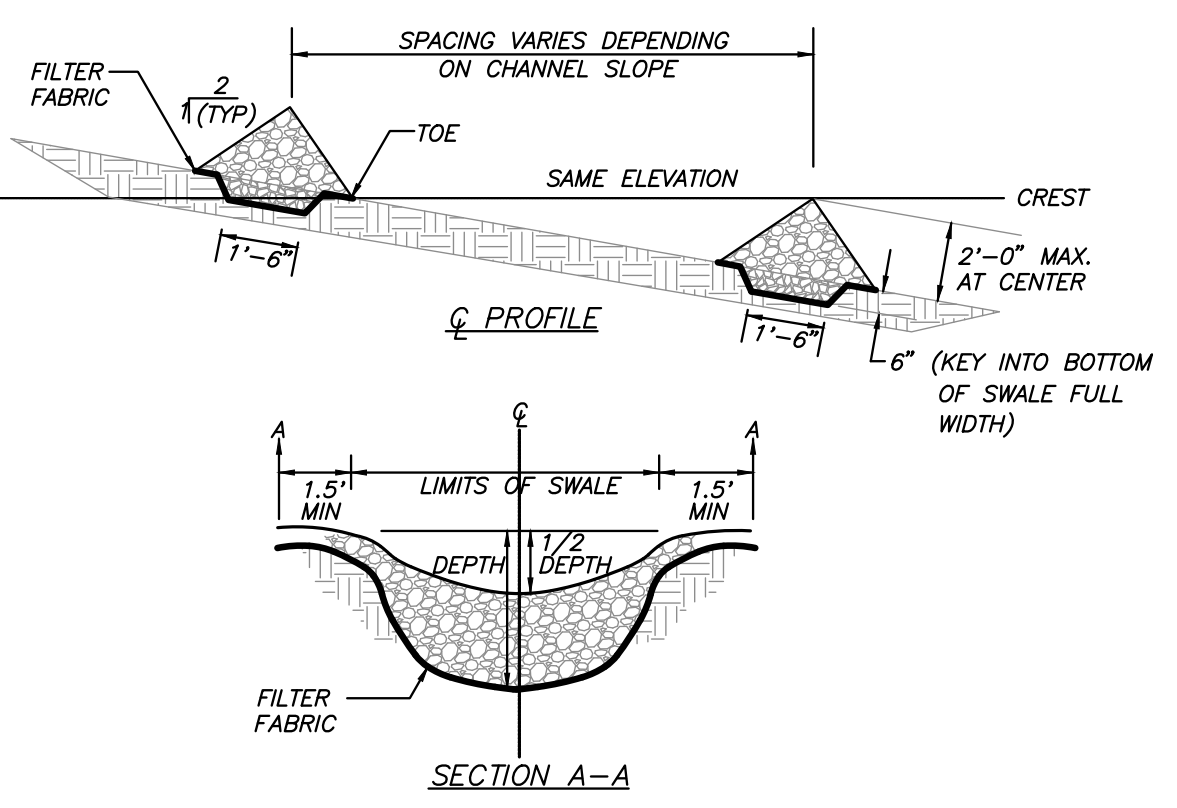
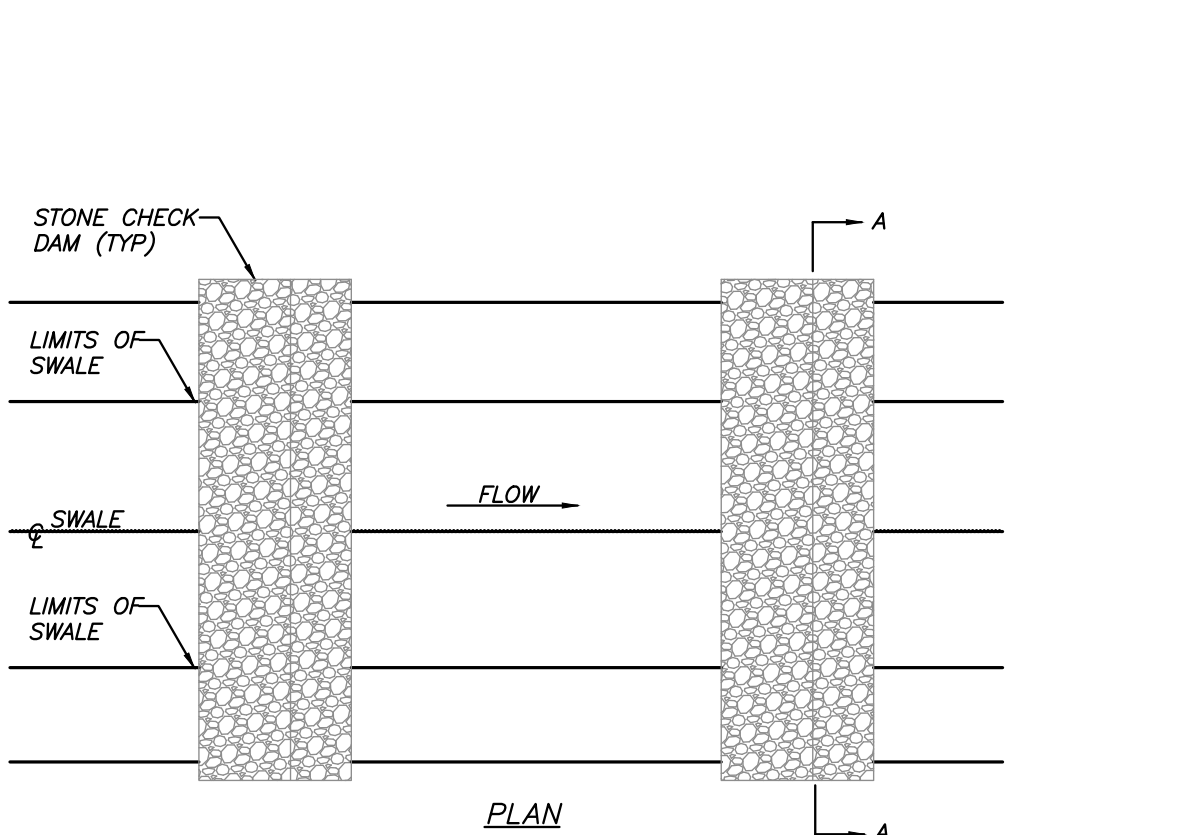


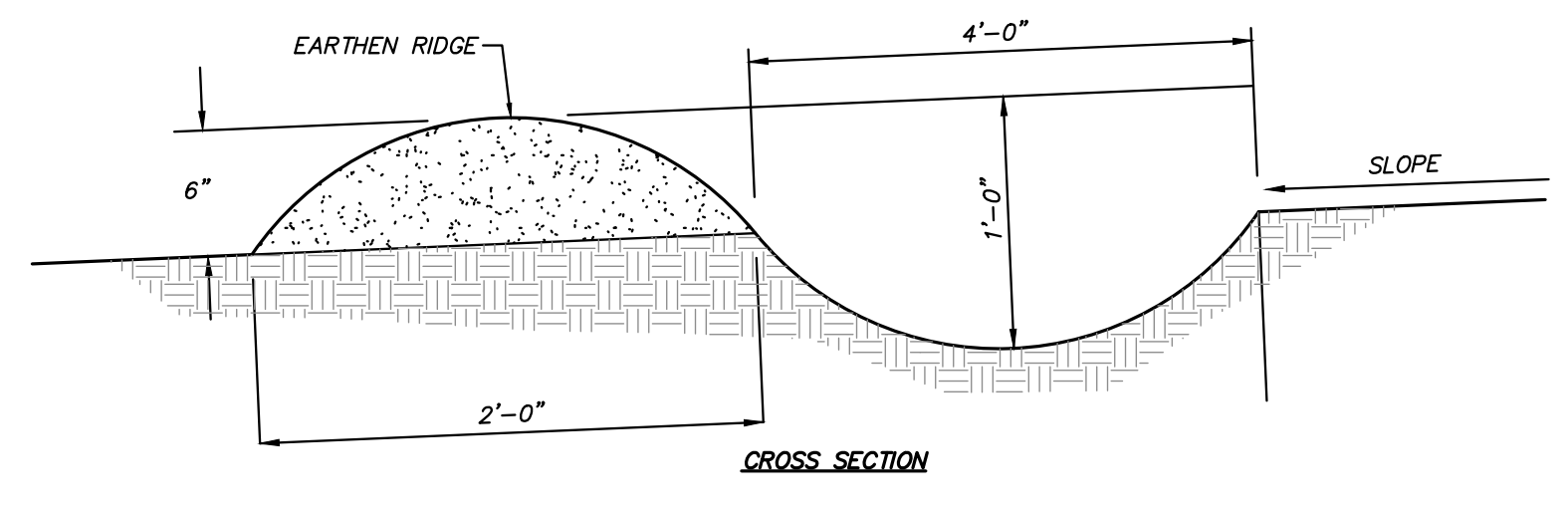
- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE:**
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS: STEEL EITHER 1 OR U TYPE TO FENCE POSTS WITH WIRE TIES OR STAPLES. OR 2" HARDWOOD.
 - FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL. PREFABRICATED UNIT: GEOPAB, ENVIROFENCE, OR APPROVED EQUAL.
 - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
 - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BALANCE DEVELOP IN THE SILT FENCE.

SILT FENCE WITH WIRE MESH DETAIL (N.T.S.)



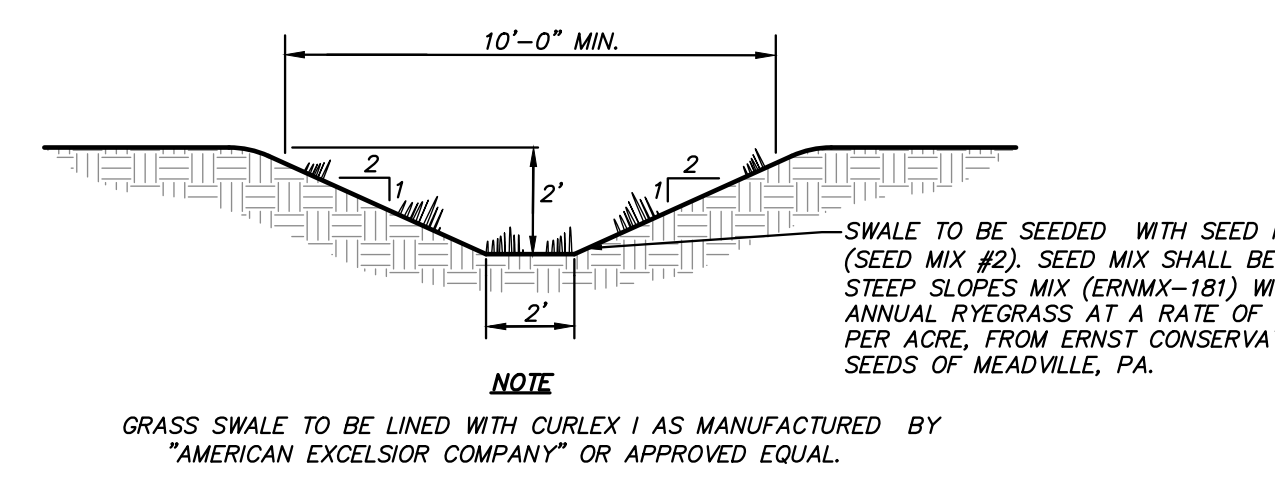
- NOTES:**
- STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION.
 - SET SPACING OF CHECK DAMS SO THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
 - EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
 - PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE LINER AS APPROPRIATE.
 - ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

STONE CHECK DAM DETAIL (N.T.S.)

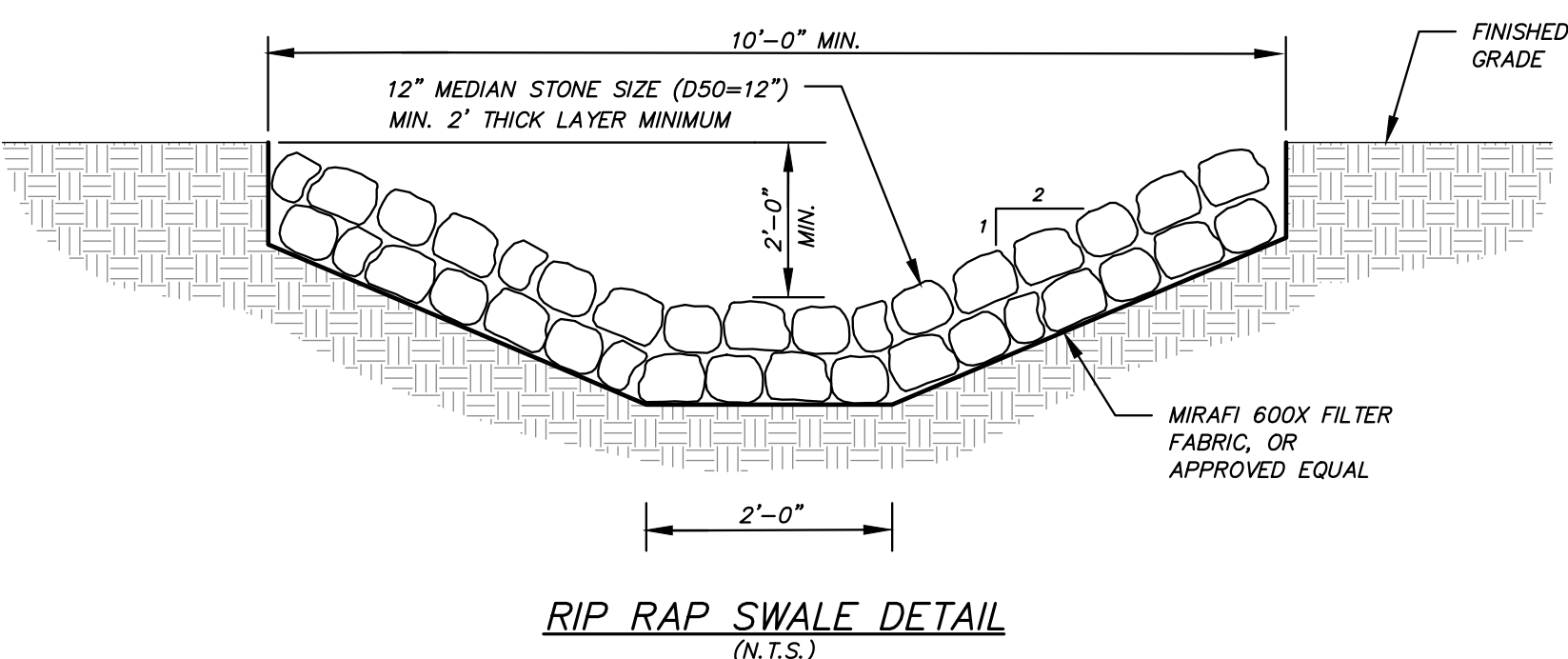


- NOTES:**
- INSTALL THE WATER BAR ACROSS TOP OF DRIVEWAY TO DIVERT RUNOFF INTO SWALES.
 - TRACK THE RIDGE TO COMPACT IT TO THE DESIGN CROSS SECTION.
 - THE OUTLET SHALL BE DIRECTED INTO THE STABILIZED SWALE ALONG THE SIDE OF THE ROAD.
 - VEHICLE CROSSING SHALL BE STABILIZED WITH GRAVEL EXPOSED AREAS SHALL BE IMMEDIATELY SEEDED AND MULCHED.
 - PERIODICALLY INSPECT WATER BARS FOR EROSION DAMAGE AND SEDIMENT ACCUMULATION. CHECK OUTLET AREAS AND MAKE REPAIRS AS NEEDED TO RESTORE OPERATION.

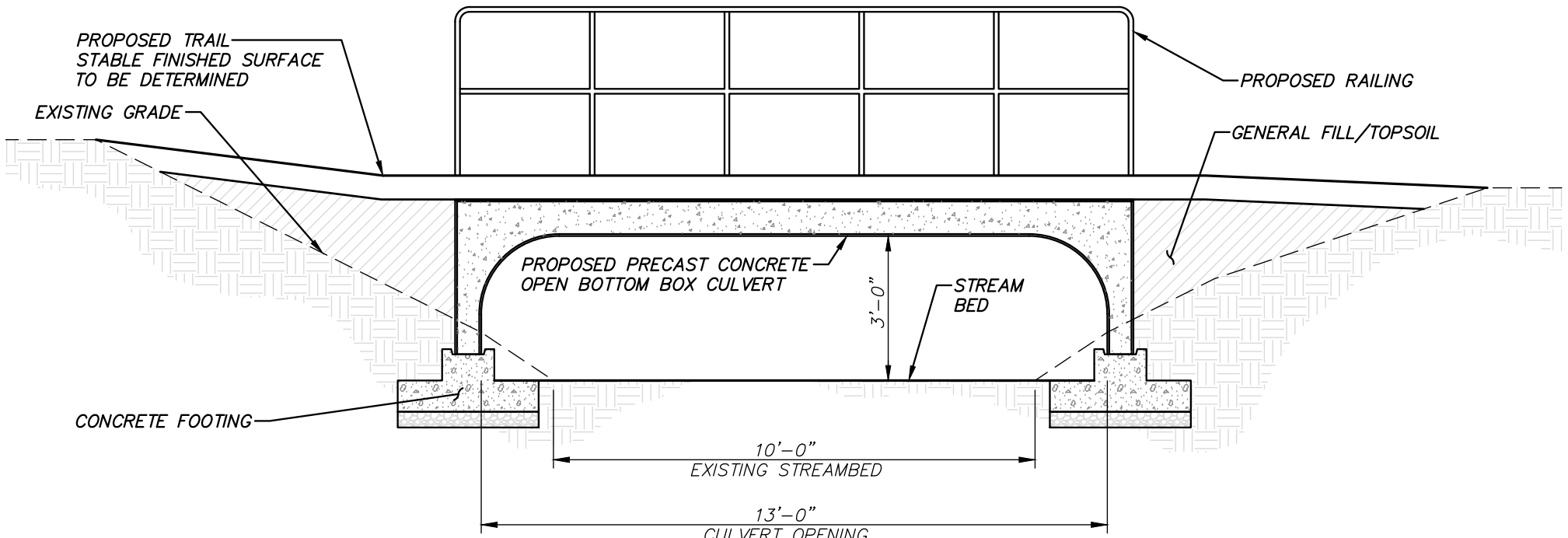
WATER BAR DETAIL (N.T.S.)



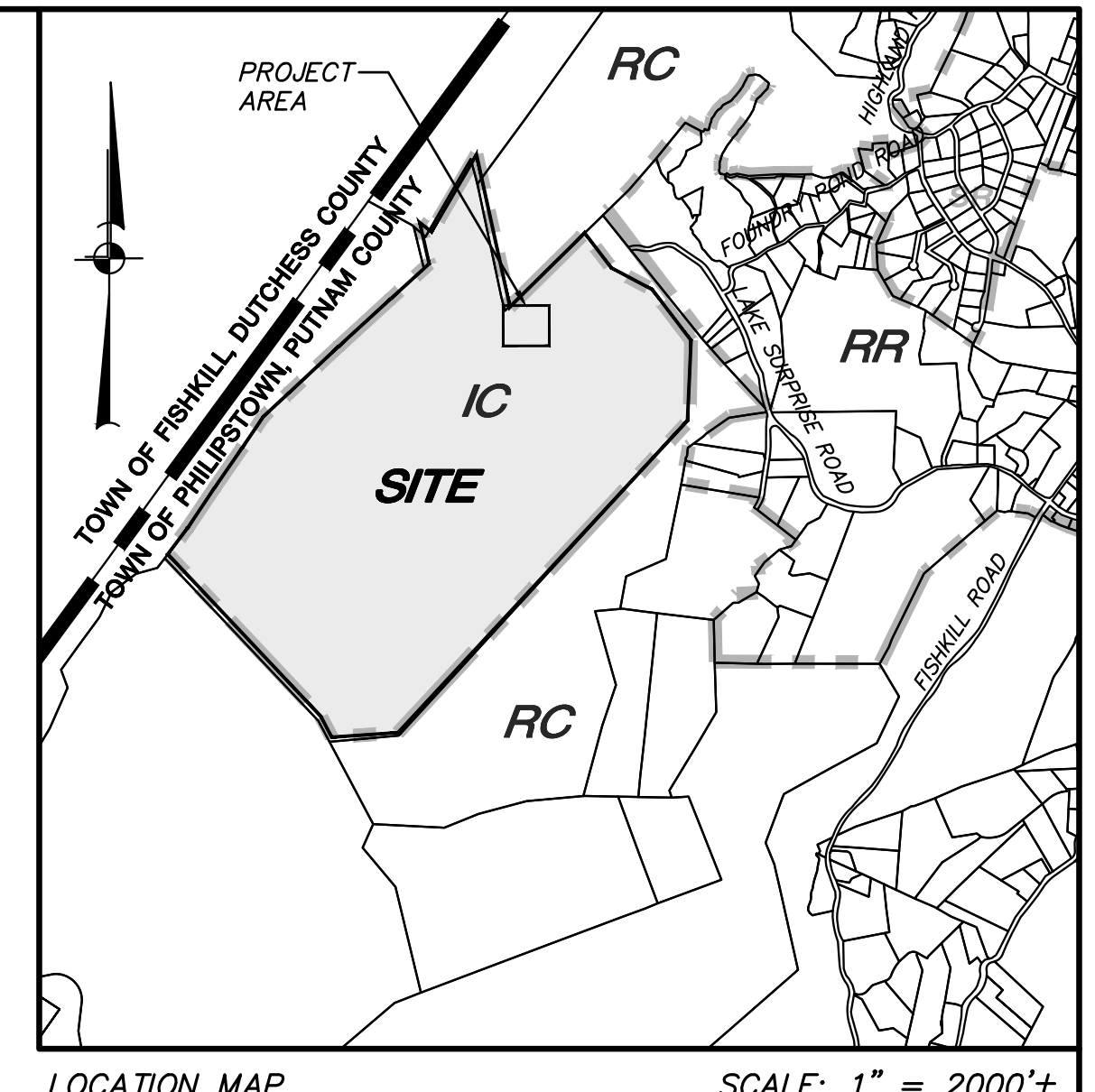
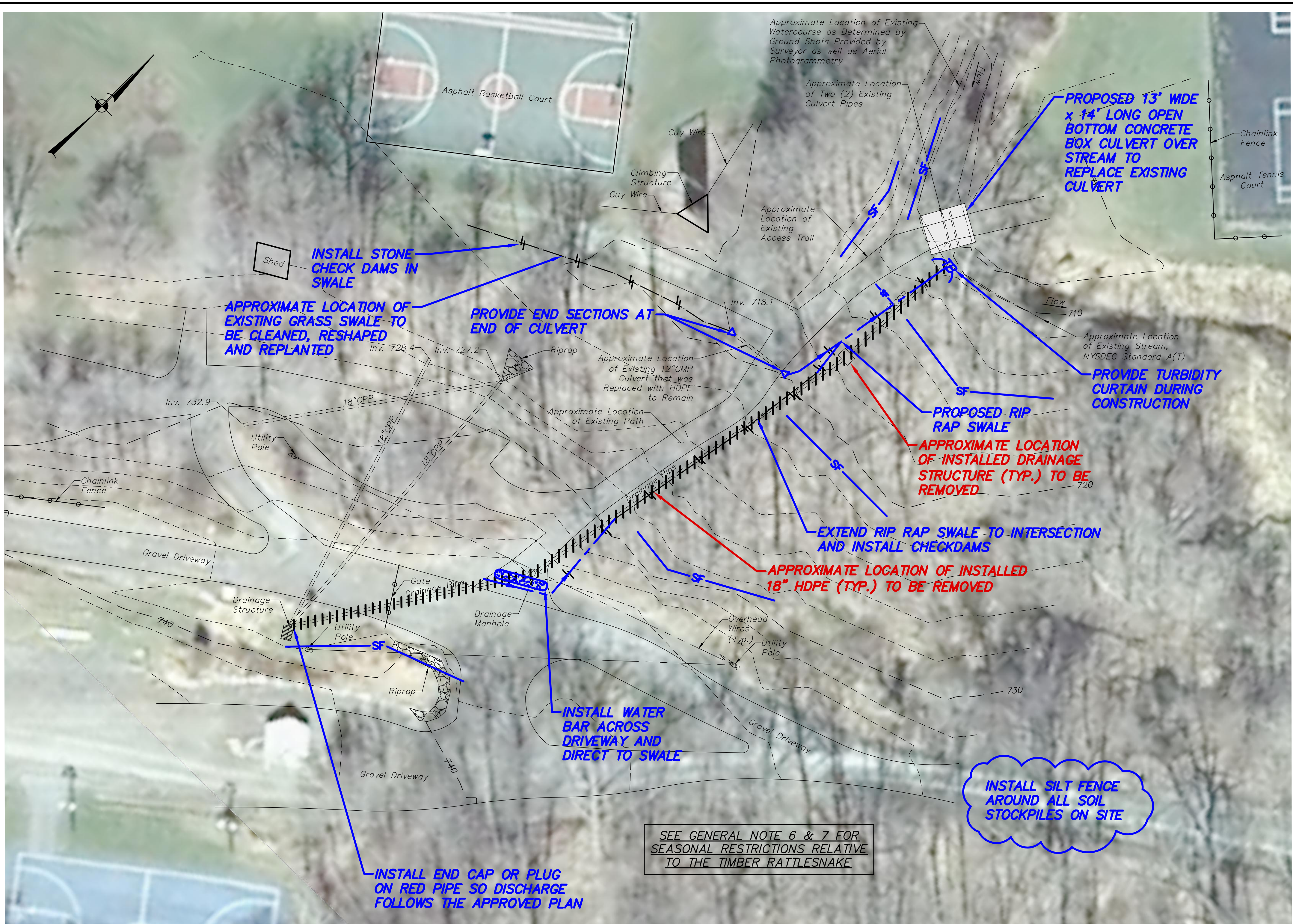
VEGETATED SWALE DETAIL (N.T.S.)



RIP RAP SWALE DETAIL (N.T.S.)



PROPOSED CULVERT STREAM CROSSING DETAIL (N.T.S.)



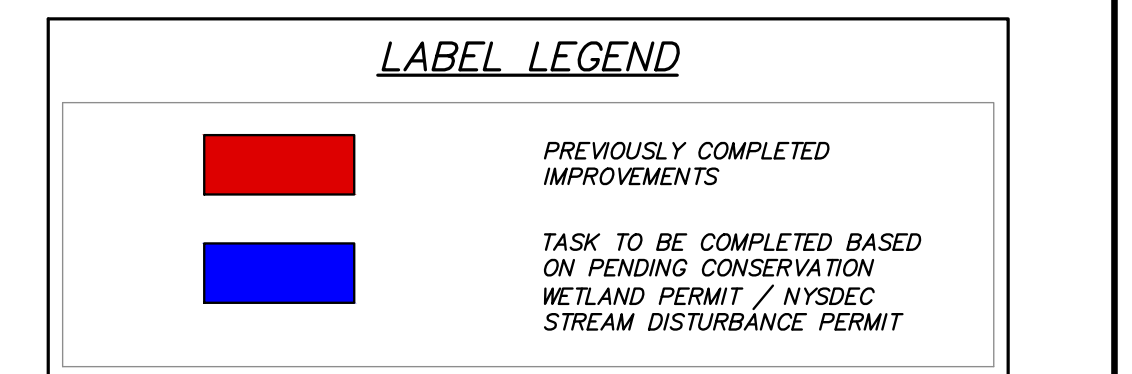
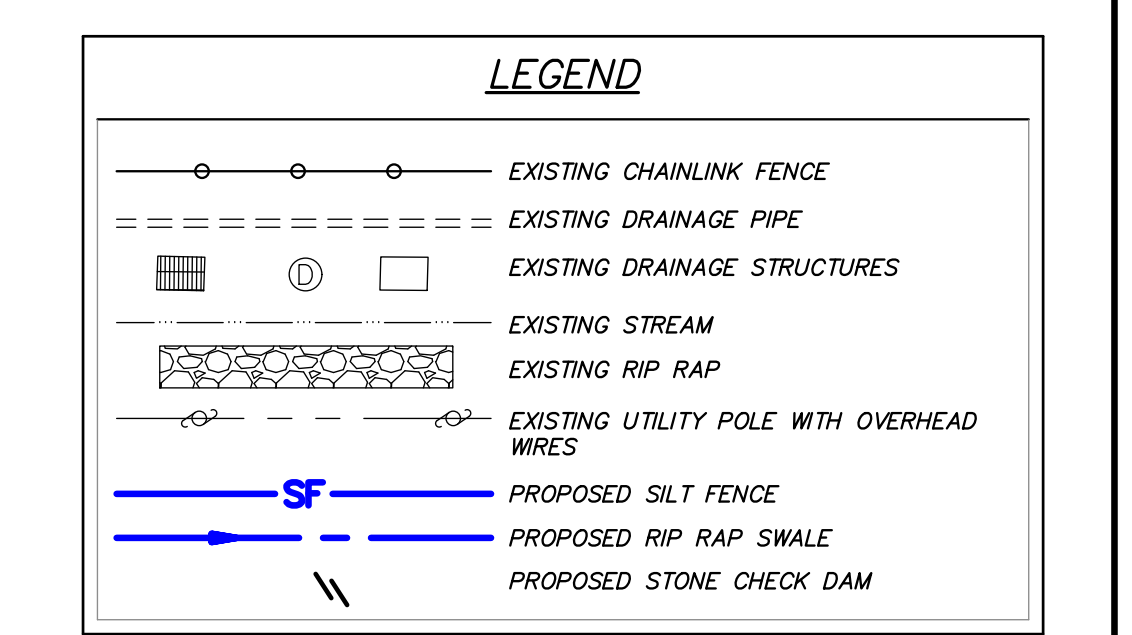
PERMANENT STORMWATER FACILITIES MAINTENANCE SCHEDULE

PRACTICE/FACILITY	MONTHLY	AFTER MAJOR STORM EVENTS	BI-ANNUALLY	YEARLY	EVERY 5 TO 10 YEARS
RIP RAP SWALES	Ensure contributing areas clean of debris, no dislodged stones, no evidence of erosion, & mowing performed.	Inspect for erosion, dislodged stones, soil permeability & evidence of flow going around structures.	-	Inspect & clean accumulated sediment.	-
WATER QUALITY SWALES	Inspect first few months after construction for eroding soils & repair immediately.	Inspect for erosion, dislodged stones, soil permeability & evidence of flow going around structures.	Inspect & clean. Mow & remove debris & litter. Revegetate as needed.	-	Inspect for & remove accumulated sediment.
DRAINAGE PIPES	-	-	Inspect & clean.	-	-
HYDRODYNAMIC SEPARATOR, DRAIN INLETS, CATCH BASINS	-	-	Inspect for damage to frame and grates, and pipe inlets/outlets. Clean accumulated sediment in sump.	-	-
WATER BAR	-	Inspect for erosion damage and sediment accumulation, check outlet areas and make repairs as needed.	Inspect for erosion damage and sediment accumulation, check outlet areas and make repairs as needed. Ensure water bar directs runoff to rip rap swale.	-	-
GRASS SWALES	Inspect first few months after construction for eroding soils & repair immediately. Inspect check dams for debris and remove as needed.	Inspect for erosion, dislodged stones, soil permeability & evidence of flow going around structures.	Inspect & clean. Mow & remove debris & litter. Revegetate as needed. Inspect check dams for debris and remove as needed.	-	Inspect for & remove accumulated sediment.
ORGANIC FILTER	Inspect first few months after construction for eroding soils & repair immediately.	Inspect for erosion, dislodged stones, soil permeability & evidence of flow going around structures. Remove debris & litter from basins & outlet structures. Remove sediment if accumulated greater than an 1".	Inspect vegetation & mulch layer.	Inspect for & remove accumulated sediment.	-

Note: The party responsible for implementation of the maintenance schedule during and after construction is: Surprise Lake Camp, 307 Seventh Avenue, Suite 900, New York, NY 10001 and/or the current owners of the subject property.

TIMBER RATTLESNAKE EDUCATION & ENCOUNTER PLAN REQUIREMENTS:

- The hillsides surrounding Surprise Lake Camp are home to the Timber Rattlesnake, a New York State Listed Threatened species. It is illegal to kill, harm, or harass them. Occasionally, especially during the summer months, snakes will travel up to two miles from their dens and could be observed on the roads and properties of Surprise Lake Camp.
- REQUIRED MITIGATION MEASURES FOR WORK OCCURRING OUTSIDE OF HIBERNATION PERIOD (April 1st to October 31st):**
- Timber Rattlesnake Monitor:** If any project-related work is to occur (in whole or in part) during the Timber Rattlesnake active season of April 1st through October 31st, the project sponsor will retain the services of a snake monitor. The snake monitor must be a qualified biologist that has knowledge of Timber Rattlesnake ecology and relocation procedures. The monitor must also have experience handling rattlesnakes and be licensed by New York State to do so. Both the name, and the New York State Department of Environmental Conservation (NYSDEC) license number of the hired snake monitor must be sent to NYSDEC at wildlife3@dec.ny.gov.
 - Education:**
 - All construction personnel are required to familiarize themselves with the Timber Rattlesnake Education & Encounter Plan, and Timber Rattlesnake Education & Encounter Pamphlet for Surprise Lake Camp.
 - For work to be conducted during April 1st to October 31st, construction workers and camp staff will be trained (by the retained biologist) in Timber Rattlesnake identification and procedures, and contacting the on-site monitor for removal of rattlesnakes within the work area. All construction personnel will sign a log, maintained on site, certifying that they have received such training.
 - In the event that a rattlesnake is found near the project area, all work will stop immediately and the licensed monitor will be contacted. Work will not resume until the licensed monitor has moved the snake to safety and inspected the project area for additional rattlesnakes.
 - Refer to the Education & Encounter Plan for additional information.



NO.	DATE	REVISION	BY
8	7-29-21	REVISED FOR NYSDEC SUBMISSION	JFR
7	4-2-21	REVISED FOR NYSDEC SUBMISSION	JFR
6	12-11-20	REVISED FOR NYSDEC SUBMISSION	JFR
5	9-11-20	REVISED FOR NYSDEC SUBMISSION	MEU
4	9-27-19	REVISED PER CB COMMENTS	JFR
3	8-2-19	REVISED PER CB COMMENTS	JMM
2	5-7-19	REVISED PER CB COMMENTS	KAM
1	3-22-19	SUBMISSION TO TOWN	KAM

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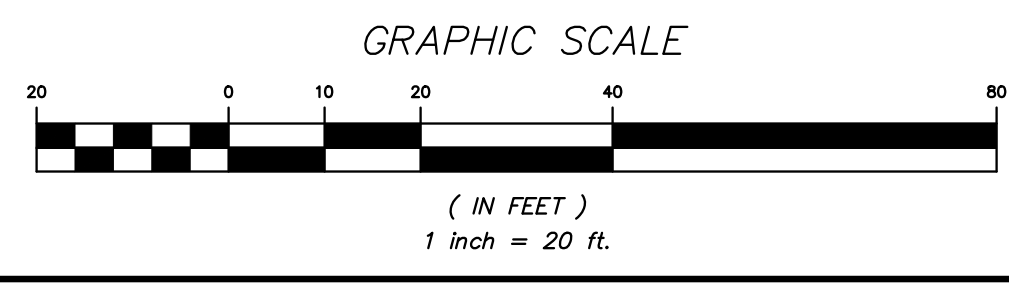
PROJECT: SURPRISE LAKE CAMP
362 LAKE SURPRISE ROAD, COLD SPRING, PUTNAM COUNTY, NY

DRAWING: GRADING AND DRAINAGE PLAN LOWER ROAD IMPROVEMENTS

PROJECT NUMBER: 17166.100
DATE: 03-11-19
SCALE: 1" = 20'

PROJECT MANAGER: R.D.W.
DRAWN BY: K.A.M.
CHECKED BY:

DRAWING NO.: SP-2.2.1
SHEET: 1



ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 146 OF THE EDUCATION LAW.