. DO NOT COVER TREE TRUNK WITH MULCH



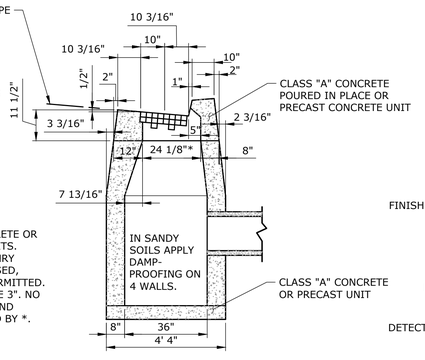
TREE PLANTING

NOT TO SCALE





SECTION A-A



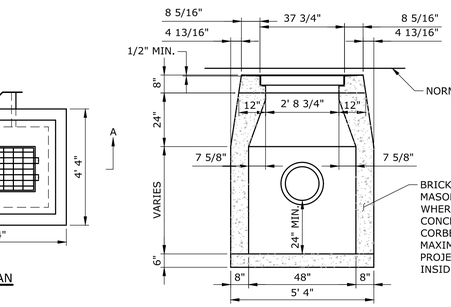
SECTION B-B

NOTES:

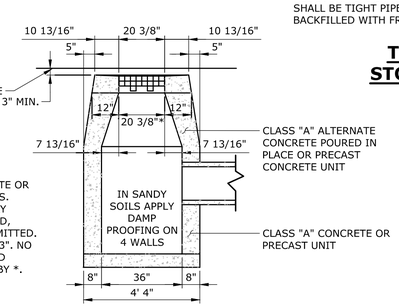
1. WHEN CATCH BASIN IS SET IN CONCRETE PAVEMENT. THE 1/2" SLOPE ON THE TOP SURFACE SHALL BE CHANGED TO MATCH ADJOINING PAVEMENT.
2. WHERE PRECAST CONCRETE UNIT IS USED FOR SUMP, THE TOP OF THE UNIT SHALL BE AT LEAST 6" BELOW THE BOTTOM OF THE PIPE OUTLET FROM THE CATCH BASIN.

TYPE "C" CATCH BASIN

NOT TO SCALE



SECTION A-A



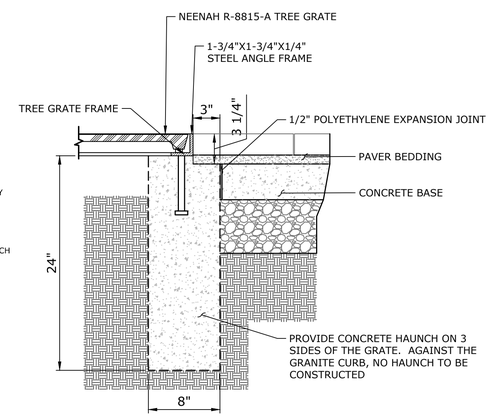
SECTION B-B

NOTES:

1. WHERE PRECAST CONCRETE UNIT IS USED FOR SUMP, THE TOP OF THE UNIT SHALL BE AT LEAST 6" BELOW THE BOTTOM OF THE PIPE OUTLETTING FROM THE CATCH BASIN.

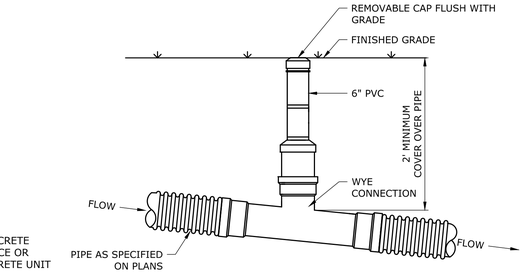
TYPE "C-L" CATCH BASIN

NOT TO SCALE



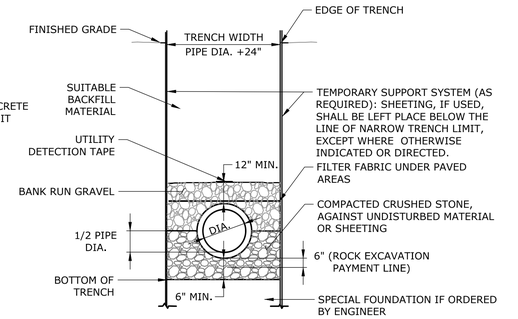
TREE GRATE FOOTING AGAINST PAVERS

NOT TO SCALE



NOTE:
CLEANOUT TO BE INSTALLED OVER ROOF LEADER WYE CONNECTIONS AND BENDS

ROOF LEADER CLEANOUT

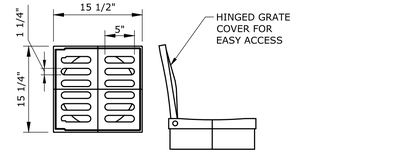


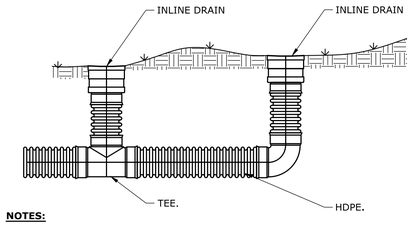
NOTES:

- ALL STORM DRAINAGE PIPE WITH LESS THAN 25' SEPARATION FROM THE SEPTIC LEACHING AREA SHALL BE TIGHT PIPE. THE TRENCH EXCAVATED FOR THE STORM DRAINAGE PIPE SHALL NOT BE BACKFILLED WITH FREE DRAINING MATERIAL.

TYPICAL TRENCH SECTION STORM DRAIN AND CULVERTS

NOT TO SCALE



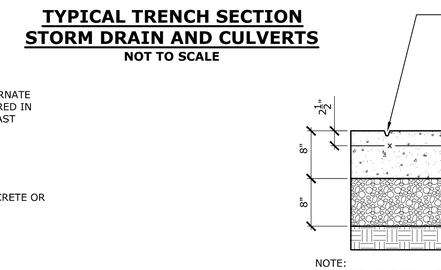


NOTES:

1. ALL AREA DRAIN GRATES SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON PLANS.
   1.1. 15" CAST IRON GRATE DRAIN AREA = 92.5SQ. INCH GRATE HAS H-20 (HEAVY TRAFFIC) DOT RATING .
   1.2. MATERIAL SHALL CONFORM TO ASTM A48 - CLASS 30B.
   1.3. CASTINGS ARE FURNISHED WITH A BLACK PAINT.
   1.4. INLINE DRAIN TO BE NYLOPLAST INC OR APPROVED EQUAL.

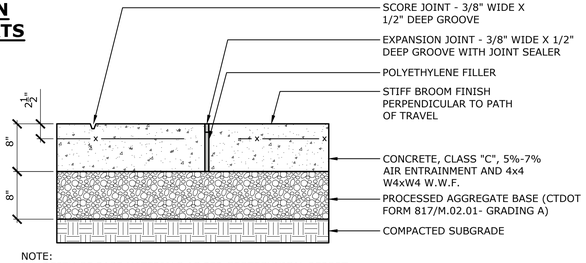
AREA DRAIN AND GRATE

NOT TO SCALE



TYPICAL TREE GRATE

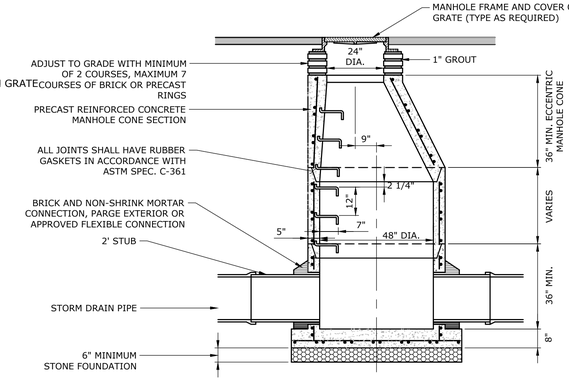
NOT TO SCALE



NOTE:
1. DEPTH OF BASE MATERIALS AS PER GEOTECHNICAL REPORT
2. EXPANSION JOINTS 20' O.C. MAX.
3. SCORE JOINTS 5' O.C. TYP (OR AS SHOWN ON PLANS)

9 **CONCRETE UTILITY PAD**

N.T.S.



NOTES:

1. 5' OR 6' DIAMETER PRECAST BASES MAY BE REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE THE 5' OR 6' BASES AS DIRECTED BY THE ENGINEER. WALL THICKNESS TO INCREASE BY 1" FOR EACH 1'-0" OF INSIDE DIAMETER.
2. ALL STORM DRAINAGE MANHOLES WITH LESS THAN 25' SEPARATION FROM THE SEPTIC LEACHING AREA - SHALL BE WATER TIGHT AND CONSTRUCTED WITH RUBBER SEAL JOINT SEALS AND WATERTIGHT PIPE CONNECTION SEALS

PRECAST CONCRETE STORM DRAINAGE MANHOLE

NOT TO SCALE

DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	AWG
TOWN COMMENTS	12/10/20	AWG

MILONE & MACBROOM
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM

SITE DETAILS

SLATE UPPER SCHOOL

5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

AS NOTED
SCALE

OCTOBER 27, 2020
DATE

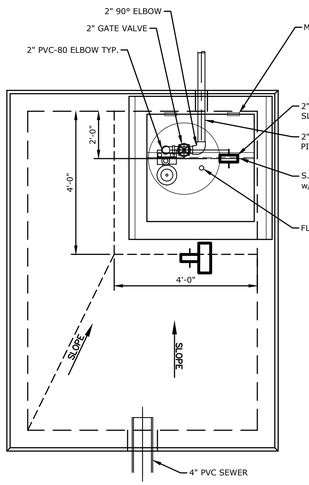
6156-03
PROJECT NO.

12 OF 15
SHEET NO.

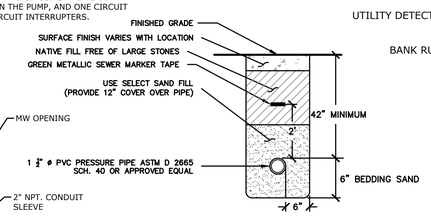
SD-2
SHEET NAME

PUMP SYSTEM NOTES:

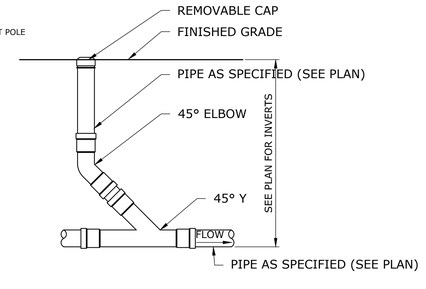
1. THE ACCESS TO THE PUMP CHAMBER SHALL BE BY MEANS OF AN ALUMINUM ACCESS COVER, OR APPROVED EQUAL.
2. PIPING INTO THE PUMP CHAMBER SHALL BE 4"Ø SOLID SCHEDULE 40 PVC FROM THE SEPTIC TANK OUTLET. PUMP DISCHARGE FORCE MAIN PIPING TO A GRAVITY DISTRIBUTION BOX SHALL BE SCHEDULE 40 PVC PRESSURE WATER PIPE, ASTM D1785/ ASTM D2665.
3. STRUCTURE CONSTRUCTION JOINT SHALL BE SEALED WITH A BUTYL RUBBER GASKET, ASPHALT CEMENT OR OTHER APPROVED MEANS. THE STRUCTURE SHALL BE SEALED WITH A WATERPROOFING COMPOUND OR APPROVED EQUAL.
4. SET STRUCTURE LEVEL ON 1'-0" COMPACTED THICKNESS OF 1 1/4" CRUSHED STONE BASE.
5. ALL ELECTRICAL AND PLUMBING WORK SHALL CONFORM TO APPLICABLE STATE AND LOCAL CODES.
6. ALL WIRING TERMINATIONS ARE TO BE BROUGHT TO A WATERPROOF JUNCTION BOX (NEMA 4X) WITHIN THE PUMP STATION AND THEN TO A CONTROL PANEL. INSTALLED IN THE GARAGE WITH VISUAL AND AUDIBLE HIGH LEVEL ALARM, SILENCE SWITCH, AUTO-OFF-MANUAL SWITCH AND POWER ON LIGHT. ALL ELECTRICAL WORK SHALL BE COMPLETED BY A LICENSED ELECTRICIAN. TWO CIRCUITS ARE TO BE INSTALLED IN THE ELECTRIC PANEL. ONE CIRCUIT TO BE DEDICATED TO RUN THE PUMP, AND ONE CIRCUIT DEDICATED FOR THE ALARM. BOTH CIRCUITS ARE TO BE GROUND FAULT CIRCUIT INTERRUPTERS.
7. FINAL SHOP DRAWING SHALL BE APPROVED BY THE ENGINEER



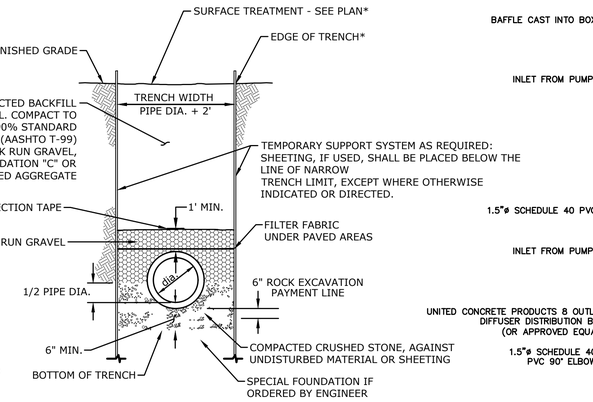
TOP VIEW



TYPICAL FORCE MAIN TRENCH
N.T.S.

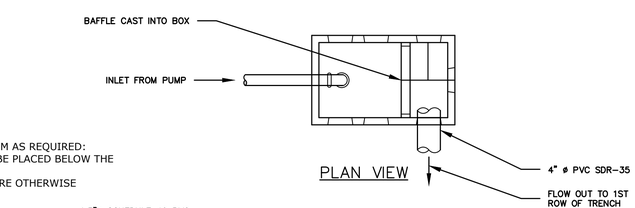


SANITARY CLEANOUT 1
NOT TO SCALE



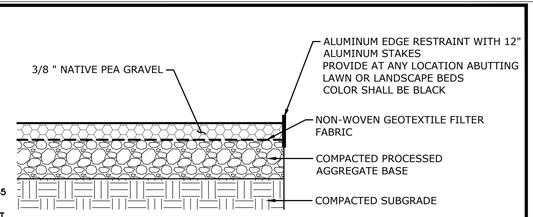
*SEE APPROPRIATE DETAIL FOR PAVEMENT REPAIR INFORMATION WHEN INSTALLING SANITARY SEWER MAINS IN PAVED AREAS.

SANITARY SEWER TRENCH
NOT TO SCALE



NOTE:
SEE SITE PLAN FOR ELEVATIONS

TYPICAL 8 OUTLET DIFFUSER BOX
NOT TO SCALE



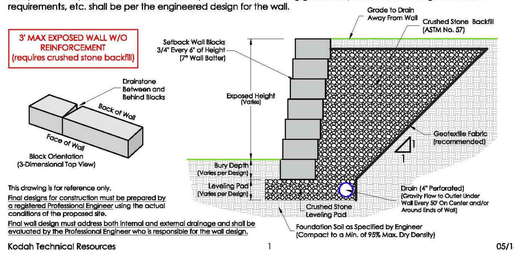
NOTE:
1. CONTRACTOR SHALL PROVIDE STONE COLOR RANGE SAMPLE AND EDGE SAMPLE FOR APPROVAL BY LANDSCAPE ARCHITECT
2. ALUMINUM LANDSCAPE EDGING SHALL BE 3500 SERIES, RIGID MAINTENANCE STRIP AS MANUFACTURED BY CURV-RITE, OR APPROVED EQUIVALENT

PEA GRAVEL PATHWAY and GREENHOUSE SURFACE
NOT TO SCALE

TYPICAL WALL CONSTRUCTION DETAILS - GRAVITY INSTALLATION

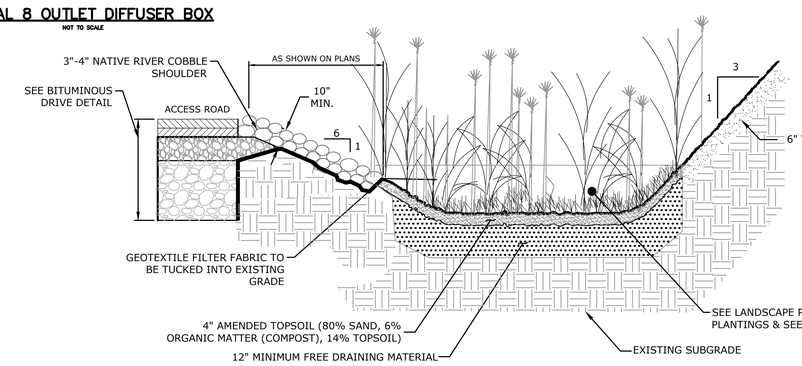
The following are typical construction details for Kodiah gravity retaining walls. This drawing represents the major components required in wall construction. Specific details including geotextile placement, drainage details, soil requirements, etc. shall be per the engineered design for the wall.

3' MAX EXPOSED WALL W/O REINFORCEMENT (requires crushed stone backfill)

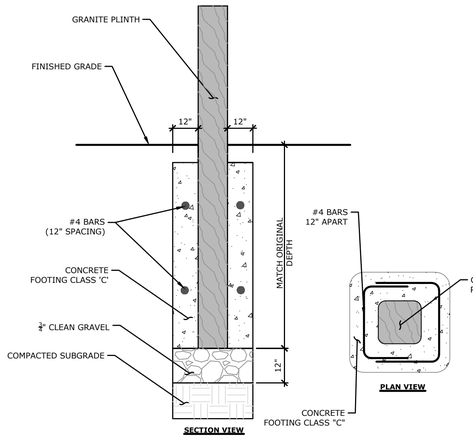


This drawing is for reference only.
Final designs for construction must be prepared by a registered Professional Engineer using the actual conditions of the proposed site.
Final wall design must address both internal and external drainage and shall be evaluated by the Professional Engineer who is responsible for the wall design.

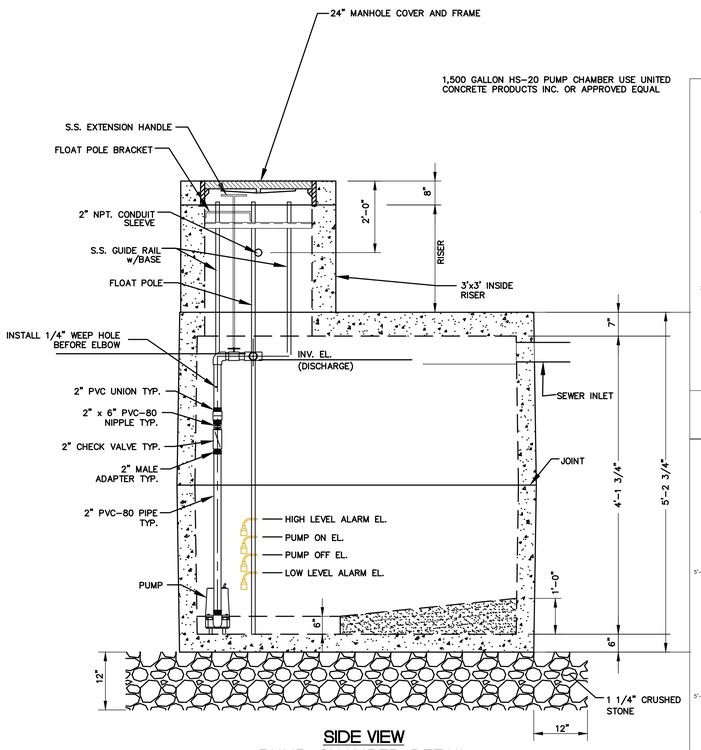
Kodiah Technical Resources 1 05/14/15



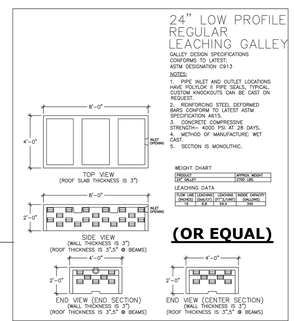
COBBLE FILTER STRIP
NOT TO SCALE

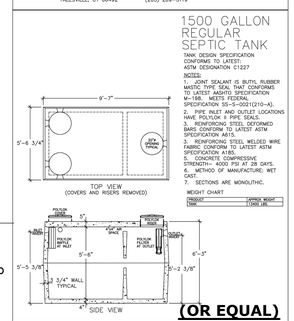


GRANITE BOLLARD
NOT TO SCALE

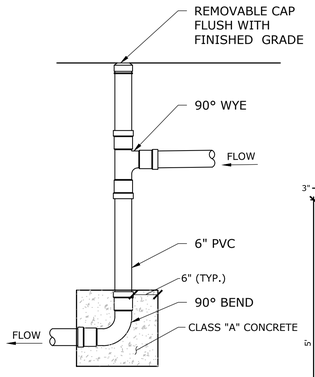


SIDE VIEW
PUMP CHAMBER DETAIL
N.T.S.

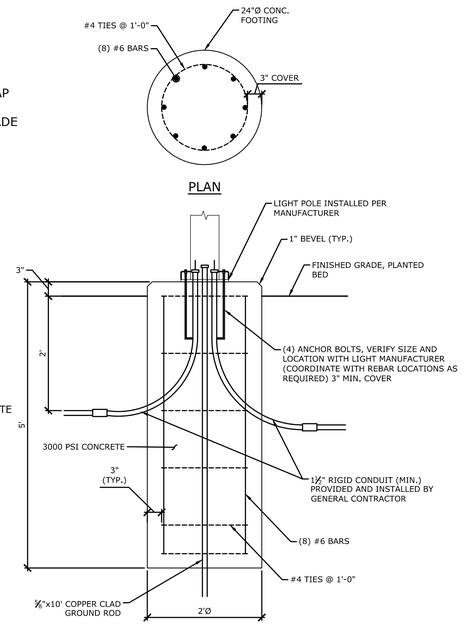




MODULAR BLOCK RETAINING WALL



SANITARY CLEANOUT 2 (DROP)
NOT TO SCALE



PEDESTRIAN LIGHT POLE FOUNDATION DETAIL
N.T.S. P-SC-5993.02-34

MODULAR BLOCK RETAINING WALL NOTES

1. WALL SHALL BE '**KODAH WALLSTONE**' AS MANUFACTURED BY NICOLOCK, TEL. 631.669.0700, COLOR: **KODAH YORK BROWN**
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE EXTERNAL STABILITY OF THE WALL, INCLUDING BEARING CAPACITY AND SLOPE STABILITY, ARE PROPERLY REVIEWED AND EVALUATED BY A LICENSED PROFESSIONAL ENGINEER. THE WALL DESIGN SHOWN IN THESE DETAILS DOES NOT ADDRESS THE SUFFICIENCY OF THE BEARING CAPACITY NOR THE SLOPE STABILITY OF THE WALL SYSTEM AND SURROUNDING SOIL.
3. LEVELING PAD SHALL CONSIST OF WELL GRADED ROAD BASE AGGREGATE, 3/4" CRUSHED, ANGULAR GRAVEL WITH SOME FINES. CONTRACTOR MAY OPT FOR A LEAN CONCRETE LEVELING PAD. IF SO, PAD SHALL BE UNREINFORCED LEAN CONCRETE, 200-300 PSI, 3" THICK MAXIMUM. DRAINAGE AGGREGATE SHALL CONSIST OF CLEAN ANGULAR GRAVEL, 3/4" DIAMETER WITH LESS THAN 5% FINES.
4. DRAINAGE PIPE SHALL BE PERFORATED OR SLOTTED PVC OR CORRUGATED HDPE PIPE. REINFORCED BACKFILL SHALL BE FREE OF DEBRIS, ORGANIC SOIL, AND EXPANSIVE SOILS. FOR UNITS TO BE EMBEDDED, COMPACT "FILL" IN FRONT OF UNITS AT THE SAME TIME "FILL" BEHIND UNITS IS COMPACTED. COMPACT TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698)
5. COMPACTION SHALL BE TO 95% COMPACTION. TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF TESTS SHALL BE DETERMINED BY THE CONTRACTOR'S DESIGN ENGINEER.
6. COMPACTION WITHIN 3FT. OF WALL SHALL BE LIMITED TO HAND OPERATED EQUIPMENT. CONTRACTOR SHALL SLOPE SITE GRADES TO DIRECT SURFACE RUNOFF AWAY FROM WALL AT END OF EACH DAY TO AVOID WATER DAMAGING THE WALL WHILE UNDER CONSTRUCTION. ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETED.
7. RETAINING WALLS GREATER THAN THREE (3') FEET IN HEIGHT MUST BE DESIGNED AND CERTIFIED BY PROFESSIONAL ENGINEER.

MILONE & MACBROOM
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM

DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	AWG
TOWN COMMENTS	12/10/20	AWG
SEPTIC TANK SIZE & CLEANOUTS	2/03/21	ACD

SITE DETAILS
SLATE UPPER SCHOOL
5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

AS NOTED
SCALE
OCTOBER 27, 2020
DATE
6156-03
PROJECT NO.
13 OF 15
SHEET NO.
SD-3
SHEET NAME

FORMATION OF EMBANKMENTS FOR STORMWATER BASINS

1. MATERIALS

ALL FILL MATERIALS SHALL BE OBTAINED FROM REQUIRED EXCAVATIONS OR DESIGNATED BORROW AREAS. FILL MATERIAL SHALL CONTAIN NO FROZEN MATERIAL, SOD, BRUSH, ROOTS, OR OTHER ORGANIC MATERIAL. EARTH EMBANKMENTS SHALL CONTAIN NO STONES OR ROCK PARTICLES OVER THREE INCHES IN DIAMETER.

THE MATERIAL USED IN THE CENTER PORTION OF THE EMBANKMENT SHALL BE THE MOST IMPERVIOUS MATERIAL OBTAINED FROM THE BORROW AREAS IF REQUIRED, THE MORE PERVIOUS MATERIALS SHALL BE USED IN THE OUTER PORTION OF THE EMBANKMENT AS SHOWN ON THE PLANS.

A. IMPERVIOUS FILL MATERIALS

IMPERVIOUS FILL SHALL BE A GLACIAL TILL, AND TO BE PROVIDED FROM AN OFFSITE SOURCE IN THE QUANTITIES REQUIRED FOR COMPLETION. FILL TO BE APPROVED BY THE ENGINEER. GLACIAL TILL SHALL CONSIST OF HARD AND DURABLE PARTICLES OR FRAGMENTS AND SHALL BE FREE FROM ORGANIC MATTER AND OTHER OBJECTIONABLE MATERIALS. GLACIAL TILL SHALL GENERALLY CONFORM TO THE FOLLOWING GRADATION LIMITS:

U.S. STANDARD SIEVE SIZE	PERCENTAGE PASSING BY WEIGHT
3 INCH	100
NO. 4	60-95
NO. 10	50-95
NO. 40	30-75
NO. 100	20-65
NO. 200	10-40

2. EMBANKMENT FOUNDATION PREPARATION

AREAS WHERE EMBANKMENTS ARE TO BE FORMED SHALL BE CLEARED AND GRUBBED OF ALL TOPSOIL AND OTHER ORGANIC MATERIALS TO A DEPTH OF AT LEAST 24 INCHES. UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS, FOUNDATION AREAS SHALL BE SCARIFIED TO A DEPTH OF THREE INCHES PRIOR TO PLACEMENT OF FILL MATERIAL.

3. PLACEMENT

NO FILL SHALL BE PLACED UNTIL THE FOUNDATION PREPARATION AND EXCAVATIONS IN THE FOUNDATION HAVE BEEN COMPLETED. NO FILL SHALL BE PLACED ON A FROZEN SURFACE NOR SHALL FROZEN MATERIAL BE INCORPORATED.

A. EMBANKMENT

MATERIAL SHALL BE PLACED IN HORIZONTAL LAYERS. THE THICKNESS OF LAYERS SHALL BE SIX INCHES. DURING CONSTRUCTION, THE SURFACE OF THE FILL SHALL HAVE A CROWN OR CROSS-SLOPE OF NOT LESS THAN TWO PERCENT. EACH LAYER OR LIFT SHALL EXTEND OVER THE ENTIRE AREA OF THE FILL.

THE FILL SHALL BE FREE FROM LENSES, POCKETS, STREAKS, OR LAYERS OF MATERIAL DIFFERING SUBSTANTIALLY IN TEXTURE OR GRADATION FROM THE SURROUNDING MATERIAL. THE MORE PERVIOUS MATERIAL SHALL BE PLACED IN THE OUTSIDE PORTION OF THE EMBANKMENT OR AS INDICATED ON THE DRAWINGS. THE FINISHED FILL SHALL BE SHAPED AND GRADED TO THE LINES AND GRADE SHOWN ON THE DRAWINGS.

B. BACKFILL AT THE PIPE OUTLET

BACKFILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED THREE INCHES IN THICKNESS AND SHALL BE BROUGHT UP UNIFORMLY AROUND THE OUTLET PIPE AND FLARED END SECTION

4. MOISTURE CONTROL

THE MOISTURE CONTENT OF MATERIALS IN THE EMBANKMENT SHALL BE CONTROLLED TO MEET THE REQUIREMENTS OF SECTION 5, "COMPACTION OF EMBANKMENT." WHEN NECESSARY, MOISTURE SHALL BE ADDED BY USE OF APPROVED SPRINKLING EQUIPMENT. WATER SHALL BE ADDED UNIFORMLY AND EACH LAYER SHALL BE THOROUGHLY DISKED OR HARROWED TO PROVIDE ROPER MIXING. ANY LAYER FOUND TOO WET FOR PROPER COMPACTION SHALL BE ALLOWED TO DRY BEFORE ROLLING. PLACING OR ROLLING OF MATERIAL ON EARTH FILLS WILL NOT BE PERMITTED DURING OR IMMEDIATELY AFTER RAINFALLS WHICH INCREASE THE MOISTURE CONTENT BEYOND THE LIMIT OF SATISFACTORY COMPACTION. THE EARTH FILL SHALL BE BROUGHT UP UNIFORMLY AND ITS TOP SHALL BE KEPT GRADED AND SLOPED SO THAT A MINIMUM OF RAINWATER WILL BE RETAINED THEREON. COMPACTED EARTH FILL DAMAGED BY WASHING SHALL BE ACCEPTABLY REPLACED BY THE CONTRACTOR.

5. COMPACTION

A. EMBANKMENT

EMBANKMENT MATERIAL SHALL BE COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY AT NEAR OPTIMUM MOISTURE CONTENT AND BY THE COMPACTION EQUIPMENT SPECIFIED HEREIN. THE COMPACTION EQUIPMENT SHALL TRAVERSE THE ENTIRE SURFACE OF EACH LAYER OF FILL MATERIAL.

APPROVED TAMPING ROLLERS SHALL BE USED FOR COMPACTING ALL PARTS OF THE EMBANKMENTS WHICH THEY CAN EFFECTIVELY REACH. THE CONTRACTOR SHALL DEMONSTRATE THE EFFECTIVENESS OF THE ROLLER BY ACTUAL SOIL COMPACTION RESULTS OF THE SOIL TO BE USED IN THE EMBANKMENT WITH LABORATORY WORK PERFORMED BY AN APPROVED SOIL TESTING LABORATORY.

B. BACKFILL AT OUTLET CONDUIT

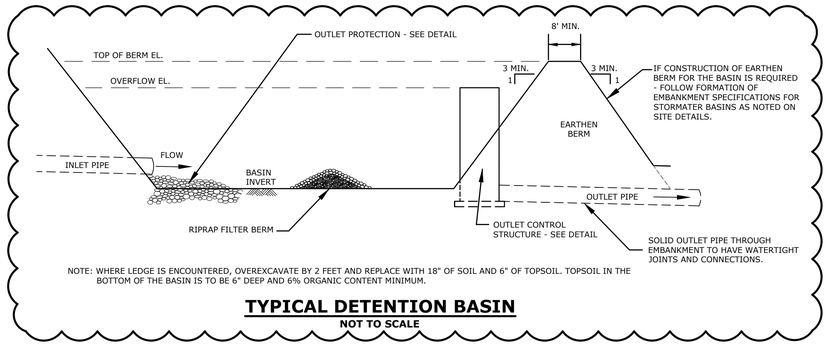
BACKFILL SHALL BE COMPACTED BY HAND TAMPING WITH MECHANICAL TAMPERS. HEAVY EQUIPMENT SHALL NOT BE OPERATED WITHIN TWO FEET OF ANY STRUCTURE. EQUIPMENT SHALL NOT BE ALLOWED TO OPERATE OVER THE OUTLET CONDUITS UNTIL THERE IS 24 INCHES OF FILL OVER THE PIPE CONDUITS.

6. FINISHING EMBANKMENTS

THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE ELEVATIONS, LINES, GRADES AND CROSS-SECTIONS AS SHOWN ON THE DRAWINGS. THE EMBANKMENTS SHALL BE MAINTAINED IN A MANNER SATISFACTORY TO THE ENGINEER AND SURFACES SHALL BE COMPACT AND ACCURATELY GRADED BEFORE TOPSOIL IS PLACED ON THEM. THE CONTRACTOR SHALL CHECK THE EMBANKMENT SLOPES WITH STRING LINES TO INSURE THAT THEY CONFORM TO THE SLOPES GIVEN ON THE PLANS AND ARE UNIFORM FOR THE ENTIRE LENGTH OF THE SLOPE.

7. CONTROL OF WATER

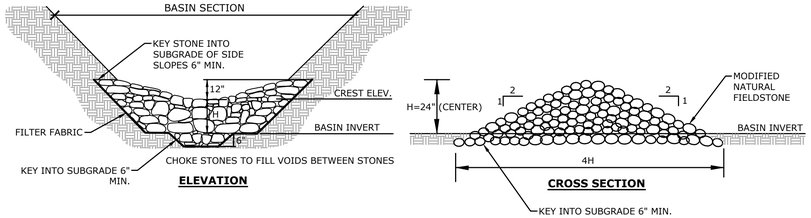
THE PROJECT SITE IS SUBJECT TO HIGH WATER TABLE. THE CONTRACTOR SHALL USE TEMPORARY PIPES OR PUMPS TO ASSURE PLACEMENT OF SELECT FILL IN DRY CONDITIONS.

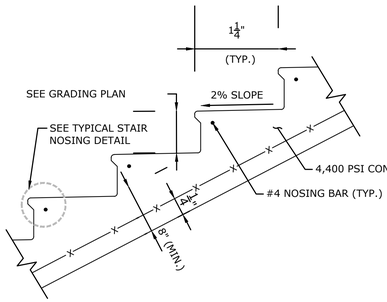


NOTE: WHERE LEDGE IS ENCOUNTERED, OVEREXCAVATE BY 2 FEET AND REPLACE WITH 18" OF SOIL AND 6" OF TOPSOIL. TOPSOIL IN THE BOTTOM OF THE BASIN IS TO BE 6" DEEP AND 6% ORGANIC CONTENT MINIMUM.

TYPICAL DETENTION BASIN

NOT TO SCALE



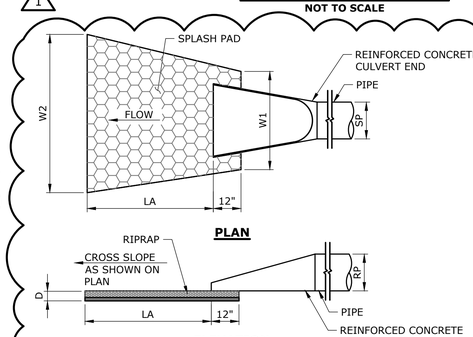


TYPICAL CONCRETE STAIR DETAIL

SCALE: 1"=1'-0"

RIPRAP FILTER BERM

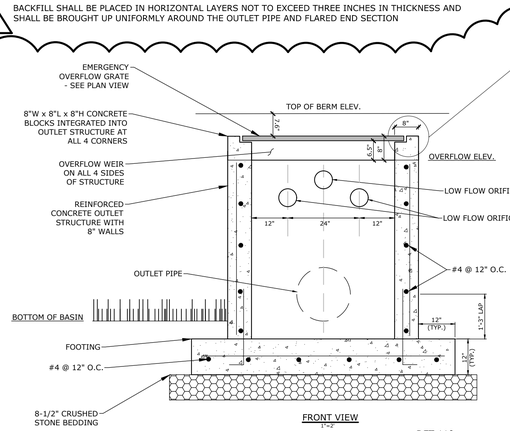
NOT TO SCALE

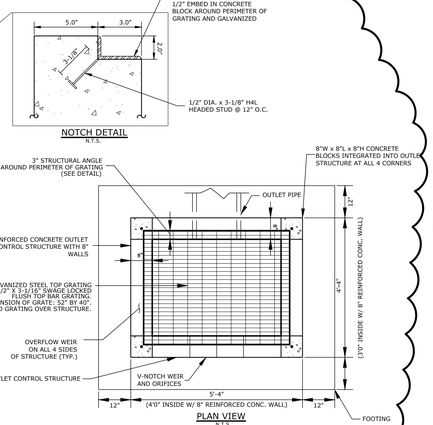


OUTLET PROTECTION ID	TYPE	SP (FT)	RP (FT)	LA (FT)	W1 (FT)	W2 (FT)	D (IN)
FES 3	MODIFIED TYPE B	1.25	1.25	12.0	4.0	9.0	12

FLARED END WITH RIP RAP SPLASH PAD

NOT TO SCALE

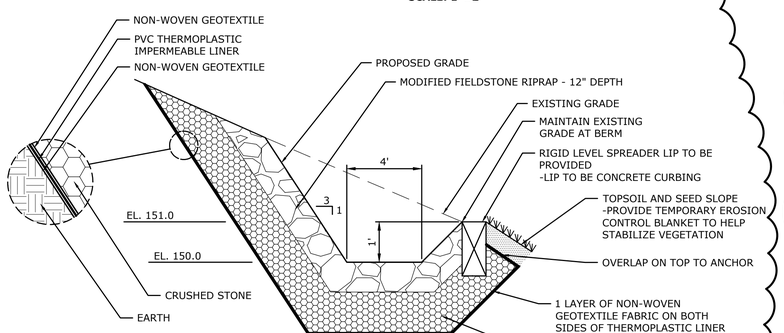




	DET 110
TOP OF BERM ELEVATION	158.8
OVERFLOW ELEVATION	157.5
100-YEAR WATER SURFACE ELEV.	157.8
LOW FLOW ORIFICE 1 DIAMETER	6"
LOW FLOW ORIFICE 1 INVERT	156.7
LOW FLOW ORIFICE 2 DIAMETER	2 ORIF. OF 6"
LOW FLOW ORIFICE 2 INVERT	156.2
BASIN BOTTOM ELEVATION	153.0
OUTLET PIPE DIAMETER	18"
OUTLET PIPE INVERT	153.0

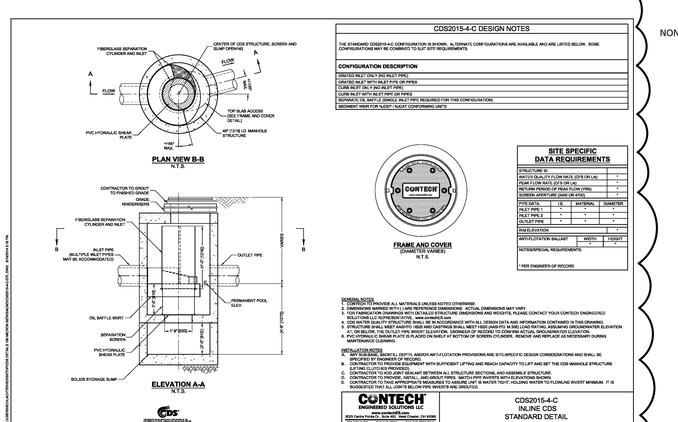
OUTLET CONTROL STRUCTURE - DET 110

SCALE: 1"=2'



RIPRAP LEVEL SPREADER

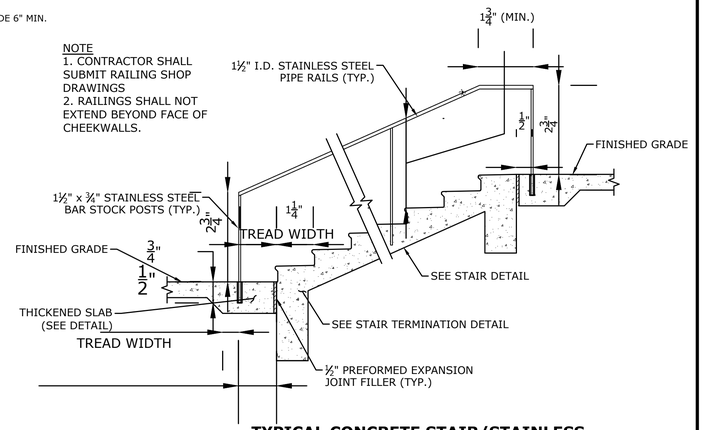
NOT TO SCALE



CONTECH CDS 2015-4-C OR APPROVED EQUAL

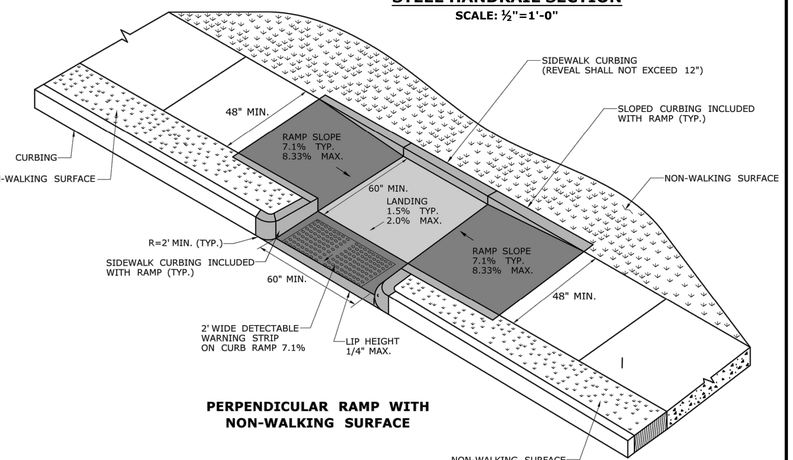
NOT TO SCALE

NOTE
1. CONTRACTOR SHALL SUBMIT RAILING SHOP DRAWINGS
2. RAILINGS SHALL NOT EXTEND BEYOND FACE OF CHEEKWALLS.



TYPICAL CONCRETE STAIR/STAINLESS STEEL HANDRAIL SECTION

SCALE: ½"=1'-0"



PERPENDICULAR RAMP WITH NON-WALKING SURFACE

GENERAL NOTES:

1. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRAVERSE TO THE SLOPE OF THE RAMP.
2. VERTICAL SURFACE DISCONTINUITIES AT JOINTS SHALL NOT EXCEED ¼ INCH.
3. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION OR CONTRACTION JOINT.
4. THE RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 PERCENT MAXIMUM BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET.

DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	AWG
TOWN COMMENTS	12/10/20	MCB
WETLANDS HEARING RESPONSE	2/17/21	AWG

MILONE & MACBROOM
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM

SITE DETAILS

SLATE UPPER SCHOOL

5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

AS NOTED
SCALE

OCTOBER 27, 2020
DATE

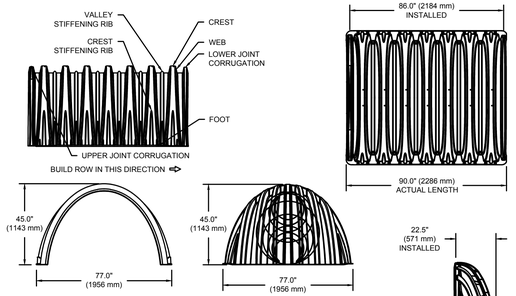
6156-03
PROJECT NO.

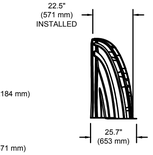
14 OF 15
SHEET NO.

SD-4
SHEET NAME

STORMWATER CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500 OR APPROVED EQUAL.
2. CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
4. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
5. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
6. CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
7. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
   a. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
   b. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET. THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
   c. STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
8. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.





NOMINAL CHAMBER SPECIFICATIONS		
SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	178.9 CUBIC FEET	(5.06 m³)
WEIGHT	135.0 lbs.	(61.2 kg)

NOMINAL END CAP SPECIFICATIONS		
SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 22.5"	(1956 mm X 1143 mm X 571 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	46.0 CUBIC FEET	(1.30 m³)
WEIGHT	50.0 lbs.	(22.7 kg)

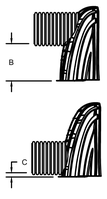
*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP30BC	30" (750 mm)	---	---

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS.
CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm).
THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHTEST POSSIBLE FOR THE PIPE SIZE.



MC-3500 TECHNICAL SPECIFICATION

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.

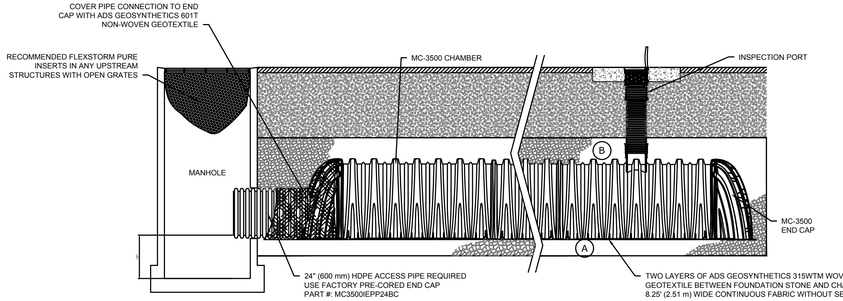
   STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm) MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING..
10. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

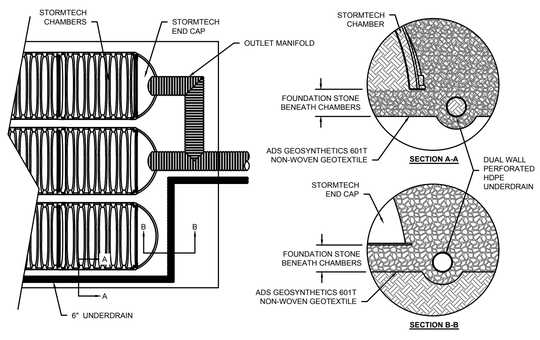
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

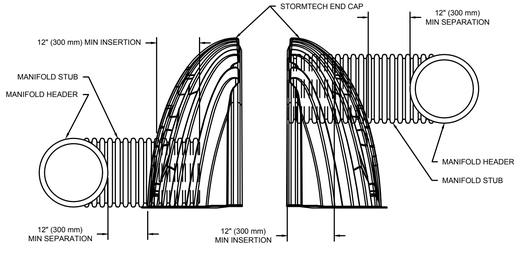
NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

MC-3500 ISOLATOR ROW DETAIL



UNDERDRAIN DETAIL



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-SERIES END CAP INSERTION DETAIL

UNDERGROUND DETENTION SYSTEM STORMTECH MC-3500 TYPICAL DETAILS

NOT TO SCALE

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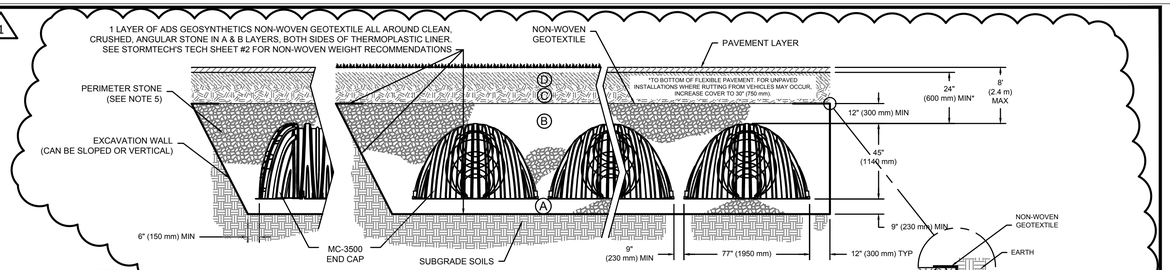


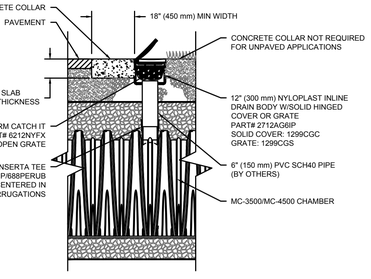
NOTES:

1. MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.
5. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
7. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145† A-1, A-2-4, A-3 OR AASHTO M43† 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43† 3, 4	
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43† 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ‡ ¤

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS



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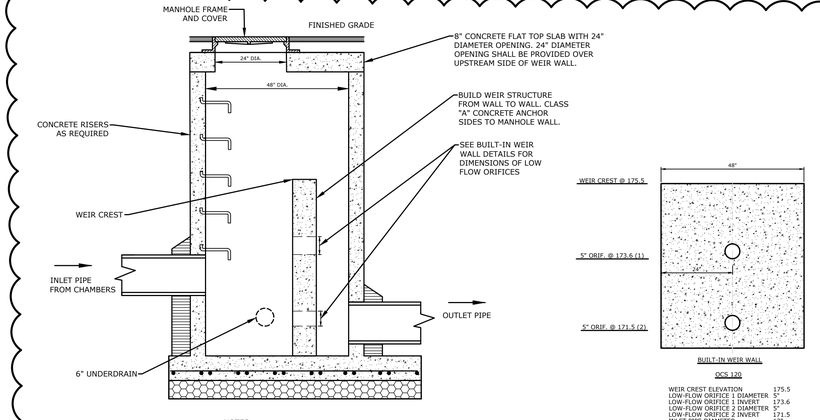
6" INSPECTION PORT DETAIL



OCS 120

WEIR CREST ELEVATION	175.5
LOW-FLOW ORIFICE 1 DIAMETER	5"
LOW-FLOW ORIFICE 1 INVERT	173.6
LOW-FLOW ORIFICE 2 DIAMETER	5"
LOW-FLOW ORIFICE 2 INVERT	171.5
INLET PIPE DIAMETER	12"
INLET PIPE INVERT	172.36
6" PERFORATED UNDERDRAIN	171.5
OUTLET PIPE DIAMETER	12"
OUTLET PIPE INVERT	171.0

NOTES:
THIS DETAIL REPRESENTS A MODIFICATION OF A STANDARD STORM MANHOLE FOR USE IN CONTROLLING THE DISCHARGE FROM THE DETENTION AREA. SEE THE MANHOLE DETAIL FOR STANDARD DIMENSIONS AND NOTES.

UNDERGROUND DETENTION OUTLET CONTROL STRUCTURE (OCS 120)

N.T.S.

MILONE & MACBROOM
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM

DESCRIPTION	DATE	BY
PLANNING AND ZONING	11/06/20	AWG
TOWN COMMENTS	12/10/20	MCB
WETLANDS HEARING RESPONSE	2/17/21	AWG

SITE DETAILS
SLATE UPPER SCHOOL
5100 RIDGE ROAD
NORTH HAVEN, CONNECTICUT

DESIGNED	DRAWN	CHECKED
AWG	AWG	TD

AS NOTED — SCALE
OCTOBER 27, 2020 — DATE
6156-03 — PROJECT NO.
15 OF 15 — SHEET NO.
SD-5 — SHEET NAME