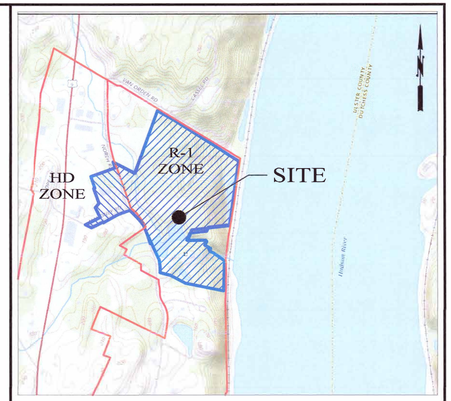
LEGEND

- EXISTING MAJOR 10 FOOT CONTOUR
- EXISTING MINOR 2 FOOT CONTOUR
- PROPOSED MAJOR 10 FOOT CONTOUR
- PROPOSED MINOR 2 FOOT CONTOUR
- TOWN (CITY, VILLAGE, COUNTY, ZONE)
- YARD SETBACK
- SILT FENCE EXIST
- SILT FENCE NEW
- WATER VALVE EXIST
- WATER VALVE NEW
- CULVERT EXIST
- CULVERT NEW
- SEWER LINE EXIST
- SEWER LINE NEW
- GAS LINE EXIST
- GAS LINE NEW
- ELECTRIC LINE EXIST
- ELECTRIC LINE NEW
- COMMUNICATIONS LINE EXIST
- COMMUNICATIONS LINE NEW
- WATER MAIN EXIST
- WATER MAIN NEW
- FORCEMAIN EXIST
- FORCEMAIN NEW
- ADJACENT PROPERTY LINE
- DECK & PORCH
- DEED LINE
- DRIVEWAY & ROAD-ASPHALT
- DRIVEWAY & ROAD-GRAVEL
- FENCE-WIRE
- FENCE-WOOD
- GUARDRAIL
- LIMIT OF DISTURBANCE
- PROPERTY LINE
- RIGHT OF WAY
- STONE WALL
- STREAM & POND & DITCH
- TREE LINE
- UTILITY LINE & POLE
- WETLANDS ADJACENT AREA
- WETLANDS BOUNDARY
- SILT FENCE
- EXIST. UNDGND ELEC.
- PROP. UNDGND ELEC
- PROP. UNDGND CATV
- EXIST. UNDGND CATV
- EXIST. FLOOD ELEVATION
- TREE HOUSE/CABIN NEW
- BUILDING EXIST REMAINS
- BUILDING EXIST REMOVE
- DRY WELL
- 200.00 SPOT ELEVATION
- TH TEST HOLE



LOCATION MAP: USGS NATIONAL MAP
SCALE: 1" = 1000'

APPLICANT

220 NORTH ROAD LLC C/O
ROBERT POLLOCK
PO BOX 444
MILTON, NY 12547

LOTS AND AREA

SBL	ACREAGE
EAST SIDE OF NORTH ROAD, R-1 ZONE	
103.1-2-12.200	
103.1-2-13	
103.1-2-11.200	
103.1-2-10	
103.1-2-11.100	
EAST SIDE TOTAL	±57.7 AC
WEST SIDE OF NORTH ROAD, HD ZONE	
103.1-2-75	
103.1-2-71	
103.1-2-72	
WEST SIDE TOTAL:	±6.0 AC

ZONING REQUIREMENTS

FOR RESIDENTIAL ZONES R-1 AND HD

	R-1 ZONE REQUIRED	R-1 ZONE PROPOSED	HD ZONE REQUIRED	HD ZONE PROPOSED
MINIMUM LOT AREA	1 AC*	±62 AC	2 AC	±62 AC
WITH PUBLIC WATER AND SEWER			1.5 AC	
MINIMUM YARDS				
FRONT YARD	35 FT	≥77 FT	75 FT	≥152 FT
REAR YARD	50 FT	≥304 FT	75 FT	≥75 FT
SIDE YARD				
ONE	35 FT	≥104 FT	25 FT	≥25 FT
BOTH	70 FT	≥104 FT	50 FT	≥50 FT
MINIMUM LOT WIDTH	150 FT	≥±1400 FT	200 FT	≥±620 FT
MINIMUM LOT DEPTH	200 FT	≥±884 FT	200 FT	≥±360 FT
MAXIMUM BUILDING COVERAGE	20%	±6.2%	40%	±6.4%
MAXIMUM HEIGHT				
STORIES	2½	2½	4	<4
HEIGHT	35 FT	<35 FT	45 FT**	<35 FT

*Minimum lot sizes in R-1 and R-Ag-1 are subject to percolation tests required under § 155-42, but in no event are less than one (1) acre.
**For buildings in excess of 35 feet in height in the HD Zone, there shall be a visual impact analysis prepared under SEQRA because the HD Zone includes property within the Coastal Boundary Zone. Regarding the alternative means of measurement of height by feet or by number of stories, the lesser of the two alternatives shall apply.

MAP REVISION DATES

DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

INDEX

SHEET	NUMBER	TITLE
I	1 OF 28	INDEX SHEET
SP-1	2 OF 28	SITE PLAN
EC-1	3 OF 28	EXISTING CONDITIONS & PROPERTY LINE REVISIONS
GP-1	4 OF 28	GRADING PLAN - HOTEL
GP-2	5 OF 28	GRADING PLAN - PARKING
RP-1	6 OF 28	DRIVEWAY PROFILE 1
RP-2	7 OF 28	DRIVEWAY PROFILE 2
UP-1	8 OF 28	SEPTIC PLAN OUTFALL #4
UP-2	9 OF 28	SEPTIC PLAN OUTFALL #5
UP-3	10 OF 28	SEPTIC PLAN OUTFALL #6
W-1	11 OF 28	WATER SERVICE
D-1	12 OF 28	SITE DETAILS
D-2	13 OF 28	SITE DETAILS
D-3	14 OF 28	WATER DETAILS
SD-1	15 OF 28	SEPTIC DETAILS
SD-2	16 OF 28	SEPTIC DETAILS
D-4	17 OF 28	DRAINAGE DETAILS
SESC-1	18 OF 28	SOIL EROSION AND SEDIMENT CONTROL
D-5	19 OF 28	SOIL EROSION AND SEDIMENT CONTROL DETAILS
ENT-1	20 OF 28	ENTRANCE DRIVEWAY & STREAM CROSSING
TM	21 OF 28	FIRE TRUCK BUS DELIVERY TRUCK ACCESS PLAN
AAP	22 OF 28	ARCHAEOLOGICAL AVOIDANCE PLAN
LP-1	23 OF 28	LIGHTING PLAN 1
LP-2	24 OF 28	LIGHTING PLAN 2
BPL-1	25 OF 28	BIORETENTION PONDS LANDSCAPING PLAN
L-1	26 OF 28	LANDSCAPING PLAN 1
L-2	27 OF 28	LANDSCAPING PLAN 2
SG-1	28 OF 28	SIGNAGE PLAN

UNDER SEPARATE COVER: ARCHITECTURAL PLANS

INDEX SHEET

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

150 0 150 300 450

Scale: 1" = 150'

NOVEMBER 9, 2023

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NEW YORK LIC. NO. 60142

I
E18 105
SHEET 1 OF 28

PROPERTIES INVOLVED

SBL	OWNER	ADDRESS	TOWN	TYPE	ACREAGE	NOTES
*103.1-2-12.100	Robert Pollock	238-244 North Rd	Marlboro	1 Family Res	±0.3 AC *	
103.1-2-12.200	Robert Pollock	238-244 North Rd	Marlboro	Res Multiple	±39.7 AC	
103.1-2-13	220 North Road Realty LLC	220-236 North Rd	Marlboro	Inn/lodge	±11.0 AC	APPLICANT
103.1-2-11.200	99 S. Elliott Place LLC	26 Van Orden Rd	Marlboro	1 Family Res	±1.3 AC	
103.1-2-10	Robert Pollock	20 Van Orden Rd	Marlboro	2 Family Res	±2.5 AC	
103.1-2-11.100	22 Van Ordon LLC	22 Van Orden Rd	Marlboro	1 Family Res	±1.2 AC	
103.1-2-75	99 S Elliott Place LLC	257 North Rd	Marlboro	1 Family Res	±1.4 AC	
103.1-2-71	99 S. Elliot Place LLC	249-251 North Rd	Marlboro	Other Storage	±3.8 AC	
103.1-2-72	Chernobyl Power & Light	8 Mahoney Rd	Marlboro	Auto body	±0.8 AC	
				TOTAL	±62.0 AC	

*±0.3 AC of 103.1-2-12.100 to be added to 103.1-2-200 in a lot line adjustment

PROPOSED BUILDINGS:

	CABINS/TREE HOUSES	35 UNITS
Ⓐ	MODULAR 1 BED: 15 @ ±500 SF	±7,500 SF
Ⓑ	REG. 1 BED: 11 @ ±480 SF	±5,280 SF
Ⓒ	REG. 2 BED: 8 @ ±800 SF)	±6,400 SF
Ⓓ	YURT: 1 @ ±700 SF	±700 SF
	MAIN HOTEL	
Ⓔ	EVENT SPACE, RESTAURANT & BANQUET HALL	±18,000 SF
Ⓕ	HOTEL (65 ROOMS)	±69,000 SF
	ACCESSORY BUILDINGS	
Ⓖ	GATE HOUSE	±520 SF
Ⓗ	HOTEL PANTRY STORAGE	±4,300 SF
	TOTAL PROPOSED:	±111,700 SF

ZONING SETBACKS:

	REQUIRED	Ⓕ HOTEL PROPOSED	Ⓔ EVENT SPACE PROPOSED	Ⓐ Ⓑ Ⓒ Ⓓ CABINS PROPOSED	Ⓖ GATE HOUSE PROPOSED
R-1 ZONE					
FRONT YARD	35 FT	≥77 FT	≥644 FT	≥271 FT	≥77 FT
REAR YARD	50 FT	≥304 FT	≥860 FT	≥605 FT	≥1340 FT
SIDE YARD					
ONE	35 FT	≥180 FT	≥47 FT	≥104 FT	≥500 FT
BOTH	70 FT	≥630 FT	≥900 FT	≥1100 FT	≥1800 FT

HD ZONE	REQUIRED	Ⓗ PANTRY/STORAGE PROPOSED
FRONT YARD	75 FT	≥152 FT
REAR YARD	75 FT	≥75 FT
SIDE YARD		
ONE	25 FT	≥25 FT
BOTH	50 FT	≥50 FT

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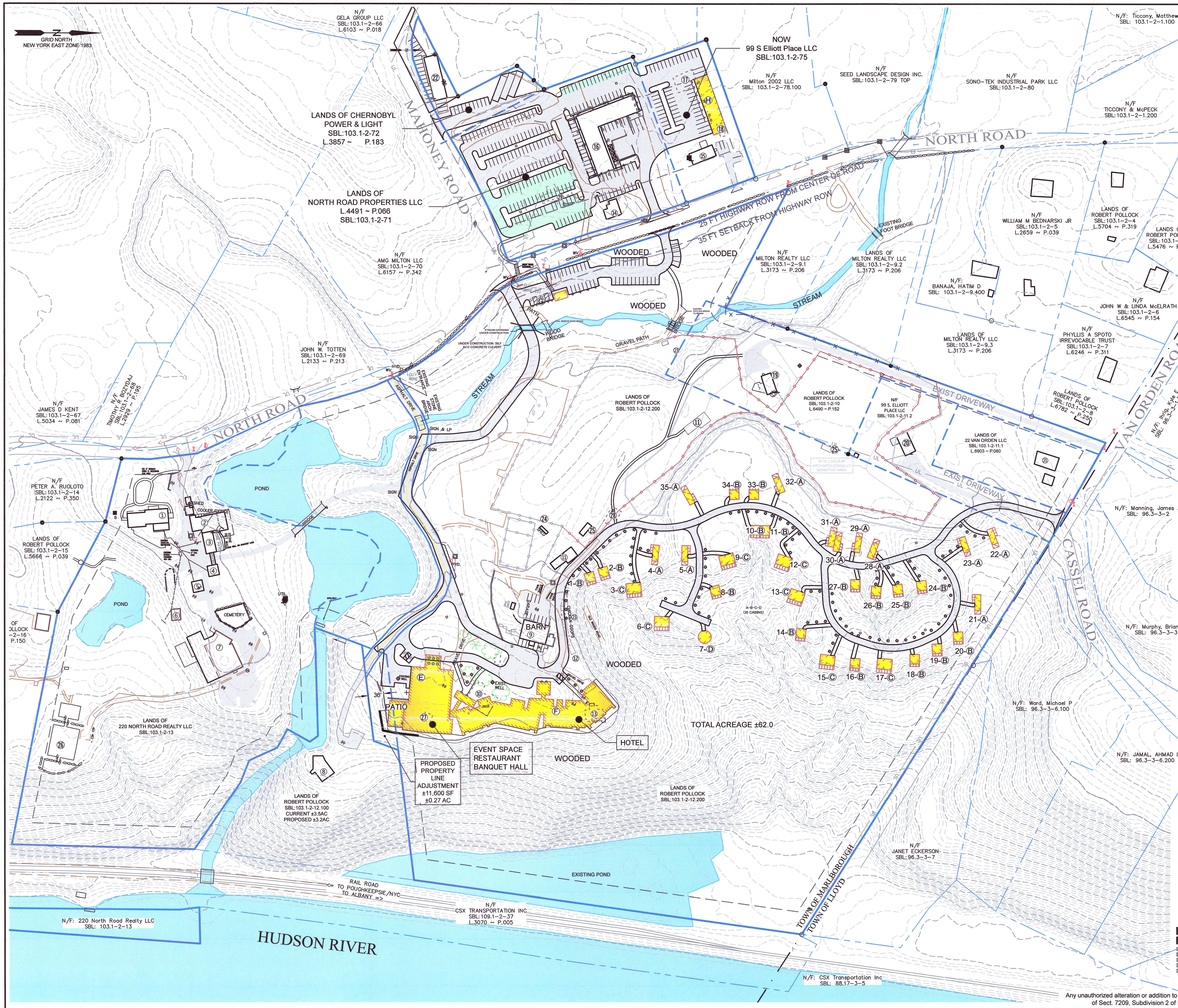
GRID NORTH
NEW YORK EAST ZONE 1983
N/F GELA GROUP LLC SBL:103.1-2-66 L.6103 ~ P.018
NOW 99 S Elliott Place LLC SBL:103.1-2-75
N/F Milton 2002 LLC SBL: 103.1-2-78.100
N/F SEED LANDSCAPE DESIGN INC. SBL:103.1-2-79 TOP
N/F SONO-TEK INDUSTRIAL PARK LLC SBL:103.1-2-80
N/F: Ticcony, Matthew SBL: 103.1-2-1.100
N/F TICCONY & McPECK SBL:103.1-2-1.200
LANDS OF CHERNOBYL POWER & LIGHT SBL:103.1-2-72 L.3857 ~ P.183
LANDS OF NORTH ROAD PROPERTIES LLC L.4491 ~ P.066 SBL:103.1-2-71
MAHONEY ROAD
NORTH ROAD
25 FT HIGHWAY ROW FROM CENTER OF ROAD
35 FT SETBACK FROM HIGHWAY ROW
EXISTING FOOT BRIDGE
N/F AMG MILTON LLC SBL:103.1-2-70 L.6157 ~ P.342
WOODED
N/F MILTON REALTY LLC SBL:103.1-2-9.1 L.3173 ~ P.206
LANDS OF MILTON REALTY LLC SBL:103.1-2-9.2 L.3173 ~ P.206
N/F WILLIAM M BEDNARSKI JR SBL:103.1-2-5 L.2659 ~ P.039
LANDS OF ROBERT POLLOCK SBL:103.1-2-4 L.5704 ~ P.319
N/F BANAJA, HATIM D SBL: 103.1-2-9.400
N/F JOHN W & LINDA McELRATH SBL:103.1-2-6 L.6545 ~ P.154
STREAM
GRAVEL PATH
WOOD BRIDGE
LANDS OF MILTON REALTY LLC SBL:103.1-2-9.3 L.3173 ~ P.206
N/F PHYLLIS A SPOTO IRREVOCABLE TRUST SBL:103.1-2-7 L.6246 ~ P.311
N/F JOHN W. TOTTEN SBL:103.1-2-69 L.2133 ~ P.213
N/F JAMES D KENT SBL:103.1-2-67 L.5034 ~ P.081
N/F TIMOTHY BOZYDAJ
LANDS OF ROBERT POLLOCK SBL:103.1-2-12.200
LANDS OF ROBERT POLLOCK SBL:103.1-2-10 L.6490 ~ P.152
N/F 99 S. ELLIOTT PLACE LLC SBL:103.1-2-11.2
EXIST DRIVEWAY
LANDS OF ROBERT POLLOCK SBL:103.1-2-8 L.6782 ~ P.250
VAN ORDEN ROAD
LANDS OF 22 VAN ORDEN LLC SBL:103.1-2-11.1 L.6903 ~ P.080
POND
N/F PETER A. RUOLOTO SBL:103.1-2-14 L.2122 ~ P.350
LANDS OF ROBERT POLLOCK SBL:103.1-2-15 L.5666 ~ P.039
CEMETERY
BARN
N/F: Manning, James A SBL: 96.3-3-2
CASSEL ROAD
N/F: Murphy, Brian W SBL: 96.3-3-3
WOODED
TOTAL ACREAGE ±62.0
HOTEL
PATIO
EVENT SPACE RESTAURANT BANQUET HALL
PROPOSED PROPERTY LINE ADJUSTMENT ±11,600 SF ±0.27 AC
LANDS OF 220 NORTH ROAD REALTY LLC SBL:103.1-2-13
LANDS OF ROBERT POLLOCK SBL:103.1-2-12.100 CURRENT ±3.5AC PROPOSED ±3.2AC
LANDS OF ROBERT POLLOCK SBL:103.1-2-12.200
N/F: Ward, Michael P SBL: 96.3-3-6.100
N/F: JAMAL, AHMAD I SBL: 96.3-3-6.200
N/F JANET ECKERSON SBL: 96.3-3-7
EXISTING POND
TOWN OF MARLBOROUGH
TOWN OF LLOYD
RAIL ROAD
<= TO POUGHKEEPSIE/NYC
TO ALBANY =>
N/F CSX TRANSPORTATION INC SBL:109.1-2-37 L.3070 ~ P.005
N/F: 220 North Road Realty LLC SBL: 103.1-2-13
HUDSON RIVER
N/F: CSX Transportation Inc SBL: 88.17-3-5

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Any unauthorized alteration or addition to this plan is a violation of Sect. 7209, Subdivision 2 of N.Y.S. Education Law.

BUILDING KEY

EXISTING BUILDINGS TO REMAIN:

BLDG#	DESCRIPTION	GROSS AREA	STATUS
1	10 BEDROOM INN	7,180 SF	
2	PROPOSED ±2907 SF ADDITION TO EXISTING RESTAURANT	6,025 SF	UNDER CONSTRUCTION
3	EXERCISE ROOM W/ 1 BEDROOM APARTMENT	1,152 SF	
4	2 CAR GARAGE W/1 BEDROOM GUEST ROOM	585 SF	
5	2 CAR GARAGE W/1 BEDROOM GUEST ROOM	585 SF	
6	1 BEDROOM RESIDENCE	519 SF	
7	SPA BUILDING W/ APPROVED SPA EXPANSION	8,064 SF	
8	PRIVATE RESIDENCE	2,850 SF	
9	120 SEAT BANQUET HALL IN EXISTING BARN W/KITCHEN	6,200 SF	
11	AGRICULTURAL BUILDING	1,450 SF	TO BE RELOCATED
14	STAFF RESIDENCE	1,610 SF	
15	STAFF RESIDENCE	1,512 SF	
16	WAREHOUSE FOR HOTEL STORAGE	14,366 SF	PARTS TO BE REMOVED
19	PRIVATE RESIDENCE	2,464 SF	
20	PRIVATE RESIDENCE	1,574 SF	
21	PRIVATE RESIDENCE	2,056 SF	
22	4 BAY GARAGE	3,000 SF	
24	SHED		
25	SHED / BEE HOUSES		TO BE RELOCATED
26	EVENT AREA		

EXISTING BUILDINGS TO BE REMOVED:

BLDG#	DESCRIPTION	GROSS AREA
10	PRIVATE RESIDENCE	2,650 SF
12	AGRICULTURAL BUILDING	850 SF
13	PRIVATE RESIDENCE	800 SF
17	SHED	
18	SHED	
23	CHICKEN COOPS	
27	POOL HOUSE	
28	SHED	
29	FOUNDATION	

PROPOSED BUILDINGS:

	CABINS/TREE HOUSES	35 UNITS
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	MAIN HOTEL	
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SITE PLAN
FOR
BUTTERMILK FALLS
TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

100 0 100 200 300

Scale: 1" = 100'

NOVEMBER 9, 2023

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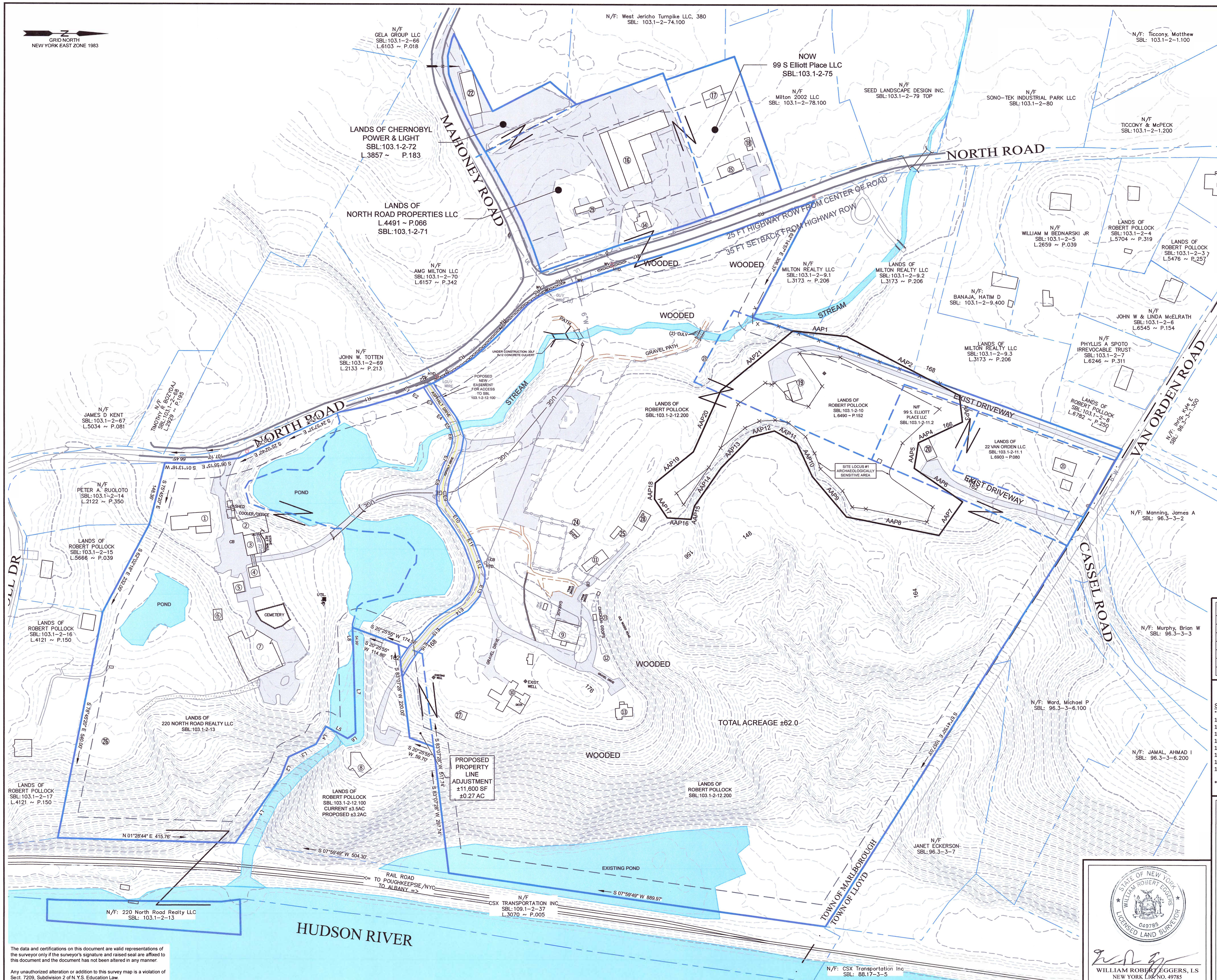

The data and certifications on this document are valid representations of the surveyor only if the surveyor's signature and raised seal are affixed to this document and the document has not been altered in any manner.

Any unauthorized alteration or addition to this survey map is a violation of Sect. 7209, Subdivision 2 of N.Y.S. Education Law.

METES & BOUNDS OF PROTECTED AREA		
LINE	BEARING	DISTANCE
AAP1	N 05°50'23" E	126.82'
AAP2	N 27°39'39" E	297.15'
AAP3	N 83°25'30" E	62.48'
AAP4	S 25°11'36" E	113.87'
AAP5	S 80°53'16" E	60.63'
AAP6	N 34°45'32" E	137.76'
AAP7	S 54°56'40" E	96.22'
AAP8	S 11°11'04" W	220.32'
AAP9	S 49°55'26" W	124.01'
AAP10	S 65°02'27" W	84.95'
AAP11	S 29°12'44" W	60.76'
AAP12	S 14°43'43" E	57.08'
AAP13	S 46°11'02" E	101.11'
AAP14	S 55°14'16" E	107.74'
AAP15	S 75°13'34" E	32.65'
AAP16	S 03°22'57" W	55.76'
AAP17	S 56°04'28" W	53.33'
AAP18	N 87°07'24" W	37.85'
AAP19	N 39°27'27" W	115.11'
AAP20	N 65°51'39" W	156.97'
AAP21	N 39°44'15" W	219.12'

EASEMENT		
LINE	BEARING	DISTANCE
E1	N 46°50'22" E	23.84'
E2	N 30°35'30" E	34.11'
E3	N 20°21'01" E	43.14'
E4	N 37°00'08" E	31.24'
E5	N 58°41'43" E	31.69'
E6	N 88°47'01" E	33.79'
E7	S 71°06'13" E	79.15'
E8	S 72°40'58" E	38.00'
E9	N 75°25'18" E	37.75'
E10	N 55°45'11" E	81.28'
E11	N 65°00'27" E	42.98'
E12	N 71°28'39" E	66.77'
E13	S 68°07'29" E	40.51'
E14	S 38°07'13" E	95.96'
E15	S 46°42'32" E	53.88'
E16	S 57°20'56" E	38.45'

PROPERTY LINE ALONG STREAM AND POND		
LINE	BEARING	DISTANCE
L1	N 55°24'33" W	186.00'
L2	N 68°32'33" W	51.85'
L3	N 24°57'33" W	70.53'
L4	N 60°57'33" W	47.86'
L5	N 29°04'27" E	58.27'
L6	N 35°00'33" W	22.51'
L7	S 88°27'27" W	192.34'
L8	S 87°49'27" W	61.72'

PROPERTY LINE ALONG NORTH ROAD		
LINE	BEARING	DISTANCE
R1	N 18°02'02" W	156.53'
R2	N 22°59'02" W	114.65'
R3	N 36°51'50" W	89.70'
R4	N 43°37'04" W	163.85'
R5	N 34°26'31" W	50.47'
R6	N 20°03'50" W	71.39'
R7	N 17°42'32" W	308.59'
R8	N 20°06'05" W	308.53'

BLDG#	DESCRIPTION	GROSS AREA
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㉕	SHED / BEE HOUSES	
㉖	EVENT AREA	
㉗	POOL HOUSE	
㉘	SHED	
㉙	FOUNDATION	

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PROPERTIES UNDER CONSIDERATION

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EXISTING CONDITIONS & LOT LINE REVISIONS

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

100 0 100 200 300

Scale: 1" = 100'

NOVEMBER 9, 2023

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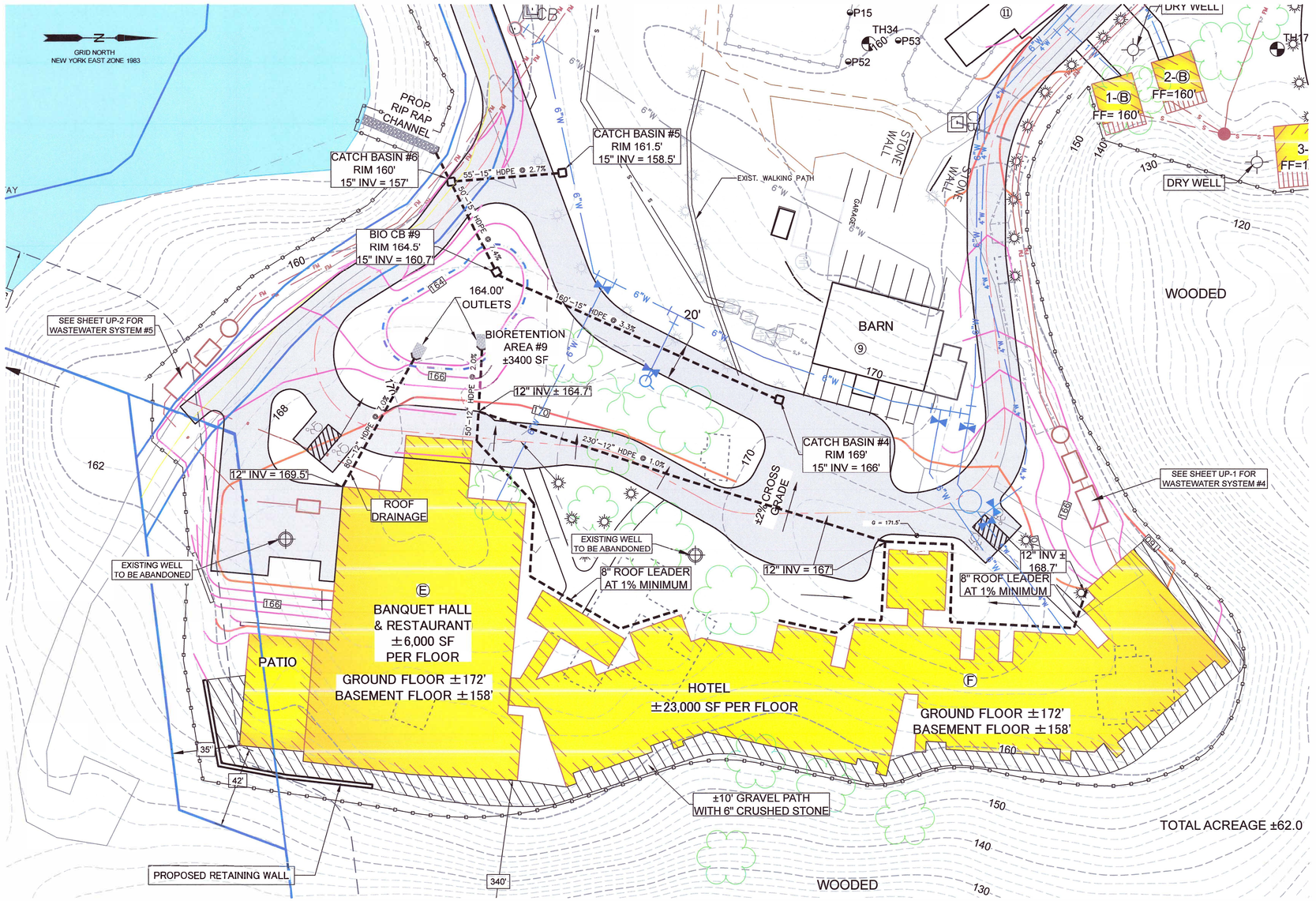

General Utility Notes and Specifications:

General Provisions:

1. All construction activities shall be in compliance with municipal, county state and federal regulations.
2. The protection of adjacent properties or areas on site that are not to be disturbed during construction, shall be the responsibility of the contractor.
3. Any conditions encountered in the field differing from those shown hereon, shall be reported to the design engineer before construction is to proceed.
4. Exploratory excavations shall be performed as needed at all utility connection locations by the contractor to verify existing conditions prior to work. Before connecting to existing utilities, verify existing utility inverts and notify the engineer if any deviation from the plan is required.
5. Where underground or overhead obstructions are encountered in the work, the contractor shall assume all costs for direct or indirect injury to them. Any valve box, valve pit, water service, water main, catch basin, manhole etc. whether or not shown on the drawings shall be protected from damage.
6. The contractor shall maintain service for all existing utilities until no longer necessary.
7. All trenching and shoring shall adhere to OSHA guidelines.
8. Contractor shall comply with all the requirements of the SPDES General Permit for Stormwater Discharges from Construction Activity - GP-0-20-001. A current copy of the Stormwater Pollution Prevention Plan (SWPPP) shall be keep on site at all times. Contractor is responsible for conducting weekly inspections (must be qualified by NYSDEC) or retaining a qualified inspector such as the design engineer to perform such inspections.

Excavation and Earthwork:

1. Prior to site disturbance the contractor shall install required erosion & sediment control measures.
2. Strip all topsoil prior to commencing earthwork operations. Topsoil may be stored and reused in lawn and planting areas only.
3. Excavation shall be carried to the lines, grades and slopes shown on the approved plans. All final earthwork shall be smoothly and evenly blended into existing conditions.
4. Remove all vegetation, trees, stumps, grasses, organic soils, debris and deleterious materials from excavated soils to be reused as fill onsite.
5. Where unstable or unsuitable material is encountered at the prescribed bottom grade of the trenches it shall be removed.
6. Contractor shall be responsible for dewatering utility trenches and excavations and for the maintenance of surface drainage during the course of the work.
7. After final grading the contractor shall reapply stockpiled top soil on all lawn and planting areas. Topsoil shall be evenly spread a minimum of 4 (four) inches over all planting areas seeded and mulched in lawn areas or planted as per landscaping plan in planting beds. The contractor shall restore lawns, driveways and other disturbed areas to at least as good a condition as before being disturbed.

Utility Bedding and Backfill:

1. Selected bedding (as specified on the utility typical trench sections heron) shall be provided for the construction of pipe foundations at those locations where the foundations or excavated material, or any portion thereof deemed to be unsuitable for supporting the pipe or structure, or for back filling the cover portion of the trenches to a level one foot above the pipe, or where excavated material consist of a predominance of large stone, boulders or rock which is not suitable for placing in the trench. Certified sieve analysis shall be submitted from the supplier for the engineer's review prior to use.
2. All suitable back fill material shall be placed in layers not exceeding twelve (12) inches in depth, (loose measure), and shall be thoroughly tamped and compacted to a minimum density of 95% standard AASHTO-T99 (ASTM-D698, as amended) compacting test. Compacting equipment shall be of a suitable type for the various back filling operations.
3. **Trench** Backfill specifications:
   A. NYSDOT Right of Way: Trench backfill material shall conform with NYSDOT Section 403 and meeting the gradation below.

   B. Parking and Roads: Trench backfill material shall consist of crushed stone, sand and gravel, crushed shell or onsite material approved by Engineer. The backfill shall consist of hard, sharp, clean granular material, free of organic matter. The material shall be free of any considerable amount of flat, laminated or elongated particles and, silt, clay, limestone, shale or other deleterious matter. The material must be capable of compaction to the densities specified or required. The material shall contain no stones larger than three (3) inches in their largest dimension and no more than 10 percent the material by weight shall pass a No. 200 sieve.

   C. Yard and Grass Areas: Trench backfill material shall consist of onsite onsite material or imported material similar to onsite material.

Drainage:

1. All storm sewer pipe shall be smooth interior HDPE pipe unless noted otherwise.
2. HDPE end sections shall be provided on all drainage pipe inlets or outlets not connected to catch basins or other drainage structures. All outlets shall also be stabilized with rip-rap as per plans.
3. All concrete chambers shall be pre cast concrete to the specifications and dimensions shown hereon. Frames and grates shall be gray iron or ductile iron. Gray iron shall conform with ASTM A-48, Class 30b and ductile iron shall conform with ASTM A 536 and be of a grade appropriate to its intended use to the dimensions and specifications as shown hereon. Any structures subject to vehicle loads shall be able to withstand an H20 loading. Shop drawings shall be submitted to the design engineer for approval prior to construction.
4. The gutters and ditches shall be kept open at all times for surface drainage. No damming or ponding of water, in gutters or other waterways will be permitted except where the engineer shall consider it necessary.
5. The transport of soils to the drainage system shall be avoided during and after construction.
6. All exposed soils shall be stabilized with vegetation, stone or as directed by the engineer.
7. Methods used to control soil erosion and sediment control shall be in accordance with the approved soil erosion and sediment control plan or as directed by the engineer. Contractor shall comply with all the requirements of the SPDES General Permit for Stormwater Discharges from Construction Activity - GP-0-20-001. A current copy of the Stormwater Pollution Prevention Plan (SWPPP) shall be keep on site at all times. Contractor is responsible for conducting weekly inspections (must be qualified by NYSDEC) or retaining a qualified inspector such as the design engineer to perform such inspections.
8. Roof drainage will be collected and piped to front (west) and connected to 12" roof drains as shown.

MAP REVISION DATES		
DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
7/11/2024	COMMENTS PER REVIEWING ENGINEER	SL

GRADING AND UTILITY PLAN-HOTEL

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

30 0 30 60 90

Scale: 1" = 30'

NOVEMBER 9, 2023

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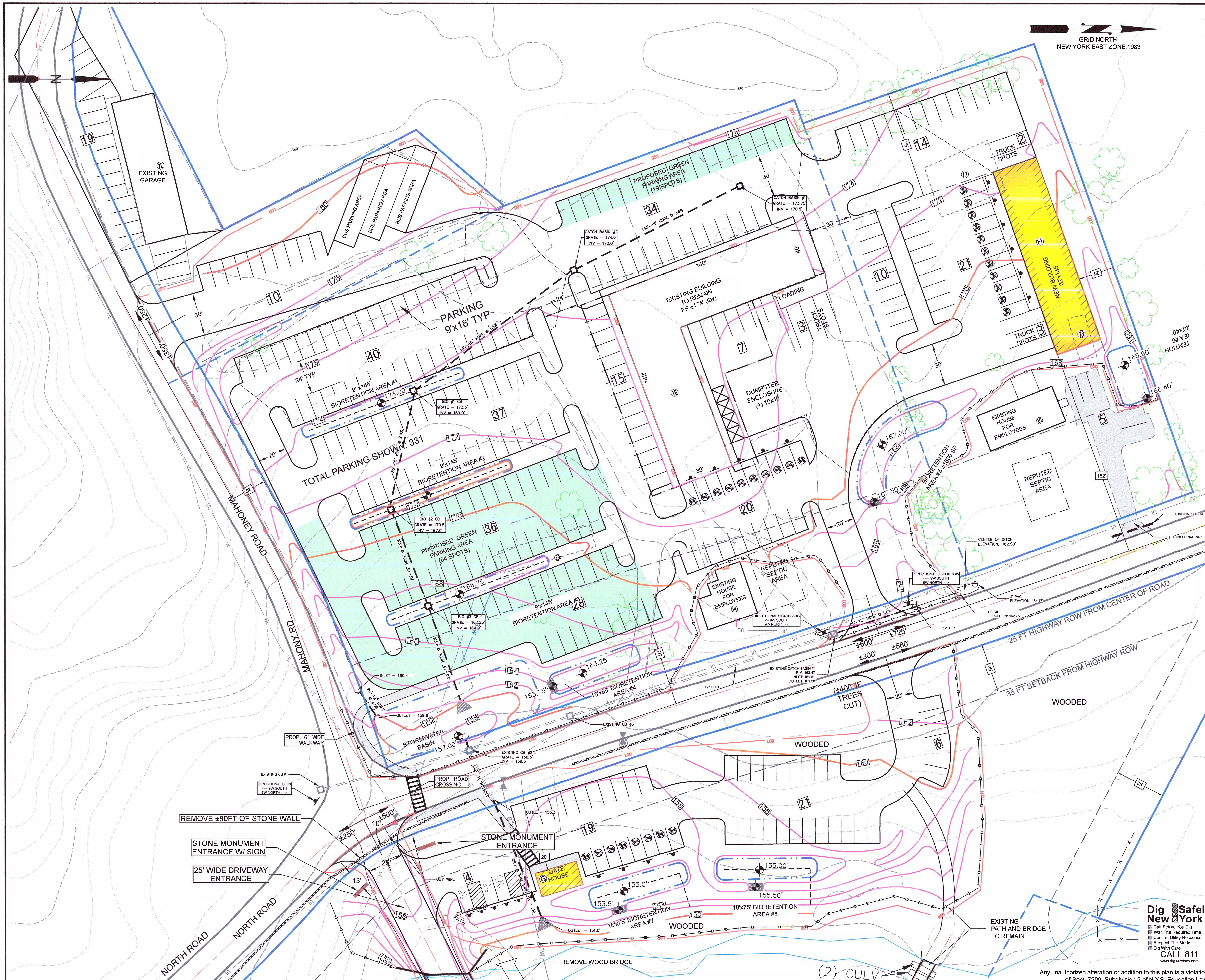

GRID NORTH
NEW YORK EAST ZONE 1983
EXISTING GARAGE
BUS PARKING AREA
PROPOSED GREEN PARKING AREA (19 SPOTS)
EXISTING BUILDING TO REMAIN FF ±174' (tbv)
LOADING
TRUCK SPOTS
DUMPSTER ENCLOSURE (4) 10x10
PARKING 9'x18' TYP
TOTAL PARKING SHOWN: 331
9'x145' BIORETENTION AREA #1
9'x145' BIORETENTION AREA #2
9'x145' BIORETENTION AREA #3
PROPOSED GREEN PARKING AREA (64 SPOTS)
15'x65' BIORETENTION AREA #4
BIORETENTION AREA #5 1800 SF
NEW BUILDING 32'x135'
EXISTING HOUSE FOR EMPLOYEES
REPUTED SEPTIC AREA
MAHONEY ROAD
MAHONY RD
NORTH ROAD
25 FT HIGHWAY ROW FROM CENTER OF ROAD
35 FT SETBACK FROM HIGHWAY ROW
WOODED
(±400'IF TREES CUT)
STORMWATER BASIN
PROP. 6' WIDE WALKWAY
PROP. ROAD CROSSING
REMOVE ±80FT OF STONE WALL
STONE MONUMENT ENTRANCE W/ SIGN
25' WIDE DRIVEWAY ENTRANCE
STONE MONUMENT ENTRANCE
GATE HOUSE
18'x75' BIORETENTION AREA #7
18'x75' BIORETENTION AREA #8
REMOVE WOOD BRIDGE
EXISTING PATH AND BRIDGE TO REMAIN
EXISTING CULVERT
EXISTING DRIVEWAY
CENTER OF DITCH ELEVATION: 162.98'
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Any unauthorized alteration or addition to this plan is a violation of Sect. 7209, Subdivision 2 of N.Y.S. Education Law.

BUTTERMILK FALLS TOTAL FACILITY PARKING ANALYSIS

EXISTING FACILITIES:	REQUIRED
BED & BREAKFAST (14 ROOMS/1)	14
HENRY'S RESTAURANT (150 SEATS/3)	50
SINGLE FAMILY COTTAGE 1x2	2
SPA (11 ROOMS/1)	11
+13 EMPLOYEES	13
BARN BANQUET HALL (120 SEATS/3)	40
OUTSIDE SPECIAL EVENTS (225 SEATS/3)	75
TOTAL EXISTING	205

PROPOSED FACILITIES:	REQUIRED
HOTEL (65 ROOMS)	65
CABINS (35 ROOMS @1)	35
RESTAURANT (60 SEATS/3)	20
BANQUET HALL (300 SEATS/3)	100
+70 EMPLOYEES	70
TOTAL PROPOSED	290
PROJECT TOTAL REQUIRED (290+205)	495
REDUCTION FOR USES NOT IN SERVICE AT SAME TIME	-90
NET TOTAL REQUIRED PARKING	**405**
(ACCESSIBLE PARKING REQUIRED	9)

	PROVIDED
EXISTING PARKING TO REMAIN:	
EAST OF NORTH ROAD	55
WEST OF NORTH ROAD	24
TOTAL EXISTING	79
PROPOSED PARKING:	
EAST OF NORTH ROAD	54
WEST OF NORTH ROAD	272
(GREEN PARKING 83 OF 272)	
PROPOSED TOTAL PARKING	326
NET TOTAL PARKING	**405**
(NET ACCESSIBLE PARKING	10)
(NET EV CHARGING	29)
TRUCK PARKING	8
BUS PARKING	3

MAP REVISION DATES

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11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

GRADING AND UTILITY PLAN-PARKING

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

30 0 30 60 90

Scale: 1" = 30'

NOVEMBER 9, 2023

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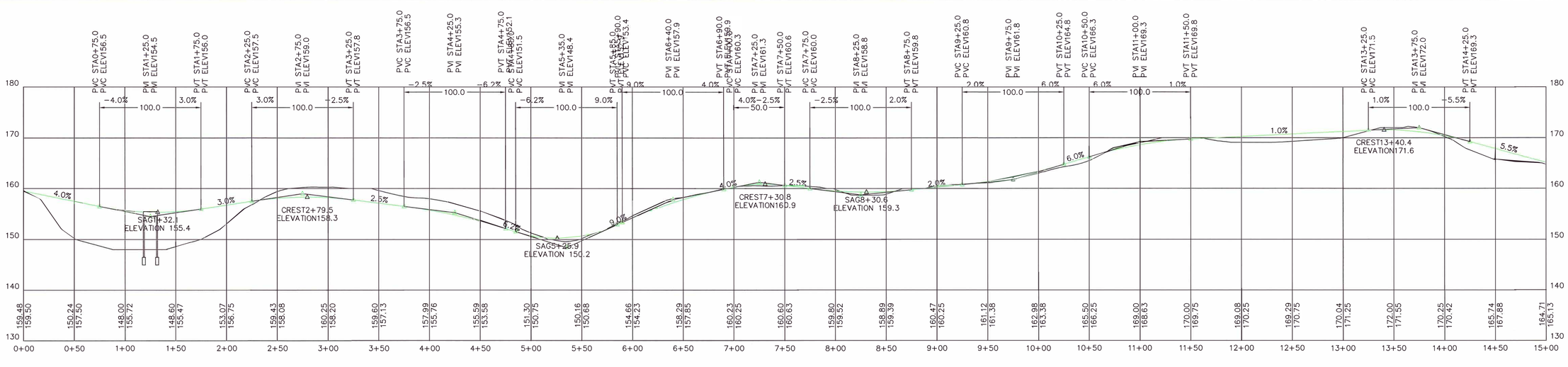
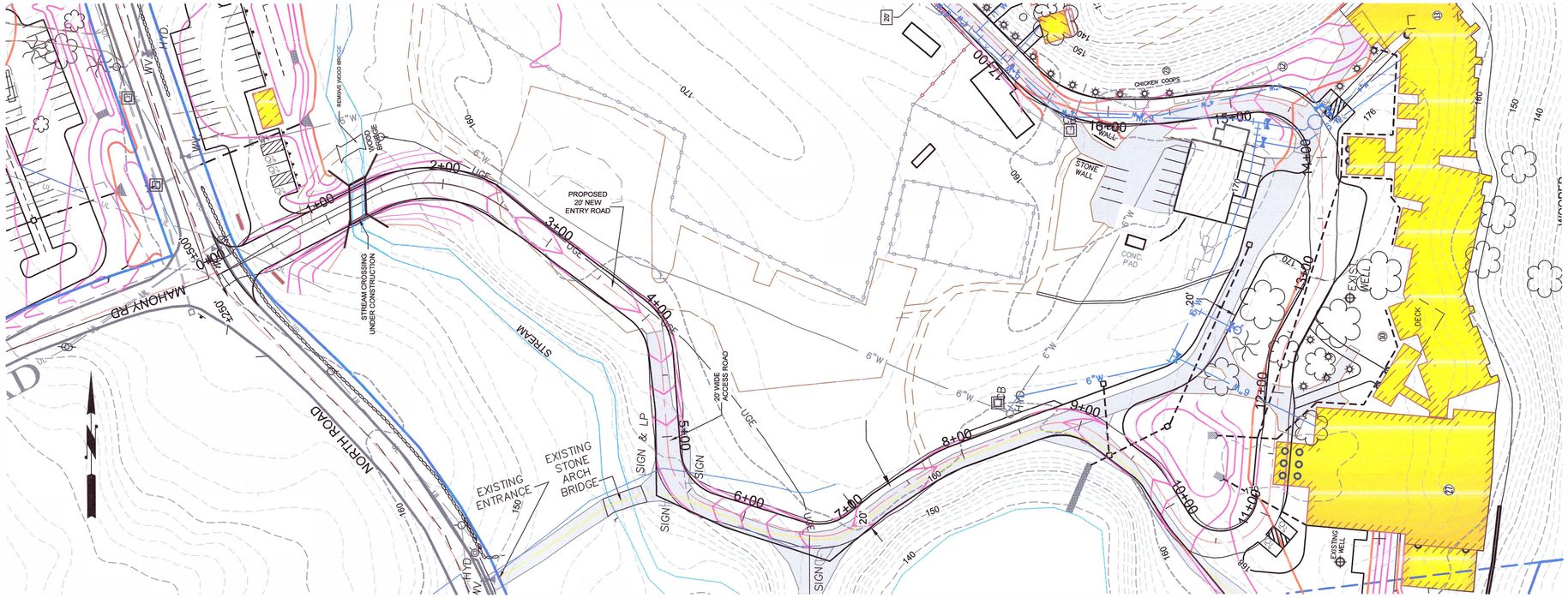


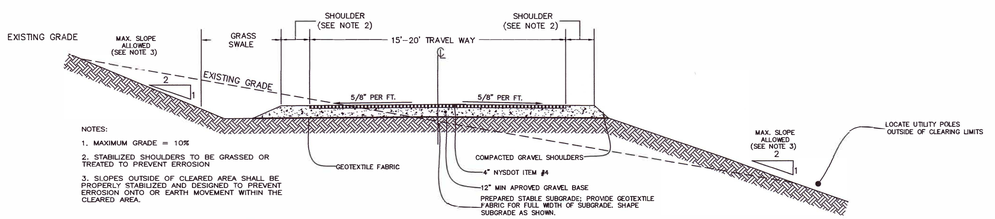
ROAD 1 - PROFILE 1 0+00 to 15+00

SCALE: 1" = 50' HORIZONTAL 1" = 10' VERTICAL



ROAD PLAN 1

SCALE: 1" = 50' HORIZONTAL



NOTES:

1. MAXIMUM GRADE = 10%
2. STABILIZED SHOULDERS TO BE GRASSED OR TREATED TO PREVENT ERROSION
3. SLOPES OUTSIDE OF CLEARED AREA SHALL BE PROPERLY STABILIZED AND DESIGNED TO PREVENT ERROSION ONTO OR EARTH MOVEMENT WITHIN THE CLEARED AREA.

TYPICAL ROAD SECTION

NOT TO SCALE

MAP REVISION DATES		
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DRIVEWAY PROFILE #1

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

50 0 50 100 150

Scale: 1" = 50'

NOVEMBER 9, 2023

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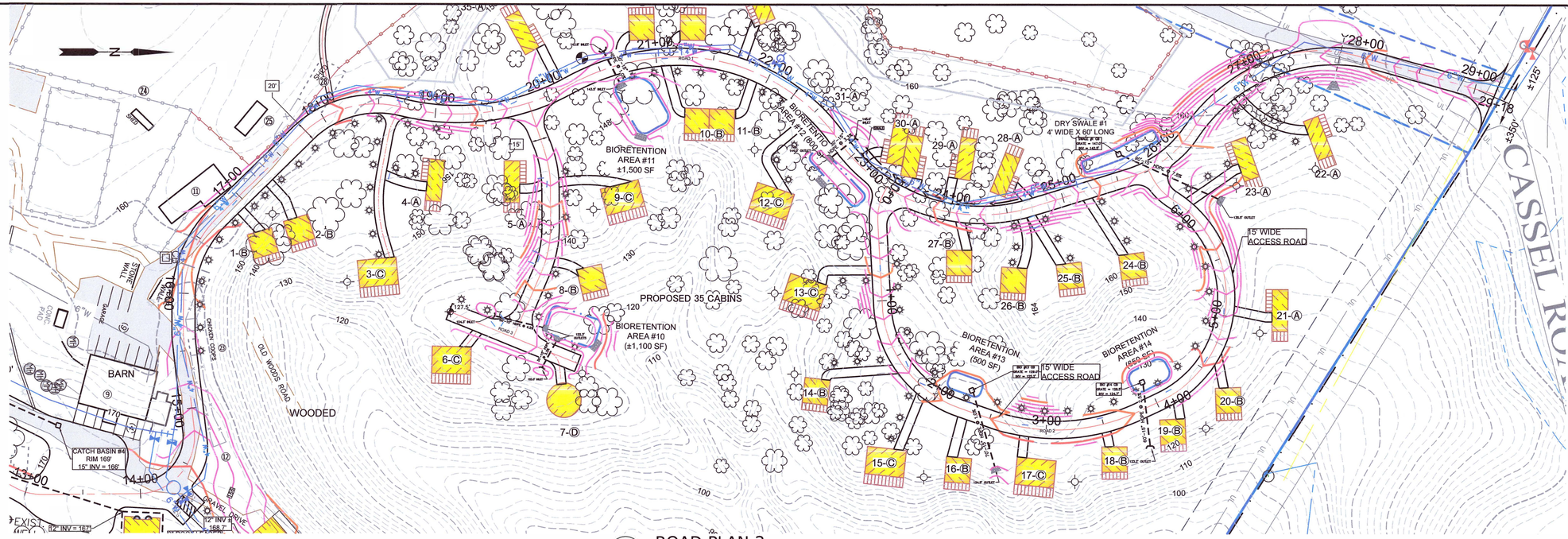
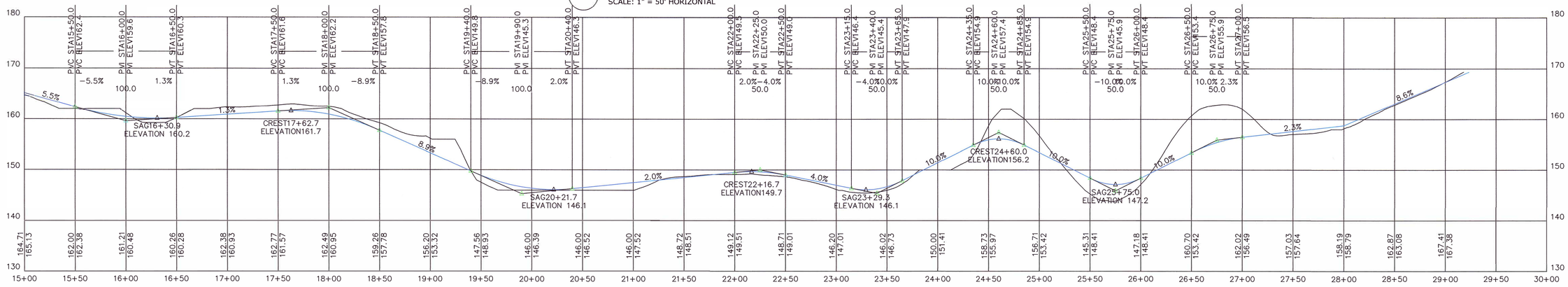


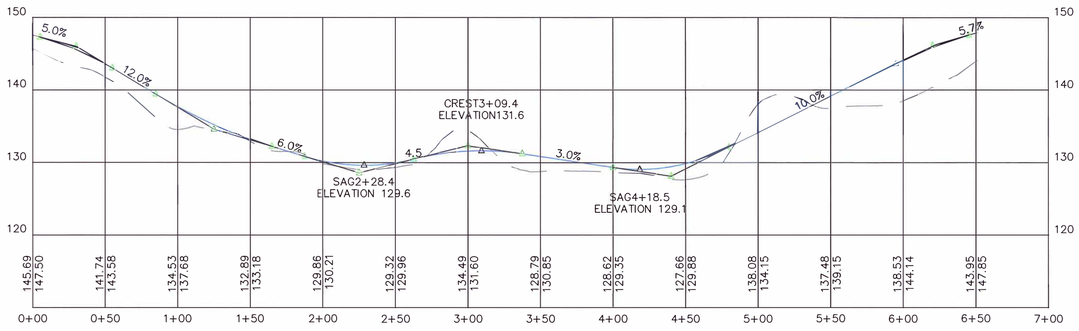
ROAD PLAN 2

SCALE: 1" = 50' HORIZONTAL



ROAD PROFILE 2 (ROAD 1) 15+00 to 29+18

SCALE: 1" = 50' HORIZONTAL 1" = 10' VERTICAL



ROAD PROFILE 3 (ROAD 2)

SCALE: 1" = 50' HORIZONTAL 1" = 10' VERTICAL

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MAP REVISION DATES

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11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

DRIVEWAY PROFILE #2

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

50 0 50 100 150

Scale: 1" = 50'

NOVEMBER 9, 2023

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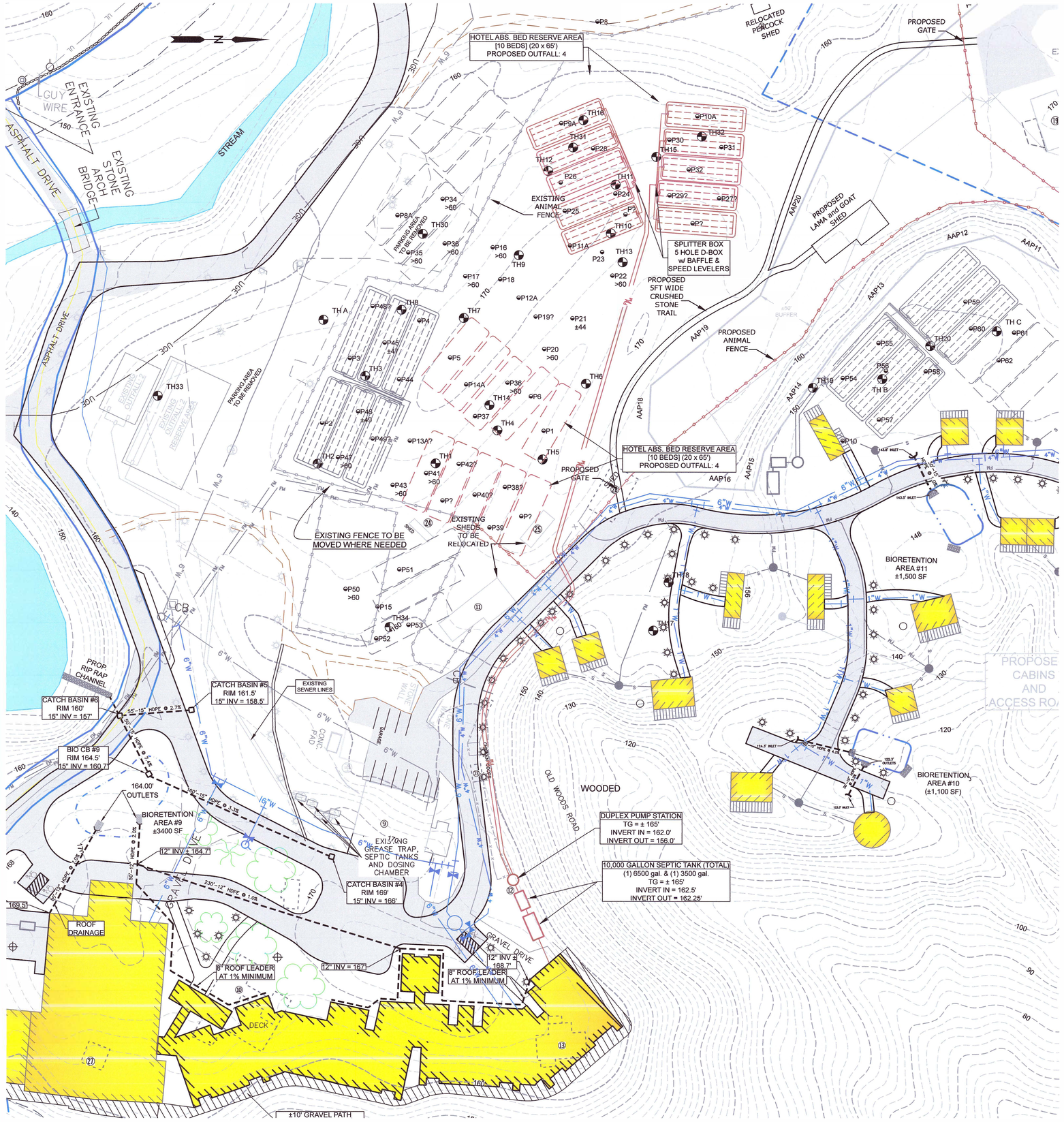

TEST HOLE DATA

TH# ◒ DENOTES SOIL TEST HOLE LOCATIONS

Conducted: 7/3/2023
Observed by Chris Kresser

TH # 4
0-12" TOPSOIL
12- 44" SILT LOAM
@32" SEEPAGE

TH # 5
0-29" TOPSOIL
29 - 48" SILT LOAM
NO WATER, ROCK, OR MOTTLING

TH #6
0-16" TOPSOIL
16 - 36" SILT LOAM
36 - 52" GRAVEL LOAM
NO WATER, ROCK, OR MOTTLING

TH # 9
0-16" TOPSOIL
16 - 43" SILT LOAM
AT 41" WATER
NO ROCK OR MOTTLING

TH # 10
0-39" TOPSOIL
39 - 54" SILT LOAM
NO WATER, ROCK OR MOTTLING

TH # 11
0- 10" TOPSOIL
10- 48" SILT LOAM
NO WATER, ROCK OR MOTTLING

TH # 12
0- 16" TOPSOIL
16- 48" SILT LOAM
NO WATER, ROCK OR MOTTLING

Conducted: 9/6/2023
Observed by Chris Kresser

TH # 13
0-8" TOPSOIL
8 - 58" SILT LOAM
AT 58" MOTTLING
NO WATER OR ROCK

TH # 15
0-6" TOPSOIL
6 - 60" SILT LOAM
60 - 78" SAND GRAVEL

TH # 14
0-10" TOPSOIL
10- 58" SILT LOAM
58 - 80" SAND GRAVEL LOAM
NO WATER, ROCK OR MOTTLING

TH # 16
0-6" TOPSOIL
6- 60" GRAVEL
60-80 FINE SAND

PERC HOLE DATA

P#◒DENOTES PERCOLATION TEST LOCATIONS

(COMPLETED ON 7/15/2023)
P1 = 13 MIN./INCH
P2 = 15 MIN./INCH
P3 = 11 MIN./INCH
P4 = 16 MIN./INCH
P5 = 14 MIN./INCH
P6 = 13 MIN./INCH
(COMPLETED ON 5/20/2024)
P8A = 24 MIN./INCH
P9A = 1 MIN./INCH
P10A = 2 MIN./INCH
P11A = 15 MIN./INCH
P12A = 10 MIN./INCH
(COMPLETED ON 5/21/2024)
P14A = 2 MIN./INCH
P15 = 1 MIN./INCH
(COMPLETED ON 7/16/2024)
P16 = +60 MIN./INCH
P17 = +60 MIN./INCH
P18 = 23 MIN./INCH
P20 = +60 MIN./INCH
P41 = +60 MIN./INCH
P43 = +60 MIN./INCH
(COMPLETED ON 7/17/2024)
P37 = 10 MIN./INCH
P30 = 2 MIN./INCH
P31 = 3 MIN./INCH
P26 = 1 MIN./INCH
P51 = 2 MIN./INCH
(COMPLETED ON 7/18/2024)
P21 = 44 MIN./INCH
P32 = +60 MIN./INCH
P36 = +60 MIN./INCH
P52 = 14 MIN./INCH
P53 = 12 MIN./INCH
(COMPLETED ON 7/26/2024)
P50 = +60 MIN./INCH
P33 = 5 MIN./INCH
P34 = +60 MIN./INCH
P35 = +60 MIN./INCH

(COMPLETED ON 8/16/2023)
P44 = 19 MIN./INCH
P45 = 47 MIN./INCH
P46 = 49 MIN./INCH
P47 = +60 MIN./INCH
(COMPLETED ON 9/9/2023)
P24 = 28 MIN./INCH
P23 = 53 MIN./INCH
P22 = +60 MIN./INCH
P57 = 5 MIN./INCH
(COMPLETED ON 9/11/2023)
P56 = 2 MIN./INCH
P54 = 2 MIN./INCH
P55 = 2 MIN./INCH
P58 = 4 MIN./INCH
P59 = 2 MIN./INCH
P60 = 1 MIN./INCH
P61 = 6 MIN./INCH
P62 = 9 MIN./INCH

Hotel 65 rooms @ 110 gpd= 7,150 gpd

Proposes 2 septic tanks in series
- one (1) 6000 gal and one (1) 3000 gal
- ten (10) disposal beds 20'x65'

HOTEL ABS. BED DESIGN SPECIFICATIONS

AVERAGE DAILY FLOW = 7150 GPD
STABILIZED PERCOLATION RATE = 20 MIN./INCH
APPLICATION RATE = 0.55 GPD/SQ.FT.
REQUIRED ABSORPTION AREA
= 7150 GPD/0.55(GPD/SQ. FT.) = 13,000 SQ. FT.
PROVIDE (10) BEDS @ 20 FT x 65 FT = 13,000 SQ. FT.
- PUMPING/DOSING VOLUME
FORCE MAIN PIPE VOLUME
640 FT OF 1 ½" PIPE x 0.0918 GALS/FT = 59 GALS
- TOTAL LATERAL PIPE VOLUME
(4) LATS @ 60 FT = 240 FT
(5) BEDS @ 240 FT = 1200 FT OF LATERIALS
1200 FT x 0.653 GALS/FT = 784 GALS
DOSING VOLUME
784 GALS x 75% = 588 GALS + 59 GALS(F.M.) = 647 GALS
784 GALS x 85% = 667 GALS + 59 GALS(F.M.) = 726 GALS

MAP REVISION DATES		
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11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

LEGEND

WATER MAIN NEW
PROPOSED GRINDER PUMP
FORCEMAIN NEW

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WASTEWATER PLAN OUTFALL #4 - HOTEL

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

40 20 0 40 80 120
Scale: 1" = 40'

FEBRUARY 06, 2024

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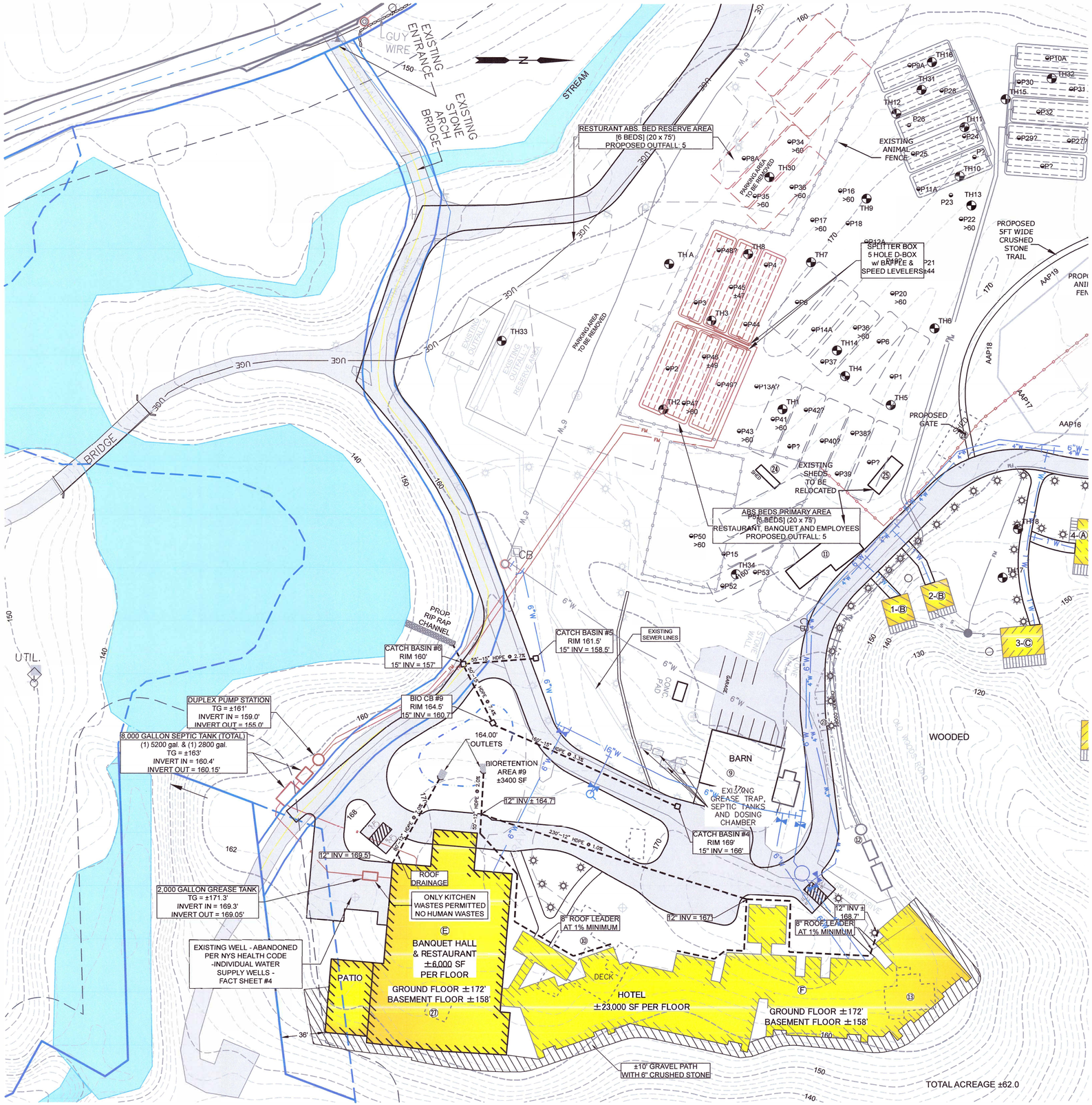

TEST HOLE DATA

TH# ◔ DENOTES SOIL TEST HOLE LOCATIONS

Conducted: 7/3/2023
Observed by Chris Kresser

TH #1
0 - 49" SILT LOAM
NO WATER, ROCK OR MOTTLING

TH #2
0-22" TOPSOIL
22-53" SILT LOAM
NO WATER, ROCK OR MOTTLING

TH #3
0-23" TOPSOIL
23- 55" SILT LOAM

TH # 4
0-12" TOPSOIL
12- 44" SILT LOAM
@32" SEEPAGE

TH # 7
0-15 TOPSOIL
15- 50 SILT LOAM
NO WATER ROCK OR MOTTLING

TH # 8
0-33" TOPSOIL
33 - 58" SILT LOAM

Conducted: 9/6/2023
Observed by Chris Kresser

TH # 14
0-10" TOPSOIL
10- 58" SILT LOAM
58 - 80" SAND GRAVEL LOAM
NO WATER, ROCK OR MOTTLING

PERC HOLE DATA

P#◒DENOTES PERCOLATION TEST LOCATIONS
(COMPLETED ON 7/15/2023)
P2 = 15 MIN./INCH
P3 = 11 MIN./INCH
P4 = 16 MIN./INCH
P5 = 14 MIN./INCH

Restaurant, Banquet Hall and Employees at 4920 gpd:

Propose 2 septic tanks in series
- one (1) 5200 gal and one (1) 2800 gal
- six (6) disposal beds 20'x75'

RESTAURANT/BANQUET HALL/EMPLOYEES ABS. BED DESIGN SPECIFICATIONS

AVERAGE DAILY FLOW = 4920 GPD
STABILIZED PERCOLATION RATE = 20 MIN./INCH
APPLICATION RATE = 0.55 G.P.D./SQ.FT.
REQUIRED ABSORPTION AREA
= 4920 GPD/0.55(GPD/SQ.FT.) = 8945 SQ.FT.
PROVIDE (6) BEDS @ 20'x75' = 9000 SQF. IN 2' WIDE
- PUMPING/DOSING VOLUME
FORCE MAIN PIPE VOLUME
535 FT OF 1 ½" PIPE x 0.0918 GALS/FT = 49 GALS
- TOTAL LATERAL PIPE VOLUME
(4) LATS @ 75' = 300 FT
(3) BEDS @ 300 FT/BED = 900 FT OF LATERIALS
900 FT x 0.653 GALS/FT = 588 GALS
DOSING VOLUME
588 GALS x 75% = 441 GALS + 49 GALS(F.M.) = 490 GALS
588 GALS x 85% = 500 GALS + 49 GALS(F.M.) = 549 GALS

MAP REVISION DATES		
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11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

WASTEWATER PLAN OUTFALL #5 - EVENT

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

40 20 0 40 80 120
Scale: 1" = 40'

FEBRUARY 06, 2024

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PROPOSED GRINDER PUMP
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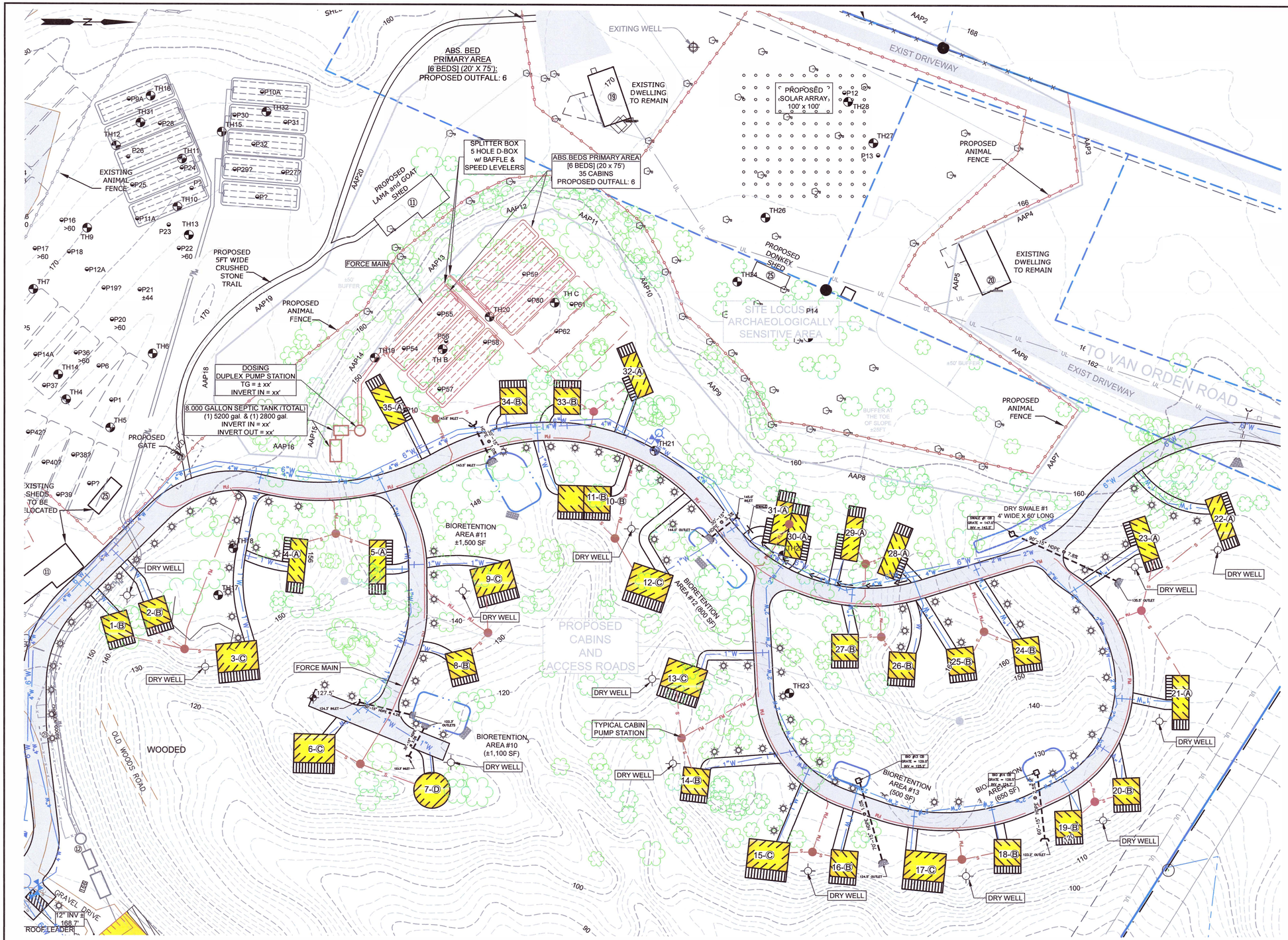

PROPOSED FLOWS FOR OUTFALL #6:

CABINS/TREE HOUSES – WASTEWATER CALCULATION 110GPD/BR

- Ⓐ MODULAR 1 BED: 15 @ 110GPD = 1650 GPD
- Ⓑ REG. 1 BED: 11 @ 110 GPD = 1210 GPD
- Ⓒ REG. 2 BED: 8 @ 220 GDP = 1760 GPD
- Ⓓ YURT: 1 BED: 1 @ 110 GPD = 110 GPD

TOTAL = 4730 GPD

CABINS ABS. BED DESIGN SPECIFICATIONS

AVERAGE DAILY FLOW = 4730 GPD
STABILIZED PERCOLATION RATE = 20 MIN./INCH
APPLICATION RATE = 0.55 GPD/SQ.FT.
REQUIRED ABSORPTION AREA
= 4730 GPD/0.55(GPD/SQ.FT.) = 8600 SQ.FT.
PROVIDE (6) BEDS @ 20'x75' = 9000 SQ.FT.
- PUMPING/DOSING VOLUME
FORCE MAIN PIPE VOLUME
160 FT OF 1 ¼" PIPE x 0.0638 GALS/FT = 10 GALS
- TOTAL LATERAL PIPE VOLUME
(4) LATS @ 70' = 280 FT
(3) BEDS @ 280 FT/BED = 840 FT OF LATERALS
840 FT x 0.653 GALS/FT = 549 GALS
DOSING VOLUME
549 GALS x 75% = 412 GALS + 10 GALS(F.M.) = 422 GALS
549 GALS x 85% = 467 GALS + 10 GALS(F.M.) = 477 GALS

TEST HOLE DATA

TH# ⊕ DENOTES SOIL TEST HOLE LOCATIONS

Conducted: 9/6/2023
Observed by Chris Kresser

TH # 17
0-1" TOPSOIL
1-84 SILT LOAM
NO WATER, ROCK, OR MOTTLING

TH # 18
0-1" TOPSOIL
1-84 SILT LOAM
NO WATER, ROCK, OR MOTTLING

TH # 19
0-4" TOPSOIL
4-84" SILT SAND LOAM
AT 84" WATER, NO MOTTLING OR WATER

TH # 20
0-4" TOPSOIL
4-63" SILT LOAM
63-72" MOTTLED CLAY
NO MOTTLING OR WATER

TH # 21
0-1" TOPSOIL
1-30" SAND
30-72 SILT SAND
NO WATER, ROCK, OR MOTTLING

TH # 22
0-1" TOPSOIL
1-42" SILT
42-84" SILT LOAM, TRACE SAND
NO WATER ROCK OR MOTTLING

TH # 23
0-1" TOPSOIL
1-12" SILT LOAM
12-84" SAND
NO WATER, ROCK OR MOTTLING

TH #24
0-2 TOPSOIL
2-36 SILT LOAM
36-72 COURSE SAND AND GRAVEL
NO WATER ROCK OR MOTTLING

TH #25
0-2" TOPSOIL
2-36" SILT LOAM
36-60" SAND
60-84" SILTY SAND

TH # 26
0-6" TOPSOIL
6-36" SILT LOAM
36-72 SAND GRAVEL
NO WATER, ROCK, OR MOTTLING

TH # 27
0-6" TOPSOIL
6-24" SILT LOAM
24-60 GRAVEL SAND
NO WATER, ROCK, OR MOTTLING

TH#28
0-6" TOPSOIL
6-24" SILT LOAM
24-72" GRAVEL SAND
72-84" SAND

PERC HOLE DATA

P# ◒ DENOTES PERCOLATION TEST LOCATIONS
(COMPLETED ON 9/27/2023)

P9 = 10 MIN./INCH
P10 = 5 MIN./INCH
P11 = 6 MIN./INCH
P12 = 7 MIN./INCH
P13 = 7 MIN./INCH
P14 = 32 MIN./INCH

LEGEND

- WATER MAIN NEW
- PROPOSED GRINDER PUMP
- FORCEMAIN NEW
- DRY WELL

Dig Safely. New York
Call Before You Dig
Wait The Required Time
Confirm Utility Response
Respect The Marks
Dig With Care
CALL 811
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MAP REVISION DATES

DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
11/07/2024	COMMENTS PER REVIEWING ENGINEER	SL

WASTEWATER PLAN

LOW PRESSURE COLLECTION SYSTEM FOR

OUTFALL #6 - COTTAGES

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

40 20 0 40 80 120
Scale: 1" = 40'

FEBRUARY 06, 2024

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BARRY MEDENBACH, P.E.
NEW YORK LIC. NO. 60142

UP-3
E18 105
SHEET 10 OF 28

MAGNETIC NORTH 1986

EXISTING MAIN WATER LINE

NORTH ROAD

EXISTING FIRE HYDRANT

EXISTING ENTRANCE

EXISTING STONE ARCH BRIDGE

STREAM

EXISTING 6" WATER MAIN

EXISTING 3/4" WATER LINE FOR EXISTING DWELLING

WOOD BRIDGE

EXIST DRIVEWAY

PROPOSED SOLAR ARRAY 100' x 100'

SITE LOCUS #1 ARCHAEOLOGICALLY SENSITIVE AREA

PROPOSED 6" WATER MAIN

PROPOSED FIRE HYDRANT

PROPOSED 1" WATER LINE

PROPOSED 35 CABINS

PROPOSED 2" WATER LINE

EXISTING FIRE HYDRANT

VAN ORDEN ROAD

EXISTING MAIN WATER LINE

STONE WALL

CHICKEN COOPS

BARN

EXIST. WELL

EXISTING WELL

BANQUET HALL & RESTAURANT ±6,000 SF PER FLOOR
GROUND FLOOR ±172'
BASEMENT FLOOR ±158'

DECK

HOTEL ±23,000 SF PER FLOOR
GROUND FLOOR ±172'
BASEMENT FLOOR ±158'

EVENT SPACE RESTAURANT BANQUET HALL

HOTEL

WATER METER PIT SEE SHEET D-2

1 DETAIL OF WATER CONNECTIONS
SCALE: 1"=20'

LEGEND

- EXISTING MAJOR 10 FOOT CONTOUR
- EXISTING MINOR 2 FOOT CONTOUR
- PROPOSED MAJOR 10 FOOT CONTOUR
- PROPOSED MINOR 2 FOOT CONTOUR
- TOWN (CITY, VILLAGE, COUNTY, ZONE)
- YARD SETBACK
- SILT FENCE EXIST
- SILT FENCE NEW
- WATER VALVE EXIST
- WATER VALVE NEW
- CULVERT EXIST
- CULVERT NEW
- SEWER LINE EXIST
- SEWER LINE NEW
- GAS LINE EXIST
- GAS LINE NEW
- ELECTRIC LINE EXIST
- ELECTRIC LINE NEW
- COMMUNICATIONS LINE EXIST
- COMMUNICATIONS LINE NEW
- 6"W WATER MAIN EXIST
- 6"W WATER MAIN NEW
- FORCEMAIN EXIST
- FORCEMAIN NEW
- ADJACENT PROPERTY LINE
- DECK & PORCH
- DEED LINE
- DRIVEWAY & ROAD-ASPHALT
- DRIVEWAY & ROAD-GRAVEL
- FENCE-WIRE
- FENCE-WOOD
- GUARDRAIL
- LIMIT OF DISTURBANCE
- PROPERTY LINE
- RIGHT OF WAY
- STONE WALL
- STREAM & POND & DITCH
- TREE LINE
- UTILITY LINE & POLE
- WETLANDS ADJACENT AREA
- WETLANDS BOUNDARY
- SILT FENCE
- EXIST. UNDGND ELEC.
- PROP. UNDGND ELEC
- PROP. UNDGND CATV
- EXIST. UNDGND CATV
- EXIST. FLOOD ELEVATION
- TREE HOUSE/CABIN NEW
- BUILDING EXIST REMAINS
- BUILDING EXIST REMOVE

Water Service Notes

1. The existing 6" water main on site with one Fire Hydrant shall be extended through the site along the access road and connect with 6" water main on Van Orden Rd.
2. Two fire hydrants and three 6" taps will be provided:
   -one for central water meter.
   -one for Banquet Hall sprinklers
   -one for Hotel sprinklers
3. Water meter pit will be provided for all domestic use. Two 4" lines will be installed after the meter. One to serve the Hotel & Banquet Hall, and one for the cabins.
4. The 4" cabin service line will follow parallel to the 6" main extension with 1" and 2" taps for the cabins.
5. Water details with specification are provided on sheet D-2

MAP REVISION DATES

DATE	REVISION	BY
11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

PROPOSED WATER SERVICE

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

50 0 50 100 150

Scale: 1" = 50'

JULY 10, 2024

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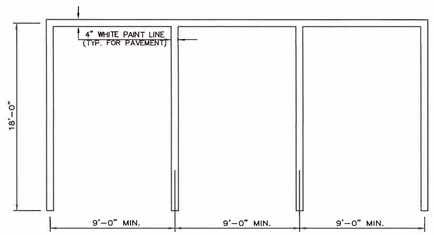
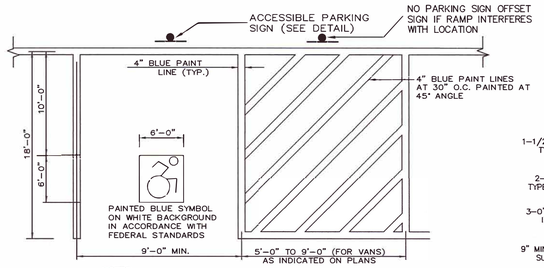


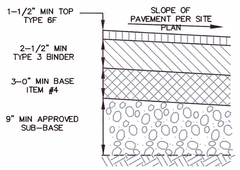
NOTES:
1. SEE SITE PLAN FOR SPACE LOCATION.
2. APPLY TWO COATS OF PAINT ON ALL SURFACES.

1 TYPICAL PARKING SPACE DETAIL
NOT TO SCALE

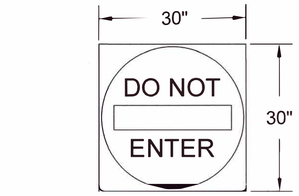


NOTES:
1. SEE SITE PLAN FOR ACCESSIBLE SPACE LOCATION AND DIMENSIONS.
2. APPLY TWO COATS OF PAINT ON ALL SURFACES.
3. ACCESSIBLE SYMBOL PER NEW YORK STATE.

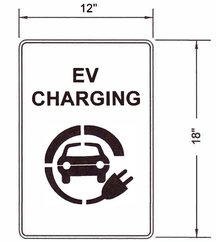
2 ACCESSIBLE PARKING SPACE DETAIL
NOT TO SCALE



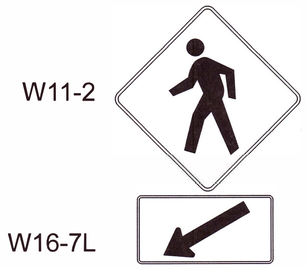
6 SITE PAVEMENT
NOT TO SCALE



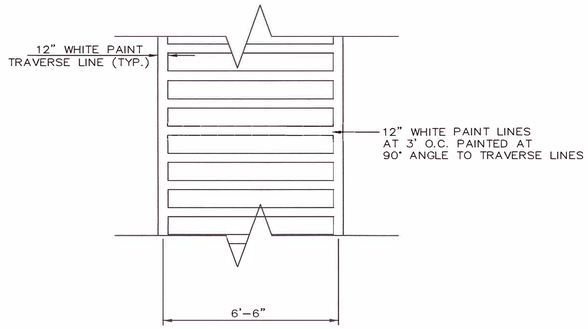
7 R5-1 DO NOT ENTER SIGN
NOT TO SCALE



8 ELECTRIC VEHICLE CHARGING STATION SIGN
NOT TO SCALE

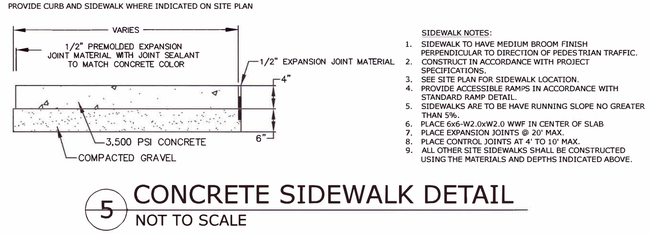


9 CROSSWALK HERE
NOT TO SCALE



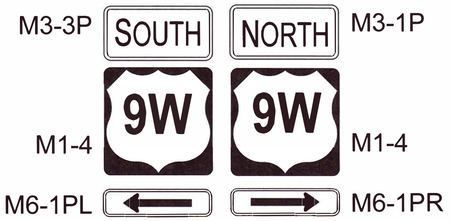
NOTES:
1. SEE SITE PLAN FOR CROSSWALK LOCATION AND DIMENSIONS.
2. APPLY TWO COATS OF PAINT ON ALL SURFACES.

3 TYPICAL CROSSWALK PAINTING DETAIL
NOT TO SCALE



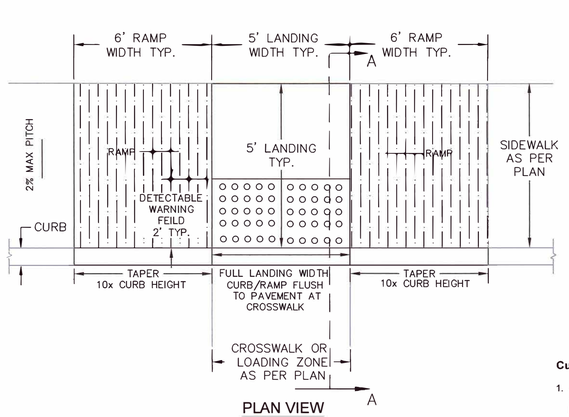
SIDEWALK NOTES:
1. SIDEWALK TO HAVE MEDIUM BROOM FINISH PERPENDICULAR TO DIRECTION OF PEDESTRIAN TRAFFIC.
2. CONSTRUCT IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
3. SEE SITE PLAN FOR SIDEWALK LOCATION.
4. PROVIDE ACCESSIBLE RAMPS IN ACCORDANCE WITH STANDARD RAMP DETAIL.
5. SIDEWALKS ARE TO BE HAVE RUNNING SLOPE NO GREATER THAN 5%.
6. PLACE 6x6-W2.0xW2.0 WWF IN CENTER OF SLAB
7. PLACE EXPANSION JOINTS @ 20' MAX.
8. PLACE CONTROL JOINTS AT 4' TO 10' MAX.
9. ALL OTHER SITE SIDEWALKS SHALL BE CONSTRUCTED USING THE MATERIALS AND DEPTHS INDICATED ABOVE.

5 CONCRETE SIDEWALK DETAIL
NOT TO SCALE

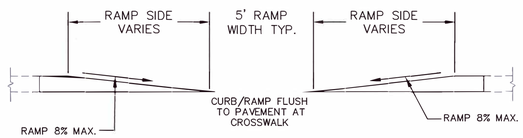


DIRECTIONAL ASSEMBLY SIGNS TYPICAL
12
NOT TO SCALE

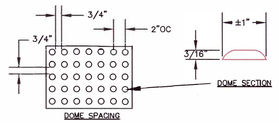
10 CROSSWALK AHEAD
NOT TO SCALE



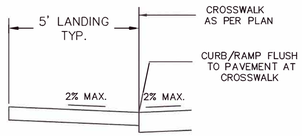
PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD DETAIL

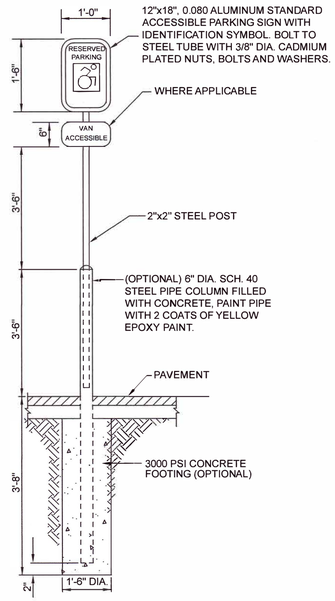


SECTION A-A

Curb Ramp Notes:

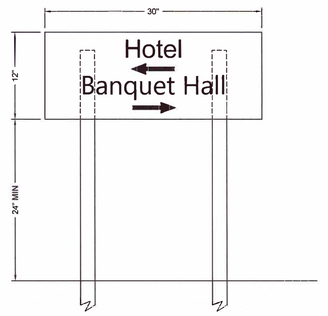
1. A curb ramp is defined as the entire concrete surface which includes the ramp & flared sides. The minimum 5' wide center portion, including the detectable surface, shall have a sloped plane of 8.33% (1:12) maximum, and cross slope, not to exceed 2%. The "flared side" of the ramp shall lie on a slope of 10% (1:10) maximum measured along the curb. The curb ramp shall have a surface tolerance of 1/4" per 10 foot straight edge maximum.
2. The ramp center line and path of travel should be parallel to the sidewalk whenever possible. The full width of the ramp shall lie within the crosswalk area. It is desirable that the location of the ramp be as close as possible to the center of the crosswalk.
3. Existing utility boxes and covers shall be adjusted flush with the curb ramp surface and shall not straddle any change in plane or material. Existing utility box frames and covers shall have matching surface finish on the entire frame and cover. New utility boxes shall not be placed within the detectable border.
4. The surface of the curb ramp and detectable surface material shall be stable, firm and slip resistant. Detectable warning fields shall visually contrast with adjoining surfaces either light on dark or dark on light. The concrete curb ramp surface shall be broom finished transverse to the axis of the ramp and shall be slightly rougher than the finish of the adjacent sidewalk surface.
5. A level landing 5'-0" deep, with a 2% maximum slope in each direction shall be provided at the upper end of each curb ramp to allow safe egress from the ramp surfaces. The width of the level landing shall be at least as wide as the width of the ramp.
6. Seal all joints on sidewalk and ramps. Maximum width of expansion joint is 1/2"

4 DEPRESSED RAMP/DETECTABLE WARNING DETAIL
NOT TO SCALE

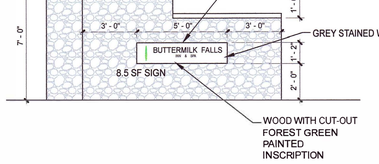


10 TYPICAL ACCESSIBLE PARKING SIGN
NOT TO SCALE

11 R8-3 NO PARKING
NOT TO SCALE



13 ONSITE DIRECTIONAL SIGNS TYPICAL
NOT TO SCALE



14 MONUMENT SIGN DETAIL
NOT TO SCALE

MAP REVISION DATES		
DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

SITE DETAILS
FOR
BUTTERMILK FALLS
TOWN OF MARLBOROUGH
ULSTER COUNTY – NEW YORK

NOVEMBER 9, 2023

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BARRY MEDENBACH, P.E.
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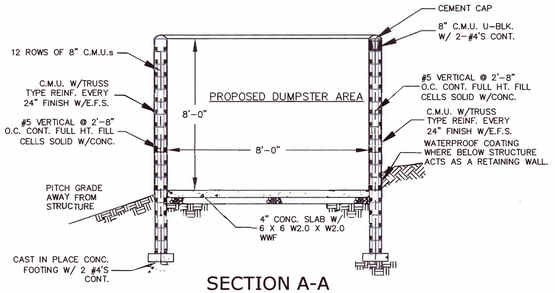
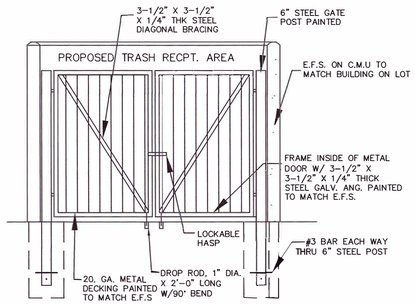
D-1
E18 105
SHEET 12 OF 28



SECTION A-A

1 DUMPSTER RECEPTACLE SCREEN SECTION

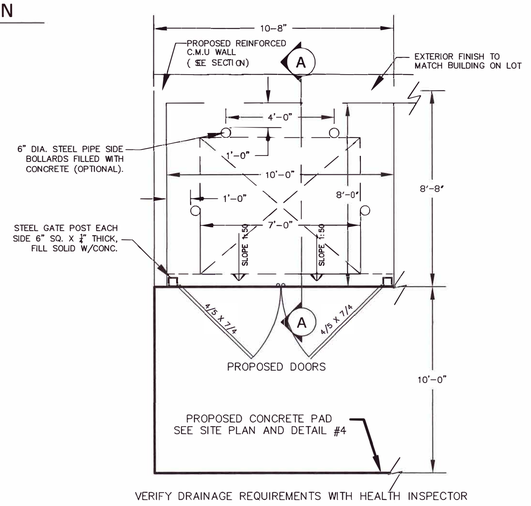
SCALE: NOT TO SCALE



DUMPSTER RECEPTACLE SCREEN ELEVATION

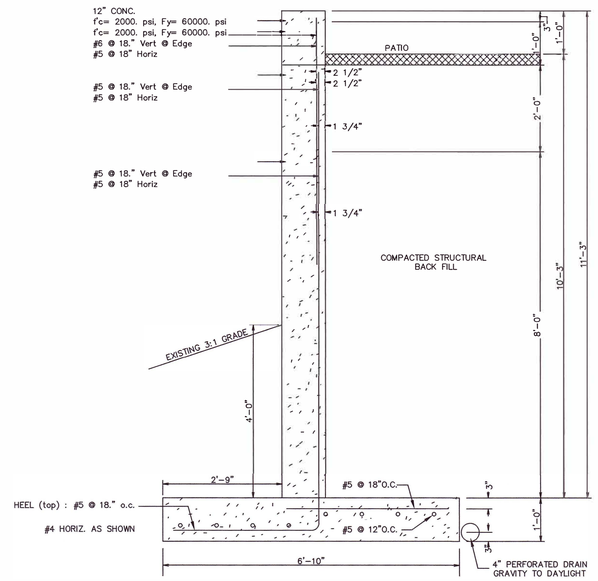
2

SCALE: NOT TO SCALE



3 TYPICAL DUMPSTER RECEPTACLE SCREEN PLAN (6X)

SCALE: NOT TO SCALE



RETAINING WALL CONCEPT DESIGN

Scale: 3/4" = 1'-0"

MAP REVISION DATES		
DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL
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11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

SITE DETAILS

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH

ULSTER COUNTY ~ NEW YORK

NOVEMBER 9, 2023

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- Dig With Care

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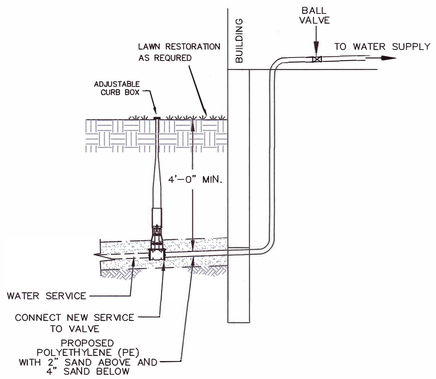
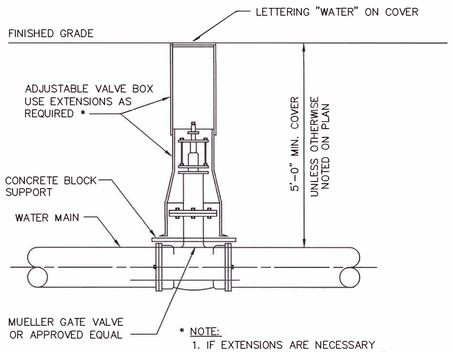
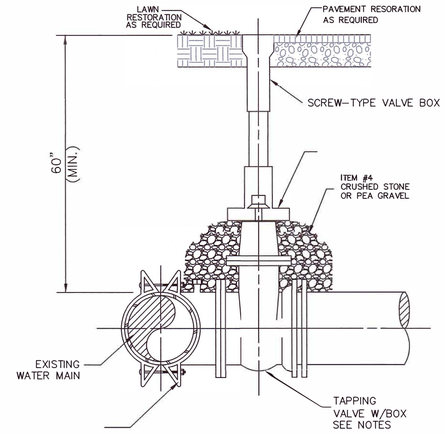


7 TYPICAL WATER CONNECTION DETAIL
NOT TO SCALE



* NOTE:
1. IF EXTENSIONS ARE NECESSARY CONTRACTOR SHALL SET "PLUMB" AND ALIGN PROPERLY FOR ACCESS TO OPERATING NUT.

2 TYPICAL GATE VALVE DETAIL
NOT TO SCALE



TAPPING SLEEVE (MUELLER):
SIZE OF SLEEVE
1. TAPPING VALVES SHALL BE RESILIENT WEDGE CONFORMING TO AWWA C509 AND HAVE A MINIMUM OPERATING PRESSURE OF 200 PSI AND BE FACTORY TESTED TO 400 PSI.
2. TAPPING VAVLES SHALL BE MODEL T-2360-19 AS MANUFACTURED BY MULLER CO, OR APPROVED EQUAL.
3. TAPPING SLEEVES SHALL BE STAINLESS STEEL.
4. SELF-CENTERING ALIGNMENT RING EQUIVALENT TO AMERICAN FLOW CONTROL.

3 TYPICAL WET TAP DETAIL
NOT TO SCALE

5 WATERLINE SEPERATION
NOT TO SCALE

Water Main Notes and Specifications

General Provisions:

1. All water lines shall be PVC SDR 21 with bell and spigot joints with rubber gasket in compliance with ASTM F-477. Pipe shall be classified to ANSI/NSF Standard 61 for potability.
2. All water lines shall be installed a minimum of 4 (four) feet below grade. The water line maybe flexed within pipe specifications or laid deeper in areas where crossings with the sanitary line occur, to achieve the required 18 inch vertical separation distance. (See sewer specifications for further information)
3. Water line is to be pressure tested and leakage tested in accordance with Great Lakes Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers' Recommended Standards for Water Works, Section 8.7.5 2003, (AWWA C-600-05).
4. Water line is to be disinfected in accordance with Great Lakes Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers' Recommended Standards for Water Works, Section 8.7.6 2003 (AWWA C-651).
5. All Water line fitting connections shall have concrete thrust blocks as per pipe and fitting manufacture.

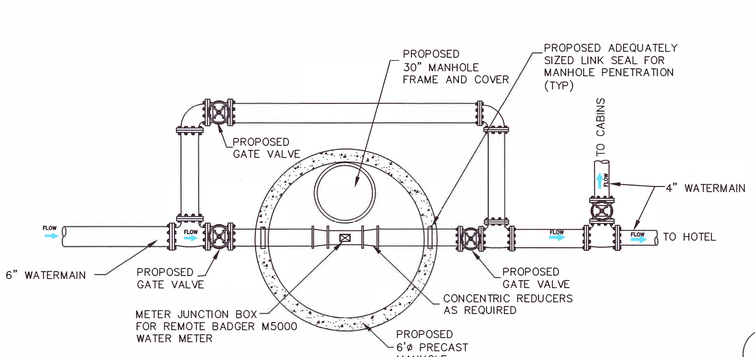
Pressure Test Procedure:

1. After trench has been backfilled hydrostatic acceptance tests, consisting of a pressure test and a leakage test shall be performed on all sections of water mains installed. leakage test shall be conducted concurrently with pressure test. Test section shall be limited to about 2000 ft (max.) unless otherwise approved by the engineer.
2. After all tests and inspections have been performed evidence of compliance shall be forwarded to owner/engineer prior to acceptance.
3. All water for tests shall be furnished and disposed of by the contractor at the contractor's expense. Source and/or quality of water which the contractor proposes to use in testing lines shall be acceptable to the engineer
4. For the pressure test, system shall be pressurized and maintained at a minimum of 150 psi, or 1.5 times the working pressure, whichever is greater, based on the elevation of the lowest point in the section being tested and corrected to the elevation of the gauge. Provisions shall be made to relieve air trapped at high points in the system through adjacent hydrants or through taps and corporation stops installed for this purpose by the contractor. After said pressure has been maintained successfully, with further pumping as required, for a period of at least two hours. The section under test shall be considered to have passed the pressure test.
5. Leakage test shall be performed concurrently using a minimum test pressure of 150 psi, or 1.5 times the working pressure, whichever is greater. Based on the elevation of the lowest point in the section under test and corrected to elevation of the gauge. leakage test duration shall be a minimum of 2 hours after leakage rate has stabilized.
6. Maximum allowable leakage shall be as shown in the following table: allowable leakage per 1000 ft of pipeline per hour (gph)

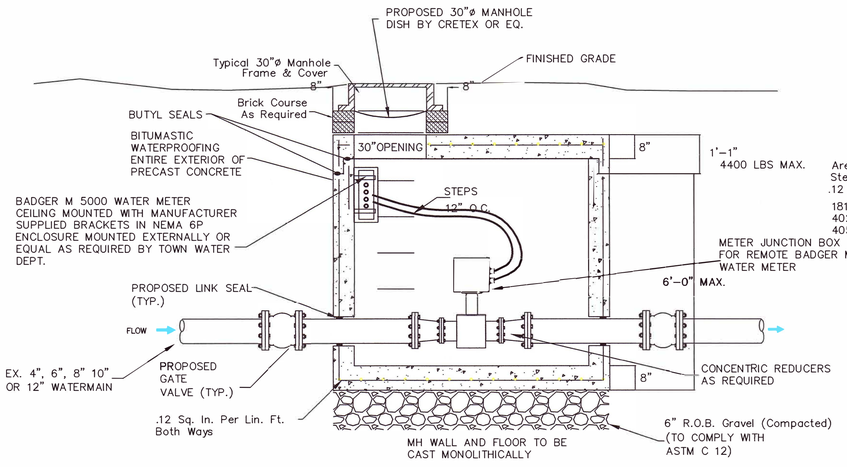
Avg Test Pressure	Nominal Pipe Dia. Inches		
PSI (BAR)	2"	4"	6"
450 (31)	0.32	0.64	0.95
400 (28)	0.30	0.60	0.90
350 (24)	0.28	0.56	0.84
300 (21)	0.26	0.52	0.78
275 (19)	0.25	0.50	0.75
250 (17)	0.24	0.47	0.71
225 (16)	0.23	0.45	0.68
200 (14)	0.21	0.43	0.64
175 (12)	0.20	0.40	0.59
150 (10)	0.19	0.37	0.55
125 (9)	0.17	0.34	0.50
100 (7)	0.15	0.30	0.45

Disinfection Procedure:

1. Water from an approved source of supply shall be made to flow at a constant rate in to the newly laid water main.
2. Water entering the new main shall receive a dose of chlorine fed at a constant rate such that the water will not have less than 25 mg/l free chlorine.
3. Measure chlorine concentration at regular intervals. Chlorine application shall not cease until the entire main is filled with heavily chlorinated water. The chlorinated water shall be retained for a minimum of 24 hours, during which time all valves in the appurtenances. The treated water in all portions of the main at the end of the 24 hour period shall have a residual of not less than 10 mg/l free chlorine.
4. After all tests and inspections have been performed evidence of compliance shall be forwarded to owner/engineer prior to acceptance.

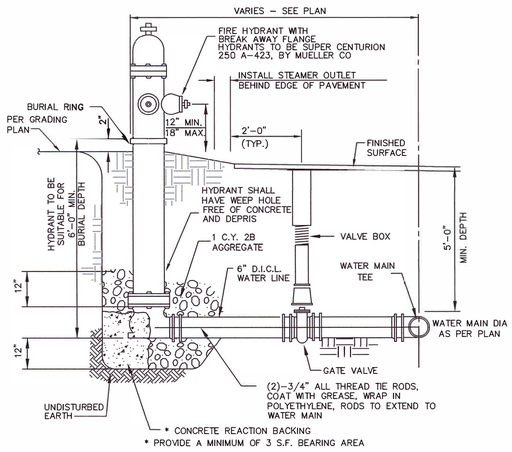


PLAN OF METER INSTALLATIONS IN PRECAST MANHOLES
NOT TO SCALE



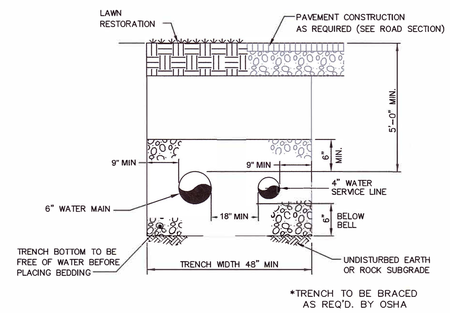
8 WATER METER CHAMBER DETAIL
SCALE: 1"=2'

6 TYPICAL UTILITY LINE CROSSING DETAIL
NOT TO SCALE



NOTES:
1. ALL HYDRANTS SHALL BE PROVIDED WITH HIGH VISIBILITY HYDRANT MARKERS AND COLOR COATED FIRE FLOW INDICATOR MECHANICALLY ATTACHED TO HYDRANT.
2. HYDRANTS SHALL BE PROVIDED WITH ONE 4-½" PUMPER NOZZLE STORZ FITTING AND TWO (2) 2-½" HOSE CONNECTIONS.

4 TYPICAL FIRE HYDRANT DETAIL
NOT TO SCALE



1 TYPICAL WATER MAIN TRENCH DETAIL
NOT TO SCALE

9 DOUBLE WATER LINES SINGLE TRENCH SEPARATION DETAIL
NOT TO SCALE

MAP REVISION DATES		
DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

WATER DETAILS
FOR
BUTTERMILK FALLS
TOWN OF MARLBOROUGH
ULSTER COUNTY - NEW YORK

NOVEMBER 9, 2023

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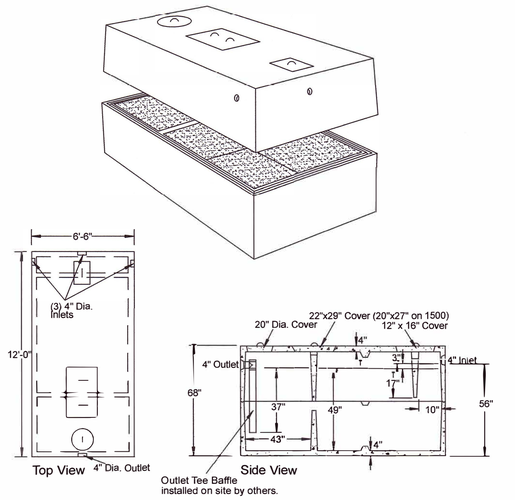
SHEET 14 OF 28



SPECIFICATIONS	PRECAST GREASE TRAP 2000 GALLONS
Concrete Min. Strength: 4,000 psi at 28 days Reinforcement: #3 Rebar, 6x6x10/10 WWM Air Entrainment: 6% Construction Joint: Butyl Rubber Sealant Pipe Connection: Polylok Seal (patented) Load Rating: 300 psf	Woodard's Concrete Products, Inc. 629 Lybolt Road, Bullville, NY 10915 (845) 361-3471 / Fax 361-1050 Page 8C 7/18/14

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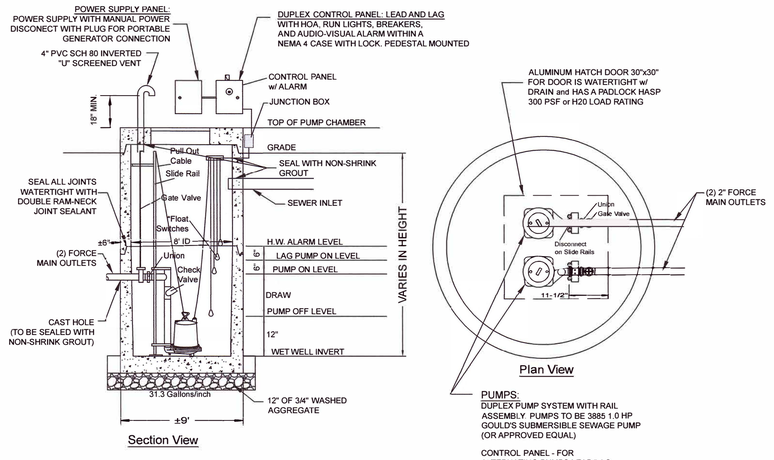


DUPLEX PUMP STATION DETAIL

NOT TO SCALE

PUMP STATION DESIGN DATA

HOTEL

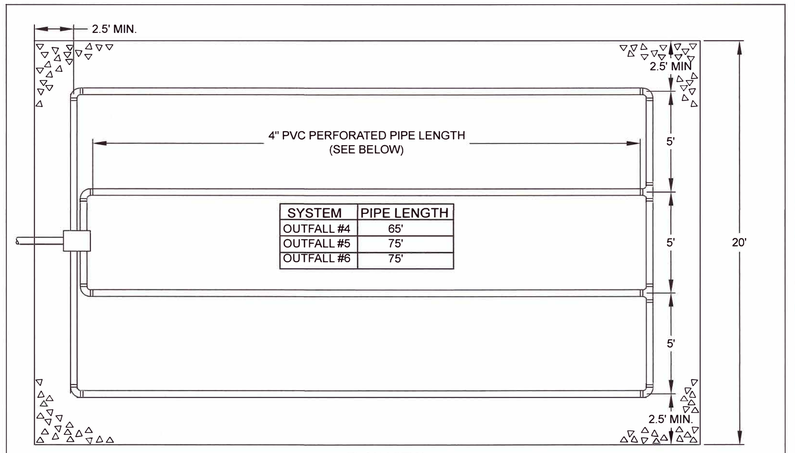
PUMP CYCLE VOLUME = 751 GALLONS
PUMP DRAW = 24"
PUMP CYCLES PER DAY = 9.5
1 ½" FORCE MAIN PIPE
USE 12' HEIGHT CHAMBER

RESTAURANT/BANQUET HALL/EMPLOYEES

PUMP CYCLE VOLUME = 532 GALLONS
PUMP DRAW = 17"
PUMP CYCLES PER DAY = 9.2
1 ½" FORCE MAIN PIPE
USE 8' HEIGHT CHAMBER

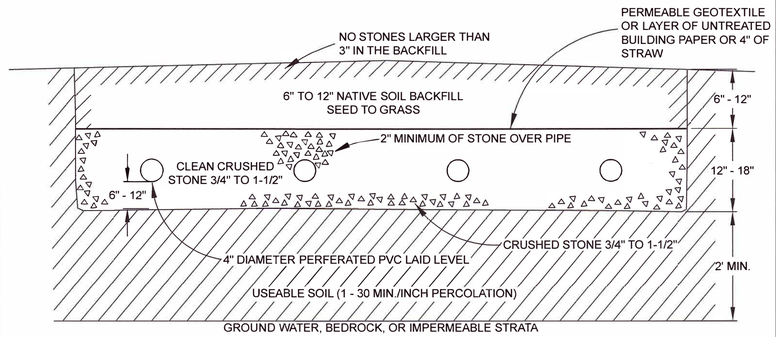
CABINS

PUMP CYCLE VOLUME = 501 GALLONS
PUMP DRAW = 16"
PUMP CYCLES PER DAY = 9.4
1 ¼" FORCE MAIN PIPE
USE 8' HEIGHT CHAMBER



SYSTEM	PIPE LENGTH
OUTFALL #4	65'
OUTFALL #5	75'
OUTFALL #6	75'

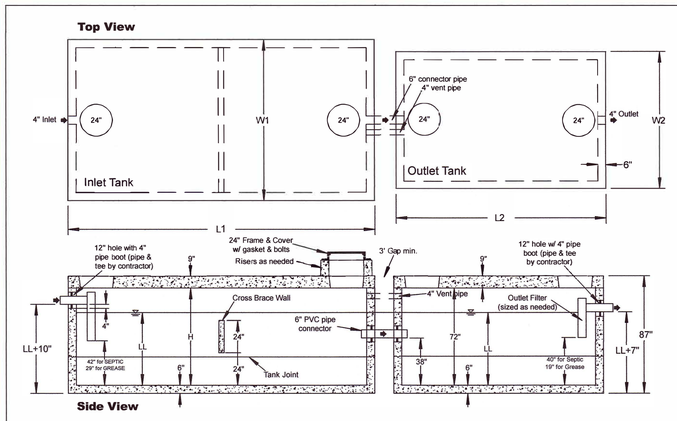
PLAN VIEW



SECTION VIEW

ABSORPTION BED DETAIL

NTS



TANK CAPACITY	L1	W1	L2	W2	H	LL	INLET CAP.	OUTLET CAP.	TOTAL Wt.
8,000 gal.	18'-0"	9'-6"	12'-0"	8'-0"	72"	58"	5,200 gal.	2,800 gal.	84,500 lb
10,000 gal.	21'-0"	9'-6"	15'-0"	8'-0"	75"	60"	6,500 gal.	3,500 gal.	98,500 lb

Tank designs are based on the NYSDEC 2012 standards.

SPECIFICATIONS	PRECAST TRAFFIC RATED TANKS 8,000 & 10,000 GALLON SEPTIC or GREASE TANKS
Concrete Min. Strength: 4,000 psi at 28 days Reinforcement: #4 & #5 Rebar / ASTM A615 Air Entrainment: 6% Construction Joint: Butyl Rubber Sealant Pipe Connections: NPC Kor-N-Seal boots Load Rating: HS20-44 + 30% / ASTM C857	Woodard's Concrete Products, Inc. 629 Lybolt Road, Bullville, NY 10915 (845) 361-3471 / Fax 361-1050 Page 5A 11/25/2020

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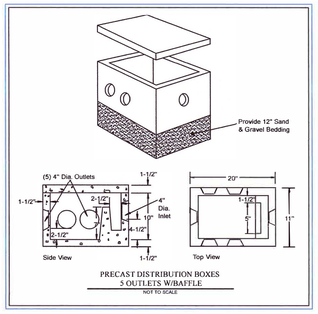

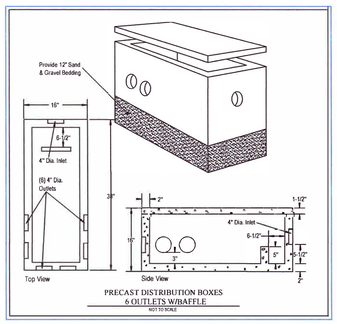

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WASTEWATER DETAILS

FOR LANDS OF

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

FEBRUARY 06, 2024

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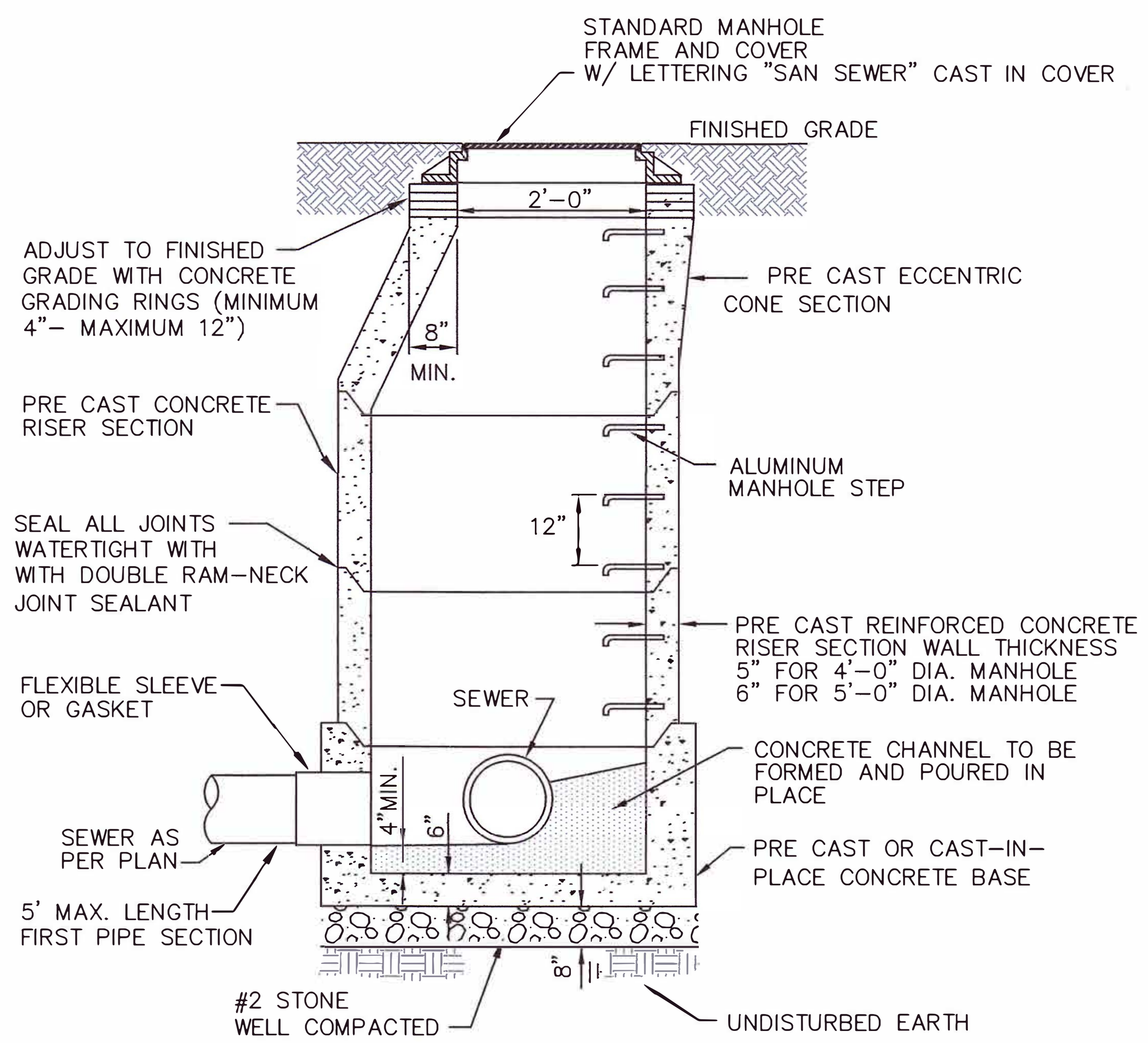
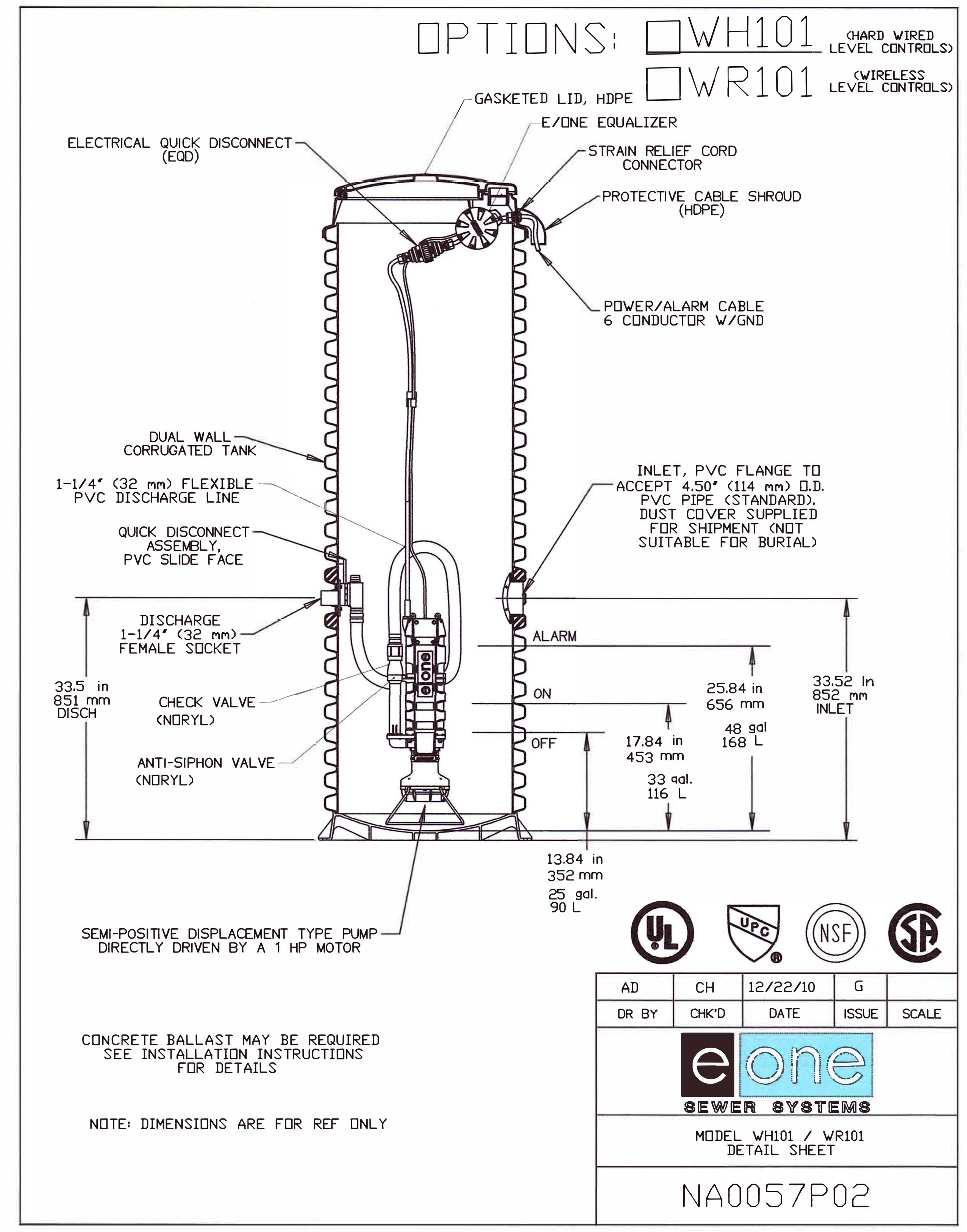


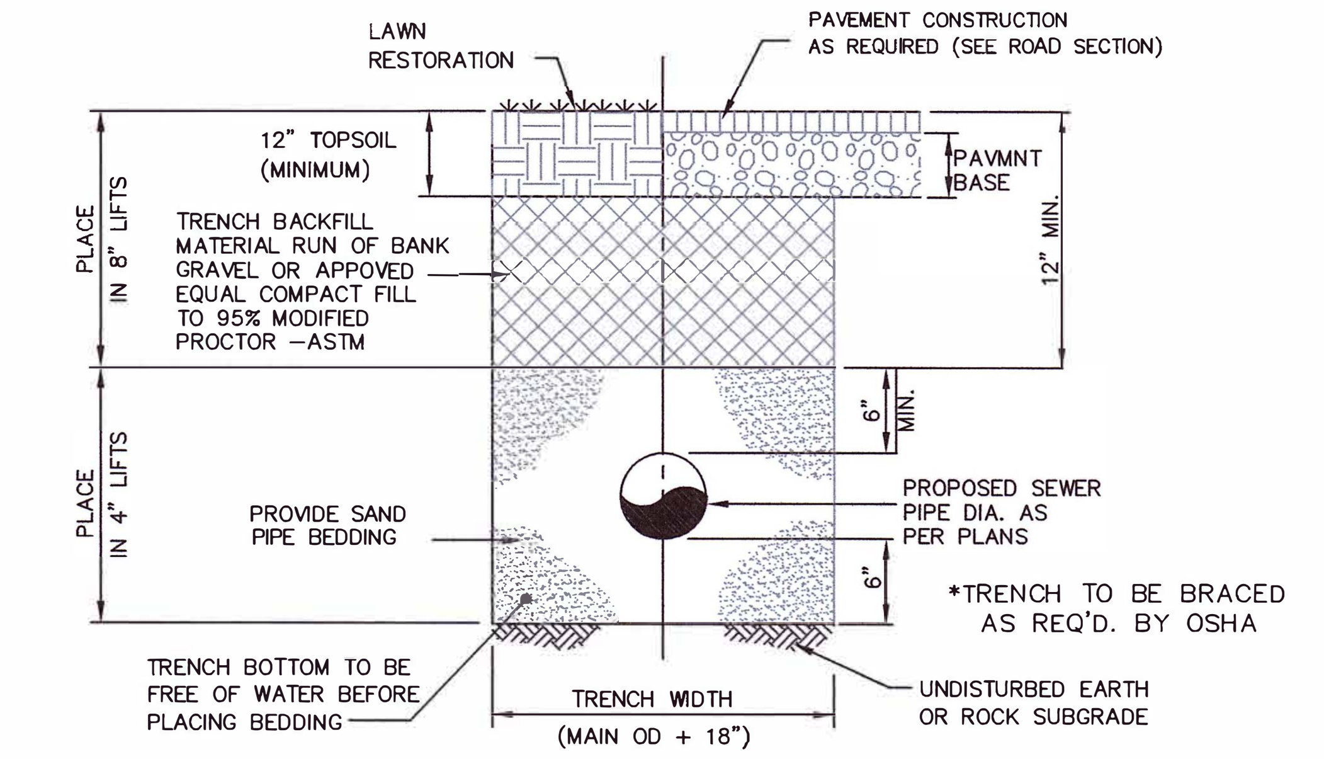
8 TYPICAL SANITARY SEWER MANHOLE

NOT TO SCALE



2 TYPICAL COTTAGE PUMP STATION DETAIL

NOT TO SCALE



3 TYPICAL SEWER TRENCH DETAIL

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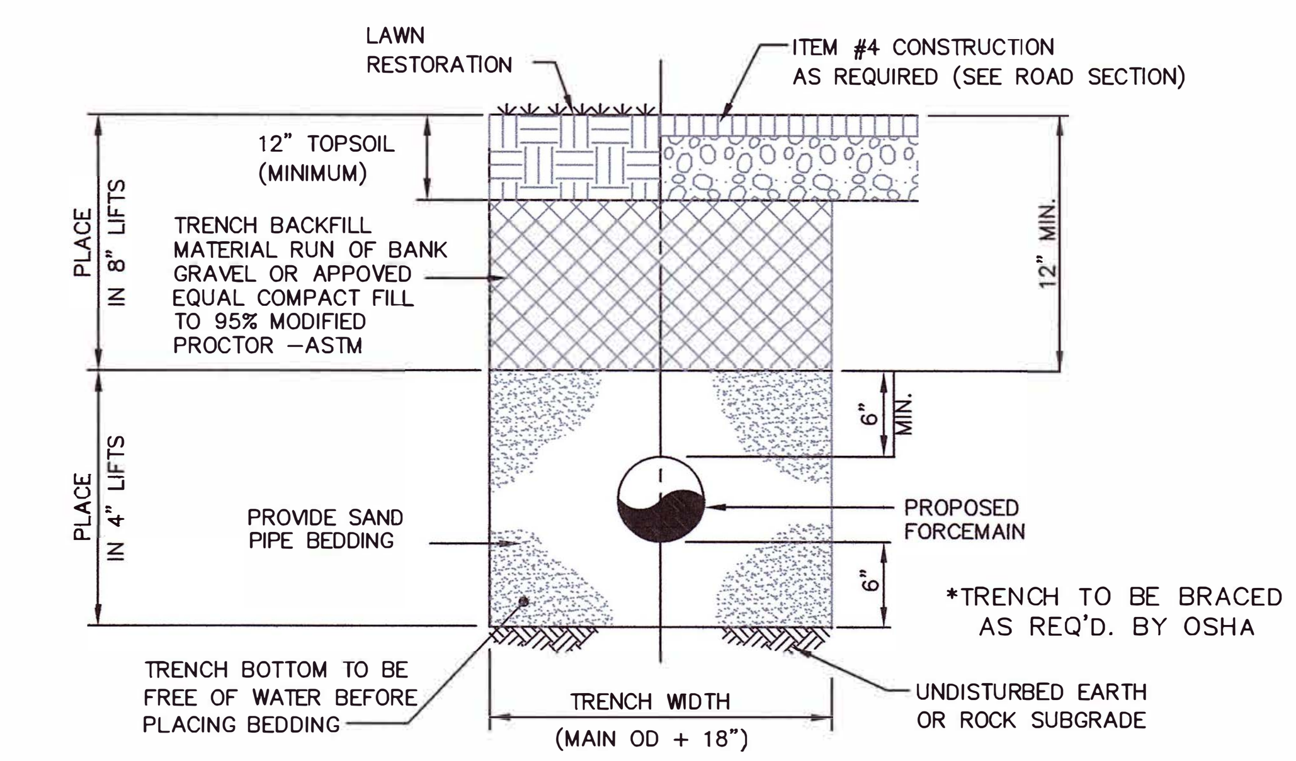

4 TYPICAL FORCE MAIN TRENCH DETAIL

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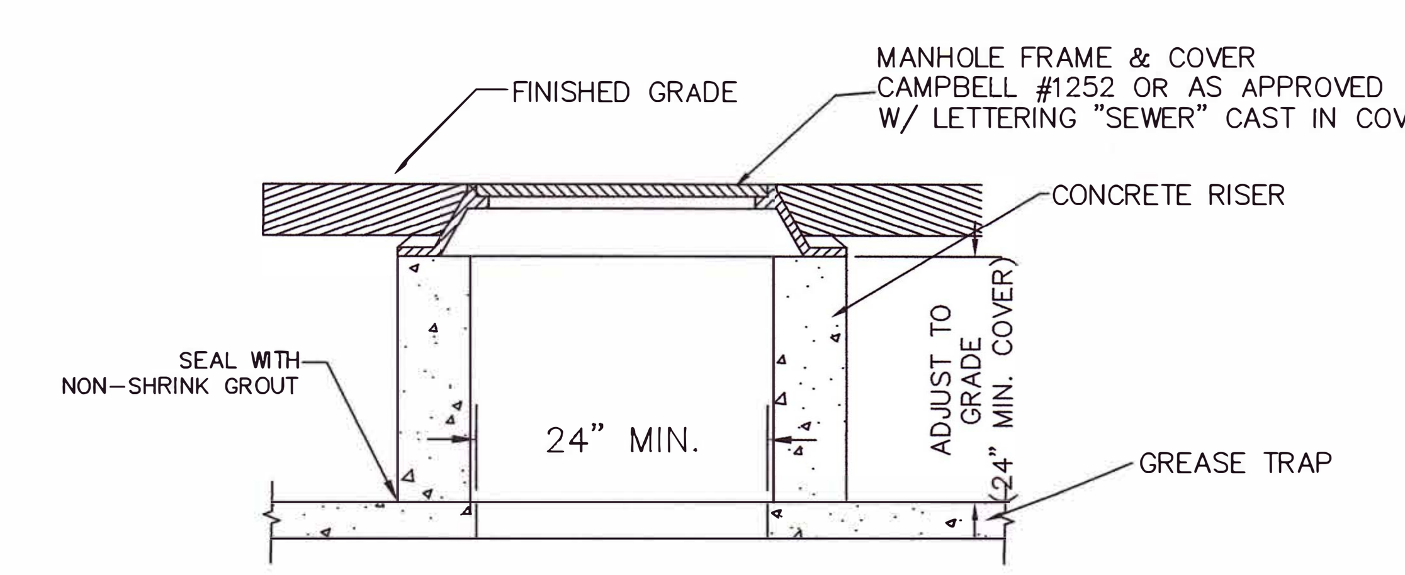
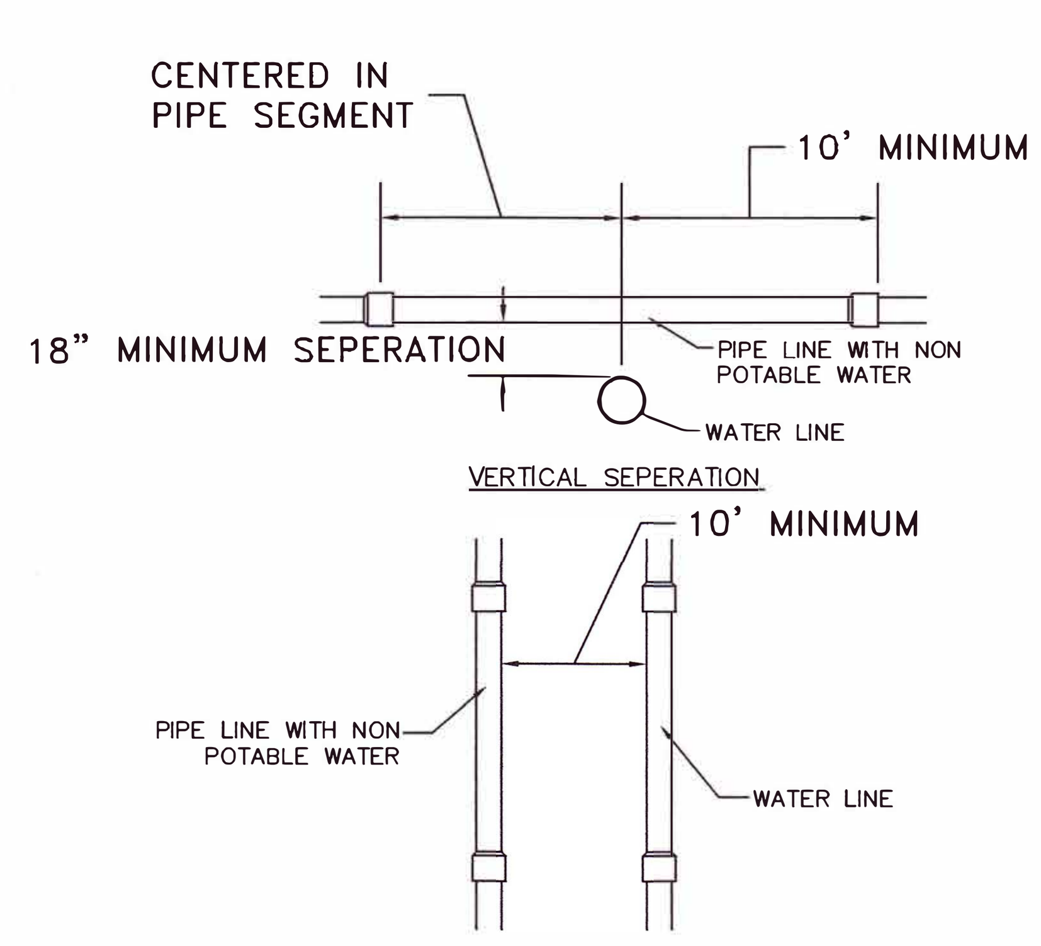


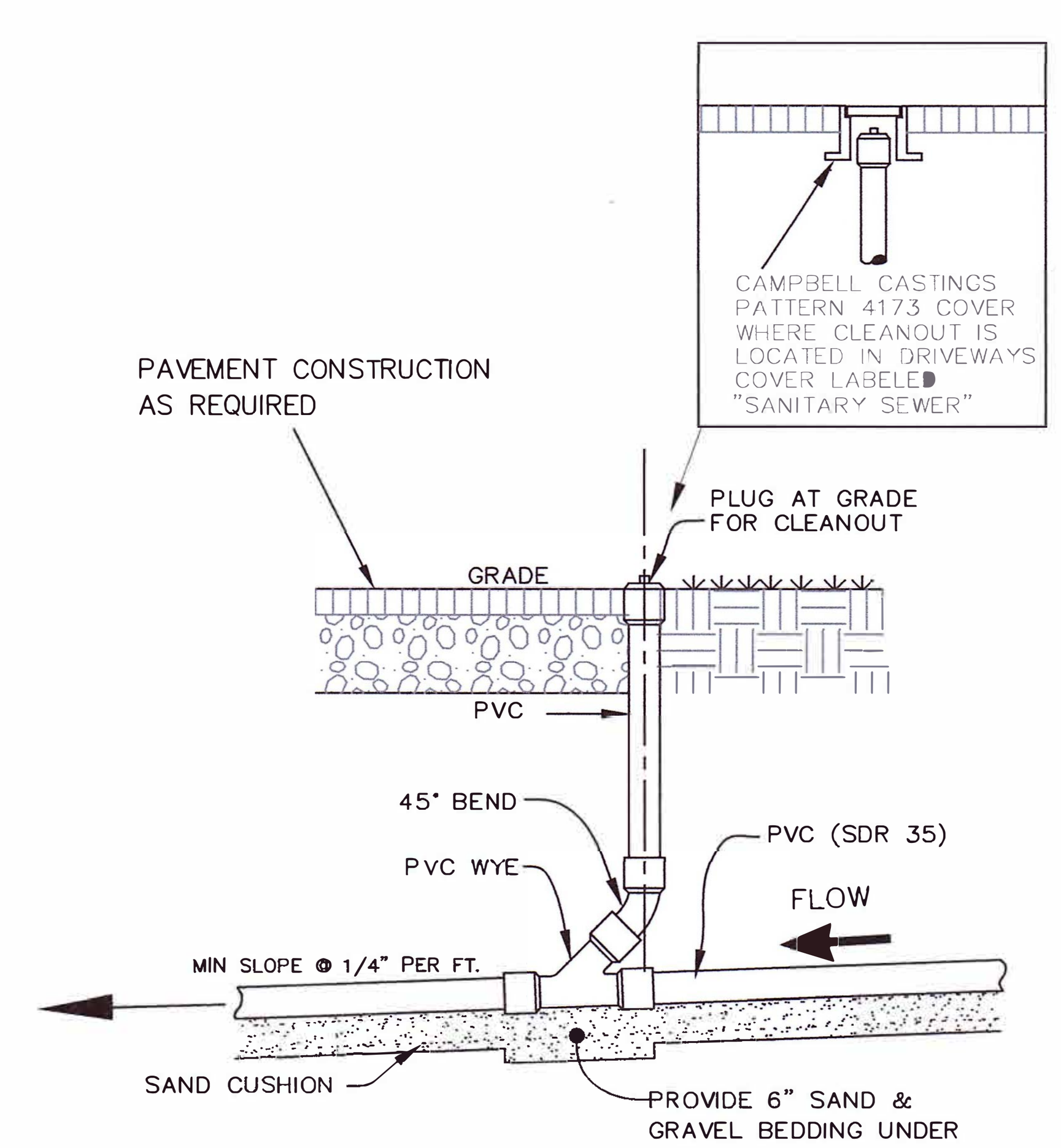
5 TYPICAL CONCRETE RISER AND FRAME

NOT TO SCALE



6 WATERLINE SEPERATION

NOT TO SCALE



7 SEWER LATERAL CLEANOUT DETAIL

NOT TO SCALE

Sanitary Sewer Notes and Specifications

General Provisions:

1. Gravity sewer pipes shall be SDR 35 with ring-tight joints in compliance with ASTM D-3212.
2. Sewer mains in relation to water mains: where possible, sewers shall be laid at least 10 (ten) feet horizontally from any existing or proposed water main. Vertical separation shall be maintained to provide 18 (eighteen) inches between top of sewer invert of the water main at utility crossings. When not possible to obtain the proper vertical separation, SDR-26 PVC pipe shall be used 10 (ten) feet on each side of the water main being crossed.
3. No roof, foundation or storm drains may discharge into the sewage disposal system.
4. All concrete tanks, manholes and chambers etc. shall be pre cast concrete to the specifications and dimensions shown hereon. Frames and covers shall be gray iron or ductile iron. Gray iron shall conform with ASTM A 48, Class 30B and ductile iron shall conform with ASTM A 536 and be of a grade appropriate to its intended use to the dimensions and specifications as shown hereon. Any structures subject to vehicle loads shall be able to withstand an H20 loading. Shop drawings shall be submitted to the design engineer for approval prior to construction.
5. Forcemain shall be HDPE 160 SDR-11 test with compression or fused connection.

Gravity Sewer System Testing:

1. Contractor shall inspect and test the sewer installations as required by the authority having jurisdiction when work is ready for testing. After all tests have been performed, evidence of compliance shall be forwarded to owner/engineer and the authority having jurisdiction prior to acceptance.
2. The contractor shall test and inspect for alignment and infiltration and exfiltration of all sanitary sewers, Infiltration or exfiltration of the sanitary sewer system shall not exceed 0.60 gal/inch of internal pipe diameter per 100' of pipeline per hour with a maximum hydrostatic head at the centerline of the pipe of 25 ft, or as required by the authority having jurisdiction.
3. Infiltration leakage tests shall be run on each single manhole-to-manhole section, or reach, independently of all other manhole-to-manhole sections. A pipeline section under test shall include all pipe and fittings between the two manholes plus the upstream manhole.
4. Each manhole-to-manhole section shall be rejected or accepted based only on results of its own independent section test and not on results of any one test run simultaneously over more than one consecutive manhole-to-manhole section. The only exception allowed: accepting several consecutive manhole-to-manhole sections based on one combined infiltration test indicating zero infiltration.
5. Infiltration tests shall be made by installing a flow measuring device in the downstream manhole of section being tested. Test duration shall be 24 hrs, or for shorter period, provided a steady state flow condition has been achieved in the test period, and results projected to a 24 hr period.
6. Exfiltration tests shall be run on each single manhole-to-manhole section, or reach, independently of all other manhole-to-manhole sections. A pipeline section under test shall include all pipe and fittings between the two man-holes plus the upstream manhole.
7. Exfiltration tests shall be made by measuring the drop in water elevation in the upstream manhole 24 hrs after initial water level is recorded. Initial water level in upstream manhole shall be 2 feet higher than either the top of pipe or groundwater elevation at the downstream manhole. Any manhole-to-manhole section undergoing an exfiltration test must have the next adjacent sections, both upstream and downstream, dry and not under test.
8. Low pressure air testing may be allowed in lieu of exfiltration tests only. When so allowed, test shall be performed under direction of engineer according to ASTM F1417. An air test shall not be run until section of line to be tested has been cleaned of all foreign material by flushing and has been visually inspected.
9. Sewers shall be laid with straight alignment between manholes. Straight alignment shall be checked either using a laser beam or lamping. Testing shall comply with requirements of the authority having jurisdiction.
10. Manholes, which cannot be properly air tested, should be visually inspected and leakage-tested using internal or external hydrostatic pressure. Leakage testing shall comply with requirements of the authority having jurisdiction.
11. In areas where conventional testing is impractical (i.e. areas designated by Engineer where existing services are tied into new line immediately and any blockage could result in health problems) no lines shall be backfilled until each pipe section and connection is inspected and approved.
12. If the allowable rate of infiltration, exfiltratlon, or air leakage is exceeded, the contractor shall locate points of excessive leakage and shall promptly correct,repair, and bring system up to the standard. Costs of all such repairs and corrective measures, including costs of repeated tests, shall be born by contractor, the sewer line section (including manholes and building services) under test shall not be accepted until these test criteria are met.

Forcemain Test Procedure:

1. Flush and purge all air from the piping to be tested.
2. Close off by valves or other method the piping to be tested.
3. Slowly, add water with a positive displacement pump to raise the system pressure to the maximum determined by the authority having jurisdiction.
4. (The maximum pressure is 1.5 times the design working pressure less the elevation hydrostatic head. Typical design (maximum operating) pressures: for SDR-9 is 200 psi, for SDR-11 is 160 psi, and SDR-13.5 is 128 psi; and is to be reduced for higher temperatures. Typically, the design temperature for HDPE is 73.4 °F. Usually it is the horizontal and above ground sections of the ghex that are above this temperature. Consult the HDPE manufacturer for the temperature reductions for pressure ratings.
5. Allow the test section of piping and test liquid to equalize in temperature.
6. Add make up water as necessary for four (4) hours to maintain test pressure.
7. Reduce pressure by ten (10 psi), by letting water out and then closing the system.
8. Monitor for one (1) hour, do not increase pressure or add water.
9. Pass/Fail Criteria: if no leakage is visually observed and the pressure remains steady (within 5% of the pressure at item # 6) then a passing test is indicated.

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TOWN OF MARLBOROUGH

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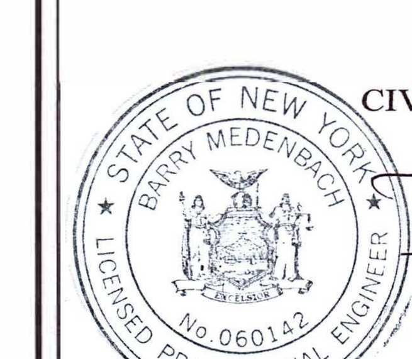

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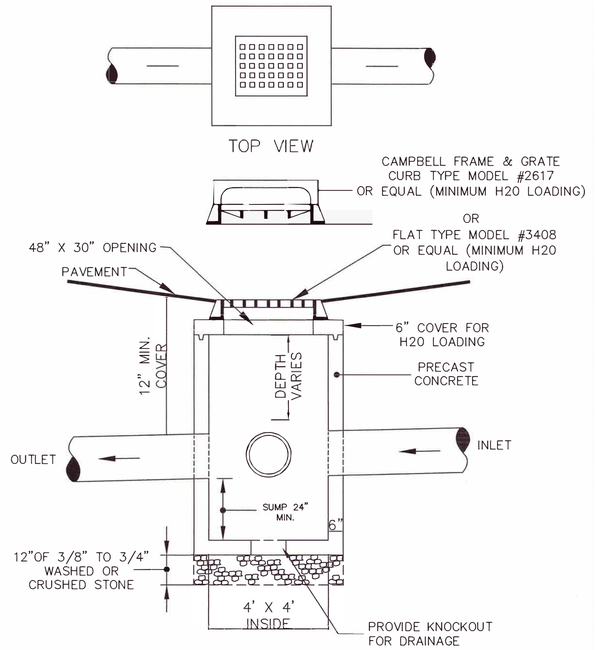
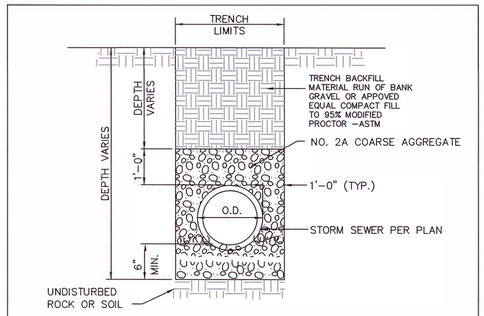


1 TYPICAL CATCH BASIN DETAIL
NOT TO SCALE



4 TYPICAL DRAINAGE TRENCH DETAIL
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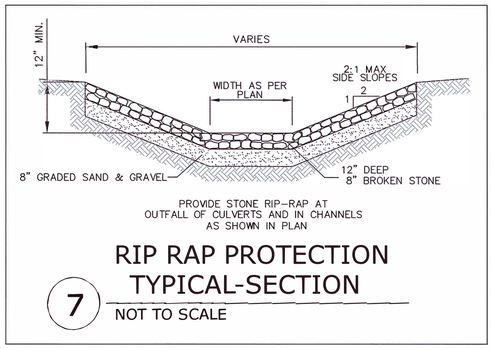
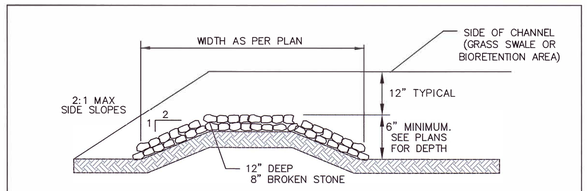
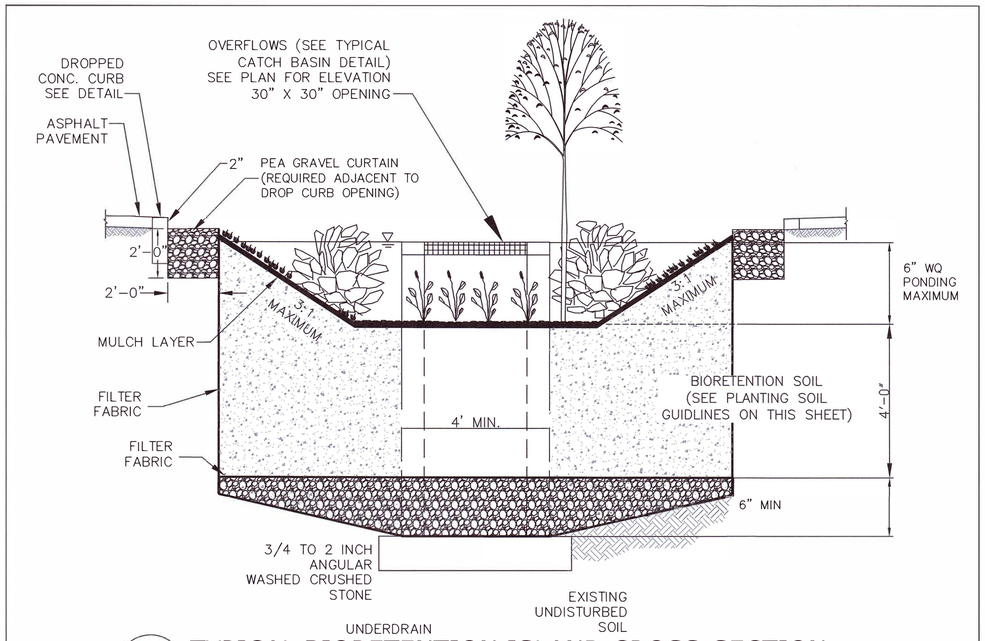


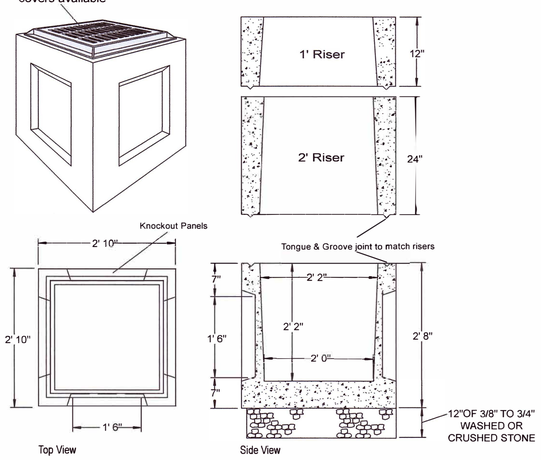
7 RIP RAP PROTECTION TYPICAL-SECTION
NOT TO SCALE



8 BROAD CRESTED WEIR DETAIL
NOT TO SCALE



5 TYPICAL BIORETENTION ISLAND CROSS-SECTION
NOT TO SCALE



2 TYPICAL YARD BASIN DETAIL
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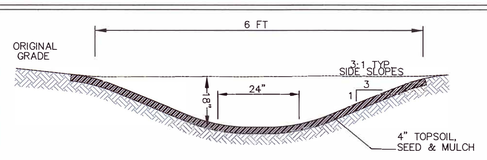
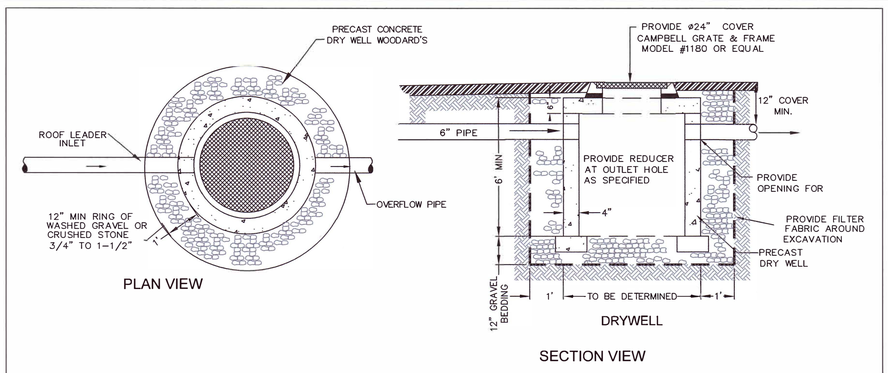


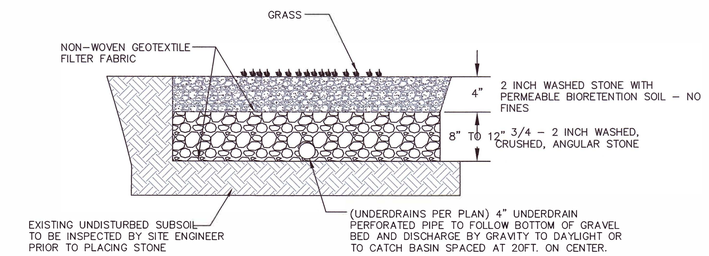
3 GRASS SWALE TYPICAL-SECTION
NOT TO SCALE



6 TYPICAL DRYWELL FOR COTTAGES
NOT TO SCALE

Green Parking Soil Guidelines:

The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. The planting soil shall be free of noxious weeds with large percent of sand and to be inspected by site engineer prior to placement.



9 GREEN PARKING AREA WITH SUBSURFACE DETENTION
NOT TO SCALE

General Construction Notes For Bio-Retention and Stormwater Zones

The bioretention facility may not be constructed until all contributing drainage area has been stabilized.

Planting Soil Guidelines:

The soil shall meet the requirements of NYSDOT ITEM 208.01030022 Bioretetion and Dry Swale soil. The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the bioretention area that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The planting soil shall be free of noxious weeds.

All bioretention areas shall have a minimum of one test according to ITEM 208.01030022 Laboratory Testing for soil Phosphorus Concentration. A textural analysis is required from the site stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed for each location where the top soil was excavated. Since different labs calibrate their testing equipment differently, all testing results shall come from the same testing facility.

Compaction and Placement of Planting Soil Guidelines:

It is very important to minimize compaction of both the base of the bioretention area and the required backfill. When possible, use excavation hoes to remove original soil. If bioretention areas are excavated using a loader, the contractor should use wide track or marsh track equipment, or light equipment with turf type tires. Use of equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high pressure tires will cause excessive compaction resulting in reduced infiltration rates and storage volumes and is not acceptable. Compaction will significantly contribute to design failure.

Compaction can be alleviated at the base of the bioretention facility by using a primary tilling operation such as a chisel plow, ripper, or subsoiler. These tilling operations are to refracture the soil profile through the 12 inch compaction zone. Substitute methods must be approved by the engineer. Rototillers typically do not till deep enough to reduce the effects of compaction from heavy equipment. Rototill 2 to 3 inches of sand into the base of the bioretention facility before back filling the required sand layer. Pump any ponded water before preparing (rototilling) base.

When back filling the topsoil over the sand layer, first place 3 to 4 inches of topsoil over the sand, then rototill the sand/topsoil to create a gradation zone. Backfill the remainder of the topsoil to final grade. When back filling the bioretention facility, place soil in lifts 12" or greater. Do not use heavy equipment within the bioretention basin. Heavy equipment can be used around the perimeter of the basin to supply soils and sand. Grade bioretention materials by hand or with light equipment such as a compact loader or a dozer/loader with marsh tracks.

Plant Installation

The plant root ball should be planted so 1/8th of the ball is above final grade surface. Root stock of the plant material shall be kept moist during transport and on-site storage. The diameter of the planting pit shall be at least six inches larger than the diameter of the planting ball. Set and maintain the plant straight during the entire planting process. Thoroughly water ground bed cover after installation. Trees shall be braced using 2" X 2" stakes only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball.

The topsoil specifications provide enough organic material to adequately supply nutrients from natural cycling. The primary function of the bioretention structure is to improve water quality. Adding fertilizers defeats, or at a minimum, impedes this goal. Only add fertilizer if wood chips or mulch is used to amend the soil. Rototill urea fertilizer at a rate of 2 pounds per 1000 square feet.

MAP REVISION DATES		
DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
11/7/2024	COMMENT PER REVIEWING ENGINEER	SL

DETAILS
FOR
BUTTERMILK FALLS
TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

NOVEMBER 9, 2023

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BARRY MEDENBACH, P.E.
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PHASE 1:

ROADS WITH CABINS:	±0.93 AC
	±1.87 AC
	±0.35 AC
CABINS:	±0.17 AC
	±0.61 AC
PARKING:	±1.20 AC
TOTAL PHASE 1 DISTURBANCE	±4.62 AC
CABINS	35
STAFF	6
PARKING PROVIDED THIS PHASE	50

PHASE 2:

HOTEL & SEPTIC	±1.99 AC
PARKING AREA	±2.49 AC
TOTAL PHASE 1	±4.48 AC
HOTEL GUESTS	65
STAFF	16
PARKING PROVIDED THIS PHASE	120

PHASE 3:

BANQUET HALL & SEPTIC	±2.62 AC
PARKING AREA	±1.84 AC
TOTAL PHASE 1	±4.46 AC
BANQUET HALL GUESTS	100
RESTAURANT	20
STAFF	48
PARKING PROVIDED THIS PHASE	77

TOTAL DISTURBANCE ±13.56 AC

LEGEND

- TOPSOIL STOCKPILE W/SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- LOD — LIMIT OF DISTURBANCE
- AREAS THAT REQUIRE SLOPE STABILIZATION (SEE SLOPE STABILIZATION DETAIL ON SHEET D-5)
- INLET SEDIMENT TRAP
- CONCRETE WASHOUT

MAP REVISION DATES

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11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

SOIL EROSION AND SEDIMENT CONTROL

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

100 0 100 200 300

Scale: 1" = 100'

JULY 19, 2023

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SESC-1
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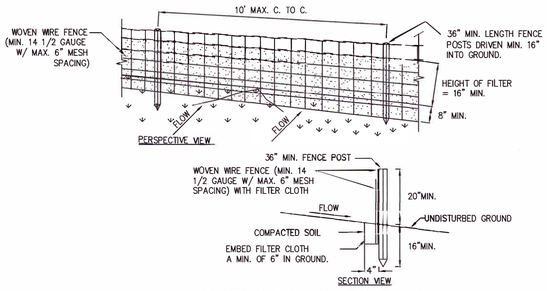
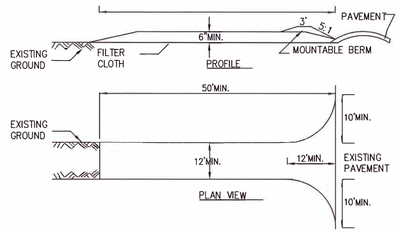


CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

1 SILT FENCE TYPICAL DETAIL

NOT TO SCALE



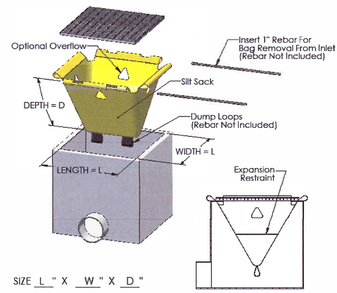
CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

2 STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE

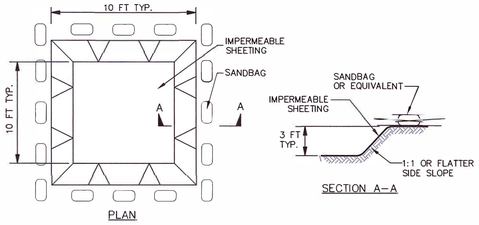
Silt Sack - Type A



1. SILT SACK OR EQUAL.

3 INLET SEDIMENT TRAP DETAIL

NOT TO SCALE



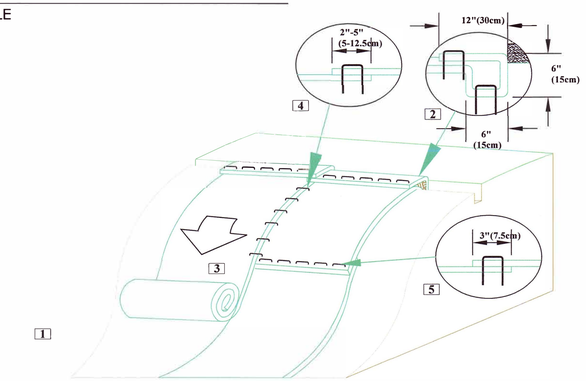
EXCAVATED WASHOUT STRUCTURE

CONSTRUCTION SPECIFICATIONS

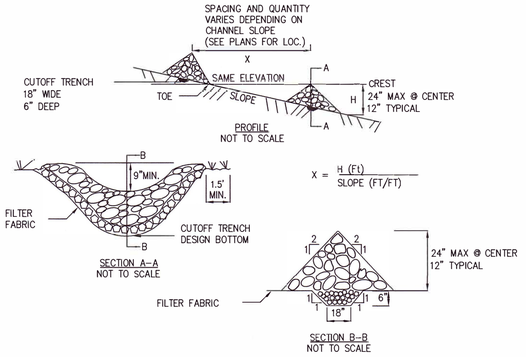
1. DESIGNATED TEMPORARY, BELOW GROUND CONCRETE WASHOUT FACILITIES WILL BE CONSTRUCTED AS SHOWN ABOVE. WASHOUTS WILL BE CENTRALLY LOCATED AT THE DISCRETION OF THE INDIVIDUALS WHO MANAGE DAY TO DAY CONSTRUCTION ACTIVITIES. WASHOUTS SHALL HAVE A MINIMUM LENGTH AND WIDTH OF 10 FEET BUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID CONRETE WASTES GERNERTATED FROM WAHOUT OPERTIONS. THE WASHOUT AREAS WILL BE LINED WITH PLASTIC SHEETING AT LEAST 10 MILS THICK AND FREE OF ANY HOLES OR TEARS. SIGNS WILL BE POISTED MARKING THE LOCATION OF THE WAHOUT AREAS.
2. TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE LOCATED A MINIMUM OF (50 FEET) FROM DRAIN INLETS.
3. KEEP THE WASHOUT AREAS WILL BE INSPECTED DAILY TO ENSURE THAT ALL CONRETE WASHING IS BEING DISCHARDE INTO THE WASHOUT AREA, NO LEAKS OR TEARS ARE PRESENT, AND TO IDENTIFY WHEN CONCRETE WASTES NEED TO BE REMOVED. THE WAHOUT AREAS WILL BE CLEANED OUT ONCE THE AREA IS FILLED TO 75 PERCENT OF THE HOLDING CAPACITY. ONCE THE AREA'S HOLDING CAPACITY HAS BEEN REACHED THE CONRETE WASTES WILL BE ALLOWED TO HARDEN , THE CONRETE WILL BE BROKEN UP, REMOVED, AND DISPOSED IN ACCORDANCE WITH LOCAL REGULATIONS. THE PLASTIC SHEET WILL BE REPLACED IF TEARS OCCCUR DURING REMOVAL OF CONCRETE WASTES FROM THE WASHOUT AREA.

4 CONCRETE WASHOUT DETAIL

NOT TO SCALE



1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12"(30cm) apart across the width of the RECPs.
3. Roll the RECPs down or horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with approximately 2" - 5" (5-12.5cm) overlap depending on the RECPs type.
5. Consecutive RECPs spliced down the slope must be end over end (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire RECPs width.



CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT OR BELOW THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

5 ROCK CHECK DAM TYPICAL DETAIL

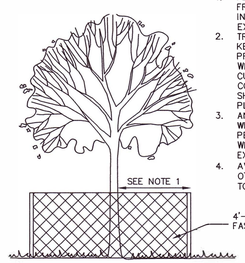
NOT TO SCALE

NOTES:

1. SLOPE STABILIZATION IS TO BE USED ON ALL SLOPES WITH A SLOPE GREATER THAN 3:1

NOTES:

1. FENCE SHALL EXTEND OUT RADIALLY FROM TRUNK TWO FEET FOR EVERY INCH IN DIAMETER TO THE GREATEST EXTENT PRACTICAL.
2. TRENCHING AROUND TREES SHALL BE KEPT OUTSIDE PROTECTIVE FENCING TO PROTECT ROOT SYSTEMS. TREE ROOTS WHICH MUST BE SEVERED SHALL BE CUT CLEAN AND ANY BACKFILL IN CONTACT WITH THE SEVERED ROOTS SHALL BE A TOPSOIL OR APPROVED PLANTING SOIL MIX.
3. ANY GRADING WHICH MUST TAKE PLACE WITHIN FENCE INTERIOR SHALL BE PERFORMED BY HAND OR WITH LIGHT WEIGHT EQUIPMENT TO THE GREATEST EXTENT PRACTICAL.
4. AVOD SPILLS OF OIL/GAS OR ANY OTHER CONTAMINATES AROUND AREAS TO BE PROTECTED.



7 VEGETATION PROTECTION DETAIL

NOT TO SCALE

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- Wait The Required Time
- Confirm Utility Response
- Respect The Marks
- Dig With Care

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MAP REVISION DATES

DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

SOIL EROSION AND SEDIMENT CONTROL DETAILS

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

NOVEMBER 9, 2023

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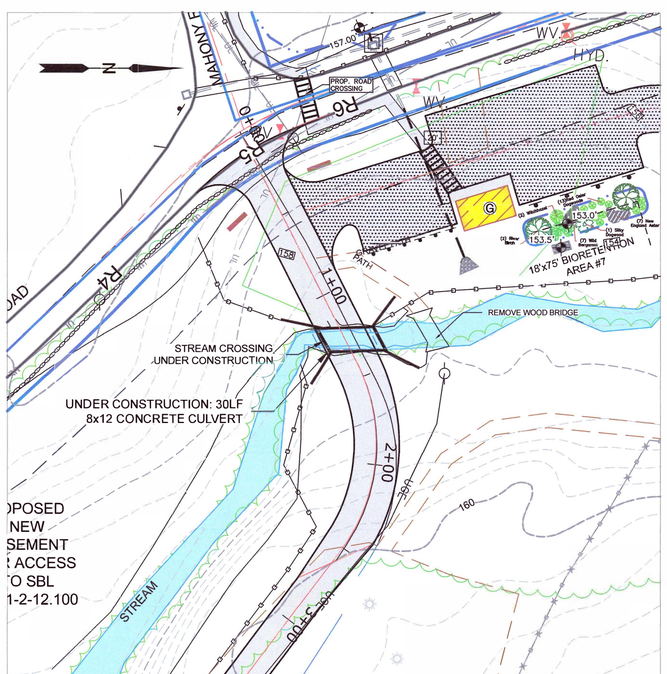
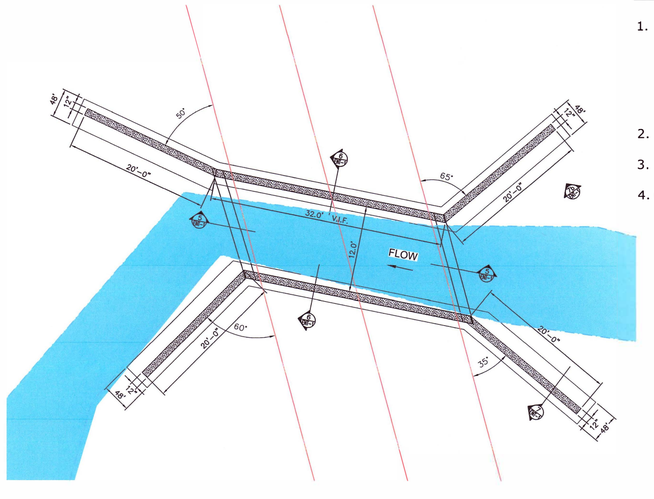
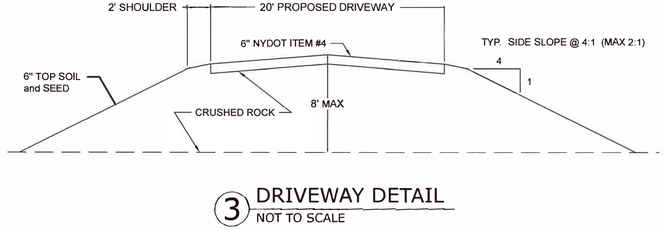
E18 105
SHEET 19 OF 28



1 PARTICAL SITE PLAN
SCALE: 1"= 40'



2 CULVERT PLAN DETAIL
SCALE: 1"= 10'

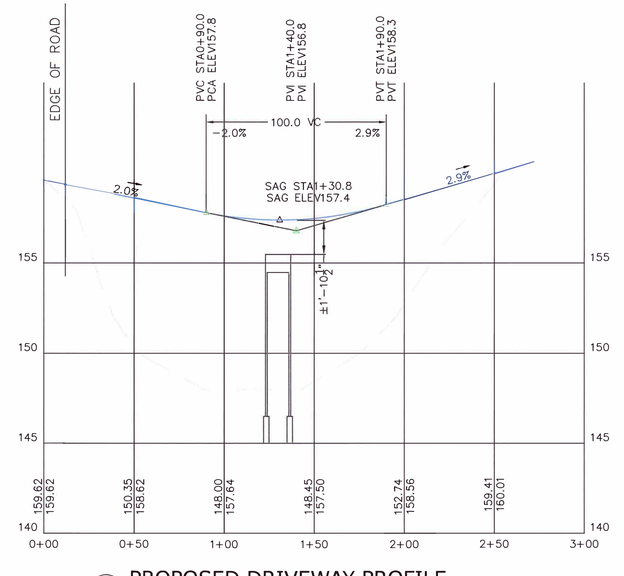


3 DRIVEWAY DETAIL
NOT TO SCALE

GENERAL NOTES:

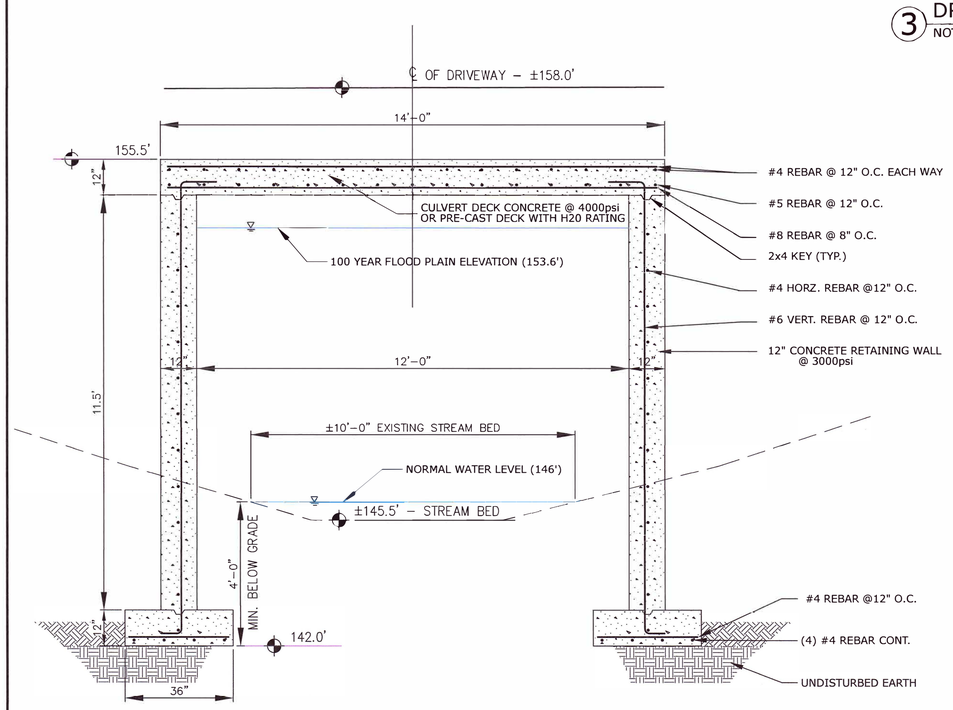
1. CONCRETE QUALITY SHALL BE AS FOLLOWS (f'c AT 28 DAYS TYPICAL):
   FOR ALL MIXES, SLUMP SHALL NOT EXCEED 5".
   CONCRETE FOOTING and VERTICAL WALLS:
   f'c=3000psi 4-6% AIR ENTRAINMENT
   CULVERT DECK:
   f'c=4000psi 4-6% AIR ENTRAINMENT
2. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A 615, GRADE 60.
3. AT ALL BAR LAP SPLICES PROVIDE WIRE-TIED MINIMUM LAP OF 30 BAR DIAMETERS UNLESS NOTED OTHERWISE.
4. CONCRETE COVER FOR REINFORCEMENT SHALL BE AS FOLLOWS UNLESS DETAILED OTHERWISE:

	INCHES
FOOTINGS POURED AGAINST EARTH	3"
SURFACE EXPOSED TO WEATHER OR EARTH:	
BARS LARGER THAN #5	2"
#5 BARS OR SMALLER	1 1/2"
SURFACES NOT EXPOSED TO WEATHER OR EARTH:	
SLABS AND WALL	3/4"
BEAMS, GIRDERS, AND COLUMNS	1 1/2"

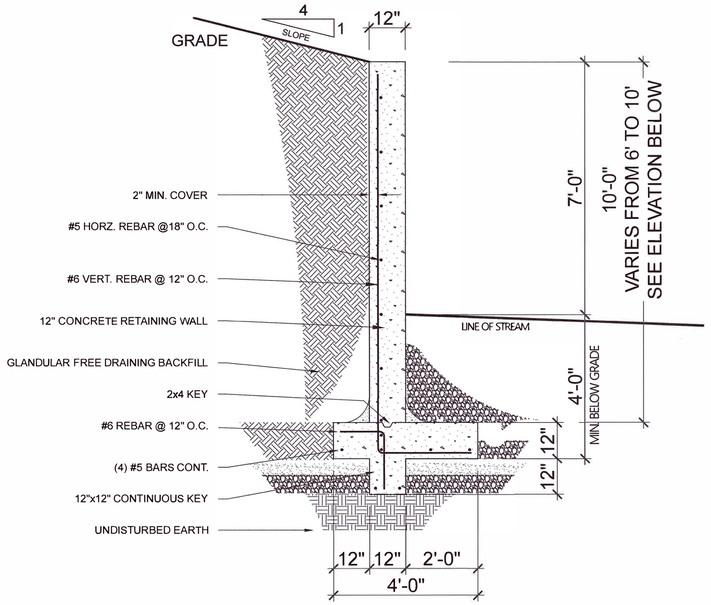


4 PROPOSED DRIVEWAY PROFILE
SCALE:
H: 1"=40' V: 1" =4'

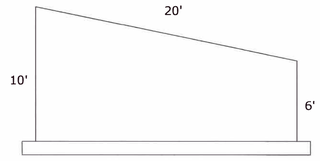
5 STONE RAILING SECTION DETAIL
SCALE: 1"= 2'



6 CULVERT SECTION DETAIL
SCALE: 1"= 2'



7 WING WALL(S) SECTION (TYP.)
SCALE: 1"= 2'



7b WING WALL ELEVATION (TYP.)
SCALE: N.T.S.

MAP REVISION DATES

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ENTRANCE DRIVEWAY PLAN
FOR STREAM CROSSING
FOR
BUTTERMILK FALLS
TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

14 JUNE 2024

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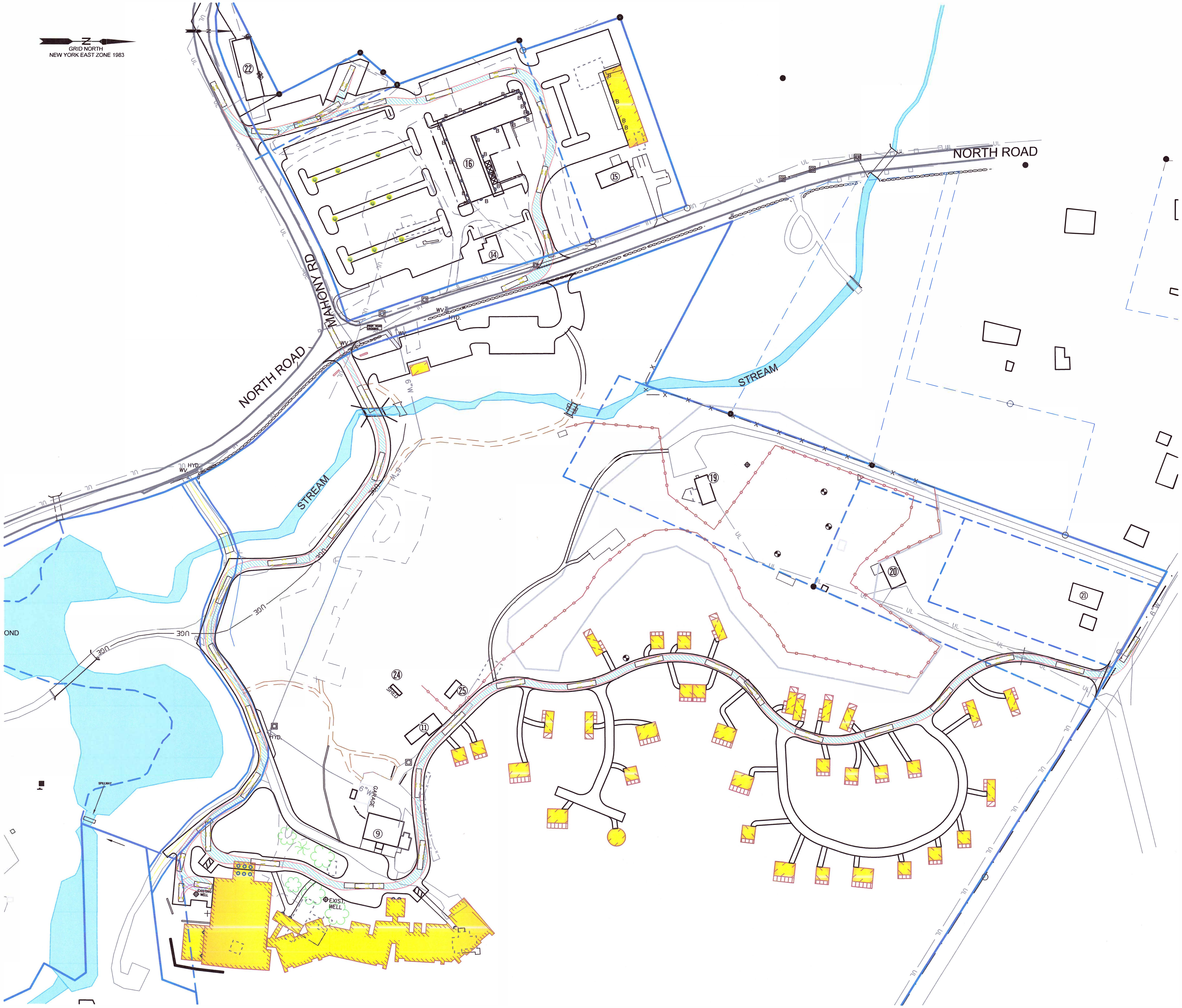
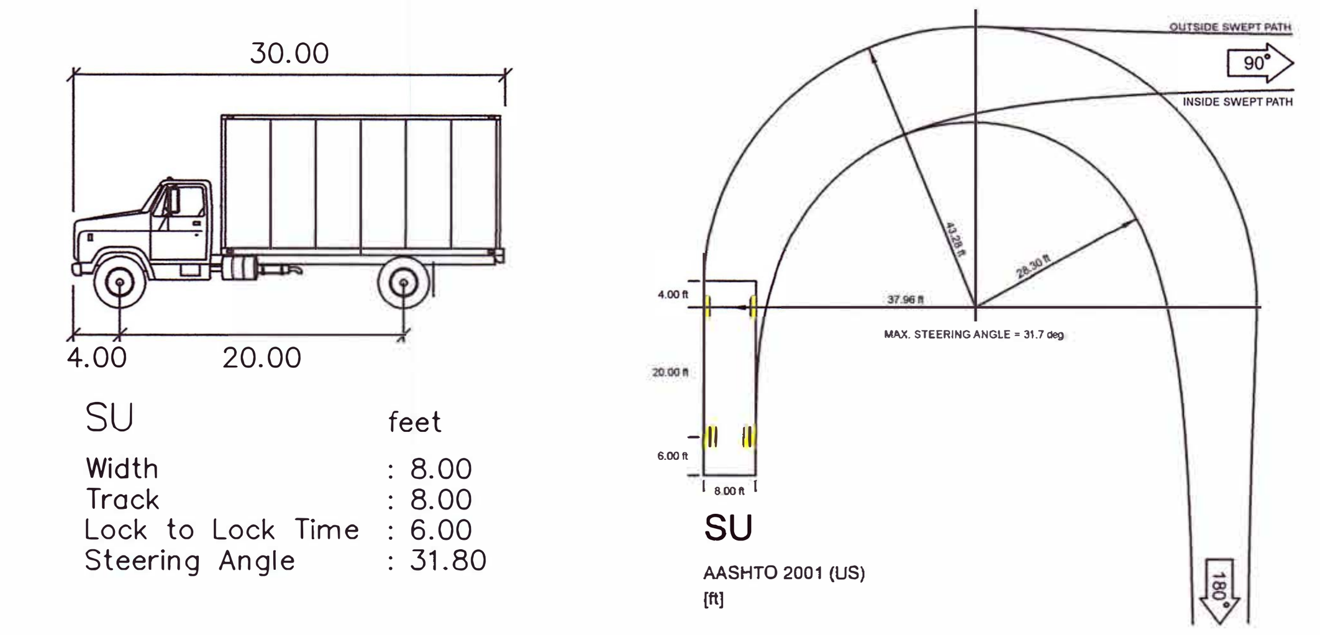
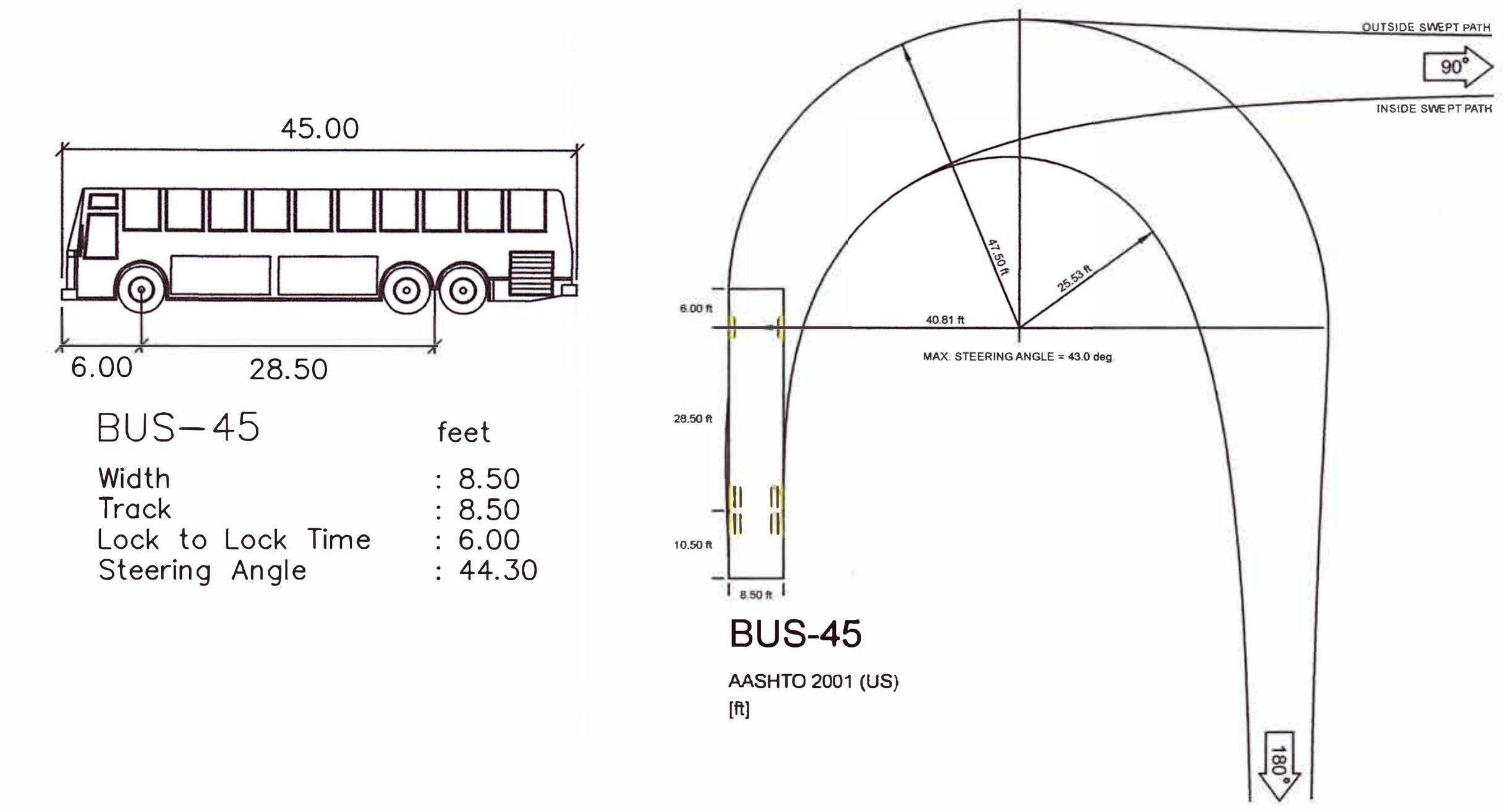
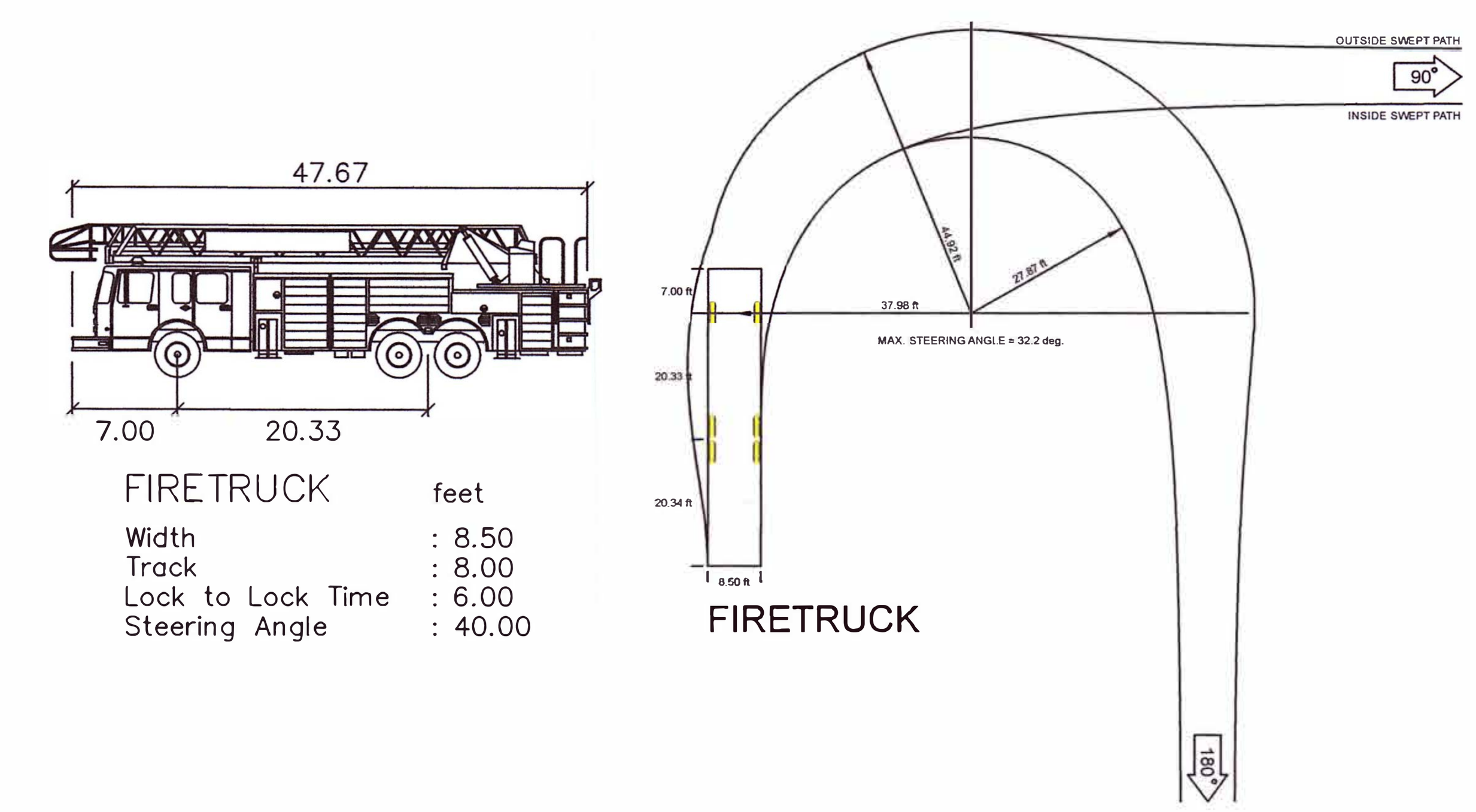




SU feet
Width : 8.00
Track : 8.00
Lock to Lock Time : 6.00
Steering Angle : 31.80



BUS-45 feet
Width : 8.50
Track : 8.50
Lock to Lock Time : 6.00
Steering Angle : 44.30



FIRETRUCK feet
Width : 8.50
Track : 8.00
Lock to Lock Time : 6.00
Steering Angle : 40.00

MAP REVISION DATES

DATE	REVISION	BY
12/11/2023	COMMENTS PER FIRE CHIEF	SL
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL
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11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL

FIRETRUCK ACCESS PLAN

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

80 40 0 80 160 340
Scale: 1" = 80'

NOVEMBER 30, 2023

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Respect The Marks
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PROPOSED ACTIVITY IN ARCHAEOLOGICALLY SENSITIVE AREA

1. FENCE AROUND PERIMETER FOR ANIMALS, SUCH AS LAMA, ALPACA & DONKEYS
2. ANIMAL SHELTER TO CONSIST OF POLE TYPE BARN ENCLOSURE WITH DIRT FLOORS
3. SOLAR PANEL NETWORK, SUPPORTED ON 2" DIA POLES SPACED 10 - 20 FT APART TO PROVIDE POWER AND SHADING FOR ANIMALS

METES & BOUNDS OF PROTECTED AREA INCLUDING BUFFER AREA

LINE	BEARING	DISTANCE
AAP1	N 05°50'23" E	126.82'
AAP2	N 27°39'39" E	297.15'
AAP3	N 83°25'30" E	62.48'
AAP4	S 25°11'36" E	113.87'
AAP5	S 80°53'16" E	60.63'
AAP6	N 34°45'32" E	137.76'
AAP7	S 54°56'40" E	96.22'
AAP8	S 11°11'04" W	220.32'
AAP9	S 49°55'26" W	124.01'
AAP10	S 65°02'27" W	84.95'
AAP11	S 29°12'44" W	60.76'
AAP12	S 14°43'43" E	57.08'
AAP13	S 46°11'02" E	101.11'
AAP14	S 55°14'16" E	107.74'
AAP15	S 75°13'34" E	32.65'
AAP16	S 03°22'57" W	55.76'
AAP17	S 56°04'28" W	53.33'
AAP18	N 87°07'24" W	37.85'
AAP19	N 39°27'27" W	115.11'
AAP20	N 65°51'39" W	156.97'
AAP21	N 39°44'15" W	219.12'

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6/17/2024	REVISED PER ARCHAEOLOGICAL SURVEY	SL
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
11/7/ 2024	COMMENTS PER REVIEWING ENGINEER	SL

ARCHAEOLOGICAL AVOIDANCE PLAN

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

40 20 0 40 80 120

Scale: 1" = 40'

FEBRUARY 06, 2024

MEDENBACH, EGGERS & CARR
CIVIL ENGINEERING & LAND SURVEYING, P.C.
STONE RIDGE, NEW YORK (845) 687-0047
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BARRY MEDENBACH, P.E.
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AAP
E18 105
SHEET 22 OF 28

Dig Safely. New York
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Wait The Required Time
Confirm Utility Response
Respect The Marks
Dig With Care
CALL 811
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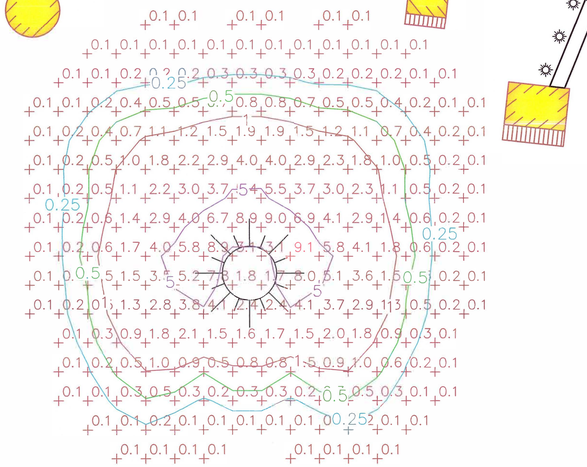


5 BOLLARD LIGHT PHOTOMETRIC DETAIL

SCALE: 1"=5'

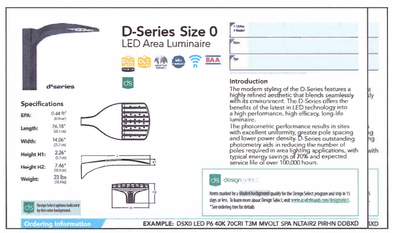
LITHONIA LIGHTING BOLLARD:
MODEL: 16 WATT LED LITHONIA MODEL#: DSXB LED 12C 350 30K ASY OR EQUAL

NOTE: ALL PHOTOMETERICS ARE IN FOOTCANDLES

LIGHTING LEGEND				
FIXTURE	Wattage (TYPE)	DENOTED BY	HEIGHT PLACEMENT	QYT.
A	45W (LED)		20'	6
B	26 W (LED)		10'	7
C	10 W (LED)		15'	6
D	16 W (LED)		3'-6"	104

NOTES:
1. REFERENCE BUILDING DRAWINGS FOR ALL LIGHTS ATTACHED TO BUILDING.

MAP REVISION DATES		
DATE	REVISION	BY
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL



1 POLE MOUNTED LIGHT DETAIL (FIXTURE A)

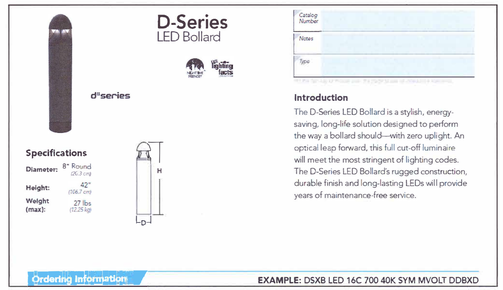
LITHONIA CSX0 SERIES LED LAMPS:MODEL'S:
45 WATT LED LAMP LITHONIA MODEL#: D-SERIES SIZE 0 AREA LUMINAIRE P2 PERFORMANCE PACKAGE 3000K CCT 80 CRI TYPE 4 MEDIUM HOUSESIDE SHIELD

2 WALL MOUNTED LIGHT DETAIL (FIXTURE B)

APPLETON
MODEL: 26 WATT LED 7000WSPITSC-LED830 30K OR EQUAL
REFERENCE ARCHITECTURAL PLANS FOR FINAL LIGHT FIXTURES

3 RECESSED LIGHT DETAIL (FIXTURE C)

APPLETON
MODEL: 26 WATT LED 7000WSPITSC-LED830 30K OR EQUAL
REFERENCE ARCHITECTURAL PLANS FOR FINAL LIGHT FIXTURES



4 BOLLARD LIGHT DETAIL (FIXTURE D)

LITHONIA LIGHTING BOLLARD:
MODEL: 16 WATT LED LITHONIA MODEL#: DSXB LED 12C 350 40K ASY OR EQUAL
MODEL: 39 WATT LED LITHONIA MODEL#: DSXB LED 12C 350 40K ASY OR EQUAL

LIGHTING PLAN

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY - NEW YORK

40 20 0 40 80 120

Scale: 1" = 40'

NOVEMBER 9, 2023

MEDENBACH & EGGERS
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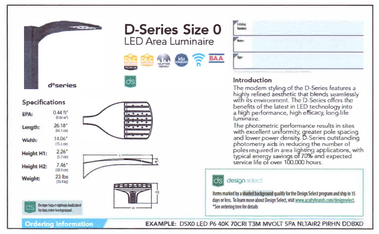
STATE OF NEW YORK BARRY MEDENBACH LICENSED PROFESSIONAL ENGINEER No. 060142

BARRY MEDENBACH, P.E.
NEW YORK LIC. NO. 60142

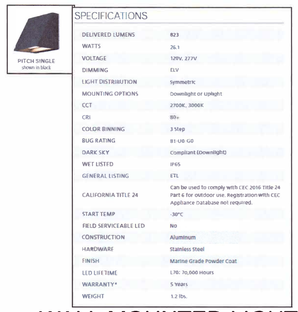
LP-1
E18 105
SHEET 23 OF 28



POLE MOUNTED LIGHT DETAIL (FIXTURE A)

1

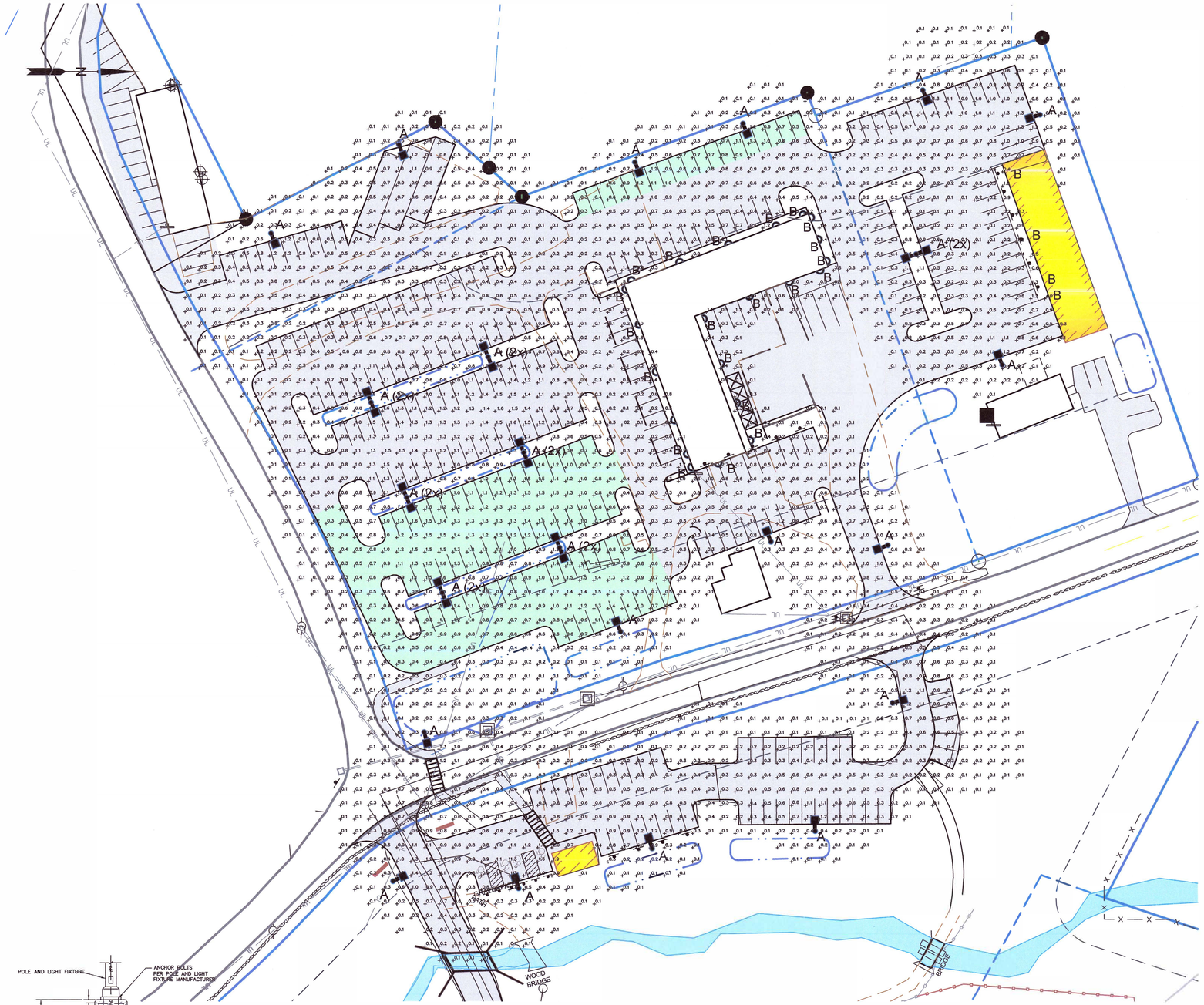
LITHONIA CSX0 SERIES LED LAMPS MODEL#: 45 WATT LED LAMP LITHONIA MODEL#: D-SERIES SIZE 0 AREA LUMINAIRE P2 PERFORMANCE PACKAGE 3000K CCT 80 CRI TYPE 4 MEDIUM HOUSESIDE SHIELD



WALL MOUNTED LIGHT DETAIL (FIXTURE B)

2

APPLETON
MODEL: 26 WATT LED 7000WSPITSC-LED830 30K OR EQUAL
REFERENCE ARCHITECTURAL PLANS FOR FINAL LIGHT FIXTURES



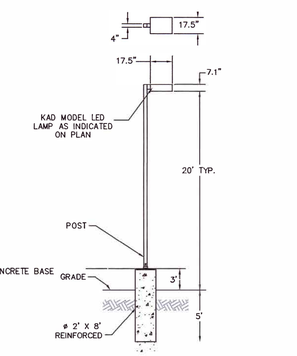
LIGHTING LEGEND

FIXTURE	Wattage (TYPE)	DENOTED BY	HEIGHT PLACEMENT	QYT.
A	45W (LED)		20'	30
B	26 W (LED)		10'	26
C	10 W (LED)		15'	0
D	16 W (LED)		3'-6"	0

NOTES:
1. REFERENCE BUILDING DRAWINGS FOR ALL LIGHTS ATTACHED TO BUILDING.

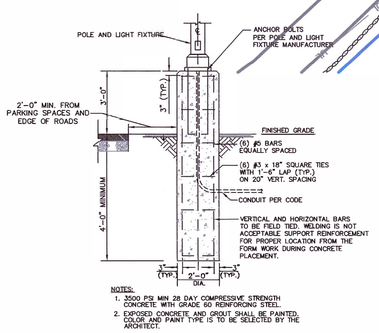
MAP REVISION DATES

DATE	REVISION	BY
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
11/7/2024	COMMENTS PER REVIEWING ENGINEER	SL



3 POLE MOUNTED LIGHT DETAIL (FIXTURE A)

94 WATT KAD LED MODEL#: KAD LED 60C 530 40K MVOLT HS OR EQUAL



4 TYPICAL LIGHT BASE

LIGHTING PLAN

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY – NEW YORK

40 20 0 40 80 120

Scale: 1" = 40'

NOVEMBER 9, 2023

MEDENBACH & EGGERS
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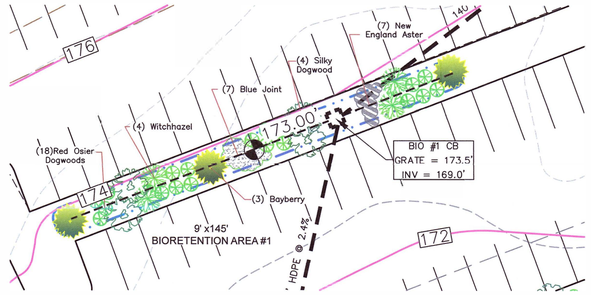
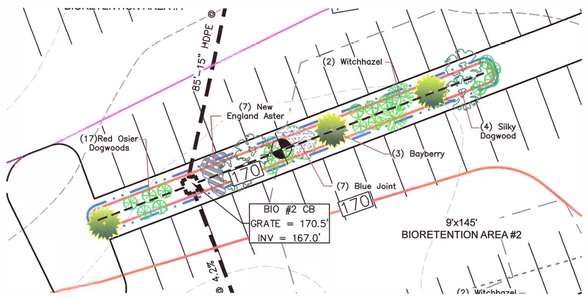
NEW YORK LIC. NO. 60142

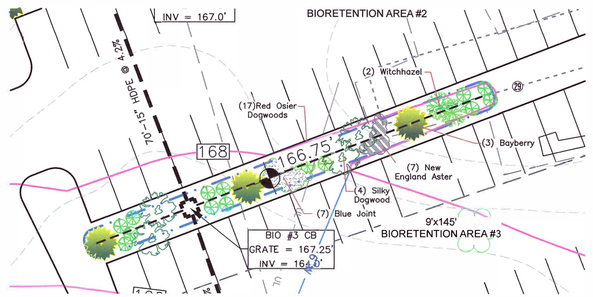
LP-1
E18 10
SHEET 24 OF 2



1 BIORETENTION #1
SCALE 1"=20'



2 INFILTRATION BIORETENTION #2
SCALE 1"=20'



3 INFILTRATION BIORETENTION #3
SCALE 1"=20'

LANDSCAPING NOTES:

1. The contractor shall furnish and plant all plants in quantities as shown on this plan. No substitutes will be permitted unless approved by the owner. All plants shall be nursery grown.

2. Plants shall be in accordance with the current "American Association for Nursery Stock" as published by the American Association of Nurserymen.

3. Plant stock shall be grown within the hardiness zone 5 established by the plant hardiness zone map, miscellaneous publications no.814, agricultural research service, United States Department of Agriculture, latest revision.

4. All plants must be moved with the root systems as solid units with the balls of earth firmly wrapped with burlap. No plants shall be accepted when the ball of earth surrounding its roots has been badly cracked or broken before planting. All plants shall be freshly dug. All plants that cannot be planted at once must be heeled-in by setting in the ground, and covering the balls with soil and then watering during transport. All plant materials shall be wrapped with wind proof covering.

5. Plant material shall bear the same relationship to finished grade as to the original planting grade prior to digging.

6. See planting details and specifications for additional requirements.

7. Tree stakes and wrap shall remain in place for no less than 6 months and no more than 1 year.

8. Planting shall be completed from April 1st through November 1st.

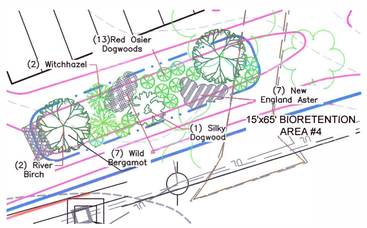
9. Maintenance shall consist of keeping the plants in a healthy growing condition and shall include weeding, cultivating, re-mulching, tightening and repairing of guys, removal of dead material, resetting plants to proper grades or upright position and maintaining the planting saucer.

10. All vegetation shown on this plan shall be maintained in a healthy and vigorous growing condition throughout the duration of the proposed use. All vegetation not so maintained shall be replaced with new same size and type vegetation at the beginning of the next planting year.

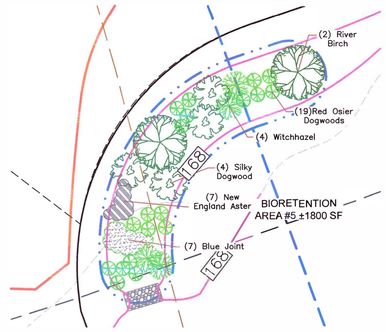
11. Replacements shall conform in all respects to the specifications for new plants and shall be planted in the same manner.

12. All disturbed areas not landscaped or otherwise specified shall receive grass seeds.

14. Plantings are to be installed by local companies familiar with the conditions in the area that employ NYS Certified Nursery Professionals or with an owner or foreman that has degree in horticulture, arboriculture, botany, or any other landscape degree or qualified experience.



4 BIORETENTIONS #4
SCALE 1"=20'



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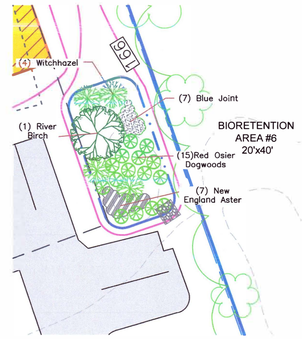
SCALE 1"=20'



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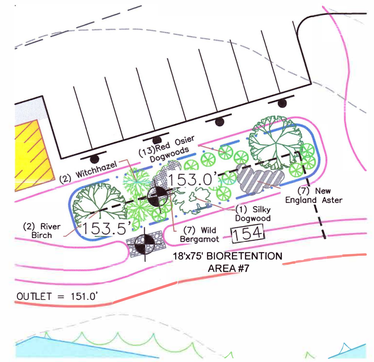
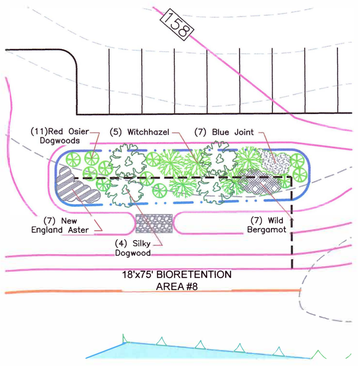
SCALE 1"=20'



7 BIORETENTION #7
SCALE 1"=20'

BIORETENTION PLANTS				
SYMBOL	SPECIES	COMMON NAME	QUANTITY	SIZE UPON PLANTING
	Betula nigra	River Birch	14	2-1/2" -3" Caliper
	Cornus amomum	Silky Dogwood	30	3 Gal. Cont.
	Hamamelis Virginiana	American Witchhazel	54	3 Gal. Cont.
	Cornus stolonifera	Red Osier Dogwood	231	3 Gal. Cont.
	Aster novae-angliae	New England Aster	98	1 Gal. Cont.
	Mondarda fistulosa	Wild Bergamot	70	1 Gal. Cont.
	Calamagrostis Canadensis	Blue Joint	77	1 Gal. Cont.
	Myrica pensylvanica	Bayberry	9	1 Gal. Cont.



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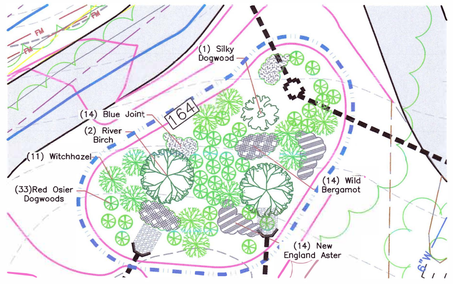
SCALE 1"=20'



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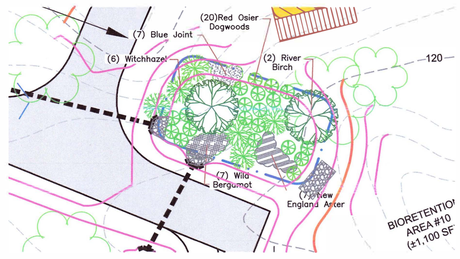
SCALE 1"=20'



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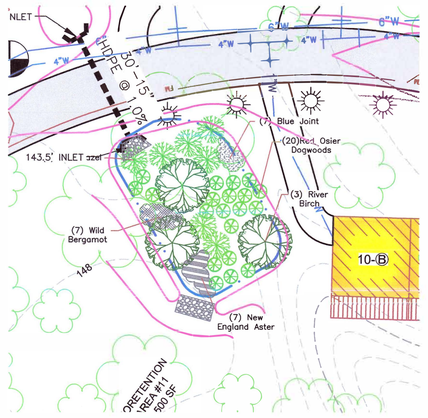
SCALE 1"=20'



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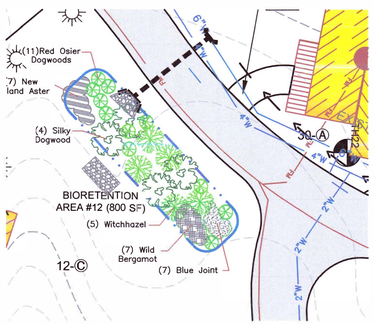

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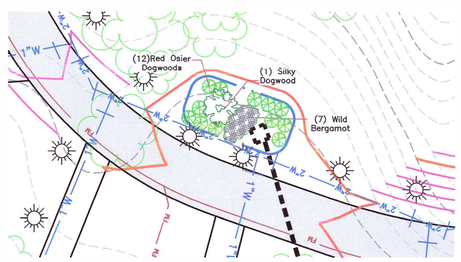
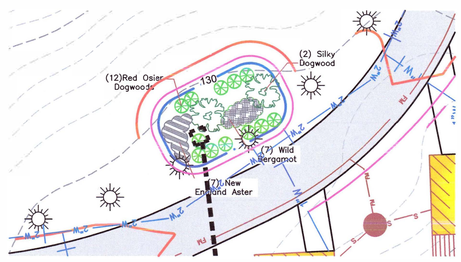
SCALE 1"=20'



13 BIORETENTION #13
SCALE 1"=20'



14 BIORETENTION #14
SCALE 1"=20'

LEGEND

- WATER MAIN NEW
- PROPOSED GRINDER PUMP
- FORCEMAIN NEW

MAP REVISION DATES		
DATE	REVISION	BY
6/24/2024	ADDED SHEETS FOR LIGHTING, LANDSCAPING, ENTRANCE	SL
11/07/2024	UPDATE LANDSCAPING	CC

BIORETENTION PONDS LANDSCAPING PLAN

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

20 0 20 40 60

Scale: 1" = 20'

FEBRUARY 06, 2024

MEDENBACH & EGGERS
CIVIL ENGINEERING & LAND SURVEYING, P.C.
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GRID NORTH

BIORETENTION AREA #1
BIORETENTION AREA #2
BIORETENTION AREA #3
BIORETENTION AREA #4
BIORETENTION AREA #5
BIORETENTION AREA #6
BIORETENTION AREA #7
BIORETENTION AREA #8
existing
SD
25'

LEGEND

SYM	TYPE	BOTANICAL NAME	COMMON NAME	SIZE	QTY.
a	SHRUB	Aronia arbutifolia	Red Chokeberry	1 gal	tbd
AC	TREE	Abies concolor	White Fir	6'-7'	tbd
AL	TREE	Amelanchier laevis	Serviceberry	5 gal.	tbd
AR	TREE	Acer rubrum	Red Maple	5 gal.	tbd
Am	SHRUB	Aronia melanocarpa	Black Chokeberry	3 gal	tbd
CA	SHRUB	Clethra alnifolia	Summersweet	1 gal.	tbd
iG	SHRUB	Ilex glabra	Inkberry	1 gal.	tbd
iV	SHRUB	Ilex verticillata	Winterberry	1 gal.	tbd
it	SHRUB	Itea virginica	Virginia Sweetspire	1 gal.	tbd
M	SHRUB	Morella pensylvanica	Bayberry	2 gal.	tbd
NS	TREE	Nyssa sylvatica	Black Gum	5 gal.	tbd
PO	TREE	Platanus occidentalis	Aerican Sycamore	5 gal.	tbd
PS	TREE	Pinus strobus	White Pine	5 gal.	tbd
QB	TREE	Quercus bicolor	Swamp White Oak	7 gal.	tbd
RA	SHRUB	Rhus aromatica 'Gro-low'	Fragrant Sumac	2 gal.	tbd
RT	SHRUB	Rhus thyphina	Staghorn Sumac	2 gal.	tbd
Sa	SHRUB	Symphoricarpos albus	White Snowberry	1 gal.	tbd
TO	TREE	Thuja occidentalis 'Nigra'	Northern White Cedar	6'-7'	tbd
TC	TREE	Tsuga canadensis	Canadian Hemlock	5 gal.	tbd
V	SHRUB	Viburnum prunifolium	Blackhaw	1 gal.	tbd
Vd	SHRUB	Viburnum dentatum	Arrowwood Viburnum	1 gal.	tbd
Vr	SHRUB	Viburnum rhytidiophyllum	Leatherleaf Viburnum	5 gal.	tbd
	SEED				
#1	PA New England Province Riparian Mix; Source:Ernst - ERNMX_253				
#2	Retention Basin Wildlife Mix; Source: Ernst - ERNMX_127				
#3	No-mow Lawn Mix; Source: Prairie Nursery				

SEEDED AREA #1: NATIVE RIPARIAN MIX

SEEDED AREA #2: RETENTION BASIN NATIVE GRASSES AND WILDFLOWER MIX

SEEDED AREA #3: NO-MOW GRASS


Abies concolor

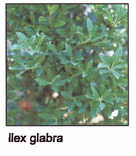

Acer rubrum


Amelanchier laevis


Aronia arbutifolia


Aronia melanocarpa


Clethra alnifolia


Ilex glabra


Ilex verticillata


Itea virginica

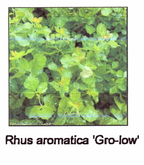

Morella pensylvanica

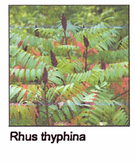

Nyssa sylvatica


Platanus occidentalis


Pinus strobus


Quercus bicolor


Rhus aromatica 'Gro-low'


Rhus thyphina


Symphoricarpos albus


Thuja occidentalis 'Nigra'


Tsuga canadensis


Viburnum dentatum


Viburnum prunifolium


Viburnum rhytidiophyllum


Seed mix

30 15 0 30 60 90
Scale: 1" = 30'

514 Main St
Beacon, NY
12508
845.838.1319

Buttermilk Falls
Milton NY 12547

PLANTING PLAN
Parking Area

Issue:
Planning Board Submission

Date: 10.02.24
Scale: 1" = 30'-0"

Drawing No:.
L1
SHEET 26 OF 28

3-Ⓒ

GRID NORTH

BIORETENTION AREA #9

EXISTING WOODLAND

PATIO

HOTEL

EXISTING WOODLAND

36'

34'

Scale: 1" = 20'

514 Main St
Beacon, NY
12508
845.838.1319

Buttermilk Falls

Milton NY 12547

PLANTING PLAN
Event Space & Hotel

Issue:
Planning Board Submission

Date: 10.02.24
Scale: 1" = 20'-0"

Drawing No:.
L2
SHEET 27 OF 28

GRID NORTH
NEW YORK EAST ZONE 1983

MAHONEY ROAD

NORTH ROAD

BUILDING

CROSSING AHEAD SIGN
SEE SHEET D-1

DIRECTIONAL SIGN
<== 9W SOUTH
9W NORTH ==>

PEDESTRIAN
CROSSING
SIGNS

DIRECTIONAL SIGN
<== 9W SOUTH
9W NORTH ==>

MONUMENT SIGN
SEE SHEET D-1

DIRECTIONAL SIGN
<= 9W SOUTH
9W NORTH =>

CROSSING AHEAD SIGN
SEE SHEET D-1

ACCESSIBLE
PARKING
ONLY

STREAM

ACCESSIBLE PARKING
VALET PARKING
<<<
DELIVERIES ONLY
↑

EXIST DRIVEWAY

PRIVATE DRIVEWAY

NORTH ROAD

HENRY'S
SPA
INN
>>>
HOTEL
BANQUET HALL
BANQUET BARN
CABINS
<<<

STREAM

MAIN STREET

HENRY'S
SPA
INN
<<<
PARKING
EXIT
>>>

FARM ROAD

VAN ORDEN ROAD

POND

BRIDGE ROAD

HOTEL
BANQUET HALL
BANQUET BARN
CABINS
>>>
PARKING
EXIT
<<<

BUTTERMILK FALLS

VIEW LN

PRIVATE
ENTRANCE

PROPOSED
FIRE GATE

EXIST DRIVEWAY

HOTEL
BANQUET HALL
DELIVERIES
>>>
BANQUET BARN
CABINS
↑

HUDSON LOOP

CASSEL ROAD

POND

BANQUET HALL
DELIVERIES
<<<
PRIVATE
PROPERTY
NO ENTRY
↑

PRIVATE DRIVEWAY

FARM ROAD
CABINS
↑

ACCESSIBLE PARKING

EXISTING POND

TOWN OF MARLBOROUGH

TOWN OF LLOYD

HUDSON RIVER

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NOTES FOR HIGH ATTENDANCE SPECIAL EVENTS:

EXCEPT FOR ACCESSIBLE PARKING AND VALET PARKING, THE MAIN ENTRANCE IS TO BE CLOSED OFF. TRAFFIC IS TO BE REDIRECTED TO THE NORTH ENTRANCE OF THE MAIN PARKING AREA WITH THE USE OF WAYFINDING (SANDWICH BOARD) SIGNS.

WAYFINDING (SANDWICH BOARD) SIGNS ARE TO BE PLACED IN THE PARKING LOT, DIRECTING PEDESTRIANS TO THE NORTH ROAD CROSSWALK, DISCOURAGING PEDESTRIAN ROAD TRAVEL.

TRAFFIC CONES ARE TO BE USED TO SIGNAL CHANGES IN TRAFFIC PATTERN AHEAD.

MAP REVISION DATES

DATE	REVISION	BY

SIGNAGE PLAN & ROAD NAMES

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

100 0 100 200 300

Scale: 1" = 100'

NOVEMBER 7, 2024

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