

Date:	<u>5/28/2026</u>	Application #:	<u>023-24</u>
Fees Paid:	<u>\$150</u>	+ \$15 recording fee =	<u>\$165</u>
Parcel ID #:	<u>960-0294.V</u>		
Tax Map #:	<u>19-232.000</u>		

TOWN OF WATERBURY ZONING PERMIT APPLICATION

Please provide all of the information requested in this application.

Read the Zoning Regulations and familiarize yourself with the requirements. Failure to provide all the required information will delay the process of this application. Based upon the nature of the project you may need to submit additional information. For instructions on how to fill out this form please refer to the *Zoning Permit Application Instructions & Fee Schedule* available on the municipal website or at the municipal offices. Submit one copy of the completed application and a check payable to the *Town of Waterbury* according to the zoning fee schedule. For questions about the permit process, please contact the Zoning Administrator at 802-244-1012.

CONTACT INFORMATION

APPLICANT Interim Town Manager,
 Name: William Woodruff, Public Works Director
 Mailing Address: 28 North Main St, Suite 1
Waterbury, VT 05676
 Home Phone : _____
 Work/Cell Phone: (802) 839-6199
 Email: bwoodruff@waterburyvt.com

PROPERTY OWNER (if different from Applicant)
 Name: Agency of Transportation
 Mailing Address: 1 National Life Drive
Montpelier, VT 05663
 Home Phone : _____
 Work/Cell Phone: _____
 Email: _____

PROJECT DESCRIPTION

Physical location of project (E911 address): 294 Armory Drive
Waterbury, VT 05676

Lot size: 6 ac Zoning District: Mixed Use

Existing Use: Sewer Maintenance Proposed Use: Sewer Maintenance

Brief description of project: This project will stabilize the Thatcher Brook channel bed and banks, thus reducing erosion risk to the sewer line near the channel along Stowe St. A flood bench will be created, the channel will be widened, and the existing sewer main easement will be extended under the widened channel section. Four riffle grade control structures will be installed to raise the channel grade and prevent further downcutting.

Cost of project: \$ 300,000 Estimated start date: 7/1/2026

Water system: None Waste water system: Municipal

EXISTING

Square footage: n/a Height: _____
 Number of bedrooms/baths: _____
 # of parking spaces: _____
 Setbacks: *front*: _____
sides: _____ / _____ *rear*: _____

PROPOSED

Square footage: n/a Height: _____
 Number of bedrooms/bath: _____
 # of parking spaces: _____
 Setbacks: *front*: _____
sides: _____ / _____ *rear*: _____

ADDITIONAL MUNICIPAL PERMITS REQUIRED:

- Curb Cut / Access permit
- E911 Address Request
- Water & Sewer Allocation
- none of the above

[Additional State Permits may also be required]

CHECK ALL THAT APPLY:

NEW CONSTRUCTION

- Single-Family Dwelling
- Two-Family Dwelling
- Multi-Family Dwelling
- Commercial / Industrial Building
- Residential Building Addition
- Comm./ Industrial Building Addition
- Accessory Structure (garage, shed)
- Accessory Apartment
- Porch / Deck / Fence / Pool / Ramp
- Development in SFHA (including repairs and renovation)
- Other _____

USE

- Establish new use
- Change existing use
- Expand existing use
- Establish home occupation

OTHER

- Subdivision (# of Lots: _____)
- Boundary Line Adjustment (BLA)
- Planned Unit Development (PUD)
- Parking Lot
- Soil/sand/gravel/mineral extraction
- Other Excavation and Sewer work

Date: _____ Application #: _____

Fees Paid: _____ (\$15 recording fee already paid)

Parcel ID #: _____

Tax Map #: _____

TOWN OF WATERBURY SPECIAL FLOOD HAZARD AREA (SFHA)

This Overlay District information sheet supplements the Zoning Permit Application. Please provide all of the information requested on both forms, according to the requirements of Article IV of the zoning bylaws. Failure to provide all the required information will delay the process. Submit

one copy of the completed forms and a check payable to the Town of Waterbury according to the zoning fee schedule.

Contact the Zoning Administrator for questions: 802-244-1012 | zoning@waterburyvt.com

PROJECT DESCRIPTION

Brief description of project: This project will stabilize the Thatcher Brook channel bed and banks, thus reducing erosion risk to the sewer line near the channel along Stowe St. A flood bench will be created, the channel will be widened, and the existing sewer main easement will be extended under the widened channel section. Four riffle grade control structures will be installed to raise the channel grade and prevent further downcutting.

SPECIAL FLOOD HAZARD AREA OVERLAY DISTRICT (SFHA)

DESIGN STANDARDS:

- All development is reasonably safe from flooding
- All fuel storage tanks are either elevated or floodproofed.

All substantial improvements and new construction (including fuel storage tanks) meet the following criteria:

- Designed, operated, maintained, modified and adequately anchored to prevent flotation, collapse, release, or lateral movement of the structure
- Constructed with materials resistant to flood damage
- Constructed by methods and practices that minimize flood damage
- Constructed with electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding
- All new subdivisions and other proposed developments that are greater than 50 lots or 5 acres, whichever is the lesser shall include within such proposal base flood elevation data. See Regulations for additional subdivision standards.
- The fully enclosed areas below the lowest floor that are useable solely for parking of vehicles, building access, or storage in an area other than a basement are designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.
- A non-residential, appurtenant structure of 500 sf or less need not be elevated to or above the base flood elevation in this area, provided the structure is placed on the building site so as to offer the minimum resistance to the flow of floodwaters
- In Zones AE, A, and A1 – A30 where base flood elevations and/or floodway limits have not been determined, new construction and substantial improvement shall not be permitted unless it demonstrates additional standards (see Regulations)
- All new construction and substantial improvements of residential structures within Zones A1-30, and AE must have the lowest floor of all residential structures (including basement) elevated to at least one foot above the base flood level.
- All manufactured homes are installed using methods and practices which minimize flood damage. Manufactured homes must be elevated on a permanent foundation such that the lowest floor of the manufactured home is at least one foot above base flood elevation, and they must be anchored to an adequately anchored foundation to resist flotation collapse, or lateral movement.
- All new construction and substantial improvements of non-residential structures within Zones A1-30, and AE shall:
 - Have the lowest floor (including basement) elevated to at least two feet above the base flood level; or
 - Be designed so that below the base flood level the structure is water tight with walls substantially impermeable to the passage of water with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy to a point at least two feet above the base flood level.

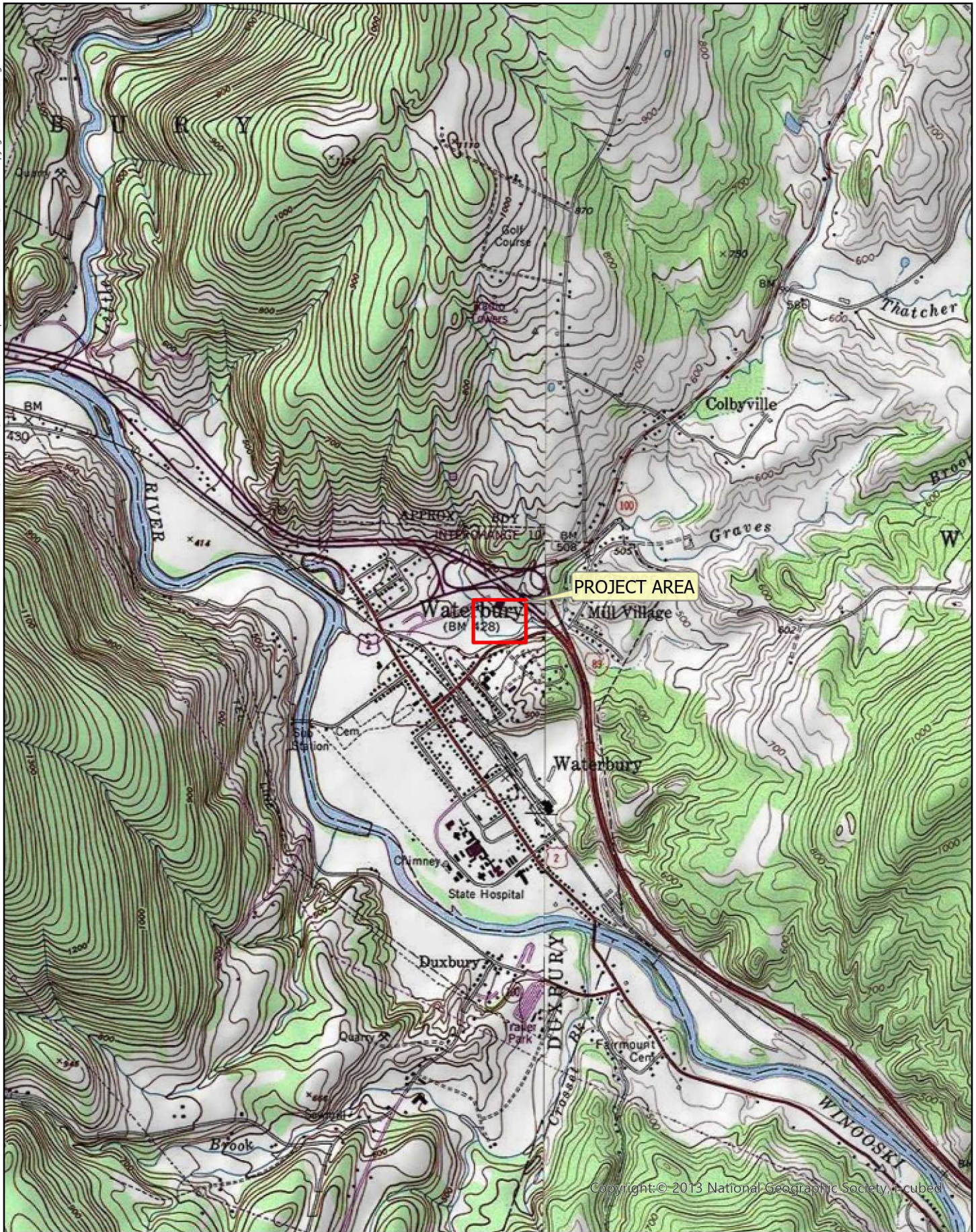
- Where a non-residential structure is intended to be made watertight below the base flood level a registered professional engineer or architect shall develop and/or review structural design
- Adequate drainage paths shall be required around structures on slopes to guide floodwaters around and away from proposed structures.
- The flood carrying and sediment transport capacity within the altered or relocated portion of any watercourse shall be maintained, and any alteration or relocation shall not result in any decrease of stream stability.
- Bridge and culverts, which by their nature must be placed in or over the stream, must obtain a stream alteration permit from the Agency of Natural Resources, if required.

SUBMISSION REQUIREMENTS:

- Plans in triplicate, drawn to scale, showing the location, dimensions, contours, and elevation of the lot; the size and location on the site of existing or proposed structures, fill or storage of materials; the location and elevations of streets, water supply, and sanitary facilities; and the relation of the above to the location of the channel, floodway, and base flood elevation
- Specifications for building construction and materials, floodproofing, mining, dredging, filling, grading, paving, excavation, or drilling, channel improvement, storage of materials, water supply, and sanitary facilities
- Base flood elevation data for all subdivisions, new construction, and substantial improvements
- The elevation, in relation to mean sea level, of the lowest floor, including basement, of all new construction or substantial improvement of structures
- Where floodproofing is used in lieu of elevation, the elevation, in relation to mean sea level, to which any structure or substantial improvement will be floodproofed
- Where an application requires Board review the application shall include certification by a registered professional engineer or architect demonstrating that the proposed development will not increase base flood elevations more than 0.25 foot
- Certification by a registered professional engineer or architect demonstrating compliance with the elevation requirements
- A description of the extent to which any watercourse will be altered or relocated as a result of the proposed development
- A Vermont Agency of Natural Resources Project Review Sheet for the proposal
- Proposed floodproofing must be supported by a FEMA Floodproofing Certificate

CERTIFICATE OF COMPLETION: Upon completing the project the Applicant must apply for and receive a Certificate of Completion to ensure the project conforms to the Special Flood Hazard Area Regulations. See Certificate of Completion Application for additional information.

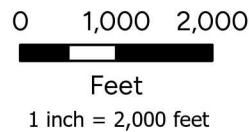
CONTACT Zoning Administrator: (802) 244-1012 | zoning@waterburyvt.com
 Mailing address: Waterbury Municipal Offices, 28 North Main Street, Suite 1, Waterbury, VT 05676
 Municipal Website: www.waterburyvt.com



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PROJECT LOCATION

THATCHER BROOK SEWER PROTECTION
TOWN OF WATERBURY

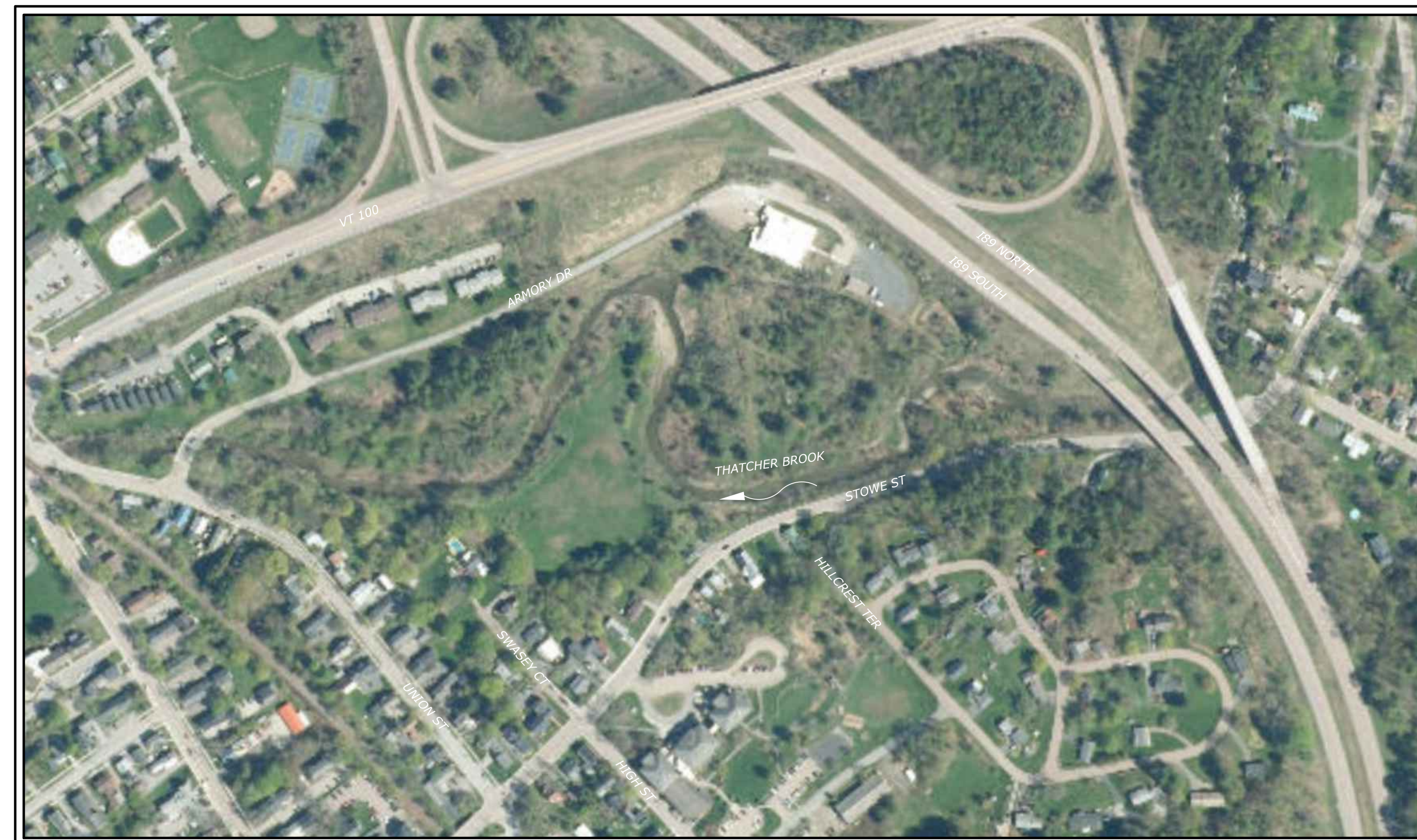


1 SOUTH MAIN ST
WATERBURY, VT 05661
802.882.8335

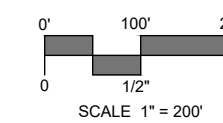
THATCHER BROOK SEWER PROTECTION AND BANK STABILIZATION

ARMORY DRIVE
EDWARD FARRAR UTILITY DISTRICT
WATERBURY, VERMONT

DRAFT FINAL DESIGN
MAY 11, 2026



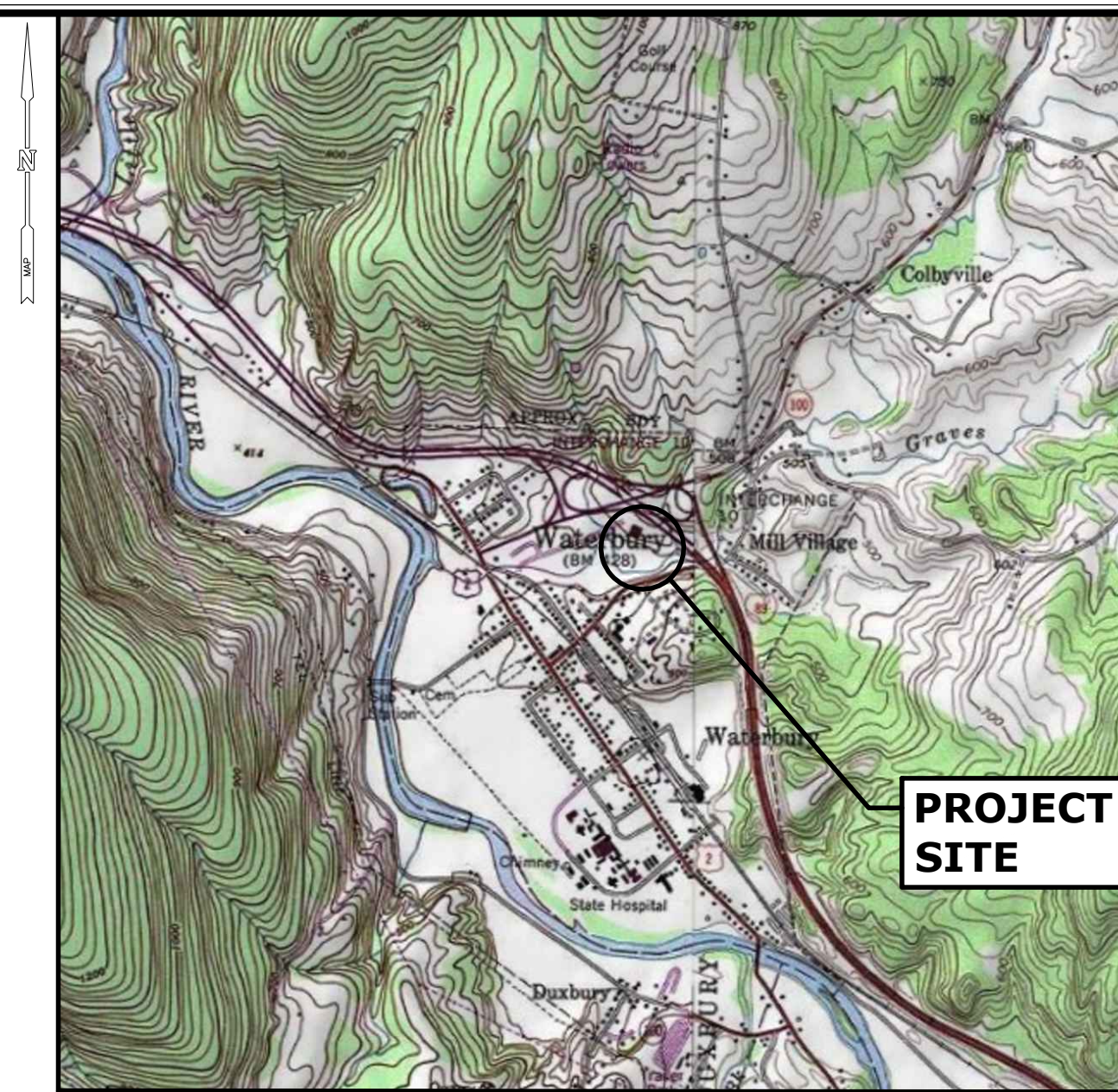
PROJECT SITE VICINITY MAP:



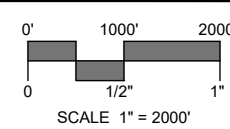
PREPARED BY:



1 SOUTH MAIN STREET
WATERBURY, VT 05676
802.882.8335
SLRCONSULTING.COM



LOCATION MAP:



PREPARED FOR:

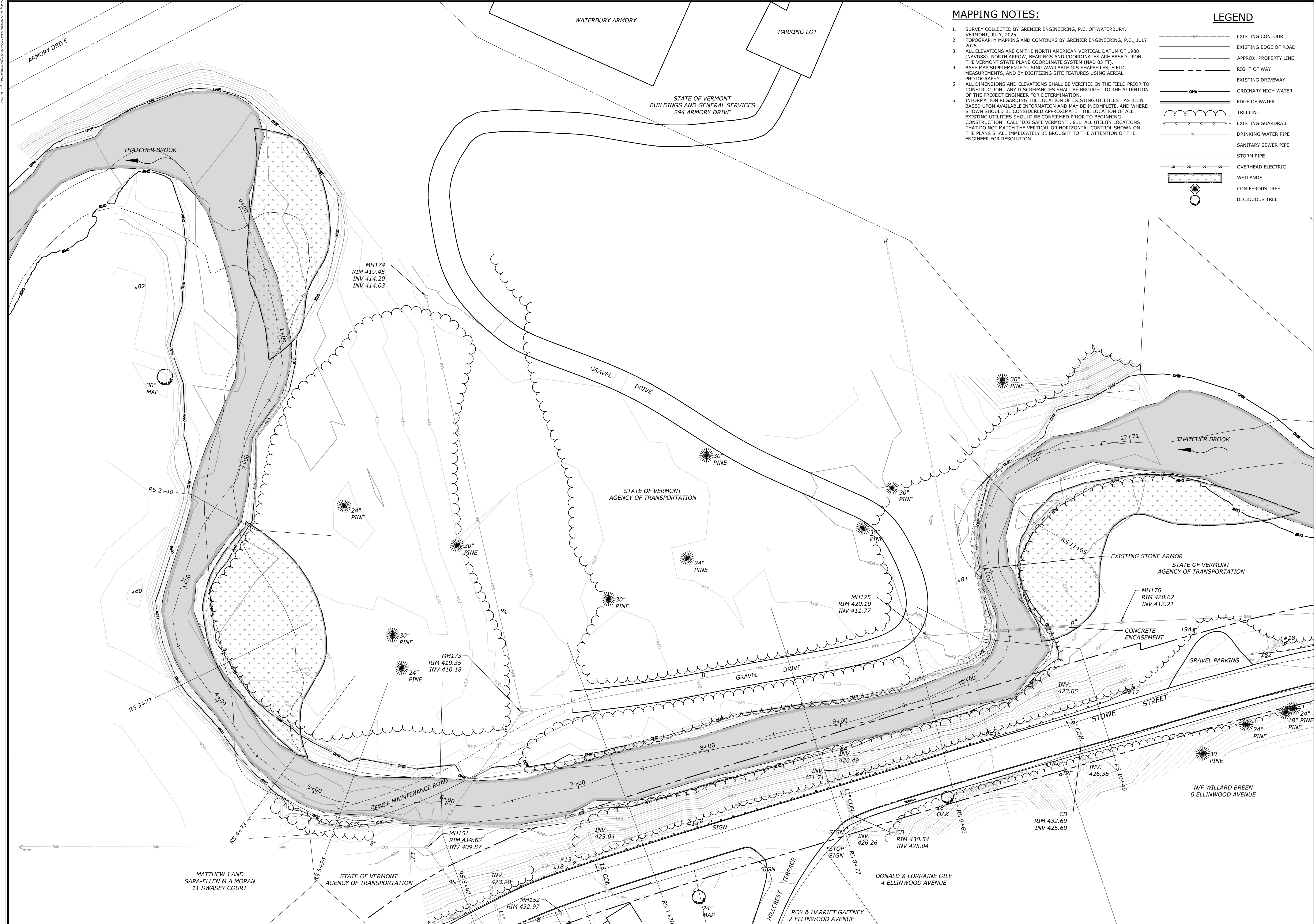
TOWN OF WATERBURY
28 NORTH MAIN STREET
WATERBURY, VERMONT 05676

LIST OF DRAWINGS

NO.	NAME	TITLE
01	-	TITLE SHEET
02	EX-1	EXISTING SITE PLAN
03	PR-1	PROPOSED SITE PLAN
04	CON-1	CONSTRUCTION ACCESS, SEQUENCE & CONTROLS
05	SEC-1	TYPICAL SECTIONS I
06	SEC-2	TYPICAL SECTIONS II
07	PRO-1	CHANNEL PROFILE
08	DET-1	DETAILS I
09	DET-2	DETAILS II



Know what's below.
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www.cbyd.com

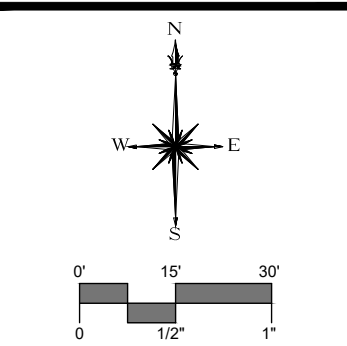


MAPPING NOTES:

1. SURVEY COLLECTED BY GRENIER ENGINEERING, P.C. OF WATERBURY, VERMONT, JULY, 2025.
2. TOPOGRAPHY MAPPING AND CONTOURS BY GRENIER ENGINEERING, P.C., JULY 2025.
3. ALL ELEVATIONS ARE ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). NORTH ARROW, BEARINGS AND COORDINATES ARE BASED UPON THE VERMONT STATE PLANE COORDINATE SYSTEM (NAD 83 FT).
4. BASE MAP SUPPLEMENTED USING AVAILABLE GIS SHAPEFILES, FIELD MEASUREMENTS, AND BY DIGITIZING SITE FEATURES USING AERIAL PHOTOGRAPHY.
5. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER FOR DETERMINATION.
6. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "DIG SAFE VERMONT" 811. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.

LEGEND

- EXISTING CONTOUR
- EXISTING EDGE OF ROAD
- - - - - APPROX. PROPERTY LINE
- - - - - RIGHT OF WAY
- - - - - EXISTING DRIVEWAY
- OHW --- ORDINARY HIGH WATER
- EDGE OF WATER
- TREELINE
- EXISTING GUARDRAIL
- DRINKING WATER PIPE
- SANITARY SEWER PIPE
- STORM PIPE
- OVERHEAD ELECTRIC
- WETLANDS
- CONIFEROUS TREE
- DECIDUOUS TREE



DESCRIPTION	DATE	BY

EXISTING SITE PLAN
 THATCHER BROOK SEWER PROTECTION
 AND BANK STABILIZATION
 ARMOY DRIVE
 WATERBURY, VERMONT

RKS	DJO	RKS
DESIGNED	DRAWN	CHECKED
SCALE: 1"=30'		
DATE: MAY 11, 2026		
PROJECT NO: 14942.00004		
SHEET NO: 2 OF 9		
SHEET NAME: EX-1		

DRAFT FINAL DESIGN

SEED MIX LIST:

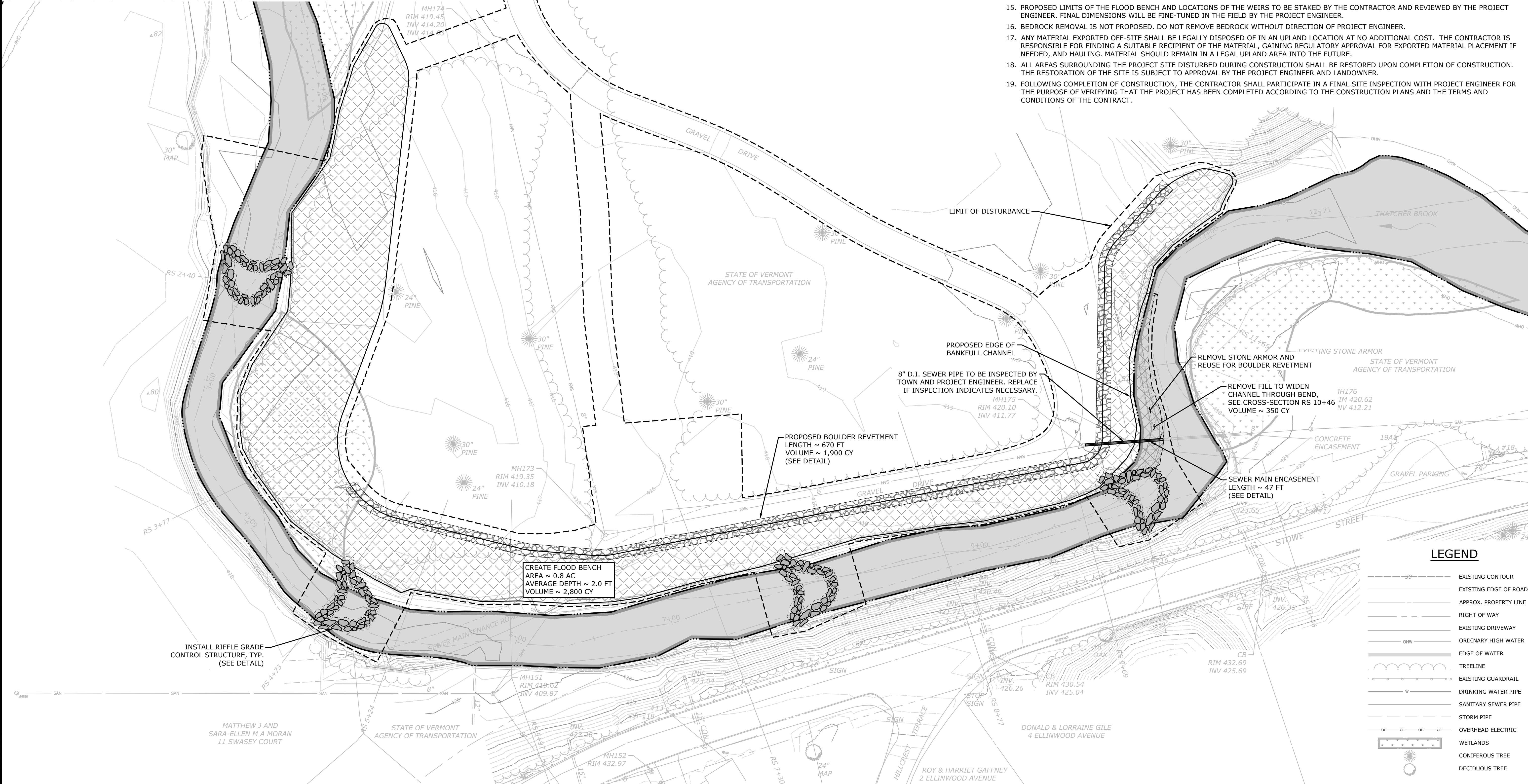
Seed Mix	Species	Application Rate	Area	Estimated Quantity
New England Conservation/Wildlife Mix	Virginia Wild Rye (<i>Elymus virginicus</i>), Little Bluestem (<i>Schizachyrium scoparium</i>), Big Bluestem (<i>Andropogon gerardii</i>), Red Fescue (<i>Festuca rubra</i>), Switch Grass (<i>Panicum virgatum</i>), Partridge Pea (<i>Chamaecrista fasciculata</i>), Panicleleaf Tick Trefoil (<i>Desmodium paniculatum</i>), Indian Grass (<i>Sorghastrum nutans</i>), Blue Vervain (<i>Verbena hastata</i>), Butterfly Milkweed (<i>Asclepias tuberosa</i>), Black Eyed Susan (<i>Rudbeckia hirta</i>), Common Sneezeweed (<i>Helenium autumnale</i>), Heath Aster (<i>Aster pilosus/Symphotrichum pilosum</i>), Early Goldenrod (<i>Solidago juncea</i>), Upland Bentgrass (<i>Agrostis perennans</i>)	25.0 Lbs. / Acre	1.5 Acres	37.5 Lbs
Fast Growing Annual	Winter Rye	45.0 Lbs. / Acre	1.5 Acres	67.5 Lbs

RESTORATION NOTES

- SEED ALL DISTURBED AREAS (E.G. FLOOD BENCH, NON-GRAVEL ACCESS AREAS, AND ANY BARE SOIL AREAS) WITH NEW ENGLAND CONSERVATION/WILDLIFE SEED MIX, FROM NEW ENGLAND WETLAND PLANTS OR APPROVED EQUAL. ALSO SEED WITH FAST GROWING ANNUALS SUCH AS WINTER RYE, BUCKWHEAT, OR OATS. APPLICATION RATE VARIES BY SPECIES CHOSEN.
- APPLY 2 INCHES STRAW MULCH OVER ALL SEEDED AREAS. HAY IS NOT ALLOWED.
- ANY DISTURBED SOIL SLOPES 2:1 OR STEEPER SHALL BE STABILIZED WITH EROSION CONTROL BLANKET PER DIRECTION OF PROJECT ENGINEER, SEE DETAIL.
- REMOVE TEMPORARY ACCESS ROADS AND TEMPORARY STOCKPILE AREAS.
- RESTORE ALL ACCESS ROUTES USED DURING CONSTRUCTION TO PRE-EXISTING OR IMPROVED CONDITIONS, FILL RUTS CREATED BY EQUIPMENT TO RESTORE GRADE AND REVEGETATE AS NEEDED.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO SITE FEATURES IF DAMAGED BY CONSTRUCTION ACTIVITIES.
- RESTORE ALL OTHER DISTURBED AREAS WITHIN THE PROJECT SITE SUCH AS TEMPORARY ACCESS ROADS, STOCKPILE AREAS, STAGING AREAS, AND SURPLUS DISPOSAL AREAS TO ORIGINAL OR IMPROVED CONDITION.
- THE SITE IS TO BE FULLY SEEDED AND MULCHED FOLLOWING CONSTRUCTION.

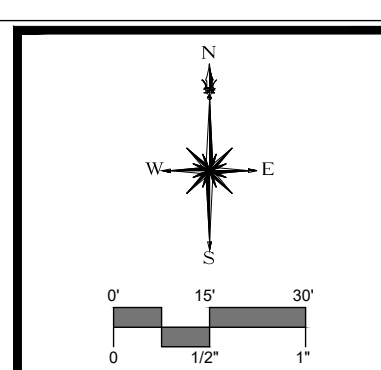
GENERAL NOTES

- THE CONTRACTOR SHALL DESIGNATE A SUPERINTENDENT AT THE START OF CONSTRUCTION AND THE CONTRACTOR'S SUPERINTENDENT SHALL BE ON-SITE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR AND HIS/HER JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR COMPLYING WITH THE JOB SPECIFICATIONS AND PERMIT REQUIREMENTS.
- THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "DIG SAFE" AT 1-888-DIG-SAFE (344-7233). THE CONTRACTOR SHALL TAKE PRECAUTIONS NOT TO DISTURB EXISTING UTILITIES.
- ALL STORAGE AND ACCESS ROUTES, PEDESTRIAN FENCES/BARRIERS, AND LIMITS OF CLEARING SHALL BE FLAGGED BY CONTRACTOR PRIOR TO CONSTRUCTION AND APPROVED BY PROJECT ENGINEER.
- THE ARMORY PROPERTY IS CURRENTLY USED AS A HOUSING SHELTER FOR THE STATE OF VERMONT. THE CONTRACTOR SHALL CAREFULLY WATCH FOR FAMILIES (ESPECIALLY CHILDREN) AS EQUIPMENT AND VEHICLES MOVE THROUGH THE SHELTER AREA.
- WORKING HOURS SHALL BE APPROVED BY PROJECT ENGINEER AND TOWN.
- NO CONSTRUCTION VEHICLES SHALL BE STORED, SERVICED, WASHED OR FLUSHED IN A LOCATION WHERE LEAKS, SPILLAGE, WASTE MATERIALS, CLEANERS, OR WATERS WILL BE INTRODUCED OR FLOW INTO WETLANDS OR WATERCOURSES. AN EMERGENCY MANAGEMENT PLAN AND SPILL KIT WILL BE MAINTAINED ON SITE AT ALL TIMES. IN THE EVENT OF AN ACCIDENTAL RELEASE, IMMEDIATELY STOP CONSTRUCTION WORK, CONTAIN THE SPILL, AND NOTIFY THE TOWN, APPROPRIATE AUTHORITIES AND PROJECT ENGINEER. THE SPILL KIT MUST CONTAIN AT A MINIMUM A CONTAINMENT BOOM, STRAW OR OTHER ABSORBENT MATERIALS, AND BUCKETS.
- STORAGE AND OR USE OF CHEMICALS, FUELS, OILS, GREASES, BITUMINOUS MATERIALS, SOLIDS, WASTE WASHINGS, AND CEMENT SHALL BE HANDLED APPROPRIATELY AS TO PREVENT LEACHING OR SURFACE RUNOFF INTO WETLANDS, WATERCOURSES, OR DRAINS. ALL APPROVED STORAGE FOR THESE MATERIALS MUST BE CONTAINED.
- EQUIPMENT SHALL BE REMOVED FROM THE RIVER PRIOR TO REFUELING. NO REFUELING OF EQUIPMENT ALLOWED IN THE WATER.
- ALL EQUIPMENT AND VEHICLES SHALL BE CLEANED PRIOR TO AND FOLLOWING CONSTRUCTION TO REDUCE THE POTENTIAL FOR SPREAD OF INVASIVE SPECIES AND SEDIMENT.
- THE PROJECT SITE IS SUBJECT TO FLOODING. THE CONTRACTOR SHALL MONITOR WEATHER FORECASTS AND STABILIZE THE CONSTRUCTION SITE AND REMOVE EQUIPMENT FROM FLOOD PRONE AREAS. ALL EQUIPMENT TO BE STORED ON HIGH GROUND.
- INSTREAM WORK SHOULD BE PERFORMED DURING LOW WATER.
- THERE SHALL BE NO CLAIMS FOR EXTRA COMPENSATION DUE TO DELAYS IN WATER CONTROL ASSOCIATED WITH HIGH WATER LEVELS FROM NATURAL EVENTS SUCH AS FLOODS.
- THE CONTRACTOR SHALL MAINTAIN ALL ROADWAYS, SIDEWALKS, AND WALKWAYS IN THE AREA FREE OF SOIL, MUD, AND CONSTRUCTION DEBRIS. CONSTRUCTION ENTRANCES MUST BE MAINTAINED AT EACH SITE ACCESS POINT. SEE PLANS AND DETAILS.
- CONTRACTOR MUST COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS THROUGHOUT DURATION OF PROJECT.
- PROPOSED LIMITS OF THE FLOOD BENCH AND LOCATIONS OF THE WEIRS TO BE STAKED BY THE CONTRACTOR AND REVIEWED BY THE PROJECT ENGINEER. FINAL DIMENSIONS WILL BE FINE-TUNED IN THE FIELD BY THE PROJECT ENGINEER.
- BEDROCK REMOVAL IS NOT PROPOSED. DO NOT REMOVE BEDROCK WITHOUT DIRECTION OF PROJECT ENGINEER.
- ANY MATERIAL EXPORTED OFF-SITE SHALL BE LEGALLY DISPOSED OF IN AN UPLAND LOCATION AT NO ADDITIONAL COST. THE CONTRACTOR IS RESPONSIBLE FOR FINDING A SUITABLE RECIPIENT OF THE MATERIAL, GAINING REGULATORY APPROVAL FOR EXPORTED MATERIAL PLACEMENT IF NEEDED, AND HAULING. MATERIAL SHOULD REMAIN IN A LEGAL UPLAND AREA INTO THE FUTURE.
- ALL AREAS SURROUNDING THE PROJECT SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED UPON COMPLETION OF CONSTRUCTION. THE RESTORATION OF THE SITE IS SUBJECT TO APPROVAL BY THE PROJECT ENGINEER AND LANDOWNER.
- FOLLOWING COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PARTICIPATE IN A FINAL SITE INSPECTION WITH PROJECT ENGINEER FOR THE PURPOSE OF VERIFYING THAT THE PROJECT HAS BEEN COMPLETED ACCORDING TO THE CONSTRUCTION PLANS AND THE TERMS AND CONDITIONS OF THE CONTRACT.



LEGEND

- EXISTING CONTOUR
- EXISTING EDGE OF ROAD
- APPROX. PROPERTY LINE
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- ORDINARY HIGH WATER
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- DRINKING WATER PIPE
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- OVERHEAD ELECTRIC
- WETLANDS
- CONIFEROUS TREE
- DECIDUOUS TREE



SLR
 SOUTH MAIN STREET
 WATERTOWN, VT 05671
 802.882.8335
 SLRCONSULTING.COM

DESCRIPTION	DATE	BY

PROPOSED SITE PLAN
THATCHER BROOK SEWER PROTECTION AND BANK STABILIZATION
 ARMORY DRIVE
 WATERBURY, VERMONT

RKS	DJO	RKS
DESIGNED	DRAWN	CHECKED
SCALE: 1"=30'		
DATE: MAY 11, 2026		
PROJECT NO: 14942.00004		
SHEET NO: 3 OF 9		
SHEET NAME: PR-1		

INVASIVE SPECIES HANDLING NOTES

- THESE NOTES PROVIDE BEST MANAGEMENT PRACTICES FOR PREVENTING THE SPREAD OF INVASIVE SPECIES. ADDITIONAL INFORMATION ON HANDLING AND IDENTIFICATION OF INVASIVE SPECIES CAN BE FOUND AT WWW.VTINVASIVES.ORG.
- LOCATE AND USE STAGING AREAS THAT ARE FREE OF INVASIVE SPECIES TO AVOID SPREADING SEEDS AND OTHER VIABLE PLANT PARTS.
- PLAN WORK SEQUENCE SO CONSTRUCTION EQUIPMENT IS MOVED FROM AREAS NOT INFESTED BY INVASIVE SPECIES, MOVING INTO AREAS INFESTED WITH INVASIVE SPECIES WHENEVER POSSIBLE.
- ALL EQUIPMENT, MACHINERY, AND HAND TOOLS USED IN AREAS WHERE INVASIVE PLANTS OCCUR SHOULD BE CLEANED OF ALL VISIBLE SOIL AND PLANT MATERIALS BEFORE LEAVING THE SITE OR MOVING TO AREAS NOT ALREADY INFESTED. CLEANING SHOULD OCCUR WITHIN THE AREA ALREADY INFESTED. ACCEPTABLE CLEANING METHODS INCLUDE:
 - PORTABLE WASH STATION THAT CONTAINS RUNOFF FROM WASHED EQUIPMENT
 - HIGH PRESSURE AIR
 - BRUSH, BROOM, OR HAND TOOLS USED WITHOUT WATER.
- EXCAVATED MATERIAL TAKEN FROM SITES THAT CONTAIN INVASIVE PLANTS CANNOT BE USED AWAY FROM THE SITE OF INFESTATION UNTIL ALL VIABLE PLANT MATERIAL IS RENDERED NONVIABLE. EXCAVATED MATERIAL MAY BE REUSED WITHIN THE EXACT LIMITS OF INFESTATION.
- ANY EXTRA EXCAVATED MATERIAL CONTAINING INVASIVE PLANT MATERIAL MUST BE STOCKPILED ON AN IMPERVIOUS SURFACE UNTIL VIABLE PLANT MATERIAL IS DESTROYED OR DISPOSED OF BY BURYING 5 FEET BELOW GROUND FOR PHRAGMITES AND KNOTWEED OR 3 FEET FOR OTHER SPECIES.
- SOIL AND OTHER MATERIALS CONTAINING INVASIVE PLANT MATERIAL MUST BE COVERED DURING TRANSPORT.
- INVASIVE SPECIES CAN BE RENDERED NONVIABLE BY THE FOLLOWING METHODS:
 - BURNING NOXIOUS WEEDS THAT ARE NOT SEEDING OR FLOWERING IS ACCEPTABLE. PLANT MATERIAL SHOULD BE TAKEN TO A DESIGNATED BURN PILE. MAKE SURE THAT ANY REMAINING ROOTS OR ROOT FRAGMENTS ARE NON-VIABLE. OBTAIN ALL NECESSARY PERMITS BEFORE BURNING.
 - BURYING NOXIOUS WEEDS IS ACCEPTABLE. SOME WEEDS SUCH AS JAPANESE KNOTWEED SHOULD BE BURIED AT LEAST 6' DEEP AND IDEALLY WOULD HAVE A BARRIER ON TOP OF THE DISPOSAL SITE.
 - CHEMICAL TREATMENT BY A CERTIFIED APPLICATOR WHO FOLLOWS THE LABEL DIRECTIONS IS ACCEPTABLE.
- INVASIVE SPECIES INCLUDING PHRAGMITES, AND PURPLE LOOSESTRIPE WILL BE MONITORED BY OTHERS CONCURRENTLY WITH THE ACOE MONITORING REQUIREMENTS AND ANY OBSERVATIONS AND/OR PROPOSED MANAGEMENT WILL BE INCLUDED IN THE ACOE REPORT.

CONSTRUCTION SEQUENCE NOTES

THIS PROPOSED CONSTRUCTION SEQUENCE IS PROVIDED AS A RECOMMENDED APPROACH. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A PROPOSED SEQUENCE TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.

- A** STEP A: PRE-CONSTRUCTION ACTIVITIES:
- SUBMIT A SEDIMENT AND EROSION CONTROL PLAN, CONSTRUCTION SEQUENCE, AND WATER CONTROL PLAN TO THE PROJECT ENGINEER FOR REVIEW SEVEN (7) DAYS PRIOR TO INITIATION OF CONSTRUCTION.
 - OBTAIN ANY NECESSARY WORK PERMITS AND SUBMIT SCHEDULES, PLANS, AND PRODUCT INFORMATION, INCLUDING THE EMERGENCY OPERATION PLAN TO THE PROJECT ENGINEER FOR REVIEW SEVEN (7) DAYS PRIOR TO INITIATION OF CONSTRUCTION.
 - CONTRACTOR SHALL PARTICIPATE IN A PRE-CONSTRUCTION SITE WALK WITH THE PROJECT ENGINEER AND OTHERS TO REVIEW ENVIRONMENTAL PERMIT REQUIREMENTS, CONTRACT PROVISIONS, PROJECT LIMITS, AND CONSTRUCTION DETAILS.
- B** STEP B: CONSTRUCTION SETUP ACTIVITIES:
- INSTALL CONSTRUCTION WARNING SIGNS AND SAFETY FENCING. INITIATE TRAFFIC CONTROL, AS NEEDED.
 - STAKE OUT LIMITS OF WORK AND INSTALL SEDIMENT AND EROSION CONTROLS, SAFETY FENCING, TEMPORARY CONSTRUCTION ACCESS, STAGING AND STORAGE AREAS. ALL TO BE REVIEWED BY PROJECT ENGINEER.
 - WAIT FOR LOW FLOW TO BEGIN IN-CHANNEL WORK.
- C** STEP C: COMPLETE BANK STABILIZATION:
- ESTABLISH WATER CONTROL.
 - EXCAVATE SEWER CROSSING FOR INSPECTION. REPLACE IF DETERMINED TO BE NECESSARY.
 - COMPLETE SEWER ENCASUREMENT.
- STEP D: COMPLETE IN-CHANNEL WORK:
- INSTALL RIPRAP FILTER BERM AND MAINTAIN WATER CONTROL IN THE WORK AREAS.
 - COMPLETE CHANNEL BEND WIDENING.
 - INSTALL FOUR RIFFLE GRADE CONTROL STRUCTURES.
- E** STEP E: COMPLETE FLOODBENCH:
- EXCAVATE FLOODBENCH TO PROPOSED GRADE.
 - INSTALL BOULDER REVETMENT.
- F** STEP F: SITE RESTORATION:
- COMPLETE SEEDING, MULCHING, AND EROSION CONTROL FABRIC INSTALLATION.
- G** STEP G: POST-CONSTRUCTION ACTIVITIES:
- PERFORM SITE RECOVERY. REMOVE ALL ACCESS ROADS AND CONSTRUCTION ENTRANCES, AND STABILIZE AND RESTORE ALL DISTURBED AREAS. COMPLETE SITE RESTORATION. RESTORE TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
 - COMPLETE POST-CONSTRUCTION SITE WALK WITH PROJECT ENGINEER.

EROSION CONTROL NOTES

- THE SEDIMENT AND EROSION CONTROL PRACTICES IMPLEMENTED AS PART OF THE PROJECT SHALL BE IMPLEMENTED AND MAINTAINED ACCORDING TO "THE LOW RISK SITE HANDBOOK FOR EROSION PROTECTION AND SEDIMENT CONTROL" GUIDANCE DOCUMENT FROM THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION, WHERE APPLICABLE IN CONSULTATION WITH PROJECT ENGINEER.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- CLEARING OF NATIVE VEGETATION FOR CONSTRUCTION ACCESS SHOULD BE MINIMIZED.
- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES. THE CONTRACTOR WILL VERIFY THE MAINTENANCE WEEKLY AND AFTER RAIN EVENTS AND REPORT IN WRITING TO PROJECT ENGINEER.
- THE PROJECT ENGINEER IS TO BE NOTIFIED IMMEDIATELY IF EXCESSIVE SEDIMENT EROSION TAKES PLACE, IF SIGNIFICANT FINE GRAINED SEDIMENT IS ENCOUNTERED OR IF POTENTIALLY CONTAMINATED SEDIMENTS ARE ENCOUNTERED (OILY, DARK COLOR, CHEMICAL ODOR).
- PERFORM WORK DURING LOW FLOW PERIODS. IF A LARGE FLOOD IS PREDICTED, STOP WORK, STABILIZE THE SITE AND REMOVE EQUIPMENT FROM FLOOD PRONE AREAS.
- STOCKPILE AND STAGING LOCATIONS AS INDICATED ON THE PLANS AND AS APPROVED BY THE PROJECT ENGINEER, SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE. WETLANDS OUTSIDE OF THE PROJECT AREA SHALL BE PROTECTED AND REMAIN UNDISTURBED THROUGHOUT THE DURATION OF THE PROJECT.
- NO DISTURBED EARTH WILL REMAIN EXPOSED FOR MORE THAN SEVEN (7) CONSECUTIVE DAYS WITHOUT APPLYING TEMPORARY OR PERMANENT STABILIZATION MEASURES AT DIRECTION OF ENGINEER.
- EXPOSED AREAS SHALL BE SEEDED AND MULCHED OR PROTECTED WITH EROSION CONTROL MATTING WITHIN 48 HOURS OF ACHIEVING FINAL GRADE.
- ANY DISTURBED SLOPES 2:1 OR STEEPER SHALL BE STABILIZED WITH EROSION CONTROL BLANKET PER DIRECTION OF PROJECT ENGINEER, SEE DETAIL.

WATER CONTROL PLAN

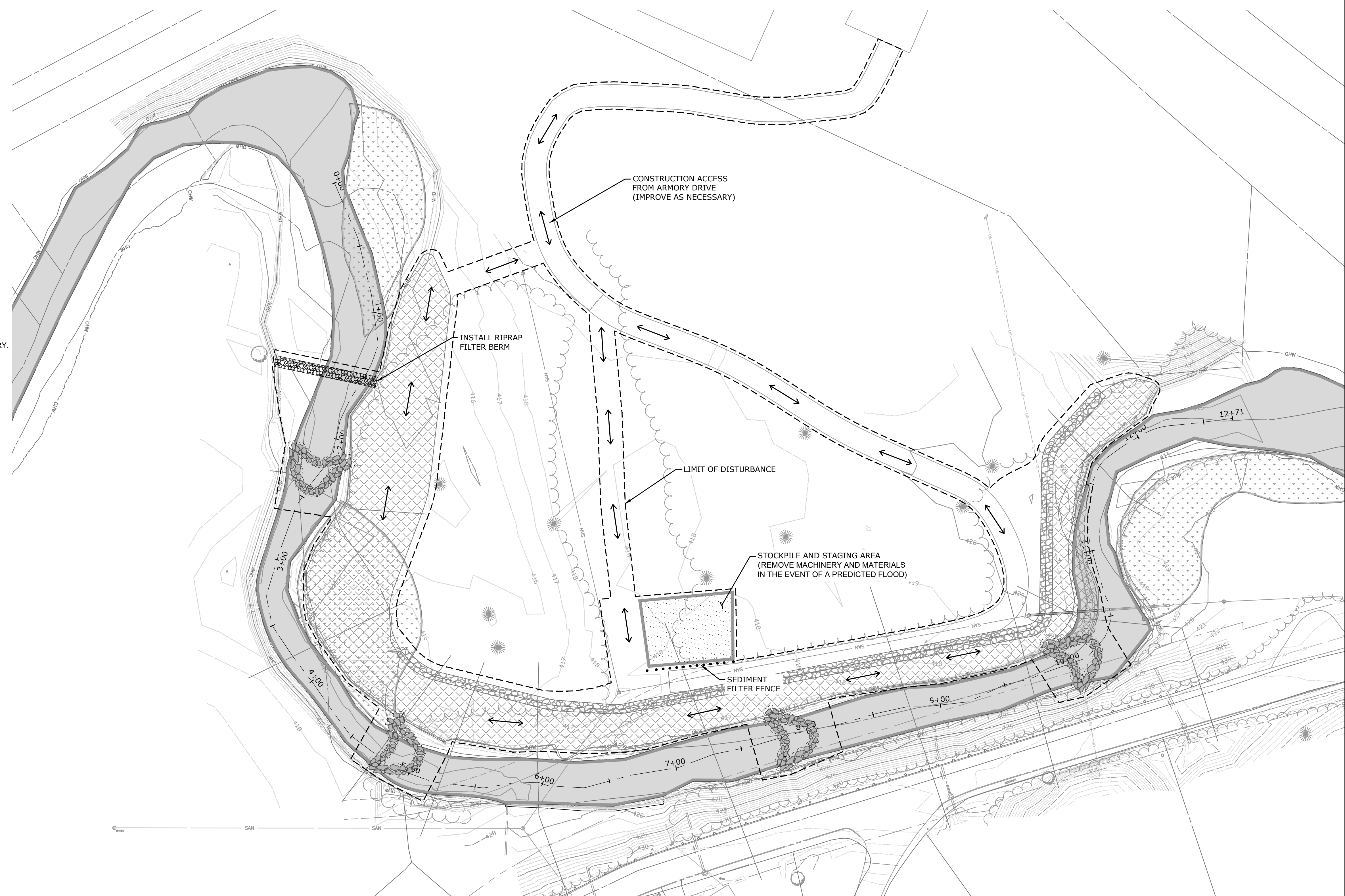
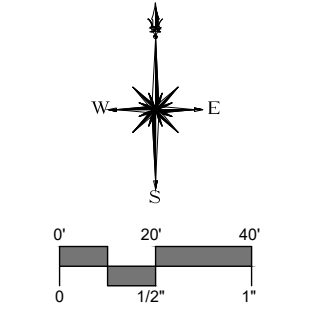
- THE PROPOSED WATER CONTROL PLAN IS PROVIDED AS A POSSIBLE APPROACH TO DEWATER THE WORK AREA TO MINIMIZE THE RELEASE OF SEDIMENTS. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A PROPOSED WATER CONTROL PLAN TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.
- BEGIN WORK DURING LOW WATER.
- COFFER DAM OF EXISTING COBBLE BAR MATERIAL, OR SANDBAGS SHALL BE USED TO DIVERT FLOWING WATER FROM THE WORK AREA AS NEEDED, OR APPROVED EQUAL.
- AS MUCH WORK AS POSSIBLE TO BE COMPLETED IN THE DRY TO MINIMIZE RIVER CHANNEL DISTURBANCE. AT A MINIMUM WORK TO TAKE PLACE SEPARATED FROM FLOWING WATER TO LIMIT TURBIDITY DISCHARGE.
- INSTALL DEWATERING BASIN OR OTHER APPROVED DEWATERING DEVICE TO RECEIVE WET SEDIMENT IF NOT IMMEDIATELY REMOVED FROM THE SITE. NO PERMANENT DISTURBANCE SHOULD TAKE PLACE DUE TO DEWATERING BASIN PLACEMENT.
- TEMPORARY COFFERDAMS WILL BE USED TO SEPARATE THE WORK FROM FLOWING WATER. SHOULD THE CONTRACTOR FEEL PUMPING IS BENEFICIAL, PRIOR APPROVAL WILL BE REQUIRED, AND PUMPING WILL BE PERFORMED AT THE CONTRACTORS EXPENSE. DIRTY WATER SHALL BE DISCHARGED TO A DEWATERING DISCHARGE BASIN OR OTHER DEVICE APPROVED BY THE PROJECT ENGINEER.

TRAFFIC MANAGEMENT NOTES

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS.
- ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- ALL CONSTRUCTION SIGNS SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF WORK.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

LEGEND

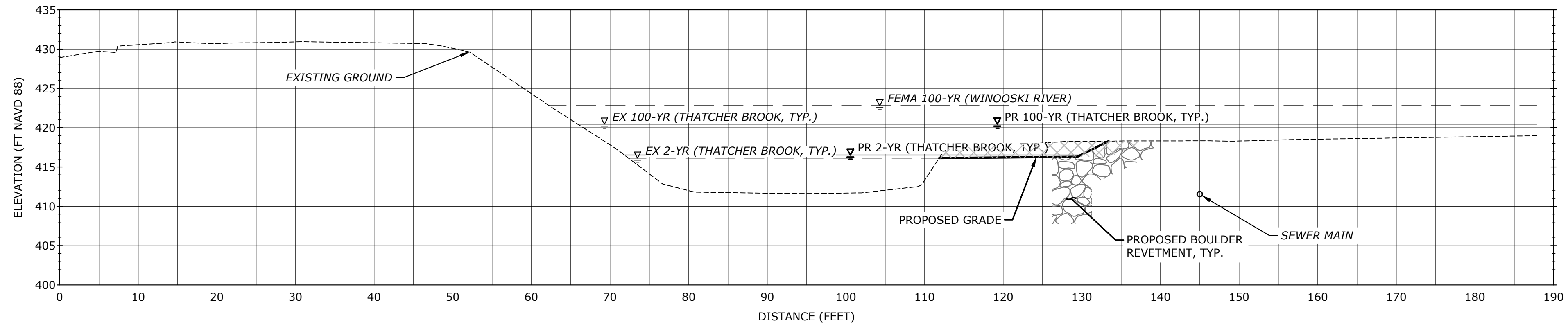
- EXISTING CONTOUR
- EXISTING EDGE OF ROAD
- APPROX. PROPERTY LINE
- RIGHT OF WAY
- EXISTING DRIVEWAY
- ORDINARY HIGH WATER
- EDGE OF WATER
- TREELINE
- EXISTING GUARDRAIL
- DRINKING WATER PIPE
- SANITARY SEWER PIPE
- STORM PIPE
- OVERHEAD ELECTRIC
- WETLANDS
- CONIFEROUS TREE
- DECIDUOUS TREE



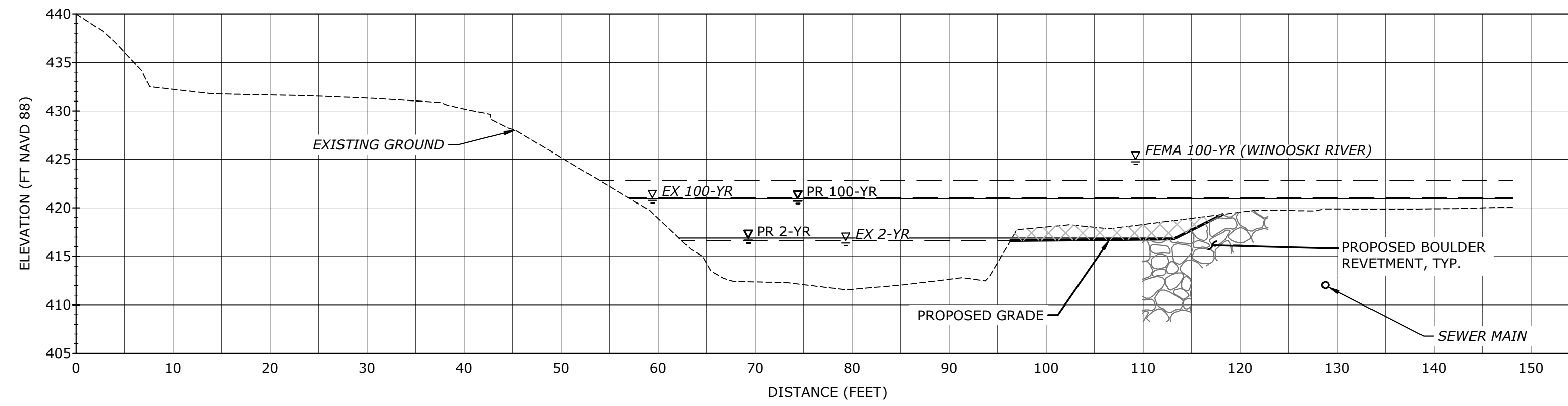
DESCRIPTION	DATE	BY

CONSTRUCTION ACCESS, SEQUENCE & CONTROLS
THATCHTER BROOK SEWER PROTECTION AND BANK STABILIZATION
 ARMORY DRIVE
 WATERBURY, VERMONT
 DRAFT FINAL DESIGN

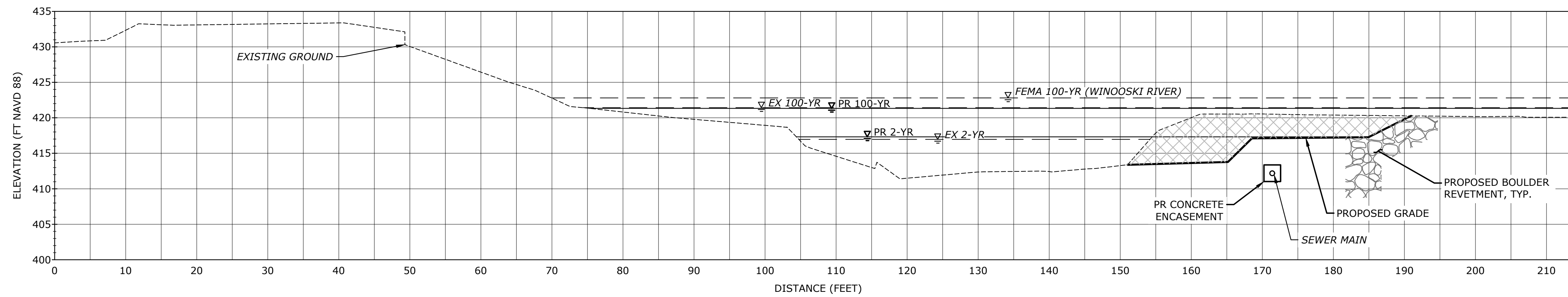
RKS	DJO	RKS
DESIGNED	DRAWN	CHECKED
1"=40'		
MAY 11, 2026		
14942.00004		
PROJECT NO.		
4 OF 9		
SHEET NO.		
CON-1		
SHEET NAME		



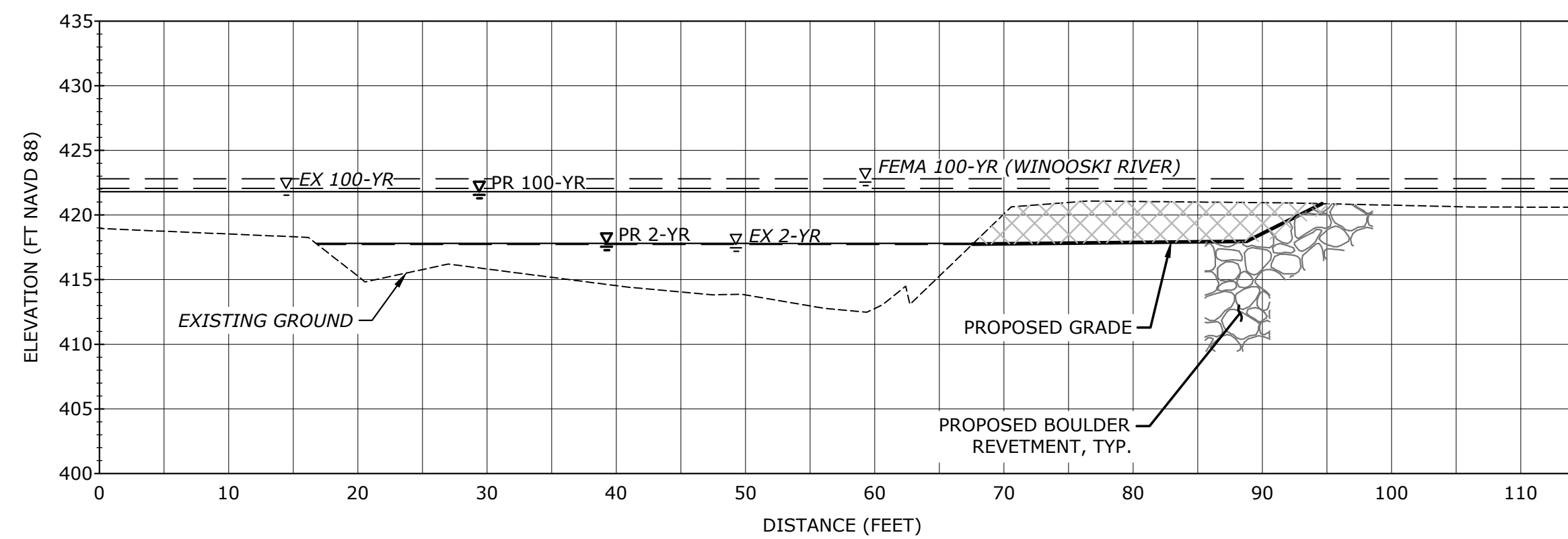
RS 8+77
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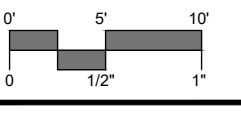
RS 9+69
SCALE: H: 1"=10', V: 1"=10'



RS 10+46 (SEWER LINE RIVER CROSSING AREA)
SCALE: H: 1"=10', V: 1"=10'



RS 11+65
SCALE: H: 1"=10', V: 1"=10'



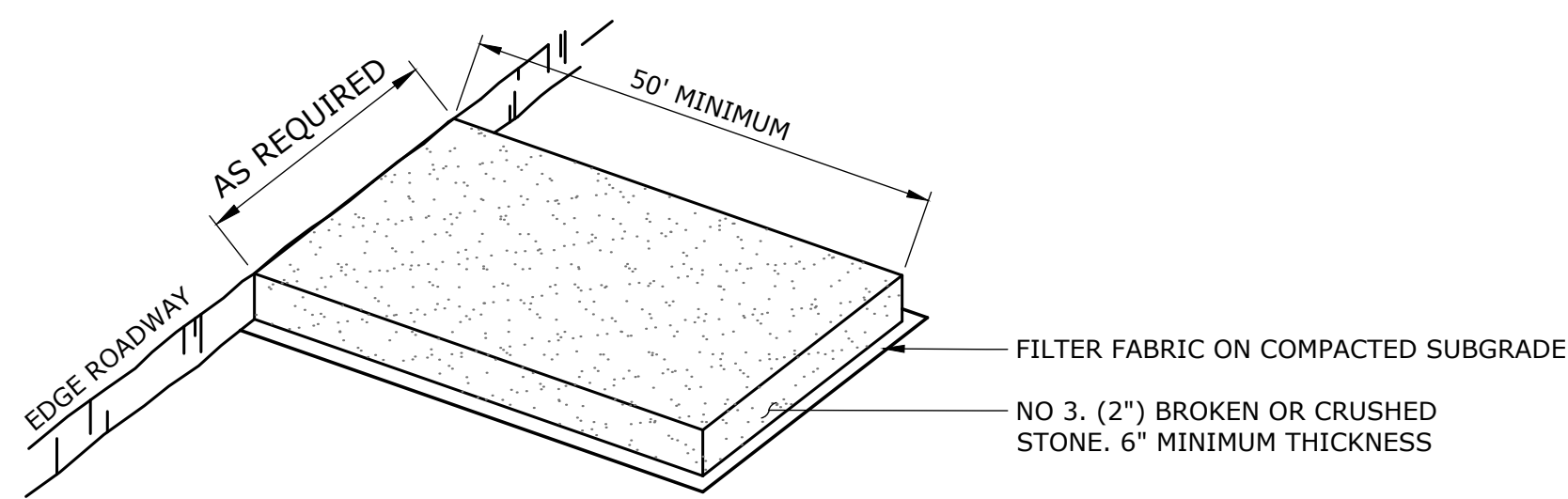
DESCRIPTION	DATE	BY

DRAFT FINAL DESIGN

TYPICAL SECTIONS II
THATCHER BROOK SEWER PROTECTION
AND BANK STABILIZATION
ARMORY DRIVE
WATERBURY, VERMONT

RKS	DJO	RKS
DESIGNED	DRAWN	CHECKED
SCALE: 1"=10'		
DATE: MAY 11, 2026		
PROJECT NO: 14942.00004		
SHEET NO: 6 OF 9		

SEC-2

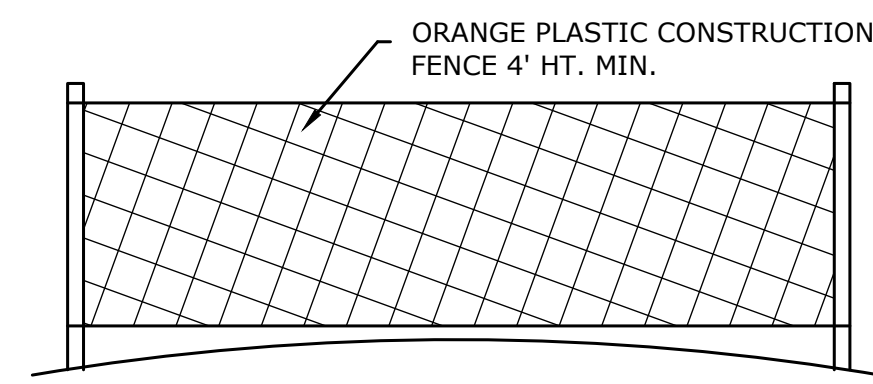


NOTES:

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

CONSTRUCTION ENTRANCE PAD

NOT TO SCALE

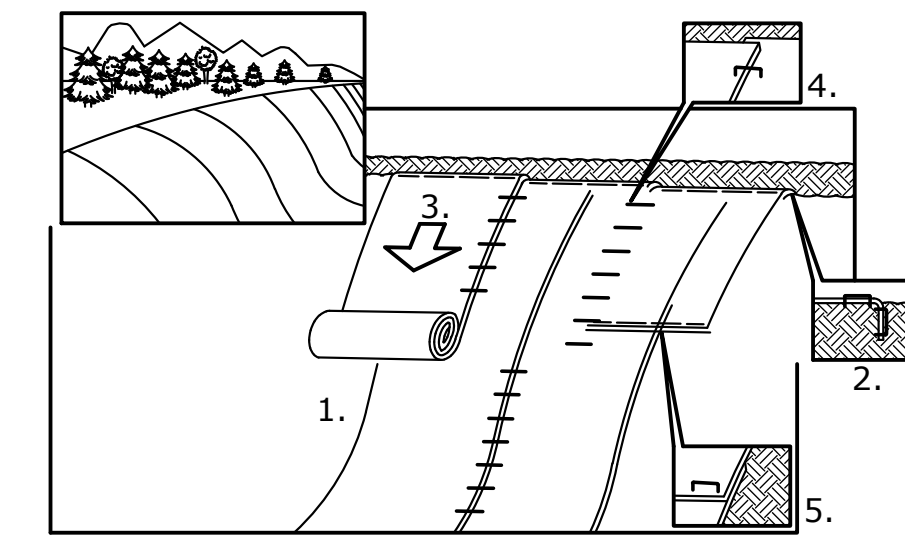


NOTE:

1. CONTRACTOR SHALL COORDINATE TEMPORARY FENCE INSTALLATION WITH OWNERS REPRESENTATIVES.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVALS PRIOR TO CONSTRUCTION.

ORANGE CONSTRUCTION SAFETY FENCING

NOT TO SCALE



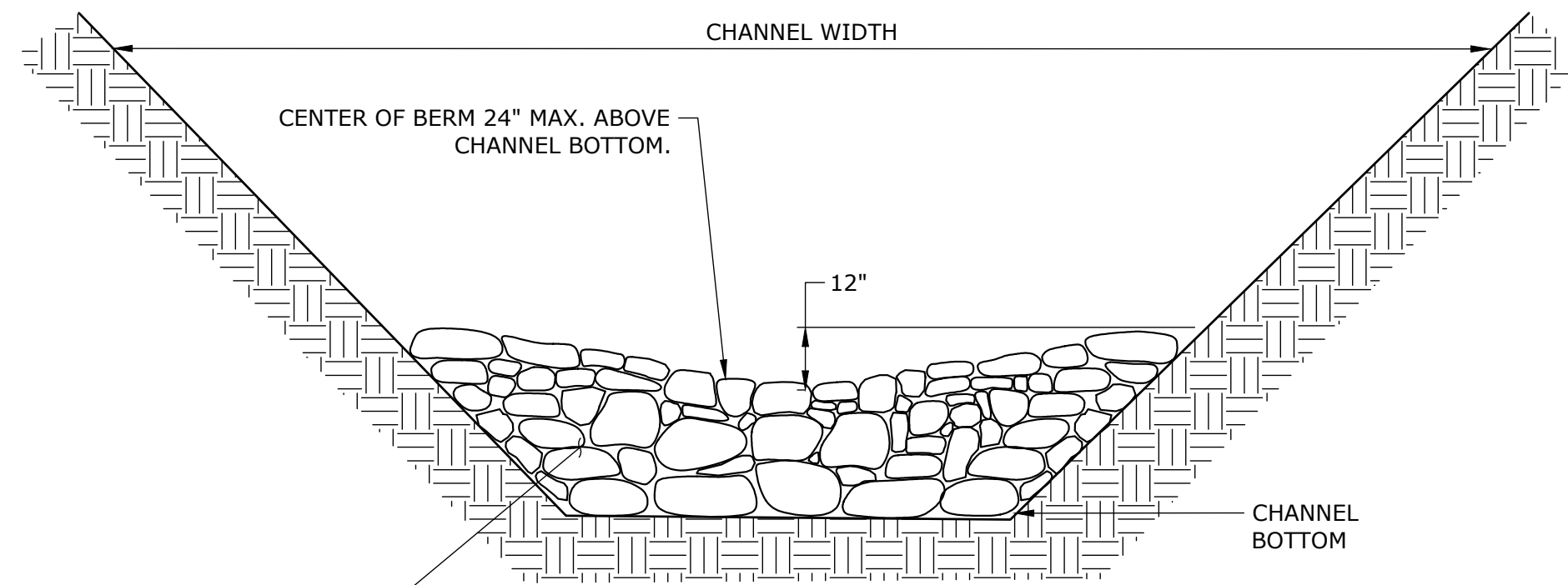
NOTES:

1. USE BIONET SHORT TERM BIODEGRADABLE EROSION CONTROL BLANKETS ITEM NUMBER S150BN, AS MANUFACTURED BY NORTH AMERICAN GREEN, 5401 ST. WENDEL-CYNTHIANA ROAD, POSEYVILLE, IN 47633, OR APPROVED EQUAL.
2. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING SCC225, DO NOT SEED PREPARED AREA. SCC225 MUST BE INSTALLED WITH PAPER SIDE DOWN.
3. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
4. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
5. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
6. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAP AREA, APPROXIMATELY 12" APART.

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

APPLICATION OF EROSION CONTROL BLANKET ON SLOPES

NOT TO SCALE

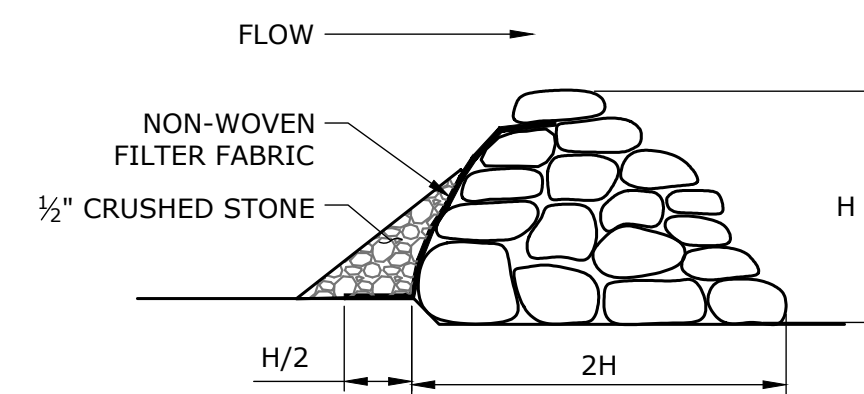


NOTES:

1. CHOKE STONES TO FILL VOIDS BETWEEN STONES
2. REMOVE PRIOR TO DEMOBILIZATION.

RIPRAP FILTER BERM

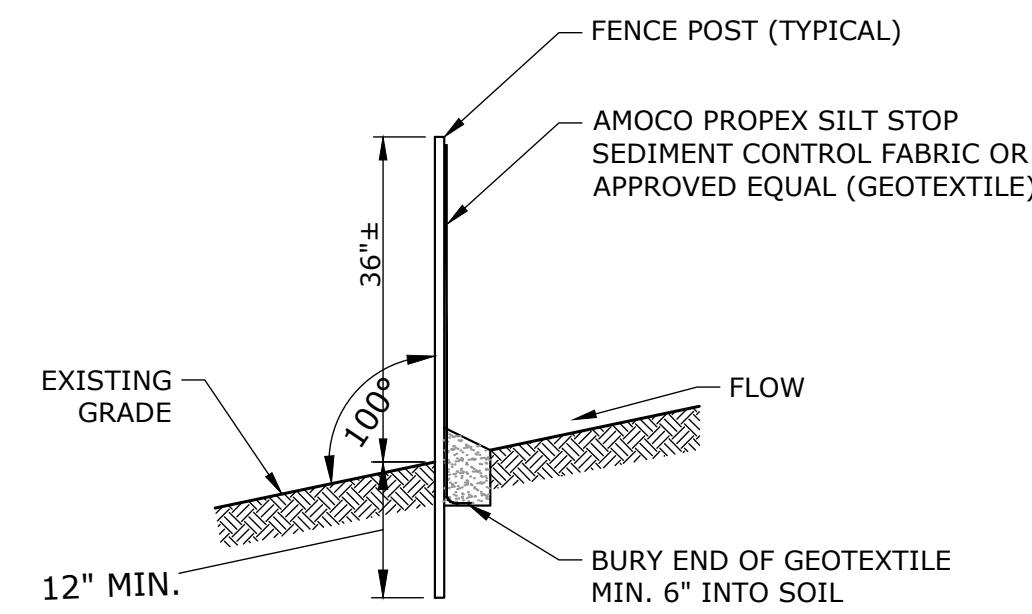
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RE-USE EXISTING STONE FROM AROUND DAM, OR LIGHT TYPE RIPRAP

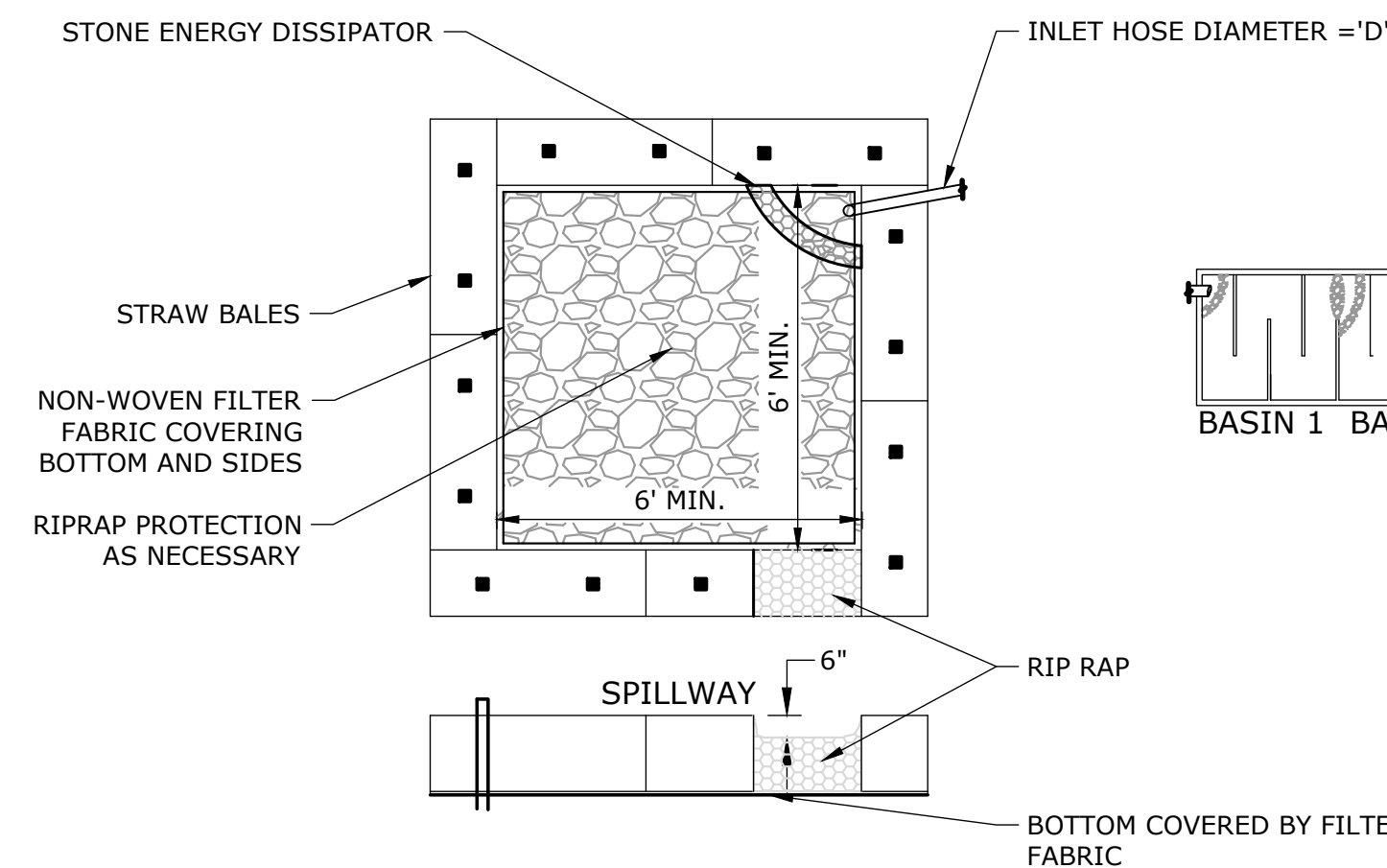
RIPRAP FILTER BERM

NOT TO SCALE



SEDIMENT FILTER FENCE

NOT TO SCALE

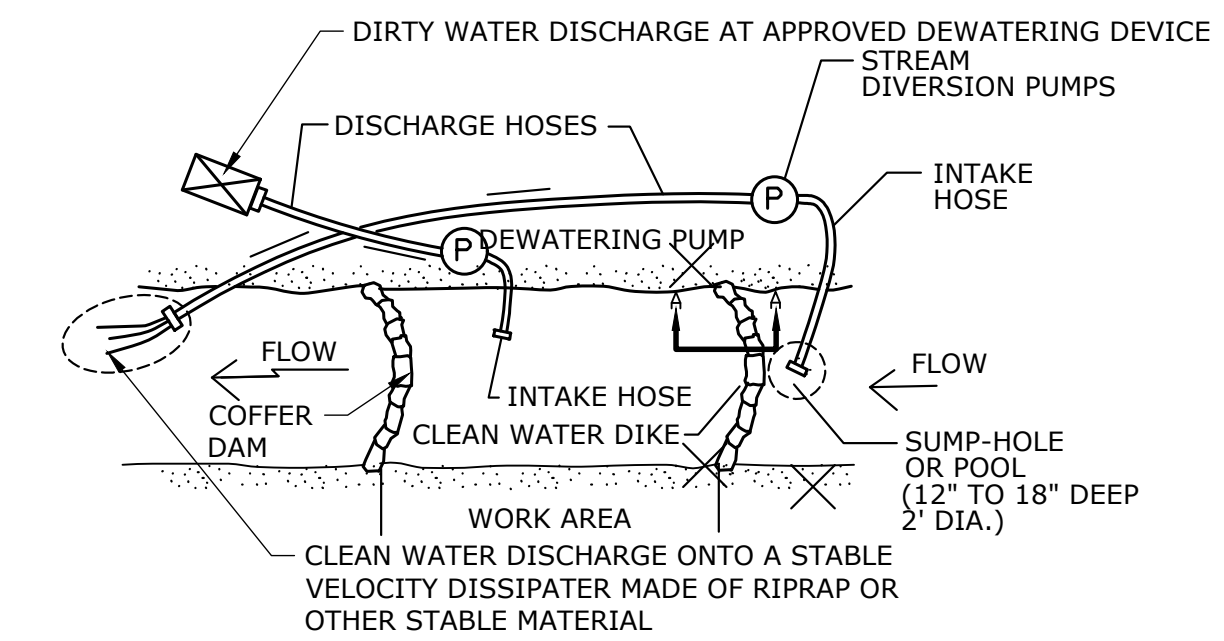


NOTES:

1. IF PUMPING VOLUME EXCEEDS BASIN CAPACITY, BASIN MAY BE USED IN SERIES.
2. INCREASE RIPRAP SIZE ON BASIN BOTTOM AS NECESSARY TO MAINTAIN SEDIMENT-FREE DISCHARGE WATERS

PUMP SETTLING BASIN

NOT TO SCALE



PUMP AROUND PRACTICE

NOT TO SCALE



DESCRIPTION	DATE	BY

THATCHER BROOK SEWER PROTECTION AND BANK STABILIZATION
ARMORY DRIVE
WATERBURY, VERMONT
DRAFT FINAL DESIGN

DETAILS II

RKS	DJO	RKS
DESIGNED	DRAWN	CHECKED

VARIES

MAY 11, 2026

14942.00004

9 OF 9

DET-2