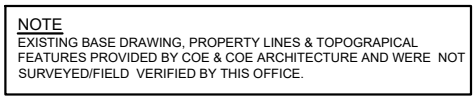


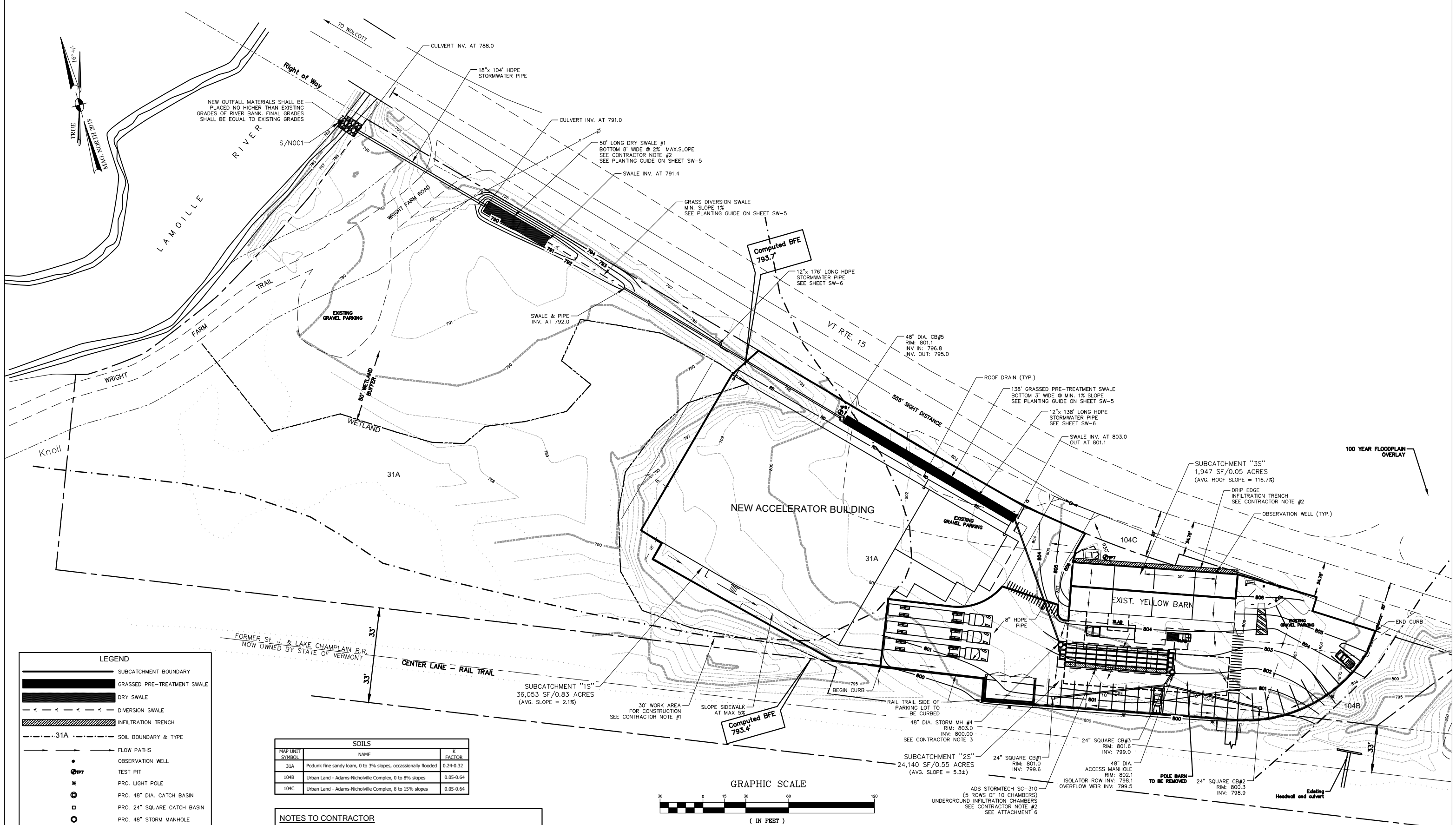
DESIGN INFILTRATION RATE = 16 IN/HR

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

No.	Date	Revision	By
1	11.07.19	EXPANDED TOPO & REVISED SUBCATCHMENT 1S	TJM
2	1.08.20	REVISED PER DEC REVIEW	TJM

Date:	5 . 08 . 19
Drawn By:	~ / TJM
Scale:	1" = 30'
Sheet No:	SW-1
Dwg Name:	YB SP



LEGEND

- SUBCATCHMENT BOUNDARY
- GRASSED PRE-TREATMENT SWALE
- DRY SWALE
- DIVERSION SWALE
- INFILTRATION TRENCH
- 31A SOIL BOUNDARY & TYPE
- FLOW PATHS
- OBSERVATION WELL
- TEST PIT
- PRO. LIGHT POLE
- PRO. 48" DIA. CATCH BASIN
- PRO. 24" SQUARE CATCH BASIN
- PRO. 48" STORM MANHOLE
- PRO. ROOF DRAIN
- EX. CONTOURS
- PRO. CONTOURS
- EX. EDGE OF DRIVE/ROAD
- PRO. EDGE OF DRIVE/PARKING
- PRO. CURB
- EDGE OF WETLAND
- WETLAND BUFFER
- PROPERTY LINE
- EXISTING TREELINE
- 100 YEAR FLOODPLAIN

SOILS		
MAP UNIT SYMBOL	NAME	K FACTOR
31A	Podunk fine sandy loam, 0 to 3% slopes, occasionally flooded	0.24-0.32
104B	Urban Land - Adams-Nicholville Complex, 0 to 8% slopes	0.05-0.64
104C	Urban Land - Adams-Nicholville Complex, 8 to 15% slopes	0.05-0.64

- NOTES TO CONTRACTOR**
- AFTER CONSTRUCTION ALL FILL OUTSIDE OF 5 FEET IN FROM BUILDING IN WETLAND AND BUFFER TO BE REMOVED.
 - CONTRACTOR SHALL COORDINATE WITH ENGINEER TO CONFIRM PERFORMANCE OF INFILTRATION THROUGH REMEDIATED SOILS PRIOR TO REPLACEMENT OF ANY STORMWATER MANAGEMENT PRACTICES DESIGNATED TO INFILTRATE.
 - OUTFALL TO LAMOILLE RIVER SHALL BE FULLY STABILIZED BEFORE RUNOFF IS DIRECTED TO MH#4 OR DRY SWALE

NOTE
EXISTING BASE DRAWING, PROPERTY LINES & TOPOGRAPHICAL FEATURES PROVIDED BY COE & COE ARCHITECTURE AND WERE NOT SURVEYED/FIELD VERIFIED BY THIS OFFICE.

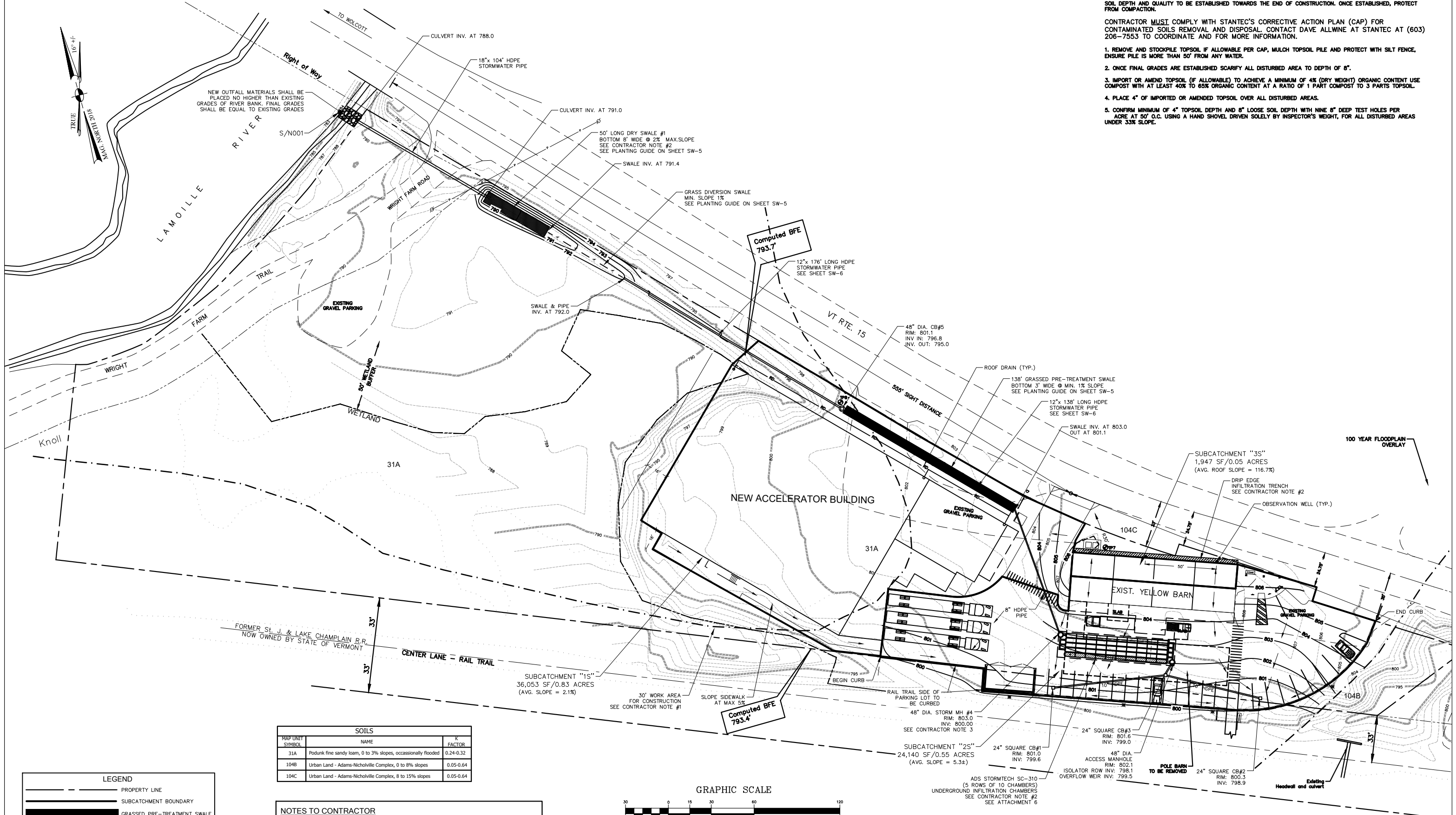
NOTE: ORIGINAL PLAN 24" x 36". OTHER SIZES NOT TO SCALE

No.	Date	Revision	By
1	11.07.19	EXPANDED TOPO & REVISED SUBCATCHMENT 1S	TJM
2	1.08.20	REVISED PER DEC REVIEW	TJM

PROPOSED CONDITIONS SITE PLAN
YELLOW BARN
281 VERMONT ROUTE 15
HARDWICK

GRENIER ENGINEERING, PC
155 DEMERITT PLACE #2
P.O. Box 445
Waterbury, VT 05676
TEL (802) 244-6413
FAX (802) 244-1572
grenierengineering.com

Date: 5.08.19
Drm By: ~TJM
Scale: 1" = 30'
Sheet No: SW-2
Dwg Name: YB SP
File No:



POST CONSTRUCTION SOIL DEPTH AND QUALITY SPECIFICATIONS

SOIL DEPTH AND QUALITY TO BE ESTABLISHED TOWARDS THE END OF CONSTRUCTION. ONCE ESTABLISHED, PROTECT FROM COMPACTION.

CONTRACTOR MUST COMPLY WITH STANTEC'S CORRECTIVE ACTION PLAN (CAP) FOR CONTAMINATED SOILS REMOVAL AND DISPOSAL. CONTACT DAVE ALLWINE AT STANTEC AT (603) 206-7553 TO COORDINATE AND FOR MORE INFORMATION.

1. REMOVE AND STOCKPILE TOPSOIL IF ALLOWABLE PER CAP, MULCH TOPSOIL PILE AND PROTECT WITH SILT FENCE, ENSURE PILE IS MORE THAN 50' FROM ANY WATER.
2. ONCE FINAL GRADES ARE ESTABLISHED SCARIFY ALL DISTURBED AREA TO DEPTH OF 8".
3. IMPORT OR AMEND TOPSOIL (IF ALLOWABLE) TO ACHIEVE A MINIMUM OF 4% (DRY WEIGHT) ORGANIC CONTENT USE COMPOST WITH AT LEAST 40% TO 65% ORGANIC CONTENT AT A RATIO OF 1 PART COMPOST TO 3 PARTS TOPSOIL.
4. PLACE 4" OF IMPORTED OR AMENDED TOPSOIL OVER ALL DISTURBED AREAS.
5. CONFIRM MINIMUM OF 4" TOPSOIL DEPTH AND 8" LOOSE SOIL DEPTH WITH NINE 8" DEEP TEST HOLES PER ACRE AT 50' O.C. USING A HAND SHOVEL DRIVEN SOLELY BY INSPECTOR'S WEIGHT, FOR ALL DISTURBED AREAS UNDER 33% SLOPE.

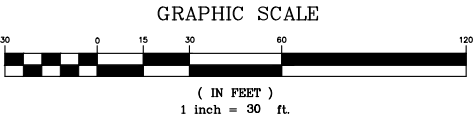
SOILS		
MAP UNIT SYMBOL	NAME	K FACTOR
31A	Podunk fine sandy loam, 0 to 3% slopes, occasionally flooded	0.24-0.32
104B	Urban Land - Adams-Nicholville Complex, 0 to 8% slopes	0.05-0.64
104C	Urban Land - Adams-Nicholville Complex, 8 to 15% slopes	0.05-0.64

- NOTES TO CONTRACTOR**
1. IMPERVIOUS SURFACES SHALL BE FULLY STABILIZED BEFORE RUNOFF IS DIRECTED TO INFILTRATION PRACTICES.
 2. CONTRACTOR SHALL COORDINATE WITH ENGINEER TO CONFIRM PERFORMANCE OF INFILTRATION THROUGH REMEDIATED SOILS PRIOR TO REPLACEMENT OF ANY STORMWATER MANAGEMENT PRACTICES DESIGNATED TO INFILTRATE.
 3. OUTFALL TO LAMOILLE RIVER SHALL BE FULLY STABILIZED BEFORE RUNOFF IS DIRECTED TO MH#4 OR DRY SWALE

NOTE
EXISTING BASE DRAWING, PROPERTY LINES & TOPOGRAPHICAL FEATURES PROVIDED BY COE & COE ARCHITECTURE AND WERE NOT SURVEYED/FIELD VERIFIED BY THIS OFFICE.

LEGEND

- PROPERTY LINE
- SUBCATCHMENT BOUNDARY
- GRASSED PRE-TREATMENT SWALE
- DRY SWALE
- DIVERSION SWALE
- INFILTRATION TRENCH
- SOIL BOUNDARY & TYPE
- FLOW PATHS
- OBSERVATION WELL
- SOIL RESTORATION BOUNDARY
- EXEMPT FROM PCSOQ STANDARD BECAUSE SLOPES EXCEEDS 33%



NOTE: ORIGINAL PLAN 24" x 36". OTHER SIZES NOT TO SCALE

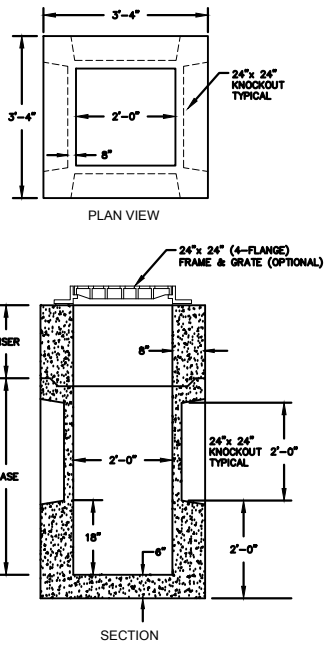
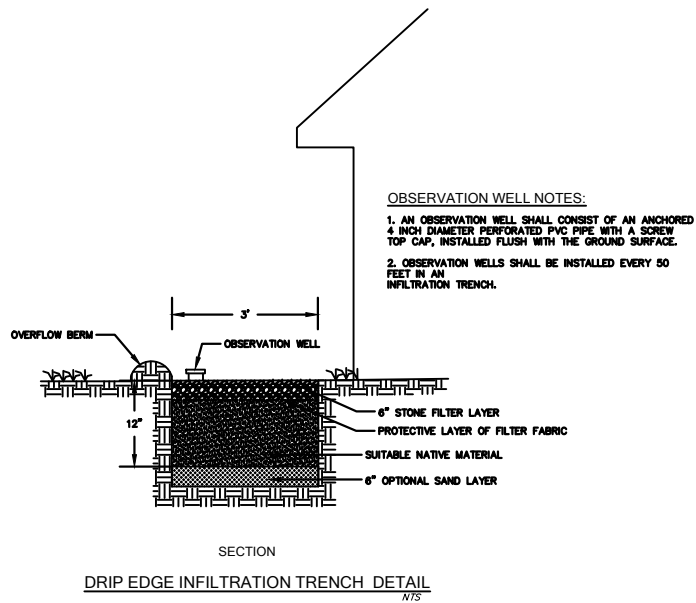
No.	Date	Revision	By
1	11.07.19	EXPANDED TOPO & REVISED SUBCATCHMENT 1S	TJM
2	1.08.19	REVISED PER DEC REVIEW	TJM

POST CONSTRUCTION SOIL DEPTH & QUALITY PLAN

YELLOW BARN
281 VERMONT ROUTE 15
HARDWICK

GRENIER ENGINEERING, PC
155 DEMERITT PLACE #2
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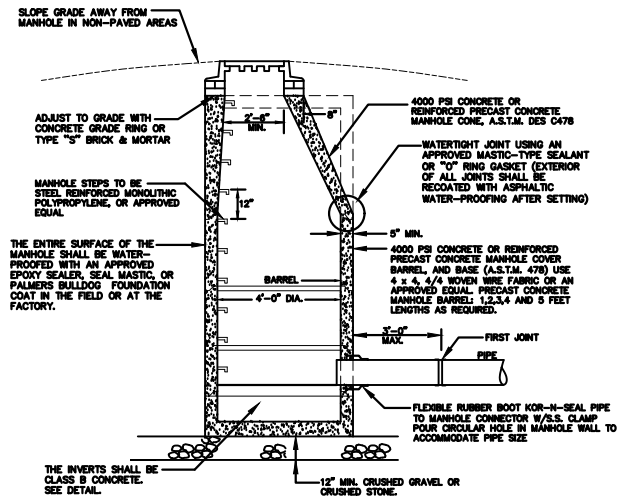
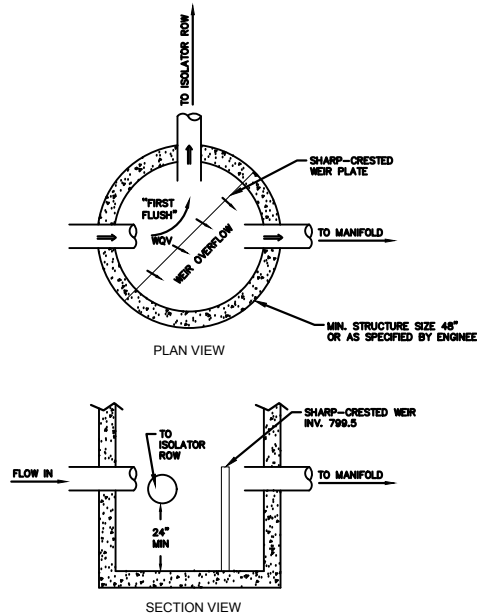
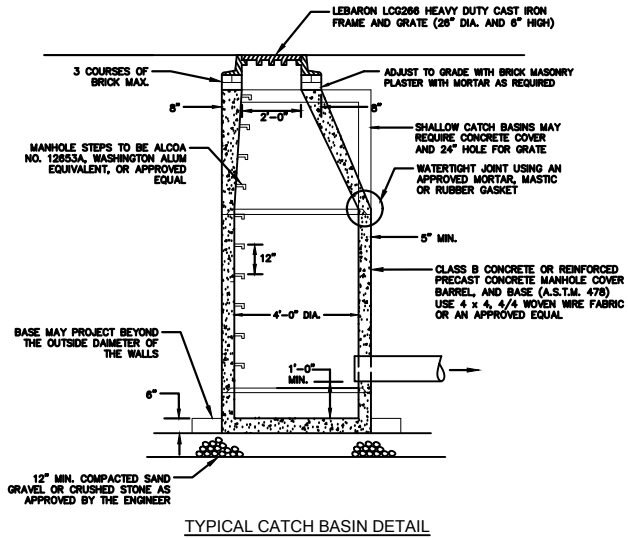
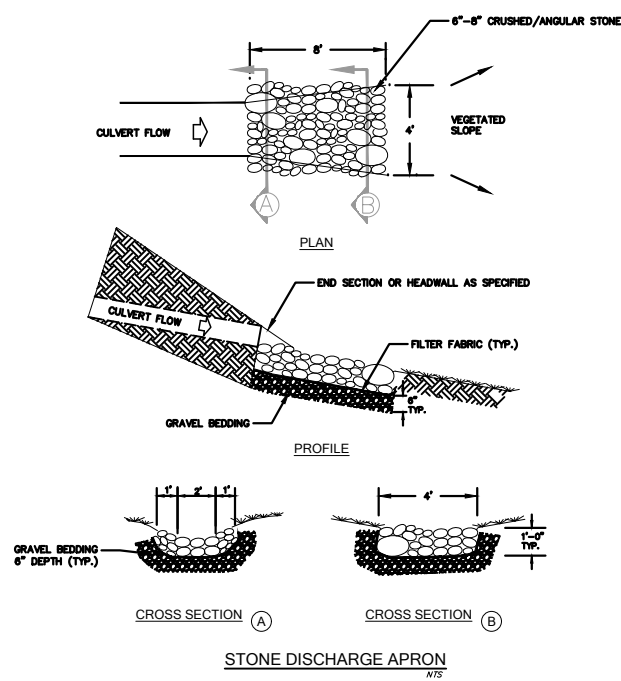
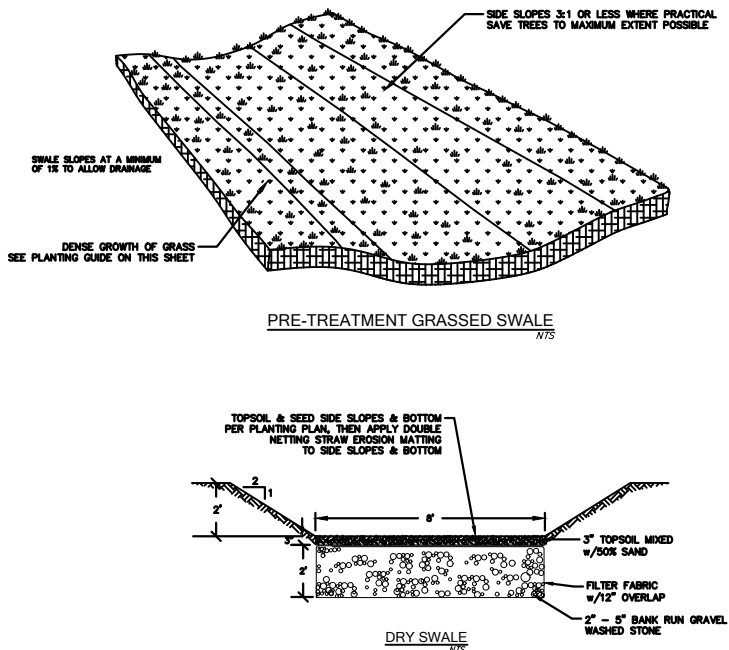
Date: 5.08.19
Drm By: ~TJM
Scale: 1" = 30'
Sheet No: SW-3
Dwg Name: YB SP
File No:



BASE SECTION		
HEIGHT	ITEM #	WEIGHT
2'-6"	SC0824W-30	2,380 LB
4'-0"	SC0824W-48	3,840 LB

RISER SECTION		
HEIGHT	ITEM #	WEIGHT
0'-6"	SC0824R-6	530 LB
1'-0"	SC0824R-12	1,050 LB
1'-6"	SC0824R-18	1,580 LB
2'-0"	SC0824R-24	2,100 LB

- REMARKS:**
- CONCRETE MINIMUM STRENGTH 3000 PSI @ 28 DAYS
 - STEEL REINFORCEMENT GRADE 60 - H-30 DESIGN
 - JOINTS SEALED WITH BUTYL SEALANT
 - MONOLITHIC CONSTRUCTION
 - WEIGHTS SUBJECT TO VARIATION



PLANTING GUIDE

PREPARATION:

- REMOVE ALL EXISTING GROWTH, EITHER BY HAND, ROTO-TILLING, ROUGH OR POWER RAKING. TILL ONLY DEEP ENOUGH TO REMOVE ALL OLD ROOTS.
- DEEP TILLING MAY BRING UP DORMANT WEED SEEDS LYING BENEATH WHICH WILL COMPETE WITH THE NEW SEED.
- TO ENSURE THAT THE SOIL IS FREE OF WEED SEEDS, TILL THE SOIL AND WAIT FOR THE CROP OF NEW WEEDS TO GROW, USUALLY ONE TO THREE WEEKS, AND THEN TILL AGAIN.
- SEED AFTER THE SECOND OR THIRD TILLING.

SEEDING:

- SEED IMMEDIATELY AFTER PREPARING THE SOIL TO AVOID GIVING POSSIBLE WEEDS AN ADVANTAGE OVER THE NEW SEED YOU WISH TO SOW.
- USE A HAND CRANK SEED SOWER OR SCATTER THE SEED BY HAND:
 1. PUT THE GRASS SEED INTO TWO BUCKETS: ADD IN ANY WILDFLOWER SEED AND SOME SAND: 4 PARTS SAND TO 1 PART SEED. THE SAND MAKES IT EASIER TO SOW EVENLY, AND IT SHOWS WHICH AREAS HAVE BEEN SEEDED.
 2. SCATTER ONE BUCKET'S MIX OVER THE AREA TO BE SEEDED. THEN REPEAT THE SECOND BUCKET, IN THE OPPOSITE DIRECTION.
 3. ENSURE THERE IS EVEN SPREADING AND NO BARE SPOTS.
- ONCE SEED IS SOWN, DO NOT RAKE OR COVER IT IN ANY WAY. IF YOU CAN, USE A LAWN ROLLER OR LAY DOWN A LARGE BOARD AND WALK ON IT TO COMPRESS THE SEED INTO THE BARE SOIL.
- KEEP YOUR NEW SEEDBED MOIST UNTIL SEEDLINGS ARE ABOUT 6-8" TALL. AFTER THAT, THEY SHOULD BE SELF SUFFICIENT; HOWEVER WATERING DURING DROUGHTS WILL KEEP YOUR FLOWERS BLOOMING.

WATERING:

- KEEP THE FRESHLY SEEDED AREA WATERED FOR 4-8 WEEKS.

MAINTENANCE:

- MOW ANNUALLY IN THE FALL AFTER ONE FROST TO DISPERSE SEED AND TO KEEP DOWN BRUSHY GROWTH.
- DURING THE ANNUAL INSPECTION, IDENTIFY AREAS THAT HAVE ERODED OR WEED FILLED, AND RESEED THOSE SPOTS AND REMOVE ALL WEEDS.
- IF THERE IS A LARGE AREA OF WEED GROWTH, RE-TILL AND RE-SEED AS DESCRIBED IN THE PREPARATION NOTES.

SEED MIXES:

GRASS SWALE:

- CONSERVATION GRASS SEED MIX AND/OR HONEY BEE MIX, OR APPROVED EQUAL

DRY SWALE:

- CONSERVATION GRASS SEED MIX AND/OR APPROVED EQUAL.

CONSERVATION GRASS SEED MIX:

FESTUCA RUBRA (CREEPING RED FESCUE)
POA PARTENSIS 'ALLEY CAT' (KENTUCKY BLUEGRASS 'ALLEN CAT')
POA PARTENSIS 'CORSAIR' (KENTUCKY BLUEGRASS 'CORSAIR')
LOLIUM MULTIFLORUM (ANNUAL RYEGRASS)
LOLIUM PERENNE 'CONFETTI' (PERENNIAL RYEGRASS 'CONFETTI')

LIGHT REQUIRED: SUN TO PARTIAL SHADE
APPLICABLE ZONES: 2, 3, 4, 5, 6, 7, 8, 9
SEEDING RATE: 100-200 LBS PER ACRE OR 3-5 LBS PER 1,000 SQ.FT.
WHEN TO PLANT: SPRING, EARLY SUMMER, FALL

HONEYBEE MIX:

MELOLOTUS ALBA (SWEETCLOVER, WHITE BLOSSOM)
TRIFOLIUM PRATENSE, MEDIUM (RED CLOVER, MEDIUM)
TRIFOLIUM INCARNATUM (CRIMSON CLOVER)
TRIFOLIUM REPENS, DUTCH (WHITE CLOVER, DUTCH)
MELOLOTUS OFFICINALIS (YELLOW BLOSSOM SWEETCLOVER)
TRIFOLIUM MICHELIANUM 'FIXATION' (BALANS CLOVER 'FIXATION')

LIGHT REQUIRED: SUN TO PARTIAL SHADE
APPLICABLE ZONES: 2, 3, 4, 5, 6, 7, 8, 9
SEEDING RATE: MIN. 10-20 LBS PER ACRE OR 1 LB PER 2,000-4,000 SQ.FT.
WHEN TO PLANT: SPRING (AFTER LAST FROST), EARLY SUMMER, FALL

STORMTECH CHAMBER DETAILS

SEE ATTACHMENT 6:
ADS STORMTECH CHAMBER SPECIFICATIONS AND NOTES

NOTE: ORIGINAL PLAN 24" x 36". OTHER SIZES NOT TO SCALE

No.	Date	Revision	By
1	11.07.19	EXPANDED TOPO & REVISED SUBCATCHMENT IS	TJM
2	1.08.20	REVISED PER DEC REVIEW	TJM

STORMWATER DETAILS

YELLOW BARN

281 VERMONT ROUTE 15

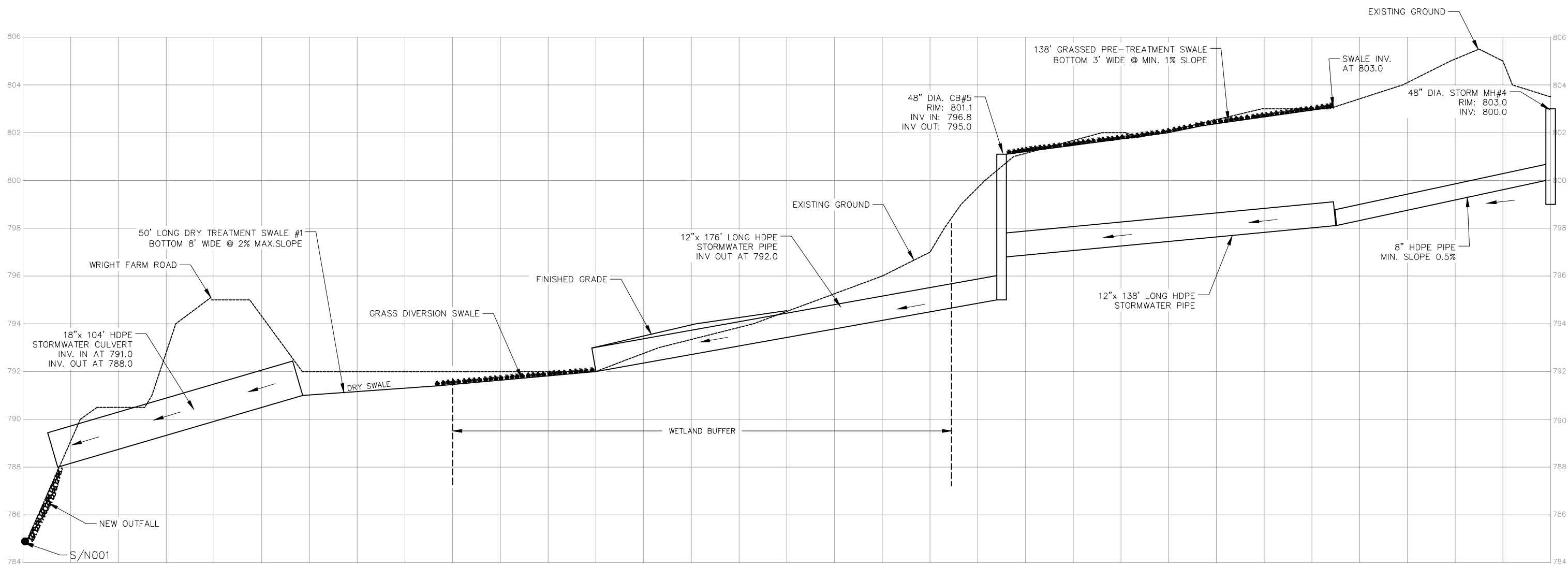
HARDWICK



GRENIER
ENGINEERING, PC
155 DEMERITT PLACE #2

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Waterbury, VT 05676
TEL (802) 244-6413
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Date: 5.08.19
Drm By: ~TJM
Scale: A/N
Sheet No: SW-5
Dwg Name: YB SP
File No:



DRAINAGE PROFILE

SCALE: 1" = 20' H & 1" = 2' V

NOTE: ORIGINAL PLAN 24" x 36". OTHER SIZES NOT TO SCALE

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DRAINAGE PROFILE

YELLOW BARN

281 VERMONT ROUTE 15

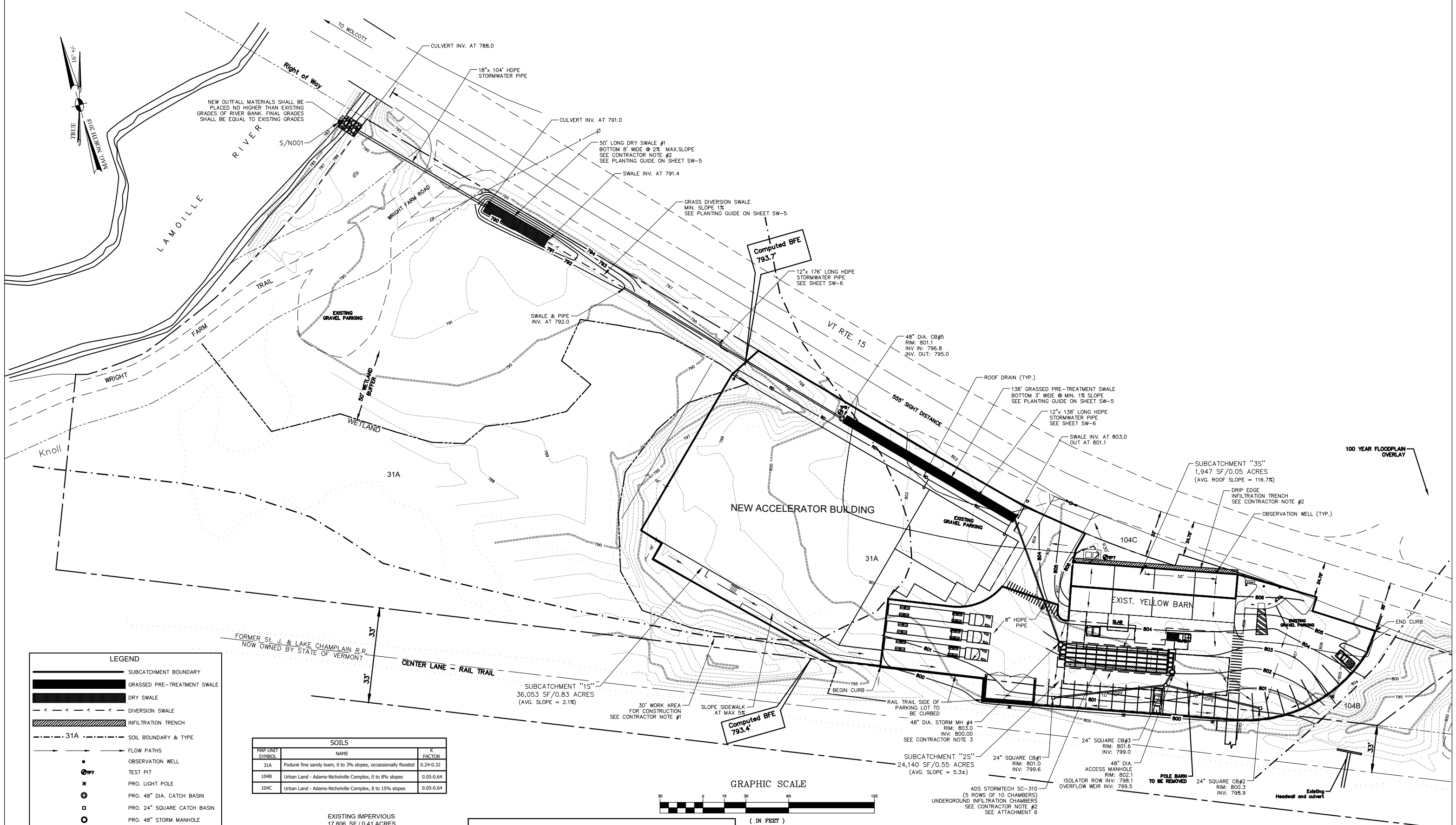
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Date: 5.08.19
Drm By: TJM
Scale: A/N
Sheet No: SW-6
Dwg Name: YB SP
File No:



LEGEND

- SUBCATCHMENT BOUNDARY
- GRASSED PRE-TREATMENT SWALE
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- EX. CONTOURS
- PRO. CONTOURS
- EX. EDGE OF DRIVE/ROAD
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- PROPERTY LINE
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SOILS		
MAP UNIT SYMBOL	NAME	K FACTOR
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104C	Urban Land - Adams-Nicholville Complex, 8 to 15% slopes	0.05-0.64

EXISTING IMPERVIOUS
17,806 SF / 0.41 ACRES

PROPOSED IMPERVIOUS
40,117 SF / 0.92 ACRES

REDEVELOPED IMPERVIOUS
7,181 SF / 0.17 ACRES

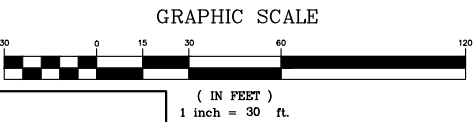
REMOVED IMPERVIOUS
4,104 SF / 0.09 ACRES

NOTES TO CONTRACTOR

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NOTE

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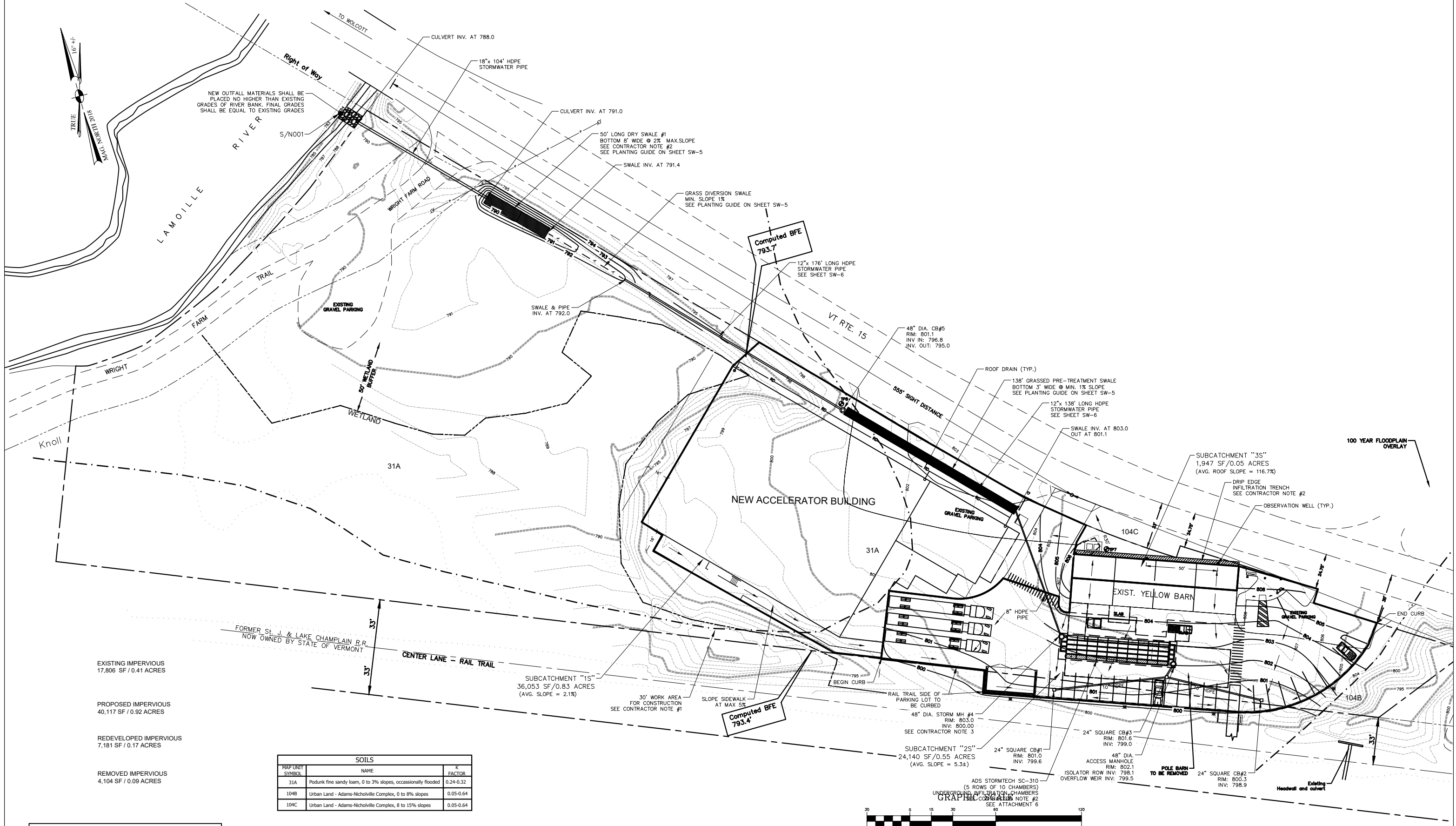
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IMPERVIOUS PLAN
YELLOW BARN
281 VERMONT ROUTE 15
HARDWICK

GRENIER ENGINEERING, PC
155 DEMERITT PLACE #2
P.O. Box 445
Waterbury, VT 05676
TEL (802) 244-6413
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Date: 5.08.19
Drm By: ~TJM
Scale: 1" = 30'
Sheet No: SW-2A
Dwg Name: YB SP
File No:



EXISTING IMPERVIOUS
17,806 SF / 0.41 ACRES

PROPOSED IMPERVIOUS
40,117 SF / 0.92 ACRES

REDEVELOPED IMPERVIOUS
7,181 SF / 0.17 ACRES

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- TEST PIT

WETLAND BUFFER

WETLAND BOUNDARY

BUFFER DISTURBANCE (13,749 SF/0.32 AC.)

TEMPORARY BUFFER DISTURBANCE (8,633 SF/0.20 AC.)

WETLAND DISTURBANCE (499 SF/0.01 AC.)

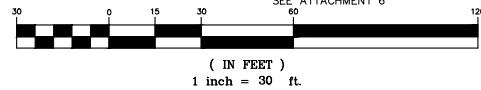
TEMPORARY WETLAND DISTURBANCE (3,076 SF/0.07 AC.)

NOTE TO CONTRACTOR

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NOTE

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No.	Date	Revision	By

PROPOSED WETLAND IMPACTS PLAN

YELLOW BARN

VERMONT ROUTE 15

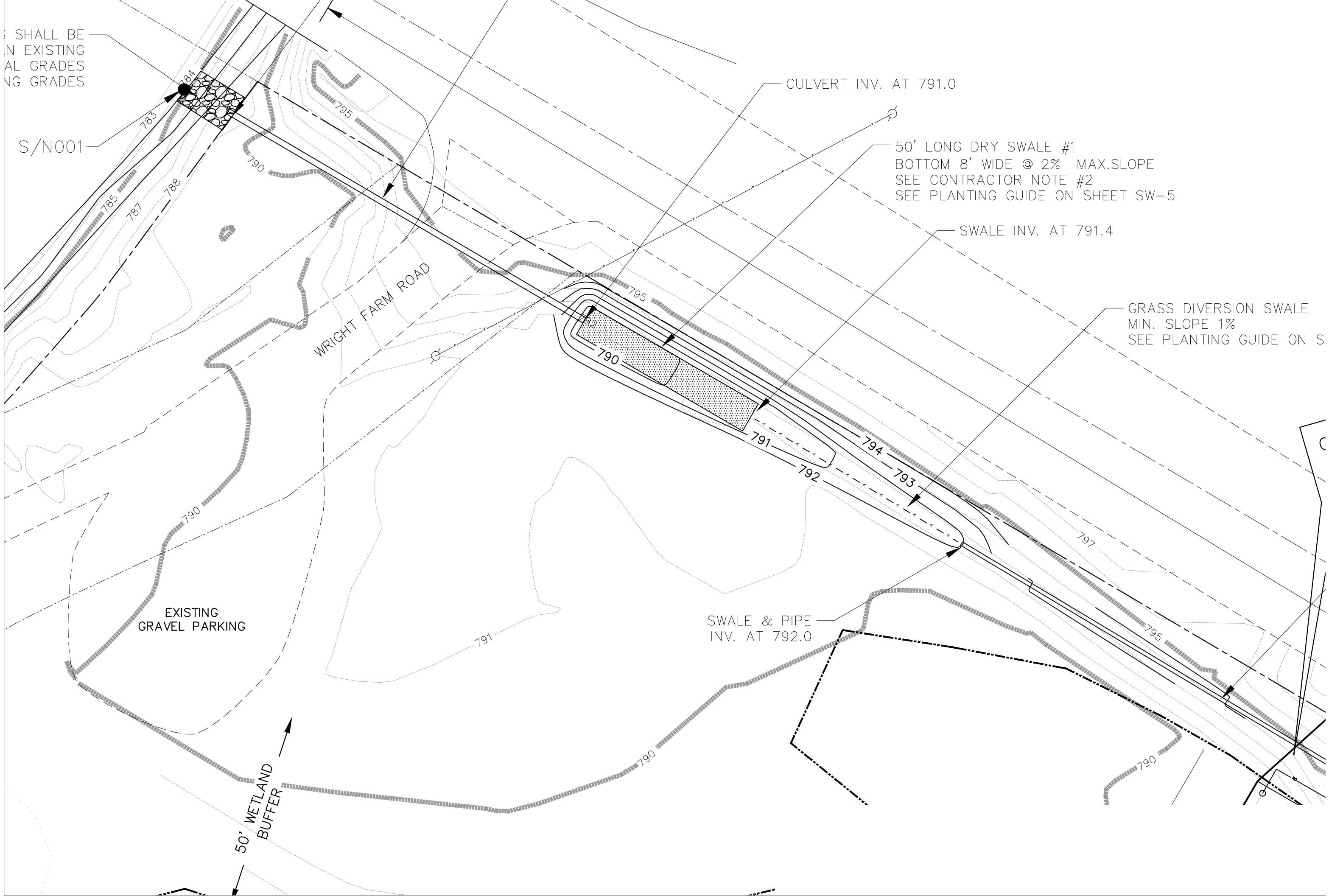
HARDWICK

GRENIER ENGINEERING, P.C.

155 DEMERITT PLACE #2

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TEL (802) 244-6413
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Date: 3.20.19
Drm By:
Scale: 1" = 30'
Sheet No: SW-2
Dwg Name: YB SP
File No:



SHALL BE
N EXISTING
AL GRADES
NG GRADES

S/N001

CULVERT INV. AT 791.0

50' LONG DRY SWALE #1
BOTTOM 8' WIDE @ 2% MAX.SLOPE
SEE CONTRACTOR NOTE #2
SEE PLANTING GUIDE ON SHEET SW-5

SWALE INV. AT 791.4

GRASS DIVERSION SWALE
MIN. SLOPE 1%
SEE PLANTING GUIDE ON S

WRIGHT FARM ROAD

EXISTING
GRAVEL PARKING

SWALE & PIPE
INV. AT 792.0

50' WETLAND
BUFFER