PROJECT LOCATION CANADA FRANKLIN ORLEANS ESSEX AMOULE FRANKLIN ORANGE State of NEW YORK RUTLAND Commonwealth of MASSACHUSETTS GENERAL LOCATION MAP

VILLAGE OF ESSEX JUNCTION, VERMONT COUNTY OF CHITTENDEN TAP TA 16 (7) (GRAVEL WETLAND) MARCH 2019

PROJECT LOCATION:

ALONG THE EAST SIDE OF MANSFIELD AVENUE TO THE INTERSECTION OF

BRICKYARD ROAD

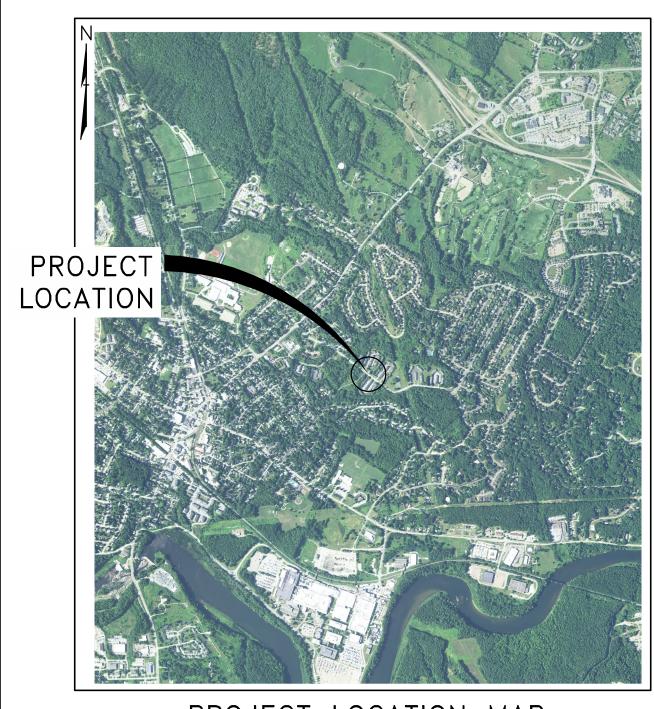
PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS CONTRACT INCLUDES THE

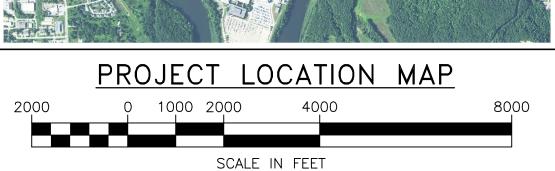
INSTALLATION OF A GRAVEL WETLAND IN THE EXISTING NATURAL DEPRESSION ADJACENT TO MANSFIELD DRIVE AND BRICKYARD ROAD. THE PROJECT INCLUDES THE REPLACEMENT OF A CULVERT WITH A STORM STRUCTURE

WITHIN THE NATRURAL DEPRESSION AND THE INSTALLATION OF A SECOND

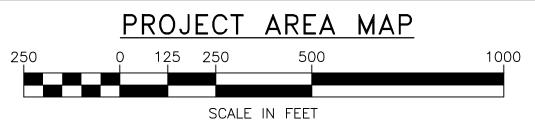
STORM STRUCTURE TO THE NORTH OF BRICKARD ROAD.

LENGTH OF PROJECT: APPROXIMATELY 475 FEET









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development

<u>LIST OF DRAWINGS</u>

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VTRANS STANDARDS

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BEDFORD, NH

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PROFESSIONAL SEAL

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CONSTRUCTION

FINAL PLANS

VILLAGE OF ESSEX JUNCTION 2 LINCOLN STREET ESSEX JUNCTION, VERMONT 05452

VILLAGE OF ESSEX TAP TA 16 (7)

(GRAVEL WETLAND)

SHEET TITLE

TITLE SHEET

DRAWN BY	DATE
CJR	MARCH 2019
CHECKED BY	D&K PROJECT#
MPH	123507
PROJ. ENG.	D&K ARCHIVE #
MPH	
SHEET	NUMBER

C1

SHEET 1 OF 11

QUALITY ASSURANCE PROGRAM: LEVEL 3

SURVEYED BY: DUBOIS & KING, INC. 2017

DATUM

VERTICAL: NAVD 86 (GEOID 12A)
HORIZONTAL: NAD 83 (2011) EPOCH 2010.0

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018, AND THE PUBLIC WORKS SPECIFICATIONS LOCATED IN APPENDIX A OF VILLAGE OF ESSEX JUNCTION LAND DEVELOPMENT CODE DATED DECEMBER 13, 2016, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS ARE INCORPORATED IN THESE PLANS.

GENERAL CONDITIONS

- 1. THE PROJECT AND PROPERTY OWNER IS THE VILLAGE OF ESSEX. AN OWNER'S REPRESENTATIVE WILL BE APPOINTED PRIOR TO CONSTRUCTION TO REPRESENT THE OWNER AND PROVIDE DIRECTION DURING THE PROJECT.
- 2. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET. A SET OF CONSTRUCTION PLANS AND TECHNICAL SPECIFICATIONS SHALL BE ON SITE AND IN GOOD CONDITION AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
- 3. THE PROJECT SITE HAS LIMITED AREA. SHOULD THE CONTRACTOR NEED ADDITIONAL STAGING OR LAY DOWN AREAS, THEY SHOULD WORK WITH THE LOCAL TOWN MUNICIPALITY TO IDENTIFY A SUITABLE AREA. ALL PRIVATE PROPERTY OWNER COMMUNICATION SHALL BE CONDUCTED THROUGH THE TOWN REPRESENTATIVE. EASEMENTS, RIGHTS OF WAY, AND RELATED PERMISSION FROM LANDOWNERS HAS BEEN OBTAINED BY OWNER. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL REVIEW CONDITIONS OF ENTRY AND ABIDE BY THEM.
- 4. CONTRACTOR SHALL INSTALL CONSTRUCTION LIMITS FENCE PRIOR TO START OF CONSTRUCTION, AND THERE SHALL BE NO DISTURBANCE BEYOND THE LIMITS OF FENCE.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY DUBOIS & KING INC. DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HERE ON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS, WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR ALL APPLICABLE REGULATIONS.
- 6. CONTRACTOR SHALL LAY OUT THE CONSTRUCTION BASELINES, STAKE OUT LIMITS OF PROPOSED WORK AND REVIEW WITH THE ENGINEER PRIOR TO CONSTRUCTION. ALL APPLICABLE EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO CONSTRUCTION.
- 7. CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL DEVICES AS NECESSARY AND IN A MANNER CONSISTENT WITH THE MOST CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL
- 8. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING, WATER DIVERSION, AND DEWATERING REQUIREMENTS NEEDED FOR THE PROJECT IN ACCORDANCE WITH REGULATIONS AND PERMIT REQUIREMENTS.
- 9. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR TECHNICAL SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION PRIOR TO PROCEEDING CONSTRUCTION ACTIVITIES.
- 10. LOCATE STAGING AREAS AWAY FROM SENSITIVE AREAS INCLUDING WETLANDS AND STREAM BUFFERS IN COMPLIANCE WITH REGULATIONS AND PERMIT REQUIREMENTS
- 11. TO LIMIT INADVERTENT DAMAGE TO AND UNAUTHORIZED REMOVAL OF TREES ADJACENT TO THE WORK AREA, CONTRACTOR SHALL COORDINATE WITH OWNER AND OBTAIN APPROVAL PRIOR TO CUTTING OR TRIMMING TREES WITHIN AND ADJACENT TO THE WORK AREA.
- 12. ALL MATERIALS USED ON THIS PROJECT SHALL CONFORM TO THE TECHNICAL SPECIFICATIONS. FOR ANY DISCREPANCY BETWEEN THE PLANS AND MATERIAL SPECIFICATIONS, THE TECHNICAL SPECIFICATIONS SHALL TAKE PRECEDENCE OVER NOTES CONTAINED WITHIN THESE PLANS.
- 13. VERIFY ALL INDICATED CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE COMMENCING ANY FABRICATION, ORDERING OF MATERIAL, OR PERFORMING ANY WORK. NOTIFY THE ENGINEER OF ANY CONDITIONS OR DIMENSIONS THAT WOULD PREVENT OR HAMPER THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- 14. THE PHRASES "REMOVE AND REPLACE" OR "REMOVE AND INSTALL" SHALL MEAN REMOVE EXISTING CONSTRUCTION AND REPLACE WITH NEW CONSTRUCTION MATERIALS AS NOTED ON THE DRAWINGS AND/OR SPECIFIED.

EXISTING INFORMATION

- 1. TOPOGRAPHIC SURVEY INFORMATION BASED ON AUGUST 2018 SURVEY DATA BY DUBOIS & KING, INC. ELEVATION DATUM IS BASED ON RTK GPS. THE DATUM OF THIS ELEVATION IS NAVD88.
- 2. THE LOCATION AND EXTENT OF UNDERGROUND UTILITIES SHOWN ON THE SITE DRAWINGS ARE BASED ON AVAILABLE INFORMATION. DUBOIS & KING, INC INCLUDES INFORMATION WITHOUT WARRANTING ITS ACCURACY IN ANY WAY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE OWNER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION SHALL BE DETERMINED AND AGREED UPON BY OWNER OR OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH WORK.
- 3. THE CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS OF THE SITE AND SURROUNDINGS PRIOR TO THE START OF ANY CONSTRUCTION.

CODES & PERMITS

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS PRIOR TO CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH PERMIT AS THEY APPLY TO THE WORK AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION.
- 2. THE FOLLOWING PERMITS ARE BEING SECURED FOR THIS PROJECT:
 - a.WETLAND CONDITIONAL USE DETERMINATION VT DEC b.CONSTRUCTION GENERAL PERMIT — VT DEC c.WETLAND GENERAL PERMIT — USACOE
- 3. THE CONTRACTOR IS RESPONSIBLE FOR BEING FAMILIAR WITH THE REQUIREMENTS OF THE PERMITS FOR COMPLIANCE DURING CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE PERMITS ON SITE DURING ALL CONSTRUCTION ACTIVITIES.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL WORK IN STRICT ACCORDANCE WITH ALL MUNICIPAL, STATE, & FEDERAL ORDINANCES, CODES, RULES, AND LAWS HAVING JURISDICTION. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK WHICH MANY NOT COMPLY COMPLETELY WITH ALL MUNICIPAL, STATE, & FEDERAL ORDINANCES, CODES, RULES, AND LAWS HAVING JURISDICTION. THESI INCLUDE. BUT ARE NOT LIMITED TO:
 - a.STATE OF VT ENVIRONMENTAL PROTECTION RULES, CHAPTER 1 b.THE AMERICAN DISABILITY ACT WITH REGARDS TO DIMENSIONS AND
 - c. VERMONT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION d.TOWN PERMITS AS REQUIRED.

UTILITY & EXCAVATION

- 1. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND DETERMINING ALL UTILITIES (ABOVE AND BELOW GROUND) WITHIN THE PROJECT LIMITS, AND TO TAKE THE NECESSARY PRECAUTIONS TO PROTECT UTILITIES DURING CONSTRUCTION. CONTACT DIG—SAFE AT 1—800—DIG—SAFE (WWW.DIGSAFE.COM) A MINIMUM OF 72 HOURS BEFORE GROUND DISTURBANCE. ALL DISTURBANCE OR DAMAGE TO UTILITIES BY CONTRACTOR ACTIVITIES WILL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL REPAIRS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER OR MUNICIPALITY.
- 2. CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL UTILITY RELOCATION AND INSTALLATION WITH THE APPROPRIATE UTILITY. THE APPROPRIATE UTILITY OR ITS AUTHORIZED REPRESENTATIVE WILL PERFORM ADJUSTMENTS OF ALL UTILITY STRUCTURES.
- 3. ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED ON THE DEMOLITION PLAN. UTILITIES SHALL BE MAINTAINED IN ACTIVE OPERATION AT ALL TIMES. PROVIDE BYPASS PIPING AND PUMPING WHERE REQUIRED. ALL NEW UTILITY SYSTEMS SHALL BE OPERATIONAL BEFORE ANY EXISTING SYSTEMS ARE ABANDONED OR REMOVED. IF EXISTING UTILITIES ARE TAKEN OUT OF SERVICE FOR CONNECTIONS, THE TIMING SHALL BE APPROVED BY THE ENGINEER.
- 4. THE LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES SHOWN ON THE CONTRACT DRAWINGS ARE APPROXIMATE. THE FOLLOWING SHALL BE PERFORMED:
- 5. VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE WORK PRIOR TO CONSTRUCTION.
 - a.EXERCISE EXTREME CAUTION WHEN WORKING ADJACENT TO EXISTING POWER, COMMUNICATIONS, WATER OR GAS LINES TO PREVENT DAMAGE TO THESE LINES.
 - b.IMMEDIATELY REPAIR ANY DAMAGE TO EXISTING UTILITIES IN A MANNER APPROVED BY THE ENGINEER, AT NO COST TO THE OWNER. C.ENSURE THAT ALL PIPES, CATCH BASINS, MANHOLES, SWALES, ETC. WITHIN AND NEAR THE AREA OF WORK ARE KEPT FREE FROM MATERIAL THAT WOULD HAMPER THE PERFORMANCE OF THE DRAINAGE SYSTEMS. FURNISH AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL DEVICES AS SHOWN ON THE CONTRACT DRAWINGS. UPON COMPLETION OF CONSTRUCTION, REMOVE ACCUMULATED SEDIMENT AND REMOVE CONTROL DEVICES.

MEETINGS. SUBMITTALS AND REQUIRED INSPECTIONS

- 1. THE CONTRACTOR SHALL PARTICIPATE IN AN ON-SITE PRE-CONSTRUCTION CONFERENCE. PRIOR TO CONSTRUCTION ACTIVITY INCLUSIVE OF MOBILIZATION.
- 2. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER MATERIAL SLIPS FOR ALL MATERIALS AND ITEMS USED ON THE PROJECT PURSUANT TO THE TECHNICAL SPECIFICATIONS.
- 3. THE ENGINEER WILL BE REQUIRED TO OBSERVE AND APPROVE CRITICAL ASPECTS OF THE CONSTRUCTION PRIOR TO EXECUTION. THESE CRITICAL ITEMS PREPARE LIST WILL BE DISCUSSED AT THE PRE—CONSTRUCTION CONFERENCE. FAILURE OF THE CONTRACTOR TO PROVIDE THE ENGINEER WITH A MINIMUM OF 48—HOUR NOTICE MAY RESULT IN DELAYS TO THE PROJECT AT NO ADDITIONAL COST TO THE OWNER. SHOULD CRITICAL ITEMS BE CONSTRUCTED PRIOR TO APPROVAL, THE ENGINEER MAY DIRECT FOR REMOVAL AND RECONSTRUCTION.

RESTORATION OF SURFACES

1. AT THE COMPLETION OF WORK, THE CONTRACTOR MUST RESTORE ACCESS ROADS, TOWN HIGHWAYS AND STAGING AREAS TO PRE—CONSTRUCTION CONDITION. RESTORATION MAY INCLUDE BUT NOT LIMITED TO PLACEMENT OF PAVEMENT OR GRAVEL ON EXISTING DRIVES AND / OR APPLICATION OF TOPSOIL, GRASS SEED, FERTILIZER, AND MULCH TO AFFECTED GRASSED AREAS.

SITE MAINTENANCE

- UTILIZE A MOBILE SWEEPER AND WATER TRUCK AS NEEDED FOR DUST CONTROL ALONG THE HAUL ROUTE AND IN AREAS MADE AVAILABLE FOR CONSTRUCTION.
- 2. PREVENT WATER PONDING RESULTING FROM CONSTRUCTION OPERATIONS. PROMPTLY REMOVE ANY PONDED WATER TO THE SATISFACTION OF THE ENGINEER.
- 3. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION WHICH ARE DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER.
- 4. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS, EQUIPMENT AND UNUSED MATERIALS FROM AUTHORITY PROPERTY AND RESTORE THE "AREA AVAILABLE FOR CONTRACTOR'S USE" TO ITS ORIGINAL CONDITION, AS APPROVED BY THE ENGINEER.

CIVIL NOTES

GRADING

- 1. ANY EXCESS MATERIAL TO BE DISPOSED OF OFF SITE SHALL BE REMOVED AT NO ADDITIONAL COST UNLESS OTHERWISE APPROVED IN ADVANCE BY THE ENGINEER. MATERIAL SHALL BE DISPOSED OF IN AN APPROVED LOCATION AWAY FROM WETLANDS, FLOODPLAIN, OR OTHER SENSITIVE AREAS.
- 2. ALL EXISTING TREE STUMPS LOCATED WITHIN 10 FEET OF THE NEW TOE OF SLOPE SHALL BE CUT FLUSH WITH THE GROUND. IF STUMPS ARE TO BE REMOVED, THE RESULTING HOLE SHALL BE BACKFILLED AND COMPACTED WITH EMBANKMENT MATERIAL, AS DIRECTED BY THE ENGINEER.
- 3. ALL REMOVED TOPSOIL SHALL BE SCREENED AND STOCK PILED FOR FUTURE REUSE. CONTRACTOR SHALL NOT MIX ANY WOODY VEGETATION, TREE STUMPS, ROOTS OR OTHER NON-SUITABLE MATERIAL WITH THE STOCK PILED TOPSOIL.
- 4. CONTRACTOR SHALL PROPERLY DISPOSE OF ALL STRIPPED WOODY VEGETATION, TREE STUMPS AND ROOTS REMOVED FROM THE EMBANKMENT. BURNING OF THIS MATERIAL SHALL ONLY BE ALLOWED WITH PRIOR WRITTEN AUTHORIZATION FROM THE LOCAL MUNICIPALITY. UNDER NO CIRCUMSTANCES SHALL MATERIAL BE BURNED OR OTHERWISE DISPOSED OF ON OR WITHIN 15 FEET OF AREAS WHERE NEW MATERIAL WILL BE PLACED.
- 5. COMPACTION TESTING IS REQUIRED ON BACKFILL AREAS. REFER TO APPLICABLE DETAILS.
- 6. PLACE 4 INCHES MINIMUM OF LOAM, TOPSOIL AND SEED ON ALL NEW EMBANKMENT MATERIAL AND DISTURBED AREAS. LOAM SHALL BE STRIPPED FROM THE EMBANKMENT IN AREAS TO BE DISTURBED, SCREENED AND REPLACED.

<u>DRAINAGE</u>

- 1. WHERE A DRAINAGE STRUCTURE IS TO BE CONSTRUCTED ON EXISTING PIPE, VERIFY THE LOCATIONS AND INVERTS OF THE EXISTING PIPE PRIOR TO CONSTRUCTION.
- 2. WHERE CONNECTIONS TO EXISTING DRAINAGE OR SANITARY STRUCTURES ARE REQUIRED, CUT NEATLY WITHOUT PERCUSSION INTO THE EXISTING STRUCTURE. THE MAXIMUM SIZE OF THE OPENING SHALL NOT EXCEED THE PIPE'S OUTER DIAMETER PLUS 3 INCHES. CONNECT THE NEW PIPE AND SEAL AROUND IT WITH CEMENT MORTAR.

SOIL EROSION & SEDIMENTATION CONTROL

CONTROL OF WATER DURING CONSTRUCTION

- ALL WORK SHALL TAKE PLACE IN THE DRY. THE CONTRACTOR SHALL DEWATER ALL WORK AREAS PRIOR TO DISTURBANCE.
- 2. THE CONTRACTOR IS REQUIRED TO PREPARE A CONTROL OF WATER PLAN IN ADVANCE OF MOBILIZING TO THE SITE. THE CONTROL OF WATER PLAN WILL BE REVIEWED AND APPROVED/DISAPPROVED DURING THE PRE—CONSTRUCTION SUBMITTAL PROCESS. THE CONTRACTOR SHALL REFER AND CONFORM TO THE TECHNICAL SPECIFICATIONS SPECIFYING WORK RELATED TO DEWATERING.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE CONTROL OF WATER THROUGHOUT THE DURATION OF THE PROJECT. ANY CHANGES TO THE APPROVED CONTROL OF WATER PLAN OR CONTROL OF WATER GUIDANCE AS OUTLINED HEREIN WILL BE SUBJECT TO APPROVAL OF THE ENGINEER AND THE VTDEC PRIOR TO IMPLEMENTATION.
- 4. DURING CONSTRUCTION, THE DEWATERED AREA SHALL REMAIN DEWATERED BY MEANS OF PUMPING. ANY TURBID DISCHARGE SHALL BE PUMPED AND DIRECTED TO AN APPROVED UPLAND AREA. THE CONTRACTOR IS ENCOURAGED TO PUMP DIRECTLY INTO FILTER BAGS TO FURTHER PREVENT TURBID WATER FROM REACHING THE DOWNSTREAM CHANNEL.
- 5. THE CONTRACTOR SHALL INSPECT THE COFFERDAM, CHECK DAMS AND BYPASS DAILY AND FOLLOWING RAIN EVENTS. MAINTENANCE SHALL TAKE PLACE PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES SCHEDULED FOR THAT DAY.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL OF WATER MEASURES FROM THE INITIATION OF CONSTRUCTION UNTIL THE CONTROL OF WATER MEASURES ARE REMOVED AT THE CONCLUSION OF THE PROJECT.

EROSION & SEDIMENTATION CONTROL PRACTICES

- 1. CONTRACTOR SHALL CONSTRUCT TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL FACILITIES PRIOR TO THE COMMENCEMENT OF EARTHWORK OPERATIONS. EROSION CONTROL MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, ITEMS IDENTIFIED WITHIN THIS PLAN SET OR WITHIN THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION (VTDEC) BEST MANAGEMENT PRACTICES (BMP'S) FOR EROSION CONTROL. SEE EROSION AND SEDIMENTATION CONTROL PLAN AND EROSION SEDIMENTATION CONTROL NOTES & DETAIL SHEET.
- 2. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EROSION AND SEDIMENTATION CONTROL DEVICES THROUGHOUT THE PROJECT SITE FOR THE DURATION OF THE CONSTRUCTION. THE CONTRACTOR SHALL (DAILY OR AS REQUIRED BASIS) INSPECT AND RECORD FINDINGS OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES TO ENSURE THAT ALL ITEMS ARE IN STABLE CONDITION. IN THE EVENT THAT SAID ITEMS ARE DETERMINED TO BE IN UNSATISFACTORY CONDITION, THE CONTRACTOR SHALL RECORD THE UNSATISFACTORY ISSUE, THE DATE OF THE UNSATISFACTORY FINDING, THE APPROPRIATE CORRECTIVE MEASURE AND THE DATE THE CORRECTIVE MEASURE WAS COMPLETED.
- 3. ALL DISTURBED AREAS SHALL NOT BE LEFT BARE FOR MORE THAN 14 DAYS, SHALL BE STABILIZED IN A MANNER TO MITIGATE EROSION OR SEDIMENTATION FROM EXITING THE LIMIT OF WORK AND SHALL BE RESTORED IN—KIND UPON COMPLETION OF THE PROJECT. THE MAXIMUM AREA ALLOWED TO BE DISTURBED AND LEFT UNSTABILIZED IS ONE ACRE PER DRAINAGE AREA.
- 4. ALL SLOPES GREATER THAN 1V:3H SHALL BE PROTECTED FROM EROSION WITH EROSION CONTROL BLANKETS OR OTHER APPROPRIATE SLOPE STABILIZATION CONTROL MEASURES PRIOR TO LOAMING, SEEDING AND MULCHING WITHIN 72 HOURS OF COMPLETION. CONTRACTOR SHALL MAINTAIN EROSION CONTROL PROTECTION UNTIL VEGETATION GROWTH HAS BEEN ESTABLISHED. ALL SLOPE STABILIZATION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION AND VERMONT BEST MANAGEMENT PRACTICES.
- 5. ALL SWALES AND DITCHES WITH SLOPES EXCEEDING 5% SLOPE SHALL BE PROTECTED FROM EROSION WITH MATTING. ALL MATTING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. ALL SWALES AND DITCHES SHALL BE PROPERLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
- 6. THE CONTRACTOR SHALL NOT PLACE PERMANENT PLANTING AND SEEDING PRIOR TO MAY 1st AND AFTER SEPTEMBER 1st. TEMPORARY SEEDING SUCH AS WINTER RYE MAY BE USED OUTSIDE OF THIS PERIOD.
- 7. ALL WORK MUST BE DONE IN A MANNER WHICH MINIMIZES THE POTENTIAL FOR THE DISCHARGE OF SEDIMENT—LADEN WATER. CONTRACTOR IS RESPONSIBLE FOR DIVERTING, PUMPING, OR OTHERWISE CONTROLLING WATER AS NECESSARY.
- 8. ALL EXISTING STORM DRAINAGE INLETS WITHIN THE WORK AREA OR THAT MAY BE AFFECTED BY THE WORK SHALL BE PROTECTED BY CATCH BASIN FILTER BASKETS, OR OTHER BMP TO PREVENT ENTRY OF SEDIMENT FROM RUNOFF WATERS INTO THE STORM DRAIN SYSTEM.

DuBois EKing Inc.

SO. BURLINGTON, VT

SPRINGFIELD, VT

BEDFORD, NH

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PROFESSIONAL SEAL

ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
28 NORTH MAIN ST.
RANDOLPH, VT 05060
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com

NOT FOR CONSTRUCTION FINAL PLANS

				ВУ
				DESCRIPTION
				DATE
				NO.

VILLAGE OF ESSEX JUNCTION 2 LINCOLN STREET ESSEX JUNCTION, VERMONT 05452

VILLAGE OF ESSEX TAP TA 16 (7)

(GRAVEL WETLAND)

SHEET TITLE

GENERAL NOTES

 DRAWN BY
 DATE

 CJR
 MARCH 2019

 CHECKED BY
 D&K PROJECT #

 MPH
 123507

 PROJ. ENG.
 D&K ARCHIVE #

 MPH
 DATE

SHEET NUMBER

C2

SHEET 2 OF 11

QUANTITY SHEET

			QUAN				
	SUMMARY O	F EST	TMATED QUANTITIES				DETAILED SUMMARY OF QUANTITIES
SGW	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING	QUANTITIES UNIT	ITEMS
0.6	0.6	ACRE	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.11			
2920	2920	CY	COMMON EXCAVATION	203.15			
170	170	LF	12" CPEP	601.0905			
10	10	LF	18" CPEP	601.0915			
55	55	LF	24" CPEP	601.0920			
2	2	EACH	CONCRETE CATCH BASIN W CAST IRON GRATE (6' DIAMETER)	604.11			
27	27	CY	STONE FILL, TYPE II	613.11			
120	120	HR	UNIFORMED TRAFFIC OFFICERS	630.10			
120	120	HR	FLAGGERS	630.15			
1	1	LS	MOBILIZATION/DEMOBILIZATION	635.11			
1	1	LS	TRAFFIC CONTROL	641.10			
54	54	SY	GEOTEXTILE UNDER STONE FILL	649.31			
36	36	LB	SEED	651.15			
300	300	LB	FERTILIZER	651.18			
1.2	1.2	TON	AGRICULTURAL LIMESTONE	651.20			
184	184	CY	TOPSOIL	651.35			
1.2	1.2	TON	HAY MULCH	653.10			
1460	1460	SY	ROLLED EROSION CONTROL PRODUCT, TYPE I	653.20			
40	40	LF	SILT FENCE, TYPE II	653.476			
1	1	LS	TREE PROTECTION	656.85			
1075	1075	LF	PROJECT DEMARCATION FENCE	727.04			
85	85	CY	SPECIAL PROVISION (PEA STONE 3/8")	900.608			
500	500	CY	SPECIAL PROVISION (WASHED STONE 3/4")(FPQ)	900.608			
210	210	CY	SPECIAL PROVISION (HYDRIC SOIL)	900.608			
6	6	LB	WETLAND PLANT SEEDS	N/A			

STATE OF VERMONT AGENCY OF TRANSPORTATION

		DETAILED SUMMARY OF QUANTITIES				PLANNING • EVELOPMENT
QUANTITIES	UNIT	ITEMS		28 NO RAND TEL: FAX: www. SO. BI SPR BE L/ Copyright	ORTH MA OLPH, V (802) 72 (802) 78 dubois-ki URLINGT RINGFIEL EDFORD ACONIA, 2019 DUB	AIN ST. T 05060 8-3376 i3-7101 ing.com TON, VT _D, VT , NH NH Bois & King Inc.
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DRAWN BY: CJR

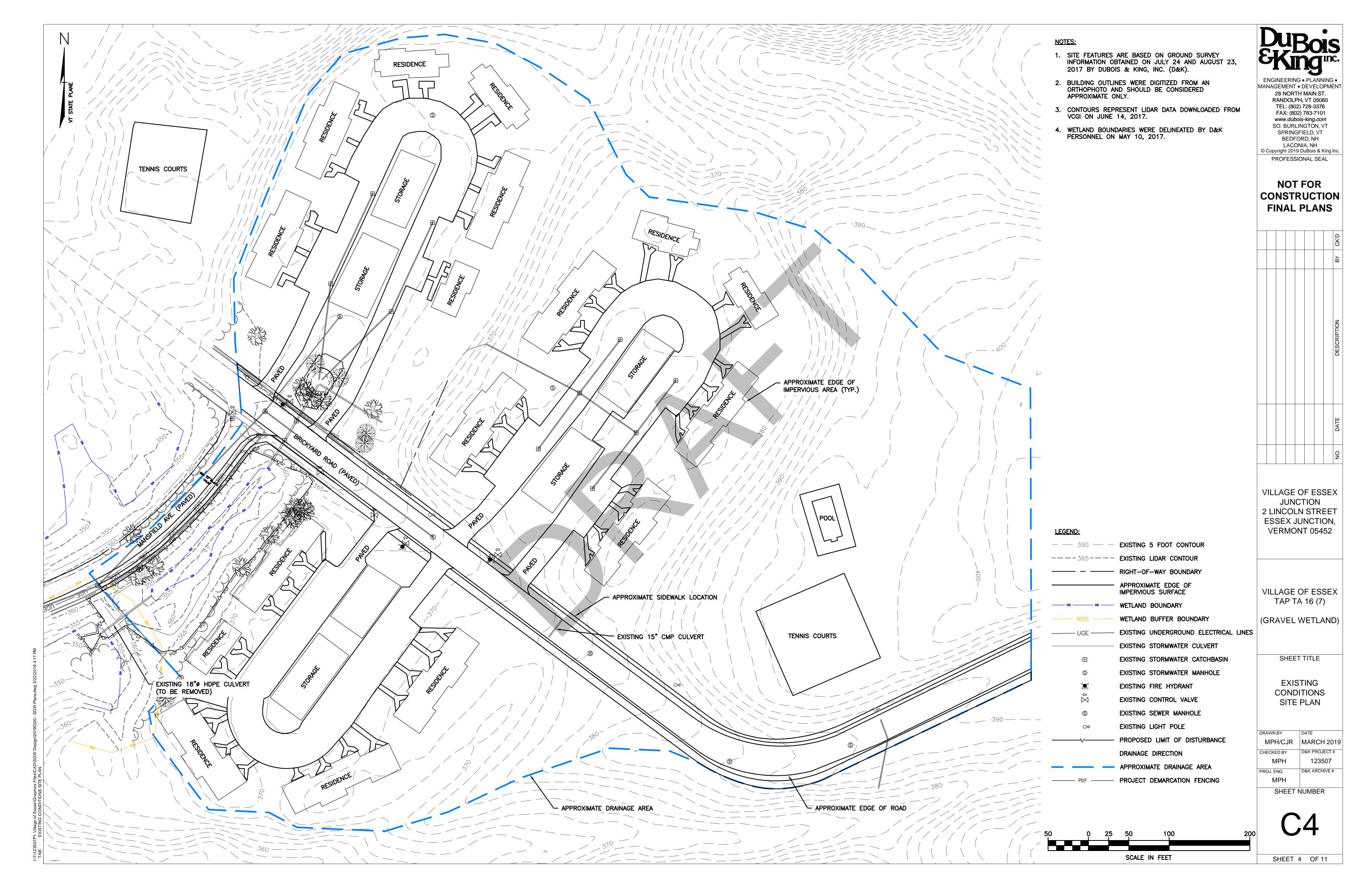
CHECKED BY: MPH SHEET 1 OF 1

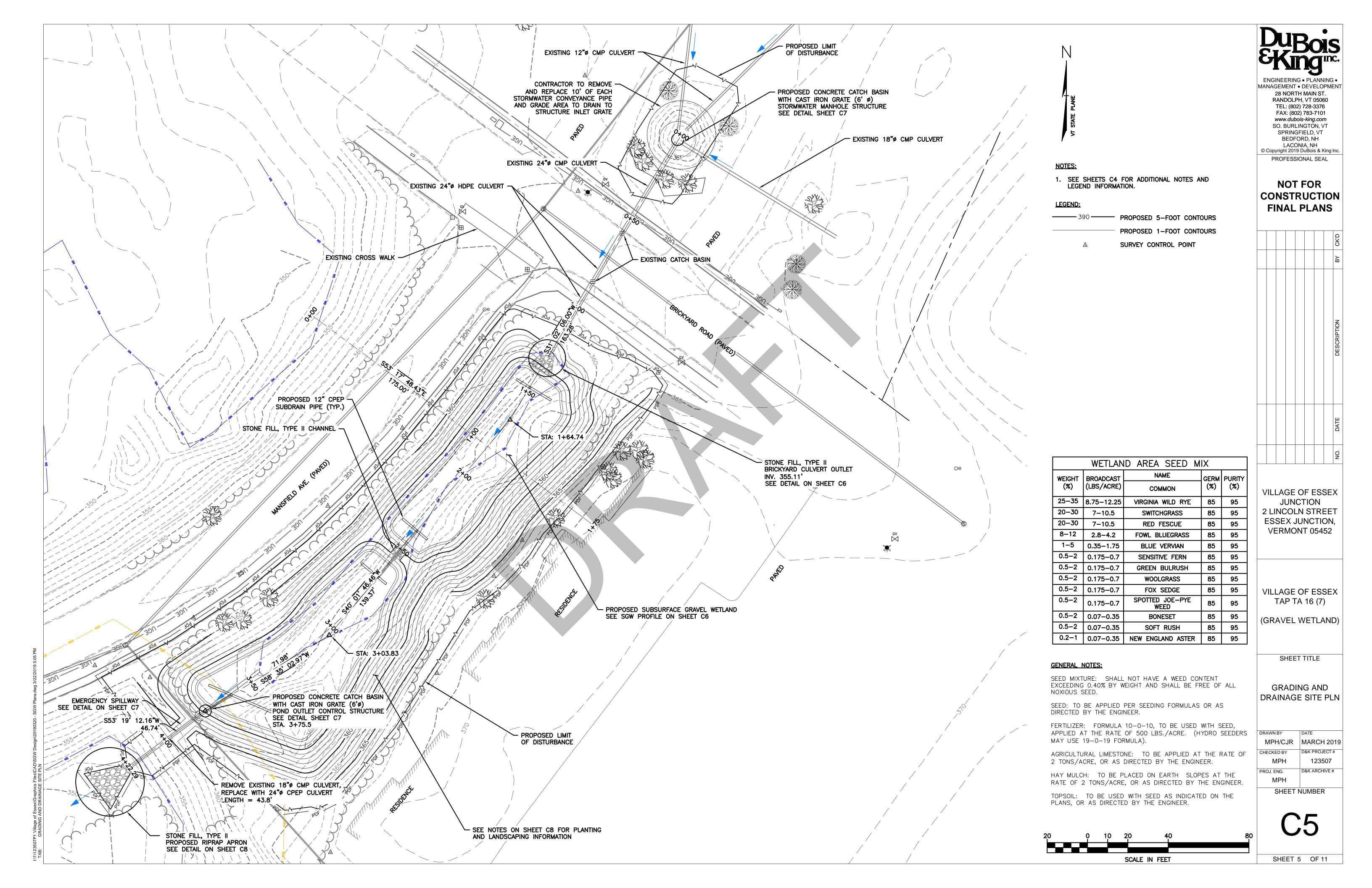
PROJECT LEADER: M. HILDENBRAND

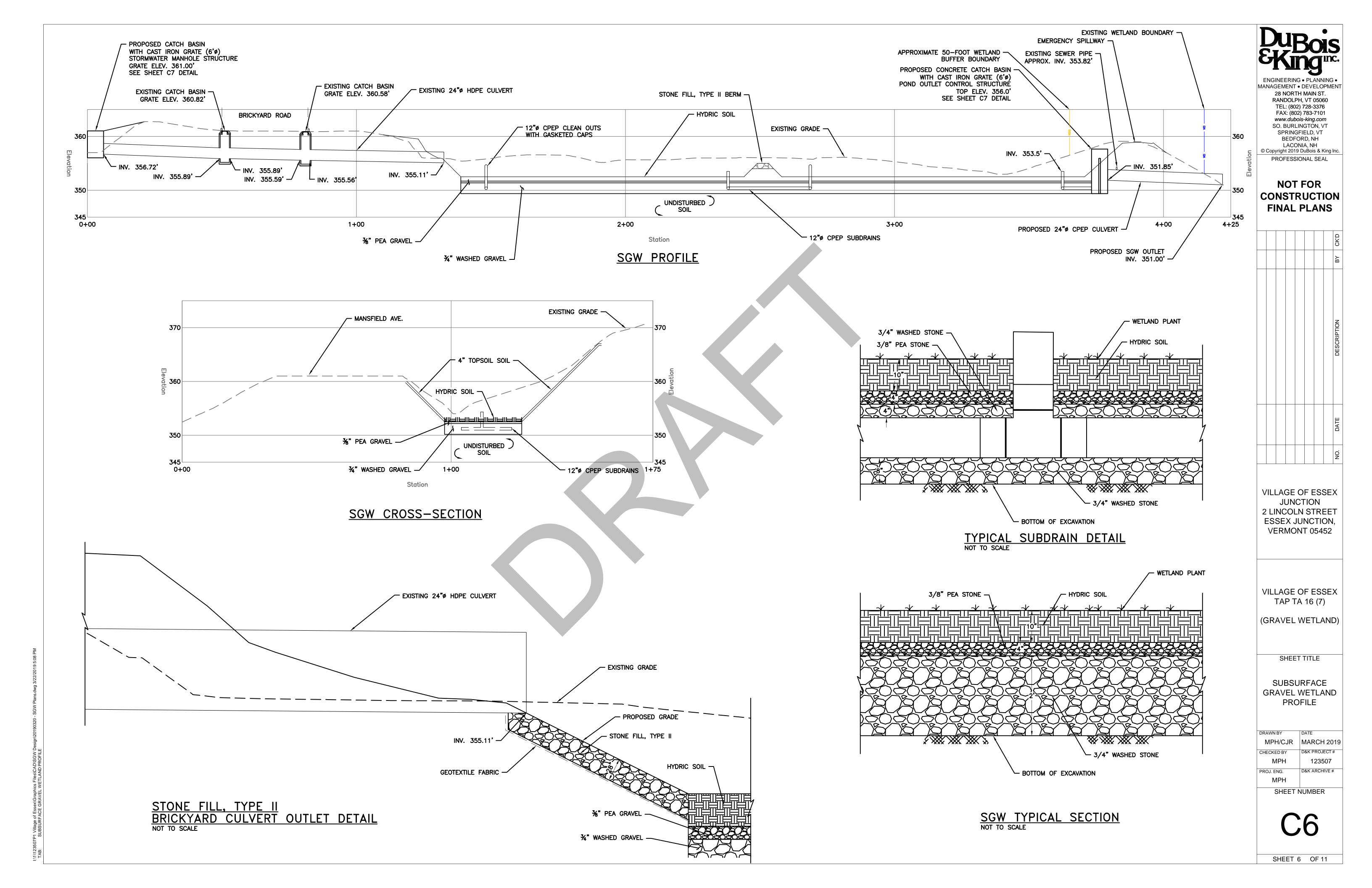
DESIGNED BY: C. RIVET

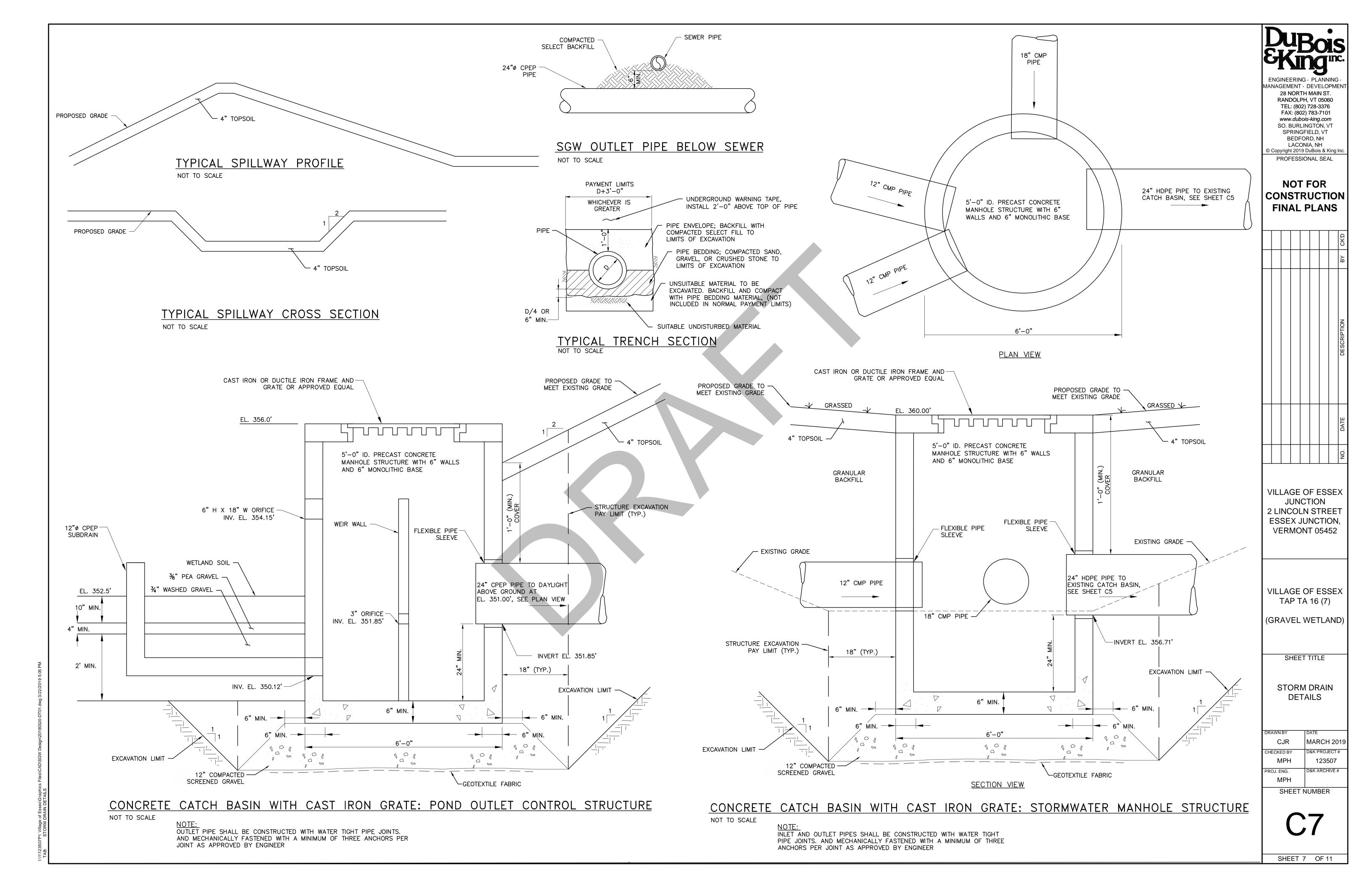
				ВУ
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SHEET 3 OF 11









EROSION PREVENTION FOR SIDE SLOPES NOT TO SCALE

APPLICATION NOTES:

- 1. THE PURPOSE OF MATTING ON SIDE SLOPES IS TO REDUCE EROSION AND AID THE ESTABLISHMENT OF VEGETATION.
- 2. EROSION CONTROL MATTING SHALL BE USED FOR THE FOLLOWING REASONS:
- * SIDE SLOPES > 3:1 (H:V)
- * AREAS WHERE SEED AND MULCH WILL NOT STAY IN PLACE ALONE
- * WHERE SEEDING IS OUTSIDE THE GROWING SEASON.

GENERAL NOTES:

- 1. GRADE AND SMOOTH THE SLOPE TO PROVIDE GOOD MATTING TO SOIL SURFACE CONTACT.
- 2. APPLY FERTILIZER, LIME, AND SEED PRIOR TO PLACING MATTING.
- 3. ANCHOR MATTING AS SHOWN, UTILIZING ANCHOR STAPLES. STAPLE PLACEMENT SHALL BE DETERMINED BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 4. UNROLL MATTING VERTICALLY DOWN SLOPE IN THE DIRECTION OF WATER FLOW.
- 5. OVERLAP UPPER MATTING OVER LOWER MATTING AS SHOWN.
- 6. OVERLAP ADJACENT MATTING AS SHOWN.
- 7. CUT EXCESS MATTING AT END OF SLOPE AND ANCHOR THE END.
- 8. EROSION CONTROL MATTING SHALL BE 100% BIODEGRADABLE.
- . MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS MINIMUM AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
- 10. MATTING SHALL BE REPAIRED AND RESTAPLED AS NECESSARY TO ENSURE PROPER FUNCTION.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE INSTALLATION, INSPECTION AND MAINTENANCE OF ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES.

WINTER CONSTRUCTION:

SITE CONSTRUCTION MAY CONTINUE THROUGH THE WINTER MONTHS ON THIS PROJECT. IT IS IMPERATIVE THAT ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES BE IN PLACE AND FUNCTIONING TO ENSURE THEIR EFFECTIVENESS THROUGH THE WINTER AND SPRING SEASON. WINTER IN VERMONT CAN DIMINISH THE EFFECTIVENESS OF CONTROLS AND PREDISPOSE A SITE TO SEVERE EROSION AND SEDIMENTATION. DISTURBED AND BARE SOIL THAT IS WELL—FROZEN IS QUITE RESISTANT TO EROSION. HOWEVER, SEVERE EROSION OCCURS DURING THE MIDWINTER AND SPRING THAWS WHEN MELTING SNOW, THAWING SOILS AND HEAVY RAINS PRODUCE INTENSE RUNOFF OVER SATURATED UNSTABLE SOILS. FOR THESE REASONS, SOIL DISTURBANCES SHALL BE STABILIZED BY PRIOR TO THE START OF THE WINTER CONSTRUCTION SEASON (OCTOBER, 15TH). ALL EARTHWORK CONTINUING DURING THE WINTER CONSTRUCTION SEASON SHALL BE STABILIZED IN ACCORDANCE WITH THE STATE OF VERMONT EROSION PREVENTION AND SEDIMENT CONTROL REQUIREMENTS FOR WINTER CONSTRUCTION.

INSPECTION AND MAINTENANCE:

INSPECT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MORE FREQUENTLY IN THE WINTER AND SPRING THAN IN THE SUMMER. PAY CAREFUL ATTENTION TO WEATHER PREDICTIONS. WATCH FOR PREDICTED THAWS OR HEAVY RAINS. BEFORE SUCH EVENTS, CHECK ALL CONTROL MEASURES TO BE SURE THAT STRUCTURES WILL MANAGE THE POTENTIALLY HEAVY AND INTENSE RUNOFF AND SEDIMENT. PRACTICALLY CONSTANT MAINTENANCE OF CRITICAL CONTROL MEASURES MAY BE NECESSARY DURING THE WINTER AND EARLY SPRING TO PREVENT FAILURE OR OVERLOADING OF CONTROL MEASURES. BE PREPARED TO QUICKLY INSTALL A SECOND LINE OF DEFENSE IF PROBLEMS OCCUR. BE PREPARED TO DEVOTE A SUBSTANTIAL AMOUNT OF TIME, EQUIPMENT AND MANPOWER TO EROSION PREVENTION AND SEDIMENT CONTROL.

FOLLOW-UP:

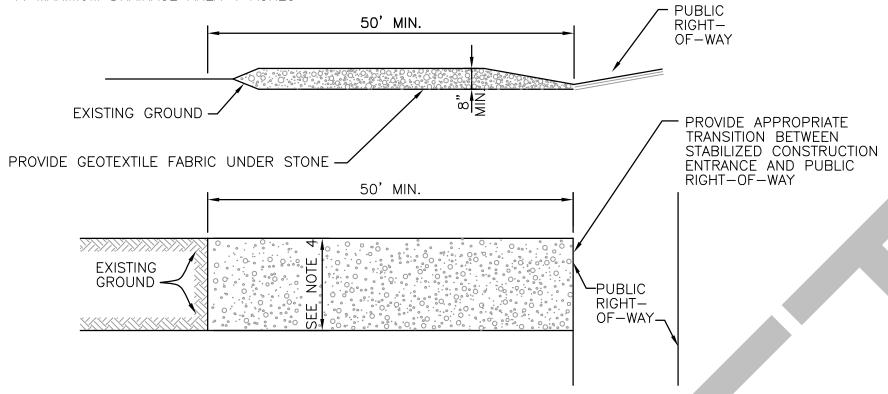
AS EARLY AS IS PRACTICAL, AT THE BEGINNING OF THE NEXT GROWING SEASON, INSTALL PERMANENT VEGETATIVE CONTROLS AS SPECIFIED IN THIS EPSC PLAN.

DEWATERING PROCEDURE:

DEWATERING WILL BE ACCOMPLISHED BY PLACEMENT OF CRUSHED STONE FILLED SUMPS IN LOW AREAS OF THE EXCAVATION. WATER WILL BE PUMPED FROM THESE SUMPS THROUGH A SEDIMENTATION DEVICE AND DISCHARGE INTO THE SUBSURFACE STORMWATER SYSTEM. THE DETAILS OF DEWATERING, INCLUDING THE NUMBER AND LOCATION OF SUMPS; THE TYPE, NUMBER AND LOCATION OF THE SEDIMENTATION DEVICE(S) AND THE ASSOCIATED DISCHARGE POINTS AND OPERATING PROCEDURES WILL DEPEND ON THE CONDITIONS ENCOUNTERED DURING CONSTRUCTION, AS WELL AS THE SEASONAL WEATHER CONDITIONS. A PLAN WHICH DETAILS THE DEWATERING SYSTEM AND PROCEDURES WILL BE PROVIDED FOR REVIEW AND APPROVAL BY THE ON-SITE COORDINATOR PRIOR TO ITS IMPLEMENTATION.

NOTES:

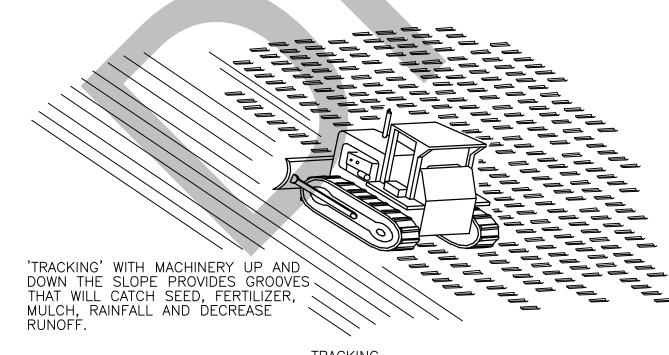
- FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
- 2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- 3. STAKE MATERIALS WILL BE STANDARD 2"X4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
- 4. SPACE STAKES EVENLY AROUND THE INLET 3 FEET APART AND DRIVE A MINIMUM OF 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- 5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- 6. A 2"X4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
- 7. MAXIMUM DRAINAGE AREA 1 ACRES

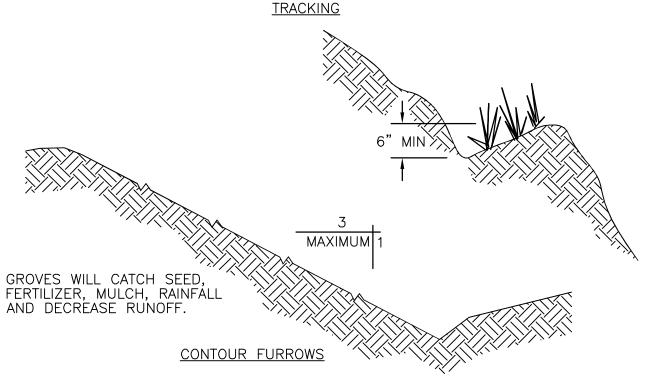


STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE

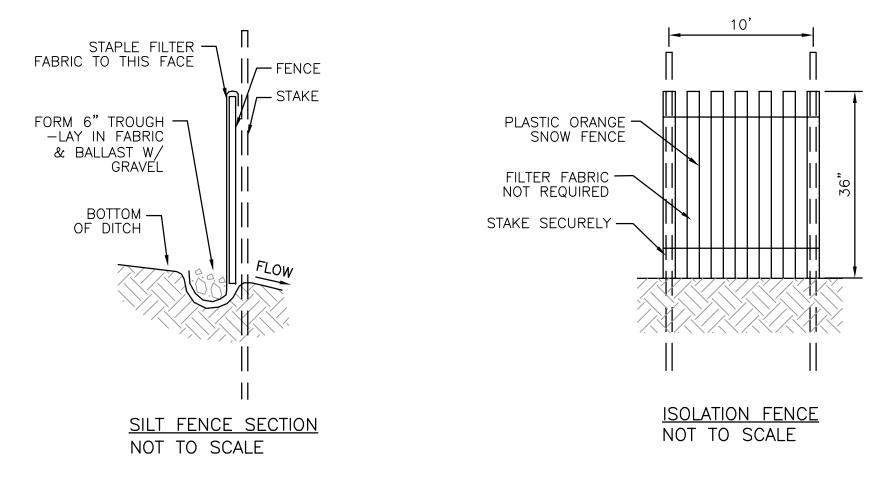
CONSTRUCTION SPECIFICATIONS:

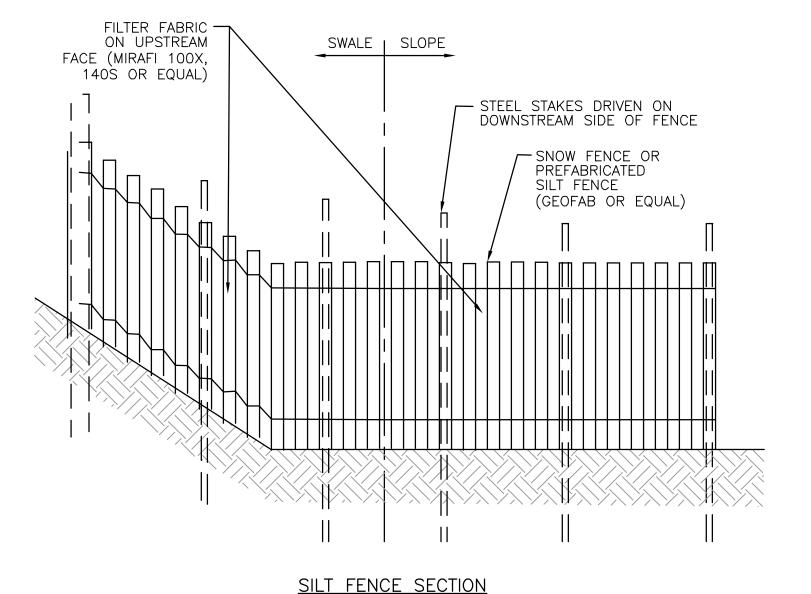
- 1. LOCATION TO BE DETERMINED BY CONTRACTOR AND APPROVED BY ENGINEER.
- 2. STONE SIZE SHALL BE 3 TO 4 INCHES.
- 3. LENGTH SHALL NOT BE LESS THAN 50 FEET.
- 4. THICKNESS SHALL NOT BE LESS THAN 8 INCHES.
- 5. WIDTH SHALL NOT BE LESS THAN 10' WIDER THAN THE LARGEST VEHICLE ENTERING OR EXITING THE SITE.
- 6. WASHING. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT—OF—WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.
- 7. MAINTENANCE. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS—OF—WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED ONTO PUBLIC RIGHTS—OF—WAY MUST BE REMOVED IMMEDIATELY.

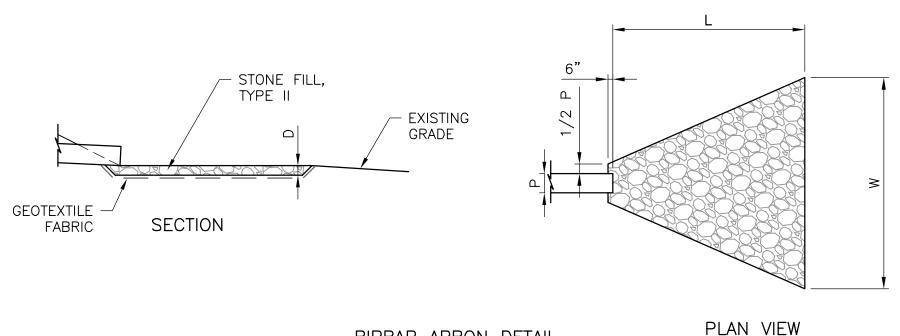




SURFACE ROUGHENING NOT TO SCALE







NOT TO SCALE

RIPRAP APRON DETAIL NOT TO SCALE

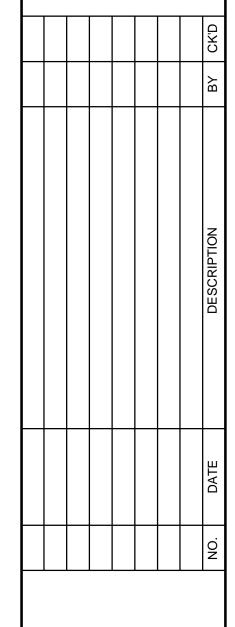
R	IPRAP A SCHEDU	
LOCATION:	POND OUTLET	BRICKYARD CULVER' OUTLET
	DIM.	DIM.
Р	2'-0"	2'-0"
L	20'-0"	11'-0"
W	22'-0"	13'-0"
D	2'-4"	2'-4"



ENGINEERING · PLANNING ·
MANAGEMENT · DEVELOPMEN'
28 NORTH MAIN ST.
RANDOLPH, VT 05060
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com
SO. BURLINGTON, VT
SPRINGFIELD, VT
BEDFORD, NH
LACONIA, NH
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NOT FOR CONSTRUCTION FINAL PLANS

PROFESSIONAL SEAL



VILLAGE OF ESSEX JUNCTION 2 LINCOLN STREET ESSEX JUNCTION, VERMONT 05452

VILLAGE OF ESSEX TAP TA 16 (7)

(GRAVEL WETLAND)

SHEET TITLE

EROSION CONTROL DETAILS

DRAWN BY
EBS/CJR
MARCH 2019
CHECKED BY
MPH
123507
PROJ. ENG.
MPH
D&K ARCHIVE #

SHEET NUMBER

C8

SHEET 8 OF 11

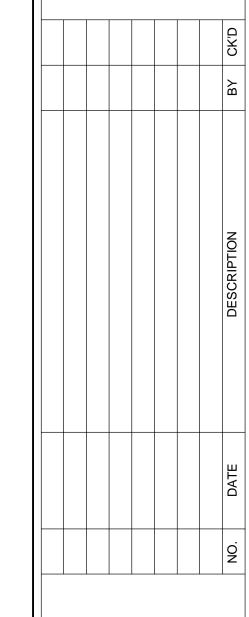
MANAGEMENT · DEVELOPMENT 28 NORTH MAIN ST. RANDOLPH, VT 05060 TEL: (802) 728-3376 FAX: (802) 783-7101 www.dubois-king.com SO. BURLINGTON, VT SPRINGFIELD, VT BEDFORD, NH LACONIA, NH © Copyright 2019 DuBois & King Inc. PROFESSIONAL SEAL

DATE

TABLE OF REVISIONS

DESCRIPTION

NOT FOR CONSTRUCTION **FINAL PLANS**



VILLAGE OF ESSEX 2 LINCOLN STREET ESSEX JUNCTION, VERMONT 05452

VILLAGE OF ESSEX TAP TA 16 (7)

(GRAVEL WETLAND)

SHEET TITLE

RIGHT OF WAY DETAIL SHEET

DRAWNBY	DATE
EBS	MARCH 2019
CHECKED BY	D&K PROJECT#
MPH	123507
PROJ. ENG.	D&K ARCHIVE #
MPH	

PLOT DATE 12/20/18

SHEET NUMBER

SHEET 9 OF 11

T				I ABL	E OF P	ROPERTY ACQUISITIO	N	T	
L	PROPERTY OWNER	R.O.W. LAYOUT NO.	BEGINNING STATION	ENDING STATION	TAKE AREA±	REMAINDER RIGHT AREA± TYPE	(T)/(P) AREA ±	RECORDING DATA TITLE DATE TOWN/CITY BOOK PA	REMARKS
	SOUTHCREEK AT ESSEX PARK ASSOCIATION, INC.	1	0+25 RT	1+97 RT	ANLAI	CONSTRUCTION	(T) 2752.09 sf		
			0+57 RT			DRAINAGE	(P)		FROM CULVERT OUTFLOW
		1	0+35.25 RT	3+65.60 RT		INSTALL AND MAINTAIN	(P) 0.73 ac		GRAVEL WETLAND, INCLUDING CULVERTS, CATCH BASINS, AND STONE FILL (31,964.01 sf)
	NORTH CREEK CONDOMINIUM ASSOCIATION, INC.	1	4+15 RT	4+99 RT		CONSTRUCTION	(T) 2196.48 sf		
		1	4+14.63 RT	4+89.18 RT		INSTALL AND MAINTAIN	(P) 3108.13 sf		STORMWATER STRUCTURE, INCLUDING CULVERTS AND CATCH BASIN
								Y	

TAKING WITH ACCESS PROPERTY LINE

TAKING WITHOUT ACCESS

SR (P)

CONST.(T)

CONSTRUCTION RIGHT

PDF ————PDF PROJECT DEMARCATION FENCE TPZ TREE PROTECTION ZONE

(P) -PERMANENT
(T) -TEMPORARY
DR. -DRAINAGE RIGH
DIT. -DITCHING RIGHT
CH. -CHANNEL RIGHT
DRIVE -DRIVE RIGHT -PERMANENT -TEMPORARY -DRAINAGE RIGHT -DITCHING RIGHT -CHANNEL RIGHT -CULVERT RIGHT -CLEARING & TRIMMING RIGHT -SLOPE RIGHT -UTILITY EASEMENT

APPROVED: _____ DATE: ____

